

Shift/Brake Lever (Hydraulic Disc Brake)

Series			DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA
Model no.			ST-R9120-R	ST-R9120-L	ST-R8020-R	ST-R8020-L	ST-R8025-R	ST-R8025-L
Color	1		Series color	Series color	Series color	Series color	Black	Black
	2		-	-	-	-	-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Shift lever	Front speeds		-	2	-	2	-	2
	Rear speeds		11	-	11	-	11	-
	Max. multiple shifts (main lever/rear)		2	-	2	-	2	-
	Multi-bearing construction		-	-	-	-	-	-
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		Rear derailleur side	OT-RS900	OT-RS900	OT-RS900	OT-RS900	OT-RS900	OT-RS900
	Inner cable	Polymer-coated cable	✓	✓	✓	✓	✓	✓
		OPTISLICK	-	-	-	-	-	-
		SIL-TEC	-	-	-	-	-	-
		Stainless	-	-	-	-	-	-
		Steel	-	-	-	-	-	-
Brake lever	Brake hose (kit)		SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR
	Hose joint		Straight	Straight	Straight	Straight	Straight	Straight
	Brake hose color (kit)	1	Black	Black	Black	Black	Black	Black
		2	-	-	-	-	-	-
	Recommended brake caliper		BR-R9170	BR-R9170	BR-R8070	BR-R8070	BR-R8070	BR-R8070
	Oil		SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
	Reach adjust		✓	✓	✓	✓	✓	✓
	Clamp band (mm)		23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	Funnel bleeding		✓	✓	✓	✓	✓	✓
	Free stroke adjust		✓	✓	✓	✓	✓	✓
	SERVO WAVE		✓	✓	✓	✓	✓	✓
	Material		CFRP	CFRP	Engineering composite	Engineering composite	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Bracket	Material		Engineering composite	Engineering composite	Engineering composite	Engineering composite	Engineering composite	Engineering composite
	Finish		-	-	-	-	-	-
Clamp band	Material		Titanium	Titanium	Steel	Steel	Steel	Steel
Average weight (g)			538 (/pair)	538 (/pair)	554 (/pair)	554 (/pair)	568 (/pair)	568 (/pair)
Note							For small hand.	For small hand.

Shift/Brake Lever (Hydraulic Disc Brake)

ROAD

Series			SHIMANO 105	SHIMANO 105	SHIMANO 105	SHIMANO 105	SHIMANO 105	SHIMANO 105
Model no.			ST-R7120-R	ST-R7120-L	ST-R7020-R	ST-R7020-L	ST-R7025-R	ST-R7025-L
Color	1		Series color	Series color	Silky black	Silky black	Silky black	Silky black
	2		-	-	-	-	-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Shift lever	Front speeds		-	2	-	2	-	2
	Rear speeds		12	-	11	-	11	-
	Max. multiple shifts (main lever/rear)		2	-	2	-	2	-
	Multi-bearing construction		-	-	-	-	-	-
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		Rear derailleur side	OT-RS900	OT-RS900	OT-RS900	OT-RS900	OT-RS900	OT-RS900
	Inner cable	Polymer-coated cable	-	-	-	-	-	-
		OPTISLICK	✓	✓	✓	✓	✓	✓
		SIL-TEC	-	-	-	-	-	-
		Stainless	-	-	-	-	-	-
		Steel	-	-	-	-	-	-
Brake lever	Brake hose (kit)		SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR
	Hose joint		Straight	Straight	Straight	Straight	Straight	Straight
	Brake hose color (kit)	1	Black	Black	Black	Black	Black	Black
		2	-	-	-	-	-	-
	Recommended brake caliper		BR-R7170	BR-R7170	BR-R7070, BR-R7170	BR-R7070, BR-R7170	BR-R7070, BR-R7170	BR-R7070, BR-R7170
	Oil		SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
	Reach adjust		✓	✓	✓	✓	✓	✓
	Clamp band (mm)		23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	Funnel bleeding		✓	✓	✓	✓	✓	✓
	Free stroke adjust		-	-	-	-	-	-
	SERVO WAVE		-	-	-	-	-	-
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Finish		Painted	Painted	Painted	Painted	Painted	Painted	
Bracket	Material		Engineering composite	Engineering composite	Engineering composite	Engineering composite	Engineering composite	Engineering composite
	Finish		-	-	-	-	-	-
Clamp band	Material		Steel	Steel	Steel	Steel	Steel	Steel
Average weight (g)			612 (/pair)	612 (/pair)	610 (/pair)	610 (/pair)	619 (/pair)	619 (/pair)
Note			-	-	-	-	For small hand.	For small hand.

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Shift/Brake Lever (Hydraulic Disc Brake)

Series			TIAGRA	TIAGRA	TIAGRA	TIAGRA	SHIMANO	SHIMANO
Model no.			ST-4720-R	ST-4720-L	ST-4725-R	ST-4725-L	ST-RS685-R	ST-RS685-L
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Shift lever	Front speeds		-	2	-	2	-	2
	Rear speeds		10	-	10	-	11	-
	Max. multiple shifts (main lever/rear)		2	-	2	-	2	-
	Multi-bearing construction		-	-	-	-	-	-
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		Rear derailleur side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
	Inner cable	Polymer-coated cable	-	-	-	-	✓	✓
		OPTISLICK	✓	✓	✓	✓	-	-
		SIL-TEC	-	-	-	-	-	-
		Stainless	-	-	-	-	-	-
		Steel	-	-	-	-	-	-
Brake lever	Brake hose (kit)		SM-BH90-J-SSR, SM-BH90-JK-SSR	SM-BH90-J-SSR, SM-BH90-JK-SSR	SM-BH90-J-SSR, SM-BH90-JK-SSR	SM-BH90-J-SSR, SM-BH90-JK-SSR	SM-BH59-J-SS, SM-BH59-JK-SS	SM-BH59-J-SS, SM-BH59-JK-SS
	Hose joint		Straight	Straight	Straight	Straight	Straight	Straight
	Brake hose color (kit)	1	Black	Black	Black	Black	Black	Black
		2	-	-	-	-	White	White
	Recommended brake caliper		BR-4770	BR-4770	BR-4770	BR-4770	BR-RS785	BR-RS785
	Oil		SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
	Reach adjust		✓	✓	✓	✓	✓	✓
	Clamp band (mm)		23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	Funnel bleeding		✓	✓	✓	✓	✓	✓
	Free stroke adjust		-	-	-	-	✓	✓
	SERVO WAVE		-	-	-	-	✓	✓
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Engineering composite	Engineering composite
Finish		Painted	Painted	Painted	Painted	Painted	Painted	
Bracket	Material		Engineering composite	Engineering composite	Engineering composite	Engineering composite	Aluminum	Aluminum
	Finish		-	-	-	-	Painted	Painted
Clamp band	Material		Steel	Steel	Steel	Steel	Steel	Steel
Average weight (g)			-	-	-	-	649 (/pair)	649 (/pair)
Note					For small hand.	For small hand.		

Shift/Brake Lever (Hydraulic Disc Brake)

Series			SHIMANO	SHIMANO
Model no.			ST-RS405-R	ST-RS405-L
Color	1		Dark gray	Dark gray
	2		-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER
Shift lever	Front speeds		-	2
	Rear speeds		10	10
	Max. multiple shifts (main lever/rear)		2	-
	Multi-bearing construction		-	-
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41
		Rear derailleur side	OT-SP41	OT-SP41
	Inner cable	Polymer-coated cable	-	-
		OPTISLICK	✓	✓
		SIL-TEC	-	-
		Stainless	-	-
		Steel	-	-
Brake lever	Brake hose (kit)		SM-BH59-J-SS	SM-BH59-J-SS
	Hose joint		Straight	Straight
	Brake hose color (kit)	1	Black	Black
		2	-	-
	Recommended brake caliper		BR-RS405	BR-RS405
	Oil		SHIMANO Mineral	SHIMANO Mineral
	Reach adjust		✓	✓
	Clamp band (mm)		23.8-24.2	23.8-24.2
	Funnel bleeding		✓	✓
	Free stroke adjust		-	-
	SERVO WAVE		-	-
	Material		Aluminum	Aluminum
	Finish		Painted	Painted
Bracket	Material		Aluminum	Aluminum
	Finish		Painted	Painted
Clamp band	Material		Steel	Steel
Average weight (g)			-	-
Note				

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Shift/Brake Lever

Series			DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA
Model no.			ST-R9100-R	ST-R9100-L	ST-9001	ST-R8000-R	ST-R8000-L	ST-6800
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Shift lever	Front speeds		-	2	2	-	2	2
	Rear speeds		11	-	11	11	-	11
	Multi-bearing construction		R:4 L:4	R:4 L:4	R:4 L:4	*	*	- *
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		Rear derailleur side	OT-RS900	OT-RS900	OT-SP41 sealed	OT-RS900	OT-RS900	OT-SP41 sealed
	Inner cable	Polymer-coated cable	✓	✓	✓	✓	✓	✓
		OPTISLICK	-	-	-	-	-	-
		SIL-TEC	-	-	-	-	-	-
		Stainless	✓	✓	✓	✓	✓	✓
		Steel	-	-	-	-	-	-
Brake lever	Reach adjust		Screw	Screw	Screw	Screw	Screw	Screw
	Clamp band (mm)		23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	SLR-EV		✓	✓	✓	✓	✓	✓
	NEW SUPER SLR		-	-	-	-	-	-
	SUPER SLR		-	-	-	-	-	-
	Material		Carbon	Carbon	Carbon	CFRP	CFRP	CFRP
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Bracket	Material		CFRP	CFRP	CFRP	CFRP	CFRP	CFRP
	Finish		CFRP	CFRP	CFRP	CFRP	CFRP	CFRP
Average weight (g)			365 (/pair)	365 (/pair)	365 (/pair)	220	218	425 (/pair)
Note						* Use bush	* Use bush	* Use bush

Shift/Brake Lever

ROAD

Series			SHIMANO 105	SHIMANO 105	SHIMANO 105	TIAGRA	TIAGRA	TIAGRA
Model no.			ST-R7000-R	ST-R7000-L	ST-5800	ST-4700-R	ST-4700-L	ST-4703-L
Color	1		Silky black	Silky black	Black	Series color	Series color	Series color
	2		Spark silver	Spark silver	Silver	-	-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Shift lever	Front speeds		-	2	2	-	2	3
	Rear speeds		11	-	11	10	-	-
	Multi-bearing construction		0	0	0	0	0	0
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		Rear derailleur side	OT-R5900	OT-R5900	OT-SP41 sealed	OT-SP41 sealed	OT-SP41 sealed	OT-SP41 sealed
	Inner cable	Polymer-coated cable	-	-	-	-	-	-
		OPTISLICK	✓	✓	✓	✓	✓	✓
		SIL-TEC	-	-	-	-	-	-
		Stainless	✓	✓	✓	✓	✓	✓
		Steel	-	-	-	-	-	-
Brake lever	Reach adjust		Screw	Screw	Screw	screw	Screw	Screw
	Clamp band (mm)		23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	SLR-EV		✓	✓	✓	✓	✓	✓
	NEW SUPER SLR		-	-	-	-	-	-
	SUPER SLR		-	-	-	-	-	-
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Bracket	Material		GFRP	GFRP	GFRP	GFRP	GFRP	GFRP
	Finish		GFRP	GFRP	GFRP	GFRP	GFRP	GFRP
Average weight (g)			251	249	486 (/pair)	-	-	-
Note			-	-				

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Shift/Brake Lever

Series			SORA	SORA	SORA	CLARIS	CLARIS	CLARIS
Model no.			ST-R3000-R	ST-R3000-L	ST-R3030-L	ST-R2000-R	ST-R2000-L	ST-R2030-L
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Shift lever	Front speeds		-	2	3	-	2	3
	Rear speeds		9	-	-	8	-	-
	Multi-bearing construction		0	0	0	-	-	-
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
		Rear derailleur side	OT-SP41 sealed	OT-SP41 sealed	OT-SP41 sealed	OT-SP41 sealed	OT-SP41 sealed	OT-SP41 sealed
	Inner cable	Polymer-coated cable	-	-	-	-	-	-
		OPTISLICK	✓	✓	✓	✓	✓	✓
		SIL-TEC	-	-	-	-	-	-
		Stainless	✓	✓	✓	-	-	-
		Steel	-	-	-	✓	✓	✓
Brake lever	Reach adjust		Screw	Screw	Screw	Screw	Screw	Screw
	Clamp band (mm)		23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	SLR-EV		-	-	-	-	-	-
	NEW SUPER SLR		✓	✓	✓	✓	✓	✓
	SUPER SLR		-	-	-	-	-	-
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Bracket	Material		GFRP	GFRP	GFRP	GFRP	GFRP	GFRP
	Finish		GFRP	GFRP	GFRP	GFRP	GFRP	GFRP
Average weight (g)			-	-	-	-	-	-
Note								

Shift/Brake Lever

ROAD

Series			CLARIS	CLARIS	CLARIS
Model no.			ST-RS200-R	ST-RS200-L	ST-RS203-L
Color	1		Series color	Series color	Series color
	2		-	-	-
Shifter type			RAPIDFIRE PLUS	RAPIDFIRE PLUS	RAPIDFIRE PLUS
Shift lever	Front speeds		-	2	3
	Rear speeds		8	-	-
	Multi-bearing construction		-	-	-
Shift lever cable	Outer casing	Lever side	OT-SP41	OT-SP41	OT-SP41
		Rear derailleur side	OT-SP41 sealed	OT-SP41 sealed	OT-SP41 sealed
	Inner cable	Polymer-coated cable	-	-	-
		OPTISLICK	✓	✓	✓
		SIL-TEC	-	-	-
		Stainless	-	-	-
		Steel	✓	✓	✓
Brake lever	Reach adjust		✓	✓	✓
	Clamp band (mm)		22.2	22.2	22.2
	SLR-EV		-	-	-
	NEW SUPER SLR		-	-	-
	SUPER SLR		✓	✓	✓
	Material		Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted
Bracket	Material		Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted
Average weight (g)			-	-	-
Note					

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Shifter

Series			DURA-ACE	SHIMANO	SHIMANO	DURA-ACE	TIAGRA	TIAGRA
Model no.			SL-BSR1	SL-RS700	SL-RS700-I	SL-7900	SL-4700	SL-4703
Color	1		Series color	Black	Black	Series color	Series color	Series color
	2		-	-	-	-	-	-
Shifter type			Bar end shifter	RAPIDFIRE PLUS	RAPIDFIRE PLUS	Down tube shifter	RAPIDFIRE PLUS	RAPIDFIRE PLUS
Front speeds			2	2	2	2/3	2	3
Rear speeds			11	11	11	10	10	-
Compatible rear derailleur type			ROAD 11-speed	ROAD 11-speed	ROAD 11-speed	ROAD 10-speed	RD-4700	RD-4700
Mount type	Clamp band		-	✓	-	-	✓	✓
	I-SPEC B		-	-	-	-	-	-
	I-SPEC II		-	-	✓	-	-	-
Shift lever position adjust			-	-	-	-	-	-
Shift lever cable adjust			-	✓	✓	-	✓	✓
Max. multiple shifts (main lever/rear)			-	4	4	-	4	-
Release function	MULTI RELEASE		-	*✓ (right)/- (left)	*✓ (right)/- (left)	-	-	-
	INSTANT RELEASE		-	✓	✓	-	✓ (rear)	-
	2-WAY RELEASE		-	✓	✓	-	✓	✓
OPTICAL GEAR DISPLAY	With		-	-	-	-	✓	✓
	With (removable)		-	-	-	-	-	-
	Without		✓	✓	✓	✓	-	-
Multi-bearing construction			-	R:2 L:2	R:2 L:2	-	R:2 L:2	2
Shift lever cable	Inner cable	Polymer-coated cable	-	-	-	-	-	-
		OPTISLICK	-	-	-	-	-	-
		SIL-TEC	✓	✓	✓	✓	-	-
		Stainless	✓	✓	✓	✓	✓	✓
		Steel	-	-	-	-	-	-
Shift lever bracket	Material		-	Aluminum	Aluminum	-	Aluminum	Aluminum
	Finish		-	Painted	Painted	-	Painted	Painted
Clamp screw	Material		-			-		
	Finish		-			-		
Main lever body	Material		Aluminum	CFRP	CFRP	Aluminum	Aluminum	Aluminum
	Finish		Clear coated	Painted	Painted	Clear coated	Painted	Painted
Release lever body	Material		-	Steel+GFRP	Steel+GFRP	-	Steel+Resin	Steel+Resin
	Finish		-	-	-	-	-	-
Recommended shift lever outer casing			OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight (g)			153 (/pair)	210 (/pair)	210 (/pair)	63 (/pair)	-	-
Note				* Pull: single Push: double	* Pull: single Push: double			

Shifter

ROAD

Series			TIAGRA	DURA-ACE	SORA	SORA	SORA	CLARIS
Model no.			SL-4603	SL-7700	SL-R3000-R	SL-R3000-L	SL-R3030-L	SL-R2000-R
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Shifter type			RAPIDFIRE PLUS	Down tube shifter	RAPIDFIRE PLUS	RAPIDFIRE PLUS	RAPIDFIRE PLUS	RAPIDFIRE PLUS
Front speeds			3	2/3	-	2	3	-
Rear speeds			-	9	9	-	-	8
Compatible rear derailleur type			-	ROAD 9-speed	RD-R3000	FD-R3000	FD-R3030	ROAD 8-speed
Mount type	Clamp band		✓	-	✓	✓	✓	✓
	I-SPEC B		-	-	-	-	-	-
	I-SPEC II		-	-	-	-	-	-
Shift lever position adjust			-	-	-	-	-	-
Shift lever cable adjust			✓	-	✓	✓	✓	✓
Max. multiple shifts (main lever/rear)			-	-	3	-	-	3
Release function	MULTI RELEASE		-	-	-	-	-	-
	INSTANT RELEASE		-	-	-	-	-	-
	2-WAY RELEASE		✓	-	✓	✓	✓	✓
OPTICAL GEAR DISPLAY	With		✓	-	✓	✓	✓	✓
	With (removable)		-	-	-	-	-	-
	Without		-	✓	-	-	-	-
Multi-bearing construction			2	-	-	-	-	-
Shift lever cable	Inner cable	Polymer-coated cable	-	-	-	-	-	-
		OPTISLICK	-	-	✓	✓	✓	✓
		SIL-TEC	-	-	-	-	-	-
		Stainless	✓	✓	✓	✓	✓	-
		Steel	-	-	-	-	-	✓
Shift lever bracket	Material		Aluminum	-	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	-	Painted	Painted	Painted	Painted
Clamp screw	Material			-				
	Finish			-				
Main lever body	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel+Resin
	Finish		Painted	Clear coated	Painted	Painted	Painted	-
Release lever body	Material		Steel+Resin	-	Steel+Resin	Steel+Resin	Steel+Resin	Steel+Resin
	Finish		-	-	-	-	-	-
Recommended shift lever outer casing			OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41	OT-SP41
Average weight (g)			-	-	-	-	-	-
Note								

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Shifter

Series			CLARIS	CLARIS	SHIMANO
Model no.			SL-R2000-L	SL-R2030-L	SL-R400
Color	1		Series color	Series color	Series color
	2		-	-	-
Shifter type			RAPIDFIRE PLUS	RAPIDFIRE PLUS	Down tube shifter
Front speeds			2	3	2/3
Rear speeds			-	-	8
Compatible rear derailleur type			-	-	ROAD 8-speed
Mount type	Clamp band		✓	✓	-
	I-SPEC B		-	-	-
	I-SPEC II		-	-	-
Shift lever position adjust			-	-	-
Shift lever cable adjust			✓	✓	-
Max. multiple shifts (main lever/rear)			-	-	-
Release function	MULTI RELEASE		-	-	-
	INSTANT RELEASE		-	-	-
	2-WAY RELEASE		✓	✓	-
OPTICAL GEAR DISPLAY	With		✓	✓	-
	With (removable)		-	-	-
	Without		-	-	✓
Multi-bearing construction			-	-	-
Shift lever cable	Inner cable	Polymer-coated cable	-	-	-
		OPTISLIC K	✓	✓	-
		SIL-TEC	-	-	-
		Stainless	-	-	✓
		Steel	✓	✓	-
Shift lever bracket	Material		Aluminum	Aluminum	-
	Finish		Painted	Painted	-
Clamp screw	Material				-
	Finish				-
Main lever body	Material		Steel+Resin	Steel+Resin	Aluminum
	Finish		-	-	Painted
Release lever body	Material		Steel+Resin	Steel+Resin	-
	Finish		-	-	-
Recommended shift lever outer casing			OT-SP41	OT-SP41	OT-SP41
Average weight (g)			-	-	-
Note					

Brake Lever (Hydraulic Disc Brake)

ROAD

Series		SHIMANO
Model no.		BL-RS600
Brake type		Hydraulic disc brake
Lever size (finger)		3
Color	1	Black
	2	-
	3	-
Brake hose (kit)		SM-BH59-JK-SS
Hose joint		Straight
Brake hose color (kit)	1	Black
	2	-
J-Kit spec (for OEM)		✓
SERVO WAVE		-
Reach adjust	Toolless	-
	Tool	✓
Free stroke adjust		-
Compatible shifter mount	Clamp band	✓
	I-SPEC B	-
	I-SPEC II	✓
Clamp band	Open clamp	✓
	Diameter (mm)	22.2
Recommended brake caliper		BR-RS405
Oil		SHIMANO mineral
Funnel bleeding		✓
Clamp screw	Material	Stainless steel
	Finish	-
Bracket	Material	-
	Finish	-
Brake lever	Material	Aluminum
	Finish	Anodized
Master cylinder	Material	Aluminum
	Finish	Painted
Average weight (g)		
Note		

ST
ST
SL
BL
BL
BR
BR
BR
BR
BR
BR
BC
RD
FD
FC
FC
BB
BB
CS
HB
FH
WH
WH
HP
ST
ST
SW
RD
FD
SMAD

Brake Lever

Series		DURA-ACE	TIAGRA	SORA	CLARIS	SHIMANO	SHIMANO
Model no.		BL-TT79	BL-4700	BL-R3000	BL-R2000	BL-R780	BL-R550
Color	1	Black	Series color	Series color	Series color	Silver	Silver
	2	-	-	-	-	Black	Black
	3	-	-	-	-	-	-
Compatible brake type	V-BRAKE	-	✓	✓	✓	✓	-
	Mechanical disc brake (Road)	✓	✓	✓	✓	✓	✓
	Caliper (NEW SUPER SLR)	✓	✓	✓	✓	✓	-
	Caliper (SUPER SLR)	-	-	-	-	-	✓
	Cantilever brake	✓	✓	✓	✓	✓	✓
	Roller brake	-	-	-	-	-	-
Recommended POWER MODULATOR	V-BRAKE	-	-	-	-	-	-
	Mechanical disc brake (MTB)	-	-	-	-	-	-
Clamp band	Open clamp band	-	-	-	-	-	-
	I-SPEC	-	-	-	-	-	-
	Diameter (mm)	*	22.2	22.2	22.2	22.2	22.2
Internal bumper stop		-	✓	✓	✓	✓	-
Lever size (finger)		-	2.5	2.5	2.5	2.5	2.5
Brake cable type		-	T-type	T-type	T-type	T-type	T-type
Power adjuster		-	-	-	-	-	-
SERVO WAVE		-	-	-	-	-	-
Reach adjust		✓	✓	✓	✓	✓	✓
Cable adjust		-	✓	✓	✓	✓	✓
Cable adjust type		-	Two hand	Two hand	Two hand	Two hand	Two hand
Brake lever	Material	CFRP	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Anodized	Anodized	anodized	Anodized	Anodized
Brake bracket	Material	CFRP	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Average weight (g)		89 (/pair)	-	-	-	170 (/pair)	-
Note		* Fixation structure is expanding plug clamp, handle bar inside diameter: 19.0 - 22.5 dim, handle bar outside diameter: 22.2 - 24.0 dim.					

