



Specification
of
2017 - 2018 / Product Catalogue

Disc Brake

Model No.	Brake Lever	BLMX30	BLMS30
	Brake Caliper	BRMX30	BRMS30
	System	DBMS30	DBMS30
Side & Front/Rear		R (Right Side Rear) / L (Left Side Front) S (Right Side Front) / D (Left Side Rear)	
Brake Type		Hydraulic Disc Brake	
Lever	I-spec II	●	
	Lever Length	2-Finger	
	Master Cylinder	Aluminum	
	Brake Lever	Aluminum Forged	Aluminum
	Clamp Bolt	Stainless	Chromoly
	Reach Adjust	●	
Caliper	Hose Joint	(B) Banjo / (S) Straight	
	Piston	2	
	Mount Type	(P) Post-Type / (I) IS-Type	
	Mono-body	Aluminum Forged	
	Oil	Mineral	
	Disc Pad	DPS10	DPS10
	Fixing Bolt	Stainless	Chromoly
Average Weight		335g (Front)	340g (Front)

Brake Levers

Model No.	BLM930		BLM500		BLM400	
Side	(L) Left Hand	(R) Right Hand	(L) Left Hand	(R) Right Hand	(L) Left Hand	(R) Right Hand
Brake Compatibility	V-Brake / Mechanical Disc Brake		V-Brake / Mechanical Disc Brake		V-Brake / Mechanical Disc Brake	
Lever Length	2-Finger		2-Finger		2-Finger	
Lever Material	Forged Aluminum / Anodized Black		Aluminum / Painted Black		Aluminum / Alloy Silver	
Bracket Material	Aluminum / Painted Black		Aluminum / Painted Black		Aluminum / Painted Black	
Cable Adjuster	CNC Aluminum Anodized Black		CNC Aluminum Anodized Black		Aluminum / Alloy Silver	
Reach Adjuster	Steel / Ruspert		Steel / Ruspert		Steel / Ruspert	
Bracket Bolt	Dacromet Chromoly		Dacromet Chromoly		Dacromet Chromoly	
Clamp Screw	Stainless Steel		Dacromet Chromoly		Dacromet Chromoly	
Clamp Diameter	22.2mm		22.2mm		22.2mm	
Finish	(B) Black		(B) Black		(B) Black / (1) Alloy Silver Lever + Black Bracket	
Average Weight	100g	100g	105g	105g	105g	105g

Brake Calipers

Model No.	BCM51		BCM52		BCM31		BCM32	
Front / Rear	F (Front)	R (Rear)	F (Front)	R (Rear)	F (Front)	R (Rear)	F (Front)	R (Rear)
Type	V-Brake		V-Brake		V-Brake		V-Brake	
Lead Pipe Angle (deg.)	90	135	90	135	90	135	90	135
Reach	20~38mm		20~38mm		20~38mm		20~38mm	
Arch Size	103mm		110mm		103mm		110mm	
Sleeve & Bushing Axle	●		●		●		●	
Arm Material	Aluminum		Aluminum		Aluminum		Aluminum	
Fixing Bolt Length	(S) 16 / (L) 25mm		(S) 16 / (L) 25mm		(S) 16 / (L) 25mm		(S) 16 / (L) 25mm	
Fixing Bolt Material	Chromoly		Chromoly		Chromoly		Chromoly	
Pad Model No.	BSM60		BSM60		BSM30		BSM30	
Pad Type	Cartridge Type		Cartridge Type		Normal Pad		Normal Pad	
Power Modulator	○ (optional) BCMSP.M2F	○ (optional) BCMSP.M2R	○ (optional) BCMSP.M2F	○ (optional) BCMSP.M2R	○ (optional) BCMSP.M2F	○ (optional) BCMSP.M2R	○ (optional) BCMSP.M2F	○ (optional) BCMSP.M2R
Finish	(B) Black / (A) Alloy Silver		(B) Black / (A) Alloy Silver		(B) Black / (A) Alloy Silver		(B) Black / (A) Alloy Silver	
Average Weight	184g (Wheel)	184g (Wheel)	195g (Wheel)	195g (Wheel)	194g (Wheel)	194g (Wheel)	205g (Wheel)	205g (Wheel)

Trigger Shifters

Model No.	DLMZ30		DLMZ3N		DLMZ3I	
	RW		RW		RW	
Side and Speed	Right 12-Spd		Right 12-Spd		Right 12-Spd	
Gear Display	Podium Top		×		×	
I-spec II Compatible	×		×		●	
Dual Release Function	●		●		●	
Cable Adjuster	●		●		●	
Multiple Shifts (Max.)	4		4		4	
Clamp Screw	Stainless Steel		Stainless Steel		Stainless Steel	
Large Lever	Aluminum		Aluminum		Aluminum	
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type	Slick-Stainless		Slick-Stainless		Slick-Stainless	
Cable Length	2,100mm		2,100mm		2,100mm	
Casing Compatibility	SP		SP		SP	
Finish	Black		Black		Black	
Average Weight	139g		125g		123g	

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Model No.	DLMX30		DLMX3N		DLMX3I	
	RE	LL	RE	LL	RE	LL
Side and Speed	Right 11-Spd	Left 2/3-Spd	Right 11-Spd	Left 2/3-Spd	Right 11-Spd	Left 2/3-Spd
Gear Display	Podium Top		×		×	
I-spec II Compatible	×		×		●	
Dual Release Function	●		●		●	
Cable Adjuster	●		●		●	
2/3 Mode Converter	×	●	×	●	×	●
Multiple Shifts (Max.)	4	1	4	1	4	1
Clamp Screw	Stainless Steel		Stainless Steel		Stainless Steel	
Large Lever	Aluminum		Aluminum		Aluminum	
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type	Slick-Stainless		Slick-Stainless		Slick-Stainless	
Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm
Casing Compatibility	SP		SP		SP	
Finish	Black		Black		Black	
Average Weight	139g	140g	125g	126g	123g	124g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Trigger Shifters

Model No.	DLMS30		DLMS3N		DLMS3I		DLMS10	
	RT	LL	RT	LL	RT	LL	RT	LL
Side and Speed	Right 10-Spd	Left 2/3-Spd	Right 10-Spd	Left 2/3-Spd	Right 10-Spd	Left 2/3-Spd	Right 10-Spd	Left 2/3-Spd
Gear Display	Podium Top		×		×		Podium Top	
I-spec II Compatible	×		×		●		×	
Dual Release Function	●		●		●		●	
Cable Adjuster	●		●		●		●	
2/3 Mode Converter	×	●	×	●	×	●	×	●
Multiple Shifts (Max.)	4	1	4	1	4	1	4	1
Clamp Screw	Stainless Steel		Stainless Steel		Stainless Steel		SCM435 Chromoly	
Large Lever	Aluminum		Aluminum		Aluminum		Engineering Polymers	
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type	Slick-Stainless		Slick-Stainless		Slick-Stainless		Slick-Galvanized	
Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm
Casing Compatibility	SP		SP		SP		SP	
Finish	Black		Black		Black		Black	
Average Weight	139g	140g	125g	126g	123g	124g	143g	144g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Trigger Shifters

Model No.	DLM930		DLM900		DLM500		DLM400		
	R9	LL	R9	LL	R8	L3	R8	R7	L3
Side and Speed	Right 9-Spd	Left 2/3-Spd	Right 9-Spd	Left 2/3-Spd	Right 8-Spd	Left 3-Spd	Right 8-Spd	Right 7-Spd	Left 3-Spd
Gear Display	Podium Top		Podium Top		Podium Top		Podium Top		
I-spec II Compatible	×		×		×		×		
Dual Release Function	●		●		●		●		
Cable Adjuster	●		●		●		●		
2/3 Mode Converter	×	●	×	●	×		×		
Multiple Shifts (Max.)	6	1	6	1	5	1	5	5	1
Clamp Screw	Stainless Steel		SCM435 Chromoly		SCM435 Chromoly		SCM435 Chromoly		
Large Lever	Aluminum		Engineering Polymers		Aluminum		Engineering Polymers		
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers		
Cable Type	Slick-Stainless		Slick-Galvanized		Slick-Galvanized		Slick-Galvanized		
Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	2,100mm	1,700mm
Casing Compatibility	SP		SP		SP		SP	2SP & ↑	2SP & ↑
Finish	Black		Black		Black		Black		
Average Weight	139g	140g	143g	144g	140g	141g	143g	143g	144g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Model No.	DLM90		DLM33			
	R9	L3	R8	R7	R6	L3
Side and Speed	Right 9-Spd	Left 3-Spd	Right 8-Spd	Right 7-Spd	Right 6-Spd	Left 3-Spd
Gear Display	Podium Top		Podium Top			
I-spec II Compatible	×		×			
Dual Release Function	×		×			
Cable Adjuster	●		●			
2/3 Mode Converter	×		×			
Multiple Shifts (Max.)	6	1	6	5	4	1
Clamp Screw	SUS302 Stainless Steel		SCM435 Chromoly			
Large Lever	Engineering Polymers		Engineering Polymers			
Small Lever	Engineering Polymers		Engineering Polymers			
Cable Type	Slick-Galvanized		Galvanized			
Cable Length	2,050mm	1,600mm	2,050mm			1,600mm
Casing Compatibility	SP		SP	2SP & ↑	2SP & ↑	2SP & ↑
Finish	Black		Black			
Average Weight	158g	157g	158g	158g	158g	157g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Trigger Shifters

Model No.	DLMZ20		DLMZ2N		DLMZ2I	
	RW		RW		RW	
Side and Speed	Right 12-Spd		Right 12-Spd		Right 12-Spd	
Gear Display	Podium Top		×		×	
I-spec II Compatible	×		×		●	
Dual Release Function	●		●		●	
Cable Adjuster	●		●		●	
Multiple Shifts (Max.)	4		4		4	
Clamp Screw	Stainless Steel		Stainless Steel		Stainless Steel	
Large Lever	Aluminum		Aluminum		Aluminum	
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type	Slick-Stainless		Slick-Stainless		Slick-Stainless	
Cable Length	2,100mm		2,100mm		2,100mm	
Casing Compatibility	SP		SP		SP	
Finish	Black		Black		Black	
Average Weight	139g		125g		123g	

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

**Compatible with SRAM MTB system

Model No.	DLMX20		DLMX2N		DLMX2I	
	RE	L2	RE	L2	RE	L2
Side and Speed	Right 11-Spd	Left 2-Spd	Right 11-Spd	Left 2-Spd	Right 11-Spd	Left 2-Spd
Gear Display	Podium Top		×		×	
I-spec II Compatible	×		×		●	
Dual Release Function	●		●		●	
Cable Adjuster	●		●		●	
Multiple Shifts (Max.)	4	1	4	1	4	1
Clamp Screw	Stainless Steel		Stainless Steel		Stainless Steel	
Large Lever	Aluminum		Aluminum		Aluminum	
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type	Slick-Stainless		Slick-Stainless		Slick-Stainless	
Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm
Casing Compatibility	SP		SP		SP	
Finish	Black		Black		Black	
Average Weight	139g	140g	125g	126g	123g	124g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

**Compatible with SRAM MTB system

Model No.	DLMS20		DLMS2N		DLMS2I	
	RT	L2	RT	L2	RT	L2
Side and Speed	Right 10-Spd	Left 2-Spd	Right 10-Spd	Left 2-Spd	Right 10-Spd	Left 2-Spd
Gear Display	Podium Top		×		×	
I-spec II Compatible	×		×		●	
Dual Release Function	●		●		●	
Cable Adjuster	●		●		●	
Multiple Shifts (Max.)	5	1	5	1	5	1
Clamp Screw	Stainless Steel		Stainless Steel		Stainless Steel	
Large Lever	Aluminum		Aluminum		Aluminum	
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type	Slick-Stainless		Slick-Stainless		Slick-Stainless	
Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm
Casing Compatibility	SP		SP		SP	
Finish	Black		Black		Black	
Average Weight	139g	140g	125g	126g	123g	124g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

**Compatible with SRAM MTB system

Trigger Shifters

Model No.	DLM920		DLM520		DLM420		
	R9	L3	R8	L3	R8	R7	L3
Side and Speed	Right 9-Spd	Left 3-Spd	Right 8-Spd	Left 3-Spd	Right 8-Spd	Right 7-Spd	Left 3-Spd
Gear Display	Podium Top		Podium Top		Podium Top		
I-spec II Compatible	×		×		×		
Dual Release Function	●		●		●		
Cable Adjuster	●		●		●		
Multiple Shifts (Max.)	4	1	3	1	3	3	1
Clamp Screw	Stainless Steel		SCM435 Chromoly		SCM435 Chromoly		
Large Lever	Aluminum		Aluminum		Engineering Polymers		
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers		
Cable Type	Slick-Stainless		Slick-Galvanized		Slick-Galvanized		
Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	2,100mm	1,700mm
Casing Compatibility	SP		SP		SP	2SP & ↑	2SP & ↑
Finish	Black		Black		Black		
Average Weight	139g	140g	140g	141g	143g	143g	144g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

**Compatible with SRAM MTB system

ST Trigger Shifters

Model No.		STMX30		STMS30		STMS10	
		RE	LL	RT	LL	RT	LL
Shift Lever	Side and Speed	Right 11-Spd	Left 2/3-Spd	Right 10-Spd	Left 2/3-Spd	Right 10-Spd	Left 2/3-Spd
	Gear Display	Podium Top		Podium Top		Podium Top	
	Dual Release Function	●		●		●	
	Cable Adjuster	●		●		●	
	2/3 Mode Converter	×	●	×	●	×	●
	Multiple Shifts (Max.)	4	1	4	1	4	1
	Large Lever	Aluminum		Aluminum		Engineering Polymers	
	Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
	Cable Type	Slick-Stainless		Slick-Stainless		Slick-Galvanized	
	Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm
	Casing Compatibility	SP		SP		SP	
Brake Lever	Compatible Brake	V-Brake / Mechanical Disc		V-Brake / Mechanical Disc		V-Brake / Mechanical Disc	
	Lever Length	2-Finger		2-Finger		2-Finger	
	Lever Material	Forged Aluminum / Anodized Black		Forged Aluminum / Anodized Black		Aluminum / Painted Black	
	Bracket Material	Aluminum / Painted Black		Aluminum / Painted Black		Aluminum / Painted Black	
	Cable Adjuster	Aluminum / Anodized		Aluminum / Anodized		Aluminum / Anodized	
	Reach Adjuster	Steel / Ruspert		Steel / Ruspert		Steel / Ruspert	
	Bracket Bolt	Steel / Ruspert		Steel / Ruspert		Steel / Ruspert	
Clamp Screw	Stainless Steel		Stainless Steel		SCM435 Chromoly		
Finish	Black		Black		Black		
Average Weight	211g	212g	211g	212g	214g	215g	

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

ST Trigger Shifters

Model No.		STM930		STM900		STM500		STM400		
		R9	LL	R9	LL	R8	L3	R8	R7	L3
Shift Lever	Side and Speed	Right 9-Spd	Left 2/3-Spd	Right 9-Spd	Left 2/3-Spd	Right 8-Spd	Left 3-Spd	Right 8-Spd	Right 7-Spd	Left 3-Spd
	Gear Display	Podium Top		Podium Top		Podium Top		Podium Top		
	Dual Release Function		●		●		●		●	
	Cable Adjuster		●		●		●		●	
	2/3 Mode Converter	×	●	×	●		×		×	
	Multiple Shifts (Max.)	6	1	6	1	5	1	5	5	1
	Large Lever	Aluminum		Engineering Polymers		Aluminum		Engineering Polymers		
	Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers		
	Cable Type	Slick-Stainless		Slick-Galvanized		Slick-Galvanized		Slick-Galvanized		
	Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	2,100mm	1,700mm
	Casing Compatibility	SP		SP		SP		SP	2SP & ↑	2SP & ↑
Brake Lever	Compatible Brake	V-Brake / Mechanical Disc		V-Brake / Mechanical Disc		V-Brake / Mechanical Disc		V-Brake / Mechanical Disc		
	Lever Length	2-Finger		2-Finger		2-Finger		2-Finger		
	Lever Material	Forged Aluminum / Anodized		Aluminum / Painted Black		Aluminum / Painted Black		Aluminum / Natural Silver		
	Bracket Material	Aluminum / Painted Black		Aluminum / Painted Black		Aluminum / Painted Black		Aluminum / Painted Black		
	Cable Adjuster	Aluminum / Anodized		Aluminum / Anodized		Aluminum / Anodized		Aluminum / Natural Silver		
	Reach Adjuster	Steel / Ruspert		Steel / Ruspert		Steel / Ruspert		Steel / Ruspert		
	Bracket Bolt	Steel / Ruspert		Steel / Ruspert		Steel / Ruspert		Steel / Ruspert		
Clamp Screw	Stainless Steel		SCM435 Chromoly		SCM435 Chromoly		SCM435 Chromoly			
Finish	Black		Black		Black		(B) Black / (A) Alloy Silver + Black			
Average Weight	211g	212g	219g	220g	216g	217g	219g	219g	220g	

