

ARCHIVE

This information was updated on December 5, 2014. Shimano makes no warranty with respect to this information, including without limitation any warranty on the accuracy of measures, specifications and compatibility of the current products. Regarding any modification and new product information after December 5, 2014, please refer to the Shimano Business Customer Web Site or directly contact the sales person of our company.

SHIMANO

2014-2015

SPEC. HANDBOOK

- MTB
- TREKKING
- ROAD
- CITY TOURING/COMFORT
- E-BIKE
- GENERAL
- Di2 Spec

REMARKS Mark X : available / Mark - : not available

All information in this spec. handbook is confidential and has been given to you for the sole use of your product development staff.

This information should not be photo copied.

Issued on December 5, 2014 SHIMANO INC.

Printed in Japan

Word definitions

BB	Bottom bracket
BC	Brake cable
BL	Brake lever
BR	Brake caliper
BT	Battery
CB	Coaster brake
CG	Chain guard
CJ	Cassette joint
CN	Chain
CP	Spoke protector
CS	Cassette sprocket
CT	Chain tensioner
DH	Hub dynamo
DU	Drive unit
EW	Electric wire
FC	Crankset
FD	Front derailleur
FH	Freehub
HB	Front hub
HP	Head parts
HRB	Hub roller brake
ID	CI-DECK
I-spec	Integration mounting system of brake and shift lever
LP	Light
MF	Multiple freewheel
MU	Motor unit
O.L.D.	Over locknut dimension
P.C.D.	Pitch circle diameter
PD	Pedal
PM	Power modulator
QR	Quick release
RD	Rear derailleur
SB	Revo shifter integrated with brake lever
SC	Cycle computer
SF	Single free
SG	Internal geared hub
SL	Shift lever
SPD	Shimano pedaling dynamics
SPD-SL	Shimano pedaling dynamics-SL
ST	Dual control lever / Shift lever integrated with brake lever
SW	Switch
WH	Wheel

ARCHIVE

	<i>Page</i>	
Shift Lever	2	SL
Shift Lever Integration unit	8	SMSL
Brake Lever	8	BL
Shift/Brake Lever	10	ST
Rear Derailleur	18	RD
Front Derailleur	25	FD
Brake	40	BR
Disc Rotor	42	RT
Disc Rotor Adapter	43	RTAD
Disc Brake Hose	44	SMBH
Crankset	45	FC
Bottom Bracket	56	BB
Cassette Sprocket	59	CS
Multiple Freewheel	62	MF
Chain	63	CN
Freehub	64	FH
Front Hub	70	HB
Wheel	74	WH
Pedal	85	PD
CI-DECK	87	CI-DECK

AMTB

AMTB

Shift Lever

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		SL-M9000-R	SL-M9000-L	SL-M9000-IR	SL-M9000-IL	SL-M980-A-L	SL-M980-B-IL
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		-	2/3	-	2/3	2/3	2/3
Rear speeds		11	-	11	-	-	-
Compatible RD Type		MTB 11-speed	-	MTB 11-speed	-	-	-
I-spec compatible		-	-	X*	X*	-	X**
SL position adjust		-	-	X	X	-	X
SL cable adjust		X	X	X	X	X (CFRP)	X (CFRP)
2/3 mode converter		-	-	-	-	X	X
Max. multiple shifts (Main lever/ rear)		4	-	4	-	-	-
Release function	Multi release	X**	-	X**	-	-	-
	Instant release	X	X	X	X	X	X
	2-Way release	X	X	X	X	X	X
Optical Gear Display	With	-	-	-	-	-	-
	With (removable)	-	-	-	-	-	-
	Without	X	X	X	X	X	X
Multi-Bearing construction		4	4	4	4	4	4
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Clamp bolt	Material	Stainless steel	Stainless steel	-	-	Stainless steel	-
	Finish	-	-	-	-	-	-
Main lever body	Material	CFRP	CFRP	CFRP	CFRP	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Anodized	Anodized
Release lever body	Material	CFRP	CFRP	CFRP	CFRP	CFRP & Steel	CFRP & Steel
	Finish	-	-	-	-	-	-
Base cover	Material	CFRP	CFRP	CFRP	CFRP	CFRP	CFRP
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Polymer-coated	Polymer-coated	Polymer-coated	Polymer-coated	SIL-TEC	SIL-TEC
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		200g	200g	205g/pair	205g/pair	104g	98g
Note		**pull:single, push:double		* I-spec1 **pull:single, push:double	* I-spec1		**I-spec B-type

Series		XTR	XTR	SAINT	SAINT	DEORE XT	DEORE XT
Model no.		SL-M980-A-R	SL-M980-B-IR	SL-M820	SL-M820-B-I	SL-M780-B-IL	SL-M780-B-IR
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		-	-	-	-	2/3	-
Rear speeds		10	10	10	10	-	10
Compatible RD Type		MTB 10-speed RD	MTB 10-speed RD	MTB 10-speed RD	MTB 10-speed RD	-	MTB 10-speed RD
I-spec compatible		-	X**	-	X**	X**	X**
SL position adjust		-	X	-	X	X	X
SL cable adjust		X (CFRP)	X (CFRP)	X(CFRP)	X (CFRP)	X	X
2/3 mode converter		-	-	-	-	X	-
Max. multiple shifts (Main lever/ rear)		4	4	4	4	-	4
Release function	Multi release	X	X	X*	X*	-	X
	Instant release	X	X	X	X	X	X
	2-Way release	X	X	X	X	X	X
Optical Gear Display	With	-	-	-	-	-	-
	With (removable)	-	-	-	-	-	-
	Without	X	X	X	X	X	X
Multi-Bearing construction		4	4	4	4	2	2
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted	Painted	Painted
Clamp bolt	Material	Stainless steel	-	Stainless steel	-	-	-
	Finish	-	-	black	-	-	-
Main lever body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted	Painted	Painted
Release lever body	Material	CFRP & Steel	CFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel
	Finish	-	-	-	-	-	-
Base cover	Material	CFRP	CFRP	GFRP	GFRP	GFRP	GFRP
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	SIL-TEC	SIL-TEC	-	-	-	-
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		99g	103g	123g	114g	106g	114g
Note			**I-spec B-type		**I-spec B-type	**I-spec B-type	**I-spec B-type

Shift Lever

Series		DEORE XT	DEORE XT	DEORE XT	DEORE XT	SLX	SLX
Model no.		SL-M780-L	SL-M780-R	SL-M770-A-L	SL-M770-A-R	SL-M670-B-IL	SL-M670-B-IR
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		2/3	-	3	-	2/3	-
Rear speeds		-	10	-	9	-	10
Compatible RD Type		-	MTB 10-speed RD	-	MTB 9-speed RD	-	MTB 10-speed RD
Ispec compatible		-	-	-	-	X**	X**
SL position adjust		-	-	-	-	X	X
SL cable adjust		X	X	X	X	X	X
2/3 mode converter		X	-	-	-	X	-
Max. multiple shifts (Main lever/ rear)		-	4	-	4	-	3
Release function	Multi release	-	X	-	-	-	-
	Instant release	X	X	X	X	-	-
	2-Way release	X	X	X	X	X	X
Optical Gear Display	With	-	-	-	-	-	-
	With (removable)	X	X	X	X	-	-
	Without	X	X	X	X	X	X
Multi-Bearing construction		2	2	2	2	-	-
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	-	-
	Finish	-	-	-	-	-	-
Main lever body	Material	Aluminum	Aluminum	Aluminum	Aluminum	GFRP & Steel	GFRP & Steel
	Finish	Painted	Painted	Painted	Painted	-	-
Release lever body	Material	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel
	Finish	-	-	-	-	-	-
Base cover	Material	GFRP	GFRP	resin	resin	GFRP	GFRP
	Finish	Painted	Painted	Painted	Painted	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		255g/pair	255g/pair	255g/pair	255g/pair	116g	121g
Note						**I-spec B-type	**I-spec B-type

Series		SLX	SLX	ZEE	DEORE	DEORE	DEORE
Model no.		SL-M670-L	SL-M670-R	SL-M640	SL-M610-L	SL-M610-R	SL-M610-IL
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		2/3	-	-	2/3	-	2/3
Rear speeds		-	10	10	-	10	-
Compatible RD Type		-	MTB 10-speed RD	MTB 10-speed RD	-	MTB 10-speed RD	-
Ispec compatible		-	-	-	-	-	X*
SL position adjust		-	-	-	-	-	-
SL cable adjust		X	X	X	X	X	X
2/3 mode converter		X	-	-	X	-	X
Max. multiple shifts (Main lever/ rear)		-	3	3	-	3	-
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	X	X	X	X	X	X
Optical Gear Display	With	-	-	-	X	X	-
	With (removable)	X	X	-	-	-	-
	Without	X	X	X	-	-	X
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	-
	Finish	-	-	-	-	-	-
Main lever body	Material	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel
	Finish	-	-	-	-	-	-
Release lever body	Material	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel
	Finish	-	-	-	-	-	-
Base cover	Material	GFRP	GFRP	GFRP	GFRP	GFRP	GFRP
	Finish	-	-	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		265g/pair	265g/pair	127g	130g	135g	116g
Note							**I-spec B-type

Shift Lever

Series		DEORE	DEORE	DEORE	ALIVIO	ALIVIO	ACERA	
Model no.		SL-M610-IR	SL-M590-L	SL-M590-R	SL-M4000-L	SL-M4000-R	SL-M390-L	
Color	1	Series color	Series color	Series color	Series color	Series color	Series color	
	2	-	-	-	-	-	-	
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	
Front speeds		-	3	-	3	-	3	
Rear speeds		10	-	9	-	9	-	
Compatible RD Type		MTB 10-speed RD	-	MTB 9-speed RD	-	MTB 9-speed RD	-	
Ispec compatible		X*	-	-	-	-	-	
SL position adjust		-	-	-	-	-	-	
SL cable adjust		X	X	X	X	X	X	
2/3 mode converter		-	-	-	-	-	-	
Max. multiple shifts (Main lever/ rear)		3	-	3	-	3	-	
Release function	Multi release	-	-	-	-	-	-	
	Instant release	-	-	-	-	-	-	
	2-Way release	X	X	X	X	X	-	
Optical Gear Display	With	-	X	X	X	X	X	
	With (removable)	-	-	-	-	-	-	
	Without	X	-	-	-	-	-	
Multi-Bearing construction		-	-	-	-	-	-	
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Clamp bolt	Material	-	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Steel	
	Finish	-	-	-	-	-	-	
Main lever body	Material	GFRP & Steel	GFRP & Steel	GFRP & Steel	Resin & Steel	Resin & Steel	Resin & Steel	
	Finish	-	-	-	-	-	-	
Release lever body	Material	GFRP & Steel	GFRP & Steel	GFRP & Steel	Resin & Steel	Resin & Steel	Resin & Steel	
	Finish	-	-	-	-	-	-	
Base cover	Material	GFRP	GFRP	GFRP	Resin	Resin	Resin	
	Finish	-	-	-	-	-	-	
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Steel	
	Finish	-	-	-	Standard	Standard	Standard	
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP40	OT-SP40	OT-SP40	
Average weight		121g	-	-	-	-	-	
Note		**I-spec B-type					-	-

Series		ACERA	ACERA	ACERA	ALTUS	ALTUS	SHIMANO
Model no.		SL-M390-R	SL-M360-L	SL-M360-R	SL-M370-L	SL-M370-R	SL-M310-L
Color	1	Series color	Series color	Series color	Black	Black	Series color
	2	-	-	-	Silver	Silver	-
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		-	3	-	3	-	3
Rear speeds		9	-	8	-	9	-
Compatible RD Type		MTB 9-speed RD	-	MTB 8-speed RD	-	MTB 9-speed RD	-
Ispec compatible		-	-	-	-	-	-
SL position adjust		-	-	-	-	-	-
SL cable adjust		X	X	X	X	X	X
2/3 mode converter		-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)		3	-	3	-	3	-
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	-	-	-	-	-	-
Optical Gear Display	With	X	X	X	X	X	X
	With (removable)	-	-	-	-	-	-
	Without	-	-	-	-	-	-
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
	Finish	-	-	-	-	-	-
Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
	Finish	-	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Standard	Standard	Standard	Standard	Standard	Standard
Recommended SL outer casing		OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40
Average weight		-	-	-	-	-	-
Note		-	-	-	-	-	-

Shift Lever

Series	SHIMANO	SHIMANO	Tourney	Tourney	Tourney	Tourney
Model no.	SL-M310-8R	SL-M310-7R	SL-RS47-L	SL-RS47-8R	SL-RS47-7R	SL-RS45-L
Color	1	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-
Shifter type	Rapidfire Plus	Rapidfire Plus	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT
Front speeds	-	-	3	-	-	3
Rear speeds	8	7	-	8	7	-
Compatible RD Type	MTB 8-speed RD	MTB 7-speed RD	-	MTB 8-speed RD	MTB 7-speed RD	-
Ispc compatible	-	-	-	-	-	-
SL position adjust	-	-	-	-	-	-
SL cable adjust	X	X	X	X	X	X
2/3 mode converter	-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)	3	3	-	7	6	-
Release function	Multi release	-	-	-	-	-
	Instant release	-	-	-	-	-
	2-Way release	-	-	-	-	-
Optical Gear Display	With	X	X	X	X	X
	With (removable)	-	-	-	-	-
	Without	-	-	-	-	-
Multi-Bearing construction	-	-	-	-	-	-
SL bracket	Material	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-
Main lever body	Material	Resin & Steel	Resin & Steel	-	-	-
	Finish	-	-	-	-	-
Release lever body	Material	Resin & Steel	Resin & Steel	-	-	-
	Finish	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-
SL cable	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Standard	Standard	Standard	Standard	Standard
Recommended SL outer casing	OT-SP40	OT-SP40	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40
Average weight	-	-	-	-	-	-
Note			OGD frame :Chrome plating Compatible with CI-DECK	OGD frame :Chrome plating Compatible with CI-DECK	OGD frame :Chrome plating Compatible with CI-DECK	Compatible with CI-DECK

Series	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.	SL-RS45-8R	SL-RS45-7R	SL-RS45-6R	SL-RS36-L	SL-RS36-LN	SL-RS36-7R
Color	1	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-
Shifter type	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT
Front speeds	-	-	-	3	3 (Friction)	-
Rear speeds	8	7	6	-	-	7
Compatible RD Type	MTB 8-speed RD	MTB 7-speed RD	MTB 6-speed RD	-	-	MTB 7-speed RD
Ispc compatible	-	-	-	-	-	-
SL position adjust	-	-	-	-	-	-
SL cable adjust	X	X	X	X	X	X
2/3 mode converter	-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)	7	6	5	-	-	6
Release function	Multi release	-	-	-	-	-
	Instant release	-	-	-	-	-
	2-Way release	-	-	-	-	-
Optical Gear Display	With	X	X	X	X	X
	With (removable)	-	-	-	-	-
	Without	-	-	-	-	-
Multi-Bearing construction	-	-	-	-	-	-
SL bracket	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-
Main lever body	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Release lever body	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-
SL cable	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Standard	Standard	Standard	Standard	Standard
Recommended SL outer casing	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40
Average weight	-	-	-	-	-	-
Note	Compatible with CI-DECK	Compatible with CI-DECK	Compatible with CI-DECK	w/ CI-DECK spec is available as option	w/ CI-DECK spec is available as option	w/ CI-DECK spec is available as option

Shift Lever

Series	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.	SL-RS36-6R	SL-RS35-L	SL-RS35-LN	SL-RS35-7R	SL-RS35-6R	SL-RS34-LN
Color	1	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-
Shifter type	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT
Front speeds	-	3	3 (Friction)	-	-	3 (Friction)
Rear speeds	6	-	-	7	6	-
Compatible RD Type	MTB 6-speed RD	-	-	MTB 7-speed RD	MTB 6-speed RD	-
Ispec compatible	-	-	-	-	-	-
SL position adjust	-	-	-	-	-	-
SL cable adjust	-	X	X	-	-	X
2/3 mode converter	-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)	5	-	-	6	5	-
Release function	Multi release	-	-	-	-	-
	Instant release	-	-	-	-	-
	2-Way release	-	-	-	-	-
Optical Gear Display	With	X	X	X	X	X
	With (removable)	-	-	-	-	-
	Without	-	-	-	-	-
Multi-Bearing construction						
SL bracket	Material	Steel	Resin	Resin	Resin	Steel
	Finish	Painted	Resin	Resin	Resin	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-
Main lever body	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Release lever body	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-
SL cable	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Standard	Standard	Standard	Standard	Standard
Recommended SL outer casing	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40
Average weight	-	-	-	-	-	-
Note	w/ CI-DECK spec is available as option	w/ CI-DECK spec is available as option	w/ CI-DECK spec is available as option	w/ CI-DECK spec is available as option	w/ CI-DECK spec is available as option	with LED position light, Electric wire length 160mm (both black /gray color spec available) / for Japanese market only

Series	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.	SL-RS34-6R	SL-RS34-7R	SM-RS34-L	SM-RS34-R	SL-TX50-L	SL-TX50-LN
Color	1	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-
Shifter type	REVOSHIFT	REVOSHIFT	-	-	Thumb Shifter Plus	Thumb Shifter Plus
Front speeds	-	-	-	-	3	3 (Friction)
Rear speeds	6	7	-	-	-	-
Compatible RD Type	MTB 6-speed RD	MTB 7-speed RD	-	-	-	-
Ispec compatible	-	-	-	-	-	-
SL position adjust	-	-	-	-	-	-
SL cable adjust	-	-	-	-	X	X
2/3 mode converter	-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)	5	6	-	-	-	-
Release function	Multi release	-	-	-	-	-
	Instant release	-	-	-	-	-
	2-Way release	-	-	-	-	-
Optical Gear Display	With	X	X	-	X	X
	With (removable)	-	-	-	-	-
	Without	-	-	-	-	-
Multi-Bearing construction						
SL bracket	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-
Main lever body	Material	-	-	-	Resin	Resin
	Finish	-	-	-	-	-
Release lever body	Material	-	-	-	Resin	Resin
	Finish	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-
SL cable	Material	Steel	Steel	-	Steel	Steel
	Finish	Standard	Standard	-	Standard	Standard
Recommended SL outer casing	OT-SIS40	OT-SIS40	-	-	OT-SIS40	OT-SIS40
Average weight	-	-	-	-	-	-
Note	with LED position light, Electric wire length 200mm (both black /gray color spec available) / for Japanese market only, with CI-DECK spec available	with LED position light, Electric wire length 200mm (both black /gray color spec available) / for Japanese market only, with CI-DECK spec available	with LED position light, Electric wire length 160mm (both black /gray color spec available) / for Japanese market only	with LED position light, Electric wire length 200mm (both black /gray color spec available) / for Japanese market only		

Shift Lever

Series		Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.		SL-TX50-7R	SL-TX50-6R	SL-TX30-LN	SL-TX30-7R	SL-TX30-6R	SL-TZ20-LN
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		Thumb Shifter Plus	Thumb Shifter Plus	Thumb Shifter Plus	Thumb Shifter Plus	Thumb Shifter Plus	Thumb Shifter
Front speeds		-	-	3 (Friction)	-	-	3 (Friction)
Rear speeds		7	6	-	7	6	-
Compatible RD Type		MTB 7-speed RD	MTB 6-speed RD	-	MTB 7-speed RD	MTB 6-speed RD	-
Ispec compatible		-	-	-	-	-	-
SL position adjust		-	-	-	-	-	-
SL cable adjust		-	-	X	-	-	-
2/3 mode converter		-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)		6	5	-	6	5	-
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	-	-	-	-	-	-
Optical Gear Display	With	X	X	X	X	X	X
	With (removable)	-	-	-	-	-	-
	Without	-	-	-	-	-	-
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Main lever body	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
Release lever body	Material	Resin	Resin	Resin	Resin	Resin	-
	Finish	-	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Standard	Standard	Standard	Standard	Standard	Standard
Recommended SL outer casing		OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40	OT-SIS40
Average weight		-	-	-	-	-	-
Note							

Series		Tourney	Tourney	Tourney
Model no.		SL-TZ20-7R	SL-TZ20-6R	SL-FT55-7R
Color	1	Series color	Series color	Series color
	2	-	-	-
Shifter type		Thumb Shifter	Thumb Shifter	Thumb shifter Plus
Front speeds		-	-	-
Rear speeds		7	6	7
Compatible RD Type		MTB 7-speed RD	MTB 6-speed RD	MTB 7-speed RD
Ispec compatible		-	-	-
SL position adjust		-	-	-
SL cable adjust		-	-	-
2/3 mode converter		-	-	-
Max. multiple shifts (Main lever/ rear)		6	5	6
Release function	Multi release	-	-	-
	Instant release	-	-	-
	2-Way release	-	-	-
Optical Gear Display	With	X	X	X
	With (removable)	-	-	-
	Without	-	-	-
Multi-Bearing construction		-	-	-
SL bracket	Material	Steel	Steel	Steel
	Finish	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel
	Finish	-	-	-
Main lever body	Material	Resin	Resin	Resin
	Finish	-	-	-
Release lever body	Material	-	-	Resin
	Finish	-	-	-
Base cover	Material	Resin	Resin	Resin
	Finish	-	-	-
SL cable	Material	Steel	Steel	Steel
	Finish	Standard	Standard	Standard
Recommended SL outer casing		OT-SIS40	OT-SIS40	OT-SIS40
Average weight		-	-	-
Note				

Shift Lever

Integration unit

Series	XTR	XTR	SAINT	DEORE XT	DEORE XT
Model no.	SM-SL98-B-L	SM-SL98-B-R	SM-SL82-B	SM-SL78-B-L	SM-SL78-B-R
Base cover material	CFRP	CFRP	GFRP	GFRP	GFRP
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted
I-spec compatible	X*	X*	X*	X*	X*
Compatible SL	SL-M980	SL-M980	SL-M820	SL-M780/SL-T780	SL-M780/SL-T780
Note	*I-spec B-type compatible	*I-spec B-type compatible	*I-spec B-type compatible	*I-spec B-type compatible	*I-spec B-type compatible

Brake Lever

Series	DXR	
Model no.	BL-MX70	
Color	1	Series color
	2	-
	3	-
Compatible brake type	V-BRAKE	X
	Mechanical disc brake (MTB)	X
	Mechanical disc brake (Road)	-
	Caliper (new super SLR)	-
	Caliper (super SLR)	-
	CANTI brake	-
	Roller brake	-
Recommended power modulator	V-BRAKE	-
	Mechanical disc brake (MTB)	-
Clamp band	Open clamp band	-
	I-spec compatible	-
	Diameter (mm)	-
Internal bumper stop	-	
Lever size (Finger)	2	
Brake cable type	T-type	
Power adjuster	-	
Servo-Wave action	-	
Reach adjust	X	
Cable adjust	X	
Cable adjust type	One hand	
Brake lever	Material	Aluminum
	Finish	Anodized
Brake bracket	Material	Aluminum
	Finish	Painted
Stainless clamp bolt	X	
Average weight	175g	
Note	For BMX	

Brake Lever

Disc Brake

Series		XTR	XTR	SAINT	DEORE XT	SLX	ZEE
Model no.		BL-M9000	BL-M9020	BL-M820-B	BL-M785-B	BL-M675-B	BL-M640-B
Brake type		Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake
Lever size (Finger)		2	2	2	2	2	2
Color	1	Series color	Series color	Series color	Black	Series color	Series color
	2	-	-	-	Silver	-	-
	3	-	-	-	-	-	-
Brake hose (Kit)		SM-BH90-SBM	SM-BH90-SBM	SM-BH90-SBLS	SM-BH90-SB	SM-BH90-SB	SM-BH90-SBS
Hose joint		Straight	Straight	Straight	Straight	Straight	Straight
Brake hose color (kit)	1	Black	Black	Black	Black	Black	Black
	2	-	-	White	White	White	White
Recommended brake caliper		BR-M9000	BR-M9020	BR-M820	BR-M785	BR-M675	BR-M640
Oil		SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
Funnel bleeding		X	X	X	X	X	X
Reach adjust	Toolless	-	X	X	X	X	-
	Tool	X	-	-	-	-	X
Free stroke adjust		-	X	X	X	-	-
Servo wave mechanism		-	X	X	X	X	X
Clamp band	Open clamp	X	X	X	X	X	X
	I-spec	X*	X*	X*	X*	X*	X*
Brake lever	Material	CFRP	Aluminum+CFRP	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Paint	Paint	Anodized	Anodized	Anodized	Anodized
Master cylinder	Material	Magnesium	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Paint	Paint	Painted	Painted	Painted	Painted
J-kit option available		X	X	-	X	X	-
Average weight		316g**	360g**	103.2g	117.8g	118.2g	116.7g
Note		*I-spec II **Kit for front	*I-spec II **Kit for front	*I-spec B-type	J-Kit spec available *I-spec B-type	J-Kit spec available *I-spec B-type	*I-spec B-type

Series		DEORE	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		BL-M615	BL-M506	BL-M445	BL-M396	BL-M355
Brake type		Hydraulic Disc brake	Hydraulic Disc brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake
Lever size (Finger)		2	2	2	2	3
Color	1	Black	Black	Black	Black	Black
	2	-	White	Silver	White	White
	3	-	-	White	-	-
Brake hose (Kit)		SM-BH90-SS	SM-BH59-SS	SM-BH59	SM-BH59	SM-BH59
Hose joint		Straight	Straight	Straight	Straight	Straight
Brake hose color (kit)	1	Black	Black	Black	Black	Black
	2	White	-	White	-	-
Recommended brake caliper		BR-M615	BR-M447	BR-M447	BR-M395	BR-M355
Oil		SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
Funnel bleeding		X	X	X	X	X
Reach adjust	Toolless	-	-	-	-	-
	Tool	X	X	X	X	X
Free stroke adjust		-	-	-	-	-
Servo wave mechanism		X	X	-	-	-
Clamp band	Open clamp	X	X	-	-	-
	I-spec	X*	X*	-	-	-
Brake lever	Material	Aluminum	Aluminum	Aluminum	Steel	Steel
	Finish	Anodized	Anodized	Anodized	Painted	Painted
Master cylinder	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
J-kit option available		X	X	-	-	-
Average weight		-	-	-	-	-
Note		*I-spec B-type	*I-spec B-type			

Shift/Brake Lever

Series		ALIVIO	ALIVIO	ACERA	ACERA	ALTUS	ALTUS	
Model no.		ST-M4000-L	ST-M4000-R	ST-M390-L	ST-M390-R	ST-M370-L	ST-M370-R	
Color	1	Series color	Series color	Black	Black	Black	Black	
	2	-	-	Silver	Silver	Silver	Silver	
Shift lever specifications	Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	
	Front speeds		3	-	3	-	3	-
	Rear speeds		-	9	-	9	-	9
	Compatible RD Type		-	MTB 9-speed RD	-	MTB 9-speed RD	-	MTB 9-speed RD
	SL position adjust		-	-	-	-	-	-
	SL cable adjust		X	X	X	X	X	X
	2/3 mode converter		-	-	-	-	-	-
	Max. multiple shifts (Main lever/rear)		-	3	-	3	-	3
	Release function	Multi release	-	-	-	-	-	-
		Instant release	-	-	-	-	-	-
		2-Way release	X	X	-	-	-	-
	Optical Gear Display	With	X	X	X	X	X	X
		With (removable)	-	-	-	-	-	-
		Without	-	-	-	-	-	-
	Multi-Bearing construction		-	-	-	-	-	-
	Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	SL cable	Material	Stainless steel	Stainless steel	Steel	Steel	Steel	Steel
		Finish	Standard	Standard	Standard	Standard	Standard	Standard
	Recommended SL outer casing		OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40
	Brake lever specifications	Compatible brake type	V-BRAKE	X	X	X	X	X
Mechanical disc brake (MTB)			X	X	X	X	X	X
Mechanical disc brake (Road)			-	-	-	-	-	-
Caliper (SLR EV)			-	-	-	-	-	-
Caliper (new super SLR)			-	-	-	-	-	-
Caliper (super SLR)			-	-	-	-	-	-
CANTI brake			-	-	-	-	-	-
Roller brake		-	-	-	-	-	-	
Recommended power modulator		V-BRAKE	-	-	-	-	-	-
		Mechanical disc brake (MTB)	-	-	-	-	-	-
Clamp band		Open clamp band	-	-	-	-	-	-
Internal bumper stop		X	X	X	X	-	-	
Lever size (Finger)		2	2	2	2	2	2	
Brake cable type		T-type	T-type	T-type	T-type	T-type	T-type	
Power adjuster		-	-	-	-	-	-	
Servo-Wave action		-	-	-	-	-	-	
Reach adjust		X	X	X	X	X	X	
Cable adjust		X	X	X	X	X	X	
Cable adjust type		Two hand	Two hand	Two hand	Two hand	Two hand	Two hand	
Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Painted	Painted	
Bracket	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish		Painted	Painted	Painted	Painted	Painted	
	Stainless clamp bolt		X	X	-	-	-	-
Average weight		-	-	-	-	-	-	
Note								

Shift/Brake Lever

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	TOURNEY TX	TOURNEY TX	
Model no.		ST-M310-L2	ST-M310-L4	ST-M310-8R2	ST-M310-8R4	ST-TX800-L	ST-TX800-8R	
Color	1	Black	Black	Black	Black	Black	Black	
	2	Silver	Silver	Silver	Silver	Silver	Silver	
Shift lever specifications	Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	EZ-fire Plus	EZ-fire Plus
	Front speeds		3	3	-	-	3	-
	Rear speeds		-	-	8	8	-	8
	Compatible RD Type		-	-	MTB 8-speed RD	MTB 8-speed RD	-	MTB 8-speed RD
	SL position adjust		-	-	-	-	-	-
	SL cable adjust		X	X	X	X	X	-
	2/3 mode converter		-	-	-	-	-	-
	Max. multiple shifts (Main lever/rear)		-	-	3	3	-	3
	Release function	Multi release	-	-	-	-	-	-
		Instant release	-	-	-	-	-	-
		2-Way release	-	-	-	-	-	-
	Optical Gear Display	With	X	X	X	X	X	X
		With (removable)	-	-	-	-	-	-
		Without	-	-	-	-	-	-
	Multi-Bearing construction		-	-	-	-	-	-
	Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin	Resin
		Finish	-	-	-	-	-	-
	Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin	Resin
		Finish	-	-	-	-	-	-
	SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
Finish		Standard	Standard	Standard	Standard	Standard	Standard	
Recommended SL outer casing		OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SIS40	OT-SIS40	
Brake lever specifications	Compatible brake type	V-BRAKE	X	X with switch	X	X with switch	X	X
		Mechanical disc brake (MTB)	X	X with switch	X	X with switch	X	X
		Mechanical disc brake (Road)	-	-	-	-	-	-
		Caliper (SLR EV)	-	-	-	-	-	-
		Caliper (new super SLR)	-	-	-	-	-	-
		Caliper (super SLR)	-	-	-	-	-	-
		CANTI brake	-	X with switch	-	X with switch	-	-
	Roller brake	-	X with switch	-	X with switch	-	-	
	Recommended power modulator	V-BRAKE	-	SM-PM40	-	SM-PM40	-	-
		Mechanical disc brake (MTB)	-	SM-PM50	-	SM-PM50	-	-
	Clamp band	Open clamp band	-	-	-	-	-	-
	Internal bumper stop		-	-	-	-	-	-
	Lever size (Finger)		2	4	2	4	2	2
	Brake cable type		T-type	T-type	T-type	T-type	T-type	T-type
	Power adjuster		-	-	-	-	-	-
	Servo-Wave action		-	-	-	-	-	-
	Reach adjust		X	X	X	X	X	X
Cable adjust		X	X	X	X	X	X	
Cable adjust type		Two hand	Two hand	Two hand	Two hand	Two hand	Two hand	
Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel/Resin	Steel/Resin	
	Finish	Anodized	Anodized	Anodized	Anodized	-	-	
Bracket	Material		Aluminum	Aluminum	Aluminum	Steel	Steel	
	Finish		Painted	Painted	Painted	Painted	Painted	
	Stainless clamp bolt		-	-	-	-	-	
Average weight		-	-	-	-	-	-	
Note			*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible			

SL

SMSL

BL

ST

RD

FD

BR

RT

RTAD

SMBH

FC

BB

CS

MF

CN

FH

HB

WH

PD

CI-DECK

Shift/Brake Lever

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		ST-EF65-L2	ST-EF65-L4	ST-EF65-9R2	ST-EF65-9R4	ST-EF65-8R2	ST-EF65-8R4
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver	Silver
Shift lever specifications	Shifter type		EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus
	Front speeds		3	3	-	-	-
	Rear speeds		-	-	9	9	8
	Compatible RD Type		-	-	MTB 9-speed RD	MTB 9-speed RD	MTB 8-speed RD
	SL position adjust		-	-	-	-	-
	SL cable adjust		X	X	X	X	X
	2/3 mode converter		-	-	-	-	-
	Max. multiple shifts (Main lever/rear)		-	-	3	3	3
	Release function	Multi release	-	-	-	-	-
		Instant release	-	-	-	-	-
		2-Way release	-	-	-	-	-
	Optical Gear Display	With	X	X	X	X	X
		With (removable)	-	-	-	-	-
		Without	-	-	-	-	-
	Multi-Bearing construction		-	-	-	-	-
	Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-
	Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-
	SL cable	Material	Steel	Steel	Steel	Steel	Steel
Finish		Standard	Standard	Standard	Standard	Standard	
Recommended SL outer casing		OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	
Brake lever specifications	Compatible brake type	V-BRAKE	X	X with switch	X	X with switch	X
		Mechanical disc brake (MTB)	X	X with switch	X	X with switch	X
		Mechanical disc brake (Road)	-	-	-	-	-
		Caliper (SLR EV)	-	-	-	-	-
		Caliper (new super SLR)	-	-	-	-	-
		Caliper (super SLR)	-	-	-	-	-
		CANTI brake	-	X with switch	-	X with switch	-
	Roller brake	-	X with switch	-	X with switch	-	
	Recommended power modulator	V-BRAKE	-	SM-PM40	-	SM-PM40	-
		Mechanical disc brake (MTB)	-	SM-PM50	-	SM-PM50	-
	Clamp band	Open clamp band	-	-	-	-	-
	Internal bumper stop		X	X	X	X	X
	Lever size (Finger)		2	4	2	4	2
	Brake cable type		T-type	T-type	T-type	T-type	T-type
	Power adjuster		-	-	-	-	-
	Servo-Wave action		-	-	-	-	-
	Reach adjust		X	X	X	X	X
Cable adjust		X	X	X	X	X	
Cable adjust type		Two hand	Two hand	Two hand	Two hand	Two hand	
Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	
Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	
	Stainless clamp bolt	-	-	-	-	-	
Average weight		-	-	-	-	-	
Note			*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible

Shift/Brake Lever

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	
Model no.		ST-EF65-7R2	ST-EF65-7R4	ST-EF51-L (2A)	ST-EF51-L (4A)	ST-EF51-9R(2A)	ST-EF51-9R (4A)	
Color	1	Black	Black	Black	Black	Black	Black	
	2	Silver	Silver	Silver	Silver	Silver	Silver	
Shift lever specifications	Shifter type	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	
	Front speeds	-	-	3	3	-	-	
	Rear speeds	7	7	-	-	9	9	
	Compatible RD Type	MTB 7-speed RD	MTB 7-speed RD	-	-	MTB 9-speed RD	MTB 9-speed RD	
	SL position adjust	-	-	-	-	-	-	
	SL cable adjust	X	X	X	X	-	-	
	2/3 mode converter	-	-	-	-	-	-	
	Max. multiple shifts (Main lever/rear)	3	3	-	-	3	3	
	Release function	Multi release	-	-	-	-	-	-
		Instant release	-	-	-	-	-	-
		2-Way release	-	-	-	-	-	-
	Optical Gear Display	With	X	X	X	X	X	X
		With (removable)	-	-	-	-	-	-
		Without	-	-	-	-	-	-
	Multi-Bearing construction	-	-	-	-	-	-	
	Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
Finish		Standard	Standard	Standard	Standard	Standard	Standard	
Recommended SL outer casing		OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	
Brake lever specifications	Compatible brake type	V-BRAKE	X	X with switch	X	X with switch	X	X with switch
		Mechanical disc brake (MTB)	X	X with switch	X	X with switch	X	X with switch
		Mechanical disc brake (Road)	-	-	-	-	-	-
		Caliper (SLR EV)	-	-	-	-	-	-
		Caliper (new super SLR)	-	-	-	-	-	-
		Caliper (super SLR)	-	-	-	-	-	-
		CANTI brake	-	X with switch	-	X with switch	-	X with switch
		Roller brake	-	X with switch	-	X with switch	-	X with switch
	Recommended power modulator	V-BRAKE	-	SM-PM40	-	SM-PM40	-	SM-PM40
		Mechanical disc brake (MTB)	-	SM-PM50	-	SM-PM50	-	SM-PM50
	Clamp band	Open clamp band	-	-	-	-	-	-
	Internal bumper stop		X	X	-	-	-	-
	Lever size (Finger)		2	4	2	4	2	4
	Brake cable type		T-type	T-type	T-type	T-type	T-type	T-type
	Power adjuster		-	-	-	-	-	-
	Servo-Wave action		-	-	-	-	-	-
	Reach adjust		X	X	X	X	X	X
	Cable adjust		X	X	X	X	X	X
	Cable adjust type		Two hand	Two hand	Two hand	Two hand	Two hand	Two hand
	Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Finish		Anodized	Anodized	Anodized (Black version) Barrel (Silver version)	Anodized (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	
Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
	Stainless clamp bolt	-	-	-	-	-	-	
Average weight		-	-	-	-	-	-	
Note			*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible	

Shift/Brake Lever

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	
Model no.		ST-EF51-8R (2A)	ST-EF51-8R (4A)	ST-EF51-7R (2A)	ST-EF51-7R (4A)	ST-EF51-AL(2A)	ST-EF51-AL(4A)	
Color	1	Black	Black	Black	Black	Black	Black	
	2	Silver	Silver	Silver	Silver	Silver	Silver	
Shift lever specifications	Shifter type	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	
	Front speeds	-	-	-	-	3	3	
	Rear speeds	8	8	7	7	-	-	
	Compatible RD Type	MTB 8-speed RD	MTB 8-speed RD	MTB 7-speed RD	MTB 7-speed RD	-	-	
	SL position adjust	-	-	-	-	-	-	
	SL cable adjust	-	-	-	-	X	X	
	2/3 mode converter	-	-	-	-	-	-	
	Max. multiple shifts (Main lever/rear)	3	3	3	3	-	-	
	Release function	Multi release	-	-	-	-	-	-
		Instant release	-	-	-	-	-	-
		2-Way release	-	-	-	-	-	-
	Optical Gear Display	With	X	X	X	X	X	X
		With (removable)	-	-	-	-	-	-
		Without	-	-	-	-	-	-
	Multi-Bearing construction	-	-	-	-	-	-	
	Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
Finish		Standard	Standard	Standard	Standard	Standard	Standard	
Recommended SL outer casing		OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	
Brake lever specifications	Compatible brake type	V-BRAKE	X	X with switch	X	X with switch	X	X with switch
		Mechanical disc brake (MTB)	X	X with switch	X	X with switch	X	X with switch
		Mechanical disc brake (Road)	-	-	-	-	-	-
		Caliper (SLR EV)	-	-	-	-	-	-
		Caliper (new super SLR)	-	-	-	-	-	-
		Caliper (super SLR)	-	-	-	-	-	-
		CANTI brake	-	X with switch	-	X with switch	-	X with switch
		Roller brake	-	X with switch	-	X with switch	-	X with switch
	Recommended power modulator	V-BRAKE	-	SM-PM40	-	SM-PM40	-	SM-PM40
		Mechanical disc brake (MTB)	-	SM-PM50	-	SM-PM50	-	SM-PM50
	Clamp band	Open clamp band	-	-	-	-	-	-
	Internal bumper stop		-	-	-	-	-	-
	Lever size (Finger)		2	4	2	4	2	4
	Brake cable type		T-type	T-type	T-type	T-type	T-type	T-type
	Power adjuster		-	-	-	-	-	-
	Servo-Wave action		-	-	-	-	-	-
	Reach adjust		X	X	X	X	X	X
	Cable adjust		X	X	X	X	X	X
	Cable adjust type		Two hand	Two hand	Two hand	Two hand	Two hand	Two hand
	Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Finish		Anodized (Black version) Barrel (Silver version)	Anodized (Black version) Barrel (Silver version)	Anodized (Black version) Barrel (Silver version)	Anodized (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	
Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
	Stainless clamp bolt	-	-	-	-	-	-	
Average weight		-	-	-	-	-	-	
Note			*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible	

Shift/Brake Lever

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	
Model no.		ST-EF51-A9R(2A)	ST-EF51-A9R (4A)	ST-EF51-A8R(2A)	ST-EF51-A8R (4A)	ST-EF51-A7R(2A)	ST-EF51-A7R (4A)	
Color	1	Black	Black	Black	Black	Black	Black	
	2	Silver	Silver	Silver	Silver	Silver	Silver	
Shift lever specifications	Shifter type	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	
	Front speeds	-	-	-	-	-	-	
	Rear speeds	9	9	8	8	7	7	
	Compatible RD Type	MTB 9-speed RD	MTB 9-speed RD	MTB 8-speed RD	MTB 8-speed RD	MTB 7-speed RD	MTB 7-speed RD	
	SL position adjust	-	-	-	-	-	-	
	SL cable adjust	-	-	-	-	-	-	
	2/3 mode converter	-	-	-	-	-	-	
	Max. multiple shifts (Main lever/rear)	3	3	3	3	3	3	
	Release function	Multi release	-	-	-	-	-	-
		Instant release	-	-	-	-	-	-
		2-Way release	-	-	-	-	-	-
	Optical Gear Display	With	X	X	X	X	X	X
		With (removable)	-	-	-	-	-	-
		Without	-	-	-	-	-	-
	Multi-Bearing construction	-	-	-	-	-	-	
	Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
		Finish	-	-	-	-	-	-
	SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
Finish		Standard	Standard	Standard	Standard	Standard	Standard	
Recommended SL outer casing		OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	OT-SP40	
Brake lever specifications	Compatible brake type	V-BRAKE	X	X with switch	X	X with switch	X	X with switch
		Mechanical disc brake (MTB)	X	X with switch	X	X with switch	X	X with switch
		Mechanical disc brake (Road)	-	-	-	-	-	-
		Caliper (SLR EV)	-	-	-	-	-	-
		Caliper (new super SLR)	-	-	-	-	-	-
		Caliper (super SLR)	-	-	-	-	-	-
		CANTI brake	-	X with switch	-	X with switch	-	X with switch
		Roller brake	-	X with switch	-	X with switch	-	X with switch
	Recommended power modulator	V-BRAKE	-	SM-PM40	-	SM-PM40	-	SM-PM40
		Mechanical disc brake (MTB)	-	SM-PM50	-	SM-PM50	-	SM-PM50
	Clamp band	Open clamp band	-	-	-	-	-	-
	Internal bumper stop	-	-	-	-	-	-	
	Lever size (Finger)		2	4	2	4	2	4
	Brake cable type		T-type	T-type	T-type	T-type	T-type	T-type
	Power adjuster		-	-	-	-	-	-
	Servo-Wave action		-	-	-	-	-	-
	Reach adjust		X	X	X	X	X	X
	Cable adjust		X	X	X	X	X	X
	Cable adjust type		Two hand	Two hand	Two hand	Two hand	Two hand	Two hand
	Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Finish		Painted (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	Painted (Black version) Barrel (Silver version)	
Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Stainless clamp bolt		-	-	-	-	-	-	
Average weight		-	-	-	-	-	-	
Note			*V-BRAKE and Mechanical Disc Brake must be used with power modulator *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator *INTER-M Compatible		*V-BRAKE and Mechanical Disc Brake must be used with power modulator *INTER-M Compatible	

Shift/Brake Lever

Series		SHIMANO	SHIMANO	SHIMANO			
Model no.		ST-EF41-L	ST-EF41-7R	ST-EF41-6R			
Color	1	Black	Black	Black			
	2	-	-	-			
Shift lever specifications	Shifter type		EZ-fire Plus	EZ-fire Plus	EZ-fire Plus		
	Front speeds		3	-	-		
	Rear speeds		-	7	6		
	Compatible RD Type		-	MTB 7-speed RD	MTB 6-speed RD		
	SL position adjust		-	-	-		
	SL cable adjust		X	-	-		
	2/3 mode converter		-	-	-		
	Max. multiple shifts (Main lever/rear)		-	3	3		
	Release function	Multi release		-	-	-	
		Instant release		-	-	-	
		2-Way release		-	-	-	
	Optical Gear Display	With		X	X	X	
		With (removable)		-	-	-	
		Without		-	-	-	
	Multi-Bearing construction		-	-	-		
	Main lever body	Material		Resin	Resin	Resin	
		Finish		-	-	-	
	Release lever body	Material		Resin	Resin	Resin	
		Finish		-	-	-	
	SL cable	Material		Steel	Steel	Steel	
Finish		Standard	Standard	Standard			
Recommended SL outer casing		OT-SIS40	OT-SIS40	OT-SIS40			
Brake lever specifications	Compatible brake type	V-BRAKE		X	X	X	
		Mechanical disc brake (MTB)		X	X	X	
		Mechanical disc brake (Road)		-	-	-	
		Caliper (SLR EV)		-	-	-	
		Caliper (new super SLR)		-	-	-	
		Caliper (super SLR)		-	-	-	
		CANTI brake		-	-	-	
		Roller brake		-	-	-	
	Recommended power modulator	V-BRAKE		-	-	-	
		Mechanical disc brake (MTB)		-	-	-	
	Clamp band		Open clamp band		-	-	-
	Internal bumper stop		-	-	-		
	Lever size (Finger)		2	2	2		
	Brake cable type		T-type	T-type	T-type		
	Power adjuster		-	-	-		
	Servo-Wave action		-	-	-		
	Reach adjust		X	X	X		
	Cable adjust		X	X	X		
	Cable adjust type		Two hand	Two hand	Two hand		
	Brake lever	Material		Steel/Resin	Steel/Resin	Steel/Resin	
Finish		-	-	-			
Bracket	Material		Steel	Steel	Steel		
	Finish		Painted	Painted	Painted		
	Stainless clamp bolt		-	-	-		
Average weight		-	-	-			
Note							

Shift/Brake Lever

Disc Brake

Series		ALIVIO	ALIVIO	
Model no.		ST-M4050-L	ST-M4050-R	
Color	1	Series color	Series color	
	2	-	-	
Shifter type		Rapid Fire Plus	Rapid Fire Plus	
Shift lever specifications	Front speeds	3	-	
	Rear speeds	-	9	
	2/3 mode converter	-	-	
	Max. multiple shifts (Main lever / rear)	-	3	
	Compatible RD type	-	MTB 9-speed RD	
	Ispec compatible	-	-	
	SL position adjust	-	-	
	Release function	Multi release	-	-
		Instant release	-	-
		2-Way release	X	X
	SL cable adjust		X	X
	Optical Gear Display	with	X	X
		with (removable)	-	-
		without	-	-
	Multi-Bearing construction		-	-
	SL outer casing		OT-SP40	OT-SP40
	SL cable	Polymer-coated cable	-	-
Ni-PTFE stainless cable		-	-	
Stainless		X	X	
Steel		-	-	
Brake lever specifications	Lever size (Finger)		2	2
	Brake hose (Kit)		SM-BH59	SM-BH59
	Hose joint		Straight	Straight
	Brake hose color (kit)	1	Black	Black
		2	-	-
	Recommended brake caliper		BR-M4050	BR-M4050
	Brake fluid	SHIMANO Mineral Oil	SHIMANO Mineral	SHIMANO Mineral
	Reach adjust	Toolless	-	-
		Tool	X	X
	Funnel bleeding		X	X
Free stroke adjust		-	-	
Servo wave mechanism		-	-	
Clamp band	Open clamp		-	-
	Ispec		-	-
	Inner diameter		-	-
Bracket	Material	Aluminum	Aluminum	
	Finish	Painted	Painted	
Brake lever	Material	Aluminum	Aluminum	
	Finish	Anodized	Anodized	
Shifter Lever body	Main	Resin & Steel	Resin & Steel	
	Release	Resin & Steel	Resin & Steel	
Master cylinder	Material	Aluminum	Aluminum	
	Finish	Painted	Painted	
Stainless clamp bolt		X	X	
Average weight		-	-	
Note				

Rear Derailleur

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		RD-M9000-SGS	RD-M9000-GS	RD-M981-GS	RD-M981-SGS	RD-M986-GS	RD-M986-SGS
Pulley cage		SGS	G5	GS	SGS	G5	SGS
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Rear speeds		11	11	10	10	10	10
Compatible chain		HG-X11	HG-X11	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Top-Normal spring type	SHADOW RD	-	-	X	X	-	-
	SHADOW RD+	X	X	-	-	X	X
	W servo	-	-	-	-	-	-
Direct attachment (Conventional)		X	X	X	X	X	X
Direct mount compatible		X*	X*	X*	X*	X*	X*
Riveted adapter	Road type	-	-	-	-	-	-
	BMX-Track type	-	-	-	-	-	-
Mode converter		-	-	-	-	-	-
Cable adjuster		-	-	-	-	-	-
Max. front difference		18T	10T	18T	18T	18T	18T
Total capacity		45T	37T	35T	41T	35T	41T
Low sprocket	Max.	40T	40T	36T	36T	36T	36T
	Min.	40T	40T	32T	32T	32T	32T
Top sprocket	Max.	11T	11T	11T	11T	11T	11T
	Min.	11T	11T	11T	11T	11T	11T
Fluoric coated link bushings		4	4	4	4	4	4
Pulley	G pulley bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing
	T pulley bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing
	Teeth	11T	11T	11	11	11	11
	Bolts material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Bolts retainer	X	X	X	X	X	X
	Sunken type pulley bolt	X	X	X	X	X	X
Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
B-Axle	Hollow axle	X	X	X	X	X	X
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
B-Axle 2	Hollow axle	-	-	X	X	X	X
	Material	Aluminum	Aluminum	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Anodized	Anodized	-	-	-	-
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Plate body	Material	CFRP	CFRP	Resin	Resin	Resin	Resin
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Outer plate	Material	CFRP	CFRP	CFRP	CFRP	CFRP	CFRP
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight		224g	227g	179g	181g	211g	213g
Note		*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available

Rear Derailleur

Series		SAINT	DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT
Model no.		RD-M820-SS	RD-M781-GS	RD-M781-SGS	RD-M786-GS	RD-M786-SGS	RD-M772-GS
Pulley cage		SS	G5	SG5	G5	SG5	G5
Color	1	Series color	Silver	Silver	Silver	Silver	Series color
	2	-	Black	Black	Black	Black	-
Rear speeds		10	10	10	10	10	9
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG 9-speed
Top-Normal spring type	SHADOW RD	-	X	X	-	-	X
	SHADOW RD+	X	-	-	X	X	-
	W servo	-	-	-	-	-	-
Direct attachment (Conventional)		X	X	X	X	X	X
Direct mount compatible		X	X*	X*	X*	X*	-
Riveted adapter	Road type	-	-	-	-	-	-
	BMX-Track type	-	-	-	-	-	-
Mode converter		X	-	-	-	-	-
Cable adjuster		-	-	-	-	-	-
Max. front difference		Single	18T	22T	18T	22T	22T
Total capacity		25T	35T	43T	35T	43T	35T
Low sprocket	Max.	28/36T*	36T	36T	36T	36T	36T
	Min.	23T	32T	32T	32T	32T	32T
Top sprocket	Max.	12T	11T	11T	11T	11T	11T
	Min.	11T	11T	11T	11T	11T	11T
Fluoric coated link bushings		5	4	4	4	4	4
Pulley	G pulley bearing	-	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	-
	T pulley bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing
	Teeth	11	11	11	11	11	11
	Bolts material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Bolts retainer	X	-	-	-	-	-
	Sunken type pulley bolt	X	X	X	X	X	X
Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
B-Axle	Hollow axle	X	X	X	X	X	X
	Material	Aluminum	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Anodized	-	-	-	-	-
B-Axle 2	Hollow axle	X	-	-	-	-	-
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Plate body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Average weight		280g (w/o mode converter)	234g	238g	262g	266g	227g
Note			*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available	

Rear Derailleur

Series		DEORE XT	DEORE XT	DEORE XT	SLX	SLX	SLX
Model no.		RD-M772-SGS	RD-M771-GS	RD-M771-SGS	RD-M670-GS	RD-M670-SGS	RD-M675-GS
Pulley cage		SGS	G5	SGS	G5	SGS	G5
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Rear speeds		9	9	9	10	10	10
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Top-Normal spring type	SHADOW RD	X	-	-	X	X	-
	SHADOW RD+	-	-	-	-	-	X
	W servo	-	X	X	-	-	-
Direct attachment (Conventional)		X	X	X	X	X	X
Direct mount compatible		-	-	-	X*	X*	X*
Riveted adapter	Road type	-	-	-	-	-	-
	BMX-Track type	-	-	-	-	-	-
Mode converter		-	-	-	-	-	-
Cable adjuster		-	-	-	-	-	-
Max. front difference		22T	22T	22T	18T	22T	18T
Total capacity		45T	35T	45T	35T	43T	35T
Low sprocket	Max.	36T	34T	34T	36T	36T	36T
	Min.	32T	32T	32T	32T	32T	32T
Top sprocket	Max.	11T	11T	11T	11T	11T	11T
	Min.	11T	11T	11T	11T	11T	11T
Fluoric coated link bushings		4	4	4	3	3	3
Pulley	G pulley bearing	-	-	-	-	-	-
	T pulley bearing	Sealed Bearing	Sealed Bearing	Sealed Bearing	-	-	-
	Teeth	11	11	11	11	11	11
	Bolts material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Bolts retainer	-	-	-	-	-	-
	Sunken type pulley bolt	X	X	X	X	X	X
Bracket	Material	Steel	-	-	Steel	Steel	Steel
	Finish	Painted	-	-	Painted	Painted	Painted
B-Axle	Hollow axle	X	X	X	X	X	X
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
B-Axle 2	Hollow axle	-	-	-	-	-	-
	Material	Stainless steel	-	-	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Plate body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer plate	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Average weight		229g	228g	238g	278g	281g	306g
Note					*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available

Rear Derailleur

Series		SLX	ZEE	DEORE	DEORE	DEORE	DEORE
Model no.		RD-M675-SGS	RD-M640-SS	RD-M610-GS	RD-M610-SGS	RD-M615-GS	RD-M615-SGS
Pulley cage		SGS	SS	GS	SGS	GS	SGS
Color	1	Series color	Series color	Black	Black	Black	Black
	2	-	-	Silver	Silver	Silver	Silver
Rear speeds		10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Top-Normal spring type	SHADOW RD	-	-	X	X	-	-
	SHADOW RD+	X	X	-	-	X	X
	W servo	-	-	-	-	-	-
Direct attachment (Conventional)		X	X	X	X	X	X
Direct mount compatible		X*	X	X*	X*	X*	X*
Riveted adapter	Road type	-	-	-	-	-	-
	BMX-Track type	-	-	-	-	-	-
Mode converter		-	-*	-	-	-	-
Cable adjuster		-	-	-	-	-	-
Max. front difference		22T	Single	18T	22T	18T	22T
Total capacity		43T	25T	35T	43T	35T	43T
Low sprocket	Max.	36T	36T(Freeride spec) 28T(DH spec)	36T	36T	36T	36T
	Min.	32T	23T	32T	32T	32T	32T
Top sprocket	Max.	11T	12T	11T	11T	11T	11T
	Min.	11T	11T	11T	11T	11T	11T
Fluor coated link bushings		3	3	3	3	3	3
Pulley	G pulley bearing	-	-	-	-	-	-
	T pulley bearing	-	-	-	-	-	-
	Teeth	11	11	11T	11T	11T	11T
	Bolts material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Bolts retainer	-	-	-	-	-	-
	Sunken type pulley bolt	X	X	X	X	X	X
Bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
B-Axle	Hollow axle	X	X	X	X	X	X
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
B-Axle 2	Hollow axle	-	-	X	X	X	X
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Plate body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer plate	Material	Steel	Aluminum	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Average weight		313g	275g	299g	308g	330g	339g
Note		*w/o bracket spec available	*Freeride spec and DH spec available	*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available	*w/o bracket spec available