Brake Lever

ROAD

Series		SHIMANO
Model no.		BL-R400
Color	1	Series color
	2	-
	3	-
Compatible brake type	V-BRAKE	-
	Mechanical disc brake (Road)	-
	Caliper (NEW SUPER SLR)	-
	Caliper (SUPER SLR)	✓
	Cantilever brake	-
	Roller brake	-
Recommended POWER MODULATOR	V-BRAKE	-
	Mechanical disc brake (MTB)	-
Clamp band	Open clamp band	-
	I-SPEC	-
	Diameter (mm)	23.8-24.2
Internal bumper stop		-
Lever size (finger)		-
Brake cable type		-
Power adjuster		-
SERVO WAVE		-
Reach adjust		-
Cable adjust		-
Cable adjust type		-
Brake lever	Material	Aluminum
	Finish	Barrel
Brake bracket	Material	Aluminum
	Finish	Anodized
Average weight (g)		-
Note		

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Brake (Hydraulic Disc Brake)

Series		DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA
Model no.		BR-R9270	BR-R9170-F	BR-R9170-R	BR-R8170	BR-R8070-F	BR-R8070-R
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
Brake type		Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake
Brake hose (kit)		SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR
Hose joint		Straight	Straight	Straight	Straight	Straight	Straight
Brake hose color (kit)	1	Black	Black	Black	Black	Black	Black
	2	-	-	-	-	-	-
J-Kit spec (for OEM)		✓	✓	✓	✓	✓	✓
ICE TECHNOLOGIES pad compatible caliper		✓	✓	✓	✓	✓	✓
Pad	Standard 1	K05Ti-RX Resin (w/o fin)	K05Ti-RX Resin (w/o fin)	K05Ti-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)
	Standard 2	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)
	Option 1	K04Ti-MX Metal (w/o fin)	K04Ti-MX Metal (w/o fin)	K04Ti-MX Metal (w/o fin)	L04C-MF Metal (w/ fin)	K04S-MX Metal (w/o fin)	K04S-MX Metal (w/o fin)
	Option 2	L04C-MF Metal (w/ fin)	L04C-MF Metal (w/ fin)	L04C-MF Metal (w/ fin)	-	L04C-MF Metal (w/ fin)	L04C-MF Metal (w/ fin)
Fixing screw spec for rear mount	10 mm mount	✓	-	-	✓	-	✓
	15 mm mount	✓	-	✓	✓	-	✓
	20 mm mount	✓	-	✓	✓	-	✓
	25 mm mount	✓	-	✓	✓	-	✓
	30 mm mount	✓	-	✓	✓	-	✓
	35 mm mount	✓	-	✓	✓	-	✓
	15.2 mm	-	-	-	-	-	-
	18.7 mm	-	-	-	-	-	-
Recommended brake lever		ST-R9270 ST-R9180	ST-R9180 ST-R9170 ST-R9120	ST-R9180 ST-R9170 ST-R9120	ST-R8170	ST-R8070 ST-R8020	ST-R8070 ST-R8020
Recommended disc brake rotor		RT-MT900 RT-CL900	SM-RT900 RT-MT900 RT-CL900	SM-RT900 RT-MT900 RT-CL900	RT-MT800 RT-CL800	SM-RT800	SM-RT800
Oil		SHIMANO mineral	SHIMANO mineral	SHIMANO mineral	SHIMANO mineral	SHIMANO mineral	SHIMANO mineral
ONE WAY BLEEDING		✓	✓	✓	✓	✓	✓
Mount type		Flat mount	Flat mount	Flat mount	Flat mount	Flat mount	Flat mount
Piston		2	2	2	2	2	2
Piston material		Resin	Ceramic	Ceramic	Resin	Ceramic	Ceramic
Caliper	MONO-BODY	✓	-	-	-	-	-
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Painting	Anodized	Anodized
Caliper fixing screw	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Tool size	4 mm	4 mm	4 mm	4 mm	4 mm	4 mm
	Anti loosen method	Screw fix pin+Snap ring	Screw fix pin+Snap ring	Screw fix pin	Screw fix pin+Snap ring	Screw fix pin+Snap ring	Screw fix pin
Pad mount		Pad axle	Pad axle	Pad axle	Pad axle	Pad axle	Pad axle
Average weight (g)		97	131	111	123	141	124
Note							

Brake (Hydraulic Disc Brake)

ROAD

Series		SHIMANO 105	SHIMANO 105	SHIMANO 105	TIAGRA	TIAGRA	SHIMANO
Model no.		BR-R7170	BR-R7070-F	BR-R7070-R	BR-4770-F	BR-4770-R	BR-RS785
Color	1	Black	Silky black	Silky black	Series color	Series color	Series color (ULTEGRA)
	2	-	Spark silver	Spark silver	-	-	-
	3	-	-	-	-	-	-
Brake type		Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake	Hydraulic disc brake
Brake hose (kit)		SM-BH90-J-SSR SM-BH90-JK-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR, SM-BH90-J-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR
Hose joint		Straight	Straight	Straight	Straight	Straight	Straight
Brake hose color (kit)	1	Black	Black	Black	Black	Black	Black
	2	-	-	-	-	-	White
J-Kit spec (for OEM)		✓	✓	✓	✓	✓	✓
ICE TECHNOLOGIES pad compatible caliper		✓	✓	✓	-	-	✓
Pad	Standard 1	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)	J05A-RF Resin (w/ fin)
	Standard 2	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)	K04S-MX Metal (w/o fin)	K04S-MX Metal (w/o fin)	J04C-MF Metal (w/ fin)
	Option 1	L04C-MF Metal (w/ fin)	K04S-MX Metal (w/o fin)	K04S-MX Metal (w/o fin)	L03A-RF Resin (w/ fin)	L03A-RF Resin (w/ fin)	G03A-RX Resin (w/o fin)
	Option 2	-	L04C-MF Metal (w/ fin)	L04C-MF Metal (w/ fin)	-	-	-
Fixing screw spec for rear mount	10 mm mount	✓	-	✓	-	✓	-
	15 mm mount	✓	-	✓	-	✓	-
	20 mm mount	✓	-	✓	-	✓	-
	25 mm mount	✓	-	✓	-	✓	-
	30 mm mount	✓	-	✓	-	✓	-
	35 mm mount	✓	-	✓	-	✓	-
	15.2 mm	-	-	-	-	-	-
	18.7 mm	-	-	-	-	-	✓
Recommended brake lever		ST-R7170	ST-R7020 ST-R7025	ST-R7020 ST-R7025	ST-4720 ST-4725	ST-4720 ST-4725	ST-R8070
Recommended disc brake rotor		SM-RT70, SM-RT64	SM-RT70	SM-RT70	SM-RT64	SM-RT64	SM-RT99
Oil		SHIMANO mineral	SHIMANO mineral	SHIMANO mineral	SHIMANO mineral	SHIMANO mineral	SHIMANO mineral
ONE WAY BLEEDING		✓	✓	✓	✓	✓	✓
Mount type		Flat mount	Flat mount	Flat mount	Flat mount	Flat mount	Post type
Piston		2	2	2	2	2	2
Piston material		Resin	Ceramic	Ceramic	Resin	Resin	Ceramic
Caliper	MONO-BODY	-	-	-	-	-	-
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Caliper fixing screw	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Tool size	4 mm	4 mm	4 mm	4 mm	4 mm	5 mm
	Anti loosen method	Screw fix pin	Screw fix pin+Snap ring	Screw fix pin	Screw fix pin+Snap ring	Screw fix pin	Snap ring
Pad mount		Pad axle	Pad axle	Pad axle	Pad axle	Pad axle	Pad axle
Average weight (g)		123	141	124	-	-	271 (/pair)
Note							

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Brake (Hydraulic Disc Brake)

Series		SHIMANO	SHIMANO
Model no.		BR-RS405-F	BR-RS405-R
Color	1	Dark gray	Dark gray
	2	-	-
	3	-	-
Brake type		Hydraulic disc brake	Hydraulic disc brake
Brake hose (kit)		SM-BH59-J-SS SM-BH59-JK-SS	SM-BH59-J-SS SM-BH59-JK-SS
Hose joint		Straight	Straight
Brake hose color (kit)	1	Black	Black
	2	-	-
J-Kit spec (for OEM)		✓	✓
ICE TECHNOLOGIES pad compatible caliper		✓	✓
Pad	Standard 1	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)
	Standard 2	-	-
	Option 1	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)
	Option 2	-	-
Fixing screw spec for rear mount	10 mm mount	-	✓
	15 mm mount	-	✓
	20 mm mount	-	✓
	25 mm mount	-	✓
	30 mm mount	-	✓
	35 mm mount	-	✓
	15.2 mm	-	-
	18.7 mm	-	-
Recommended brake lever		ST-RS405 BL-RS600	ST-RS405 BL-RS600
Recommended disc brake rotor		SM-RT70	SM-RT70
Oil		SHIMANO mineral	SHIMANO mineral
ONE WAY BLEEDING		✓	✓
Mount type		Flat mount	Flat mount
Piston		2	2
Piston material		Resin	Resin
Caliper	MONO-BODY	-	-
	Material	Aluminum	Aluminum
	Finish	Painted	Painted
Caliper fixing screw	Material	Steel	Steel
	Tool size	4 mm	4 mm
	Anti loosen method	Screw fix pin+Snap ring	Screw fix pin
Pad mount		Pad axle	Pad axle
Average weight (g)		-	-
Note			

Brake (Mechanical Disc Brake)

ROAD

Series		SHIMANO	SHIMANO	SHIMANO
Model no.		BR-R317	BR-RS305-F	BR-RS305-R
Color	1	Black	Black	Black
	2	-	-	-
Brake type		Mechanical disc brake	Mechanical disc brake	Mechanical disc brake
Compatibility		NEW SUPER SLR	NEW SUPER SLR	NEW SUPER SLR
ICE TECHNOLOGIES pad compatible caliper		-	✓	✓
Pad	Standard 1	G05A-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)	K05S-RX Resin (w/o fin)
	Standard 2	-	-	-
	Option 1	-	L05A-RF Resin (w/ fin)	L05A-RF Resin (w/ fin)
	Option 2	-	-	-
Fixing screw spec for rear mount	10 mm mount	-	-	✓
	15 mm mount	-	-	✓
	20 mm mount	-	-	✓
	25 mm mount	-	-	✓
	30 mm mount	-	-	✓
	35 mm mount	-	-	✓
Recommended brake lever		BL-R2000	-	-
Recommended disc brake rotor		SM-RT54 (160 mm), SM-RT70 (140 mm)	SM-RT54/RT56 (160 mm), SM-RT70 (140 mm/160 mm)	SM-RT54/RT56 (160 mm), SM-RT70 (140 mm/160 mm)
Mount type		Post type	Flat mount	Flat mount
Piston		1	1	1
Piston material		-	-	-
Caliper	MONO-BODY	-	-	-
	Material	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted
Caliper fixing screw	Material	Steel	Steel	Steel
	Tool size	5 mm	4 mm	4 mm
	Anti loosen method	Snap ring	Screw fix pin+Snap ring	Screw fix pin
Pad mount		Pad axle	Pad axle	Pad axle
Average weight (g)		-	-	-
Note		SHIMANO logo	SHIMANO logo	SHIMANO logo

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Brake (Caliper Brake)

Series			DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE
Model no.			BR-R9200	BR-R9210-F	BR-R9210-R5	BR-R9100	BR-R9110-F	BR-R9110-R
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Type			SLR-EV Dual Pivot	Direct mount type	Direct mount type	SLR-EV Dual Pivot	Direct mount type	Direct mount type
Reach (mm)			51	51	51	51	51	51
Brake shoe	Standard		R55C4	R55C4	R55C4	R55C4	R55C4	R55C4
	Optional choice		R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4
Compatibility			SLR-EV	SLR-EV	SLR-EV	SLR-EV	SLR-EV	SLR-EV
Assembly pivot nut (mm)	Front (mm)	10.5	✓	-	-	✓	-	-
		12.5	✓	-	-	✓	-	-
		18.0	✓	-	-	✓	-	-
		27.0	✓	-	-	✓	-	-
		32.0	✓	-	-	✓	-	-
	Rear (mm)	10.5	✓	-	-	✓	-	-
Cartridge shoe holder			✓	✓	✓	✓	✓	✓
Tire guide bumpers			✓	✓	✓	✓	✓	✓
Quick release lever			✓	✓	✓	✓	✓	-
Shoe angle adjusting			✓	✓	✓	✓	✓	✓
Spring tension adjusting			-	-	-	-	-	✓
Maximum tire size			28C	28C	28C	28C	28C	28C
Rim width (mm)			20.8-28	20.8-28	20.8-28	20.8-28	20.8-28	20.8-28
Cartridge shoe holder	Material		Magnesium	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
C-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Y-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Gate	Material		Aluminum	-	-	Aluminum	-	-
	Finish		Anodized	-	-	Anodized	-	-
Quick release lever	Material		Resin	Resin	Resin	Resin	Resin	-
	Finish		Painted	Painted	Painted	Painted	Painted	-
Titanium cable fixing screw			✓	✓	✓	✓	✓	✓
Titanium pivot bolt			✓	✓ (fixing screw)	✓ (fixing screw)	✓	✓ (fixing screw)	✓ (fixing screw)
Average weight (g)			327 (/pair)	156 (/pc)	154 (/pc)	327 (/pair)	150 (/pc)	139 (/pc)
Note								Need inline cable adjuster (SM-CB90) for cable adjusting and quick release feature.

Brake (Caliper Brake)

ROAD

Series			DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA	SHIMANO	ULTEGRA
Model no.			BR-R9110-RS	BR-R8100	BR-R8110-F	BR-R8110-RS	BR-RS811-R	BR-R8000
Color	1		Series color	Series color	Series color	Series color	Black	Series color
	2		-	-	-	-	-	-
Type			Direct mount type	SLR-EV Dual Pivot	Direct mount type	Direct mount type	Direct mount type	SLR-EV Dual Pivot
Reach (mm)			51	51	51	51	51	51
Brake shoe	Standard		R55C4	R55C4	R55C4	R55C4	R55C4	R55C4
	Optional choice		R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 Carbon, R55C4-A Carbon, R55CT4	R55C4 carbon, R55C4-A carbon, R55CT4
Compatibility			SLR-EV	SLR-EV	SLR-EV	SLR-EV	SLR-EV	SLR-EV
Assembly pivot nut (mm)	Front (mm)	10.5	-	✓	-	-	-	✓
		12.5	-	✓	-	-	-	✓
		18.0	-	✓	-	-	-	✓
		27.0	-	✓	-	-	-	✓
		32.0	-	✓	-	-	-	✓
	Rear (mm)	10.5	-	✓	-	-	-	✓
Cartridge shoe holder			✓	✓	✓	✓	✓	✓
Tire guide bumpers			✓	✓	✓	✓	✓	✓
Quick release lever			✓	✓	✓	✓	-	✓
Shoe angle adjusting			✓	✓	✓	✓	✓	✓
Spring tension adjusting			-	-	-	-	✓	-
Maximum tire size			28C	28C	28C	28C	28C	28C
Rim width (mm)			20.8-28	20.8-28	20.8-28	20.8-28	20.8-28	20.8-28
Cartridge shoe holder	Material		Magnesium	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
C-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Painted	Anodized
Y-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Painted	Anodized
Gate	Material		-	Aluminum	-	-	-	Aluminum
	Finish		-	Anodized	-	-	-	Anodized
Quick release lever	Material		Resin	Resin	Resin	Resin	-	Resin
	Finish		Painted	Painted	Painted	Painted	-	-
Titanium cable fixing screw			✓	-	-	-	-	-
Titanium pivot bolt			✓ (fixing screw)	-	-	-	-	-
Average weight (g)			148 (/pc)	182 (Front) 180 (Rear)	180 (/pc)	178 (/pc)	-	182 (Front) 178 (Rear)
Note							Need inline cable adjuster (SM-CB90) for cable adjusting and quick release feature.	

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Brake (Caliper Brake)

Series			ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA
Model no.			BR-R8010-F	BR-R8010-R	BR-R8010-RS	BR-6800	BR-6810-F	BR-6810-RS
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Type			Direct mount type	Direct mount type	Direct mount type	SLR-EV Dual Pivot	Direct mount type	Direct mount type
Reach (mm)			51	51	51	51	51	51
Brake shoe	Standard		R55C4	R55C4	R55C4	R55C4	R55C4	R55C4
	Optional choice		R55C4 carbon, R55C4-A carbon, R55CT4	R55C4 carbon, R55C4-A carbon, R55CT4	R55C4 carbon, R55C4-A carbon, R55CT4	R55C4 carbon, R55C4-A carbon	R55C4 carbon, R55C4-A carbon	R55C4 carbon, R55C4-A carbon
Compatibility			SLR-EV	SLR-EV	SLR-EV	SLR-EV	SLR-EV	SLR-EV
Assembly pivot nut (mm)	Front (mm)	10.5	-	-	-	✓	-	-
		12.5	-	-	-	✓	-	-
		18.0	-	-	-	✓	-	-
		27.0	-	-	-	✓	-	-
		32.0	-	-	-	✓	-	-
	Rear (mm)	10.5	-	-	-	✓	-	-
Cartridge shoe holder			✓	✓	✓	✓	✓	✓
Tire guide bumpers			✓	✓	✓	✓	✓	✓
Quick release lever			✓	-	✓	✓	✓	✓
Shoe angle adjusting			✓	✓	✓	✓	✓	✓
Spring tension adjusting			-	✓	-	✓	-	-
Maximum tire size			28C	28C	28C	25C	28C	28C
Rim width (mm)			20.8-28	20.8-28	20.8-28	19-28	19-28	19-28
Cartridge shoe holder	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
C-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Y-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Gate	Material		-	-	-	Aluminum	-	-
	Finish		-	-	-	Anodized	-	-
Quick release lever	Material		Resin	-	Resin	Aluminum	Aluminum	Aluminum
	Finish		-	-	-	Painted	Painted	Painted
Titanium cable fixing screw			-	-	-	-	-	-
Titanium pivot bolt			-	-	-	-	-	-
Average weight (g)			174 (/pc)	160 (/pc)	172 (/pc)	335 (/pair)	173 (/pc)	168 (/pc)
Note				Need inline cable adjuster (SM-CB90) for cable adjusting and quick release feature.		* Rim width: 19-28 mm (R55C4-A carbon)	* Rim width: 19-28 mm (R55C4-A carbon)	* Rim width: 19-28 mm (R55C4-A carbon)

Brake (Caliper Brake)

ROAD

Series			SHIMANO 105	SHIMANO 105	SHIMANO 105	TIAGRA	SORA	CLARIS
Model no.			BR-R7000	BR-R7010-F	BR-R7010-R5	BR-4700	BR-R3000	BR-R2000
Color	1		Silky black	Silky black	Silky black	Series color	Series color	Series color
	2		Spark silver	-	-	-	-	-
Type			SLR-EV Dual Pivot	Direct mount type	Direct mount type	NEW SUPER SLR Dual pivot	NEW SUPER SLR Dual pivot	NEW SUPER SLR Dual pivot
Reach (mm)			51	51	51	51	51mm	51mm
Brake shoe	Standard		R55C4	R55C4	R55C4	R50T5	R50T5	R50T5
	Optional choice		R55C4 carbon, R55C4-A carbon, R55CT4	R55C4 carbon, R55C4-A carbon, R55CT4	R55C4 carbon, R55C4-A carbon, R55CT4	R50T4	R50T4	R50T4
Compatibility			SLR-EV	SLR-EV	SLR-EV	NEW SUPER SLR	NEW SUPER SLR	NEW SUPER SLR
Assembly pivot nut (mm)	Front (mm)	10.5	✓	-	-	✓	✓	✓
		12.5	✓	-	-	✓	✓	✓
		18.0	✓	-	-	✓	✓	✓
		27.0	✓	-	-	✓	✓	✓
		32.0	✓	-	-	✓	✓	✓
	Rear (mm)	10.5	✓	-	-	✓	✓	✓
Cartridge shoe holder			✓	✓	✓	-	-	-
Tire guide bumpers			✓	✓	✓	-	-	-
Quick release lever			✓	✓	✓	✓	✓	✓
Shoe angle adjusting			✓	✓	✓	✓	✓	✓
Spring tension adjusting			-	-	-	-	-	-
Maximum tire size			28C	28C	28C	28C	28 mm	28 mm
Rim width (mm)			20.8-28	20.8-28	20.8-28	19-26	19-28	19-26
Cartridge shoe holder	Material		Aluminum	Aluminum	Aluminum	-	-	-
	Finish		Painted	Painted	Painted	-	-	-
C-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Painted	Painted
Y-arm	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Painted	Painted
Gate	Material		Aluminum	-	-	Aluminum	Aluminum	Aluminum
	Finish		Anodized	-	-	Anodized	Anodized	Anodized
Quick release lever	Material		Resin	Resin	Resin	Resin	Resin	Resin
	Finish		-	-	-	Painted	-	-
Titanium cable fixing screw			-	-	-	-	-	-
Titanium pivot bolt			-	-	-	-	-	-
Average weight (g)			379 (/pair)	174 (/pc)	174 (/pc)	-	-	-
Note			-	-	-			

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Brake (Caliper Brake)