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

ST Trigger Shifters

Model No.		STMX20		STMS20	
		RE	L2	RT	L2
Shift Lever	Side and Speed	Right 11-Spd	Left 2-Spd	Right 10-Spd	Left 2-Spd
	Gear Display	Podium Top		Podium Top	
	Dual Release Function	●		●	
	Cable Adjuster	●		●	
	Multiple Shifts (Max.)	4	1	4	1
	Large Lever	Aluminum		Aluminum	
	Small Lever	Engineering Polymers		Engineering Polymers	
	Cable Type	Slick-Stainless		Slick-Stainless	
	Cable Length	2,100mm	1,700mm	2,100mm	1,700mm
	Casing Compatibility	SP		SP	
Brake Lever	Compatible Brake	V-Brake / Mechanical Disc		V-Brake / Mechanical Disc	
	Lever Length	2-Finger		2-Finger	
	Lever Material	Forged Aluminum / Anodized Black		Forged Aluminum / Anodized Black	
	Bracket Material	Aluminum / Painted Black		Aluminum / Painted Black	
	Cable Adjuster	Aluminum / Anodized		Aluminum / Anodized	
	Reach Adjuster	Steel / Ruspert		Steel / Ruspert	
	Bracket Bolt	Steel / Ruspert		Steel / Ruspert	
	Clamp Screw	Stainless Steel		Stainless Steel	
Finish	Black		Black		
Average Weight	211g	212g	211g	212g	

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

**Compatible with SRAM MTB system

ST Trigger Shifters

Model No.		STM920		STM520		STM420		
		R9	L3	R8	L3	R8	R7	L3
Shift Lever	Side and Speed	Right 9-Spd	Left 3-Spd	Right 8-Spd	Left 3-Spd	Right 8-Spd	Right 7-Spd	Left 3-Spd
	Gear Display	Podium Top		Podium Top		Podium Top		
	Dual Release Function	●		●		●		
	Cable Adjuster	●		●		●		
	Multiple Shifts (Max.)	4	1	3	1	3	3	1
	Large Lever	Aluminum		Aluminum		Engineering Polymers		
	Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers		
	Cable Type	Slick-Stainless		Slick-Galvanized		Slick-Galvanized		
	Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	2,100mm	1,700mm
	Casing Compatibility	SP		SP		SP	2SP & ↑	2SP & ↑
Brake Lever	Compatible Brake	V-Brake / Mechanical Disc		V-Brake / Mechanical Disc		V-Brake / Mechanical Disc		
	Lever Length	2-Finger		2-Finger		2-Finger		
	Lever Material	Forged Aluminum / Anodized		Aluminum / Painted Black		Aluminum / Natural Silver		
	Bracket Material	Aluminum / Painted Black		Aluminum / Painted Black		Aluminum / Painted Black		
	Cable Adjuster	Aluminum / Anodized		Aluminum / Anodized		Aluminum / Natural Silver		
	Reach Adjuster	Steel / Ruspert		Steel / Ruspert		Steel / Ruspert		
	Bracket Bolt	Steel / Ruspert		Steel / Ruspert		Steel / Ruspert		
	Clamp Screw	Stainless Steel		SCM435 Chromoly		SCM435 Chromoly		
Finish	Black		Black		(B) Black / (A) Alloy Silver + Black			
Average Weight	211g	212g	216g	217g	219g	219g	220g	

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

**Compatible with SRAM MTB system

Twist Shifters

Model No.	TSM37			
	R7	R6	L3	LF
Side and Speed	Right 7-Speed	Right 6-Speed	Left 3-Speed	Left Friction
Cyclops Display	●			
Cable Adjuster	●			
Clamp Type	C-Clamp			
Cable Type	Slick-Galvanized			
Cable Length	1,900mm		1,400mm	
Casing Compatibility	2SP & ↑	2SP & ↑	2SP & ↑	2SP & ↑
Handle Bar Diameter	22.2mm*			
Average Weight	89g	89g	86g	86g

* Tighten Torque of 15 ~ 25 kgf-cm

Twist Shifters

Model No.	TSM28 / TSM27				
	R7	R6	R5	L3	LF
Side and Speed	Right 7-Speed	Right 6-Speed	Right 5-Speed	Left 3-Speed	Left Friction
Cable Adjuster	●		●		
C-Clamp	×		×		
Cable Type	Slick-Galvanized			Slick-Galvanized	
Cable Length	1,900mm			1,400mm	
Casing Compatibility	2SP & ↑			2SP & ↑	2SP & ↑
Handle Bar Diameter	22.2mm*			22.2mm*	
Average Weight	90g	90g	90g	87g	87g

* Tighten Torque of 15 ~ 17 kgf-cm

Model No.	TSM21					
	R8	R7	R6	R5	L3	LF
Side and Speed	Right 8-Speed	Right 7-Speed	Right 6-Speed	Right 5-Speed	Left 3-Speed	Left Friction
Cable Adjuster	●			●		
C-Clamp	×			×		
Cable Type	Galvanized			Galvanized		
Cable Length	1,900mm			1,400mm		
Casing Compatibility	SP	2SP & ↑	2SP & ↑	2SP & ↑	2SP & ↑	2SP & ↑
Handle Bar Diameter	22.2mm*			22.2mm*		
Color Option	(G) Gray / (R) Red / (O) Orange / (2) Blue			(G) Gray / (R) Red / (O) Orange / (2) Blue		
Average Weight	90g	90g	90g	90g	87g	87g

* Tighten Torque of 15 ~ 17 kgf-cm

Model Number	TSM10	
	RF	LF
Side and Speed	Right Friction	Left Friction
Cable Adjuster	×	
C-Clamp	×	
Cable Type	Galvanized	
Cable Length	1,900mm	1,400mm
Casing Compatibility	2SP & ↑	2SP & ↑
Handle Bar Diameter	22.2mm*	
Average Weight	86g	86g

* Tighten Torque of 15 ~ 17 kgf-cm

Thumb Shifters

Model No.	SLM96				
	R9	R8	RF	L3	LF
Side and Speed	Right 9-Speed	Right 8-Speed	Right Friction	Left 3-Speed	Left Friction (3/2)
Lever Position Adjust	●	●	●	●	●
Lever Material	Aluminum / High-Polished			Aluminum / High-Polished	
Clamp Material	Aluminum			Aluminum	
Cable Adjuster	×			×	
Cable Type	Slick-Galvanized			Slick-Galvanized	
Cable Length	1,950mm			1,450mm	
Casing Compatibility	SP & ↑			SP & ↑	2SP & ↑
Handle Bar Diameter	22.2mm*			22.2mm*	
Average Weight	87g	87g	87g	85g	85g

* Tighten Torque of 60~ 80 kgf-cm

Model No.	SLM2T				SLM10	
	R7	R6	R5	LF	RF	LF
Side and Speed	Right 7-Speed	Right 6-Speed	Right 5-Speed	Left Friction (3/2)	Right Friction (7/6/5)	Left Friction (3/2)
Lever Material	Engineering Polymers			Engineering Polymers	Aluminum	Aluminum
Clamp Material	Steel			Steel	Steel	Steel
Cable Adjuster	×			●	×	
Cable Type	Galvanized			Galvanized	Galvanized	
Cable Length	1,900mm			1,450mm	1,950mm	1,450mm
Casing Compatibility	2SP & ↑			2SP & ↑	2SP & ↑	
Handle Bar Diameter	22.2mm*			22.2mm*	22.2mm*	
Average Weight	64.5g	64.5g	64.5g	65g	64.5g	61.5g

* Tighten Torque of 20~ 25 kgf-cm

Front Cranksets

Model No.	FCMX0X (S1)	FCMX08 (S1)	FCMX0W (S1)	FCMX0V (S1)	FCMX0U (S1)	FCMX0T (S1)
Compatibility	1 x	1 x	1 x	1 x	1 x	1 x
Function	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth
Crank Arm Spline Type	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)
Number of Teeth	40T	38T	36T	34T	32T	30T
Outer Chainring	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized
Middle Chainring	×	×	×	×	×	×
Inner Chainring	×	×	×	×	×	×
Removable Chainrings	●	●	●	●	●	●
Chainguard Option	×	×	×	×	×	×
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	175mm	175mm	175mm	175mm	175mm	175mm
Axle Material	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly
Axle Diameter	Ø 24mm	Ø 24mm	Ø 24mm	Ø 24mm	Ø 24mm	Ø 24mm
Axle Bolt	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter	96mm	96mm	96mm	96mm	96mm	96mm
Bottom Bracket (Included)	Model	BBM97 (S1)*	BBM97 (S1)*	BBM97 (S1)*	BBM97 (S1)*	BBM97 (S1)*
	Adapter	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized
	Shell Width	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm
	Chain Line	53mm	53mm	53mm	53mm	53mm
	Weight	127g	127g	127g	127g	127g
Total Average Weight	971g (175)	961g (175)	951g (175)	941g (175)	931g (175)	921g (175)

* Not compatible with Shimano MTB

Front Cranksets

Model No.	FCMS0X (S1)	FCMS08 (S1)	FCMS0W (S1)	FCMS0V (S1)	FCMS0U (S1)	FCMS0T (S1)
Compatibility	1 x	1 x	1 x	1 x	1 x	1 x
Function	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth
Crank Arm Spine Type	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)
Number of Teeth	40T	38T	36T	34T	32T	30T
Outer Chainring	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black
Middle Chainring	×	×	×	×	×	×
Inner Chainring	×	×	×	×	×	×
Removable Chainrings	●	●	●	●	●	●
Chainguard Option	×	×	×	×	×	×
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	175mm	175mm	175mm	175mm	175mm	175mm
Axle Material	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly
Axle Diameter	Ø 24mm	Ø 24mm	Ø 24mm	Ø 24mm	Ø 24mm	Ø 24mm
Axle Bolt	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter	96mm	96mm	96mm	96mm	96mm	96mm
Bottom Bracket (Included)	Model	BBM97 (S1)*	BBM97 (S1)*	BBM97 (S1)*	BBM97 (S1)*	BBM97 (S1)*
	Adapter	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized
	Shell Width	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm
	Chain Line	53mm	53mm	53mm	53mm	53mm
	Weight	127g	127g	127g	127g	127g
Total Average Weight	1171g (175)	1141g (175)	1111g (175)	1081g (175)	1051g (175)	1021g (175)

* Not compatible with Shimano MTB

Front Cranksets

Model No.	FCMS66 (S1)	FCMS58 (S1)	FCMS50 (S1)
Compatibility	10-Speed	10-Speed	10-Speed
Function	Super Fluid Drive™	Super Fluid Drive™	Super Fluid Drive™
Crank Arm Spline Type	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)
Number of Teeth	36-22T	48-36-26T	40-30-22T
Outer Chainring	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized
Middle Chainring	×	Steel / Painted	Steel / Painted
Inner Chainring	Steel / Painted	Steel / Painted	Steel / Painted
Removable Chainrings	●	●	●
Chainguard Option	●	●	●
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	175mm	175mm	175mm
Axle Material	Chromoly	Chromoly	Chromoly
Axle Diameter	Ø 24mm	Ø 24mm	Ø 24mm
Axle Bolt	7075 Aluminum	7075 Aluminum	7075 Aluminum
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter	104mm/64mm	104mm/64mm	96mm/64mm
Bottom Bracket (Included)	Model	BBM97 (S1)*	BBM97 (S1)*
	Adapter	Aluminum / Silver Anodized	Aluminum / Silver Anodized
	Shell Width	BSA 68 /73mm	BSA 68 /73mm
	Chain Line	48.8mm	50mm
	Weight	127g	127g
Total Average Weight	975g (175)	1231g (175)	1071g (175)

* Not compatible with Shimano MTB

Front Cranksets

Model No.	FCM966 (S1)	FCM958 (S1)	FCM954 (S1)	FCM950 (S1)
Compatibility	9-Speed	9-Speed	9-Speed	9-Speed
Function	Super Fluid Drive™	Super Fluid Drive™	Super Fluid Drive™	Super Fluid Drive™
Crank Arm Spine Type	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)
Number of Teeth	36-22T	48-36-26T	44-32-22T	40-30-22T
Outer Chainring	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized
Middle Chainring	×	Steel / Painted	Steel / Painted	Steel / Painted
Inner Chainring	Steel / Painted	Steel / Painted	Steel / Painted	Steel / Painted
Removable Chainrings	●	●	●	●
Chainguard Option	●	●	●	●
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	175mm	175mm	175mm	175mm
Axle Material	Chromoly	Chromoly	Chromoly	Chromoly
Axle Diameter	Ø 24mm	Ø 24mm	Ø 24mm	Ø 24mm
Axle Bolt	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter	104mm/64mm	104mm/64mm	104mm/64mm	96mm/64mm
Bottom Bracket (Included)	Model	BBM97 (S1)*	BBM97 (S1)*	BBM97 (S1)*
	Adapter	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized
	Shell Width	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm
	Chain Line	48.8mm	50mm	50mm
	Weight	127g	127g	127g
Total Average Weight	975g (175)	1231g (175)	1083g (175)	1071g (175)

* Not compatible with Shimano MTB

Front Cranksets

Model No.	FCM926	FCM918	FCM914	FCM910	FCM904
Compatibility	9-Speed	9-Speed	9-Speed	9-Speed	9-Speed
Function	Super Fluid Drive™	Super Fluid Drive™	Super Fluid Drive™	Super Fluid Drive™	Super Fluid Drive™
Crank Arm Spine Type	Square	Square	Square	Square	Square
Number of Teeth	36-22T	48-36-26T	44-32-22T	40-30-22T	44-32-22T
Outer Chainring	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized	Steel / Painted
Middle Chainring	×	Steel / Painted	Steel / Painted	Steel / Painted	Steel / Painted
Inner Chainring	Steel / Painted	Steel / Painted	Steel / Painted	Steel / Painted	Steel / Painted
Removable Chainrings	●	●	●	●	×
Chainguard Option	●	●	●	●	●
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	175mm	175mm	175mm	175mm	175 / 170mm
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	×
Bolt Circle Diameter	104mm/64mm	104mm/64mm	104mm/64mm	96mm/64mm	Riveted
Bottom Bracket (Optional)	Model	BBS15	BBS15	BBS15	BBS15
	Shell Width	(S) 68mm	(S) 68mm	(S) 68mm	(S) 68mm
	Spindle Length	(K) 119mm	(N) 122mm	(N) 122mm	(K) 119mm
	Chain Line	48.8mm	50mm	50mm	50mm
Total Average Weight	705g (175)	964g (175)	813g (175)	801g (175)	990g (175)

Front Cranksets

Model No.	FCM80X	FCM808	FCM80W	FCM80V	FCM80U	FCM80T
Compatibility	1 x	1 x	1 x	1 x	1 x	1 x
Function	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth
Crank Arm Spine Type	Square	Square	Square	Square	Square	Square
Number of Teeth	40T	38T	36T	34T	32T	30T
Outer Chainring	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black
Middle Chainring	×	×	×	×	×	×
Inner Chainring	×	×	×	×	×	×
Removable Chainrings	●	●	●	●	●	●
Chainguard Option	×	×	×	×	×	×
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	(L)175 / (O)170 / (1)165 / (2)160mm					
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter	96mm	96mm	96mm	96mm	96mm	96mm
Bottom Bracket (Optional)	Model	BBS15	BBS15	BBS15	BBS15	BBS15
	Shell Width	(S) 68mm	(S) 68mm	(S) 68mm	(S) 68mm	(S) 68mm
	Spindle	(K) 119mm	(K) 119mm	(K) 119mm	(K) 119mm	(K) 119mm
	Chain Line	50mm	50mm	50mm	50mm	50mm
Total Average Weight	810g (175)	780g (175)	750g (175)	720g (175)	690g (175)	660g (175)

