



2011 ~ 2012 / Product Catalogue

Introduction

For almost 40 years, SunRace have been producing quality bicycle transmissions and drivetrain components. More recently, we have added our top of the line products under the Driven brand.

This catalogue illustrates the complete range of SunRace and Driven cycle components including the latest innovations in Shifters, Front & Rear Derailleurs, Cranksets, Cassettes & Freewheels, Chains, Hubs, Bottom Bracket axles and Brakes.



2011 New Products



FCRZ(D2)

- Improved wider, stiffer carbon crank arm with optional ceramic cartridge bearing bottom bracket.



RDRZ2

- Improved cold forged links with link pin bushings, ceramic cartridge bearing pulleys, and now accepts a 28T sprocket.



RDRX2

- Improved cold forged links with link pin bushings, cable adjuster, and now accepts a 28T sprocket.



BCRZ3



BCRX3

- Improved braking power featuring SwissStop® Yellow King™ pads for carbon rims.



BCRZ2



BCRX2

- Improved braking power featuring SwissStop® GHPII™ pads for aluminum rims.

SUNRACE

2011 New Products



TSM37

☀ New 8-speed, 7-speed, 6-speed, 5-speed, 3-speed, and friction twist shifter with lighter shifting action. Also new bigger lens featuring our Cyclops™ display.



TSM28

☀ Now also available in 8-speed.



SLM96

☀ New 9-speed, 8-speed, 3-speed, and friction thumb shifter with adjustable lever position.



CNS12

☀ New high performance single speed 1/8" chain with hollow plate in silver finish.



RDM97

☀ Improved bracket bolt and cable adjuster.



CSM98

☀ New 9-speed 12-36T ratio cassette.



MFEX9

☀ New 9-speed 11-32T freewheel with anodized aluminum spacers and spider and satin finished sprockets.



QRM1

☀ New light weight quick-release with titanium axle and lever.

NMZ

Driven MZ, top of the line 27 speed MTB components.



P.08

NMX

Driven MX, ultra high performance 27 speed MTB components.



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M90
Avantgarde

Sun Race performance 27 speed MTB group.



P.12

M90
SunRace

Sun Race entry 27 speed MTB group.



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M60
SunRace

Sun Race performance 24 speed MTB group.



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SUNRACE

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Sun Race entry 24 speed MTB group.

M50
SUNRACE



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Sun Race MegaDrive 21 speed MTB group.

M40
SUNRACE



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Sun Race 21/18 speed MTB group.

M30
SUNRACE



P.17

Sun Race entry 21/18 speed MTB group.

M20
SUNRACE



P.18

Sun Race friction 21/18/15 speed MTB group.

M05
SUNRACE



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NRZ

Driven RZ, top of the line 10x2 speed Road group.



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NRX

Driven RX, ultra high performance 10x2 speed Road group



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RS
SunRACE

Sun Race performance 10x2 speed Road group.



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R90
SunRACE

Sun Race performance 9x2 or 9x3 speed Road group.



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R80
SunRACE

Sun Race 8x2 or 8x3 speed Road group.



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SunRACE

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Sun Race 7x2, 6x2, 5x2 speed Road group.



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Sun Race entry friction Road group.



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FCMZ7 (D1) 44-32-22T
[Carbon Reinforced Crank]
[Titanium Axle]
[7075 Chainrings]
[7075 Bolts & Nuts]
[7075 Axle Bolt]
[818g incl. BB]



BBMZ (D1)
[Int. BB FCMZ]
[127g]



CNM9Z [Hollow Pins & Plates]
T[Titanium-Nitride]
[254g/110L]



[LD]



[MD]

RDMZ LD/MD
[Carbon Cage]
[Forged Alloy Links]
[7075 Pulleys]
[Sealed Cartridge Bearings]
[245g/235g]



HBMZ7 F/R9
[Titanium QR Axle]
[7075 Cassette Carrier]
[Sealed Cartridge Bearings]
[198g/343g incl. QR]



P[Titanium-Alloy-Nitride]



T[Titanium-Nitride]

CSMZ7 9AV 11-34T
9AU 11-32T

[7075 3-Piece Spider]
[6061 Lockring]
[287g/275g]



CSMD7 8AT 11-30T
8AS 11-28T

[Alloy Spoke Guard]
[6061 Lockring]
[Alloy Spacers]
[9-Speed Spacing]
[406g/388g incl. Alloy Guard]



HBMD7 F/R9

[Through Axle Type]
[7075 Cassette Carrier]
[Sealed Cartridge Bearings]
[387g/695g incl. QR]



FCMX7 (D1) 44-32-22T
[6061 Forged Alloy Crank]
[Chromoly Axle]
[7075 Chainrings]
[7075 Bolts & Nuts]
[7075 Axle Bolt]
[851g incl. BB]

BBMX (D1)
[Int. BB FCMX]
[127g]



CNM9X [Hollow Pins & Plates]
S[Silver]
[254g/110L]



[LD]

[MD]

RDMX LD/MD
[7075 Pulleys]
[Forged Alloy Links]
[Alloy Cage]
[Sealed Cartridge Bearings]
[250g/240g]



HBMX7 F/R9
[7075 Cassette Carrier]
[Sealed Cartridge Bearings]
[207g/355g incl. QR]



S[Satin]



B[Black]

CSMX7 9AV 11-34T
9AU 11-32T
[7075 3-Piece Spider]
[6061 Lockring]
S[Satin]
[287g/275g]



CSMX5 9AV 11-34T
9AU 11-32T
9AS 11-28T
[6061 Lockring]
[Alloy Spacers]
S[Satin]
[357g/345g/272g]





S[Silver]



B[Black]

DLM93 R9/L3
[Alloy Up-Shift Lever]



HBM96 F/R9



FCM99 (S1) [7075 44-32-22T]

FCM97 (S1) [7075 44T]
44-32-22T

[6061 Forged Alloy Crank]
[SCM435 Bolts & Nuts]
[Chromoly Axle]
[7075 Axle Bolt]

BBM97 (S1)
[Int. BB FCM99/97]



CNM99 [Hollow Pins]
S[Silver]/Y[Gray]



S[Satin]

B[Black]

CSM98 9BW 12-36T

CSM96 9AV 11-34T

9AU 11-32T

9AS 11-28T

[Light Weight Design]



FDM97 LD/MD/SD
[44-32-22T or 48-36-26T]
[Alloy Body]
[Dual Pull]



B[Black]



S[Silver]

RDM97 LD
[Alloy Links]



DLM90 R9/L3
[Composite Shift Levers]



CSM9S 9AU 11-32T
U[UCP]
[Light Weight Design]



MFM90 9CU 13-32T
U[UCP]/C[CP]
MFE90 9CU 13-32T
C[CP]
[Lockring Design]
[Light Weight Design]



MFEX9 9AU 11-32T
[Alloy Spider]
[Alloy Spacers]
[Lockring Design]
[Light Weight Design]
C[CP]
[610g]



FCM9A [7075 44T]
FCM9B
44-32-22T
[Square Taper]



FDM96 LD/MD/SD
[44-32-22T or 48-36-26T]
[Alloy-Steel Body]
[Dual Pull]



CNM94
S[Silver]/Y[Gray]



SLM96 R9/R8/L3/LF
[Alloy Lever & Clamp]
[Adj. Lever Position]



BBS15 BSG
[BC-68/113mm]



RDM90 LD
[Alloy Outer Link]
[13T Tension Pulley]



TSM63 R8/R7/L3/LF
[Force Adjuster]
[Alloy C-Clamp]



SLM96 R9/R8/L3/LF
[Alloy Lever & Clamp]
[Adj. Lever Position]



HBM63 F/R8



FCM63 42-32-22T
[Alloy I-Crank]



[M]



BBS15 BSK
[BC-68/119mm]



CSM66 8AV 11-34T*
8AU 11-32T*
8AS 11-28T*
8BV 12-34T
8BU 12-32T



MFM61 8CV 13-34T
MFM60 8CU 13-32T
8CS 13-28T
U[UCP]/C[CP]



FDM67 LD/MD/SD
[42-32-22T]
[Alloy Clamp]
[Dual Pull]



RDM63 LD
[Magnesium Outer Link]
[Alloy Outer Cage]
[13T Tension Pulley]

CSM63 7AS 11-28T
7BS 12-28T
S[Satin]/*B[Black] Option
[Light Weight Design]

MFE60 8CU 13-32T
8CS 13-28T
C[CP]
[Locking Design]
[Light Weight Design]

FDM66 LD/MD/SD
[42-32-22T]
[Alloy-Steel Clamp]
[Dual Pull]



CNM89 [Hollow Pins]
S[Silver]/Y[Gray]



DLM53 R8/R7/L3
[Alloy Up-Shift Lever]



DLM33 R8/R7/L3
[Composite Levers]



TSM37 R8/R7/R6/R5/L3/LF
[Cyclops Display]
[Light Action Shift-Dual Ways]



