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	2005 new
	revise just after NPP

**\*\*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.

# Rear Derailleur (ATB / NEXAVE) Specifications

Series	XTR	XTR	XTR	XTR	SAINT	SAINT	SAINT	SAINT
Model No.	RD-M960	RD-M960	RD-M952	RD-M952	RD-M805	RD-M805	RD-M805	RD-M800
Pulley Cage	GS	SGS	GS	SGS	SS	GS	SGS	SS
Speeds	9	9	9	9	9	9	9	9
Compatible with LG sprocket	-	-	-	-	-	-	-	-
Low-Normal Spring Type	X	X	-	-	X	X	X	X
Max Front Difference	22T	22T	22T	22T	Front single use	10T	22T	Front single use
Total Capacity	33T	43T	33T	43T	29T	33T	45T	29T
Max. Rear Sprocket	34T	34T	34T	34T	34T	34T	34T	34T
Min. Rear Sprocket	11T	11T	11T	11T	11T	11T	11T	11T
Riveted Adapter	Road type	-	-	-	-	-	-	-
	Bmx-Track type	-	-	-	-	-	-	-
Dropout	for Road type	-	-	-	-	X	X	X
	for Bmx-Track type	-	-	-	-	-	-	X
Direct Attachment	X	X	X	X	-	-	-	-
Detachable Bracket	-	-	-	-	-	-	-	-
Wheel-Type Cable Guide	-	-	-	-	-	-	-	-
Fluoric Coated Link Bushings	4	4	4	4	2	2	2	2
Parallelogram Spring Adjuster	-	-	X	X	-	-	-	-
Sealed Bearing Guide Pulley	X	X	X	X	-	-	-	-
Sealed Bearing Tension Pulley	X	X	X	X	X	X	X	X
11T Pulley	X	X	X	X	X	X	X	X
Pulley Bolt Retainer	X	X	-	-	X	X	X	X
Bracket Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Painted	Painted	Painted
Plate Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Painted	Painted	Painted
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Painted	Painted	Painted
Inner Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Anodized	Anodized	Anodized	Plated	Plated	Plated
Outer Plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Inner Plate	Material	Aluminum	Aluminum	Aluminum	Steel	Aluminum	Aluminum	Steel
	Finish	Anodized	Anodized	Anodized	Painted	Anodized	Anodized	Anodized
Removable Rubber Bumper	X	X	-	-	-	-	-	-
Adjustable Bump Stopper	-	-	-	-	X	X	X	X
NOTE					Compatible with FH-M805 (12mm hub axle)	Compatible with FH-M805 (12mm hub axle)	Compatible with FH-M805 (12mm hub axle)	Compatible with FH-M800 (10mm hub axle)

# Rear Derailleur (ATB / NEXAVE) Specifications

Series	SAINT	SAINT	Deore-XT	Deore-XT	Deore-XT	Deore-XT	HONE	HONE
Model No.	RD-M800	RD-M800	RD-M760	RD-M760	RD-M751	RD-M751	RD-M600	RD-M600
Pulley Cage	GS	SGS	GS	SGS	GS	SGS	GS	SGS
Speeds	9	9	9	9	9	9	9	9
Compatible with LG sprocket	-	-	-	-	-	-	-	-
Low-Normal Spring Type	X	X	X	X	-	-	X	X
Max Front Difference	10T	22T	22T	22T	22T	22T	22T	22T
Total Capacity	33T	45T	33T	45T	33T	45T	33T	45T
Max. Rear Sprocket	34T	34T	34T	34T	34T	34T	34T	34T
Min. Rear Sprocket	11T	11T	11T	11T	11T	11T	11T	11T
Riveted Adapter	Road type	-	-	-	-	-	-	-
	Bmx-Track type	-	-	-	-	-	-	-
Dropout	for Road type	X	X	-	-	-	X	X
	for Bmx-Track type	X	X	-	-	-	X	X
Direct Attachment	-	-	X	X	X	X	-	-
Detachable Bracket	-	-	-	-	-	-	-	-
Wheel-Type Cable Guide	-	-	-	-	-	-	-	-
Fluoric Coated Link Bushings	2	2	4	4	4	4	2	2
Parallelogram Spring Adjuster	-	-	-	-	-	-	-	-
Sealed Bearing Guide Pulley	-	-	-	-	-	-	-	-
Sealed Bearing Tension Pulley	X	X	X	X	X	X	-	-
11T Pulley	X	X	X	X	X	X	X	X
Pulley Bolt Retainer	X	X	-	-	-	-	-	-
Bracket Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Plate Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Inner Link	Material	Steel	Steel	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Plated	Plated	Painted	Painted	Painted	Painted	Painted
Outer Plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Painted
Inner Plate	Material	Aluminum	Steel	Aluminum	Steel	Aluminum	Steel	Steel
	Finish	Anodized	Painted	Anodized	Painted	Anodized	Painted	Painted
Removable Rubber Bumper	-	-	X	X	X	X	-	-
Adjustable Bump Stopper	X	X	-	-	-	-	X	X
NOTE	Compatible with FH-M800 (10mm hub axle)	Compatible with FH-M800 (10mm hub axle)					Compatible with FH-M600	Compatible with FH-M600

# Rear Derailleur (ATB / NEXAVE) Specifications

Series	Deore LX	Deore LX	Deore LX	Deore LX	Deore	Deore	Deore	Deore	Alivio
Model No.	RD-M580	RD-M580	RD-M571	RD-M571	RD-M530-L	RD-M530-S	RD-M511-L	RD-M511-S	RD-M410-L
Pulley Cage	GS	SGS	GS	SGS	SGS	SGS	SGS	SGS	SGS
Speeds	9	9	9	9	9	9	9	9	8/7
Compatible with LG sprocket	-	-	-	-	-	-	-	-	-
Low-Normal Spring Type	X	X	-	-	X	X	-	-	-
Max Front Difference	22T	22T	22T	22T	22T	22T	22T	22T	20T
Total Capacity	33T	45T	33T	45T	45T	45T	45T	45T	43T
Max. Rear Sprocket	34T	34T	34T	34T	34T	34T	34T	34T	34T
Min. Rear Sprocket	11T	11T	11T	11T	11T	11T	11T	11T	11T
Riveted Adapter	Road type	-	-	-	-	-	-	-	-
	Bmx-Track type	-	-	-	-	-	-	-	-
Dropout	for Road type	-	-	-	-	-	-	-	-
	for Bmx-Track type	-	-	-	-	-	-	-	-
Direct Attachment	X	X	X	X	X	X	X	X	X
Detachable Bracket	-	-	-	-	-	-	-	-	-
Wheel-Type Cable Guide	-	-	-	-	-	-	-	-	-
Fluoric Coated Link Bushings	2	2	2	2	2	2	2	2	2
Parallelogram Spring Adjuster	-	-	-	-	-	-	-	-	-
Sealed Bearing Guide Pulley	-	-	-	-	-	-	-	-	-
Sealed Bearing Tension Pulley	-	-	-	-	-	-	-	-	-
11T Pulley	X	X	X	X	X	X	X	X	13/13T
Pulley Bolt Retainer	-	-	-	-	-	-	-	-	-
Bracket Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Plate Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Resin
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Inner Link	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Outer Plate	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Inner Plate	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Removable Rubber Bumper	X	X	X	X	-	-	-	-	-
Adjustable Bump Stopper	-	-	-	-	-	-	-	-	-
NOTE					Black Version	Silver Version	Black Version	Silver Version	Black Version

# Rear Derailleur (ATB / NEXAVE) Specifications

Series		Alivio	Acera	Acera	Altus	Altus	Tourney	Tourney	Tourney
Model No.		RD-M410-S	RD-M340-L	RD-M340-S	RD-CT95-L	RD-CT95-S	RD-TX70	RD-TX50	RD-TX30
Pulley Cage		SGS	Smart	Smart	Smart	Smart	Smart	Smart	Smart
Speeds		8/7	7/8	7/8	7/8	7/8	6/7	6/7	6/7
Compatible with LG sprocket		-	-	-	-	-	-	-	-
Low-Normal Spring Type		-	-	-	-	-	-	-	-
Max Front Difference		20T	20T	20T	20T	20T	20T	20T	20T
Total Capacity		43T	43T	43T	43T	43T	43T	43T	43T
Max. Rear Sprocket		34T	34T	34T	34T	34T	28-34T	28-34T	28-34T
Min. Rear Sprocket		11T	11T	11T	11T	11T	11T	11T	11T
Riveted Adapter	Road type	-	-	-	-	-	X	X	X
	Bmx-Track type	-	-	-	-	-	-	X	X
Dropout	for Road type	-	-	-	-	-	-	-	-
	for Bmx-Track type	-	-	-	-	-	-	-	-
Direct Attachment		X	X	X	X	X	X	X	X
Detachable Bracket		-	-	-	-	-	-	-	-
Wheel-Type Cable Guide		-	-	-	-	-	X	X	-
Fluoric Coated Link Bushings		2	1	1	-	-	-	-	-
Parallelogram Spring Adjuster		-	-	-	-	-	-	-	-
Sealed Bearing Guide Pulley		-	-	-	-	-	-	-	-
Sealed Bearing Tension Pulley		-	-	-	-	-	-	-	-
11T Pulley		13/13T	13/15T	13/15T	13/15T	13/15T	13/15T	13/15T	13/15T
Pulley Bolt Retainer		-	-	-	-	-	-	-	-
Bracket Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Resin	Resin	Resin
	Finish	Painted	Painted	Painted	Painted	Painted	-	-	-
Plate Body	Material	Resin	Resin	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	-	-	-	-	-	-	-	-
Outer Link	Material	Aluminum	Steel	Steel	Steel	Steel	Aluminum	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Inner Link	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Outer Plate	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Chrome Plated
Inner Plate	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Removable Rubber Bumper		-	-	-	-	-	-	-	-
Adjustable Bump Stopper		-	-	-	-	-	-	-	-
NOTE		Silver Version	Black Version	Silver Version	Black Version	Silver Version			

# Rear Derailleur (ATB / NEXAVE) Specifications

Series	Tourney	Tourney	Tourney	Tourney	Tourney	NEXAVE	NEXAVE	NEXAVE
Model No.	RD-FT30	RD-TY18	RD-TY18	RD-TY15	RD-TY15	RD-C810	RD-C600	RD-C531
Pulley Cage	SS	SS	GS	SS	GS	SGS	Smart	SS
Speeds	6/7	6	6	5	5	8	9	8
Compatible with LG sprocket	-	-	-	-	-	X	-	X
Low-Normal Spring Type	-	-	-	-	-	-	X	X
Max Front Difference	Front single use	13T	20T	13T	20T	22T	12T	Front single use
Total Capacity	17T	28T	34T	28T	34T	44T	35T	22T
Max. Rear Sprocket	28T	28T	28T	28T	28T	33T	32-34T	33T
Min. Rear Sprocket	11T	14T	14T	14T	14T	11T	11T	11T
Riveted Adapter	Road type	X	X	X	X	X	-	-
	Bmx-Track type	X	-	-	X	-	-	-
Dropout	for Road type	-	-	-	-	-	-	-
	for Bmx-Track type	-	-	-	-	-	-	-
Direct Attachment	X	X	X	X	X	X	X	X
Detachable Bracket	-	-	-	-	-	-	-	-
Wheel-Type Cable Guide	X	-	-	-	-	-	X	X
Fluoric Coated Link Bushings	-	-	-	-	-	4	3	2
Parallelogram Spring Adjuster	-	-	-	-	-	-	-	-
Sealed Bearing Guide Pulley	-	-	-	-	-	-	-	-
Sealed Bearing Tension Pulley	-	-	-	-	-	-	-	-
11T Pulley	11T	-	-	-	-	X	13/15T	13/13T
Pulley Bolt Retainer	-	-	-	-	-	-	-	-
Bracket Body	Material	Steel	Steel	Steel	Steel	Steel	Aluminum	Aluminum
	Finish	Painted	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Painted	Painted
Plate Body	Material	Steel	Steel	Steel	Steel	Steel	Aluminum	Aluminum
	Finish	Painted	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Painted	Painted
Outer Link	Material	Steel	Steel	Steel	Steel	Steel	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Zinc Plated	Zinc Plated	Painted	Painted
Inner Link	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Painted	Pearl Bright
Outer Plate	Material	Steel	Steel	Steel	Steel	Steel	Aluminum	Steel
	Finish	Pearl Bright	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Anodized	Painted
Inner Plate	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Pearl Bright	Pearl Bright
Removable Rubber Bumper	-	-	-	-	-	-	-	-
Adjustable Bump Stopper	-	-	-	-	-	-	-	-
NOTE	For folding bike with over 16inch wheel.							

## Rear Derailleur (ATB / NEXAVE) Specifications

Series		NEXAVE	NEXAVE
Model No.		RD-C505	RD-T300
Pulley Cage		Smart	MGS
Speeds		8	7
Compatible with LG sprocket		X	-
Low-Normal Spring Type		X	X
Max Front Difference		22T	20T
Total Capacity		44T	43T
Max. Rear Sprocket		33T	34T
Min. Rear Sprocket		11T	11T
Riveted Adapter	Road type	-	X
	Bmx-Track type	-	-
Dropout	for Road type	-	-
	for Bmx-Track type	-	-
Direct Attachment		X	X
Detachable Bracket		-	X
Wheel-Type Cable Guide		X	-
Fluoric Coated Link Bushings		3	3
Parallelogram Spring Adjuster		-	-
Sealed Bearing Guide Pulley		-	-
Sealed Bearing Tension Pulley		-	-
11T Pulley		13/15T	X
Pulley Bolt Retainer		-	-
Bracket Body	Material	Aluminum	Aluminum
	Finish	Painted	Barrel
Plate Body	Material	Aluminum	Aluminum
	Finish	Painted	Barrel
Outer Link	Material	Aluminum	Steel
	Finish	Painted	Pearl Bright
Inner Link	Material	Steel	Steel
	Finish	Painted	Zinc Plated
Outer Plate	Material	Steel	Steel
	Finish	Painted	Pearl Bright
Inner Plate	Material	Steel	Steel
	Finish	Painted	Zinc Plated
Removable Rubber Bumper		-	-
Adjustable Bump Stopper		-	-
NOTE			

# Front Derailleur (ATB / NEXAVE) Specifications

Series		XTR	XTR	XTR	SAINT	SAINT	
Model No.		FD-M961	FD-M960	FD-M960-E	FD-M806	FD-M805	
Rear Speeds		9	9	9	9	9	
Front SIS		X	X	X	X	X	
Chain Ring		Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	
Top Swing Link		-	X	X	-	X	
E-type BB Mount		-	-	X	-	-	
Applicable Chain Line		50mm	50mm	50mm	57.5	57.5	
Top Gear Teeth		44T	44T	44T	44T	44T	
Total Capacity		22T	22T	22T	22T	22T	
Top-Middle Min. Capacity		12T	12T	12T	12T	12T	
Dual Pull		X	X	X	X	X	
Multi Clamp Band		X	X	-	X	X	
Powerchange Mechanism		-	-	-	-	-	
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	-	
	28.6mm	Top	X (w/AdapterS)	X (w/AdapterS)	X	X (w/AdapterS)	X (w/AdapterS)
		Down	X (w/AdapterS)	X (w/AdapterS)	X	X (w/AdapterS)	X (w/AdapterS)
	31.8mm	Top	X	X	X	X (w/AdapterM)	X (w/AdapterM)
		Down	X	X	X	X (w/AdapterM)	X (w/AdapterM)
	34.9mm	Top	X	X	X	X	X
		Down	X	X	X	X	X
	Chainstay Angle 63 to 66 degrees	Braze-on		-	-	-	-
28.6mm		Top	-	-	-	-	-
		Down	-	-	-	-	-
31.8mm		Top	-	-	-	-	-
		Down	-	-	-	-	-
34.9mm		Top	-	-	-	-	-
		Down	-	-	-	-	-
Front Clamp Band		Material	Aluminum	Aluminum	-	Aluminum	Aluminum
	Finish	Anodized	Anodized	-	Painted	Painted	
Rear Clamp Band	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	
	Finish	Anodized	Anodized	-	Painted	Painted	
BB Plate	Material	-	-	Aluminum	-	-	
Outer Link	Material	Aluminum	Steel	Steel	Aluminum	Steel	
	Finish	Anodized	Painted	Painted	Painted	Painted	
Inner Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Painted	
Chain Guide	Material	Steel	Aluminum	Aluminum	Steel	Steel	
	Finish	Chrome Plated	Nickel Plated	Nickel Plated	Chrome Plated	Chrome Plated	
Note		*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	For 150mm O.L.D with 83mm BB shell width *For MTB(SAINT/HONE) Double FC	For 150mm O.L.D with 83mm BB shell width *For MTB(SAINT/HONE) Double FC	



# Front Derailleur (ATB / NEXAVE) Specifications

Series		Deore XT	Deore XT	Deore XT	Deore XT	Deore XT	HONE	
Model No.		FD-M761A-3	FD-M761A-6	FD-M760A-3	FD-M760A-6	FD-M760A-E	FD-M601	
Rear Speeds		9	9	9	9	9	9	
Front SIS		X	X	X	X	X	X	
Chain Ring		Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	
Top Swing Link		-	-	X	X	X	-	
E-type BB Mount		-	-	-	-	X	-	
Applicable Chain Line		50mm	50mm	50mm	50mm	50mm	50mm	
Top Gear Teeth		44/48T	44/48T	44/48T	44/48T	44T	44T	
Total Capacity		22T	22T	22T	22T	22T	22T	
Top-Middle Min. Capacity		12T	12T	12T	12T	12T	12T	
Dual Pull		X	X	X	X	X	X	
Multi Clamp Band		X	X	X	X	-	X	
Powerchange Mechanism		-	-	-	-	-	-	
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	-	-	
	28.6mm	Top	-	X (w/AdapterS)	-	X (w/AdapterS)	X	X (w/AdapterS)
		Down	-	X (w/AdapterS)	-	X (w/AdapterS)	X	X (w/AdapterS)
	31.8mm	Top	-	X (w/AdapterM)	-	X (w/AdapterM)	X	X (w/AdapterM)
		Down	-	X (w/AdapterM)	-	X (w/AdapterM)	X	X (w/AdapterM)
	34.9mm	Top	-	X	-	X	X	X
		Down	-	X	-	X	X	X
	Chainstay Angle 63 to 66 degrees	Braze-on		-	-	-	-	-
28.6mm		Top	X (w/AdapterS)	-	X (w/AdapterS)	-	-	-
		Down	X (w/AdapterS)	-	X (w/AdapterS)	-	-	-
31.8mm		Top	X (w/AdapterM)	-	X (w/AdapterM)	-	-	-
		Down	X (w/AdapterM)	-	X (w/AdapterM)	-	-	-
34.9mm		Top	X	-	X	-	-	-
		Down	X	-	X	-	-	-
Front Clamp Band		Material	Aluminum	Aluminum	Aluminum	Aluminum	-	Aluminum
	Finish	Painted	Painted	Painted	Painted	-	Painted	
Rear Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	-	Aluminum	
	Finish	Painted	Painted	Painted	Painted	-	Painted	
BB Plate	Material	-	-	-	-	Aluminum	-	
Outer Link	Material	Aluminum	Aluminum	Steel	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	
Note		*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	

# Front Derailleur (ATB / NEXAVE) Specifications

Series		HONE	HONE	Deore LX	Deore LX	Deore LX	Deore LX	
Model No.		FD-M600	FD-M600-E	FD-M581A-3	FD-M581A-6	FD-M580A-3	FD-M580A-6	
Rear Speeds		9	9	9	9	9	9	
Front SIS		X	X	X	X	X	X	
Chain Ring		Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	
Top Swing Link		X	X	-	-	X	X	
E-type BB Mount		-	X	-	-	-	-	
Applicable Chain Line		50mm	50mm	50mm	50mm	50mm	50mm	
Top Gear Teeth		44T	44 T	44T/48T	44T/48T	44T/48T	44T/48T	
Total Capacity		22T	22T	22T	22T	22T	22T	
Top-Middle Min. Capacity		12T	12T	12T	12T	12T	12T	
Dual Pull		X	X	X	X	X	X	
Multi Clamp Band		X	-	X	X	X	X	
Powerchange Mechanism		-	-	-	-	-	-	
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	-	-	
	28.6mm	Top	X (w/AdapterS)	X	-	X (w/AdapterS)	-	X (w/AdapterS)
		Down	X (w/AdapterS)	X	-	X (w/AdapterS)	-	X (w/AdapterS)
	31.8mm	Top	X (w/AdapterM)	X	-	X (w/AdapterM)	-	X (w/AdapterM)
		Down	X (w/AdapterM)	X	-	X (w/AdapterM)	-	X (w/AdapterM)
	34.9mm	Top	X	X	-	X	-	X
		Down	X	X	-	X	-	X
	Chainstay Angle 63 to 66 degrees	Braze-on		-	-	-	-	-
28.6mm		Top	-	-	X (w/AdapterS)	-	X (w/AdapterS)	-
		Down	-	-	X (w/AdapterS)	-	X (w/AdapterS)	-
31.8mm		Top	-	-	X (w/AdapterM)	-	X (w/AdapterM)	-
		Down	-	-	X (w/AdapterM)	-	X (w/AdapterM)	-
34.9mm		Top	-	-	X	-	X	-
		Down	-	-	X	-	X	-
Front Clamp Band		Material	Aluminum	-	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	-	Painted	Painted	Painted	Painted	
Rear Clamp Band	Material	Aluminum	-	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	-	Painted	Painted	Painted	Painted	
BB Plate	Material	-	Aluminum	-	-	-	-	
Outer Link	Material	Steel	Steel	Aluminum	Aluminum	Steel	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	
Note		*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	

# Front Derailleur (ATB / NEXAVE) Specifications

Series	Deore LX	Deore	Deore	Deore	Deore	Deore		
Model No.	FD-M580A-E	FD-M531-3	FD-M531-6	FD-M530-3	FD-M530-6	FD-M511		
Rear Speeds	9	9	9	9	9	9		
Front SIS	X	X	X	X	X	X		
Chain Ring	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*	Triple/Double*		
Top Swing Link	X	-	-	X	X	-		
E-type BB Mount	X	-	-	-	-	-		
Applicable Chain Line	50mm	50mm	50mm	50mm	50mm	47.5 / 50mm		
Top Gear Teeth	44 T	44T/48T	44T/48T	44T/48T	44T/48T	44 / 48T		
Total Capacity	22T	22T	22T	22T	22T	22T		
Top-Middle Min. Capacity	12T	12T	12T	12T	12T	12T		
Dual Pull	X	X	X	X	X	X		
Multi Clamp Band	-	X	X	X	X	X		
Powerchange Mechanism	-	-	-	-	-	-		
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	-		
	28.6mm	Top	X	-	X (w/AdapterS)	-	X (w/AdapterS)	X (w/AdapterS)
		Down	X	-	X (w/AdapterS)	-	X (w/AdapterS)	X (w/AdapterS)
	31.8mm	Top	X	-	X (w/AdapterM)	-	X (w/AdapterM)	X (w/AdapterM)
		Down	X	-	X (w/AdapterM)	-	X (w/AdapterM)	X (w/AdapterM)
	34.9mm	Top	X	-	X	-	X	X
		Down	X	-	X	-	X	X
	Chainstay Angle 63 to 66 degrees	Braze-on		-	-	-	-	-
28.6mm		Top	-	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
		Down	-	X (w/AdapterS)	-	X (w/AdapterS)	-	X (w/AdapterS)
31.8mm		Top	-	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
		Down	-	X (w/AdapterM)	-	X (w/AdapterM)	-	X (w/AdapterM)
34.9mm		Top	-	X	-	X	-	X
		Down	-	X	-	X	-	X
Front Clamp Band		Material	-	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	Painted	Painted	Painted	Painted	Painted	
Rear Clamp Band	Material	-	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	-	Painted	Painted	Painted	Painted	Painted	
BB Plate	Material	Aluminum	-	-	-	-	-	
Outer Link	Material	Steel	Aluminum	Aluminum	Steel	Steel	Aluminum	
	Finish	Painted	Painted	Painted	Zinc Plated	Zinc Plated	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	
Note	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC	*For MTB(SAINT/HONE) Double FC		

# Front Derailleur (ATB / NEXAVE) Specifications

Series		Deore	Non-Series	Alivio	Alivio	Alivio	Acera	
Model No.		FD-M510	FD-MC21	FD-M410-6	FD-M410-3	FD-M410-E	FD-M330	
Rear Speeds		9	8	8/7	8/7	8/7	7/8	
Front SIS		X	X	X	X	X	X	
Chain Ring		Triple/Double*	Triple	Triple	Triple	Triple	Triple	
Top Swing Link		X	-	X	X	X	X	
E-type BB Mount		-	-	-	-	X	-	
Applicable Chain Line		47.5 / 50mm	47.5 / 50mm	50mm	50mm	50mm	47.5 / 50mm	
Top Gear Teeth		44 / 48T	42T	42T	42T	42T	42T	
Total Capacity		22T	20T	20T	20T	20T	20T	
Top-Middle Min. Capacity		12T	10T	10T	10T	10T	10T	
Dual Pull		X	X	X	X	X	-	
Multi Clamp Band		X	X	X	X	-	-	
Powerchange Mechanism		-	-	-	-	-	-	
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	•New Slotted E-type •Chainstay Angle: 63 to 69 degrees	-	
	28.6mm	Top	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)		-	X
		Down	X (w/AdapterS)	X (w/AdapterS)	X (w/AdapterS)		-	X
	31.8mm	Top	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)		-	X
		Down	X (w/AdapterM)	X (w/AdapterM)	X (w/AdapterM)		-	X
	34.9mm	Top	X	X	X		-	-
		Down	X	X	X		-	-
	Chainstay Angle 63 to 66 degrees	Braze-on		-	-		-	-
28.6mm		Top	X (w/AdapterS)	X (w/AdapterS)	-		X (w/AdapterS)	X
		Down	X (w/AdapterS)	X (w/AdapterS)	-		X (w/AdapterS)	X
31.8mm		Top	X (w/AdapterM)	X (w/AdapterM)	-	X (w/AdapterM)	X	
		Down	X (w/AdapterM)	X (w/AdapterM)	-	X (w/AdapterM)	X	
34.9mm		Top	X	X	-	X	-	
		Down	X	X	-	X	-	
Front Clamp Band		Material	Aluminum	Aluminum	Steel	Steel	-	Steel
	Finish	Painted	Barrel	Painted	Painted	-	Pearl Bright	
Rear Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	-	Steel	
	Finish	Painted	Barrel	Painted	Painted	-	Painted	
BB Plate	Material	-	-	-	-	Aluminum(Painted)	-	
Outer Link	Material	Steel	Steel	Steel	Steel	Steel	Steel	
	Finish	Zinc Plated	Zinc Plated	Painted	Painted	Painted	Zinc Plated	
Inner Link	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel	
	Finish	Painted	Barrel	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	
Note		*For MTB(SAINT/HONE) Double FC				New slotted E-type		

# Front Derailleur (ATB / NEXAVE) Specifications

Series		Acera	Altus	C-Series	C-Series	C-Series	C-Series
Model No.		FD-M330-E	FD-CT92-E	FD-C101-E	FD-C102	FD-C051	FD-C050
Rear Speeds		7/8	8/7	8/7	8/7	7/6	7/6
Front SIS		X	X	X	X	X	X
Chain Ring		Triple	Triple	Triple	Triple	Triple	Triple
Top Swing Link		X	X	X	X	X	X
E-type BB Mount		w/o Bolt	w/o Bolt	w/o Bolt	-	-	-
Applicable Chain Line		47.5 / 50mm	47.5 / 50mm	47.5 / 50mm	47.5 / 50mm	47.5 / 50mm	47.5 / 50mm
Top Gear Teeth		42T	42T	42T	48T	48T	42T
Total Capacity		20T	18T	18T	20T	20T	18T
Top-Middle Min. Capacity		10T	8T	8T	10T	10T	8T
Dual Pull		-	-	X	X	X	X
Multi Clamp Band		-	-	-	-	X	X
Powerchange Mechanism		-	-	-	-	-	-
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	-	-
	28.6mm	Top	-	X	X	X	X
		Down	-	X	X	X	X
	31.8mm	Top	X	X	X	X	X
		Down	X	X	X	X	X
	34.9mm	Top	X*	X*	X*	X	X
Down		X*	X*	X*	X	X	
Chainstay Angle 63 to 66 degrees	Braze-on		-	-	-	-	-
	28.6mm	Top	-	X	X	-	-
		Down	-	X	X	-	-
	31.8mm	Top	-	X	X	-	X
		Down	-	X	X	-	X
	34.9mm	Top	-	-	-	-	-
Down		-	-	-	-	-	
Front Clamp Band	Material	-	-	-	Steel	Steel	Steel
	Finish	-	-	-	Zinc Plated	Zinc Plated	Zinc Plated
Rear Clamp Band	Material	-	-	-	Steel	Steel	Steel
	Finish	-	-	-	Zinc Plated	Zinc Plated	Zinc Plated
BB Plate	Material	Steel	Steel	Steel	-	-	-
Outer Link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
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
Note		*For 47.5mm Chain Line :BB 68mm	*For 47.5mm Chain Line :BB 68mm	*For 47.5mm Chain Line :BB 68mm			

# Front Derailleur (ATB / NEXAVE) Specifications

Series		Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model No.		FD-TY30	FD-TY22-SS	FD-TY22-GS	FD-TY18	FD-TY15GS	FD-TY15SS
Rear Speeds		7/6	7/6	7/6	6	5	5
Front SIS		X	-	-	-	-	-
Chain Ring		Triple	Double	Triple	Triple	Triple	Double
Top Swing Link		-	X	X	-	-	-
E-type BB Mount		-	-	-	-	-	-
Applicable Chain Line		47.5 / 50mm	43.5 / 45mm	47.5 / 50mm	47.5 / 50mm	47.5 / 50mm	43.5 / 45mm
Top Gear Teeth		48T	48T or 38T	48T	-	-	-
Total Capacity		22T	14T	20T	22T	22T	14T
Top-Middle Min. Capacity		10T	8T	10T	8T	8T	-
Dual Pull		-	-	-	-	-	-
Multi Clamp Band		-	-	-	-	-	-
Powerchange Mechanism		-	-	-	-	-	-
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	-	-
	28.6mm	Top	-	-	X	X	-
		Down	X	X	X	X	X
	31.8mm	Top	-	-	X	X	-
		Down	-	-	X	X	X
	34.9mm	Top	-	-	-	-	-
Down		-	-	-	-	-	
Chainstay Angle 63 to 66 degrees	Braze-on		-	-	-	-	-
	28.6mm	Top	-	-	-	-	-
		Down	X	-	-	-	-
	31.8mm	Top	-	-	-	-	-
		Down	-	-	-	-	-
	34.9mm	Top	-	-	-	-	-
Down		-	-	-	-	-	
Front Clamp Band	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Rear Clamp Band	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
BB Plate	Material	-	-	-	-	-	-
Outer Link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Painted	Painted	Zinc Plated	Zinc Plated	Zinc Plated
Inner Link	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Chain Guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Zinc Plated	Chrome Plated	Chrome Plated
Note							

# Front Derailleur (ATB / NEXAVE) Specifications

Series		Tourney	TZ	TZ	NEXAVE	NEXAVE	NEXAVE
Model No.		FD-TY10	FD-TZ30	FD-TZ31	FD-C810	FD-C600	FD-C510
Rear Speeds		7/6	7/6	7/6	8*	9	8*
Front SIS		X	-	-	SPCM	SPCM	X
Chain Ring		Triple	Triple	Triple	Triple	Double	Triple
Top Swing Link		-	-	-	X	X	X
E-type BB Mount		-	-	-	X	X	-
Applicable Chain Line		47.5 / 50mm	47.5 / 50mm	47.5 / 50mm	50mm	52.5mm	50mm
Top Gear Teeth		42T	42T	48T	46T	46T	46T
Total Capacity		18T	18T	22T	22T	12T	22T
Top-Middle Min. Capacity		8T	8T	8T	12T	-	12T
Dual Pull		-	-	-	-	X	X
Multi Clamp Band		-	-	-	-	-	X
Powerchange Mechanism		-	-	-	X	X	-
Chainstay Angle 66 to 69 degrees	Braze-on		-	-	-	-	-
	28.6mm	Top	X	X	X	X	X
		Down	X	X	X	X	X
	31.8mm	Top	X	X	X	X	X
		Down	X	X	X	X	X
	34.9mm	Top	X*	-	-	X	X
Down		-	-	-	X	X	
Chainstay Angle 63 to 66 degrees	Braze-on		-	-	-	-	-
	28.6mm	Top	-	-	-	X	X
		Down	-	-	-	X	X
	31.8mm	Top	-	-	-	X	X
		Down	-	-	-	X	X
	34.9mm	Top	-	-	-	X	X
Down		-	-	-	X	X	
Front Clamp Band		Material: Steel	Material: Steel	Material: Steel	-	-	Material: Aluminum
		Finish: Zinc Plated	Finish: Painted	Finish: Painted	-	-	Finish: Painted
Rear Clamp Band		Material: Steel	Material: Steel	Material: Steel	-	-	Material: Aluminum
		Finish: Zinc Plated	Finish: Painted	Finish: Painted	-	-	Finish: Painted
BB Plate		Material: -	Material: -	Material: -	Material: Aluminum	Material: Aluminum	Material: -
Outer Link		Material: Steel	Material: Steel	Material: Steel	Material: Steel	Material: Steel	Material: Steel
		Finish: Zinc Plated	Finish: Painted	Finish: Painted	Finish: Zinc Plated	Finish: Painted	Finish: Painted
Inner Link		Material: Steel	Material: Steel	Material: Steel	Material: Aluminum	Material: Aluminum/Steel	Material: Aluminum
		Finish: Zinc Plated	Finish: Painted	Finish: Painted	Finish: Painted	Finish: Painted	Finish: Painted
Chain Guide		Material: Steel	Material: Steel	Material: Steel	Material: Steel	Material: Steel	Material: Steel
		Finish: Zinc Plated	Finish: Painted	Finish: Painted	Finish: Chrome Plated	Finish: Pearl Bright Plated	Finish: Chrome Plated
Note		*For 50mm Chain Line only (BB width 73mm)			Electrical FD *must be used with Super Narrow HG Chain for 9-speed		*must be used with Super Narrow HG Chain for 9-speed