Rear Derailleur

Series		DEORE	DEORE	ALIVIO	ACERA	ACERA	ALTUS
Model no.		RD-M592-SGS	RD-M591-SGS	RD-M4000	RD-M390-SGS	RD-M360-SGS	RD-M370-SGS
Pulley cage		SGS	SGS	SGS	SGS	SGS	SGS
Color	1	Series color	Silver	Series color	Black	Black	Black
	2	-	Black	-	Silver	Silver	Silver
Rear speeds		9	9	9	9	8/7	9
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 8/7-speed	HG 9-speed
Top-Normal spring type	SHADOW RD	X	-	X	-	-	-
	SHADOW RD+	-	-	-	-	-	-
	W servo	-	X	-	X	X	X
Direct attachment (Conventional)		X	X	X	X	X	X
Direct mount compatible		-	-	X*	-	-	-
Riveted adapter	Road type	-	-	-	-	-	-
	BMX-Track type	-	-	-	-	-	-
Mode converter		-	-	-	-	-	-
Cable adjuster		-	-	X	X	X	X
Max. front difference		22T	22T	22T	22T	20T	22T
Total capacity		45T	45T	45T	45T	43T	45T
Low sprocket	Max.	36T	34T	36T	34T	34T	34T
	Min.	32T	28T	32T	28T	28T	28T
Top sprocket	Max.	12T	12T	12T	12T	14T	11T
	Min.	11T	11T	11T	11T	11T	11T
Fluoric coated link bushings		3	3	2	1	1	-
Pulley	G pulley bearing	-	-	-	-	-	-
	T pulley bearing	-	-	-	-	-	-
	Teeth	11	11	11	11	13/13T	11/11T
	Bolts material	Stainless steel	Stainless steel	Stainless steel	Steel	Steel	Steel
	Bolts retainer	-	-	-	-	-	-
	Sunken type pulley bolt	X	X	X	X	-	X (Guide pulley) - (Tension pulley)
Bracket	Material	Steel	-	Steel	-	-	-
	Finish	Painted	-	Painted	-	-	-
B-Axle	Hollow axle	X	-	X	-	-	-
	Material	Stainless steel	Stainless steel	Stainless Steel	Stainless steel	Stainless steel	Steel
	Finish	-	-	-	-	-	-
B-Axle 2	Hollow axle	-	-	X	-	-	-
	Material	Stainless steel	-	Steel	-	-	-
	Finish	-	-	-	-	-	-
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	Painted	-	-	-
Plate body	Material	Aluminum	Aluminum	Resin	Resin	Resin	Resin
	Finish	Painted	Painted	Painted	Painted	- (Black) Painted (Silver)	Painted
Outer link	Material	Aluminum	Aluminum	CFRP	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Zinc Plated	Painted
Outer plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Zinc Plated	Painted
Average weight		-	-	-	-	-	-
Note				* w/o bracket spec available			

Rear Derailleur

Series		ALTUS	ALTUS	TOURNEY TX	Tourney	Tourney	Tourney
Model no.		RD-M310-Smart	RD-M280-SGS	RD-TX800	RD-TX55-SGS	RD-TX35-SGS	RD-FT55-SS
Pulley cage		Smart	SGS	SGS	SGS	SGS	SS
Color	1	Black	Series color	Black	Series color	Series color	Series color
	2	Silver	-	Silver	-	-	-
Rear speeds		8/7	8/7	8/7	7/6	7/6	7/6
Compatible chain		HG 8/7-speed	HG 8/7-speed	HG 8/7-speed	HG-UG 7/6-speed	HG-UG 7/6-speed	HG-UG 7/6-speed
Top-Normal spring type	SHADOW RD	-	-	-	-	-	-
	SHADOW RD+	-	-	-	-	-	-
	W servo	X	X	X	X	X	-
Direct attachment (Conventional)		X	X	X	X	X	X
Direct mount compatible		-	-	-	-	-	-
Riveted adapter	Road type	-	-	-	X	X	X
	BMX-Track type	-	-	-	X	X	X
Mode converter		-	-	-	-	-	-
Cable adjuster		X	X	X	X	X	X
Max. front difference		20T	20T	20T	20T	20T	Front single use
Total capacity		43T	43T	43T	43T	43T	17T
Low sprocket	Max.	34T	34T	34T	34T	34T	28T
	Min.	28T	28T	28T	28T	28T	28T
Top sprocket	Max.	14T	14T	14T	14T	14T	14T
	Min.	11T	11T	11T	11T	11T	11T
Fluoric coated link bushings		-	-	-	-	-	-
Pulley	G pulley bearing	-	-	-	-	-	-
	T pulley bearing	-	-	-	-	-	-
	Teeth	13/15T	13/13T	13/13T	13/13T	13/13T	11/11T
	Bolts material	Steel	Steel	Steel	Steel	Steel	Steel
	Bolts retainer	-	-	-	-	-	-
	Sunken type pulley bolt	-	-	-	-	-	-
Bracket	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
B-Axle	Hollow axle	-	-	-	-	-	-
	Material	Stainless steel	Steel	Stainless steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
B-Axle 2	Hollow axle	-	-	-	-	-	-
	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Bracket body	Material	Aluminum	Aluminum	Resin	Resin	Resin	Resin
	Finish	Painted	Painted	Painted	-	-	-
P-Axle	Material	Steel	Steel	-	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Plate body	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
Outer link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Chrome Plating + Name Plate
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Outer plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Nickel Plating	Chrome Plating
Inner plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Painted	Painted	Painted
Average weight		-	-	-	-	-	-
Note							Allen key fixing

Rear Derailleur

Series		Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.		RD-FT35-SS	RD-TZ50-GS	RD-TY21-A-SS	RD-TY21-A-SS	RD-TY21-A-GS	RD-TY21-A-GS
Pulley cage		SS	G5	SS	SS	G5	G5
Color	1	Series color	Black	Silver	Black	Silver	Black
	2	-	-	-	-	-	-
Rear speeds		7/6	6	6	6	6	6
Compatible chain		HG-UG 7/6-speed	HG-UG 6-speed	HG-UG 6-speed	HG-UG 6-speed	HG-UG 6-speed	HG-UG 6-speed
Top-Normal spring type	SHADOW RD	-	-	-	-	-	-
	SHADOW RD+	-	-	-	-	-	-
	W servo	-	-	-	-	-	-
Direct attachment (Conventional)		X	X	X	X	X	X
Direct mount compatible		-	-	-	-	-	-
Riveted adapter	Road type	X	X	X	X	X	X
	BMX-Track type	X	-	X	-	-	-
Mode converter		-	-	-	-	-	-
Cable adjuster		X	X	X	X	X	X
Max. front difference		Front single use	20T	13T	13T	20T	20T
Total capacity		17T	34T	28T	28T	34T	34T
Low sprocket	Max.	28T	28T	28T	28T	28T	28T
	Min.	28T	28T	28T	28T	28T	28T
Top sprocket	Max.	14T	14T	14T	14T	14T	14T
	Min.	11T	14T	14T	14T	14T	14T
Fluoric coated link bushings		-	-	-	-	-	-
Pulley	G pulley bearing	-	-	-	-	-	-
	T pulley bearing	-	-	-	-	-	-
	Teeth	11/11T	11/11T	11/11T	11/11T	11/11T	11/11T
	Bolts material	Steel	Steel	Steel	Steel	Steel	Steel
	Bolts retainer	-	-	-	-	-	-
	Sunken type pulley bolt	-	-	-	-	-	-
Bracket	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
B-Axle	Hollow axle	-	-	-	-	-	-
	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	Black	Black	Black	Black
B-Axle 2	Hollow axle	-	-	-	-	-	-
	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Bracket body	Material	Resin	Steel	Resin	Resin	Resin	Resin
	Finish	-	Painted	-	-	-	-
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	Zinc plated	Zinc plated	Zinc plated	Zinc plated
Plate body	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
Outer link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Zinc Plated	Painted	Zinc Plated	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Painted	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Outer plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Zinc Plated	Painted	Zinc Plated	Painted
Inner plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Zinc Plated	Painted	Zinc Plated	Painted
Average weight		-	-	-	-	-	-
Note							

Front Derailleur

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		FD-M9000-H	FD-M9000-L	FD-M9000-D	FD-M9000-E	FD-M9020-H	FD-M9020-L
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	3	3	3	3	2	2
	Rear	11	11	11	11	11	11
Compatible chain		HG-X11	HG-X11	HG-X11	HG-X11	HG-X11	HG-X11
Action	Top Swing	-	-	-	-	-	-
	Down Swing	-	-	-	-	-	-
	Side Swing	X	X	X	X	X	X
Mount	Clamp Band	28.6mm	X (w/ S size adapter)	X (w/ S size adapter)	-	X (w/ S size adapter)	X (w/ S size adapter)
		31.8mm	X (w/ M size adapter)	X (w/ M size adapter)	-	X (w/ M size adapter)	X (w/ M size adapter)
		34.9mm	X	X	-	-	X
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	-	-	X	-	-
	Direct Mount	-	-	X	-	-	-
Cable route type	Dual-Pull	-	-	-	-	-	-
	Top-Pull exclusive	-	-	-	-	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	X	X	X	X	X	X
Chain line (mm)		50	50	50	50	48.8	48.8
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69
Top gear teeth		40T	40T	40T	40T	34-38T	34-38T
Total capacity		18T	18T	18T	18T	10T	10T
Applicable Top-Mid tooth difference		10T	10T	10T	10T	-	-
Multi access cable fixing bolt		-	-	-	-	-	-
Angled stroke adjust bolt		X	X	X	X	X	X
Angled clamp band design		X	X	-	-	X	X
Link bushings		6	6	6	6	6	6
Front clamp band	Material	Aluminum	Aluminum	-	-	Aluminum	Aluminum
	Finish	Painted	Painted	-	-	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Stainless steel	Stainless steel	-	-	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Nickel Plating	Nickel Plating	Nickel Plating	Nickel Plating	Nickel Plating	Nickel Plating
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Average weight		137g	119g	120g	105g	131g	113g
Note							

Front Derailleur

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		FD-M9020-D	FD-M9020-E	FD-M9025-H	FD-M9025-L	FD-M9025-D	FD-M9025-E
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	2	2	2	2	2	2
	Rear	11	11	11	11	11	11
Compatible chain		HG-X11	HG-X11	HG-X11	HG-X11	HG-X11	HG-X11
Action	Top Swing	-	-	-	X	-	X
	Down Swing	-	-	X	-	X	-
	Side Swing	X	X	-	-	-	-
Mount	Clamp Band	28.6mm	-	-	X (w/ S size adapter)	X (w/ S size adapter)	-
		31.8mm	-	-	X (w/ M size adapter)	X (w/ M size adapter)	-
		34.9mm	-	-	X	X	-
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	X	-	-	-	X
	Direct Mount	X	-	-	-	X	-
Cable route type	Dual-Pull	-	-	X	-	X	-
	Top-Pull exclusive	-	-	X	-	X	-
	Down-Pull exclusive	-	-	-	X	-	X
	Front-Pull	X	X	-	-	-	-
Chain line (mm)		48.8	48.8	48.8	48.8	48.8	48.8
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69
Top gear teeth		34-38T	34-38T	34-38T	34-38T	34-38T	34-38T
Total capacity		10T	10T	10T	10T	10T	10T
Applicable Top-Mid tooth difference		-	-	-	-	-	-
Multi access cable fixing bolt		-	-	-	-	-	-
Angled stroke adjust bolt		X	X	X	X	X	X
Angled clamp band design		-	-	X	X	-	-
Link bushings		6	6	8	2	8	2
Front clamp band	Material	-	-	Aluminum	Aluminum	-	-
	Finish	-	-	Painted	Painted	-	-
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	-	-	Stainless steel	Stainless steel	-	-
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Aluminum	Aluminum	Aluminum	Steel	Aluminum	Steel
	Finish	Painted	Painted	Anodized	Painted	Anodized	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Nickel Plating	Nickel Plating	Nickel Plating	Nickel Plating	Nickel Plating	Nickel Plating
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Average weight		118g	103g	143g	129g	135g	124g
Note							

Front Derailleur

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		FD-M980	FD-M980-E	FD-M981	FD-M981-D	FD-M985	FD-M985-E
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	3	3	3	3	2	2
	Rear	10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Action	Top Swing	X	X	-	-	X	X
	Down Swing	-	-	X	X	-	-
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
		34.9mm	X	-	X	-	X
	BB Plate	-	X	-	-	-	X
	Without BB Plate	-	X	-	-	-	-
	Direct Mount	-	-	-	X	-	-
Cable route type	Dual-Pull	X	X	X	X	X	X
	Top-Pull exclusive	-	-	X	X	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		50	50	50	50	46.8 for 38T 48.8 for 40-44T	48.8 for 40-44T
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69
Top gear teeth		42T	42T	42T	42T	38-44T	40-44T
Total capacity		18T	18T	18T	18T	14T	14T
Applicable Top-Mid tooth difference		10T	10T	10T	10T	-	-
Multi access cable fixing bolt		X	X	-	-	X	X
Angled stroke adjust bolt		X	X	X	X	X	X
Angled clamp band design		X	-	X	-	X	-
Link bushings		2	2	8	8	2	2
Front clamp band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Anodized	-	Anodized	-	Anodized	-
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Anodized	Anodized
Clamp bolt	Material	Stainless steel	-	Stainless steel	-	Stainless steel	-
	Finish	-	-	-	-	-	-
BB plate	Material	-	Aluminum	-	-	-	Aluminum
	Finish	-	Painted	-	-	-	Painted
Outer link	Material	Steel	Steel	Aluminum	Aluminum	Steel	Steel
	Finish	Painted	Painted	Anodized	Anodized	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Nickel Plated	Nickel Plated	Nickel Plated	Nickel Plated	Nickel Plated	Nickel Plated
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Average weight		125g	142g (w / o BB plate)	148g	143g	135g	155g
Note					*Outer cable stopper integrated design		

Front Derailleur

Series		XTR	XTR	XTR	DEORE XT	DEORE XT	DEORE XT	
Model no.		FD-M985-E2	FD-M986	FD-M986-D	FD-M780-A-B	FD-M780-A-E	FD-M781-A-B	
Color		Series color	Series color	Series color	Black	Black	Black	
Speeds	Front	2	2	2	3	3	3	
	Rear	10	10	10	10	10	10	
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	
Action	Top Swing	X	-	-	X	X	-	
	Down Swing	-	X	X	-	-	X	
	Side Swing	-	-	-	-	-	-	
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	-	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
		34.9mm	-	X	-	X	-	X
	BB Plate	-	-	-	-	-	-	
	Without BB Plate	X	-	-	-	X	-	
	Direct Mount	-	-	X	-	-	-	
Cable route type	Dual-Pull	X	X	X	X	X	X	
	Top-Pull exclusive	-	X	X	-	-	X	
	Down-Pull exclusive	-	-	-	-	-	-	
	Front-Pull	-	-	-	-	-	-	
Chain line (mm)		46.8 for 38T 48.8 for 40-44T	46.8 for 38T 48.8 for 40-44T	46.8 for 38T 48.8 for 40-44T	50	50	50	
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69	
Top gear teeth		38-44T	38-44T	38-44T	40-42T	40-42T	40-42T	
Total capacity		14T	14T	14T	18T	18T	18T	
Applicable Top-Mid tooth difference		-	-	-	10T	10T	10T	
Multi access cable fixing bolt		X	-	-	X	X	-	
Angled stroke adjust bolt		X	X	X	X	X	X	
Angled clamp band design		-	X	-	X	-	X	
Link bushings		2	8	8	2	2	8	
Front clamp band	Material	-	Aluminum	-	Aluminum	-	Aluminum	
	Finish	-	Anodized	-	Painted	-	Painted	
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Painted	Painted	Painted	Painted	
Clamp bolt	Material	-	Stainless steel	-	Stainless steel	-	Stainless steel	
	Finish	-	-	-	-	-	-	
BB plate	Material	-	-	-	-	-	-	
	Finish	-	-	-	-	-	-	
Outer link	Material	Steel	Aluminum	Aluminum	Steel	Steel	Aluminum	
	Finish	Painted	Anodized	Anodized	Painted	Painted	Painted	
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Chain guide	Material	Steel	Aluminum	Aluminum	Steel	Steel	Steel	
	Finish	Nickel Plated	Nickel Plated	Nickel Plated	Chrome Plated	Chrome Plated	Chrome Plated	
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	-	-	-	-	-	-	
Average weight		125g	127g	122g	152g	141g	151g(Dual pull) 147g(Top pull)	
Note				*Outer cable stopper integrated design *new FD mount position is required when used for 44T				

Front Derailleur

Series		DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT	
Model no.		FD-M781-A-D	FD-M785	FD-M785-E2	FD-M786	FD-M786-D	FD-M770	
Color		Black	Black	Black	Black	Black	Series color	
Speeds	Front	3	2	2	2	2	3	
	Rear	10	10	10	10	10	9	
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG 9-speed	
Action	Top Swing	-	X	X	-	-	X	
	Down Swing	X	-	-	X	X	-	
	Side Swing	-	-	-	-	-	-	
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	-	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
		34.9mm	-	X	-	X	-	X
	BB Plate	-	-	-	-	-	-	
	Without BB Plate	-	-	X	-	-	-	
	Direct Mount	X	-	-	-	X	-	
Cable route type	Dual-Pull	X	X	X	X	X	X	
	Top-Pull exclusive	X	-	-	X	X	-	
	Down-Pull exclusive	-	-	-	-	-	-	
	Front-Pull	-	-	-	-	-	-	
Chain line (mm)		50	48.8	48.8	48.8	48.8	50	
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69	
Top gear teeth		40-42T	38-44T	38-44T	38-44T	38-44T	44/48T	
Total capacity		18T	14T	14T	14T	14T	22T	
Applicable Top-Mid tooth difference		10T	-	-	-	-	12T	
Multi access cable fixing bolt		-	X	X	-	-	-	
Angled stroke adjust bolt		X	X	X	X	X	X	
Angled clamp band design		-	X	-	X	-	X	
Link bushings		8	2	2	8	8	2	
Front clamp band	Material	-	Aluminum	-	Aluminum	-	Aluminum	
	Finish	-	Painted	-	Painted	-	Painted	
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Clamp bolt	Material	-	Stainless steel	-	Stainless steel	-	Stainless steel	
	Finish	-	-	-	-	-	-	
BB plate	Material	-	-	-	-	-	-	
	Finish	-	-	-	-	-	-	
Outer link	Material	Aluminum	Steel	Steel	Aluminum	Aluminum	Steel	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	-	-	-	-	-	-	
Average weight		143g(Dual pull) 139g(Top pull)	136g	127g	155g	146g	152g	
Note						*Outer cable stopper integrated design		

Front Derailleur

Series		DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT	SLX
Model no.		FD-M770-E	FD-M771	FD-M771-D	FD-M772A	FD-M773	FD-M670-A-B
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	3	3	3	3	3	3
	Rear	9	9	9	9	9	10
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG-X 10-speed
Action	Top Swing	X	-	-	X	-	X
	Down Swing	-	X	X	-	X	-
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	-	X (w/AdapterS)	X (w/AdapterS)
		31.8mm	-	X (w/AdapterM)	-	X (w/AdapterM)	X (w/AdapterM)
		34.9mm	-	X	-	X	X
	BB Plate	X	-	-	-	-	-
	Without BB Plate	X	-	-	-	-	-
	Direct Mount	-	-	X	-	-	-
Cable route type	Dual-Pull	X	X	X	X (w/AdapterM)	X (w/AdapterM)	X
	Top-Pull exclusive	-	-	-	X	X	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		50	50	50	50	50	50
Chain stay angle		66-69	66-69	66-69	63-66	66-69	66-69
Top gear teeth		44T	44T	44T	44/48T	44/48T	40-42T
Total capacity		22T	22T	22T	22T	22T	18T
Applicable Top-Mid tooth difference		12T	12T	12T	12T	12T	10T
Multi access cable fixing bolt		-	-	-	-	-	X
Angled stroke adjust bolt		X	X	X	-	-	X
Angled clamp band design		-	X	-	X	X	X
Link bushings		2	8	8	2	7	2
Front clamp band	Material	-	Aluminum	-	Aluminum	Aluminum	Aluminum
	Finish	-	Painted	-	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	-	Painted	Painted	Painted
Clamp bolt	Material	-	Stainless steel	-	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
BB plate	Material	Aluminum	-	-	-	-	-
	Finish	Painted	-	-	-	-	-
Outer link	Material	Steel	Aluminum	Aluminum	Steel	Aluminum	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Average weight		166g	155g	147g	160g	174g	153g
Note				*Outer cable stopper integrated design			

Front Derailleur

Series		SLX	SLX	SLX	SLX	SLX	SLX	
Model no.		FD-M670-A-E	FD-M671-A-B	FD-M671-A-D	FD-M675-B	FD-M675-E2	FD-M676-B	
Color		Series color	Series color	Series color	Series color	Series color	Series color	
Speeds	Front	3	3	3	2	2	2	
	Rear	10	10	10	10	10	10	
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	
Action	Top Swing	X	-	-	X	X	-	
	Down Swing	-	X	X	-	-	X	
	Side Swing	-	-	-	-	-	-	
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	-	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
		34.9mm	-	X	-	X	-	X
	BB Plate	-	-	-	-	-	-	
	Without BB Plate	X	-	-	-	X	-	
	Direct Mount	-	-	X	-	-	-	
Cable route type	Dual-Pull	X	X	X	X	X	X	
	Top-Pull exclusive	-	X	X	-	-	X	
	Down-Pull exclusive	-	-	-	-	-	-	
	Front-Pull	-	-	-	-	-	-	
Chain line (mm)		50	50	50	48.8	48.8	48.8	
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69	
Top gear teeth		40-42T	40-42T	40-42T	38-44T	38-44T	38-44T	
Total capacity		18T	18T	18T	14T	14T	14T	
Applicable Top-Mid tooth difference		10T	10T	10T	-	-	-	
Multi access cable fixing bolt		X	-	-	X	X	-	
Angled stroke adjust bolt		X	X	X	X	X	X	
Angled clamp band design		-	X	-	X	-	X	
Link bushings		2	8	8	2	2	8	
Front clamp band	Material	-	Aluminum	-	Aluminum	-	Aluminum	
	Finish	-	Painted	-	Painted	-	Painted	
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Clamp bolt	Material	-	Stainless steel	-	Stainless steel	-	Stainless steel	
	Finish	-	-	-	-	-	-	
BB plate	Material	-	-	-	-	-	-	
	Finish	-	-	-	-	-	-	
Outer link	Material	Steel	Aluminum	Aluminum	Steel	Steel	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	-	-	-	-	-	-	
Average weight		142g	155g	145g	138g	129g	157.5g	
Note								

Front Derailleur

Series		SLX	SLX	SLX	SLX	SLX	DEORE	
Model no.		FD-M676-D	FD-M660	FD-M660-E	FD-M661	FD-M661-D	FD-M610-B	
Color		Series color	Series color	Series color	Series color	Series color	Black	
Speeds	Front	2	3	3	3	3	3	
	Rear	10	9	9	9	9	10	
Compatible chain		HG-X 10-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG-X 10-speed	
Action	Top Swing	-	X	X	-	-	X	
	Down Swing	X	-	-	X	X	-	
	Side Swing	-	-	-	-	-	-	
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	-	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
		34.9mm	-	X	-	X	-	X
	BB Plate	-	-	X	-	-	-	
	Without BB Plate	-	-	-	-	-	-	
	Direct Mount	X	-	-	-	X	-	
Cable route type	Dual-Pull	X	X	X	X	X	X	
	Top-Pull exclusive	X	-	-	-	-	-	
	Down-Pull exclusive	-	-	-	-	-	-	
	Front-Pull	-	-	-	-	-	-	
Chain line (mm)		48.8	50	50	50	50	50	
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69	
Top gear teeth		38-44T	44T	44T	44T	44T	40-42T	
Total capacity		14T	22T	22T	22T	22T	18T	
Applicable Top-Mid tooth difference		-	12T	12T	12T	12T	10T	
Multi access cable fixing bolt		-	-	-	-	-	X	
Angled stroke adjust bolt		X	X	X	X	X	X	
Angled clamp band design		-	X	-	X	-	X	
Link bushings		8	2	2	8	8	2	
Front clamp band	Material	-	Aluminum	-	Aluminum	Aluminum	Aluminum	
	Finish	-	Painted	-	Painted	-	Painted	
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Clamp bolt	Material	-	Stainless steel	-	Stainless steel	-	Stainless steel	
	Finish	-	-	-	-	-	-	
BB plate	Material	-	-	Aluminum	-	-	-	
	Finish	-	-	Painted	-	-	-	
Outer link	Material	Aluminum	Steel	Steel	Aluminum	Aluminum	Steel	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Pearl Bright	
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	-	-	-	-	-	-	
Average weight		148g	-	170g	-	150g	154g	
Note		*Outer cable stopper integrated design				*Outer cable stopper integrated design		

Front Derailleur

Series		DEORE	DEORE	DEORE	DEORE	DEORE	DEORE	
Model no.		FD-M610-E	FD-M611-B	FD-M611-D	FD-M615-B	FD-M615-E2	FD-M616-B	
Color		Black	Black	Black	Black	Black	Black	
Speeds	Front	3	3	3	2	2	2	
	Rear	10	10	10	10	10	10	
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	
Action	Top Swing	X	-	-	X	X	-	
	Down Swing	-	X	X	-	-	X	
	Side Swing	-	-	-	-	-	-	
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	-	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
		34.9mm	-	X	-	X	-	X
	BB Plate	-	-	-	-	-	-	
	Without BB Plate	X	-	-	-	X	-	
	Direct Mount	-	-	X	-	-	-	
Cable route type	Dual-Pull	X	X	X	X	X	X	
	Top-Pull exclusive	-	X	X	-	-	X	
	Down-Pull exclusive	-	-	-	-	-	-	
	Front-Pull	-	-	-	-	-	-	
Chain line (mm)		50	50	50	48.8	48.8	48.8	
Chain stay angle		66-69	66-69	66-69	66-69	66-69	66-69	
Top gear teeth		40-42T	40-42T	40-42T	38-44T	38-40T	38-44T	
Total capacity		18T	18T	18T	14T	14T	14T	
Applicable Top-Mid tooth difference		10T	10T	10T	-	-	-	
Multi access cable fixing bolt		X	-	-	X	X	-	
Angled stroke adjust bolt		X	X	X	X	X	X	
Angled clamp band design		-	X	-	X	-	X	
Link bushings		2	8	8	2	2	8	
Front clamp band	Material	-	Aluminum	-	Aluminum	-	Aluminum	
	Finish	-	Painted	-	Painted	-	Painted	
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Clamp bolt	Material	-	Stainless steel	-	Stainless steel	-	Stainless steel	
	Finish	-	-	-	-	-	-	
BB plate	Material	-	-	-	-	-	-	
	Finish	-	-	-	-	-	-	
Outer link	Material	Steel	Aluminum	Aluminum	Steel	Steel	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Pearl Bright	Pearl Bright	Pearl Bright	
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	-	-	-	-	-	-	
Average weight		143g	155g(Dual pull) 151g(Top pull)	146g(Dual pull) 141g(Top pull)	138g(Dual pull)	129g	158g(Dual pull) 151g(Top pull)	
Note								

Front Derailleur

Series		DEORE	ALIVIO	ALIVIO	ALIVIO	ALIVIO	ALIVIO	
Model no.		FD-M616-D	FD-M4000-TS3	FD-M4000-TS6	FD-M4000-DS3	FD-M4000-DS6	FD-M410-E	
Color		Black	Series color	Series color	Series color	Series color	Series color	
Speeds	Front	2	3	3	3	3	3	
	Rear	10	9	9	9	9	8/7	
Compatible chain		HG-X 10-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 8/7-speed	
Action	Top Swing	-	X	X	-	-	X	
	Down Swing	X	-	-	X	X	-	
	Side Swing	-	-	-	-	-	-	
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	-
		31.8mm	-	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	-
		34.9mm	-	X	X	X	X	-
	BB Plate	-	-	-	-	-	-	X
	Without BB Plate	-	-	-	-	-	-	-
	Direct Mount	X	-	-	-	-	-	-
Cable route type	Dual-Pull	X	X	X	X	X	X	
	Top-Pull exclusive	X	-	-	-	-	-	
	Down-Pull exclusive	-	-	-	-	-	-	
	Front-Pull	-	-	-	-	-	-	
Chain line (mm)		48.8	50	50	50	50	50	
Chain stay angle		66-69	63-66	66-69	63-66	66-69	63-69 *	
Top gear teeth		38-44T	40T	40T	40T	40T	42T	
Total capacity		14T	18T	18T	18T	18T	20T	
Applicable Top-Mid tooth difference		-	10T	10T	10T	10T	10T	
Multi access cable fixing bolt		-	-	-	-	-	-	
Angled stroke adjust bolt		X	X	X	X	X	-	
Angled clamp band design		-	X	X	X	X	-	
Link bushings		8	-	-	2	2	-	
Front clamp band	Material	-	Steel	Steel	Steel	Steel	Steel	
	Finish	-	Painted	Painted	Painted	Painted	Painted	
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Clamp bolt	Material	-	Stainless steel	Stainless steel	Stainless steel	Stainless steel	-	
	Finish	-	-	-	-	-	-	
BB plate	Material	-	-	-	-	-	Aluminum	
	Finish	-	-	-	-	-	Painted	
Outer link	Material	Aluminum	Steel	Steel	Aluminum	Aluminum	Steel	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Inner link	Material	Aluminum	Steel	Steel	Aluminum	Aluminum	Steel	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Pearl Bright	Chrome plated	Chrome plated	Chrome plated	Chrome plated	Chrome Plated	
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Steel	
	Finish	-	-	-	-	-	-	
Average weight		149g(Dual pull) 142g(Top pull)	-	-	-	-	-	
Note							* Slits are required on the right side edge of BB shell	

Front Derailleur

Series		ACERA	ACERA	ACERA	ACERA	ALTUS	ALTUS
Model no.		FD-M390-3	FD-M390-6	FD-M360-3	FD-M360-6	FD-M370-3	FD-M370-6
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	3	3	3	3	3	3
	Rear	9	9	8/7	8/7	9	9
Compatible chain		HG 9-speed	HG 9-speed	HG 8/7-speed	HG 8/7-speed	HG 9-speed	HG 9-speed
Action	Top Swing	X	X	X	X	X	X
	Down Swing	-	-	-	-	-	-
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)
		31.8mm	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)
		34.9mm	X	X	X	X	X
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	-	-	-	-	-
	Direct Mount	-	-	-	-	-	-
Cable route type	Dual-Pull	X	X	X	X	X	X
	Top-Pull exclusive	-	-	-	-	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		50	50	47.5 / 50	47.5 / 50	50	50
Chain stay angle		63-66	66-69	63-66	66-69	63-66	66-69
Top gear teeth		44/48T	44/48T	42/48T	42/48T	44T/48T	44T/48T
Total capacity		22T	22T	20T	20T	22T	22T
Applicable Top-Mid tooth difference		12T	12T	10T	10T	12T	12T
Multi access cable fixing bolt		-	-	-	-	-	-
Angled stroke adjust bolt		-	-	-	-	-	-
Angled clamp band design		X	X	X	X	X	X
Link bushings		-	-	-	-	-	-
Front clamp band	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plate	Chrome Plate
Cable fixing bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Average weight		-	-	-	-	-	-
Note							

Front Derailleur

Series		ALTUS	ALTUS	ALTUS	ALTUS	ALTUS	ALTUS
Model no.		FD-M371-3	FD-M371-6	FD-M313-3	FD-M313-6	FD-M310-3	FD-M310-6
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	3	3	3	3	3	3
	Rear	9	9	8/7	8/7	8/7	8/7
Compatible chain		HG 9-speed	HG 9-speed	HG 8/7-speed	HG 8/7-speed	HG 8/7-speed	HG 8/7-speed
Action	Top Swing	-	-	-	-	X	X
	Down Swing	X	X	X	X	-	-
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)
		31.8mm	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)
		34.9mm	X	X	X	X	X
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	-	-	-	-	-
	Direct Mount	-	-	-	-	-	-
Cable route type	Dual-Pull	X	X	X	X	X	X
	Top-Pull exclusive	-	-	-	-	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		50	50	47.5 / 50	47.5 / 50	47.5 / 50	47.5 / 50
Chain stay angle		63-66	66-69	63-66	66-69	63-66	66-69
Top gear teeth		44T/48T	44T/48T	42/48T	42/48T	42/48T	42/48T
Total capacity		22T	22T	20T	20T	20T	20T
Applicable Top-Mid tooth difference		12T	12T	10T	10T	10T	10T
Multi access cable fixing bolt		-	-	-	-	-	-
Angled stroke adjust bolt		-	-	-	-	-	-
Angled clamp band design		X	X	X	X	X	X
Link bushings		-	-	-	-	-	-
Front clamp band	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plate	Chrome Plate	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Cable fixing bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Average weight		-	-	-	-	-	-
Note							

Front Derailleur

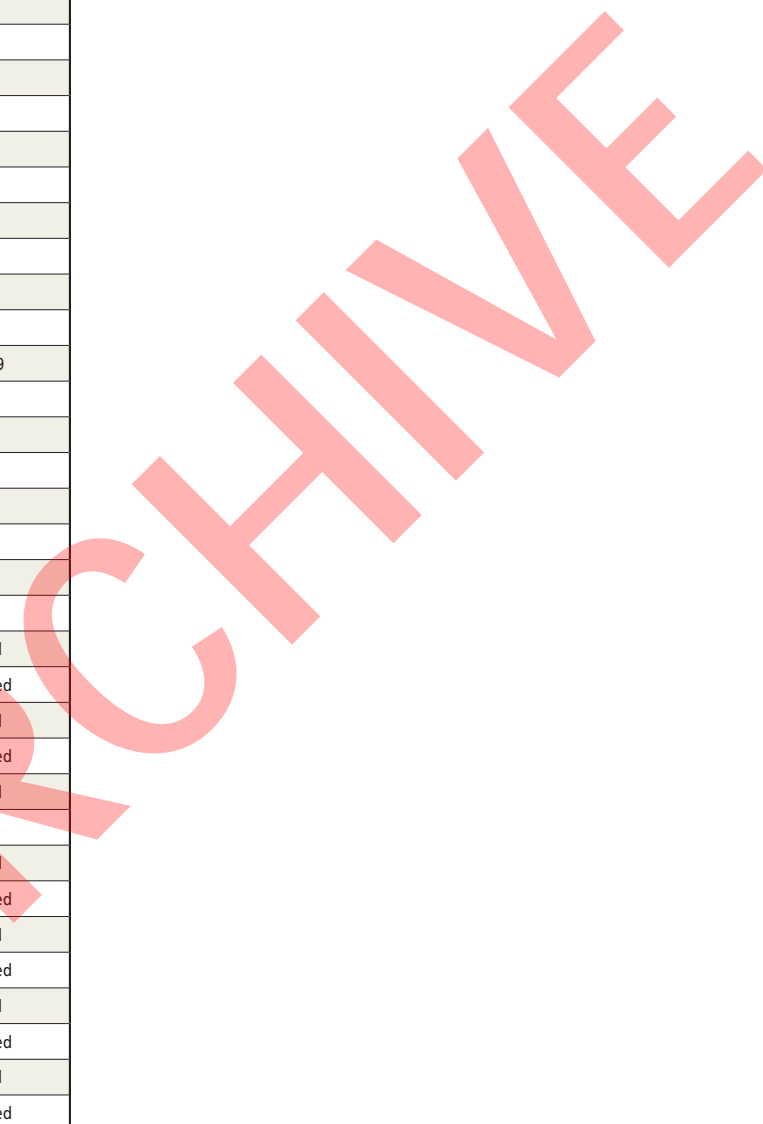
Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	TOURNEY TX	TOURNEY TX
Model no.		FD-M190-3	FD-M190A-6	FD-M191-3	FD-M191-6	FD-TX800-TS3	FD-TX800-TS6
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	3	3	3	3	3	3
	Rear	8/7	8/7	8/7	8/7	8/7	8/7
Compatible chain		HG 8/7-speed	HG 8/7-speed	HG 8/7-speed	HG 8/7-speed	HG 8/7-speed	HG 8/7-speed
Action	Top Swing	X	X	X	X	X	X
	Down Swing	-	-	-	-	-	-
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)
		31.8mm	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)
		34.9mm	X	X	X	X	X
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	-	-	-	-	-
	Direct Mount	-	-	-	-	-	-
Cable route type	Dual-Pull	X	X	X	X	X	X
	Top-Pull exclusive	-	-	-	-	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		47.5 / 50	47.5 / 50	47.5 / 50	47.5 / 50	47.5 / 50	47.5 / 50
Chain stay angle		63-66	66-69	63-66	66-69	63-66	66-69
Top gear teeth		42T	42T	48T	48T	42/48T	42/48T
Total capacity		18T	18T	20T	20T	20T	20T
Applicable Top-Mid tooth difference		8T	8T	10T	10T	10T	10T
Multi access cable fixing bolt		-	-	-	-	-	-
Angled stroke adjust bolt		-	-	-	-	-	-
Angled clamp band design		X	X	X	X	X	X
Link bushings		-	-	-	-	-	-
Front clamp band	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Cable fixing bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Average weight		-	-	-	-	-	-
Note							

Front Derailleur

Series		Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.		FD-TX50-3	FD-TX50-6	FD-TX51-3	FD-TX51-6	FD-TY10	FD-TZ30
Color		Series color	Series color	Series color	Series color	Series color	Series color
Speeds	Front	3	3	3	3	3	3 (friction)
	Rear	7/6	7/6	7/6	7/6	7/6	7/6
Compatible chain		HG-UG 7/6-speed	HG-UG 7/6-speed	HG-UG 7/6-speed	HG-UG 7/6-speed	HG-UG 7/6-speed	HG-UG 7/6-speed
Action	Top Swing	X	X	X	X	-	-
	Down Swing	-	-	-	-	X	X
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X
		31.8mm	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X
		34.9mm	X	X	X	X	X*
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	-	-	-	-	-
	Direct Mount	-	-	-	-	-	-
Cable route type	Dual-Pull	X	X	X	X	-	-
	Top-Pull exclusive	-	-	-	-	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		47.5 / 50	47.5 / 50	47.5 / 50	47.5 / 50	47.5	47.5
Chain stay angle		63-66	66-69	63-66	66-69	66-69	66-69
Top gear teeth		42T	42T	48T	48T	42T	42T
Total capacity		18T	18T	20T	20T	18T	18T
Applicable Top-Mid tooth difference		8T	8T	10T	10T	8T	8T
Multi access cable fixing bolt		-	-	-	-	-	-
Angled stroke adjust bolt		-	-	-	-	-	-
Angled clamp band design		X	X	X	X	-	-
Link bushings		-	-	-	-	-	-
Front clamp band	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Painted
Rear clamp band, base bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Painted
Clamp bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	Steel	Steel
	Finish	-	-	-	-	Zinc Plated	Painted
Outer link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Zinc Plated	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated / Painted	Zinc Plated / Painted	Zinc Plated / Painted	Zinc Plated / Painted	Zinc Plated / Painted	Painted
Cable fixing bolt	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Average weight		-	-	-	-	-	-
Note						*For 50mm chain line	

Front Derailleur

Series		Tourney	
Model no.		FD-TZ31	
Color		Series color	
Speeds	Front	3 (friction)	
	Rear	7/6	
Compatible chain		HG-UG 7/6-speed	
Action	Top Swing	-	
	Down Swing	X	
	Side Swing	-	
Mount	Clamp Band	28.6mm	X
		31.8mm	X
		34.9mm	-
	BB Plate	-	
	Without BB Plate	-	
Direct Mount	-		
Cable route type	Dual-Pull	-	
	Top-Pull exclusive	-	
	Down-Pull exclusive	-	
	Front-Pull	-	
Chain line (mm)		47.5	
Chain stay angle		66-69	
Top gear teeth		48T	
Total capacity		20T	
Applicable Top-Mid tooth difference		10T	
Multi access cable fixing bolt		-	
Angled stroke adjust bolt		-	
Angled clamp band design		-	
Link bushings		-	
Front clamp band	Material	Steel	
	Finish	Painted	
Rear clamp band, base bracket	Material	Steel	
	Finish	Painted	
Clamp bolt	Material	Steel	
	Finish	-	
BB plate	Material	Steel	
	Finish	Painted	
Outer link	Material	Steel	
	Finish	Painted	
Inner link	Material	Steel	
	Finish	Painted	
Chain guide	Material	Steel	
	Finish	Painted	
Cable fixing bolt	Material	Steel	
	Finish	-	
Average weight		-	
Note			



SL

SMSL

BL

ST

RD

FD

BR

RT

RTAD

SMBH

FC

BB

CS

MF

CN

FH

HB

WH

PD

CI-DECK

Brake

V-BRAKE

Series		DXR
Model no.		BR-MX70
Color	1	Series color
	2	-
	3	-
Brake type		V-BRAKE
Brake shoe type	Standard 1	S70C
	Standard 2	-
	Option 1	M70T4
	Option 2	M70T3
Cartridge shoe holder		X
Arch size (mm)		103
Spacer type	X type	X
	Y type	X
Compatible lead pipe angle (deg.)		45/90/135
Sleeve & Bushing axle		X
V-arm/Caliper	Material	Aluminum
	Finish	Anodized
	Light weight link	X
Cover	Material	Aluminum
	Finish	Anodized
Fixing bolt length (mm)	16	X
	25	X
Fixing bolt	Material	Stainless steel
	Finish	Plated
	Chamfered bolt	X
Power modulator		X (OPTION SM-PM70)
Linear spring		-
Stainless cable fixing bolt		X
Average weight		184g
Note		

ARCHIVE

Brake

Disc Brake

Series	XTR	XTR	SAINT	DEORE XT	SLX	ZEE	
Model no.	BR-M9000	BR-M9020	BR-M820	BR-M785	BR-M675	BR-M640	
Color	1	Series color	Series color	Black	Series color	Series color	
	2	-	-	Silver	-	-	
	3	-	-	-	-	-	
Brake type	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	
Brake hose (kit)	SM-BH90-SBM	SM-BH90-SBM	SM-BH90-SBLS	SM-BH90-SB	SM-BH90-SB	SM-BH90-SBS	
Hose joint	Banjo	Banjo	Banjo	Banjo	Banjo	Banjo	
Brake hose color (kit)	1	Black	Black	Black	Black	Black	
	2	-	-	White	White	White	
ICE TECHNOLOGY pad compatible caliper	X	X	X	X	X	X	
Pad	Standard 1	G02A Resin	J02 A Resin	H01A Resin	G01A Resin	G01S Resin	D01S Resin
	Standard 2	G04Ti Metal	J04C Metal	H03C Metal	F03C Metal	F03C Metal	D02S Metal
	Option 1	J02 A Resin	G02A Resin	-	G03S Metal	G03S Metal	H01A Resin
	Option 2	J04C Metal	G04Ti Metal	-	F01A Resin	F01A Resin	-
Recommended brake lever	BL-M9000	BL-M9020	BL-M820	BL-M785/BL-T785	BL-M675	BL-M640	
Recommended brake rotor	*SM-RT99	*SM-RT99	SM-RT99, SM-RT86	SM-RT81 SM-RT86	SM-RT68, SM-RT66	SM-RT68, SM-RT66	
Oil	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	
One way bleeding	X	X	X	X	X	X	
Mount type (available for IS mount with mount adapter)	Post-type	Post-type	Post-type	Post-type	Post-type	Post-type	
Piston	2	2	4	2	2	4	
Piston material	High insulation Resin	High insulation Resin	Ceramic	Ceramic	Ceramic	Ceramic	
Caliper	Mono-body	-	X	-	-	-	
	Material	Magnesium	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Paint	Paint	Painted	Painted	Painted	Painted
Caliper fixing bolt	Material	Ti	Ti	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Tool size	**4mm	**4mm	5mm	5mm	5mm	5mm
	Anti loosen method	Wiring	Wiring	Snap ring	Snap ring	Snap ring	Snap ring
Pad mount	Pad axle	Pad axle	Pad axle	Pad axle	Sprit pin	Sprit pin	
Average weight	316g***	360g***	306g (Resin pad w / radiator fin)	262g (F&R, Resin pad w / radiator fin)	264g(F&R, Resin pad)	314g (Resin pad)	
Note	J-Kit spec available *140mm for rear only **Titanium ***Kit for front	J-Kit spec available *140mm for rear only **Titanium ***Kit for front		J-Kit spec available	J-Kit spec available		

Series	DEORE	DEORE	SHIMANO	SHIMANO	SHIMANO	ALIVIO
Model no.	BR-M615	BR-M615	BR-M447	BR-M446	BR-M416A	BR-M4050
Color	1	Black	Black	Black	Black	Series color
	2	-	-	Silver	Silver	-
	3	-	-	White	White	-
Brake type	Hydraulic Disc brake	Hydraulic Disc brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Mechanical Disc-brake	Hydraulic Disc-brake
Brake hose (kit)	SM-BH90-SS	SM-BH90-SS	SM-BH59	SM-BH59	Cable	SM-BH59
Hose joint	Straight	Straight	Straight	Straight	-	Straight
Brake hose color (kit)	1	Black	Black	Black	-	Black
	2	White	White	White	White	-
ICE TECHNOLOGY pad compatible caliper	X	X	-	-	-	-
Pad	Standard 1	G01S Resin	G01S Resin	B01S Resin	B01S Resin	B01S Resin
	Standard 2	G03S Metal	G03S Metal	-	-	-
	Option 1	F01A Resin	F01A Resin	-	-	-
	Option 2	-	-	-	-	-
Recommended brake lever	BL-M615	BL-M615	BL-M445 / BL-T445 / BL-M506	BL-M445 / BL-T445 / BL-M506	V-BRAKE BL (1.5-2.5 finger)	ST-M4050
Recommended brake rotor	SM-RT64, SM-RT66	SM-RT64, SM-RT66	SM-RT54 SM-RT56	SM-RT54 SM-RT56	SM-RT54 SM-RT56	SM-RT54 SM-RT56
Oil	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	-	SHIMANO Mineral
One way bleeding	X	X	X	X	-	X
Mount type (available for IS mount with mount adapter)	Post-type	Post-type	Post-type	Post-type	Post-type	Post-type
Piston	2	2	2	2	1	2
Piston material	Resin	Resin	Resin	Resin	-	Resin
Caliper	Mono-body	-	-	-	-	-
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
Caliper fixing bolt	Material	Steel	Steel	Steel	Steel	Steel
	Tool size	5mm	5mm	5mm	5mm	5mm
	Anti loosen method	Snap ring	Snap ring	Snap ring	Snap ring	Snap ring
Pad mount	Split pin	Split pin	Split pin	Split pin	Split pin	Split pin
Average weight	285g(F&R, Resin pad)	285g(F&R, Resin pad)	-	-	-	-
Note		SHIMANO logo				

Brake

Disc Brake

Series	SHIMANO	SHIMANO	SHIMANO	TOURNEY TX
Model no.	BR-M395	BR-M375	BR-M355	BR-TX805
Color	1	Black	Black	Black
	2	White	Silver	-
	3	-	-	-
Brake type	Hydraulic Disc-brake	Mechanical Disc-brake	Hydraulic Disc-brake	Mechanical Disc-brake
Brake hose (kit)	SM-BH59	Cable	SM-BH59	Cable
Hose joint	Straight	-	Straight	-
Brake hose color (kit)	1	Black	Black	-
	2	-	-	-
ICE TECHNOLOGY pad compatible caliper	-	-	-	-
Pad	Standard 1	B01S Resin	B01S Resin	B01S Resin
	Standard 2	-	-	-
	Option 1	-	-	-
	Option 2	-	-	-
Recommended brake lever	BL-M395	V-BRAKE BL (1.5-2.5 finger)	BL-M355	V-BRAKE BL (1.5-2.5 finger)
Recommended brake rotor	SM-RT30 SM-RT54 SM-RT56	SM-RT30 SM-RT54 SM-RT56	SM-RT30 SM-RT54 SM-RT56	SM-RT20 SM-RT30 SM-RT56
Oil	SHIMANO Mineral	-	SHIMANO Mineral	-
One way bleeding	X	-	X	-
Mount type (available for IS mount with mount adapter)	Post-type	Post-type	Post-type	Post-type
Piston	2	1	2	1
Piston material	Resin	-	Resin	-
Caliper	Mono-body	-	-	-
	Material	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted
Caliper fixing bolt	Material	Steel	Steel	Steel
	Tool size	5mm	5mm	5mm
	Anti loosen method	Snap ring	Snap ring	Snap ring
Pad mount	Split pin	Split pin	Split pin	Split pin
Average weight	-	-	-	-
Note			SHIMANO logo	

Disc Rotor

Series	XTR/SAINT	XTR	SAINT/DEORE XT	SAINT/DEORE XT	DEORE XT	SHIMANO
Model no.	SM-RT99	SM-RT98	SM-RT86	SM-RT81	SM-RT76	SM-RT68
Center lock	X	X	-	X	-	X
6-bolt (P.C.D. 44mm)	-	-	X	-	X	-
ICE TECHNOLOGIES	X (Radiator fin)	X	X	X	-	X
Freeza(Radiator fin)	X	-	-	-	-	-
Outside diameter	203mm	X	X	X	X	X
	180mm	X	X	X	X	X
	160mm	X	X	X	X	X
	140mm	X*	X*	-	-	-
Alloy lock ring	X	X	X	X	-	-
Adapter	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Painted	Anodized	Painted	Painted	Painted
Rotor	Material	Stainless steel+Aluminum+ Stainless steel	Stainless steel+Aluminum+ Stainless steel	Stainless steel+Aluminum+ Stainless steel	Stainless steel+Aluminum+ Stainless steel	Stainless steel
	Finish	Polished	Polished	Polished	Polished	Polished
Pad compatibility	Metal	X	X	X	X	X
	Resin	X	X	X	X	X
Average weight* *W/O lock ring	118.1g (160mm)	118.5g (160mm)	135g (160mm)	122g (160mm)	141g (160mm)	150g (160mm)
Note	w/Radiator fin *for rear only in MTB usage	*140mm for rear only	With anti loosen tightening plate		With anti loosen tightening plate	

Disc Rotor

Series		SLX/DEORE	DEORE	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		SM-RT66	SM-RT64	SM-RT56	SM-RT54	SM-RT30	SM-RT20
Center lock		-	X	-	X	X	X
6-bolt (P.C.D. 44mm)		X	-	X	-	-	-
ICE TECHNOLOGIES		-	-	-	-	-	-
Freeza(Radiator fin)		-	-	-	-	-	-
Outside diameter	203mm	X	X	-	-	-	-
	180mm	X	X	X	X	X	X
	160mm	X	X	X	X	X	X
	140mm	-	-	-	-	-	-
Alloy lock ring		-	-	-	-	-	-
Adapter	Material	-	Aluminum	-	Aluminum	Stainless steel	Stainless steel
	Finish	-	Painted	-	Painted	Painted	Painted
Rotor	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Polished	Polished	Polished	Polished	Polished	Polished
Pad compatibility	Metal	X	X	-	-	-	-
	Resin	X	X	X	X	X	X
Average weight* *W/O lock ring		-	-	-	-	-	177g
Note		With anti loosen tightening plate		With anti loosen tightening plate			

Disc Rotor Adapter

Series		SHIMANO	SHIMANO
Model no.		SM-RTAD10	SM-RTAD05
Color	1	Black	Black
	2	-	-
	3	-	-
Lock ring	Type	Inner serration	Outer serration
	Material	Aluminum	Steel
Rotor mount method		Stainless pins	Torx bolts
Compatibility (Rotor)	SM-RT86	-	-
	SM-RT76	-	-
	SM-RT66	X	X
	SM-RT56	X	X
Compatibility (Axle)	F20 Thru	X	X
	F15 E-Thru	X	X
	F9 QR	X	X
	R12 E-Thru	X	X
	R12 Thru	X	X
	R10 Thru	X	X
Average weight		-	-
Note		Use this disc rotor adapter to attach the 6-bolt mount type rotor to CENTER LOCK mount type hub. Cannot be used with the 6-bolt rotor that is installed with an aluminum adapter. (SM-RT86/76)	Use this disc rotor adapter to attach the 6-bolt mount type rotor to CENTER LOCK mount type hub. Cannot be used with the 6-bolt rotor that is installed with an aluminum adapter. (SM-RT86/76)

Disc Brake Hose

Series		XTR	SAINT	ZEE	XTR/DEORE XT/SLX	SHIMANO	SHIMANO
Model no.		SM-BH90-SBM	SM-BH90-SBLS	SM-BH90-SBS	SM-BH90-SB	SM-BH90-SS	SM-BH59-SS
Color	1	Black	Black	Black	Black	Black	Black
	2	-	-	White	White	White	White
	3	-	-	-	-	-	-
Hose joint	Brake lever	Straight	Straight	Straight	Straight	Straight	Straight
	Brake caliper	Banjo	Banjo	Banjo	Banjo	Straight	Straight
Rigidity		High power	High power	High power	High power	High power	Standard
Banjo	Material	Aluminum	Aluminum	Aluminum	Aluminum	-	-
	Length	Standard	Long	Standard	Standard	-	-
	Banjo bolt length	Long	Short	Short	Long	-	-
	Banjo bolt material	Steel	Steel	Steel	Steel	-	-
Connecting bolt	Material	Stainless	Stainless	Stainless	Stainless	Stainless	Stainless
Average weight		-	-	-	-	-	-
Note							

Series		SHIMANO
Model no.		SM-BH59-SB
Color	1	Black
	2	White
	3	-
Hose joint	Brake lever	Straight
	Brake caliper	Banjo
Rigidity		Standard
Banjo	Material	-
	Length	-
	Banjo bolt length	-
	Banjo bolt material	-
Connecting bolt	Material	Stainless
Average weight		-
Note		

Crankset

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		FC-M9020-3	FC-M9000-2	FC-M9000-2	FC-M9000-2	FC-M9000-1	FC-M9020-2
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Rear speeds		11	11	11	11	11	11
Compatible chain		HG-X11	HG-X11	HG-X11	HG-X11	HG-X11	HG-X11
Chain line (mm)		50	48.8	48.8	48.8	50.4	48.8
P.C.D. (mm)		96/64	96/64	96/64	96/64	96	96/64
Gear arms		4arm ***	4arm ***	4arm ***	4arm ***	4arm ***	4arm ***
Arm adapter		Integrate	Integrate	Integrate	Integrate	Integrate	Integrate
Chain ring combination		40-30-22T	34-24T	36-26T	38-28T	30, 32, 34, 36T (SM-CRM90)	34-24T
Crank arm length (mm)	165.0	X	-	-	-	-	X
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	180.0	X	-	-	-	-	X
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	-	-	-	-	-	-
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	X	X
2-piece crank construction		-	-	-	-	-	-
HOLLOWTECH crank arm		X	X	X	X	X	X
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		X	X	X	X	X*	X
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB93	SM-BB93	SM-BB93	SM-BB93	SM-BB93	SM-BB93
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
	Pressfit	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		-	-	-	-	-	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum/CFRP	Titanium/Aluminum/CFRP	Titanium/Aluminum/CFRP	Titanium/Aluminum/CFRP	Titanium/Aluminum/CFRP**	Titanium/Aluminum/CFRP
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	Titanium/CFRP	-	-	-	-	-
	Finish	Shot Blasting	-	-	-	-	-
Inner ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	-	Aluminum
	Finish	Plated	Plated	Plated	Plated	-	Plated
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	-	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		656g*	601g*	622g*	647g*	556g(30T, w/o BB) 565g(32T, w/o BB) 567g(34T, w/o BB) 608g(36T, w/o BB)	630g*
Note		* w/o BB *** Spider arm angle is special.	* w/o BB *** Spider arm angle is special.	* w/o BB *** Spider arm angle is special.	* w/o BB *** Spider arm angle is special.	* 36/34T is hollow, 32/30T is not hollow ** 32T/30T is Titanium/Aluminum *** Spider arm angle is special.	* w/o BB *** Spider arm angle is special.

Crankset

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		FC-M9020-2	FC-M9020-2	FC-M9020-1	FC-M980	FC-M980	FC-M985
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Rear speeds		11	11	11	10	10	10
Compatible chain		HG-X11	HG-X11	HG-X11	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Chain line (mm)		48.8	48.8	50.4	50	46.8	48.8
P.C.D. (mm)		96/64	96/64	96	104/64	104/64	88
Gear arms		4arm ***	4arm ***	4arm ***	4arm	4arm	4arm
Arm adapter		Integrate	Integrate	Integrate	X	X	X
Chain ring combination		36-26T	38-28T	30, 32, 34, 36T (SM-CRM90)	42-32-24T	38-26T	40-28T
Crank arm length (mm)	165.0	X	X	X	X	X	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	X
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	-	-	-	-	-	-
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	X	X
2-piece crank construction		-	-	-	X	X	X
HOLLOWTECH crank arm		X	X	X	X	X	X
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		X	X	X*	-	-	-
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB93	SM-BB93	SM-BB93	SM-BB93	SM-BB93	SM-BB93
	Threaded (E-type)	-	-	-	SM-BB93	SM-BB93	SM-BB93
	Threaded (chain case)	-	-	-	-	-	-
	Pressfit	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A	SM-BB94-41A
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		-	-	-	-	-	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Titanium/Aluminum/CFRP	Titanium/Aluminum/CFRP	Titanium/Aluminum/CFRP **	Aluminum	-	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted/Plated	-	Painted/Plated
Middle ring	Material	-	-	-	Titanium/CFRP	Aluminum	-
	Finish	-	-	-	Shot Blasting	Painted/Plated	-
Inner ring	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	Aluminum
	Finish	Plated	Plated	-	Plated	Plated	Plated
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Aluminum	Aluminum	Aluminum
	Finish	-	-	-	Anodized	Anodized	Anodized
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	-	Aluminum	Aluminum	-
	Finish	-	-	-	Anodized	Anodized	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		649g*	676g*	583g(30T, w/o BB) 592g(32T, w/o BB) 592g(34T, w/o BB) 639g(36T, w/o BB)	770g	735g	715g
Note		* w/o BB *** Spider arm angle is special.	* w/o BB *** Spider arm angle is special.	* 36/34T is hollow, 32/30T is not hollow ** 32T/30T is Titanium/Aluminum *** Spider arm angle is special.			