CSM56 8AU 11-32T
U[UCP]
[Light Weight Design]



MFM56 8CV 13-34T
U[UCP]
[Lockring Design]



FCM52 42-34-24T
[Alloy I-Crank]



[M]



BBS15 BSN
[BC-68/122mm]



HBM53 F/R8



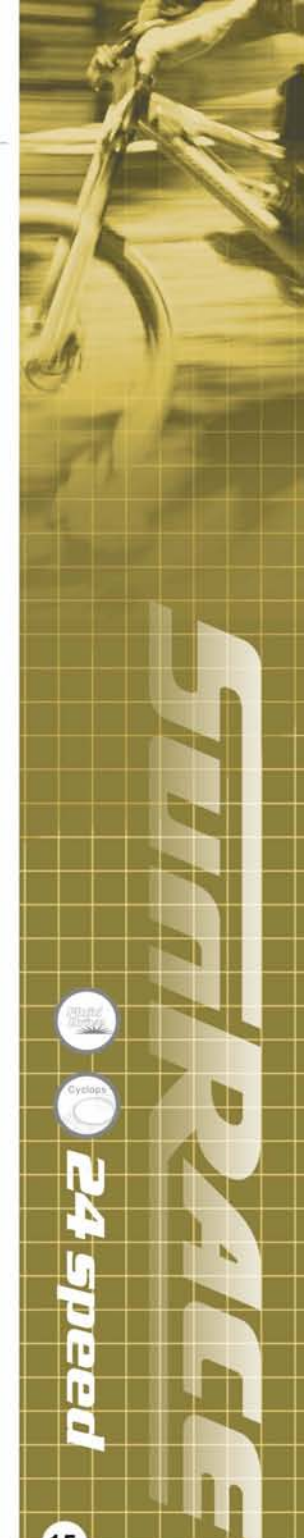
FDM56 LD/MD/SD
[42-34-24T]
[Alloy-Steel Clamp]
[Dual Pull]



RDM56 LD
[Alloy Outer Link]
[13T Tension Pulley]



CNM84
S[Silver]/Y[Gray]





TSM4S R7/L3
[Cyclops Display]
[Alloy C-Clamp]



HBM45 F/R8/R7
[QR or Nuted Type]



MFM4S 7CV 13-34T
U[UCP+Black Combination]
[Locking Design]
[Light Weight Design]



MFM2A 7DV 14-34T
3[UCP+Black Combination]
2[Brown+Black Combination]
[Locking Design]



RDM4S XD/XB
[Mega 15T Tension Pulley]
[Index Cable Adj.]



CNM54
Y[Gray]



DLM33 R8/R7/L3
[Composite Shift Levers]



FCM33 48-38-28T
[Alloy I-Crank]

[M]

[1]



BBS15 BSU
[BC-68/127mm]



FDM34 LD/MD/SD
[48-38-28T]
[Alloy-Steel Clamp]
[Dual Pull]



TSM37 R8/R7/R6/R5/L3/LF
[Cyclops Display]
[Light Action Shift-Dual Ways]



FCM31 48-38-28T
[Alloy A-Crank]

[M]

[1]



RDM36 SD/SB
[6-Speed]
[Index Cable Adj.]



RDM37 LD/LB/SD/SB
[7-Speed]
[Index Cable Adj.]



MFM30 7CS 13-28T
C[CP]
[Locking Design]
[Light Weight Design]



MFM3S 7CS 13-28T
U[UCP]
[Locking Design]
[Light Weight Design]



MFM20 6DS 14-28T
U[UCP]
[Light Weight Design]



CNM54
Y[Gray]



21 speed Performance

SunRACE



TSM28 R8/R7/R6/R5/L3/LF
[Cable Adjuster]
[Light Action Shift - Dual Ways]
[TPR Grip]



SLM2T R7/R6/R5/L3/LF



FDM2S
SB/ST/MB/MT
[42-34-24T]
[Heat Treated Chainguide]



FDM2A
SB/ST/MB/MT
[48-38-28T]
[Heat Treated Chainguide]



FDM2B [48-38-28T]
FDM2C [42-34-24T]
SB/ST/MB/MT
[Friction]



RDM15 LD/LB
SD/SB
[5-Speed]
[Index Cable Adj.]



RDM2T LD/LB
SD/SB
[7 & 6-Speed]
[Index Cable Adj.]



CNM54
Y[Gray]



[3]

MFM2A 7DV 14-34T
3[UCP+Black Combination]
2[Brown+Black Combination]
[Lockring Design]



[2]



[1]

MFM2A 7DS 14-28T
6DS 14-28T
5DS 14-28T
1[UCP+Black Combination]
2[Brown+Black Combination]
[Lockring Design]



[2]



TSM10 RF/LF
[Light Action Shift-Dual Ways]
[TPR Grip]
[Friction]



SLM10 RF/LF



MFM05 7DS 14-28T
6DS 14-28T
5DS 14-28T
[Friction]



FDM06 SB
[Double]



FDM05 SB/MB
[48-38-28T]
[Friction]



RDM10 LD/LB
[Friction]



CNM22
B[Black]





STRZ RT/L2
[Carbon Reinforced Brake Lever]
[7075 Forged Alloy Up-Shift Lever]
[Teflon® Coated Cable]
[383g/pair]



FCRZ6 [D2] 50-34T **FCRZ1 [D2] 53-39T**
Z7 [D2] 50-36T **Z3 [D2] 52-39T**
[BCD 110mm] [BCD 130mm]

[Carbon Crank]
[Titanium Axle]
[7075 Chainrings]
[7075 Bolts & Nuts]
[7075 Axle Bolt]
[733~753g incl. BB]



BBRZ [D1]
[Int. BB FCRZ]
[112g]



BBRZ3 [D1]
[Ceramic Cartridge Bearings]
[112g]



RDRZ2 SD
[Carbon Reinforced Link]
[Carbon Cage]
[Carbon Cable Adj.]
[7075 Pulleys]
[Ceramic Cartridge Bearings]
[7075 Bracket Bolt]
[10 & 9-Speed]
[189g]



FDRZ BB
[56~50T Double]
[Carbon Reinforced Cage]
[Forged Alloy Links]
[102g]



CSRZ	TAO	11-23T	CSRZ5*	TAO	11-23T
	TAS	11-28T		TBQ	12-25T
	TBO	12-23T		TBR	12-27T
	TBQ	12-25T			
		[7075 Sprockets]			
		[6061 Lockring]			
		M[Ceramic Coated]			
		[105~120g]			
		*Campy Type			



BCRZ3 F/R
 [Quick-Release]
 [CNC Alloy Caliper]
 [Titanium Hardware]
 [Cartridge Brake Shoe Pads]
 [SwissStop® Yellow King™ Pads]
 [For Carbon Rim]
 [Convex Washer Adj. Shoes]
 [281g/pair]



BCRZ2 F/R
 [Quick-Release]
 [CNC Alloy Caliper]
 [Titanium Hardware]
 [Cartridge Brake Shoe Pads]
 [SwissStop® GHPI™ Pads]
 [Convex Washer Adj. Shoes]
 [325g/pair]



CNR1Z [Hollow Pins & Plates]
 T[Titanium-Nitride]
 [244g/110L]





STRX RT/L2

[Forged Alloy Brake Lever]
[7075 Forged Alloy Up-Shift Lever]
[Teflon® Coated Cable]
[387g]



FCRX6 [D1] 50-34T
X7 [D1] 50-36T
[BCD 130mm]

FCRX1 [D1] 53-39T
X3 [D1] 52-39T
[BCD 110mm]

[6061 Forged Alloy Crank]
[Chromoly ISIS Axle]
[7075 Chainrings]
[7075 Bolts & Nuts]
[7075 Axle Bolt]
[944~956g incl. BB]



BBRX [D1]
[Int. BB FCRX]
[125g]



BCRX3 F/R

[Quick-Release]
[CNC Alloy Caliper]
[Chromoly Hardware]
[Cartridge Brake Shoe Pads]
[SwissStop® Yellow King™ Pads]
[For Carbon Rim]
[Convex Washer Adj. Shoes]
[325g/pair]



BCRX2 F/R

[Quick-Release]
[CNC Alloy Caliper]
[Chromoly Hardware]
[Cartridge Brake Shoe Pads]
[SwissStop® GHPII™ Pads]
[Convex Washer Adj. Shoes]
[325g/pair]



CSRX TAO 11-23T
TAQ 11-25T
TAS 11-28T
TBQ 12-25T

S[Satin]
[6061 Lockring]
[6061 Spacer]
[230~249g]



RDRX2 SD

[Alloy Links & Cage]
[7075 Pulleys]
[Sealed Cartridge Bearings]
[7075 Bracket Bolt]
[10 & 9-Speed]
[200g]



FDRX BB

[56~50T Double]
[Forged Alloy Links]
[99g]



CNR1X [Hollow Pins & Plates]
S[Silver]
[244g/110L]