Series			SHIMANO	SHIMANO
Model no.			BR-R561	BR-R451
Color	1		Silver	Black
	2		Black	Silver
Type			NEW SUPER SLR Dual pivot	SUPER SLR Dual Pivot
Reach (mm)			49	57
Brake shoe	Standard		R55C3	R50T2
	Optional choice		R55C for ceramic rim, R55C3 for carbon rim	-
Compatibility			NEW SUPER SLR	SUPER SLR
Assembly pivot nut (mm)	Front (mm)	10.5	✓	✓
		12.5	✓	✓
		18.0	✓	✓
		27.0	✓	✓
		32.0	-	-
	Rear (mm)	10.5	✓	✓
Cartridge shoe holder			✓	-
Tire guide bumpers			-	-
Quick release lever			✓	✓
Shoe angle adjusting			✓	✓
Spring tension adjusting			-	-
Maximum tire size			28C	32C
Rim width (mm)			19-26	19-26
Cartridge shoe holder	Material		Aluminum	-
	Finish		Painted	-
C-arm	Material		Aluminum	Aluminum
	Finish		Anodized	Painted
Y-arm	Material		Aluminum	Aluminum
	Finish		Anodized	Painted
Gate	Material		Aluminum	Aluminum
	Finish		Anodized	Painted
Quick release lever	Material		Zinc	Resin
	Finish		Plated	-
Titanium cable fixing screw			-	-
Titanium pivot bolt			-	-
Average weight (g)			-	-
Note			Maximum tire size: 28 mm	Quick release lever wider open Maximum tire size: 32 mm

Brake (V-BRAKE)

Series		SHIMANO
Model no.		BR-R353
Color	1	Silver
	2	Black
	3	-
Brake type		V-BRAKE
Brake shoe	Standard 1	S70T
	Standard 2	-
	Option 1	M70T4
	Option 2	-
Cartridge shoe holder		-
Arch size (mm)		90
Spacer type	X type	✓
	Y type	-
Compatible lead pipe angle (deg.)		45/90/135
Sleeve & bushing axle		✓
V-arm/caliper	Material	Aluminum
	Finish	Painted
Fixing screw length (mm)	16	✓
	25	✓
Fixing screw	Material	Steel
	Finish	Plated (black)
	Chamfered screw	-
POWER MODULATOR		-
Linear spring		✓
Threaded brake shoe post		✓
Average weight (g)		-
Note		SHIMANO logo

Brake (Cantilever Brake)

Series		SHIMANO
Model no.		BR-CX50
Color	1	Silver
	2	-
Brake type		Cantilever brake
Reach		-
Brake shoe	Standard	R50T2
	Optional choice	-
Compatibility		NEW SUPER SLR
Assembly pivot nut (mm)		-
Cartridge shoe holder		-
Tire guide bumpers		-
Quick release lever		-
Toe-in adjust		✓
Spring tension adjusting		✓
Cartridge shoe holder	Material	-
	Finish	-
Cantilever	Material	Aluminum
	Finish	Anodized
Average weight (g)		175
Note		Cyclocross usage

Brake Cable

Series		DURA-ACE	SHIMANO	SHIMANO
Model no.		BC-9000	BC-R680	BC-1051
Color	High-tech gray	✓	✓	✓
	Black	✓	✓	✓
	White	✓	✓	✓
	Red	✓	✓	✓
	Blue	✓	✓	-
	Lime-green	✓	✓	-
	Orange	✓	✓	-
	Yellow	✓	✓	-
Brake type		Caliper	Caliper	Caliper
Inner cable	Material	Stainless steel	Stainless steel	Steel
	Coated	Polymer-coated cable	Polymer-coated cable	-
Outer casing	Material	Steel (plated)	Steel (plated)	Steel
	Prelubricated casings	✓	✓	-
Note				

Rear Derailleur

Series			DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA
Model no.			RD-R9100-SS	RD-9000-SS	RD-R8000-SS	RD-R8000-GS	RD-6800-SS	RD-6800-GS
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Rear speeds			11	11	11	11	11	11
Compatible chain			LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed
RD construction	SHIMANO SHADOW RD		✓	-	✓	✓	-	-
	SHIMANO SHADOW RD+		-	-	-	-	-	-
	Double servo		-	✓	-	-	✓	✓
Applicable derailleur hanger	SHIMANO MTB type	Direct attachment (conventional)	-	-	-	-	-	-
		Direct mount	-	-	-	-	-	-
	SHIMANO ROAD type	Direct attachment (conventional)	✓	✓	✓	✓	✓	✓
		Direct mount	✓	-	✓	✓	-	-
	UDH standard		-	-	-	-	-	-
	Riveted adapter	ROAD type	-	-	-	-	-	-
		BMX-track type	-	-	-	-	-	-
	Cable adjuster			✓	✓	✓	✓	✓
Max. front difference			16T	16T	16T	16T	16T	16T
Total capacity			35T	33T	35T	39T	33T	37T
Low sprocket	Max.		30T	28T	30T	34T	28T	32T
	Min.		25T	23T	25T	28T	23T	28T
Top sprocket	Max.		14T	14T	14T	12T	14T	12T
	Min.		11T	11T	11T	11T	11T	11T
Fluoric coated link bushings			4	4	4	4	4	4
Pulley	Guide pulley bearing		✓	✓	✓	✓	✓	✓
	Tension pulley bearing		✓	✓	✓	✓	✓	✓
	Teeth		11T	11T	11T	11T	11T	11T
	Screws material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Sunken type pulley screw		✓	✓	✓	✓	✓	✓
Bracket	Material		Aluminum	-	-	-	-	-
	Finish		Anodized	-	-	-	-	-
B-axle	Hollow axle		✓	✓	✓	✓	✓	✓
	Material		Aluminum	Aluminum	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish		Anodized	-	-	-	-	-
B-axle 2	Hollow axle		-	-	-	-	-	-
	Material		Aluminum	-	-	-	-	-
	Finish		Anodized	-	-	-	-	-
Bracket body	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Painted	Painted	Painted	Painted
P-axle	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Plated	Plated	Plated	Plated	Plated	Plated
Plate body	Material		CFRP	CFRP	GFRP	GFRP	CFRP	CFRP
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Painted	Painted	Painted	Painted
Inner link	Material		Aluminum	Aluminum	GFRP	GFRP	Aluminum	Aluminum
	Finish		Anodized	Anodized	-	-	Painted	Painted
Outer plate	Material		Carbon	Carbon	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Clear coated	Clear coated	Painted	Painted	Painted	Painted
Inner plate	Material		CFRP	CFRP	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Clear coated	Clear coated	Painted	Painted	Painted	Painted
Cable fixing screw	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish		Black coated	-	Black coated	Black coated	-	-
Stroke adjusting screw	Material		Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish		Anodized	Anodized	Plated	Plated	Plated	Plated
Average weight (g)			158	158	200	210	195	207
Note			* w/o Bracket spec available		* w/o Bracket spec available	* w/o Bracket spec available		

Rear Derailleur

ROAD

Series			ULTEGRA RX	SHIMANO 105	SHIMANO 105	SHIMANO 105	SHIMANO 105	SHIMANO 105
Model no.			RD-RX800-GS	RD-R7100	RD-R7000-SS	RD-R7000-GS	RD-5701-SS	RD-5701-GS
Color	1		Series color	Series color	Silky black	Silky black	Black	Black
	2		-	-	Spark silver	Spark silver	Silver	Silver
Rear speeds			11	12	11	11	10	10
Compatible chain			LINKGLIDE, HG 11-speed	HG 12-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	HG 10-speed	HG 10-speed
RD construction	SHIMANO SHADOW RD		-	✓	✓	✓	-	-
	SHIMANO SHADOW RD+		✓	-	-	-	-	-
	Double servo		-	-	-	-	✓	✓
Applicable derailleur hanger	SHIMANO MTB type	Direct attachment (conventional)	-	-	-	-	-	-
		Direct mount	-	-	-	-	-	-
	SHIMANO ROAD type	Direct attachment (conventional)	✓	✓	✓	✓	✓	✓
		Direct mount	✓	✓	✓	✓	-	-
	UDH standard		-	-	-	-	-	-
	Riveted adapter	ROAD type	-	-	-	-	-	-
		BMX-track type	-	-	-	-	-	-
	Cable adjuster			✓	✓	✓	✓	✓
Max. front difference			16T	16T	16T	16T	16T	16T (front double), 22T (front triple)
Total capacity			39T	41T	35T	39T	34T	40T
Low sprocket	Max.		34T	36T	30T	34T	30T	30T (front triple), 32T (front double)
	Min.		28T	34T	25T	28T	25T	27T (front double), 25T (front triple)
Top sprocket	Max.		11T	11T	14T	12T	14T	12T (front double), 14T (front triple)
	Min.		11T	11T	11T	11T	11T	11T
Fluoric coated link bushings			4	2	2	2	2	2
Pulley	Guide pulley bearing		✓	✓	-	-	-	-
	Tension pulley bearing		✓	-	-	-	-	-
	Teeth		11T	11T	11T	11T	11T	11T
	Screws material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Sunken type pulley screw		✓	✓	✓	✓	✓	✓
Bracket	Material		Aluminum	-	-	-	-	-
	Finish		Anodized	-	-	-	-	-
B-axle	Hollow axle		✓	-	-	-	-	-
	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Steel	Steel
	Finish		-	-	-	-	Plated	Plated
B-axle 2	Hollow axle		-	-	-	-	-	-
	Material		-	-	-	-	-	-
	Finish		-	-	-	-	-	-
Bracket body	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
P-axle	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		-	Plated	Plated	Plated	Plated	Plated
Plate body	Material		Aluminum	GFRP	GFRP	GFRP	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material		Aluminum	GFRP	GFRP	GFRP	Steel	Steel
	Finish		Painted	-	-	-	Plated	Plated
Outer plate	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Inner plate	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Cable fixing screw	Material		Stainless steel	Steel	Steel	Steel	Steel	Steel
	Finish		Passivation	Plated	Plated	Plated	Plated	Plated
Stroke adjusting screw	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Plated	Plated	Plated	Plated
Average weight (g)			248	249	225	232	230	243
Note			* w/o bracket spec available		* w/o Bracket spec available	* w/o Bracket spec available		

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Rear Derailleur

Series			TIAGRA	TIAGRA	SORA	SORA	SHIMANO	CLARIS
Model no.			RD-4700-SS	RD-4700-GS	RD-R3000-SS	RD-R3000-GS	RD-R350-GS	RD-R2000-SS
Color	1		Series color	Series color	Series color	Series color	Black	Series color
	2		-	-	-	-	-	-
Rear speeds			10	10	9	9	9	8
Compatible chain			HG-X 10-speed	HG-X 10-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 8/7/6-speed
RD construction	SHIMANO SHADOW RD		-	-	-	-	-	-
	SHIMANO SHADOW RD+		-	-	-	-	-	-
	Double servo		✓	✓	✓	✓	✓	✓
Applicable derailleur hanger	SHIMANO MTB type	Direct attachment (conventional)	-	-	-	-	-	-
		Direct mount	-	-	-	-	-	-
	SHIMANO ROAD type	Direct attachment (conventional)	✓	✓	✓	✓	✓	✓
		Direct mount	-	-	-	-	-	-
	UDH standard		-	-	-	-	-	-
	Riveted adapter	ROAD type	-	-	-	-	-	-
		BMX-track type	-	-	-	-	-	-
	Cable adjuster			✓	✓	✓	✓	✓
Max. front difference			16T	16T (front double), 20T (front triple)	16T	20T	20T	16T
Total capacity			33T	41T	37T	43T	41T	37T
Low sprocket	Max.		28T	32T (front triple), 34T (front double)	32T	34T	32T	32T
	Min.		25T	28T (front double), 25T (front triple)	25T	28T	25T	25T
Top sprocket	Max.		14T	12T	14T	14T	14T	13T
	Min.		11T	11T	11T	11T	11T	11T
Fluoroc coated link bushings			2	2	2	2	2	-
Pulley	Guide pulley bearing		-	-	-	-	-	-
	Tension pulley bearing		-	-	-	-	-	-
	Teeth		11T	11T	11T	11T	11T	11T
	Screws material		Stainless steel	Stainless steel	Steel	Steel	Steel	Steel
	Sunken type pulley screw		✓	✓	-	-	✓	✓
Bracket	Material		-	-	-	-	-	-
	Finish		-	-	-	-	-	-
B-axle	Hollow axle		-	-	-	-	-	-
	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish		-	-	-	-	-	Plated
B-axle 2	Hollow axle		-	-	-	-	-	-
	Material		-	-	-	-	-	-
	Finish		-	-	-	-	-	-
Bracket body	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
P-axle	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Plated	Plated	Plated	Plated
Plate body	Material		Aluminum	Aluminum	Resin	Resin	Resin	Resin
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Outer link	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Painted	Painted	Painted	Painted
Outer plate	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Painted	Painted	Painted	Painted
Inner plate	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Painted	Painted	Painted	Painted
Cable fixing screw	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Stroke adjusting screw	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Plated	Plated	Zinc Plated	Zinc Plated	Zinc Plated	Zinc Plated
Average weight (g)			-	-	-	-	-	-
Note							SHIMANO logo	

Rear Derailleur

ROAD

Series			CLARIS
Model no.			RD-R2000-GS
Color	1		Series color
	2		-
Rear speeds			8
Compatible chain			HG 8/7/6-speed
RD construction	SHIMANO SHADOW RD		-
	SHIMANO SHADOW RD+		-
	Double servo		✓
Applicable derailleur hanger	SHIMANO MTB type	Direct attachment (conventional)	-
		Direct mount	-
	SHIMANO ROAD type	Direct attachment (conventional)	✓
		Direct mount	-
	UDH standard		-
	Riveted adapter	ROAD type	-
		BMX-track type	-
	Cable adjuster		
Max. front difference			20T
Total capacity			43T
Low sprocket	Max.		34T
	Min.		28T
Top sprocket	Max.		13T
	Min.		11T
Fluoric coated link bushings			-
Pulley	Guide pulley bearing		-
	Tension pulley bearing		-
	Teeth		11T
	Screws material		Steel
	Sunken type pulley screw		✓
Bracket	Material		-
	Finish		-
B-axle	Hollow axle		-
	Material	Stainless steel	
B-axle 2	Finish	Plated	
	Hollow axle		-
	Material	-	
Bracket body	Finish	-	
	Material		Aluminum
	Finish	Painted	
P-axle	Material		Steel
	Finish		Plated
Plate body	Material		Resin
	Finish		Painted
Outer link	Material		Steel
	Finish		Painted
Inner link	Material		Steel
	Finish		Painted
Outer plate	Material		Steel
	Finish		Painted
Inner plate	Material		Steel
	Finish		Painted
Cable fixing screw	Material		Steel
	Finish		Nickel plated
Stroke adjusting screw	Material		Steel
	Finish		Zinc Plated
Average weight (g)			-
Note			

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Front Derailleur

Series			DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA
Model no.			FD-R9100-F	FD-R9100-B	FD-9000-F	FD-9000-B	FD-R8000-F	FD-R8000-B
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Front speeds			2	2	2	2	2	2
Rear speeds			11	11	11	11	11	11
Compatible chain			LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed
Action	TOP SWING		-	-	-	-	-	-
	Down swing		✓	✓	✓	✓	✓	✓
Mount	Clamp band (mm)	28.6	-	✓ (w/ S size adapter)	-	✓ (w/ S size adapter)	-	✓ (w/ S size adapter)
		31.8	-	✓	-	✓	-	✓
		34.9	-	✓	-	✓	-	✓
	Brazed-on		✓	-	✓	-	✓	-
Cable adjust			✓	✓	-	-	✓	✓
Cable route type	Top-pull exclusive		-	-	-	-	-	-
Chain line (mm)			43.5	43.5	43.5	43.5	43.5	43.5
Chainstay angle (deg.)			61-66	61-66	61-66	61-66	61-66	61-66
Top gear teeth			50-55T	50-55T	50-55T	50-55T	46-53T	46-53T
Total capacity			16T	16T	16T	16T	16T	16T
Applicable top-mid tooth difference			-	-	-	-	-	-
Angled clamp band design			-	-	-	-	-	-
Multi-bearing construction			2	2	-	-	-	-
Link bushings			8	8	7	7	8	8
Front clamp band	Material		-	Aluminum	-	Aluminum	-	Aluminum
	Finish		-	Painted	-	Anodized	-	Painted
Rear clamp band, base bracket	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Anodized	Anodized	Painted	Painted
Clamp screw	Material		-	-	-	-	-	-
	Finish		-	-	-	-	-	-
Outer link	Material		CFRF	CFRF	Aluminum	Aluminum	GFRP	GFRP
	Finish		Plated/Painted	Plated/Painted	Anodized	Anodized	Painted	Painted
Inner link	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Anodized	Anodized	Anodized	Anodized	Painted	Painted
Chain guide	Material		Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel
	Finish		Nickel plated	Nickel plated	Nickel plated	Nickel plated	Chrome plated	Chrome plated
Cable fixing screw	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish		-	-	-	-	-	-
Stroke adjusting screw	Material		Steel	Steel	Aluminum	Aluminum	Stainless steel	Stainless steel
	Finish		Black	Black	Anodized	Anodized	Black	Black
Average weight (g) (band type: L size, direct type w/ screw)			70	85	66	78	92	106
Note								

Front Derailleur

ROAD

Series			ULTEGRA	ULTEGRA	SHIMANO 105	SHIMANO 105	SHIMANO 105	SHIMANO 105
Model no.			FD-6800-F	FD-6800-B	FD-R7100-F	FD-R7100-B	FD-R7000-F	FD-R7000-B
Color	1		Series color	Series color	Series color	Series color	Silky black	Silky black
	2		-	-	-	-	Spark silver	Spark silver
Front speeds			2	2	2	2	2	2
Rear speeds			11	11	12	12	11	11
Compatible chain			LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	HG 12-speed	HG 12-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed
Action	TOP SWING		-	-	-	-	-	-
	Down swing		✓	✓	✓	✓	✓	✓
Mount	Clamp band (mm)	28.6	-	✓ (w/ S size adapter)	-	✓ (w/ S size adapter)	-	✓ (w/ S size adapter)
		31.8	-	✓	-	✓	-	✓
		34.9	-	✓	-	✓	-	✓
	Brazed-on		✓	-	✓	-	✓	-
Cable adjust			-	-	✓	✓	✓	✓
Cable route type	Top-pull exclusive		-	-	-	-	-	-
Chain line (mm)			43.5	43.5	44.5	44.5	43.5	43.5
Chainstay angle (deg.)			61-66	61-66	61-66	61-66	61-66	61-66
Top gear teeth			46-53T	46-53T	50-52T	50-52T	46-53T	46-53T
Total capacity			16T	16T	16T	16T	16T	16T
Applicable top-mid tooth difference			-	-	-	-	-	-
Angled clamp band design			-	-	-	✓	-	✓
Multi-bearing construction			-	-	-	-	-	-
Link bushings			7	7	7	7	7	7
Front clamp band	Material		-	Aluminum	-	Aluminum	-	Aluminum
	Finish		-	Painted	-	Painted	-	Painted
Rear clamp band, base bracket	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Clamp screw	Material		-	-	-	-	-	-
	Finish		-	-	-	-	-	-
Outer link	Material		Aluminum	Aluminum	GFRP	GFRP	GFRP	GFRP
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material		Aluminum	Aluminum	Steel	Steel	Steel	Steel
	Finish		Painted	Painted	Plated	Plated	Plated	Plated
Chain guide	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Chrome plated	Chrome plated	Chrome Plated	Chrome Plated	Chrome Plated	Chrome Plated
Cable fixing screw	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish		-	-	-	-	-	-
Stroke adjusting screw	Material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish		-	-	Black	Black	Black	Black
Average weight (g) (band type: L size, direct type w/ screw)			89	104	96	111	96	111
Note					-	-	-	-

Front Derailleur

Series		SHIMANO 105	SHIMANO 105	TIAGRA	TIAGRA	TIAGRA	TIAGRA
Model no.		FD-5700-F	FD-5703-F	FD-4700-F	FD-4700-B	FD-4703-F	FD-4703-B
Color	1	Black	Black	Series color	Series color	Series color	Series color
	2	Silver	Silver	-	-	-	-
Front speeds		2	3	2	2	3	3
Rear speeds		10	10	10	10	10	10
Compatible chain		HG 10-speed	HG 10-speed (for 3x10s)	HG-X 10-speed, CN-HG500	HG-X 10-speed, CN-HG500	HG-X 10-speed, CN-HG500	HG-X 10-speed, CN-HG500
Action	TOP SWING	-	-	-	-	-	-
	Down swing	✓	✓	✓	✓	✓	✓
Mount	Clamp band (mm)	28.6	-	-	✓ *	-	✓ *
		31.8	-	-	✓	-	✓
		34.9	-	-	✓	-	✓
	Brazed-on	✓	✓	✓	-	✓	-
Cable adjust		-	-	-	-	-	-
Cable route type	Top-pull exclusive	-	-	-	-	-	-
Chain line (mm)		43.5	45	43.5	43.5	45	45
Chainstay angle (deg.)		61-66	63-66	61-66	61-66	63-66	63-66
Top gear teeth		50-56T	50T	46-52T	46-52T	50T	50T
Total capacity		16T	20T	16T	16T	20T	20T
Applicable top-mid tooth difference		-	11T	-	-	11T	11T
Angled clamp band design		-	-	-	-	-	-
Multi-bearing construction		-	-	-	-	-	-
Link bushings		-	-	-	-	-	-
Front clamp band	Material	-	-	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	-	-	Painted	Painted	Painted	Painted
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Clamp screw	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Chrome plated	Chrome plated	Chrome plated	Chrome plated	Chrome plated	Chrome plated
Cable fixing screw	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Stroke adjusting screw	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Average weight (g) (band type: L size, direct type w/ screw)		89	114	-	-	-	-
Note					* 28.6 mm Clamp band; 31.8 mm w/ Adapter		* 28.6 mm Clamp band; 31.8 mm w/ Adapter