•Chainstay Angle: 63 to 69 degrees  
•Max. 34.9mm  
•only Top swing

# Front Derailleur (ATB / NEXAVE) Specifications

Series		NEXAVE	NEXAVE	NEXAVE
Model No.		FD-C505	FD-T301	FD-T300
Rear Speeds		8*	7/8	7/8
Front SIS		SPCM	X	X
Chain Ring		Triple	Triple	Triple
Top Swing Link		X	X	X
E-type BB Mount		X	-	-
Applicable Chain Line		50mm	47.5mm	47.5/50mm
Top Gear Teeth		46T	48T	42T
Total Capacity		22T	20T	18T
Top-Middle Min. Capacity		12T	10T	8T
Dual Pull		X	-	-
Multi Clamp Band		-	-	-
Powerchange Mechanism		X	-	-
Chainstay Angle 66 to 69 degrees	Braze-on		-	-
	28.6mm	Top	X	-
		Down	X	-
	31.8mm	Top	X	X
		Down	X	X
	34.9mm	Top	-	-
		Down	-	-
	Chainstay Angle 63 to 66 degrees	Braze-on		-
28.6mm		Top	X	-
		Down	X	-
31.8mm		Top	X	X
		Down	X	X
34.9mm		Top	-	-
		Down	-	-
Front Clamp Band		Material	Steel	Steel
		Finish	Painted	Painted
Rear Clamp Band		Material	Steel	Steel
		Finish	Painted	Painted
BB Plate		Material	Aluminum	-
Outer Link		Material	Steel	Steel
		Finish	Zinc Plated	Zinc Plated
Inner Link		Material	Aluminum	Steel
		Finish	Painted	Painted
Chain Guide		Material	Steel	Steel
		Finish	Chrome Plated	Chrome Plated
Note		*must be used with Super Narrow HG Chain for 9-speed		



## Shift Lever (ATB / NEXAVE) Specifications

Series	XTR	XTR	XTR	SAINT	SAINT	Deore-XT
Model No.	ST-M966	ST-M961	SL-M952	ST-M800	SL-M800	ST-M766
Lever Type	Dual Control	Dual Control	Rapidfire-M9	Dual Control	Rapidfire-M9	Dual Control
Front	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS	-	3-speed SIS
Rear	9-speed SIS	9-speed SIS	9-speed SIS	9-speed SIS	9-speed SIS	9-speed SIS
SL Cable Adjust	X	X	X	X	X	X
Optical Gear Display	In-line Cylindrical Type	In-line Cylindrical Type	X	-	-	X
Multi-Bearing Construction	R:3 L:3	R:3 L:3	R:3 L:3	R:1 L:3	R:2	R:1 L:3
SL Outer Casing	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed
Stainless SL Cable	X	X	X	X	X	X
Flight Deck w/ Gear Sensor Compatible (Option)	-	-	X	-	-	-
W/ CI-DECK	-	-	-	-	-	-
SL Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	All 9-speed RD	All 9-speed RD	All 9-speed RD	All 9-speed RD	All 9-speed RD	All 9-speed RD
Note					Right Only	

## Shift Lever (ATB / NEXAVE) Specifications

Series	Deore-XT	Non-Series	Non-Series	Non-Series	HONE	Deore LX
Model No.	ST-M761	SL-M751-L	SL-M751-S	SL-M748	ST-M600	ST-M585
Lever Type	Dual Control	Rapidfire-M9	Rapidfire-M9	Rapidfire	Dual Control	Dual Control
Front	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS
Rear	9-speed SIS	9-speed SIS	9-speed SIS	8-speed SIS	9-speed SIS	9-speed SIS
SL Cable Adjust	X	X	X	X	X	X
Optical Gear Display	X	X	X	X	X	X
Multi-Bearing Construction	R:1 L:3	R:2 L:2	R:2 L:2	R:2 L:2	R: - L:2	R: - L:2
SL Outer Casing	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed
Stainless SL Cable	X	X	X	X	X	X
Flight Deck w/ Gear Sensor Compatible (Option)	-	X	X	X*	-	-
W/ CI-DECK	-	-	-	-	-	-
SL Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	All 9-speed RD	All 9-speed RD	All 9-speed RD	All 8-speed RD	All 9-speed RD	All 9-speed RD
Note		Black Version Shimano logo	Silver Version Shimano logo	Shimano logo *SM-6500/6501-M		

## Shift Lever (ATB / NEXAVE) Specifications

Series	Deore LX	Deore LX	Deore	Deore	Deore	Deore
Model No.	ST-M580	SL-M571	ST-M535-L	ST-M535-S	ST-M530-L	ST-M530-S
Lever Type	Dual Control	Rapidfire-M9	Dual Control	Dual Control	Dual Control	Dual Control
Front	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS
Rear	9-speed SIS	9-speed SIS	9-speed SIS	9-speed SIS	9-speed SIS	9-speed SIS
SL Cable Adjust	X	X	X	X	X	X
Optical Gear Display	X	X	X	X	X	X
Multi-Bearing Construction	R: - L:2	-	-	-	-	-
SL Outer Casing	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed	SP41 sealed
Stainless SL Cable	X	X	X	X	X	X
Flight Deck w/ Gear Sensor Compatible (Option)	-	X	-	-	-	-
W/ CI-DECK	-	-	-	-	-	-
SL Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	All 9-speed RD	All 9-speed RD	All 9-speed RD	All 9-speed RD	All 9-speed RD	All 9-speed RD
Note			Black Version	Silver Version	Black Version	Silver Version

## Shift Lever (ATB / NEXAVE) Specifications

Series	Deore	Alivio	Alivio	Alivio	Alivio	Non-Series
Model No.	SL-M511	ST-M410-L	ST-M410-S	SL-M410	SL-MC40	ST-EF35-8R(LS) 2A
Lever Type	Rapidfire-M9	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	EZ-fire Plus
Front	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS	-
Rear	9-speed SIS	8-speed SIS	8-speed SIS	8-speed SIS	7-speed SIS	8-speed SIS
SL Cable Adjust	X	X	X	X	X	X
Optical Gear Display	X	Above handlebar	Above handlebar	Above handlebar	Slide type /below handlebar	Dial type
Multi-Bearing Construction	-	-	-	-	-	-
SL Outer Casing	SP41 sealed	SP40	SP40	SP40	SP40	SP40
Stainless SL Cable	X	Option	Option	Option	Option	Option
Flight Deck w/ Gear Sensor Compatible (Option)	X	-	-	-	-	-
W/ CI-DECK	-	-	-	-	-	Option
SL Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Silver Painted
SL Compatible RD Type	All 9-speed RD	Top Normal	Top Normal	Top Normal	Top Normal	Top Normal
Note		Black Version	Silver Version			

# Shift Lever (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	ST-EF35-7R(LS) 2A	ST-EF35-L(LS) 2A	ST-EF50-8R(LL) 4A	ST-EF50-8R(SL) 4A	ST-EF50-7R(LL) 4A	ST-EF50-7R(SL) 4A
Lever Type	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus
Front	-	3-speed SIS	-	-	-	-
Rear	7-speed SIS	-	8-speed SIS	8-speed SIS	7-speed SIS	7-speed SIS
SL Cable Adjust	X	X	-	-	-	-
Optical Gear Display	Dial type	Dial type	Dial type	Dial type	Dial type	Dial type
Multi-Bearing Construction	-	-	-	-	-	-
SL Outer Casing	SP40	SP40	SP40	SP40	SP40	SP40
Stainless SL Cable	Option	Option	-	-	-	-
Flight Deck w/ Gear Sensor Compatible (Option)	-	-	-	-	-	-
W/ CI-DECK	Option	Option	-	-	-	-
SL Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	Top Normal	-	Top Normal	Top Normal	Top Normal	Top Normal
Note			Black Version /4 Finger Alloy Brake Lever /Not compatible with CI-DECK	Silver Version /4 Finger Alloy Brake Lever /Not compatible with CI-DECK	Black Version /4 Finger Alloy Brake Lever /Not compatible with CI-DECK	Silver Version /4 Finger Alloy Brake Lever /Not compatible with CI-DECK

# Shift Lever (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	ST-EF50-L(LL) 4A	ST-EF50-L(SL) 4A	ST-EF50-8R(LL) 2A	ST-EF50-8R(SL) 2A	ST-EF50-7R(LL) 2A	ST-EF50-7R(SL) 2A
Lever Type	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus	EZ-fire Plus
Front	3-speed SIS	3-speed SIS	-	-	-	-
Rear	-	-	8-speed SIS	8-speed SIS	7-speed SIS	7-speed SIS
SL Cable Adjust	X	X	-	-	-	-
Optical Gear Display	Dial type	Dial type	Dial type	Dial type	Dial type	Dial type
Multi-Bearing Construction	-	-	-	-	-	-
SL Outer Casing	SP40	SP40	SP40	SP40	SP40	SP40
Stainless SL Cable	-	-	-	-	-	-
Flight Deck w/ Gear Sensor Compatible (Option)	-	-	-	-	-	-
W/ CI-DECK	-	-	-	-	-	-
SL Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	-	-	Top Normal	Top Normal	Top Normal	Top Normal
Note	Black Version /4 Finger Alloy Brake Lever /Not compatible with CI-DECK	Silver Version /4 Finger Alloy Brake Lever /Not compatible with CI-DECK	Black Version /Not compatible with CI-DECK	Silver Version /Not compatible with CI-DECK	Black Version /Not compatible with CI-DECK	Silver Version /Not compatible with CI-DECK

# Shift Lever (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	ST-EF50-L(LL) 2A	ST-EF50-L(SL) 2A	SB-C055A-8R(SL) 4A	SB-C055A-8R(SL) 2A	SB-C055A-7R(SL) 4A	SB-C055A-7R(SL) 2A
Lever Type	EZ-fire Plus	EZ-fire Plus	Revo Shift	Revo Shift	Revo Shift	Revo Shift
Front	3-speed SIS	3-speed SIS	-	-	-	-
Rear	-	-	8-speed SIS	8-speed SIS	7-speed SIS	7-speed SIS
SL Cable Adjust	X	X	-	-	-	-
Optical Gear Display	Dial type	Dial type	Revolving type	Revolving type	Revolving type	Revolving type
Multi-Bearing Construction	-	-	-	-	-	-
SL Outer Casing	SP40	SP40	SIS40	SIS40	SIS40	SIS40
Stainless SL Cable	-	-	-	-	-	-
Flight Deck w/ Gear Sensor Compatible (Option)	-	-	-	-	-	-
W/ CI-DECK	-	-	Option	Option	Option	Option
SL Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	-	-	Top Normal	Top Normal	Top Normal	Top Normal
Note	Black Version /Not compatible with CI-DECK	Silver Version /Not compatible with CI-DECK	4 Finger Alloy Brake Lever	2 Finger Alloy Brake Lever	4 Finger Alloy Brake Lever	2 Finger Alloy Brake Lever

## Shift Lever (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model No.	SB-C055A-L(SL) 4A	SB-C055A-L(SL) 2A	SL-RS43-8R	SL-RS43-7R	SL-RS43-6R	SL-RS43-L	SL-RS41A-8R	SL-RS41A-7R
Lever Type	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift
Front	3-speed SIS	3-speed SIS	-	-	-	3-speed SIS	-	-
Rear	-	-	8-speed SIS	7-speed SIS	6-speed SIS	-	8-speed SIS	7-speed SIS
SL Cable Adjust	X	X	X	X	X	X	X	X
Optical Gear Display	Revolving type	Revolving type	Window type	Window type	Window type	Window type	Window type	Window type
Multi-Bearing Construction	-	-	-	-	-	-	-	-
SL Outer Casing	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40
Stainless SL Cable	-	-	-	-	-	-	-	-
Flight Deck w/ Gear Sensor Compatible (Option)	-	-	-	-	-	-	-	-
W/ CI-DECK	Option	Option	Option	Option	Option	Option	Option	Option
SL Bracket	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	-	-	Top Normal	Top Normal	Top Normal	-	Top Normal	Top Normal
Note	4 Finger Alloy Brake Lever	2 Finger Alloy Brake Lever						



## Shift Lever (ATB / NEXAVE) Specifications

Series	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
<b>Model No.</b>	<b>SL-RS41A-L</b>	<b>SL-RS41-8R</b>	<b>SL-RS41-7R</b>	<b>SL-RS41-6R</b>	<b>SL-RS41-L</b>	<b>SL-RS31-7R</b>	<b>SL-RS31-6R</b>	<b>SL-RS31-5R</b>	<b>SL-RS31-L</b>
<b>Lever Type</b>	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift	Revo Shift
<b>Front</b>	3-speed SIS	-	-	-	3-speed SIS	-	-	-	Ratchet
<b>Rear</b>	-	8-speed SIS	7-speed SIS	6-speed SIS	-	7-speed SIS	6-speed SIS	5-speed SIS	-
<b>SL Cable Adjust</b>	X	X	X	X	X	-	-	-	X
<b>Optical Gear Display</b>	Window type	Revolving type	Revolving type	Revolving type	Revolving type	Revolving type	Revolving type	Revolving type	Revolving type
<b>Multi-Bearing Construction</b>	-	-	-	-	-	-	-	-	-
<b>SL Outer Casing</b>	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40
<b>Stainless SL Cable</b>	-	-	-	-	-	-	-	-	-
<b>Flight Deck w/ Gear Sensor Compatible (Option)</b>	-	-	-	-	-	-	-	-	-
<b>W/ CI-DECK</b>	Option	Option	Option	Option	Option	Option	Option	Option	Option
<b>SL Bracket</b>	<b>Material</b>	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	<b>Finish</b>	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
<b>SL Compatible RD Type</b>	-	Top Normal	Top Normal	Top Normal	-	Top Normal	Top Normal	Top Normal	-
<b>Note</b>								Not compatible with ID-TX50	

## Shift Lever (ATB / NEXAVE) Specifications

Series	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney
Model No.	SL-RS31-LA	SL-TX50-7R	SL-TX50-6R	SL-TX50-L	SL-TX50-LN	SL-TX30-7R	SL-TX30-6R
Lever Type	Revo Shift	Thumb Shifter Plus	Thumb Shifter Plus	Thumb Shifter	Thumb Shifter	Thumb Shifter Plus	Thumb Shifter Plus
Front	3-speed SIS	-	-	3-speed SIS	Ratchet	-	-
Rear	-	7-speed SIS	6-speed SIS	-	-	7-speed SIS	6-speed SIS
SL Cable Adjust	X	-	-	X	X	-	-
Optical Gear Display	Revolving type	Window type	Window type	Window type	Window type	Dial type	Dial type
Multi-Bearing Construction	-	-	-	-	-	-	-
SL Outer Casing	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40
Stainless SL Cable	-	-	-	-	-	-	-
Flight Deck w/ Gear Sensor Compatible (Option)	-	-	-	-	-	-	-
W/ CI-DECK	Option	-	-	-	-	-	-
SL Bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	-	Top Normal	Top Normal	-	-	Top Normal	Top Normal
Note		Not compatible with CI-DECK	Not compatible with CI-DECK	Not compatible with CI-DECK	Not compatible with CI-DECK	Not compatible with CI-DECK	Not compatible with CI-DECK

# Shift Lever (ATB / NEXAVE) Specifications

Series	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney	NEXAVE	NEXAVE	
Model No.	SL-TX30-LN	SL-TY22	SL-TY22-7	SL-TY22-A	SL-TY18	SL-TY15-A	SL-C600	ST-C530(L)	
Lever Type	Thumb Shifter	Thumb Shifter	Thumb Shifter	Thumb Shifter	Thumb Shifter	Thumb Shifter	Tap-Fire	Tap-Fire	
Front	Ratchet	Friction	-	3-speed SIS	Friction	Friction	2-speed SPCM	-	
Rear	-	6-speed SIS	7-speed SIS	-	6-speed SIS	5-speed SIS	9-speed SIS	-	
SL Cable Adjust	X	-	-	X	-	-	X	X	
Optical Gear Display	Dial type	Dial type	Dial type	Dial type	Dial type	Dial type	R:Above handlebar L:-	Above handlebar	
Multi-Bearing Construction	-	-	-	-	-	-	-	-	
SL Outer Casing	SIS40	SIS40	SIS40	SIS40	SIS40	SIS40	SP40 sealed	SP40 sealed	
Stainless SL Cable	-	-	-	-	-	-	X	X	
Flight Deck w/ Gear Sensor Compatible (Option)	-	-	-	-	-	-	-	-	
W/ CI-DECK	-	-	-	-	-	-	-	-	
SL Bracket	Material	Steel	Steel	Steel	Steel	Steel	Steel	R:Aluminum L:Aluminum+Resin	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
SL Compatible RD Type	-	Top Normal	Top Normal	Top Normal	Top Normal	Top Normal	Linear Action RD	-	
Note	Not compatible with CI-DECK	Black or Yellow Sticker Available						Special for INTEGO 3-speed	

## Shift Lever (ATB / NEXAVE) Specifications

Series		NEXAVE	NEXAVE	NEXAVE
Model No.		ST-C505(L)	ST-C503-A	ST-T300-S
Lever Type		Tap-Fire	Tap-Fire	Tap-Fire
Front		3-speed SPCM	3-speed SIS	3-speed SIS
Rear		-	8-speed SIS	7-speed SIS
SL Cable Adjust		X	X	X
Optical Gear Display		-	X	Dial type
Multi-Bearing Construction		-	-	-
SL Outer Casing		SP40 sealed	SP40 sealed	SP40
Stainless SL Cable		X	X	Option
Flight Deck w/ Gear Sensor Compatible (Option)		-	-	X
W/ CI-DECK		-	-	-
SL Bracket	Material	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Polished
SL Compatible RD Type		-	Low Normal	Low Normal
Note		Special for SPCM3	Special for LG Gear RD	RH Optical Gear Display for Rapid Rise RD

## Brake Lever (ATB / NEXAVE) Specifications

Series	XTR	XTR	Deore-XT	Non-Series	Deore-LX	Deore-LX	Deore	Deore	Deore	Alivio
Model No.	ST-M961	BL-M950	ST-M761	BL-M740	ST-M580	BL-M571	ST-M530	BL-M511-L	BL-M511-S	ST-M410-L
Brake Type	V-brake	V-brake	V-brake	V-brake	V-brake	V-brake	V-brake	V-brake	V-brake	V-brake
Lever Size	1.5 finger	1.5 finger	1.5 finger	1.5 finger	1.5 finger	1.5 finger	1.5 finger	2 finger	2 finger	2 finger
Brake Cable Type	W-type	W-type	W-type	W-type	T-type	T-type	T-type	T-type	T-type	T-type
Power Adjuster	X	X	X	X	X	X	X	-	-	-
Servo-Wave Action	X	X	X	X	X	X	X	-	-	-
Reach Adjust	X	X	X	X	X	X	X	X	X	X
Cable Adjust	X	X	X	X	X	X	X	X	X	X
Brake Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Brake Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted	Painted
Note				Shimano logo				Black Version	Silver Version	Black Version

## Brake Lever (ATB / NEXAVE) Specifications

Series	Alivio	Non-series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	ST-M410-S	BL-M420	ST-EF50-8R(LL) 4A	ST-EF50-8R(SL) 4A	ST-EF50-7R(LL) 4A	ST-EF50-7R(SL) 4A
Brake Type	V-brake	V-brake	HRB/Canti brake V-brake*	HRB/Canti brake V-brake*	HRB/Canti brake V-brake*	HRB/Canti brake V-brake*
Lever Size	2 finger	2 finger	4 finger	4 finger	4 finger	4 finger
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
Brake Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Barrel	Anodized	Barrel	Anodized
Brake Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
Note	Silver Version		*Black Version *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	*Black Version *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

## Brake Lever (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	ST-EF50-L(LL) 4A	ST-EF50-L(SL) 4A	ST-EF50-8R(LL) 2A	ST-EF50-8R(SL) 2A	ST-EF50-7R(LL) 2A	ST-EF50-7R(SL) 2A
Brake Type	HRB/Canti brake V-brake*	HRB/Canti brake V-brake*	V-brake	V-brake	V-brake	V-brake
Lever Size	4 finger	4 finger	2 finger	2 finger	2 finger	2 finger
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
Brake Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Barrel	Anodized	Barrel	Anodized
Brake Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
Note	*Black Version *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		*Black Version		*Black Version

## Brake Lever (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	ST-EF50-L(LL) 2A	ST-EF50-L(SL) 2A	ST-EF35-8R(LS) 2A	ST-EF35-7R(LS) 2A	ST-EF35-L(LS) 2A	SB-C055A-8R(SL) 4A
Brake Type	V-brake	V-brake	V-brake	V-brake	V-brake	HRB/Canti brake V-brake*
Lever Size	2 finger	2 finger	2 finger	2 finger	2 finger	4 finger
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
Brake Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Barrel	Anodized	Anodized	Anodized
Brake Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
Note	*Black Version					*V-brake and Mechanical Disc Brake must be used with power modulator. *INTER-M Compatible



## Brake Lever (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	SB-C055A-8R(SL) 2A	SB-C055A-7R(SL) 4A	SB-C055A-7R(SL) 2A	SB-C055A-L(SL) 4A	SB-C055A-L(SL) 2A	SB-C055A-7R(SL) 2A
Brake Type	V-brake	HRB/Canti brake V-brake*	V-brake	HRB/Canti brake V-brake*	V-brake	V-brake
Lever Size	2 finger	4 finger	2 finger	4 finger	2 finger	2 finger
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
Brake Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	-	Barrel	-	Barrel
Brake Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
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		

## Brake Lever (ATB / NEXAVE) Specifications

Series		Non-Series	Non-Series	NEXAVE	NEXAVE	NEXAVE	NEXAVE
Model No.		SB-C055A-L(SL) 4A	SB-C055A-L(SL) 2A	BL-C800	ST-C530(L)	ST-C505(L)	ST-C503-A
<b>Brake Type</b>		HRB/Canti brake V-brake*	V-brake	V with modulator /Canti, Roller brake*	V with modulator /Canti, Roller brake*	V with modulator /Canti, Roller brake*	V with modulator /Canti, Roller brake*
<b>Lever Size</b>		4 finger	2 finger	3 finger	4 finger	4 finger	4 finger
<b>Brake Cable Type</b>		T-type	T-type	T-type	T-type	T-type	T-type
<b>Power Adjuster</b>		-	-	-	-	-	-
<b>Servo-Wave Action</b>		-	-	-	-	-	-
<b>Reach Adjust</b>		X	X	X	X	X	X
<b>Cable Adjust</b>		X	X	X	X	X	X
<b>Brake Lever</b>	<b>Material</b>	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	<b>Finish</b>	-	Barrel	Barrel	Anodized	Anodized	Anodized
<b>Brake Bracket</b>	<b>Material</b>	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	<b>Finish</b>	Painted	Painted	Painted	Painted	Painted	Painted
<b>Note</b>		*V-brake and Mechanical Disc Brake must be used with power modulator. *INTER-M (BR-C050) Compatible		*V-brake and Mechanical Disc Brake must be used with power modulator.	*V-brake and Mechanical Disc Brake must be used with power modulator.	*V-brake and Mechanical Disc Brake must be used with power modulator.	*V-brake and Mechanical Disc Brake must be used with power modulator.

## Brake Lever (ATB / NEXAVE) Specifications

Series		NEXAVE	NEXAVE
Model No.		ST-T300-S	BL-T400
Brake Type		V with modulator /Canti, Roller brake*	V with modulator /Canti, Roller brake*
Lever Size		4 finger	4 finger
Brake Cable Type		T-type	T-type
Power Adjuster		-	-
Servo-Wave Action		-	-
Reach Adjust		X	X
Cable Adjust		X	X
Brake Lever	Material	Aluminum	Aluminum
	Finish	Barrel	Anodized
Brake Bracket	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Note		*V-brake and Mechanical Disc Brake must be used with power modulator.	*V-brake and Mechanical Disc Brake must be used with power modulator.

## Brake (ATB / NEXAVE) Specifications

Series	XTR	Deore XT	Deore LX	Deore
Model No.	BR-M960	BR-M760	BR-M580	BR-M530-L
Brake Type	V-brake	V-brake	V-brake	V-brake
Link Wire	-	-	-	-
Reinforced Link	X	X	-	-
Parallel Link	X	X	-	-
Power Modulator	-	-	-	-
Linear Spring	X	X	X	X
Threaded BR Shoe Post	X	X	X	X
Brake Shoe Type	Standard	M70R2	S70C	S70T
	Optional Choice	Shoe for ceramic coated rim	Shoe for ceramic coated rim M70R2 M70T3 M70T4	M70T3 M70T4
Arch Size	103mm	103mm	103mm	107mm
Fixing Bolt Length	18/21.5/30.5mm	22/25/34mm	16/25mm	16/25mm
Sleeve & Bushing Type	X	X	X	X
Lead Pipe Angle	45/90/135	45/90/135	45/90/135	45/90/135
Canti Lever /V-arm /Caliper	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized
Cartridge Shoe Holder	X	X	X	-
Note				Black Version

## Brake (ATB / NEXAVE) Specifications

Series	Deore	Alivio	Alivio	Alivio	Alivio	NEXAVE	
Model No.	BR-M530-S	BR-M431-L	BR-M431-S	BR-M421-L	BR-M421-S	BR-T300	
Brake Type	V-brake	V-brake	V-brake	V-brake	V-brake	V-brake	
Link Wire	-	-	-	-	-	-	
Reinforced Link	-	-	-	-	-	-	
Parallel Link	-	-	-	-	-	-	
Power Modulator	-	-	-	-	-	X	
Linear Spring	X	X	X	X	X	X	
Threaded BR Shoe Post	X	X	X	X	X	X	
Brake Shoe Type	Standard	S70T	S70T	S70T	M65T	M65T	S70T
	Optional Choice	M70T3 M70T4	M70R2	M70R2	M65T3 M70T4	M65T3 M70T4	M70T3
Arch Size	107mm	107mm	107mm	107mm	107mm	-	
Fixing Bolt Length	16/25mm	16/25mm	16/25mm	16/25mm	16/25mm	22/25/34mm	
Sleeve & Bushing Type	X	X	X	X	X	X	
Lead Pipe Angle	45/90/135	45/90/135	45/90/135	45/90/135	45/90/135	45/90/135	
Canti Lever /V-arm /Caliper	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Painted	Painted	Painted	Painted	Barrel
Cartridge Shoe Holder	-	X	X	-	-	-	
Note	Silver Version	Black Version	Silver Version	Black Version	Silver Version	With 3 Mode Power Modulator	

# Disc Brake (ATB / NEXAVE) Specifications

## Brake Caliper

Series		XTR	XTR	SAINT	Deore XT
Model No.		BR-M966	BR-M965	BR-M800	BR-M765
Brake Type		Disc-brake	Disc-brake	Disc-brake	Disc-brake
Recommended Brake Lever		ST-M966	ST-M966	ST-M800 BL-M800	ST-M766 BL-M765
Recommended Brake Rotor		SM-RT96	SM-RT96	SM-RT80 SM-RT80S	SM-RT77 SM-RT77L
Hydraulic or Mechanical		Hydraulic	Hydraulic	Hydraulic	Hydraulic
Oil		Mineral	Mineral	Mineral	Mineral
Mount Type		Post-type	International standard	International standard Post-type	International standard Post-type
Piston	Opposed 2-piston	X	X	X	X
	1-piston	-	-	-	-
Caliper	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Painted	Painted
PAD	Standard	M07 Resin	M07 Resin	M06 Metal	M07-S Resin
	Option	M06 Metal	M06 Metal	M07-S Resin	M06 Metal
Hose		SM-BH96	SM-BH96	SM-BH63	SM-BH63
Note		Front Only			

# Disc Brake (ATB / NEXAVE) Specifications

## Brake Caliper

Series		HONE	Deore LX	Deore
Model No.		BR-M601	BR-M585	BR-M535
Brake Type		Disc-brake	Disc-brake	Disc-brake
Recommended Brake Lever		ST-M600 BL-M525	ST-M585 BL-M585	ST-M535 BL-M535
Recommended Brake Rotor		SM-RT63 SM-RT62M SM-RT62L	SM-RT63 SM-RT62M SM-RT62L	SM-RT63 SM-RT62M SM-RT62L
Hydraulic or Mechanical		Hydraulic	Hydraulic	Hydraulic
Oil		Mineral	Mineral	Mineral
Mount Type		International standard Post-type	International standard Post-type	International standard Post-type
Piston	Opposed 2-piston	X	X	X
	1-piston	-	-	-
Caliper	Material	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted
PAD	Standard	M06 Metal	M07-S Resin	M07-S Resin
	Option	M07-S Resin	M06 Metal	M06 Metal
Hose		SM-BH59	SM-BH59	SM-BH59
Note				

# Disc Brake (ATB / NEXAVE) Specifications

## Brake Caliper

Series		Non-Series	Non-Series	Non-Series	NEXAVE
Model No.		BR-M525	BR-M495	BR-M465	BR-C901
Brake Type		Disc-brake	Disc-brake	Disc-brake	Disc-brake
Recommended Brake Lever		ST-M535 BL-M525	V-brake BL (1.5-2.5 finger)	V-brake BL (1.5-2.5 finger)	BL-C901
Recommended Brake Rotor		SM-RT61	SM-RT52 SM-RT61	SM-RT52 SM-RT61	SM-RT61
Hydraulic or Mechanical		Hydraulic	Mechanical	Mechanical	Hydraulic
Oil		Mineral	-	-	Mineral
Mount Type		International standard Post-type	International standard Post-type	International standard Post-type	International standard
Piston	Opposed 2-piston	X	-	-	X
	1-piston	-	X	X	-
Caliper	Material	Aluminum	Aluminum	Aluminum/Steel	Aluminum
	Finish	Anodized	Painted(Silver)	Painted(Black)	Anodized
PAD	Standard	M08 Resin	M08 Resin	M08 Resin	C01 Metal
	Option	-	-	-	-
Hose		SM-BH59	Cable	Cable	SM-BH60/61
Note		Shimano logo			



# Disc Brake (ATB / NEXAVE) Specifications

## Brake Lever

Series	XTR	SAINT	SAINT	Deore XT	Non-Series	HONE
Model No.	ST-M966	ST-M800	BL-M800	ST-M766	BL-M765	ST-M600
Brake Type	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake
Recommended Brake Caliper	BR-M966/965	BR-M800	BR-M800	BR-M765	BR-M765	BR-M601
Oil	Mineral	Mineral	Mineral	Mineral	Mineral	Mineral
Master Cylinder	X	X	X	X	X	X
Lever Size	1.5 finger	1.5 finger	1.5 finger	1.5 finger	1.5 finger	1.5 finger
Reach Adjust	X	X	X	X	X	X
Brake Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Brake Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
Brake Hose	SM-BH96	SM-BH63	SM-BH63	SM-BH63	SM-BH63	SM-BH59
Note					Shimano Logo	

# Disc Brake (ATB / NEXAVE) Specifications

## Brake Lever

Series	Deore LX	Deore LX	Deore	Deore	Non-Series	NEXAVE
Model No.	ST-M585	BL-M585	ST-M535	BL-M535	BL-M525	BL-C901
Brake Type	Disc-brake	Disc-brake	Disc-brake	Hydraulic Disc-brake	Hydraulic Disc-brake	Disc-brake
Recommended Brake Caliper	BR-M585	BR-M585	BR-M535	BR-M535	BR-M601/525	BR-C901
Oil	Mineral	Mineral	Mineral	Mineral	Mineral	Mineral
Master Cylinder	X	X	X	X	X	X
Lever Size	1.5 finger	1.5 finger	1.5 finger	1.5 finger	1.5 finger	4 finger
Reach Adjust	X	X	X	X	X	X
Brake Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Barrel F
Brake Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted
Brake Hose	SM-BH59	SM-BH59	SM-BH59	SM-BH59	SM-BH59	SM-BH60/61
Note					Shimano Logo	

# Disc Brake (ATB / NEXAVE) Specifications

## Brake Rotor

Series	XTR	SAINT	SAINT	Deore XT	Deore XT	Non-Series	Non-Series
Model No.	SM-RT96	SM-RT80	SM-RT80S	SM-RT77	SM-RT77L	SM-RT75S	SM-RT75M
Brake Type	Disc-brake	Disc-brake	Disc-brake	Disc-brake	Disc-brake	Disc-brake	Disc-brake
Outside Diameter	160mm	203mm	160mm	160mm	203mm	160mm	170mm
PCD (mm)	-	-	-	-	-	44mm	44mm
Material	Stainless Steel/ Aluminum	Stainless Steel/ Aluminum	Stainless Steel/ Aluminum	Stainless Steel/ Aluminum	Stainless Steel/ Aluminum	Stainless Steel	Stainless Steel
Finish	Polished/ Anodized	Polished/ Anodized	Polished/ Anodized	Polished/ Anodized	Polished/ Anodized	Polished	Polished
Center Lock Type	X	Large Size	Large Size	X	X	-	-
Note							Use with BR-M755 for manitou suspension. For front only.