Front Cranksets

Model No.	FCM40X	FCM408	FCM40W	FCM40V	FCM40U	FCM40T
Compatibility	1 x	1 x	1 x	1 x	1 x	1 x
Function	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth	Narrow-Wide Tooth
Crank Arm Spline Type	Square	Square	Square	Square	Square	Square
Number of Teeth	40T	38T	36T	34T	32T	30T
Outer Chainring	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black	Steel / ED Black
Middle Chainring	×	×	×	×	×	×
Inner Chainring	×	×	×	×	×	×
Removable Chainrings	×	×	×	×	×	×
Chainguard Option	×	×	×	×	●(DCG)	●(DCG)
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	(L)175 / (0)170 / (1)165 / (2)160 / (F)155mm / (3)152mm / (4)150mm / (5)145mm / (6)140mm					
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter	96mm	96mm	96mm	96mm	96mm	96mm
Bottom Bracket (Optional)	Model	BBS15	BBS15	BBS15	BBS15	BBS15
	Shell Width	(S) 68mm	(S) 68mm	(S) 68mm	(S) 68mm	(S) 68mm
	Spindle	(N) 122mm	(N) 122mm	(N) 122mm	(N) 122mm	(N) 122mm
	Chain Line	50mm	50mm	50mm	50mm	50mm
Total Average Weight	866g (175)	836g (175)	806g (175)	776g (175)	746g (175)	716g (175)

Model No.	FCM600	FCM500	FCM300
Compatibility	8 / 7-Speed	8 / 7-Speed	7 / 8-Speed
Function	Super Fluid Drive™	Super Fluid Drive™	Super Fluid Drive™
Crank Arm Spline Type	Square	Square	Square
Number of Teeth	42-32-22T	42-34-24T	48-38-28T
Outer Chainring	Steel / Painted	Steel / Painted	Steel / Painted
Middle Chainring	Steel / Painted	Steel / Painted	Steel / Painted
Inner Chainring	Steel / Painted	Steel / Painted	Steel / Painted
Removable Chainrings	×	×	×
Chainguard Option	(M) Ring Type / (2) Disk Cover / (3) Full Type	(M) Ring Type / (2) Disk Cover / (3) Full Type	(M) Full Type / (1) Ring Type / (2) Disk Cover / (3) Full Type
Crank Arms	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum Forged / Anodized
Crank Arm Length	175 / 170mm	175 / 170mm	175 / 170mm
Chainring Bolts & Nuts	×	×	×
Bolt Circle Diameter	Riveted	Riveted	Riveted
Bottom Bracket (Optional)	Model	BBS15	BBS15
	Shell Width	(S) 68mm	(S) 68mm
	Spindle Length	(P) 123mm	(U) 127mm
	Chain Line	50mm	50mm
Total Average Weight	938g (175)	974g (175)	1107g (175)

Front Derailleurs

Model No.	FDMS66	FDMS28	FDMS20	FDM966	FDM924	FDM920	FDM500	FDM300
Rear Compatibility	10-Speed	10-Speed	10-Speed	9-Speed	9-Speed	9-Speed	8 / 7-Speed	8 / 7-Speed
Chainring Compatibility	Double	Triple	Triple	Double	Triple	Triple	Triple	Triple
Action	Top Swing	Top Swing	Top Swing	Top Swing	Top Swing	Top Swing	Top Swing	Top Swing
Top Gear Teeth	34~38T	48T	40T	34~38T	44T / 48T	40T	42T	42T / 48T
Top-Low Max. Capacity	14T	22T	18T	14T	22T	18T	18T	20T
Top-Middle Min. Capacity	×	12T	10T	×	12T	10T	8T	10T
Clamp Diameter	(2) E-Type / (L) 34.9 / (M) 31.8* / (S) 28.6*mm			(2) E-Type / (L) 34.9 / (M) 31.8* / (S) 28.6*mm			(L) 34.9 / (M) 31.8* / (S) 28.6*mm	
Cable Routing	(D) Dual Pull			(D) Dual Pull			(D) Dual Pull	
Chain Stay Angle	66~69°			66~69°			66~69°	
Chain Guide	Matt Chrome Plated			Chrome Plated			Chrome Plated	
Base Bracket Material	Aluminum			Aluminum			Aluminum	
Clamp Material	Aluminum			Aluminum			Aluminum	
Clamp Bolt	Stainless Steel			Stainless Steel			SCM435 Chromoly	
Cable Fixing Bolt	Stainless Steel			Stainless Steel			SCM435 Chromoly	
Average Weight	136g (L)	149g (L)	145g (L)	136g (L)	149g (L)	145g (L)	146g (L)	143g (L)

* With multi clamp band inserts which convert 34.9mm to 31.8mm or 28.6mm

Model No.	FDM2A	FDM2S	FDM05	FDM06
Rear Compatibility	7 / 6-Speed	7 / 6-Speed	7 / 6 / 5-Speed	6 / 5-Speed
Chainring Compatibility	Triple	Triple	Triple Friction	Double Friction
Action	Down Swing	Down Swing	Down Swing	Down Swing
Top Gear Teeth	48T	42T	48T	48T
Top-Low Max. Capacity	20T	18T	20T	10T
Top-Middle Min. Capacity	10T	8T	10T	×
Clamp Diameter	(M) 31.8 / (S) 28.6mm*		(M) 31.8 / (S) 28.6mm	(S) 28.6mm
Cable Routing	(T) Top Pull / (B) Bottom Pull		(B) Bottom Pull	(B) Bottom Pull
Chain Stay Angle	66~69°		66~69°	66~69°
Average Weight	154g (M)	144g (M)	148g	142g

* Optional multi clamp band inserts which convert 31.8mm to 28.6mm

Rear Derailleurs

Model No.	RDMZ90 MD	RDMX70 MD	RDMS70 MD
Cage Type	(M) Medium	(M) Medium	(M) Medium
Mounting Type	(D) Direct	(D) Direct	(D) Direct
Speeds	12-Speed	11-Speed	11-Speed
Adjustable Chain Stabilizer	●	●	●
Max. Sprocket	1 x	50T	50T
	2 x	×	42T
	3 x	×	×
Min. Sprocket	10T	10T	10T
Rear Capacity	40T	40T	40T
Max. Front Difference	×	14T	14T
Total Capacity	46T	46T	46T
Outer Link	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum
Inner Link	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum
Bracket Body	Aluminum Forged / Anodized	Aluminum Forged / Anodized	Aluminum
Plate Body	Engineering Polymers	Engineering Polymers	Engineering Polymers
Outer Plate Cage	Carbon	Aluminum / Anodized	Aluminum / Anodized
Inner Plate Cage	Aluminum / Anodized	Aluminum / Anodized	Aluminum / Anodized
Guide Pulley	12T / 7075 Aluminum / Cartridge Bearing	12T / 7075 Aluminum / Cartridge Bearing	12T(Bushing)
Tension Pulley	14T / 7075 Aluminum / Cartridge Bearing	14T / 7075 Aluminum / Cartridge Bearing	14T(Bushing)
Bracket Bolt	7075 Aluminum / Anodized	7075 Aluminum / Anodized	Steel
Cable Adjuster	×	×	×
Pin Bushing (Outer Link)	●	●	●
Pin Bushing (Inner Link)	●	●	●
Average Weight	278g	283g	301g

Rear Derailleurs

Model No.	RDMX10 MD	RDMX10 MD	RDMS10 MD	RDMS10 MD	RDM97 LD	RDM91 LD
Cage Type	(L) Long	(M) Medium	(L) Long	(M) Medium	(L) Long	(L) Long
Mounting Type	(D) Direct	(D) Direct	(D) Direct	(D) Direct	(D) Direct	(D) Direct
Speeds	10-Speed	10-Speed	10-Speed	10-Speed	9-Speed	9-Speed
Adjustable Chain Stabilizer	●	●	●	●	×	×
Max. Sprocket	1 x	46T	46T	46T	46T	40T
	2 x	42T	42T	42T	42T	40T
	3 x	40T	×	40T	×	36T
Min. Sprocket	10T	10T	10T	10T	11T	11T
Rear Capacity	36T	36T	36T	36T	29T	29T
Max. Front Difference	18T	14T	18T	14T	22T	22T
Total Capacity	48T	46T	48T	46T	45T	45T
Outer Link	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Steel
Inner Link	Aluminum	Aluminum	Aluminum	Aluminum	Steel	Steel
Bracket Body	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Plate Body	Engineering Polymers	Engineering Polymers	Engineering Polymers	Engineering Polymers	Aluminum	Engineering Polymers
Outer Plate Cage	Aluminum / Anodized	Aluminum / Anodized	Steel	Steel	Steel	Steel
Inner Plate Cage	Aluminum / Anodized	Aluminum / Anodized	Steel	Steel	Steel	Steel
Guide Pulley	12T(Bushing)	12T(Bushing)	12T(Bushing)	12T(Bushing)	11T (Bushing)	11T (Bushing)
Tension Pulley	14T(Bushing)	14T(Bushing)	14T(Bushing)	14T(Bushing)	11T (Bushing)	11T (Bushing)
Bracket Bolt	Steel	Steel	Steel	Steel	Steel	Steel
Cable Adjuster	×	×	×	×	Composite	Composite
Pin Bushing (Outer Link)	●	●	●	●	●	×
Pin Bushing (Inner Link)	●	●	●	●	×	×
Average Weight	311g	301g	352g	342g	335g	342g

Rear Derailleurs

Model No.	RDM57 LD	RDM41 LD	RDM37 LD	RDM37 LB	RDM37 SD	RDM37 SB	RDM36 SD	RDM36 SB
Cage Type	(L) Long	(L) Long	(L) Long	(L) Long	(S) Short	(S) Short	(S) Short	(S) Short
Mounting Type	(D) Direct	(D) Direct	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket
Speeds	8 / 7-Speed	8 / 7-Speed	7-Speed		7-Speed		6-Speed	
Max. Sprocket	34T	34T	30T		30T		30T	
Min. Sprocket	11T	11T	13T		13T		13T	
Rear Capacity	23T	23T	17T		17T		16T	
Max. Front Difference	20T	20T	20T		20T		20T	
Total Capacity	43T	43T	37T		37T		36T	
Outer Link	Steel	Steel	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Inner Link	Steel	Steel	Steel		Steel		Steel	
Bracket Body	Engineering Polymers	Engineering Polymers	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Plate Body	Engineering Polymers	Engineering Polymers	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Outer Plate Cage	Steel	Steel	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Inner Plate Cage	Steel	Steel	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Guide Pulley	11T(bushing)	11T(bushing)	11T		11T		11T	
Tension Pulley	11T(bushing)	13T(bushing)	11T		11T		11T	
Bracket Bolt	Steel	Steel	Steel		Steel		Steel	
Cable Adjuster	Composite	Composite	Composite		Composite		Composite	
Pin Bushing (Outer Link)	×	×	×		×		×	
Pin Bushing (Inner Link)	×	×	×		×		×	
Average Weight	354g	376g	230g	270g	225g	265g	225g	265g

Model No.	RDM2T LD	RDM2T LB	RDM2T SD	RDM2T SB	RDM15 LD	RDM15 LB	RDM15 SD	RDM15 SB	RDM10 LD	RDM10 LB
Cage Type	(L) Long	(L) Long	(S) Short	(S) Short	(L) Long	(L) Long	(S) Short	(S) Short	(L) Long	(L) Long
Mounting Type	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket
Speeds	7 / 6-Speed		7 / 6-Speed		5-Speed		5-Speed		Friction	
Max. Sprocket	28T		28T		28T		28T		28T	
Min. Sprocket	13T		13T		14T		14T		13T	
Rear Capacity	15T		15T		14T		14T		15T	
Max. Front Difference	20T		12T		20T		12T		20T	
Total Capacity	35T		27T		34T		26T		35T	
Outer Link	Steel		Steel		Steel		Steel		Steel	
Inner Link	Steel		Steel		Steel		Steel		Steel	
Bracket Body	Steel		Steel		Steel		Steel		Steel	
Plate Body	Steel		Steel		Steel		Steel		Steel	
Outer Plate Cage	Steel		Steel		Steel		Steel		Steel	
Inner Plate Cage	Steel		Steel		Steel		Steel		Steel	
Guide Pulley	10T		10T		10T		10T		10T	
Tension Pulley	10T		10T		10T		10T		10T	
Cable Adjuster	Composite		Composite		Composite		Composite		Steel	
Average Weight	265g	290g	251g	276g	265g	290g	253g	278g	265g	290g

Cassettes

Model No.	CSMZ91 WT5*	CSMZ90 WA5
Speeds	12-Speed (Wide Ratio)	12-Speed (Wide Ratio)
Function	Fluid Drive Plus™	Fluid Drive Plus™
Number of Teeth	10-50T	11-50T
Gear Combination	10-12-14-16-18-21- -24-28-32-36-42-50	11-13-15-17-19-21- -24-28-32-36-42-50
Spider Material	Aluminum / Red Anodized	Aluminum / Red Anodized
Sprockets On Spider	7 Sprockets on 2 Spider Carriers	7 Sprockets on 2 Spider Carriers
Sprocket Material	1st~10th	Hi-Tensile Steel
	11th~12th	A7075 Aluminum / Anodized
Sprocket Finish	(O) Black Chrome / (X) Metallic Silver	(O) Black Chrome / (X) Metallic Silver
Light Weight Holes	●	●
Spacer Material	Aluminum / Red Anodized	Aluminum / Red Anodized
Lock Ring	Aluminum / Red Anodized	Aluminum / Red Anodized
Chain Compatibility	12 Speed	12 Speed
Average Weight	579g	586g

* Requires a special cassette body

Cassettes

Model No.	CSMX9 ETY*	CSMX80 EA5	CSMX80 EAZ	CSMX8 EA5	CSMX8 EAZ	CSMX8 EAY	CSMX8 EAX
Speeds	11-Speed (Wide Ratio)	11-Speed (Wide Ratio)		11-Speed (Wide Ratio)			
Function	Fluid Drive Plus™	Fluid Drive Plus™		Fluid Drive Plus™			
Number of Teeth	10-42T	11-50T	11-46T	11-50T	11-46T	11-42T	11-40T
Gear Combination	10-12-14-16-18- -21-24-28-32-36-42	11-13-15-18-21- -24-28-32-36-42-50	11-13-15-18-21- -24-28-32-36-40-46	11-13-15-18-21- -24-28-32-36-42-50	11-13-15-18-21- -24-28-32-36-40-46	11-13-15-17-19- -21-24-28-32-36-	11-13-15-17-19- -21-24-28-32-36-
Spider Material	Aluminum / Red Anodized	Aluminum / Red Anodized		Aluminum / Red Anodized			
Sprockets On Spider	6 Sprockets on 2 Spider Carriers	7 on 2	7 on 2	7 on 2	7 on 2	6 on 2	6 on 2
Sprocket Material	1st~9th	Hi-Tensile Steel		Hi-Tensile Steel			
	10th	Hi-Tensile Steel		Hi-Tensile Steel			
	11th	A7075 Aluminum / Anodized		A7075 Aluminum / Anodized			
Sprocket Finish	(O) Black Chrome / (X) Metallic Silver	(O) Black Chrome / (X) Metallic Silver		(O) Black Chrome / (X) Metallic Silver			
Light Weight Holes	●	●		●			
Spacer Material	Aluminum / Red Anodized	Aluminum / Red Anodized		Aluminum / Red Anodized			
Lock Ring	Aluminum / Red Anodized	Aluminum / Red Anodized		Aluminum / Red Anodized			
Chain Compatibility	11 Speed	11 Speed		11 Speed			
Average Weight	413g	512g	464g	560g	485g	419g	412g