Front Derailleur

ROAD

Series			SHIMANO	SHIMANO	SORA	SORA	SORA	SORA
Model no.			FD-CX70-F-T	FD-CX70-F-D	FD-R3000-F	FD-R3000-B	FD-R3030-F	FD-R3030-B
Color	1		Gray	Gray	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Front speeds			2	2	2	2	3	3
Rear speeds			10	10	9	9	9	9
Compatible chain			HG 10-speed	HG 10-speed	-	-	-	-
Action	TOP SWING		-	-	-	-	-	-
	Down swing		✓	✓	✓	✓	✓	✓
Mount	Clamp band (mm)	28.6	-	-	-	✓ (w/ S size adapter)	-	✓ (w/ S size adapter)
		31.8	-	-	-	✓ (w/ M size adapter)	-	✓ (w/ M size adapter)
		34.9	-	-	-	✓	-	✓
	Brazed-on		✓	✓	✓	-	✓	-
Cable adjust			-	-	-	-	-	-
Cable route type	Top-pull exclusive		✓	-	-	-	-	-
Chain line (mm)			43.5	43.5	43.5	43.5	45	45
Chainstay angle (deg.)			63-66	63-66	61-66	61-66	63-66	63-66
Top gear teeth			46-52T	46-52T	46-52T	46-52T	50T	50T
Total capacity			16T	16T	16T	16T	20T	20T
Applicable top-mid tooth difference			-	-	-	-	11T	11T
Angled clamp band design			-	-	✓	✓	✓	✓
Multi-bearing construction			-	-	-	-	-	-
Link bushings			7	7	-	-	-	-
Front clamp band	Material		-	-	-	Aluminum	-	Aluminum
	Finish		-	-	-	Painted	-	Painted
Rear clamp band, base bracket	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Clamp screw	Material		-	-	-	-	-	-
	Finish		-	-	-	-	-	-
Outer link	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Inner link	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Chain guide	Material		Steel	Steel	Steel	Steel	Steel	Steel
	Finish		Chrome plated	Chrome plated	Chrome plated	Chrome plated	Chrome plated	Chrome plated
Cable fixing screw	Material		Stainless steel	Stainless steel	Steel	Steel	Steel	Steel
	Finish		-	-	Nickel plated	Nickel plated	Nickel plated	Nickel plated
Stroke adjusting screw	Material		Stainless steel	Stainless steel	Steel	Steel	Steel	Steel
	Finish		-	-	Zinc plated	Zinc plated	Zinc plated	Zinc plated
Average weight (g) (band type: L size, direct type w/ screw)			92	87	-	-	-	-
Note								

Front Derailleur

Series			CLARIS	CLARIS	CLARIS	CLARIS
Model no.			FD-R2000-F	FD-R2000-B	FD-R2030-F	FD-R2030-B
Color	1		Series color	Series color	Series color	Series color
	2		-	-	-	-
Front speeds			2	2	3	3
Rear speeds			8	8	8	8
Compatible chain			HG 8/7/6-speed	HG 8/7/6-speed	HG 8/7/6-speed	HG 8/7/6-speed
Action	TOP SWING		-	-	-	-
	Down swing		✓	✓	✓	✓
Mount	Clamp band (mm)	28.6	-	✓ (w/ S size adapter)	-	✓ (w/ S size adapter)
		31.8	-	✓ (w/ M size adapter)	-	✓ (w/ M size adapter)
		34.9	-	✓	-	✓
	Brazed-on		✓		✓	
Cable adjust			-	-	-	-
Cable route type	Top-pull exclusive		-	-	-	-
Chain line (mm)			43.5	43.5	45	45
Chainstay angle (deg.)			61-66	61-66	63-66	63-66
Top gear teeth			46-52T	46-52T	50T	50T
Total capacity			16T	16T	20T	20T
Applicable top-mid tooth difference			-	-	11T	11T
Angled clamp band design			✓	✓	✓	✓
Multi-bearing construction			-	-	-	-
Link bushings			-	-	-	-
Front clamp band	Material		-	Steel	-	Steel
	Finish		-	Painted	-	Painted
Rear clamp band, base bracket	Material		Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted
Clamp screw	Material		-	-	-	-
	Finish		-	-	-	-
Outer link	Material		Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted
Inner link	Material		Steel	Steel	Steel	Steel
	Finish		Painted	Painted	Painted	Painted
Chain guide	Material		Steel	Steel	Steel	Steel
	Finish		Chrome plated	Chrome plated	Chrome plated	Chrome plated
Cable fixing screw	Material		Steel	Steel	Steel	Steel
	Finish		Nickel plated	Nickel plated	Nickel plated	Nickel plated
Stroke adjusting screw	Material		Steel	Steel	Steel	Steel
	Finish		Zinc plated	Zinc plated	Zinc plated	Zinc plated
Average weight (g) (band type: L size, direct type w/ screw)			-	-	-	-
Note						

Crankset

ROAD

Series		DURA-ACE	ULTEGRA	SHIMANO 105	SHIMANO	DURA-ACE	DURA-ACE
Model no.		FC-R9200	FC-R8100	FC-R7100	FC-RS520	FC-09	FC-R9100
Color	1	Series color	Series color	Black	Black	Series color	Series color
	2	-	-	-	-	-	-
Rear speeds		12	12	12	12	11	11
Compatible chain		HG 12-speed	HG 12-speed	HG 12-speed	HG 12-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed
Chain line (mm)		44.5	44.5	44.5	44.5	44.5	43.5
P.C.D. (mm)		110	110	110	110	110	110
Spider/gear arms		4	4	4	4	4	4
Chaining combination		46-36T, 50-34T, 52-36T, 54-40T	46-36T, 50-34T, 52-36T	50-34T, 52-36T	50-34T	50-34T, 52-36T, 54-40T	50-34T, 52-36T, 53-39T, 54-42T, 55-42T
Q-factor (mm)		148	148	148	150	148	146
Crank arm length (mm)	160	✓	✓	✓	-	-	-
	165	✓	✓	✓	✓	✓	✓
	167.5	✓	-	-	-	✓	✓
	170	✓	✓	✓	✓	✓	✓
	172.5	✓	✓	✓	✓	✓	✓
	175	✓	✓	✓	✓	✓	✓
	177.5	✓	-	-	-	✓	✓
	180	-	-	-	-	-	✓
Optional chain guard	With chain guard	-	-	-	-	-	-
	Without chain/bash guard	✓	✓	✓	✓	✓	✓
HOLLOWTECH II		✓	✓	✓	-	✓	✓
2-PIECE CRANKSET		-	-	-	✓	-	-
HOLLOWTECH crank arm		✓	✓	✓	-	✓	✓
OCTALINK		-	-	-	-	-	-
HOLLOWGLIDE		✓	✓	-	-	✓	✓
Compatible bottom bracket type	Outboard	✓	✓	✓	✓	✓	✓
	OCTALINK	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended bottom bracket	Threaded (normal)	BB-R9100	SM-BBR60	SM-BBR60	BB-RS501	BB-R9100	BB-R9100
	Press-Fit	SM-BB92-41B	SM-BB72-41B	SM-BB72-41B	BB-RS500-PB	SM-BB92-41B	SM-BB92-41B
Axle length of BB-UN/E5 (mm)		-	-	-	-	-	-
Threaded bottom bracket shell width (mm)	68	✓	✓	✓	✓	✓	✓
	70	✓	✓	✓	✓	✓	✓
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Plated	Plated	Plated	Plated	Plated	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum/CFRP (except 46-36T), Aluminum (46-36T)	Aluminum/CFRP (except 46-36T), Aluminum (46-36T)	Aluminum+GFRP	Aluminum+Resin	Aluminum+CFRP	Aluminum/CFRP
	Finish	Anodized	Anodized	Anodized	Painted	Anodized	Anodized
Middle ring	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Inner ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Outer/middle ring fixing bolt	Material	Aluminum	Aluminum	Stainless Steel	Stainless Steel	Aluminum	Aluminum
	Finish	Anodized	Anodized	-	-	Anodized	Anodized
Inner ring fixing screw	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Crank fixing screw included		✓	✓	✓	✓	✓	✓
Average weight (g) (170 mm, w/o bottom bracket)		693 (46-36T) 685 (50-34T) 692 (52-36T) 714 (54-40T)	702 (46-36T) 700 (50-34T) 711 (52-36T)	754 (50-34T)	-	685 (50-34T) 692 (52-36T) 714 (54-40T)	614 (50-34T) 624 (52-36T) 626 (53-39T) 642 (54-42T) 650 (55-42T)
Note							

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Crankset

Series		DURA-ACE	ULTEGRA	ULTEGRA	SHIMANO 105	SHIMANO	DURA-ACE
Model no.		FC-9000	FC-08	FC-R8000	FC-R7000	FC-RS510	FC-7710
Color	1	Series color	Series color	Series color	Silky black	Black	Series color
	2	-	-	-	Spark silver	-	-
Rear speeds		11	11	11	11	11	1
Compatible chain		LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	1/2 x 1/8, 1/2 x 3/32
Chain line (mm)		43.5	44.5	43.5	43.5	43.5	42.5
P.C.D. (mm)		110	110	110	110	110	144
Spider/gear arms		4	4	4	4	4	5
Chaining combination		50-34T, 52-36T, 52-38T, 53-39T, 54-42T, 55-42T	46-36T, 50-34T, 52-36T	46-36T, 50-34T, 52-36T, 53-39T	50-34T, 52-36T, 53-39T	46-36T, 50-34T, 52-36T	45T to 55T (1/2 x 1/8, 1/2 x 3/32)
Q-factor (mm)		146	148	146	146	150	136.3
Crank arm length (mm)	160	-	-	-	✓	-	-
	165	✓	✓	✓	✓	✓	✓
	167.5	✓	-	-	-	-	✓
	170	✓	✓	✓	✓	✓	✓
	172.5	✓	✓	✓	✓	✓	✓
	175	✓	✓	✓	✓	✓	✓
	177.5	✓	-	-	-	-	-
	180	✓	-	-	-	-	-
Optional chain guard	With chain guard	-	-	-	-	-	-
	Without chain/bash guard	✓	✓	✓	✓	✓	✓
HOLLOWTECH II		✓	✓	✓	✓	-	-
2-PIECE CRANKSET		-	-	-	-	✓	-
HOLLOWTECH crank arm		✓	✓	✓	✓	-	✓
OCTALINK		-	-	-	-	-	✓
HOLLOWGLIDE		✓	✓	✓, - (46-36T)	-	-	-
Compatible bottom bracket type	Outboard	✓	✓	✓	✓	✓	-
	OCTALINK	-	-	-	-	-	✓
	Square	-	-	-	-	-	-
Recommended bottom bracket	Threaded (normal)	BB-R9100	SM-BBR60	SM-BBR60	SM-BBR60	BB-RS501	BB-7710, BB-7700
	Press-Fit	SM-BB92-41B	SM-BB72-41B	SM-BB72-41B	SM-BB72-41B	BB-RS500-PB	-
Axle length of BB-UN/ES (mm)		-	-	-	-	-	109.5
Threaded bottom bracket shell width (mm)	68	✓	✓	✓	✓	✓	✓
	70	✓	✓	✓	✓	✓	✓
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	-
	Finish	Plated	Plated	Plated	Plated	Plated	-
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum+CFRP or GFRP	Aluminum	Aluminum+CFRP or Aluminum (46-36T only)	Aluminum+GFRP	Aluminum+Resin	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Middle ring	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Inner ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Outer/middle ring fixing bolt	Material	Aluminum	Aluminum	Aluminum	Stainless steel	Stainless steel	Stainless steel
	Finish	Anodized	Anodized	Anodized	-	-	-
Inner ring fixing screw	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Crank fixing screw included		✓	✓	✓	✓	✓	✓
Average weight (g) (170 mm, w/o bottom bracket)		610 (50-34T) 618 (52-36T) 622 (52-38T) 618 (53-39T) 632 (54-42T) 639 (55-42T)	702 (46-36T) 700 (50-34T) 711 (52-36T)	668 (46-36T) 674 (50-34T) 681 (52-36T) 690 (53-39T)	713.4 (50-34T) 742.6 (52-36T) 757.8 (53-39T)	908 (50-34T)	566 (52T, 1/2 inch x 1/8 inch)
Note			*46T chaining color is black. Fixed with dedicated nuts.				

Crankset

ROAD

Series		SHIMANO 105	SHIMANO 105	SHIMANO	TIAGRA	TIAGRA	SHIMANO
Model no.		FC-5750	FC-5703	FC-CX50	FC-4700	FC-4703	FC-RS400
Color	1	Black	Black	Silver	Series color	Series color	Black
	2	-	-	Black	-	-	-
Rear speeds		10	10	10	10	10	10
Compatible chain		HG 10-speed	HG 10-speed (for 3x10s)	HG 10-speed	HG-X 10-speed	HG-X 10-speed	HG-X 10-speed
Chain line (mm)		43.5	45	43.5	43.5	45	43.5
P.C.D. (mm)		110	130/74	110	110	110/74	110
Spider/gear arms		5	5	5	4	4	5
Chaining combination		50-34T	50-39-30T	46-36T	48-34T, 50-34T, 52-36T	50-39-30T	50-34T
Q-factor (mm)		146	154.76	150	150	158.8	150.3
Crank arm length (mm)	160	-	-	-	-	-	-
	165	✓	✓	-	✓	✓	-
	167.5	-	-	-	-	-	-
	170	✓	✓	✓	✓	✓	✓
	172.5	✓	✓	✓	✓	✓	-
	175	✓	✓	✓	✓	✓	✓
	177.5	-	-	-	-	-	-
	180	-	-	-	-	-	-
Optional chain guard	With chain guard	-	-	-	-	-	-
	Without chain/bash guard	✓	✓	✓	✓	✓	✓
HOLLOWTECH II		✓	✓	-	-	-	-
2-PIECE CRANKSET		-	-	✓	✓	✓	✓
HOLLOWTECH crank arm		✓	✓	-	-	-	-
OCTALINK		-	-	-	-	-	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible bottom bracket type	Outboard	✓	✓	✓	✓	✓	✓
	OCTALINK	-	-	-	-	-	-
	Square	-	-	-	-	-	-
Recommended bottom bracket	Threaded (normal)	SM-BB5700	SM-BB5700	BB-RS501	BB-RS501	BB-RS501	BB-RS501
	Press-Fit	SM-BB71-41B	SM-BB71-41B	SM-BB71-41B	BB-RS500-PB	BB-RS500-PB	BB-RS500-PB
Axle length of BB-UN/ES (mm)		-	-	-	-	-	-
Threaded bottom bracket shell width (mm)	68	✓	✓	✓	✓	✓	✓
	70	✓	✓	✓	✓	✓	✓
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Painted
Crank axle	Material	Steel	Steel	Steel	Steel	Steel	-
	Finish	Plated	Plated	Plated	Plated	Plated	-
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum	Aluminum	Aluminum	Aluminum/Resin (48-34T), Aluminum/GFRP (50-34T, 52-36T)	Aluminum+GFRP	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized+Painted (48-34T), Anodized (50-34T, 52-36T)	Anodized	Anodized
Middle ring	Material	-	Aluminum	-	-	Aluminum	-
	Finish	-	Anodized	-	-	Anodized	-
Inner ring	Material	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Plated	Anodized
Outer/middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Inner ring fixing screw	Material	-	Stainless steel	-	-	Stainless steel	-
	Finish	-	-	-	-	-	-
Crank fixing screw included		✓	✓	✓	✓	✓	✓
Average weight (g) (170 mm, w/o bottom bracket)		716	831	798	-	-	-
Note							

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Crankset

Series		SORA	SORA	SORA	SORA	SHIMANO	CLARIS
Model no.		FC-R3030	FC-R3030-CG	FC-R3000	FC-R3000-CG	FC-R345	FC-R2030
Color	1	Series color	Series color	Series color	Series color	Silver	Series color
	2	-	-	-	-	Black	-
Rear speeds		9	9	9	9	9	8
Compatible chain		HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 9-speed	HG 8/7/6-speed
Chain line (mm)		45	45	43.5	43.5	43.5	45
P.C.D. (mm)		110/74	130/74	110	110	110	110/74
Spider/gear arms		4	5	4	5	5	4
Chaining combination		50-39-30T	50-39-30T	50-34T	50-34T	50-34T	50-39-30T
Q-factor (mm)		158.8	158.8	150	150	152.2	158.8
Crank arm length (mm)	160	-	-	-	-	-	-
	165	✓	✓	✓	✓	-	✓
	167.5	-	-	-	-	-	-
	170	✓	✓	✓	✓	✓	✓
	172.5	-	-	-	-	-	-
	175	✓	✓	✓	✓	✓	✓
	177.5	-	-	-	-	-	-
Optional chain guard	180	-	-	-	-	-	-
	With chain guard	-	✓	-	✓	✓	-
	Without chain/bash guard	✓	-	✓	-	✓	✓
HOLLOWTECH II		-	-	-	-	-	-
2-PIECE CRANKSET		✓	✓	✓	✓	-	✓
HOLLOWTECH crank arm		-	-	-	-	-	-
OCTALINK		-	-	-	-	✓	-
HOLLOWGLIDE		-	-	-	-	-	-
Compatible bottom bracket type	Outboard	✓	✓	✓	✓	-	✓
	OCTALINK	-	-	-	-	✓	-
	Square	-	-	-	-	-	-
Recommended bottom bracket	Threaded (normal)	BB-RS501	BB-RS501	BB-RS501	BB-RS501	BB-ES300	BB-RS501
	Press-Fit	BB-RS500-PB	BB-RS500-PB	BB-RS500-PB	BB-RS500-PB	-	BB-RS500-PB
Axle length of BB-UN/ES (mm)		-	-	-	-	113	-
Threaded bottom bracket shell width (mm)	68	✓	✓	✓	✓	✓	✓
	70	✓	✓	✓	✓	✓	✓
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Crank axle	Material	Steel	Steel	Steel	Steel	-	Steel
	Finish	Plated	Plated	Plated	Plated	-	Plated
Spider arm	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Spider arm cover	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Outer ring	Material	Aluminum+Resin	Aluminum+Resin	Aluminum+Resin	Aluminum+Resin	Aluminum	Steel+Resin
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Painted
Middle ring	Material	Steel	Steel	-	-	-	Steel
	Finish	Painted	Painted	-	-	-	Painted
Inner ring	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Outer/middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-	-	-
Inner ring fixing screw	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	-	Stainless steel
	Finish	-	-	-	-	-	-
Crank fixing screw included		✓	✓	✓	✓	✓	✓
Average weight (g) (170 mm, w/o bottom bracket)		-	-	-	-	-	-
Note			w/ Chain guard spec.		w/ Chain guard spec.		

Crankset

ROAD

Series		CLARIS	CLARIS	CLARIS	SHIMANO
Model no.		FC-R2030-CG	FC-R2000	FC-R2000-CG	FC-RS200
Color	1	Series color	Series color	Series color	Black
	2	-	-	-	-
Rear speeds		8	8	8	8
Compatible chain		HG 8/7/6-speed	HG 8/7/6-speed	HG 8/7/6-speed	HG 8/7/6-speed
Chain line (mm)		45	43.5	43.5	43.5
P.C.D. (mm)		110/74	110	110	110
Spider/gear arms		4	4	4	5
Chaining combination		50-39-30T	50-34T	50-34T	46-34T, 50-34T
Q-factor (mm)		158.8	150	150	153.7
Crank arm length (mm)	160	-	-	-	-
	165	✓	✓	✓	✓
	167.5	-	-	-	-
	170	✓	✓	✓	✓
	172.5	-	-	-	-
	175	✓	✓	✓	✓
	177.5	-	-	-	-
	180	-	-	-	-
Optional chain guard	With chain guard	✓	-	✓	✓
	Without chain/bash guard	-	✓	-	✓
HOLLOWTECH II		-	-	-	-
2-PIECE CRANKSET		✓	✓	✓	-
HOLLOWTECH crank arm		-	-	-	-
OCTALINK		-	-	-	-
HOLLOWGLIDE		-	-	-	-
Compatible bottom bracket type	Outboard	✓	✓	✓	-
	OCTALINK	-	-	-	-
	Square	-	-	-	✓
Recommended bottom bracket	Threaded (normal)	BB-RS501	BB-RS501	BB-RS501	BB-UN300
	Press-Fit	BB-RS500-PB	BB-RS500-PB	BB-RS500-PB	-
Axle length of BB-UN/ES (mm)		-	-	-	MM110
Threaded bottom bracket shell width (mm)	68	✓	✓	✓	✓
	70	✓	✓	✓	✓
Crank arm	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted
Crank axle	Material	Steel	Steel	Steel	-
	Finish	Plated	Plated	Plated	-
Spider arm	Material	-	-	-	-
	Finish	-	-	-	-
Spider arm cover	Material	-	-	-	-
	Finish	-	-	-	-
Outer ring	Material	Steel+Resin	Steel+Resin	Steel+Resin	Steel
	Finish	Painted	Painted	Painted	Painted
Middle ring	Material	Steel	-	-	-
	Finish	Painted	-	-	-
Inner ring	Material	Steel	Steel	Steel	Steel
	Finish	Painted	Painted	Painted	Painted
Outer/middle ring fixing bolt	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	-	-	-	-
Inner ring fixing screw	Material	Stainless steel	Stainless steel	Stainless steel	-
	Finish	-	-	-	-
Crank fixing screw included		✓	✓	✓	✓
Average weight (g) (170 mm, w/o bottom bracket)		-	-	-	-
Note					

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Crankset (Power Meter)

Series			DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA
Model no.			FC-R9200-P	FC-R9200-PX	FC-R9100-P	FC-R8100-P
Chaining combination			50-34T, 52-36T, 54-40T, w/o chainrings	50-34T, 52-36T, 54-40T	50-34T, 52-36T, 53-39T, w/o chainrings	50-34T, 52-36T, w/o chainrings
Crank arm length (mm)	160		✓ *	-	-	✓ *
	165		✓ (50-34T, 52-36T, w/o chainrings)	✓	✓ *	✓
	167.5		✓ *	-	✓ *	-
	170		✓	✓	✓	✓
	172.5		✓	✓	✓	✓
	175		✓	✓	✓	✓
	177.5		✓ *	-	✓ *	-
Force measurement	180		-	-	✓ *	-
	Right side		✓	✓	✓	✓
	Left side		✓	✓	✓	✓
	Number of strain sensor		24	24	24	24
Cadence measurement	Magnet		✓	✓	✓	✓
	Accelerometer		-	-	-	-
Accuracy (%)			±1.5	±1.5	±2	±2
LED for system status			✓	✓	✓	✓
Number of control button			1	1	1	1
Zero offset	By control button		✓	✓	✓	✓
	By device		✓	✓	✓	✓
Active temperature compensation			✓	✓	✓	✓
Battery	Type	Lithium ion	✓	✓	✓	✓
		Coin cell	-	-	-	-
	Life		226 h	226 h	300 h or longer	226 h
	Charging port		✓	✓	✓	✓
	Charging cable		EW-EC300	EW-EC300	Included	EW-EC300
Firmware update by E-TUBE PROJECT			✓	✓	✓	✓
Di2 connectivity wired						
Di2 connectivity wireless	Di2 shifting		-	-	-	-
	Di2 shifting		-	-	-	-
	Bluetooth h® LE	Cycling power	✓	✓	✓	✓
	ANT+	Bicycle power	✓	✓	✓	✓
	Bluetooth h® LE custom (*1)	Adjust mode information	-	-	-	-
		Di2 battery level	-	-	-	-
		Gear position	-	-	-	-
		SHIMANO E-BIKE SYSTEM S data items (*3)	-	-	-	-
		Compatible with E-TUBE RIDE	✓	✓	✓	✓
		Compatible with E-TUBE PROJECT	✓	✓	✓	✓
	ANT private (*2)	Adjust mode information	-	-	-	-
		Di2 battery level	-	-	-	-
		Gear position	-	-	-	-
		SHIMANO E-BIKE SYSTEM S data items (*3)	-	-	-	-
SD50 port (pcs)			0	0	0	0
SD300 port (pcs)			0	0	0	0
SD50 connector (pcs)			0	0	0	0
SD300 connector (pcs)			0	0	0	0
Average weight (g) (170 mm, w/o bottom bracket)			745 (50-34T) 752 (52-36T) 774 (54-40T)	745 (50-34T) 752 (52-36T) 774 (54-40T)	685 (50-34T) 695 (52-36T) 696 (53-39T)	758 (50-34T) 769 (52-36T)
Note *1 Compatible with a Bluetooth LE cycle computer and smartphone/tablet but not freely open profile. *2 Compatible with ANT+ cycle computer but not freely open profile. *3 Will be shown only when connected to SHIMANO E-BIKE SYSTEMS bike.			Crankset specifications not listed here are the same as FC-R9200	Crankset specifications not listed here are the same as FC-R9200	Crankset specifications not listed here are the same as FC-R9100	Crankset specifications not listed here are the same as FC-R8100
			* w/o chainrings	* w/o chainrings	* w/o chainrings	* w/o chainrings
			Chemistry: Li-ion Rated voltage: 3.7 V Rated capacity: 0.66 Ah Rated capacity: 2.442 Wh	Chemistry: Li-ion Rated voltage: 3.7 V Rated capacity: 0.66 Ah Rated capacity: 2.442 Wh	Chemistry: Li-ion Rated voltage: 3.7 V Rated capacity: 0.66 Ah Rated capacity: 2.442 Wh	Chemistry: Li-ion Rated voltage: 3.7 V Rated capacity: 0.66 Ah Rated capacity: 2.442 Wh