# Disc Brake (ATB / NEXAVE) Specifications

## Brake Rotor

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	SM-RT75-DH	SM-RT63	SM-RT62M	SM-RT62L	SM-RT61	SM-RT52
Brake Type	Disc-brake	Disc-brake	Disc-brake	Disc-brake	Disc-brake	Disc-brake
Outside Diameter	203mm	160mm	180mm	203mm	160mm	160mm
PCD (mm)	44mm	-	-	-	44mm	-
Material	Stainless Steel	Stainless Steel/ Aluminum	Stainless Steel/ Aluminum	Stainless Steel/ Aluminum	Stainless Steel	Stainless Steel/ Aluminum
Finish	Polished	Polished/ Painted	Polished/ Painted	Polished/ Painted	Polished	Polished/ Painted
Center Lock Type	-	X	X	X	-	X
Note						For Resin Pad Only

# Disc Brake (ATB / NEXAVE) Specifications

## Hydraulic Brake Hose

Series		XTR		Non-Series		Non-Series	
Model No.		SM-BH96		SM-BH63		SM-BH59	
Recommended Brake Lever		ST-M966		ST-M800 ST-M765 BL-M800 BL-M765		ST-M600 ST-M585 ST-M535 BL-M585 BL-M535 BL-M525	
Material		Resin		Resin		Resin	
Hose Length (mm)	Front	Right	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm
		Left	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm
	Rear	Right	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm
		Left	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm	900/1300/1700mm
Note		Adjustable / For BR and BL assembly:supplied by 50mm		Adjustable / For BR and BL assembly:supplied by 50mm		Adjustable / For BR and BL assembly:supplied by 50mm	

# Hub Roller Brake Specifications


Function Name		Inter-M										
Model No.		BR-IM75	BR-IM70		BR-IM50		BR-C050-IM		BR-IM41		BR-IM31	
		Front	Front	Rear	Front	Rear	Front	Rear	Front	Rear	Front	Rear
Brake Type	Multi Condition	X	X	X	-	-	X	X	-	-	-	-
	Regular	-	-	-	X	X	-	-	X	X	X	X
Cooling Fin Diameter		150mm	150mm	150mm	130mm	130mm	160mm	160mm	90mm	100mm	90mm	90mm
Structure		Hyper	Hyper	Hyper	Normal	Normal	Hyper	Hyper	Normal	Normal	Normal	Normal
Without Cooling Fin		-	-	-	-	-	-	-	-	-	Available	Available
Inner Cable Quick Release		X	X	X	X	X	X	X	X	X	-	-
Disc Brake Mount Compatible		X	-	-	-	-	-	-	-	-	-	-
Note												



## Power Modulator (ATB / NEXAVE) Specifications








Series	Non-Series	Non-Series	Non-Series
Model No.	SM-PM60	SM-PM50	SM-PM40
Available Lead Pipe Angle	-	-	90°/ 135°
Body Material	Aluminum	Aluminum	Aluminum
Body Finish	Barrel and Sticker	Barrel and Printed	Barrel and Sticker
Lead Pipe Material	-	-	Stainless Steel
Compatible Brake	Any Shimano V-brake (Except: BRT400/T300)	Any Shimano Mechanical Disc Brake	Any Shimano V-brake without power modulator
Compatible BL	Any Shimano V-brake Lever (Except: BL-C900/C600)	Any Shimano V-brake Lever without power modulator	Any Shimano V-brake Lever without power modulator
Note	Silver Version	Silver Version	Black, Red or Blue Version

# Front Chainwheel (ATB / NEXAVE) Specifications

Series	XTR	SAINT	SAINT	SAINT	SAINT	SAINT
Model No.	FC-M960	FC-M805-3	FC-M805-2	FC-M805-1	FC-M800-3	FC-M800-2
Rear Speeds	9	9	9	9	9	9
Chaining Combination	44-32-22T/ 44-32-24T	44-32-22T	32-22T	34/38/42/46T	44-32-22T	32-22T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	146/102/64	104/64mm	104/64mm	104/64mm	104/64mm	104/64mm
Crank Arm Length	160mm	-	-	-	-	-
	165mm	X	X	X	X	X
	167.5mm	X	-	-	-	-
	170mm	X	X	X	X	X
	172.5mm	X	-	-	-	-
	175mm	X	X	X	X	X
	177.5mm	X	-	-	-	-
	180mm	X	X	X	X	X
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	Included	Included	Included	Included	Included	Included
Axle Length	Chain Line 47.5	-	Chain Line 57.5	Chain Line 57.5	Chain Line 57.5	-
	Chain Line 50	X				X
	Chain Line 52.5	-				-
	Chain Line 50+t	-				-
	Chain Line 47.5+t	-				-
Fixing Nut Available	-	-	-	-	-	-
Optional Chain Guard	-	-	With Bash Guard	-	-	With Bash Guard
Hollowtech Crank Arm	X 	X 	X 	X 	X 	X 
Splined Crank (OCTALINK)	X	X	X	X	X	X
One-key Release	-	-	-	-	-	-
Chain Case Compatible Crank Arm	-	-	-	-	-	-
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Spider Arm	Material	-	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	Painted	Painted	Painted	Painted
Spider Arm Cover	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Outer Ring	Material	7075 Aluminum	7075 Aluminum	-	7075 Aluminum	7075 Aluminum
	Finish	Anodized	Anodized	-	Anodized	Anodized
Middle Ring	Material	7075 Aluminum	Aluminum	Aluminum	-	Aluminum
	Finish	Plated	Plated	Plated	-	Plated
Inner Ring	Material	7075 Aluminum	Aluminum	Aluminum	-	Aluminum
	Finish	Plated	Plated	Plated	-	Plated
Note		Triple for 83mm BB shell width	Double for 83mm BB shell width	Single for 83mm BB shell width	Triple for 68/73mm BB shell width	Double for 68/73mm BB shell width








# Front Chainwheel (ATB / NEXAVE) Specifications

Series	SAINT	Deore XT	Deore XT	HONE	HONE	Deore LX	Deore LX
Model No.	FC-M800-1	FC-M760	FC-M761	FC-M601-2	FC-M600-3	FC-M580	FC-M581
Rear Speeds	9	9	9	9	9	9	9
Chaining Combination	34/38/42/46T	44-32-22T	48-36-26T 44-32-22T	32-22T	44-32-22T	44-32-22T	48-36-26T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	104/64mm	104/64mm	104/64mm	104/64mm	104/64mm	104/64mm	104/64mm
Crank Arm Length	160mm	-	-	-	-	-	-
	165mm	X	X	X	-	-	-
	167.5mm	-	-	-	-	-	-
	170mm	X	X	X	X	X	X
	172.5mm	-	-	-	-	-	-
	175mm	X	X	X	X	X	X
	177.5mm	-	-	-	-	-	-
	180mm	X	X	X	-	-	-
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	Included	Included	Included	Included	Included	Included	Included
Axle Length	Chain Line 47.5	-	-	-	-	-	-
	Chain Line 50	X	X	X	X	X	X
	Chain Line 52.5	-	-	-	-	-	-
	Chain Line 50+t	-	-	-	-	-	-
	Chain Line 47.5+t	-	-	-	-	-	-
Fixing Nut Available	-	-	-	-	-	-	-
Optional Chain Guard	-	X	X	With Bash Guard	-	X	X
Hollowtech Crank Arm	X 	X 	X 	X 	X 	X 	X 
Splined Crank (OCTALINK)	X	X	X	X	X	X	X
One-key Release	-	-	-	-	-	-	-
Chain Case Compatible Crank Arm	-	-	X	-	-	-	X
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Spider Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spider Arm Cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer Ring	Material	7075 Aluminum	7075 Aluminum	7075 Aluminum	-	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	-	Anodized	Anodized
Middle Ring	Material	-	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	Plated	Plated	Plated	Plated	Plated
Inner Ring	Material	-	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	-	Plated	Plated	Plated	Plated	Plated
Note	Single for 68/73mm BB shell width			Double for 68/73mm BB shell width	Triple for 68/73mm BB shell width		

# Front Chainwheel (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Deore	Deore	Non-Series	Deore
Model No.	FC-M540-L	FC-M540-LK	FC-M540-L	FC-M540-LK	FC-M540-SK	FC-M531-L
Rear Speeds	9	9	9	9	9	9
Chaining Combination	44-32-22T	44-32-22T	44-32-22T	44-32-22T	48-36-26T	44-32-22T/ 48-36-26T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	104/64	104/64	104/64	104/64	104/64	104/64
Crank Arm Length	160mm	-	-	-	-	-
	165mm	-	-	-	-	-
	167.5mm	-	-	-	-	-
	170mm	X	X	X	X	X
	172.5mm	-	-	-	-	-
	175mm	X	X	X	X	X
	177.5mm	-	-	-	-	-
	180mm	-	-	-	-	-
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	BB-ES51(-E) BB-ES30(-E)	BB-ES51(-E/K) BB-ES30(-E/K)	BB-ES51(-E) BB-ES30(-E)	BB-ES51(-E/K) BB-ES30(-E/K)	BB-ES51(-E/K) BB-ES30(-E/K)	BB-ES51-AK BB-ES30-AK
Axle Length	Chain Line 47.5	113(E)	121(E)	113(E)	121(E)	-
	Chain Line 50	118(E)	126(E)	118(E)	126(E)	121AK
	Chain Line 52.5	-	-	-	-	-
	Chain Line 50+t	-	-	-	-	-
	Chain Line 47.5+t	-	121K	-	121K	121K
Fixing Nut Available	-	-	-	-	-	-
Optional Chain Guard	X	X	X	X	X	X
Hollowtech Crank Arm	X 	X 	X 	X 	X 	X 
Splined Crank (OCTALINK)	X	X	X	X	X	X
One-key Release	-	-	-	-	-	-
Chain Case Compatible Crank Arm	-	X	-	X	X	X
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted(Black)	Painted(Black)	Painted(Black)	Painted(Black)	Painted(Silver)
Spider Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted(Black)	Painted(Black)	Painted(Black)	Painted(Black)	Painted(Silver)
Spider Arm Cover	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Outer Ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized(Black)	Anodized(Black)	Anodized(Black)	Anodized(Black)	Anodized(Black)
Middle Ring	Material	Aluminum	Aluminum	Steel	Steel	Aluminum
	Finish	Plated(Silver)	Plated(Silver)	Plated(Silver)	Plated(Silver)	Plated(Silver)
Inner Ring	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Plated(Silver)	Plated(Silver)	Plated(Silver)	Plated(Silver)	Plated(Silver)
Note	Black Version. Aluminum 44T/32T chainring. Octalink	Black Version. For chain case. Aluminum 44T/32T chainring. Octalink	Black Version. Aluminum 44T chainring. Octalink	Black Version. For chain case. Aluminum 44T chainring. Octalink	Silver Version. For chain case. Aluminum 48T chainring. Octalink	Black Version For chain case

# Front Chainwheel (ATB / NEXAVE) Specifications

Series	Deore	Deore	Deore	Deore	Deore	Non-Series
Model No.	FC-M531-S	FC-M530-L	FC-M530-S	FC-M510-LO	FC-M510-SO	FC-M470-LK
Rear Speeds	9	9	9	9	9	9
Chaining Combination	44-32-22T/ 48-36-26T	44-32-22T/ 48-36-26T	44-32-22T/ 48-36-26T	44-32-22T	44-32-22T	44-32-22T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	104/64	104/64	104/64	104/64	104/64	104/64
Crank Arm Length	160mm	-	-	-	-	-
	165mm	-	-	-	-	-
	167.5mm	-	-	-	-	-
	170mm	X	X	X	X	X
	172.5mm	-	-	-	-	-
	175mm	X	X	X	X	X
	177.5mm	-	-	-	-	-
	180mm	-	-	-	-	-
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	BB-ES51-AK BB-ES30-AK	BB-ES51 BB-ES30	BB-ES51 BB-ES30	BB-ES51(-E) BB-ES30(-E)	BB-ES51(-E) BB-ES30(-E)	BB-ES51(E/K) BB-ES30(E/K)
Axle Length	Chain Line 47.5	-	-	-	113(E)	121(E)
	Chain Line 50	121AK	113	113	118(E)	126(E)
	Chain Line 52.5	-	-	-	-	-
	Chain Line 50+t	-	-	-	-	-
	Chain Line 47.5+t	-	-	-	-	121K
Fixing Nut Available	-	-	-	-	-	-
Optional Chain Guard	X	X	X	X	X	X
Hollowtech Crank Arm	X 	X 	X 	X 	X 	X 
Splined Crank (OCTALINK)	X	X	X	X	X	X
One-key Release	-	-	-	-	-	-
Chain Case Compatible Crank Arm	X	-	-	-	-	X
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted(Black)
Spider Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted(Black)
Spider Arm Cover	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Outer Ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized(Black)
Middle Ring	Material	Aluminum	Aluminum	Aluminum	Steel	Steel
	Finish	Plated	Plated	Plated	Pearl Bright	Pearl Bright
Inner Ring	Material	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Pearl Bright	Pearl Bright
Note	Silver Version For chain case	Black Version	Silver Version	Black Version. Splined Crank Arm. Made in Italy.	Silver Version. Splined Crank Arm. Made in Italy.	Black Version. For chain case. Aluminum 44T chaining. Octalink



# Front Chainwheel (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	FC-M470-SK	FC-M460-LK	FC-M440-L	FC-M440-L	FC-M440-S
Rear Speeds	9	9	9	9	9
Chaining Combination	48-36-26T	44-32-22T	44-32-22T	44-32-22T	44-32-22T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	104/64	104/64	104/64	104/64	104/64
Crank Arm Length	160mm	-	-	-	-
	165mm	-	-	-	-
	167.5mm	-	-	-	-
	170mm	X	X	X	X
	172.5mm	-	-	-	-
	175mm	X	X	X	X
	177.5mm	-	-	-	-
	180mm	-	-	-	-
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	BB-ES51(E/K) BB-ES30(E/K)	BB-UN26(-K)	BB-ES30(-E)	BB-ES30(-E)	BB-ES30(-E)
Axle Length	Chain Line 47.5	121(E)	117.5	113(E)	113(E)
	Chain Line 50	126(E)	-	118(E)	118(E)
	Chain Line 52.5	-	-	-	-
	Chain Line 50+t	-	-	-	-
	Chain Line 47.5+t	121K	117.5K	-	-
Fixing Nut Available	-	-	-	-	-
Optional Chain Guard	X	X	X	X	X
Hollowtech Crank Arm	X 	X 	X	X	-
Splined Crank (OCTALINK)	X	-	X	X	X
One-key Release	-	-	-	-	-
Chain Case Compatible Crank Arm	X	X	-	-	-
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted(Silver)	Painted(Black)	Painted(Black)	Painted(Black)
Spider Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted(Silver)	Painted(Black)	Painted(Black)	Painted(Black)
Spider Arm Cover	Material	-	-	-	-
	Finish	-	-	-	-
Outer Ring	Material	Aluminum	Aluminum	Aluminum	Steel
	Finish	Anodized(Black)	Anodized(Black)	Anodized	Painted(Black)
Middle Ring	Material	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Pearl Bright
Inner Ring	Material	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Pearl Bright
Note	Silver Version. For chain case. Aluminum 48T chainring. Octalink	Black Version. For chain case. Aluminum 44T chainring.	Black Version Aluminum 44T chainring Octalink	Black Version Steel chainrings Octalink	Silver Version Aluminum 44T chainring Octalink



# Front Chainwheel (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.	FC-M440-S	FC-M440-L	FC-M440-L	FC-M440-S	FC-M440-SK
Rear Speeds	9	9	9	9	9
Chaining Combination	44-32-22T	44-32-22T	44-32-22T	44-32-22T	48-36-26T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	104/64	104/64	104/64	104/64	104/64
Crank Arm Length	160mm	-	-	-	-
	165mm	-	-	-	-
	167.5mm	-	-	-	-
	170mm	X	X	X	X
	172.5mm	-	-	-	-
	175mm	X	X	X	X
	177.5mm	-	-	-	-
	180mm	-	-	-	-
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	BB-ES30(-E)	BB-UN26(-E)	BB-UN26(-E)	BB-UN26(-E)	BB-UN26(-K)
Axle Length	Chain Line 47.5	113(E)	MM110(E)	MM110(E)	117.5
	Chain Line 50	118(E)	LL113(E)	LL113(E)	-
	Chain Line 52.5	-	-	-	-
	Chain Line 50+t	-	-	-	-
	Chain Line 47.5+t	-	-	-	-
Fixing Nut Available	-	-	-	-	-
Optional Chain Guard	X	X	X	X	X
Hollowtech Crank Arm	-	-	-	-	-
Splined Crank (OCTALINK)	X	-	-	-	-
One-key Release	-	-	-	-	-
Chain Case Compatible Crank Arm	-	-	-	-	X
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted(Silver)	Painted(Black)	Painted(Black)	Painted(Silver)
Spider Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted(Silver)	Painted(Black)	Painted(Black)	Painted(Silver)
Spider Arm Cover	Material	-	-	-	-
	Finish	-	-	-	-
Outer Ring	Material	Steel	Aluminum	Steel	Steel
	Finish	Painted(Black)	Anodized	Painted(Black)	Painted(Black)
Middle Ring	Material	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Pearl Bright
Inner Ring	Material	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Pearl Bright
Note	Silver Version Steel chainrings Octalink	Black Version Aluminum 44T chaining	Black Version Steel chainrings	Silver Version Steel chainrings	Silver Version. For chain case. Aluminum 48T chaining.



# Front Chainwheel (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Alivio	Alivio	Alivio	Alivio	Non-Series
Model No.	FC-M416-L	FC-M415-L	FC-M411-L	FC-M411-S	FC-M410-L	FC-M410-S	FC-M341-L
Rear Speeds	8/7	8/7	8/7	8/7	8/7	8/7	8/7
Chaining Combination	42-32-22T	42-32-22T	42-32-22T	42-32-22T	42-32-22T	42-32-22T	42-32-22T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	104/64	104/64	104/64	104/64	104/64	104/64	104/64
Crank Arm Length	160mm	-	-	-	-	-	-
	165mm	-	-	-	-	-	-
	167.5mm	-	-	-	-	-	-
	170mm	X	X	X	X	X	X
	172.5mm	-	-	-	-	-	-
	175mm	X	X	X	X	X	X
	177.5mm	-	-	-	-	-	-
	180mm	-	-	-	-	-	-
Chain	HG	HG	HG	HG	HG	HG	HG
Bottom Bracket	BB-UN26(-K) BB-UN28(-K)	BB-UN26(-E) BB-LP28(-E)	BB-UN26(-K) BB-UN28(-K)	BB-UN26(-K) BB-UN28(-K)	BB-UN26(-E) BB-LP28(-E)	BB-UN26(-E) BB-LP28(-E)	BB-UN26(-K) BB-LP28(-K)
Axle Length	Chain Line 47.5	-	-	-	-	-	-
	Chain Line 50	LL123(K)	LL113(E)	LL123(K)	LL123(K)	LL113(E)	LL123(K)
	Chain Line 52.5	-	-	-	-	-	-
	Chain Line 50+t	-	-	-	-	-	-
	Chain Line 47.5+t	-	-	-	-	-	-
Fixing Nut Available	X	X	X	X	X	X	X
Optional Chain Guard	X	X	X	X	X	X	X
Hollowtech Crank Arm	X 	X 	-	-	-	-	-
Splined Crank (OCTALINK)	-	-	-	-	-	-	-
One-key Release	-	-	-	-	-	-	-
Chain Case Compatible Crank Arm	X	-	X	X	-	-	X
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spider Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	-
	Finish	Painted	Painted	Painted	Painted	Painted	-
Spider Arm Cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
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	Plated	Plated	Plated	Plated	Plated	Plated
Inner Ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Note	Black Version only	Black Version only	Black Version	Silver Version	Black Version	Silver Version	Black Version

# Front Chainwheel (ATB / NEXAVE) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	
Model No.	FC-M341-S	FC-M405-L	FC-M405-S	FC-MC09-L	FC-MC09-S	FC-TS95-LK	FC-TS95-SK	
Rear Speeds	8/7	8/7	8/7	8/7	8/7	9	9	
Chaining Combination	42-32-22T	42-32-22T	42-32-22T	42-32-22T	42-32-22T	44-32-22T	44-32-22T	
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm	4arm	4arm	
PCD (mm)	104/64	Rivitted	Rivitted	Rivitted	Rivitted	104/64	104/64	
Crank Arm Length	160mm	-	-	-	-	-	-	
	165mm	-	-	-	-	-	-	
	167.5mm	-	-	-	-	-	-	
	170mm	X	X	X	X	X	X	
	172.5mm	-	-	-	-	-	-	
	175mm	X	X	X	-	-	-	
	177.5mm	-	-	-	-	-	-	
	180mm	-	-	-	-	-	-	
Chain	HG	HG	HG	HG	HG	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	
Bottom Bracket	BB-UN26(-K) BB-LP28(-K)	BB-UN26(-K) BB-LP28(-K)	BB-UN26(-K) BB-LP28(-K)	BB-UN26(-K) BB-LP28(-K)	BB-UN26(-K) BB-LP28(-K)	BB-TS50(-K)/30(-K) BB-UN26(-K)	BB-TS50(-K)/30(-K) BB-UN26(-K)	
Axle Length	Chain Line 47.5	-	-	-	-	117.5	117.5	
	Chain Line 50	LL123(K)	LL123(K)	LL123(K)	LL123(K)	-	-	
	Chain Line 52.5	-	-	-	-	-	-	
	Chain Line 50+t	-	-	-	-	-	-	
	Chain Line 47.5+t	-	-	-	-	117.5	117.5	
Fixing Nut Available	X	X	X	X	X	-	-	
Optional Chain Guard	X	X	X	X	X	X	X	
Hollowtech Crank Arm	-	-	-	-	-	X 	X 	
Splined Crank (OCTALINK)	-	-	-	-	-	X (option upon request)	X (option upon request)	
One-key Release	-	-	-	-	-	-	-	
Chain Case Compatible Crank Arm	X	X	X	X	X	X	X	
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Painted	Painted	Painted	Painted	Polished	Painted(Black)	Painted(Silver)
Spider Arm	Material	-	-	-	-	-	Aluminum	Aluminum
	Finish	-	-	-	-	-	Painted(Black)	Painted(Silver)
Spider Arm Cover	Material	-	Plastic	Plastic	Plastic	Plastic	-	-
	Finish	-	Painted	Painted	-	-	-	-
Outer Ring	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted(Black)	Painted(Black)
Middle Ring	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Painted	Painted	Painted	Painted	Pearl Bright	Pearl Bright
Inner Ring	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Painted	Painted	Painted	Painted	Pearl Bright	Pearl Bright
Note	Silver Version	Black Version	Silver Version	Black Version	Silver Version	Black Version Made in Italy	Silver Version Made in Italy	

# Front Chainwheel (ATB / NEXAVE) Specifications


Series	Non-Series	Non-Series	Non-Series	Tourney	Tourney
Model No.	FC-TS95-LK	FC-TS95-SK	FC-TS91	FC-TX70	FC-TX71
Rear Speeds	9	9	9	8/7/6	8/7/6
Chaining Combination	48-36-26T	48-36-26T	44-32-22T	42-34-24T	48-38-28T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	104/64	104/64	104/64	Riveted	Riveted
Crank Arm Length	160mm	-	-	-	-
	165mm	-	-	-	-
	167.5mm	-	-	-	-
	170mm	X	X	X	X
	172.5mm	-	-	-	-
	175mm	-	-	-	-
	177.5mm	-	-	-	-
	180mm	-	-	-	-
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	HG/UG	HG/UG
Bottom Bracket	BB-TS50(-K)/30(-K) BB-UN26(-K)	BB-TS50(-K)/30(-K) BB-UN26(-K)	BB-TS50	BB-UN26(-K)	BB-UN26(-K)
Axle Length	Chain Line 47.5	117.5	117.5	117.5	D-NL
	Chain Line 50	-	-	-	-
	Chain Line 52.5	-	-	-	-
	Chain Line 50+t	-	-	-	-
	Chain Line 47.5+t	117.5	117.5	-	-
Fixing Nut Available	-	-	-	D-NL	D-NL
Optional Chain Guard	X	X	X	X	X
Hollowtech Crank Arm	X 	X 	-	-	-
Splined Crank (OCTALINK)	X (option upon request)	X (option upon request)	-	-	-
One-key Release	-	-	-	-	-
Chain Case Compatible Crank Arm	X	X	X	X	X
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted(Black)	Painted(Silver)	Painted (Black or Silver)	Polished
Spider Arm	Material	Aluminum	Aluminum	Aluminum	-
	Finish	Painted(Black)	Painted(Silver)	Polished	-
Spider Arm Cover	Material	-	-	-	Resin
	Finish	-	-	-	Resin
Outer Ring	Material	Aluminum	Aluminum	Steel	Steel
	Finish	Anodizing silver	Anodizing silver	Painted(Black)	Painted
Middle Ring	Material	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Painted
Inner Ring	Material	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Pearl Bright	Painted
Note	Black Version Made in Italy	Silver Version Made in Italy	Made in Italy	4arm	4arm



# Front Chainwheel (ATB / NEXAVE) Specifications

Series	Tourney	Tourney	NEXAVE	NEXAVE	NEXAVE	NEXAVE
Model No.	FC-TY40	FC-TY33	FC-C810	FC-C600	FC-C530	FC-C530
Rear Speeds	8/7/6	8/7/6	LG 8spd	9	LG 8spd	LG 8spd
Chaining Combination	42-34-24T	48-38-28T	46-34-24T SPCM	46-34T SPCM	33T (Single)	38T (Single)
Spider or Gear Arm	4arm	4arm	4arm	4arm	4arm	4arm
PCD (mm)	Riveted	Riveted	100/64	112	-	-
Crank Arm Length	160mm	-	-	-	-	-
	165mm	-	-	-	-	-
	167.5mm	-	-	-	-	-
	170mm	X	X	X	X	X
	172.5mm	-	-	-	-	-
	175mm	-	-	X	X	-
	177.5mm	-	-	-	-	-
	180mm	-	-	-	-	-
Chain	HG/UG	HG/UG	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	BB-UN26(-E)	BB-UN26	BB-UN26	BB-UN26-K	BB-TS30 BB-UN26-K	BB-TS30 BB-UN26-K
Axle Length	Chain Line 47.5	YL117	D-NL	-	-	YL117 for C.L. 44+t
	Chain Line 50	ZL122	-	130	-	117.5K
	Chain Line 52.5	-	-	-	-	D-NL for C.L. 47+t
	Chain Line 50+t	-	-	-	-	D-EL for C.L. 49.5+t
	Chain Line 47.5+t	-	-	-	-	-
Fixing Nut Available	-	X	-	-	-	-
Optional Chain Guard	X	X	Black*	X	Double CG*	Double CG*
Hollowtech Crank Arm	-	-	-	-	-	-
Splined Crank (OCTALINK)	-	-	-	-	-	-
One-key Release	-	-	-	-	-	-
Chain Case Compatible Crank Arm	-	X	X	X	X	-
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Polished	Polished	Painted(Silver)	Painted	Anodized
Spider Arm	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Spider Arm Cover	Material	Resin	Resin	-	-	Cover ring dia. : 95mm
	Finish	Resin	Resin	-	-	: 95mm
Outer Ring	Material	Steel	Steel	Aluminum	Steel	Steel
	Finish	Painted(Silver)	Painted	Anodized	Painted(Silver)	Painted
Middle Ring	Material	Steel	Steel	Steel	-	-
	Finish	Painted(Silver)	Painted	Painted(Silver)	-	-
Inner Ring	Material	Steel	Steel	Steel	Steel	-
	Finish	Painted(Silver)	Painted	Painted(Silver)	Painted(Silver)	-
Note	4arm	4arm	Di2 *Small Chain Guard is available(Silver)		*Small double CG for Chain case compatible	*Large outer CG & small inner CG (Not compatible Chain case)

# Front Chainwheel (ATB / NEXAVE) Specifications

Series	NEXAVE	NEXAVE	NEXAVE	NEXAVE	NEXAVE	NEXAVE
Model No.	FC-C530	FC-C510	FC-C505	FC-T410-S	FC-T300-S	FC-T303
Rear Speeds	LG 8spd	LG 8spd	LG 8spd	8	8/7	8/7
Chaining Combination	38T (Single)	46-34-24T	46-34-24T SPCM	42-32-22T	42-34-24T	48-38-28T
Spider or Gear Arm	4arm	4arm	4arm	4arm	4-arm	4-arm
PCD (mm)	-	100/64	100/64	100/64	Riveted	Riveted
Crank Arm Length	160mm	-	-	-	-	-
	165mm	-	-	-	-	-
	167.5mm	-	-	-	-	-
	170mm	X	X	X	X	X
	172.5mm	-	-	-	-	-
	175mm	-	X	X	-	-
	177.5mm	-	-	-	-	-
	180mm	-	-	-	-	-
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	IG	HG	HG
Bottom Bracket	BB-TS30 BB-UN26-K	BB-UN26	BB-UN26	BB-UN26-K	BB-UN26(-E)	BB-UN26(-E)
Axle Length	Chain Line 47.5	YL117 for C.L. 44+ t	-	-	YL117	YL117
	Chain Line 50	117.5 for C.L. 46+t	123SP	130	ZL122	ZL122
	Chain Line 52.5	D-NL for C.L. 47+t	-	-	-	-
	Chain Line 50+t	D-EL for C.L. 49.5+t	-	-	-	-
	Chain Line 47.5+t	-	-	-	117.5K	-
Fixing Nut Available	-	-	-	-	-	-
Optional Chain Guard	Double CG*	Black*	Black*	-	X	X
Hollowtech Crank Arm	-	-	-	X 	-	-
Splined Crank (OCTALINK)	-	-	-	-	-	-
One-key Release	-	-	-	-	-	-
Chain Case Compatible Crank Arm	X	X	X	X	X	X
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Painted(Silver)	Painted(Silver)	Painted(Silver)	Anodized
Spider Arm	Material	-	-	-	Aluminum	-
	Finish	-	-	-	Painted(Silver)	-
Spider Arm Cover	Material	Cover ring dia. : 95mm	-	-	-	Resin
	Finish	-	-	-	-	Painted(Silver)
Outer Ring	Material	Steel	Aluminum	Aluminum	Aluminum	Steel
	Finish	Painted	Anodized	Anodized	Anodized	Painted(Silver)
Middle Ring	Material	-	Steel	Steel	Steel	Steel
	Finish	-	Painted(Silver)	Painted(Silver)	Pearl Bright	Painted(Silver)
Inner Ring	Material	-	Steel	Steel	Steel	Steel
	Finish	-	Painted(Silver)	Painted(Silver)	Pearl Bright	Painted(Silver)
Note	*Small double CG for Chain case compatible	*Small Chain Guard is available(Silver)	*Small Chain Guard is available(Silver)	Made in Italy		

# Bottom Bracket (ATB / NEXAVE) Specifications

Model No.			FC-M960	FC-M805-3	FC-M805-2	FC-M805-1	FC-M800-3	FC-M800-2	FC-M800-1	FC-M760	FC-M761	FC-M600-3
Cartridge Type BB / E-type			-	-	-	-	-	-	-	-	-	-
For Chain Case			-	-	-	-	-	-	-	-	X	-
Spindle	Hollow Pipe		X	X	X	X	X	X	X	X	X	X
	Splined Spindle		X	X	X	X	X	X	X	X	X	X
	Material		Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Aluminum
<Axle Length>			<BB Shell>									
Hollowtech II	83mm	(BC1.37)	-	X	X	X	-	-	-	-	-	-
	68mm	(BC1.37)	X	-	-	-	X	X	X	X	X	X
	73mm	(BC1.37)	X	-	-	-	X	X	X	X	X	X
112.5mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
116mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
MM110	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
LL113	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
113	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
YL117	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
117.5	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
118	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
XL118	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
121	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
126	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
D-NL (122.5mm)	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
D-EL (127.5mm)	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
YL116	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
ZL121	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
ZL122	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
LL123	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
123SP	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
130	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
Note			E-type Compatible	E-type Compatible	E-type Compatible	E-type Compatible	E-type Compatible	E-type Compatible	E-type Compatible	E-type Compatible	E-type Compatible	E-type Compatible