Crankset

Series		XTR	XTR	SAINT	SAINT	DEORE XT	DEORE XT
Model no.		FC-M985	FC-M985	FC-M820	FC-M825	FC-M780	FC-M782
Color	1	Series color	Series color	Series color	Series color	Black	Black
	2	-	-	-	-	Silver	Silver
Rear speeds		10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Chain line (mm)		48.8	48.8	50.4	57.9	50	50
P.C.D. (mm)		88	88	104	104	104/64	96/64
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		X	X	-	-	-	-
Chain ring combination		42-30T	44-30T	34/36/38T (SM-CR82)	34/36/38T (SM-CR82)	42-32-24T	40-30-22T
Crank arm length (mm)	165.0	-	-	X	X	X	X
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	X	X	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
	180.0	X	X	-	-	X	X
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	-	-	-	-	-	-
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	X	X
2-piece crank construction		X	X	X	X	X	X
HOLLOWTECH crank arm		X	X	X	X	X	X
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB93	SM-BB93	SM-BB80	SM-BB80	SM-BB70	SM-BB70
	Threaded (E-type)	SM-BB93	SM-BB93	-	-	SM-BB70	SM-BB70
	Threaded (chain case)	-	-	-	-	-	-
	Pressfit	SM-BB94-41A	SM-BB94-41A	SM-BB71-41A	SM-BB71-41C	SM-BB71-41A	SM-BB71-41A
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	-	X	X
	73mm	X	X	X	-	X	X
	83mm	-	-	-	X	-	-
Chain case compatible		-	-	-	-	-	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	-	-	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	-	Painted	Painted	Painted	Painted
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	-	-	Aluminum	Aluminum
	Finish	Painted/Plated	Painted/Plated	-	-	Anodized	Anodized
Middle ring	Material	-	-	Aluminum	Aluminum	Steel/CF composite	Steel/CF composite
	Finish	-	-	Anodized	Anodized	Plated	Plated
Inner ring	Material	Aluminum	Aluminum	-	-	Aluminum	Aluminum
	Finish	Plated	Plated	-	-	Plated	Plated
Outer / middle ring fixing bolt	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Inner ring fixing bolt	Material	-	-	-	-	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		720g	740g	919g (36T, 170mm, w/o bash guard)	931g (36T, 170mm, w/o bash guard)	860g	870g
Note					for 83mm BB shell width		FD-M780-A/M781-A

Crankset

Series		DEORE XT	DEORE XT	DEORE XT	SLX	SLX	SLX
Model no.		FC-M785	FC-M785	FC-M785	FC-M670	FC-M670	FC-M672
Color	1	Black	Black	Black	Series color	Series color	Series color
	2	Silver	Silver	Silver	-	-	-
Rear speeds		10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Chain line (mm)		48.8	48.8	48.8	50	50	50
P.C.D. (mm)		104/64	104/64	104/64	104/64	104/64	96/64
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		-	-	-	-	-	-
Chain ring combination		38-24T	38-26T	40-28T	42-32-24T	48-36-26T	40-30-22T
Crank arm length (mm)	165.0	X	X	X	-	-	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
	180.0	X	X	X	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	-	-	-	X	X	-
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	X	X
2-piece crank construction		X	X	X	X	X	X
HOLLOWTECH crank arm		X	X	X	X	X	X
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB70	SM-BB70	SM-BB70	SM-BB70	SM-BB70	SM-BB70
	Threaded (E-type)	SM-BB70	SM-BB70	SM-BB70	SM-BB70	-	SM-BB70
	Threaded (chain case)	-	-	-	-	-	-
	Pressfit	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		-	-	-	-	-	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	-	-	-	Steel/GF composite	Aluminum	Steel/GF composite
	Finish	-	-	-	Plated	Plated	Plated
Inner ring	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Painted	Painted	Plated
Outer / middle ring fixing bolt	Material	Aluminum	Aluminum	Aluminum	Stainless steel	Stainless steel	Stainless steel
	Finish	Anodized	Anodized	Anodized	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		-	810g	820g	905g	-	890g
Note							FD-M670-A/M671-A

Crankset

Series		SLX	SLX	SLX	ZEE	ZEE	SHIMANO
Model no.		FC-M675	FC-M675	FC-M675	FC-M640	FC-M645	FC-M622
Color	1	Series color	Series color	Series color	Series color	Series color	Black
	2	-	-	-	-	-	-
Rear speeds		10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Chain line (mm)		48.8	48.8	48.8	50.4	57.9	50
P.C.D. (mm)		104/64	104/64	104/64	104	104	96/64
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		-	-	-	-	-	X
Chain ring combination		38-24T	38-26T	40-28T	34/36/38T	34/36/38T	40-30-22T
Crank arm length (mm)	165.0	-	-	-	X	X	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	180.0	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	-	-	-	-	-	-
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	-	-	-
2-piece crank construction		X	X	X	X	X	X
HOLLOWTECH crank arm		X	X	X	-	-	-
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB70	SM-BB70	SM-BB70	SM-BB52	SM-BB52	SM-BB52
	Threaded (E-type)	SM-BB70	SM-BB70	SM-BB70	SM-BB52	SM-BB52	SM-BB52
	Threaded (chain case)	-	-	-	-	-	-
	Pressfit	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41C	SM-BB71-41A
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	-	X
	73mm	X	X	X	X	-	X
	83mm	-	-	-	-	X	-
Chain case compatible		-	-	-	-	-	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Painted	Painted
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	Aluminum	Aluminum	Aluminum	-	-	Aluminum
	Finish	Painted	Painted	Painted	-	-	Painted
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	-	-	Aluminum
	Finish	Anodized	Anodized	Anodized	-	-	Anodized
Middle ring	Material	-	-	-	Aluminum	Aluminum	Steel GF composite
	Finish	-	-	-	Anodized	Anodized	Plated
Inner ring	Material	Steel	Steel	Steel	-	-	Steel
	Finish	Painted	Painted	Painted	-	-	Painted
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	-	-	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		840g	850g	865g	906g (36T, 170mm, w/o bash guard)	938g (36T, 170mm, w/o bash guard)	965g
Note						for 83mm BB shell width	

Crankset

Series		SHIMANO	DEORE	DEORE	DEORE	DEORE	DEORE
Model no.		FC-M625	FC-M610	FC-M610	FC-M612	FC-M615	FC-M615
Color	1	Black	Black	Black	Black	Black	Black
	2	-	Silver	Silver	Silver	Silver	Silver
Rear speeds		10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Chain line (mm)		48.8	50	50	50	48.8	48.8
P.C.D. (mm)		104/64	104/64	104/64	96/64	104/64	104/64
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		X	-	-	X	X	X
Chain ring combination		38-24T	42-32-24T	48-36-26T	40-30-22T	38-24T	38-26T
Crank arm length (mm)	165.0	-	-	-	-	-	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
	180.0	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	-	-	X	-	-	-
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		-	-	-	-	-	-
2-piece crank construction		X	X	X	X	X	X
HOLLOWTECH crank arm		-	-	-	-	-	-
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB52	SM-BB52	SM-BB52	SM-BB52	SM-BB52	SM-BB52
	Threaded (E-type)	SM-BB52	SM-BB52	-	SM-BB52	SM-BB52	SM-BB52
	Threaded (chain case)	-	-	-	-	-	-
	Pressfit	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A	SM-BB71-41A
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		-	-	-	-	-	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	-	Steel GF composite	Steel	Steel GF composite	-	-
	Finish	-	Plated	Painted	Plated	-	-
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		914g	975g	1052g	965g	914g	922g
Note							

Crankset

Series		DEORE	SHIMANO	SHIMANO	SHIMANO	DEORE	SHIMANO	
Model no.		FC-M615	FC-M552	FC-M523	FC-M522	FC-M591	FC-M521	
Color	1	Black	Black	Black	Black	Black	Black	
	2	Silver	Silver	Silver	Silver	Silver	Silver	
Rear speeds		10	10	10	10	9	9	
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG for 9-speed	HG for 9-speed	
Chain line (mm)		48.8	50	50	50	50	50	
P.C.D. (mm)		104/64	104/64	96/64	104/64	104/64	104/64	
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm	
Arm adapter		X	-	X	X	-	X	
Chain ring combination		40-28T	42-32-24T	40-30-22T	42-32-24T	44-32-22T 48-36-26T	44-32-22T 48-36-26T	
Crank arm length (mm)	165.0	-	-	-	-	-	-	
	167.5	-	-	-	-	-	-	
	170.0	X	X	X	X	X	X	
	172.5	-	-	-	-	-	-	
	175.0	X	X	X	X	X	X	
	177.5	-	-	-	-	-	-	
Optional chain guard	With bash guard	-	-	-	-	-	-	
	With chain guard	-	X	X	X	X	X	
	Without chain / bash guard	X	X	X	X	X	X	
HOLLOWTECH II Technology		-	-	-	-	-	-	
2-piece crank construction		X	X	-	-	X	-	
HOLLOWTECH crank arm		-	-	X	X	-	X	
OCTALINK technology		-	-	X	X	-	X	
HOLLOWGLIDE		-	-	-	-	-	-	
Compatible BB type	Outboard	X	X	-	-	X	-	
	Octalink	-	-	X	X	-	X	
	Square	-	-	-	-	-	-	
Recommended BB	Threaded (normal)	SM-BB52	SM-BB52	BB-ES25	BB-ES25	SM-BB52	BB-ES25-AK	
	Threaded (E-type)	SM-BB52	SM-BB52	-	-	-	BB-ES25-E	
	Threaded (chain case)	-	-	-	-	SM-BB52	BB-ES25-AK	
	Pressfit	SM-BB71-41A	-	-	-	-	-	
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	118	113	-	121-AK	
	Threaded (E-type)	-	-	-	-	-	121-E*	
	Threaded (chain case)	-	-	-	-	-	121-AK	
Threaded BB shell width	68mm	X	X	X	X	X	X	
	73mm	X	X	X	X	X	X	
	83mm	-	-	-	-	-	-	
Chain case compatible		-	-	-	-	X	X	
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Crank axle	Material	Steel	Steel	-	-	Steel	-	
	Finish	Plated	Plated	-	-	Plated	-	
Spider arm	Material	Aluminum	-	Aluminum	Aluminum	-	Aluminum	
	Finish	Painted	-	Painted	Painted	-	Painted	
Spider arm cover	Material	-	-	-	-	-	-	
	Finish	-	-	-	-	-	-	
Outer ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	
Middle ring	Material	-	Steel/GF composite	Steel/GF composite	Steel/GF composite	Steel	Steel	
	Finish	-	Plated	Plated	Plated	Painted	Plated	
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Painted	Painted	Painted	Painted	Painted	Plated	
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	-	-	-	-	-	-	
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	-	-	-	-	-	-	
Stainless chain guard fixing bolt		-	-	-	-	-	-	
Crank fixing bolt included		X	X	X	X	X	X	
Average weight		935g	-	-	-	-	-	
Note							* In case of no chain case used, 68mm shell width: 121 also can be used, 73mm BB shell width : 121 must be used	

Crankset

Series		SHIMANO	ALIVIO	ALIVIO	ALIVIO	ALIVIO	ALIVIO
Model no.		FC-M4000	FC-M4050	FC-M4060	FC-M430	FC-M430-8	FC-M430-8
Color	1	Series color	Series color	Series color	Black	Black	Black
	2	-	-	-	Silver	Silver	-
Rear speeds		9	9	9	9	9	9
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG for 9-speed	HG for 9-speed	HG for 9-speed
Chain line (mm)		50	50	50	50	50	50
P.C.D. (mm)		96/64	96/64	104/64	104/64	104/64	104/64
Gear arms		4 arms	4 arms	4 arms	4arm	4arm	4arm
Arm adapter		X	X	X	X	X	X
Chain ring combination		40-30-22T	40-30-22T	48-36-26T	44-32-22T	44-32-22T	44-32-22T
Crank arm length (mm)	165.0	X	X	X	-	-	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
	180.0	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	X	X	X	X	X	X
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		-	-	-	-	-	-
2-piece crank construction		-	X	X	-	-	-
HOLLOWTECH crank arm		-	-	-	-	-	-
OCTALINK technology		X	-	-	-	X	X
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	-	X	X	-	-	-
	Octalink	X	-	-	-	X	X
	Square	-	-	-	X	-	-
Recommended BB	Threaded (normal)	BB-ES25	SM-BB52	SM-BB52	BB-UN26	BB-ES25	BB-ES25
	Threaded (E-type)	BB-ES25-E	-	-	BB-UN26-E	BB-ES25-E	BB-ES25-E
	Threaded (chain case)	-	-	-	-	-	-
	Pressfit	-	SM-BB71-41A	-	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	118	-	-	LL113	118	118
	Threaded (E-type)	118-E	-	-	LL113-E	118-E	118-E
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		-	-	-	-	-	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Crank axle	Material	-	Steel	Steel	-	-	-
	Finish	-	Plated	Plated	-	-	-
Spider arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Steel	Steel	Steel	Steel	Steel	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Anodized
Middle ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	X	X	X
Crank fixing bolt included		X	X	X	X	X	X
Average weight		-	-	-	-	-	-
Note					SHIMANO logo	SHIMANO / ALIVIO Logo	With alloy outer chain ring, SHIMANO logo

Crankset

Series		ACERA	ACERA	SHIMANO	ACERA	ACERA	ALTUS
Model no.		FC-M391	FC-M391-8	FC-M371	FC-M361	FC-M361	FC-M311
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver	Silver
Rear speeds		9	9	9	8/7	8/7	8/7
Compatible chain		HG for 9-speed	HG for 9-speed	HG for 9-speed	HG for 8/7-speed	HG for 8/7-speed	HG for 8/7-speed
Chain line (mm)		50	50	50	50	50	50
P.C.D. (mm)		104/64	104/64	Riveted	104/64	104/64	Riveted
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		-	-	-	-	-	-
Chain ring combination		44-32-22T 48-36-26T	44-32-22T 48-36-26T	44-32-22T 48-36-26T	42-32-22T	48-38-28T	42-32-22T
Crank arm length (mm)	165.0	X*	-	X	X*	-	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	X	X	X	X	X	X
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		-	-	-	-	-	-
2-piece crank construction		-	-	-	-	-	-
HOLLOWTECH crank arm		-	-	-	-	-	-
OCTALINK technology		-	X	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	-	-	-	-	-	-
	Octalink	-	X	-	-	-	-
	Square	X	-	X	X	X	X
Recommended BB	Threaded (normal)	BB-UN26	BB-ES25	BB-UN26	BB-UN26	BB-UN26	BB-UN26
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	BB-UN26-K	BB-ES25-K	BB-UN26-K	BB-UN26-K	BB-UN26-K	BB-UN26-K
	Pressfit	-	-	-	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	LL123	126	LL123	LL123	LL123	LL123
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	LL123-K	126-K	LL123-K	LL123-K	LL123-K	LL123-K
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Crank axle	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	Resin	-	-	Resin
	Finish	-	-	Resin	-	-	Resin
Outer ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Middle ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	-	Stainless steel	Stainless steel	-
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	-	Stainless steel	Stainless steel	-
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		-	-	-	-	-	-
Note		SHIMANO logo, * 48-36-26 Silver with CG spec	SHIMANO / ACERA Logo	SHIMANO logo	SHIMANO logo, * 48-38-28 Silver with CG spec	SHIMANO logo	SHIMANO logo

Crankset

Series		ALTUS	ALTUS	TOURNEY TX	TOURNEY TX	SHIMANO	SHIMANO
Model no.		FC-M311	FC-M311-8	FC-TX801	FC-TX801	FC-M171-A	FC-M171
Color	1	Black	Black	Black	Black	4 color variations	4 color variations
	2	Silver	-	Silver	Silver	-	-
Rear speeds		8/7	8/7	8/7	8/7	8/7/6	8/7/6
Compatible chain		HG for 8/7-speed	HG for 8/7-speed	HG for 8/7-speed	HG for 8/7-speed	HG for 8/7-speed	HG for 8/7-speed
Chain line (mm)		50	50	50	50	47.5 / 47.5+t	47.5 / 47.5+t
P.C.D. (mm)		Riveted	Riveted	Riveted	Riveted	Riveted	Riveted
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		-	-	-	-	-	-
Chain ring combination		48-38-28T	42-32-22T	42-32-22T	48-38-28T	48-38-28T	42-34-24T
Crank arm length (mm)	165.0	-	-	X	X	X*	X*
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
	180.0	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	X	X	X	X	X	X
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		-	-	-	-	-	-
2-piece crank construction		-	-	-	-	-	-
HOLLOWTECH crank arm		-	-	-	-	-	-
OCTALINK technology		-	X	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	-	-	-	-	-	-
	Octalink	-	X	-	-	-	-
	Square	X	-	X	X	X	X
Recommended BB	Threaded (normal)	BB-UN26	BB-ES25	BB-UN26	BB-UN26	BB-UN26	BB-UN26
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	BB-UN26-K	BB-ES25-K	BB-UN26-K	BB-UN26-K	BB-UN26-K	BB-UN26-K
	Pressfit	-	-	-	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	LL123	126	LL123	LL123	D-NL	D-NL
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	LL123-K	126-K	LL123-K	LL123-K	D-NL K	D-NL K
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Crank axle	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	Resin	Resin	Resin	Resin	Resin	Resin
Outer ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Middle ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	-	-
Average weight		-	-	-	-	-	-
Note		SHIMANO logo	SHIMANO logo			SHIMANO logo, * available for standard color spec	SHIMANO logo, * available for standard color spec

Crankset

Series		SHIMANO	SHIMANO	SHIMANO	DXR
Model no.		FC-M171	FC-M131	FC-M131	FC-MX71
Color	1	4 color variations	Series color	Series color	Series color
	2	-	-	-	-
Rear speeds		8/7/6	8/7/6	8/7/6	1
Compatible chain		HG for 8/7-speed	HG for 8/7-speed	HG for 8/7-speed	for single speed
Chain line (mm)		47.5 / 47.5+t	47.5 / 47.5+t	47.5 / 47.5+t	44
P.C.D. (mm)		Riveted	Riveted	Riveted	104/64
Gear arms		4arm	4arm	4arm	4arm
Arm adapter		-	-	-	-
Chain ring combination		48-38-28T	42-34-24T	48-38-28T	34/38/41/42/ 43/44/46T
Crank arm length (mm)	165.0	X*	-	-	X
	167.5	-	-	-	-
	170.0	X	X	X	X
	172.5	-	-	-	-
	175.0	X	-	-	X
	177.5	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-
	With chain guard	X	X	X	-
	Without chain / bash guard	X	X	X	X
HOLLOWTECH II Technology		-	-	-	X
2-piece crank construction		-	-	-	X
HOLLOWTECH crank arm		-	-	-	X
OCTALINK technology		-	-	-	-
HOLLOWGLIDE		-	-	-	-
Compatible BB type	Outboard	-	-	-	X
	Octalink	-	-	-	-
	Square	X	X	X	-
Recommended BB	Threaded (normal)	BB-UN26	BB-UN26	BB-UN26	SM-BB70(S)
	Threaded (E-type)	-	-	-	-
	Threaded (chain case)	BB-UN26-K	BB-UN26-K	BB-UN26-K	-
	Pressfit	-	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	D-NL	D-NL	D-NL	-
	Threaded (E-type)	-	-	-	-
	Threaded (chain case)	D-NL K	D-NL K	D-NL K	-
Threaded BB shell width	68mm	X	X	X	X
	73mm	X	X	X	X
	83mm	-	-	-	-
Chain case compatible		X	X	X	-
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Polished	Polished	Anodized
Crank axle	Material	-	-	-	Steel
	Finish	-	-	-	Plated
Spider arm	Material	-	-	-	Aluminum
	Finish	-	-	-	Anodized
Spider arm cover	Material	Resin	Resin	Resin	-
	Finish	Resin	Resin	Resin	-
Outer ring	Material	Steel	Steel	Steel	Aluminum
	Finish	Painted	Painted	Painted	Anodized
Middle ring	Material	Steel	Steel	Steel	-
	Finish	Painted	Painted	Painted	-
Inner ring	Material	Steel	Steel	Steel	-
	Finish	Painted	Painted	Painted	-
Outer / middle ring fixing bolt	Material	-	-	-	Aluminum
	Finish	-	-	-	Anodized
Inner ring fixing bolt	Material	-	-	-	-
	Finish	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-
Crank fixing bolt included		-	-	-	X
Average weight		-	-	-	-
Note		SHIMANO logo, * available for standard color spec	SHIMANO logo	SHIMANO logo	BMX racing 68mm BB shell width

Bottom Bracket

Series			SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.			BB-ES51	BB-ES51-E	BB-ES51-K	BB-ES51-AK	BB-ES25	BB-ES25-E
Structure	Standard		X	-	-	-	X	-
	E-type		-	X	-	-	-	X
	For chain case		-	-	X	X	-	-
Spindle	Hollow pipe		X	X	X	X	X	X
	Octalink		X	X	X	X	X	X
	Square type		-	-	-	-	-	-
Axle length / shell width	MM110	68mm (BC1.37)	-	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	-	-	-	-	-	-
	LL113	68mm (BC1.37)	-	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	-	-	-	-	-	-
	113	68mm (BC1.37)	X	-	-	-	X	X
		70mm (M36)	-	-	-	-	X	-
		73mm (BC1.37)	X	-	-	-	X	-
	YL117	68mm (BC1.37)	-	-	-	-	-	-
	117.5	68mm (BC1.37)	-	-	-	-	-	-
	118	68mm (BC1.37)	X	-	-	-	X	X
		70mm (M36)	-	-	-	-	X	-
		73mm (BC1.37)	X	-	-	-	X	X
	XL118	68mm (BC1.37)	-	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	-	-	-	-	-	-
	121	68mm (BC1.37)	X	-	-	-	X	X
		70mm (M36)	X	-	-	-	-	-
		73mm (BC1.37)	-	-	-	-	X	X
	126	68mm (BC1.37)	X	-	-	-	X	X
		73mm (BC1.37)	-	-	-	-	X	X
	D-NL (122.5mm)	68mm (BC1.37)	-	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	-	-	-	-	-	-
	D-EL (127.5mm)	68mm (BC1.37)	-	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	-	-	-	-	-	-
	LL123	68mm (BC1.37)	-	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
73mm (BC1.37)		-	-	-	-	-	-	
123SP	68mm (BC1.37)	-	-	-	-	-	-	
130	68mm (BC1.37)	-	-	-	-	-	-	
Spindle	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Black coloring	Black coloring	Black coloring	Black coloring	Bondelube	Bondelube
Left hand adapter	Material		Resin	Resin	Resin	Resin	Resin	Resin
	Finish		-	-	-	-	-	-
Average weight			-	-	-	-	-	
Note						For FC-M521 Only		

Bottom Bracket

Series			SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.			BB-ES25-K	BB-ES25-AK	BB-UN55	BB-UN26	BB-UN26-E	BB-UN26-K
Structure	Standard		-	-	X	X	-	-
	E-type		-	-	-	-	X	-
	For chain case		X	X	-	-	-	X
Spindle	Hollow pipe		X	X	-	-	-	-
	Octalink		X	X	-	-	-	-
	Square type		-	-	X	X	X	X
Axle length / shell width	MM110	68mm (BC1.37)	-	-	X	X*	X	X
		70mm (M36)	-	-	X	X	-	-
		73mm (BC1.37)	-	-	X	X	-	-
	LL113	68mm (BC1.37)	-	-	X	X*	X	-
		70mm (M36)	-	-	X	X	-	-
		73mm (BC1.37)	-	-	X	X	X	-
	113	68mm (BC1.37)	X	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	-	-	-	-	-	-
	YL117	68mm (BC1.37)	-	-	-	X* (CL:47.5) X (CL:45)	X* (CL:47.5)	X* (CL:47.5)
	117.5	68mm (BC1.37)	-	-	-	X	-	X
	118	68mm (BC1.37)	X	-	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	X	-	-	-	-	-
	XL118	68mm (BC1.37)	-	-	X	-	-	-
		70mm (M36)	-	-	X	-	-	-
		73mm (BC1.37)	-	-	X	-	-	-
	121	68mm (BC1.37)	X	X*	-	-	-	-
		70mm (M36)	-	-	-	-	-	-
		73mm (BC1.37)	X	-	-	-	-	-
	126	68mm (BC1.37)	X	-	-	-	-	-
		73mm (BC1.37)	X	-	-	-	-	-
	D-NL (122.5mm)	68mm (BC1.37)	-	-	X	X*	-	X*
		70mm (M36)	-	-	X	-	-	-
		73mm (BC1.37)	-	-	X	-	-	-
	D-EL (127.5mm)	68mm (BC1.37)	-	-	X	X*	-	-
		70mm (M36)	-	-	-	-	-	-
73mm (BC1.37)		-	-	-	-	-	-	
LL123	68mm (BC1.37)	-	-	-	X	X	X (t=1.8)	
	70mm (M36)	-	-	-	X	-	-	
	73mm (BC1.37)	-	-	-	-	X	-	
123SP	68mm (BC1.37)	-	-	-	X	-	-	
130	68mm (BC1.37)	-	-	-	X	-	-	
Spindle	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Bondelube	Bondelube	Black coloring	Bondelube	Bondelube	Bondelube
Left hand adapter	Material		Resin	Resin	Aluminum	Resin	Resin	Resin
	Finish		-	-	-	-	-	-
Average weight			-	-	-	-	-	-
Note				* with 1.8mm spacer version also available for FC-M521		*w/Fixing Bolts	*w/Fixing Bolts	*w/Fixing Bolts

SL

SMSL

BL

ST

RD

FD

BR

RT

RTAD

SMBH

FC

BB

CS

MF

CN

FH

HB

WH

PD

CI-DECK

Bottom Bracket

HOLLOWTECH II

Series		XTR	XTR	SHIMANO	SAINT/ZEE	SAINT/ZEE	SHIMANO
Model no.		SM-BB93	SM-BB94-41A	SM-BB71-41A	SM-BB80	SM-BB71-41C	SM-BB70
HOLLOWTECH II BB	Threaded BB type	X	-	-	X	-	X
	Press-Fit type	-	X	X	-	X	-
Threaded BB shell width	68mm	X	-	-	X	-	X
	73mm	X	-	-	X	-	X
	83mm	-	-	-	X	-	-
Press-Fit BB shell width	84.5mm	-	-	-	-	-	-
	89.5mm	-	X	X	-	-	-
	92mm	-	X	X	-	-	-
	104.5mm	-	-	-	-	X	-
	107mm	-	-	-	-	X	-
Small ball bearing		X	X	-	-	-	-
Adapter	Material	Aluminum	Resin	Resin	Aluminum	Resin	Aluminum
	Finish	Anodized	-	-	Anodized	-	Anodized
Spacer	Material	Aluminum	Resin	Resin	Resin	Resin	Resin
	Finish	Anodized	-	-	-	-	-
Average weight		73g	58g	71g	-	73g	-
Note							

Series		SHIMANO	SHIMANO
Model no.		SM-BB70-S	SM-BB52
HOLLOWTECH II BB	Threaded BB type	X	X
	Press-Fit type	-	-
Threaded BB shell width	68mm	X	X
	73mm	-	X
	83mm	-	-
Press-Fit BB shell width	84.5mm	-	-
	89.5mm	-	-
	92mm	-	-
	104.5mm	-	-
	107mm	-	-
Small ball bearing		-	-
Adapter	Material	Aluminum	Aluminum
	Finish	Anodized	Painted
Spacer	Material	Resin	Resin
	Finish	-	-
Average weight		-	-
Note		For BMX	

Cassette Sprocket

Series	XTR	XTR	XTR	DEORE XT	DEORE XT	DEORE XT
Model no.	CS-M9000	CS-M980	CS-M980	CS-M771-10	CS-M771-10	CS-M771-10
Type	HG	HG	HG	HG	HG	HG
Speeds	11-speed	10-speed	10-speed	10-speed	10-speed	10-speed
Combination *Titanium gear **Aluminum gear	11th	40**	-	-	-	-
	10th	35*	34*	36*	32	34
	9th	31*	30*	32*	28	30
	8th	27*	26*	28*	25	26
	7th	24*	23*	24*	22	23
	6th	21*	21*	21*	20	21
	5th	19*	19	19	18	19
	4th	17	17	17	16	17
	3rd	15	15	15	14	15
	2nd	13	13	13	12	13
1st	11	11	11	11	11	
Group	bs	bj	bk	bL	bj	bk
Compatible chain	HG-X11	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Carbon Spider arm	QTY (pcs)	2	-	-	-	-
	Finish	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	2	3	3	2	2
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Steel Spider arm	QTY (pcs)	-	-	-	-	-
	Finish	-	-	-	-	-
Titanium gear	Finish	Shot	Shot	Shot	Shot	Shot
Steel gear	Finish	Shot-Ni	Shot-Ni	Shot-Ni	Shot-Cr	Shot-Cr
Lock ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight	330g	255g	272g	294g	323g	343g
Note						

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.	CS-HG81-10	CS-HG81-10	CS-HG81-10	CS-HG62-10	CS-HG62-10	CS-HG50-10
Type	HG	HG	HG	HG	HG	HG
Speeds	10-speed	10-speed	10-speed	10-speed	10-speed	10-speed
Combination *Titanium gear **Aluminum gear	11th	-	-	-	-	-
	10th	32	34	36	32	34
	9th	28	30	32	28	30
	8th	25	26	28	25	26
	7th	22	23	24	22	23
	6th	20	21	21	20	21
	5th	18	19	19	18	19
	4th	16	17	17	16	17
	3rd	14	15	15	14	15
	2nd	12	13	13	12	13
1st	11	11	11	11	11	
Group	bL	bj	bk	bk	bj	bk
Compatible chain	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-
	Finish	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	1	1	1	-	-
	Finish	Anodized	Anodized	Anodized	-	-
Steel Spider arm	QTY (pcs)	-	-	-	1	1
	Finish	-	-	-	Ni plated	Ni plated
Titanium gear	Finish	Shot	Shot	Shot	-	-
Steel gear	Finish	Shot-Cr/ Shot-Ni	Shot-Cr/ Shot-Ni	Shot-Cr/ Shot-Ni	Shot-Ni	Shot-Ni
Lock ring	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Cr plated	Cr plated	Cr plated	Cr plated	Cr plated
Average weight	317g	351g	369g	-	-	-
Note	Use CN-6701/CN-4601 with Road double FC			Use CN-6701/CN-4601 with Road double FC		Use CN-6701/CN-4601 with Road double FC

Cassette Sprocket

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		CS-HG80-9	CS-HG80-9	CS-HG80-9	CS-HG400-9	CS-HG400-9	CS-HG400-9
Type		HG	HG	HG	HG	HG	HG
Speeds		9-speed	9-speed	9-speed	9-speed	9-speed	9-speed
Combination *Titanium gear **Aluminum gear	11th	-	-	-	-	-	-
	10th	-	-	-	-	-	-
	9th	28	32	34	28	32	34
	8th	24	28	30	24	28	30
	7th	21	24	26	21	24	26
	6th	18	21	23	18	21	23
	5th	16	18	20	16	18	20
	4th	14	16	17	14	16	17
	3rd	13	14	15	13	14	15
2nd	12	12	13	12	12	13	
1st	11	11	11	11	11	11	
Group		bg	ar	au	bg	ar	au
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	1	1	1	-	-	-
	Finish	Anodized	Anodized	Anodized	-	-	-
Steel Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Titanium gear	Finish	Shot	Shot	Shot	-	-	-
Steel gear	Finish	Shot-Cr/ Shot-Ni	Shot-Cr/ Shot-Ni	Shot-Cr/ Shot-Ni	Ni-Ni plated	Ni-Ni plated	Ni-Ni plated
Lock ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Cr plated	Cr plated	Cr plated	Ni-Ni plated	Ni-Ni plated	Ni-Ni plated
Average weight		231g	292g	315g	-	-	-
Note							

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		CS-HG400-9	CS-HG300-9	CS-HG300-9	CS-HG300-9	CS-HG300-9	CS-HG200-9
Type		HG	HG	HG	HG	HG	HG
Speeds		9-speed	9-speed	9-speed	9-speed	9-speed	9-speed
Combination *Titanium gear **Aluminum gear	11th	-	-	-	-	-	-
	10th	-	-	-	-	-	-
	9th	36	28	32	34	36	32
	8th	32	24	28	30	32	28
	7th	28	21	24	26	28	24
	6th	24	18	21	23	24	21
	5th	21	16	18	20	21	19
	4th	18	14	16	17	18	17
	3rd	16	13	14	15	16	15
2nd	14	12	12	13	14	13	
1st	12	11	11	11	12	11	
Group		bh	bg	ar	au	bh	bo
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Steel Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Titanium gear	Finish	-	-	-	-	-	-
Steel gear	Finish	Ni-Ni plated	Ni plated (Top gear: Zinc phosphate)	Ni plated (Top gear: Zinc phosphate)	Ni plated (Top gear: Zinc phosphate)	Ni plated (Top gear: Zinc phosphate)	Zinc Phosphate
Lock ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Ni-Ni plated	Zinc phosphate	Zinc phosphate	Zinc phosphate	Zinc phosphate	Zinc Phosphate
Average weight		-	-	-	-	-	-
Note							

Cassette Sprocket

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		CS-HG200-9	CS-HG51-8	CS-HG51-8	CS-HG51-8	CS-HG41-8	CS-HG41-8
Type		HG	HG	HG	HG	HG	HG
Speeds		9-speed	8-speed	8-speed	8-speed	8-speed	8-speed
Combination *Titanium gear **Aluminum gear	11th	-	-	-	-	-	-
	10th	-	-	-	-	-	-
	9th	34	-	-	-	-	-
	8th	30	28	30	32	30	32
	7th	26	24	26	28	26	28
	6th	23	21	23	24	23	24
	5th	20	19	20	21	20	21
	4th	17	17	17	18	17	18
	3rd	15	15	15	15	15	15
2nd	13	13	13	13	13	13	
1st	11	11	11	11	11	11	
Group		bn	bf	an	aw	an	aw
Compatible chain		HG 9-speed	IG/HG	IG/HG	IG/HG	IG/HG	IG/HG
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Steel Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Titanium gear	Finish	-	-	-	-	-	-
Steel gear	Finish	Zinc Phosphate	Chrome plated	Chrome plated	Chrome plated	Ni plated	Ni plated
Lock ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Phosphate	Chrome plated	Chrome plated	Chrome plated	Manganese phosphate	Manganese phosphate
Average weight		-	-	-	-	-	-
Note							

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		CS-HG41-8	CS-HG31-8	CS-HG31-8	CS-HG31-8	CS-HG200-8	CS-HG41-7
Type		HG	HG	HG	HG	HG	HG
Speeds		8-speed	8-speed	8-speed	8-speed	8-speed	7-speed
Combination *Titanium gear **Aluminum gear	11th	-	-	-	-	-	-
	10th	-	-	-	-	-	-
	9th	-	-	-	-	-	-
	8th	34	30	32	34	32	-
	7th	26	26	28	26	28	28
	6th	23	23	24	23	24	24
	5th	20	20	21	20	21	21
	4th	17	17	18	17	18	18
	3rd	15	15	15	15	16	15
2nd	13	13	13	13	14	13	
1st	11	11	11	11	12	11	
Group		ao	an	aw	ao	br	ac
Compatible chain		IG/HG	IG/HG	IG/HG	IG/HG	HG 8-speed	IG/HG
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Steel Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Titanium gear	Finish	-	-	-	-	-	-
Steel gear	Finish	Ni plated	Zinc Phosphate	Zinc Phosphate	Zinc Phosphate	Zinc phosphate	Ni plated
Lock ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Manganese phosphate	Manganese phosphate	Manganese phosphate	Manganese phosphate	Zinc phosphate	Manganese phosphate
Average weight		-	-	-	-	-	-
Note							

Cassette Sprocket

Series		SHIMANO	SHIMANO	DXR
Model no.		CS-HG20-7	CS-HG20-7	CS-MX66
Type		HG	HG	Single sprocket for FH-MX70
Speeds		7-speed	7-speed	Single
Combination *Titanium gear **Aluminum gear	11th	-	-	-
	10th	-	-	-
	9th	-	-	-
	8th	-	-	-
	7th	28	32	-
	6th	24	26	-
	5th	21	21	-
	4th	18	18	-
	3rd	16	16	-
Group		bm	bp	-
Compatible chain		IG/HG	IG/HG	1/2" x 3/32"
Carbon Spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Steel Spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Titanium gear	Finish	-	-	-
Steel gear	Finish	Brown / Black	Brown / Black	Shot-Cr / Shot-Ni
Lock ring	Material	Steel	Steel	Steel
	Finish	Manganese phosphate	Manganese phosphate	Chrome plated
Average weight		-	-	-
Note		-	-	For BMX racing

Multiple Freewheel

Series		Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.		MF-HG37	MF-TZ31-CP	MF-TZ31	MF-TZ21-CP	MF-TZ21	MF-TZ30-CP
Type		HG	HG/UG	HG/UG	HG/UG	HG/UG	HG/UG
Speeds		7-speed	7-speed	7-speed	7-speed	7-speed	6-speed
Combination	10th	-	-	-	-	-	-
	9th	-	-	-	-	-	-
	8th	-	-	-	-	-	-
	7th	28	34	34	28	28	-
	6th	24	24	24	24	24	34
	5th	21	22	22	22	22	24
*Steel cog on spider	4th	19	20	20	20	20	21
**Titanium cog on spider	3rd	17	18	18	18	18	18
	2nd	15	16	16	16	16	16
	1st	13	14	14	14	14	14
Group		bz	-	-	-	-	-
Spider Arm (Pcs)		-	-	-	-	-	-
Aluminum lock ring		-	-	-	-	-	-
Finish		Ni-Plated & Black	Brown	Brown & Black	Brown	Brown & Black	Brown
Compatible chain		HG/UG	HG/UG	HG/UG	HG/UG	HG/UG	HG/UG
Average weight		-	-	-	-	-	-
Note		-	With chain protector	-	With chain protector	-	With chain protector

Multiple Freewheel

Series		Tourney	Tourney	Tourney
Model no.		MF-TZ30	MF-TZ20-CP	MF-TZ20
Type		HG/UG	HG/UG	HG/UG
Speeds		6-speed	6-speed	6-speed
Combination	10th	-	-	-
	9th	-	-	-
	8th	-	-	-
	7th	-	-	-
	6th	34	28	28
	5th	24	24	24
*Steel cog on spider	4th	21	21	21
**Titanium cog on spider	3rd	18	18	18
	2nd	16	16	16
	1st	14	14	14
Group		-	-	-
Spider Arm (Pcs)		-	-	-
Aluminum lock ring		-	-	-
Finish		Brown & Black	Brown	Brown & Black
Compatible chain		HG/UG	HG/UG	HG/UG
Average weight		-	-	-
Note			With chain protector	

Chain

Series	XTR	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.	CN-HG900-11	CN-HG95	CN-HG54	CN-HG93	CN-HG53	CN-HG71	CN-HG40
Type	HG-X11	HG-X 10-speed	HG-X 10-speed	HG 9-speed	HG 9-speed	HG	HG
Pin link plate	SIL-TEC	SIL-TEC	Gray	Zinc-Alloy Plated	Gray	Silver	Gray
Roller link plate	SIL-TEC	SIL-TEC	Brown	Gray	Brown	Gray	Brown
Roller	SIL-TEC	-	-	-	-	-	-
Chromizing treatment link pin	X	X	X	X	X	X	-
Hollow pin	X	-	-	-	-	-	-
Average weight (114 links)	247g	273g	273g	299g	304g	324g	324g
Note							

Freehub

Series		XTR	XTR	DXR	SAINT	SAINT	SAINT
Model no.		FH-M9000	FH-M9010	FH-MX71	FH-M820	FH-M825	FH-M828
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Brake Type		Center Lock Disc	Center Lock Disc	Rim	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	1	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed
O.L.D. (mm)		135	142	112	135	150	142
Spoke hole	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	-	-	X	X	X	X
Axle	Fixing method		QR	12mm E-Thru	Nut	Thru	Thru
	QR skewer length (mm)	166	-	-	-	-	-
		168	X	-	-	-	-
		170	-	-	-	-	-
		173	X	-	-	-	-
	Length (mm)		146	142	-	-	-
	Diameter (mm)		16	16	-	-	-
	Thru Axle Length x Inner Diameter (mm)	135x10	-	-	-	X	-
		135x12	-	-	-	X	-
		142x12	-	X	-	-	X
150x12		-	-	-	-	X	
Flange distance (mm)		57.4	57.4	57.4	57.4	72.4	57.4
Offset (mm)		6.6	6.6	0	6.4	6.6	6.4
P.C.D. Left/Right (mm)		44/45	44/45	45	44/45	44/45	44/45
Flange diameter Left/Right (mm)		52.8/53.8	52.8/53.8	53.8	52.8/ 53.8	52.8/ 53.8	52.8/ 53.8
Quick engagement		X (36points/360°)	X (36points/360°)	X (36points/360°)	X (36points/360°)	X (36points/360°)	X (36points/360°)
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	Contact	Contact	Contact	Contact	Contact	Contact
Internal grease sleeve		X	X	X	X	X	X
Bearing	Stainless ball	X	X	X	X	X	X
	Cup	Grinding	Grinding	Grinding	Grinding	Grinding	Grinding
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Disc mount	Center lock	X	X	-	X	X	X
	Outer serration rotor lock ring	X	X	-	-	-	-
	Center lock mount cover option	-	-	-	X	X	X
	6-bolt	-	-	-	-	-	-
Freehub body	Material	Titanium	Titanium	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Anodized	Anodized	-	-	-	-
QR lever	Material	Aluminum	-	-	-	-	-
	Finish	Anodized	-	-	-	-	-
QR housing	Material	Aluminum	-	-	-	-	-
	Finish	Anodized	-	-	-	-	-
QR nut	Material	Resin & Steel	-	-	-	-	-
	Finish	-	-	-	-	-	-
Average weight* *w/o axle, QR nor locking		271g	268g	448g (w/ fixing bolt)	347g (φ10) 333g (φ12)	348g	336g
Note				For BMX			SM-AX75/65/55 are not recommended

Freehub

Series		DEORE XT	DEORE XT	DEORE XT	SLX	SLX	ZEE	
Model no.		FH-M785	FH-M788	FH-M756	FH-M675	FH-M678	FH-M640	
Color	1	Black	Black	Black	Series color	Series color	Series color	
	2	Silver	Silver	Silver	-	-	-	
Brake Type		Center Lock Disc	Center Lock Disc	6-bolt Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	
Speeds		8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	
O.L.D. (mm)		135	142	135	135	142	135	
Spoke hole	28H	-	-	-	-	-	-	
	32H	X	X	X	X	X	X	
	36H	X	-	X	X	-	X	
Axle	Fixing method		QR	12mm E-Thru	QR	QR	12mm E-Thru	Thru
	QR skewer length (mm)	166	-	-	-	-	-	-
		168	X	-	X	X	-	-
		170	-	-	-	-	-	-
		173	X	-	X	X	-	-
	Length (mm)		146	-	146	146	-	-
	Diameter (mm)		14	-	10	10	-	-
	Thru Axle Length x Inner Diameter (mm)	135x10	-	-	-	-	-	X
		135x12	-	-	-	-	-	X
		142x12	-	X	-	-	X	-
150x12		-	-	-	-	-	-	
Flange distance (mm)		57.4	57.4	57.1	57.4	57.4	57.4	
Offset (mm)		6.6	6.4	6.8	6.6	6.4	6.4	
P.C.D. Left/Right (mm)		44/45	44/45	61	44/45	44/45	44/45	
Flange diameter Left/Right (mm)		52.8/ 53.8	52.8/ 53.8	70.6	52.8/ 53.8	52.8/ 53.8	52.8/ 53.8	
Quick engagement		X (36points/360°)	X (36points/360°)	-	X (32points/360°)	X (36points/360°)	X (36points/360°)	
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	
	Freehub body	Contact	Contact	Contact	Contact	Contact	Contact	
Internal grease sleeve		X	X	X	X	X	X	
Bearing	Stainless ball	-	-	-	-	-	X	
	Cup	-	Grinding	-	-	-	-	
	Cone	CBN	CBN	CBN	CBN	CBN	CBN	
Disc mount	Center lock	X	X	-	X	X	X	
	Outer serration rotor lock ring	-	-	-	-	-	-	
	Center lock mount cover option	X	X	X	X	X	X	
	6-bolt	-	-	X	-	-	-	
Freehub body	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	-	-	-	-	-	-	
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	
Axle	Material	Aluminum	Steel	Steel	Steel	Steel	Steel	
	Finish	Anodized	-	-	-	-	-	
QR lever	Material	Aluminum	-	Aluminum	Aluminum	-	-	
	Finish	Anodized	-	Anodized	Anodized	-	-	
QR housing	Material	Aluminum	-	Aluminum	Aluminum	-	-	
	Finish	Anodized	-	Anodized	Anodized	-	-	
QR nut	Material	Resin & Steel	-	Resin & Steel	Resin & Steel	-	-	
	Finish	-	-	-	-	-	-	
Average weight* *w/o axle, QR nor locking		330g	357g	426g	384g	357g	375g (φ10) 350g (φ12)	
Note				Spoke hole 24H spec available				

Freehub

Series		ZEE	ZEE	DEORE	DEORE	SHIMANO	SHIMANO
Model no.		FH-M645	FH-M648	FH-M615	FH-M618	FH-M525A	FH-M4050
Color	1	Series color	Series color	Black	Black	Black	Black
	2	-	-	Silver	-	Silver	Silver
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	6-bolt Disc	Center Lock Disc
Speeds		8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed	8-10 speed MTB 11-speed
O.L.D. (mm)		150	142	135	142	135	135
Spoke hole	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	-	X	X
Axle	Fixing method		Thru	Thru	QR	12mm E-Thru	QR
	QR skewer length (mm)	166	-	-	-	-	-
		168	-	-	X	-	X
		170	-	-	-	-	-
		173	-	-	X	-	X
	Length (mm)		-	-	146	-	146
	Diameter (mm)		-	-	10	-	10
	Thru Axle Length x Inner Diameter (mm)	135x10	-	-	-	-	-
		135x12	-	-	-	-	-
		142x12	-	X	-	X	-
150x12		X	-	-	-	-	
Flange distance (mm)		72.4	57.4	57.4	57.4	57.1	57.4
Offset (mm)		6.4	6.4	8.6	6.4	6.8	6.6
P.C.D. Left/Right (mm)		44/45	44/45	45	44/45	61	45 / 45
Flange diameter Left/Right (mm)		52.8/ 53.8	52.8/ 53.8	53.8	52.8/ 53.8	70.6	53.8
Quick engagement		X (36points/360°)	X (36points/360°)	-	X (36points/360°)	-	-
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	Contact	Contact	Contact	Contact	Contact	Contact
Internal grease sleeve		X	X	X	X	-	X
Bearing	Stainless ball	X	X	-	-	-	-
	Cup	-	-	-	-	-	-
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Disc mount	Center lock	X	X	X	X	-	X
	Outer serration rotor lock ring	-	-	-	-	-	-
	Center lock mount cover option	X	X	X	X	-	-
	6-bolt	-	-	-	-	X	-
Freehub body	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
QR lever	Material	-	-	Aluminum	-	Aluminum	Aluminum
	Finish	-	-	Painted	-	Anodized	Barrel
QR housing	Material	-	-	Aluminum	-	Aluminum	Steel
	Finish	-	-	Painted	-	Anodized	Plated
QR nut	Material	-	-	Resin & Steel	-	Resin & Steel	Steel + Resin
	Finish	-	-	-	-	-	-
Average weight* *w/o axle, QR nor locking		363g	357g	372g	357g	-	-
Note			SM-AX75/65/55 are not recommended				

Freehub

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	
Model no.		FH-M475	FH-RM70	FH-RM66	FH-RM35	FH-RM33	FH-TX800-QR	
Color	1	Black	Black	Black	Black	Black	Black	
	2	Silver	Silver	-	-	-	Silver	
Brake Type		6-bolt Disc	Rim	Center Lock Disc	Center Lock Disc	Center Lock Disc	Rim	
Speeds		8-10 speed	8-10 speed	8-10 speed	8-10 speed	8-10 speed	8-10 speed	
O.L.D. (mm)		135	135	135	135	135	135	
Spoke hole	28H	-	-	-	X*	-	-	
	32H	X	X	X	X	X	X	
	36H	X	X	X	X	X	X	
Axle	Fixing method		QR	QR	QR	QR	QR	
	QR skewer length (mm)	166	X	X	X	X	X	X
		168	-	-	-	-	-	-
		170	X	X	X	X	X	X
		173	X	-	-	-	-	-
	Length (mm)		146	146	146	146	146	146
	Diameter (mm)		10	10	10	10	10	10
	Thru Axle Length x Inner Diameter (mm)	135x10	-	-	-	-	-	-
		135x12	-	-	-	-	-	-
		142x12	-	-	-	-	-	-
150x12		-	-	-	-	-	-	
Flange distance (mm)		57.1	59.2	57.4	57.4	57.4	59.2	
Offset (mm)		6.8	7.5	6.6	6.6	6.6	7.7	
P.C.D. Left/Right (mm)		61	45 / 45	45 / 45	45 / 45	45 / 45	45 / 45	
Flange diameter Left/Right (mm)		70.6	53.8	53.8	53.8	53.8	53.8	
Quick engagement		-	-	-	-	-	-	
Seal	Hub	Labyrinth & Contact	Contact	Contact	-	-	-	
	Freehub body	-	-	-	-	-	-	
Internal grease sleeve		-	-	-	-	-	-	
Bearing	Stainless ball	-	-	-	-	-	-	
	Cup	-	-	-	-	-	-	
	Cone	-	-	-	-	-	-	
Disc mount	Center lock	-	-	X	X	X	-	
	Outer serration rotor lock ring	-	-	-	-	-	-	
	Center lock mount cover option	-	-	X	X	X	-	
	6-bolt	X	-	-	-	-	-	
Freehub body	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	-	-	-	-	-	-	
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Painted	Painted	Painted (Black) Shiny (Silver)	
Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	-	-	-	-	-	-	
QR lever	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Plated	Plated	Plated	Plated	Plated	Plated	
QR housing	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Plated	Plated	Plated	Plated	Plated	Plated	
QR nut	Material	Steel + Resin	Steel + Resin	Steel + Resin	Steel + Resin	Steel + Resin	Steel + Resin	
	Finish	-	-	-	-	-	-	
Average weight* *w/o axle, QR nor locking		-	-	-	-	-	-	
Note					* 166mm QR spec	Spoke hole 24H spec available		

Freehub

Series		SHIMANO	SHIMANO	SHIMANO	
Model no.		FH-TX800-NT	FH-RM30-7-QR	FH-RM30-7-NT	
Color	1	Black	Black	Black	
	2	Silver	Silver	Silver	
Brake Type		Rim	Rim	Rim	
Speeds		8-10 speed	7-speed	7-speed	
O.L.D. (mm)		135	130/135	135	
Spoke hole	28H	-	-	-	
	32H	X	-	-	
	36H	X	X	X	
Axle	Fixing method		Nut	QR	Nut
	QR skewer length (mm)	166	-	X	-
		168	-	-	-
		170	-	X	-
		173	-	-	-
	Length (mm)		185	141/146	185
	Diameter (mm)		10	10	10
	Thru Axle Length x Inner Diameter (mm)	135x10	-	-	-
		135x12	-	-	-
		142x12	-	-	-
150x12		-	-	-	
Flange distance (mm)		59.2	59.2	59.2	
Offset (mm)		7.5	135:5.5	135:5.5	
P.C.D. Left/Right (mm)		45 / 45	45 / 45	45 / 45	
Flange diameter Left/Right (mm)		53.8	53.8	53.8	
Quick engagement		-	-	-	
Seal	Hub	-	-	-	
	Freehub body	-	-	-	
Internal grease sleeve		-	-	-	
Bearing	Stainless ball	-	-	-	
	Cup	-	-	-	
	Cone	-	-	-	
Disc mount	Center lock	-	-	-	
	Outer serration rotor lock ring	-	-	-	
	Center lock mount cover option	-	-	-	
	6-bolt	-	-	-	
Freehub body	Material	Steel	Steel	Steel	
	Finish	-	-	-	
Hub shell	Material	Aluminum	Aluminum/2pcs	Aluminum/2pcs	
	Finish	Painted (Black) Shiny (Silver)	Painted (Black) Shiny (Silver)	Painted (Black) Shiny (Silver)	
Axle	Material	Steel	Steel	Steel	
	Finish	-	-	-	
QR lever	Material	-	Steel	-	
	Finish	-	Plated	-	
QR housing	Material	-	Steel	-	
	Finish	-	Plated	-	
QR nut	Material	-	Steel + Resin	-	
	Finish	-	-	-	
Average weight* *w/o axle, QR nor locking		-	-	-	
Note					

Freehub

Roller Brake

Series		NEXAVE	Tourney	Tourney	SHIMANO
Model no.		FH-IM70	RH-IM11	RH-IM10	FH-IM20
Color		Silver	Silver	Silver	Silver
Spoke holes	28H	-	X	X	X
	32H	X	X	X	-
	36H	X	X	X	X
	Others	-	-	-	-
	P.C.D. (mm)	45	74	74	45
Freehub body	Speeds	8-9 speed	-	-	7-speed
	11T compatible	X	-	-	X
	Roller clutch	Roller Clutch	-	-	-
	Material	Steel	-	-	Steel
O.L.D. (mm)		135	132.7(6-speed) 134.7(7-speed)	132.7(6-speed) 134.7(7-speed)	134.7
Flange diameter (mm)		53.8	84	84	54
Flange distance (mm)		60	57.1	57.1	61.2
Dish (mm)		6.8	6.9(6-speed) 7.9(7-speed)	6.9(6-speed) 7.9(7-speed)	5.85
Axle (QR type)	QR Skewer Length	-	-	-	-
	Length (mm)	-	-	-	-
	Material	-	Steel	Steel	-
Axle (Nut Type)	Length (mm)	185 (M10)	180 (M10)	180 (M10)	194/202
	Material	Steel	Steel	Steel	Steel
Seal	Hub	X	-	-	-
	Freewheel	X	-	-	-
Hub shell	Material	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Plating	Plating	Chrome Plated
Average weight		-	-	-	-
Note			For 6 or 7-speed multifree wheel	For 6 or 7-speed multifree wheel	

SL

SMSL

BL

ST

RD

FD

BR

RT

RTAD

SMBH

FC

BB

CS

MF

CN

FH

HB

WH

PD

CI-DECK

Front Hub

Series		XTR	SAINT	DXR	DEORE XT	DEORE XT	DEORE XT	
Model no.		HB-M9010	HB-M820	HB-MX71	HB-M785	HB-M756	HB-M788	
Color	1	Series color	Series color	Series color	Black	Black	Black	
	2	-	-	-	Silver	Silver	Silver	
Brake Type		Center Lock Disc	Center Lock Disc	Rim	Center Lock Disc	6-bolt Disc	Center Lock Disc	
O.L.D. (mm)		100	110	100	100	100	100	
Spoke hole	32H	X	X	X	X	X	X	
	36H	-	X	X	X	X	-	
Axle	Fixing method		15mm E-Thru	20mm Thru	Nut	QR	QR	15mm E-Thru
	QR skewer length (mm)	129	-	-	-	-	-	-
		133	-	-	-	X	X	-
	Length (mm)		100	110	-	108	108	100
	Diameter (mm)		17.5	20	-	14	10	15
	Thru Axle Length x Inner Diameter (mm)	100x8	-	-	-	-	-	-
		100x15	X	-	-	-	-	X
110x20		-	X	-	-	-	-	
Flange distance (mm)		60.2	61.6	74	60.6	59.4	60.2	
Offset (mm)		5.4	5.6	0	6	5.5	5.4	
P.C.D. Left / Right (mm)		44 / 44	52	40	44/41	61	44	
Flange diameter (mm)		52.8	59.6	50.4	52.8/51.4 (L/R)	70.6	52.8	
Seal		Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	
Internal grease sleeve		X	X	X	X	-	X	
Bearing	Stainless ball	X	X	X	-	-	-	
	Cup	Grinding	CBN	Grinding	-	-	CBN	
	Cone	CBN	CBN	CBN	CBN	CBN	CBN	
Disc mount	Outer serration rotor lock ring	X (Aluminum)	X (Aluminum)	-	-	-	X (Aluminum)	
	Center lock mount cover option	-	-	-	X	-	-	
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	
Axle	Material	Aluminum	Aluminum	Steel	Aluminum	Steel	Aluminum	
	Finish	Anodized	Anodized	-	Anodized	-	Anodized	
QR lever	Material	-	-	-	Aluminum	Aluminum	-	
	Finish	-	-	-	Anodized	Anodized	-	
QR housing	Material	-	-	-	Aluminum	Aluminum	-	
	Finish	-	-	-	Anodized	Anodized	-	
QR nut	Material	-	-	-	Resin & Steel	Resin & Steel	-	
	Finish	-	-	-	-	-	-	
Average weight		136g	216g	-	166g	239g	170g	
Note			Axle is supplied with front fork	For BMX racing		Spoke hole 24H spec available	Axle is supplied with front fork	