STRS RT/L2
[Forged Alloy Brake Lever]
[Rubber Cushioned Up-Shift Lever]
[Teflon® Coated Cable]
[418g]



FCRS6 (S1) 50-34T [BCD 110mm]
FCRS1 (S1) 53-39T [BCD 130mm]
[6061 Forged Alloy Crank]
[Alloy Chainrings]
[7075 Bolts & Nuts]
[7075 Axle Bolt]
[944g/949g incl. BB]



BBRS (S1)
[Int. BB FCRS]
[125g]



BCRS F/R B[Black]
[Quick-Release]
[Forged Alloy Caliper]
[Cartridge Brake Shoe Pads]
[Convex Washer Adj. Shoes]
[368g/pair]



FDRS0 BB/LB/MB
[56~50T Double]
[Forged Alloy Links]
[99g]



CSRS TAO 11-23T
TAQ 11-25T
TAS 11-28T
TBQ 12-25T
S[Satin]
[238~257g]



RDRS SD
[7075 Bracket Bolt]
[Alloy Links]
[Alloy Cage]
[10 & 9-Speed]
[195g]



CNR10 [Hollow Pins]
S[Silver]



CN10S
Y[Gray]
S[Silver]





STR90 R9/LL/L2/L3
[Forged Alloy Brake Lever]
[Rubber Cushioned Up-Shift Lever]
[418g/pair]



SLR90 R9/LF
B[28.6mm]
C[44mm]
F[50mm]



SLR96 R9/LF
B[Bar End]



CSR96 9AQ 11-25T
9BQ 12-25T
S[Satin]
[Light Weight Design]



FDR99 BB/LB/MB [50T]
[Triple]
[Forged Alloy Links]



FDR90 BB/LB/MB
[56~50T Double]
[Forged Alloy Links]



CNM99 [Hollow Pins]
S[Silver]/Y[Gray]



CNM94
S[Silver]/Y[Gray]



FCR9F 50-34T
FCR9A 53-39T
[Alloy Chainrings]
[SCM435 Bolts & Nuts]
[6061 Forged Alloy Crank]



FCR96 50-34T
FCR91 53-39T
[SCM435 Bolts & Nuts]
[6061 Forged Alloy Crank]



RDR90 SD/LD
[Alloy Links]
[9-Speed]



BBS18 BSA/BSF
[BC-68/(103mm FCR9F)/(111mm FCR9A)]
[Alloy RH & LH Cups]
[Alloy Sleeve]



BBS15 BSA/BSF
[BC-68/(103mm FCR96)/(111mm FCR91)]



BCR91 F/R
[Quick-Release]
[Alloy Caliper]
[Cartridge Brake Shoe Pads]



BCR90 F/R
[Quick-Release]
[Forged Alloy Caliper]
[Cartridge Brake Shoe Pads]





STR80 R8/LL/L2/L3
[Forged Alloy Brake Lever]
[Rubber Cushioned Up-Shift Lever]
[418g/pair]



SLR63

Brazed on: R8/LF B [28.6mm]
C [44mm]
F [50mm]
Clamp: 8F H [22.2mm]
G [25.4mm]
D [28.6mm]



CSR86 8AO 11-23T
8BQ 12-25T
CSR63 7AP 11-24T
7BP 12-24T

S[Satin]
[Light Weight Design]



FDR87 BB/MB/SB
[52T Triple]
[Forged Alloy Links]



FDR80 BB/MB/SB
[56~50T Double]
[Forged Alloy Links]



CNM89 [Hollow Pins]
S[Silver]/Y[Gray]



CNM84
S[Silver]/Y[Gray]



FCR86 50-34T
[6061 Forged Alloy Crank]
[SCM435 Bolts & Nuts]



FCR81 53-39T
FCR83 52-42T
FCR87 52-42-30T
[6061 Forged Alloy Crank]
[SCM435 Bolts & Nuts]



RDR86 SD/LD
[8-Speed]



BBS15 BSB/BSA/BSF
[BC-68/(107mm FCR81/83)
/(103mm FCR86)
/(111mm FCR87)]



BCR81 F/R
[Quick-Release]
[Alloy Caliper]



BCR80 F/R
[Quick-Release]
[Forged Alloy Caliper]





BLR31



SLR39

Brazed on: R7/R6/R5/LF B [28.6mm]
C [44mm]

Clamp: 7F/6F/5F H [22.2mm]
G [25.4mm]
D [28.6mm]



FCR31 53-39T

FCR33 52-42T

[6061 Forged Alloy Crank]
[SCM435 Bolts & Nuts]
[Friction]



BBS15 BSB

[BC-68/107mm]



MFR30 7CQ 13-25T

C [CP]

[Lockring Design]

[Light Weight Design]



MFR3S 7CP 13-24T

1 [UCP+Black+Combination]



MFR2A 6DP 14-24T

2 [Brown+Black Combination]



FDR31 SB/MB

[53~52T Double]



RDR31 SD

[7-Speed]



CNM54

Y [Gray]



BCR30 F/R

[Forged Alloy Caliper]



BLR02



SLR03 FF/RF
Clamp:(H) 22.2mm (D)28.6mm



FDM06 SB
[Double]
[Friction]



CNM22
B[Black]



BLR03



MFR2A 6DP 14-24T
2[Brown+Black Combination]



RDM10 SD/SB
[Friction]

Bottom Brackets

[ISIS]



BB140
[Hollow SCM435 Axle]
[Alloy RH & LH Cups]
[Alloy Sleeve]
[Alloy Stopper]
[Sealed Cartridge Bearings x 4]



BB130
[Hollow SCM435 Axle]
[Alloy RH & LH Cups]
[Eng. Polymer Sleeve]
[Alloy Stopper]
[Sealed Cartridge Bearings]



BB120
[Hollow SCM435 Axle]
[Alloy Cups]
[Alloy Sleeve]
[SCM415 Stopper]
[Sealed Cartridge Bearings]



BB110
[Hollow SCM435 Axle]
[Steel RH & LH Cups]
[Steel Sleeve]
[SCM415 Stopper]
[Sealed Cartridge Bearings]

[Square Taper]



BBS18
[Steel Axle]
[Alloy RH & LH Cups]
[Alloy Sleeve]
[Eng. Polymer Stopper]
[Sealed Cartridge Bearings]



BBS15
[Steel Axle]
[Steel RH & LH Cups]
[Steel Sleeve]
[Eng. Polymer Stopper]
[Sealed Cartridge Bearings]



BBS08 B [BC1.37]
[Steel Axle]
[Steel RH Cup & Eng. Polymer LH Cup]
[Steel Sleeve]
[Eng. Polymer Stopper]
[Sealed Cartridge Bearings]



BBS08 5[35mm]
8[38mm]
4[40mm]
[Steel Axle]
[Eng. Polymer RH & LH Cups]
[Steel Sleeve]
[Eng. Polymer Stopper]
[Sealed Cartridge Bearings]

Bottom Brackets



BBS05
[Steel Axle]
[Steel RH & LH Cups]
[Eng. Polymer Sleeve]
[Ball Cage Bearings]



BBT08 B[BC1.37]
[Steel Axle]
[Eng. Polymer RH & LH Cups]
[Steel Sleeve]
[Eng. Polymer Stopper]
[Sealed Cartridge Bearings]



BBT08 5[35mm]
8[38mm]
4[40mm]
[Steel Axle]
[Eng. Polymer RH & LH Cups]
[Steel Sleeve]
[Eng. Polymer Stopper]
[Sealed Cartridge Bearings]

BB Axle Bolt [ISIS]
[M12 & M15 Option]
[Alloy Cup]



BAI42
[M12 Chromoly Bolt]
BAI30
[M15 Alloy Bolt]
BAI20
[M15 Chromoly Bolt]



BAI10
[M15 Chromoly Bolt]



BAI41
[M12 Chromoly Bolt]
[Plastic Cap]
BAI08
[M15 Chromoly Bolt]
[Plastic Cap]



BAS05
[M8 Chromoly Bolt]



BAS15
[M8 Chromoly Bolt]
[Plastic Cap]

Outer Casings / Inner Cables

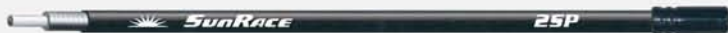
Shift



OCSXP - XP Index Type Ø4.5mm



OCSSP - SP Index Type Ø4mm B[Black]



OCS2S - 2SP Index Type Ø4mm B[Black]

Color options available



OCSSP - SP Index Type Ø4mm Y[Gray]



OCS2S - 2SP Index Type Ø4mm Y[Gray]

Ferrules



OFS95[ID4.5mm]
OFS90[ID4mm]
[Alloy]
[Sealed]



OFS80[ID4mm]
[Alloy]



OFS50[ID4mm]
[Brass]



OFS10[ID4mm]
[Plastic]

Crimps



INS60
[Alloy]
[ID1.6mm]



[G]



ICSTF - Teflon® Stainless Ø1.1mm
ICSSS - Slick Stainless Ø1.1mm
ICSSG - Slick Galvanized Ø1.1mm
ICSRG - Regular Galvanized Ø1.2mm
[Shift Cable]