# Bottom Bracket (ATB / NEXAVE) Specifications

Model No.			FC-M601-2	FC-M580	FC-M581	BB-ES71	BB-ES71-E	BB-ES51	BB-ES51-E	BB-ES51-K	BB-ES51-AK	BB-ES30
Cartridge Type BB /E-type			-	-	-	-	X	-	X	-	-	-
For Chain Case			-	-	X	-	-	-	-	X	X	-
Spindle	Hollow Pipe		X	X	X	X (22.2mm)	X (22.2mm)	X (22.2mm)	X (22.2mm)	X (22.2mm)	X (22.2mm)	X (22.2mm)
	Splined Spindle		X	X	X	X	X	X	X	X	X	X
	Material		Steel	Aluminum	Aluminum	Steel	Steel	Steel	Steel	Steel	Steel	Steel
<Axle Length>			<BB Shell>									
Hollowtech II	83mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	X	X	X	-	-	-	-	-	-	-
	73mm	(BC1.37)	X	X	X	-	-	-	-	-	-	-
112.5mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
116mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
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	X	-	-	X
	70mm	(M36)	-	-	-	X	-	X	-	-	-	X
	73mm	(BC1.37)	-	-	-	X	-	X	-	-	-	X
YL117	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
117.5	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
118	68mm	(BC1.37)	-	-	-	X	-	X	-	-	-	X
	70mm	(M36)	-	-	-	X	-	X	-	-	-	X
	73mm	(BC1.37)	-	-	-	X	X	X	X	-	-	X
XL118	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
121	68mm	(BC1.37)	-	-	-	-	-	X	X	X	X	X
	70mm	(M36)	-	-	-	-	-	X	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	X	-	-	-	X
126	68mm	(BC1.37)	-	-	-	-	-	X	-	-	-	X
	73mm	(BC1.37)	-	-	-	-	-	X	X	-	-	X
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
D-NL (122.5mm)	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
D-EL (127.5mm)	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
YL116	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
ZL121	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
ZL122	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
LL123	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
123SP	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
130	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
Note			E-type Compatible	E-type Compatible	E-type Compatible						For FC-M531 Only	

# Bottom Bracket (ATB / NEXAVE) Specifications

Model No.			BB-ES30-E	BB-ES30-K	BB-ES30-AK	BB-UN73	BB-UN53	BB-UN53-E	BB-UN53-K	BB-UN26	BB-UN26-E	BB-UN26-K
Cartridge Type BB / E-type			X	-	-	-	-	X	-	-	X	-
For Chain Case			-	X	X	-	-	-	X	-	-	X
Spindle	Hollow Pipe		X (22.2mm)	X (22.2mm)	X (22.2mm)	X	-	-	-	-	-	-
	Splined Spindle		X	X	X	-	-	-	-	-	-	-
	Material		Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
<Axle Length>			<BB Shell>									
Hollowtech II	83mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
112.5mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
116mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
MM110	68mm	(BC1.37)	-	-	-	X	X	-	-	X	X	X
	70mm	(M36)	-	-	-	-	X	-	-	X	-	-
	73mm	(BC1.37)	-	-	-	X	X	-	-	X	-	-
LL113	68mm	(BC1.37)	-	-	-	X	X	X	-	X	X	-
	70mm	(M36)	-	-	-	-	X	-	-	X	-	-
	73mm	(BC1.37)	-	-	-	X	X	-	-	X	X	-
113	68mm	(BC1.37)	X	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
YL117	68mm	(BC1.37)	-	-	-	-	-	-	X* (CL:47.5)	X* (CL:47.5)	X* (CL:47.5)	
117.5	68mm	(BC1.37)	-	-	-	-	-	-	-	X	-	X
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
118	73mm	(BC1.37)	X	-	-	-	-	-	X	-	-	-
	68mm	(BC1.37)	-	-	-	-	X	-	-	-	-	-
	70mm	(M36)	-	-	-	-	X	-	-	-	-	-
XL118	73mm	(BC1.37)	-	-	-	-	X	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
121	68mm	(BC1.37)	X	X	X	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
126	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	X	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	X	X	-	-	X*	-	X*
D-NL (122.5mm)	70mm	(M36)	-	-	-	-	X	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	X	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	X	-	-	X*	-	-
D-EL (127.5mm)	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
YL116	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
ZL121	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
ZL122	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
LL123	68mm	(BC1.37)	-	-	-	-	X	-	X	X	X	X (t=1.8)
	70mm	(M36)	-	-	-	-	-	-	-	X	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	X	-
123SP	68mm	(BC1.37)	-	-	-	-	-	-	-	X	-	
130	68mm	(BC1.37)	-	-	-	-	-	-	-	X	-	
Note					For FC-M531 Only					*w/FixingBolts	*w/FixingBolts	*w/FixingBolts

# Bottom Bracket (ATB / NEXAVE) Specifications

Model No.			BB-LP28	BB-LP28-E	BB-LP28-K	BB-TY30	BB-TY30-K	BB-TS30	BB-TS30-E	BB-TS30-K	BB-TS30-EK	BB-TS50
Cartridge Type BB /E-type			-	X	-	-	-	-	X	-	X	-
For Chain Case			-	-	X	-	-	-	-	X	X	-
Spindle	Hollow Pipe		-	-	-	-	-	-	-	-	-	-
	Splined Spindle		-	-	-	-	-	-	-	-	-	-
	Material		Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
<Axle Length>	<BB Shell>											
Hollowtech II	83mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
112.5mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
116mm	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
MM110	68mm	(BC1.37)	X	X	X	-	-	X	X	X	-	X
	70mm	(M36)	X	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	X	-	-	-	-	X	-	-	-	X
LL113	68mm	(BC1.37)	X	-	-	-	-	X*	-	-	-	X
	70mm	(M36)	X	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	X	X	-	-	-	X	-	-	-	X
113	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
YL117	68mm	(BC1.37)	-	-	-	-	X, X*	X*	X*	X*	X, X*	
117.5	68mm	(BC1.37)	-	-	-	-	-	X	-	-	-	X
	68mm	(BC1.37)	-	-	-	-	-	X*	X	X	X	X
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
118	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	X	-	-	-	-	-	-	-	-	-
	70mm	(M36)	X	-	-	-	-	-	-	-	-	-
XL118	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
121	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
126	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	X	X	X*	-	X	-	X*
D-NL (122.5mm)	70mm	(M36)	-	-	-	X	-	-	-	X	-	-
	73mm	(BC1.37)	-	-	-	X	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	X	-	X*	-	X*	-	X*
D-EL (127.5mm)	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	-	-	-	X	-	-	-	-	-	-
	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
YL116	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	-
	70mm	(M36)	-	-	-	-	-	-	-	-	-	-
ZL121	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
ZL122	73mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
LL123	68mm	(BC1.37)	X	X	X (t=1.8)	-	-	-	-	-	-	-
	70mm	(M36)	X	-	-	-	-	-	-	-	-	-
	73mm	(BC1.37)	X	X	-	-	-	-	-	-	-	-
123SP	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
130	68mm	(BC1.37)	-	-	-	-	-	-	-	-	-	
Note								*w/FixingBolts	*w/FixingBolts	*w/FixingBolts	*w/FixingBolts	*w/FixingBolts

## Bottom Bracket (ATB / NEXAVE) Specifications

Model No.			BB-TS50-E	BB-TS50-K	BB-TS50-EK
Cartridge Type BB /E-type			X	-	X
For Chain Case			-	X	X
Spindle	Hollow Pipe		-	-	-
	Splined Spindle		-	-	-
	Material		Steel	Steel	Steel
<Axle Length>	<BB Shell>				
Hollowtech II	83mm	(BC1.37)	-	-	-
	68mm	(BC1.37)	-	-	-
	73mm	(BC1.37)	-	-	-
112.5mm	68mm	(BC1.37)	-	-	-
	73mm	(BC1.37)	-	-	-
116mm	68mm	(BC1.37)	-	-	-
	73mm	(BC1.37)	-	-	-
MM110	68mm	(BC1.37)	X	X	-
	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
LL113	68mm	(BC1.37)	-	-	-
	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
113	68mm	(BC1.37)	-	-	-
	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
YL117	68mm	(BC1.37)	X*	X*	X*
117.5	68mm	(BC1.37)	X	X	X
	68mm	(BC1.37)	-	-	-
118	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
	68mm	(BC1.37)	-	-	-
XL118	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
	68mm	(BC1.37)	-	-	-
121	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
	68mm	(BC1.37)	-	-	-
126	68mm	(BC1.37)	-	-	-
	73mm	(BC1.37)	-	-	-
D-NL (122.5mm)	68mm	(BC1.37)	-	X*	-
	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
D-EL (127.5mm)	68mm	(BC1.37)	-	-	-
	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
YL116	68mm	(BC1.37)	-	-	-
	70mm	(M36)	-	-	-
ZL121	73mm	(BC1.37)	-	-	-
ZL122	73mm	(BC1.37)	-	-	-
LL123	68mm	(BC1.37)	-	-	-
	70mm	(M36)	-	-	-
	73mm	(BC1.37)	-	-	-
123SP	68mm	(BC1.37)	-	-	-
130	68mm	(BC1.37)	-	-	-
Note			*w/FixingBolts	*w/FixingBolts	*w/FixingBolts

# Freehub (ATB/ NEXAVE) Specifications( Standard /Disc Brake /Roller Brake )

Series		XTR	Deore XT	Deore XT	Deore LX
Model No.		FH-M960	FH-M760-L	FH-M760-S	FH-M580
Spoke Holes	24H	-	-	-	-
	28H	X	-	-	-
	32H	X	X	X	X
	36H	X	X	X	X
	40/48H	-	-	40H	-
	Hole PCD (mm)	45	45	45	45
Freehub Body	Speeds	8/9	8/9	8/9	8/9
	11T Compatible	X	X	X	X
	Roller Clutch	-	-	-	-
	Material	Titanium	Steel	Steel	Steel
O.L.D. (mm)	130	-	-	-	-
	135	X	X	X	X
	Others	-	-	-	-
Flange Distance		58.4	59.3	59.3	59.2
Dish		6.15	7.9	7.9	7.6
Axle(QR)	QR Skewer Length	168/173mm	168/173mm	168/173mm	168/173mm
	Length	146mm(M10)	146mm(M10)	146mm(M10)	146mm(M10)
	Material	Titanium	Steel	Steel	Steel
Axle(Nut)	Length	-	-	-	-
	Material	-	-	-	-
Seal	Hub	X	X	X	X
	Freewheel	X	X	X	X
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Quick Release Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
CBN (Cubic Boron Nitride)	Cone Races	X	X	X	X
	Cup Races	X	-	-	-
Stainless Steel Ball Bearings		X	-	-	-
Thread for Drum Brake (BC1.37X24)		-	-	-	-
Note			Black Version	Silver Version	



# Freehub (ATB/ NEXAVE) Specifications( Standard /Disc Brake /Roller Brake )

Series		Deore	Deore	Alivio	Non-Series	Non-Series
Model No.		FH-M530-L	FH-M530-S	FH-MC18	FH-RM60-8-QR	FH-RM30-8-QR
Spoke Holes	24H	-	-	-	-	-
	28H	-	-	-	-	-
	32H	X	X	X	X	X
	36H	X	X	X	X	X
	40/48H	-	-	-	-	-
	Hole PCD (mm)	45	45	45	45	45
Freehub Body	Speeds	8/9	8/9	8/9	8/9	8
	11T Compatible	X	X	X	X	X
	Roller Clutch	-	-	-	-	-
	Material	Steel	Steel	Steel	Steel	Steel
O.L.D. (mm)	130	-	-	-	-	-
	135	X	X	X	X	X
	Others	-	-	-	-	-
Flange Distance		59.2	59.2	60.6	59.2	59.2
Dish		7.6	7.6	7.6	7.3	7.7
Axle(QR)	QR Skewer Length	168/173mm	168/173mm	168mm	166mm	166mm
	Length	146mm(M10)	146mm(M10)	146mm(M10)	146mm(M10)	146mm(M10)
	Material	Steel	Steel	Steel	Steel	Steel
Axle(Nut)	Length	-	-	-	-	-
	Material	-	-	-	-	-
Seal	Hub	X	X	X	X	-
	Freewheel	X	X	X	X	-
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum/1pcs	Aluminum/2pcs
	Finish	Anodized	Anodized	Machined	Machined	Shiny
Quick Release Lever	Material	Aluminum	Aluminum	Aluminum	Steel	Steel
	Finish	Anodized	Anodized	Barrel	Chrome Plated	Chrome Plated
CBN (Cubic Boron Nitride)	Cone Races	X	X	-	-	-
	Cup Races	X	X	-	-	-
Stainless Steel Ball Bearings		-	-	-	-	-
Thread for Drum Brake (BC1.37X24)		-	-	-	-	-
Note		Black Version	Silver Version	Black color available	Black Hub Shell Available	Black Hub Shell Available

# Freehub (ATB/ NEXAVE) Specifications( Standard /Disc Brake /Roller Brake )

Series		Non-Series	Non-Series	Non-Series	Altus	Non-Series
Model No.		FH-RM30-8-NT	FH-RM30-7-QR	FH-RM30-7-NT	FH-CT91	FH-RM40
Spoke Holes	24H	-	-	-	-	-
	28H	-	-	-	-	-
	32H	X	-	-	X	-
	36H	X	X	X	X	X
	40/48H	-	-	-	-	-
	Hole PCD (mm)	45	45	45	45	45
Freehub Body	Speeds	8	7	7	7	7
	11T Compatible	X	X	X	X	X
	Roller Clutch	-	-	-	-	-
	Material	Steel	Steel	Steel	Steel	Steel
O.L.D. (mm)	130	-	X	X	X	X
	135	X	X	X	X	X
	Others	-	-	-	-	-
Flange Distance		59.2	59.2	59.2	60.6	60.6
Dish		7.7	130mm:8.0mm 135mm:5.5mm	130mm:8.0mm 135mm:5.5mm	130mm: 7.8mm 135mm: 5.3mm	130mm: 7.8mm 135mm: 5.3mm
Axle(QR)	QR Skewer Length	-	161/166mm	-	161/166mm	161/166mm
	Length	-	141/146mm(M10)	-	141/146mm(M10)	141/146mm(M10)
	Material	-	Steel	-	Steel	Steel
Axle(Nut)	Length	185mm(M10)	-	180/185mm(M10)	-	180/185mm(M10)
	Material	Steel	-	Steel	-	Steel
Seal	Hub	-	-	-	-	-
	Freewheel	-	-	-	-	-
Hub Shell	Material	Aluminum/2pcs	Aluminum/2pcs	Aluminum/2pcs	Aluminum	Aluminum
	Finish	Shiny	Shiny	Shiny	Machined	Machined
Quick Release Lever	Material	-	Steel	-	Steel	Steel
	Finish	-	Chrome Plated	-	Chrome Plated	Chrome Plated
CBN (Cubic Boron Nitride)	Cone Races	-	-	-	-	-
	Cup Races	-	-	-	-	-
Stainless Steel Ball Bearings		-	-	-	-	-
Thread for Drum Brake (BC1.37X24)		-	-	-	-	-
Note		Black Hub Shell Available	Black Hub Shell Available	Black Hub Shell Available		

# Freehub (ATB/ NEXAVE) Specifications( Standard /Disc Brake /Roller Brake )

Series		Non-Series	Non-Series	NEXAVE
Model No.		HB-TS30-R	FH-HF08	FH-T300
Spoke Holes	24H	-	-	-
	28H	-	-	-
	32H	-	-	X
	36H	X	-	X
	40/48H	-	X	-
	Hole PCD (mm)	45	62.5	45
Freehub Body	Speeds	7*	8/9	7
	11T Compatible	-	X	X
	Roller Clutch	-	-	X
	Material	-	Steel	Steel
O.L.D. (mm)	130	X	-	X
	135	X	-	X
	Others	-	145	-
Flange Distance		58.0	54.0	60.6
Dish		130mm: 7.5mm 135mm: 7.5mm	2.5	141:7.8 146:5.3
Axle(QR)	QR Skewer Length	161/166mm	178/mm	163/168mm
	Length	141/146mm(M10)	156/mm(M10)	141/146mm(M10)
	Material	Steel	Steel	Steel
Axle(Nut)	Length	180/185mm(M10)	-	-
	Material	Steel	-	-
Seal	Hub	-	X	X
	Freewheel	-	X	X
Hub Shell	Material	Aluminum	Aluminum	Aluminum
	Finish	Machined	Anodized	Machined
Quick Release Lever	Material	Steel	Aluminum	Aluminum
	Finish	Chrome Plated	Anodized	Barrel
CBN (Cubic Boron Nitride)	Cone Races	-	X	-
	Cup Races	-	-	-
Stainless Steel Ball Bearings		-	-	-
Thread for Drum Brake (BC1.37X24)		-	X	-
Note		*Rear hub for MF Sticker Silver and Black Available	For tandem bicycle	

# Freehub (ATB / NEXAVE) Specifications(Standard / Disc Brake /Roller Brake )

Series		XTR	SAINT	SAINT	Deore XT	Deore XT
Model No.		FH-M965	FH-M805	FH-M800	FH-M765-L	FH-M765-S
Spoke Holes	24H	X	-	-	-	-
	28H	X	-	-	-	-
	32H	X	X	X	X	X
	36H	X	X	X	X	X
	40/48H	-	-	-	-	-
	Hole PCD (mm)	45	61	61	45	45
Freehub Body	Speeds	8/9	8/9	8/9	8/9	8/9
	11T compatible	X	X	X	X	X
	Material	Titanium	Steel	Steel	Steel	Steel
O.L.D. (mm)	130	-	-	-	-	-
	135	X	-	X	X	X
	Others	-	150	-	-	-
Flange Distance		58.4	72	57.1	58.4	58.4
Dish		6.15	6.7	6.8	6.15	6.15
Axle(QR)	QR Skewer Length	168/173mm	-	-	168/173mm	168/173mm
	Length	146mm(M10)	-	-	146mm(M10)	146mm(M10)
	Material	Titanium	-	-	Steel	Steel
Axle(Nut)	Length	-	211mm( $\phi$ 12)	197mm( $\phi$ 10)	-	-
	Material	-	Steel	Steel	-	-
Seal	Hub	X	X	X	X	X
	Freewheel	X	X	X	X	X
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Quick Release Lever	Material	Aluminum	-	-	Aluminum	Aluminum
	Finish	Anodized	-	-	Anodized	Anodized
CBN (Cubic Boron Nitride)	Cone Races	X	X	X	X	X
	Cup Races	X	X	X	-	-
Stainless Steel Ball Bearings		X	-	-	-	-
Center Lock Rotor Mount		X	Larger Size	Larger Size	X	X
Note			For 150mm O.L.D.	For 135mm O.L.D.	Black Version	Silver Version

# Freehub (ATB / NEXAVE) Specifications(Standard / Disc Brake /Roller Brake )

Series		HONE	Deore LX	Deore	Deore	Non-Series	Non-Series
Model No.		FH-M600	FH-M585	FH-M535-L	FH-M535-S	FH-M525-L	FH-M525-S
Spoke Holes	24H	-	-	-	-	-	-
	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
	40/48H	-	-	-	-	-	-
	Hole PCD (mm)	45	45	45	45	61	61
Freehub Body	Speeds	8/9	8/9	8/9	8/9	8/9	8/9
	11T compatible	X	X	X	X	X	X
	Material	Steel	Steel	Steel	Steel	Steel	Steel
O.L.D. (mm)	130	-	-	-	-	-	-
	135	X	X	X	X	X	X
	Others	-	-	-	-	-	-
Flange Distance		57.4	57.4	57.4	57.4	57.1	57.1
Dish		6.65	6.65	6.65	6.65	6.8	6.8
Axle(QR)	QR Skewer Length	-	168/173mm	168/173mm	168/173mm	168/173mm	168/173mm
	Length	-	146mm(M10)	146mm(M10)	146mm(M10)	146mm(M10)	146mm(M10)
	Material	-	Steel	Steel	Steel	Steel	Steel
Axle(Nut)	Length	186mm	-	-	-	-	-
	Material	Steel	-	-	-	-	-
Seal	Hub	X	X	X	X	X	X
	Freewheel	X	X	X	X	X	X
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick Release Lever	Material	-	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	Anodized	Anodized	Anodized	Anodized	Anodized
CBN (Cubic Boron Nitride)	Cone Races	X	X	X	X	X	X
	Cup Races	-	-	-	-	-	-
Stainless Steel Ball Bearings		-	-	-	-	-	-
Center Lock Rotor Mount		X	X	X	X	-	-
Note		For RD-M600		Black Version	Silver Version	Black Version/ Shimano logo	Silver Version/ Shimano logo

# Freehub (ATB / NEXAVE) Specifications(Standard / Disc Brake /Roller Brake )

Series		Non-Series	Non-Series	Non-Series	Non-Series
Model No.		FH-M495-L	FH-M495-S	FH-M475-L	FH-M475-S
Spoke Holes	24H	-	-	-	-
	28H	-	-	-	-
	32H	X	X	X	X
	36H	X	X	X	X
	40/48H	-	-	-	-
	Hole PCD (mm)	45	45	61	61
Freehub Body	Speeds	8/9	8/9	8/9	8/9
	11T compatible	X	X	X	X
	Material	Steel	Steel	Steel	Steel
O.L.D. (mm)	130	-	-	-	-
	135	X	X	X	X
	Others	-	-	-	-
Flange Distance		57.4	57.4	57.1	57.1
Dish		6.7	6.7	6.8	6.8
Axle(QR)	QR Skewer Length	166mm/170mm	166mm/170mm	166mm/170mm	166mm/170mm
	Length	146mm(M10)	146mm(M10)	146mm(M10)	146mm(M10)
	Material	Steel	Steel	Steel	Steel
Axle(Nut)	Length	-	-	-	-
	Material	-	-	-	-
Seal	Hub	X	X	X	X
	Freewheel	X	X	X	X
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Quick Release Lever	Material	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
CBN (Cubic Boron Nitride)	Cone Races	-	-	-	-
	Cup Races	-	-	-	-
Stainless Steel Ball Bearings		-	-	-	-
Center Lock Rotor Mount		X	X	-	-
Note		Black Version	Silver Version	Black Version	Silver Version

# Freehub (ATB / NEXAVE) Specifications( Standard /Disc Brake / Roller Brake )

Series		Tourney	NEXAVE	NEXAVE	NEXAVE
Model No.		RH-IM10	FH-IM70	FH-IM45	FH-IM40
Spoke Holes	24H	-	-	-	-
	28H	-	-	-	-
	32H	-	-	-	-
	36H	X	X	X	X
	40/48H	-	-	-	-
	Hole PCD (mm)	45	45	45	46
Freehub Body	Speeds	-	8/9	7	7
	11T compatible	-	X	X	X
	Roller Clutch	-	X	-	-
	Material	-	Steel	Steel	Steel
O.L.D. (mm)	130	X	-	X	X
	135	-	X	-	-
	Others	-	-	-	-
Flange Distance		55.1	60.0	56.3	56.3
Dish		5.85	6.8	6.5	6.5
Axle(QR)	QR Skewer Length	-	-	-	-
	Length	-	-	-	-
	Material	Steel	-	Steel	Steel
Axle(Nut)	Length	180mm(M10)	185mm(M10)	180mm(M10)	180mm(M11)
	Material	Steel	Steel	Steel	Steel
Seal	Hub	-	X	X	X
	Freewheel	-	X	X	X
Hub Shell	Material	Steel	Aluminum	Aluminum	Aluminum
	Finish	Painted	Anodized	Machined	Machined
Note		For 6 or 7-speed multifree wheel			

# FH-Dynamo Specifications

Series		NEXAVE	NEXAVE
Model No.		FH-C810	FH-C811
Type		Roller	Disc
Voltage (110rpm15Ω)		4.1V*	4.1V*
Output Power (110rpm15Ω)		1.12W*	1.12W*
Spoke Holes	28H	-	-
	32H	X	X
	36H	X	X
	Hole PCD (mm)	74.4	74.4
Freehub Body	Speeds	8/9	8/9
	11T compatible	X	X
	Roller Clutch	-	-
	Material	Steel	Steel
O.L.D. (mm)	130	-	-
	135	X	X
	Others	-	-
Flange Distance		55.65	55.65
Dish		7	7
Axle(QR)	QR Skewer Length	-	168mm
	Length	-	146mm(M10)
	Material	-	Steel
Axle(Nut)	Length	185mm(M10)	-
	Material	Steel	-
Seal	Hub	X	X
	Freewheel	X	X
Hub Shell	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
Quick Release Lever	Material	-	Aluminum
	Finish	-	Anodized
CBN (Cubic Boron Nitride)	Cone Races	X	X
	Cup Races	-	-
Stainless Steel Ball Bearings		-	-
Center Lock Rotor Mount		-	-
EW(Electoric Cable) Type		EW-EF	EW-EG
Note		* Reference data	



## Internal Freehub Specifications

Series		NEXAVE	NEXAVE
Model No.		IF-C530	IF-C530-VS
Speed		3	3
Silent Clutch		X	X
Gear Change Support Mechanism		X	X
Super Light Shifting		X	X
Left Hand Dust Cap		-	X
Brake		BR-IM41/50/70	V-Brake
Over Locknut Dim.	OLD(mm)	136mm	136mm
Dropout Width Dim.	Left(mm)	8	8
	Right(mm)	8	8
Non Turn Washer	Left(mm)	6	6
	Right(mm)	6	6
Gear Ratio	Total	186%	186%
	1	0.73	0.73
	2	1	1
	3	1.36	1.36
Hub Shell Material		Aluminum	Aluminum
Finish( Corrosion Resistant )		X	X
Weight		983g	983g
Spoke Hole		36H	36H
Spoke Size		#14	#14
Sprocket		8	8
Belcrank	Model No.	SM-BC05(Belcrank5)	SM-BC05(Belcrank5)
	Shifting Lever	ST-C530(L)	ST-C530(L)
Note		Only LG gear compatible	Only LG gear compatible

# Front Hub (ATB/NEXAVE) Specifications ( Standard /Disc Brake/Roller Brake)

Series		XTR	Deore XT	Deore XT	Deore LX	Deore	Deore
Model No.		HB-M960	HB-M760-L	HB-M760-S	HB-M580	HB-M530-L	HB-M530-S
Spoke Holes	24H	-	-	-	-	-	-
	28H	X	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
	40/48H	-	-	-	-	-	-
	Hole PCD (mm)	38	38	38	38	38	38
O.L.D. (mm)		100	100	100	100	100	100
Flange Distance		71.6	71.6	71.6	71.6	71.6	71.6
Axle(QR)	QR Skewer Length	133mm	133mm	133mm	133mm	133mm	133mm
	Axle Length	108mm(M10)	108mm(M10)	108mm(M10)	108mm(M10)	108mm(M10)	108mm(M10)
	Material	Titanium	Steel	Steel	Steel	Steel	Steel
Axle(Nut)	Axle Length	-	-	-	-	-	-
	Material	-	-	-	-	-	-
Seal		X	X	X	X	X	X
Stainless Steel Ball Bearings		X	-	-	-	-	-
Strong Axle		X	X	X	X	X	X
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	X
	Cup Races	X	-	-	-	-	-
Quick Release Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Radial Lacing		X	X	X	X	X	X
Note			Black Version	Silver Version		Black Version	Silver Version

# Front Hub (ATB/NEXAVE) Specifications ( Standard /Disc Brake/Roller Brake)

Series		Alivio	Altus	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.		HB-MC12-P	HB-CT91	HB-RM60-L	HB-RM60-S	HB-RM40	HB-TS30-F	HB-HF08
Spoke Holes	24H	-	-	-	-	-	-	-
	28H	-	-	-	-	-	-	-
	32H	X	-	X	X	X	-	-
	36H	X	X	X	X	X	X	-
	40/48H	-	-	-	-	-	-	X
	Hole PCD (mm)	38	38	38	38	38	45	62.5
O.L.D. (mm)		100	100	100	100	100	100	100
Flange Distance		71.6	71.6	71.6	71.6	71.6	64.0	71.6
Axle(QR)	QR Skewer Length	129/133mm	129/133mm	133mm	133mm	129/133mm	129mm	133mm
	Axle Length	108mm(M9)	108mm(M9)	108mm	108mm	108mm(M9)	108mm(M9)	108mm(M9)
	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Axle(Nut)	Axle Length	140mm(M9)	-	-	-	140mm(M9)	140mm(M9)	-
	Material	Steel	-	-	-	Steel	Steel	-
Seal		X	X	X	X	-	-	X
Stainless Steel Ball Bearings		-	-	-	-	-	-	-
Strong Axle		-	-	-	-	-	-	-
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Machined	Anodized	Machined	Machined	Machined	Anodized
CBN (Cubic Boron Nitride)	Cone Races	-	-	-	-	-	-	-
	Cup Races	-	-	-	-	-	-	-
Quick Release Lever	Material	Aluminum	Steel	Steel	Steel	Steel	Steel	Aluminum
	Finish	Barrel	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Anodized
Radial Lacing		-	-	-	-	-	-	-
Note		Black Version Available		Black Version	Silver Version		Silver and Black Sticker Available	

# Front Hub (ATB / NEXAVE) Specifications ( Standard / Disc Brake /Roller Brake)

Series		XTR	SAINT	Deore XT	Deore XT
Model No.		HB-M965	HB-M800A	HB-M765-L	HB-M765-S
Spoke Holes	24H	X	-	-	-
	28H	X	-	-	-
	32H	X	X	X	X
	36H	X	X	X	X
	40/48H	-	-	-	-
	Hole PCD (mm)	44/38	57	44/41	44/41
O.L.D. (mm)		100	110	100	100
Flange Distance		60.6	60.9	60.4	60.4
Offset		5.5	5.5	5.5	5.5
Axle(QR)	QR Skewer Length	133mm	-	133mm	133mm
	Axle Length	108mm(M10)	-	108mm(M10)	108mm(M10)
	Material	Titanium	-	Steel	Steel
Axle(Nut)	Axle Length	-	N/A(Axle is supplied with Front Suspension Fork)	-	-
	Material	-		-	-
Seal		X	X	X	X
Strong Axle		X	-	X	X
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
CBN (Cubic Boron Nitride)	Cone Races	X	X	X	X
	Cup Races	X	X	-	-
Quick Release Lever	Material	Aluminum	-	Aluminum	Aluminum
	Finish	Anodized	-	Anodized	Anodized
Center Lock Mount Type		X	X (Larger Size)	X	X
Radial Lacing		Right Side only	-	-	-
Note			For 20mm Axle	Black Version	Silver Version

# Front Hub (ATB / NEXAVE) Specifications ( Standard / Disc Brake /Roller Brake)

Series		Non-Series	HONE	Deore LX	Deore	Deore	Non-Series
Model No.		HB-M765-LR	HB-M600	HB-M585	HB-M535-L	HB-M535-S	HB-M525-L
Spoke Holes	24H	-	-	-	-	-	-
	28H	-	-	-	-	-	-
	32H	X	X	X	X	X	X
	36H	X	X	X	X	X	X
	40/48H	-	-	-	-	-	-
	Hole PCD (mm)	44/41	44	44	44	44	61
O.L.D. (mm)		100	100	100	100	100	100
Flange Distance		60.4	60.2	60.2	60.2	60.2	59.4
Offset		5.5	5.3	5.3	5.3	5.3	5.5
Axle(QR)	QR Skewer Length	133mm	133mm	133mm	133mm	133mm	133mm
	Axle Length	108mm(M10)	108mm(M10)	108mm(M10)	108mm(M10)	108mm(M10)	108mm(M9)
	Material	Steel	Steel	Steel	Steel	Steel	Steel
Axle(Nut)	Axle Length	-	-	-	-	-	-
	Material	-	-	-	-	-	-
Seal		X	X	X	X	X	X
Strong Axle		X	X	X	X	X	-
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	X
	Cup Races	-	-	-	-	-	-
Quick Release Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Center Lock Mount Type		X	X	X	X	X	-
Radial Lacing		-	-	-	-	-	-
Note		Saint Color / Shimano logo			Black Version	Silver Version	Black Version/ Shimano logo