Bottom Bracket (HOLLOWTECH II)

ROAD

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		BB-R9100	SM-BB92-41B	SM-BB72-41B	SM-BB71-41B	SM-BBR60	BB-RS501
HOLLOWTECH II bottom bracket	Threaded bottom bracket type	✓	-	-	-	✓	✓
	Press-Fit type	-	✓	✓	✓	-	-
Threaded bottom bracket shell width (mm)	68	✓	-	-	-	✓	✓
	70	✓	-	-	-	✓	✓
Press-Fit bottom bracket shell width (mm)	86.5	-	✓	✓	✓	-	-
Small ball bearing		✓	✓	✓	-	✓	-
Adapter	Material	Aluminum	Resin	Resin	Resin	Aluminum	Aluminum
	Finish	Anodized	-	-	-	Anodized	Anodized
Average weight (g)		65	54	69	71	77	93
Note							

Series		SHIMANO	SHIMANO
Model no.		BB-RS500	BB-RS500-PB
HOLLOWTECH II bottom bracket	Threaded bottom bracket type	✓	-
	Press-Fit type	-	✓
Threaded bottom bracket shell width (mm)	68	✓	-
	70	✓	-
Press-Fit bottom bracket shell width (mm)	86.5	-	✓
Small ball bearing		-	-
Adapter	Material	Aluminum	Resin
	Finish	Anodized	-
Average weight (g)		92	71
Note			

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Bottom Bracket

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

Cassette

ROAD

Series		DURA-ACE	ULTEGRA	ULTEGRA
Model no.		CS-R9200-12	CS-R8101-12	CS-R8100-12
Type		HYPERGLIDE+	HYPERGLIDE+	HYPERGLIDE+
Rear speeds		12	12	12
Compatible chain		HG 12-speed	HG 12-speed	HG 12-speed
Combination name (Group name)		11-30T, 11-34T	11-30T, 11-34T	11-30T, 11-34T
Combination * Titanium gear	1	11-12-13-14-15-16-17-19* ^T -21*-24*-27*-30*	11-12-13-14-15-16-17-19-21-24-27-30T	11-12-13-14-15-16-17-19-21-24-27-30T
	2	11-12-13-14-15-17-19*-21*-24*-27*-30*-34* ^T	11-12-13-14-15-17-19-21-24-27-30-34T	11-12-13-14-15-17-19-21-24-27-30-34T
	3	-	-	-
	4	-	-	-
	5	-	-	-
	6	-	-	-
	7	-	-	-
Spline type	MICRO SPLINE	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	✓	✓	✓
	HG spline L (ROAD 12/11-speed)	-	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-
	HG spline S (7-speed)	-	-	-
Carbon spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Aluminum spider arm	QTY (pcs)	2	2	2
	Finish	Anodized	-	-
Steel spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Titanium gear	QTY (pcs)	5 (11-30T), 6 (11-34T)	0	0
	Finish	Titanium	-	-
Aluminum gear	QTY (pcs)	0	0	0
	Finish	-	-	-
Steel gear	QTY (pcs)	7 (11-30T), 6 (11-34T)	12	12
	Finish	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized
Average weight (g)		223 (11-30T) 253 (11-34T)	291 (11-30T) 345 (11-34T)	291 (11-30T) 345 (11-34T)
Note				

Series		SHIMANO 105	SHIMANO 105	SHIMANO
Model no.		CS-R7101-12	CS-R7100-12	CS-HG710-12
Type		HG	HG	HG
Rear speeds		12	12	12
Compatible chain		HG 12-speed	HG 12-speed	HG 12-speed
Combination name (Group name)		11-34T	11-34T	11-36T
Combination * Titanium gear	1	11-12-13-14-15-17-19-21-24-27-30-34T	11-12-13-14-15-17-19-21-24-27-30-34T	11-12-13-14-15-17-19-21-24-28-32-36T
	2	-	-	-
	3	-	-	-
	4	-	-	-
	5	-	-	-
	6	-	-	-
	7	-	-	-
Spline type	MICRO SPLINE	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	✓	✓	✓
	HG spline L (ROAD 12/11-speed)	-	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-
	HG spline S (7-speed)	-	-	-
Carbon spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Aluminum spider arm	QTY (pcs)	1	1	1
	Finish	Anodized	Anodized	Anodized
Steel spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Titanium gear	QTY (pcs)	0	0	0
	Finish	-	-	-
Aluminum gear	QTY (pcs)	0	0	0
	Finish	-	-	-
Steel gear	QTY (pcs)	12	12	12
	Finish	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Steel	Steel	Steel
	Finish	Nickel plated	Nickel plated	Nickel plated
Average weight (g)		361	361	391
Note				

Cassette

Series		DURA-ACE	ULTEGRA	SHIMANO
Model no.		CS-R9100	CS-R8000	CS-HG800-11
Type		HG-EV	HG-EV	HG-EV
Rear speeds		11	11	11
Compatible chain		LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed
Combination name (Group name)		11-25T, 11-28T, 11-30T, 12-25T, 12-28T	11-25T, 11-28T, 11-30T, 11-32T, 12-25T, 14-28T	11-34T
Combination * Titanium gear	1	11-12-13-14-15-16-17*-19*-21*-23*-25*T	11-12-13-14-15-16-17-19-21-23-25T	11-13-15-17-19-21-23-25-27-30-34T
	2	11-12-13-14-15-17-19*-21*-23*-25*-28*T	11-12-13-14-15-17-19-21-23-25-28T	-
	3	11-12-13-14-15-17-19*-21*-24*-27*-30*T	11-12-13-14-15-17-19-21-24-27-30T	-
	4	12-13-14-15-16-17-18*-19*-21*-23*-25*T	12-13-14-15-16-17-18-19-21-23-25T	-
	5	12-13-14-15-16-17-19*-21*-23*-25*-28*T	14-15-16-17-18-19-20-21-23-25-28T	-
	6	-	11-12-13-14-16-18-20-22-25-28-32T	-
	7	-	-	-
Spline type	MICRO SPLINE	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-
	HG spline L (ROAD 12/11-speed)	✓	✓	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	✓
	HG spline S (7-speed)	-	-	-
Carbon spider arm	QTY (pcs)	1	1	-
	Finish	-	-	-
Aluminum spider arm	QTY (pcs)	1	1	2
	Finish	Anodized	Anodized	Anodized
Steel spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Titanium gear	QTY (pcs)	5	0	0
	Finish	Titanium	-	-
Aluminum gear	QTY (pcs)	0	0	0
	Finish	-	-	-
Steel gear	QTY (pcs)	6	11	11
	Finish	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized
Average weight (g)		175 (11-25T) 193 (11-28T) 211 (11-30T) 189 (12-25T) 205 (12-28T)	232 (11-25T) 251 (11-28T) 269 (11-30T) 243 (12-25T) 300 (14-28T) 292 (11-32T)	335
Note				

Series		SHIMANO 105	SHIMANO	ULTEGRA
Model no.		CS-R7000	CS-HG700-11	CS-6700
Type		HG-EV	HG-EV	HG
Rear speeds		11	11	10
Compatible chain		LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	HG 10-speed
Combination name (Group name)		11-28T, 11-30T, 11-32T, 12-25T	11-34T	11-25T, 11-28T, 12-25T, 12-30T
Combination * Titanium gear	1	11-12-13-14-15-17-19-21-23-25-28T	11-13-15-17-19-21-23-25-27-30-34T	11-12-13-14-15-17-19-21-23-25T
	2	11-12-13-14-15-17-19-21-24-27-30T	-	11-12-13-14-15-17-19-21-24-28T
	3	11-12-13-14-16-18-20-22-25-28-32T	-	12-13-14-15-16-17-19-21-23-25T
	4	12-13-14-15-16-17-18-19-21-23-25T	-	12-13-14-15-17-19-21-24-27-30T
	5	-	-	-
	6	-	-	-
	7	-	-	-
Spline type	MICRO SPLINE	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-
	HG spline L (ROAD 12/11-speed)	✓	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	✓	✓
	HG spline S (7-speed)	-	-	-
Carbon spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Aluminum spider arm	QTY (pcs)	1	1	1
	Finish	Anodized	Anodized	Anodized
Steel spider arm	QTY (pcs)	-	-	-
	Finish	-	-	-
Titanium gear	QTY (pcs)	0	0	0
	Finish	-	-	-
Aluminum gear	QTY (pcs)	0	0	0
	Finish	-	-	-
Steel gear	QTY (pcs)	11	11	10
	Finish	Nickel plated	Nickel plated	Nickel plated
Lock ring	Material	Steel	Steel	Aluminum
	Finish	Nickel plated	Nickel plated	Anodized
Average weight (g)		284 (11-28T) 304 (11-30T) 320 (11-32T) 269 (12-25T)	379	230 (11-25T) 242 (11-28T) 238 (11-25T) 275 (12-30T)
Note				

Cassette

ROAD

Series		SHIMANO	SHIMANO
Model no.		CS-HG500-10	CS-HG50-9
Type		HG	HG
Rear speeds		10	9
Compatible chain		HG-X 10-speed, HG 10-speed	HG 9-speed
Combination name (Group name)		11-25T, 12-28T, 11-32T, 11-34T	11-30T (bQ), 12-25T, 13-25T, 14-25T
Combination * Titanium gear	1	11-12-13-14-15-17-19-21-23-25T	11-12-14-16-18-20-23-26-30T (bQ)
	2	12-13-14-15-17-19-21-23-25-28T	12-13-14-15-17-19-21-23-25T
	3	11-12-14-16-18-20-22-25-28-32T	13-14-15-16-17-19-21-23-25T
	4	11-13-15-17-19-21-23-26-30-34T	14-15-16-17-18-19-21-23-25T
	5	-	-
	6	-	-
	7	-	-
Spline type	MICRO SPLINE	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-
	HG spline L (ROAD 12/11-speed)	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	✓	✓
	HG spline S (7-speed)	-	-
Carbon spider arm	QTY (pcs)	-	-
	Finish	-	-
Aluminum spider arm	QTY (pcs)	-	-
	Finish	-	-
Steel spider arm	QTY (pcs)	-	-
	Finish	-	-
Titanium gear	QTY (pcs)	0	0
	Finish	-	-
Aluminum gear	QTY (pcs)	0	0
	Finish	-	-
Steel gear	QTY (pcs)	10	9
	Finish	Nickel plated	Nickel plated
Lock ring	Material	Steel	Steel
	Finish	Nickel plated	Nickel plated
Average weight (g)		-	-
Note			

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Front Hub (Rim/Disc Brake)

Series		DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	SHIMANO 105	SHIMANO 105
Model no.		HB-9000	HB-7710	HB-7600	HB-6800	HB-R7000	HB-R7070
Color	1 Hub shell	Series color	Silver	Silver	Series color	Silky black	Silky black
	1 Quick release	Series color	Silver	Silver	Series color	Black	-
	2 Hub shell	-	-	-	-	Spark silver	-
	2 Quick release	-	-	-	-	Black	-
Brake type		Rim brake	Rim brake	Rim brake	Rim brake	Rim brake	CENTER LOCK disc brake
O.L.D. (mm)		100	100 (front), 120 (rear)	100 (front), 120 (rear)	100	100	100
Spoke hole	24H	✓	-	-	-	-	-
	28H	✓	✓	✓	-	-	-
	32H	✓	✓	✓	✓	✓	✓
	36H	✓	✓	✓	✓	✓	✓
Axle fixing method		Quick release	Nut	Nut	Quick release	Quick release	12 mm E-THRU
Quick release skewer length (mm)	129	-	-	-	-	-	-
	133	✓	-	-	✓	✓	-
Thru axle (length x inner diameter ; mm)	100 x 8	-	-	-	-	-	-
	100 x 12	-	-	-	-	-	✓
	100 x 15	-	-	-	-	-	-
	110 x 20	-	-	-	-	-	-
Flange distance (mm)		74.0	74.0 (front), 72.5 (single thread/rear), 67.0 (double thread/rear)	72.3 (front), 75.5 (single thread, rear), 65.0 (double thread, rear)	71.6	71.6	59.6
Offset (mm)		0	0 (front), 2.75 (single thread/rear), 0 (double thread/rear)	0 (front), 5.25 (rear)	0	0	6
P.C.D. left / right (mm)		38	38 (Front), 44 (Rear)	67	40	38	44
Flange diameter (mm)		48.4	46 (Front), 52 (Rear)	75	50.4	48.4	52.8
Seal		Labyrinth+Contact	Dust cap	Dust cap	Labyrinth+Contact	Contact	Contact
Internal grease sleeve		✓	-	-	✓	✓	✓
Digital adjustment system		✓	-	-	✓	-	-
Bearing	Stainless ball	✓	✓	✓	-	-	-
	Cup	Super finishing **	Polish	CBN+Polish	Polish	Polish	Polish
	Cone	CBN+Polish	CBN+Polish	CBN+Polish	CBN+Polish	CBN+Polish	CBN+Polish
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Steel	Steel	Aluminum	Steel	Aluminum
	Finish	Anodized	Plating	Plating	Anodized	-	Anodized
Quick release lever	Material	Aluminum	-	-	Aluminum	Aluminum	-
	Finish	Anodized	-	-	Anodized	Anodized	-
Quick release housing	Material	Anodized	-	-	Aluminum	Aluminum	-
	Finish	Silver	-	-	Anodized	Anodized	-
Quick release nut	Material	Anodized	-	-	Resin	Resin	-
	Finish	Silver	-	-	Black	Black	-
Radial lacing		✓	-	-	✓	✓	-
Average weight (g) (w/o axle and lock ring)		120	298 (rear w/ lock ring), 203 (front)	313 (rear LF w/ lock ring), 241 (front LF)	158	155	165
Note		* Aero spoke hole available(18H/24H) ** Super Finishing	For Track * Dishing Distance R (Single Thread): 2.75 mm / (Double Thread): 0			-	-

Front Hub (Rim/Disc Brake)

ROAD

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		HB-RS770	HB-RS400	HB-RS470	HB-RS300
Color	1 Hub shell	Black/Silver	Black	Black	Silver
	1 Quick release	-	Black	-	Silver
	2 Hub shell	-	Silver	-	Black
	2 Quick release	-	Black	-	Black
Brake type		CENTER LOCK disc brake	Rim brake	CENTER LOCK disc brake	Rim brake
O.L.D. (mm)		100	100	100	100
Spoke hole	24H	-	-	-	-
	28H	✓	✓	✓	✓
	32H	✓	✓	✓	✓
	36H	✓	✓	-	✓
Axle fixing method		12 mm E-THRU	Quick release	12 mm E-THRU	Quick release
Quick release skewer length (mm)	129	-	-	-	✓
	133	-	✓	-	✓
Thru axle (length x inner diameter ; mm)	100 x 8	-	-	-	-
	100 x 12	✓	-	✓	-
	100 x 15	-	-	-	-
	110 x 20	-	-	-	-
Flange distance (mm)		59.6	71.6	59.6	71.6
Offset (mm)		6	0	6.3	0
P.C.D. left / right (mm)		44	38	44	38
Flange diameter (mm)		52.8	48.4	52.8	48.4
Seal		Labyrinth+Contact	Contact	Contact	Contact
Internal grease sleeve		-	✓	✓	-
Digital adjustment system		-	-	-	-
Bearing	Stainless ball	-	-	-	-
	Cup	CBN	Polish	Polish	-
	Cone	CBN	CBN	CBN+Polish	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Steel	Aluminum	Steel
	Finish	Anodized	-	-	-
Quick release lever	Material	-	Aluminum	-	Aluminum
	Finish	-	Painted	-	Painted
Quick release housing	Material	-	Aluminum	-	Steel
	Finish	-	Painted	-	Painted
Quick release nut	Material	-	Resin	-	Resin
	Finish	-	Black	-	Black
Radial lacing		-	✓	✓	✓
Average weight (g) (w/o axle and lock ring)		125	-	-	-
Note		-	-	-	-

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

FREEHUB (Rim/Disc Brake)

Series		DURA-ACE	ULTEGRA	SHIMANO 105	SHIMANO 105	SHIMANO	SHIMANO
Model no.		FH-9000	FH-6800	FH-R7000	FH-R7070	FH-RS770	FH-RS400
Color	1 Hub shell	Series color	Series color	Silky black	Silky black	Black/Silver	Black
	1 Quick release	Series color	Series color	Black	Black	-	Black
	2 Hub shell	-	-	Spark silver	-	-	Silver
	2 Quick release	-	-	Black	-	-	Black
Brake type		Rim brake	Rim brake	Rim brake	CENTER LOCK disc brake	CENTER LOCK disc brake	Rim brake
Rear speeds		11/10 *	11/10 *	11/10 *	11/10 *	11/10 *	11/10
O.L.D. (mm)		130	130	130	142	142	130
Spoke hole	24H	✓	-	-	-	-	-
	28H	✓	-	-	-	✓	✓
	32H	✓	✓	✓	✓	✓	✓
	36H	✓	✓	✓	✓	✓	✓
External serration disc brake rotor lock ring	With	-	-	-	-	-	-
	Without	-	-	-	-	-	-
Internal serration disc brake rotor lock ring	With	-	-	-	-	-	-
	Without	-	-	-	✓	✓	-
CENTER LOCK mount cover option		-	-	-	✓	-	-
Axle fixing method		Quick release	Quick release	Quick release	12 mm E-THRU	12 mm E-THRU	Quick release
Quick release skewer length (mm)	161	-	-	-	-	-	-
	163	✓	✓	✓	-	-	✓
	166	-	-	-	-	-	-
	168	✓	✓	✓	-	-	✓
	170	-	-	-	-	-	-
	173	-	-	-	-	-	-
Thru axle (length x inner diameter, mm)	135 x 10	-	-	-	-	-	-
	135 x 12	-	-	-	-	-	-
	142 x 12	-	-	-	✓	✓	-
	148 x 12	-	-	-	-	-	-
	150 x 12	-	-	-	-	-	-
Flange distance (mm)		56.9 **	56.9	56.9	55.7	55.7	56.9
Offset (mm)		9.75 **	9.7	9.75	7.45	7.5	9.75
P.C.D. left / right (mm)		44/45	44/45	44/45	44/45	44/45	44/45
Flange diameter left / right (mm)		52.8/53.8	52.8/53.8	52.8/53.8	52.8/53.8	52.8/53.8	52.8/53.8
Spline type	MICRO SPLINE	-	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-	-	-	-
	HG spline L (ROAD 12/11-speed)	✓	✓	✓	✓	✓	✓
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	Contact	Contact	Contact	Contact	Contact	Contact
Internal grease sleeve		✓	✓	✓	✓	-	✓
Digital adjustment system		✓	✓	-	-	-	-
Bearing	Stainless ball	✓	-	-	-	-	-
	Cup	CBN	Polish	Polish	Polish	CBN	Polish
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
FREEHUB body	Material	Titanium	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Steel	Steel	Aluminum	Steel
	Finish	Anodized	Anodized	-	-	Anodized	-
Quick release lever	Material	Aluminum	Aluminum	Aluminum	-	-	Aluminum
	Finish	Anodized	Anodized	Anodized	-	-	Painted
	Color	9000SLV	Black	Black	-	-	Black
Quick release housing	Material	Aluminum	Aluminum	Aluminum	-	-	Aluminum
	Finish	Anodized	Anodized	Anodized	-	-	Painted
Quick release nut	Material	Aluminum	Resin	Resin	-	-	Resin
	Finish	Anodized	Black	Black	-	-	Black
Disc brake rotor lock ring	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Radial lacing		-	-	-	-	-	-
Average weight (g) (w/o axle, quick release nor lock ring)		247	330	368	361	302	-
Note		* Can be used for 10-speed with an additional spacer ** Aero spoke hole available *** Flange Distance: 56.5 Dish: 9.95 (only for 28H) **** Super Finishing.	* Can be used for 10-speed with an additional spacer	* Can be used for 10-speed with an additional spacer	* Can be used for 10-speed with an additional spacer.	* Can be used for 10-speed with an additional spacer. For disc brake/ CENTER LOCK mount	* Can be used for 10-speed with an additional spacer

FREEHUB (Rim/Disc Brake)

ROAD

Series		SHIMANO	SHIMANO
Model no.		FH-RS470	FH-RS300
Color	1 Hub shell	Black	Silver
	1 Quick release	-	Silver
	2 Hub shell	-	Black
	2 Quick release	-	Black
Brake type		CENTER LOCK disc brake	Rim brake
Rear speeds		11/10 *	11/10/9/8/7
O.L.D. (mm)		142	130
Spoke hole	24H	-	-
	28H	✓	✓
	32H	✓	✓
	36H	-	✓
External serration disc brake rotor lock ring	With	-	-
	Without	-	-
Internal serration disc brake rotor lock ring	With	-	-
	Without	✓	-
CENTER LOCK mount cover option		-	-
Axle fixing method		12 mm E-THRU	Quick release
Quick release skewer length (mm)	161	-	-
	163	-	✓
	166	-	-
	168	-	✓
	170	-	-
	173	-	-
Thru axle (length x inner diameter ; mm)	135 x 10	-	-
	135 x 12	-	-
	142 x 12	✓	-
	148 x 12	-	-
	150 x 12	-	-
Flange distance (mm)		55.7	57.9
Offset (mm)		7.45	8.4
P.C.D. left / right (mm)		44/45	45
Flange diameter left / right (mm)		52.8/53.8	53.8
Spline type	MICRO SPLINE	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-
	HG spline L (ROAD 12/11-speed)	✓	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	✓
	HG spline S (7-speed)	-	-
Seal	Hub	Contact	Contact
	FREEHUB body	Contact	Contact
Internal grease sleeve		✓	✓
Digital adjustment system		-	-
Bearing	Stainless ball	-	-
	Cup	Polish	-
	Cone	CBN	-
FREEHUB body	Material	Steel	Steel
	Finish	-	-
Hub shell	Material	Aluminum	Aluminum
	Finish	Anodized	Anodized
Axle	Material	Steel	Steel
	Finish	-	-
Quick release lever	Material	-	Aluminum
	Finish	-	Painted
	Color	-	Black
Quick release housing	Material	-	Steel
	Finish	-	Painted
	Color	-	-
Quick release nut	Material	-	Resin
	Finish	-	Black
Disc brake rotor lock ring	Material	-	-
	Finish	-	-
Radial lacing		-	-
Average weight (g) (w/o axle, quick release nor lock ring)		-	-
Note		* Can be used for 10-speed with an additional spacer	