Brake



OCBKW - KW Type Ø5mm



OCBKB - KB Type Ø5mm



OCBXP - XP Type Ø5mm S[Silver]



OCB2X - 2X Type Ø5mm S[Silver]



OCB2P - 2P Type Ø5mm B[Black]



OCB2P - 2P Type Ø5mm Y[Gray]



- ICBTF - Teflon® Stainless Ø1.5mm
- ICBSS - Slick Stainless Ø1.5mm
- ICBSG - Slick Galvanized Ø1.5mm
- ICBRG - Regular Galvanized Ø1.6mm
[Universal Brake Cable]



- ICRTRF - Teflon® Stainless Ø1.5mm
- ICRSS - Slick Stainless Ø1.5mm
- ICRRG - Regular Galvanized Ø1.6mm
[Road Brake Cable]

Ferrules



OFB90 [ID5mm]
[Alloy]
[Sealed]



OFB80 [ID5mm]
[Alloy]



OFB50 [ID5mm]
[Brass]



OFB10 [ID5mm]
[Plastic]

Crimps



INB60
[Alloy]
[ID2.1mm]



[A]



[B]



[G]



[R]



[2]

Chains

(11-Speed)



CN11Z (T)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Hollow Outer Plates]
T[Titanium-Nitride]
245g/110L



CN11X (S)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Hollow Outer Plates]
S[Silver]
245g/110L

(10-Speed)



CNR1Z (T)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Hollow Plates]
T[Titanium-Nitride]
244g/110L



CNR1X (S)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Hollow Plates]
S[Silver]
244g/110L



CNR10 (S)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Plates]
S[Silver]
246g/110L



CN10S (S)
[1/2" x 11/128"]
[Chromized Pins]
[Chromoly Plates]
S[Silver]
263g/110L



CN10S (1)
[1/2" x 11/128"]
[Chromized Pins]
[Chromoly Plates]
1[Silver/Gray]
263g/110L

(9-Speed)



CNM9Z (T)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Hollow Plates]
T[Titanium-Nitride]
254g/110L



CNM99 (S)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Plates]
S[Silver]
256g/110L



CNM94 (S)
[1/2" x 11/128"]
[Chromized Pins]
[Chromoly Plates]
S[Silver]
273g/110L



CNM9X (S)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Hollow Plates]
S[Silver]
254g/110L



CNM99 (Y)
[1/2" x 11/128"]
[Chromized Hollow Pins]
[Chromoly Plates]
Y[Gray]
256g/110L



CNM94 (Y)
[1/2" x 11/128"]
[Chromized Pins]
[Chromoly Plates]
Y[Gray]
273g/110L

(8-Speed)



CNM89 (S)
[1/2" x 3/32"]
[Chromized Hollow Pins]
S[Silver]
257g/110L



CNM84 (S)
[1/2" x 3/32"]
S[Silver]
274g/110L



CNM89 (Y)
[1/2" x 3/32"]
[Chromized Hollow Pins]
Y[Gray]
257g/110L



CNM84 (Y)
[1/2" x 3/32"]
Y[Gray]
274g/110L

Chains

[7 & 6-Speed]



CNM54 (Y)
[1/2" x 3/32"]
Y[Gray]

[Friction]



CNM22 (B)
[1/2" x 3/32"]
B[Black]

[Fixed / BMX]



CNX46 (S)
[1/2" x 1/8"]
S[Silver]

CNX58 (S)
[1/2" x 3/32"]
S[Silver]



CNX56 (S)
[Hollow Pins]
[1/2" x 1/8"]
S[Silver]

CNX59 (S)
[Hollow Pins]
[1/2" x 3/32"]
S[Silver]

[Single Speed / Internal Gear Hub]



CNS22 (D)
[1/2" x 3/32"]
D[Dacromet]



CNS12
[1/2" x 1/8"]
[Hollow Outer Plates]
S[Silver]



CNS10 (D)
[1/2" x 1/8"]
D[Dacromet]



CNS10 (B)
[1/2" x 1/8"]
B[Black]

[Guide Pins]

- CNP11 [11 Speed]
- CNP10 [10 Speed]
- CNP09 [9 Speed]
- CNPX1 [1/8" CNX]
- CNPX3 [3/32" CNX]



[Easy Links]

- CNU11 [11 Speed]
- CNU10 / CNQ10 [10 Speed]
- CNU09 / CNQ09 [9 Speed]
- CNU87 / CNQ87 [8/7 Speed]



[U]



[Q]



Brake Pads for Disc Brakes

SHIMANO® COMPATIBLE



DPS30



DPS20



DPS15



DPS10

HAYES® COMPATIBLE



DPH35



DPH25



MAGURA® COMPATIBLE



DPMM1



DPML7



DPMJ1



AVID® COMPATIBLE



DPA10

FORMULA® COMPATIBLE



DPF10

TEKTRO® COMPATIBLE



DPT10

*Please refer to page 85

Service Parts

Brake Shoes for Road



BSRZ3
[Alloy Cartridge Body]
[Titanium Hardware]
[SwissStop® Yellow King™ Pads]
[For Carbon Rim]
[Convex Washer Adj. Shoes]



BSRZ2
[Alloy Cartridge Body]
[Titanium Hardware]
[SwissStop® GHPII™ Pads]
[Convex Washer Adj. Shoes]



BSRX3
[Alloy Cartridge Body]
[Chromoly Hardware]
[SwissStop® Yellow King™ Pads]
[For Carbon Rim]
[Convex Washer Adj. Shoes]



BSRX2
[Alloy Cartridge Body]
[Chromoly Hardware]
[SwissStop® GHPII™ Pads]
[Convex Washer Adj. Shoes]



BSRS
[Alloy Cartridge Body]
[Chromoly Hardware]
[Convex Washer Adj. Shoes]



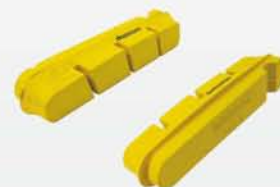
BSR90
[Alloy Cartridge Body]
[Chromoly Hardware]



BSR80



Brake Pads for Road



BPRZ3
[SwissStop® Yellow King™ Pads]
[For Carbon Rim]



BPRX2
[SwissStop® GHPII™ Pads]



BPR90



Brake Shoes for ATB/MTB



BSM96
[Alloy Cartridge Body]
[Chromoly Hardware]
[BPM96 Pad]



BSM90
[Alloy Cartridge Body]
[Chromoly Hardware]
[Satin Finish]
[BPM90 Pad]



BSM60
[Alloy Cartridge Body]
[Chromoly Hardware]
[BPM60 Pad]



BSM30
[T3/T4 Type]



BSM20
[T2 Type]



A[Silver] B[Black]
BCMSP.M2F 90°
M2R 135°



A[Silver] B[Black]
BCMSP.M1F 90°
M1R 135°



BCMSP.B1



Brake Pads for ATB/MTB



BPM96
[Tri-Compound Rubber]
[Severe Condition]
[Mud-Proof]
[High Performance]
[Squeal-Free]



BPM95
[Tri-Compound Rubber]
[Severe Condition]
[High Performance]



BPM90



BPM60

Service Parts



SP711 [11T]
SP712 [12T]
SP721 [11T Campy]
SP722 [12T Campy]
Lock Ring For Cassettes
[Forged Alloy]



SP880 R[Red]
Rear Derailleur Pulley
[11T]
[7075 Alloy/CNC]
[Ceramic Cartridge Bearing]



SP860 G[Gold]
S [Silver]
Rear Derailleur Pulley
[11T]
[7075 Alloy/CNC]
[Sealed Cartridge Bearing]



SP853
Tension Pulley
[10T]
[Steel Bushing]

SP852
Guide Pulley
[10T]
[Steel Bushing]



SP850
Rear Derailleur Pulley
[10T]



QRM1R



QRM1F

Quick Release
[Titanium Axle & Lever]
[Alloy Nut]



QRZ7R



QRZ7F

Quick Release
[Titanium Axle]
[Alloy Lever & Nut]



QRX7R



QRX7F

Quick Release
[SCM435 Axle]
[Alloy Lever & Nut]

BB Axle Bolt [ISIS]
[M12 & M15 Option]
[Alloy Cup]

BB Axle Bolt
[M8]



BAI42
[M12 Chromoly Bolt]
BAI30
[M15 Alloy Bolt]
BAI20
[M15 Chromoly Bolt]



BAI10
[M15 Chromoly Bolt]



BAI41
[M12 Chromoly Bolt]
[Plastic Cap]
BAI08
[M15 Chromoly Bolt]
[Plastic Cap]



BAS05
[M8 Chromoly Bolt]



BAS15
[M8 Chromoly Bolt]
[Plastic Cap]



SP131
Casing Stop



SP210
Bolt & Nut Set for Chainrings
[7075 Alloy]