# Front Hub (ATB / NEXAVE) Specifications ( Standard / Disc Brake /Roller Brake)

Series		Non-Series	Non-Series	Non-Series	Non-Series	Non-Series
Model No.		HB-M525-S	HB-M495-L	HB-M495-S	HB-M475-L	HB-M475-S
Spoke Holes	24H	-	-	-	-	-
	28H	-	-	-	-	-
	32H	X	X	X	X	X
	36H	X	X	X	X	X
	40/48H	-	-	-	-	-
	Hole PCD (mm)	61	44	44	61	61
O.L.D. (mm)		100	100	100	100	100
Flange Distance		59.4	60.2	60.2	59.4	59.4
Offset		5.5	5.3	5.3	5.5	5.5
Axle(QR)	QR Skewer Length	133mm	133mm	133mm	133mm	133mm
	Axle Length	108mm(M9)	108mm(M9)	108mm(M9)	108mm(M9)	108mm(M9)
	Material	Steel	Steel	Steel	Steel	Steel
Axle(Nut)	Axle Length	-	-	-	-	-
	Material	-	-	-	-	-
Seal		X	X	X	X	X
Strong Axle		-	-	-	-	-
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
CBN (Cubic Boron Nitride)	Cone Races	X	-	-	-	-
	Cup Races	-	-	-	-	-
Quick Release Lever	Material	Aluminum	Steel	Steel	Steel	Steel
	Finish	Anodized	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Center Lock Mount Type		-	X	X	-	-
Radial Lacing		-	-	-	-	-
Note		Silver Version/ Shimano logo	Black Version	Silver Version	Black Version	Silver Version

# Front Hub (ATB/NEXAVE) Specifications ( Standard/Disc Brake / Roller Brake )

Series		Tourney	Tourney	NEXAVE	NEXAVE	NEXAVE
Model No.		HB-IM20-E	HB-IM20-EC	HB-IM70	HB-IM50	HB-IM45
Spoke Holes	24H	-	-	-	-	-
	28H	-	-	-	-	-
	32H	-	-	-	-	-
	36H	X	X	X	X	X
	40/48H	-	-	-	-	-
	Hole PCD (mm)	62	62	70	52	52
O.L.D. (mm)		100	100	100	100	100
Flange Distance		59	59	56.8	61.5	61.5
Offset		4.6	4.6	4.2	4.3	4.3
Axle(QR)	QR Skewer Length	-	-	129mm	129mm	-
	Axle Length	-	-	108mm(M9)	108mm(M9)	-
	Material	-	-	Steel	Steel	-
Axle(Nut)	Axle Length	140mm(M9)	140mm(M9)	-	-	140mm(M9)
	Material	Steel	Steel	-	-	Steel
Seal		X	X	X	X	X
Hub Shell	Material	Steel	Steel	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Clear Painted	Polished	Machined
Quick Release Lever	Material	-	-	Aluminum	Aluminum	-
	Finish	-	-	Anodized	Anodized	-
Structure		Hyper	Hyper	Hyper	Normal	Normal
Modulator Setting		26inch or more	20-24inch	26inch or more	26inch or more	26inch or more
Note						

# Front Hub (ATB/NEXAVE) Specifications ( Standard/Disc Brake / Roller Brake )

Series		Nexus	Nexus
Model No.		HB-IM40	HB-IM30
Spoke Holes	24H	-	-
	28H	-	-
	32H	-	-
	36H	X	X
	40/48H	-	-
	Hole PCD (mm)	52	52
O.L.D. (mm)		100	100
Flange Distance		61.5	61.5
Offset		4.3	4.3
Axle(QR)	QR Skewer Length	-	-
	Axle Length	-	-
	Material	-	-
Axle(Nut)	Axle Length	140mm(M9)	140mm(M9)
	Material	Steel	Steel
Seal		X	X
Hub Shell	Material	Aluminum	Aluminum
	Finish	Machined	Machined
Quick Release Lever	Material	-	-
	Finish	-	-
Structure		Normal	Normal
Modulator Setting		26inch or more	24inch or less
Note			



# Cassette Sprocket (ATB / NEXAVE) Specifications

Series name	XTR	XTR	XTR	Deore XT	Deore XT	Deore LX	Deore LX
Model No.	CS-M960 (ba)	CS-M960 (ap)	CS-M960 (as)	CS-M760 (aq)	CS-M760 (as)	CS-M580 (ar)	CS-M580 (au)
Type	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket
Combination	Speed	9	9	9	9	9	9
	9	32	34	34	32	34	32
	8	28	30	30	28	30	28
	7	24	26	26	24	26	24
	6	21	23	23	21	23	21
	5	18	20	20	18	20	18
	4	16	18	17	16	17	16
	3	14	16	15	14	15	14
	2	12	14	13	12	13	12
1	11	12	11	11	11	11	11
Group	ba	ap	as	aq	as	ar	au
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Spider Arm	X	X	X	X	X	-	-
Aluminum Lock Ring	X	X	X	-	-	-	-
Steel Cog	11-12-14-16-18T	12-14-16-18-20T	11-13-15-17-20T	11-32T	11-34T	11-32T	11-34T
Ti Cog	21-24-28-32T	23-26-30-34T	23-26-30-34T	-	-	-	-
Finish	Ti / Ni-P Coated	Ti / Ni-P Coated	Ti / Ni-P Coated	Chrome Plated	Chrome Plated	Pearl Bright	Pearl Bright
Note							

# Cassette Sprocket (ATB / NEXAVE) Specifications

Series name	Deore NEXAVE	Deore NEXAVE	NEXAVE	NEXAVE	Alivio	Alivio	C-Series
Model No.	CS-HG50-9 (ar)	CS-HG50-9 (au)	CS-LG50	CS-HG60-8I	CS-HG50-8I	CS-HG50-8I	CS-HG40-8I
Type	HG Cassette Sprocket	HG Cassette Sprocket	LG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket
Combination	Speed	9	9	8	8	8	8
	9	32	34	-	-	-	-
	8	28	30	33	34	30	32
	7	24	26	29	26	26	28
	6	21	23	25	23	23	24
	5	18	20	21	20	20	21
	4	16	17	17	17	17	18
	3	14	15	15	15	15	15
	2	12	13	13	13	13	13
1	11	11	11	11	11	11	11
Group	ar	au	bb	ao	an	aw	ao
Chain	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	IG/HG	IG/HG	IG/HG	IG/HG
Spider Arm	-	-	-	-	-	-	-
Aluminum Lock Ring	-	-	-	-	-	-	-
Steel Cog	11-32T	11-34T	11-33T	11-34T	11-30T	11-32T	11-34T
Ti Cog	-	-	-	-	-	-	-
Finish	Ni-plated	Ni-plated	Ni-plated	Silver	Ni-plated	Ni-plated	Ni-plated
Note			With Spoke Protector				

# Cassette Sprocket (ATB / NEXAVE) Specifications

Series name	Acera	Acera	NEXAVE	Acera	C-Series	C-Series	Tourney
Model No.	CS-HG30-8I	CS-HG30-8I	CS-HG50-I	CS-HG30-I	MF-HG50-7	MF-HG50-7	MF-HG40-7
Type	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Cassette Sprocket	HG Multiple Freewheel	HG Multiple Freewheel	HG Multiple Freewheel
Combination	Speed	8	8	7	7	7	7
	9	-	-	-	-	-	-
	8	30	32	-	-	-	-
	7	26	28	34	28	34	34
	6	23	24	26	24	24	24
	5	20	21	22	21	21	22
	4	17	18	18	18	18	20
	3	15	15	15	15	15	18
	2	13	13	13	13	13	16
1	11	11	11	11	11	14	
Group	an	aw	at	ac	-	-	-
Chain	IG/HG	IG/HG	IG/HG	IG/HG	HG/UG	HG/UG	HG/UG
Spider Arm	-	-	-	-	-	-	-
Aluminum Lock Ring	-	-	-	-	-	-	-
Steel Cog	11-30T	11-32T	11-34T	11-28T	11-34T	11-28T	14-34T
Ti Cog	-	-	-	-	-	-	-
Finish	Brown & Black	Brown & Black	Ni-plated	Ni-plated	Ni-plated & Black	Ni-plated & Black	Ni-plated & Black
Note							

# Cassette Sprocket (ATB / NEXAVE) Specifications

Series name	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney	Tourney	
Model No.	MF-HG37	MF-HG37	MF-ZH36	MF-HG22	MF-HG22	MF-Z015	MF-Z015	
Type	HG Multiple Freewheel	HG Multiple Freewheel	HG/UG Multiple Freewheel	HG Multiple Freewheel	HG Multiple Freewheel	UG Multiple Freewheel	UG Multiple Freewheel	
Combination	Speed	7	7	6	6	6	5	
	9	-	-	-	-	-	-	
	8	-	-	-	-	-	-	
	7	28	28	-	-	-	-	
	6	24	24	34	24	28	-	
	5	22	21	24	22	24	24	28
	4	20	19	21	20	21	21	24
	3	18	17	18	18	18	19	20
	2	16	15	15	16	16	17	17
1	14	13	13	14	14	14	14	
Group	-	bz	cx	X	Y	-	-	
Chain	HG/UG	HG/UG	HG/UG	HG/UG	HG/UG	UG/HP	UG/HP	
Spider Arm	-	-	-	-	-	-	-	
Aluminum Lock Ring	-	-	-	-	-	-	-	
Steel Cog	14-28T	14-28T	13-34T	14-24T	14-24T	14-24T	14-24T	
Ti Cog	-	-	-	-	-	-	-	
Finish	Ni-plated & Black	Ni-plated & Black	Ni-plated & Brown	Ni-plated & Black	Ni-plated & Black	Brown	-	
Note								

# Cassette Sprocket (ATB / NEXAVE) Specifications

Series name		TZ	TZ	TZ
Model No.		MF-TZ37	MF-TZ07	MF-TZ06
Type		HG/UG Multiple Freewheel	HG/UG Multiple Freewheel	HG/UG Multiple Freewheel
Combination	Speed	7	7	6
	9	-	-	-
	8	-	-	-
	7	34	28	-
	6	24	24	28
	5	22	22	24
	4	20	20	21
	3	18	18	18
	2	16	16	16
1	14	14	14	
Group		-	-	-
Chain		HG/UG	HG/UG	HG/UG
Spider Arm		-	-	-
Aluminum Lock Ring		-	-	-
Steel Cog		14-34T	14-28T	14-28T
Ti Cog		-	-	-
Finish		Brown & Black	Brown & Black	Brown & Black
Note				

## Chain (ATB / NEXAVE) Specifications

Series	XTR Saint	Deore XT	Deore LX Deore NEXAVE	Deore NEXAVE	Altus NEXAVE T300	Tourney	Non-Series	Non-Series	Tourney
Model No.	CN-7701	CN-HG93	CN-HG73	CN-HG53	CN-HG50	CN-HG50	CN-HG40	CN-IG70	CN-UG51
Type	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	HG	HG	HG	IG	UG
Pin Link Plate	Zinc-Alloy Plated	Zinc-Alloy Plated	Gray	Gray	Black	Black	Gray	Silver	Gray
Roller Link Plate	Zinc-Alloy Plated	Gray	Gray	Brown	Black	Black	Black	Gray	Black
Chromizing Treatment Link Pin	X	X	X	X	X	X	-	X	-
Note	special rivet	special rivet	special rivet	special rivet					

## Front Suspension (NEXAVE/Nexus/Di2) Specifications

Series		NEXAVE / Nexus		NEXAVE / Nexus	
Model No.		FS-C812		FS-C810	
Adjuster	Auto	X		X	
	Manual	X		X	
Pre-load Adjuster		Dial type		Dial type	
Travel		63mm(53+10)		70mm(60+10)	
Damping		Cartridge Oil		Cartridge Oil	
Spring		Coil		Coil	
Wheel Size		max. 28x2.00 - 700x47C		700C	26"
V-Brake Fixation		-		X	-
Disc Brake (International A) Fixation		X		X	
Compatible HRB		BR-IM75-F		BR-IM75-F	
Dynamo Eye		-		-	
Mudguard Eye		X		X	
Crown	Material	Aluminum		Aluminum	
	Finish	Black Anodized		Black Anodized	
Stanchion	Material	Cromoly		Cromoly	
	Finish	Chrome Plated		Chrome Plated	
Steer Diameter		25.4mm	28.6mm	25.4mm	28.6mm
Cone Race		26.4mm	30mm	26.4mm	30mm
Steer Threads		Threadless		Cromoly	
Steer Material		Cromoly	A7075	1 x 24T or Threadless	1-1/8 x 26T or Threadless
Steer Length ( Threads / mm )		-		160 / 200 / 225 / 250	
Steer Length ( Threadless / mm )		270		270	
Lower Tubes	Material	Magnesium		Magnesium	
	Color	Silver		Silver	
Dynamo Cable Cover		SM-FS11(w/ tapping screw)		SM-FS10(w/ bolts and nuts)	
Disc Brake Hose Cover		SM-FS12(w/ tapping screw)		-	
Note		must be used with QR type hub "SHIMANO Di2" Logo		must be used with QR type hub "SHIMANO Di2" Logo	

## Rear Suspension (NEXAVE/Nexus/Di2) Specifications

Series		NEXAVE / Nexus	
Model No.		RS-C810-25	RS-C810-45
Adjuster	Auto	X	X
	Manual	X	X
Travel		20mm	30mm
Damping		-	-
Spring		Air	Air
Eye to Eye		125mm	145mm
Note			

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## Switch (NEXAVE/Nexus/Di2) Specifications

Series	NEXAVE	Nexus
<b>Model No.</b>	<b>SW-C810</b>	<b>SW-8S40</b>
<b>Lever type</b>	Seasaw & Button type	Seasaw & Button type
<b>Left SW</b>	FD:Triple	FS-C810/C812, RS-C810
<b>Right SW</b>	RD: 8-speed	SG: 8-speed
<b>Compatible Brake Lever</b>	BL-C901/C800/C600	BL-IM65
<b>Compatible Front Derailleur</b>	FD-C810	-
<b>Compatible Rear Derailleur</b>	RD-C810	-
<b>Compatible SG</b>	-	SG-8R45/SG-8C45
<b>Compatible Flight Deck</b>	SC-C810	SC-8S40
<b>Note</b>		

Series	NEXAVE
<b>Model No.</b>	<b>SM-SW10</b>
<b>Application</b>	SC bracket
<b>Compatible Switch</b>	SW-C810C/ SW-8S40C
<b>Compatible Flight Deck</b>	SC-C810/SC-8S40
<b>Shrink Tube</b>	-
<b>Cable</b>	Connectable /with small connector
<b>Cable Length</b>	600mm
<b>Fixing Band</b>	-
<b>Note</b>	SC bracket parts for neat cables

## Switch (NEXAVE/Nexus/Di2) Specifications

Series	NEXAVE	NEXAVE	NEXAVE	NEXAVE
Model No.	SW-C810C(L)	SW-C810C(R)	SW-8S40C(L)	SW-8S40C(R)
Application	Operator for FD:Triple/Suspension	Operator for RD:8spd	Operator for Suspension	Operator for SG:8spd
Compatible Front Derailleur	FD-C810	-	-	-
Compatible Rear Derailleur	-	RD-C810	-	-
Compatible Suspension	FS-C810, C812 / RS-C810	-	FS-C810, C812 / RS-C810	-
Compatible SG	-	SG-8R45 / SG-8C45	-	SG-8R45 / SG-8C45
Compatible SC bracket	SM-SW10	SM-SW10	SM-SW10	SM-SW10
Shrink tube	X	X	X	X
Cable	Connectable /with small connector	Connectable /with small connector	Connectable /with small connector	Connectable /with small connector
Cable length	300mm	300mm	300mm	300mm
Note	Switch parts for neat cables	Switch parts for neat cables	Switch parts for neat cables	Switch parts for neat cables

# Electronic Wire Cable( NEXAVE/Nexus/Di2) Specifications

Series		NEXAVE/ Nexus					
Model No.		EW-AA	EW-AB	EW-AC	EW-DD	EW-EF	EW-EG
Length*		400mm	650mm	280mm	700mm	410mm	500mm
		450mm	700mm	320mm	750mm	450mm	540mm
		500mm	750mm	360mm	900mm		
		550mm	800mm	400mm	950mm		
		600mm	850mm	440mm	1000mm		
		650mm	900mm	480mm	1050mm		
		700mm	950mm	500mm	1100mm		
		750mm	1000mm	520mm	1800mm		
		800mm	1100mm	560mm	1950mm		
		850mm	1200mm	700mm			
		1000mm	1250mm	850mm			
		1100mm	1300mm	1100mm			
		1400mm	2100mm				
		1800mm					
<b>w/o one side connector</b>		-	1400mm**	600mm***	1400mm****	-	-
<b>Adjustable</b>		-	X	X	X	X	X
<b>For</b>	<b>C810</b>	RD - FD	SC - FD	FS-SC bracket / RS-FD	-	FH-C810 - FD	FH-C811 - FD
	<b>Cyber Nexus</b>	MU - AI	AI - SC bracket	FS-SC bracket / AI-RS	DH - AI	-	-
<b>Note</b>			** w/o Y terminal (B type)	*** w/o Y terminal (C type)	**** w/o one side connector (D type)		

\* supplied as of Mar.14, 2005

## Rear Derailleur (Road) Specifications

Series		Dura-Ace	Dura-Ace	Ultegra	Ultegra	105	105	TIAGRA	TIAGRA	SORA
Model No.		RD-7800	RD-7800	RD-6600	RD-6600	RD-5600	RD-5600	RD-4400	RD-4400	RD-3300
Pulley Cage		SS	GS	SS	GS	SS	GS	SS	GS	SS
Speeds		10	10	10	10	10	10	9	9	8
Max Front Difference		16T	22T	16T	22T	16T	22T	14T	22T	14T
Total Capacity		29T	37T	29T	37T	29T	37T	29T	37T	29T
Max. Rear Sprocket		27T	27T	27T	27T	27T	27T	27T	27T	27T
Min. Rear Sprocket		11T	11T	11T	11T	11T	11T	11T	11T	11T
Riveted Adapter Available		-	-	-	-	-	-	-	-	-
Direct Attachment		X	X	X	X	X	X	X	X	X
Fluoric Coated Link Bushing		4	4	4	4	2	2	2	2	-
11T Pulley		X	X	X	X	X	X	X	X	X
Sealed Bearing Guide Pulley		X	X	-	-	-	-	-	-	-
Sealed Bearing Tension Pulley		X	X	X	X	-	-	-	-	-
Bracket Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Barrel	Barrel	Barrel
Plate Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Resin
	Finish	Anodized	Anodized	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Barrel	Barrel	Resin
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Anodized	Anodized	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Barrel	Barrel	Pearl Plated
Inner Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel	Steel	Steel
	Finish	Anodized	Anodized	Clear Coated	Clear Coated	Pearl Bright	Pearl Bright	Zinc Plated	Zinc Plated	Zinc Plated
Outer Plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Painted	Painted	Pearl Plated
Inner Plate	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Zinc Plated	Zinc Plated	Zinc Plated
Note		SIZE: SS(SHORT CAGE) < Smart Cage < GS (LONG CAGE)								

## Rear Derailleur (Road) Specifications

Series		SORA	2200	A050
Model No.		RD-3300	RD-2200	RD-A050
Pulley Cage		GS	Smart	Smart
Speeds		8	8	7
Max Front Difference		22T	22T	14T
Total Capacity		37T	35T	29T
Max. Rear Sprocket		27T	26T	28T
Min. Rear Sprocket		11T	11T	13T
Riveted Adapter Available		-	-	X
Direct Attachment		X	X	X
Fluoric Coated Link Bushing		-	-	-
11T Pulley		X	13/13T	13/13T
Sealed Bearing Guide Pulley		-	-	-
Sealed Bearing Tension Pulley		-	-	-
Bracket Body	Material	Aluminum	Aluminum	Resin
	Finish	Barrel	Painted	Painted
Plate Body	Material	Resin	Resin	Resin
	Finish	Resin	Resin	Painted
Outer Link	Material	Steel	Steel	Steel
	Finish	Pearl Plated	Painted	Chrome Plated
Inner Link	Material	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Zinc Plated
Outer Plate	Material	Steel	Steel	Steel
	Finish	Pearl Plated	Painted	Chrome Plated
Inner Plate	Material	Steel	Steel	Steel
	Finish	Zinc Plated	Zinc Plated	Painted
Note				

## Front Derailleur (Road) Specifications

Series	Dura-Ace	Dura-Ace	Dura-Ace	Dura-Ace	Ultegra	Ultegra	
Model No.	FD-7800-B	FD-7800-F	FD-7803-B	FD-7803-F	FD-6600-B	FD-6600-F	
Rear Speeds	10	10	10	10	10	10	
Front SIS	X	X	X	X	X	X	
Chain Ring	Double	Double	Triple	Triple	Double	Double	
Link Type	Conventional	Conventional	Conventional	Conventional	Conventional	Conventional	
Mount Type	Clamp Band	Brazed-On	Clamp Band	Brazed-On	Clamp Band	Brazed-On	
Applicable Chainline	43.5mm	43.5mm	45mm	45mm	43.5mm	43.5mm	
Clamp Band Diameter	28.6/31.8/34.9mm	-	28.6/31.8/34.9mm	-	*(28.6)/31.8/34.9mm	-	
Top Gear Teeth	50-56T	50-56T	52T	52T	50-56T	50-56T	
Capacity	16T	16T	22T	22T	16T	16T	
Chainstay Angle	61-66 Degrees	61-66 Degrees	63-66 Degrees	63-66 Degrees	61-66 Degrees	61-66 Degrees	
Compatible Adapter	SM-AD11(31.8mm)	-	X	-	X	-	X
	SM-AD15(34.9mm)	-	X	-	X	-	X
Front Clamp Band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Anodized	-	Anodized	-	Clear Coated	-
Rear Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Clear Coated	Clear Coated
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Clear Coated	Clear Coated
Inner Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Clear Coated	Clear Coated
Chain Guide	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish	Nickel Plated	Nickel Plated	Nickel Plated	Nickel Plated	Pearl Bright	Pearl Bright
Note					*W/Multi Clamp Band		

# Front Derailleur (Road) Specifications

Series	Ultegra	Ultegra	105	105	105	105	
Model No.	FD-6603-B	FD-6603-F	FD-5600-B	FD-5600-F	FD-5603-B	FD-5603-F	
Rear Speeds	10	10	10	10	10	10	
Front SIS	X	X	X	X	X	X	
Chain Ring	Triple	Triple	Double	Double	Triple	Triple	
Link Type	Conventional	Conventional	Conventional	Conventional	Conventional	Conventional	
Mount Type	Clamp Band	Brazed-On	Clamp Band	Brazed-On	Clamp Band	Brazed-On	
Applicable Chainline	45mm	45mm	43.5mm	43.5mm	45mm	45mm	
Clamp Band Diameter	*(28.6)/31.8/34.9mm	-	*(28.6)/31.8/34.9mm	-	*(28.6)/31.8/34.9mm	-	
Top Gear Teeth	52T	52T	50-56T	50-56T	50T	50T	
Capacity	22T	22T	16T	16T	20T	20T	
Chainstay Angle	63-66 Degrees	63-66 Degrees	61-66 Degrees	61-66 Degrees	63-66 Degrees	63-66 Degrees	
Compatible Adapter	SM-AD11(31.8mm)	-	X	-	X	-	X
	SM-AD15(34.9mm)	-	X	-	X	-	X
Front Clamp Band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Clear Coated	-	Clear Coated	-	Clear Coated	-
Rear Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated
Inner Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated
Chain Guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Pearl Bright	Pearl Bright	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Note	*W/Multi Clamp Band		*W/Multi Clamp Band		*W/Multi Clamp Band		

# Front Derailleur (Road) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	
Model No.	FD-R770-B	FD-R770-F	FD-R773-2B	FD-R773-2F	FD-R773-0B	FD-R773-0F	
Rear Speeds	10	10	10	10	10	10	
Front SIS	X	X	X	X	X	X	
Chain Ring	Double	Double	Triple	Triple	Triple	Triple	
Link Type	Conventional	Conventional	Conventional	Conventional	Conventional	Conventional	
Mount Type	Clamp Band	Brazed-On	Clamp Band	Brazed-On	Clamp Band	Brazed-On	
Applicable Chainline	43.5mm	43.5mm	45mm	45mm	45mm	45mm	
Clamp Band Diameter	*(28.6)/31.8/34.9mm	-	*(28.6)/31.8/34.9mm	-	*(28.6)/31.8/34.9mm	-	
Top Gear Teeth	50-56T	50-56T	52T	52T	50T	50T	
Capacity	16T	16T	22T	22T	20T	20T	
Chainstay Angle	61-66 Degrees	61-66 Degrees	63-66 Degrees	63-66 Degrees	63-66 Degrees	63-66 Degrees	
Compatible Adapter	SM-AD11(31.8mm)	-	X	-	X	-	X
	SM-AD15(34.9mm)	-	X	-	X	-	X
Front Clamp Band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Clear Coated	-	Clear Coated	-	Clear Coated	-
Rear Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated
Inner Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated
Chain Guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Note	*W/Multi Clamp Band / For flat handlebar shifter ST-R770.	For flat handlebar shifter ST-R770.	*W/Multi Clamp Band / For flat handlebar shifter ST-R770.	For flat handlebar shifter ST-R770.	*W/Multi Clamp Band / For flat handlebar shifter ST-R770.	For flat handlebar shifter ST-R770.	



## Front Derailleur (Road) Specifications

Series	Non-Series	Non-Series	Non-Series	Non-Series	TIAGRA	TIAGRA	
Model No.	FD-R440-B	FD-R440-F	FD-R443-B	FD-R443-F	FD-4400-B	FD-4400-F	
Rear Speeds	9	9	9	9	9	9	
Front SIS	X	X	X	X	X	X	
Chain Ring	Double	Double	Triple	Triple	Double	Double	
Link Type	Conventional	Conventional	Conventional	Conventional	Conventional	Conventional	
Mount Type	Clamp Band	Brazed-On	Clamp Band	Brazed-On	Clamp Band	Brazed-on	
Applicable Chainline	43.5mm	43.5mm	45mm	45mm	43.5mm	43.5mm	
Clamp Band Diameter	28.6/31.8mm	-	28.6/31.8mm	-	28.6/31.8mm	-	
Top Gear Teeth	50-56T	50-56T	52T	52T	50-56T	50-56T	
Capacity	15T	15T	22T	22T	15T	15T	
Chainstay Angle	61-66 Degrees	61-66 Degrees	63-66 Degrees	63-66 Degrees	61-66 Degrees	61-66 Degrees	
Compatible Adapter	SM-AD11(31.8mm)	-	X	-	X	-	X
	SM-AD15(34.9mm)	-	X	-	-	-	X
Front Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Barrel	Barrel	Barrel	Barrel
Rear Clamp Band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Barrel	-	Barrel	-	Barrel	-
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Barrel	Barrel	Barrel	Barrel
Inner Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Zinc	Zinc
	Finish	Barrel	Barrel	Barrel	Barrel	Pearl Plated	Pearl Plated
Chain Guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Note	Designed to work with flat handlebar shifter SL-R660/R440.		Designed to work with flat handlebar shifter SL-R660/R440.				

## Front Derailleur (Road) Specifications

Series	TIAGRA	TIAGRA	Non-Series	Non-Series	Non-Series	Non-Series	
Model No.	FD-4403-B	FD-4403-F	FD-R440A-B	FD-R440A-F	FD-R443A-B	FD-R443A-F	
Rear Speeds	9	9	8	8	8	8	
Front SIS	X	X	X	X	X	X	
Chain Ring	Triple	Triple	Double	Double	Triple	Triple	
Link Type	Conventional	Conventional	Conventional	Conventional	Conventional	Conventional	
Mount Type	Clamp Band	Brazed-On	Clamp Band	Brazed-On	Clamp Band	Brazed-On	
Applicable Chainline	45mm	45mm	43.5mm	43.5mm	45mm	45mm	
Clamp Band Diameter	28.6/31.8mm	-	28.6/31.8mm	-	28.6/31.8mm	-	
Top Gear Teeth	52T	52T	50-53T	50-53T	52T	52T	
Capacity	22T	22T	15T	15T	22T	22T	
Chainstay Angle	63-66 Degrees	63-66 Degrees	61-66 Degrees	61-66 Degrees	63-66 Degrees	63-66 Degrees	
Compatible Adapter	SM-AD11(31.8mm)	-	X	-	X	-	X
	SM-AD15(34.9mm)	-	-	-	-	-	X
Front Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Barrel	Barrel	Barrel	Barrel
Rear Clamp Band	Material	Aluminum	-	Aluminum	-	Aluminum	-
	Finish	Barrel	-	Barrel	-	Barrel	-
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Barrel	Barrel	Barrel	Barrel
Inner Link	Material	Zinc	Zinc	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Pearl Plated	Pearl Plated	Barrel	Barrel	Barrel	Barrel
Chain Guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Note			Designed to work with Flat handlebar shifter SL-R440/ST-R220.		Designed to work with Flat handlebar shifter SL-R440/ST-R223.		