Front Hub

Series		SLX	SLX	ZEE	DEORE	DEORE	SHIMANO	
Model no.		HB-M675	HB-M678	HB-M640	HB-M615	HB-M618	HB-M525A	
Color	1	Series color	Series color	Series color	Black	Black	Black	
	2	-	-	-	Silver	-	Silver	
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	6-bolt Disc	
O.L.D. (mm)		100	100	110	100	100	100	
Spoke hole	32H	X	X	X	X	X	X	
	36H	X	-	X	X	-	X	
Fixing method		QR	15mm E-Thru	20mm Thru	QR	15mm E-thru	QR	
Axle	QR skewer length (mm)	129	-	-	-	-	-	
		133	X	-	-	X	-	
	Length (mm)		108	100	110	108	100	108
	Diameter (mm)		10	15	20	10	15	10
	Thru Axle Length x Inner Diameter (mm)	100x8	-	-	-	-	-	-
		100x15	-	X	-	-	X	-
110x20		-	-	X	-	-	-	
Flange distance (mm)		60.2	59.8	61.6	60.2	60.2	59.4	
Offset (mm)		5.3	5.3	5.6	5.3	5.3	5.5	
P.C.D. Left / Right (mm)		44	47	52	44	44	61	
Flange diameter (mm)		52.8/51.4 (L/R)	52.8	59.6	52.8	52.8	70.6	
Seal		Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	
Internal grease sleeve		X	X	X	-	X	-	
Bearing	Stainless ball	-	-	-	-	-	-	
	Cup	-	-	-	-	-	-	
	Cone	CBN	CBN	CBN	CBN	CBN	CBN	
Disc mount	Outer serration rotor lock ring	-	X (Aluminum)	X (Aluminum)	-	X (Steel)	-	
	Center lock mount cover option	X	-	-	X	-	-	
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	
Axle	Material	Steel	Aluminum	Aluminum	Steel	Aluminum	Steel	
	Finish	-	Anodized	Anodized	-	Anodized	-	
QR lever	Material	Aluminum	-	-	Aluminum	-	Aluminum	
	Finish	Anodized	-	-	Painted	-	Anodized	
QR housing	Material	Aluminum	-	-	Aluminum	-	Aluminum	
	Finish	Anodized	-	-	Painted	-	Anodized	
QR nut	Material	Resin & Steel	-	-	Resin & Steel	-	Resin & Steel	
	Finish	-	-	-	-	-	-	
Average weight		189g	190g	228g	185g	155g	-	
Note			Axle is supplied with front fork	Axle is supplied with front fork		Axle is supplied with front fork		

SL

SMSL

BL

ST

RD

FD

BR

RT

RTAD

SMBH

FC

BB

CS

MF

CN

FH

HB

WH

PD

CI-DECK

Front Hub

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		HB-M475	HB-M4050	HB-RM70	HB-RM66	HB-RM35	HB-RM33
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	-	-	-
Brake Type		6-bolt Disc	Center Lock Disc	Rim	Center Lock Disc	Center Lock Disc	Center Lock Disc
O.L.D. (mm)		100	100	100	100	100	100
Spoke hole	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
Axle	Fixing method		QR	QR	QR	QR	QR
	QR skewer length (mm)	129	-	-	-	-	-
		133	X	X	X	X	X
	Length (mm)		108	108	108	108	108
	Diameter (mm)		10	10	9	10	10
	Thru Axle Length x Inner Diameter (mm)	100x8	-	-	-	-	-
		100x15	-	-	-	-	-
110x20		-	-	-	-	-	
Flange distance (mm)		59.4	60.2	71.6	60.2	60.2	60.2
Offset (mm)		5.5	5.6	0	5.5	5.5	5.5
P.C.D. Left / Right (mm)		61	44/44	38/38	44/44	44/44	44/44
Flange diameter (mm)		70.6	52.8	48.4	52.8	52.8	52.8
Seal		Contact	Labyrinth & Contact	Labyrinth & Contact	Contact	-	-
Internal grease sleeve		-	-	-	-	-	-
Bearing	Stainless ball		-	-	-	-	-
	Cup		-	-	-	-	-
	Cone		-	-	-	-	-
Disc mount	Outer serration rotor lock ring		-	-	-	-	-
	Center lock mount cover option		-	-	-	X	X
Hub shell	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Painted
Axle	Material		Steel	Steel	Steel	Steel	Steel
	Finish		-	-	-	-	-
QR lever	Material		Steel	Aluminum	Steel	Steel	Steel
	Finish		Plated	Barrel	Plated	Plated	Plated
QR housing	Material		Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Plated	Plated	Plated
QR nut	Material		Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
	Finish		-	-	-	-	-
Average weight		-	-	-	-	-	-
Note							Spoke hole 24H spec available

Front Hub

Series		TOURNEY TX	TOURNEY TX	
Model no.		HB-TX800-QR	HB-TX800-NT	
Color	1	Black	Black	
	2	Silver	Silver	
Brake Type		Rim	Rim	
O.L.D. (mm)		100	100	
Spoke hole	32H	X	X	
	36H	X	X	
Fixing method		QR	Nut	
Axle	QR	129	X	
	skewer length (mm)	133	X	
		Length (mm)	108	140
	Diameter (mm)	9	9	
	Thru Axle Length x Inner Diameter (mm)	100x8	-	-
		100x15	-	-
Flange distance (mm)		71.6	71.6	
Offset (mm)		0	0	
P.C.D. Left / Right (mm)		38/38	38/38	
Flange diameter (mm)		46	46	
Seal		-	-	
Internal grease sleeve		-	-	
Bearing	Stainless ball	-	-	
	Cup	-	-	
	Cone	-	-	
Disc mount	Outer serration rotor lock ring	-	-	
	Center lock mount cover option	-	-	
Hub shell	Material	Aluminum	Aluminum	
	Finish	Painted (Black) Shiny (Silver)	Painted (Black) Shiny (Silver)	
Axle	Material	Steel	Steel	
	Finish	-	-	
QR lever	Material	Steel	-	
	Finish	Plated	-	
QR housing	Material	Steel	-	
	Finish	Plated	-	
QR nut	Material	Resin & Steel	-	
	Finish	-	-	
Average weight		-	-	
Note		-	-	

Front Hub

Roller Brake

Series		NEXAVE	Nexus
Model no.		HB-IM70	HB-IM40
Color	1	Silver	Silver
	2	-	-
Type		For hub roller brake	For hub roller brake
Spoke holes	28H	-	-
	32H	-	-
	36H	X	X
	Others	-	-
P.C.D. (mm)		70	52
O.L.D.	100 mm	X	X
	105 mm	X	-
Flange distance (mm)		56.8	61.5
Offset (mm)		4.2(QR)3.7/6(NUT)	4.3
Wheel size	26-28inch	X	X
	20-28inch	-	-
	16-28inch	-	-
	24-28inch	-	-
	20-24inch	X	-
	16-20inch	-	-
	Compatible wheel size (mm)	-	-
Roller brake modulator grade	More than 26inch High	-	-
	More than 26inch Standard	X	X
	20-24inch	X	-
Axle (QR type)	QR skewer length 129 mm	X	-
	QR skewer length 133 mm	X	-
	Axle length (mm)	108 (M10)	-
Axle (Nut type)	Material	Steel	-
	Axle length 140 mm	X (M9)	X (M9)
	Axle length 145 mm	X (M9)	-
	Material	Steel	Steel
Seal		X	X
Hub shell	Material	Aluminum	Aluminum
	Finish	Clear Painted	Machined
Quick release lever	Material	Aluminum	-
	Finish	Anodized	-
Structure (Braking power)		Hyper	Normal
Average weight		-	-
Note		-	-

Wheel

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		WH-M9000-TU-F15-29	WH-M9000-TU-R-29	WH-M9000-TU-R12-29	WH-M9000-TL-F15-29	WH-M9000-TL-R-29	WH-M9000-TL-R12-29
Color	1	Series Color	Series Color	Series Color	Series Color	Series Color	Series Color
	2	-	-	-	-	-	-
Front / Rear		Front	Rear	Rear	Front	Rear	Rear
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		-	MTB 11-speed***	MTB 11-speed***	-	MTB 11-speed***	MTB 11-speed***
O.L.D. (mm)		100	135	142	100	135	142
Wheel Size		29inch	29inch	29inch	622x20C (29")	622x20C (29")	622x20C (29")
Tire	Type	Tubular	Tubular	Tubular	UST / Clincher *	UST / Clincher *	UST / Clincher *
	Recommended size	29x1.90-2.10	29x1.90-2.10	29x1.90-2.10	29x1.90-2.25	29x1.90-2.25	29x1.90-2.25
Rim	Height (mm)	23	23	23	18.8	18.8	18.8
	Width (mm)	26	26	26	23.9	23.9	23.9
	Rim joint	CFRP monocoque	CFRP monocoque	CFRP monocoque	Welding	Welding	Welding
	Brazed reinforcement	-	-	-	-	-	-
	Offset rim	X	X	X	X	X	X
Spokes	Requires rim tape	-	-	-	X**	X**	X**
	Number	28	28	28	28	28	28
	Straight pull	X	X	X	X	X	X
	J-bend	-	-	-	-	-	-
	Butted	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0
Axle	Bladed	-	-	-	-	-	-
	Fixing method	15mm E-Thru	QR	12mm E-Thru	15mm E-Thru	QR	12mm E-Thru
	QR skewer length (mm)	133	-	-	-	-	-
		168	-	X	-	-	X
		173	-	X	-	-	X
	Length (mm)	100	146	142	100	146	142
Diameter (mm)	17.5	16	16	17.5	16	16	
Thru Axle Length x Inner Diameter (mm)	100x15	X	-	-	X	-	-
	142x12	-	-	X	-	-	X
Quick engagement		-	X (36points/360°)	X (36points/360°)	-	X (36points/360°)	X (36points/360°)
Bearing	Stainless ball	X	X	X	X	X	X
	Cup	Grinding	Grinding	Grinding	Grinding	Grinding	Grinding
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	-	Contact	Contact	-	Contact	Contact
Internal grease sleeve		X	X	X	X	X	X
Disc mount	Outer serration rotor lock ring	X (Aluminum)	X (Aluminum)	X (Aluminum)	X (Aluminum)	X (Aluminum)	X (Aluminum)
Rim	Material	CFRP	CFRP	CFRP	Carbon/Aluminum	Carbon/Aluminum	Carbon/Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Freehub body	Material	-	Titanium	Titanium	-	Titanium	Titanium
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
QR lever	Material	-	Aluminum	-	-	Aluminum	-
	Finish	-	Anodized	-	-	Anodized	-
QR housing	Material	-	Aluminum	-	-	Aluminum	-
	Finish	-	Anodized	-	-	Anodized	-
QR nut	Material	-	Resin & Steel	-	-	Resin & Steel	-
	Finish	-	-	-	-	-	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight		598g	734g	731g	761g	894g	894g
Note			***CP is available only for 11-speed	***CP is available only for 11-speed	* Max pressure 280kPa ** Exclusive rim tape ***CP is available only for 11-speed	* Max pressure 280kPa ** Exclusive rim tape ***CP is available only for 11-speed	* Max pressure 280kPa ** Exclusive rim tape ***CP is available only for 11-speed

Wheel

Series		XTR	XTR	XTR	XTR	XTR	XTR
Model no.		WH-M9000-TL-F15-275	WH-M9000-TL-R-275	WH-M9000-TL-R12-275	WH-M9020-TL-F15-29	WH-M9020-TL-R12-29	WH-M9020-TL-F15-275
Color	1	Series Color	Series Color	Series Color	Series Color	Series Color	Series Color
	2	-	-	-	-	-	-
Front / Rear		Front	Rear	Rear	Front	Rear	Front
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		-	MTB 11-speed***	MTB 11-speed***	-	MTB 11-speed***	-
O.L.D. (mm)		100	135	142	100	142	100
Wheel Size		584x20C (650B=27.5")	584x20C (650B=27.5")	584x20C (650B=27.5")	622x24C (29")	622x24C (29")	584x24C (650B=27.5")
Tire	Type	UST / Clincher *	UST / Clincher *	UST / Clincher *	UST / Clincher *	UST / Clincher *	UST / Clincher *
	Recommended size	27.5x1.90-2.25	27.5x1.90-2.25	27.5x1.90-2.25	29x2.10-2.35	29x2.10-2.35	27.5x2.10-2.40
Rim	Height (mm)	18.8	18.8	18.8	18.8	18.8	18.8
	Width (mm)	23.9	23.9	23.9	27.9	27.9	27.9
	Rim joint	Welding	Welding	Welding	Welding	Welding	Welding
	Brazed reinforcement	-	-	-	-	-	-
	Offset rim	X	X	X	X	X	X
Requires rim tape		X**	X**	X**	X**	X**	X**
Spokes	Number	28	28	28	28	28	28
	Straight pull	X	X	X	X	X	X
	J-bend	-	-	-	-	-	-
	Butted	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0
	Bladed	-	-	-	-	-	-
Axle	Fixing method		15mm E-Thru	QR	12mm E-Thru	15mm E-Thru	12mm E-Thru
	QR skewer length (mm)	133	-	-	-	-	-
		168	-	X	-	-	-
		173	-	X	-	-	-
	Length (mm)		100	146	142	100	142
	Diameter (mm)		17.5	16	16	17.5	16
	Thru Axle Length x Inner Diameter (mm)	100x15	X	-	-	X	-
142x12		-	-	X	-	X	
Quick engagement		-	X (36points/360°)	X (36points/360°)	-	X (36points/360°)	-
Bearing	Stainless ball	X	X	X	X	X	X
	Cup	Grinding	Grinding	Grinding	Grinding	Grinding	Grinding
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	-	Contact	Contact	-	Contact	-
Internal grease sleeve		X	X	X	X	X	X
Disc mount	Outer serration rotor lock ring	X (Aluminum)	X (Aluminum)	X (Aluminum)	X (Aluminum)	X (Aluminum)	X (Aluminum)
Rim	Material	Carbon/Aluminum	Carbon/Aluminum	Carbon/Aluminum	Carbon/Aluminum	Carbon/Aluminum	Carbon/Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Freehub body	Material	-	Titanium	Titanium	-	Titanium	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
QR lever	Material	-	Aluminum	-	-	-	-
	Finish	-	Anodized	-	-	-	-
QR housing	Material	-	Aluminum	-	-	-	-
	Finish	-	Anodized	-	-	-	-
QR nut	Material	-	Resin & Steel	-	-	-	-
	Finish	-	-	-	-	-	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight		724g	857g	857g	777g	923g	750g
Note		* Max pressure 280kPa ** Exclusive rim tape	* Max pressure 280kPa ** Exclusive rim tape ***CP is available only for 11-speed	* Max pressure 280kPa ** Exclusive rim tape ***CP is available only for 11-speed	* Max pressure 260kPa ** Exclusive rim tape	* Max pressure 260kPa ** Exclusive rim tape ***CP is available only for 11-speed	* Max pressure 260kPa ** Exclusive rim tape

SL

SMSL

BL

ST

RD

FD

BR

RT

RTAD

SMBH

FC

BB

CS

MF

CN

FH

HB

WH

PD

CI-DECK

Wheel

Series		XTR	DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT
Model no.		WH-M9020-TL-R12-275	WH-M785-F15	WH-M785-F	WH-MT785-R	WH-M785-F-275	WH-M785-F15-275
Color	1	Series Color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Front / Rear		Rear	Front	Front	Rear	Front	Front
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		MTB 11-speed***	-	-	8-10 speed MTB 11-speed***	-	-
O.L.D. (mm)		142	100	100	135	100	100
Wheel Size		584x24C (650B=27.5")	559x19C (26")	559x19C (26")	559x19C (26")	584X19C (650B=27.5")	584X19C (650B=27.5")
Tire	Type	UST / Clincher *	UST/clincher	UST/clincher	UST/clincher	UST/clincher	UST/clincher
	Recommended size	27.5x2.10-2.40	26x1.50-2.25	26x1.50-2.25	26x1.50-2.25	27.5X1.50-2.25	27.5X1.50-2.25
Rim	Height (mm)	18.8	21	21	21	19	19
	Width (mm)	27.9	23.3	23.3	23.3	24.6	24.6
	Rim joint	Welding	Welding	Welding	Welding	Welding	Welding
	Brazed reinforcement	-	X	X	X	X	X
	Offset rim	X	-	-	-	-	-
	Requires rim tape	X**	-	-	-	-	-
Spokes	Number	28	24	24	24	24	24
	Straight pull	X	X	X	X	X	X
	J-bend	-	-	-	-	-	-
	Butted	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.8-2.0	2.0-1.8-2.0
	Bladed	-	-	-	-	-	-
	Fixing method	12mm E-Thru	15mm E-Thru	QR	QR	QR	15mm E-Thru
Axle	QR skewer length (mm)	133	-	X	-	X	-
		168	-	-	X	-	-
		173	-	-	X	-	-
	Length (mm)	142	100	108	146	108	100
	Diameter (mm)	16	-	14	14	10	-
	Thru Axle Length x Inner Diameter (mm)	100x15	-	X	-	-	-
	142x12	X	-	-	-	-	-
Quick engagement		X (36points/360°)	-	-	X (36points/360°)	-	-
Bearing	Stainless ball	X	-	-	-	-	-
	Cup	Grinding	CBN	-	-	-	CBN
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	Contact	-	-	Contact	-	-
Internal grease sleeve		X	X	X	X	X	X
Disc mount	Outer serration rotor lock ring	X (Aluminum)	X (Aluminum)	-	-	-	X (Aluminum)
Rim	Material	Carbon/Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Anodized	Anodized	Anodized	Anodized	Anodized
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Black	Black	Black	Black	Black
Freehub body	Material	Titanium	-	-	Steel	-	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
QR lever	Material	-	-	Aluminum	Aluminum	Aluminum	-
	Finish	-	-	Anodized	Anodized	Anodized	-
QR housing	Material	-	-	Aluminum	Aluminum	Aluminum	-
	Finish	-	-	Anodized	Anodized	Anodized	-
QR nut	Material	-	-	Resin & Steel	Resin & Steel	Resin & Steel	-
	Finish	-	-	-	-	-	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	RR317-WUA SW	RR317-WUA SW
Average weight		892g	775g	750g	915g	803g	806g
Note		* Max pressure 260kPa ** Exclusive rim tape ***CP is available only for 11-speed			***CP is available only for 9 & 10-speed		

Wheel

Series		DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT	
Model no.		WH-M785-R-275	WH-M785-R12-275	WH-M785-F15-29	WH-M785-F-29	WH-M785-R-29	WH-M785-R12-29	
Color	1	Series color	Series color	Series color	Series color	Series color	Series color	
	2	-	-	-	-	-	-	
Front / Rear		Rear	Rear	Front	Front	Rear	Rear	
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	
Speeds		8-10 speed MTB 11-speed***	8-10 speed MTB 11-speed***	-	-	8-10 speed MTB 11-speed***	8-10 speed MTB 11-speed***	
O.L.D. (mm)		135	142	100	100	135	142	
Wheel Size		584X19C (650B=27.5")	584X19C (650B=27.5")	622x19C (29")	622x19C (29")	622x19C (29")	622x19C (29")	
Tire	Type	UST/clincher	UST/clincher	UST/clincher	UST/clincher	UST/clincher	UST/clincher	
	Recommended size	27.5X1.50-2.25	27.5X1.50-2.25	29x1.50-2.25	29x1.50-2.25	29x1.50-2.25	29x1.50-2.25	
Rim	Height (mm)	19	19	21	21	21	21	
	Width (mm)	24.6	24.6	23.3	23.3	23.3	23.3	
	Rim joint	Welding	Welding	Welding	Welding	Welding	Welding	
	Brazed reinforcement	X	X	X	X	X	X	
	Offset rim	-	-	-	-	-	-	
	Requires rim tape	-	-	-	-	-	-	
Spokes	Number	24	24	24	24	24	24	
	Straight pull	X	X	X	X	X	X	
	J-bend	-	-	-	-	-	-	
	Butted	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	
	Bladed	-	-	-	-	-	-	
Axle	Fixing method		QR	12mm E-Thru	15mm E-Thru	QR	QR	12mm E-Thru
	QR skewer length (mm)	133	-	-	-	X	-	-
		168	X	-	-	-	X	-
		173	X	-	-	-	X	-
	Length (mm)		146	142	100	108	146	142
	Diameter (mm)		10	N/A (SM-AX75)	-	14	14	N/A (SM-AX75)
	Thru Axle Length x Inner Diameter (mm)	100x15	-	-	X	-	-	-
142x12		-	X	-	-	-	X	
Quick engagement		X (36points/360°)	X (36points/360°)	-	-	X (36points/360°)	X (36points/360°)	
Bearing	Stainless ball		-	-	-	-	-	
	Cup		-	Grinding	CBN	-	-	Grinding
	Cone		CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub		Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	
	Freehub body		Contact	Contact	-	-	Contact	Contact
Internal grease sleeve		X	X	X	X	X	X	
Disc mount	Outer serration rotor lock ring		-	-	X (Aluminum)	-	-	
Rim	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Spoke	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish		Black	Black	Black	Black	Black	Black
Nipple	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish		Black	Black	Black	Black	Black	Black
Freehub body	Material		Steel	Steel	-	-	Steel	
	Finish		-	-	-	-	-	-
Hub shell	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material		Steel	Steel	Aluminum	Aluminum	Aluminum	
	Finish		-	-	Anodized	Anodized	Anodized	-
QR lever	Material		Aluminum	-	-	Aluminum	Aluminum	
	Finish		Anodized	-	-	Anodized	Anodized	-
QR housing	Material		Aluminum	-	-	Aluminum	Aluminum	
	Finish		Anodized	-	-	Anodized	Anodized	-
QR nut	Material		Resin & Steel	-	-	Resin & Steel	Resin & Steel	
	Finish		-	-	-	-	-	-
Reflector	JIS/CPSC		RR-550-WUW SW	RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	
	AS		RR-550-WUA SW	RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	
	DIN		RR317-WUA SW	RR317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	
Average weight		968g	999g	840g	840g	990g	1047g	
Note		***CP is available only for 9 & 10-speed	***CP is available only for 9 & 10-speed			***CP is available only for 9 & 10-speed	***CP is available only for 9 & 10-speed	

Wheel

Series		DEORE XT	DEORE XT	DEORE XT	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-M788-F15	WH-M788-R12	WH-M788-R	WH-MT68-F15	WH-MT68-R12	WH-MT68-R
Color	1	Series color	Series color	Series color	Black	Black	Black
	2	-	-	-	White	White	White
Front / Rear		Front	Rear	Rear	Front	Rear	Rear
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		-	8-10 speed MTB 11-speed***	8-10 speed MTB 11-speed***	-	8-10 speed MTB 11-speed***	8-10 speed MTB 11-speed***
O.L.D. (mm)		100	142	135	100	142	135
Wheel Size		559x21C (26")	559x21C (26")	559x21C (26")	559x21C (26")	559x21C (26")	559x21C (26")
Tire	Type	UST/clincher	UST/clincher	UST/clincher	UST/clincher	UST/clincher	UST/clincher
	Recommended size	26x1.95-2.50	26x1.95-2.50	26x1.95-2.50	26x1.95-2.50	26x1.95-2.50	26x1.95-2.50
Rim	Height (mm)	22	22	22	20.5	20.5	20.5
	Width (mm)	26.4	26.4	26.4	25.8	25.8	25.8
	Rim joint	Welding	Welding	Welding	Welding	Welding	Welding
	Brazed reinforcement	X	X	X	-	-	-
	Offset rim	-	-	-	-	-	-
	Requires rim tape	-	-	-	X**	X**	X**
Spokes	Number	24	24	24	24	24	24
	Straight pull	X	X	X	X	X	X
	J-bend	-	-	-	-	-	-
	Butted	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0
	Bladed	-	-	-	-	-	-
Axle	Fixing method		15mm E-Thru	12mm E-Thru	QR	15mm E-Thru	12mm E-Thru
	QR skewer length (mm)	133	-	-	-	-	-
		168	-	-	X	-	X
		173	-	-	X	-	X
	Length (mm)		100	142	146	100	142
	Diameter (mm)		-	N/A (SM-AX75)	14	-	N/A (SM-AX65)
	Thru Axle Length x Inner Diameter (mm)	100x15	X	-	-	X	-
142x12		-	X	-	-	X	
Quick engagement		-	X (36points/360°)	X (36points/360°)	-	X (36points/360°)	X (32points/360°)
Bearing	Stainless ball	-	-	-	-	-	-
	Cup	CBN	Grinding	-	-	-	-
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	-	Contact	Contact	-	Contact	Contact
Internal grease sleeve		X	X	X	X	X	X
Disc mount	Outer serration rotor lock ring	X (Aluminum)	-	-	X (Aluminum)	-	-
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Black	Black	Black	Black	Black	Black
Freehub body	Material	-	Steel	Steel	-	Steel	Steel
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Steel	Aluminum	Aluminum	Steel	Aluminum
	Finish	Anodized	-	Anodized	Anodized	-	Anodized
QR lever	Material	-	Aluminum	Aluminum	-	-	Aluminum
	Finish	-	Anodized	Anodized	-	-	Anodized
QR housing	Material	-	Aluminum	Aluminum	-	-	Aluminum
	Finish	-	Anodized	Anodized	-	-	Anodized
QR nut	Material	-	-	Resin & Steel	-	-	Resin & Steel
	Finish	-	-	-	-	-	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight		775g	1020g	980g	910g	1090g	1050g
Note			***CP is available only for 9 & 10-speed	***CP is available only for 9 & 10-speed	** Exclusive rim tape ***CP is available only for 9 & 10-speed	** Exclusive rim tape ***CP is available only for 9 & 10-speed	** Exclusive rim tape ***CP is available only for 9 & 10-speed

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	
Model no.		WH-MT66-F15	WH-MT66-F	WH-MT66-R	WH-MT66-F15-29	WH-MT66-F-29	WH-MT66-R12-29	
Color	1	Black	Black	Black	Black	Black	Black	
	2	White	White	White	White	White	White	
Front / Rear		Front	Front	Rear	Front	Front	Rear	
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	
Speeds		-	-	8-10 speed MTB 11-speed***	-	-	8-10 speed MTB 11-speed***	
O.L.D. (mm)		100	100	135	100	100	135	
Wheel Size		559x19C (26")	559x19C (26")	559x19C (26")	622x19C (29")	622x19C (29")	622x19C (29")	
Tire	Type	UST/clincher	UST/clincher	UST/clincher	UST/clincher	UST/clincher	UST/clincher	
	Recommended size	26x1.50-2.25	26x1.50-2.25	26x1.50-2.25	29x1.50-2.25	29x1.50-2.25	29x1.50-2.25	
Rim	Height (mm)	19	19	19	19	19	19	
	Width (mm)	24.6	24.6	24.6	24.6	24.6	24.6	
	Rim joint	Welding	Welding	Welding	Welding	Welding	Welding	
	Brazed reinforcement	-	-	-	-	-	-	
	Offset rim	-	-	-	-	-	-	
	Requires rim tape	X**	X**	X**	X**	X**	X**	
Spokes	Number	24	24	24	24	24	28	
	Straight pull	X	X	X	X	X	X	
	J-bend	-	-	-	-	-	-	
	Butted	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	
	Bladed	-	-	-	-	-	-	
Axle	Fixing method		15mm E-Thru	QR	QR	15mm E-Thru	QR	12mm E-Thru
	QR skewer length (mm)	133	-	X	-	-	X	-
		168	-	-	X	-	-	-
		173	-	-	X	-	-	-
	Length (mm)		100	108	146	100	108	142
	Diameter (mm)		-	14	14	-	14	N/A (SM-AX65)
	Thru Axle Length x Inner Diameter (mm)	100x15	X	-	-	X	-	-
142x12		-	-	-	-	-	X	
Quick engagement		-	-	X (32points/360°)	-	-	X (36points/360°)	
Bearing	Stainless ball	-	-	-	-	-	-	
	Cup	-	-	-	-	-	-	
	Cone	CBN	CBN	CBN	CBN	CBN	CBN	
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	
	Freehub body	-	-	Contact	-	-	Contact	
Internal grease sleeve		X	X	X	X	X	X	
Disc mount	Outer serration rotor lock ring	X (Aluminum)	-	-	X (Aluminum)	-	-	
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Paint	Paint	Paint	Anodized	Anodized	Anodized	
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
	Finish	Black	Black	Black	Black	Black	Black	
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Black	Black	Black	Black	Black	Black	
Freehub body	Material	-	-	Steel	-	-	Steel	
	Finish	-	-	-	-	-	-	
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	
Axle	Material	Aluminum	Steel	Steel	Aluminum	Steel	Steel	
	Finish	Anodized	-	-	Anodized	-	-	
QR lever	Material	-	Aluminum	Aluminum	-	Aluminum	-	
	Finish	-	Anodized	Anodized	-	Anodized	-	
QR housing	Material	-	Aluminum	Aluminum	-	Aluminum	-	
	Finish	-	Anodized	Anodized	-	Anodized	-	
QR nut	Material	-	Resin & Steel	Resin & Steel	-	Resin & Steel	-	
	Finish	-	-	-	-	-	-	
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	
Average weight		840g	840g	985g	945g	945g	1120g	
Note		** Exclusive rim tape	** Exclusive rim tape	** Exclusive rim tape ***CP is available only for 9 & 10-speed	** Exclusive rim tape	** Exclusive rim tape	** Exclusive rim tape ***CP is available only for 9 & 10-speed	

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-MT66-R-29	WH-MT55-F15	WH-MT55-F	WH-MT55-R	WH-MT55-F15-29	WH-MT55-F-29
Color	1	Black	Black	Black	Black	Black	Black
	2	White	White	White	White	White	White
Front / Rear		Rear	Front	Front	Rear	Front	Front
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		8-10 speed MTB 11-speed***	-	-	8-10 speed MTB 11-speed***	-	-
O.L.D. (mm)		135	100	100	135	100	100
Wheel Size		622x19C (29")	559x19C (26")	559x19C (26")	559x19C (26")	622x19C (29")	622x19C (29")
Tire	Type	UST/clincher	Clincher	Clincher	Clincher	Clincher	Clincher
	Recommended size	29x1.50-2.25	26x1.50-2.25	26x1.50-2.25	26x1.50-2.25	29x1.50-2.25	29x1.50-2.25
Rim	Height (mm)	19	19	19	19	19	19
	Width (mm)	24.6	24.6	24.6	24.6	24.6	24.6
	Rim joint	Welding	Welding	Welding	Welding	Welding	Welding
	Brazed reinforcement	-	-	-	-	-	-
	Offset rim	-	-	-	-	-	-
	Requires rim tape	X**	-	-	-	-	-
Spokes	Number	28	24	24	24	24	24
	Straight pull	X	X	X	X	X	X
	J-bend	-	-	-	-	-	-
	Butted	2.0-1.8-2.0	2.0	2.0	2.0	2.0	2.0
	Bladed	-	-	-	-	-	-
Axle	Fixing method		QR	15mm E-Thru	QR	QR	15mm E-Thru
	QR skewer length (mm)	133	-	-	X	-	X
		168	X	-	-	X	-
		173	X	-	-	X	-
	Length (mm)		146	100	108	146	100
	Diameter (mm)		14	-	9	10	-
Thru Axle Length x Inner Diameter (mm)	100x15	-	X	-	-	X	
	142x12	-	-	-	-	-	
Quick engagement		X (32points/360°)	-	-	-	-	-
Bearing	Stainless ball		-	-	-	-	-
	Cup		-	-	-	-	-
	Cone		CBN	CBN	CBN	CBN	CBN
Seal	Hub		Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body		Contact	-	-	Contact	-
Internal grease sleeve		X	X	-	X	X	-
Disc mount	Outer serration rotor lock ring		-	X (Aluminum)	-	-	X (Aluminum)
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Rim	Finish		Anodized	Paint	Paint	Paint	Paint
	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Spoke	Finish		Black	Black	Black	Black	Black
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Nipple	Finish		Black	Black	Black	Black	Black
	Material		Steel	-	-	Steel	-
Freehub body	Finish		-	-	-	-	-
	Material		Aluminum	Aluminum	Anodized	Aluminum	Aluminum
Hub shell	Finish		Anodized	Anodized	Anodized	Anodized	Anodized
	Material		Steel	Aluminum	Steel	Aluminum	Steel
Axle	Finish		-	Anodized	-	-	Anodized
	Material		Aluminum	-	Aluminum	Aluminum	-
QR lever	Finish		Anodized	-	Anodized	Anodized	-
	Material		Aluminum	-	Aluminum	Aluminum	-
QR housing	Finish		Anodized	-	Anodized	Anodized	-
	Material		Resin & Steel	-	Resin & Steel	Resin & Steel	-
QR nut	Finish		-	-	-	-	-
	Material		Resin & Steel	-	Resin & Steel	Resin & Steel	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight		1080g	850g	853g	1030g	919g	933g
Note		** Exclusive rim tape ***CP is available only for 9 & 10-speed			***CP is available only for 9 & 10-speed		

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-MT55-R-29	WH-MT35-F	WH-MT35-F15	WH-MT35-R	WH-MT35-F-275	WH-MT35-F15-275
Color	1	Black	Black	Black	Black	Black	Black
	2	White	White	White	White	White	White
Front / Rear		Rear	Front	Front	Rear	Front	Front
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		8-10 speed MTB 11-speed***	-	-	8-10 speed MTB 11-speed***	-	-
O.L.D. (mm)		135	100	100	135	100	100
Wheel Size		622x19C (29")	559x19C (26")	559x19C (26")	559x19C (26")	584X19C (650B=27.5")	584X19C (650B=27.5")
Tire	Type	Clincher	clincher	clincher	clincher	Clincher	Clincher
	Recommended size	29x1.50-2.25	26X1.50-2.25	26X1.50-2.25	26X1.50-2.25	27.5X1.50-2.25	27.5X1.50-2.25
Rim	Height (mm)	19	19	19	19	19	19
	Width (mm)	24.6	24.6	24.6	24.6	24.6	24.6
	Rim joint	Welding	Welding	Welding	Welding	Welding	Welding
	Brazed reinforcement	-	-	-	-	-	-
	Offset rim	-	-	-	-	-	-
	Requires rim tape	-	X (20-559)	X (20-559)	X (20-559)	X (20-584)	X (20-584)
Spokes	Number	24	24	24	28	24	24
	Straight pull	X	-	-	-	-	-
	J-bend	-	X	X	X	X	X
	Butted	2.0	2.0	2.0	2.0	2.0	2.0
	Bladed	-	X	X	X	X	X
Axle	Fixing method	QR	QR	15mm E-Thru	QR	QR	15mm E-Thru
	QR skewer length (mm)	133	-	X	-	X	-
		168	X	-	-	X	-
		173	X	-	-	X	-
	Length (mm)	146	108	100	146	108	100
	Diameter (mm)	10	10	-	10	10	-
	Thru Axle Length x Inner Diameter (mm)	100x15	-	-	X	-	-
142x12		-	-	-	-	-	-
Quick engagement		-	-	-	-	-	-
Bearing	Stainless ball	-	-	-	-	-	-
	Cup	-	-	-	-	-	-
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	Contact	-	-	Contact	-	-
Internal grease sleeve		X	-	X	X	-	X
Disc mount	Outer serration rotor lock ring	-	-	X (Steel)	-	-	X (Steel)
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Paint	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Black	Black	Black	Black	Black	Black
Freehub body	Material	Steel	-	-	Steel	-	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Steel	Steel	Aluminum	Steel	Steel	Aluminum
	Finish	-	-	Anodized	-	-	Anodized
QR lever	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	-
	Finish	Anodized	Painted	-	Painted	Painted	-
QR housing	Material	Aluminum	Steel	-	Steel	Steel	-
	Finish	Anodized	Painted	-	Painted	Painted	-
QR nut	Material	Resin & Steel	Resin & Steel	-	Resin & Steel	Resin & Steel	-
	Finish	-	-	-	-	-	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW
Average weight		1106g	839g	817g	1076g	874g	889g
Note		***CP is available only for 9 & 10-speed			***CP is available only for 9 & 10-speed		

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-MT35-R-275	WH-MT35-F-29	WH-MT35-F15-29	WH-MT35-R-29	WH-MT15-A-F	WH-MT15-A-F15
Color	1	Black	Black	Black	Black	Black	Black
	2	White	White	White	White	White	White
Front / Rear		Rear	Front	Front	Rear	Front	Front
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		8-10 speed MTB 11-speed***	-	-	8-10 speed MTB 11-speed***	-	-
O.L.D. (mm)		135	100	100	135	100	100
Wheel Size		584X19C (650B=27.5")	622x19C (29")	-	622x19C (29")	559x19C (26")	559x19C (26")
Tire	Type	Clincher	Clincher	-	Clincher	Clincher	Clincher
	Recommended size	27.5X1.50-2.25	29X1.50-2.25	29X1.50-2.25	29X1.50-2.25	26X1.50-2.25	26X1.50-2.25
Rim	Height (mm)	19	19	19	19	21	21
	Width (mm)	24.6	24.6	24.6	24.6	24.6	24.6
	Rim joint	Welding	Welding	Welding	Welding	Sleeve	Sleeve
	Brazed reinforcement	-	-	-	-	-	-
	Offset rim	-	-	-	-	-	-
	Requires rim tape	X (20-584)	X (20-622)	X (20-622)	X (20-622)	X (20-559)	X (20-559)
Spokes	Number	28	24	24	28	28	28
	Straight pull	-	-	-	-	-	-
	J-bend	X	X	X	X	X	X
	Butted	2.0	2.0	2.0	2.0	2.0	2.0
	Bladed	X	X	X	X	X	X
Axle	Fixing method	QR	QR	15mm E-Thru	QR	QR	15mm E-Thru
	QR skewer length (mm)	133	-	X	-	X	-
		168	X	-	-	X	-
		173	X	-	-	X	-
	Length (mm)	146	108	100	146	108	100
	Diameter (mm)	10	10	-	10	10	-
	Thru Axle Length x Inner Diameter (mm)	100x15	-	-	X	-	-
142x12		-	-	-	-	-	-
Quick engagement		-	-	-	-	-	-
Bearing	Stainless ball	-	-	-	-	-	-
	Cup	-	-	-	-	-	-
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	Contact	-	-	Contact	-	-
Internal grease sleeve		X	-	X	X	-	X
Disc mount	Outer serration rotor lock ring	-	-	X (Steel)	-	-	X (Steel)
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Brass	Brass
	Finish	Black	Black	Black	Black	Silver	Silver
Freehub body	Material	Steel	-	-	Steel	-	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Painted	Painted
Axle	Material	Steel	Steel	Aluminum	Steel	Steel	Aluminum
	Finish	-	-	Anodized	-	-	Anodized
QR lever	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	-
	Finish	Painted	Painted	-	Painted	Painted	-
QR housing	Material	Steel	Steel	-	Steel	Steel	-
	Finish	Painted	Painted	-	Painted	Painted	-
QR nut	Material	Resin & Steel	Resin & Steel	-	Resin & Steel	Resin & Steel	-
	Finish	-	-	-	-	-	-
Reflector	JIS/CPSC	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW
	AS	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW
	DIN	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW
Average weight		1091g	908g	886g	1148g	938g	946g
Note		***CP is available only for 9 & 10-speed			***CP is available only for 9 & 10-speed		

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-MT15-A-R	WH-MT15-A-F-29	WH-MT15-A-F15-29	WH-MT15-A-R-29	WH-MT15-A-F-275	WH-MT15-A-F15-275
Color	1	Black	Black	Black	Black	Black	Black
	2	White	White	White	White	White	White
Front / Rear		Rear	Front	Front	Rear	Front	Front
Brake Type		Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc	Center Lock Disc
Speeds		8-10 speed MTB 11-speed***	-	-	8-10 speed MTB 11-speed***	-	-
O.L.D. (mm)		135	100	100	135	100	100
Wheel Size		559x19C (26")	622x19C (29")	622x19C (29")	622x19C (29")	584X19C (650B=27.5")	584X19C (650B=27.5")
Tire	Type	Clincher	Clincher	Clincher	Clincher	Clincher	Clincher
	Recommended size	26X1.50-2.25	29X1.50-2.25	29X1.50-2.25	29X1.50-2.25	27.5x1.90-2.25	27.5x1.90-2.25
Rim	Height (mm)	21	21	21	21	21	21
	Width (mm)	24.6	24.6	24.6	24.6	24.6	24.6
	Rim joint	Sleeve	Sleeve	Sleeve	Sleeve	Sleeve	Sleeve
	Brazed reinforcement	-	-	-	-	-	-
	Offset rim	-	-	-	-	-	-
	Requires rim tape	X (20-559)	X (20-622)	X (20-622)	X (20-622)	X (20-584)	X (20-584)
Spokes	Number	28	28	28	28	28	28
	Straight pull	-	-	-	-	-	-
	J-bend	X	X	X	X	X	X
	Butted	2.0	2.0	2.0	2.0	2.0	2.0
	Bladed	X	X	X	X	X	X
Axle	Fixing method	QR	QR	15mm E-Thru	QR	QR	15mm E-Thru
	QR skewer length (mm)	133	-	X	-	X	-
		168	X	-	-	X	-
		173	X	-	-	X	-
	Length (mm)	146	108	100	146	108	100
	Diameter (mm)	10	10	-	10	10	-
	Thru Axle Length x Inner Diameter (mm)	100x15	-	-	X	-	-
142x12		-	-	-	-	-	-
Quick engagement		-	-	-	-	-	-
Bearing	Stainless ball	-	-	-	-	-	-
	Cup	-	-	-	-	-	-
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	Contact	-	-	Contact	-	-
Internal grease sleeve		X	-	X	X	-	X
Disc mount	Outer serration rotor lock ring	-	-	X (Steel)	-	-	X (Steel)
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)	Anodized(Black rim)/ Painted(White rim)
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Brass	Brass	Brass	Brass	Brass	Brass
	Finish	Silver	Silver	Silver	Silver	Silver	Silver
Freehub body	Material	Steel	-	-	Steel	-	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Axle	Material	Steel	Steel	Aluminum	Steel	Steel	Aluminum
	Finish	-	-	Anodized	-	-	Anodized
QR lever	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	-
	Finish	Painted	Painted	-	Painted	Painted	-
QR housing	Material	Steel	Steel	-	Steel	Steel	-
	Finish	Painted	Painted	-	Painted	Painted	-
QR nut	Material	Resin & Steel	Resin & Steel	-	Resin & Steel	Resin & Steel	-
	Finish	-	-	-	-	-	-
Reflector	JIS/CPSC	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW	RR-550-WUW SW
	AS	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW	RR-550-WUA SW
	DIN	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW	RR317-WUA SW
Average weight		1148g	1036g	1044g	1246g	992g/Black 997g/White	984g/Black 989g/White
Note		***CP is available only for 9 & 10-speed			***CP is available only for 9 & 10-speed		

Wheel

Series		SHIMANO	
Model no.		WH-MT15-A-R-275	
Color	1	Black	
	2	White	
Front / Rear		Rear	
Brake Type		Center Lock Disc	
Speeds		8-10 speed MTB 11-speed***	
O.L.D. (mm)		135	
Wheel Size		584X19C (650B=27.5")	
Tire	Type	Clincher	
	Recommended size	27.5x1.90-2.25	
Rim	Height (mm)	21	
	Width (mm)	24.6	
	Rim joint	Sleeve	
	Brazed reinforcement	-	
	Offset rim	-	
Requires rim tape		X (20-584)	
Spokes	Number	28	
	Straight pull	-	
	J-bend	X	
	Butted	2.0	
	Bladed	X	
Axle	Fixing method	QR	
	QR skewer length (mm)	133	-
		168	X
		173	X
	Length (mm)	146	
	Diameter (mm)	10	
Thru Axle Length x Inner Diameter (mm)	100x15	-	
	142x12	-	
Quick engagement		-	
Bearing	Stainless ball	-	
	Cup	-	
	Cone	CBN	
Seal	Hub	Labyrinth & Contact	
	Freehub body	Contact	
Internal grease sleeve		X	
Disc mount	Outer serration rotor lock ring	-	
	Material	Aluminum	
Rim	Finish	Anodized(Black rim)/ Painted(White rim)	
	Material	Stainless steel	
Spoke	Finish	Black	
	Material	Brass	
Nipple	Finish	Silver	
	Material	Steel	
Freehub body	Finish	-	
	Material	Aluminum	
Hub shell	Finish	Painted	
	Material	Steel	
Axle	Finish	-	
	Material	Aluminum	
QR lever	Finish	Painted	
	Material	Steel	
QR housing	Finish	Painted	
	Material	Resin & Steel	
QR nut	Finish	-	
	Material	Resin & Steel	
Reflector	JIS/CPSC	RR-550-WUW SW	
	AS	RR-550-WUA SW	
	DIN	RR317-WUA SW	
Average weight		1200g/Black 1205g/White	
Note		***CP is available only for 9 & 10-speed	

Pedal

SPD

Series	XTR	XTR	DEORE XT	DEORE XT	SHIMANO	SHIMANO
Model no.	PD-M9000	PD-M9020	PD-M785	PD-M780	PD-M540	PD-M530
Color 1	Black	Black	Black	Black	Silver	Black
Color 2	-	-	-	-	Bronze	White
Color 3	-	-	-	-	-	-
Type	Off-Road (SPD)	Off-Road (SPD)	Off-Road (SPD)	Off-Road (SPD)	Off-Road (SPD)	Off-Road (SPD)
Binding	Dual Sided	Dual Sided	Dual Sided	Dual Sided	Dual Sided	Dual Sided
Pedal axle material	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel
Cartridge axle	X	X	X	X	X	X
Sealed mechanism	X	X	X	X	X	X
Cleat retention adjuster	X	X	X	X	X	X
Pop-up cage	-	-	-	-	-	-
Integrated cage	-	X	X	-	-	X
Offset binding	X	-	-	X	-	-
Oval shape axle body housing	X	X	-	-	-	-
Cleat included	SM-SH51	SM-SH51	SM-SH51	SM-SH51	SM-SH51	SM-SH51
Optional cleat	SM-SH56	SM-SH56	SM-SH56	SM-SH56	SM-SH56	SM-SH56
Reflector	SM-PD60	SM-PD60	SM-PD60	SM-PD60	SM-PD22	SM-PD60
Pedal body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized (Silver) / Painted (Bronze) / Painted (White)
Cage	Material	-	-	-	-	-
Average weight (pair)	310g	379g	408g	343g	352g	455g
Note						

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	
Model no.	PD-M520	PD-M505	PD-M647	PD-M545	PD-M424	PD-M324	
Color 1	Silver	Silver	Black	Silver	Black	Silver	
Color 2	Black	Black	-	-	-	-	
Color 3	White	-	-	-	-	-	
Type	Off-Road (SPD)	Off-Road (SPD)	Off-Road/BMX (SPD)	Off-Road/BMX (SPD)	Off-Road/BMX (SPD)	Multi-purpose (SPD/ Flat)	
Binding	Dual Sided	Dual Sided	Dual Sided	Dual Sided	Dual Sided	Single Sided	
Pedal axle material	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel	
Cartridge axle	X	-	X	X	X	-	
Sealed mechanism	X	X	X	X	X	X	
Cleat retention adjuster	X	X	X	X	X	X	
Pop-up cage	-	-	X	X	X	-	
Integrated cage	-	-	-	-	-	-	
Offset binding	-	-	-	-	-	-	
Oval shape axle body housing	-	-	-	-	-	-	
Cleat included	SM-SH51	SM-SH51	SM-SH51	SM-SH51	SM-SH51	SM-SH56	
Optional cleat	SM-SH56	SM-SH56	SM-SH56	SM-SH56	SM-SH56	SM-SH51	
Reflector	SM-PD22	SM-PD22	SM-PD60	SM-PD40	SM-PD40	Y41B98010	
Pedal body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Polished (Silver) / Painted (Black) / Painted (White)	Polished (Silver) / Painted (Black)	Painted	Painted	Polished	Painted
Cage	Material	-	-	Resin	Aluminum	Resin	Steel
Average weight (pair)	380g	443g	568g	567g	472g	533g	
Note		For OEM spec.					

Pedal

Click'R

Series	SHIMANO	
Model no.	PD-MT50	
Color 1	Black	
Color 2	-	
Color 3	-	
Type	Recreational use (Click'R)	
Binding	Dual Sided	
Pedal axle material	Chromoly Steel	
Cartridge axle	X	
Sealed mechanism	X	
Cleat retention adjuster	X	
Pop-up cage	X	
Integrated cage	-	
Offset binding	-	
Oval shape axle body housing	-	
Cleat included	SM-SH56	
Optional cleat	SM-SH51	
Reflector	SM-PD60	
Pedal body	Material	Aluminum
	Finish	Painted
Cage	Material	Resin
Average weight (pair)		498g
Note		

Pedal

Flat pedal

Series	SAINT	
Model no.	PD-MX80	
Color 1	Black	
Color 2	-	
Color 3	-	
Type	Off-Road(Flat Pedal)	
Binding	-	
Pedal axle material	Chromoly Steel	
Cartridge axle	X	
Sealed mechanism	X	
Cleat retention adjuster	-	
Pop-up cage	-	
Integrated cage	-	
Offset binding	-	
Oval shape axle body housing	-	
Cleat included	-	
Optional cleat	-	
Reflector	SM-PD64	
Pedal body	Material	Aluminum
	Finish	Painted
Cage	Material	-
Average weight (pair)		500g
Note		

CI-DECK

Series		Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model no.		ID-TX51-7R	ID-TX51-6R	ID-TX51-LN	ID-TX51-LC	SM-TX20-A	SM-TX21
Compatible shift lever		SL-RS35/36/45/47	SL-RS35/36/45/47	SL-RS35/36/45/47	-	-	-
Front speeds		-	-	Friction	-	-	-
Rear speeds		7	6	-	-	-	-
SL compatible RD type		Top normal	Top normal	-	-	-	-
CID cable		Stainless steel	Stainless steel	Stainless steel	-	-	-
CID cable type		TX50	TX50	TX50	-	-	-
Optical Gear Display	Front	-	-	Friction	-	-	-
	Rear	6-speed	7-speed	-	-	-	-
Clamp band diameter	22.2mm	-	-	-	-	-	-
	25.0mm	-	-	-	-	-	-
	22.2/25.0mm	-	-	-	-	X	-
C.I.D upper cover	Material	Resin	Resin	Resin	Resin	-	-
	Color	Painted	Painted	Painted	Painted	-	-
C.I.D body	Material	Resin	Resin	Resin	Resin	-	-
	Color	Painted	Painted	Painted	-	-	-
Clamp band	Material	Resin	Resin	Resin	-	Resin	-
	Color	Painted	Painted	Painted	-	-	-
Average weight		-	-	-	-	-	-
Note		Use with SM-TX20-A/ TX35-A	Use with SM-TX20-A/ TX35-A	Use with SM-TX20-A/ TX35-A	dummy cover	Bracket for ID-TX51/SM-TX37	Cowling Use with SM-TX20-A

CI-DECK

Series		Tourney	Tourney	Tourney
Model no.		SM-TX35-A	SM-TX36	SM-TX37
Compatible shift lever		-	-	-
Front speeds		-	-	-
Rear speeds		-	-	-
SL compatible RD type		-	-	-
CID cable		-	-	-
CID cable type		-	-	-
Optical Gear Display	Front	-	-	-
	Rear	-	-	-
Clamp band diameter	22.2mm	-	-	-
	25.0mm	-	-	-
	22.2/25.0mm	X	-	-
C.I.D upper cover	Material	-	-	-
	Color	-	-	-
C.I.D body	Material	-	-	-
	Color	-	-	-
Clamp band	Material	Resin	-	-
	Color	-	-	-
Average weight		-	-	-
Note		Bracket for ID-TX51/ SC-TX35/SM-TX37	Cowling Use with SM-TX35-A	Analog compass Use with SM-TX20-A/ TX35-A

TREKKING

	<i>Page</i>	
Shift Lever	90	SL
Brake Lever	90	BL
Shift/Brake Lever	92	ST
Rear Derailleur	93	RD
Front Derailleur	94	FD
Brake	96	BR
Crankset	97	FC
Freehub	100	FH
Front Hub	101	HB
Pedal	102	PD

Shift Lever

Series		DEORE XT	DEORE XT	DEORE LX	DEORE LX	DEORE	DEORE
Model no.		SL-T780-L	SL-T780-R	SL-T670-L	SL-T670-R	SL-T610-L	SL-T610-R
Color	1	Series color	Series color	Black	Black	Black	Black
	2	-	-	Silver	Silver	Silver	Silver
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		3	-	3	-	3	-
Rear speeds		-	10	-	10	-	10
Compatible RD Type		-	MTB 10-speed RD	-	MTB 10-speed RD	-	MTB 10-speed RD
I-spec compatible		-	-	-	-	-	-
SL position adjust		-	-	-	-	-	-
SL cable adjust		X	X	X	X	X	X
2/3 mode converter		-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)		-	4	-	3	-	3
Release function	Multi release	-	X	-	-	-	-
	Instant release	X	X	-	-	-	-
	2-Way release	X	X	X	X	X	X
Optical Gear Display	with	X	X	X	X	X	X
	with (removable)	-	-	-	-	-	-
	without	-	-	-	-	-	-
Multi-Bearing construction		2	2	-	-	-	-
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Main lever body	Material	Aluminum	Aluminum	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel
	Finish	Painted	Painted	-	-	-	-
Release lever body	Material	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel	GFRP & Steel
	Finish	-	-	-	-	-	-
Base cover	Material	GFRP	GFRP	GFRP	GFRP	GFRP	GFRP
	Finish	Painted	Painted	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		-	-	260g/pair	260g/pair	134g	139g
Note							

Brake Lever

Series		DEORE XT	DEORE LX	DEORE	DEORE	SHIMANO	SHIMANO
Model no.		BL-T780-B	BL-T670-B	BL-T610	BL-T611	BL-T4000	BL-T4010
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver	Silver
	3	-	-	-	-	-	-
Compatible brake type	V-BRAKE	X*	X*	X	X*	X	X
	Mechanical disc brake (MTB)	X*	X*	X	X*	X	X
	Mechanical disc brake (Road)	-	-	-	-	-	-
	Caliper (new super SLR)	-	-	-	-	-	-
	Caliper (super SLR)	-	-	-	-	-	-
	CANTI brake	-	-	-	-	-	-
Recommended power modulator	Roller brake	-	-	-	-	-	-
	V-BRAKE	SM-PM70	SM-PM70	-	SM-PM70	-	SM-PM40
Clamp band	Mechanical disc brake (MTB)	SM-PM50	SM-PM50	-	SM-PM50	-	SM-PM50
	Open clamp band	X	X	X	X	-	-
	I-spec compatible	X**	X**	X**	X**	-	-
Diameter (mm)		22.2	22.2	22.2	22.2	22.2	22.2
Internal bumper stop		X	X	X	X	X	X
Lever size (Finger)		3	3	2	3	2	3
Brake cable type		T-type	T-type	T-type	T-type	T-type	T-type
Power adjuster		-	-	-	-	-	-
Servo-Wave action		-	-	-	-	-	-
Reach adjust		X	X	X	X	X	X
Cable adjust		X	X	X	X	X	X
Cable adjust type		One Hand	Two Hand	Two Hand	Two Hand	Two Hand	Two Hand
Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Brake bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Stainless clamp bolt		X	X	X	X	X	X
Average weight		196.6g	211.2g	205g	211g	-	-
Note		For Trekking * Power modulator must be used for front brake **I-spec B-type	For Trekking * Power modulator must be used for front brake **I-spec B-type	For Cross bike, **I-spec B-type	For Trekking * Power modulator must be used for front brake **I-spec B-type		

Brake Lever

Disc Brake

Series		DEORE XT	DEORE LX	DEORE	SHIMANO
Model no.		BL-T785-B	BL-T675-B	BL-T615	BL-T445
Brake type		Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake
Lever size (Finger)		3	3	3	3
Color	1	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver
	3	-	-	-	White
Brake hose (Kit)		SM-BH90-SB	SM-BH90-SS	SM-BH59	SM-BH59
Hose joint		Straight	Straight	Straight	Straight
Brake hose color (kit)	1	Black	Black	Black	Black
	2	-	-	White	White
Recommended brake caliper		BR-M785	BR-T675	BR-T615	BR-M446
Oil		SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
Funnel bleeding		X	X	X	X
Reach adjust	Toolless	X	X	-	-
	Tool	-	-	X	X
Free stroke adjust		-	-	-	-
Servo wave mechanism		-	-	-	-
Clamp band	Open clamp	X	X	X	-
	I-spec	X*	X*	X*	-
Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Master cylinder	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
J-kit option available		-	-	-	-
Average weight		120.45g	126g	-	-
Note		*I-spec B-type	*I-spec B-type	*I-spec B-type	