SPFDC.A01L.BD0 [Ø34.9]
SPFDC.A01M.BD0 [Ø31.8]
SPFDC.A01S.BD0 [Ø28.6]
Front Derailleur Clamp
[Forged Alloy]
[Ø34.9, Ø31.8, Ø28.6mm Option]



SP550
Rear Derailleur Bracket



TLCS1
Cassette Lock Ring Tool

CS

FW

TLFW1
Freewheel Removal Tool



GPM50
O [Open]/C [Closed]
End Grip - TPR
[Open 80mm]
[Closed 86mm]



CRM0.44 [44T,w/CNC]
CRM0.32 [32T]
CRM0.22 [22T]

Chainring Combinations
[7075 Alloy]



CRR0.53 [53T]
CRR0.52 [52T]
CRR0.39 [39T]
CRR0.50 [50T]
CRR0.34 [34T]
CRR1.50 [50T]
CRR1.36 [36T]

Chainring Combinations
[7075 Alloy/CNC]



CRRS0.53 [53T,w/CNC]
CRRS0.39 [39T]
CRRS0.50 [50T,w/CNC]
CRRS0.34 [34T]

Chainring Combinations
[Alloy]





SunRACE

After Market

BP - Blister Pack

SUNRACE



HP - Header Plastic



After Market

HC - Header Cover



ZB - Zipper Bag



Trigger Shifters

Model No.	DLM93		DLM90		DLM53			DLM33		
	R9	L3	R9	L3	R8	R7	L3	R8	R7	L3
Side and Speed	Right 9-Speed	Left 3-Speed	Right 9-Speed	Left 3-Speed	Right 8-Speed	Right 7-Speed	Left 3-Speed	Right 8-Speed	Right 7-Speed	Left 3-Speed
Display Type	Podium Top		Podium Top		Podium Top			Podium Top		
Cable Adjuster	●		●		●			●		
Clamp Screw	SUS302 Stainless Steel		SUS302 Stainless Steel		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-Galvanized		Slick-Galvanized		Slick-Galvanized			Galvanized		
Cable Length	2,050mm	1,600mm	2,050mm	1,600mm	2,050mm		1,600mm	2,050mm		1,600mm
Casing Compatibility	SP		SP		SP	2SP & ↑	2SP & ↑	SP	2SP & ↑	2SP & ↑
Finish	(S) Silver / (B) Black		Black		Black			Black		
Average Weight	156g	153g	158g	157g	156g	156g	154g	158g	158g	157g

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

Twist Shifters

Model No.	TSM63			
	R8	R7	L3	LF
Side and Speed	Right 8-Speed	Right 7-Speed	Left 3-Speed	Left Friction
Cyclops Display	×			
Force Adjuster	●			
Cable Adjuster	●			
Clamp Type	C-Clamp			
Cable Type	Slick-Galvanized			
Cable Length	1,850mm		1350mm	
Casing Compatibility	SP	2SP & ↑	2SP & ↑	2SP & ↑
Handle Bar Diameter	22.2mm*			
Average Weight	109g	109g	107g	107g

* Tighten Torque of 15 ~ 25 kgf-cm

Model No.	TSM4S	
	R7	L3
Side and Speed	Right 7-Speed	Left 3-Speed
Cyclops Display	●	
Cable Adjuster	●	
Clamp Type	C-Clamp	
Cable Type	Slick-Galvanized	
Cable Length	1,900mm	1,400mm
Casing Compatibility	SP	2SP & ↑
Handle Bar Diameter	22.2mm*	
Average Weight	114g	112g

* Tighten Torque of 15 ~ 25 kgf-cm

Model No.	TSM37					
	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
Cyclops Display	●					
Cable Adjuster	●					
Clamp Type	C-Clamp					
Cable Type	Slick-Galvanized					
Cable Length	1,900mm				1,400mm	
Casing Compatibility	SP	SP	2SP & ↑	2SP & ↑	2SP & ↑	2SP & ↑
Handle Bar Diameter	22.2mm*					
Average Weight	89g	89g	89g	86g	86g	86g

* Tighten Torque of 15 ~ 25 kgf-cm

Twist Shifters

Model No.	TSM28					
	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	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	90g	87g	87g

* Tighten Torque of 15 ~ 17 kgf-cm

Model No.	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	L3	LF
Side and Speed	Right 9-Speed	Right 9-Speed	Left 3-Speed	Left-Friction (3/2)
Lever Position Adjust	●	●	●	●
Lever Material	Aluminum	Aluminum	Aluminum	Aluminum
Clamp Material	Aluminum	Aluminum	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	85g	85g

* Tighten Torque of 20~ 25 kgf-cm

Model No.	SLM2T					SLM10	
	R7	R6	R5	L3	LF	RF	LF
Side and Speed	Right 7-Speed	Right 6-Speed	Right 5-Speed	Left 3-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 & ↑	2SP & ↑	
Handle Bar Diameter	22.2mm*			22.2mm*		22.2mm*	
Average Weight	64.5g	64.5g	64.5g	65g	65g	64.5g	61.5g

* Tighten Torque of 20~ 25 kgf-cm

Front Cranksets

Model No.		FCMZ7 (D1)	FCMX7 (D1)	FCM99 (S1)	FCM97 (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 Spline Type		Integrated ISIS External BB (D1)	Integrated ISIS External BB (D1)	Integrated ISIS External BB (S1)	Integrated ISIS External BB (S1)
Number of Teeth		44-32-22T	44-32-22T	44-32-22T	44-32-22T
Outer Chainring		7075 Aluminum / Anodized / CNC	7075 Aluminum / Anodized / CNC	7075 Aluminum / Anodized	7075 Aluminum / Anodized
Middle Chainring		7075 Aluminum / Anodized	7075 Aluminum / Anodized	7075 Aluminum / Anodized	Hi-Tensile Steel / Painted
Inner Chainring		7075 Aluminum / Anodized	7075 Aluminum / Anodized	7075 Aluminum / Anodized	Hi-Tensile Steel / Painted
Removable Chainrings		●	●	●	●
Chainguard Option		●	●	●	●
Crank Arms		Carbon Reinforced 6061	6061 Aluminum Forged / Anodized	6061 Aluminum Forged / Anodized	6061 Aluminum Forged / Anodized
Crank Arm Length		175mm	175mm	175mm	175mm
Axle Material		Titanium	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		7075 Aluminum / Gold Anodized	7075 Aluminum / Silver Anodized	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter		104mm/64mm	104mm/64mm	104mm/64mm	104mm/64mm
Bottom Bracket (Included)	Model	BBMZ (D1)	BBMX (D1)	BBM97 (S1)	BBM97 (S1)
	Adapter	Aluminum / Gold Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized	Aluminum / Silver Anodized
	Shell Width	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm	BSA 68 /73mm
	Chain Line	50mm	50mm	50mm	50mm
	Weight	127g	127g	127g	127g
Crank (R) Weight		476g (175)	525g (175)	529g (175)	597g (175)
Crank (L) Weight		215.5g (175)	199g (175)	207g (175)	207g (175)
Total Average Weight		818g (175)	851g (175)	863g (175)	931g (175)

M Specifications

Front Cranksets

Model No.	FCM9A	FCM9B
Compatibility	9-Speed	9-Speed
Function	Fluid Drive Plus™	Fluid Drive Plus™
Crank Arm Spline Type	Square Taper	Square Taper
Number of Teeth	44-32-22T	44-32-22T
Outer Chainring	7075 Aluminum / Anodized	Hi-Tensile Steel
Middle Chainring	Hi-Tensile Steel	Hi-Tensile Steel
Inner Chainring	Hi-Tensile Steel	Hi-Tensile Steel
Removable Chainrings	●	●
Chainguard Options	●	●
Crank Arms	Forged Aluminum / Black Anodized	Forged Aluminum / Black Anodized
Crank Arm Length	175mm	175mm
Chainring Bolts & Nuts	SCM435 Chromoly	SCM435 Chromoly
Bolt Circle Diameter	104mm/64mm	104mm/64mm
Bottom Bracket (Optional)	Model	BBS15
	Shell Width	68mm (S)
	Spindle Length	113mm (G)
	Chain Line	50mm
Average Weight	814g (175)	950g (175)

Model No.	FCM63	FCM52	FCM33	FCM31
Compatibility	8 / 7-Speed	8 / 7-Speed	7 / 8-Speed	7 / 8-Speed
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive™	Fluid Drive™
Number of Teeth	42-32-22T	42-34-24T	48-38-28T	48-38-28T
Outer Chainring	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel
Middle Chainring	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel
Inner Chainring	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel
Chainguard Options	Ring Type	Ring Type	Full or Ring Type	Full or Ring Type
Crank Style	I-Crank	I-Crank	I-Crank	A-Crank
Crank Arms	A356.2 Aluminum	A356.2 Aluminum	A356.2 Aluminum	A356.2 Aluminum
Crank Arm Length (mm)	175/170mm	175/170/165/162.5/152mm	175/170/165/162.5/152mm	175/170/165/162.5/152mm
Bottom Bracket (Optional)	Model	BBS15	BBS15	BBS15
	Shell Width	68mm (S)	68mm (S)	68mm (S)
	Spindle Length	119mm (K)	127mm (U)	127mm (U)
	Chain Line	50mm	50mm	50mm
Average Weight	885g (175)	920g (175)	1,035g (175)	1,015g (175)