## Front Derailleur (Road) Specifications

Series		SORA	SORA	SORA	SORA	2200	2200
Model No.		FD-3300-B	FD-3300-F	FD-3304-B	FD-3304-F	FD-2200-B	FD-2200-F
Rear Speeds		8	8	8	8	8	8
Front SIS		X	X	X	X	X	X
Chain Ring		Double	Double	Triple	Triple	Double	Double
Link Type		Conventional	Conventional	Conventional	Conventional	Conventional	Conventional
Mount Type		Clamp Band	Brazed-on	Clamp Band	Brazed-On	Clamp Band	Brazed-on
Applicable Chainline		43.5mm	43.5mm	45mm	45mm	43.5mm	43.5mm
Clamp Band Diameter		28.6/31.8mm	-	28.6/31.8mm	-	28.6/31.8mm	-
Top Gear Teeth		50-53T	50-53T	52T	52T	50-53T	50-53T
Capacity		15T	15T	22T	22T	15T	15T
Chainstay Angle		61-66 Degrees	61-66 Degrees	63-66 Degrees	63-66 Degrees	61-66 Degrees	61-66 Degrees
Compatible Adapter	SM-AD11(31.8mm)	-	X	-	X	-	X
	SM-AD15(34.9mm)	-	X	-	-	-	X
Front Clamp Band	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Barrel	Barrel	Painted	Painted
Rear Clamp Band	Material	Steel	-	Steel	-	Steel	-
	Finish	Pearl Plated	-	Pearl Plated	-	Painted	-
Outer Link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Barrel	Barrel	Painted	Painted
Inner Link	Material	Zinc	Zinc	Aluminum	Aluminum	Steel	Steel
	Finish	Pearl Plated	Pearl Plated	Barrel	Barrel	Painted	Painted
Chain Guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Note						For ST-R500, ST-3300/3304	For ST-R500, ST-3300/3304

## Front Derailleur (Road) Specifications

Series		2200	2200	A050
Model No.		FD-2203-B	FD-2203-F	FD-A050
Rear Speeds		8	8	7
Front SIS		X	X	-
Chain Ring		Triple	Triple	Double
Link Type		Conventional	Conventional	Conventional
Mount Type		Clamp Band	Brazed-On	Clamp Band
Applicable Chainline		45mm	45mm	43.5mm
Clamp Band Diameter		28.6/31.8mm	-	28.6/31.8mm
Top Gear Teeth		52T	52T	53T
Capacity		22T	22T	15T
Chainstay Angle		63-66 Degrees	63-66 Degrees	61-66 Degrees
Compatible Adapter	SM-AD11(31.8mm)	-	X	-
	SM-AD15(34.9mm)	-	X	-
Front Clamp Band	Material	Aluminum	Aluminum	Steel
	Finish	Painted	Painted	Zinc Plated
Rear Clamp Band	Material	Steel	-	Steel
	Finish	Painted	-	Zinc Plated
Outer Link	Material	Aluminum	Aluminum	Steel+Resin
	Finish	Painted	Painted	Zinc Plated
Inner Link	Material	Steel	Steel	Steel
	Finish	Painted	Painted	Zinc Plated
Chain Guide	Material	Steel	Steel	Steel
	Finish	Chrome Plated	Chrome Plated	Chrome Plated
Note		For ST-R500, ST-3300/3304	For ST-R500, ST-3300/3304	

## Shift / Brake Lever (Road) Specifications

Series		Dura-Ace	Dura-Ace	Dura-Ace	Dura-Ace	Dura-Ace	Dura-Ace	
Model No.		ST-7801	ST-7803	SL-7800	SL-BS78	SL-7700	SL-BS77	
<b>Lever Type</b>		Dual Control Lever	Dual Control Lever	Down Tube Shifter	Bar end Shifter	Down Tube Shifter	Bar end Shifter	
<b>Shift Lever Specifications</b>	<b>Front</b>	Double	Triple	Double / Triple	Double / Triple	Double / Triple	Double / Triple	
	<b>Rear</b>	10	-	10	10	9	9	
	<b>Optical Gear Display Unit</b>	X	-	-	-	-	-	
	<b>Flight Deck</b>	<b>With Gear Sensor</b>	X	X	-	-	-	-
		<b>Without Gear Sensor</b>	-	-	-	-	-	-
	<b>Multi-Bearing Construction</b>	2	2	-	-	-	-	
	<b>Outer Casing</b>	<b>Lever side</b>	SP41	SP41	-	SP41	-	SP40
		<b>RD side</b>	SP41 Sealed	-	SP41 Sealed	SP41 Sealed	SP40 Sealed	SP40 Sealed
	<b>Stainless Cable</b>	X	X	X	X	X	X	
	<b>Clamp Band</b>	-	-	-	-	-	-	
<b>Brake Lever Specifications</b>	<b>Reach Adjust</b>	-	-	-	-	-	-	
	<b>Clamp Band</b>	23.8mm/ 24.2mm	23.8mm/ 24.2mm	-	-	-	-	
	<b>Super SLR</b>	X	X	-	-	-	-	
<b>Bracket</b>	<b>Material</b>	Engineering Composite	Engineering Composite	-	-	-	-	
	<b>Finish</b>	Engineering Composite	Engineering Composite	-	-	-	-	
<b>Lever</b>	<b>Material</b>	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	<b>Finish</b>	Anodized	Anodized	Clear Coated	Clear Coated	Clear Coated	Clear Coated	
<b>Note</b>			Front Lever					

## Shift / Brake Lever (Road) Specifications

Series		Ultegra	Ultegra	Ultegra	Non-Series	Non-Series	Non-Series	
Model No.		ST-6600	ST-6603	SL-BS64-8	ST-R700	ST-R600	BL-R600	
Lever Type		Dual Control Lever	Dual Control Lever	Bar end Shifter	Dual Control Lever	Dual Control Lever	Brake Lever	
Shift Lever Specifications	Front	Double	Triple	Double / Triple	Double / Triple	Double / Triple	-	
	Rear	10	-	8	10	9	-	
	Optical Gear Display Unit		-	-	-	-	-	-
	Flight Deck	With Gear Sensor	X	X	-	X	X	-
		Without Gear Sensor	-	-	-	-	-	-
	Multi-Bearing Construction		1	1	-	-	-	-
	Outer Casing	Lever side	SP41	SP41	SP40	SP41	SP41	-
		RD side	SP41 Sealed	-	SP40 Sealed	SP41 Sealed	SP41 Sealed	-
	Stainless Cable		X	X	X	X	X	-
	Clamp Band		-	-	-	-	-	-
Brake Lever Specifications	Reach Adjust	-	-	-	X	X	-	
	Clamp Band	23.8mm/ 24.2mm	23.8mm/ 24.2mm	-	23.8mm / 24.2mm	23.8mm/ 24.2mm	23.8mm/ 24.2mm	
	Super SLR	X	X	-	-	-	X	
Bracket	Material	Engineering Plastic	Engineering Plastic	-	Engineering Plastic	Engineering Plastic	Aluminum	
	Finish	Engineering Plastic	Engineering Plastic	-	Engineering Plastic	Engineering Plastic	Barrel	
Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Clear Coated	Anodized	
Note			Front Lever					

## Shift / Brake Lever (Road) Specifications

Series		105	TIAGRA	Non-Series	Non-Series	Non-Series	SORA	
Model No.		ST-5600	ST-4400	ST-R500	SL-R400	BL-R400	ST-3300	
Lever Type		Dual Control Lever	Dual Control Lever	Dual Control Lever	Down Tube Shifter	Brake Lever	Dual Control Lever	
Shift Lever Specifications	Front	Double / Triple	Double / Triple	Double / Triple	Double / Triple	-	Double	
	Rear	10	9	8	8	-	8	
	Optical Gear Display Unit		-	-	-	-	-	-
	Flight Deck	With Gear Sensor	X	X	X	-	-	X
		Without Gear Sensor	-	-	-	-	-	-
	Multi-Bearing Construction		-	-	-	-	-	-
	Outer Casing	Lever side	SP41	SP41	SP41	-	-	SP41
		RD side	SP41 Sealed	SP41 Sealed	SP41 Sealed	SP41	-	SP41 Sealed
	Stainless Cable		X	X	X	-	-	X
	Clamp Band		-	-	-	-	-	-
Brake Lever Specifications	Reach Adjust	-	-	-	-	-	X	
	Clamp Band	23.8mm / 24.2mm	23.8mm / 24.2mm	23.8mm / 24.2mm	-	23.8mm / 24.2mm	23.8mm / 24.2mm	
	Super SLR	X	X	X	-	X	-	
Bracket	Material	Engineering Plastic	Engineering Plastic	Engineering Plastic	-	Aluminum	Engineering Plastic	
	Finish	Engineering Plastic	Engineering Plastic	Engineering Plastic	-	Barrel	Engineering Plastic	
Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Clear Coated	Painted	Clear Coated	Barrel	Anodized	Painted	
Note								

## Shift / Brake Lever (Road) Specifications

Series		SORA	Non-Series	Non-Series	A050	A050	Non-Series	
Model No.		ST-3304	ST-3300-7	ST-3304-7	SL-A050-7R	SL-A050-LN	SL-SY20A-6-STEM	
Lever Type		Dual Control Lever	Dual Control Lever	Dual Control Lever	Handle Bar Mount Shifter	Handle Bar Mount Shifter	Stem Mount Shifter	
Shift Lever Specifications	Front	Triple	Double	Triple	-	Double/Friction	Double/Friction	
	Rear	-	7	-	7	-	6	
	Optical Gear Display Unit		-	-	-	-	-	-
	Flight Deck	With Gear Sensor	X	-	-	-	-	-
		Without Gear Sensor	-	X	X	-	-	-
	Multi-Bearing Construction		-	-	-	-	-	-
	Outer Casing	Lever side	SP41	SP41	SP41	SIS	SIS	SIS
		RD side	SP41 Sealed	SP41 Sealed	SP41 Sealed	SIS	SIS	SIS
	Stainless Cable		X	X	X	-	-	-
	Clamp Band		-	-	-	25.6mm	25.6mm	22.2mm
Brake Lever Specifications	Reach Adjust	X	X	X	-	-	-	
	Clamp Band	23.8mm / 24.2mm	23.8mm / 24.2mm	23.8mm / 24.2mm	-	-	-	
	Super SLR	-	-	-	-	-	-	
Bracket	Material	Engineering Plastic	Engineering Plastic	Engineering Plastic	Steel	Steel	Steel	
	Finish	Engineering Plastic	Engineering Plastic	Engineering Plastic	Zinc Plated	Zinc Plated	Zinc Plated	
Lever	Material	Aluminum	Aluminum	Aluminum	Resin	Resin	Resin+Zinc Cap	
	Finish	Painted	Painted	Painted	Resin	Resin	Resin+CP(Pearl)	
Note		Front Lever W/Trim		Front Lever W/Trim				



## Shift / Brake Lever (Road) Specifications

Series		Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	
Model No.		SL-SY20A-7-STEM	SL-SY20A-6-D	SL-SY20A-7-D	SL-SY20A-6-D/BAND	SL-SY20A-7-D/BAND	SL-R770	
Lever Type		Stem Mount Shifter	Down Tube Mount Shifter	Down Tube Mount Shifter	Down Tube Mount Shifter	Down Tube Mount Shifter	Rapidfire Plus	
Shift Lever Specifications	Front	Double/Friction	Double/Friction	Double/Friction	Double/Friction	Double/Friction	Double / Triple	
	Rear	7	6	7	6	7	10	
	Optical Gear Display Unit		-	-	-	-	-	Detachable/ Above handlebar
	Flight Deck	With Gear Sensor	-	-	-	-	-	-
		Without Gear Sensor	-	-	-	-	-	-
	Multi-Bearing Construction		-	-	-	-	-	2
	Outer Casing	Lever side	SIS	SIS	SIS	SIS	SIS	SP41
		RD side	SIS	SIS	SIS	SIS	SIS	SP41 Sealed
	Stainless Cable		-	-	-	-	-	X
Clamp Band		22.2mm	22.2mm	22.2mm	28.6mm	28.6mm	22.2mm	
Brake Lever Specifications	Reach Adjust	-	-	-	-	-	-	
	Clamp Band	-	-	-	-	-	-	
	Super SLR	-	-	-	-	-	-	
Bracket	Material	Steel	Steel	Steel	Steel	Steel	Aluminum	
	Finish	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated	Clear Coated	
Lever	Material	Resin+Zinc Cap	Resin+Zinc Cap	Resin+Zinc Cap	Resin+Zinc Cap	Resin+Zinc Cap	Aluminum	
	Finish	Resin+CP(Pearl)	Resin+CP(Pearl)	Resin+CP(Pearl)	Resin+CP(Pearl)	Resin+CP(Pearl)	Clear Coated	
Note			Brazed On Type	Brazed On Type	Band Type	Band Type	For flat handlebar.	

## Shift / Brake Lever (Road) Specifications

Series		Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	Non-Series	
Model No.		SL-R660	SL-R440	SL-R440-8	ST-R220	ST-R224	BL-R440	
Lever Type		Rapidfire Plus	Rapidfire Plus	Rapidfire Plus	EZ-fire Plus	EZ-fire Plus	Brake Lever	
Shift Lever Specifications	Front	Double / Triple	Double / Triple	Double / Triple	Double	Triple	-	
	Rear	9	9	8	8	-	-	
	Optical Gear Display Unit		Detachable/ Above handlebar	Detachable/ Above handlebar	Detachable/ Above handlebar	Dial type	Dial type	-
	Flight Deck	With Gear Sensor	-	-	-	-	-	-
		Without Gear Sensor	*1	*1	*1	-	-	-
	Multi-Bearing Construction		2	-	-	-	-	-
	Outer Casing	Lever side	SP41	SP41	SP41	SP40	SP40	-
		RD side	SP41 Sealed	SP41 Sealed	SP41 Sealed	SP40	SP40	-
	Stainless Cable		X	X	X	-	-	-
	Clamp Band		22.2mm	22.2mm	22.2mm	-	-	-
Brake Lever Specifications	Reach Adjust	-	-	-	X	X	X	
	Clamp Band	-	-	-	22.2mm	22.2mm	22.2mm	
	Super SLR	-	-	-	-	-	-	
Bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Clear Coated	Painted	Painted	Painted	Painted	Painted	
Lever	Material	Aluminum+Resin	Steel+Resin	Steel	SL:Steel+Resin BL:Aluminum	SL:Steel+Resin BL:Aluminum	Aluminum	
	Finish	Clear Coated	Black Plated	Black Plated	SL:Black Plated BL:Anodized	SL:Black Plated BL:Anodized	Anodized	
Note		For flat handlebar.*1 SM-6500/6501-M available.	For flat handlebar.*1 SM-6500/6501-M available.	For flat handlebar.*1 SM-6500/6501-M available.		Front Lever W/Trim		
					For flat handlebar.	For flat handlebar.	For flat handlebar.	
					Caliper/Canti/Roller/V-brake		Caliper/Canti/Roller	







# Brake (Road) Specifications

Series	Dura-Ace	Ultegra	Non-Series	105	Non-Series
Model No.	BR-7800	BR-6600	BR-R600	BR-5600	BR-A550-57
Type	Super SLR Dual Pivot	Super SLR Dual Pivot	Super SLR Dual Pivot	Super SLR Dual Pivot	Super SLR Dual Pivot
Reach	49mm	49mm	57mm	49mm	57mm
Brake Shoe	Standard	R55C2	R55C2	R55C+1	R55C2
	Optional Choice	R55C+1 R55C for carbon rim R55C for ceramic rim	R55C for carbon rim R55C for ceramic rim	R55C for carbon rim R55C for ceramic rim	-
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	10.5 / 12.5 / 18.0 / 27.0	10.5 / 12.5
Cartridge Shoe Holder	X	X	X	X	-
Tire Guide Bumpers	X	X	X	-	-
QR	X	X	X	X	X
Shoe Angle Adjusting	X	X	-	X	-
Spring Tension Adjusting	X	X	-	-	-
Cartridge Shoe Holder	Material	Aluminum	Aluminum	Aluminum	-
	Finish	Anodized	Painted	Painted	-
C-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Y-arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Gate	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
QR	Material	Aluminum	Aluminum	Aluminum	Zinc
	Finish	Plated	Painted	Painted	Pearl Bright Plated
Titanium Cable Fixing Bolt	X	-	-	-	-
Note					SHIMANO Logo Available



## Brake (Road) Specifications

Series		Non-Series	TIAGRA	SORA
Model No.		BR-R550	BR-4400	BR-3300
Type		Canti-brake	Super SLR Dual Pivot	Super SLR Dual Pivot
Reach		49mm	49mm	49mm
Brake Shoe	Standard	S70C(severe condition)	R50T	R50T
	Optional Choice	M70R2(severe condition) M70CT4(severe condition)	M50T	M50T
Assembly Pivot Nut (mm)		16/25mm	10.5 / 12.5 / 18.0	10.5 / 12.5 / 18.0/20.0
Cartridge Shoe Holder		X	-	-
Tire Guide Bumpers		-	-	-
QR		-	X	X
Shoe Angle Adjusting		X	-	-
Spring Tension Adjusting		X	-	-
Cartridge Shoe Holder	Material	Aluminum	-	-
	Finish	Painted	-	-
C-arm	Material	-	Aluminum	Aluminum
	Finish	-	Anodized	Barrel
Y-arm	Material	-	Aluminum	Aluminum
	Finish	-	Anodized	Barrel
Gate	Material	-	Aluminum	Aluminum
	Finish	-	Anodized	Barrel
QR	Material	-	Zinc	Steel
	Finish	-	Black Chrome Plated	Pearl Plated
Titanium Cable Fixing Bolt		-	-	-
Note				

# Front Chainwheel (Road) Specifications

Series		Dura-Ace	Dura-Ace	Dura-Ace(Track)	Ultegra	Ultegra	Non-Series
Model No.		FC-7800	FC-7803	FC-7710	FC-6600	FC-6603	FC-R700
Rear Speeds		10	10	Single	10	10	10
Chainring Combination		53-42T 52-39T 53-39T 50-39T 54-42T 55-42T 56-44T	52-39-30T	45T>>55T (1/2"X1/8")  45T>>55T (1/2"X3/32")	52-39T  53-39T	52-39-30T	50-34T
PCD		130mm	130mm/92mm	144mm	130mm	130mm/74mm	110mm
Splined Crank		X	X	X	X	X	X
Crank Arm Length	160.0mm	-	-	-	-	-	-
	162.5mm	-	-	-	-	-	-
	165mm	X	X	X	X	X	X
	167.5mm	X	X	X	-	-	-
	170mm	X	X	X	X	X	X
	172.5mm	X	X	X	X	X	X
	175mm	X	X	X	X	X	X
	177.5mm	X	X	-	-	-	-
180mm	X	X	-	-	-	-	
Chain		Super Narrow HG for 10-speed	Super Narrow HG for 10-speed	1/2"X1/8" 1/2"X3/32"	Super Narrow HG for 10-speed	Super Narrow HG for 10-speed	Super Narrow HG for 10-speed
Bottom Bracket	Model No.	SM-FC7800	SM-FC7800	BB-7710 / 7700	Included*	Included*	Included*
	Chain Line	43.5mm	-	109.5mm	X	-	X
		45mm	-	X	-	-	X
Optional Chain Guard		-	-	-	-	-	-
Hollowtech Crank Arm		X 	X 	X 	X 	X 	X 
One Key Release		-	-	X	-	-	-
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Top Gear	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Nickel Plated	Anodized	Anodized	Anodized
Middle Gear	Material	-	Aluminum	-	-	Aluminum	-
	Finish	-	Anodized	-	-	Anodized	-
Low Gear	Material	Aluminum	Aluminum	-	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	-	Anodized	Anodized	Anodized
Note					*Individual package (SM-FC6600) is available for after market.	*Individual package (SM-FC6600) is available for after market.	*Individual package (SM-FC6600) is available for after market.

## Front Chainwheel (Road) Specifications

Series		105	105	TIAGRA	TIAGRA	TIAGRA	TIAGRA	TIAGRA
Model No.		FC-5600	FC-5603	FC-4401	FC-4401-S	FC-4404	FC-4404-S	FC-4400
Rear Speeds		10	10	9	9	9	9	9
Chainring Combination		52-39T 50-39T	50-39-30	52-39T 50-39T	52-39T 50-39T	52-42-30T	52-42-30T	52-39T 50-39T
PCD		130mm	130mm/74mm	130mm	130mm	130mm/74mm	130mm/74mm	130mm
Splined Crank		X	X	X	X	X	X	-
Crank Arm Length	160.0mm	-	-	-	-	-	-	-
	162.5mm	-	-	-	-	-	-	-
	165mm	X	X	X	X	X	X	X
	167.5mm	-	-	-	-	-	-	-
	170mm	X	X	X	X	X	X	X
	172.5mm	X	X	-	-	-	-	-
	175mm	X	X	X	X	X	X	X
	177.5mm	-	-	-	-	-	-	-
180mm	-	-	-	-	-	-	-	
Chain		Super Narrow HG for 10-speed	Super Narrow HG for 10-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed	Super Narrow HG for 9-speed
Bottom Bracket	Model No.	Included*	Included*	BB-ES51/30	BB-ES51/30	BB-ES51/30	BB-ES51/30	BB-UN53
	Chain Line	43.5mm	X	-	113mm	113mm	-	MM110
		45mm	-	X	-	-	118mm	118mm
Optional Chain Guard		-	-	-	-	-	-	-
Hollowtech Crank Arm		X 	X 	-	-	-	-	-
One Key Release		-	-	-	-	-	-	-
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Polished	Polished	Polished	Polished	Polished
Top Gear	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle Gear	Material	-	Aluminum	-	-	Steel	Steel	-
	Finish	-	Anodized	-	-	Painted	Pearl Plated	-
Low Gear	Material	Aluminum	Aluminum	Steel	Steel	Steel	Steel	Steel
	Finish	Anodized	Anodized	Painted	Pearl Plated	Painted	Pearl Plated	Painted
Note		*Individual package (SM-FC5600) is available for after market.	*Individual package (SM-FC5600) is available for after market.		Silver Chain ring		Silver Chain ring	

## Front Chainwheel (Road) Specifications

Series		TIAGRA	SORA	SORA	SORA	SORA	2200	2200	A050
Model No.		FC-4403	FC-3301	FC-3304	FC-3300	FC-3303	FC-2200	FC-2203	FC-A050
Rear Speeds		9	8	8	8	8	8	8	7/8
Chaining Combination		52-42-30T	52-39T 50-39T	52-42-30T	52-39T 50-39T	52-42-30T	52-39T 50-39T	52-42-30T	52-39T 50-39T
PCD		130mm/74mm	130mm	130mm/74mm	130mm	130mm/74mm	130mm	130mm/74mm	130mm
Splined Crank		-	X	X	-	-	-	-	-
Crank Arm Length	160.0mm	-	-	-	-	-	-	-	X
	162.5mm	-	-	-	-	-	-	-	-
	165mm	X	X	X	X	X	X	X	-
	167.5mm	-	-	-	-	-	-	-	-
	170mm	X	X	X	X	X	X	X	X
	172.5mm	-	-	-	-	-	-	-	-
	175mm	X	X	X	X	X	X	X	-
	177.5mm	-	-	-	-	-	-	-	-
180mm	-	-	-	-	-	-	-	-	
Chain		Super Narrow HG for 9-speed	HG	HG	HG	HG	HG	HG	HG
Bottom Bracket	Model No.	BB-UN53	BB-ES30	BB-ES30	BB-UN40	BB-UN40	BB-UN26	BB-UN26	BB-UN26
	Chain Line	43.5mm	-	113mm	-	MM110	-	MM110	-
		45mm	LL113	-	118mm	-	LL113	-	LL113
Optional Chain Guard		-	X	X	X	X	X	X	X
Hollowtech Crank Arm		-	-	-	-	-	-	-	-
One Key Release		-	-	-	-	-	-	-	-
Crank Arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Polished	Polished	Polished	Polished	Polished	Painted	Painted	Polished
Top Gear	Material	Aluminum	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Anodized	Plated	Plated	Pearl Plated	Pearl Plated	Painted	Painted	Painted
Middle Gear	Material	Steel	-	Steel	-	Steel	-	Steel	-
	Finish	Painted	-	Plated	-	Pearl Plated	-	Painted	-
Low Gear	Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Plated	Plated	Pearl Plated	Pearl Plated	Painted	Painted	Painted
Note									

# Bottom Bracket (Road) Specifications

Series Name				Dura-Ace	Dura-Ace	Dura-Ace(Track)	Dura-Ace	Dura-Ace(Track)	Ultegra	
Model No.				SM-FC7800	BB-7700	BB-7710	BB-7703	BB-7710	SM-FC6600	
Applicable Front Chainwheel				FC-7800/7803	FC-7710	FC-7710	FC-7703	FC-7710	FC-6600/6603/R770	
Hollow Pipe				X	X	X	X	X	X	
Cartridge Type				-	-	X	X	X	-	
Splined Crank Arm Mounts				X	X	X	X	X	X	
Axle Length	Hollowtech II	68mm	(BC1.37)	X	-	-	-	-	X	
		70mm	(M36)	X	-	-	-	-	X	
	109.5 mm	68mm	(BC1.37)	-	X	X	-	-	X	-
		70mm	(M36)	-	X	-	-	-	-	-
	118.5 mm	68mm	(BC1.37)	-	-	-	X	-	-	-
		70mm	(M36)	-	-	-	X	-	-	-
	113 mm	68mm	(BC1.37)	-	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-	-
	118 mm	68mm	(BC1.37)	-	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-	-
	MM107	68mm	(BC1.37)	-	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-	-
	MM110	68mm	(BC1.37)	-	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-	-
	LL113	68mm	(BC1.37)	-	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-	-
	D-H (115mm)	68mm	(BC1.37)	-	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-	-
	XL118	68mm	(BC1.37)	-	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-	-
D-NL (122.5mm)	68mm	(BC1.37)	-	-	-	-	-	-	-	
	70mm	(M36)	-	-	-	-	-	-	-	
Note										



# Bottom Bracket (Road) Specifications

Series Name				105	105 (Double)	105 (Triple)	TIAGRA (Double)	TIAGRA (Triple)	SORA (Double)
Model No.				SM-FC5600	BB-5500	BB-5500	BB-ES51	BB-ES51	BB-ES30
Applicable Front Chainwheel				FC-5600/5603	FC-5502	FC-5505	FC-4401	FC-4404	FC-3301
Hollow Pipe				X	X	X	X	X	X
Cartridge Type				-	X	X	X	X	X
Splined Crank Arm Mounts				X	X	X	X	X	X
Axle Length	Hollowtech II	68mm	(BC1.37)	X	-	-	-	-	-
		70mm	(M36)	X	-	-	-	-	-
	109.5 mm	68mm	(BC1.37)	-	X	-	-	-	-
		70mm	(M36)	-	X	-	-	-	-
	118.5 mm	68mm	(BC1.37)	-	-	X	-	-	-
		70mm	(M36)	-	-	X	-	-	-
	113 mm	68mm	(BC1.37)	-	-	-	X	-	X
		70mm	(M36)	-	-	-	X	-	X
	118 mm	68mm	(BC1.37)	-	-	-	-	X	-
		70mm	(M36)	-	-	-	-	X	-
	MM107	68mm	(BC1.37)	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-
	MM110	68mm	(BC1.37)	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-
	LL113	68mm	(BC1.37)	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-
	D-H (115mm)	68mm	(BC1.37)	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-
	XL118	68mm	(BC1.37)	-	-	-	-	-	-
		70mm	(M36)	-	-	-	-	-	-
D-NL (122.5mm)	68mm	(BC1.37)	-	-	-	-	-	-	
	70mm	(M36)	-	-	-	-	-	-	
Note									

## Bottom Bracket (Road) Specifications

Series Name				SORA (Triple)	2200 (Double)	2200 (Triple)	A050	
Model No.				BB-ES30	BB-UN26	BB-UN26	BB-UN26	
Applicable Front Chainwheel				FC-3304	FC-2200	FC-2203	FC-A050	
Hollow Pipe				X	-	-	-	
Cartridge Type				X	X	X	X	
Splined Crank Arm Mounts				X	-	-	-	
Axle Length	Hollowtech II	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	109.5 mm	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	118.5 mm	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	113 mm	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	118 mm	68mm	(BC1.37)	X	-	-	-	
		70mm	(M36)	X	-	-	-	
	MM107	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	MM110	68mm	(BC1.37)	-	X	-	X	
		70mm	(M36)	-	X	-	X	
	LL113	68mm	(BC1.37)	-	-	X	-	
		70mm	(M36)	-	-	X	-	
	D-H (115mm)	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	XL118	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	D-NL (122.5mm)	68mm	(BC1.37)	-	-	-	-	
		70mm	(M36)	-	-	-	-	
	Note							

# Freehub (Road) Specifications

Series		Dura-Ace	Dura-Ace	Ultegra	105	TIAGRA
Model No.		FH-7801	FH-7700	FH-6600	FH-5600	FH-4400
Spoke Hole	20H	X	X	-	-	-
	24H	X	X	X	X	-
	28H	X	X	X	X	-
	32H	X	X	X	X	X
	36H	X	X	X	X	X
	Aero spoke	24/28H	12/16/20/24/28H	24H	-	-
	Hole PCD	44/45mm	44mm	45mm	45mm	45mm
Freehub Body	Speeds	10	8/9	8/9/10	8/9/10	8/9
	11T Compatible	X	X	X	X	X
O.L.D.		130mm	130mm	130mm	130mm	130mm
Flange Distance		56.9	58.0	59.2	59.2	60.0
Dish		7.9	7.9	8.8	8.8	8.7
Axle	QR Skewer Length	163mm	163mm	163mm	163mm	163mm
	Length	141mm	141mm	141mm	141mm	141mm
	Material	Aluminum	Steel	Steel	Steel	Steel
Seal		Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact
Freehub Body	Material	Aluminum	Titanium	Steel	Steel	Steel
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
CBN (Cubic Boron Nitride)	Cone Races	X*	X	X	X	X
	Cup Races	X*	X	-	-	-
QR Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Barrel
Note		*Super Finishing				

# Freehub (Road) Specifications

Series		SORA	SORA	2200	2200
Model No.		FH-3300	FH-3300-B	FH-2200	FH-2200-L
Spoke Hole	20H	-	-	-	-
	24H	-	-	-	-
	28H	-	-	-	-
	32H	X	X	X	X
	36H	X	X	X	X
	Aero spoke	-	-	-	-
	Hole PCD	45mm	45mm	45mm	45mm
Freehub Body	Speeds	8/9	8/9	8/9	8/9
	11T Compatible	X	X	X	X
O.L.D.		130mm	130mm	130mm	130mm
Flange Distance		60.0	60.0	57.9	57.9
Dish		8.7	8.7	8.6	8.6
Axle	QR Skewer Length	163mm	163mm	163mm	163mm
	Length	141mm	141mm	141mm	141mm
	Material	Steel	Steel	Steel	Steel
Seal		Single Contact	Single Contact	Single Contact	Single Contact
Freehub Body	Material	Steel	Steel	Steel	Steel
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Machined	Anodized	Machined	Anodized
CBN (Cubic Boron Nitride)	Cone Races	-	-	-	-
	Cup Races	-	-	-	-
QR Lever	Material	Aluminum	Aluminum	Steel	Steel
	Finish	Barrel	Barrel	Chrome Plated	Black Chrome Plated
Note			Black Version with SHIMANO logo.		

# Front Hub (Road) Specifications

Series		Dura-Ace	Dura-Ace(Track)	Dura-Ace
Model No.		HB-7800	HB-7710	HB-7600
Spoke Hole	24H	X	-	-
	28H	X	X	X
	32H	X	X	X
	36H	X	X	X
	Aero Spoke	18/24/28/32H	-	-
	Hole PCD	40mm	38mm (Front) 44mm (Rear)	67mm(Front) 67mm(Rear)
O.L.D.		100mm	100mm(Front) 120mm(Rear)	100mm(Front) 120mm(Rear)
Flange Distance		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
Axle	QR Skewer Length	133mm	-	-
	Length	108mm	142mm(M9) (Front) 164mm(M10) (Rear)	142mm(M9) (Front) 164mm(M10) (Rear)
	Material	Aluminum	Steel	Steel
Seal		Labyrinth and Contact	Dust Cap	Dust Cap
CBN (Cubic Boron Nitride)	Cone Races	X*	X	X
	Cup Races	X*	X	X
Hub Shell	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized
QR Lever	Material	Aluminum	-	-
	Finish	Anodized	-	-
Radial Lacing		X	-	-
Note		*Super Finishing	*Dishing Distance R(Single Thread):2.75mm (Double Thread):0	

# Front Hub (Road) Specifications

Series		Ultegra	105	TIAGRA	SORA
Model No.		HB-6600	HB-5600	HB-4400	HB-3300
Spoke Hole	24H	X	X	-	-
	28H	X	X	-	-
	32H	X	X	X	X
	36H	X	X	X	X
	Aero Spoke	18H	-	-	-
	Hole PCD	38mm	38mm	38mm	38mm
O.L.D.		100mm	100mm	100mm	100mm
Flange Distance		71.6	71.6	71.6	71.0
Axle	QR Skewer Length	133mm	133mm	133mm	133mm
	Length	108mm(M9)	108mm(M10)	108mm(M9)	108mm(M9)
	Material	Steel	Steel	Steel	Steel
Seal		Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Single Contact
CBN (Cubic Boron Nitride)	Cone Races	X	X	X	-
	Cup Races	-	-	-	-
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Machined
QR Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Barrel	Barrel
Radial Lacing		X	X	-	-
Note					

# Front Hub (Road) Specifications

Series		SORA	2200	2200
Model No.		HB-3300-B	HB-2200	HB-2200-L
Spoke Hole	24H	-	-	-
	28H	-	-	-
	32H	X	X	X
	36H	-	X	X
	Aero Spoke	-	-	-
	Hole PCD	38mm	38mm	38mm
O.L.D.		100mm	100mm	100mm
Flange Distance		71.0	71.6	71.6
Axle	QR Skewer Length	133mm	129/133mm	129/133mm
	Length	108mm(M9)	108mm(M9)	108mm(M9)
	Material	Steel	Steel	Steel
Seal		Single Contact	Single Contact	Single Contact
CBN (Cubic Boron Nitride)	Cone Races	-	-	-
	Cup Races	-	-	-
Hub Shell	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Machined	Anodized
QR Lever	Material	Aluminum	Steel	Steel
	Finish	Barrel	Chrome Plated	Black Chrome Plated
Radial Lacing		-	-	-
Note		Black Version with SHIMANO Logo		

# Cassette Sprocket (Road) Specifications

Series		Dura-Ace	Dura-Ace	Dura-Ace	Dura-Ace	Dura-Ace	Dura-Ace	Ultegra	Ultegra
Model No.		CS-7800	CS-7800	CS-7800	CS-7800	CS-7800	CS-7800	CS-6600	CS-6600
<b>Speeds</b>		10	10	10	10	10	10	10	10
<b>Type</b>		HG	HG	HG	HG	HG	HG	HG	HG
<b>Combination</b>	<b>10</b>	21	23	21	23	25	27	23	23
	<b>9</b>	19	21	20	21	23	24	21	21
	<b>8</b>	18	19	19	19	21	21	19	19
	<b>7</b>	17	17	18	18	19	19	17	18
	<b>6</b>	16	16	17	17	17	17	16	17
	<b>5</b>	15	15	16	16	16	16	15	16
	<b>4</b>	14	14	15	15	15	15	14	15
	<b>3</b>	13	13	14	14	14	14	13	14
	<b>2</b>	12	12	13	13	13	13	12	13
<b>1</b>	11	11	12	12	12	12	11	12	
<b>Group</b>		-	-	-	-	-	-	-	-
<b>Chain</b>		Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed
<b>Spider Arm</b>		2	2	2	2	2	2	1	1
<b>Aluminum Lock Ring</b>		X	X	X	X	X	X	-	-
<b>Material</b>	<b>Steel</b>	11-17T	11-17T	12-17T	12-17T	12-17T	12-17T	11-23T	12-23T
	<b>Titanium</b>	18-19-21T	19-21-23T	18-19-20-21T	18-19-21-23T	19-21-23-25T	19-21-24-27T	-	-
<b>Finish</b>		Ni-plated & Titanium	Ni-plated & Titanium	Ni-plated & Titanium	Ni-plated & Titanium	Ni-plated & Titanium	Ni-plated & Titanium	Ni-plated	Ni-plated
<b>Note</b>									