SL

BL

ST

RD

FD

BR

FC

FH

HB

PD

Shift/Brake Lever

Series		ALIVIO	ALIVIO	
Model no.		ST-T4000-L	ST-T4000-R	
Color	1	Black	Black	
	2	Silver	Silver	
Shift lever specifications	Shifter type		TAP FIRE PLUS	TAP FIRE PLUS
	Front speeds		3	-
	Rear speeds		-	9
	Compatible RD Type		-	MTB 9-speed RD
	SL position adjust		-	-
	SL cable adjust		X	X
	2/3 mode converter		-	-
	Max. multiple shifts (Main lever/rear)		-	3
	Release function	Multi release	-	-
		Instant release	-	-
		2-Way release	-	-
	Optical Gear Display	with	X	X
		with (removable)	-	-
		without	-	-
	Multi-Bearing construction		-	-
	Main lever body	Material	Resin & Steel	Resin & Steel
		Finish	-	-
	Release lever body	Material	Resin & Steel	Resin & Steel
		Finish	-	-
	SL cable	Material	Stainless steel	Stainless steel
Finish		Standard	Standard	
Recommended SL outer casing		OT-SP40	OT-SP40	
Brake lever specifications	Compatible brake type	V-BRAKE	X	X
		Mechanical disc brake (MTB)	X	X
		Mechanical disc brake (Road)	-	-
		Caliper (SLR EV)	-	-
		Caliper (new super SLR)	-	-
		Caliper (super SLR)	-	-
		CANTI brake	-	-
		Roller brake	-	-
	Recommended power modulator	V-BRAKE	SM-PM40	SM-PM40
		Mechanical disc brake (MTB)	SM-PM50	SM-PM50
	Clamp band	Open clamp band	-	-
	Internal bumper stop		X	X
	Lever size (Finger)		3	3
	Brake cable type		T-type	T-type
	Power adjuster		-	-
	Servo-Wave action		-	-
	Reach adjust		X	X
Cable adjust		X	X	
Cable adjust type		Two hand	Two hand	
Brake lever	Material	Aluminum	Aluminum	
	Finish	Anodized	Anodized	
Bracket	Material	Aluminum	Aluminum	
	Finish	Painted	Painted	
Stainless clamp bolt		X	X	
Average weight		-	-	
Note				

Rear Derailleur

Series		DEORE XT	DEORE LX	DEORE	ALIVIO
Model no.		RD-T780-SGS	RD-T670-A-SGS	RD-T610-SGS	RD-T4000
Pulley cage		SGS	SGS	SGS	SGS
Color	1	Silver	Silver	Black	Black
	2	Black	Black	Silver	Silver
Rear speeds		10	10	10	9
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG 9-speed
Top-Normal spring type	SHADOW RD	-	-	-	-
	SHADOW RD+	-	-	-	-
	W servo	X	X	X	X
Direct attachment (Conventional)		X	X	X	X
Direct mount compatible		-	-	-	-
Riveted adapter	Road type	-	-	-	-
	BMX-Track type	-	-	-	-
Mode converter		-	-	-	-
Cable adjuster		-	-	-	X
Max. front difference		22T	22T	22T	22T
Total capacity		45T	45T	45T	45T
Low sprocket	Max.	34T	34T	34T	34T
	Min.	28T	28T	28T	28T
Top sprocket	Max.	12T	12T	11T	11T
	Min.	11T	11T	11T	11T
Fluoroc coated link bushings		4	2	2	2
Pulley	G pulley bearing	-	-	-	-
	T pulley bearing	Sealed Bearing	-	-	-
	Teeth	11T	11T	11T	11T
	Bolts material	Stainless steel	Stainless steel	Stainless steel	Steel
	Bolts retainer	-	-	-	-
	Sunken type pulley bolt	X	X	X	X
Bracket	Material	Aluminum	-	-	-
	Finish	Painted	-	-	-
B-Axle	Hollow axle	-	-	-	-
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-
B-Axle 2	Hollow axle	-	-	-	-
	Material	-	-	-	-
	Finish	-	-	-	-
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
P-Axle	Material	Steel	Steel	Steel	Steel
	Finish	-	-	-	Painted
Plate body	Material	Aluminum	Aluminum	Aluminum	Resin
	Finish	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted
Outer plate	Material	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted
Inner plate	Material	Aluminum	Aluminum	Steel	Steel
	Finish	Painted	Painted	Painted	Painted
Stainless inner cable fixing bolt		X	-	-	X
Stainless stroke adjust screw		-	-	-	X
Average weight		236g	-	304g	-
Note					

SL

BL

ST

RD

FD

BR

FC

FH

HB

PD

Front Derailleur

Series		DEORE XT	DEORE XT	DEORE XT	DEORE LX	DEORE LX	DEORE LX
Model no.		FD-T780-3	FD-T780-6	FD-T781-3	FD-T670-3	FD-T670-6	FD-T671-3
Color		Black	Black	Black	Black	Black	Black
Speeds	Front	3	3	3	3	3	3
	Rear	10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Action	Top Swing	X	X	-	X	X	-
	Down Swing	-	-	X	-	-	X
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)
		31.8mm	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)
		34.9mm	X	X	X	X	X
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	-	-	-	-	-
	Direct Mount	-	-	-	-	-	-
Cable route type	Dual-Pull	X	X	X	X	X	X
	Top-Pull exclusive	-	-	-	-	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		50	50	50	50	50	50
Chain stay angle		63-66	66-69	63-66	63-66	66-69	63-66
Top gear teeth		44/48T	44/48T	44/48T	44/48T	44/48T	44/48T
Total capacity		22T	22T	22T	22T	22T	22T
Applicable Top-Mid tooth difference		12T	12T	12T	12T	12T	12T
Multi access cable fixing bolt		-	-	-	-	-	-
Angled stroke adjust bolt		-	-	-	-	-	-
Angled clamp band design		X	X	X	X	X	X
Link bushings		2	2	8	2	2	8
Front clamp band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Steel	Steel	Aluminum	Steel	Steel	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stroke adjusting screw	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Average weight		155g	155g	167.7g	157g	157g	172g
Note							

Front Derailleur

Series		DEORE	DEORE	DEORE	ALIVIO	ALIVIO	ALIVIO
Model no.		FD-T610-3	FD-T610-6	FD-T611-3	FD-T4000-TS3	FD-T4000-TS6	FD-T4000-DS3
Color		Black	Black	Black	Series color	Series color	Series color
Speeds	Front	3	3	3	3	3	3
	Rear	10	10	10	9	9	9
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG 9-speed	HG 9-speed	HG 9-speed
Action	Top Swing	X	X	-	X	X	-
	Down Swing	-	-	X	-	-	X
	Side Swing	-	-	-	-	-	-
Mount	Clamp Band	28.6mm	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)
		31.8mm	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)
		34.9mm	X	X	X	X	X
	BB Plate	-	-	-	-	-	-
	Without BB Plate	-	-	-	-	-	-
	Direct Mount	-	-	-	-	-	-
Cable route type	Dual-Pull	X	X	X	X	X	X
	Top-Pull exclusive	-	-	-	-	-	-
	Down-Pull exclusive	-	-	-	-	-	-
	Front-Pull	-	-	-	-	-	-
Chain line (mm)		50	50	50	50	50	50
Chain stay angle		63-66	66-69	63-66	63-66	66-69	63-66
Top gear teeth		44/48T	44/48T	44/48T	44/48T	44/48T	44/48T
Total capacity		22T	22T	22T	22T	22T	22T
Applicable Top-Mid tooth difference		12T	12T	12T	12T	12T	12T
Multi access cable fixing bolt		X	X	-	-	-	-
Angled stroke adjust bolt		-	-	-	-	-	-
Angled clamp band design		-	-	-	X	X	X
Link bushings		2	2	8	-	-	2
Front clamp band	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
BB plate	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Steel	Steel	Aluminum	Steel	Steel	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Chrome Plated	Chrome Plated	Chrome Plated
Cable fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stroke adjusting screw	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Average weight		157g	157g	172g	-	-	-
Note							

SL

BL

ST

RD

FD

BR

FC

FH

HB

PD

Brake

V-BRAKE

Series		DEORE XT	DEORE LX	DEORE	SHIMANO	SHIMANO
Model no.		BR-T780	BR-T670	BR-T610	BR-T4000	BR-T4010
Color	1	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver
	3	-	-	-	-	-
Brake type		V-BRAKE	V-BRAKE	V-BRAKE	V-BRAKE	V-BRAKE
Brake shoe type	Standard 1	S70C	S70C	S70C	S65T	S70C
	Standard 2	M70CT4	M70CT4	M70CT4	-	-
	Option 1	-	M70T3	S70T	M65T4	M70R2
	Option 2	-	-	-	M65T3	-
Cartridge shoe holder		X	X	X	-	X (alloy)
Arch size (mm)		103	107	107	107	107
Spacer type	X type	X	X	X	X	X
	Y type	X	X	X	X	X
Compatible lead pipe angle (deg.)		45/90/135	45/90/135	45/90/135	45/90/135	45/90/135
Sleeve & Bushing axle		X	X	X	X	X
V-arm/Caliper	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Painted
	Light weight link	X	X	-	-	-
Cover	Material	Aluminum	Aluminum	Aluminum	-	-
	Finish	Anodized	Anodized	Painted	-	-
Fixing bolt length (mm)	16	X	X	X	X	X
	25	X	X	X	X	X
Fixing bolt	Material	Stainless steel	Stainless steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	-	-
	Chamfered bolt	X	X	X	-	-
Power modulator		X (OPTION SM-PM70)	X (OPTION SM-PM70)	SM-PM70	SM-PM40	SM-PM40
Linear spring		X	X	X	-	-
Stainless cable fixing bolt		X	-	-	-	-
Average weight		174g	176g	186g	-	-
Note						

Brake

Disc Brake

Series		DEORE LX	DEORE
Model no.		BR-T675	BR-T615
Color	1	Black	Black
	2	Silver	Silver
	3	-	-
Brake type		Hydraulic Disc-brake	Hydraulic Disc-brake
Brake hose (kit)		SM-BH90-SS	SM-BH59
Hose joint		Straight	Straight
Brake hose color (kit)	1	Black	Black
	2	-	White
ICE TECHNOLOGY pad compatible caliper		-	-
Pad	Standard 1	B01S Resin	B01S Resin
	Standard 2	-	-
	Option 1	-	-
	Option 2	-	-
Recommended brake lever		BL-T675	BL-T615
Recommended brake rotor		SM-RT54, SM-RT66	SM-RT54, SM-RT56
Oil		SHIMANO Mineral	SHIMANO Mineral
One way bleeding		X	X
Mount type (available for IS mount with mount adapter)		Post-type	Post-type
Piston		2	2
Piston material		Resin	Resin
Caliper	Mono-body	-	-
	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Caliper fixing bolt	Material	Stainless steel	Steel
	Tool size	5mm	5mm
	Anti loosen method	Snap ring	Snap ring
Pad mount		Sprit pin	Split pin
Average weight		268g(F&R, Resin pad)	268g (F&R, Resin pad)
Note			

Crankset

Series		DEORE XT	DEORE XT	DEORE XT	DEORE LX	DEORE LX	DEORE
Model no.		FC-T780	FC-T781	FC-T781	FC-T671	FC-T671	FC-T611
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver	Silver
Rear speeds		10	10	10	10	10	10
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Chain line (mm)		50	50	50	50	50	50
P.C.D. (mm)		104/64	104/64	104/64	104/64	104/64	104/64
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		-	-	-	X	X	-
Chain ring combination		48-36-26T	48-36-26T	44-32-24T	48-36-26T	44-32-24T	48-36-26T
Crank arm length (mm)	165.0	X	X	X	-	-	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	X	X	X	X	X	X
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	X	-
2-piece crank construction		X	X	X	X	X	X
HOLLOWTECH Technology		X	X	X	X	X	-
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB70	SM-BB70	SM-BB70	SM-BB70	SM-BB70	SM-BB52
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	SM-BB70	SM-BB70	SM-BB70	SM-BB70	SM-BB52
	Pressfit	SM-BB71-41A	-	-	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
	Threaded (E-type)	-	-	-	-	-	-
	Threaded (chain case)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		-	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	Aluminum	Aluminum	Aluminum	-	-	-
	Finish	Painted	Painted	Painted	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	Aluminum	Aluminum	Steel/CF composite	Aluminum	Steel/GF composite	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Painted
Inner ring	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	Aluminum	Aluminum	Aluminum	Stainless steel	Stainless steel	Stainless steel
	Finish	Anodized	Anodized	Anodized	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		-	-	-	-	-	-
Crank fixing bolt included		X	X	X	X	X	X
Average weight		950g	965g	940g	992g	958g	1189g
Note					4 arm integrated crank arm W/O CG spec available	4 arm integrated crank arm W/O CG spec available	

SL

BL

ST

RD

FD

BR

FC

FH

HB

PD

Crankset

Series		DEORE	SHIMANO	SHIMANO	SHIMANO	SHIMANO	ALIVIO
Model no.		FC-T611	FC-T551	FC-T551	FC-T521	FC-T521	FC-T4060
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver	Silver
Rear speeds		10	10	10	10	10	9
Compatible chain		HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed	HG for 9-speed
Chain line (mm)		50	50	50	50	50	50
P.C.D. (mm)		104/64	104/64	104/64	104/64	104/64	104/64
Gear arms		4arm	4arm	4arm	4arm	4arm	4arm
Arm adapter		-	-	-	X	X	-
Chain ring combination		44-32-24T	44-32-24T	48-36-26T	48-36-26T	44-32-24T	44-32-22T
Crank arm length (mm)	165.0	-	-	-	-	-	X
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
Optional chain guard	With bash guard	-	-	-	-	-	-
	With chain guard	X	X	X	X	X	X
	Without chain / bash guard	X	X	X	X	X	X
HOLLOWTECH II Technology		-	-	-	-	-	-
2-piece crank construction		X	X	X	-	-	X
HOLLOWTECH Technology		-	-	-	X	X	-
OCTALINK technology		-	-	-	X	X	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	-	-	X
	Octalink	-	-	-	X	X	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB52	SM-BB52	SM-BB52	BB-ES25	BB-ES25	SM-BB52
	Threaded (E-type)	-	-	-	BB-ES25-E	BB-ES25-E	-
	Threaded (chain case)	SM-BB52	SM-BB52	SM-BB52	BB-ES25-AK	BB-ES25-AK	SM-BB52
	Pressfit	-	-	-	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	121-AK	121-AK	-
	Threaded (E-type)	-	-	-	121-E*	121-E*	-
	Threaded (chain case)	-	-	-	121-AK	121-AK	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	73mm	X	X	X	X	X	X
	83mm	-	-	-	-	-	-
Chain case compatible		X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Painted	Painted	Painted	Painted	Painted
Crank axle	Material	Steel	Steel	Steel	-	-	Steel
	Finish	Plated	Plated	Plated	-	-	Plated
Spider arm	Material	-	-	-	Aluminum	Aluminum	-
	Finish	-	-	-	Painted	Painted	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Painted
Middle ring	Material	Steel GF composite	Steel/GF composite	Aluminum	Steel	Steel GF composite	Steel
	Finish	Plated	Plated	Plated	Painted	Plated	Painted
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Plated	Plated	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stainless chain guard fixing bolt		X	X	-	X	X	X
Crank fixing bolt included		X	X	X	X	X	X
Average weight		1095g	-	-	-	-	-
Note							

Crankset

Series		ALIVIO	SHIMANO	SHIMANO
Model no.		FC-T4060	FC-T4010	FC-T4010
Color	1	Black	Black	Black
	2	Silver	Silver	Silver
Rear speeds		9	9	9
Compatible chain		HG for 9-speed	HG for 9-speed	HG for 9-speed
Chain line (mm)		50	50	50
P.C.D. (mm)		104/64	104/64	104/64
Gear arms		4arm	4arm	4arm
Arm adapter		-	X	X
Chain ring combination		48-36-26T	44-32-22T	48-36-26T
Crank arm length (mm)	165.0	X	X	X
	167.5	-	-	-
	170.0	X	X	X
	172.5	-	-	-
	175.0	X	X	X
	180.0	-	-	-
Optional chain guard	With bash guard	-	-	-
	With chain guard	X	X	X
	Without chain / bash guard	X	X	X
HOLLOWTECH II Technology		-	-	-
2-piece crank construction		X	-	-
HOLLOWTECH Technology		-	-	-
OCTALINK technology		-	X	X
HOLLOWGLIDE		-	-	-
Compatible BB type	Outboard	X	-	-
	Octalink	-	X	X
	Square	-	-	-
Recommended BB	Threaded (normal)	SM-BB52	BB-ES25	BB-ES25
	Threaded (E-type)	-	-	-
	Threaded (chain case)	SM-BB52	BB-ES25-K	BB-ES25-K
	Pressfit	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	126	126
	Threaded (E-type)	-	-	-
	Threaded (chain case)	-	126-K	126-K
Threaded BB shell width	68mm	X	X	X
	73mm	X	X	X
	83mm	-	-	-
Chain case compatible		X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted
Crank axle	Material	Steel	-	-
	Finish	Plated	-	-
Spider arm	Material	-	Aluminum	Aluminum
	Finish	-	Painted	Painted
Spider arm cover	Material	-	-	-
	Finish	-	-	-
Outer ring	Material	Steel	Steel	Steel
	Finish	Painted	Painted	Painted
Middle ring	Material	Steel	Steel	Steel
	Finish	Painted	Painted	Painted
Inner ring	Material	Steel	Steel	Steel
	Finish	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-
Inner ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-
Stainless chain guard fixing bolt		-	X	-
Crank fixing bolt included		X	X	X
Average weight		-	-	-
Note				

SL

BL

ST

RD

FD

BR

FC

FH

HB

PD

Freehub

Series		DEORE XT	DEORE LX	DEORE LX	DEORE	SHIMANO
Model no.		FH-T780	FH-T670	FH-T675	FH-T610	FH-T4000
Color	1	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver
Brake Type		Rim	Rim	Center Lock Disc	Rim	Rim
Speeds		8-10 speed	8-10 speed	8-10 speed	8-10 speed	8-10 speed
O.L.D. (mm)		135	135	135	135	135
Spoke hole	28H	-	-	-	-	-
	32H	X	X	X	X	X
	36H	X	X	X	X	X
Axle	Fixing method		QR	QR	QR	QR
	QR skewer length (mm)	166	-	-	-	-
		168	X	X	X	X
		170	-	-	-	-
		173	X	X	X	X
	Length (mm)		146	146	146	146
	Diameter (mm)		14	10	10	10
	Thru Axle Length x Inner Diameter (mm)	135x10	-	-	-	-
		135x12	-	-	-	-
		142x12	-	-	-	-
150x12		-	-	-	-	
Flange distance (mm)		57.4	59.2	57.4	59.2	59.2
Offset (mm)		6.6	7.6	6.6	7.8	7.6
P.C.D. Left/Right (mm)		44/45	45	44/45	44/45	45/45
Flange diameter Left/Right (mm)		52.8/ 53.8	53.8	52.8/ 53.8	53.8	53.8
Quick engagement		X (36points/360°)	-	-	-	-
Seal	Hub	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact
	Freehub body	Contact	Contact	Contact	Contact	Contact
Internal grease sleeve		X	X	X	X	X
Bearing	Stainless ball	-	-	-	-	-
	Cup	-	-	-	-	-
	Cone	CBN	CBN	CBN	CBN	CBN
Disc mount	Center lock	-	-	X	-	-
	Outer serration rotor lock ring	-	-	-	-	-
	Center lock mount cover option	-	-	X	-	-
	6-bolt	-	-	-	-	-
Freehub body	Material	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Steel	Steel	Steel	Steel
	Finish	Anodized	-	-	-	-
QR lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Barrel
QR housing	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Anodized	Anodized	Anodized	Painted	Plated
QR nut	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin + Steel
	Finish	-	-	-	-	-
Average weight* *w/o axle, QR nor locking		338g	365g	369g	365g	-
Note						

Front Hub

Series		DEORE XT	SHIMANO	DEORE LX	DEORE LX	DEORE	SHIMANO	
Model no.		HB-T780	HB-T708	HB-T670	HB-T675	HB-T610	HB-T4000	
Color	1	Black	Silver	Black	Black	Black	Black	
	2	Silver	-	Silver	Silver	Silver	Silver	
Brake Type		Rim	Center Lock Disc	Rim	Center Lock Disc	Rim	Rim	
O.L.D. (mm)		100	100	100	100	100	100	
Spoke hole	32H	X	X	X	X	X	X	
	36H	X	X	X	X	X	X	
Fixing method		QR	8mm E-Thru	QR	QR	QR	QR	
Axle	QR skewer length (mm)	129	-	-	-	-	-	
		133	X	-	X	X	X	
	Length (mm)	108	100	108	108	108	108	
	Diameter (mm)	14	8 (SM-AX60)	10	10	10	9	
	Thru Axle Length x Inner Diameter (mm)	100x8	-	X	-	-	-	-
		100x15	-	-	-	-	-	-
110x20		-	-	-	-	-	-	
Flange distance (mm)		71.6	60.05	71.6	60.2	71.6	71.6	
Offset (mm)		0	5.4	0	5.3	0	0	
P.C.D. Left / Right (mm)		40	45	38	44	40/40	38/38	
Flange diameter (mm)		50.4	52.8	48.4	52.8/51.4 (L/R)	48.4	48.4	
Seal		Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	Labyrinth & Contact	
Internal grease sleeve		X	X	X	-	-	-	
Bearing	Stainless ball	-	-	-	-	-	-	
	Cup	-	-	-	-	-	-	
	Cone	CBN	CBN	CBN	CBN	CBN	-	
Disc mount	Outer serration rotor lock ring	-	-	-	-	-	-	
	Center lock mount cover option	-	X	-	X	-	-	
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	
Axle	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel	
	Finish	Anodized	Anodized	-	-	-	-	
QR lever	Material	Aluminum	-	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Anodized	-	Anodized	Anodized	Painted	Barrel	
QR housing	Material	Aluminum	-	Aluminum	Aluminum	Aluminum	Steel	
	Finish	Anodized	-	Anodized	Anodized	Painted	Plated	
QR nut	Material	Resin & steel	-	Resin & steel	Resin & steel	Resin & steel	Resin & steel	
	Finish	-	-	-	-	-	-	
Average weight		153g	-	161g	192g	-	-	
Note								

SL

BL

ST

RD

FD

BR

FC

FH

HB

PD

Pedal

SPD

Series	DEORE XT	
Model no.	PD-T780	
Color 1	Black	
Color 2	-	
Color 3	-	
Type	Trekking (SPD/Flat)	
Binding	Single Sided	
Pedal axle material	Chromoly Steel	
Cartridge axle	X	
Sealed mechanism	X	
Cleat retention adjuster	X	
Pop-up cage	-	
Integrated cage	-	
Offset binding	-	
Oval shape axle body housing	-	
Cleat included	SM-SH56	
Optional cleat	SM-SH51	
Reflector	Integrated	
Pedal body	Material	Aluminum
	Finish	Anodized
Cage	Material	-
Average weight (pair)		392g
Note		

Pedal

Click'R

Series	SHIMANO	SHIMANO	SHIMANO
Model no.	PD-T700	PD-T400	PD-T420
Color 1	Black	Black	Black
Color 2	-	White	-
Color 3	-	-	-
Type	Trekking (Click'R)	Trekking (Click'R)	Trekking (Click'R)
Binding	Dual Sided	Dual Sided	Single Sided
Pedal axle material	Chromoly Steel	Chromoly Steel	Chromoly Steel
Cartridge axle	X	X	X
Sealed mechanism	X	X	X
Cleat retention adjuster	X	X	X
Pop-up cage	X	X	X
Integrated cage	-	-	-
Offset binding	-	-	-
Oval shape axle body housing	-	-	-
Cleat included	SM-SH56	SM-SH56	SM-SH56
Optional cleat	SM-SH51	SM-SH51	SM-SH51
Reflector	Integrated	Integrated	Integrated
Pedal body	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Cage	Material	Resin	Resin
Average weight (pair)		457g	507g
Note			

ROAD

	<i>Page</i>	
Shift/Brake Lever	104	ST
Shift Lever	109	SL
Brake Lever	112	BL
Brake Cable	113	BC
Brake	113	BR
Rear Derailleur	117	RD
Front Derailleur	119	FD
Crankset	122	FC
Bottom Bracket	128	BB
Cassette Sprocket	129	CS
Chain	134	CN
Freehub	135	FH
Front Hub	137	HB
Wheel	139	WH
Pedal	148	PD
Head Parts	148	HP

Shift/Brake Lever

Series		DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA	105	
Model no.		ST-9001	ST-7900	ST-6800	ST-6700	ST-6703	ST-5800	
Color	1	Series color	Series color	Series color	Series color	Series color	Black	
	2	-	-	-	-	-	Silver	
Bracket cover color	1	2-Tone	Standard	Standard	Standard	Standard	Standard	
	2	-	-	White	White	White	White	
Lever type		Dual Control Lever	Dual Control Lever	Dual Control Lever	Dual Control Lever	Dual Control Lever	Dual Control Lever	
Shift lever specifications	Front speeds	2	2	2	2	3	2	
	Rear speeds	11	10	11	10	-	11	
	Optical Gear Display unit	-	-	-	-	-	-	
	Flight Deck	-	X	-	X	X	-	
	Multi-Bearing Construction	R:4 L:4	R:1	- *	1	1	0	
	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		RD side	OT-SP41	OT-SP41 Sealed	OT-SP41	OT-SP41 Sealed	-	OT-SP41 Sealed
	Polymer-coated cable	X	-	X	-	-	X	
	SIL-TEC cable	-	X	-	X	X	-	
Stainless cable	-	-	-	-	-	-		
Brake lever specifications	Reach adjust	Screw	Screw	Screw	Spacer Use	Spacer Use	Screw	
	Clamp band (mm)	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	
	SLR EV	X	-	X	-	-	X	
	New Super SLR	-	X	-	X	X	-	
	Super SLR	-	-	-	-	-	-	
Bracket	Cable adjuster bracket	-	-	-	-	-	-	
	Material	CFRP	CFRP	CFRP	GFRP	GFRP	GFRP	
	Finish	CFRP	CFRP	CFRP	GFRP	GFRP	GFRP	
Main lever	Material	Carbon	Carbon	CFRP	CFRP	CFRP	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Average weight		365g/pair	379g/pair	425g/pair	447g/pair	460g/pair	486g/pair	
Note				* Use bush				

Shift/Brake Lever

Series		105	105	Tiagra	Tiagra	SHIMANO	SORA	
Model no.		ST-5700	ST-5703	ST-4600	ST-4603	ST-R460	ST-3500	
Color	1	Silver	Silver	Series color	Series color	Black	Series color	
	2	Black	Black	-	-	-	-	
Bracket cover color	1	Standard	Standard	Standard	Standard	Standard	Standard	
	2	White	White	-	-	-	-	
Lever type		Dual Control Lever	Dual Control Lever	Dual Control Lever	Dual Control Lever	Dual Control Lever (ST-4600 operation style)	Dual Control Lever	
Shift lever specifications	Front speeds	2	3	2	3	2	2	
	Rear speeds	10	-	10	-	10	9	
	Optical Gear Display unit	-	-	X	X	X	X	
	Flight Deck	-	-	-	-	-	-	
	Multi-Bearing Construction	-	-	-	-	-	-	
	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		RD side	OT-SP41 Sealed	-	OT-SP41 Sealed	-	OT-SP41 Sealed	OT-SP41 Sealed
	Polymer-coated cable	-	-	-	-	-	-	
	SIL-TEC cable	X	X	-	-	-	-	
Stainless cable	-	-	X	X	X	X		
Brake lever specifications	Reach adjust	Spacer Use	Spacer Use	Spacer Use	Spacer Use	Spacer Use	Spacer Use	
	Clamp band (mm)	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	
	SLR EV	-	-	-	-	-	-	
	New Super SLR	X	X	X	X	X	X	
	Super SLR	-	-	-	-	-	-	
Bracket	Cable adjuster bracket	-	-	X	X	-	X	
	Material	GFRP	GFRP	GFRP	GFRP	GFRP	GFRP	
	Finish	GFRP	GFRP	GFRP	GFRP	GFRP	GFRP	
Main lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Silver: Clear Coated Black Paint	Silver: Clear Coated Black Paint	Clear Coated	Clear Coated	Painted	Painted	
Average weight		490g/pair	507g/pair	510g/pair	510g/pair	-	-	
Note				Integrated Cable Adjuster available	Integrated Cable Adjuster available	SHIMANO logo Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE	Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE Integrated Cable Adjuster available	

ST

SL

BL

BC

BR

RD

FD

FC

BB

CS

CN

FH

HB

WH

PD

HP

Shift/Brake Lever

Series		SORA	SHIMANO	SHIMANO	Claris	Claris	Claris	
Model no.		ST-3503	ST-R353	ST-R350-R	ST-2400-R	ST-2400-L	ST-2403-L	
Color	1	Series color	Black	Black	Series color	Series color	Series color	
	2	-	-	-	-	-	-	
Bracket cover color	1	Standard	Standard	Standard	Standard	Standard	Standard	
	2	-	-	-	-	-	-	
Lever type		Dual Control Lever	Dual Control Lever (ST-3500 operation style)	Dual Control Lever (ST-3500 operation style)	Dual Control Lever	Dual Control Lever	Dual Control Lever	
Shift lever specifications	Front speeds	3	3	-	-	2	3	
	Rear speeds	-	-	9	8	-	-	
	Optical Gear Display unit	X	X	X	X	X	X	
	Flight Deck	-	-	-	-	-	-	
	Multi-Bearing Construction	-	-	-	-	-	-	
	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		RD side	-	-	OT-SP41 Sealed	OT-SP41 Sealed	-	-
	Polymer-coated cable	-	-	-	-	-	-	
	SIL-TEC cable	-	X	X	-	-	-	
	Stainless cable	X	-	-	X	X	X	
Brake lever specifications	Reach adjust	Spacer Use	Spacer Use	Spacer Use	Spacer Use	Spacer Use	Spacer Use	
	Clamp band (mm)	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	
	SLR EV	-	-	-	-	-	-	
	New Super SLR	X	X	X	X	X	X	
	Super SLR	-	-	-	-	-	-	
Bracket	Cable adjuster bracket	X	-	-	-	-	-	
	Material	GFRP	GFRP	GFRP	GFRP	GFRP	GFRP	
	Finish	GFRP	GFRP	GFRP	GFRP	GFRP	GFRP	
Main lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	
Average weight		-	-	-	-	-	-	
Note		Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE Integrated Cable Adjuster available	SHIMANO logo Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE	SHIMANO logo Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE	Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE	Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE	Compatible with Caliper/Canti /Road disc brake Not compatible with V-BRAKE/ Compact V-BRAKE	

Shift/Brake Lever

Series		Tourney	Tourney	
Model no.		ST-A070	ST-A073-L	
Color	1	Series color	Series color	
	2	-	-	
Bracket cover color	1	Standard	Standard	
	2	-	-	
Lever type		Dual Control Lever	Dual Control Lever	
Shift lever specifications	Front speeds		2	3
	Rear speeds		7	-
	Optical Gear Display unit		X	X
	Flight Deck		-	-
	Multi-Bearing Construction		-	-
	Outer casing	Lever side	SIS40	SIS40
		RD side	SIS40	-
	Polymer-coated cable		-	-
	SIL-TEC cable		-	-
Stainless cable		Option	Option	
Brake lever specifications	Reach adjust		Screw	Screw
	Clamp band (mm)		23.8-24.2	23.8-24.2
	SLR EV		-	-
	New Super SLR		-	-
	Super SLR		X	X
Bracket	Cable adjuster bracket		-	-
	Material		GFRP	GFRP
	Finish		GFRP	GFRP
Main lever	Material		Aluminum	Aluminum
	Finish		Painted	Painted
Average weight		-	-	
Note				

ST

SL

BL

BC

BR

RD

FD

FC

BB

CS

CN

FH

HB

WH

PD

HP

Shift/Brake Lever

Disc Brake

Series		SHIMANO	SHIMANO	
Model no.		ST-RS685-L	ST-RS685-R	
Color	1	Standard	Standard	
	2	-	-	
Bracket cover color	1	Standard	Standard	
	2	-	-	
Shifter type		Dual Control Lever	Dual Control Lever	
Shift lever specifications	Front speeds		2	-
	Rear speeds		-	11
	2/3 mode converter		-	-
	Max. multiple shifts(Main lever / rear)		-	2
	Compatible RD type		-	Road 11-speed RD
	I-spec compatible		-	-
	SL position adjust		-	-
	Release function	Multi release	-	-
		Instant release	-	-
		2-Way release	-	-
	Optical Gear Display	with	-	-
		with (removable)	-	-
		without	-	-
	Multi-Bearing construction		-	-
	SL outer casing		OT-SP41	OT-SP41
	SL cable	Polymer-coated cable	X	X
		Ni-PTFE stainless cable	-	-
Stainless		-	-	
Steel		-	-	
Brake lever specifications	Lever size (Finger)		-	-
	Brake hose (Kit)		SM-BH59-J-SS SM-BH59-JK-SS	SM-BH59-J-SS SM-BH59-JK-SS
	Hose joint		Straight	Straight
	Brake hose color (kit)	1	Black	Black
		2	White	White
	Recommended brake caliper		BR-RS785	BR-RS785
	Brake fluid	SHIMANO Mineral Oil	SHIMANO Mineral	SHIMANO Mineral
		Tool less	-	-
	Reach adjust	Tool	X	X
	Funnel bleeding		X	X
	Free stroke adjust		X	X
Servo wave mechanism		X	X	
Clamp band	Open clamp		-	-
	I-spec diameter(mm)		23.8-24.2	23.8-24.2
Bracket	Material		Aluminum	Aluminum
	Finish		Painted	Painted
Brake lever	Material		Engineering Composite	Engineering Composite
	Finish		Painted	Painted
Shifter Lever body	Main		-	-
	Release		Resin & Steel	Resin & Steel
Master cylinder	Material		-	-
	Finish		-	-
Clamp band		Steel	Steel	
Average weight		649g/pair	649g/pair	
Note				

Shift Lever

Series		DURA-ACE	DURA-ACE	DURA-ACE	SHIMANO	SHIMANO	DURA-ACE
Model no.		SL-BSR1	SL-7900	SL-B579	SL-R780	SL-R783-L	SL-7700
Color	1	Series color	Series color	Series color	Silver	Silver	Series color
	2	-	-	-	Black	Black	-
Shifter type		Bar end Shifter	Down Tube Shifter	Bar end Shifter	Rapidfire Plus	Rapidfire Plus	Down Tube Shifter
Front speeds		2	2/3	2/3	2	3	2/3
Rear speeds		11	10	10	10	-	9
Compatible RD type		ROAD 11-speed RD	ROAD 10-speed RD	ROAD 10-speed RD	ROAD 10-speed RD	-	ROAD 9-speed RD
SL position adjust		-	-	-	-	-	-
SL cable adjust		-	-	-	X	X	-
Max. multiple shifts (Main lever/ rear)		-	-	-	4	-	-
Release function	Multi release	-	-	-	X(Right) / - (Left)	-	-
	Instant release	-	-	-	X	X	-
	2-Way release	-	-	-	X	X	-
Optical Gear Display	With	-	-	-	X	X	-
	With (removable)	-	-	-	-	-	-
	Without	X	X	X	-	-	X
Multi-Bearing construction		-	-	-	R:2 L:2	2	-
SL bracket	Material	-	-	-	Aluminum	Aluminum	-
	Finish	-	-	-	Painted	Painted	-
Main lever body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated
Release lever body	Material	-	-	-	GFRP & Steel	GFRP & Steel	-
	Finish	-	-	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	SIL-TEC	SIL-TEC	SIL-TEC	-	-	-
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		153g/pair	63g/pair	153g/pair	270g/pair	270g/pair	-
Note					For flat handle bar	For flat handle bar	

Series		DURA-ACE	SHIMANO	ULTEGRA	Tiagra	Tiagra	SHIMANO
Model no.		SL-B577	SL-R5700	SL-B564-8	SL-4600	SL-4603	SL-R460
Color	1	Series color	Silver	Series color	Series color	Series color	Black
	2	-	Black	-	-	-	-
Shifter type		Bar end Shifter	Rapidfire Plus	Bar end Shifter	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		2/3	2	2/3	2	3	2
Rear speeds		9	11	8	10	-	10
Compatible RD type		ROAD 9-speed RD	ROAD 11-speed RD	ROAD 8-speed RD	ROAD 10-speed RD	-	ROAD 10-speed RD
SL position adjust		-	-	-	-	-	-
SL cable adjust		-	X	-	X	X	X
Max. multiple shifts (Main lever/ rear)		-	4	-	4	-	4
Release function	Multi release	-	*X(Right) / - (Left)	-	-	-	-
	Instant release	-	X	-	X (R)	-	X (right side)
	2-Way release	-	X	-	X	X	X
Optical Gear Display	With	-	-	-	X	X	X
	With (removable)	-	-	-	-	-	-
	Without	X	X	X	-	-	-
Multi-Bearing construction		-	R:2 L:2	-	R:2 L:2	2	R:2 L:2
SL bracket	Material	-	Aluminum	-	Aluminum	Aluminum	Aluminum
	Finish	-	Painted	-	Painted	Painted	Painted
Main lever body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Painted	Clear Coated	Painted	Painted	Painted
Release lever body	Material	-	GFRP & Steel	-	Resin & Steel	Resin & Steel	Resin & Steel
	Finish	-	-	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	SIL-TEC	-	-	-	-
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		-	-	-	275g/pair	275g/pair	-
Note			* Pull:single Push:double				SHIMANO logo

Shift Lever

Series		SHIMANO	SORA	SORA	SHIMANO	SHIMANO	Claris
Model no.		SL-R400	SL-3500	SL-3503	SL-R350-R	SL-R353	SL-2400-R
Color	1	Series color	Series color	Series color	Black	Black	Series color
	2	-	-	-	-	-	-
Shifter type		Down Tube Shifter	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus
Front speeds		2/3	2	3	-	3	-
Rear speeds		8	9	-	9	-	8
Compatible RD type		ROAD 8-speed RD	ROAD 9-speed RD	-	ROAD 9-speed RD	-	ROAD 8-speed RD
SL position adjust		-	-	-	-	-	-
SL cable adjust		-	X	X	X	X	X
Max. multiple shifts (Main lever/ rear)		-	3	-	3	-	3
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	-	X	X	X	X	X
Optical Gear Display	With	-	X	X	X	X	X
	With (removable)	-	-	-	-	-	-
	Without	X	-	-	-	-	-
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	-	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	Painted	Painted	Painted	Painted	Painted
Main lever body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Resin & Steel
	Finish	Painted	Painted	Painted	Painted	Painted	-
Release lever body	Material	-	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel
	Finish	-	-	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		-	-	-	-	-	-
Note					SHIMANO logo	SHIMANO logo	

Series		Claris	Claris	Claris	Claris	Claris	A050
Model no.		SL-2400-L	SL-2403-L	ST-R240-R	ST-R240-L	ST-R243-L	SL-A050-7R
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Handle Bar Mount Shifter
Front speeds		2	3	-	2	3	-
Rear speeds		-	-	8	-	-	7
Compatible RD type		-	-	ROAD 8-speed RD	-	-	ROAD 7-speed RD
SL position adjust		-	-	-	-	-	-
SL cable adjust		X	X	X	X	X	-
Max. multiple shifts (Main lever/ rear)		-	-	3	-	-	-
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	X	X	X	X	X	-
Optical Gear Display	With	X	X	X	X	X	-
	With (removable)	-	-	-	-	-	-
	Without	-	-	-	-	-	X
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Zinc Plated
Main lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin
	Finish	-	-	-	-	-	-
Release lever body	Material	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin & Steel	Resin
	Finish	-	-	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Steel
	Finish	-	-	-	-	-	Standard
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP40
Average weight		-	-	-	-	-	-
Note							

Shift Lever

Series		A050	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		SL-A050-LN	SL-SY20A-6-STEM	SL-SY20A-7-STEM	SL-SY20A-6-D	SL-SY20A-7-D	SL-SY20A-6-D/BAND
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		Handle Bar Mount Shifter	Stem Mount Shifter	Stem Mount Shifter	Down Tube Mount Shifter	Down Tube Mount Shifter	Down Tube Mount Shifter
Front speeds		2 (Friction)	2 (Friction)	2 (Friction)	2 (Friction)	2 (Friction)	2 (Friction)
Rear speeds		-	6	7	6	7	6
Compatible RD type		-	ROAD 6-speed RD	ROAD 7-speed RD	ROAD 6-speed RD	ROAD 7-speed RD	ROAD 6-speed RD
SL position adjust		-	-	-	-	-	-
SL cable adjust		-	-	-	-	-	-
Max. multiple shifts (Main lever/ rear)		-	-	-	-	-	-
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	-	-	-	-	-	-
Optical Gear Display	With	-	-	-	-	-	-
	With (removable)	-	-	-	-	-	-
	Without	X	X	X	X	X	X
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Main lever body	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
Release lever body	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Standard	Standard	Standard	Standard	Standard	Standard
Recommended SL outer casing		OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight		-	-	-	-	-	-
Note					Brazed On Type	Brazed On Type	Band Type

Series		SHIMANO
Model no.		SL-SY20A-7-D/BAND
Color	1	Series color
	2	-
Shifter type		Down Tube Mount Shifter
Front speeds		2 (Friction)
Rear speeds		7
Compatible RD type		ROAD 7-speed RD
SL position adjust		-
SL cable adjust		-
Max. multiple shifts (Main lever/ rear)		-
Release function	Multi release	-
	Instant release	-
	2-Way release	-
Optical Gear Display	With	-
	With (removable)	-
	Without	X
Multi-Bearing construction		-
SL bracket	Material	Steel
	Finish	Zinc Plated
Main lever body	Material	Resin
	Finish	-
Release lever body	Material	Resin
	Finish	-
SL cable	Material	Steel
	Finish	Standard
Recommended SL outer casing		OT-SP41
Average weight		-
Note		Band Type

Brake Lever

Series		SHIMANO	DURA-ACE	Tiagra	SHIMANO	SHIMANO	SORA
Model no.		BL-R780	BL-TT79	BL-4600	BL-R550	BL-R400	BL-3500
Color	1	Silver	Black	Standard	Silver	Standard	Standard
	2	Black	-	-	Black	-	-
	3	-	-	-	-	-	-
Compatible brake type	V-BRAKE	X	-	X	-	-	X
	Mechanical disc brake (MTB)	-	-	-	-	-	-
	Mechanical disc brake (Road)	X	X	X	X	-	X
	Caliper (new super SLR)	X	X	X	-	-	X
	Caliper (super SLR)	-	-	-	X	X	-
	CANTI brake	X	X	X	X	-	X
	Roller brake	-	-	-	-	-	-
Recommended power modulator	V-BRAKE	-	-	-	-	-	-
	Mechanical disc brake (MTB)	-	-	-	-	-	-
Clamp band	Open clamp band	-	-	-	-	-	-
	I spec compatible	-	-	-	-	-	-
	Diameter (mm)	22.2	*	22.2	22.2	23.8-24.2	22.2
	Internal bumper stop	X	-	X	-	-	X
Lever size (Finger)	2.5	-	2.5	2.5	-	2.5	
Brake cable type	T-type	-	T-type	T-type	-	T-type	
Power adjuster	-	-	-	-	-	-	
Servo-Wave action	-	-	-	-	-	-	
Reach adjust	X	X	X	X	-	X	
Cable adjust	X	-	X	X	-	X	
Cable adjust type	Two hand	-	Two hand	Two hand	-	Two hand	
Brake lever	Material	Aluminum	CFRP	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Anodized	Barrel	Anodized Black
Brake bracket	Material	Aluminum	CFRP	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Painted	Anodized	Painted	Anodized	Painted
Average weight		129g/pair	89g/pair	176g/pair	-	-	-
Note			* : Fixiation structure is expanding plug clamp, handle bar inside diameter : 19.0-22.5 dim, handle bar outside diameter : 22.2-24.0 dim.				

Series		Claris	Claris	Claris	Claris
Model no.		BL-2400	ST-R240-R	ST-R240-L	ST-R243-L
Color	1	Standard	Standard	Standard	Standard
	2	-	-	-	-
	3	-	-	-	-
Compatible brake type	V-BRAKE	X	X	X	X
	Mechanical disc brake (MTB)	-	-	-	-
	Mechanical disc brake (Road)	X	X	X	X
	Caliper (new super SLR)	X	X	X	X
	Caliper (super SLR)	-	X	X	X
	CANTI brake	X	X	X	X
	Roller brake	-	-	-	-
Recommended power modulator	V-BRAKE	-	-	-	-
	Mechanical disc brake (MTB)	-	-	-	-
Clamp band	Open clamp band	-	-	-	-
	I spec compatible	-	-	-	-
	Diameter (mm)	22.2	22.2	22.2	22.2
Internal bumper stop	X	X	X	X	
Lever size (Finger)	2.5	2.5	2.5	2.5	
Brake cable type	T-type	T-type	T-type	T-type	
Power adjuster	-	-	-	-	
Servo-Wave action	-	-	-	-	
Reach adjust	X	X	X	X	
Cable adjust	X	X	X	X	
Cable adjust type	Two hand	Two hand	Two hand	Two hand	
Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized Black	Anodized Black	Anodized Black	Anodized Black
Brake bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
Average weight		-	-	-	-
Note					

Brake Cable

Series		DURA-ACE	SHIMANO	SHIMANO
Model no.		BC-9000	BC-R680	BC-1051
Color	High-tech Gray	X	X	X
	Black	X	X	X
	White	X	X	X
	Red	X	X	X
	Blue	-	X	X
	Lime-Green	-	X	X
	Orange	-	X	X
	Yellow	-	X	X
Brake type		Caliper	Caliper	Caliper
Inner cable	Material	SUS	SUS	Steel
	Coated	Polymer-coated cable	Polymer-coated cable	-
Outer cable	Material	Steel (Plated)	Steel (Plated)	Steel
	Prelubricated casings	X	X	-
Average weight		-	-	-
Note				

Brake Caliper Brake

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA
Model no.		BR-9000	BR-9010-F	BR-9010-R	BR-9010-RS	BR-6800	BR-6810-F
Color	1	Standard	Standard	Standard	Standard	Standard	Standard
	2	-	-	-	-	-	-
Type		SLR EV Dual Pivot	Direct mount type	Direct mount type	Direct mount type	SLR EV Dual Pivot	Direct mount type
Reach (mm)		49	49	49	49	51	51
Brake shoe	Standard	R55C4	R55C4	R55C4	R55C4	R55C4	R55C4
	Optional choice	R55C4 Carbon R55C4-1 Carbon R55C3	R55C4 Carbon R55C4-1 Carbon	R55C4 Carbon R55C4-1 Carbon	R55C4 Carbon R55C4-1 Carbon	R55C4 Carbon R55C4-1 Carbon	R55C4 Carbon R55C4-1 Carbon
Compatibility		SLR EV	SLR EV	SLR EV	SLR EV	SLR EV	SLR EV
Assembly pivot nut (mm)		10.5/ 12.5/ 18.0/ 25.0/ 32.0	-	-	-	10.5/ 12.5/ 18.0 / 27.0/ 32.0	-
Cartridge shoe holder		X	X	X	X	X	X
Tire guide bumpers		X	X	X	X	X	X
QR		X	X	-	X	X	X
Shoe angle adjusting		X	X	X	X	X	X
Spring tension adjusting		X	X	X	X	X	X
Maximum tire size		25C	25C	25C	25C	25C	28C
Rim width		*19-28mm	*19-28mm	*19-28mm	*19-28mm	*19-28mm	*19-28mm
Cartridge shoe holder	Material	Magnesium	Magnesium	Magnesium	Magnesium	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
C-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Y-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Gate	Material	Aluminum	-	-	-	Aluminum	-
	Finish	Anodized	-	-	-	Anodized	-
QR	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	-	Painted	Painted	Painted
Titanium cable fixing bolt		X	X	X	X	-	-
Titanium pivot bolt		X	X (fixing bolt)	X (fixing bolt)	X (fixing bolt)	-	-
Average weight		297g/pair	153g/pcs	127g/pcs	149g/pc	335g/pair	173g/pc
Note		Maximum tire size: 25mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 25mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	"Need Inline cable adjuster (SM-CB90) for cable adjusting and QR feature." Maximum tire size: 25mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 25mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 25mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 28mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)

Brake

Caliper Brake

Series		ULTEGRA	ULTEGRA	SHIMANO	105	105	105
Model no.		BR-6810-R	BR-6810-RS	BR-R650	BR-5800	BR-5810-F	BR-5810-R
Color	1	Standard	Standard	Silver	Black	Black	Black
	2	-	-	-	Silver	-	-
Type		Direct mount type	Direct mount type	Super SLR Dual Pivot	SLR EV Dual Pivot	Direct mount type	Direct mount type
Reach (mm)		51	51	57	51mm	-	-
Brake shoe	Standard	R55C4	R55C4	R55C2	R55C4		
	Optional choice	R55C4 Carbon R55C4-1 Carbon	R55C4 Carbon R55C4-1 Carbon	R55C for Carbon rim R55C for Ceramic rim	R55C4 for Carbon rim, R55C4-1 for Carbon rim (wider than 25mm rim)		
Compatibility		SLR EV	SLR EV	SUPER SLR	SLR EV	SLR EV	SLR EV
Assembly pivot nut (mm)		-	-	10.5/ 12.5/ 18.0/ 27.0	10.5/ 12.5/ 18.0 / 27.0/ 32.0	-	-
Cartridge shoe holder		X	X	X	X	X	X
Tire guide bumpers		X	X	-	X	X	X
QR		-	X	X	X	X	-
Shoe angle adjusting		X	X	X	X	X	X
Spring tension adjusting		X	X	-	-	-	-
Maximum tire size		28C	28C	28C	28mm	28mm	28mm
Rim width		*19-28mm	*19-28mm	19-26mm	19-28mm	19-28mm	19-28mm
Cartridge shoe holder	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
C-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Y-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Gate	Material	-	-	Aluminum	Aluminum	-	-
	Finish	-	-	Anodized	Anodized	-	-
QR	Material	-	Aluminum	Zinc	resin	resin	-
	Finish	-	Painted	Plated	Painted	Painted	-
Titanium cable fixing bolt		-	-	-	-	-	-
Titanium pivot bolt		-	-	-	-	-	-
Average weight		165g/pcs	168g/pc	-	388g/pair	174g/pc	176g/pc
Note		"Need Inline cable adjuster (SM-CB90) for cable adjusting and QR feature." Maximum tire size: 28mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 28mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 28mm	Maximum tire size: 28mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 28mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	"Need Inline cable adjuster (SM-CB90) for cable adjusting and QR feature." Maximum tire size: 28mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)

Brake

Caliper Brake

Series	105	SHIMANO	Tiagra	SHIMANO	SORA	Claris
Model no.	BR-5810-R5	BR-R561	BR-4600	BR-R451	BR-3500	BR-2400
Color	1	Black	Silver	Standard	Black	Standard
	2	-	Black	-	Silver	-
Type	Direct mount type	Super SLR Dual Pivot	Super SLR Dual Pivot	Super SLR Dual Pivot	Super SLR Dual Pivot	Super SLR Dual Pivot
Reach (mm)	-	49	49	57	49	49
Brake shoe	Standard	R55C4	R55C3	R50T2	R50T2	R50T2
	Optional choice	R55C4 for Carbon rim, R55C4-1 for Carbon rim (wider than 25mm rim)	R55C for Ceramic rim R55C3 for Carbon rim	-	-	R50T4
Compatibility	SLR EV	New SUPER SLR	New SUPER SLR	SUPER SLR	New SUPER SLR	New SUPER SLR
Assembly pivot nut (mm)	-	10.5/ 12.5/ 18.0/ 27.0	10.5/ 12.5/ 18.0/ 27.0	10.5/ 12.5/ 18.0/ 27.0	10.5/ 12.5/ 18.0/ 27.0	10.5/ 12.5/ 18.0/ 27.0
Cartridge shoe holder	X	X	-	-	-	-
Tire guide bumpers	X	-	-	-	-	-
QR	X	X	X	X	X	X
Shoe angle adjusting	X	X	X	X	X	X
Spring tension adjusting	X	-	-	-	-	-
Maximum tire size	28mm	28C	28C	32C	28C	28C
Rim width	19-28mm	19-26mm	19-26mm	19-26mm	19-26mm	19-26mm
Cartridge shoe holder	Material	Aluminum	Aluminum	-	-	-
	Finish	Painted	Painted	-	-	-
C-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Painted
Y-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Painted
Gate	Material	-	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	Anodized	Anodized	Painted	Anodized
QR	Material	Aluminum	Zinc	Zinc	Resin	Resin
	Finish	Painted	Plated	Plated	-	-
Titanium cable fixing bolt	-	-	-	-	-	-
Titanium pivot bolt	-	-	-	-	-	-
Average weight	175g/pc	-	-	-	-	-
Note	Maximum tire size: 28mm Rim width: 19-26mm /19-28mm(R55C4-1 Carbon)	Maximum tire size: 28mm	Maximum tire size: 28mm	QR Wider OpenMaximum tire size: 32mm	Maximum tire size: 28mm	Maximum tire size: 28mm

Brake

Canti Lever Brake

Series	SHIMANO	SHIMANO
Model no.	BR-CX70	BR-CX50
Color	1	Glossy Gray
	2	-
Type	Canti lever	Canti lever
Reach	-	-
Brake shoe	Standard	R55C+1
	Optional choice	R55C3 R55C4 Carbon
Compatibility	New SUPER SLR	New SUPER SLR
Assembly pivot nut (mm)	-	-
Cartridge shoe holder	X	-
Tire guide bumpers	X	-
QR	-	-
Shoe angle adjusting	X	X
Spring tension adjusting	X	X
Cartridge shoe holder	Material	Aluminum
	Finish	Painted
Canti lever	Material	Aluminum
	Finish	Anodized
Average weight	165g	175g
Note	Cyclecross usage	Cyclecross usage

Brake

V-BRAKE

Series		SHIMANO	SHIMANO	SHIMANO
Model no.		BR-R573	BR-R463	BR-R353
Color	1	Silver	Silver	Silver
	2	Black	-	Black
	3	-	-	-
Brake type		V-BRAKE	V-BRAKE	V-BRAKE
Brake shoe type	Standard 1	M70R2	S70C	S70T
	Standard 2	-	-	-
	Option 1	M70CT4	M70CT4	M70T4
	Option 2	S70C	-	-
Cartridge shoe holder		X	X	-
Arch size (mm)		90	90	90
Spacer type	X type	X	X	X
	Y type	-	-	-
Compatible lead pipe angle (deg.)		45/90/135	45/90/135	45/90/135
Sleeve & Bushing axle		X	X	X
V-arm/Caliper	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted
Fixing bolt length (mm)	16	X	X	X
	25	X	X	X
Fixing bolt	Material	Titanium	Stainless	Steel
	Finish	-	-	Plated (Black)
	Chamfered bolt	X	-	-
Link wire		-	-	-
Reinforced link		-	-	-
Parallel link		-	-	-
Power modulator		-	-	-
Linear spring		X	X	X
Threaded BR shoe post		X	X	X
Average weight		-	-	-
Note		SHIMANO logo	SHIMANO logo	SHIMANO logo

Brake

Disc Brake

Series		SHIMANO	SHIMANO	SHIMANO
Model no.		BR-CX77	BR-R517	BR-R317
Brake type		Mechanical Disc-brake	Mechanical Disc-brake	Mechanical Disc-brake
Color	1	Glossy Gray	Black	Silver
	2	-	Silver	Black
Compatibility		New SUPER SLR	New SUPER SLR	New SUPER SLR
Cable		SLR Brake	SLR Brake	SLR Brake
Pad	Standard 1	G01A Resin	G01S Resin	G01S Resin
	Option 1	G03Ti	-	-
Recommended brake lever		ST-9001/ST-9070/ ST-6800/ST-6870/ ST-6700/ 6770/ BL-R780	ST-4600/5700 BL-4600/R780	ST-3500/2400 BL-3500/2400
Recommended brake rotor		SM-RT81/86	SM-RT64/RT66	SM-RT54 (Center Lock) SM-RT56 (6 Bolt)
Mount type (available for IS mount with mount adapter)		Post-type	Post-type	Post-type
Piston		1	1	1
Piston material		-	-	-
Caliper	Mono-body	-	-	-
	Material	Aluminum	Aluminum	Aluminum
	Finish	Clear Painted	Clear Painted	Painted
Caliper fixing bolt	Material	Steel	Steel	Steel
	Tool size	5mm	5mm	5mm
	Anti loosen method	Snap ring	Snap ring	Snap ring
Pad mount		Pad axle	Pad axle	Pad axle
Average weight		159g	-	-
Note		Cyclecross usage	SHIMANO logo	SHIMANO logo

Brake

Hydraulic Disc Brake

Series		SHIMANO	SHIMANO
Model no.		BR-R5785	BR-R785
Brake type		Hydraulic Disc-brake	Hydraulic disc brake
Color	1	Gray	Gray
	2	-	-
	3	-	-
Brake hose (kit)		SM-BH59-J-SS SM-BH59-JK-SS	SM-BH59
Hose joint		Straight	Banjo
Brake hose color (kit)	1	Black	Black
	2	White	White
ICE TECHNOLOGY pad compatible caliper		X	X
Pad	Standard 1	J02A-Resin	F01A-Resin
	Standard 2	J04C-Metal	F03C-Metal
	Option 1	G02A-Resin	G01A-Resin
	Option 2	G03S Metal	G03S Metal
Recommended brake lever		ST-R5685 ST-R785	ST-R785
Recommended brake rotor		SM-RT99 (SS, S)	SM-RT98 (SS, S) SM-RT99 (SS, S)
Oil		SHIMANO Mineral	SHIMANO Mineral
One way bleeding		X	X
Mount type (available for IS mount with mount adapter)		Post-type	Post-mount
Piston		2	2
Piston material		Resin	Ceramic
Caliper	Mono-body	-	-
	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Caliper fixing bolt	Material	Steel	Steel
	Tool size	5mm	5mm
	Anti loosen method	Snap ring	Snap ring
Pad mount		Pad axle	Pad axle
Average weight		284g/pair	271g
Note		-	-