Front Derailleurs

Model No.	FDM97	FDM96	FDM67	FDM66	FDM56	FDM34
Rear Compatibility	9-Speed		8 / 7-Speed		8 / 7-Speed	
Chainring Compatibility	Triple		Triple		Triple	
Top Gear Teeth	44T or 48T		42T		42T	48T
Top-Low Max. Capacity	22T		20T		18T	20T
Top-Middle Min. Capacity	12T		10T		8T	10T
Cable Routing	(D) Dual Pull		(D) Dual Pull		(D) Dual Pull	
Clamp Diameter	(L) 34.9 / (M) 31.8 / (S) 28.6mm*		(L) 34.9 / (M) 31.8 / (S) 28.6mm*		(L) 34.9 / (M) 31.8 / (S) 28.6mm*	
Clamp Material	Aluminum	Aluminum-Steel	Aluminum	Aluminum-Steel	Aluminum-Steel	
Chain Stay Angle	66~69°		66~69°		66~69°	
Average Weight	144g (M)	153g (M)	141g (M)	150g (M)	150g (L)	145 (L)

* with multi clamp band

Model No.	FDM2A	FDM2S	FDM2B	FDM2C
Rear Compatibility	7 / 6-Speed		7 / 6-Speed	
Chainring Compatibility	Triple		Triple Friction	
Top Gear Teeth	48T	42T	48T	42T
Top-Low Max. Capacity	20T	18T	20T	18T
Top-Middle Min. Capacity	10T	8T	10T	8T
Clamp Diameter	(M) 31.8 / (S) 28.6mm		(M) 31.8 / (S) 28.6mm	
Cable Routing	(T) Top Pull / (B) Bottom Pull		(T) Top Pull / (B) Bottom Pull	
Chain Stay Angle	66~69°		66~69°	
Average Weight	154g (M)	144g (M)	154g (M)	144g (M)

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

Rear Derailleurs

Model No.	RDMZ LD	RDMZ MD	RDMX LD	RDMX MD	RDM97 LD	RDM90 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
Speeds	9-Speed		9-Speed		9-Speed	9-Speed
Max. Sprocket	34T		34T		34T	32T
Min. Sprocket	11T		11T		11T	11T
Rear Capacity	23T		23T		23T	21T
Max. Front Difference	22T	22T	22T	22T	22T	22T
Total Capacity	45T	35T	45T	35T	45T	43T
Outer Link	Forged Aluminum / Anodized / CNC		Forged Aluminum / Anodized / CNC		Aluminum	Aluminum
Inner Link	Aluminum Forged / Anodized		Aluminum Forged / Anodized		Steel	Steel
Bracket Body	Forged Aluminum / Anodized / CNC		Forged Aluminum / Anodized / CNC		Aluminum	Engineering Polymers
Plate Body	Forged Aluminum / Anodized / CNC		Forged Aluminum / Anodized / CNC		Aluminum	Engineering Polymers
Outer Plate Cage	Carbon		Aluminum / Anodized / CNC		Steel	Steel
Inner Plate Cage	Aluminum / Anodized		Aluminum / Anodized		Steel	Steel
Guide Pulley	11T / 7075 Aluminum / Cartridge Bearing		11T / 7075 Aluminum / Cartridge Bearing		11T (Bushing)	11T (Bushing)
Tension Pulley	11T / 7075 Aluminum / Cartridge Bearing		11T / 7075 Aluminum / Cartridge Bearing		11T (Bushing)	13T (Bushing)
Bracket Bolt	7075 Aluminum / Gold Anodized		7075 Aluminum / Black Anodized		Steel	Steel
Cable Adjuster	×		×		●	●
Pin Bushing (Outer Link)	●		●		●	×
Pin Bushing (Inner Link)	●		●		×	×
Average Weight	245g	235g	250g	240g	335g	355g

Rear Derailleurs

Model No.	RDM63 LD	RDM56 LD
Cage Type	(L) Long	(L) Long
Mounting Type	(D) Direct	(D) Direct
Speeds	8-Speed	8-Speed
Max. Sprocket	34T	34T
Min. Sprocket	11T	11T
Rear Capacity	23T	23T
Max. Front Difference	20T	20T
Total Capacity	43T	43T
Outer Link	Magnesium Alloy	Aluminum
Inner Link	Steel	Steel
Bracket Body	Engineering Polymers	Engineering Polymers
Plate Body	Engineering Polymers	Engineering Polymers
Outer Plate Cage	6061 Aluminum	Steel
Inner Plate Cage	Steel	Steel
Guide Pulley	11T(bushing)	11T(bushing)
Tension Pulley	13T(bushing)	13T(bushing)
Cable Adjuster	Composite	Composite
Pin Bushing (Outer Link)	●	×
Pin Bushing (Inner Link)	×	×
Average Weight	292g	355g

Rear Derailleurs

Model No.	RDM4S XD	RDM4S XB	RDM37 LD	RDM37 LB	RDM37 SD	RDM37 SB	RDM36 SD	RDM36 SB
Cage Type	(X) X-Long	(X) X-Long	(L) Long	(L) Long	(S) Short	(S) Short	(S) Short	(S) Short
Mounting Type	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket	(D) Direct	(B) Bracket
Speeds	7-Speed		7-Speed		7-Speed		6-Speed	
Max. Sprocket	34T		30T		30T		30T	
Min. Sprocket	13T		13T		13T		14T	
Rear Capacity	21T		17T		17T		16T	
Max. Front Difference	20T		20T		20T		20T	
Total Capacity	41T		37T		37T		36T	
Outer Link	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers	
Inner Link	Steel		Steel		Steel		Steel	
Bracket Body	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers	
Plate Body	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers	
Outer Plate Cage	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers	
Inner Plate Cage	Engineering Polymers		Engineering Polymers		Engineering Polymers		Engineering Polymers	
Guide Pulley	11T (bushing)		11T		11T		11T	
Tension Pulley	15T (bushing)		11T		11T		11T	
Cable Adjuster	Composite		Composite		Composite		Composite	
Average Weight	245g	285g	230g	270g	225g	265g	225g	265g

Rear Derailleurs

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		13T		14T		13T	
Rear Capacity	15T		15T		15T		14T		15T	
Max. Front Difference	20T		12T		20T		12T		20T	
Total Capacity	35T		27T		35T		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

M Specifications

Cassettes

Model No.	CSMD7 8AT	CSMD7 8AS	CSMZ7 9AV	CSMZ7 9AU	CSMX7 9AV	CSMX7 9AU
Speeds	8-Speed (w/9-Speed Spacing)		9-Speed		9-Speed	
Function	Fluid Drive Plus™		Super Fluid Drive™		Super Fluid Drive™	
Number of Teeth	11-30T	11-28T	11-34T	11-32T	11-34T	11-32T
Gear Combination	11-12-14-16-18-21-24-30	11-12-14-16-18-21-24-28	11-12-14-16-18-21-24-28-34	11-12-14-16-18-21-24-28-32	11-12-14-16-18-21-24-28-34	11-12-14-16-18-21-24-28-32
Sprocket Finish	(S) Sandblast Satin		(P) Ti-Aluminum Nitride / (T) Titanium-Nitride		(S) Sandblast Satin / (B) ED Black	
Sprocket Material			Hi-Tensile Steel		Hi-Tensile Steel	
Light Weight Holes	●		●		●	
Spacer Spider	✕		●		●	
Spacer Material	Aluminum / Gold Anodized		Spider Carrier 7075 Aluminum / Black Anodized			
Lock Ring	6061 Aluminum / Black Anodized		6061 Aluminum / Black Anodized			
Protector Material	6061 Aluminum		✕		✕	
Proctector Finish	Anodized Gold		✕		✕	
Chain Compatibility	6.6mm		6.6mm		6.6mm	
Average Weight	406g	388g	287g	275g	287g	275g

Model No.	CSMX5 9AV	CSMX5 9AU	CSMX5 9AS
Speeds	9-Speed		
Function	Super Fluid Drive™		
Number of Teeth	11-34T	11-32T	11-28T
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
Sprocket Finish	(S) Sandblast Satin		
Sprocket Material	Hi-Tensile Steel		
Light Weight Holes	●		
Spacer Material	Aluminum / Silver Anodized		
Lock Ring	6061 Aluminum / Black Anodized		
Chain Compatibility	6.6mm		
Average Weight	357g	345g	272g