# Cassette Sprocket (Road) Specifications

Series	Ultegra	Ultegra	Ultegra	Ultegra	Ultegra	Ultegra	105	105	105	
Model No.	CS-6600	CS-6600	CS-6600	CS-6600	CS-6600	CS-6600	CS-5600	CS-5600	CS-5600	
<b>Speeds</b>	10	10	10	10	10	10	10	10	10	
<b>Type</b>	HG	HG	HG	HG	HG	HG	HG	HG	HG	
<b>Combination</b>	<b>10</b>	25	27	25	25	25	27	23	25	27
	<b>9</b>	23	24	23	23	23	25	21	23	24
	<b>8</b>	21	21	21	21	22	23	19	21	21
	<b>7</b>	19	19	19	20	21	22	17	19	19
	<b>6</b>	17	17	18	19	20	21	16	17	17
	<b>5</b>	16	16	17	18	19	20	15	16	16
	<b>4</b>	15	15	16	17	18	19	14	15	15
	<b>3</b>	14	14	15	16	17	18	13	14	14
	<b>2</b>	13	13	14	15	16	17	12	13	13
<b>1</b>	12	12	13	14	15	16	11	12	12	
<b>Group</b>	-	-	-	-	-	-	-	-	-	
<b>Chain</b>	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	Super narrow HG for 10-speed	
<b>Spider Arm</b>	1	1	1	1	1	1	1	1	1	
<b>Aluminum Lock Ring</b>	-	-	-	-	-	-	-	-	-	
<b>Material</b>	<b>Steel</b>	12-25T	12-27T	13-25T	14-25T	15-25T	16-27T	11-23T	12-25T	12-27T
	<b>Titanium</b>	-	-	-	-	-	-	-	-	-
<b>Finish</b>	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	
<b>Note</b>			Not compatible with FH-7801 /WH-7801	*Not compatible with FH-7801 /WH-7801 *RD:Use SS cage only	*Not compatible with FH-7801 /WH-7801 *RD:Use SS cage only	*Not compatible with FH-7801 /WH-7801 *RD:Use SS cage only				

# Cassette Sprocket (Road) Specifications

Series	TIAGRA	TIAGRA	TIAGRA	TIAGRA	SORA 2200	SORA 2200	SORA 2200	SORA 2200	SORA 2200	
Model No.	CS-HG50-9	CS-HG50-9	CS-HG50-9	CS-HG50-9	CS-HG50-8	CS-HG50-8	CS-HG50-8	CS-HG50-8	CS-HG50-8	
Speeds	9	9	9	9	8	8	8	8	8	
Type	HG	HG	HG	HG	HG	HG	HG	HG	HG	
Combination	10	-	-	-	-	-	-	-	-	
	9	23	25	25	25	-	-	-	-	
	8	21	23	23	23	21	23	25	23	
	7	19	21	21	21	19	21	23	21	
	6	17	19	19	19	17	19	21	19	
	5	16	17	17	18	16	17	19	17	
	4	15	15	16	17	15	15	17	16	
	3	14	14	15	16	14	14	15	15	
	2	13	13	14	15	13	13	13	14	
1	12	12	13	14	12	12	12	13		
Group	-	-	-	-	S	U	W	T	V	
Chain	Super narrow HG for 9-speed	Super narrow HG for 9-speed	Super narrow HG for 9-speed	Super narrow HG for 9-speed	HG	HG	HG	HG	HG	
Spider Arm	-	-	-	-	-	-	-	-	-	
Aluminum Lock Ring	-	-	-	-	-	-	-	-	-	
Material	Steel	12-23T	12-25T	13-25T	14-25T	12-21T	12-23T	12-25T	13-23T	13-26T
	Titanium	-	-	-	-	-	-	-	-	-
Finish	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	Ni-plated	
Note										

## Chain (Road) Specifications

Series	Dura-Ace	Ultegra	105	TIAGRA	SORA 2200
Model No.	CN-7801	CN-6600	CN-5600	CN-HG53	CN-HG50
Type	Super Narrow HG for 10-speed	Super Narrow HG for 10-speed	Super Narrow HG for 10-speed	Super Narrow HG for 9-speed	HG
Pin Link Plate	Zinc-Alloy Plated	Zinc-Alloy Plated	Gray	Gray	Black
Roller Link Plate	Zinc-Alloy Plated	Gray	Gray	Brown	Black
Chromizing Treatment Link Pin	X	X	X	X	X
Note	special rivet	special rivet	special rivet	special rivet	

## Head Parts (Road) Specifications

Series		Dura-Ace	Ultegra	105	105
Model No.		HP-7410	HP-6500	HP-5501-L	HP-5501-S
Size		JIS ENGLISH	JIS ENGLISH	JIS ENGLISH	JIS ENGLISH
Thread		BC1"x24T.PT.I.	BC1"x24T.PT.I.	BC1"x24T.PT.I.	BC1"x24T.PT.I.
Sealed Cartridge Bearings		X	X	X	X
Stack Height		37.6mm	37.6mm	37.6mm	37.6mm
Lock Nut	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Upper/Lower Cups	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Upper Stem Cone	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Stem Cone	Material	Aluminum	Steel	Steel	Steel
	Finish	Anodized	Painted	Painted	Painted
Note				Black Version	Silver Version

## Seat Post (Road) Specifications

Series		Dura-Ace	Ultegra	Non-Series
Model No.		SP-7410	SP-6600	SP-R600
Post Type		Round	Round	Round
Outer Diameter	26.8mm	X	-	-
	27.0mm	X	X	-
	27.2mm	X	X	X
Length		270mm	270mm	330mm
One-bolt Clamp		X	X	X
Easy Adjust Feature		X	X	X
Special Easton Tubing		X	-	-
Pipe	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized
Note				Black

# Pedal Specifications

Model No.	PD-7800	PD-6610	PD-R540	PD-A520	PD-M959	PD-M647	PD-MX30
Type	Road	Road	Road	Sport	Off-Road	Off-Road/BMX	Off-Road/BMX
SPD	-	-	-	Single Sided	Dual Sided	Dual Sided	Non-SPD
SPD-SL	Single Sided	Single Sided	Single Sided	-	-	-	-
Cartridge Axle	-	X	X	X	X	X	X
Sealed Mechanism	X	X	X	X	X	X	X
Cleat Retention Adjuster	X	X	X	X	X	X	-
Pop-up/Caged	-	-	-	-	-	X	-
Cleat Included	SM-SH11	SM-SH11	SM-SH11	SM-SH51	SM-SH51	SM-SH51	-
Optional Cleat	SM-SH10	SM-SH10	SM-SH10	SM-SH56	SM-SH56	SM-SH56	-
Reflector	SM-PD58	SM-PD58	SM-PD58	SM-PD59	SM-PD22	SM-PD60	Y41B98010
Pedal Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted*	High Finishing	Painted	Painted
Cage	Material	-	-	-	-	Resin	-
Note			Silver and Black Version Available				

# Pedal Specifications

Model No.		PD-M545	PD-M540	PD-M424	PD-M520	PD-M505	PD-M324
Type		Off-Road	Off-Road	Off-Road	Off-Road	Off-Road	Multi-purpose
SPD		Dual Sided	Dual Sided	Dual Sided	Dual Sided	Dual Sided	Single Sided
SPD-SL		-	-	-	-	-	-
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/Caged		X	-	X	-	-	-
Cleat Included		SM-SH51	SM-SH51	SM-SH51	SM-SH51	SM-SH51	SM-SH55
Optional Cleat		SM-SH55 SM-SH56	SM-SH56	SM-SH55 SM-SH56	SM-SH56	SM-SH55 SM-SH56	SM-SH51 SM-SH56
Reflector		SM-PD40	SM-PD22	SM-PD40	SM-PD22	SM-PD22	Y41B98010
Pedal Body	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Centrifugal Barrel	Barrel	Barrel(Silver) /Painted(Black)	Barrel/Painted	Painted
Cage	Material	Aluminum	-	Resin	-	-	Steel
Note							

# Wheel Specifications (MTB)

Model No.		WH-M965-disc (front)	WH-M965-disc (rear)	WH-M765-disc (front)	WH-M765-disc (rear)	WH-M565 (front)	WH-M565 (rear)
Freehub Body	Speeds	-	9	-	9	-	9
	11T Compatible	-	X	-	X	-	X
	Material	-	Titanium	-	Steel	-	Steel
O.L.D.		100mm	135mm	100mm	135mm	100mm	135mm
Axle	QR	X	X	X	X	X	X
	QR Skewer Length	133mm	168mm	133mm	168mm	133mm	168mm
	Length	108mm	146mm	108mm	146mm	108mm	146mm
	Material	Titanium	Titanium	Steel	Steel	Steel	Steel
Seal		Contact	Contact	Contact	Contact	Contact	Contact
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
QR Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Lock Ring Type Rotor Mount		X	X	X	X	X	X
Rim	Tubeless	559 X 19 (26")	559 X 19 (26")	559 X 19 (26")	559 X 19 (26")	-	-
	Clincher	-	-	-	-	559 X 19 (26")	559 X 19 (26")
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
	Height	20.5mm	20.5mm	20.5mm	20.5mm	22mm	22mm
	Width	23.3mm	23.3mm	23.3mm	23.3mm	25.2mm	25.2mm
Spokes	No. of Spokes	24	24	24	24	24	24
	Length	272mm	252 / 272mm	272mm	252 / 272mm	266mm	248/266mm
	Bladed	-	-	-	-	X	X
	Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Nipple	Size	4.3mm(#11)	4.3mm(#11)	4.3mm(#11)	4.3mm(#11)	4.3mm(#11)	4.3mm(#11)
	Thread	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Spoke Protector (Option)		-	CP-WH10/WH11	-	CP-WH10/WH11	-	CP-WH10/WH11
Reflector (Option)		CAT EYE : RR-550-WUW/W SMN 03 (CPSC/JIS/BS), RR-550-WUA/A SMN03 (AS), RR-317-WUA/4K SMN03 (DIN)		CAT EYE : RR-550-WUW/W SMN 03 (CPSC/JIS/BS), RR-550-WUA/A SMN03 (AS), RR-317-WUA/4K SMN03 (DIN)		CATEYE: RR-550-WUW SW W/O BRACKET (JIS/CPSC) RR-550-WUA SW W/O BRACKET (AS) RR-317-WUA SW W/O BRACKET (DIN)	
Weight *	Tubeless	783g	929g	820g	1001g	-	-
	Clincher	-	-	-	-	967g	1142g
Note		Recommended Tires: 26x1.50-2.25		Recommended Tires: 26x1.50-2.25		Recommended Tires: 26x1.50-2.25	
		* Weight does not include quick release or valve stem.		* Weight does not include quick release or valve stem.		Both rim and disc brake compatible.	
						* Weight does not include quick release.	



# Wheel Specifications (MTB)

Model No.		WH-M540 (front)	WH-M540 (rear)
Freehub Body	Speeds	-	9
	11T Compatible	-	X
	Material	-	Steel
O.L.D.		100mm	135mm
Axle	QR	X	X
	QR Skewer Length	133mm	168mm
	Length	108mm	146mm
	Material	Steel	Steel
Seal		Contact	Contact
Hub Shell	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
QR Lever	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
Lock Ring Type Rotor Mount		-	-
Rim	Tubeless	-	-
	Clincher	559 X 18 (26")	559 X 18 (26")
	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
	Height	28mm	28mm
	Width	24mm	24mm
Spokes	No. of Spokes	16	16
	Length	258mm	250/266mm
	Bladed	X	X
	Material	Steel	Steel
Nipple	Size	4.3mm(#11)	4.3mm(#11)
	Thread	BC 2.3 (#13)	BC 2(#14)/BC2.3(#13)
	Material	Aluminum	Aluminum
Spoke Protector (Option)		-	CP-WH10/WH11
Reflector (Option)		CAT EYE : RR-550-WUW SW (CPSC/JIS/BS), RR-550-WUA SW (AS), RR-317-WUA SW (DIN)	
Weight *	Tubeless	-	-
	Clincher	846g	1091g
Note		Recommended Tires: 26x1.50-2.25 * Weight does not include quick release.	

# Wheel Specifications (Road)

Model No.		WH-7801-carbon (front)	WH-7801-carbon (rear)	WH-7801-SL (front)	WH-7801-SL (rear)	WH-7801 (front)	WH-7801 (rear)
Freehub Body (*note)	Speeds	-	10	-	10	-	10
	11T Compatible	-	X	-	X	-	X
	Material	-	Aluminum	-	Aluminum	-	Aluminum
O.L.D.		100mm	130mm	100mm	130mm	100mm	130mm
Axle	QR Skewer Length	133mm	163mm	133mm	163mm	133mm	163mm
	Length	108mm	141mm	108mm	141mm	108mm	141mm
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Seal		Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
QR Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Rim	Tubular	700C	700C	-	-	700C	700C
	Clincher	-	-	622 X 15C (700C) Tubeless	622 X 15C (700C) Tubeless	622 X 15C (700C)	622 X 15C (700C)
	Material	CFRP	CFRP	Scandium Alloy	Scandium Alloy	Aluminum	Aluminum
	Finish	-	-	Anodized	Anodized	Anodized	Anodized
	Height	28mm	24mm offset	24mm	24mm offset	24mm	24mm offset
	Width	20.8mm	20.8mm	20.8mm	20.8mm	20.8mm	20.8mm
Spokes	No. of Spokes	16	20	16	20	16	20
	Length	278mm	274/300 mm	282mm	274/300mm	282mm	274/300 mm
	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
Nipple	Size	4.3mm (#11)	4.3mm (#11)	4.3mm (#11)	4.3mm (#11)	4.3mm (#11)	4.3mm (#11)
	Thread	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Spoke Protector (Option)		-	CP-WH20-A	-	CP-WH20-A	-	CP-WH20-A
Reflector (Option)		CAT EYE : RR-550-WUW SW (CPSC/JIS/BS), RR-550-WUA SW (AS), RR-317-WUA SW (DIN)		CAT EYE : RR-550-WUW SW (CPSC/JIS/BS), RR-550-WUA SW (AS), RR-317-WUA SW (DIN)		CAT EYE : RR-550-WUW SW (CPSC/JIS/BS), RR-550-WUA SW (AS), RR-317-WUA SW (DIN)	
Weight **	Tubular	570g	740g	-	-	698g	909g
	Clincher	-	-	650g	870g	712g	906g
Note		-	For 10-speed only	-	For 10-speed only	-	For 10-speed only
		** Weight does not include quick release.		** Weight does not include quick release.		** Weight does not include quick release.	
						Recommended Tires 19-25mm (Clincher)	

## Wheel Specifications (Road)

Model No.		WH-R600 (front)	WH-R600 (rear)	WH-R560 (front)	WH-R560 (rear)
Freehub Body (*note)	Speeds	-	10	-	8/9*
	11T Compatible	-	X	-	X
	Material	-	Aluminum	-	Steel
O.L.D.		100mm	130mm	100mm	130mm
Axle	QR Skewer Length	133mm	163mm	133mm	163mm
	Length	108mm	141mm	108mm	141mm
	Material	Steel	Aluminum	Steel	Steel
Seal		Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
QR Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Barrel	Barrel
Rim	Tubular	-	-	-	-
	Clincher	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)
	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
	Height	24mm	24mm offset	24mm	24mm
	Width	20.8mm	20.8mm	20.8mm	20.8mm
Spokes	No. of Spokes	16	20	16	20
	Length	286mm	272/300 mm	286mm	276/300mm
	Shape	Bladed	Bladed	Bladed	Bladed
	Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Nipple	Size	4.3mm (#11)	4.3mm (#11)	4.3mm (#11)	4.3mm (#11)
	Thread	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)
	Material	Aluminum	Aluminum	Aluminum	Aluminum
Spoke Protector (Option)		-	CP-WH20-A	-	CP-WH20-A
Reflector (Option)		CAT EYE : RR-550-WUW SW (CPSC/JIS/BS), RR-550-WUA SW (AS), RR-317-WUA SW (DIN)		CAT EYE : RR-550-WUW SW (CPSC/JIS/BS), RR-550-WUA SW (AS), RR-317-WUA SW (DIN)	
Weight **	Tubular	-	-	-	-
	Clincher	771g	959g	771g	1029g
Note		-	For 10-speed only	-	*Can be used for 10-speed with an additional spacer.
		Recommended Tires 19-28mm (Clincher)		Recommended Tires 19-28mm (Clincher)	
		** Weight does not include quick release.		** Weight does not include quick release	

## Wheel Specifications (Road)

Model No.		WH-R550 (front)	WH-R550 (rear)	WH-R500 (front)	WH-R500 (rear)
Freehub Body (*note)	Speeds	-	8/9*	-	8/9*
	11T Compatible	-	X	-	X
	Material	-	Steel	-	Steel
O.L.D.		100mm	130mm	100mm	130mm
Axle	QR Skewer Length	133mm	163mm	133mm	163mm
	Length	108mm	141mm	108mm	141mm
	Material	Steel	Steel	Steel	Steel
Seal		Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact	Labyrinth and Contact
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
QR Lever	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	Barrel	Barrel	Barrel
Rim	Tubular	-	-	-	-
	Clincher	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)	622 X 15C (700C)
	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
	Height	24mm	24mm	24mm	24mm
	Width	20.8mm	20.8mm	20.8mm	20.8mm
Spokes	No. of Spokes	16	20	20	24
	Length	286mm	276/300mm	278mm	286/288mm
	Shape	Bladed	Bladed	Round	Round
	Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Nipple	Size	4.3mm (#11)	4.3mm (#11)	3.4mm (#14)	3.4mm (#14)
	Thread	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)
	Material	Aluminum	Aluminum	Brass	Brass
Spoke Protector (Option)		-	CP-WH20-A	-	CP-FH02 (21-25T) CP-FH35 (27T)
Reflector (Option)		CAT EYE : RR-550-WUW SW (CPSC/JIS/BS), RR-550-WUA SW (AS), RR-317-WUA SW (DIN)		CATEYE: RR-550-WUW/W SMN03 (JIS/CPSC) RR-550-WUA/A SMN03 (AS) RR-317-WUA/4K SMN03 (DIN)	CATEYE: RR-550-WUW SW W/O BRACKET (JIS/CPSC) RR-550-WUA SW W/O BRACKET (AS) RR-317-WUA SW W/O BRACKET (DIN)
Weight **	Tubular	-	-	-	-
	Clincher	793g	1052g	812g	1072g
Note		-	*Can be used for 10-speed with an additional spacer.	-	*Can be used for 10-speed with an additional spacer.
		Recommended Tires 19-28mm (Clincher)		Recommended Tires 19-28mm (Clincher)	
		** Weight does not include quick release.		** Weight does not include quick release.	

## Wheel Specifications (Trekking)

Model No.		WH-3N71-NX (front)	WH-8R25 (rear)	WH-3N71-T (front)	WH-T560 (rear)	WH-T565 (front)	WH-T565 (rear)
Freehub Body	Speeds	-	8 internal	-	8/9	-	8/9
	11T Compatible	-	-	-	X	-	X
	Material	-	-	-	Steel	-	Steel
O.L.D.		100mm	132mm	100mm	135mm	100mm	135mm
Axle	QR	X	-	X	X	X	X
	QR Skewer Length	133mm	-	133mm	168mm	133mm	168mm
	Length	108mm	184mm	108mm	146mm	108mm	146mm
	Material	Steel	Steel	Steel	Steel	Steel	Steel
Seal		Contact	Labyrinth and Contact	Contact	Contact	Contact	Contact
Hub Shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Anodized	Anodized	Anodized	Anodized
QR Lever	Material	Aluminum	-	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Barrel	-	Barrel	Barrel	Barrel	Barrel
Lock Ring Type Rotor Mount		-	-	-	-	X	X
Rim	Clincher	622 X 19 (28")	622 X 19 (28")	622 X 19 (28")	622 X 19 (28")	622 X 19 (28")	622 X 19 (28")
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Black Anodized	Black Anodized	Black Anodized	Black Anodized	Black Anodized	Black Anodized
	Height	20.0mm	20.0mm	20.0mm	20mm	22mm	22mm
	Width	23.5mm	23.5mm	23.5mm	23.5mm	25.2mm	25.2mm
Spokes	No. of Spokes	20	24	20	24	24	24
	Length	266/272mm	260/274mm	266/272mm	280/298mm	298mm	278/296mm
	Bladed	-	-	-	X	X	X
	Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Nipple	Size	3.4mm (#14)	3.6mm (#13)	3.4mm (#14)	4.3mm (#11)	4.3mm (#11)	4.3mm (#11)
	Thread	BC 2 (#14)	BC 2.3 (#13)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)	BC 2 (#14)
	Material	Brass	Brass	Brass	Aluminum	Aluminum	Aluminum
Spoke Protector (Option)		-	-	-	CP-WH10/WH11	-	CP-WH10/WH11
Reflector (Option)		CAT EYE : RR-550-WUW/W SMN 03 (CPSC/JIS/BS), RR-550-WUA/A SMN03 (AS), RR-317-WUA/4K SMN03 (DIN)	CATEYE: RR-550-WUW SW W/O BRACKET (JIS/CPSC) RR-550-WUA SW W/O BRACKET (AS) RR-317-WUA SW W/O BRACKET (DIN)	CAT EYE : RR-550-WUW/W SMN 03 (CPSC/JIS/BS), RR-550-WUA/A SMN03 (AS), RR-317-WUA/4K SMN03 (DIN)	CATEYE: RR-550-WUW SW W/O BRACKET (JIS/CPSC) RR-550-WUA SW W/O BRACKET (AS) RR-317-WUA SW W/O BRACKET (DIN)	CATEYE: RR-550-WUW SW W/O BRACKET (JIS/CPSC) RR-550-WUA SW W/O BRACKET (AS) RR-317-WUA SW W/O BRACKET (DIN)	
Weight *	Clincher	1306g	2319g	1306g	1082g	1058g	1232g
Note	Recommended Tires: 700x28-47C			Recommended Tires: 700x28-47C		Recommended Tires: 700x28-47C	
	6V 3.0W Sports Dynamo		6V 3.0W Sports Dynamo		For rim brake only		Both rim and disc brake compatible
	* Weight does not include quick release		** Accessories are sold separately		* Weight does not include quick release		* Weight does not include quick release.

## Cycle Computer (Head Display unit) Specifications

Head Display unit Model No.	SC-6502
Rear Speeds	7-10
Front Speeds	Single/Double/Triple
4 different wheel size programs	X
Wheel size range	1300mm-2400mm
ODO Meter Reset	X
Auto Start & Auto Stop	X
Current Speed	X
Clock	X
Trip Time	X
Trip Distance	X
ODO Meter	X
Stop Watch	X
Stop Watch-Trip Distance	X
Stop Watch-Average Speed	X
Stop Watch-Maximum Speed	X
Cadence available	X
Main Display Cadence	X
Maximum Speed	X
Average Speed	X
Lap Counter	X
Gear Teeth Number (Digital) available	X
Gear Indicator (Bar) available	X
Pace Arrow	X
Low Battery Display	X
Note	

# Cycle Computer (Head Display unit) Specifications

Head Display unit Model No.	SC-C050	SC-C051	SC-C052	SC-M300	SC-TX50
7 different wheel size programs (20"-22"-24"-26"-27"-28"-700C)	X	X	-	X	X
ODO Meter Reset	-	X	-	X	X
Front single gear available	-	-	-	-	-
Auto Start & Auto Stop	X	X	X	X	X
Water Resistant (1bar)	X	X	X	X	X
Current Speed	X	-	-	X	X
Clock	-	-	X	X	X
Trip Time	-	-	-	-	-
Trip Distance	-	X	-	X	X
ODO Meter	-	X	-	X	X
Stop Watch	-	-	X	-	-
Back Light (EL)	-	-	-	X	X
Stop Watch-Trip Distance	-	-	-	-	-
Stop Watch-Average Speed	-	-	-	-	-
Stop Watch-Maximum Speed	-	-	-	-	-
Cadence Available	-	-	-	-	-
Main Display Cadence	-	-	-	-	-
Maximum Speed	-	-	-	-	-
Average Speed	-	-	-	X	X
Lap Counter	-	-	-	-	-
Gear Number (Digital) Available	-	-	-	-	-
Gear Teeth Number (Digital) Available	-	-	-	-	-
Gear Ratio Available	-	-	-	-	-
Gear Indicator (Bar) Available	-	-	-	-	-
Pace Arrow	-	-	-	-	-
Low Battery Display	-	-	-	-	-
<b>Note</b>				*must be used with Hub Dynamo	*must be used with Hub Dynamo

# Cycle Computer (Head Display unit) Specifications

Series		NEXAVE	Nexus
Model No.		SC-C810	SC-8S40
Wheel Size Range	24"-26"-700C	X	X
Front Single Gear Available		-	X
Current Speed		X	X
Clock		X	X
Trip Time		-	-
Trip Distance		X	X
Trip Meter Reset		X	X
ODO Meter		X	X
ODO Meter Reset		X	X
Maximum Speed		-	-
Average Speed		-	-
Gear Position Display		X	X
Gear Shifting Mode Select Switch		by SW-C810 SW-C810C	by SW-8S40 SW-8S40C
RD(SG) - Auto and Manual Display		X	X
Low Battery Display		X	X
Suspension Mode Select Switch		by SW-C810	by SW-8S40
Suspension Mode Display		X	X
Suspension Hard and Soft Display		X	X
Display Panel Detachable		X	X
Back Light		X	X
Beep (on and off switch)		by SW-C810 SW-C810C	by SW-8S40 SW-8S40C
Note			



# Cycle Computer (Harness kit) Specifications

Harness Kit Model No.	SM-SC70	SM-6502	SM-6501-A	SM-6501-MD	SM-6501-M	SM-6500-RS
<b>Compatible Head Display Unit</b>	SC-6502	SC-6502	SC-6502/6501	SC-6502/6501	SC-6502/6501	SC-6502/6501
<b>Compatible Shift Lever</b>	ST-7801 ST-7803 ST-6600 ST-6603 ST-5600 ST-R700	ST-7801 ST-7803 ST-6600 ST-6603 ST-5600 ST-R700	ST-7703 ST-7700-C ST-6510 ST-5510 ST-4400 ST-3300 ST-3304 ST-R600 ST-R500	ST-M510 SL-M510	ST-M952 ST-M750 ST-M570 SL-M952 SL-M750 SL-M570 SL-R660 SL-R440	ST-7703 ST-7700-C ST-6510 ST-5510 ST-4400 ST-3300 ST-3304 ST-R600 ST-R500
<b>Wireless Speed Sensor</b>	X	-*	X	X	X	-
<b>Connector Joint</b>	-	-	-	X	X	-
<b>Mode &amp; Start/Stop switch</b>	Right & Left	Right & Left	Right & Left	Right & Left	Right	Right & Left
<b>Hands-on-levers Control Capability</b>	X	X	X	X	X	X
<b>Cadence</b>	X	X	X	X	X	X
<b>Main Display Cadence</b>	X	X	X	X	X	X
<b>Gear Teeth Number (Digital)</b>	SC-6502	SC-6502	SC-6501/6502	SC-6501/6502	SC-6501/6502	SC-6501/6502
<b>Gear Indicator (Bar)</b>	X	X	X	X	X	X
<b>Note</b>		*1350mm cable length for rear wheel		Fits on 9-speed shifters mentioned above.	Fits on 9-speed shifters mentioned above.	

Adapter Model No.		SM-C050WCA1	SM-C050WCA2
<b>Clamp band for switch of SC-C052</b>	<b>Clamp band diameter</b>	-	-
<b>Sensor code adapter for front fork</b>	<b>Front fork diameter</b>	18.0-44.0mm	-
	<b>Number of installation cords</b>	2	-
<b>Sensor code adapter for brake cable</b>	<b>Number of installation cords</b>	-	2

# CI-Deck Specifications

Series	Tourney	Tourney	Tourney	Tourney	C-Series	Tourney	C-Series	C-Series
Model No.	ID-TX50-6R	ID-TX50-7R	ID-TX50-LN	ID-TX50-L	ID-TX50-LC	SM-TX50	ID-C050-6R (L)	ID-C050-6R (R)
Compatible Shift Lever	SL-RS31/41/43	SB-C055A SL-RS31/41 /41A/43	SB-C055A SL-RS31/41 /41A/43	SB-C055A SL-RS31/41 /41A/43	SL-RS31	-	SL-RS31/41/43	SL-RS31/41/43
Front	-	-	Friction	3-speed	-	-	-	-
Rear	6-speed SIS	7-speed SIS	-	-	-	-	6-speed SIS	6-speed SIS
SL Compatible RD Type	Top normal	Top normal	-	-	-	-	Top normal /Rapid Rise	Top normal /Rapid Rise
CID Cable	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	-	-	Stainless Steel	Stainless Steel
CID Cable Type	TX50	TX50	TX50	TX50	-	-	C050	C050
CID Cable Adjust	X	X	X	X	-	-	X	X
Optical Gear Display	Front	-	Friction	3-speed	-	-	-	-
	Rear	6-speed	7-speed	-	-	-	6-speed	6-speed
Stainless CID Cable	X	X	X	X	-	-	X	X
Clamp Band Diameter	22.2mm	-	-	-	-	-	-	-
	25.0mm	-	-	-	-	-	-	-
	22.2/25.0mm	-	-	-	-	X	X	X
C.I.D Upper Cover	Material	Resin	Resin	Resin	Resin	Resin	Resin	Resin
	Color	Silver	Silver	Silver	Silver	Silver	Black	Red
C.I.D Body	Material	Resin	Resin	Resin	Resin	Resin	Resin	Resin
	Color	Black	Black	Black	Black	Black	Black	Black
Clamp Band	Material	Resin	Resin	Resin	Resin	Resin	Resin	Resin
	Color	Black	Black	Black	Black	Black	Black	Black
	Use with SM-TX50	Use with SM-TX50	Use with SM-TX50	Use with SM-TX50	Use with SM-TX50. No gear position & display for front single crankset bicycle.	Bracket for ID-TX50		

# CI-Deck Specifications

Series	C-Series	C-Series	C-Series	C-Series	C-Series	C-Series	C-Series	C-Series
Model No.	ID-C050-7R (L)	ID-C050-7R (R)	ID-C050-7R (BL)	ID-C050-7R (YL)	ID-C050-L (L)	ID-C050-L (R)	ID-C050-L (BL)	ID-C050-L (YL)
<b>Compatible Shift Lever</b>	SB-C055A SL-RS31/41 /41A/43	SB-C055A SL-RS31/41 /41A/43	SB-C055A SL-RS31/41 /41A/43	SB-C055A SL-RS31/41 /41A/43	SL-RS31/41 /41A/43 ST-EF35	SL-RS31/41 /41A/43 ST-EF35	SL-RS31/41 /41A/43 ST-EF35	SL-RS31/41 /41A/43 ST-EF35
<b>Front</b>	-	-	-	-	3-speed SIS	3-speed SIS	3-speed SIS	3-speed SIS
<b>Rear</b>	7-speed SIS	7-speed SIS	7-speed SIS	7-speed SIS	-	-	-	-
<b>SL Compatible RD Type</b>	Top normal /Rapid Rise	Top normal /Rapid Rise	Top normal /Rapid Rise	Top normal /Rapid Rise	-	-	-	-
<b>CID Cable</b>	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
<b>CID Cable Type</b>	C050	C050	C050	C050	C050	C050	C050	C050
<b>CID Cable Adjust</b>	X	X	X	X	X	X	X	X
<b>Optical Gear Display</b>	<b>Front</b>	-	-	-	3-speed	3-speed	3-speed	3-speed
	<b>Rear</b>	7-speed	7-speed	7-speed	7-speed	-	-	-
<b>Stainless CID Cable</b>	X	X	X	X	X	X	X	X
<b>Clamp Band Diameter</b>	<b>22.2mm</b>	-	-	-	-	-	-	-
	<b>25.0mm</b>	-	-	-	-	-	-	-
	<b>22.2/25.0mm</b>	X	X	X	X	X	X	X
<b>C.I.D Upper Cover</b>	<b>Material</b>	Resin	Resin	Resin	Resin	Resin	Resin	Resin
	<b>Color</b>	Black	Red	Blue	Yellow	Black	Red	Blue
<b>C.I.D Body</b>	<b>Material</b>	Resin	Resin	Resin	Resin	Resin	Resin	Resin
	<b>Color</b>	Black	Black	Black	Black	Black	Black	Black
<b>Clamp Band</b>	<b>Material</b>	Resin	Resin	Resin	Resin	Resin	Resin	Resin
	<b>Color</b>	Black	Black	Black	Black	Black	Black	Black