* Requires a special cassette body

Model No.	CSMS8 EAZ	CSMS8 EAY	CSMS8 EAX	CSMS8 EAW	CSMS7 EAY	CSMS7 EAX
Speeds	11-Speed (Wide Ratio)				11-Speed (Wide Ratio)	
Function	Fluid Drive Plus™				Fluid Drive Plus™	
Number of Teeth	11-46T	11-42T	11-40T	11-36T	11-42T	11-40T
Gear Combination	11-13-15-18-21- -24-28-32-36-40-46	11-13-15-17-19- -21-24-28-32-36-42	11-13-15-17-19- -21-24-28-32-36-40	11-12-13-15-17- -19-21-24-28-32-36	11-13-15-17-19- -21-24-28-32-36-42	11-13-15-17-19- -21-24-28-32-36-40
Spider Material	Aluminum / Black Anodized				Steel / ED Black	
Sprockets On Spider	7 on 2	6 on 2	6 on 2	5 on 2	5 on 2	5 on 2
Sprocket Material	1st~10th	Hi-Tensile Steel				Hi-Tensile Steel
	11th	Hi-Tensile Steel				Hi-Tensile Steel
Sprocket Finish	(X) Metallic Silver / (E) ED Black				(X) Metallic Silver / (E) ED Black	
Light Weight Holes	●				●	
Spacer Material	Engineering Polymers				Engineering Polymers	
Lock Ring	Steel / ED Black				Steel / ED Black	
Chain Compatibility	11 Speed				11 Speed	
Average Weight	534g	465g	429g	360g	507g	471g

Cassettes

Model No.	CSMX3 TAZ	CSMX3 TAY	CSMX3 TAX	CSMS3 TAZ	CSMS3 TAY	CSMS3 TAX	CSMS2 TAZ	CSMS2 TAY	CSMS2 TAX	
Speeds	10-Speed (Wide Ratio)			10-Speed (Wide Ratio)			10-Speed (Wide Ratio)			
Function	Fluid Drive Plus™			Fluid Drive Plus™			Fluid Drive Plus™			
Number of Teeth	11-46T	11-42T	11-40T	11-46T	11-42T	11-40T	11-46T	11-42T	11-40T	
Gear Combination	11-13-15-18-21- -24-28-34-40-46	11-13-15-18-21- -24-28-32-36-42	11-13-15-18-21- -24-28-32-36-40	11-13-15-18-21- -24-28-34-40-46	11-13-15-18-21- -24-28-32-36-42	11-13-15-18-21- -24-28-32-36-40	11-13-15-18-21- -24-28-34-40-46	11-13-15-18-21- -24-28-32-36-42	11-13-15-18-21- -24-28-32-36-40	
Spider Material	Aluminum / Red Anodized			Aluminum / Black Anodized			Steel / ED Black			
Sprockets On Spider	6 Sprockets on 2 Spider Carriers			6 Sprockets on 2 Spider Carriers			5 Sprockets on 2 Spider Carriers			
Sprocket Material	1st~9th	Hi-Tensile Steel			Hi-Tensile Steel			Hi-Tensile Steel		
	10th	A7075 Aluminum / Anodized			Hi-Tensile Steel			Hi-Tensile Steel		
Sprocket Finish	(O) Black Chrome / (X) Metallic Silver			(X) Metallic Silver / (E) ED Black			(X) Metallic Silver / (E) ED Black			
Light Weight Holes	●			●			●			
Spacer Material	Aluminum / Red Anodized			Engineering Polymers			Engineering Polymers			
Lock Ring	Aluminum / Red Anodized			Steel / ED Black			Steel / ED Black			
Chain Compatibility	10 Speed			10 Speed			10 Speed			
Average Weight	436g	393g	385g	486g	448g	414g	538g	494g	458g	

Model No.	CSMX0 TAW	CSMS0 TAW	CSMS0 TAV	CSMS1 TAW	CSMS1 TAV
Speeds	10-Speed	10-Speed		10-Speed	
Function	Fluid Drive Plus™		Fluid Drive Plus™		Fluid Drive Plus™
Number of Teeth	11-36T	11-36T	11-34T	11-36T	11-34T
Gear Combination	11-13-15-17-19- -21-24-28-32-36	11-13-15-17-19- -21-24-28-32-36	11-12-13-15-17- -19-21-24-28-34	11-13-15-17-19- -21-24-28-32-36	11-12-13-15-17- 19-21-24-28-34
Spider Material	Aluminum / Red Anodized		Aluminum / Black Anodized		Steel / ED Black
Sprockets On Spider	5 Sprockets on 2 Spider Carriers		5 on 2	3 on 1	4 on 2
Sprocket Material	Hi-Tensile Steel		Hi-Tensile Steel		Hi-Tensile Steel
Sprocket Finish	(O) Black Chrome / (X) Metallic Silver		(X) Metallic Silver / (E) ED Black		(X) Metallic Silver / (E) ED Black
Light Weight Holes	●		●		●
Spacer Material	Aluminum / Red Anodized		Engineering Polymers		Engineering Polymers
Lock Ring	Aluminum / Red Anodized		Steel / ED Black		Steel / ED Black
Chain Compatibility	10 Speed		10 Speed		10 Speed
Average Weight	341g		348g	315g	390g

Model No.	CSD11X 7AP	CSD110 7AP	CSD10X 7AP	CSD100 7AP
Speeds	7-Speed (Downhill)		7-Speed (Downhill)	
Function	Fluid Drive Plus™		Fluid Drive Plus™	
Number of Teeth	11-24T		11-24T	
Gear Combination	11-13-15- 17-19-21-24		11-13-15- 17-19-21-24	
Spider Material	Aluminum / Blk Ano.	×	Aluminum / Blk Ano.	×
Sprockets On Spider	2 on 1	×	2 on 1	×
Sprocket Material	Hi-Tensile Steel		Hi-Tensile Steel	
Sprocket Finish	(O) Black Chrome / (X) Metallic Silver	(X) Metallic Silver / (E) ED Black	(O) Black Chrome / (X) Metallic Silver	(X) Metallic Silver / (E) ED Black
Sprocket Protector	Aluminum / Anodized	Engineering Polymers	Aluminum / Anodized	Engineering Polymers
Light Weight Holes	●		●	
Spacer Material	Aluminum / Blk Ano.	Engineering Polymers	Aluminum / Blk Ano.	Engineering Polymers
Lock Ring	Aluminum / Blk Ano.	Steel	Aluminum / Blk Ano.	Steel
Chain Compatibility	11 Speed		10 Speed	
Average Weight	224g	234g	224g	234g

Cassettes

Model No.	CSM990 9AX	CSM980 9AX	CSM98 9AW	CSM98 9BW
Speeds	9-Speed (Wide Ratio)		9-Speed	
Function	Fluid Drive Plus™		Fluid Drive Plus™	
Number of Teeth	11-40T	11-40T	11-36T	12-36T
Gear Combination	11-13-15-18- -21-24-28-34-40	11-13-15-18- -21-24-28-34-40	11-13-15-18- -21-24-28-32-36	12-14-16-18- -21-24-28-32-36
Spider Material	Aluminum / Blk Ano.	×	×	
Sprockets On Spider	3 on 1	×	×	
Sprocket Material	Hi-Tensile Steel		Hi-Tensile Steel	
Sprocket Finish	(E) ED Black		(N) Nickel / (E) ED Black	
Light Weight Holes	●		●	
Spacer Material	Engineering Polymers		Engineering Polymers	
Lock Ring	Aluminum / Blk Ano.	Steel / ED Black	Steel / ED Black	
Chain Compatibility	9 Speed	9 Speed	9 Speed	
Average Weight	425g	500g	436g	441g

Model No.	CSM96 9AV	CSM96 9AU	CSM96 9AS	CSM90 9AW	CSM90 9AV	CSM90 9AU
Speeds	9-Speed			9-Speed		
Function	Super Fluid Drive™			Super Fluid Drive™		
Number of Teeth	11-34T	11-32T	11-28T	11-36T	11-34T	11-32T
Gear Combination	11-12-14-16- 18-21-24-28-34	11-12-14-16- 18-21-24-28-32	11-12-13-14- -16-18-21-24-28	11-13-15-18- -21-24-28-32-36	11-12-14-16- 18-21-24-28-34	11-12-14-16- 18-21-24-28-32
Sprocket Material	Steel			Steel		
Sprocket Finish	(N) Nickel			(U) Zinc / (B) Black		
Light Weight Holes	●			●		
Spacer Material	Engineering Polymers			Engineering Polymers		
Lock Ring	Steel / ED Black			Steel / ED Black		
Chain Compatibility	9 Speed			9 Speed		
Average Weight	358g	346g	273g	436g	358g	346g

Cassettes

Model No.	CSM680 8AX	CSM66 8AV	CSM66 8AU	CSM66 8BV	CSM66 8BU	CSM55 8AV	CSM55 8AU	CSM400 8BU
Speeds	8-Spd (Wide Ratio)	8-Speed		8-Speed		8-Speed		8-Speed
Function	Super Fluid Drive™	Super Fluid Drive™		Super Fluid Drive™		Super Fluid Drive™		Fluid Drive™
Number of Teeth	11-40T	11-34T	11-32T	12-34T	12-32T	11-34T	11-32T	12-32T
Gear Combination	11-13-15-18- -22-28-34-40	11-13-15-18- -21-24-28-34	11-13-15-18- -21-24-28-32	12-14-16-18- -21-24-28-34	12-14-16-18- -21-24-28-32	11-13-15-18- -21-24-28-34	11-13-15-18- -21-24-28-32	12-14-16-18- -21-24-28-32
Sprocket Material	Steel	Steel		Steel		Steel		Steel
Sprocket Finish	(N) Nickel / (E) ED Black	(N) Nickel		(N) Nickel		(U) Zinc / (B) Black		(E) ED Black
Light Weight Holes	●	●		●		●		●
Spacer Material	Eng. Polymers	Engineering Polymers		Engineering Polymers		Engineering Polymers		Eng. Polymers
Lock Ring	Steel / ED Black	Steel / ED Black		Steel / ED Black		Steel / ED Black		Steel / ED Black
Chain Compatibility	8 Speed	8 Speed		8 Speed		8 Speed		8 Speed
Average Weight	456g	346g	334g	346g	334g	346g	334g	364g

Model No.	CSM63 7AS	CSM63 7BS	CSM40 7AV	CSM40 7AS	CSM40 7BV
Speeds	7-Speed		7-Speed		
Function	Super Fluid Drive™		Super Fluid Drive™		
Number of Teeth	11-28T	12-28T	11-34T	11-28T	12-34T
Gear Combination	11-13-15- -18-21-24-28	12-14-16- -18-21-24-28	11-13-15- -18-22-28-34	11-13-15- -18-21-24-28	12-14-16- -18-22-28-34
Sprocket Material	Steel		Steel		
Sprocket Finish	(N) Nickel		(U) Zinc / (B) Black		
Light Weight Holes	●		●		
Spacer Material	Engineering Polymers		Engineering Polymers		
Lock Ring	Steel / ED Black		Steel / ED Black		
Chain Compatibility	7 Speed		7 Speed		
Average Weight	248g	258g	310g	248g	311g

Freewheels [E-Bike]

Model No.	MFEZ1 TAW	MFEX9 9AU	MFE90 9CU	MFE61 8CV	MFE60 8CU	MFE60 8CS
Speeds	10-Speed	9-Speed	9-Speed	8-Speed	8-Speed	8-Speed
Lock Ring Type	●	●	●	●	●	●
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Number of Teeth	11-36T	11-32T	13-32T	13-34T	13-32T	13-28T
Gear Combination	11-13-15-17-19- -21-24-28-32-36	11-12-14-16- 18-21-24-28-32	13-14-15-16- 18-21-24-28-32	13-15-17-19- 21-24-28-34	13-15-17-19- 21-24-28-32	13-15-17-19- 21-23-25-28
Spider Material	Aluminum / Gold Anodized	Aluminum / Gold Anodized	×	×		
Sprockets On Spider	4 on 2	2 on 1	×	×		
Sprocket Finish	(C) Chrome Plated	(C) Chrome Plated	(C) Chrome Plated	(C) Chrome+EDB 34T	(C) Chrome Plated	(C) Chrome Plated
Sprocket Material	Hi-Tensile Steel	Hi-Tensile Steel	Steel	Steel		
Light Weight Holes	●	●	●	●		
Spacer Material	Aluminum / Gold Anodized	Aluminum / Gold Anodized	Engineering Polymers	Engineering Polymers		
Chain Compatibility	10 Speed	9 Speed	9 Speed	8 Speed	8 Speed	8 Speed
Average Weight	653g	595g	570g	605g	576g	574g

Freewheels

Model No.	MFM56 8CV	MFM4S 7CV	MFM300 7CV	MFM300 7DV	MFM30 7CS	MFM3S 7CS	MFM20 6DS
Speeds	8-Speed	7-Speed	7-Speed	7-Speed	7-Speed	7-Speed	6-Speed
Lock Ring Type	●	●	●	●	●	●	×
Function	Fluid Drive™	Fluid Drive Plus™	Fluid Drive™	Fluid Drive™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Number of Teeth	13-34T	13-34T	13-34T	14-34T	13-28T	13-28T	14-28T
Gear Combination	13-15-17-19-21-24-28-34	13-15-17-19-21-24-34	13-15-18-21-24-28-34	14-16-18-21-24-28-34	13-15-17-19-21-24-28	13-15-17-19-21-24-28	14-16-18-21-24-28
Sprocket Finish	(E) EDB (U) Zinc + EDB	(U) Zinc + EDB	(E) EDB (2) Brown+EDB	(E) EDB (2) Brown+EDB	(C) Chrome Plated	(U) Zinc Plated	(U) Zinc Plated
Sprocket Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Light Weight Holes	×	●	×	×	●	●	●
Spacer Material	Engineering Polymers						
Chain Compatibility	8 Speed	7 Speed	7 Speed	7 Speed	7 Speed	7 Speed	6 Speed
Average Weight	609g	504g	540	545g	460g	460g	433g

Model No.	MFM2A 7CS	MFM2A 7DS	MFM2A 6DS	MFM2A 5DS	MFM05 7DS	MFM05 6DS	MFM05 5DS
Speeds	7-Speed	7-Speed	6-Speed	5-Speed	7-Speed	6-Speed	5-Speed
Lock Ring Type	●	●	●	●	×		
Function	Fluid Drive™	Fluid Drive™	Fluid Drive™	Fluid Drive™	Friction		
Number of Teeth	13-28T	14-28T	14-28T	14-28T	14-28T	14-28T	14-28T
Gear Combination	13-15-18-20-22-24-28	14-16-18-20-22-24-28	14-16-18-21-24-28	14-16-20-24-28	14-16-18-20-22-24-28	14-16-18-20-24-28	14-16-20-24-28
Sprocket Finish	(1) Zinc	(1) Zinc (2) Brown+EDB	(1) Zinc (2) Brown+EDB	(1) Zinc (2) Brown+EDB	(B) Black		
Sprocket Material	Steel				Steel		
Spacer Material	Engineering Polymers				Engineering Polymers		
Chain Compatibility	7 Speed	7 Speed	6 Speed	5 Speed	7 Speed	6 Speed	5 Speed
Average Weight	479g	495g	458g	416g	480g	468g	432g

Hubs

Model No.	HBMX92	HBMX90	HBMX82	HBMX80
	RE (for <u>only</u> CSMX9 with 10T)		RE (for standard MTB cassettes)	
Cassette Carrier Material	7075 Aluminum		7075 Aluminum	
Cassette Carrier System	4 Pawls		4 Pawls	
Hub Shell Material	6061 Aluminum		6061 Aluminum	
Bearing	Cartridge (x4)		Cartridge (x4)	
D-Dimension	41mm		41mm	
Axle Diameter	12mm	10mm	12mm	10mm
Over Lock Dimension	142mm	135mm	142mm	135mm
Hub Axle Material	7075 Aluminum		7075 Aluminum	
Hub Axle Length	142mm	145mm	142mm	145mm
Spoke Holes	32H		32H	
Pitch Circle Diameter	58mm		58mm	
Flange Width	58mm		58mm	
Center to Flange	Right	22.5mm	22.5mm	
	Left	35.5mm	35.5mm	
QR Lever Material	×		×	
QR Nut Material	×		×	
QR Axle Material	×		×	
QR Axle Length	×		×	
Finish	Black Anodized		Black Anodized	
Average Weight	310g (w/o QR)		315g (w/o QR)	