Rear Derailleur

Series		DURA-ACE	ULTEGRA	ULTEGRA	105	105	105
Model no.		RD-9000-SS	RD-6800-SS	RD-6800-GS	RD-5800	RD-5800	RD-5701-SS
Pulley cage		SS	SS	GS	SS	GS	SS
Color	1	Series color	Series color	Series color	Black	Black	Black
	2	-	-	-	Silver	Silver	Silver
Rear speeds		11	11	11	11	11(double)	10
Compatible chain		HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG 10-speed
Direct attachment (Conventional)		X	X	X	X	X	X
Riveted adapter	Road type	-	-	-	-	-	-
	BMX-Track type	-	-	-	-	-	-
Cable adjuster		X	X	X	X	X	X
Max. front difference		16T	16T	16T	16T	16T	16T
Total capacity		33T	33T	37T	33T	37T	34T
Low sprocket	Max.	28T	28T	32T	28T	32T	30T
	Min.	23T	23T	28T	23T	28T	25T
Top sprocket	Max.	14T	14T	12T	14T	12T	14T
	Min.	11T	11T	11T	11T	11T	11T
Fluoroc coated link bushings		4	4	4	2	2	2
Pulley	G pulley bearing	X	X	X	-	-	-
	T pulley bearing	X	X	X	-	-	-
	Teeth	11T	11T	11T	11T	11T	11T
	Bolts material	SUS	SUS	SUS	SUS	SUS	SUS
	Sunken type pulley bolt	X	X	X	X	X	X
B-Axle	Hollow axle	X	X	X	-	-	-
	Material	Aluminum	SUS	SUS	Steel	Steel	Steel
	Finish	-	-	-	Plated	Plated	Plated
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminium	Aluminium	Aluminium
	Finish	Anodized	Painted	Painted	Painted	Painted	Painted
P-Axle	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Plate body	Material	CFRP	CFRP	CFRP	Aluminium	Aluminium	Aluminium
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminium	Aluminium	Aluminium
	Finish	Anodized	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Painted	Painted	Painted	Painted	Plated
Outer plate	Material	CFRP	Aluminum	Aluminum	Aluminium	Aluminium	Aluminium
	Finish	Clear Coated	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	CFRP	Aluminum	Aluminum	Aluminium	Aluminium	Aluminium
	Finish	Clear Coated	Painted	Painted	Painted	Painted	Painted
Average weight		158g	195g	207g	234g	250g	230g
Note							

ST

SL

BL

BC

BR

RD

FD

FC

BB

CS

CN

FH

HB

WH

PD

HP

Rear Derailleur

Series	105	105	Tiagra	Tiagra	Tiagra	SORA	
Model no.	RD-5701-GS	RD-5701-GS	RD-4601-SS	RD-4601-GS	RD-4601-GS	RD-3500-SS	
Pulley cage	GS(Front double)	GS(Front triple)	SS	GS(Front double)	GS(Front triple)	SS	
Color	1	Black	Black	Series color	Series color	Series color	
	2	Silver	Silver	-	-	-	
Rear speeds	10	10	10	10	10	9	
Compatible chain	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 9-speed	
Direct attachment (Conventional)	X	X	X	X	X	X	
Riveted adapter	Road type	-	-	-	-	-	
	BMX-Track type	-	-	-	-	-	
Cable adjuster	X	X	X	X	X	X	
Max. front difference	22T	16T	16T	22T	16T	16T	
Total capacity	40T	37T	34T	40T	37T	37T	
Low sprocket	Max.	30T	32T	30T	32T	32T	
	Min.	25T	27T	25T	27T	25T	
Top sprocket	Max.	14T	12T	14T	14T	14T	
	Min.	11T	11T	11T	11T	11T	
Fluoricoated link bushings	2	2	2	2	2	2	
Pulley	G pulley bearing	-	-	-	-	-	
	T pulley bearing	-	-	-	-	-	
	Teeth	11T	11T	11T	11T	11T	
	Bolts material	SUS	SUS	SUS	SUS	SUS	Steel
	Sunken type pulley bolt	X	X	X	X	X	X
B-Axle	Hollow axle	-	-	-	-	-	
	Material	Steel	Steel	Steel	Steel	Steel	SUS
Bracket body	Finish	Plated	Plated	Plated	Plated	Plated	-
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Plate body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Resin
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Outer plate	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Plated	Plated	Plated	Painted
Average weight	243g	243g	-	-	-	-	
Note							

Series	SORA	SHIMANO	SHIMANO	Claris	Claris	Tourney A070	
Model no.	RD-3500-GS	RD-R350-10-SS	RD-R350-GS	RD-2400-SS	RD-2400-GS	RD-A070	
Pulley cage	GS	SS	GS	SS	GS	Smart	
Color	1	Series color	Black	Black	Series color	Series color	
	2	-	-	-	-	-	
Rear speeds	9	10	9	8	8	7	
Compatible chain	HG 9-speed	HG 10-speed	HG 9-speed	HG 8-speed	HG 8-speed	HG	
Direct attachment (Conventional)	X	X	X	X	X	X	
Riveted adapter	Road type	-	-	-	-	X	
	BMX-Track type	-	-	-	-	-	
Cable adjuster	X	X	X	X	X	X	
Max. front difference	20T	14T	20T	16T	20T	20T	
Total capacity	41T	37T	41T	37T	41T	37T	
Low sprocket	Max.	32T	34T	32T	32T	28T	
	Min.	25T	30T	25T	25T	28T	
Top sprocket	Max.	14T	12T	14T	13T	14T	
	Min.	11T	11T	11T	11T	11T	
Fluoricoated link bushings	2	2	2	-	-	-	
Pulley	G pulley bearing	-	-	-	-	-	
	T pulley bearing	-	-	-	-	-	
	Teeth	11T	11T	11T	11T	11/13T	
	Bolts material	Steel	Steel	Steel	Steel	Steel	
	Sunken type pulley bolt	X	X	X	X	X	-
B-Axle	Hollow axle	-	-	-	-	-	
	Material	SUS	SUS	SUS	Steel	Steel	Steel
Bracket body	Finish	-	-	-	Plated	Plated	MnPO4
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Resin
P-Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Plate body	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	Painted	Painted	Painted	Painted	Painted	-
Outer link	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Zinc Plated
Outer plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Average weight	-	-	-	-	-	-	
Note		SHIMANO logo	SHIMANO logo				

Front Derailleur

Series		DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA
Model no.		FD-9000-B	FD-9000-F	FD-6800-B	FD-6800-F	FD-6700-B	FD-6700-F
Color	1	Series color	Series color	Series color	Series color	Silver	Silver
	2	-	-	-	-	Glossy Gray	Glossy Gray
Speeds	Front	2	2	2	2	2	2
	Rear	11	11	11	11	10	10
Compatible chain		HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG 10-speed	HG 10-speed
Action	Top Swing	-	-	-	-	-	-
	Down Swing	X	X	X	X	X	X
Mount	Clamp Band	28.6mm	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	X	-	X	-	X
		34.9mm	X	-	X	-	X
	Brazed-On	-	X	-	X	-	X
Top-Pull exclusive option		-	-	-	-	-	-
Chain line (mm)		43.5	43.5	43.5	43.5	43.5	43.5
Chain stay angle		61-66	61-66	61-66	61-66	61-66	61-66
Top gear teeth		50-55T	50-55T	46-53T	46-53T	50-56T	50-56T
Total capacity		16T	16T	16T	16T	16T	16T
Applicable Top-Mid tooth difference		-	-	-	-	-	-
Angled clamp band design		-	-	-	-	-	-
Link bushings		7	7	7	7	7	7
Front clamp band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Anodized	-	Painted	-	Painted	-
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted	Painted	Painted
Chain guide	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Nickel Plated	Nickel Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Average weight		78g	66g	104g (L size)	89g	104g (L size)	89g
Note							

Series		ULTEGRA	ULTEGRA	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		FD-6703-B	FD-6703-F	FD-CX70-B-T	FD-CX70-B-D	FD-CX70-F-T	FD-CX70-F-D
Color	1	Silver	Silver	Gray	Gray	Gray	Gray
	2	Glossy Gray	Glossy Gray	-	-	-	-
Speeds	Front	3	3	2	2	2	2
	Rear	10	10	10	10	10	10
Compatible chain		HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed
Action	Top Swing	-	-	-	-	-	-
	Down Swing	X	X	X	X	X	X
Mount	Clamp Band	28.6mm	X (w/AdapterS)	-	X (w/AdapterS)	-	-
		31.8mm	X	-	X	-	-
		34.9mm	X	-	X	-	-
	Brazed-On	-	X	-	-	X	X
Top-Pull exclusive option		-	-	X	-	X	-
Chain line (mm)		45	45	43.5	43.5	43.5	43.5
Chain stay angle		63-66	63-66	63-66	63-66	63-66	63-66
Top gear teeth		52T	52T	46-52T	46-52T	46-52T	46-52T
Total capacity		16T	16T	16T	16T	16T	16T
Applicable Top-Mid tooth difference		13T	13T	-	-	-	-
Angled clamp band design		-	-	-	-	-	-
Link bushings		7	7	7	7	7	7
Front clamp band	Material	Aluminum	-	Aluminum	Aluminum	-	-
	Finish	Painted	-	Painted	Painted	-	-
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Average weight		131g (L size)	114g	108g	103g	92g	87g
Note							

Front Derailleur

Series		105	105	105	105	105	105
Model no.		FD-5800-B	FD-5800-F	FD-5700-B	FD-5700-F	FD-5703-B	FD-5703-F
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	Silver	Silver	Silver	Silver
Speeds	Front	2	2	2	2	3	3
	Rear	11	11	10	10	10	10
Compatible chain		HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed
Action	Top Swing	-	-	-	-	-	-
	Down Swing	X	X	X	X	X	X
Mount	Clamp Band	28.6mm	X*	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	X	-	X	-	X
		34.9mm	X	-	X	-	X
	Brazed-On	-	X	-	X	-	X
Top-Pull exclusive option		-	-	-	-	-	-
Chain line (mm)		43.5	43.5	43.5	43.5	45	45
Chain stay angle		61-66	61-66	61-66	61-66	63-66	63-66
Top gear teeth		46-53T	46-53T	50-56T	50-56T	50T	50T
Total capacity		16T	16T	16T	16T	20T	20T
Applicable Top-Mid tooth difference		-	-	-	-	11T	11T
Angled clamp band design		-	-	-	-	-	-
Link bushings		8	8	-	-	-	-
Front clamp band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Painted	-	Painted	-	Painted	-
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated		Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Average weight		104g	89g	105g (L size)	89g	132g (L size)	114g
Note		* w/Adapter					

Series		Tiagra	Tiagra	Tiagra	Tiagra	SHIMANO	SORA
Model no.		FD-4600-B	FD-4600-F	FD-4603-B	FD-4603-F	FD-R460-B	FD-3500-B
Color	1	Series color	Series color	Series color	Series color	Black	Series color
	2	-	-	-	-	-	-
Speeds	Front	2	2	3	3	2	2
	Rear	10	10	10	10	10	9
Compatible chain		HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 9-speed
Action	Top Swing	-	-	-	-	-	-
	Down Swing	X	X	X	X	X	X
Mount	Clamp Band	28.6mm	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		31.8mm	X	-	X	-	X
		34.9mm	X	-	X	-	X
	Brazed-On	-	X	-	X	-	-
Top-Pull exclusive option		-	-	-	-	-	-
Chain line (mm)		43.5	43.5	45	45	43.5	43.5
Chain stay angle		61-66	61-66	63-66	63-66	63-66	61-66
Top gear teeth		50-56T	50-56T	50T	50T	46-50T	46-52T
Total capacity		16T	16T	20T	20T	16T	16T
Applicable Top-Mid tooth difference		-	-	11T	11T	-	-
Angled clamp band design		-	-	-	-	-	-
Link bushings		-	-	-	-	-	-
Front clamp band	Material	Aluminum	-	Aluminum	-	Aluminum	Aluminum
	Finish	Painted	-	Painted	-	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Plated
Average weight		105g (L size)	89g	132g (L size)	114g	-	-
Note						SHIMANO logo	

Front Derailleur

Series		SORA	SORA	SORA	SHIMANO	Claris	Claris
Model no.		FD-3500-F	FD-3503-B	FD-3503-F	FD-R353-B	FD-2400-B	FD-2400-F
Color	1	Series color	Series color	Series color	Black	Series color	Series color
	2	-	-	-	-	-	-
Speeds	Front	2	3	3	3	2	2
	Rear	9	9	9	9	8	8
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 8-speed	HG 8-speed
Action	Top Swing	-	-	-	-	-	-
	Down Swing	X	X	X	X	X	X
Mount	Clamp Band	28.6mm	-	X (w/AdapterS)	-	X (w/Adapter S)	-
		31.8mm	-	X	-	X	-
		34.9mm	-	X	-	X	-
	Brazed-On	X	-	X	-	-	X
Top-Pull exclusive option		-	-	-	-	-	-
Chain line (mm)		43.5	45	45	45	43.5	43.5
Chain stay angle		61-66	63-66	63-66	63-66	61-66	61-66
Top gear teeth		46-52T	50T	50T	50T	46-52T	46-52T
Total capacity		16T	16T	20T	20T	16T	16T
Applicable Top-Mid tooth difference		-	20T	20T	11T	-	-
Angled clamp band design		-	-	-	-	X	X
Link bushings		-	-	-	-	-	-
Front clamp band	Material	-	Aluminum	-	Aluminum	Steel	Aluminum
	Finish	-	Painted	-	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	-
	Finish	Painted	Painted	Painted	Painted	Painted	-
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Chrome Plated	Plated	Plated
Average weight		-	-	-	-	-	-
Note						SHIMANO logo	

Series		Claris	Claris	Tourney	Tourney	A050
Model no.		FD-2403-B	FD-2403-F	FD-A070-A	FD-A073	FD-A050
Color	1	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-
Speeds	Front	3	3	2	3	2 (Friction)
	Rear	8	8	7	7	7
Compatible chain		HG 8-speed	HG 8-speed	HG	HG	HG
Action	Top Swing	-	-	-	-	-
	Down Swing	X	X	X	X	X
Mount	Clamp Band	28.6mm	X (w/Adapter S)	-	X (Adapter S)	X (Adapter S)
		31.8mm	X	-	X (Adapter M)	X (Adapter M)
		34.9mm	X	-	X	X
	Brazed-On	-	X	-	-	-
Top-Pull exclusive option		-	-	-	-	-
Chain line (mm)		45	45	43.5	45	43.5
Chain stay angle		63-66	63-66	61-66	63-66	61-66
Top gear teeth		50T	50T	50T	50T	53T
Total capacity		20T	20T	16T	20T	16T
Applicable Top-Mid tooth difference		11T	11T	-	11T	16T
Angled clamp band design		X	X	X	X	-
Link bushings		-	-	-	-	-
Front clamp band	Material	Steel	Aluminum	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Zinc Plated
Rear clamp band, base bracket	Material	Aluminum	-	Aluminum	Aluminum	Steel
	Finish	Painted	-	Painted	Painted	Zinc Plated
Outer link	Material	Aluminum	Aluminum	Steel	Steel	Steel+Resin
	Finish	Painted	Painted	Painted	Painted	Zinc Plated
Inner link	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Zinc Plated
Chain guide	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Painted	Painted	Chrome Plated
Average weight		-	-	-	-	-
Note						

Crankset

Series		DURA-ACE	ULTEGRA	ULTEGRA	105	SHIMANO	DURA-ACE
Model no.		FC-9000	FC-6800	FC-6800	FC-5800	FC-RS500	FC-7900
Color	1	Series color	Series color	Series color	Black	Black	Series color
	2	-	-	-	Silver	Silver	-
Rear speeds		11	11	11	11	11	10
Compatible chain		HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG 10-speed
Chain line (mm)		43.5	43.5	43.5	43.5	43.5	43.5
P.C.D. (mm)		110	110	110	110	110	130
Gear arms		4	4	4	4	5	5
Arm adapter		-	-	-	-	-	-
Chain ring combination		50-34T 52-36T 52-38T 53-39T 54-42T 55-42T	50-34T 52-36T 53-39T	46-36T	50-34T 52-36T 53-39T	46-36T 50-34T 52-36T	52-39T 53-39T 53-42T 54-42T 55-42T 56-44T
Crank arm length (mm)	165.0	X	X	X	X	X	X
	167.5	X	-	-	-	-	X
	170.0	X	X	X	X	X	X
	172.5	X	X	X	X	X	X
	175.0	X	X	X	X	X	X
	177.5	X	-	-	-	-	X
Optional chain guard	with chain guard	-	-	-	-	-	-
	without chain guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	-	X
2-piece crank construction		-	-	-	-	X	-
HOLLOWTECH Technology		X	X	X	X	-	X
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		X	X	-	-	-	X
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB9000	SM-BBR60	SM-BBR60	SM-BBR60	SM-BB4600	SM-BB7900
	Pressfit	SM-BB92-41B	SM-BB72-41B	SM-BB72-41B	SM-BB72-41B	SM-BB72-41B	SM-BB91-41B
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	70mm	X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum/CFRP or GFRP	Aluminum/CFRP	Aluminum	Aluminum/GFRP	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Inner ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Outer / middle ring fixing bolt	Material	Aluminum	Aluminum	Aluminum	Stainless steel	SUS	Aluminum
	Finish	Anodized	Anodized	Anodized	-	-	Anodized
Inner ring fixing bolt	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
crank fixing bolt included		X	X	X	X	X	X
Average weight		683g(50-34T, w/BB) 683g(53-39T, w/BB)	765g(50-34T, w/BB) 765g(53-39T, w/BB)	-	802g(50-34T, w/o BB) 813g(52-36T, w/o BB) 817g(53-39T, w/o BB)	885g(46-36T) 893g(50-34T) 919g(52-36T)	735g (53-39T, integrated BB)
Note							

Crankset

Series		DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA	SHIMANO
Model no.		FC-7950	FC-7710	FC-6700	FC-6703	FC-6750	FC-R601
Color	1	Series color	Series color	Silver	Silver	Silver	Series color
	2	-	-	Glossy Gray	Glossy Gray	Glossy Gray	-
Rear speeds		10	-	10	10	10	10
Compatible chain		HG 10-speed	1/2"X1/8 / 1/2"X3/32"	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed
Chain line (mm)		43.5	42.5	43.5	45	43.5	-
P.C.D. (mm)		110	144	130	130 / 92	110	130
Gear arms		5	5	5	5	5	5
Arm adapter		-	-	-	-	-	-
Chain ring combination		50-34T	45T>>55T (1/2"X1/8"/ 1/2"X3/32")	52-39T 53-39T	52-39-30T	50-34T	40T (Left side)
Crank arm length (mm)	165.0	X	X	X	X	X	-
	167.5	X	X	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	X	X	X	X	X	-
	175.0	X	X	X	X	X	X
	177.5	X	-	-	-	-	-
	180.0	X	-	-	-	-	-
Optional chain guard	with chain guard	-	-	-	-	-	-
	without chain guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	X	X
2-piece crank construction		-	-	-	-	-	-
HOLLOWTECH Technology		X	X	X	X	X	X
OCTALINK technology		-	X	-	-	-	-
HOLLOWGLIDE		X	-	X	X	X	-
Compatible BB type	Outboard	X	-	X	X	X	X
	Octalink	-	X	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB7900	BB-7710 / 7700	SM-BB6700	SM-BB6700	SM-BB6700	Included
	Pressfit	SM-BB91-41B	-	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	109.5	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	70mm	X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	-	Steel	Steel	Steel	Steel
	Finish	Plated	-	Plated	Plated	Plated	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum/CFRP	Aluminum/CFRP	Aluminum/CFRP	Aluminum/CFRP
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	-	-	-	Aluminum	-	-
	Finish	-	-	-	Anodized	-	-
Inner ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Outer / middle ring fixing bolt	Material	Aluminum	Stainless steel	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	-	Anodized	Anodized	Anodized	Anodized
Inner ring fixing bolt	Material	-	-	-	Aluminum	-	-
	Finish	-	-	-	Anodized	-	-
crank fixing bolt included		X	X	X	X	X	X
Average weight		735g (integrated BB)	82g (46T, 1 / 2"x 1 / 8")	790g (53-39T, integrated BB)	892g (integrated BB)	788g (integrated BB)	724g (integrated BB)
Note							Tandem front

Crankset

Series		SHIMANO	105	105	105	SHIMANO	SHIMANO
Model no.		FC-R603	FC-5700	FC-5750	FC-5703	FC-R563	FC-CX50
Color	1	Series color	Silver	Silver	Silver	Silver	Silver
	2	-	Black	Black	Black	Black	Black
Rear speeds		10	10	10	10	10	10
Compatible chain		HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed
Chain line (mm)		45	43.5	43.5	45	45	43.5
P.C.D. (mm)		130 / 92	130	110	130 / 74	130 / 92	110
Gear arms		5	5	5	5	5	5
Arm adapter		-	-	-	-	-	-
Chain ring combination		52-39-30T (Right side), 40T(Left side)	52-39T 53-39T	50-34T	50-39-30T	50-39-30T	46-36T
Crank arm length (mm)	165.0	-	X	X	X	X	-
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	X	X	X	X	X
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
	180.0	-	-	-	-	-	-
Optional chain guard	with chain guard	-	-	-	-	-	-
	without chain guard	X	X	X	X	X	X
HOLLOWTECH II Technology		X	X	X	X	-	-
2-piece crank construction		-	-	-	-	X	X
HOLLOWTECH Technology		X	X	X	X	-	-
OCTALINK technology		-	-	-	-	-	-
HOLLOWGLIDE		X	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	X	X	X
	Octalink	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB6700	SM-BB5700	SM-BB5700	SM-BB5700	SM-BB4600	SM-BB4600
	Pressfit	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	70mm	X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum/CFRP	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	Aluminum	-	-	Aluminum	Aluminum	-
	Finish	Anodized	-	-	Anodized	Anodized	-
Inner ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Outer / middle ring fixing bolt	Material	Aluminum	Stainless steel	Stainless steel	Stainless steel	SUS	SUS
	Finish	Anodized	-	-	-	-	-
Inner ring fixing bolt	Material	Aluminum	-	-	Stainless steel	SUS	-
	Finish	Anodized	-	-	-	-	-
crank fixing bolt included		X	X	X	X	X	X
Average weight		1048g (integrated BB)	846g (53-39T, integrated BB)	805g (integrated BB)	920g (integrated BB)	-	972g (integrated BB)
Note		Tandem Rear					

Crankset

Series		Tiagra	Tiagra	Tiagra	SHIMANO	SHIMANO	SORA
Model no.		FC-4600	FC-4650	FC-4603	FC-R460	FC-R453	FC-3550
Color	1	Series color	Series color	Series color	Black	Black	Series color
	2	-	-	-	-	-	-
Rear speeds		10	10	10	10	9	9
Compatible chain		HG 10-speed	HG 10-speed	HG 10-speed	HG-X 10-speed	HG 9-speed	HG 9-speed
Chain line (mm)		43.5	43.5	45	43.5	45	43.5
P.C.D. (mm)		130	110	130 / 92	110	130 / 74	110
Gear arms		5	5	5	5	5	5
Arm adapter		-	-	-	-	-	-
Chain ring combination		52-39T	50-34T	50-39-30T	46-34T 48-34T	50-39-30T	46-34T 50-34T
Crank arm length (mm)	165.0	X	X	X	X	X	X
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	X	X	X	-	-	-
	175.0	X	X	X	X	X	X
	177.5	-	-	-	-	-	-
	180.0	-	-	-	-	-	-
Optional chain guard	with chain guard	-	-	-	-	-	X
	without chain guard	X	X	X	X	X	X
HOLLOWTECH II Technology		-	-	-	-	-	-
2-piece crank construction		X	X	X	X	-	X
HOLLOWTECH Technology		-	-	-	-	-	-
OCTALINK technology		-	-	-	-	X	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	X	X	-	X
	Octalink	-	-	-	-	X	-
	Square	-	-	-	-	-	-
Recommended BB	Threaded (normal)	SM-BB4600	SM-BB4600	SM-BB4600	SM-BB4600	BB-ES25	SM-BB4600
	Pressfit	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B	-	SM-BB71-41B
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	-	-	-	-
Threaded BB shell width	68mm	X	X	X	X	X	X
	70mm	X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Painted	Painted
Crank axle	Material	Steel	Steel	Steel	Steel	-	Steel
	Finish	Plated	Plated	Plated	Plated	-	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	-	-	Aluminum	-	Steel	-
	Finish	-	-	Anodized	-	Painted	-
Inner ring	Material	Aluminum	Aluminum	Steel	Aluminum	Steel	Steel
	Finish	Anodized	Anodized	Plated	Anodized	Painted	Painted
Outer / middle ring fixing bolt	Material	SUS	SUS	SUS	SUS	SUS	SUS
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	-	-	SUS	-	SUS	-
	Finish	-	-	-	-	-	-
crank fixing bolt included		X	X	X	X	X	X
Average weight		-	-	-	-	-	-
Note					SHIMANO logo	SHIMANO logo	

Crankset

Series		SORA	SHIMANO	SHIMANO	Claris	Claris	Tourney A070
Model no.		FC-3503	FC-R350	FC-R345	FC-2450	FC-2403	FC-A070
Color	1	Series color	Black	Silver	Series color	Series color	Series color
	2	-	-	Black	Black	Black	-
Rear speeds		9	9	9	8	8	7/8
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 8-speed	HG 8-speed	HG
Chain line (mm)		45	43.5	43.5	43.5	45	43.5
P.C.D. (mm)		130 / 74	130	110	110	130 / 74	Riveted
Gear arms		5	5	5	5	5	5
Arm adapter		-	-	-	-	-	X
Chain ring combination		50-39-30T	52-39T	50-34T	46-34T 50-34T	50-39-30T	50-34T
Crank arm length (mm)	165.0	X	X	-	X	X	X
	167.5	-	-	-	-	-	-
	170.0	X	X	X	X	X	X
	172.5	-	-	-	-	-	-
	175.0	X	X	X	X	X	-
	177.5	-	-	-	-	-	-
	180.0	-	-	-	-	-	-
Optional chain guard	with chain guard	X	X	X	X	X	X
	without chain guard	X	X	X	X	X	X
HOLLOWTECH II Technology		-	-	-	-	-	-
2-piece crank construction		X	X	-	-	-	-
HOLLOWTECH Technology		-	-	-	-	-	-
OCTALINK technology		-	-	X	X	X	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible BB type	Outboard	X	X	-	-	-	-
	Octalink	-	-	X	X	X	-
	Square	-	-	-	-	-	X
Recommended BB	Threaded (normal)	SM-BB4600	SM-BB4600	BB-ES25	BB-ES25	BB-ES25	BB-UN26
	Pressfit	SM-BB71-41B	SM-BB71-41B	-	-	-	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	-	-	113	113	121	MM110
Threaded BB shell width	68mm	X	X	X	X	X	X
	70mm	X	X	X	X	X	X
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Crank axle	Material	Steel	Steel	-	-	-	-
	Finish	Plated	Plated	-	-	-	-
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Anodized	Anodized	Painted	Painted	Painted
Middle ring	Material	Steel	-	-	-	Steel	-
	Finish	Painted	-	-	-	Painted	-
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer / middle ring fixing bolt	Material	SUS	SUS	SUS	SUS	SUS	-
	Finish	-	-	-	-	-	-
Inner ring fixing bolt	Material	SUS	-	-	-	SUS	-
	Finish	-	-	-	-	-	-
crank fixing bolt included		X	X	X	X	X	-
Average weight		-	-	-	-	-	-
Note							

Crankset

Series		Tourney
Model no.		FC-A073
Color	1	Series color
	2	-
Rear speeds		7/8
Compatible chain		HG
Chain line (mm)		45
P.C.D. (mm)		Riveted
Gear arms		5
Arm adapter		-
Chain ring combination		50-39-30T
Crank arm length (mm)	165.0	X
	167.5	-
	170.0	X
	172.5	-
	175.0	-
	177.5	-
	180.0	-
Optional chain guard	with chain guard	X
	without chain guard	X
HOLLOWTECH II Technology		-
2-piece crank construction		-
HOLLOWTECH Technology		-
OCTALINK technology		-
HOLLOWGLIDE		-
Compatible BB type	Outboard	-
	Octalink	-
	Square	X
Recommended BB	Threaded (normal)	BB-UN26
	Pressfit	-
Axle length of BB-UN / ES (mm)	Threaded (normal)	LL113
Threaded BB shell width	68mm	X
	70mm	X
Crank arm	Material	Aluminum
	Finish	Painted
Crank axle	Material	-
	Finish	-
Spider arm	Material	-
	Finish	-
Spider arm cover	Material	-
	Finish	-
Outer ring	Material	Steel
	Finish	Painted
Middle ring	Material	Steel
	Finish	Painted
Inner ring	Material	Steel
	Finish	Painted
Outer / middle ring fixing bolt	Material	-
	Finish	-
Inner ring fixing bolt	Material	-
	Finish	-
crank fixing bolt included		-
Average weight		-
Note		

ST

SL

BL

BC

BR

RD

FD

FC

BB

CS

CN

FH

HB

WH

PD

HP

Bottom Bracket

Series				DURA-ACE	DURA-ACE	105	105	Tiagra	Tiagra
Model no.				BB-7700	BB-7710	BB-5500	BB-5500	BB-ES51	BB-ES51
Spindle	Hollow pipe			X	X	X	X	X	X
	Octalink			X	X	X	X	X	X
	Square type			-	-	-	-	-	-
Axle length / shell width	109.5 mm	68mm	(BC1.37)	X	X	X	-	-	-
		70mm	(M36)	X	-	X	-	-	-
	MM110	68mm	(BC1.37)	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-
	LL113	68mm	(BC1.37)	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-
	113	68mm	(BC1.37)	-	-	-	-	X	-
		70mm	(M36)	-	-	-	-	X	-
	118.5 mm	68mm	(BC1.37)	-	-	-	X	-	-
		70mm	(M36)	-	-	-	X	-	-
121	68mm	(BC1.37)	-	-	-	-	-	X	
Spindle	Material			Steel	Steel	Steel	Steel	Steel	Steel
	Finish			Plated	Plated	Plated	Plated	Plated	Plated
Left hand adapter	Material			Aluminium	Aluminium	Aluminium	Aluminium	Resin	Resin
	Finish			Anodized	Anodized	Anodized	Anodized	-	-
Average weight				173g	244g	-	-	-	-
Note					For track	For double	For triple	For double	For triple

Series				SORA	Claris	Claris	Tourney A070	Tourney A070
Model no.				BB-ES25	BB-ES25	BB-ES25	BB-UN26	BB-UN26
Spindle	Hollow pipe			X	X	X	-	-
	Octalink			X	X	X	-	-
	Square type			-	-	-	X	X
Axle length / shell width	109.5 mm	68mm	(BC1.37)	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-
	MM110	68mm	(BC1.37)	-	-	-	X	-
		70mm	(M36)	-	-	-	X	-
	LL113	68mm	(BC1.37)	-	-	-	-	X
		70mm	(M36)	-	-	-	-	X
	113	68mm	(BC1.37)	-	X	-	-	-
		70mm	(M36)	-	X	-	-	-
	118.5 mm	68mm	(BC1.37)	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-
121	68mm	(BC1.37)	X	-	X	-	-	
Spindle	Material			Steel	Steel	Steel	Steel	Steel
	Finish			Plated	Plated	Plated	Plated	Plated
Left hand adapter	Material			Resin	Resin	Resin	Resin	Resin
	Finish			-	-	-	-	-
Average weight				-	-	-	-	-
Note				For Triple	For Double	For Triple	For Double	For Triple

Bottom Bracket

HOLLOWTECH II

Series		DURA-ACE	SHIMANO	SHIMANO	SHIMANO	Tiagra/ SORA
Model no.		SM-BB9000	SM-BB92-41B	SM-BB72-41B	SM-BBR60	SM-BB4600
HOLLOWTECH II BB	Threaded BB type	X	-	-	X	X
	Press-Fit type	-	X	X	-	-
Threaded BB shell width	68mm	X	-	-	X	X
	70mm	X	-	-	X	X
Press-Fit BB shell width	86mm	-	X	X	-	-
Small ball bearing		X	X	X	X	-
Adapter	Material	Aluminum	Resin	Resin	Aluminum	Aluminum
	Finish	Anodized	-	-	Anodized	Painted
Average weight		65g	54g	63g	77g	96g
Note						

Cassette Sprocket

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA
Model no.		CS-9000	CS-9000	CS-9000	CS-9000	CS-9000	CS-6800
Type		HG-EV	HG-EV	HG-EV	HG-EV	HG-EV	HG-EV
Speeds		11	11	11	11	11	11
Combination *Titanium gear	11th	23	25	28	25	28	23
	10th	21	23	25	23	25	21
	9th	19	21	23	21	23	19
	8th	18	19	21	19	21	18
	7th	17	17	19	18	19	17
	6th	16	16	17	17	17	16
	5th	15	15	15	16	16	15
	4th	14	14	14	15	15	14
	3rd	13	13	13	14	14	13
	2nd	12	12	12	13	13	12
1st	11	11	11	12	12	11	
Group		-	-	-	-	-	-
Compatible chain		HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11
Carbon Spider arm	QTY (pcs)	2	2	2	2	2	1
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-	-	-	1
	Finish	-	-	-	-	-	Anodized
Titanium gear	Finish	Titanium	Titanium	Titanium	Titanium	Titanium	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight		165g	175g	193g	189g	205g	212g
Note							

Cassette Sprocket

Series		ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA	105	105
Model no.		CS-6800	CS-6800	CS-6800	CS-6800	CS-5800	CS-5800
Type		HG-EV	HG-EV	HG-EV	HG-EV	HG-EV	HG-EV
Speeds		11	11	11	11	11	11
Combination *Titanium gear	11th	25	25	28	32	28	32
	10th	23	23	25	28	25	28
	9th	21	21	23	25	23	25
	8th	19	19	21	22	21	22
	7th	17	18	19	20	19	20
	6th	16	17	17	18	17	18
	5th	15	16	15	16	15	16
	4th	14	15	14	14	14	14
	3rd	13	14	13	13	13	13
	2nd	12	13	12	12	12	12
	1st	11	12	11	11	11	11
Group		-	-	-	-	11-28T	11-32T
Compatible chain		HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11
Carbon Spider arm	QTY (pcs)	1	1	1	1	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	1	1	1	1	1	1
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Titanium gear	Finish	-	-	-	-	-	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel
	Finish	Anodized	Anodized	Anodized	Anodized	Nickel plated	Nickel plated
Average weight		-	-	-	-	284g	320g
Note							

Series		105	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE
Model no.		CS-5800	CS-7900	CS-7900	CS-7900	CS-7900	CS-7900
Type		HG-EV	HG	HG	HG	HG	HG
Speeds		11	10	10	10	10	10
Combination *Titanium gear	11th	25	-	-	-	-	-
	10th	23	21	23	25	27	28
	9th	21	19	21	23	24	24
	8th	19	18	19	21	21	21
	7th	18	17	17	19	19	19
	6th	17	16	16	17	17	17
	5th	16	15	15	15	15	15
	4th	15	14	14	14	14	14
	3rd	14	13	13	13	13	13
	2nd	13	12	12	12	12	12
	1st	12	11	11	11	11	11
Group		12-25T	-	-	-	-	-
Compatible chain		HG-EV 11-speed/ HG-X11	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	1	2	2	2	2	2
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Titanium gear	Finish	-	Titanium	Titanium	Titanium	Titanium	Titanium
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Steel	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Nickel plated	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight		269g	159g	163g	180g	184g	187g
Note							

Cassette Sprocket

Series		DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA
Model no.		CS-7900	CS-7900	CS-7900	CS-6700	CS-6700	CS-6700
Type		HG	HG	HG	HG	HG	HG
Speeds		10	10	10	10	10	10
Combination *Titanium gear	11th	-	-	-	-	-	-
	10th	23	25	27	23	25	28
	9th	21	23	24	21	23	24
	8th	19	21	21	19	21	21
	7th	18	19	19	17	19	19
	6th	17	17	17	16	17	17
	5th	16	16	16	15	15	15
	4th	15	15	15	14	14	14
	3rd	14	14	14	13	13	13
	2nd	13	13	13	12	12	12
1st	12	12	12	11	11	11	
Group		-	-	-	-	-	-
Compatible chain		HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	2	2	2	1	1	1
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Titanium gear	Finish	Titanium	Titanium	Titanium	-	-	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight		181g	184g	189g	209g	229g	242g
Note							

Series		ULTEGRA	ULTEGRA	ULTEGRA	105	105	105
Model no.		CS-6700	CS-6700	CS-6700	CS-5700	CS-5700	CS-5700
Type		HG	HG	HG	HG	HG	HG
Speeds		10	10	10	10	10	10
Combination *Titanium gear	11th	-	-	-	-	-	-
	10th	23	25	30	25	28	25
	9th	21	23	27	23	24	23
	8th	19	21	24	21	21	21
	7th	18	19	21	19	19	19
	6th	17	17	19	17	17	17
	5th	16	16	17	15	15	16
	4th	15	15	15	14	14	15
	3rd	14	14	14	13	13	14
	2nd	13	13	13	12	12	13
1st	12	12	12	11	11	12	
Group		-	-	-	-	-	-
Compatible chain		HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	1	1	1	1	1	1
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Titanium gear	Finish	-	-	-	-	-	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Anodized	Anodized	Nickel plated	Nickel plated	Nickel plated
Average weight		225g	238g	-	245g	255g	250g
Note							

Cassette Sprocket

Series		105	Tiagra	Tiagra	Tiagra	SORA	SORA
Model no.		CS-5700	CS-4600	CS-4600	CS-4600	CS-HG50-9	CS-HG50-9
Type		HG	HG	HG	HG	HG	HG
Speeds		10	10	10	10	9	9
Combination *Titanium gear	11th	-	-	-	-	-	-
	10th	27	25	28	30	-	-
	9th	24	23	25	27	25	30
	8th	21	21	23	24	23	26
	7th	19	19	21	21	21	23
	6th	17	17	19	19	19	20
	5th	16	15	17	17	17	18
	4th	15	14	15	15	15	16
	3rd	14	13	14	14	13	14
	2nd	13	12	13	13	12	12
1st	12	11	12	12	11	11	
Group		-	-	-	-	-	bQ
Compatible chain		HG 10-speed	HG 10-speed	HG 10-speed	HG 10-speed	HG 9-speed	HG 9-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	1	-	-	-	-	-
	Finish	Anodized	-	-	-	-	-
Titanium gear	Finish	-	-	-	-	-	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Average weight		258g	-	310g	329g	-	-
Note							

Series		SORA	SORA	SORA	SORA	SORA	SORA
Model no.		CS-HG50-9	CS-HG50-9	CS-HG50-9	CS-HG50-9	CS-HG50-9	CS-HG50-9
Type		HG	HG	HG	HG	HG	HG
Speeds		9	9	9	9	9	9
Combination *Titanium gear	11th	-	-	-	-	-	-
	10th	-	-	-	-	-	-
	9th	32	23	25	27	25	25
	8th	28	21	23	24	23	23
	7th	24	19	21	21	21	21
	6th	21	17	19	19	19	19
	5th	18	16	17	17	17	18
	4th	16	15	15	15	16	17
	3rd	14	14	14	14	15	16
	2nd	12	13	13	13	14	15
1st	11	12	12	12	13	14	
Group		ar	-	-	-	-	-
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed
Carbon Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Titanium gear	Finish	-	-	-	-	-	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Average weight		-	-	-	-	-	-
Note							

Cassette Sprocket

Series	Claris	Claris	Claris	SHIMANO	SHIMANO	Claris
Model no.	CS-HG50-8	CS-HG50-8	CS-HG50-8	CS-HG50-8	CS-HG50-8	CS-HG50-8
Type	HG	HG	HG	HG	HG	HG
Speeds	8	8	8	8	8	8
Combination *Titanium gear	11th	-	-	-	-	-
	10th	-	-	-	-	-
	9th	-	-	-	-	-
	8th	28	30	32	21	23
	7th	24	26	28	19	21
	6th	21	23	24	17	19
	5th	19	20	21	16	17
	4th	17	17	18	15	15
	3rd	15	15	15	14	14
	2nd	13	13	13	13	13
1st	11	11	11	12	12	
Group	bf	an	aw	S	U	W
Compatible chain	CN-HG71	CN-HG71	CN-HG71	HG	HG	HG
Carbon Spider arm	QTY (pcs)	-	-	-	-	-
	Finish	-	-	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-	-	-
	Finish	-	-	-	-	-
Titanium gear	Finish	-	-	-	-	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Nickel plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Average weight	-	-	-	-	-	-
Note						

Series	SHIMANO	Claris	Tourney A070	Tourney A070
Model no.	CS-HG50-8	CS-HG50-8	CS-HG41-7	CS-HG20-7
Type	HG	HG	HG	HG
Speeds	8	8	7	7
Combination *Titanium gear	11th	-	-	-
	10th	-	-	-
	9th	-	-	-
	8th	23	26	-
	7th	21	23	28
	6th	19	21	24
	5th	17	19	21
	4th	16	17	18
	3rd	15	15	15
	2nd	14	14	13
1st	13	13	11	
Group	T	V	ac	E
Compatible chain	HG	HG	IG/HG	IG/HG
Carbon Spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Aluminum Spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Titanium gear	Finish	-	-	-
Steel gear	Finish	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Steel	Steel	Steel
	Finish	Nickel plated	Nickel plated	-
Average weight	-	-	-	-
Note				

Chain

Series	SHIMANO	DURA-ACE	ULTEGRA	SHIMANO	SHIMANO	ULTEGRA	ULTEGRA
Model no.	CN-HG900-11	CN-9000	CN-6800	CN-HG700-11	CN-HG600-11	CN-6701	CN-6600
Type	HG-X11	HG-EV 11-speed	HG-EV 11-speed	HG-X11	HG-X11	HG 10-speed	HG 10-speed
Pin link plate	SIL-TEC	SIL-TEC	SIL-TEC	SIL-TEC	-	Zinc-Alloy Plated	Zinc-Alloy Plated
Roller link plate	SIL-TEC	SIL-TEC	SIL-TEC	SIL-TEC	SIL-TEC	Gray	Gray
Roller	SIL-TEC	-	-	-	-	-	-
Chromizing treatment link pin	X	X	X	X	X	X	X
Hollow pin	X	X	-	-	-	-	-
Average weight (114 links)	247g	243g	253g	257g	257g	267g	275g
Note							For triple

Series	Tiagra	SORA	SHIMANO	SHIMANO
Model no.	CN-4601	CN-HG53	CN-HG71	CN-HG40
Type	HG 10-speed	HG 9-speed	HG	HG
Pin link plate	Gray	Gray	Silver	Gray
Roller link plate	Brown	Brown	Gray	Brown
Roller	-	-	-	-
Chromizing treatment link pin	X	X	X	-
Hollow pin	-	-	-	-
Average weight (114 links)	-	-	-	-
Note				

Freehub

Series		DURA-ACE	ULTEGRA	105	SHIMANO	Tiagra	SORA
Model no.		FH-9000	FH-6800	FH-5800	FH-R505	FH-4600	FH-3500
Color	1	Standard	Standard	Black	Silver	Standard	Black
	2	-	-	Silver	Black	-	-
Spoke hole	24H	X	-	-	-	-	-
	28H	X	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
	Aero spoke	24/28H	-	-	-	-	-
P.C.D. Left/Right (mm)		44/45	44/45	44/45	45	45	45
Freehub body	Speeds	11/10*	11/10*	11/10*	8/9/10	8/9/10	8/9/10
	11T Compatible	X	X	X	X	X	X
O.L.D. (mm)		130	130	130	135	130	130
Flange distance (mm)		56.9 **	56.9	56.9	57.4	57.9	57.9
Dish (mm)		9.75 **	9.7	9.75	6.7	8.4	8.4
Axle	QR skewer length (mm)	163/168	163/168	163/168	168/173	163/168	163/168
	Length (mm)	141	141	141	146	141	141
	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
Digital adjustment system		X	X	-	-	-	-
Seal		Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact
Freehub body	Material	Titanium	Steel	Steel	Steel	Steel	Steel
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
CBN (Cubic Boron Nitride)	Cone races	X***	X	X	X	X	-
	Cup races	-	-	-	-	-	-
QR lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight		247g	330g	368g	-	-	-
Note		* Can be used for 10-speed with an additional spacer. ** Flange Distance:56.5, Dish:9.95(only for 28H) ***Super Finishing.	* Can be used for 10-speed with an additional spacer.	* Can be used for 10-speed with an additional spacer.	For Disc Brake/ Center lock mount		QR Lever Housing Aluminum

Series		Claris	Tourney A070
Model no.		FH-2400	FH-RM30-7-QR
Color	1	Standard	Silver
	2	Black	-
Spoke hole	24H	-	-
	28H	-	-
	32H	X	X
	36H	X	-
	Aero spoke	-	-
P.C.D. Left/Right (mm)		45	45
Freehub body	Speeds	8/9-speed	7
	11T Compatible	X	X
O.L.D. (mm)		130	130
Flange distance (mm)		57.9	59.2
Dish (mm)		8.4	5.5
Axle	QR skewer length (mm)	163 or 168	161
	Length (mm)	141	141
	Material	Steel	Steel
Digital adjustment system		-	-
Seal		Labyrinth and Contact	-
Freehub body	Material	Steel	Steel
Hub shell	Material	Aluminum	Aluminum/2pcs
	Finish	Anodized	Shiny
CBN (Cubic Boron Nitride)	Cone races	-	-
	Cup races	-	-
QR lever	Material	Aluminum	Steel
	Finish	Painting	Plated
Average weight		-	-
Note		QR Lever Housing Steel	

Freehub

Disc Brake

Series		SHIMANO	
Model no.		FH-CX75	
Spec		-	
Color option	1	6800 Standard	
	2	-	
Spoke hole	20H	-	
	24H	-	
	28H	X	
	32H	-	
	36H	-	
	Aero spoke	X	
	Hole P.C.D. (mm)	44 (Left side) / 45 (Right side)	
Freehub body	Speeds	11/10*	
	Cassette	Road 11-speed and Road 10-speed	
	Low sprocket	Max 32T	
	11T compatible	X	
	Quick engagement	-	
	Spoke protector	-	
	Outer body material	Steel	
Axle	Material	Aluminum	
	QR	X	
	QR skewer length (mm)	168 / 173	
	Length (mm)	146	
O.L.D. (mm)		135	
Flange Distance (mm)		55.65	
Dish (mm)		7.5	
Digital Adjustment System		-	
Seal		Labyrinth and Contact	
Hub shell	Material	Aluminum	
	Finish	Anodized	
	Rotor mount	Center lock	X
		6-Bolt	-
	Outer serration lock ring	-	
CBN (Cubic Boron Nitride)	Cone races	X	
	Cup races	-	
Grease sleeve		X	
QR lever	Material	Aluminum	
	Finish	Anodized	
Radial lacing		-	
Average weight		325g	
Note		* Can be used for 10-speed with an additional spacer. For Disc Brake/ Center lock mount	

Front Hub

Series		DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	105	SHIMANO
Model no.		HB-9000	HB-7710	HB-7600	HB-6800	HB-5800	HB-R505
Color	1	Standard	Silver	Silver	Standard	Black	Silver
	2	-	-	-	-	Silver	Black
Spoke hole	18H	-	-	-	-	-	-
	24H	X	-	-	-	-	-
	28H	X	X	X	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
	Aero spoke	18/24H	-	-	-	-	-
	P.C.D. (mm)	38	38 (Front) 44 (Rear)	67	40	38	44
O.L.D. (mm)		100	100 (Front) 120 (Rear)	100 (Front) 120 (Rear)	100	100	100
Flange Distance (mm)		74.0	F:74.0 *R(Single Thread):72.5 (Double Thread):67.0	F:72.3 *R(Single Thread):75.5 (Double Thread):65.0	71.6	71.6	60.2
Axle	QR skewer length (mm)	133	-	-	133	133	133
	Length (mm)	108	142(M9) (Front) 164(M10) (Rear)	142(M9) (Front) 164(M10) (Rear)	108	108	108(M10)
	Material	Aluminum	Steel	Steel	Aluminum	Steel	Steel
Digital adjustment system		X	-	-	X	-	-
Seal		Labyrinth and Contact	Dust Cap	Dust Cap	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact
CBN (Cubic Boron Nitride)	Cone races	X*	X	X	X	X	X
	Cup races	-	X	X	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
QR lever	Material	Aluminum	-	-	Aluminum	Aluminum	Aluminum
	Finish	Anodized	-	-	Anodized	Anodized	Anodized
Radial lacing		X	-	-	X	X	X
Average weight		120g	298g (rear w / lock ring) 203g (front)	313g (rear LF w / lock ring) 241g (front LF)	158g	155g	-
Note		*Super Finishing	For Track *Dishing Distance R(Single Thread):2.75mm (Double Thread):0				For Disc Brake/ Center lock mount Dish: 5.2mm

Series		Tiagra	SORA	Claris	Tourney A070
Model no.		HB-4600	HB-3500	HB-2400	HB-RM40
Color	1	Silver	Black	Standard	Black
	2	-	-	Black	Silver
Spoke hole	18H	-	-	-	-
	24H	-	-	-	-
	28H	-	-	-	-
	32H	X	X	X	X
	36H	X	X	X	X
	Aero spoke	-	-	-	-
	P.C.D. (mm)	38	38	38	38
O.L.D. (mm)		100	100	100	100
Flange Distance (mm)		71.6	71.6	71.6	71.6
Axle	QR skewer length (mm)	133	133	129/133	129/133
	Length (mm)	108(M9)	108(M9)	108(M9)	108(M9)
	Material	Steel	Steel	Steel	Steel
Digital adjustment system		-	-	-	-
Seal		Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	-
CBN (Cubic Boron Nitride)	Cone races	X	-	-	-
	Cup races	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Machined
QR lever	Material	Aluminum	Aluminum	Aluminum	Steel
	Finish	Anodized	Anodized	Painting	Plated
Radial lacing		X	X	X	-
Average weight		-	-	-	-
Note			QR Lever Housing Aluminum	QR Lever Housing Steel	

ST

SL

BL

BC

BR

RD

FD

FC

BB

CS

CN

FH

HB

WH

PD

HP

Front Hub

Disc Brake

Series		SHIMANO	
Model no.		HB-CX75	
Spec		-	
Color option	1	6800 Standard	
	2	-	
Spoke hole	18H	-	
	24H	-	
	28H	X	
	32H	-	
	36H	-	
	Aero spoke	X	
	P.C.D. Left/Right (mm)	44/41	
Axle	O.L.D. (mm)	100	
	QR	X	
	QR skewer length (mm)	133	
	Axle length (mm)	108	
	Material	Aluminum	
Flange distance (mm)		59.6	
Dish (mm)		6.0	
Digital adjustment system		-	
Seal		Labyrinth and Contact	
Hub shell	Material		Aluminum
	Finish		Anodized
	Rotor mount	Center lock	X
		6-Bolt	-
Outer serration lock ring		-	
CBN (Cubic Boron Nitride)	Cone races	X	
	Cup races	-	
Easy adjusting system		-	
Grease sleeve		X	
QR lever	Material		Aluminum
	Finish		Anodized
Radial lacing		-	
Average weight		166g	
Note		For Disc Brake/ Center lock mount 140mm Disc Rotor Compatible	

Wheel

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE
Model no.		WH-9000-C24-CL-F	WH-9000-C24-CL-R	WH-9000-C24-TL-F	WH-9000-C24-TL-R	WH-9000-C24-TU-F	WH-9000-C24-TU-R
Rim type		Clincher	Clincher	Tubeless	Tubeless	Tubular	Tubular
Front / Rear		Front	Rear	Front	Rear	Front	Rear
Color	1	Standard	Standard	Standard	Standard	Standard	Standard
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
	Sticker color option	-	-	-	-	-	-
Freehub body (*Note)	Speeds	-	10*/11	-	10*/11	-	10*/11
	11T compatible	-	X	-	X	-	X
	Maximum low gear	-	32T	-	32T	-	32T
	Material	-	Titanium	-	Titanium	-	Titanium
O.L.D. (mm)		100	130	100	130	100	130
Hub Axle	Length (mm)	108	141	108	141	108	141
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Digital Adjustment System		X	-	-	X	X	X
Hub shell	Contact seal	X	X	X	X	X	X
	Center lock rotor mount	-	-	-	-	-	-
	Flange type	Flangeless	5 arms	Flangeless	5 arms	Flangeless	7 arms / Flangeless
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized
	Color	Standard	Standard	Standard	Standard	Standard	Standard
QR lever	QR skewer length (mm)	133	163/168	133	163/168	133	163/168
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Color	Standard	Standard	Standard	Standard	Standard	Standard
Rim	Size	622x15C	622x15C	622x15C Tubeless	622x15C Tubeless	700C	700C
	D2 rim	-	-	-	-	-	-
	Offset rim	-	X	-	X	-	X
	Welded joint	X	X	X	X	-	-
	Height (mm)	21	23	21	23	24	24
	Width (mm)	20.8	20.8	20.8	20.8	20.8	20.8
	Brazed reinforcement	-	-	-	-	-	-
	Requires rim tape	X	X	-	-	-	-
	Material	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum	CFRP	CFRP
Finish	-	-	-	-	CFRP	CFRP	
Spokes	No. of spokes	16	20	16	20	16	21
	Optbal (2:1)	-	-	-	-	-	X
	Shape	Butted(2.0-1.5-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.5-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.5-2.0)/ Bladed	Butted(2.0-1.5-2.0)/ Bladed Butted(2.0-1.8-2.0)/ Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Color	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Color	Black	Black	Black	Black	Black	Black
Tire	Type	Clincher	Clincher	Tubeless	Tubeless	Tubular	Tubular
	Recommended size	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	20-28" - 25-28"	20-28" - 25-28"
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		578g	809g	634g	835g	483g	668g
Note		** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem

Wheel

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE
Model no.		WH-9000-C35-CL-F	WH-9000-C35-CL-R	WH-9000-C35-TU-F	WH-9000-C35-TU-R	WH-9000-C50-CL-F	WH-9000-C50-CL-R
Rim type		Clincher	Clincher	Tubular	Tubular	Clincher	Clincher
Front / Rear		Front	Rear	Front	Rear	Front	Rear
Color	1	Standard	Standard	Standard	Standard	Standard	Standard
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
	Sticker color option	-	-	-	-	-	-
Freehub body (*Note)	Speeds	-	10*/11	-	10*/11	-	10*/11
	11T compatible	-	X	-	X	-	X
	Maximum low gear	-	32T	-	32T	-	32T
	Material	-	Titanium	-	Titanium	-	Titanium
O.L.D. (mm)		100	130	100	130	100	130
Hub Axle	Length (mm)	108	141	108	141	108	141
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Digital Adjustment System		X	X	X	X	X	X
Hub shell	Contact seal	X	X	X	X	X	X
	Center lock rotor mount	-	-	-	-	-	-
	Flange type	Flangeless	7 arms / Flangeless	Flangeless	7 arms / Flangeless	Flangeless	7 arms / Flangeless
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized
	Color	Standard	Standard	Standard	Standard	Standard	Standard
QR lever	QR skewer length (mm)	133	163/168	133	163/168	133	163/168
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Color	Standard	Standard	Standard	Standard	Standard	Standard
Rim	Size	622x15C	622x15C	700C	700C	622x17C	622-17C
	D2 rim	-	-	-	-	X	X
	Offset rim	-	-	-	X	-	-
	Welded joint	X	X	-	-	-	-
	Height (mm)	35	35	35	35	50	50
	Width (mm)	20.8	20.8	20.8	20.8	22.4	22.4
	Brazed reinforcement	-	-	-	-	-	-
	Requires rim tape	X	X	-	-	X	X
	Material	CFRP / Aluminum	CFRP / Aluminum	CFRP	CFRP	CFRP / Aluminum	CFRP / Aluminum
	Finish	-	-	-	-	-	-
Spokes	No. of spokes	16	21	16	21	16	21
	Optbal (2:1)	-	X	-	X	-	X
	Shape	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Color	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Color	Black	Black	Black	Black	Black	Black
Tire	Type	Clincher	Clincher	Tubular	Tubular	Clincher ***	Clincher ***
	Recommended size	23-622 - 28-622	23-622 - 28-622	20-28" - 25-28"	20-28" - 25-28"	23-622 - 28-622	23-622 - 28-622
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		662g	826g	647g	715g	752g	920g
Note		** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem *** Max tire pressure 8 bar	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem *** Max tire pressure 8 bar