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Wheel (Disc Brake)

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE
Model no.		WH-R9270-C60-HR-TU-F	WH-R9270-C60-HR-TU-R	WH-R9270-C60-HR-TL-F	WH-R9270-C60-HR-TL-R	WH-R9270-C50-TU-F	WH-R9270-C50-TU-R
Model name		WH-R9270-C60-HR-TU	WH-R9270-C60-HR-TU	WH-R9270-C60-HR-TL	WH-R9270-C60-HR-TL	WH-R9270-C50-TU	WH-R9270-C50-TU
Specification		F	R	F	R	F	R
Color	1 Hub shell	Series color	Series color	Series color	Series color	Series color	Series color
	1 Quick release	-	-	-	-	-	-
	2 Hub shell	-	-	-	-	-	-
	2 Quick release	-	-	-	-	-	-
Front/Rear		Front	Rear	Front	Rear	Front	Rear
Brake type		CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake
Rear speeds		-	12	-	12	-	12
O.L.D. (mm)		100	142	100	142	100	142
Wheel size		700C	700C	622 x 21C (700C)	622 x 21C (700C)	700C	700C
Tire	Type	Tubular	Tubular	Tubeless	Tubeless	Tubular	Tubular
	Recommended size	25-28" - 32-28"	25-28" - 32-28"	25-622 - 32-622	25-622 - 32-622	25-28" - 32-28"	25-28" - 32-28"
Rim	Height (mm)	60	60	60	60	50	50
	Internal width (mm)	-	-	21	21	-	-
	External width (mm)	28	28	28	28	28	28
	Rim joint	-	-	-	-	-	-
Spokes	Brazed reinforcement	-	-	-	-	-	-
	OFFSET RIM	-	-	-	-	-	-
	Requires rim tape	-	-	✓	✓	-	-
	Number	24	24	24	24	24	24
Spokes	Straight pull	✓	✓	✓	✓	✓	✓
	Bladed	✓	✓	✓	✓	✓	✓
	Butted	✓	✓	✓	✓	✓	✓
	Diameter (mm)	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.5-2.0	2.0-1.5-2.0
Axle fixing method		12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU
Quick release skewer length (mm)	133	-	-	-	-	-	-
	163	-	-	-	-	-	-
	168	-	-	-	-	-	-
Thru axle (length x inner diameter ; mm)	100 x 8	-	-	-	-	-	-
	100 x 12	✓	-	✓	-	✓	-
	142 x 12	-	✓	-	✓	-	✓
	142 x 12	-	✓	-	✓	-	✓
Spline type	MICRO SPLINE	-	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	✓	-	✓	-	✓
	HG spline L (ROAD 12.1-speed)	-	-	-	-	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-	-
Engagement type		-	Direct engagement	-	Direct engagement	-	Direct engagement
Bearing	Stainless ball	✓	✓	✓	✓	✓	✓
	Cup	CBN	CBN	CBN	CBN	CBN	CBN
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Disc mount	CENTER LOCK	✓	✓	✓	✓	✓	✓
	CENTER LOCK mount cover option	-	-	-	-	-	-
	140 mm disc brake rotor compatible	✓	✓	✓	✓	✓	✓
OPTBAL (2:1)		✓	✓	✓	✓	✓	✓
D2 rim		✓	✓	✓	✓	✓	✓
Digital adjustment system		-	-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	-	Contact	-	Contact	-	Contact
Internal grease sleeve		-	-	-	-	-	-
Rim	Material	Carbon	Carbon	Carbon	Carbon	Carbon	Carbon
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Series color	Series color	Series color	Series color	Series color	Series color
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Series color	Series color	Series color	Series color	Series color	Series color
FREEHUB body	Material	-	Aluminum	-	Aluminum	-	Aluminum
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release lever	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Quick release housing	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Quick release nut	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Compatible spoke protector		-	CP-WR92C	-	CP-WR92C	-	CP-WR92A
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		667	770	751	858	610	723
Note		-	-	-	-	-	-

Wheel (Disc Brake)

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE
Model no.		WH-R9270-C50-TL-F	WH-R9270-C50-TL-R	WH-R9270-C36-TU-F	WH-R9270-C36-TU-R	WH-R9270-C36-TL-F	WH-R9270-C36-TL-R
Model name		WH-R9270-C50-TL	WH-R9270-C50-TL	WH-R9270-C36-TU	WH-R9270-C36-TU	WH-R9270-C36-TL	WH-R9270-C36-TL
Specification		F	R	F	R	F	R
Color	1 Hub shell	Series color	Series color	Series color	Series color	Series color	Series color
	1 Quick release	-	-	-	-	-	-
	2 Hub shell	-	-	-	-	-	-
	2 Quick release	-	-	-	-	-	-
Front/Rear		Front	Rear	Front	Rear	Front	Rear
Brake type		CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake
Rear speeds		100	142	100	142	100	142
Wheel size		622 x 21C (700C)	622 x 21C (700C)	700C	700C	622 x 21C (700C)	622 x 21C (700C)
Tire	Type	Tubeless	Tubeless	Tubular	Tubular	Tubeless	Tubeless
	Recommended size	25-622 - 32-622	25-622 - 32-622	25-28" - 32-28"	25-28" - 32-28"	25-622 - 32-622	25-622 - 32-622
Rim	Height (mm)	50	50	36	36	36	36
	Internal width (mm)	21	21	-	-	21	21
	External width (mm)	28	28	28	28	28	28
	Rim joint	-	-	-	-	-	-
	Brazed reinforcement	-	-	-	-	-	-
	OFFSET RIM	-	-	-	-	-	-
Spokes	Requires rim tape	✓	✓	-	-	✓	✓
	Number	24	24	24	24	24	24
	Straight pull	✓	✓	✓	✓	✓	✓
	Bladed	✓	✓	✓	✓	✓	✓
	Butted	✓	✓	✓	✓	✓	✓
	Diameter (mm)	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0	2.0-1.5-2.0
Axle fixing method		12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU
Quick release skewer length (mm)	133	-	-	-	-	-	-
	163	-	-	-	-	-	-
	168	-	-	-	-	-	-
Thru axle (length x inner diameter ; mm)	100 x 8	-	-	-	-	-	-
	100 x 12	✓	-	✓	-	✓	-
	142 x 12	-	✓	-	✓	-	✓
Spline type	MICRO SPLINE	-	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	✓	-	✓	-	✓
	HG spline L (ROAD 12/11-speed)	-	-	-	-	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-	-
	Engagement type	-	Direct engagement	-	Direct engagement	-	Direct engagement
Bearing	Stainless ball	✓	✓	✓	✓	✓	✓
	Cup	CBN	CBN	CBN	CBN	CBN	CBN
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Disc mount	CENTER LOCK	✓	✓	✓	✓	✓	✓
	mount cover option	-	-	-	-	-	-
	140 mm disc brake rotor compatible	✓	✓	✓	✓	✓	✓
OPTBAL (2:1)		✓	✓	✓	✓	✓	✓
D2 rim		✓	✓	✓	✓	✓	✓
Digital adjustment system		-	-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	-	Contact	-	Contact	-	Contact
Internal grease sleeve		-	-	-	-	-	-
Rim	Material	Carbon	Carbon	Carbon	Carbon	Carbon	Carbon
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Series color	Series color	Series color	Series color	Series color	Series color
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Series color	Series color	Series color	Series color	Series color	Series color
FREEHUB body	Material	-	Aluminum	-	Aluminum	-	Aluminum
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release lever		-	-	-	-	-	-
Quick release housing		-	-	-	-	-	-
Quick release nut		-	-	-	-	-	-
Compatible spoke protector		-	-	-	-	-	-
Reflector	JIS/CPSC	CATEYE	CP-WR92A CATEYE	CATEYE	CP-WR92A CATEYE	CATEYE	CP-WR92A CATEYE
	AS	RR-550-WUW SW CATEYE	RR-550-WUW SW CATEYE	RR-550-WUW SW CATEYE	RR-550-WUW SW CATEYE	RR-550-WUW SW CATEYE	RR-550-WUW SW CATEYE
	DIN	RR-550-WUA SW CATEYE	RR-550-WUA SW CATEYE	RR-550-WUA SW CATEYE	RR-550-WUA SW CATEYE	RR-550-WUA SW CATEYE	RR-550-WUA SW CATEYE
	Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)	674	787	522	632	620	730
Note		-	-	-	-	-	-

Wheel (Disc Brake)

Series	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA
Model no.	WH-R8170-C60-TL-F	WH-R8170-C60-TL-R	WH-R8170-C50-TL-F	WH-R8170-C50-TL-R	WH-R8170-C36-TL-F	WH-R8170-C36-TL-R
Model name	WH-R8170-C60-TL	WH-R8170-C60-TL	WH-R8170-C50-TL	WH-R8170-C50-TL	WH-R8170-C36-TL	WH-R8170-C36-TL
Specification	F	R	F	R	F	R
Color	1 Hub shell	Series color	Series color	Series color	Series color	Series color
	1 Quick release	-	-	-	-	-
	2 Hub shell	-	-	-	-	-
	2 Quick release	-	-	-	-	-
Front/Rear	Front	Rear	Front	Rear	Front	Rear
Brake type	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake
Rear speeds	100	12/11	100	12/11	100	12/11
Wheel size	622 x 21C (700C)	622 x 21C (700C)	622 x 21C (700C)	622 x 21C (700C)	622 x 21C (700C)	622 x 21C (700C)
Tire	Type	Tubeless	Tubeless	Tubeless	Tubeless	Tubeless
	Recommended size	25-622 - 32-622	25-622 - 32-622	25-622 - 32-622	25-622 - 32-622	25-622 - 32-622
Rim	Height (mm)	60	60	50	36	36
	Internal width (mm)	21	21	21	21	21
	External width (mm)	28	28	28	28	28
	Rim joint	-	-	-	-	-
	Brazed reinforcement	-	-	-	-	-
	OFFSET RIM	-	-	-	-	-
Spokes	Requires rim tape	✓	✓	✓	✓	✓
	Number	24	24	24	24	24
	Straight pull	✓	✓	✓	✓	✓
	Bladed	✓	✓	✓	✓	✓
	Butted	✓	✓	✓	✓	✓
	Diameter (mm)	2.0-1.6-2.0	2.0-1.6-2.0	2.0-1.6-2.0	2.0-1.6-2.0	2.0-1.6-2.0
Axle fixing method		12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU
Quick release skewer length (mm)	133	-	-	-	-	-
	163	-	-	-	-	-
	168	-	-	-	-	-
Thru axle (length x inner diameter ; mm)	100 x 8	-	-	-	-	-
	100 x 12	✓	-	✓	✓	-
	142 x 12	-	✓	-	✓	✓
Spline type	MICRO SPLINE	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-	-	-
	HG spline L (ROAD 12/11-speed)	-	✓	-	✓	✓
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-
Engagement type		-	Pawl ratchet	-	Pawl ratchet	Pawl ratchet
Bearing	Stainless ball	-	-	-	-	-
	Cup	Polish	Polish	Polish	Polish	Polish
	Cone	CBN	CBN	CBN	CBN	CBN
Disc mount	CENTER LOCK	✓	✓	✓	✓	✓
	CENTER LOCK mount cover option	-	-	-	-	-
	140 mm disc brake rotor compatible	✓	✓	✓	✓	✓
OPTBAL (2:1)		✓	✓	✓	✓	✓
D2 rim		✓	✓	✓	✓	✓
Digital adjustment system		-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	-	Contact	Contact	-	Contact
Internal grease sleeve		✓	✓	✓	✓	✓
Rim	Material	Carbon	Carbon	Carbon	Carbon	Carbon
	Finish	Painted	Painted	Painted	Painted	Painted
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Series color	Series color	Series color	Series color	Series color
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Series color	Series color	Series color	Series color	Series color
FREEHUB body	Material	-	Steel	-	Steel	-
	Finish	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release lever		-	-	-	-	-
Quick release housing		-	-	-	-	-
Quick release nut		-	-	-	-	-
Compatible spoke protector		-	-	-	-	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CP-WR81A CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CP-WR81A CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
	Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)	738	911	698	872	657
Note		-	-	-	-	-

Wheel (Disc Brake)

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO	DURA-ACE	SHIMANO
Model no.	WH-RS710-C32-TL-F	WH-RS710-C32-TL-R	WH-RS710-C46-TL-F	WH-RS710-C46-TL-R	WH-R9170-C60-TU-F12	WH-RS370-TL-F12
Model name	WH-RS710 C32-TL-F	WH-RS710 C32-TL-R	WH-RS710 C46-TL-F	WH-RS710 C46-TL-R	WH-R9170-C60-TU F12	WH-RS370-TL F12
Specification						
Color	1 Hub shell	Black	Black	Black	Series color	Black
	1 Quick release	-	-	-	-	-
	2 Hub shell	-	-	-	-	-
	2 Quick release	-	-	-	-	-
Front/Rear	Front	Rear	Front	Rear	Front	Front
Brake type	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake
Rear speeds	12/11	12/11	12/11	12/11	12/11	12/11
O.L.D. (mm)	100	142	100	142	100	100
Wheel size	622 x 21C (700C)	622 x 21C (700C)	622 x 21C (700C)	622 x 21C (700C)	700C	622 x 19C (700C)
Tire	Type	Tubeless	Tubeless	Tubeless	Tubeless	Tubeless
	Recommended size	25-622 - 32-622	25-622 - 32-622	25-622 - 32-622	23-28" - 28-28"	28-622 - 45-622
Rim	Height (mm)	32	32	46	60	19
	Internal width (mm)	21	21	21	-	19
	External width (mm)	28	28	28	28	23.4
	Rim joint	-	-	-	-	Welded
	Brazed reinforcement	-	-	-	-	-
	OFFSET RIM	-	-	-	-	-
Spokes	Requires rim tape	✓	✓	✓	✓	✓
	Number	24	24	24	24	24
	Straight pull	✓	✓	✓	✓	✓
	Bladed	✓	✓	✓	✓	✓
	Butted	✓	✓	✓	✓	✓
	Diameter (mm)	2.0-1.6-2.0	2.0-1.6-2.0	2.0-1.6-2.0	2.0-1.8-2.0	2.0-1.8-2.0
Axle fixing method	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	12 mm E-THRU
Quick release skewer length (mm)	133	-	-	-	-	-
	163	-	-	-	-	-
	168	-	-	-	-	-
	100 x 8	-	-	-	-	-
Thru axle (length x inner diameter, mm)	100 x 12	✓	-	✓	✓	✓
	142 x 12	-	✓	-	-	-
	142 x 12	-	-	-	-	-
Spline type	MICRO SPLINE	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-	-	-
	HG spline L (ROAD 12/11-speed)	-	✓	-	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-
	-	-	-	-	-	-
Engagement type	-	Pawl ratchet	-	Pawl ratchet	-	-
Bearing	Stainless ball	-	-	-	✓	-
	Cup	Polish	Polish	Polish	CBN	Polish
	Cone	CBN	CBN	CBN	CBN	CBN
Disc mount	CENTER LOCK	✓	✓	✓	✓	✓
	CENTER LOCK mount cover option	-	-	-	-	-
	140 mm disc brake rotor compatible	✓	✓	✓	✓	✓
OPTBAL (2:1)	-	-	-	-	-	-
D2 rim	✓	✓	✓	✓	✓	-
Digital adjustment system	-	-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	-	Contact	Contact	-	-
Internal grease sleeve	-	-	-	-	✓	✓
Rim	Material	Carbon	Carbon	Carbon	Carbon	Aluminum
	Finish	Painted	Painted	Painted	Painted	Anodized
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Black	Black	Black	Silver	Black
FREEHUB body	Material	-	Steel	Steel	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	-
Quick release lever	Material	-	-	-	-	-
Quick release housing	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Quick release nut	Material	-	-	-	-	-
Compatible spoke protector	Material	-	-	-	-	-
	Finish	-	-	-	-	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CP-WR71A(11-36T) CATEYE RR-550-WUW SW	CP-WR71A(11-36T) CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUUA SW	CATEYE RR-550-WUUA SW	CATEYE RR-550-WUUA SW	CATEYE RR-550-WUUA SW	CATEYE RR-550-WUUA SW
	DIN	CATEYE RR-317-WUUA SW	CATEYE RR-317-WUUA SW	CATEYE RR-317-WUUA SW	CATEYE RR-317-WUUA SW	CATEYE RR-317-WUUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		665	839	719	893	678
Note		-	-	-	-	-

Wheel (Disc Brake)

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-RS370-TL-R12	WH-RS171-CL-F12-700C	WH-RS171-CL-R12-700C	WH-RX010-CL-F	WH-RX010-CL-R
Model name		WH-RS370-TL	WH-RS171-CL	WH-RS171-CL	WH-RX010-CL	WH-RX010-CL
Specification		R12	F12-700c	R12-700c	F	R
Color	1 Hub shell	Black	Black	Black	Black	Black
	1 Quick release	-	-	-	Black	Black
	2 Hub shell	-	-	-	-	-
	2 Quick release	-	-	-	-	-
Front/Rear		Rear	Front	Rear	Front	Rear
Brake type		CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake	CENTER LOCK disc brake
Rear speeds		11/10 *	11/10 *	11/10 *	11/10 *	11/10 *
O.L.D. (mm)		142	100	142	100	135
Wheel size		622 x 19C (700C)	622 x 19C (700C)	622 x 19C (700C)	622 x 17C (700C)	622 x 17C (700C)
Tire	Type	Tubeless	Clincher	Clincher	Clincher	Clincher
	Recommended size	28-622 - 45-622	28-622 - 42-622	28-622 - 42-622	25-622 - 38-622	25-622 - 38-622
Rim	Height (mm)	19	19	19	24	24
	Internal width (mm)	19	19	19	-	-
	External width (mm)	23.4	24.6	24.6	23	23
	Rim joint	Welded	Sleeve	Sleeve	Sleeve	Sleeve
	Brazed reinforcement	-	-	-	-	-
	OFFSET RIM	-	-	-	-	-
Spokes	Requires rim tape	✓	✓	✓	✓	✓
	Number	24	28	28	28	28
	Straight pull	✓	-	-	-	-
	Bladed	-	-	-	-	-
	Butted	-	-	-	-	-
	Diameter (mm)	2.0-1.8-2.0	2	2	2	2
Axle fixing method		12 mm E-THRU	12 mm E-THRU	12 mm E-THRU	Quick release	Quick release
Quick release skewer length (mm)	133	-	-	-	✓	-
	163	-	-	-	-	-
	168	-	-	-	-	✓
	100 x 8	-	-	-	-	-
Thru axle (length x inner diameter, mm)	100 x 12	-	✓	-	-	-
	142 x 12	✓	-	✓	-	-
	142 x 12	-	-	-	-	-
Spline type	MICRO SPLINE	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-	-	-
	HG spline L (ROAD 12/11-speed)	✓	-	✓	-	✓
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-
	Engagement type	-	-	Pawl ratchet	-	Pawl ratchet
Bearing	Stainless ball	-	-	-	-	-
	Cup	Polish	Polish	Polish	Polish	Polish
Disc mount	Cone	CBN	CBN	CBN	CBN	CBN
	CENTER LOCK	✓	✓	✓	✓	✓
	CENTER LOCK mount cover option	-	-	-	-	-
	140 mm disc brake rotor compatible	✓	✓	✓	✓	✓
OPTBAL (2:1)		-	-	-	-	-
D2 rim		-	-	-	-	-
Digital adjustment system		-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	Contact	Contact	Contact	Contact	Contact
Internal grease sleeve		✓	✓	✓	✓	✓
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Spoke	Finish	Anodized	Anodized	Anodized	Anodized (black)	Anodized (black)
	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Nipple	Finish	Black	Black	Black	Black	Black
	Material	Aluminum	Brass	Brass	Brass	Brass
FREEHUB body	Finish	Black	Silver	Silver	Silver	Silver
	Material	Steel	-	Steel	-	Steel
Hub shell	Finish	-	-	-	-	-
	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Axle	Finish	Anodized	Anodized	Anodized	Anodized	Anodized
	Material	Steel	Aluminum	Aluminum	Steel	Steel
Quick release lever	Finish	-	-	-	Aluminum	Aluminum
	Material	-	-	-	Painted	Painted
Quick release housing	Finish	-	-	-	Steel	Steel
	Material	-	-	-	Painted	Painted
Quick release nut	Finish	-	-	-	Resin	Resin
	Material	-	-	-	Black	Black
Compatible spoke protector		CP-FH08 (23T-28T 11-speed) CP-WH41 (23-30T 10-speed) CP-WH12 (32T 11/10-speed)	-	CP-FH08 (23T-28T 11-speed) CP-WH41 (23-30T 10-speed) CP-WH12 (32T 11/10-speed)	-	CP-FH08/CP-WH12 (11-speed), CP-FH40/CP-FH41/CP-WH12 (10-speed)
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		1090	897	1098	982	1177
Note		* The adapter is needed to use 10-speed cassette		* The adapter is needed to use 10-speed cassette		* The adapter is needed to use 10-speed cassette

Wheel (Rim Brake)