Hubs

Model No.	HBM96		HBM63		HBM53		
	F	R9	F	R8	F	R8	
Cassette Carrier Material	---	SCM435	---	SCM435	---	SCM435	
Cassette Carrier System	---	3 Pawls	---	3 Pawls	---	3 Pawls	
Hub Shell Material	6061 Aluminum		6061 Aluminum		6061 Aluminum		
Bearing	Precision Ground Loose Ball		Precision Ground Loose Ball		Loose Ball	Loose Ball	
D-Dimension	---	41mm	---	41mm	---	41mm	
Axle Diameter	9mm	10mm	9mm	10mm	9mm	10mm	
Over Lock Dimension	100mm	135mm	100mm	135mm	100mm	135mm	
Hub Axle Material	SCM435		SCM435		SCM435		
Hub Axle Length	108mm	145mm	108mm	145mm	108mm	145mm	
Spoke Holes	32H		32H/36H		32H/36H		
Pitch Circle Diameter	58mm	58mm	40mm	45.5mm	38.5mm	45.5mm	
Flange Width	58.6mm	58mm	63.4mm	58mm	72mm	58mm	
Center to Flange	Right	34.3mm	21.1mm	31.7mm	21.1mm	36mm	21.5mm
	Left	24.3mm	36.9mm	31.7mm	36.9mm	36mm	36.5mm
QR Lever Material	6061 Aluminum		6061 Aluminum		6061 Aluminum		
QR Axle Material	SCM435		SCM435		SCM435		
QR Axle Length	112mm	149mm	112mm	149mm	112mm	149mm	
Finish	Black Anodized		Black Anodized		Natural Alloy		
Average Weight	304g (w/QR)	492g (w/QR)	250.5g (w/QR)	457g (w/QR)	220g (w/QR)	440g (w/QR)	

Model No.	HBM45 (Q)			HBM45 (A)		
	F	R7	R8	F	R7	
Cassette / Freewheel	---	Freewheel		---	Freewheel	
Hub Shell Material	6061 Aluminum			6061 Aluminum		
Bearing	Loose Ball			Loose Ball		
D-Dimension	---	38mm	41mm	---	38mm	
Axle Diameter	9mm	10mm		3/8"		
Over Lock Dimension	100mm	135mm		100mm	135mm	
Hub Axle Material	S45C			S45C		
Hub Axle Length	108mm	145mm		140mm	175mm	
Spoke Holes	36H			36H		
Pitch Circle Diameter	38mm	45mm		38mm	45mm	
Flange Width	72mm	57mm		72mm	57mm	
Center to Flange	Right	36mm	23.5mm	23.5mm	36mm	23.5mm
	Left	36mm	33.5mm	33.5mm	36mm	33.5mm
QR Lever Material	6061 Aluminum			N/A (Nuttet)		
QR Axle Material	SCM435					
QR Axle Length	112mm	149mm				
Finish	Natural Alloy			Natural Alloy		
Average Weight	208g (w/QR)	320g (w/QR)	326g (w/QR)	212g	317g	

Cassettes [Small Wheel Bike]

Model No.	CSSX0 ENW	CSSX0 ENU	CSSX6 ETU	CSSX6 ETS	CSSS0 TNU	CSSS0 TNS	CSS90 TNS
Speeds	11-Speed		11-Speed		10-Speed		9-Speed
Function	Fluid Drive Plus™		Fluid Drive Plus™		Fluid Drive Plus™		Fluid Drive Plus™
Number of Teeth	9-36T	9-32T	10-32T	10-28T	9-32T	9-28T	9-28T
Gear Combination	9-10-11-13-15-18-21-24-28-32-36	9-10-11-13-15-17-19-21-24-28-32	10-11-12-13-15-17-19-21-24-28-32	10-11-12-13-14-15-17-19-21-24-28	9-10-11-13-15-18-21-24-28-32	9-10-11-13-15-17-19-21-24-28	9-10-11-13-15-18-21-24-28
Spider Material	Aluminum / Black Anodized		Aluminum / Red Anodized		Aluminum / Black Anodized		×
Sprockets On Spider	5 on 2	3 on 1	3 Sprockets on 1 Spider Carrier		3 Sprockets on 1 Spider Carriers		×
Sprocket Material	Hi-Tensile Steel		Hi-Tensile Steel		Hi-Tensile Steel		Steel
Sprocket Finish	(X) Metallic Silver		(X) Metallic Silver		(X) Metallic Silver		(N) Nickel
Light Weight Holes	●		●		●		●
Spacer Material	Aluminum / Black Anodized		Aluminum / Red Anodized		Aluminum / Black Anodized		Engineering Polymers
Lock Ring	Steel		Aluminum / Red Anodized		Steel		Steel
Chain Compatibility	11 Speed		11 Speed		10 Speed		9 Speed
Compatible Hub	HBSX0.RE*		HBSX6.RE*		HBSX0.RT*		HBSX0.R9*
Average Weight	345g	313g	311g	286g	296g	252g	271g

* Requires a special cassette body

Hubs [Small Wheel Bike]

Model No.	HBSX6	HBSX0		
	RE (11-Spd)	RE (11-Spd)	RT (10-Spd)	R9 (9-Spd)
Compatible CS Type	CSSX6 (10T)	CSSX0 (9T)	CSSS0 (9T)	CSS90 (9T)
Cassette Carrier Material	7075 Aluminum			
Cassette Carrier System	3 Pawls			
Hub Shell Material	6061 Aluminum			
Bearing	Cartridge (x4)			
D-Dimension	42.5mm	42.5mm	41mm	41mm
Axle Diameter	10mm			
Over Lock Dimension	135mm			
Hub Axle Material	7075 Aluminum			
Hub Axle Length	145mm			
Spoke Holes	32H			
Pitch Circle Diameter	47.5mm			
Flange Width	51mm			
Center to Flange	Right	17mm		
	Left	34mm		
Quick Release	Without			
Finish	Black Anodized			
Average Weight	292g (w/o QR)	307g (w/o QR)	309g (w/o QR)	312g (w/o QR)

STR Shifters

Model No.		STRZ		STRX		STRS1	
		RT(10)	L2	RT(10)	L2	RT(10)	L2
Speed	Rear	10-Speed	×	10-Speed	×	10-Speed	×
	Front	×	2-Speed	×	2-Speed	×	2-Speed
Max.Single-Stroke Shifts		3 (rear)	1 (front)	3 (rear)	1 (front)	3 (rear)	1 (front)
Brake Lever		Carbon Reinforced Forged Aluminum		Aluminum Forged / High-Polished Anodized		Aluminum Forged / High-Polished Anodized	
Shift Lever	Large Lever	Forged Aluminum		Forged Aluminum		Rubber Cushioned	
	Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type		Slick-Stainless + Teflon® Coating*		Slick-Stainless + Teflon® Coating*		Slick-Stainless + Teflon® Coating*	
Cable Length		2,100mm	1,650mm	2,100mm	1,650mm	2,100mm	1,650mm
Casing Compatibility		SP		SP		SP	
Bracket		Engineering Polymers		Engineering Polymers		Engineering Polymers	
Handle Bar Diameter		23.8~24.2mm		23.8~24.2mm		23.8~24.2mm	
Average Weight		383g (Pair)		387g (Pair)		418g (Pair)	

* Teflon® is a registered trademark and brand name owned by DuPont.

Model No.		STR91			STR81		
		R9	L2	L3	R8	L2	L3
Speed	Rear	9-Speed	×	×	8-Speed	×	×
	Front	×	2-Speed	3-Speed	×	2-Speed	3-Speed
Max.Single-Stroke Shifts		3 (rear)	1 (front)	1 (front)	3 (rear)	1 (front)	1 (front)
Brake Lever		Aluminum Forged / High-Polished Anodized			Aluminum Forged / High-Polished Black Anodized		
Shift Lever	Large Lever	Rubber Cushioned			Rubber Cushioned		
	Small Lever	Engineering Polymers			Engineering Polymers		
Cable Type		Slick-Stainless			Slick-Stainless		
Cable Length		2,100mm	1,650mm	1,650mm	2,100mm	1,650mm	1,650mm
Casing Compatibility		SP			SP		
Bracket		Engineering Polymers			Engineering Polymers		
Handle Bar Diameter		23.8~24.2mm			23.8~24.2mm		
Average Weight		418g (Pair)			418g (Pair)		

Trigger Shifters

Model No.	DLRX30		DLRX3N		DLRX3I	
	RE	L2	RE	L2	RE	L2
Side and Speed	Right 11-Spd	Left 2-Spd	Right 11-Spd	Left 2-Spd	Right 11-Spd	Left 2-Spd
Gear Display	Podium Top		×		×	
I-spec II Compatible	×		×		●	
Dual Release Function	●		●		●	
Cable Adjuster	●		●		●	
Multiple Shifts (Max.)	5	1	5	1	5	1
Clamp Screw	Stainless Steel		Stainless Steel		Stainless Steel	
Large Lever	Aluminum		Aluminum		Aluminum	
Small Lever	Engineering Polymers		Engineering Polymers		Engineering Polymers	
Cable Type	Slick-Stainless		Slick-Stainless		Slick-Stainless	
Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	2,100mm	1,700mm
Casing Compatibility	SP		SP		SP	
Finish	Black		Black		Black	
Average Weight	139g	140g	125g	126g	123g	124g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Model No.	DLRS30			DLRS3N			DLRS3I		
	RT	L3	L2	RT	L3	L2	RT	L3	L2
Side and Speed	Right 10-Spd	Left 3-Spd	Left 2-Spd	Right 10-Spd	Left 3-Spd	Left 2-Spd	Right 10-Spd	Left 3-Spd	Left 2-Spd
Gear Display	Podium Top			×			×		
I-spec II Compatible	×			×			●		
Dual Release Function	●			●			●		
Cable Adjuster	●			●			●		
Multiple Shifts (Max.)	6	1	1	6	1	1	6	1	1
Clamp Screw	Stainless Steel			Stainless Steel			Stainless Steel		
Large Lever	Aluminum			Aluminum			Aluminum		
Small Lever	Engineering Polymers			Engineering Polymers			Engineering Polymers		
Cable Type	Slick-Stainless			Slick-Stainless			Slick-Stainless		
Cable Length	2,100mm	1,700mm	1,700mm	2,100mm	1,700mm	1,700mm	2,100mm	1,700mm	1,700mm
Casing Compatibility	SP			SP			SP		
Finish	Black			Black			Black		
Average Weight	139g	140g	140g	123g	126g	126g	125g	126	126g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Trigger Shifters

Model No.	DLR930			DLR800		
	R9	L3	L2	R8	L3	L2
Side and Speed	Right 9-Spd	Left 3-Spd	Left 2-Spd	Right 8-Spd	Left 3-Spd	Left 2-Spd
Gear Display	Podium Top			Podium Top		
Dual Release Function	●			●		
Cable Adjuster	●			●		
Multiple Shifts (Max.)	6	1	1	5	1	1
Clamp Screw	Stainless Steel			SCM435 Chromoly		
Large Lever	Aluminum			Engineering Polymers		
Small Lever	Engineering Polymers			Engineering Polymers		
Cable Type	Slick-Stainless			Slick-Galvanized		
Cable Length	2,100mm	1,700mm	1,700mm	2,100mm	1,700mm	1,700mm
Casing Compatibility	SP			SP		
Finish	Black			Black		
Average Weight	139g	140g	140g	139g	140g	140g

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

ST Trigger Shifters

Model No.		STFX30		STFS30			STF930			STF800		
		RE	L2	RE	L3	L2	R9	L3	L2	R8	L3	L2
Shift Lever	Side and Speed	Right 11-Spd	Left 2-Spd	Right 10-Spd	Left 3-Spd	Left 2-Spd	Right 9-Spd	Left 3-Spd	Left 2-Spd	Right 8-Spd	Left 3-Spd	Left 2-Spd
	Gear Display	Podium Top		Podium Top			Podium Top			Podium Top		
	Dual Release Function	●		●			●			●		
	Cable Adjuster	●		●			●			●		
	Multiple Shifts (Max.)	5	1	6	1	1	6	1	1	5	1	1
	Large Lever	Aluminum		Aluminum			Aluminum			Engineering Polymers		
	Small Lever	Engineering Polymers		Engineering Polymers			Engineering Polymers			Engineering Polymers		
	Cable Type	Slick-Stainless		Slick-Stainless			Slick-Stainless			Slick-Galvanized		
	Cable Length	2,100mm	1,700mm	2,100mm	1,700mm	1,700mm	2,100mm	1,700mm	1,700mm	2,100mm	1,700mm	1,700mm
	Casing Compatibility	SP		SP			SP			SP		
Brake Lever	Compatible Brake	V-Brake / Mechanical Disc		V-Brake / Mechanical Disc			V-Brake / Mechanical Disc			V-Brake / Mechanical Disc		
	Lever Length	2-Finger		2-Finger			2-Finger			2-Finger		
	Bracket Material	Aluminum / Painted Black		Aluminum / Painted Black			Aluminum / Painted Black			Aluminum / Painted Black		
	Lever Material	Aluminum Forged / Anodized		Aluminum Forged / Anodized			Aluminum Forged / Anodized			Aluminum / Painted Black		
	Cable Adjuster	Aluminum / Anodized		Aluminum / Anodized			Aluminum / Anodized			Aluminum / Anodized		
	Clamp Screw	Stainless Steel		Stainless Steel			Stainless Steel			SCM435 Chromoly		
	Reach Adjuster	Steel / Ruspert		Steel / Ruspert			Steel / Ruspert			Steel / Ruspert		
Finish	Black		Black			Black			Black			
Average Weight	211g	212g	211g	212g	212g	211g	212g	212g	216g	217g	217g	

* Handlebar diameter 22.2 ±0.2 mm / Tighten torque 60 ~ 80 kgf-cm

Thumb Shifters

Model No.		SLR96		SLR91		SLR80		
		R9	LF	R9	LF	R8	LF	8F
Speed	Rear	9-Speed	×	9-Speed	×	8-Speed	×	8-Speed
	Front	×	Friction (3 / 2)	×	Friction (3 / 2)	×	Friction (3 / 2)	Friction (3 / 2)
Mounting		(B) Bar End		(B) Brazed On Type 28.6mm / (C) Brazed On Type 44mm / (F) Brazed On Type 50mm		(B) Brazed On Type 28.6mm / (C) Brazed On Type 44mm / (F) Brazed On Type 50mm		(H) 22.2mm Clamp / (G) Handlebar Stem 25.4mm Clamp / (D) Down Tube 28.6mm Clamp
Shift Lever		Aluminum / High-Polished		Aluminum / High-Polished		Aluminum / High-Polished		Aluminum / High-Polished
Cable Type		Slick-Galvanized		Slick-Galvanized		Slick-Galvanized		Slick-Galvanized
Cable Length		2,400mm	1,900mm	1,950mm	1,450mm	1,950mm	1,450mm	R:1,950mm / L:1,450mm
Casing Compatibility		SP	SP	SP	2SP & ↑	SP	2SP & ↑	R: SP / L: 2SP & ↑
Average Weight		105g	105g	50g	50g	50g	50g	(D) 107g / (G) (H) 122g

Model No.		SLR30				
		R7	R6	LF	7F	6F
Speed	Rear	7-Speed	6-Speed	×	7-Speed	6-Speed
	Front	×		Friction (3 / 2)	Friction (3 / 2)	
Mounting		(B) Brazed On Type 28.6mm / (C) Brazed On Type 44mm			(D) Down Tube 28.6mm Clamp / (G) Handlebar Stem 25.4mm Clamp / (H) 22.2mm Clamp	
Shift Lever		Aluminum			Aluminum	
Cable Type		Slick-Galvanized			Slick-Galvanized	
Cable Length		1,950mm		1,450mm	R:1,950mm / L:1,450mm	
Casing Compatibility		SP	2SP & ↑	2SP & ↑	R: SP / L: 2SP & ↑	2SP & ↑
Average Weight		50g	50g	50g	(D) 107g / (G) (H) 122g	