Wheel

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA
Model no.		WH-9000-C50-TU-F	WH-9000-C50-TU-R	WH-9000-C75-TU-F	WH-9000-C75-TU-R	WH-6800	WH-6800
Rim type		Tubular	Tubular	Tubular	Tubular	Tubeless	Tubeless
Front / Rear		Front	Rear	Front	Rear	Front	Rear
Color	1	Standard	Standard	Standard	Standard	Standard	Standard
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
	Sticker color option	-	-	-	-	-	-
Freehub body (*Note)	Speeds	-	10*/11	-	10*/11	-	10*/11
	11T compatible	-	X	-	X	-	X
	Maximum low gear	-	32T	-	32T	-	32T
	Material	-	Titanium	-	Titanium	-	Steel
O.L.D. (mm)		100	130	100	130	100	130
Hub Axle	Length (mm)	108	141	108	141	108	141
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminium	Aluminium
Digital Adjustment System		X	X	X	X	X	X
Hub shell	Contact seal	X	X	X	X	X	X
	Center lock rotor mount	-	-	-	-	-	-
	Flange type	Flangeless	7 arms / Flangeless	Flangeless	7 arms / Flangeless	Flangeless	5 arms
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized
	Color	Standard	Standard	Standard	Standard	Standard	Standard
QR lever	QR skewer length (mm)	133	163/168	133	163/168	133	163/168
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Color	Standard	Standard	Standard	Standard	Standard	Standard
Rim	Size	700C	700C	700C	700C	622-15C	622-15C
	D2 rim	X	X	X	X	-	-
	Offset rim	-	-	-	-	-	X
	Welded joint	-	-	-	-	X	X
	Height (mm)	50	50	75	75	23	23
	Width (mm)	24	24	24	24	20.8	20.8
	Brazed reinforcement	-	-	-	-	X	X
	Requires rim tape	-	-	-	-	-	-
	Material	CFRP	CFRP	CFRP	CFRP	Aluminum	Aluminum
Finish	-	-	-	-	Standard	Standard	
Spokes	No. of spokes	16	21	16	21	16	20
	Optbal (2:1)	-	X	-	X	-	-
	Shape	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.5-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Color	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Color	Black	Black	Black	Black	Gray	Gray
Tire	Type	Tubular	Tubular	Tubular	Tubular	Tubeless	Tubeless
	Recommended size	23-28" - 25-28"	23-28" - 25-28"	23-28" - 25-28"	23-28" - 25-28"	23-622 - 28-622	23-622 - 28-622
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		641g	808g	678g	867g	700g	940g
Note		** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-RS81-C24-CL-F	WH-RS81-C24-CL-R	WH-RS81-C24-TL-F	WH-RS81-C24-TL-R	WH-RS81-C35-CL-F	WH-RS81-C35-CL-R
Rim type		Clincher	Clincher	Tubeless	Tubeless	Clincher	Clincher
Front / Rear		Front	Rear	Front	Rear	Front	Rear
Color	1	Black	Black	Black	Black	Black	Black
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
	Sticker color option	-	-	-	-	-	-
Freehub body (*Note)	Speeds	-	10*/11	-	10*/11	-	10*/11
	11T compatible	-	X	-	X	-	X
	Maximum low gear	-	32T	-	32T	-	32T
	Material	-	Steel	-	Steel	-	Steel
O.L.D. (mm)		100	130	100	130	100	130
Hub Axle	Length (mm)	108	141	108	141	108	141
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Digital Adjustment System		X	X	X	X	X	X
Hub shell	Contact seal	X	X	X	X	X	X
	Center lock rotor mount	-	-	-	-	-	-
	Flange type	Flangeless	5 arms	Flangeless	5 arms	Flangeless	7 arms / Flangeless
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized
	Color	Black	Black	Black	Black	Black	Black
QR lever	QR skewer length (mm)	133	163/168	133	163/168	133	163/168
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Color	Black	Black	Black	Black	Black	Black
Rim	Size	622-15C	622-15C	622-15C	622-15C	622-15C	622-15C
	D2 rim	-	-	-	-	-	-
	Offset rim	-	X	-	X	-	-
	Welded joint	X	X	X	X	X	X
	Height (mm)	21	23	21	24	35	35
	Width (mm)	20.8	20.8	20.8	20.8	20.8	20.8
	Brazed reinforcement	-	-	-	-	-	-
	Requires rim tape	X	X	-	-	X	X
	Material	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum
	Finish	CFRP	CFRP	CFRP	CFRP	CFRP	CFRP
Spokes	No. of spokes	16	20	16	20	16	21
	Optbal (2:1)	-	-	-	-	-	X
	Shape	Butted(2.0-1.5-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.5-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Color	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Color	Black	Black	Black	Black	Black	Black
Tire	Type	Clincher	Clincher	Tubeless	Tubeless	Clincher	Clincher
	Recommended size	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		615g	887g	667g	914g	709g	922g
Note		** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-RS81-C35-TL-F	WH-RS81-C35-TL-R	WH-RS81-C50-CL-F	WH-RS81-C50-CL-R	WH-RS610-TL-F	WH-RS610-TL-R
Rim type		Tubeless	Tubeless	Clincher	Clincher	Tubeless	Tubeless
Front / Rear		Front	Rear	Front	Rear	Front	Rear
Color	1	Black	Black	Black	Black	Black	Black
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
	Sticker color option	-	-	-	-	-	-
Freehub body (*Note)	Speeds	-	10*/11	-	10/11	-	10*/11
	11T compatible	-	X	-	X	-	X
	Maximum low gear	-	32T	-	32T	-	32T
	Material	-	Steel	-	Steel	-	Steel
O.L.D. (mm)		100	130	100	130	100	130
Hub Axle	Length (mm)	108	141	108	141	108	141
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel
Digital Adjustment System		X	X	X	X	-	-
Hub shell	Contact seal	X	X	X	X	X	X
	Center lock rotor mount	-	-	-	-	-	-
	Flange type	Flangeless	7 arms / Flangeless	Flangeless	7 arms / Flangeless	Flangeless	5 arms
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Buffed / Anodized	Anodized	Anodized
	Color	Black	Black	Black	Black	Black	Black
QR lever	QR skewer length (mm)	133	163/168	133	163/168	133	163/168
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Color	Black	Black	Black	Black	Black	Black
Rim	Size	622-15C	622-15C	622-17C	622-17C	622x15C Tubeless	622x15C Tubeless
	D2 rim	-	-	X	X	-	-
	Offset rim	-	-	-	-	-	X
	Welded joint	X	X	-	-	X	X
	Height (mm)	35	35	50	50	21	24
	Width (mm)	20.8	20.8	22.4	22.4	20.8	20.8
	Brazed reinforcement	-	-	-	-	-	-
	Requires rim tape	-	-	X	X	-	-
	Material	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum	CFRP / Aluminum	Aluminum	Aluminum
	Finish	CFRP	CFRP	CFRP	CFRP	Black	Black
Spokes	No. of spokes	16	21	16	21	16	20
	Optbal (2:1)	-	X	-	X	-	-
	Shape	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.5-2.0)/ Bladed	RH:Butted(2.0-1.8-2.0)/ Bladed LH:Butted(2.0-1.5-2.0)/ Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Color	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Color	Black	Black	Black	Black	Black	Black
Tire	Type	Tubeless	Tubeless	Clincher ***	Clincher ***	Tubeless	Tubeless
	Recommended size	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622	23-622 - 28-622
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		767g	977g	841g	1067g	748g	1037g
Note		** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem *** Max tire pressure 8 bar	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem *** Max tire pressure 8 bar	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS

Wheel

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.	WH-RS31	WH-RS31	WH-RS21-CL-F	WH-RS21-CL-R	WH-RS11	WH-RS11
Rim type	Clincher	Clincher	Clincher	Clincher	Clincher	Clincher
Front / Rear	Front	Rear	Front	Rear	Front	Rear
Color	1	Black	Black	Black	Black	Black
	2	White	White	Silver	Silver	Silver
	3	-	-	White	White	White
	Sticker color option	Red/Blue/Orange/ Green/ Sky Blue/Hi tech Gray	Red/Blue/Orange/ Green/ Sky Blue/Hi tech Gray	Red/Blue/Orange/ Green/ Sky Blue/Hi tech Gray	Red/Blue/Orange/ Green/ Sky Blue/Hi tech Gray	Red/Blue/Orange/ Green/ Sky Blue/Hi tech Gray
Freehub body (*Note)	Speeds	-	10*/11	-	10*/11	-
	11T compatible	-	X	-	X	-
	Maximum low gear	-	32T	-	32T	-
	Material	-	Steel	-	Steel	-
O.L.D. (mm)	100	130	100	130	100	130
Hub Axle	Length (mm)	108	141	108	141	108
	Material	Steel	Steel	Steel	Steel	Steel
Digital Adjustment System	-	-	-	-	-	-
Hub shell	Contact seal	X	X	X	X	X
	Center lock rotor mount	-	-	-	-	-
	Flange type	Flangeless	5 arms	Flangeless	5 arms	Flangeless
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
QR lever	Color	Black	Black	Black	Black	Black
	QR skewer length (mm)	133	163/168	133	163/168	133
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Rim	Size	622-15C	622-15C	622x15C	622x15C	622-15C
	D2 rim	-	-	-	-	-
	Offset rim	-	X	-	X	-
	Welded joint	-	-	-	-	-
	Height (mm)	30	30	22	24	24
	Width (mm)	20.8	20.8	20.8	20.8	20.8
	Brazed reinforcement	-	-	-	-	-
	Requires rim tape	X	X	X	X	-
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Spokes	Finish	Anodized/painting	Anodized/painting	Black: Anodized Silver: Anodized White: Painting	Black: Anodized Silver: Anodized White: Painting	Black: Anodized Silver: Anodized White: Painting
	No. of spokes	16	20	16	20	20
	Optbal (2:1)	-	-	-	-	-
	Shape	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Butted(2.0-1.8-2.0)/ Bladed	Straight(2.0)/Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Nipple	Color	Black	Black	Black	Black	Black
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Tire	Type	Clincher	Clincher	Clincher	Clincher	Clincher
	Recommended size	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **	838g	1121g	-	-	795g	1085g
Note	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-RS010-CL-F	WH-RS010-CL-R	WH-R501-30-F	WH-R501-30-R	WH-R501-A-F	WH-R501-A-R
Rim type		Clincher	Clincher	Clincher	Clincher	Clincher	Clincher
Front / Rear		Front	Rear	Front	Rear	Front	Rear
Color	1	Black	Black	Black	Black	Black	Black
	2	-	-	Silver	Silver	Silver	Silver
	3	-	-	-	-	-	-
	Sticker color option	X	X	X	X	X	X
Freehub body (*Note)	Speeds	-	10*/11	-	8/9/10	-	8/9/10
	11T compatible	-	X	-	X	-	X
	Maximum low gear	-	32T	-	30T	-	30T
	Material	-	Steel	-	Steel	-	Steel
O.L.D. (mm)		100	130	100	130	100	130
Hub Axle	Length (mm)	108	141	108	141	108	141
	Material	Steel	Steel	Steel	Steel	Steel	Steel
Digital Adjustment System		-	-	-	-	-	-
Hub shell	Contact seal	X	X	X	X	X	X
	Center lock rotor mount	-	-	-	-	-	-
	Flange type	Round	Round	Round	Round	Round	Round
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Color	Black	Black	Black	Black	Black	Black
QR lever	QR skewer length (mm)	133	163/168	133	163/168	133	163/168
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Barrel	Barrel	Barrel	Barrel
	Color	Black	Black	Black	Black	Black	Black
Rim	Size	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)
	D2 rim	-	-	-	-	-	-
	Offset rim	-	X	-	-	-	-
	Welded joint	-	-	-	-	-	-
	Height (mm)	24	24	30	30	24	24
	Width (mm)	20.8	20.8	20.8	20.8	20.8	20.8
	Brazed reinforcement	-	-	-	-	-	-
	Requires rim tape	X	X	X	X	X	X
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Black	Black	Anodized	Anodized	Anodized	Anodized
Spokes	No. of spokes	20	24	20	24	20	24
	Optbal (2:1)	-	-	-	-	-	-
	Shape	J-bent(2.0)/Round	J-bent(2.0)/Round	J-bent(2.0)/Bladed	J-bent(2.0)/Bladed	J-bent(2.0)/Bladed	J-bent(2.0)/Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Color	Black	Black	Black	Black	Black	Black
Nipple	Material	Brass	Brass	Brass	Brass	Brass	Brass
	Color	Silver	Silver	Silver	Silver	Silver	Silver
Tire	Type	Clincher	Clincher	Clincher	Clincher	Clincher	Clincher
	Recommended size	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		789g	1080g	822g	1078g	822g	1078g
Note		** Weight does not include quick release or rim tape	** Weight does not include quick release or rim tape	** Weight does not include quick release or rim tape	** Weight does not include quick release or rim tape	** Weight does not include quick release or rim tape New Seal system	** Weight does not include quick release or rim tape New Seal system

Wheel

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-R501-F	WH-R501-R	WH-RX830-TL-F	WH-RX830-TL-R	WH-RX31	WH-RX31
Rim type		Clincher	Clincher	Tubeless	Tubeless	Clincher	Clincher
Front / Rear		Front	Rear	Front	Rear	Front	Rear
Color	1	Black	Black	Black	Black	Black	Black
	2	Silver	Silver	-	-	-	-
	3	-	-	-	-	-	-
	Sticker color option	X	X	-	-	Standard Red (5sets box only) Hi tech Gray (5sets box only)	Standard Red (5sets box only) Hi tech Gray (5sets box only)
Freehub body (*Note)	Speeds	-	8/9/10	-	10*/11	-	11-speed (10s compatible)
	11T compatible	-	X	-	X	-	X
	Maximum low gear	-	30T	-	32T	-	32T
	Material	-	Steel	-	Steel	-	Steel
O.L.D. (mm)		100	130	100	135	100	135
Hub Axle	Length (mm)	108	141	108	141	108	146
	Material	Steel	Steel	Aluminum	Aluminum	Steel	Steel
Digital Adjustment System		-	-	-	-	-	-
Hub shell	Contact seal	X	X	X	X	X	X
	Center lock rotor mount	-	-	X	X	X	X
	Flange type	Round	Round	6 arms	6 arms	6 arms	6 arms
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Color	Black	Black	Gray	Gray	Black	Black
QR lever	QR skewer length (mm)	133	163/168	133	168/173	133	168/173
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Anodized	Anodized	Anodized	Anodized
	Color	Black	Black	Gray	Gray	Black	Black
Rim	Size	622 X 15C (700C)	622 X 15C (700C)	622-17C	622-17C	622-17C	622-17C
	D2 rim	-	-	-	-	-	-
	Offset rim	-	-	-	-	-	-
	Welded joint	-	-	X	X	-	-
	Height (mm)	24	24	35	35	24	24
	Width (mm)	20.8	20.8	23	23	22.4	22.4
	Brazed reinforcement	-	-	-	-	-	-
	Requires rim tape	X	X	-	-	X	X
	Material	Aluminum	Aluminum	CFRP / Aluminum	CFRP / Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	CFRP	CFRP	Anodized	Anodized
Spokes	No. of spokes	20	24	24	24	24	24
	Optbal (2:1)	-	-	-	-	-	-
	Shape	J-bent(2.0)/Round	J-bent(2.0)/Round	Butted(2.0-1.8-2.0)/Bladed	Butted(2.0-1.8-2.0)/Bladed	Butted(2.0-1.8-2.0)/Bladed	Butted(2.0-1.8-2.0)/Bladed
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Color	Black	Black	Black	Black	Black	Black
Nipple	Material	Brass	Brass	Aluminum	Aluminum	Aluminum	Aluminum
	Color	Silver	Silver	Black	Black	Black	Black
Tire	Type	Clincher	Clincher	Tubeless	Tubeless	Clincher	Clincher
	Recommended size	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	(622) 25C-38C	(622) 25C-38C
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		822g	1078g	836g	1005g	912g	1096g
Note		** Weight does not include quick release or rim tape New Seal system	** Weight does not include quick release or rim tape New Seal system	** Weight does not include quick release or valve stem	*The adapter is needed to use 10-speed CS ** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem	** Weight does not include quick release or valve stem

Wheel

Series		SHIMANO	SHIMANO
Model no.		WH-RX05	WH-RX05
Rim type		Clincher	Clincher
Front / Rear		Front	Rear
Color	1	Black	Black
	2	White	White
	3	-	-
	Sticker color option	Red/Gray (mono tone)	Red/Gray (mono tone)
Freehub body (*Note)	Speeds	-	8/9/10
	11T compatible	-	X
	Maximum low gear	-	32T
	Material	-	Steel
O.L.D. (mm)		100	135
Hub Axle	Length (mm)	108	146
	Material	Steel	Steel
Digital Adjustment System		-	-
Hub shell	Contact seal	X	X
	Center lock rotor mount	X	X
	Flange type	Round	Round
	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
	Color	Black	Black
QR lever	QR skewer length (mm)	133	168/173
	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
	Color	Black	Black
Rim	Size	622-17C	622-17C
	D2 rim	-	-
	Offset rim	-	-
	Welded joint	-	-
	Height (mm)	24	24
	Width (mm)	22.4	22.4
	Brazed reinforcement	-	-
	Requires rim tape	X	X
	Material	Aluminum	Aluminum
Finish	Anodized or painting	Anodized or painting	
Spokes	No. of spokes	28	28
	Optbal (2:1)	-	-
	Shape	J-bent(2.0)/Bladed	J-bent(2.0)/Bladed
	Material	Stainless steel	Stainless steel
	Color	Black	Black
Nipple	Material	Brass	Brass
	Color	Silver	Silver
Tire	Type	Clincher	Clincher
	Recommended size	25-622 - 38-622	25-622 - 38-622
Option	Reflector JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	Reflector AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	Reflector DEN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight **		945g	1130g
Note		** Weight does not include quick release or rim tape New Seal system	** Weight does not include quick release or rim tape New Seal system

ST

SL

BL

BC

BR

RD

FD

FC

BB

CS

CN

FH

HB

WH

PD

HP

Pedal

SPD-SL

Series	DURA-ACE	ULTEGRA	105	SHIMANO	SHIMANO	SHIMANO
Model no.	PD-9000	PD-6800	PD-5800	PD-R550	PD-R540-LA	PD-R540
Color 1	CFRP	CFRP	CFRP	Black	Black	Silver
Color 2	-	-	-	Gray	White	Black
Color 3	-	-	-	-	-	White
Type	Road	Road	Road	Road	Road	Road
Binding	Single Sided	Single Sided	Single Sided	Single Sided	Single Sided	Single Sided
Pedal axle material	Nickel Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel	Chromoly Steel
Cartridge axle	-	X	X	X	X	X
Sealed mechanism	X	X	X	X	X	X
Cleat retention adjuster	X	X	X	X	X	X
Cleat included	SM-SH12	SM-SH11	SM-SH11	SM-SH11	SM-SH11	SM-SH11
Optional cleat	SM-SH10 / SM-SH11	SM-SH10 / SM-SH12	SM-SH10 / SM-SH12	SM-SH10 / SM-SH12	SM-SH10 / SM-SH12	SM-SH10 / SM-SH12
Reflector	SM-PD63	SM-PD63	SM-PD65	SM-PD65	SM-PD58	SM-PD58
Pedal body	Material	Carbon	Carbon	Carbon	Resin	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
Body cover material	Polished Special Stainless	Special Stainless	Stainless	Stainless	Resin	Resin
Wide platform	X	X	X	X	-	-
Road clearance	35°	32°	32°	32°	34°	34°
Average weight (pair)	248g	260g	285g	310g	330g	330g
Note	4mm longer axle available			Wider spring tension range	Lighter spring tension	

Pedal

SPD

Series	SHIMANO	SHIMANO	SHIMANO
Model no.	PD-A600	PD-A530	PD-A520
Color 1	Gray	Silver	Silver
Color 2	-	Black	-
Color 3	-	-	-
Type	Road (SPD)	Multi-purpose (SPD/Flat)	Road (SPD)
Binding	Single Sided	Single Sided	Single Sided
Pedal axle material	Chromoly Steel	Chromoly Steel	Chromoly Steel
Cartridge axle	X	X	X
Sealed mechanism	X	X	X
Cleat retention adjuster	X	X	X
Pop-up cage	-	-	-
Integrated cage	-	-	-
Offset binding	-	-	-
Oval shape axle body housing	-	-	-
Cleat included	SM-SH51	SM-SH51	SM-SH51
Optional cleat	SM-SH56	SM-SH56	SM-SH56
Reflector	SM-PD62	SM-PD61	SM-PD59
Pedal body	Material	Aluminum	Aluminum
	Finish	Polished/Painted	Painted
Cage	Material	-	-
Average weight (pair)	286g	383g	315g
Note			

Head Parts

Series	DURA-ACE	
Model no.	HP-7410	
Size	JIS ENGLISH	
Thread	BC1"x24T.PT.I.	
Sealed cartridge bearings	X	
Stack height (mm)	37.6	
Lock nut	Material	Aluminum
	Finish	Anodized
Upper / Lower cups	Material	Aluminum
	Finish	Anodized
Upper stem cone	Material	Aluminum
	Finish	Anodized
Stem cone	Material	Aluminum
	Finish	Anodized
Average weight	101g	
Note		

CITY TOURING/COMFORT

	<i>Page</i>	
Internal Geared Hub	150	SG
Chain Tensioner	151	CT
Cassette Sprocket	151	CS
Shift Lever	152	SL
Brake Lever	152	BL
Brake	152	BR
Crankset	153	FC
Internal Geared Hub	154	SG
Shift Lever	157	SL
Brake Lever	159	BL
Brake	159	BR
Crankset	161	FC
Head Parts	161	HP
Chain	161	CN
Electric Wire	162	EW
Shift Lever	163	SL
Brake Lever	163	BL
Rear Derailleur	164	RD
Brake	164	BR
Crankset	164	FC
Cassette Sprocket	164	CS
Freehub	165	FH
Front Hub	165	HB

Internal Geared Hub

Series		ALFINE	ALFINE
Function name		Inter-11	Inter-8
Model no.		SG-S700	SG-S7000-8
Color	1	Silver	Silver
	2	Black	Black
	3	-	-
Brake Type	Mount Type	Center Lock Type	Center Lock Type
	Recommended Model	BR-S700	BR-S700
Speeds		11	8
Gear ratio	Total	409%	307%
	1	0.527	0.527
	2	0.681	0.644
	3	0.770	0.748
	4	0.878	0.851
	5	0.995	1
	6	1.134	1.223
	7	1.292	1.419
	8	1.462	1.615
	9	1.667	-
	10	1.888	-
Top-Normal		X	X
Silent clutch		X	X
Gear change support mechanism		X	X
Shifting power modulator		X	X
Driving efficiency		HIGH	HIGH
w/ Left hand dust cap		-	-
O.L.D. (mm)		135	135
Spoke size		#13 / #14	#13 / #14
Spoke hole	28H	-	-
	32H	X	X
	36H	X	X
	Others	-	-
Axle length (mm)	182	-	-
	184	-	-
	187	X	X
	193	-	-
	Others	-	-
Flange distance (mm)		57.3	57.3
Flange diameter (mm)		104.3	104.3
Flange width (mm)	Right	3.2	3.2
	Left	3.2	3.2
Offset (mm)		3.15	3.15
P.C.D Left / Right. (mm)		92.6	92.6
Hub shell	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
Average weight		1665g	1680g
Note			

Chain Tensioner

Series		ALFINE	ALFINE	
Model no.		CT-S500	CT-S510	
Color	1	Silver	-	
	2	Black	-	
	3	-	Silver&Black	
Speeds		Single	Single	
Compatible chain		CN-HG93 CN-HG71 CN-HG53	CN-HG73 CN-HG53	CN-HG71
Compatible CS		CS-S500	CS-S500	SM-GEAR
Max. front difference		16T	-	-
Max. rear sprocket		20T	20T	23T
Min. rear sprocket		18T	18T	16T
Dropout		Vertical drop end type	Vertical drop end type	
Direct attachment		-	-	
Structure		Double pulley	Single pulley	
Tensioner arm	Material	Aluminum	Aluminum	
	Finish	Painted	Painted	
Average weight		-	-	-
Note				

Cassette Sprocket

Series		ALFINE
Model no.		CS-S500
Chain guard	with	X
	without	X
Gear teeth	14T	-
	16T	-
	17T	-
	18T	X (w/ and w/o guard)
	19T	-
	20T	X (w/ and w/o guard)
	21T	-
	22T	-
	23T	-
Gear thickness (mm)		2.0
Compatible chain	Super Narrow HG for 9-speed	X (CN-HG93 CN-HG53)
	HG 8-speed (1/2"x3/32")	-
	1/2"x1/8"	-
Gear	Material	Steel
	Finish	Chrome plated
Average weight		-
Note		

Shift Lever

Series		ALFINE	ALFINE
Model no.		SL-S700	SL-S7000-8
Color	1	Silver	Silver
	2	Black	Black
	3	-	-
Shifter type		Rapidfire Plus	Rapidfire Plus
Top-Normal		X	X
Speeds		115(Inter-11 pitch)	8
Compatible SG type		SG-S700	SG-S7000-8
I-spec compatible		-	-
SL position adjust		-	-
SL cable adjust		X	X
Max. multiples shifts		2	1
Release function	Multi release	X	-
	Instant release	X	-
	2-Way release	X	X
Optical gear display		Above handlebar	Above handlebar
LED positioning light		-	-
Multi-Bearing construction		-	-
SL bracket	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Main lever body	Material	Steel & Resin	Steel & Resin
	Finish	-	-
Release lever body	Material	Steel & Resin	Steel & Resin
	Finish	-	-
Base cover	Material	Resin	Resin
	Finish	-	-
SL cable	Material	Stainless steel	Stainless steel
	Finish	-	-
Recommended SL outer casing		SP41 sealed	Sealed
Stainless clamp bolt		-	-
Brake lever integrated		-	-
Brake lever size		-	-
Left hand brake lever		-	-
Clamping diameter (mm)		22.2	22.2
Average weight		-	-
Note			

Brake

Disc Brake

Series		ALFINE
Model no.		BR-S700
Brake type		Hydraulic Disc-brake
Color	1	Silver
	2	Black
	3	-
Brake hose (kit)		SM-BH90-SB
Hose joint		Banjo
Brake hose color (kit)	1	Black
	2	-
ICE TECHNOLOGY pad compatible caliper		X
Pad	Standard 1	G01A Resin
	Standard 2	-
	Option 1	F01A Resin
Option 2		-
Recommended brake lever		BL-S700-B
Recommended brake rotor		SM-RT81
Oil		SHIMANO Mineral
One way bleeding		X
Mount type (available for IS mount with mount adapter)		International standard Post-type
Piston		2
Piston material		Ceramic
Caliper	Mono-body	-
	Material	Aluminum
	Finish	Painted
Caliper fixing bolt	Material	Stainless steel
	Tool size	5mm
	Anti loosen method	Snap ring
Pad mount		Pad axle
Average weight		-
Note		

Brake Lever

Series		ALFINE
Model no.		BL-S700-B
Brake type		Hydraulic Disc-brake
Lever size (Finger)		3
Color	1	Silver
	2	Black
	3	-
Brake hose (Kit)		SM-BH90-SB
Hose joint		Straight
Brake hose color (kit)	1	Black
	2	-
Recommended brake caliper		BR-S700
Oil		SHIMANO Mineral
Funnel bleeding		X
Reach adjust	Toolless	X
	Tool	-
Free stroke adjust		-
Servo wave mechanism		-
Clamp band	Open clamp	X
	I-spec	X*
Brake lever	Material	Aluminum
	Finish	Anodized
Master cylinder	Material	Aluminum
	Finish	Painted
Average weight		-
Note		I-spec B-type compatible

Crankset

Series		ALFINE		ALFINE	
Model no.		FC-S501		FC-S400	
Color	1	Silver		Silver	
	2	Black		Black	
	3	-		-	
Chain ring teeth	45T	X		X	
	42T	X		-	
	39T	X		X	
	38T	-		-	
	33T	-		-	
	Others	-		-	
	P.C.D. (mm)	130		130	
Chain guard type	Double	X	-	X	-
	Single	-	X	-	X
	NA	-	-	-	-
Chain line (mm)		49.2	42.7	49.2	42.7
Compatible chain	Super Narrow HG for 9-speed	X (CN-HG93 CN-HG53)		X (CN-HG93 CN-HG53)	
	HG 8-speed (1/2"x3/32")	X (CN-HG71)		X (CN-HG71)	
	1/2"x1/8"	-		-	
Crank Arm length (mm)		170		170	
Gear arms		5		5	
2-piece solid crank construction		X		-	
Compatible BB type	Outboard	X		-	
	Octalink	-		X	
	Square	-		-	
Recommended BB	Threaded (normal)	-		X	
	Threaded (chain case)	-		-	
Axle length of BB-UN / ES (mm)	Threaded (normal)	-		BB-ES25	
	Threaded (chain case)	-		-	
Threaded BB shell width	68mm	X		126	118
Chain case compatible		-		-	
Crank arm	Material	Aluminum		Aluminum	
	Finish	Anodized / Painted		Painted	
Chain ring	Material	Aluminum		Aluminum	
	Finish	Anodized		Anodized	
Chain guard1	Material	Aluminum		Aluminum	
	Finish	Anodized		Anodized	
Chain guard2	Material	Resin	-	Resin	-
	Finish	-	-	-	-
Average weight		-	-	-	-
Note					

SG

CT

CS

SL

BL

BR

FC

SG

SL

BL

BR

FC

HP

CN

EW

SL

BL

RD

BR

FC

CS

FH

HB

Internal Geared Hub

Series		Nexus	Nexus	Nexus	Nexus	Nexus	Nexus
Function name		Inter-8	Inter-8	Inter-8	Inter-8	Inter-8	Inter-7
Model no.		SG-C6010-8R	SG-C6010-8V	SG-C6000-8R	SG-C6000-8V	SG-C6000-8C	SG-C3000-7R
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	Black	Black	Black	Black	Black	Black
	3	-	-	-	-	-	-
Brake Type	Mount Type	Inter-M	V-BRAKE	Inter-M	V-BRAKE	Coaster	Inter-M
	Recommended Model	BR-IM81 BR-IM80 BR-IM55 BR-IM45	-	BR-IM81 BR-IM80 BR-IM55 BR-IM45	-	-	BR-IM81 BR-IM80 BR-IM55 BR-IM45
Speeds		8	8	8	8	8	7
Gear ratio	Total	307%	307%	307%	307%	307%	244%
	1	0.527	0.527	0.527	0.527	0.527	0.632
	2	0.644	0.644	0.644	0.644	0.644	0.741
	3	0.748	0.748	0.748	0.748	0.748	0.843
	4	0.851	0.851	0.851	0.851	0.851	0.989
	5	1	1	1	1	1	1.145
	6	1.223	1.223	1.223	1.223	1.223	1.335
	7	1.419	1.419	1.419	1.419	1.419	1.545
	8	1.615	1.615	1.615	1.615	1.615	-
	9	-	-	-	-	-	-
	10	-	-	-	-	-	-
Top-Normal		-	-	-	-	-	-
Silent clutch		X	X	X	X	X	-
Gear change support mechanism		X	X	X	X	X	-
Shifting power modulator		X	X	X	X	X	-
Driving efficiency		HIGH	HIGH	Standard	Standard	Standard	Standard
w/ Left hand dust cap		-	X	-	X	-	-
O.L.D. (mm)		132	132	132	132	132.3	130
Spoke size		#13 / #14	#13 / #14	#13 / #14	#13 / #14	#13 / #14	#13 / #14
Spoke hole	28H	-	X	-	X	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
	Others	40H	-	40H	-	-	-
Axle length (mm)	182	-	-	-	-	-	X
	184	X	X	X	X	X	-
	187	-	-	-	-	-	-
	193	-	-	-	-	-	-
	Others	-	-	203	203	-	201
Flange distance (mm)		58.3	58.3	58.3	58.3	58.3	54.6
Flange diameter (mm)		105.2	105.2	105.2	105.2	105.2	99.6
Flange width (mm)	Right	3.2	3.2	3.2	3.2	3.2	3.2
	Left	3.2	3.2	3.2	3.2	3.2	3.2
Offset (mm)		2.7	2.7	2.7	2.7	2.55	3.85
P.C.D Left / Right. (mm)		92.6	92.6	92.6	92.6	92.6	87
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Average weight		1630g	1655g	1750g	1775g	2040g	1592g
Note							

Internal Geared Hub

Series		Nexus	Nexus	Nexus	Nexus	Nexus	Nexus
Function name		Inter-7	Inter-7	Inter-5	Inter-5	Inter-5	Inter-5
Model no.		SG-C3000-7C	SG-C3000-7C-DX	SG-5R30	SG-5R30-VS	SG-5R35	SG-5R35-VS
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	-	-	-	-	Black	Black
	3	-	-	-	-	-	-
Brake Type	Mount Type	Coaster	Coaster	Inter-M	V-BRAKE	Inter-M	V-BRAKE
	Recommended Model	-	-	BR-IM81 BR-IM80 BR-IM55 BR-IM45	-	BR-IM81 BR-IM80 BR-IM55 BR-IM45	-
Speeds		7	7	5	5	5	5
Gear ratio	Total	244%	244%	206%	206%	206%	206%
	1	0.632	0.632	0.750	0.750	0.750	0.750
	2	0.741	0.741	1.001	1.001	1.001	1.001
	3	0.843	0.843	1.159	1.159	1.159	1.159
	4	0.989	0.989	1.335	1.335	1.335	1.335
	5	1.145	1.145	1.545	1.545	1.545	1.545
	6	1.335	1.335	-	-	-	-
	7	1.545	1.545	-	-	-	-
	8	-	-	-	-	-	-
	9	-	-	-	-	-	-
	10	-	-	-	-	-	-
Top-Normal		-	-	-	-	-	-
Silent clutch		-	-	X	X	X	X
Gear change support mechanism		-	-	-	-	-	-
Shifting power modulator		-	-	-	-	-	-
Driving efficiency		Standard	Standard	Standard	Standard	Standard	Standard
w/ Left hand dust cap		-	-	-	X	-	X
O.L.D. (mm)		127	127	132	132	132	132
Spoke size		#13 / #14	#13 / #14	#13 / #14	#13 / #14	#13 / #14	#13 / #14
Spoke hole	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
	Others	-	-	-	-	-	-
Axle length (mm)	182	-	-	-	-	-	-
	184	-	-	X	X	X	X
	187	-	-	-	-	-	-
	193	-	-	-	-	-	-
	Others	175.5	175.5	210/215	210	-	-
Flange distance (mm)		56.2	56.2	54.6	54.6	54.6	54.6
Flange diameter (mm)		92.5	92.5	86	86	88.6	86
Flange width (mm)	Right	2.3	2.3	2.3	2.3	3.4	2.3
	Left	2.7	2.7	2.5	2.5	3.6	2.5
Offset (mm)		4.6	4.6	0.3	0.3	0.3	0.3
P.C.D Left / Right. (mm)		83.5	83.5	76	76	76	76
Hub shell	Material	Steel	Steel	Steel	Steel	Aluminum	Aluminum
	Finish	Plated	Plated+ Painted(clear)	Plated	Plated	Painted	Painted
Average weight		1963g	-	1305g	1330g	1230g	1255g
Note				*Japanese market only	*Japanese market only	*Japanese market only	*Japanese market only

SG

CT

CS

SL

BL

BR

FC

SG

SL

BL

BR

FC

HP

CN

EW

SL

BL

RD

BR

FC

CS

FH

HB

Internal Geared Hub

Series		Nexus	Nexus	Nexus	Nexus
Function name		Inter-3	Inter-3	Inter-3	Inter-3
Model no.		SG-3R40	SG-3C41	SG-3D55	SG-3R75
Color	1	Silver	Silver	Silver	Silver
	2	Black	-	Black	-
	3	White	-	-	-
Brake Type	Mount Type	Inter-M	Coaster	Disc Brake	Inter-M
	Recommended Model	BR-IM81 BR-IM80 BR-IM55 BR-IM45	-	-	BR-IM81 BR-IM80 BR-IM55 BR-IM45
Speeds		3	3	3	3
Gear ratio	Total	186%	186%	186%	158%
	1	0.733	0.733	0.733	0.632
	2	1.000	1.000	1.000	0.741
	3	1.360	1.360	1.360	1.000
	4	-	-	-	-
	5	-	-	-	-
	6	-	-	-	-
	7	-	-	-	-
	8	-	-	-	-
	9	-	-	-	-
	10	-	-	-	-
11	-	-	-	-	
Top-Normal		-	-	-	-
Silent clutch		-	-	X	X
Gear change support mechanism		X	X	X	-
Shifting power modulator		X	X	X	-
Driving efficiency		Standard	Standard	Standard	HIGH
w/ Left hand dust cap		-	-	-	-
O.L.D. (mm)		120.4/126.8	120/127.4	135	122
Spoke size		#13 / #14	#13 / #14	#13 / #14	#13 / #14
Spoke hole	28H	X	X	-	-
	32H	X	-	X	-
	36H	X	X	X	X
	Others	-	-	-	-
Axle length (mm)	182	X	-	-	-
	184	X	-	-	-
	187	-	-	-	-
	193	-	-	X	X
	Others	170/177/189/192	168/175/178	-	174/198/200
Flange distance (mm)		53	57.5	53.5	51.1
Flange diameter (mm)		84	67.5	77.6	92.5
Flange width (mm)	Right	2.3	2.3	3.2	2.3
	Left	2.3	2.3	3.2	2.7
Offset (mm)		0.8	1.2	1.67	3.6
P.C.D Left / Right. (mm)		74	59	65	83.5
Hub shell	Material	Steel	Steel	Aluminum	Steel
	Finish	Plated	Plated	Plated	Plated
Average weight		885g	1120g	945g	1315g
Note					

Shift Lever

Series		Nexus	Nexus	Nexus	Nexus	Nexus	Nexus
Model no.		SL-8S31	SB-8S20	ST-8S20	SL-7S50	SL-7S31	SB-7S45
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	Black	-	-	Black	Black	-
	3	-	-	-	-	-	-
Shifter type		REVOSHIFT	REVOSHIFT	Tap fire	Rapidfire Plus	REVOSHIFT	REVOSHIFT
Top-Normal		-	-	-	-	-	-
Speeds		8	8	8	7	7	7
Compatible SG type		Inter-8	Inter-8	Inter-8	Inter-7	Inter-7	Inter-7
Ispec compatible		-	-	-	-	-	-
SL position adjust		-	-	-	-	-	-
SL cable adjust		X	X	X	X	X	X
Max. multiples shifts		7	7	1	1	6	6
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	-	-	-	X	-	-
Optical gear display		Window	Window	Dial	Window	Window	Dial
LED positioning light		-	-	-	-	-	-
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Resin	Aluminum	Aluminum	Aluminum	Resin	Aluminum
	Finish	Resin	Painted	Painted	Painted	Resin	Painted
Main lever body	Material	-	-	Resin & Steel	Resin & Steel	-	-
	Finish	-	-	-	-	-	-
Release lever body	Material	-	-	Resin & Steel	Resin & Steel	-	-
	Finish	-	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Recommended SL outer casing		Sealed	Sealed	Sealed	Sealed	Sealed	Sealed
Stainless clamp bolt		-	-	-	-	-	-
Brake lever integrated		-	X	X	-	-	X
Brake lever size		-	4 Finger	3 Finger	-	-	3 Finger
Left hand brake lever		-	BL-IM60	BL-IM65	-	-	BL-IM45
Clamping diameter (mm)		22.2	22.2	22.2	22.2	22.2	22.2
Average weight		-	-	-	-	-	-
Note							

Series		Nexus	Nexus	Nexus	Nexus	Nexus	Nexus
Model no.		SL-5S50	SL-5S30	SL-5S30-A	SL-3S42E	SL-3S41E	SL-3S35E
Color	1	Silver	Silver	Silver	-	-	-
	2	Black	Black	Black	Black	Black	Black
	3	-	White	White	-	-	-
Shifter type		Rapidfire Plus	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT	REVOSHIFT
Top-Normal		-	-	-	-	-	-
Speeds		5	5	5	3	3	3
Compatible SG type		Inter-5	Inter-5	Inter-5	Inter-3	Inter-3	Inter-3
Ispec compatible		-	-	-	-	-	-
SL position adjust		-	-	-	-	-	-
SL cable adjust		X	X	X	-	-	-
Max. multiples shifts		1	4	4	2	2	2
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	-	-	-	-	-	-
Optical gear display		Window	Window	Window	Window	Window	Dial
LED positioning light		-	-	-	-	-	-
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Aluminum	Resin	Resin	Resin	Resin	Aluminum
	Finish	Painted	Resin	Resin	Resin	Resin	Painted
Main lever body	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Release lever body	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
SL cable	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Recommended SL outer casing		Sealed	Sealed	Sealed	Sealed	Sealed	Sealed
Stainless clamp bolt		-	-	-	-	-	-
Brake lever integrated		-	-	-	-	-	-
Brake lever size		-	-	-	-	-	-
Left hand brake lever		-	-	-	-	-	-
Clamping diameter (mm)		22.2	22.2	22.2	22.2	22.2	22.2
Average weight		-	-	-	-	-	-
Note							

- SG
- CT
- CS
- SL
- BL
- BR
- FC
- SG
- SL
- BL
- BR
- FC
- HP
- CN
- EW
- SL
- BL
- RD
- BR
- FC
- CS
- FH
- HB

Shift Lever

Series		Nexus	Nexus	Nexus	Nexus	Nexus	Nexus
Model no.		SL-3558 J	SL-3542 J	SL-3543 J	SL-3590	SL-3591J	SL-3560
Color	1	Silver	Silver	Silver	Gray	-	Silver
	2	Black	Black	Black	Black	-	-
	3	White	-	White	-	White	White
Shifter type		REVOSHIFT	REVOSHIFT	REVOSHIFT	Piano-touch	Piano-touch	REVOSHIFT
Top-Normal		-	-	-	-	-	-
Speeds		3	3	3	3	3	3
Compatible SG type		Inter-3	Inter-3	Inter-3	Inter-3	Inter-3	Inter-3
Ispec compatible		-	-	-	-	-	-
SL position adjust		-	-	-	-	-	-
SL cable adjust		-	-	-	-	-	-
Max. multiples shifts		2	2	2	2	2	2
Release function	Multi release	-	-	-	-	-	-
	Instant release	-	-	-	-	-	-
	2-Way release	-	-	-	-	-	-
Optical gear display		Window	Window	Window	Dial	Dial	Window type with O.G.D light
LED positioning light		-	-	-	-	-	X
Multi-Bearing construction		-	-	-	-	-	-
SL bracket	Material	Resin	Resin	Resin	Steel	Steel	Resin
	Finish	Resin	Resin	Resin	Painted	Painted	Resin
Main lever body	Material	-	-	-	Resin & Steel	Resin & Steel	-
	Finish	-	-	-	-	-	-
Release lever body	Material	-	-	-	Resin & Steel	Resin & Steel	-
	Finish	-	-	-	-	-	-
Base cover	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-
SL cable	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Standard	Standard	Standard	Standard	Standard	Standard
Recommended SL outer casing		Normal	Normal	Normal	Normal	Normal	Normal
Stainless clamp bolt		-	-	-	-	-	-
Brake lever integrated		-	-	-	-	-	-
Brake lever size		-	-	-	-	-	-
Left hand brake lever		-	-	-	-	-	-
Clamping diameter (mm)		22.2	22.2	22.2	22.2	22.2	22.2
Average weight		-	-	-	-	-	-
Note		For Japanese market	For Japanese market	For Japanese market	For Japanese market	For Japanese market	For Japanese market

Series		Nexus
Model no.		SM-3560
Color	1	Silver
	2	-
	3	White
Shifter type		-
Top-Normal		-
Speeds		-
Compatible SG type		-
Ispec compatible		-
SL position adjust		-
SL cable adjust		-
Max. multiples shifts		-
Release function	Multi release	-
	Instant release	-
	2-Way release	-
Optical gear display		-
LED positioning light		X
Multi-Bearing construction		-
SL bracket	Material	Resin
	Finish	Resin
Main lever body	Material	-
	Finish	-
Release lever body	Material	-
	Finish	-
Base cover	Material	Resin
	Finish	-
SL cable	Material	-
	Finish	-
Recommended SL outer casing		-
Stainless clamp bolt		-
Brake lever integrated		-
Brake lever size		-
Left hand brake lever		-
Clamping diameter (mm)		22.2
Average weight		-
Note		For Japanese market

Brake Lever

Series		Nexus	Nexus	Nexus	Nexus
Model no.		BL-C6000	BL-IM65	BL-IM60	BL-IM45
Color	1	Silver	Silver	Silver	Silver
	2	Black	-	-	-
	3	-	-	-	-
Compatible brake type	V-BRAKE	X	X	X	X
	Mechanical disc brake (MTB)	-	-	-	-
	Mechanical disc brake (Road)	-	-	-	-
	Caliper (new super SLR)	-	-	-	-
	Caliper (super SLR)	-	-	-	-
	CANTI brake	-	-	-	-
Recommended power modulator	Roller brake	X	X	X	X
	V-BRAKE	SM-PM40	SM-PM40	SM-PM40	SM-PM40
Clamp band	Mechanical disc brake (MTB)	-	-	-	-
	Open clamp band	-	-	-	-
	Ispec compatible	-	-	-	-
Diameter (mm)		22.2	22.2	22.2	22.2
Internal bumper stop		X	-	-	-
Lever size (Finger)		4	3	4	4
Brake cable type		T-type	T-type	T-type	T-type
Power adjuster		-	-	-	-
Servo-Wave action		-	-	-	-
Reach adjust		X	X	X	X
Cable adjust		X	X	X	X
Cable adjust type		Two hand	Two hand	Two hand	Two hand
Brake lever	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Brake bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
Stainless clamp bolt		X	X	X	X
Average weight		-	-	-	-
Note				* Left only	* Left only

Brake Roller Brake

Series	Nexus	Nexus	Nexus	Nexus	Nexus	Nexus	Nexus
Model no.	BR-IM86-F	BR-IM81-F	BR-IM81-R	BR-IM80-F	BR-IM80-R	BR-IM55-F	BR-IM55-R
Front	X	X	-	X	-	X	-
Rear	-	-	X	-	X	-	X
Structure type	Hyper	Hyper	Hyper	Hyper	Hyper	Normal	Normal
Braking power (*1)	1.5	1.5	1.5	1.5	1.5	1.0	1.0
Cooling fin diameter (mm)	180	180	180	150	150	140	140
Heat dissipation (*1)	2.3	2.3	2.3	1.4	1.4	1.2	1.2
Without cooling fin	-	-	-	-	-	-	-
Inner cable quick release	X	X	X	X	X	X	X
Disc brake mount compatible	X	-	-	-	-	-	-
Average weight	-	-	-	-	-	-	-
Note*Performance index rating uses BR-IM45 brake unit as a reference value of 1. Testing condition							

Brake

Roller Brake

Series	Nexus	Nexus	Shimano	Shimano	Nexus	Nexus
Model no.	BR-IM45-F	BR-IM45-R	BR-IM35	BR-IM35	BR-IM31	BR-IM31
Front	X	-	X	-	X	-
Rear	-	X	-	X	-	X
Structure type	Normal	Normal	Normal	Normal	Normal	Normal
Braking power (*1)	1.1	1.1	1	1	1	1
Cooling fin diameter (mm)	122	122	160	160	90	90
Heat dissipation (*1)	1.0	1.0	1.4	1.4	Less than 1	Less than 1
Without cooling fin	-	-	-	-	-	Available
Inner cable quick release	X	X	-	-	-	-
Disc brake mount compatible	-	-	-	-	-	-
Average weight	-	-	-	-	-	-
Note*Performance index rating uses BR-IM45 brake unit as a reference value of 1. Testing condition			Recommended for Japanese market	Recommended for Japanese market	Recommended for Japanese market	Recommended for Japanese market

Crankset

Series		Nexus
Model no.		FC-C6000
Color	1	Silver
	2	Black
	3	-
Chain ring teeth	45T	-
	42T	-
	39T	-
	38T	X
	33T	X
	Others	-
	P.C.D. (mm)	-
Chain guard type	Double	-
	Single	-
	NA	X
Chain line (mm)		44
Compatible chain	Super Narrow HG for 9-speed	-
	HG 8-speed (1/2"x3/32")	X (CN-HG71)
	1/2"x1/8"	X (CN-NX10)
Crank Arm length (mm)		170
Gear arms		-
2-piece solid crank construction		-
OCTALINK technology		-
Compatible BB type	Outboard	-
	Octalink	-
	Square	X
Recommended BB	Threaded (normal)	-
	Threaded (chain case)	X
Axle length of BB-UN / ES (mm)	Threaded (normal)	-
	Threaded (chain case)	BB-UN26-K
Threaded BB shell width	68mm	X
Chain case compatible		X
Crank arm	Material	Aluminum
	Finish	Painted
Chain ring	Material	Steel
	Finish	Black
Cover ring	Material	Resin
	Finish	Painted
	Diameter (mm)	95.4
Average weight		-
Note	t : chain case thickness * Both of spec with bolt and spec w/o bolt are available.	

Head Parts

Series		Nexus
Model no.		HP-NX10
Color	1	Black
	2	-
A (mm)		30.0 (ø29.85) or 30.2 (ø30.01)
B (mm)		30.5 - 31.5
Front fork stem thread Size		BC 1" X 24 T.P.I
C (mm)		Max. ø38
D (mm)		21.7
Head tube material		Steel
Average weight		-
Note		

Chain

Series		Nexus
Model no.		CN-NX10
Type		Single speed chain
Size	Super Narrow HG for 9-speed	-
	HG 8-speed (1/2"x3/32")	-
	1/2"x1/8"	X
Anti corrosion		X
Half link chain		-
Pin link plate		-
Roller link plate		-
Chromizing treatment link pin		-
Hollow pin		-
Average weight		-
Note		

- SG
- CT
- CS
- SL
- BL
- BR
- FC
- SG
- SL
- BL
- BR
- FC
- HP
- CN
- EW
- SL
- BL
- RD
- BR
- FC
- CS
- FH
- HB

Electric Wire

Series		SHIMANO				SHIMANO			
Model no.		EW-NX60 (Long)				EW-NX60 (Short)			
Number of branch		3	3	4	4	-	-	-	
Distributor		X	X	X	X	-	-	-	
Electric wire color	Black	-	X	-	X	X	X	X	
	Gray	X	-	X	-	-	-	-	
Length (mm)	Cord to SL / SM-R	Length	50	50	50	50	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Cord to SM / SM-L	Length	50	50	50	50	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Distributor B **	Length	46	46	-	-	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Distributor C *	Length	-	-	46	46	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Cord between distributor B/C and A	Length	315	315	315	315	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Distributor A ***	Length	46	46	46	46	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Cord to Front LP	Length	180	180	180	180	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Cord to Rear LP	Length	-	-	150	150	815	885	960
		EZ cable clamp	-	-	-	-	-	-	-
	Cord to Dynamo	Length	545	545	545	545	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
	Cord for converter	Length	-	-	-	-	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-
Usage		DH-LP-SL-SM	DH-LP-SL-SM	DH-LP-SL-SM	DH-LP-SL-SM	EW(NX60 Long)-LP(Rear)	EW(NX60 Long)-LP(Rear)	EW(NX60 Long)-LP(Rear)	
Average weight		-	-	-	-	-	-	-	
Note		Distributor A*** : Branch from DH to LP / main cord Distributor B** : Branch from main cord to SL / SM Distributor C* : Branch from main cord to SL / SM / LP (Rear)							

Electric Wire

Series		SHIMANO								
Model no.		EW-NX30								
Number of branch		Convert-er-1	Convert-er-2	Convert-er-3	2	2	3	3	4	4
Distributor		-	-	-	X	X	X	X	X	X
Electric wire color	Black	X	X	X	X	X	X	X	X	X
	Gray	-	-	-	X	X	X	X	X	X
Length (mm)	Cord to SL / SM-R	Length	-	-	-	-	175	175	175	175
		EZ cable clamp	-	-	-	-	-	2	2	2
	Cord to SM / SM-L	Length	-	-	-	-	65	215	65	215
		EZ cable clamp	-	-	-	-	-	1	2	1
	Distributor B **	Length	-	-	-	-	-	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-	-
	Distributor C *	Length	-	-	-	-	-	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-	-
	Cord between distributor B/C and A	Length	-	-	-	-	-	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-	-
	Distributor A ***	Length	-	-	-	-	-	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-	-
	Cord to Front LP	Length	-	-	-	570	570	570	570	570
		EZ cable clamp	-	-	-	1	1	1	1	1
	Cord to Rear LP	Length	-	-	-	270	270	-	-	270
		EZ cable clamp	-	-	-	2	2	-	-	2
	Cord to Dynamo	Length	-	-	-	800	1000	800	1000	800
		EZ cable clamp	-	-	-	-	-	-	-	-
	Cord for converter	Length	50	50	50	-	-	-	-	-
		EZ cable clamp	-	-	-	-	-	-	-	-
Usage		Converter between EWNX60 (with pin hole) connector and EWNX30 (with pin) connector	Converter between front light tab on and EWNX30 (with pin) connector	Converter between EWNX30 (with pin hole) connector and EWNX60 (with pin) connector	Auto light + LP-RTX2 combination		Auto light + SL/SMRS34 combination		PHF combination (Auto light + SL/SMRS34 + LP-RTX2)	
Average weight		-	-	-	-	-	-	-	-	
Note										

Shift Lever

Series		Capreo
Model no.		SL-F800
Color	1	Silver
	2	-
Shifter type		Rapidfire Plus
Front speeds		-
Rear speeds		9
Compatible RD Type		Capreo 9-speed RD
Ispec compatible		-
SL position adjust		-
SL cable adjust		X
Max. multiple shifts (Main lever/ rear)		3
Release function	Multi release	-
	Instant release	-
	2-Way release	X
Optical Gear Display	with	X
	with (removable)	-
	without	-
Multi-Bearing construction		-
SL bracket	Material	Aluminum
	Finish	Painted
SL cable	Material	stainless steel
	Finish	-
Recommended SL outer casing		SP41 sealed
Average weight		-
Note		

Brake Lever

Series		Capreo
Model no.		BL-F800
Color	1	Silver
	2	-
	3	-
Compatible brake type	V-BRAKE	X
Recommended power modulator	V-BRAKE	SM-PM60
Clamp band	Open clamp band	-
	Ispec compatible	-
	Diameter (mm)	22.2
Internal bumper stop		X
Lever size (Finger)		2
Brake cable type		T-type
Power adjuster		-
Servo-Wave action		-
Reach adjust		X
Cable adjust		X
Brake lever	Material	Aluminum
	Finish	Anodized
Brake bracket	Material	Aluminum
	Finish	Painted
Average weight		-
Note		with Internal bumper stop

Rear Derailleur

Series		Capreo	Capreo
Model no.		RD-F800-SS	RD-F800-GS
Pulley cage		SS	GS
Color	1	Silver	Silver
	2	-	-
Rear speeds		9	9
Compatible chain		HG 9-speed	HG 9-speed
Top-Normal spring type	SHADOW RD	X	X
	SHADOW RD+	-	-
	W servo	-	-
Direct attachment (Conventional)		X	X
Cable adjuster		-	-
Max. front difference		Only single	Only single
Total capacity		17	17
Low sprocket	Max.	26	26
	Min.	26	26
Top sprocket	Max.	9	9
	Min.	9	9
Fluoroc coated link bushings		3	3
Pulley	G pulley bearing	-	-
	T pulley bearing	-	-
	Teeth	11	11
	Bolts material	Stainless steel	Stainless steel
	Bolts retainer	-	-
	Sunken type pulley bolt	X	X
Bracket	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Bracket body	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Plate body	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Outer link	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Inner link	Material	Steel	Steel
	Finish	Painted	Painted
Outer plate	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Inner plate	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Average weight		-	-
Note		SHIMANO SHADOW RD	

Crankset

Series		Capreo
Model no.		FC-F800
Rear speeds		9
Chainring combination		45T
Group		-
Spider or gear arm		5-arm
P.C.D. (mm)		130
Crank arm length (mm)		170
Chain		Super narrow HG for 9-speed
Bottom bracket		BB-UN26
Axle length	chain line 46mm	MM110
	chain line 48.5mm	LL113
	chain line 50mm	YL117
	chain line 52.5+t mm	117.5
Fixing nut available		-
Chain guard		Double / Resin
HOLLOWTECH crank arm		-
Splined crank (OCTALINK)		-
One-key release		-
Chain case compatible crank arm		-
Crank arm	Material	Aluminum
	Finish	Painted
Spider arm		-
Spider arm cover		-
Chain ring	Material	Aluminum
	Finish	Anodized
Note		

Brake

V-BRAKE

Series		Capreo
Model no.		BR-F800
Color	1	Silver
	2	-
	3	-
Brake type		V-BRAKE
Brake shoe type	Standard 1	R55C for F700/F800
	Option 1	-
Cartridge shoe holder		X
Arch size (mm)		107
Spacer type	X type	X
	Y type	X
Compatible lead pipe angle (deg.)		45/90/135
Sleeve & Bushing axle		X
V-arm/Caliper	Material	Aluminum
	Finish	Painted
Fixing bolt length (mm)	16	X
	25	X
Fixing bolt	Material	Steel
	Finish	Plated
	Chamfered bolt	X
Power modulator		X (Option)
Linear spring		X
Threaded BR shoe post		X
Average weight		-
Note		

Cassette Sprocket

Series		Capreo
Model no.		CS-HG70-S
Type		HG Cassette Sprocket
Speeds		9
Combination	9th	26
	8th	23
	7th	20
	6th	17
	5th	15
	4th	13
	3rd	11
	2nd	10
	1st	9
Group		bc
Compatible chain		HG 9-speed
Steel gear	Finish	Sn-Co plated (Top: Ni plated)
Lock ring	Material	Steel
	Finish	Sn-Co plated
Average weight		-
Note		Only for FH-F700

Freehub

Series		Capreo
Model no.		FH-F700
Compatible CS type		Only CS-HG70-S
Compatible wheel size		Only 16-20inch
Spoke holes	24H	X
	28H	-
	32H	X
	36H	X
	40/48H	-
	P.C.D. (mm)	45
Freehub body	Speeds	9
	11T compatible	9T
	Roller clutch	-
	Material	Steel
O.L.D. (mm)	130	Option
	135	X
	Others	-
Flange distance (mm)		60.3
Dish (mm)		8.3
Axle	QR	X
	QR skewer length (mm)	168
	Length (mm)	146 (M10)
	Nut	-
	Material	Steel
Seal	Hub	X
	Freewheel	-
Hub shell	Material	Aluminum
	Finish	Anodized
Quick release lever	Material	Aluminum
	Finish	Anodized
C.B.N. (Cubic Boron Nitride)	Cone Races	-
	Cup Races	-
Stainless steel ball bearings		-
Thread for drum brake (BC1.37X24)		-
Note		

Front Hub

Series		Capreo
Model no.		HB-F700
Spoke holes	24H	X
	28H	-
	32H	X
	36H	X
	40/48H	-
P.C.D. (mm)		38
O.L.D. (mm)		100
Flange distance (mm)		71.6
Axle	QR	X
	QR skewer length (mm)	133
	Axle length (mm)	108 (M9)
	Material	Steel
	Nut	-
Seal		X
Stainless steel ball bearings		-
Strong axle		-
Hub shell	Material	Aluminum
	Finish	Anodized
C.B.N. (Cubic Boron Nitride)	Cone races	-
	Cup races	-
Quick release lever	Material	Aluminum
	Finish	Anodized
Radial lacing		X
Note		

SG

CT

CS

SL

BL

BR

FC

SG

SL

BL

BR

FC

HP

CN

EW

SL

BL

RD

BR

FC

CS

FH

HB

E-BIKE

	<i>Page</i>	
Drive unit	168	DU
Crankset	168	FC
Adapter for light	168	SM
Drive unit cover	168	DU
Chain	169	CN
Cycle computer	169	SC
Switch unit	169	SW
Battery	170	BTR
Battery mount	170	BTH
Battery charger	170	BCR

Drive unit

Series		SHIMANO
Model no.		DU-E6001
Color	1	Standard
	2	-
	3	-
Compatible Brake type		V-BRAKE, Roller brake, Disc brake
Motor type		Brushless motor
Position		Mid ship
Maximum continuous rated power		-
Compatible Wheel Size		26"-29"
Maximum limit Power (Watt)		500
Maximum Rated Power (Watt)		250
Maximum torque (Nm)		50
Rated Voltage		DC 36V
Maximum Assist ratio (%)	HIGH	230
	NORMAL	150
	ECO	70
Power supply for front light		X
Power supply for rear light		X
Communication		E-tube
Chain case compatible		X
Magnetostrictive type torque sensor		X
Bike speed sensor		X
Cadence sensor		X
Walk assist function		X
Semi-automatic shifting		X
Average weight		-
Note		

Adapter for light

Series		SHIMANO	SHIMANO
Model no.		SM-DUE01	SM-DUE01
Color	1	Standard	Standard
	2	-	-
	3	-	-
Type		For DC light	For DC light
Cables for lights	With	*X	-
	Without	-	X
Front light		X	X
Rear light		X	X
Water proof connector		DU side	DU side
Wire holder		-	-
Average weight		-	-
Note		*Cable length: 1600 mm	

Drive unit cover

Series		SHIMANO	SHIMANO
Model no.		SM-DUE60	SM-DUE60-45
Color	1	Standard	Standard
	2	-	-
	3	-	-
Available DU angle		* 0 degree	* 45 degrees
Average weight		-	-
Note		* This angle is just guideline. Check the availability by 3D data.	* This angle is just guideline. Check the availability by 3D data.