# CI-Deck Specifications

Series	C-Series	C-Series	C-Series	C-Series	C-Series	C-Series	C-Series
Model No.	ID-C050-L (GS)	ID-C050-LN (L)	ID-C050-LN (R)	ID-C050-LC (L)	ID-C050-LC(R)	ID-C050-LC (BL)	ID-C050-LC(YL)
<b>Compatible Shift Lever</b>	SL-RS31/41 /41A/43 ST-EF35	SL-RS31/43	SL-RS31/43	-	-	-	-
<b>Front</b>	3-speed SIS	Friction	Friction	-	-	-	-
<b>Rear</b>	-	-	-	-	-	-	-
<b>SL Compatible RD Type</b>	-	-	-	-	-	-	-
<b>CID Cable</b>	Stainless Steel	Stainless Steel	Stainless Steel	-	-	-	-
<b>CID Cable Type</b>	C050	C050	C050	-	-	-	-
<b>CID Cable Adjust</b>	X	X	X	-	-	-	-
<b>Optical Gear Display</b>	<b>Front</b>	3-speed	3-speed	3-speed	-	-	-
	<b>Rear</b>	-	-	-	-	-	-
<b>Stainless CID Cable</b>	X	X	X	-	-	-	-
<b>Clamp Band Diameter</b>	<b>22.2mm</b>	-	-	-	-	-	-
	<b>25.0mm</b>	-	-	-	-	-	-
	<b>22.2/25.0mm</b>	X	X	X	X	X	X
<b>C.I.D Upper Cover</b>	<b>Material</b>	Resin	Resin	Resin	Resin	Resin	Resin
	<b>Color</b>	Gray	Black	Red	Black	Red	Blue
<b>C.I.D Body</b>	<b>Material</b>	Resin	Resin	Resin	Resin	Resin	Resin
	<b>Color</b>	Silver	Black	Black	Black	Black	Black
<b>Clamp Band</b>	<b>Material</b>	Resin	Resin	Resin	Resin	Resin	Resin
	<b>Color</b>	Black	Black	Black	Black	Black	Black
				No gear position & display for front single crankset bicycle	No gear position & display for front single crankset bicycle	No gear position & display for front single crankset bicycle	No gear position & display for front single crankset bicycle

## Lamp-Battery case Specifications

Lamp		LP-R600	LP-NX50	LP-NX30	LP-NX21
Auto Light		-	X	X	X
Bulb Type		9.6V-5.0W Flange type(Halogen)	6V-2.4W Screw type (Xenon)	6V-2.4W Screw type (Xenon)	6V-2.4W Screw type (Xenon)
LED		Super Bright White LED	Super Bright White LED	-	-
LED as a positioning lamp		-	X (ring shape)	-	-
Electric Power Input		+ and -	+ (frame earth)	+ (frame earth)	+ (frame earth)
Electric Power Output		-	-	-	-
Lamp body	Material	Resin	Resin	Resin	Resin
	Finish	Painted	Painted	Painted	Painted
Attachment Position		Above handlebar	Front fork Light stay	Front fork Light stay	Front fork Light stay
Clamp Band Diameter		31.8/25.8/22.2mm	-	-	-
Switch	Auto	-	X	X	X
	Manual	X	-	-	-
Note		For 3.0W Dynamo	Only for Japanese market /With connection wire cable	Only for Japanese market /With connection wire cable	Only for Japanese market /With connection wire cable

## Lamp-Battery case Specifications

Lamp		LP-C050	LP-C050-HSW	LP-C050-AT	LP-C050-ATJ
Auto Light		-	-	X	X
Bulb Type		6V-2.4W Screw type (Xenon) Flange type(Halogen)	6V-2.4W Screw type (Xenon) Flange type(Halogen)	6V-2.4W Screw type (Xenon)	6V-2.4W Screw type (Xenon)
LED		-	-	-	-
LED as a positioning lamp		-	-	-	-
Electric Power Input		+ and -	+ and -	+ and -	+ and -
Electric Power Output		+ and -	+ and -	-	-
Lamp body	Material	Resin	Resin	Resin	Resin
	Finish	-	-	-	-
Attachment Position		Handle bar	Handle bar	Handle bar	Front fork Light stay
Clamp Band Diameter		22.2/25.0mm	22.2/25.0mm	22.2/25.0mm	-
Switch	Auto	-	-	X	X
	Manual	X	X	-	-
Note		J-Type: Xenon Bulb (Differnet Lens) Body Switch	Switch operation is possible, holding grip	Only for Japanese market /With connection wire cable	Only for Japanese market /With connection wire cable

## Lamp-Battery case Specifications

Lamp		LP-M300	LP-M300-J
Auto Light		X	X
Bulb Type		6V-2.4W Screw type (Xenon)	6V-2.4W Screw type (Xenon)
LED		Super Bright White LED	Super Bright White LED
LED as a positioning lamp		-	-
Electric Power Input		+ and -	+ and -
Electric Power Output		-	-
Lamp body	Material	Resin	Resin
	Finish	-	-
Attachment Position		Handle bar	Under front basket
Clamp Band Diameter		22.2/25.0mm	-
Switch	Auto	X	X
	Manual	-	-
Note		Only for Japanese market /With connection wire cable	Only for Japanese market /With connection wire cable

## Lamp-Battery case Specifications

Battery Case	SM-C050BT
Battery Type	LR6x4
Note	

Connection Wire Cable	SM-C050DC
Terminal	+ and -
Diameter	4mm
Note	

Adapter Model No.		SM-C050WCA1	SM-C050WCA2
Conection wire cable adapter for front fork	Front fork diameter	18.0-44.0mm	-
	Number of installation cords	2	-
Conection wire cable adapter for brake cable	Number of installation cords	-	2



## Hub-Dynamo Specifications

Model No.		DH-3D71	DH-3N71	DH-2N71	HB-NX70	DH-2R30-E
Type		For disc brake*	Regular	Regular	For disc brake	For hub roller brake
Voltage		6V	6V	6V	6V	6V
Output		3.0W	3.0W	2.4W	3.0W	2.4W
QR type		X	X	X	X	-
Nut type		-	-	-	-	X
Over Locknut Dim.		100mm	100mm	100mm	100mm	100mm
Flange Distance		52.3	60.0	60.0	51.9	54.4
Offset		3.85	0	0	4.05	2.9
Hole Reference (PCD)		74mm	74mm	74mm	80mm	74mm
Axle Length		108mm	108mm	108mm	108mm	140mm
Spoke Size		#14	#14	#14	#14	#14
Seal		Double Contact	Double Contact	Double Contact	Single Contact	Single Contact
Spoke Hole	28H	-	-	-	-	-
	32H	X	X	X	X	-
	36H	X	X	X	X	X
Wheel Size	26-28inch	X	X	X	-	X
	16-28inch	-	-	-	X	-
	20-24inch	-	-	-	-	-
	24-28inch	-	-	-	-	-
Roller Brake Modulator Grade	More than 26inch	High	-	-	-	X
		Standard	-	-	-	-
	20-24inch	-	-	-	-	-
Electric power output connector	frame earth type( 1 terminal )	-	-	-	-	-
	cable earth type( 2 terminal )	X	X	X	X	X
	For ECOVISION type( 2 terminal )	-	-	-	-	-
Finish		Anodized	Anodized	Anodized	Painted	Painted
Color		Anodized	Anodized	Anodized	Anodized/Black	Silver/Black
Note		*Lock Ring Type Rotor Mount				

## Hub-Dynamo Specifications

Model No.		DH-2R40	HB-NX60	HB-NX60-J	HB-NX60-JC	DH-3RB1
Type		For hub roller brake	For hub roller brake	For hub roller brake	For hub roller brake	For hub roller brake
Voltage		6V	6V	6V	6V	6V
Output		2.4W	2.4W	2.4W	2.4W	3.0W
QR type		-	-	-	-	X
Nut type		X	X	X	X	-
Over Locknut Dim.		100mm	100mm	100mm	100mm	100mm
Flange Distance		53.3	53.3	53.3	53.3	53.3
Offset		2.35	2.35	2.35	2.35	2.35
Hole Reference (PCD)		80mm	80mm	80mm	80mm	80mm
Axle Length		140mm	140mm/155mm	155mm	155mm	108mm
Spoke Size		#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke Hole	28H	-	-	-	-	-
	32H	-	-	-	-	X
	36H	X	X	X	X	X
Wheel Size	26-28inch	X	X	X	-	X
	16-28inch	-	-	-	-	-
	20-24inch	-	-	-	X	-
	24-28inch	-	-	-	-	-
Roller Brake Modulator Grade	More than 26inch	High	X	-	-	X
		Standard	-	X	X	-
	20-24inch	-	-	-	X	-
Electric power output connector	frame earth type( 1 terminal )	-	-	X	X	-
	cable earth type( 2 terminal )	X	X	-	-	-
	For ECOVISION type( 2 terminal )	-	-	-	-	X
Finish		Painted	Painted	Painted	Painted	Painted
Color		Clear /Inter-8 Silver	Clear/Silver	Clear	Clear	Inter-8 Silver
Note				JPN only	JPN only	for only ECOVISION AI-8S40

## Hub-Dynamo Specifications

Model No.		DH-3R40	DH-3R40	HB-NX50	HB-NX50
Type		For hub roller brake	For hub roller brake	For hub roller brake	For hub roller brake
Voltage		6V	6V	6V	6V
Output		3.0W	3.0W	3.0W	3.0W
QR type		X	-	X	-
Nut type		-	X	-	X
Over Locknut Dim.		100mm	100mm	100mm	100mm
Flange Distance		53.3	53.3	53.3	53.3
Offset		2.35	2.35	2.35	2.35
Hole Reference (PCD)		80mm	80mm	80mm	80mm
Axle Length		108mm	140mm	108mm	140mm
Spoke Size		#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact
Spoke Hole	28H	-	-	-	-
	32H	-	-	-	-
	36H	X	X	X	X
Wheel Size	26-28inch	X	X	X	X
	16-28inch	-	-	-	-
	20-24inch	-	-	-	-
	24-28inch	-	-	-	-
Roller Brake Modulator Grade	More than 26inch				
	High	X	X	-	-
	Standard	-	-	X	X
	20-24inch	-	-	-	-
Electric power output connector	frame earth type( 1 terminal )	-	-	-	-
	cable earth type( 2 terminal )	X	X	X	X
	For ECOVISION type( 2 terminal )	-	-	-	-
Finish		Painted	Painted	Painted	Painted
Color		Clear /Inter-8 Silver	Clear /Inter-8 Silver	Clear	Clear
Note					

# Hub-Dynamo Specifications

Model No.		DH-3NB1	DH-3NAI	DH-3N30	DH-3N30-QR	DH-3N30-QR
Type		Regular	Regular	Regular	Regular	Regular
Voltage		6V	6V	6V	6V	6V
Output		3.0W	3.0W	3.0W	3.0W	3.0W
QR type		X	-	-	X	X
Nut type		-	X	X	-	-
Over Locknut Dim.		100mm	100mm	100mm	100mm	100mm
Flange Distance		60	60.0	60mm	60mm	60mm
Offset		0	0	0	0	0
Hole Reference (PCD)		80mm	80mm	74mm	74mm	74mm
Axle Length		108mm	140mm	140mm	140mm	140mm
Spoke Size		#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke Hole	28H	-	-	-	-	-
	32H	X	-	-	-	X
	36H	X	X	X	X	-
Wheel Size	26-28inch	X	X	-	-	-
	16-28inch	-	-	X	X	X
	20-24inch	-	-	-	-	-
	24-28inch	-	-	-	-	-
Roller Brake Modulator Grade	More than 26inch	High	-	-	-	-
		Standard	-	-	-	-
	20-24inch	-	-	-	-	-
Electric power output connector	frame earth type( 1 terminal )	-	-	-	-	-
	cable earth type( 2 terminal )	-	-	X	X	X
	For ECOVISION type( 2 terminal )	X	X	-	-	-
Finish		Painted	Painted	Painted	Painted	Painted
Color		Inter-8 Silver	Clear	Silver/Black	Silver/Black	Silver/Black
Note		for only ECOVISION AI-8S40	for only ECOVISION AI-3S30			

# Hub-Dynamo Specifications

Model No.		HB-NX32	DH-2N30-E	DH-2N30-E-QR	HB-NX22	HB-NX23	HB-NX23-C
Type		Regular	Regular	Regular	Regular	Regular	Regular
Voltage		6V	6V	6V	6V	6V	6V
Output		3.0W	2.4W	2.4W	2.4W	2.4W	2.4W
QR type		X	-	X	X	-	-
Nut type		-	X	-	-	X	X
Over Locknut Dim.		100mm	100mm	100mm	100mm	93mm	93mm
Flange Distance		60.0	60mm	60mm	60.0	60.0	60.0
Offset		0	0	0	0	0	0
Hole Reference (PCD)		80mm	74mm	74mm	80mm	80mm	80mm
Axle Length		108mm	140mm	140mm	108mm	150mm	150mm
Spoke Size		#14	#14	#14	#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact	Single Contact	Single Contact	Single Contact
Spoke Hole	28H	-	-	-	-	-	X
	32H	X	-	-	X	-	-
	36H	X	X	X	X	X	-
Wheel Size	26-28inch	-	-	-	-	-	-
	16-28inch	X	X	X	-	-	-
	20-24inch	-	-	-	-	-	X
	24-28inch	-	-	-	X	X	-
Roller Brake Modulator Grade	More than 26inch	High	-	-	-	-	-
		Standard	-	-	-	-	-
	20-24inch	-	-	-	-	-	-
Electric power output connector	frame earth type( 1 terminal )	-	-	-	-	X	X
	cable earth type( 2 terminal )	X	X	X	X	-	-
	For ECOVISION type( 2 terminal )	-	-	-	-	-	-
Finish		Painted	Painted	Painted	Painted	Painted	Painted
Color		Clear/Black Inter-8 Silver	Silver/Black	Silver/Black	Clear/Black /Inter-8 Silver	Silver	Silver
Note						JPN only	JPN only

## Hub-Dynamo Specifications

Model No.		HB-C050-DR	HB-C050-DRC	HB-C050-D
Type		For hub roller brake	For hub roller brake	Regular
Voltage		6V	6V	6V
Output		2.4W	2.4W	2.4W
QR type		-	-	-
Nut type		X	X	X
Over Locknut Dim.		100mm	100mm	100mm
Flange Distance		53.3	53.3	60.0
Offset		2.35	2.35	0
Hole Reference (PCD)		80mm	80mm	80mm
Axle Length		140mm/M9	140mm/M9	140mm/M9
Spoke Size		#14	#14	#14
Seal		Single Contact	Single Contact	Single Contact
Spoke Hole	28H	-	-	-
	32H	-	-	-
	36H	X	X	X
Wheel Size	26-28inch	X	-	-
	16-28inch	-	-	-
	20-24inch	-	X	-
	24-28inch	-	-	X
Roller Brake Modulator Grade	More than 26inch	High	X	-
		Standard	-	-
	20-24inch	-	X	-
Electric power output connector	frame earth type( 1 terminal )	-	-	-
	cable earth type( 2 terminal )	X	X	X
	For ECOVISION type( 2 terminal )	-	-	-
Finish		Painted	Painted	Painted
Color		Black	Black	Black
Note				

# Capreo Specifications

## RD

Model No.		RD-F700
Pulley Cage		SS/SGS
Speeds		9
Rapid-Rise Rear Derailleur		-
Total Capacity		17T
Max. Rear Sprocket		26T
Min. Rear Sprocket		9T
Riveted Adapter Available	Road type	-
	Bmx-Track type	-
Direct Attachment		X
Detachable Bracket		-
Wheel-Type Cable Guide		-
Fluoric Coated Link Bushings		2
Parallelogram Spring Adjuster		-
Sealed Bearing Guide Pulley		-
Sealed Bearing Tension Pulley		-
11T Pulley		X
Pulley Bolt Holder		-
Bracket Body	Material	Aluminum
	Finish	Painted(Silver)
Plate Body	Material	Aluminum
	Finish	Painted(Silver)
Outer Link	Material	Aluminum
	Finish	Painted(Silver)
Inner Link	Material	Steel
	Finish	Zinc Plated
Outer Plate	Material	Steel
	Finish	Painted(Silver)
Inner Plate	Material	Steel
	Finish	Zinc Plated
Removable Rubber Bumper		-
NOTE		

## CS

Model No.		CS-HG70-S
Type		HG Cassette Sprocket
Combination	Speed	9
	9	26
	8	23
	7	20
	6	17
	5	15
	4	13
	3	11
	2	10
1	9	
Group		bc
Chain		Super Narrow HG for 9-Speed
Spider Arm		-
Lock Ring		Steel
Steel Cog		X
Ti Cog		-
Finish		Sn-Co Plating
Note		Only for FH-F700

## SL

Model No.		SL-F700(R)
Lever type		Tap-Fire
Front		-
Rear		9-speed SIS
SL cable adjust		X
Optical gear display		Above handlebar
Multi-Bearing Construction		-
SL outer casing		SP40 sealed
Stainless SL cable		X
Flight Deck w/ Gear Sensor Compatible (Option)		-
W/ CI-DECK		-
SL Bracket	Material	Aluminum
	Finish	Painted
SL Compatible RD Type		-
Note		

## BL

Model No.		BL-F700
Brake type		V-brake
Lever size		2 finger
Brake cable type		T-type
Power adjuster		-
Servo-Wave Action		-
Reach adjust		X
Cable adjust		X
Brake lever	Material	Aluminum
	Finish	Barrel
Brake bracket	Material	Aluminum
	Finish	Painted
Note		

## BR

Model No.		BR-F700
Brake type		V-brake
Link Wire		-
Reinforced Link		-
Parallel link		-
Power Modulator		X (Option)
Linear Spring		X
Threaded BR Shoe Post		X
Brake shoe type	Standard	R55C for F700
	Optional choice	-
Arch size		-
Fixing bolt length		16/25mm
Sleeve & Bushing type		X
Lead Pipe Angle		45/90/135
Canti lever /V-arm /Caliper	Material	Aluminum
	Finish	Painted
Cartridge Shoe Holder		X
Note		

# Capreo Specifications

## FC

Model No.		FC-F700
Rear Speeds		9
Chainring Combination		45T
Group		-
Spider or Gear Arm		5-arm
PCD (mm)		130mm
Crank Arm Length	160mm	-
	165mm	X
	167.5mm	-
	170mm	X
	172.5mm	-
175mm	-	
Chain		Super narrow HG for 9-Speed
Bottom Bracket		BB-UN40(-K) / UN26(-K)
Axle Length	Chain Line 46	MM110
	Chain Line 48.5	LL113
	Chain Line 50	YL117
	Chain Line 52.5+t	117.5
Fixing Nut Available		-
Optional Chain Guard		Standard/Silver
Hollowtech Crank Arm		-
Splined Crank (OCTALINK)		-
One-key Release		-
Chain Case Compatible Crank Arm		-
Crank Arm	Material	Aluminum
	Finish	Painted(Silver)
Spider Arm		-
Spider Arm Cover		-
Outer Ring	Material	Aluminum
	Finish	Anodized
Middle Ring		-
Inner Ring		-
Note		

## HB

Model No.		HB-F700
Spoke Holes	24H	X
	28H	-
	32H	X
	36H	X
	40/48H	-
Hole PCD (mm)		38
O.L.D. (mm)		100
Flange Distance		71.6
Axle	QR	X
	QR Skewer Length	133mm
	Axle Length	108mm (M9)
	Material	Steel
	Nut	-
Axle Length		-
Seal		X
Stainless Steel Ball Bearings		-
Strong Axle		-
Hub Shell	Material	Aluminum
	Finish	Anodized
CBN (Cubic Boron Nitride)	Cone Races	-
	Cup Races	-
Quick Release Lever	Material	Aluminum
	Finish	Anodized
Radial Lacing		X
Note		

## FH

Model No.		FH-F700
Spoke Holes	24H	X
	28H	-
	32H	X
	36H	X
	40/48H	-
Hole PCD (mm)		45
Speeds		9
Freehub Body	11T compatible	9T
	Roller Clutch	-
O.L.D. (mm)	Material	Steel
	130	-
	135	X
	Others	-
Flange Distance		60.3
Dish		8.3
Axle	QR	X
	QR Skewer Length	168mm
	Length	146mm (M10)
	Nut	-
	Length	-
Seal	Material	Steel
	Hub	X
Hub Shell	Freewheel	-
	Material	Aluminum
Quick Release Lever	Finish	Anodized
	Material	Aluminum
CBN (Cubic Boron Nitride)	Finish	Anodized
	Cone Races	-
Stainless Steel Ball Bearings	Cup Races	-
	Material	-
Thread for Drum Brake (BC1.37X24)		-
Note		Only for CS-HG70-S Only for 16-20inch



## Nexus Di2 (Cyber Nexus) Specifications

### AI

Series	Nexus
Model No.	AI-8S40
Capacitor for Better Shifting, Suspension & Lighting	X
Automatic Light Sensor	X
Shifting Timing Adjuster SW	X
Position to be fixed	Below down tube, near BB part
Way of Fixing	M5 screw x 2
Speed Signal Input	DH-3NB1-QR DH-3RB1-QR
Power Supply	DH-3NB1-QR DH-3RB1-QR

### MU

Series	Nexus
Model No.	MU-8S40
Type	Same type of AUTO-D with Inter-4
Compatible Hub Gear	SG-8R45/8C45

<b>DH</b>	<b><u>DH-3RB1/3NB1 &lt;Refer to Page147/148&gt;</u></b>
<b>EW</b>	<b><u>EW-AA/AB/AC/DD &lt;Refer to Page91&gt;</u></b>
<b>FS</b>	<b><u>FS-C810/C812 &lt;Refer to Page87&gt;</u></b>
<b>SC</b>	<b><u>SC-8S40 &lt;Refer to Page136&gt;</u></b>
<b>SG</b>	<b><u>SG-8R45/8C45 &lt;Refer to Page155&gt;</u></b>
<b>SW</b>	<b><u>SW-8S40 &lt;Refer to Page89&gt;</u></b>

# Inter-8 Specifications

Function Name	Inter-8				
	SG-8R20	SG-8R25	SG-8R20-VS	SG-8R25-VS	SG-8C20
Speeds	8				8
Silent Clutch	X				X
Gear Change Support Mechanism	X				X
Shifting Power Modulator	X				X
Driving Efficiency	Standard	HIGH	Standard	HIGH	Standard
w/ Left hand dust cap	- ( HRB )	- ( HRB )	X	X	-
Brake	Inter-M		V-Brake		Coaster
	BR-IM41/50/70-R				
Over Locknut Dim. /OLD (mm)	132				132.3
Axle Length(mm)	184				184
Gear Ratio	Total	307%			307%
	1	0.527			0.527
	2	0.644			0.644
	3	0.748			0.748
	4	0.851			0.851
	5	1			1
	6	1.223			1.223
	7	1.419			1.419
8	1.615			1.615	
Hub Shell Material	Aluminum				Aluminum
Finish	Painted				Painted
Weight	1750g	1550g	1750g	1550g	1990g
Spoke Hole	36H				36H
Spoke Size	#13 / #14				#13 / #14
Flange Dist. (mm)	58.3				58.3
Spoke Hole P.C.D (mm)	92.6				92.6
Flange Diameter (mm)	105.2				105.2
Flange width (mm)	3.2				3.2
Sprocket Teeth	16T,18T,19T,20T,21T,22T,23T				16T,18T,19T,20T,21T,22T,23T
Sprocket Thickness (mm)	2.3				2.3
Chain Size	1/2"x1/8" or 1/2"x3/32"				1/2"x1/8" or 1/2"x3/32"
Recommended Chain	CN-NX10				CN-NX10
Chain Line(mm) 16-23T	42.7/47.7				42.85/47.85
Dishing Distance (mm)	2.7				2.55
Shifting Lever/Al	SB-8S20/ST-8S20/SL-8S20				SB-8S20/ST-8S20/SL-8S20
Cassette Joint/Motor Unit	CJ-8S20/CJ-8S40				CJ-8S20/CJ-8S40
Note					

# Inter-8 Specifications

Function Name	Inter-8		
Model No.	SG-8R45	SG-8R45-VS	SG-8C45
Speeds	8		8
Silent Clutch	X		X
Gear Change Support Mechanism	X		X
Shifting Power Modulator	X		X
Driving Efficiency	HIGH		HIGH
w/ Left hand dust cap	-( HRB )	X	-
Brake	Inter-M	V-Brake	Coaster
	BR-IM41/50/70-R		
Over Locknut Dim. /OLD (mm)	132.9		133.2
Axle Length(mm)	184.9		184.9
Gear Ratio	Total	307%	
	1	0.527	
	2	0.644	
	3	0.748	
	4	0.851	
	5	1	
	6	1.223	
	7	1.419	
8	1.615		
Hub Shell Material	Aluminum		Aluminum
Finish	Painted		Painted
Weight	1550g		1950g
Spoke Hole	36H		36H
Spoke Size	#13 / #14		#13 / #14
Flange Dist. (mm)	58.3		58.3
Spoke Hole P.C.D (mm)	92.6		92.6
Flange Diameter (mm)	105.2		105.2
Flange width (mm)	3.2		3.2
Sprocket Teeth	16T,18T,19T,20T,21T,22T,23T		16T,18T,19T,20T,21T,22T,23T
Sprocket Thickness (mm)	2.3		2.3
Chain Size	1/2"x1/8" or 1/2"x3/32"		1/2"x1/8" or 1/2"x3/32"
Recommended Chain	CN-NX10		CN-NX10
Chain Line(mm) 16-23T	42.25		42.4
Dishing Distance (mm)	3.15		3
Shifting Lever/AI	AI-8S40		AI-8S40
Cassette Joint/Motor Unit	MU-8S40		MU-8S40
Note			

# Inter-7 Specifications

Function Name		Inter-7		
Model No.		SG-7R46		SG-7C18/16
Speeds		7		
Silent Clutch		-		
Gear Change Support Mechanism		-		
Shifting Power Modulator		X		
Brake		Inter-M		Coaster
		BR-IM41/50/70-R		
Over Locknut Dim. / OLD (mm)		130	130	127
Axle Length (mm)		182	201	175.5
Gear Ratio	Total	244%		
	1	0.632		
	2	0.741		
	3	0.843		
	4	0.989		
	5	1.145		
	6	1.335		
	7	1.545		
Hub Shell Material		Aluminum		Steel
Corrosion Resistant Finish		X	X	X
Weight		1465g		1860g
Spoke Hole		36H		
Spoke Size		#13 / #14		
Flange Dist. (mm)		54.6		56.2
Spoke Hole P.C.D (mm)		87		83.5
Flange Diameter (mm)		99.6		92.5
Flange width (mm)		3.2		2.7
Sprocket Teeth		16T, 17T, 18T, 19T, 20T, 21T, 22T, 23T		
Sprocket Thickness (mm)		2.3		
Chain Size		1/2"x1/8" or 1/2"x3/32"		
Recommended Chain		CN-NX10		
Chain Line(mm)	16T	45.3		46.5
	18-23T	40.3 / 45.3		41.5 / 46.5
Dishing Distance (mm)		3.85		4.6
Shifting Lever		SB-7S45, SL-7S10, ST-7S20		
Cassette Joint		CJ-NX10 / CJ-NX40		
Note				

# Inter-3 Specifications

Function Name		Inter-3				
Model No.		SG-3R40		SG-3C41		
Speeds		3				
Silent Clutch		-				
Gear Change Support Mechanism		X				
Shifting Power Modulator		X				
Super Light Shifting		X				
Brake		Inter-M		Coaster		
		BR-IM41-R/ BR-IM31-R				
Over Locknut Dim. / OLD (mm)		120.4/120.4	126.8	120/120	127.4	
Axle Length (mm)		170.3/189.4	176.8	168/178	175	
Gear Ratio		Total 186%				
		1 0.733				
		2 1.000				
		3 1.360				
		4 -				
		5 -				
		6 -				
		7 -				
Hub Shell Material		Steel				
Corrosion Resistant Finish		X				
Weight		885g		1120g		
Spoke Hole		36H / 28H				
Spoke Size		#13 / #14				
Flange Dist. (mm)		53	53	57.5	57.5	
Spoke Hole P.C.D (mm)		74	74	59	59	
Flange Diameter (mm)		84	84	67.5	67.5	
Flange width (mm)		2.3				
Sprocket Teeth		15T, 16T, 18T, 19T, 20T, 21T, 22T, 23T				
Sprocket Thickness (mm)		2.3				
Chain Size		1/2"x1/8" or 1/2"x3/32"				
Recommended Chain		CN-NX10				
Chain Line(mm)		15T	42.2	40.5	43.7	42.2
		16T	-/44.7	-/43	-/46.2	-/44.7
		18-23T	39.7/44.7	38/43	41.2/46.2	39.7/44.7
Dishing Distance (mm)		0.8	2.5	1.2	2.7	
Shifting Lever		SB-3S30, SB-3S30J, SL-3S35, SL-3S95				
Cassette Joint		BELL CRANK 3 / BELL CRANK 4				
Note						

# AI Specifications

Function Name	AUTO-D		
Model No.	AI-3S10	AI-3S30	AI-8S40
Speeds	3	3	8
Information Display	-	-	SC-8S40
Display Type	-	-	LCD
Automatic Shifting	X	X	X
Number of Automatic mode	2	8	3(L/D/Ds) x 8
Auto Light Function	-	X	X
Beep Sound	X	X	X
Power Supply	Battery	DH-3NA1 (from hub dynamo)	DH-3NB1/ DH-3RB1
Speed Signal Input	Sensor & Magnet	DH-3NA1 (from hub dynamo)	DH-3NB1/ DH-3RB1
Main Unit Position	On the Chaincase	On the Chaincase	Below down tube by using 2 pcs of M5 screw
SG	SG-3R40/45/55 SG-3C41	SG-3R40/45/55 SG-3C41	SG-8R45 SG-8C45
Note			

# SB/SL/ST Specifications

Function Name	Inter-S									
	SB-8S20	SL-8S20	ST-8S20	SB-7S45	SL-7S10	ST-7S20	SB-3S30	SB-3S30J	SL-3S35	SL-3S95
Speeds	8	8	8	7	7	7	3	3	3	3
Shifter Type	Revo	Revo	Tap fire	Revo	Revo	Rapidfire	Revo	Revo	Revo	Piano touch
Optical Gear Display	Dial	Dial	Meter	Dial	Dial	Dial	Dial	Dial	Dial	Dial
Max Number of Shift	7	7	1	6	6	1	2	2	2	1
Brake Lever Integrated	X	-	X	X	-	-	X	X	-	-
Brake Lever Size	4 Finger	-	3 Finger	3 Finger	-	-	3 Finger	2.5 Finger	-	-
Left Hand Brake Lever	BL-IM60	-	BL-IM65	BL-IM45	-	-	BL-IM32	BL-IM32J	-	-
Clamping Diameter	22.2mm	22.2mm	22.2mm	22.2mm	22.2mm	22.2mm	22.2mm	22.2mm	22.2mm	22.2mm
Inner Cable Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
SL Outer Cable Cap	Sealed	Sealed	Sealed	Sealed	Sealed	Sealed	Sealed	Sealed	Sealed	Sealed
Note										

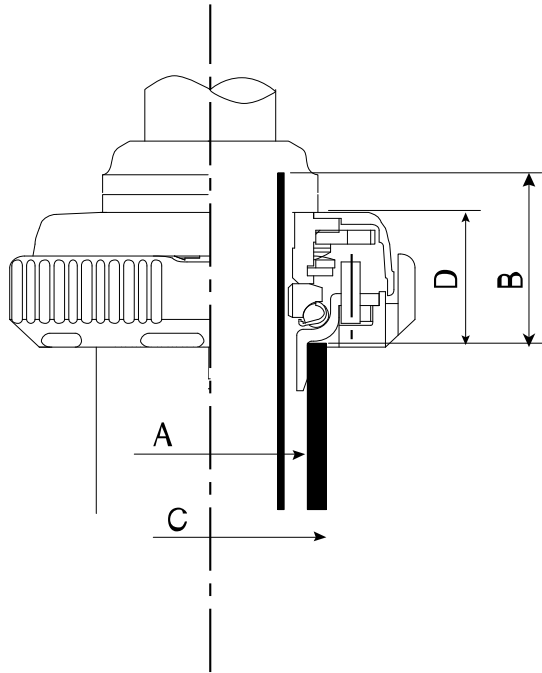
# Front Chainwheel Specifications

Function Name		Inter-C	
Model No.		FC-NX80	FC-NX60
Chain Ring Teeth		46T	33T   38T
Chain Line		43+t mm	44+t mm
Chain Type		1/2"X3/8" or 1/2"X3/32"	
Crank Length		170mm	170mm
BB	With Chaincase Stay	BB-TS30/50 MM110-K	BB-TS30/50-K
	Without Chaincase Stay	BB-TS30/50 MM110	YL117
Chain Ring	Material	Alumium	Steel
	Finish	Anodized	Black
Cover Ring Dia.		-	95mm
Crank Arm	Material	Alumium	Alumium
	Finish	Painted	Painted
Pedalling Power Modulator		-	-
Integrated Chain Guard Diameter		202mm	-
Note		FC-NX80/60 BB-TS30/50 :Made in Italy	

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## Others. Specifications



<b>Function Name</b>	<b>Nexus Headset</b>
<b>Model No.</b>	<b>HP-NX10</b>
<b>A</b>	$\phi 29.85 - 30.0\text{mm}$ or $\phi 30.01 - 30.2\text{mm}$
<b>B</b>	30.5 - 31.5mm
<b>Front Fork Stem Thread Size</b>	BC 1" X 24 T.P.I
<b>C</b>	$\phi 38\text{mm}$ ( Max. )
<b>D</b>	21.7mm
<b>Head Tube Material</b>	Steel

<b>Function Name</b>	<b>Nexus Chain</b>
<b>Model No.</b>	<b>CN-NX10</b>
<b>Size</b>	1/2x3/8"
<b>Function</b>	Anti corrosion