Model No.		SLR03	
		FF	RF
Speed	Rear	Friction (8 / 7 / 6)	
	Front	Friction (3 / 2)	×
Mounting		(D) Down Tube 28.6mm Clamp / (H) Handlebar Stem 22.2mm Clamp	
Shift Lever		Aluminum	
Cable Type		Galvanized	
Cable Length		R:1,950mm / L:1,450mm	
Casing Compatibility		2SP & ↑	
Average Weight		(D) 78g / (H) 70g	(D) 45g / (H) 37g

Front Cranksets

Model No.	FCRX7 (D1)	FCRX6 (D1)	FCRX3 (D1)	FCRX1 (D1)	FCRS6 (S1)	FCRS1 (S1)	
Compatibility	10-Speed				10-Speed		
Function	Super Fluid Drive™				Super Fluid Drive™		
Crank Arm Spline Type	Integrated ISIS External BB (D1)				Integrated ISIS External BB (S1)		
Number of Teeth	50-36T	50-34T	52-39T	53-39T	50-34T	53-39T	
Outer Chainring	7075 Aluminum / Black Anodized / CNC				Aluminum / Anodized / CNC		
Inner Chainring	7075 Aluminum / Black Anodized / CNC				Aluminum / Anodized		
Removable Chainrings	●				●		
Crank Arms	6061 Aluminum Forged / High-Polished Anodized				6061 Aluminum Forged / Hi-Polished Anodized		
Crank Arm Length	(M) 172.5mm				(M) 172.5mm		
Axle Material	Chromoly				Chromoly		
Axle Diameter	Ø 24mm				Ø 24mm		
Axle Bolt	7075 Aluminum				7075 Aluminum		
Chainring Bolts & Nuts	7075 Aluminum / Silver Anodized				7075 Aluminum / Silver Anodized		
Bolt Circle Diameter	110mm		130mm		110mm	130mm	
Bottom Bracket (Included)	Model	BBRX (D1)*				BBRS (S1)*	
	Adapter	Aluminum / Silver Anodized				Aluminum / Silver Anodized	
	Shell Width	BSA 68mm				BSA 68mm	
	Chain Line	43.5mm				43.5mm	
	Weight	125g				125g	
Crank(R) Weight	566g	559g	579g	571g	559g	564g	
Crank(L) Weight	260g	260g	260g	260g	260g	260g	
Total Average Weight	951g	944g	964g	956g	944g	949g	

* Not compatible with Shimano Road

Front Cranksets

Model No.	FCR9F	FCR9A	FCR96	FCR91	
Compatibility	9-Speed		9-Speed		
Function	Super Fluid Drive™		Super Fluid Drive™		
Crank Arm Spline Type	Square Taper		Square Taper		
Number of Teeth	50-34T	53-39T	50-34T	53-39T	
Outer Chainring	Aluminum / Anodized / CNC		Steel		
Inner Chainring	Aluminum / Anodized		Steel		
Removable Chainrings	●		●		
Crank Arms	6061 Aluminum Forged / High-Polished Anodized		6061 Aluminum Forged / High-Polished Anodized		
Crank Arm Length	(M) 172.5 / (O) 170mm		(M) 172.5 / (O) 170mm		
Chainring Bolts & Nuts	SCM435 Chromoly		SCM435 Chromoly		
Bolt Circle Diameter	110mm	130mm	110mm	130mm	
Bottom Bracket (Optional)	Model	BBS18	BBS18	BBS15	BBS15
	Shell Width	68mm (S)	68mm (S)	68mm (S)	68mm (S)
	Spindle Length	103mm (A)	111mm (F)	103mm (A)	111mm (F)
	Chain Line	43.5mm	43.5mm	43.5mm	43.5mm
Average Weight	600g	697g	831g	889g	

Model No.	FCR87	FCR86	FCR83	FCR81	FCR33	FCR31
Chain Compatibility	8-Speed		8-Speed		7/6-Speed	
Function	Super Fluid Drive™		Super Fluid Drive™		Friction	
Crank Arm Spline Type	Square Taper		Square Taper		Square Taper	
Number of Teeth	52-42-30T	50-34T	52-42T	53-39T	52-42T	53-39T
Outer Chainring	Steel		Steel		Steel	
Inner Chainring	Steel		Steel		Steel	
Removable Chainrings	●		●		●	
Crank Arms	6061 Aluminum Forged / High-Polished Anodized		6061 Aluminum Forged / High-Polished Anodized		6061 Aluminum Forged / High-Polished	
Crank Arm Length	170mm		170mm		170mm	
Chainring Bolts & Nuts	SCM435 Chromoly		SCM435 Chromoly		SCM435 Chromoly	
Bolt Circle Diameter	130 / 74mm	110mm	130mm		130mm	
Bottom Bracket (Optional)	Model	BBS15	BBS15	BBS15	BBS15	BBS15
	Shell Width	68mm (S)	68mm (S)	68mm (S)	68mm (S)	68mm (S)
	Spindle Length	111mm (F)	103mm (A)	107mm (B)	107mm (B)	107mm (B)
	Chain Line	45mm	43.5mm	43.5mm	43.5mm	43.5mm
Average Weight	1,090g	831g	899g	906g	894g	901g

Front Derailleurs

Model No.	FDRZ	FDRX	FDRS	FDR99	FDR90	FDR87	FDR80
Rear Compatibility	10-Speed	10-Speed	10-Speed	9-Speed	9-Speed	8-Speed	8-Speed
Chainring Compatibility	Double	Double	Double	Triple	Double	Triple	Double
Top Gear Teeth	56~50 T	56~50 T	56~50 T	50T	56~50T	52T	56~50T
Capacity	16T	16T	16T	20T	16T	22T	16T
Mounting	Brazed on	Brazed on	Band / (B) Brazed on	Band / (B) Brazed on	Band / (B) Brazed on	Band / (B) Brazed on	Band / (B) Brazed on
Band Diameter	×	×	(L) 34.9 / (M) 31.8mm*	(L) 34.9 / (M) 31.8mm*	(L) 34.9 / (M) 31.8mm*	(M)31.8 / (S) 28.6mm*	(M)31.8 / (S) 28.6mm*
Cable Routing	(B) Bottom Pull	(B) Bottom Pull	(B) Bottom Pull	(B) Bottom Pull	(B) Bottom Pull	(B) Bottom Pull	(B) Bottom Pull
Band & Brazed on	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged
Outer Link	Aluminum Forged	Aluminum Forged / CNC	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged
Inner Link	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged	Aluminum Forged
Chain Guide	Carbon Reinforced Steel	Steel / Chrome Plated	Steel / Chrome Plated	Steel / Chrome Plated	Steel / Chrome Plated	Steel / Chrome Plated	Steel / Chrome Plated
Applicable Chainline	43.5mm	43.5mm	43.5mm	45mm	43.5mm	45mm	43.5mm
Chain Stay Angle	61~66°	61~66°	61~66°	63~66°	61~66°	63~66°	61~66°
Average Weight	102g	99g	111g / 99g (B)	114g / 99g (B)	111g / 99g (B)	115g / 100g (B)	114g / 99g (B)

* With multi clamp band inserts

Model No.	FDR31
Rear Compatibility	7 / 6 / 5-Speed
Chainring Compatibility	Double Friction
Top Gear Teeth	53 T
Capacity	14 T
Mounting	Band
Band Diameter	(M) 31.8 / (S)28.6mm
Cable Routing	(B) Bottom Pull
Band & Brazed on	Steel
Outer Link	Steel
Inner Link	Steel
Chain Guide	Steel
Applicable Chainline	45mm
Chain Stay Angle	63~66°
Average Weight	150g

Rear Derailleurs

Model No.	RDRZ2 SD	RDRX2 SD	RDRS2 SD	RDR91 SD	RDR91 LD	RDR81 SD	RDR81 LD	RDR37 SD
Cage Type	(S) Short	(S) Short	(S) Short	(S) Short	(L) Long	(S) Short	(L) Long	(S) Short
Mounting Type	(D) Direct	(D) Direct	(D) Direct	(D) Direct	(D) Direct	(D) Direct	(D) Direct	(D) Direct
Speeds	10 / 9-Speed	10 / 9-Speed	10 / 9-Speed	9-Speed		8-Speed	8-Speed	7 & 6-Speed
Max. Sprocket	28T	28T	28T	28T	28T	28T	28T	28T
Min. Sprocket	11T	11T	11T	11T	11T	11T	11T	13T
Rear Capacity	17T	17T	17T	17T	17T	17T	17T	15T
Max. Front Difference	16T	16T	16T	16T	22T	16T	22T	14T
Total Capacity	33T	33T	33T	33T	39T	33T	39T	31T
Outer Link	Carbon Reinforced Cold Forged Aluminum	Cold Forged Aluminum High-Polished Anodized	Aluminum High-Polished	Aluminum High-Polished		Aluminum		Steel
Inner Link	Cold Forged Aluminum High-Polished Anodized	Cold Forged Aluminum High-Polished Anodized	Steel	Steel		Steel		Steel
Bracket Body	Cold Forged Aluminum High-Polished Anodized	Cold Forged Aluminum High-Polished Anodized	Cold Forged Aluminum High-Polished Anodized	Aluminum		Aluminum		Aluminum
Plate Body	Cold Forged Aluminum High-Polished Anodized	Cold Forged Aluminum High-Polished Anodized	Cold Forged Aluminum High-Polished Anodized	Composite		Composite		Composite
Outer Plate Cage	Carbon	Aluminum Anodized CNC	Aluminum Anodized	Steel		Steel		Steel
Inner Plate Cage	Aluminum	Aluminum	Aluminum	Steel		Steel		Steel
Guide Pulley	11T / 7075 / Ceramic Sealed Cart. Bearing	11T / 7075 / Sealed Cart. Bearing	11T / Sealed Cart. Bearing	11T		11T		11T
Tension Pulley	11T / 7075 / Ceramic Sealed Cart. Bearing	11T / 7075 / Sealed Cart. Bearing	11T / Sealed Cart. Bearing	11T		11T		11T
Bracket Bolt	7075 Aluminum Black Anodized	7075 Aluminum Black Anodized	7075 Aluminum Anodized	Steel		Steel		Steel
Cable Adjuster	Carbon	Composite	Composite	Composite		Composite		Composite
Pin Bushings (Outer Link)	●	●	×	×		×		×
Pin Bushings (Inner Link)	●	●	×	×		×		×
Average Weight	202g	211g	232g	257g	279g	257g	279g	282g

Cassettes

Model No.	CSRX8 EAX	CSRX8 EAY
Speeds	11-Speed (Wide Ratio)	
Function	Fluid Drive Plus™	
Number of Teeth	11-40T	11-42T
Gear Combination	11-13-15-17-19- -21-24-28-32-36-40	11-13-15-17-19- -21-24-28-32-36-42
Spider Material	Aluminum / Red Anodized	
Sprockets On Spider	6 Sprockets on 2 Spider Carriers	
Sprocket Material	1st~10th	Hi-Tensile Steel
	11th	A7075 Aluminum / Anodized
Sprocket Finish	(O) Black Chrome / (X) Metallic Silver	
Light Weight Holes	●	
Spacer Material	Aluminum / Red Anodized	
Lock Ring	Aluminum / Red Anodized	
Chain Compatibility	11 Speed	
Average Weight	392g	404g

* For 11 Speed Road Hubs

Model No.	CSRZ1 EAS	CSRZ1 EAU	CSRX1 EAS	CSRX1 EAU	CSRX1 EAV	CSRX1 EAW	CSRS3 EAU
Speeds	11-Speed		11-Speed				11-Speed
Function	Super Fluid Drive™		Super Fluid Drive™				Fluid Drive Plus™
Number of Teeth	11-28T	11-32T	11-28T	11-32T	11-34T	11-36T	11-32T
Gear Combination	11-12-13-14-15- -17-19-21-23-25-28	11-12-13-14-15- -17-19-21-24-28-32	11-12-13-14-15- -17-19-21-23-25-28	11-12-13-14-15- -17-19-21-24-28-32	11-12-13-14-15- -17-19-21-24-28-34	11-12-13-15-17- -19-21-24-28-32-36	11-12-13-14-15- -17-19-21-24-28-32
Spider Material	Aluminum / Red Anodized		Aluminum / Red Anodized				Steel / ED Black
Sprockets On Spider	4 on 2	3 on 1	4 on 2	3 on 1	3 on 1	5 on 2	3 on 1
Sprocket Material	Hi-Tensile Steel		Hi-Tensile Steel				Hi-Tensile Steel
Sprocket Finish	(T) Titanium-Nitride		(O) Black Chrome / (X) Metallic Silver				(X) Metallic Silver / (E) ED Black
Light Weight Holes	●		●				●
Spacer Material	Aluminum / Red Anodized		Aluminum / Red Anodized				Eng. Polymers
Lock Ring	6061 Aluminum / Red Anodized		6061 Aluminum / Red Anodized				Steel / ED Black
Chain Compatibility	11 Speed		11 Speed				11 Speed
Average Weight	278g	290g	278g	290g	304g	360g	332g

Cassettes

Model No.	CSRX0 TAQ	CSRX0 TAS	CSRX0 TAU	CSRX0 TAV	CSRX0 TBS
Speeds	10-Speed				
Function	Super Fluid Drive™				
Number of Teeth	11-25T	11-28T	11-32T	11-34T	12-28T
Gear Combination	11-12-13-14-15- -17-19-21-23-25	11-12-13-14-15- -17-19-21-24-28	11-12-13-15-17- -19-21-24-28-32	11-12-13-15-17- -19-21-24-28-34	12-13-14-15-17- -19-21-23-25-28
Spider Material	Aluminum / Red Anodized				
Sprockets On Spider	3 on 2	3 on 1	3 on 1	3 on 1	4 on 2
Sprocket Material	Hi-Tensile Steel				
Sprocket Finish	(O) Black Chrome / (X) Metallic Silver				
Light Weight Holes	●				
Spacer Material	Aluminum / Red Anodized				
Lock Ring	Aluminum / Red Anodized				
Chain Compatibility	10 Speed				
Average Weight	236g	245g	304g	320g	290g

Model No.	CSRS0 TAQ	CSRS0 TAS	CSRS0 TAU	CSMS0 TAV	CSRS1 TAS	CSRS1 TAU	CSMS1 TAV
Speeds	10-Speed				10-Speed		
Function	Super Fluid Drive™				Super Fluid Drive™		
Number of Teeth	11-25T	11-28T	11-32T	11-34T	11-28T	11-32T	11-34T
Gear Combination	11-12-13-14-15- -17-19-21-23-25	11-12-13-14-15- -17-19-21-24-28	11-12-13-15-17- -19-21-24-28-32	11-12-13-15-17- -19-21-24-28-34	11-12-13-14-15- -17-19-21-24-28	11-12-13-15-17- -19-21-24-28-32	11-12-13-15-17- -19-21-24-28-34
Spider Material	Aluminum / Black Anodized				Steel / ED Black		
Sprockets On Spider	3 on 2	3 on 1	3 on 1	3 on 1	2 on 1	3 on 1	3 on 1
Sprocket Material	Hi-Tensile Steel				Hi-Tensile Steel		
Sprocket Finish	(X) Metallic Silver				(X) Metallic Silver		
Light Weight Holes	●				●		
Spacer Material	Engineering Polymers				Engineering Polymers		
Lock Ring	Steel / ED Black				Steel / ED Black		
Chain Compatibility	10 Speed				10 Speed		
Average Weight	242g	250g	309g	325g	267g	322g	338g