ROAD

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE
Model no.		WH-R9200-C60-HR-TU-F	WH-R9200-C60-HR-TU-R	WH-R9200-C50-TU-F	WH-R9200-C50-TU-R	WH-R9200-C36-TU-F	WH-R9200-C36-TU-R
Model name		WH-R9200-C60-HR-TU	WH-R9200-C60-HR-TU	WH-R9200-C50-TU	WH-R9200-C50-TU	WH-R9200-C36-TU	WH-R9200-C36-TU
Specification		F	R	F	R	F	R
Color	1 Hub shell	Series color	Series color	Series color	Series color	Series color	Series color
	1 Quick release	Series color	Series color	Series color	Series color	Series color	Series color
	2 Hub shell	-	-	-	-	-	-
	2 Quick release	-	-	-	-	-	-
Front/Rear		Front	Rear	Front	Rear	Front	Rear
Brake type		Rim brake	Rim brake	Rim brake	Rim brake	Rim brake	Rim brake
Rear speeds		-	12	-	12	-	12
O.L.D. (mm)		100	130	100	130	100	130
Wheel size		700C	700C	700C	700C	700C	700C
Tire	Type	Tubular	Tubular	Tubular	Tubular	Tubular	Tubular
	Recommended size	25-28" - 32-28"	25-28" - 32-28"	25-28" - 32-28"	25-28" - 32-28"	25-28" - 32-28"	25-28" - 32-28"
Rim	Height (mm)	60	60	50	50	36	36
	Internal width (mm)	-	-	-	-	-	-
	External width (mm)	28	28	28	28	28	28
	Rim joint	-	-	-	-	-	-
	Brazed reinforcement	-	-	-	-	-	-
	OFFSET RIM	-	-	-	-	-	-
	Requires rim tape	-	-	-	-	-	-
Spokes	Number	16	21	16	21	16	21
	Straight pull	✓	✓	✓	✓	✓	✓
	Bladed	✓	✓	✓	✓	✓	✓
	Butted	✓	✓	✓	✓	✓	✓
	Diameter (mm)	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.6-2.0	2.0-1.6-2.0	2.0-1.6-2.0	2.0-1.6-2.0
Axle fixing method		Quick release	Quick release	Quick release	Quick release	Quick release	Quick release
Quick release skewer length (mm)	133	✓	-	✓	-	✓	-
	163	-	✓	-	✓	-	✓
	168	-	✓	-	✓	-	✓
Thru axle (length x inner diameter ; mm)	100 x 12	-	-	-	-	-	-
	142 x 12	-	-	-	-	-	-
Spline type	MICRO SPLINE	-	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	✓	-	✓	-	✓
	HG spline L (ROAD 12/11-speed)	-	-	-	-	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-	-
Engagement type		-	Direct engagement	-	Direct engagement	-	Direct engagement
Bearing	Stainless ball	✓	✓	✓	✓	✓	✓
	Cup	CBN	CBN	CBN	CBN	CBN	CBN
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Disc mount	CENTER LOCK	-	-	-	-	-	-
	CENTER LOCK mount cover option	-	-	-	-	-	-
	140 mm disc brake rotor compatible	-	-	-	-	-	-
OPTBAL (2:1)		-	✓	-	✓	-	✓
D2 rim		-	-	-	-	-	-
Digital adjustment system		-	-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	-	Contact	-	Contact	-	Contact
Internal grease sleeve		-	-	-	-	-	-
Rim	Material	Carbon	Carbon	Carbon	Carbon	Carbon	Carbon
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Series color	Series color	Series color	Series color	Series color	Series color
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Series color	Series color	Series color	Series color	Series color	Series color
FREEHUB body	Material	-	Aluminum	-	Aluminum	-	Aluminum
	Finish	-	Anodized	-	Anodized	-	Anodized
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release housing	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release nut	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Series color	Series color	Series color	Series color	Series color	Series color
Compatible spoke protector		-	CP-W124	-	CP-W124	-	CP-W124
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		653	796	586	723	602	684
Note							

Wheel (Rim Brake)

Series		DURA-ACE	DURA-ACE	DURA-ACE	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-R9100-C60-TU-F	WH-R9100-C40-TU-F	WH-R9100-C40-TU-R	WH-RS700-C30-TL-F	WH-RS700-C30-TL-R	WH-RS500-TL-F
Model name		WH-R9100-C60-TU	WH-R9100-C40-TU-F	WH-R9100-C40-TU-R	WH-RS700-C30-TL	WH-RS700-C30-TL	WH-RS500-TL
Specification		F	F	R	F	R	F
Color	1 Hub shell	Series color	Series color	Series color	Silver	Silver	Silver
	1 Quick release	Series color	Series color	Series color	Silver	Silver	Silver
	2 Hub shell	-	-	-	-	-	-
	2 Quick release	-	-	-	-	-	-
Front/Rear		Front	Front	Rear	Front	Rear	Front
Brake type		Rim brake	Rim brake	Rim brake	Rim brake	Rim brake	Rim brake
Rear speeds		-	-	11/10 *	-	11/10 *	-
O.L.D. (mm)		100	100	130	100	130	100
Wheel size		700C	700C	700C	622 x 15C (700C)	622 x 15C (700C)	622 x 15C (700C)
Tire	Type	Tubular	Tubular	Tubular	Tubeless	Tubeless	Tubeless
	Recommended size	23-28" - 28-28"	23-28" - 28-28"	23-28" - 28-28"	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622
Rim	Height (mm)	60	37	37	24	31	24
	Internal width (mm)	-	-	-	15	15	15
	External width (mm)	28	28	28	20.8	20.8	20.8
	Rim joint	-	-	-	Welded	Welded	Welded
	Brazed reinforcement	-	-	-	-	-	✓
	OFFSET RIM	-	-	✓	-	✓	-
	Requires rim tape	-	-	-	✓	✓	-
Spokes	Number	16	16	21	16	21	16
	Straight pull	✓	✓	✓	✓	✓	✓
	Bladed	✓	✓	✓	✓	✓	✓
	Butted	✓	✓	✓	✓	✓	✓
	Diameter (mm)	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.8-2.0	2.0-1.5-2.0	2.0-1.8-2.0	2.0-1.5-2.0
Axle fixing method		Quick release	Quick release	Quick release	Quick release	Quick release	Quick release
Quick release skewer length (mm)	133	✓	✓	✓	✓	-	✓
	163	-	-	-	-	✓	-
	168	-	-	✓	-	✓	-
Thru axle (length x inner diameter ; mm)	100 x 12	-	-	-	-	-	-
	142 x 12	-	-	-	-	-	-
Spline type	MICRO SPLINE	-	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-	-	-	-
	HG spline L (ROAD 12/11-speed)	-	-	✓	-	✓	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-	-
Engagement type		-	-	Pawl ratchet	-	Pawl ratchet	-
Bearing	Stainless ball	✓	✓	✓	✓	-	-
	Cup	CBN	CBN	CBN	CBN	CBN	Polish
	Cone	CBN	CBN	CBN	CBN	CBN	CBN+Polish
Disc mount	CENTER LOCK	-	-	-	-	-	-
	CENTER LOCK mount cover option	-	-	-	-	-	-
	140 mm disc brake rotor compatible	-	-	-	-	-	-
OPTBAL (2:1)		-	-	✓	-	✓	-
D2 rim		✓	✓	✓	-	-	-
Digital adjustment system		✓	✓	✓	-	-	✓
Seal	Hub	Contact	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	-	-	Contact	-	Contact	-
Internal grease sleeve		✓	✓	✓	✓	✓	✓
Rim	Material	Carbon	Carbon	Carbon	Carbon+AL	Carbon+AL	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Anodized
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Silver	Silver	Silver	Black	Black	Black
FREEHUB body	Material	-	-	Titanium (rear)	-	Steel	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release housing	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Anodized
Quick release nut	Material	Aluminum	Aluminum	Aluminum	Resin	Resin	Resin
	Finish	Series color	Series color	Series color	Black	Black	Black
Compatible spoke protector		-	-	CP-W124	-	CP-W124	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		666	637	747	616	924	705
Note		-	-	* The adapter is needed to use 10-speed cassette	-	* The adapter is needed to use 10-speed cassette	-

Wheel (Rim Brake)

ROAD

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-RS500-TL-R	WH-RS300-CL-F	WH-RS300-CL-R	WH-RS330-CL-F	WH-RS330-CL-R	WH-RS100-CL-F
Model name		WH-RS500-TL	WH-RS300-CL	WH-RS300-CL	WH-RS330-CL	WH-RS330-CL	WH-RS100-CL
Specification		R	F	R	F	R	F
Color	1 Hub shell	Silver	Black	Black	Black	Black	Black
	1 Quick release	Silver	Black	Black	Black	Black	Black
	2 Hub shell	-	-	-	-	-	-
	2 Quick release	-	-	-	-	-	-
Front/Rear		Rear	Front	Rear	Front	Rear	Front
Brake type		Rim brake	Rim brake	Rim brake	Rim brake	Rim brake	Rim brake
Rear speeds		11/10 *	-	11/10 *	-	11/10 *	-
O.L.D. (mm)		130	100	130	100	130	100
Wheel size		622 x 15C (700C)	622 x 17C (700C)	622 x 17C (700C)	622 x 15C (700C)	622 x 15C (700C)	622 x 17C (700C)
Tire	Type	Tubeless	Clincher	Clincher	Clincher	Clincher	Clincher
	Recommended size	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622
Rim	Height (mm)	24	24	24	30	30	24
	Internal width (mm)	15	17	17	15	15	17
	External width (mm)	20.8	23.2	23.2	20.8	20.8	23.2
	Rim joint	Welded	Sleeve	Sleeve	Sleeve	Sleeve	Sleeve
	Brazed reinforcement	✓	-	-	-	-	-
	OFFSET RIM	✓	-	✓	-	✓	-
	Requires rim tape	-	18-622	18-622	✓	✓	18-622
	Number	20	16	20	16	21	20
Spokes	Straight pull	✓	✓	✓	✓	✓	-
	Bladed	✓	✓	✓	✓	✓	-
	Butted	✓	✓	✓	✓	✓	-
	Diameter (mm)	2.0-1.8-2.0	2	2	2	2	2
Axle fixing method		Quick release	Quick release	Quick release	Quick release	Quick release	Quick release
Quick release skewer length (mm)	133	-	✓	-	✓	-	✓
	163	✓	-	✓	-	✓	-
	168	✓	-	✓	-	✓	-
Thru axle (length x inner diameter ; mm)	100 x 12	-	-	-	-	-	-
	142 x 12	-	-	-	-	-	-
Spline type	MICRO SPLINE	-	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-	-	-	-
	HG spline L (ROAD 12/11-speed)	✓	-	✓	-	✓	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	-	-
	HG spline S (7-speed)	-	-	-	-	-	-
Engagement type		Pawl ratchet	-	Pawl ratchet	-	Pawl ratchet	-
Bearing	Stainless ball	-	-	-	-	-	-
	Cup	Polish	Polish	Polish	Polish	Polish	Polish
	Cone	CBN+Polish	CBN	CBN	CBN+Polish	CBN+Polish	CBN
Disc mount	CENTER LOCK	-	-	-	-	-	-
	CENTER LOCK mount cover option	-	-	-	-	-	-
	140 mm disc brake rotor compatible	-	-	-	-	-	-
OPTBAL (2:1)		-	-	-	-	✓	-
D2 rim		-	-	-	-	-	-
Digital adjustment system		✓	-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	Contact	-	Contact	-	Contact	-
Internal grease sleeve		✓	✓	✓	✓	✓	-
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Black	Black	Painted	Painted	Black
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Brass
	Finish	Black	Black anodized	Black anodized	Black	Black	Silver
FREEHUB body	Material	Steel	-	Steel	-	Steel	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	-	-	Painted
Axle	Material	Aluminum	Steel	Steel	Steel	Steel	Steel
	Finish	Anodized	-	-	-	-	-
Quick release lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Anodized	Anodized	Anodized	-	-	Painted
Quick release housing	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
	Finish	Anodized	Anodized	Anodized	Anodized	Anodized	Black
Quick release nut	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	Black	Black	Black	Black	Black	Black
Compatible spoke protector		CP-WH23 (23-28T) CP-W120 (32T) CP-W020 (10-speed)	-	CP-WH23 (23-28T) CP-W120 (32T)	-	CP-W124	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		944	770	1057	875	1176	827
Note		* The adapter is needed to use 10-speed cassette	-	* The adapter is needed to use 10-speed cassette	-	* The adapter is needed to use 10-speed cassette	-

Wheel (Rim Brake)

Series		SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO	SHIMANO
Model no.		WH-RS100-CL-R	WH-RS010-CL-F	WH-RS010-CL-R	WH-R501-A-CL-F	WH-R501-A-CL-R	WH-R501-CL-F
Model name		WH-RS100-CL	WH-RS010-CL	WH-RS010-CL	WH-R501-A-CL	WH-R501-A-CL	WH-R501-CL
Specification		R	F	R	F	R	F
Color	1 Hub shell	Black	Black	Black	Black	Black	Black
	1 Quick release	Black	Black	Black	Black	Black	Black
	2 Hub shell	-	-	-	Silver	Silver	Silver
	2 Quick release	-	Black	Black	Black	Black	Black
Front/Rear		Rear	Front	Rear	Front	Rear	Front
Brake type		Rim brake	Rim brake	Rim brake	Rim brake	Rim brake	Rim brake
Rear speeds		11/10 *	-	11/10 *	-	11/10/9/8/7	-
O.L.D. (mm)		130	100	130	100	130	100
Wheel size		622 x 17C (700C)	622 x 15C (700C)	622 x 15C (700C)	622 x 15C (700C)	622 x 15C (700C)	622 x 15C (700C)
Tire	Type	Clincher	Clincher	Clincher	Clincher	Clincher	Clincher
	Recommended size	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622	23-622 - 32-622
Rim	Height (mm)	24	24	24	24	24	24
	Internal width (mm)	17	15	15	15	15	15
	External width (mm)	23.2	20.8	20.8	20.8	20.8	20.8
	Rim joint	Sleeve	Sleeve	Sleeve	Sleeve	Sleeve	Sleeve
	Brazed reinforcement	-	-	-	-	-	-
	OFFSET RIM	✓	-	✓	-	-	-
	Requires rim tape	18-622	✓	✓	✓	✓	✓
Spokes	Number	24	20	24	20	24	20
	Straight pull	-	-	-	-	-	-
	Bladed	-	-	-	✓	✓	-
	Butted	-	-	-	-	-	-
	Diameter (mm)	2	2	2	2	2	2
Axle fixing method		Quick release	Quick release	Quick release	Quick release	Quick release	Quick release
Quick release skewer length (mm)	133	-	✓	-	✓	-	✓
	163	✓	-	✓	-	✓	-
	168	✓	-	✓	-	✓	-
Thru axle (length x inner diameter ; mm)	100 x 12	-	-	-	-	-	-
	142 x 12	-	-	-	-	-	-
Spline type	MICRO SPLINE	-	-	-	-	-	-
	HG spline L2 (ROAD 12-speed dedicated)	-	-	-	-	-	-
	HG spline L (ROAD 12/11-speed)	✓	-	✓	-	-	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	-	-	-	-	✓	-
	HG spline S (7-speed)	-	-	-	-	-	-
Engagement type		Pawl ratchet	-	Pawl ratchet	-	Pawl ratchet	-
Bearing	Stainless ball	-	-	-	-	-	-
	Cup	Polish	Polish	Polish	Polish	Polish	Polish
	Cone	CBN	CBN	CBN	CBN	CBN	CBN
Disc mount	CENTER LOCK	-	-	-	-	-	-
	CENTER LOCK mount cover option	-	-	-	-	-	-
	140 mm disc brake rotor compatible	-	-	-	-	-	-
OPTBAL (2:1)		-	-	-	-	-	-
D2 rim		-	-	-	-	-	-
Digital adjustment system		-	-	-	-	-	-
Seal	Hub	Contact	Contact	Contact	Contact	Contact	Contact
	FREEHUB body	Contact	-	Contact	-	Contact	-
Internal grease sleeve		-	-	-	-	-	-
Rim	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Black	Anodized	Anodized	Anodized	Anodized	Anodized
Spoke	Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Finish	Black	Black	Black	Black	Black	Black
Nipple	Material	Brass	Brass	Brass	Brass	Brass	Brass
	Finish	Silver	Silver	Silver	Silver	Silver	Silver
FREEHUB body	Material	Steel	-	Steel	-	Steel	-
	Finish	-	-	-	-	-	-
Hub shell	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Anodized	Anodized	Anodized	Anodized	Anodized
Axle	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	-	-	-	-	-	-
Quick release lever	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Quick release housing	Material	Steel	Steel	Steel	Steel	Steel	Steel
	Finish	Black	Painted	Painted	Painted	Painted	Painted
Quick release nut	Material	Resin	Resin	Resin	Resin	Resin	Resin
	Finish	Black	Black	Black	Black	Black	Black
Compatible spoke protector		CP-WH24 CP-FH53 (34T)	-	CP-WH24 CP-FH53 (34T)	-	CP-FH06 CP-FH31 CP-FH46 CP-WH24	-
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW	CATEYE RR-317-WUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		1105	818	1102	820	1069	820
Note		* The adapter is needed to use 10-speed cassette		* The adapter is needed to use 10-speed cassette			

Wheel (Rim Brake)

Series		SHIMANO
Model no.		WH-R501-CL-R
Model name		WH-R501-CL
Specification		R
Color	1 Hub shell	Black
	1 Quick release	Black
	2 Hub shell	Silver
	2 Quick release	Black
Front/Rear		Rear
Brake type		Rim brake
Rear speeds		11/10/9/8/7
O.L.D. (mm)		130
Wheel size		622 x 15C (700C)
Tire	Type	Clincher
	Recommended size	23-622 - 32-622
Rim	Height (mm)	24
	Internal width (mm)	15
	External width (mm)	20.8
	Rim joint	Sleeve
	Brazed reinforcement	-
	OFFSET RIM	-
	Requires rim tape	✓
Spokes	Number	24
	Straight pull	-
	Bladed	-
	Butted	-
	Diameter (mm)	2
Axle fixing method		Quick release
Quick release skewer length (mm)	133	-
	163	✓
	168	✓
Thru axle (length x inner diameter ; mm)	100 x 12	-
	142 x 12	-
Spline type	MICRO SPLINE	-
	HG spline L2 (ROAD 12-speed dedicated)	-
	HG spline L (ROAD 12/11-speed)	-
	HG spline M (10/9/8-speed, MTB 11-speed, 7-speed CS-HG400/HG210)	✓
	HG spline S (7-speed)	-
Engagement type		Pawl ratchet
Bearing	Stainless ball	-
	Cup	Polish
	Cone	CBN
Disc mount	CENTER LOCK	-
	CENTER LOCK mount cover option	-
	140 mm disc brake rotor compatible	-
OPTBAL (2:1)		-
D2 rim		-
Digital adjustment system		-
Seal	Hub	Contact
	FREEHUB body	Contact
Internal grease sleeve		-
Rim	Material	Aluminum
	Finish	Anodized
Spoke	Material	Stainless steel
	Finish	Black
Nipple	Material	Brass
	Finish	Silver
FREEHUB body	Material	Steel
	Finish	-
Hub shell	Material	Aluminum
	Finish	Anodized
Axle	Material	Steel
	Finish	-
Quick release lever	Material	Aluminum
	Finish	Painted
Quick release housing	Material	Steel
	Finish	Painted
Quick release nut	Material	Resin
	Finish	Black
Compatible spoke protector		CP-FH06 CP-FH31 CP-FH46 CP-WH24
Reflector	JIS/CPSC	CATEYE RR-550-WUW SW
	AS	CATEYE RR-550-WUA SW
	DIN	CATEYE RR-317-WUA SW
Average weight (g) (w/o quick release, rim tape, tubeless tape, valve stem, lock ring)		1069
Note		

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Head Parts

Series		DURA-ACE
Model no.		HP-7410
Size		JIS, ENGLISH
Thread		BC 1 x 24 T.P.I.
Sealed cartridge bearings		✓
Stack height (mm)		37.6
Lock nut	Material	Aluminum
	Finish	Anodized
Upper / Lower cups	Material	Aluminum
	Finish	Anodized
Upper stem cone	Material	Aluminum
	Finish	Anodized
Stem cone	Material	Aluminum
	Finish	Anodized
Average weight (g)		101
Note		

Shift/Brake Lever (Hydraulic Disc Brake)

ROAD

Series			DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	SHIMANO 105	SHIMANO 105
Model no.			ST-R9270-R	ST-R9270-L	ST-R8170-R	ST-R8170-L	ST-R7170-R	ST-R7170-L
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
	2		-	-	-	-	-	-
Shifter type			DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Remote switch			✓	✓	✓	✓	-	-
Brake lever	Brake hose (kit)		SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-J-SSR, SM-BH90-JK-SSR	SM-BH90-J-SSR, SM-BH90-JK-SSR
	Hose joint		Straight	Straight	Straight	Straight	Straight	Straight
	Brake hose color (kit)	1	Black	Black	Black	Black	Black	Black
		2	-	-	-	-	-	-
	Recommended brake caliper		BR-R9270	BR-R9270	BR-R8170	BR-R8170	BR-R7170	BR-R7170
	Oil		SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
	Reach adjust		✓	✓	✓	✓	✓	✓
	Clamp band (mm)		23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	Funnel bleeding		✓	✓	✓	✓	✓	✓
	Free stroke adjust		✓	✓	✓	✓	✓	✓
	SERVO WAVE		✓	✓	✓	✓	-	-
	Material		Carbon	Carbon	Aluminum	Aluminum	Aluminum	Aluminum
Finish		Painted	Painted	Painted	Painted	Anodized	Anodized	
Bracket	Material		CFRP	CFRP	CFRP	CFRP	GFRP	GFRP
	Finish		-	-	-	-	-	-
Electric button	Material		CFRP	CFRP	CFRP	CFRP	GFRP	GFRP
	Finish		Painted	Painted	Painted	Painted	-	-
Di2 connectivity wired	Di2 shifting		✓	✓	✓	✓	-	-
Di2 connectivity wireless	Di2 shifting		✓	✓	✓	✓	✓	✓
Master unit			-	-	-	-	-	-
Firmware update by E-TUBE PROJECT			✓	✓	✓	✓	✓	✓
SD50 port (pcs)			0	0	0	0	0	0
SD300 port (pcs)			1	1	1	1	1	1
SD50 connector (pcs)			0	0	0	0	0	0
SD300 connector (pcs)			0	0	0	0	0	0
Port for SD50 remote sprinter shifter (pcs)			0	0	0	0	0	0
Port for SD300 satellite shifter (pcs)			1	1	1	1	0	0
Battery			CR1632	CR1632	CR1632	CR1632	CR1632 x 2	CR1632 x 2
Average weight (g)			350 (/pair)	350 (/pair)	391 (/pair)	391 (/pair)	423 (/pair)	423 (/pair)
Note								

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Shift/Brake Lever (Hydraulic Disc Brake)