Crankset

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		FC-E6000	FC-E6000	FC-E6000	FC-E6000	FC-E6000	FC-E6000
Color	1	Standard	Standard	Standard	Standard	Standard	Standard
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
Gear speed		1	1	1	1	1	1
Chain ring teeth	44T	X (SM-CRE60)	X (SM-CRE60)	X (SM-CRE60)	-	-	-
	38T	-	-	-	X (SM-CRE60)	X (SM-CRE60)	X (SM-CRE60)
	Others	-	-	-	-	-	-
Chain guard type	Double	X	-	-	X	-	-
	Single	-	X	-	-	X	-
	W/o CG	-	-	X	-	-	X
Chain ring fixing lock nut		X	X	X	X	X	X
Chain ring cover outer diameter (mm)		-	-	95.5	-	-	95.5
Chain line (mm)		46.5	46.5	46.5	46.5	46.5	46.5
Q factor (mm)		189.6	189.6	189.6	189.6	189.6	189.6
Chain case compatible		-	X	X	-	X	X
Chain ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Crank arm length (mm)	175	X	X	X	X	X	X
	170	X	X	X	X	X	X
	Others	-	-	-	-	-	-
Spider arm		-	-	-	-	-	-
BB type		Square type	Square type	Square type	Square type	Square type	Square type
Average weight		928g	928g	928g	843g	843g	843g
Note							

Chain

Series	SHIMANO	SHIMANO
Model no.	CN-E6090-10	CN-E6070-9
Type	HG-X 10-speed	HG 9-speed
Pin link plate	SIL-TEC	Gray
Roller link plate	SIL-TEC	Gray
Roller	-	-
Chromizing treatment link pin	X	X
Hollow pin	-	-
Average weight	276g	275.7g
Note		

Switch unit

Series	SHIMANO	SHIMANO
Model no.	SW-E6000	SW-E6000
Color	1	Standard
	2	-
	3	-
Usage	For assist	* For SEIS shift
Right SW	-	X
Left SW	X	-
Switch numbers (pcs)	3	3
E-tube connector numbers(pcs)	1	1
E-tube port numbers (pcs)	-	-
System On-Off	-	-
Assist Mode Change	X	-
Display change	X	X
Light On-Off	* X	-
Manual shifting switch	-	* X
Multiple input	-	* X
Compatible SC	SC-E6000	SC-E6000
Average weight	-	-
Note	* Set by E-tube project	* Set by E-tube project

Cycle computer

Series	SHIMANO	
Model no.	SC-E6000	
Color	1	Standard
	2	-
	3	-
Mount position (center on handlebar)	X	
Ports number for EW-SD50 (pcs)	3	
Back Light	X	
Beep	X	
Display Panel Detachable	X	
Reset button	-	
Inside battery	X	
Auto Start & Auto Stop	-	
Contents of Display	Clock	X
	Assist mode display	X
	Battery charge level	X
	Current Speed	X
	Gear Position Display	*X (8/11spd)
	Maximum speed (MAX)	** X
	Average speed (AVG)	** X
	Trip distance (DST)	X
	Trip time (TIME)	** X
	Odometer (ODO)	X
	Estimated range (RANGE)	X
	Range overview	X
Error Message	X	
Setting menu	Trip Distance reset	X
	Odometer reset	-
	km / mile	X
	Clock adjustment	X
	Back Light on/off	X
	Beep on/off	X
	Language	6 languages
	Adjust for shift	X
Setting Clear	X	
Average weight	-	
Note	* In case of SEIS ** Option by E-tube project	

DU

FC

SM

DU

CN

SC

SW

BTR

BTH

BCR

Battery

Series		SHIMANO	SHIMANO
Model no.		BT-E6000	BT-E6010
Color	1	Standard	Standard
	2	-	-
	3	-	-
Chemistry		Li-Ion	Li-Ion
Position		Rear carrier	Down tube
Rated voltage (V)		36	36
Rated capacity (Ah)		11.6	11.6
Rated capacity (Wh)		418	418
Cyclelife span for charge (times)		1000 (more than 60%)	1000 (more than 60%)
Time to charge (hour)		*4	*4
Charge level display		X	X
Error signal		X	X
Charging port		-	-
Tail light / Reflector integration		-	-
Lock system		X	X
Key hole		-	-
System on/off switch		X	X
Compatible holder		SM-BME60-A SM-BME60-B	SM-BME61
Compatible charger		SM-BCE60	SM-BCE60
Average weight		-	-
Note		*By SM-BCE60	*By SM-BCE60

Battery mount

Series		SHIMANO	SHIMANO	SHIMANO
Model no.		SM-BME60-A	SM-BME60-B	SM-BME61
Color	1	Standard	Standard	Standard
	2	-	-	-
	3	-	-	-
Position		Rear carrier	Rear carrier	Down tube
Charging port		-	-	-
Lock system		-	-	-
Key hole		X	X	X
System on/off switch		-	-	-
Connecting cable with Drive unit		X	X	X
Compatible battery		BT-E6000	BT-E6000	BT-E6010
Average weight		-	-	-
Note				

Battery charger

Series		SHIMANO
Model no.		SM-BCE60
Color	1	Standard
	2	-
	3	-
Compatible battery		BT-E6000/BT-E6010
AC power cable		SM-BCC1
Compatible voltage		AC100V-240V 50-60Hz
CE standard		X
Time to charge (hour)		*4
Charging Level Display		-
Plug in charging type		X
Charging temperature		0-40°C
Storage temperature		-20-60°C
Error signal		X
Average weight		-
Note		*In case of BT-E6000 & BT-E6010

GENERAL

	<i>Page</i>	
Light	172	LP
Hub Dynamo	175	DH
Power Modulator	182	PM
Cycle Computer	183	SC

Light

Series	Nexus	Nexus	Nexus	Nexus	SHIMANO	Nexus
Model no.	LP-C2100-S	LP-C2101-S	LP-C2100-B	LP-C2101-B	LP-R200	LP-X200
Auto light	-	-	-	-	X	X
Type	6V-0.9W	6V-0.9W	6V-0.9W	6V-0.9W	6V-2.4W	6V-2.4W
Main light	1W	1W	1W	1W	1W Super Bright White LED X 2	1W Super Bright White LED X 2
Sub light	-	-	-	-	-	-
Standlight (LED flashing) function	-	-	-	-	-	-
Reflector integration	X	X	X	X	-	-
Electric power input	Tab-on type	-	-	-	X	X
	Connector type	J2-A	J2-A	J2-A	J2-A	X
Light body material	Resin	Resin	Resin	Resin	Resin	Resin
Color	1	White	White	White	White	Silver(Painted)
	2	Black	Black	Black	Black	Black(Painted)
	3	Gray	Gray	Gray	Gray	-
	4	Silver	Silver	Silver	Silver	-
	5	CP	CP	CP	CP	-
	6	-	-	-	-	-
Attachment position	Light stay	X	X	-	-	X
	Below basket	-	-	X	X	-
	Fork center	-	-	-	-	-
	Handle bar	-	-	-	-	X(Center)
	On mud guard	-	-	-	-	-
	Mud guard style stay	-	-	-	-	-
Compatible seat stay diameter (mm)	13	-	-	-	-	-
	16	-	-	-	-	-
	19	-	-	-	-	-
Compatible handle bar diameter (mm)	22.2	-	-	-	X	-
	25.4	-	-	-	X	-
	31.8	-	-	-	X	-
Switch	Auto	-	-	-	-	X
	Manual (on)	-	-	-	-	X
	Manual (off)	-	-	-	-	-
	Permanent	X	X	X	X	-
Electric wire color	Black	-	-	-	-	X
	Gray	X	X	X	X	-
Electric wire length (mm)	Tab-on type	-	-	-	-	765
	Connector type	410 (J2-A)	410 (J2-A)	675 (J2-A)	675 (J2-A)	180
EZ cable clamp	-	-	-	-	-	-
Cord length adjuster	-	-	-	-	-	-
Compatible wheel size	-	-	-	-	-	-
Average weight	-	-	-	-	-	-
Note	*Japanese market only *Difference between these 2 models is appearance design.		*Japanese market only *Difference between these 2 models is appearance design.		*Japanese market only	*Japanese market only

Light

Series	Nexus	Nexus	Nexus	Nexus	Nexus	Nexus	
Model no.	LP-X103	LP-X102-H	LP-X102-HC	LP-X102	LP-X101-H	LP-X101	
Auto light	X	X	X	X	X	X	
Type	6V-2.4W	6V-2.4W	6V-2.4W	6V-2.4W	6V-2.4W	6V-2.4W	
Main light	1W Super Bright White LED	1W Super Bright White LED	1W Super Bright White LED	1W Super Bright White LED	1W Super Bright White LED	1W Super Bright White LED	
Sub light	-	-	-	-	-	-	
Standlight (LED flashing) function	X	-	-	-	-	-	
Reflector integration	-	X	X	-	X	-	
Electric power input	Tab-on type	X	X	X	X	X	
	Connector type	X	X	X	X	X	
Light body material	Resin	Resin	Resin	Resin	Resin	Resin	
Color	1	Silver(Painted)	Silver(Painted)	Silver(Painted)	Silver(Painted)	Silver(Painted)	
	2	Black(Painted)	Black(Painted)	Black(Painted)	Black(Painted)	-	
	3	White(Painted)	White(Painted)	White(Painted)	White(Painted)	White(Painted)	
	4	CP	CP	CP	-	Black(Material color)	Black(Material color)
	5	-	-	-	-	Gray(Material color)	Gray(Material color)
	6	-	-	-	-	-	-
Attachment position	Light stay	X	X	-	X	X	
	Below basket	-	-	-	-	-	
	Fork center	-	-	X	-	-	
	Handle bar	-	-	-	-	-	
	On mud guard	-	-	-	-	-	
	Mud guard style stay	-	-	-	-	-	
	Seat stay	-	-	-	-	-	
Compatible seat stay diameter (mm)	13	-	-	-	-	-	
	16	-	-	-	-	-	
	19	-	-	-	-	-	
Compatible handle bar diameter (mm)	22.2	-	-	-	-	-	
	25.4	-	-	-	-	-	
	31.8	-	-	-	-	-	
Switch	Auto	X	X	X	X	X	
	Manual (on)	X	X	X	X	X	
	Manual (off)	-	-	-	-	-	
	Permanent	-	-	-	-	-	
Electric wire color	Black	X	X	X	X	X	
	Gray	-	-	-	-	-	
Electric wire length (mm)	Tab-on type	405	405	565	405	410	
	Connector type	155	155	155	155	160	
EZ cable clamp	-	-	-	-	-	-	
Cord length adjuster	-	-	-	-	-	-	
Compatible wheel size	-	-	-	-	-	-	
Average weight	-	-	-	-	-	-	
Note	*Japanese market only	*Japanese market only	*Japanese market only	*Japanese market only	*Japanese market only	*Japanese market only	

LP

DH

PM

SC

Light

Series		Nexus	Nexus	Tourney	Tourney
Model no.		LP-X100	LP-NX60-R	LP-RTX2	LP-RTX2
Auto light		X	-	-	-
Type		6V-2.4W	6V-2.4W	6V-2.4W	6V-2.4W
Main light		1W Super Bright White LED	Super Bright Red LED	Super Bright Red LED	Super Bright Red LED
Sub light		-	-	-	-
Standlight (LED flashing) function		-	X (if used with LP-X103)	X (if used with LP-X103)	X (if used with LP-X103)
Reflector integration		-	-	-	-
Electric power input	Tab-on type	X	-	-	-
	Connector type	X	X	X	X
Light body material		Resin	Resin	Resin	Resin
Color	1	Silver(Painted)	Silver(Painted)	Black (material color)	Black (material color)
	2	-	Black(Painted)	-	-
	3	White(Painted)	White(Painted)	-	-
	4	Black(Material color)	-	-	-
	5	Gray(Material color)	-	-	-
	6	-	-	-	-
Attachment position	Light stay	X	-	-	-
	Below basket	-	-	-	-
	Fork center	-	-	-	-
	Handle bar	-	-	-	-
	On mud guard	-	X *	-	-
	Mud guard style stay	-	-	X	-
Compatible seat stay diameter (mm)	13	-	-	-	X
	16	-	-	-	X
	19	-	-	-	X
Compatible handle bar diameter (mm)	22.2	-	-	-	-
	25.4	-	-	-	-
	31.8	-	-	-	-
Switch	Auto	X	-	-	-
	Manual (on)	X	-	-	-
	Manual (off)	-	-	-	-
	Permanent	-	X	X	X
Electric wire color	Black	X	X	X	X
	Gray	-	X	-	X
Electric wire length (mm)	Tab-on type	675	-	-	-
	Connector type	125	Available	910	1140 / 1240
EZ cable clamp		-	-	3	5
Cord length adjuster		-	-	X	X
Compatible wheel size		-	22/24/26/27 inch	20/22/24 inch CTB	-
Average weight		-	-	-	-
Note		*Japanese market only	*Japanese market only, (attached with special stay. 2 kinds of stays are available. One for IHG, another for RH/FH)	*Japanese market only	*Japanese market only

Series		Tourney
Model no.		SM-RTX2
size	13mm	X
	16mm	X
	19mm	X
color	black	X
	gray	X
Note		Frame clip

Hub Dynamo

LP

DH

PM

SC

Series		DEORE XT	DEORE XT	DEORE XT	DEORE XT	DEORE XT	ALFINE
Model no.		DH-T785	DH-T785-1D	DH-T780	DH-T780-1N	DH-T708	DH-S701
Regulation	StVZO	X	X	X	X	X	X
	TIGBI	-	-	-	-	-	-
	JIS	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	Black	Black	Black	Black	-	Piano Black
	3	-	-	-	-	-	-
	4	-	-	-	-	-	-
	5	-	-	-	-	-	-
Type		Disc-brake	Disc-brake	Regular	Regular	Disc-brake	Disc-brake
Center lock mount type		X	X	-	-	X	X
Voltage (V)		6	6	6	6	6	6
Output (W)		3	1.5	3	1.5	3	1.5
QR type		X	X	X	X	.*	X
Nut type		-	-	-	-	-	-
O.L.D. (mm)		100	100	100	100	100	100
Flange Distance (mm)		52.1	54	60	60	52.1	54
Offset (mm)		3.95	3.1	0	0	3.9	3.1
Hole P.C.D. (mm)		70	57	70	57	70	57
Axle length (mm)		108	108	108	108	100	108
Spoke size		#14	#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke hole	24H	-	-	-	-	-	-
	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
Wheel size	26-28inch	X	-	X	-	X	-
	20-28inch	-	X	-	X	-	X
	18-28inch	-	-	-	-	-	-
	16-28inch	-	-	-	-	-	-
	24-28inch	-	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
	16-20inch	-	-	-	-	-	-
Compatible wheel size (mm)		(646-716)	(492-716)	(646-716)	(492-716)	(646-716)	(492-71)
Roller brake modulator grade	More than 26inch	High	-	-	-	-	-
		Standard	-	-	-	-	-
	20-24inch		-	-	-	-	-
Electric power output connector	J1 type	-	-	-	-	-	-
	J2 type	-	-	-	-	-	-
	E2 type	X	X	X	X	X	X
Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight		-	425g	-	425g	-	-
Note						*8mm Ethru axle (SM-AX60)	

Hub Dynamo

Series		ALFINE	DEORE LX	DEORE LX	DEORE LX	SHIMANO	SHIMANO
Model no.		DH-S501	DH-T675	DH-T670-3N	DH-T670-2N	DH-3D80	DH-3D72
Regulation	StVZO	X	X	X	-	X	X
	TiGBI	-	-	-	-	-	-
	JIS	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	Piano Black	Black	Black	Black	-	-
	3	-	-	-	-	-	-
	4	-	-	-	-	-	-
	5	-	-	-	-	-	-
Type		Disc-brake	Disc-brake	Regular	Regular	Disc-brake	Disc-brake
Center lock mount type		X	X	-	-	X	X
Voltage (V)		6	6	6	6	6	6
Output (W)		3	3	3	2.4	3	3
QR type		X	X	X	X	X	X
Nut type		-	-	-	-	-	-
O.L.D. (mm)		100	100	100	100	100	100
Flange Distance (mm)		52.1	52.1	60	60	52.1	52.1
Offset (mm)		3.8	4	0	0	3.95	3.8
Hole P.C.D. (mm)		70	70	70	70	70	70
Axle length (mm)		108	108	108	108	108	108
Spoke size		#14	#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke hole	24H	-	-	-	-	-	-
	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
Wheel size	26-28inch	X	X	X	X	X	X
	20-28inch	-	-	-	-	-	-
	18-28inch	-	-	-	-	-	-
	16-28inch	-	-	-	-	-	-
	24-28inch	-	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
	16-20inch	-	-	-	-	-	-
	Compatible wheel size (mm)	(646-716)	(646-716)	(646-716)	(646-716)	(646-716)	(646-716)
Roller brake modulator grade	More than 26inch	High	-	-	-	-	-
		Standard	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
Electric power output connector	J1 type	-	-	-	-	-	-
	J2 type	-	-	-	-	-	-
	E2 type	X	X	X	X	X	X
Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Average weight		-	559g	550g	550g	-	-
Note							

Hub Dynamo

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		DH-3D37-QR	DH-3D37-NT	DH-3D32-QR	DH-3D32-NT	DH-3N80	DH-2N80E
Regulation	StVZO	X	X	X	X	X	-
	TiGBI	-	-	-	-	-	-
	JIS	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	Black	Black	Black	Black	-	-
	3	-	-	-	-	-	-
	4	-	-	-	-	-	-
	5	-	-	-	-	-	-
Type		Disc-brake	Disc-brake	Disc-brake	Disc-brake	Regular	Regular
Center lock mount type		X	X	-	-	-	-
Voltage (V)		6	6	6	6	6	6
Output (W)		3	3	3	3	3	2.4
QR type		X	X	X	-	X	X
Nut type		-	-	-	X	-	-
O.L.D. (mm)		100	100	100	100	100	100
Flange Distance (mm)		51	51	51.1	51.1	60.0	60.0
Offset (mm)		4	4	4	3.6	0	0
Hole P.C.D. (mm)		74	74	74	74	70	70
Axle length (mm)		108	108	108	140	108	108
Spoke size		#14	#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke hole	24H	-	-	-	-	-	-
	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
Wheel size	26-28inch	-	-	-	-	X	X
	20-28inch	-	-	-	-	-	-
	18-28inch	-	-	-	-	-	-
	16-28inch	X	X	X	X	-	-
	24-28inch	-	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
	16-20inch	-	-	-	-	-	-
Compatible wheel size (mm)		(400-716)	(400-716)	(400-716)	(400-716)	(646-716)	(646-716)
Roller brake modulator grade	More than 26inch	High	-	-	-	-	-
		Standard	-	-	-	-	-
	20-24inch		-	-	-	-	-
Electric power output connector	J1 type	-	-	-	-	-	-
	J2 type	-	-	-	-	-	-
	E2 type	X	X	X	X	X	X
Finish		Painted	Painted	Painted(Clear)	Painted(Clear)	Anodized	Anodized
Average weight		-	-	-	-	490g	490g
Note							

LP

DH

PM

SC

Hub Dynamo

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		DH-3N72	DH-2N72	DH-3N31-QR	DH-3N31-NT	DH-2N35-QR	DH-2N35-NT
Regulation	StVZO	X	-	X	X	-	-
	TiGBI	-	-	X	X	-	-
	JIS	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	Black	-	Black	Black	Black	Black
	3	-	-	-	-	-	-
	4	-	-	-	-	-	-
	5	-	-	-	-	-	-
Type		Regular	Regular	Regular	Regular	Regular	Regular
Center lock mount type		-	-	-	-	-	-
Voltage (V)		6	6	6	6	6	6
Output (W)		3	2.4	3	3	2.4	2.4
QR type		X	X	X	-	X	-
Nut type		-	-	-	X	-	X
O.L.D. (mm)		100	100	100	100	100	100
Flange Distance (mm)		60.0	60.0	60.0	60.0	60.0	60.0
Offset (mm)		0	0	0	0	1	1
Hole P.C.D. (mm)		70	70	74	74	74	74
Axle length (mm)		108	108	108	140	108	140
Spoke size		#14	#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke hole	24H	-	-	-	-	-	-
	28H	-	-	-	X	-	-
	32H	X	X	X	X	X	-
	36H	X	X	X	X	X	X
Wheel size	26-28inch	X	X	-	-	-	-
	20-28inch	-	-	-	-	-	-
	18-28inch	-	-	-	-	-	-
	16-28inch	-	-	X	X	X	X
	24-28inch	-	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
	16-20inch	-	-	-	-	-	-
Compatible wheel size (mm)		(646-716)	(646-716)	(400-716)	(400-716)	(400-716)	(400-716)
Roller brake modulator grade	More than 26inch	High	-	-	-	-	-
		Standard	-	-	-	-	-
	20-24inch		-	-	-	-	-
Electric power output connector	J1 type	-	-	-	-	-	-
	J2 type	-	-	-	-	-	-
	E2 type	X	X	X	X	X	X
Finish		Anodized/Painted	Anodized	Painted	Painted	Painted	Painted
Average weight		-	-	-	-	-	-
Note							

Hub Dynamo

Series		Capreo	SHIMANO	Nexus	Nexus	Nexus	Nexus
Model no.		DH-F703	DH-F703-S	DH-C6000-3R-QR	DH-C6000-3R-NT	DH-C6000-2R	DH-C6000-1R
Regulation	StVZO	X	X	X	X	-	X
	TiGBI	-	-	-	X	-	-
	JIS	-	-	-	-	-	-
	Others	-	-	-	-	-	-
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	-	-	Black	Black	Black	Black
	3	-	-	-	-	-	-
	4	-	-	-	-	-	-
	5	-	-	-	-	-	-
Type		Regular	Regular	Hub Roller Brake	Hub Roller Brake	Hub Roller Brake	Hub Roller Brake
Center lock mount type		-	-	-	-	-	-
Voltage (V)		6	6	6	6	6	6
Output (W)		3	3	3	3	2.4	1.5
QR type		X	X	X	-	-	-
Nut type		-	-	-	X	X	X
O.L.D. (mm)		74	74	100	100	100	100
Flange Distance (mm)		44.6	44.6	58.1	58.1	58.1	58.1
Offset (mm)		0	0	5.2	4.7	4.7	4.7
Hole P.C.D. (mm)		74	74	76	76	76	76
Axle length (mm)		82	82	108	140	140	140
Spoke size		#14	#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke hole	24H	X	X	-	-	-	-
	28H	-	X	-	-	-	-
	32H	-	-	X	X	X	X
	36H	-	-	X	X	X	X
Wheel size	26-28inch	-	-	X	X	X	X
	20-28inch	-	-	-	-	-	-
	18-28inch	-	-	-	-	-	-
	16-28inch	-	-	-	-	-	-
	24-28inch	-	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
	16-20inch	X	X	-	-	-	-
Compatible wheel size (mm)	(400-536)	(400-536)	(646-716)	(646-716)	(646-716)	(646-716)	
Roller brake modulator grade	More than 26inch	High	-	-	X	X	X
		Standard	-	-	X	X	X
	20-24inch	-	-	-	-	-	-
Electric power output connector	J1 type	-	-	-	-	-	-
	J2 type	-	-	-	-	-	-
	E2 type	X	X	X	X	X	X
Finish		Anodized	Painted	Painted(Clear)	Painted(Clear)	Painted(Clear)	Painted(Clear)
Average weight		-	-	1007g	1027g	1027g	-
Note							

LP

DH

PM

SC

Hub Dynamo

Series		Nexus	Nexus	ALIVIO	Nexus	Nexus	Nexus
Model no.		DH-C6000-1N	DH-C3000-1N	DH-T4000-1N	DH-C2100-N	DH-C2100-NC	DH-2N40-J
Regulation	StVZO	X	X	X	-	-	-
	TiGBI	-	-	-	-	-	-
	JIS	-	-	-	-	-	X
	Others	-	-	-	VIA	VIA	-
Color	1	Silver	Silver	Silver	Silver	Silver	Silver
	2	Black	Black	Black	Black	Black	-
	3	-	-	-	-	-	-
	4	-	-	-	-	-	-
	5	-	-	-	-	-	-
Type		Regular	Regular	Regular	Regular	Regular	Regular
Center lock mount type		-	-	-	-	-	-
Voltage (V)		6	6	6	6	6	6
Output (W)		1.5	1.5	1.5	0.9	0.9	2.4
QR type		-	-	X	-	-	-
Nut type		X	X	-	X	X	X
O.L.D. (mm)		100	100	100	93	93	93
Flange Distance (mm)		56.0	56.0	56.0	58	58	60.0
Offset (mm)		0	0	0	0.5	0.5	0
Hole P.C.D. (mm)		67	67	67	60	60	69
Axle length (mm)		140	140	108	155	155	150
Spoke size		#14	#14	#14	#13 / #14	#13 / #14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke hole	24H	-	-	-	-	-	-
	28H	-	-	-	-	X	-
	32H	X	X	X	-	-	-
	36H	X	X	X	X	-	X
Wheel size	26-28inch	-	-	-	X	-	-
	20-28inch	X	X	X	-	-	-
	18-28inch	X	X	X	-	-	-
	16-28inch	-	-	-	-	-	-
	24-28inch	-	-	-	-	-	X
	20-24inch	-	-	-	-	X	-
	16-20inch	-	-	-	-	-	-
Compatible wheel size (mm)	(448-716)	(448-716)	(448-716)	-	-	-	
Roller brake modulator grade	More than 26inch	High	-	-	-	-	-
		Standard	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
Electric power output connector	J1 type	-	-	-	-	-	-
	J2 type	-	-	-	-	-	X
	E2 type	X	X	X	-	-	-
Finish		Painted(Clear)	Painted	Painted	Painted	Painted	Painted
Average weight		-	-	580g	491g	491g	-
Note							* Japanese market only

Hub Dynamo

Series		Nexus	SHIMANO	SHIMANO	Nexus	Nexus
Model no.		DH-2N40-JC	DH-2N40-JW	DH-2N40-JWC	DH-2R30-J	DH-2R30-JC
Regulation	StVZO	-	-	-	-	-
	TiGBI	-	-	-	-	-
	JIS	X	X	X	X	X
	Others	-	-	-	-	-
Color	1	Silver	Black	Black	Silver	Silver
	2	-	Silver	-	-	-
	3	-	-	-	-	-
	4	-	-	-	-	-
	5	-	-	-	-	-
Type		Regular	Regular	Regular	Hub Roller Brake	Hub Roller Brake
Center lock mount type		-	-	-	-	-
Voltage (V)		6	6	6	6	6
Output (W)		2.4	2.4	2.4	2.4	2.4
QR type		-	-	-	-	-
Nut type		X	X	X	X	X
O.L.D. (mm)		93	100	100	100	100
Flange Distance (mm)		60.0	60.0	60.0	58.1	58.1
Offset (mm)		0	2.7	2.7	4.8	4.8
Hole P.C.D. (mm)		69	69	69	74	74
Axle length (mm)		150	140	140	155	155
Spoke size		#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke hole	24H	-	-	-	-	-
	28H	X	-	-	-	-
	32H	-	-	-	-	-
	36H	-	X	X	X	X
Wheel size	26-28inch	-	-	-	-	-
	20-28inch	-	-	-	-	-
	18-28inch	-	-	-	-	-
	16-28inch	-	-	-	-	-
	24-28inch	-	X	-	X	-
	20-24inch	X	-	X	-	X
	16-20inch	-	-	-	-	-
Compatible wheel size (mm)	-	-	-	-	-	
Roller brake modulator grade	More than 26inch	High	-	-	-	-
		Standard	-	-	X	X
	20-24inch	-	-	-	-	-
Electric power output connector	J1 type	-	-	-	-	-
	J2 type	X	X	X	X	X
	E2 type	-	-	-	-	-
Finish		Painted	Painted	Painted	Painted	Painted
Average weight		-	-	-	-	-
Note		* Japanese market only	* Japanese market only	* Japanese market only	* Japanese market only	* Japanese market only

LP

DH

PM

SC

Power Modulator

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		SM-PM70	SM-PM60	SM-PM50	SM-PM40
Modulator level		Standard	High*	Standard	Standard
Mount type		Lead pipe	Outer casing	Outer casing	Lead pipe
Available lead pipe angle	90°	X	-	-	X
	135°	X	-	-	X
Compatible Brake	V-BRAKE	X**	X**	-	X**
	Mechanical disc brake (MTB)	-	-	X**	-
	Mechanical disc brake (Road)	-	-	-	-
	Caliper (new super SLR)	-	-	-	-
	Caliper (super SLR)	-	-	-	-
	Canti brake	-	-	-	-
	Roller brake	-	-	-	-
Compatible Brake Lever	V-BRAKE 4-finger	X***	X***	X***	X***
	V-BRAKE 3-finger	X***	X***	X***	X***
	V-BRAKE 2-finger	X	X	X	X
	Road	-	-	-	-
Body	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized + Laser Marking	Barrel and Sticker	Barrel and Printed	Barrel and Sticker
Lead pipe	Material	Stainless steel	-	-	Stainless steel
Average weight		-	-	-	-
Note		** Except brake integrated power modulator *** Power modulator should be used for front brake	*City use for Japanese market ** Except brake integrated power modulator*** Power modulator should be used for front brake	** Except brake integrated power modulator *** Power modulator should be used for front brake	** Except brake integrated power modulator *** Power modulator should be used for front brake

Cycle Computer

Series		Tourney
Model no.		SC-TX35
Compatible system		Mechanical
Attachement position		Handle Bar
Battery type		CR2032
Charging for cycle computer		-
Rear speeds		-
Front speeds		-
Number of programable wheel size		1
Wheel size range		20"-22"-24"-26"-27"-28"-700C
Remote switch		-
Communications		Wired
Memory capacity		-
PC software available		-
Detachable		X
Display spec	Size (ActiveArea)	42.5mm (1.7 inch)
	Font type	Segment
	Panel type	LCD
	Back light	-
	Touch panel	-
Display function	Gear indicator	-
	Speed	X
	Cadence	-
	Trip distance	-
	Odometer	X
	Heart rate	-
	Power	-
	Time/Clock	X
	Altitude/Slope	-
	Temperature	-
	Lap time	-
	Auto display start	X
Setting function	Display customizing	-
	Unit setting	-
	Language choice	-
	Beep on/off	-
	Changing data sampling rate	-
For Di2 system	Di2 battery indicator	-
	Adjust indicator	-
	System diagnosis	-
	Multi shifting speed setting	-
	Speeds switching	-
	Saver reset (crash recovery mode)	-
	E-tube connector	-
	Charging connector for built-in battery	-
	Compatible charger	-
	Power current indicator	-
	Light on/off indicator	-
	Assist mode display	-
Regenerator mode display	-	
Average weight		-
Note		Use with SM-TX35-A

LP

DH

PM

SC

Di2 spec

		<i>Page</i>	
<MTB>	Shifting Switch	186	SW
	Rear Derailleur	186	RD
	Front Derailleur	187	FD
	Mount Adapter for Front Derailleur	187	SMAD
	System Information Display	188	SC
<ROAD>	Shift/Brake Lever	188	ST
	Shifting Switch	189	SW
	Rear Derailleur	190	RD
	Front Derailleur	190	FD
	Front Derailleur Adapter	191	SMAD
	Wireless unit	191	EWV
<CITY TOURING/ COMFORT>	Internal Geared Hub	192	SG
	Motor Unit	193	MU
	Shift/Brake Lever	193	ST/BL
	Shifting Switch	193	SW
	Information Display	193	SC
<GENERAL>	Junction-A	194	JC
	Battery case	194	BTC
	Battery	195	BTR
	Battery mount	195	BMR
	Battery charger	195	BCR
	Cable	196	BCC
	Grommet	196	GM
	Electric Wire	196	EW
	Cord cover	196	EWC

Shifting Switch

Series	XTR	XTR
Model no.	SW-M9050-R	SW-M9050-L
Switch type	Shift Switch for rear	Shift Switch for front
Position	Clamp band, Right	Clamp band, Left
Compatible EW	EW-SD50	EW-SD50
Switch QTY	2	2
E-tube connector QTY	0	0
E-tube port QTY	1	1
Multiple input	2 step	-(X)
	Hold	-(X)
Suspension switch	-	-
Mount Position adjust	X	X
Average weight	64g/pc	64g/pc
Note		*User can use it for RD multishift

Rear Derailleur

Series	XTR	XTR	
Model no.	RD-M9050-SGS	RD-M9050-GS	
Pulley cage	SGS	GS	
Color	Series color	Series color	
Rear speeds	11	11	
Compatible chain	HG-X11	HG-X11	
Top-Normal spring type	SHADOW RD+	X	
Direct attachment (Conventional)	X	X	
Direct mount compatible	X*	X*	
Max. front difference	18T	10T	
Total capacity	41T**	33T**	
Low sprocket	Max.	40T	
	Min.	40T	
Top sprocket	Max.	11T	
	Min.	11T	
Fluoric coated link bushings	4	4	
Pulley	G pulley bearing	Sealed Bearing	Sealed Bearing
	T pulley bearing	Sealed Bearing	Sealed Bearing
	Teeth	11	11
	Bolts material	Stainless steel	Stainless steel
	Bolts retainer	X	X
Sunken type pulley bolt	X	X	
Bracket	Material	Aluminum	Aluminum
	Finish	Anodizing	Anodizing
B-Axle	Hollow axle	X	X
	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
B-Axle 2	Hollow axle	X	X
	Material	Stainless steel	Stainless steel
	Finish	-	-
Bracket body	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
P-Axle	Material	Steel	Steel
	Finish	-	-
Plate body	Material	CFRP	CFRP
	Finish	Painted	Painted
Outer link	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
Inner link	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
Outer plate	Material	CFRP	CFRP
	Finish	Painted	Painted
Inner plate	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
E-tube port (QTY)	1	1	
Average weight	292g	289g	
Note	*w/o bracket spec available. ** The Di2 system limits cross chain to prevent a chain from getting loose.	*w/o bracket spec available. ** The Di2 system limits cross chain to prevent a chain from getting loose.	

Front Derailleur

Series		XTR	XTR	
Model no.		FD-M9050	FD-M9070	
Color	1	Series Color	Series Color	
	2	-	-	
Speeds	Front	3	2	
	Rear	11	11	
Compatible chain		HG-X11	HG-X11	
Action	Top Swing	-	-	
	Down Swing	X	X	
	Side Swing	-	-	
Mount	Clamp band	28.6mm	w/ SM-FD905-L, SM-FD905-H	w/ SM-FD905-L, SM-FD905-H
		31.8mm	w/ SM-FD905-L, SM-FD905-H	w/ SM-FD905-L, SM-FD905-H
		34.9mm	w/ SM-FD905-L, SM-FD905-H	w/ SM-FD905-L, SM-FD905-H
	BB plate	-	-	
	Without BB plate	w/SM-FD905-E	w/SM-FD905-E	
	Direct mount	w/SM-FD905-D	w/SM-FD905-D	
Chain line (mm)		50	48.8	
Chain stay angle		66-69	66-69	
Top gear teeth		40T	38-34T	
Total capacity		18T	10T	
Applicable Top-Mid tooth difference		10T	-	
Link bushings		7	7	
Outer link	Material	Aluminum	Aluminum	
	Finish	Painted	Painted	
Inner link	Material	Aluminum	Aluminum	
	Finish	Painted	Painted	
Chain guide	Material	Aluminum	Aluminum	
	Finish	Nickel Plated	Nickel Plated	
E-tube port (QTY)		1	1	
Average weight		133g	115g	
Note				

Mount Adapter for Front Derailleur

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		SM-FD905-H	SM-FD905-L	SM-FD905-D	SM-FD905-E
Mount type		High clamp band	Low clamp band	Direct mount	E type mount
Front clamp band	Material	Aluminum	Aluminum	-	-
	Finish	Painted	Painted	-	-
Rear clamp band	Material	Aluminum	Aluminum	-	-
	Finish	Painted	Painted	-	-
Clamp band diameter	28.6mm	*X	*X	-	-
	31.8mm	*X	*X	-	-
	34.9mm	X	X	-	-
Direct mound bracket	Material	-	-	Aluminum	Aluminum
	Finish	-	-	Painted	Painted
FC Top gear teeth		40-34T	40-34T	40-34T	40-34T
Average weight		33g	38.5g	13.8g	27.1g
Note		*W/Multi Clamp Band	*W/Multi Clamp Band		

System Information Display

Series	SHIMANO	
Model no.	SC-M9050	
Compatible system	EW-SD50	
Attachment position	Handle bar*	
Rear speeds	11	
Front speeds	3	
Communications	E-tube	
PC software available	X	
Adjust button	X	
Display detachable	-	
Display function	Gear indicator	X
	Shifting Mode (Manual/Synchronized)	X
	Suspension Mode	X
	Shifting Adjust Mode	X
	Battery charge level	X
Setting function	Shifting adjust	X
For Di2 system	Shifting adjust indicator	X
	System diagnosis	X
	Charging port for built-in battery	X
	Compatible charger	SM-BCR2
	Synchronized shift Mode change	X
E-tube port	QTY	3
Average weight		30g
Note		*2 Spec of clamp band diameter ϕ 31.8 and ϕ 35.

Shift/Brake Lever

Series		DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA
Model no.		ST-9070	ST-9071	ST-6870	ST-6871
Lever type		Dual Control Lever	TT/Triathlon Dual Control Lever	Dual Control Lever	TT/Triathlon Dual Control Lever
Shift lever specifications	Front speeds	2	2	2	2
	Rear speeds	11	11	11	11
	Flight Deck operational switch	-	-	-	-
Brake lever specifications	Reach adjust	X	X	X	X
	Clamp band (mm)	23.8 / 24.2	INNER DIA. 19.0 - 22.5	23.8 / 24.2	INNER DIA. 19.0 - 22.5
	SLR-EV	X	X	X	X
Bracket	Material	CFRP	CFRP	GFRP	CFRP
	Finish	-	-	-	-
Electric button	Material	GFRP	GFRP	GFRP	GFRP
	Finish	-	-	-	-
Lever	Material	CFRP	CFRP	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Anodized
E-tube connector (QTY)		0	2	0	2
E-tube port (QTY)		4	0	4	0
Port for remote sprinter shifter (QTY)		2	0	2	0
Average weight		237g/pair	128g/pair	295g/pair	142g/pair
Note					

Shift/Brake Lever

Disc Brake

Series		SHIMANO	
Model no.		ST-R785	
Color	1	Gray	
	2	-	
Shifter type		Dual Control Lever	
Shift lever specifications	Front speeds	2	
	Rear speeds	11	
	Flight Deck operational SW	-	
	E-tube connector (QTY)	0	
	E-tube port (QTY)	1 (each ST R/L)	
	Compatible RD type	Road 11speed	
	SL position adjust	-	
	Multiple input	2 step	-
		Hold	X -
	Suspension switch	X -	
Brake lever specifications	Lever size (Finger)	-	
	Brake hose (Kit)	SM-BH595B	
	Hose joint	Straight	
	Brake hose color (kit)	1	Black
		2	White
	Recommended brake caliper	BR-R785 BR-RS785	
	Brake fluid	SHIMANO Mineral Oil	SHIMANO Mineral
	Reach adjust	Toolless	-
		Tool	X
Funnel bleeding	X		
Free stroke adjust	X		
Servo wave mechanism	X		
Clamp band	Open clamp	-	
	Inner diameter	23.8-24.2	
Bracket	Material	Aluminum	
	Finish	Painted	
Brake lever	Material	Aluminum	
	Finish	Painted	
Shifter Lever body	Main	GFRP	
	Release	GFRP	
Master cylinder	Material	Aluminum	
	Finish	-	
Average weight		500g/pair	
Note			

Shifting Switch

Series	DURA-ACE	SHIMANO	SHIMANO	SHIMANO
Model no.	SW-9071	SW-R671	SW-R610	SW-R600
Switch type	Remote TT/Time trial shifter New 1 button design	Remote Triathlon shifter Current 2 button design	Remote sprinter shifter	Remote satellite shifter (Climbing shifter)
Position	DH Bar	DH Bar	Anywhere	Anywhere
Compatible EW	EW-SD50	EW-SD50	-	EW-SD50
E-tube connector (QTY)	2	2	0	1
Connector for remote sprinter shifter (QTY)	0	0	2	0
E-tube port (QTY)	0	0	0	0
Port for remote sprinter shifter (QTY)	0	0	0	0
Average weight	60g/pair	95g/pair	10g/pair	30g
Note				

- SW
- RD
- FD
- SMAD
- SC
- ST
- SW
- RD
- FD
- SMAD
- EWV
- SG
- MU
- ST/BL
- SW
- SC
- JC
- BTC
- BTR
- BMR
- BCR
- BCC
- GM
- EW
- EWV

Rear Derailleur

Series		DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA
Model no.		RD-9070-SS	RD-6870-SS	RD-6870-GS	RD-6770-SS
Pulley cage		SS	SS	GS	SS
Rear speeds		11	11	11	10
Max front difference		16T	16T	16T	16T
Total capacity		33T	33T	37T	33T
Max. low sprocket		28T	28T	32T	28T
Min. low sprocket		23T	23T	28T	23T
Max. top sprocket		14T	14T	12T	12T
Min. top sprocket		11T	11T	11T	11T
Riveted adapter available		-	-	-	-
Direct attachment		X	X	X	X
Fluoric coated link bushing		4	4	4	4
11T pulley		X	X	X	X
Sealed bearing guide pulley		X	X	X	-
Sealed bearing tension pulley		X	X	X	X
Bracket body	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Painted	Painted	Painted
Plate body	Material	CFRP	CFRP	CFRP	CFRP
	Finish	Painted	Painted	Painted	Painted
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Painted	Painted	Painted
Inner link	Material	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Painted	Painted	Painted
Outer plate	Material	CFRP	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
Inner plate	Material	CFRP	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
Average weight		217g	250g	260g	270g
Note					

Front Derailleur

Series		DURA-ACE	ULTEGRA	ULTEGRA
Model no.		FD-9070-F	FD-6870-F	FD-6770-F
Color	1	Series Color	Series Color	Series Color
	2	-	-	-
Speeds	Front	2	2	2
	Rear	11	11	10
Compatible chain		HG-EV 11-speed/ HG-X11	HG-EV 11-speed/ HG-X11	HG 10-speed
Action	Top Swing	-	-	-
	Down Swing	X	X	X
Mount	Clamp Band1	-	-	-
	Clamp Band2	-	-	-
	Clamp Band3	-	-	-
	Brazed-On	X	X	X
Chain line (mm)		43.5	43.5	43.5
Chain stay angle		61-66°	61-66°	61-66°
Top gear teeth		50-55T	46-53T	50-56T
Total capacity		16T	16T	16T
Link bushings		4	4	4
Front clamp band	Material	-	-	-
	Finish	-	-	-
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Painted	Painted
Outer link	Material	CFRP	Resin	ZDC
	Finish	IP	Painted	Painted
Inner link	Material	Titanium	Steel	Steel
	Finish	-	Plated	Plated
Chain guide	Material	Aluminum	Steel	Steel
	Finish	Nickel Plated	Chrome Plated	Plated
Average weight		114g	155g	167g
Note				

Front Derailleur

Adapter

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		SM-AD90-L	SM-AD90-M	SM-AD90-MS	SM-AD67-L	SM-AD67-M	SM-AD67-MS
Front Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Painted	Painted
Rear Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painted	Painted	Painted
Clamp band diameter	28.6mm	-	-	X*	-	-	X*
	31.8mm	-	X	X	-	X	X
	34.9mm	X	-	-	X	-	-
Average weight		-	-	-	-	-	-
Note			*W/Multi Clamp Band	*W/Multi Clamp Band			*W/Multi Clamp Band

Wireless unit

Series		SHIMANO
Model no.		SM-EWW01
Wireless system		ANT private*
Number of receptors		2
Compatible system		E-tube system (9070, 6870, 6770, or future model)
Function	Gear position	X
	Di2 Battery level	X
	Adjust mode display	X **
Average weight		-
Note		* ANT private has compatibility with ANT+ cycle computer but not freely open profile ** PRO cycle computer has no "Adjust mode display" function.

SW

RD

FD

SMAD

SC

ST

SW

RD

FD

SMAD

EWW

SG

MU

ST/BL

SW

SC

JC

BTC

BTR

BMR

BCR

BCC

GM

EW

EWC

Internal Geared Hub

Series		ALFINE	ALFINE	Nexus	Nexus	Nexus
Function name		Inter-11	Inter-8	Inter-8	Inter-8	Inter-8
Model no.		SG-S705	SG-S505	SG-C6060-8R	SG-C6060-8V	SG-C6060-8C
Color	1	Silver	Silver	Silver	Silver	Silver
	2	Black	Black	Black	Black	Black
	3	-	-	-	-	-
Brake Type	Mount Type	Center Lock Type	Center Lock Type	Inter-M	V-BRAKE	Coaster
	Recommended Model	BR-S701	BR-S701	BR-IM81-R BR-IM80-R BR-IM55-R BR-IM45-R	-	-
Speeds		11	8	8	8	8
Gear ratio	Total	409%	307%	307%	307%	307%
	1	0.527	0.527	0.527	0.527	0.527
	2	0.681	0.644	0.644	0.644	0.644
	3	0.770	0.748	0.748	0.748	0.748
	4	0.878	0.851	0.851	0.851	0.851
	5	0.995	1	1	1	1
	6	1.134	1.223	1.223	1.223	1.223
	7	1.292	1.419	1.419	1.419	1.419
	8	1.462	1.615	1.615	1.615	1.615
	9	1.667	-	-	-	-
	10	1.888	-	-	-	-
Top-Normal		-	-	-	-	-
Silent clutch		X	X	X	X	X
Gear change support mechanism		X	X	X	X	X
Shifting power modulator		X	X	X	X	X
Driving efficiency		HIGH	HIGH	HIGH	HIGH	HIGH
w/ Left hand dust cap		-	-	-	X	-
O.L.D. (mm)		135	135	135	135	135
Spoke size		#13 / #14	#13 / #14	#13 / #14	#13 / #14	#13 / #14
Spoke hole	28H	-	-	-	-	-
	32H	X	X	-	-	X
	36H	X	X	X	X	X
	Others	-	-	-	-	-
Axle length (mm)	182	-	-	-	-	-
	184	-	-	-	-	-
	187	X	X	X	X	X
	193	-	-	-	-	-
	Others	-	-	-	-	-
Flange distance (mm)		57.3	57.3	58.3	58.3	58.3
Flange diameter (mm)		104.3	104.3	105.2	105.2	105.2
Flange width (mm)	Right	3.2	3.2	3.2	3.2	3.2
	Left	3.2	3.2	3.2	3.2	3.2
Offset (mm)		3.15	3.15	3.1	3.1	3.7
P.C.D Left / Right. (mm)		92.6	92.6	92.6	92.6	92.6
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted	Painted
Average weight		1665g	1680g	1645g	1668g	2055g
Note						

Motor Unit

Series	ALFINE
Model no.	MU-S705
Compatible internal geared hub	SG-S705 SG-S505 SG-C6060
Compatible speed	11/8-speed
Electric power connector	E-tube (EW-SD50)
Average weight	-
Note	

Shift/Brake Lever

Series		ALFINE	ALFINE
Model no.		ST-S705-R	BL-S705-L
Lever type		Dual Control Lever	Brake lever
Shift lever specifications	Front speeds	-	-
	Rear speeds	Inter-11 Inter-8	-
	Flight Deck compatible	-	-
Brake lever specifications	Reach adjust	X	X
	Clamp band (mm)	23.8 – 24.2	23.8 – 24.2
	Super SLR	X	X
Bracket	Material	GFRP	GFRP
	Finish	-	-
Electric button	Material	GFRP	-
	Finish	-	-
Lever	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Average weight		-	-
Note			

Shifting Switch

Series	ALFINE
Model no.	SW-S705
Lever type	Shifting switch
Right SW	X
Left SW	-
Manual shifting switch	X
Display mode change	-
Shift mode (Auto/ Manual) change	-
Auto mode select switch	-
SC integration	-
Electric power connector	E-tube (EW-SD50)
Compatible SG	SG-S705 SG-S505
Compatible brake lever	BL-S700
Average weight	-
Note	

Information Display

Series		ALFINE
Model no.		SC-S705
Compatible system		Di2(ALFINE only)
Attachement position		Handle Bar
Battery type		-
Charging for cycle computer		-
Rear speeds		8 / 11
Front speeds		-
Number of programable wheel size		-
Wheel size range		-
Remote switch		-
Communications		E-tube
Memory capacity		-
PC software available		-
Detachable		-
Display spec	Size(ViewArea)	32x11(mm)
	Font type	Segment
	Panel type	OLED
	Back light	-
Display function	Touch panel	-
	Gear indicator	X
	Speed	-
	Cadence	-
	Trip distance	-
	Odometer	-
	Heart rate	-
	Power	-
	Time/Clock	-
	Altitude/Slope	-
	Temperature	-
	Lap time	-
	Auto display start	X
	Setting function	Display customizing
Unit setting		-
Language choice		-
Beep on/off		-
For Di2 system	Changing data sampling rate	-
	Di2 battery Indicator	X
	Adjust Indicator	X
	System diagnosis	X
	Multi shifting speed setting	-
	Speeds switching	-
	Saver reset (crash recovery mode)	-
	E-tube port	2 pcs
	Charging connector for built-in battery	1 pcs
	Compatible charger	SM-BCR2
	Power current Indicator	-
	Light on/off indicator	-
	Assist mode display	-
Regenarator mode display	-	
Average weight		-
Note		

Junction-A

Series	DURA-ACE	DURA-ACE	ULTEGRA
Model no.	SM-EW90-A	SM-EW90-B	SM-EW67-A-E
E-tube port (pcs)	3	5	1
E-tube connector (pcs)	0	0	2
Charging port (pcs)	1	1	-
Compatible head display unit	-	-	-
Wireless system	-	-	-
Average weight	-	-	-
Note			

Junction-B

Series	SHIMANO	SHIMANO
Model no.	SM-JC40	SM-JC41
E-tube port QTY	4	4
Specification	4 connectors type of junction	4 connectors type of junction
Average weight	-	-
Note	For External spec (fixed on frame with screw)	For built-in type

Battery case

Series		SHIMANO
Model no.		SM-BTC1
Specification	w/junction	X*
	w/o junction	X
Mount		Bolt on bottle cage mounting thread
Junction	E-tube port (pcs)	6*
	E-tube connector (pcs)	0*
	Compatible battery	SM-BTR2
	Compatible EW	EW-SD50
Note		* W/junction spec include one special cable for connecting battery and junction

Battery

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.	SM-BTR2-1	SM-BTR2-2	SM-BTR1 type1	SM-BTR1 type2
Type	Built-in	Built-in	External	External
Compatible charger	SM-BCR2	SM-BCR2	SM-BCR1	SM-BCR1
Average weight	-	-	-	-
Note	With recycle marks	Without recycle mark	With recycle mark	Without recycle mark

Battery mount

Series	SHIMANO	SHIMANO	SHIMANO
Model no.	SM-BMR2-L	SM-BMR2-S	SM-BMR2-I
Specification	Long size battery mount	Short size battery mount	Long size battery mount
Wire routing	External	External/Inter	Internal
Compatible EW	EW-SD50	EW-SD50	EW-SD50
Average weight	-	-	-
Note			

Battery charger

Series	SHIMANO	SHIMANO
Model no.	SM-BCR2	SM-BCR1
Compatible battery	SM-BTR2	SM-BTR1
Charging cord	Including SM-BCR2	SM-BCC1
Average weight	-	-
Note		

SW

RD

FD

SMAD

SC

ST

SW

RD

FD

SMAD

EWV

SG

MU

ST/BL

SW

SC

JC

BTC

BTR

BMR

BCR

BCC

GM

EW

EWC

Cable

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.	SM-BCC1-1	SM-BCC1-2	SM-BCC1-3	SM-BCC1-4	SM-BCC1-5	SM-BCC1-6
Typical example country / Region	Europe	USA Canada	Japan	Australia New Zealand	China	U.K
Rated power input (V)	220	120	100	240	220	240
Cable length (m)	1	2	1	1	1	1
Note						

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.	SM-BCC1-7	SM-BCC1-8	SM-BCC1-9	SM-BCC1-10	SM-BCC1-11	SM-BCC1-12
Typical example country / Region	Korea	Taiwan	South-Africa	Argentina	Brazil	Brazil
Rated power input (V)	220	110	220/230	220	230	127/220
Cable length (m)	1	1	1	1	1	1
Note						

Grommet

Series	SHIMANO	SHIMANO
Model no.	SM-GM01	SM-GM02
Compatible EW	EW-SD50	EW-SD50
Hole dimension on frame	6 mm circle	7 x 8 mm
Average weight	-	-
Note		

Electric Wire

Series	SHIMANO	SHIMANO
Model no.	EW-SD50	EW-SD50-I
Type	For External routing	For Built-in routing
Average weight	-	-
Note		

Cord cover

Series	SHIMANO
Model no.	SM-EWC2
Specification	Long/Short
Color	Black/White
Compatible EW	EW-SD50
Note	

SHIMANO