Cassettes

Model No.	CSR91 9AQ	CSR91 9AS	CSR91 9BQ	CSM96 9AS	CSM96 9AU	CSM96 9AV
Speeds	9-Speed			9-Speed		
Function	Super Fluid Drive™			Super Fluid Drive™		
Number of Teeth	11-25T	11-28T	12-25T	11-28T	11-32T	11-34T
Gear Combination	11-12-13-15- -17-19-21-23-25	11-12-13-14- -16-18-21-24-28	12-13-14-15- -17-19-21-23-25	11-12-13-14- -16-18-21-24-28	11-12-14-16- -18-21-24-28-32	11-12-14-16- -18-21-24-28-34
Sprocket Material	Steel			Steel		
Sprocket Finish	(N) Nickel			(N) Nickel		
Light Weight Holes	●			●		
Spacer Material	Engineering Polymers			Engineering Polymers		
Lock Ring	Aluminum / Black Anodized			Steel / ED Black		
Chain Compatibility	9 Speed			9 Speed		
Average Weight	284g	264g	293g	273g	346g	358g

Model No.	CSR86 8AO	CSR86 8AS	CSR86 8BQ	CSM66 8AU	CSM66 8AV	CSR63 7AP	CSR63 7BP
Speeds	8-Speed					7-Speed	
Function	Super Fluid Drive™					Super Fluid Drive™	
Number of Teeth	11-23T	11-28T	12-25T	11-32T	11-34T	11-24T	12-24T
Gear Combination	11-12-13-15- -17-19-21-23	11-12-14-16- -18-21-24-28	12-13-15-17- -19-21-23-25	11-13-15-18- -21-24-28-32	11-13-15-18- -21-24-28-34	11-12-14- -16-18-21-24	12-13-14- -16-18-21-24
Sprocket Material	Steel					Steel	
Sprocket Finish	(N) Nickel					(N) Nickel	
Light Weight Holes	●					●	
Spacer Material	Engineering Polymers					Engineering Polymers	
Lock Ring	Steel / ED Black					Steel / ED Black	
Chain Compatibility	8 Speed					7 Speed	
Average Weight	240g	265g	285g	334g	346g	190g	208g

Freewheels

Model No.	MFR30 7CQ	MFR2A 6DP
Speeds	7-Speed	6-Speed
Function	Fluid Drive™	Fluid Drive™
Lockring Type	●	●
Number of Teeth	13-25T	14-24T
Gear Combination	13-15-17-19-21-23-25	14-16-18-20-22-24
Sprocket Finish	(C) Chrome	(1) Zinc+EDB
Sprocket Material	Steel	Steel
Spacer Material	Engineering Polymers	Engineering Polymers
Chain Compatibility	7 Speed	7 Speed
Average Weight	440g	393g

Model No.	MFM2A 7CS	MFM2A 7DS	MFM2A 6DS	MFM2A 5DS
Speeds	7-Speed	7-Speed	6-Speed	5-Speed
Lock Ring Type	●	●	●	●
Function	Fluid Drive™	Fluid Drive™	Fluid Drive™	Fluid Drive™
Number of Teeth	13-28T	14-28T	14-28T	14-28T
Gear Combination	13-15-18-20-22-24-28	14-16-18-20-22-24-28	14-16-18-21-24-28	14-16-20-24-28
Sprocket Finish	(1) Zinc	(1) Zinc (2) Brown+EDB	(1) Zinc (2) Brown+EDB	(1) Zinc (2) Brown+EDB
Sprocket Material	Steel			
Spacer Material	Engineering Polymers			
Chain Compatibility	7 Speed	7 Speed	6 Speed	5 Speed
Average Weight	479g	495g	458g	416g

Brake Levers

Model No.	BLR31	BLR03	BLR02
Return Spring	●	×	×
Bar Diameter	22.2~23.8mm	22.2~23.8mm	22.2~23.8mm
Lever Material	Forged Aluminum	Forged Aluminum	Forged Aluminum
Bracket Material	Nylon Composite	Forged Aluminum	Forged Aluminum
Cover Material	Rubber	×	×
Finish	Anodized	Anodized	Anodized
Average Weight	248g (Pair)	270g (Pair)	164g (Pair)

Brake Calipers

Model No.	BCRZ3	BCRZ2	BCRX3	BCRX2
Type	Dual-Pivot Device	Dual-Pivot Device	Dual-Pivot Device	Dual-Pivot Device
Reach	39~49mm	39~49mm	39~49mm	39~49mm
Quick Release	● (Index)	● (Index)	● (Index)	● (Index)
Convex Washers	●	●	●	●
Spring Adjustment	●	●	●	●
Arm Material	6061 Aluminum CNC		6061 Aluminum CNC	
Adjuster Material	6061 Aluminum CNC		6061 Aluminum CNC	
QR Material	6061 Aluminum CNC		6061 Aluminum CNC	
Mounting Bolt	Titanium		Chromoly	
Pivot Bolt	Titanium		Chromoly	
Other Bolts	Titanium		Chromoly	
Misc Screws	Stainless Steel		Stainless Steel	
Pad	SwissStop® Yellow King™	SwissStop® GHPII™	SwissStop® Yellow King™	SwissStop® GHPII™
Pad Type	Adjustable Angle Cartridge		Adjustable Angle Cartridge	
Rim Compatibility	Carbon Rim	Aluminum Rim	Carbon Rim	Aluminum Rim
Finish	Anodized		Anodized	
Average Weight	141g (Wheel)	141g (Wheel)	163g (Wheel)	163g (Wheel)

Model No.	BCRS	BCR91	BCR81
Type	Dual-Pivot Device	Dual-Pivot Device	Dual-Pivot Device
Reach	39~49mm	39~49mm	39~49mm
Quick Release	● (Index)	● (Index)	● (Index)
Convex Washers	●	×	×
Spring Adjustment	●	●	●
Arm Material	Forged Aluminum	Aluminum	Aluminum
Adjuster Material	Aluminum	Aluminum	Aluminum
QR Material	Aluminum	Aluminum	Aluminum
Mounting Bolt	Chromoly	Chromoly	Chromoly
Pivot Bolt	Chromoly	Chromoly	Chromoly
Other Bolts	Chromoly	Chromoly	Chromoly
Pad	BSRS0	BSR90	BSR80
Pad Type	Adj. Angle Cartridge	Cartridge Type	Normal Pad Type
Rim Compatibility	Aluminum Rim	Aluminum Rim	Aluminum Rim
Finish	High-Polish Anodized	ED Black	ED Black
Average Weight	184g (Wheel)	175g (Wheel)	190g (Wheel)

Bottom Brackets

Model No.	BBI40	BBI30	BBI20	BBI10
Type	ISIS	ISIS	ISIS	ISIS
Material	Axle	SCM435 (Hollow)	SCM435 (Hollow)	SCM435 (Hollow)
	Cups	Aluminum w/Nylok	Aluminum w/Nylok	Steel
	Sleeve	Aluminum	Engineering Polymers	Aluminum (Cylindrical)
	Stopper	Steel	Alloy	SCM415
Bearing	Sealed Cartridge (x4)	Sealed Cartridge (x2)	Sealed Cartridge (x2)	Sealed Cartridge (x2)
Cup Thread	(B) BSA: BC1.37x24T	(B) BSA: BC1.37x24T	(B) BSA: BC1.37x24T	(B) BSA: BC1.37x24T
Shell Width	(S) 68 / (L) 73mm	(S) 68 / (L) 73mm	(S) 68 / (L) 73mm	(S) 68 / (L) 73mm
Spindle Length	(C) 108* / (G)113 / (J) 118mm / (P) 123mm	(C) 108* / (G)113 / (J) 118mm / (P) 123mm	(C) 108* / (G)113 / (J) 118mm / (P) 123mm	(C) 108* / (G)113 / (J) 118mm / (P) 123mm
Axle Thread	M12 x P1.0	M15 x P1.0	M15 x P1.0	M15 x P1.0
Axle Bolt	Optional: BAI40, BAI42	Optional: BAI30 / BAI20 / BAI10	Optional: BAI30 / BAI20 / BAI10	Optional: BAI30 / BAI20 / BAI10
Finish	(B) Black	(B) Black w/ Silver Alloy Cup	(S) Silver Alloy	(B) Black
Average Weight	366g (68/L113mm)	154g (68/L113mm)	236g (68/L113mm)	228g (68/L113mm)

* Only shell width 68mm

** Italian-Cup with All RH Thread

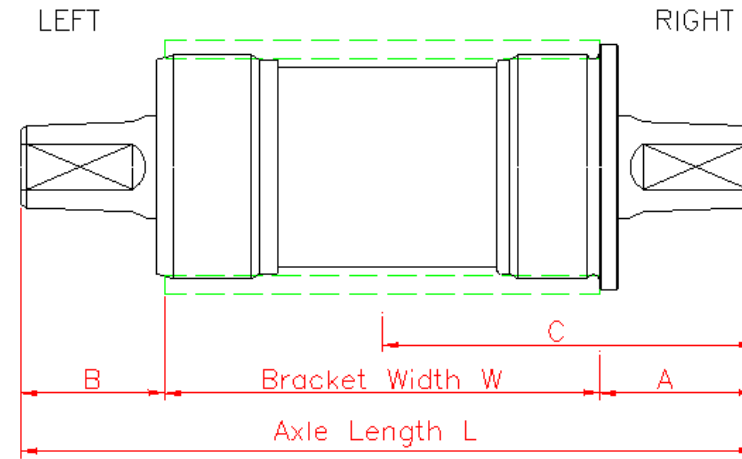
Model No.	BBS18 / BBS19	BBS15 / BBS16	BBS08 / BBS07	BBS05	BBT08	
Type	Square Taper	Square Taper	Square Taper	Square Taper	Cottered	
Material	Axle	Steel	Steel	Steel	Steel	
	Cups	Aluminum	Steel	Engineering Polymers	Steel (with Waterproof Seal)	
	Sleeve	Aluminum (BBS18 Cylindrical) / (BBS19 Tapered Center)	Steel (BBS15 Cylindrical) / (BBS16 Tapered Center)	BBS08 Steel (Cylindrical) BBS07 without Sleeve	Engineering Polymers	Steel (Cylindrical)
	Stopper	Engineering Polymers	Engineering Polymers	Engineering Polymers	×	Engineering Polymers
Bearing	Sealed Cartridge (x2)	Sealed Cartridge (x2)	Sealed Cartridge (x2)	Ball Cage	Seal Cartridge (x2)	
Cup Thread / Cup Diameter	(B) BSA: BC1.37x24T / (M) M36x24T**	(B) BSA:BC1.37x24T / (M) M36x24T**	(B) BSA: BC1.37x24T / (5) 35mm / (8) 38mm / (4) 40mm	(B) BSA: BC1.37x24T / (M) M36x24T**	(B) BSA: BC1.37x24T / (5) 35mm / (8) 38mm / (4) 40mm	
Shell Width	(S) 68 / (M) 70 / (L) 73mm	(S) 68 / (M) 70 / (L) 73mm	(S) 68mm	(S) 68 / (M) 70mm	(S) 68mm	
Spindle Length	(A) 103* / (B) 107 / (F) 111 / (G) 113 / (5) 115 / (H) 116 / (J) 118 / (K) 119 / (N) 122 / (P) 123 / (Q)124 / (U) 127 / (9)129 / (X) 131mm	(A) 103* / (B) 107 / (F) 111/ (G) 113 / (5) 115 / (H) 116 / (J) 118 / (K) 119 / (N) 122 / (P) 123 / (Q)124 / (U) 127 / (9)129 / (X) 131mm	(G) 113 / (5) 115 / (H) 116 / (J) 118 / (K) 119 / (N) 122 / (U) 127 / (X) 131mm	(I) 117.5 / (Q) 124mm	(6) 136mm	
Axle Thread	M8 x P1.0	M8 x P1.0	M8 x P1.0	M8 x P1.0	×	
Axle Bolt	Standard: BAS05 / Optional: BAS15	Standard: BAS05 / Optional: BAS15	Standard: BAS05 / Optional: BAS15	Standard: BAS05 / Optional: BAS15	×	
Finish	(S) Silver / (B) Black	(B) Black w/ Gray Cups	(B) Black	(B) Black	(B) Black	
Average Weight	260g (68/L113mm)	338g (68/L113mm)	280g (BBS08 68/L113mm) 229g (BBS07 68/L113mm)	360g (68/L120mm)	280g (68/L136mm)	

* Only shell width 68mm.

** Italian-Cup with All RH Thread.

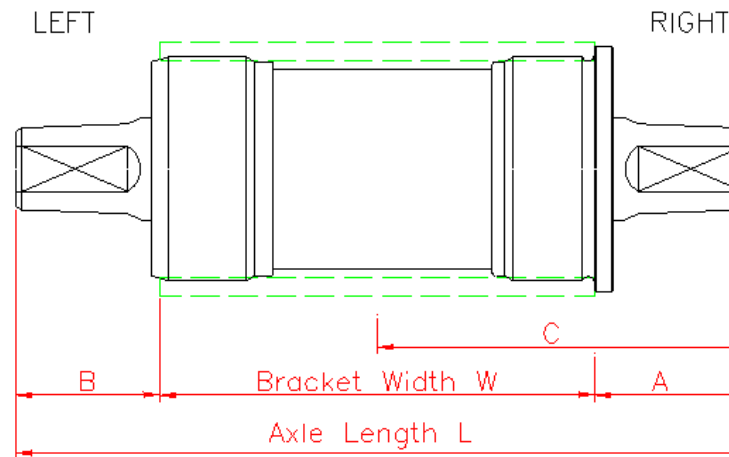
BBS18 / BBS19, BBS15 / BBS16, BBS08 / BBS07 Dimensions:

Model Number	W Bracket Width	L Axle Length	B (mm)	A (mm)	C (mm)
SA	(S) 68	(A) 103	17	18	52
SB	(S) 68	(B) 107	18.5	20.5	54.5
SF	(S) 68	(F) 111	22.5	20.5	54.5
SG	(S) 68	(G) 113	22	23	57
S5	(S) 68	(5) 115	23.5	23.5	57.5
SH	(S) 68	(H) 116	23	25	59
SJ	(S) 68	(J) 118	25	25	59
SK	(S) 68	(K) 119	25	26	60
SN	(S) 68	(N) 122	26	28	62
SP	(S) 68	(P) 123	26	29	63.5
SQ	(S) 68	(Q) 124	27	29	63
SU	(S) 68	(U) 127	28.5	30.5	64.5
S9	(S) 68	(9) 129	28.5	32.5	66.5
SX	(S) 68	(X) 131	29.3	33.7	67.7



BBS18 / BBS19, BBS15 / BBS16, BBS08 / BBS07 Dimensions:

Model Number	W Bracket Width	L Axle Length	B (mm)	A (mm)	C (mm)
LB	(L) 73	(B) 107	16.0	18	54.5
LF	(L) 73	(F) 111	20	18	54.5
LG	(L) 73	(G) 113	20	20	57
L5	(L) 73	(5) 115	21	21	57.5
LH	(L) 73	(H) 116	20.5	22.5	59
LJ	(L) 73	(J) 118	22.5	22.5	59
LK	(L) 73	(K) 119	22.5	23.5	60
LN	(L) 73	(N) 122	23.5	25.5	62
LP	(L) 73	(P) 123	23	27	63.5
LQ	(L) 73	(Q) 124	24.5	26.5	63
LU	(L) 73	(U) 127	26	28	64.5
L9	(L) 73	(9) 129	26	30	66.5



Bottom Brackets

Model No.	BBMZ (D1)	BBMZ (D0)**	BBMX (D1)	BBMX (D0)**
Type	Integrated BB for FCMZ (D1)	Integrated BB for FCMZ (D0)	Integrated BB for FCMX (D1)	Integrated BB for FCMX (D0)
Shimano Compatible	×	● (MTB)	×	● (MTB)
Material	Cups	Aluminum	Aluminum	Aluminum
	Sleeve	Clear Composite	Black Composite	Black Composite
	Spacers	Composite	Composite	Composite
Bearing	Oversized Sealed Cartridge (x2)	Sealed Cartridge (x2)	Oversized Sealed Cartridge (x2)	Sealed Cartridge (x2)
Cup Thread	BC 1.37 x 24T	BC 1.37 x 24T	BC 1.37 x 24T	BC 1.37 x 24T
Shell Width	68* / 73mm	68* / 73mm	68* / 73mm	68* / 73mm
Finish	(G) Gold Anodized	(G) Gold Anodized	(S) Silver Anodized	(S) Silver Anodized
Average Weight	127g	93g	127g	93g