Series		DURA-ACE	DURA-ACE	DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA
Model no.		ST-R9170-R	ST-R9170-L	ST-R9180-R	ST-R9180-L	ST-R8070-R	ST-R8070-L
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Shifter type		DUAL CONTROL LEVER	DUAL CONTROL LEVER	TT/Triathlon DUAL CONTROL LEVER	TT/Triathlon DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Remote switch		✓	✓	-	-	✓	✓
Brake lever	Brake hose (kit)	SM-BH90-JK-SSR	SM-BH90-JK-SSR	SM-BH90-JK-SS	SM-BH90-JK-SS	SM-BH90-JK-SSR	SM-BH90-JK-SSR
	Hose joint	Straight	Straight	Straight	Straight	Straight	Straight
	Brake hose color (kit)	1	Black	Black	Black	Black	Black
		2	-	-	-	-	-
	Recommended brake caliper	BR-R9170	BR-R9170	BR-R9170	BR-R9170	BR-R8070	BR-R8070
	Oil	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral	SHIMANO Mineral
	Reach adjust	✓	✓	✓	✓	✓	✓
	Clamp band (mm)	23.8-24.2	23.8-24.2	INNER DIA. 19.0 - 22.5	INNER DIA. 19.0 - 22.5	23.8-24.2	23.8-24.2
	Funnel bleeding	✓	✓	✓	✓	✓	✓
	Free stroke adjust	✓	✓	-	-	✓	✓
	SERVO WAVE	-	-	-	-	-	-
	Material	Carbon	Carbon	Carbon	Carbon	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Bracket	Material	CFRP	CFRP	Aluminum	Aluminum	CFRP	CFRP
	Finish	-	-	-	-	-	-
Electric button	Material	-	-	CFRP	CFRP	-	-
	Finish	-	-	-	-	-	-
Di2 connectivity wired	Di2 shifting	✓	✓	✓	✓	✓	✓
Di2 connectivity wireless	Di2 shifting	-	-	-	-	-	-
Master unit		-	-	-	-	-	-
Firmware update by E-TUBE PROJECT		✓	✓	✓	✓	✓	✓
SD50 port (pcs)		2	2	1	1	2	2
SD300 port (pcs)		0	0	0	0	0	0
SD50 connector (pcs)		0	0	0	0	0	0
SD300 connector (pcs)		0	0	0	0	0	0
Port for SD50 remote sprinter shifter (pcs)		0	0	0	0	0	0
Port for SD300 satellite shifter (pcs)		0	0	0	0	0	0
Battery		-	-	-	-	-	-
Average weight (g)		160	160	99	99	180	180
Note							

Shift/Brake Lever

ROAD

Series		DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	DURA-ACE	DURA-ACE
Model no.		ST-R9250-R	ST-R9250-L	ST-R8150-R	ST-R8150-L	ST-R9150-R	ST-R9150-L
Shifter type		DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER
Remote switch		✓	✓	✓	✓	✓	✓
Brake lever	Reach adjust	✓	✓	✓	✓	✓	✓
	Clamp band (mm)	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2	23.8-24.2
	SLR-EV	✓	✓	✓	✓	✓	✓
	Material	CFRP	CFRP	Aluminum	Aluminum	CFRP	CFRP
	Finish	Painted	Painted	Painted	Painted	Painted	Painted
Bracket	Material	CFRP	CFRP	GFRP	GFRP	CFRP	CFRP
	Finish	-	-	-	-	-	-
Electric button	Material	CFRP	CFRP	GFRP	GFRP	CFRP	CFRP
	Finish	Painted	Painted	-	-	-	-
Master unit		-	-	-	-	-	-
Firmware update by E-TUBE PROJECT		✓	✓	✓	✓	✓	✓
Di2 connectivity wired	Di2 shifting	✓	✓	✓	✓	✓	✓
Di2 connectivity wireless	Di2 shifting	-	-	-	-	-	-
SD50 port (pcs)		0	0	0	0	2	2
SD300 port (pcs)		2	2	2	2	0	0
SD50 connector (pcs)		0	0	0	0	0	0
SD300 connector (pcs)		0	0	0	0	0	0
Port for SD50 remote sprinter shifter (pcs)		0	0	0	0	1	1
Port for SD300 satellite shifter (pcs)		1	1	1	1	0	0
Battery		-	-	-	-	-	-
Average weight (g)		230 (/pair)	230 (/pair)	295 (/pair)	295 (/pair)	230 (/pair)	230 (/pair)
Note		-	-	-	-	-	-

Series		DURA-ACE	DURA-ACE	ULTEGRA	ULTEGRA	ULTEGRA	ULTEGRA
Model no.		ST-R9160-R	ST-R9160-L	ST-R8050-R	ST-R8050-L	ST-R8060-R	ST-R8060-L
Shifter type		TT/Triathlon DUAL CONTROL LEVER	TT/Triathlon DUAL CONTROL LEVER	DUAL CONTROL LEVER	DUAL CONTROL LEVER	TT/Triathlon DUAL CONTROL LEVER	TT/Triathlon DUAL CONTROL LEVER
Remote switch		-	-	✓	✓	-	-
Brake lever	Reach adjust	✓	✓	✓	✓	✓	✓
	Clamp band (mm)	INNER DIA. 19.0 - 22.5	INNER DIA. 19.0 - 22.5	23.8-24.2	23.8-24.2	INNER DIA. 19.0 - 22.5	INNER DIA. 19.0 - 22.5
	SLR-EV	✓	✓	✓	✓	✓	✓
	Material	CFRP	CFRP	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Anodized	Anodized	Anodized	Anodized
Bracket	Material	GFRP	GFRP	GFRP	GFRP	GFRP	GFRP
	Finish	-	-	-	-	-	-
Electric button	Material	CFRP	CFRP	GFRP	GFRP	CFRP	CFRP
	Finish	-	-	-	-	-	-
Master unit		-	-	-	-	-	-
Firmware update by E-TUBE PROJECT		✓	✓	✓	✓	✓	✓
Di2 connectivity wired	Di2 shifting	✓	✓	✓	✓	✓	✓
Di2 connectivity wireless	Di2 shifting	-	-	-	-	-	-
SD50 port (pcs)		1	1	2	2	1	1
SD300 port (pcs)		0	0	0	0	0	0
SD50 connector (pcs)		0	0	0	0	0	0
SD300 connector (pcs)		0	0	0	0	0	0
Port for SD50 remote sprinter shifter (pcs)		0	0	1	1	0	0
Port for SD300 satellite shifter (pcs)		0	0	0	0	0	0
Battery		-	-	-	-	-	-
Average weight (g)		127 (/pair)	127 (/pair)	295 (/pair)	295 (/pair)	138 (/pair)	138 (/pair)
Note		-	-	-	-	-	-

Shift/Brake Lever

Series		ULTEGRA	ULTEGRA
Model no.		ST-6870	ST-6871
Shifter type		DUAL CONTROL LEVER	TT/Triathlon DUAL CONTROL LEVER
Remote switch		-	-
Brake lever	Reach adjust	✓	✓
	Clamp band (mm)	23.8-24.2	INNER DIA. 19.0 - 22.5
	SLR-EV	✓	✓
	Material	Aluminum	Aluminum
	Finish	Painted	Anodized
Bracket	Material	GFRP	CFRP
	Finish	-	-
Electric button	Material	GFRP	GFRP
	Finish	-	-
Master unit		-	-
Firmware update by E-TUBE PROJECT		✓	✓
Di2 connectivity wired	Di2 shifting	✓	✓
Di2 connectivity wireless	Di2 shifting	-	-
SD50 port (pcs)		2 /each, total 4	0
SD300 port (pcs)		0	0
SD50 connector (pcs)		0	1 /each, total 2
SD300 connector (pcs)		0	0
Port for SD50 remote sprinter shifter (pcs)		1 /each, total 2	0
Port for SD300 satellite shifter (pcs)		0	0
Battery		-	-
Average weight (g)		303.2 (/pair)	148 (/pair)
Note		-	-

Shift Switch

ROAD

Series	SHIMANO	SHIMANO	SHIMANO	SHIMANO	DURA-ACE	SHIMANO
Model no.	SW-RS801-E	SW-RS801-S	SW-RS801-T	SW-R9150	SW-R9160	SW-R671
Switch type	Extra long cable, for Remote extension bar switch	Short cable for remote sprinter switch	Long cable for top bar switch	Option SW (pair)	Bar-end SW for TT (pair)	Remote Triathlon shifter Current 2 button design, pair
Position	Extension bar	On road Bar	Top handle	On road Bar	DH Bar	DH Bar
Compatible electric wire	-	-	-	EW-SD50	EW-SD50	EW-SD50
Master unit	-	-	-	-	-	-
Firmware update by E-TUBE PROJECT	-	-	-	✓	✓	✓
SD50 port (pcs)	0	0	0	0	2	0
SD300 port (pcs)	0	0	0	0	0	0
SD50 connector (pcs)	0	0	0	2	0	2
SD300 connector (pcs)	0	0	0	0	0	0
Connector for SD50 remote sprinter shifter (pcs)	0	0	0	0	0	0
Connector for SD300 satellite shifter (pcs)	1/each, total 2	1/each, total 2	1/each, total 2	0	0	0
Port for SD50 remote sprinter shifter (pcs)	0	0	0	0	0	0
Port for SD300 satellite shifter (pcs)	0	0	0	0	0	0
Wireless shifting	-	-	-	-	-	-
Average weight (g)	16.5 (/pair)	6.4 (/pair)	11.8 (/pair)	12 (/pair)	40 (/pair)	100 (/pair)
Note	2 pcs switch in a spec model	2 pcs switch in a spec model	2 pcs switch in a spec model			

Series	SHIMANO	SHIMANO
Model no.	SW-R610	SW-R600
Switch type	Remote sprinter shifter (pair)	Remote satellite shifter (climbing shifter)
Position	Anywhere	Anywhere
Compatible electric wire	-	EW-SD50
Master unit	-	-
Firmware update by E-TUBE PROJECT	-	✓
SD50 port (pcs)	0	0
SD300 port (pcs)	0	0
SD50 connector (pcs)	0	1
SD300 connector (pcs)	0	0
Connector for SD50 remote sprinter shifter (pcs)	2	0
Connector for SD300 satellite shifter (pcs)	0	0
Port for SD50 remote sprinter shifter (pcs)	0	0
Port for SD300 satellite shifter (pcs)	0	0
Wireless shifting	-	-
Average weight (g)	5.8 (/pair)	19 (/pc)
Note		

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Rear Derailleur

Series			DURA-ACE	ULTEGRA	SHIMANO 105	DURA-ACE	ULTEGRA	ULTEGRA
Model no.			RD-R9250	RD-R8150	RD-R7150	RD-R9150	RD-R8050-SS	RD-R8050-GS
Color	1		Series color	Series color	Series color	Series color	Series color	Series color
Rear speeds	2		12	12	12	11	11	11
RD construction	SHIMANO SHADOW RD		✓	✓	✓	✓	✓	✓
	SHIMANO SHADOW RD+		-	-	-	-	-	-
	Double servo		-	-	-	-	-	-
Applicable derailleur hanger	SHIMANO MTB type	Direct attachment (conventional)	-	-	-	-	-	-
		Direct mount	-	-	-	-	-	-
		Direct attachment (conventional)	✓	✓	✓	✓	✓	✓
	SHIMANO ROAD type	Direct attachment (conventional)	✓	✓	✓	✓	✓	✓
		Direct mount	✓	✓	✓	✓	✓	✓
		UDH standard		✓	✓	✓	-	-
Max. front difference			16T	16T	16T	16T	16T	16T
Total capacity			37T	39T	41T	33T	33T	37T
Low sprocket	Max.		34T	34T	36T	30T	30T	34T
	Min.		30T	30T	34T	25T	25T	28T
Top sprocket	Max.		11T	11T	11T	14T	14T	12T
	Min.		11T	11T	11T	11T	11T	11T
Fluoroc coated link bushings			4	4	4	4	4	4
Pulley	Guide pulley bearing		✓	✓	-	✓	✓	✓
	Tension pulley bearing		✓	✓	-	✓	✓	✓
	Teeth		11T	11T	11T	11T	11T	11T
	Screws material		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Sunken type pulley screw		✓	✓	✓	✓	✓	✓
	Bracket	Material		Aluminum	Aluminum	Steel	Aluminum	Aluminum
Finish		Anodized	Painted	Plated	Anodized	Anodized	Anodized	
B-axle	Hollow axle		✓	✓	✓	✓	✓	✓
	Material		Aluminum	Stainless steel	Stainless steel	Aluminum	Stainless steel	Stainless steel
B-axle 2	Hollow axle		✓	✓	-	✓	-	-
	Material		Aluminum	Aluminum	Stainless steel	Aluminum	Aluminum	Aluminum
Bracket body	Finish		Anodized	Anodized	-	Anodized	Anodized	Anodized
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
P-axle	Finish		Painted	Painted	Painted	Painted	Painted	Painted
	Material		Aluminum	Steel	Steel	Aluminum	Steel	Steel
Plate body	Finish		CFRP	Passivation	Plated	CFRP	Passivation	Passivation
	Material		Aluminum	GFRP	GFRP	Aluminum	GFRP	GFRP
Outer link	Finish		Painted	Painted	-	Painted	Painted	Painted
	Material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Inner link	Finish		Anodized	Painted	Painted	Anodized	Painted	Painted
	Material		CFRP	GFRP	Steel	CFRP	GFRP	GFRP
Outer plate	Material		Carbon	Aluminum	Aluminum	Painted	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Carbon	Painted	Painted
Inner plate	Material		Carbon	Aluminum	Aluminum	Carbon	Aluminum	Aluminum
	Finish		Painted	Painted	Painted	Painted	Painted	Painted
Stroke adjusting screw	Material		Aluminum	Steel	Steel	Aluminum	Steel	Steel
Di2 connectivity wired	Finish		Anodized	Plated	Plated	Anodized	Plated	Plated
Di2 connectivity wireless	Di2 shifting		✓	✓	✓	✓	✓	✓
	Di2 shifting		✓	✓	✓	-	-	-
	Bluetooth h® LE	Cycling power	-	-	-	-	-	-
		ANT+	Bicycle power	-	-	-	-	-
		Bluetooth h® LE custom (*1)	Adjust mode information	✓	✓	✓	-	-
	Di2 battery level		✓	✓	✓	-	-	-
	Gear position		✓	✓	✓	-	-	-
	SHIMANO E-BIKE SYSTEMS data items (*3)		✓	✓	✓	-	-	-
	Compatible with E-TUBE RIDE		✓	✓	✓	-	-	-
	Compatible with E-TUBE PROJECT		✓	✓	✓	-	-	-
	Adjust mode information		✓	✓	✓	-	-	-
	ANT private (*2)	Di2 battery level	✓	✓	✓	-	-	-
		Gear position	✓	✓	✓	-	-	-
		SHIMANO E-BIKE SYSTEMS data items (*3)	✓	✓	✓	-	-	-
		Firmware update by E-TUBE PROJECT		✓	✓	✓	✓	✓
SD50 port (pcs)		0	0	0	1	1	1	
SD300 port (pcs)		1	1	1	0	0	0	
SD50 connector (pcs)		0	0	0	0	0	0	
SD300 connector (pcs)		0	0	0	0	0	0	
LED for system status		✓	✓	✓	-	-	-	
Charging port		✓	✓	✓	-	-	-	
Charging cable		EW-EC300	EW-EC300	EW-EC300	-	-	-	
Average weight (g)		215	262	302	197	240	247	
Note *1 Compatible with a Bluetooth LE cycle computer and smartphone/tablet but not freely open profile. *2 Compatible with ANT+ cycle computer but not freely open profile. *3 Will be shown only when connected to SHIMANO E-BIKE SYSTEMS bike.			w/o Bracket spec. available	w/o Bracket spec. available	w/o Bracket spec. available	w/o Bracket spec. available	* w/o Bracket spec. available	* w/o Bracket spec. available

Rear Derailleur

ROAD

Series			ULTEGRA	ULTEGRA	ULTEGRA RX
Model no.			RD-6870-SS	RD-6870-GS	RD-RX805-GS
Color	1 2		Series color	Series color	Series color
Rear speeds			11	11	11
RD construction	SHIMANO SHADOW RD		-	-	-
	SHIMANO SHADOW RD+		-	-	✓
	Double servo		✓	✓	-
Applicable derailleur hanger	SHIMANO MTB type	Direct attachment (conventional)	-	-	-
		Direct mount	-	-	-
	SHIMANO ROAD type	Direct attachment (conventional)	✓	✓	✓
		Direct mount	-	-	✓
	UDH standard		-	-	-
Max. front difference			16T	16T	16T
Total capacity			33T	37T	39T
Low sprocket	Max.		28T	32T	34T
	Min.		23T	28T	28T
Top sprocket	Max.		14T	12T	11T
	Min.		11T	11T	11T
Fluoroc coated link bushings			4	4	4
Pulley	Guide pulley bearing		✓	✓	✓
	Tension pulley bearing		✓	✓	✓
	Teeth		11T	11T	11T
	Screws material		Stainless steel	Stainless steel	Stainless steel
	Sunken type pulley screw		✓	✓	✓
	Material		Aluminum	Aluminum	Aluminum
Bracket	Finish		✓	✓	Anodized
	Hollow axle		-	-	✓
B-axle	Material		Stainless steel	Stainless steel	Stainless steel
	Finish		Passivation	Passivation	-
B-axle 2	Hollow axle		-	-	✓
	Material		-	-	Aluminum
Bracket body	Finish		-	-	Anodized
	Material		Aluminum	Aluminum	Aluminum
P-axle	Finish		Painted	Painted	Painted
	Material		Aluminum	Aluminum	Steel
Plate body	Finish		CFRP	CFRP	-
	Material		Painted	Painted	Aluminum
Outer link	Finish		Painted	Painted	Painted
	Material		Aluminum	Aluminum	Aluminum
Inner link	Finish		Painted	Painted	Painted
	Material		Steel	Steel	GFRP
Outer plate	Finish		Painted	Painted	-
	Material		Aluminum	Aluminum	Aluminum
Inner plate	Finish		Painted	Painted	Painted
	Material		Aluminum	Aluminum	Aluminum
Stroke adjusting screw	Finish		Painted	Painted	Painted
	Material		Stainless steel	Stainless steel	Steel
Di2 connectivity wired	Finish		Black coated	Black coated	Plated
	Di2 shifting		✓	✓	✓
Di2 connectivity wireless	Di2 shifting		-	-	-
	Bluetooth® LE	Cycling power	-	-	-
		Bicycle power	-	-	-
	ANT+	Adjust mode information	-	-	-
		Di2 battery level	-	-	-
		Gear position	-	-	-
		SHIMANO E-BIKE SYSTEMS data items (*3)	-	-	-
		Compatible with E-TUBE RIDE	-	-	-
		Compatible with E-TUBE PROJECT	-	-	-
		Adjust mode information	-	-	-
	Bluetooth® LE custom (*1)	Di2 battery level	-	-	-
		Gear position	-	-	-
		SHIMANO E-BIKE SYSTEMS data items (*3)	-	-	-
		Compatible with E-TUBE RIDE	-	-	-
		Compatible with E-TUBE PROJECT	-	-	-
	ANT private (*2)	Adjust mode information	-	-	-
Di2 battery level		-	-	-	
Gear position		-	-	-	
SHIMANO E-BIKE SYSTEMS data items (*3)		-	-	-	
Firmware update by E-TUBE PROJECT		-	-	-	
Firmware update by E-TUBE PROJECT			✓	✓	✓
SD50 port (pcs)			1	1	1
SD300 port (pcs)			0	0	0
SD50 connector (pcs)			0	0	0
SD300 connector (pcs)			0	0	0
LED for system status			-	-	-
Charging port			-	-	-
Charging cable			-	-	-
Average weight (g)			257	268	280
Note *1 Compatible with a Bluetooth LE cycle computer and smartphone/tablet but not freely open profile. *2 Compatible with ANT+ cycle computer but not freely open profile. *3 Will be shown only when connected to SHIMANO E-BIKE SYSTEMS					* w/o Bracket spec available

ST

ST

SL

BL

BL

BR

BR

BR

BR

BR

BR

BC

RD

FD

FC

FC

BB

BB

CS

HB

FH

WH

WH

HP

ST

ST

SW

RD

FD

SMAD

Front Derailleur

Series		DURA-ACE	ULTEGRA	SHIMANO 105	DURA-ACE	ULTEGRA	ULTEGRA
Model no.		FD-R9250	FD-R8150	FD-R7150	FD-R9150	FD-R8050	FD-6870-F
Color	1	Series color	Series color	Series color	Series color	Series color	Series color
	2	-	-	-	-	-	-
Front speeds		2	2	2	2	2	2
Rear speeds		12	12	12	11	11	11
Compatible chain		HG 12-speed	HG 12-speed	HG 12-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed	LINKGLIDE, HG 11-speed
Action	TOP SWING	-	-	-	-	-	-
	Down swing	✓	✓	✓	✓	✓	✓
Mount	Clamp band1	-	-	-	-	-	-
	Clamp band2	-	-	-	-	-	-
	Clamp band3	-	-	-	-	-	-
	Brazed-on	✓	✓	✓	✓	✓	✓
Chain line (mm)		44.5	44.5	44.5	43.5	43.5	43.5
Chainstay angle (deg.)		61-66	61-66	61-66	61-66	61-66	61-66
Top gear teeth		46-54T	46-52T	50-52T	50T-55T	46T-53T	46T-53T
Total capacity		16T	16T	16T	16T	16T, 17T *	16T
Link bushings		4	4	2	4	2	4
Front clamp band	Material	-	-	-	-	-	-
	Finish	-	-	-	-	-	-
Rear clamp band, base bracket	Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Finish	Painted	Painted	Painted	Anodized	Painted	Painted
Outer link	Material	Aluminum	Aluminum	GFRP	CFRP	CFRP	CFRP
	Finish	Anodized	Painted	-	Painted	Painted	Painted
Inner link	Material	Steel	Steel	Steel	Titanium	Steel	Steel
	Finish	Plated	Painted	Plated	-	Plated	Plated
Chain guide	Material	Aluminum	Steel	Steel	Aluminum	Steel	Steel
	Finish	Plated	Plated	Chrome plated	Nickel plated	Chrome plated	Chrome plated
Master unit		-	-	-	-	-	-
Firmware update by E-TUBE PROJECT		✓	✓	✓	✓	✓	✓
SD50 port (pcs)		0	0	0	1	1	1
SD300 port (pcs)		1	1	1	0	0	0
SD50 connector (pcs)		0	0	0	0	0	0
SD300 connector (pcs)		0	0	0	0	0	0
Average weight (g) (band type: L size, direct type w/ screw)		96	110	142	104	132	138.5
Note						* Use with E-BIKE	

Front Derailleur (Adapter)

Series		DURA-ACE	DURA-ACE
Model no.		SM-AD91-L	SM-AD91-MS
Front clamp band	Material	Aluminum	Aluminum
	Finish	Painted	Anodized
Rear clamp band	Material	Aluminum	Aluminum
	Finish	Painted	Anodized
Clamp band diameter (mm)	28.6	-	✓*
	31.8	-	✓
	34.9	✓	-
Note			* w/ Multi Clamp Band