Cassettes

M Specifications

Model No.	CSM98 9BW	CSM96 9AV	CSM96 9AU	CSM96 9AS	CSM9S 9AU
Speeds	9-Speed				9-Speed
Function	Super Fluid Drive™				Super Fluid Drive™
Number of Teeth	12-36T	11-34T	11-32T	11-28T	11-32T
Gear Combination	12-14-16-18-21-24-28-32-36	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	11-12-14-16-18-21-24-28-32
Sprocket Finish	(S) Sandblast Satin / (B) ED Black				(U) Zinc
Sprocket Material	Hi-Tensile Steel				Steel
Light Weight Holes	●				●
Spacer Material	Engineering Polymers				Engineering Polymers
Lock Ring	Steel				Steel
Chain Compatibility	6.6mm				6.6mm
Average Weight	441g	358g	346g	273g	336g

Model No.	CSM66 8AV	CSM66 8AU	CSM66 8AS	CSM66 8BV	CSM66 8BU	CSM56 8AU
Speeds	8-Speed			8-Speed		8-Speed
Function	Super Fluid Drive™			Super Fluid Drive™		Super Fluid Drive™
Number of Teeth	11-34T	11-32T	11-28T	12-34T	12-32T	11-32T
Gear Combination	11-13-15-18-21-24-28-34	11-13-15-18-21-24-28-32	11-12-14-16-18-21-24-28	12-14-16-18-21-24-28-34	12-14-16-18-21-24-28-32	11-13-15-18-21-24-28-32
Sprocket Finish	(S) Sandblast Satin / (B) ED Black			(S) Sandblast Satin		(U) Zinc
Sprocket Material	Hi-Tensile Steel			Hi-Tensile Steel		Steel
Light Weight Holes	●			●		●
Spacer Material	Engineering Polymers			Engineering Polymers		Engineering Polymers
Lock Ring	Steel			Steel		Steel
Chain Compatibility	7.1~7.3mm			7.1~7.3mm		7.1~7.3mm
Average Weight	346g	334g	265g	346g	334g	334g

Model No.	CSM63 7AS	CSM63 7BS
Speeds	7-Speed	
Function	Super Fluid Drive™	
Number of Teeth	11-28T	12-28T
Gear Combination	11-13-15-18-21-24-28	12-14-16-18-21-24-28
Sprocket Finish	(S) Sandblast Satin	
Sprocket Material	Hi-Tensile Steel	
Light Weight Holes	●	
Spacer Material	Engineering Polymers	
Lock Ring	Steel	
Chain Compatibility	7.1~7.3mm	
Average Weight	248g	258g

STARRACE

M Specifications

Freewheels

Model No.	MSEX9 9AU	MFE90 9CU	MFE60 8CU	MFE60 8CS
Speeds	9-Speed	9-Speed	8-Speed	8-Speed
Lock Ring Type	●	●	●	●
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Number of Teeth	11-32T	13-32T	13-32T	13-28T
Gear Combination	11-12-14-16-18-21-24-28-32	13-14-15-16-18-21-24-28-32	13-15-17-19-21-24-28-32	13-15-17-19-21-23-25-28
Spider Material	6061 Aluminum / Gold Anodized	×	×	
Sprockets On Spider	2	×	×	
Sprocket Finish	(C) Chrome Plated	(C) Chrome Plated	(C) Chrome Plated	
Sprocket Material	Hi-Tensile Steel	Steel	Steel	
Light Weight Holes	●	●	●	
Spacer Material	Aluminum / Gold Anodized	Engineering Polymers	Engineering Polymers	
Chain Compatibility	6.6mm	6.6mm	7.1~7.3mm	7.1~7.3mm
Average Weight	610g	570g	576g	574g

Model No.	MFM90 9CU	MFM61 8CV	MFM60 8CU	MFM60 8CS
Speeds	9-Speed	8-Speed	8-Speed	8-Speed
Lock Ring Type	●	●	●	●
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Number of Teeth	13-32T	13-34T	13-32T	13-28T
Gear Combination	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
Sprocket Finish	(C) Chrome Plated / (U) Zinc Plated			
Sprocket Material	Steel			
Light Weight Holes	●			
Spacer Material	Engineering Polymers			
Chain Compatibility	6.6mm	7.1~7.3mm	7.1~7.3mm	7.1~7.3mm
Average Weight	570g	605g	576g	574g

Freewheels

Model No.	MFM56 8CV	MFM4S 7CV	MFM30 7CS	MFM3S 7CS	MFM20 6DS
Speeds	8-Speed	7-Speed	7-Speed	7-Speed	6-Speed
Lock Ring Type	●	●	●	●	×
Function	Fluid Drive™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Number of Teeth	13-34T	13-34T	13-28T	13-28T	14-28T
Gear Combination	13-15-17-19-21-24-28-34	13-15-17-19-21-24-34	13-15-17-19-21-24-28	13-15-17-19-21-24-28	14-16-18-21-24-28
Sprocket Finish	(U) Zinc + EDB	(U) Zinc + EDB	(C) Chrome Plated	(U) Zinc Plated	(U) Zinc Plated
Sprocket Material	Steel	Steel	Steel	Steel	Steel
Light Weight Holes	×	●	●	●	●
Spacer Material	Engineering Polymers				
Chain Compatibility	7.1~7.3mm	7.3mm	7.3mm	7.3mm	7.3~7.8mm
Average Weight	609g	504g	460g	460g	433g

Model No.	MFM2A 7DV	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	14-34T	14-28T	14-28T	14-28T	14-28T	14-28T	14-28T
Gear Combination	14-16-18-20-22-24-34	14-16-18-20-22-24-28	14-16-18-20-24-28	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	(3) Zinc+EDB (2) Brown+EDB	(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	7.3mm	7.3mm	7.3~7.8mm	7.8mm	7.3mm	7.3~7.8mm	7.8mm
Average Weight	535g	495g	458g	416g	480g	468g	432g

Hubs

Model No.	HBMD7		HBMZ7		HBMX7	
	F	R9	F	R9	F	R9
Cassette Carrier Material	---	7075 Aluminum	---	7075 Aluminum	---	7075 Aluminum
Cassette Carrier System	---	3 Pawls	---	3 Pawls	---	3 Pawls
Hub Shell Material	6061 Aluminum		6061 Aluminum		6061 Aluminum	
Bearing	Cartridge(×2)	Cartridge(×5)	Cartridge(×2)	Cartridge(×4)	Cartridge(×2)	Cartridge(×4)
D-Dimension	---	41mm	---	41mm	---	41mm
Axle Diameter	20mm	12mm	9mm	10mm	9mm	10mm
Over Lock Dimension	110mm	150mm	100mm	135mm	100mm	135mm
Hub Axle Material	---	SCM435	7075 Aluminum		7075 Aluminum	
Hub Axle Length	148mm	150mm	110mm	145mm	110mm	145mm
Spoke Holes	32H		32H		32H	
Pitch Circle Diameter	58mm		R38.5mm / L58mm	R48mm / L58mm	R38.5mm / L58mm	R45.5mm / L58mm
Flange Width	57.4mm	75.1mm	56.3mm	57.4mm	56.3mm	57.4mm
Center to Flange	Right	33.0mm	30.8mm	33.4mm	21.5mm	33.4mm
	Left	24.4mm	44.3mm	22.9mm	35.9mm	22.9mm
QR Lever Material	6061 Aluminum	6061 Aluminum	6061 Aluminum		6061 Aluminum	
QR Nut Material	6061 Aluminum	6061 Aluminum	6061 Aluminum		6061 Aluminum	
QR Axle Material	6061 / SCM435	SCM435	Titanium		SCM435	
QR Axle Length	148mm	166mm	112mm	149mm	112mm	149mm
Finish	Gold Anodized		Gold Anodized		Black Anodized	
Average Weight	387g (w/QR)	695g (w/QR)	198g (w/QR)	343g (w/QR)	207g (w/QR)	355g (w/QR)

Hubs

Model No.		HBM96		HBM63		HBM53	
		F	R9	F	R8	F	R8
Cassette Carrier Material		---	SCM435	---	Cassette	---	Cassette
Cassette Carrier System		---	3 Pawls	---	2 Pawls	---	2 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		7075 Aluminum		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)

Hubs

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		108mm	145mm
Spoke Holes		36H			36H	
Pitch Circle Diameter		38mm	45.5mm		38mm	45.5mm
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

STR Shifters

Model No.		STRZ		STRX		STRS	
		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		Aluminum Forged	
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.		STR90				STR80			
		R9	LL	L2	L3	R8	LL	L2	L3
Speed	Rear	9-Speed	×	×	×	8-Speed	×	×	×
	Front	×	2/3-Speed	2-Speed	3-Speed	×	2/3-Speed	2-Speed	3-Speed
Max.Single-Stroke Shifts		3 (rear)	1 (front)	1 (front)	1 (front)	3 (rear)	1 (front)	1 (front)	1 (front)
Brake Lever		Aluminum Forged				Aluminum Forged			
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	1,650mm	2,100mm	1,650mm	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)			