* With spacers (Right: 2x / Left: 1x)

** Compatible with Shimano MTB

Model No.	BBM97 (S1)	BBM97 (S0)**
Type	Integrated BB for FCM99/97 (S1)	Integrated BB for FCM99/98/97 (S0)
Shimano Compatible	×	● (MTB)
Material	Cups	Aluminum
	Sleeve	Clear Composite
	Spacers	Composite
Bearing	Oversized Sealed Cartridge (x2)	Sealed Cartridge (x2)
Cup Thread	BC 1.37 x 24T	BC 1.37 x 24T
Shell Width	68* / 73mm	68* / 73mm
Finish	(S) Silver Anodized	(S) Silver Anodized
Average Weight	127g	93g

* With spacers (Right: 2x / Left: 1x)

** Compatible with Shimano MTB

Bottom Brackets

Model No.	BBRZ (D0)	BBRX (D1)	BBRS (S1)	BBRS (S0)**
Type	Integrated BB for FCRZ (D0)	Integrated BB for FCRX (D1)	Integrated BB for FCRS (S1)	Integrated BB for FCRS (S0)
Shimano Compatible	×	×	×	● (ROAD)
Material	Cups	Aluminum	Aluminum	Aluminum
	Sleeve	Black Composite	Clear Composite	Black Composite
	Spacers	×	×	×
Bearing	Sealed Cartridge (x2)	Sealed Cartridge (x2)	Sealed Cartridge (x2)	Sealed Cartridge (x2)
Cup Thread	BC 1.37 x 24T	BC 1.37 x 24T	BC 1.37 x 24T	BC 1.37 x 24T
Shell Width	68mm	68mm	68mm	68mm
Finish	(G) Gold Anodized	(S) Silver Anodized	(S) Silver Anodized	(S) Silver Anodized
Average Weight	93g	125g	125g	93g

** Compatible with Shimano Road

Chains

Model No.	CN12H (O) / (T) / (S)	CN12S (S)
Speed	12-Speed	12-Speed
Pitch	1/2" x 11/128"	1/2" x 11/128"
Pin Material	Chromized SCM Hollow Pin	Chromized SCM
Pin Power	≥ 200kgf	≥ 200kgf
Roller Material	Chromized SCM435	Chromized SCM435
Outer Plate Material	SCM440 + Teflon®* Plate	SCM440 + Teflon®* Plate
Inner Plate Material	SCM435 + Teflon®* Plate	SCM435 + Teflon®* Plate
Tensile Strength	≥ 820kgf	≥ 820kgf
Finish	(O) TiN-Black / (T) TiN-Gold / (S) Silver Nickel	(S) Silver Nickel
Connect End Pin	×	×
Connect Guide Pin	×	×
Connect Easy Link	CNQ12 (included)	CNQ12 (included)
Average Weight	231g (110 Links)	250g (110 Links)

* Teflon® is a registered trademark and brand name owned by DuPont.

Chains

Model No.	CN11Z (O) / (T)	CN11X (S)	CN11H (S)	CN11S (S)	CN11A (S)
Speed	11-Speed	11-Speed	11-Speed	11-Speed	11-Speed
Pitch	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"
Pin Material	Chromized SCM Hollow Pin	Chromized SCM Hollow Pin	Chromized SCM Hollow Pin	Chromized SCM	Chromized SCM
Pin Power	≥ 200kgf	≥ 200kgf	≥ 200kgf	≥ 200kgf	≥ 200kgf
Roller Material	Chromized SCM435	Chromized SCM435	Chromized SCM435	Chromized SCM435	Chromized SCM435
Outer Plate Material	SCM440 + Teflon®* Hollow Plate	SCM440 + Teflon®* Hollow Plate	SCM440	SCM440 / Hollow Plate	SCM440
Inner Plate Material	SCM435 + Teflon®* Hollow Plate	SCM435 + Teflon®* Hollow Plate	SCM435	SCM435	SCM435
Tensile Strength	≥ 820kgf	≥ 820kgf	≥ 820kgf	≥ 820kgf	≥ 820kgf
Finish	(O) TiN-Black / (T) TiN-Gold	(S) Silver Nickel	(S) Silver Nickel	(S) Silver Nickel	(S) Silver Nickel
Connect End Pin	×	×	×	×	×
Connect Guide Pin	CNP11 (included)	CNP11 (included)	CNP11 (included)	CNP11 (optional)	CNP11 (optional)
Connect Easy Link	CNQ11 (optional)	CNQ11 (optional)	CNQ11 (optional)	CNQ11 (included)	CNQ11 (included)
Average Weight	245g (110 Links)	245g (110 Links)	247g (110 Links)	266g (110 Links)	266g (110 Links)

* Teflon® is a registered trademark and brand name owned by DuPont.

Model No.	CNR1Z (T)	CNR1X (S)	CN10H (S)	CN10S (S) / (1)	CN10A (S) / (1) / (B)
Speed	10-Speed	10-Speed	10-Speed	10-Speed	10-Speed
Pitch	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"
Pin Material	Chromized SCM Hollow Pin	Chromized SCM Hollow Pin	Chromized SCM Hollow Pin	Chromized SCM	Chromized SCM
Pin Power	≥ 200kgf	≥ 200kgf	≥ 200kgf	≥ 200kgf	≥ 200kgf
Roller	Chromized SCM435	Chromized SCM435	SCM435	Chromized SCM435	SCM435
Outer Plate Material	SCM435 + Teflon®* / Hollow Plate	SCM435 + Teflon®* / Hollow Plate	SCM435	SCM435	SCM435
Inner Plate Material	SCM430 + Teflon®* / Hollow Plate	SCM430 + Teflon®* / Hollow Plate	SCM430	SCM430	SCM430
Tensile Strength	≥ 820kgf	≥ 820kgf	≥ 820kgf	≥ 820kgf	≥ 820kgf
Finish	(T) Titanium-Nitride w/ Ni-PO4	(S) Silver Nickel	(S) Silver Nickel	(S) Silver Nickel / (1) Silver/Gray	(S) Silver Nickel / (1) Silver/Gray / (B) Black
Connect End Pin	×	×	×	×	×
Connect Guide Pin	CNP10 (included)	CNP10 (included)	CNP10 (included)	CNP10 (optional)	CNP10 (optional)
Connect Easy Link	CNQ10 (optional)	CNQ10 (optional)	CNQ10 (optional)	CNQ10 (included)	CNQ10 (included)
Average Weight	244g (110 Links)	244g (110 Links)	247g (110 Links)	266g (110 Links)	266g (110 Links)

* Teflon® is a registered trademark and brand name owned by DuPont.

Chains

Model No.	CNM9Z (T)	CNM9X (S)	CNM99 (S)	CNM94 (S) / (1) / (Y) / (B)
Speed	9-Speed	9-Speed	9-Speed	9-Speed
Pitch	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"
Pin Material	Chromized SCM Hollow Pin	Chromized SCM Hollow Pin	Chromized SCM Hollow Pin	Chromized SCM
Pin Power	≥ 200kgf	≥ 200kgf	≥ 200kgf	≥ 200kgf
Roller Material	SCM435	SCM435	SCM435	SCM435
Outer Plate Material	SCM435 + Teflon®* Hollow Plate	SCM435 + Teflon®* Hollow Plate	SCM435	SCM435
Inner Plate Material	SCM430 + Teflon®* Hollow Plate	SCM430 + Teflon®* Hollow Plate	SCM430	SCM430
Tensile Strength	≥ 820kgf	≥ 820kgf	≥ 820kgf	≥ 820kgf
Finish	(T) Titanium-Nitride	(S) Silver Nickel	(S) Silver Nickel	(S) Silver Nickel / (1) Silver/Gray / (Y) Gray / (B) Black
Connect End Pin	×	×	×	●
Connect Guide Pin	CNP09 (included)	CNP09 (included)	CNP09 (included)	CNP09 (optional)
Connect Easy Link	CNQ09 (optional)	CNQ09 (optional)	CNQ09 (optional)	CNQ09 (optional)
Average Weight	254g (110 Links)	254g (110 Links)	256g (110 Links)	273g (110 Links)

* Teflon® is a registered trademark and brand name owned by DuPont.

Model No.	CNM89 (S)	CNM84 (S) / (Y) / (B)	CNM54 (Y)	CNM22 (B)
Speed	8-Speed	8-Speed	7 / 6-Speed	Friction
Pitch	1/2" x 3/32"	1/2" x 3/32"	1/2" x 3/32"	1/2" x 3/32"
Pin Material	Chromized SCM Hollow Pin	Steel	Steel	Steel
Pin Power	≥ 150kgf	≥ 150kgf	≥ 150kgf	≥ 80kgf
Roller Material	Steel	Steel	Steel	Steel
Outer Plate Material	SAE1035	Steel	SAE1008	SAE1008
Inner Plate Material	SAE1035	SAE1035	SAE1008	SAE1008
Tensile Strength	≥ 820kgf	≥ 820kgf	≥ 820kgf	≥ 820kgf
Finish	(S) Silver Ni	(S) Silver Nickel / (Y) Gray / (B) Black	(Y) Gray	(B) Black
Connect End Pin	●	●	●	●
Connect Guide Pin	×	×	×	×
Connect Easy Link	CNQ87 (optional)	CNQ87 (optional)	CNQ87 (optional)	×

Chains

Model No.	CNS22 (D)	CNS1X (D)	CNS12 (S)	CNS10 (D) / (B)
Speed	Single / Internal Gear Hub	Single / Internal Gear Hub	Single / Internal Gear Hub	Single / Internal Gear Hub
Pitch	1/2" x 3/32"	1/2" x 1/8"	1/2" x 1/8"	1/2" x 1/8"
Pin Material	Steel	Steel	Steel	Steel
Pin Power	≥ 80kgf	≥ 150kgf	≥ 150kgf	≥ 80kgf
Roller Material	Steel	Steel (Bushing)	Steel	Steel
Outer Plate Material	SAE1008	SAE1008	SAE1008 / Hollow Plate	SAE1008
Inner Plate Material	SAE1008	SAE1008	SAE1008	SAE1008
Tensile Strength	≥ 820kgf	≥ 1000kgf	≥ 920kgf	≥ 820kgf
Finish	(D) Dacromet	(D) Dacromet	(S) Silver Ni	(D) Dacromet / (B) Black
Connect End Pin	●	×	●	●
Connect Guide Pin	×	×	×	×
Connect Easy Link	×	●	×	×

Model No.	CNX46 (S)	CNX56 (S)	CNX58 (S)	CNX59 (S)
Speed	Single / Fixed / BMX	Single / Fixed / BMX	Single / Fixed / BMX	Single / Fixed / BMX
Pitch	1/2" x 1/8"	1/2" x 1/8"	1/2" x 3/32"	1/2" x 3/32"
Pin Material	SCM420	Chromized SCM Hollow Pin	SCM420	Chromized SCM Hollow Pin
Pin Power	≥ 150kgf	≥ 150kgf	≥ 150kgf	≥ 150kgf
Roller	Steel	SCM435	SCM435	SCM435
Outer Plate Material	SAE1035	SAE1035	SAE1035	SAE1035
Inner Plate Material	SAE1035	SAE1035	SAE1035	SAE1035
Tensile Strength	≥ 1000kgf	≥ 1000kgf	≥ 1000kgf	≥ 1000kgf
Finish	(S) Silver Nickel	(S) Silver Nickel	(S) Silver Nickel	(S) Silver Nickel
Connect End Pin	○ (optional)	○ (optional)	○ (optional)	○ (optional)
Connect Guide Pin	CNPX1 (included)	CNPX1 (included)	CNPX3 (included)	CNPX3 (included)
Connect Easy Link	CNQX1 (optional)	CNQX1 (optional)	CNQX3 (optional)	CNQX3 (optional)

Guide Pins

Model No.	CNP11	CNP10	CNP09	CNPX1	CNPX3
Chain Compatibility	11-Speed	10-Speed	9-Speed	CNX 1/8"	CNX 3/32"

Easy Q Links

Model No.	CNQ12	CNQ11	CNQ10	CNQ09	CNQ87	CNQX1
Chain Compatibility	12-Speed	11-Speed	10-Speed	9-Speed	8 / 7-Speed / Single(3/32")	Single(1/8")

Outer Casings (Shift)

Model No.	OCSXP	OCSSP	OCS2S
Type	Shift Outer Casing	Shift Outer Casing	Shift Outer Casing
Description	Index-XP	Index-SP	Index-2SP
Shifter Compatibility	Index - R10/R9/R8/R7/L3/LF	Index - R10/R9/R8/R7/L3/LF	Index - R7/R6/R5/L3/LF
For Cable Diameter	Ø 1.2mm / Ø 1.1mm	Ø 1.2mm / Ø 1.1mm	Ø 1.2 mm / Ø 1.1mm
Pre-lubricated Grease	●(Silicone)	●(Silicone)	●(Silicone)
Inner Plastic Lining	●	●	●
Inner Metal Structure	Straight Steel Wire x 17	Straight Steel Wire x 17	Curled Flat Steel Coil (Hi-Density)
Reinforcement Lining	Braided Nylon	×	×
Outer Lining	Composite	Composite	Composite
Outer Dimension	Ø 4mm	Ø 4mm	Ø 4mm
Ferrule Material	Aluminum	Plastic	Plastic
Ferrule Diameter	Ø 6mm	Ø 6mm	Ø 6mm
Ferrule Finish	Silver	Black	Black
Color	(S) Silver / (Options)	(B) Black / (Y) Gray / (Options)	(B) Black / (Y) Gray / (Options)
Pre-Cut Length	To Order	To Order	To Order
Roll Length	500m / 50m / 40m / 30m	500m / 50m / 40m / 30m	500m / 50m / 40m / 30m

Outer Casings (Brake)

Model No.	OCB2X	OCB2P
Type	Brake Outer Casing	Brake Outer Casing
Description	Braided 2P	2P
Brake Compatibility	All	All
For Cable Diameter	Ø 1.6mm / Ø 1.5mm	Ø 1.6mm / Ø 1.5mm
Pre-lubricated Grease	●(Silicone)	●(Silicone)
Inner Plastic Lining	●	●
Inner Metal Structure	Curled Flat Steel Coil	Curled Flat Steel Coil (Low-Density)
Reinforcement Lining	Braided Nylon	×
Outer Lining	Composite	Composite
Outer Dimension	Ø 5mm	Ø 5mm
Ferrule Material	Alloy	Brass
Ferrule Diameter	Ø 6mm	Ø 6mm
Ferrule Finish	Silver	Chrome
Color	(S) Silver / (Options)	(B) Black / (Y) Gray / (Options)
Pre-Cut Length	To Order	To Order
Roll Length	500m / 50m / 40m / 30m	500m / 50m / 40m / 30m

Disc Pads - SHIMANO Type

Model No.	DPS30	DPS20	DPS15	DPS10
Compatible Systems	XTR M965, M966, M975, Saint M800 XT M765, M775 SLX M665, Hone M60 LX M585, T665 Deore M535, M595	XT M755, M755-DH	Deore M555, M555-M Nexave C-92	Deore M465, M475, M495, M515, M525, Nexave C501, C601

Springs are included with necessary models

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Disc Pads - HAYES Type

Model No.	DPH35	DPH25
Compatible Systems	Stroker Trail	Mag, MX1, HFX 9

Hayes® is a registered trademark and brand name owned by Hayes Bicycle Group, a division of HB Performance Systems, Inc.

Disc Pads - MAGURA Type

Model No.	DPML7	DPMJ1	DPMM1
Compatible Systems	Louise 2007, BAT, Carbon	Julie	Matra Matra SL

Springs are included with necessary models

Magura® is a registered trademark and brand name owned by Gustav Magenwirth GmbH & Co. KG

Disc Pads - AVID Type

Model No.	DPA10
Compatible Systems	Juicy BB7

Springs are included with necessary models

Avid® is a registered trademark and brand name owned by SRAM Corporation.

Disc Pads - FORMULA Type

Model No.	DPF10
Compatible Systems	Oro

Springs are included with necessary models

Formula® is a registered trademark and brand name owned by Formula S.R.L.

Disc Pads - TEKTRON Type

Model No.	DPT10
Compatible Systems	lo

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