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

R Specifications

Thumb Shifters

Model No.		SLR96		SLR90		SLR63		
		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
Cable Type		Slick-Galvanized		Slick-Galvanized		Slick-Galvanized		Slick-Galvanized
Cable Length		2,400mm	1,450mm	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	56g	56g	56g	56g	(D) 119g / (G) (H) 134g

Model No.		SLR39						
		R7	R6	R5	LF	7F	6F	5F
Speed	Rear	7-Speed	6-Speed	5-Speed	×	7-Speed	6-Speed	5-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		
Cable Type		Slick-Galvanized				Slick-Galvanized		
Cable Length		1,950mm			1,450mm	R:1,950mm / L:1,450mm		
Casing Compatibility		SP	2SP & ↑	2SP & ↑	2SP & ↑	R: SP / L: 2SP & ↑	2SP & ↑	
Average Weight		56g	56g	56g	56g	(D) 119g / (G) (H) 134g		

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	
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.		FCRZ7 (D2)	FCRZ6 (D2)	FCRZ3 (D2)	FCRZ1 (D2)	FCRX7 (D1)	FCRX6 (D1)	FCRX3 (D1)	FCRX1 (D1)	FCRS6 (S1)	FCRS1 (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 (D1)				Intergated ISIS External BB (D1)				Integrated ISIS External BB (S1)	
Number of Teeth		50-36T	50-34T	52-39T	53-39T	50-36T	50-34T	53-39T	52-39T	50-34T	53-39T
Outer Chainring		7075 Aluminum / Black Anodized / CNC				7075 Aluminum / Black Anodized / CNC				Aluminum / Anodized / CNC	
Inner Chainring		7075 Aluminum / Black Anodized / CNC				7075 Aluminum / Black Anodized / CNC				Aluminum / Anodized	
Removable Chainrings		●				●				●	
Crank Arms		Carbon				6061 Aluminum Forged / Anodized				6061 Aluminum Forged / Anodized	
Crank Arm Length		(L) 175mm / (M) 172.5mm / (O) 170mm				(M) 172.5mm				172.5mm	
Axle Material		Titanium				Chromoly				Chromoly	
Axle Diameter		Ø 24mm				Ø 24mm				Ø 24mm	
Axle Bolt		7075 Aluminum				7075 Aluminum				7075 Aluminum	
Chainring Bolts & Nuts		7075 Aluminum / Anodized				7075 Aluminum / Silver Anodized				7075 Aluminum / Silver Anodized	
Bolt Circle Diameter		110mm		130mm		110mm		130mm		110mm	130mm
Bottom Bracket (Included)	Model	BBRZ (D1)				BBRX (D1)				BBRS (S1)	
	Adapter	Aluminum / Anodized				Aluminum / Silver Anodized				Aluminum / Black Anodized	
	Shell Width	BSA 68mm				BSA 68mm				BSA 68mm	
	Chain Line	43.5mm				43.5mm				43.5mm	
	Weight	112g				125g				125g	
Crank(R) Weight		442g	435g	447g	455g	566g	559g	579g	571g	559g	564g
Crank(L) Weight		186g	186g	186g	186g	260g	260g	260g	260g	260g	260g
Total Average Weight		740g	733g	745g	753g	951g	944g	964g	956g	944g	949g

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		7075 Aluminum / Anodized		Steel	
Removable Chainrings		●		●	
Crank Arms		6061 Aluminum Forged / Anodized			
Crank Arm Length		172.5 / 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-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 / Anodized		6061 Aluminum Forged / Anodized		6061 Aluminum Forged	
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
Rear Compatibility	10-Speed	10-Speed	10-Speed	9-Speed	9-Speed
Chainring Compatibility	Double	Double	Double	Triple	Double
Top Gear Teeth	56~50 T	56~50 T	56~50 T	50T	56~50T
Capacity	16T	16T	16T	20T	16T
Mounting	Brazed on	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*
Cable Routing	(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
Outer Link	Aluminum Forged	Aluminum Forged (+CNC)	Aluminum Forged	Aluminum Forged	Aluminum Forged
Inner Link	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
Applicable Chainline	43.5mm	43.5mm	43.5mm	45mm	43.5mm
Chain Stay Angle	61~66°	61~66°	61~66°	63~66°	61~66°
Average Weight	102g	99g	111g / 99g (B)	114g / 99g (B)	111g / 99g (B)

* With Multi Clamp Band

Model No.	FDR87	FDR80	FDR31	FDM06
Rear Compatibility	8-Speed	8-Speed	7 / 6 / 5-Speed	6 / 5-Speed
Chainring Compatibility	Triple	Double	Double Friction	Double Friction
Top Gear Teeth	52T	56~50T	53 T	48T
Capacity	22T	16T	14 T	10T
Mounting	Band / (B) Brazed on	Band / (B) Brazed on	Band	Band
Band Diameter	(M)31.8 / (S) 28.6mm*	(M)31.8 / (S) 28.6mm*	(M) 31.8 / (S)28.6mm	(S) 28.6mm
Cable Routing	(B) Bottom Pull	(B) Bottom Pull	(B) Bottom Pull	(B) Bottom Pull
Band & Brazed on	Aluminum Forged	Aluminum Forged	Steel	
Outer Link	Aluminum Forged	Aluminum Forged	Steel	
Inner Link	Aluminum Forged	Aluminum Forged	Steel	
Chain Guide	Steel / Chrome Plated	Steel / Chrome Plated	Steel	
Applicable Chainline	45mm	43.5mm	45mm	45mm
Chain Stay Angle	63~66°	61~66°	63~66°	66~69°
Average Weight	115g / 100g (B)	114g / 99g (B)	150g	142g

* With Multi Clamp Band

R Specifications

Rear Derailleurs

Model No.	RDRZ2 SD	RDRX2 SD	RDRS SD	RDR90 SD	RDR90 LD
Cage Type	(S) Short	(S) Short	(S) Short	(S) Short	(L) Long
Mounting Type	(D) Direct	(D) Direct	(D) Direct	(D) Direct	(D) Direct
Speeds	10 / 9-Speed	10 / 9-Speed	10 / 9-Speed	9-Speed	
Max. Sprocket	28T	28T	27T	27T	27T
Min. Sprocket	11T	11T	11T	11T	11T
Rear Capacity	17T	17T	16T	16T	16T
Max. Front Difference	16T	16T	16T	16T	22T
Total Capacity	33T	33T	29T	29T	37T
Outer Link	Carbon Reinforced Cold Forged Aluminum	Cold Forged Aluminum	Aluminum	Aluminum	
Inner Link	Cold Forged Aluminum	Cold Forged Aluminum	Aluminum	Aluminum	
Bracket Body	Cold Forged Aluminum	Cold Forged Aluminum	Aluminum	Aluminum	
Plate Body	Cold Forged Aluminum	Cold Forged Aluminum	Aluminum	Aluminum	
Outer Plate Cage	Carbon	Aluminum / Anodized / CNC	Aluminum / Anodized	Steel	
Inner Plate Cage	Aluminum	Aluminum	Aluminum	Steel	
Guide Pulley	11T / 7075 / Ceramic Sealed Cart. Bearing	11T / 7075 / Sealed Cart. Bearing	11T	11T	
Tension Pulley	11T / 7075 / Ceramic Sealed Cart. Bearing	11T / 7075 / Sealed Cart. Bearing	11T	11T	
Bracket Bolt	7075 Aluminum	7075 Aluminum / Black Anodized	7075 Aluminum / Anodized	Steel	
Cable Adjuster	Carbon	Composite	Composite	Composite	
Pin Bushings (Outer Link)	●	●	×	×	
Pin Bushings (Inner Link)	●	●	×	×	
Average Weight	189g	200g	195g	252g	274g

Rear Derailleurs

Model No.	RDR86 SD	RDR86 LD	RDR31 SD
Cage Type	(S) Short	(L) Long	(S) Short
Mounting Type	(D) Direct	(D) Direct	(D) Direct
Speeds	8-Speed	8-Speed	7-Speed
Max. Sprocket	27T	27T	24T
Min. Sprocket	11T	11T	11T
Rear Capacity	16T	16T	17T
Max. Front Diff.	16T	22T	14T
Total Capacity	29T	37T	29T
Outer Link	Aluminum	Aluminum	Steel
Inner Link	Steel	Steel	Steel
Link Pin Bushings	×	×	×
Bracket Body	Aluminum	Aluminum	Aluminum
Plate Body	Aluminum	Aluminum	Composite
Outer Plate Cage	Steel	Steel	Steel
Inner Plate Cage	Steel	Steel	Steel
Bracket Bolt	Steel	Steel	Steel
Guide Pulley	11T	11T	10T
Tension Pulley	11T	11T	10T
Cable Adjuster	Composite	Composite	Composite
Average Weight	287g	309g	265g

Model No.	RDM10 SD	RDM10 SB
Cage Type	(S) Short	(S) Short
Mounting Type	(D) Direct	(B) Bracket
Speeds	Friction	
Max. Sprocket	28T	
Min. Sprocket	14T	
Rear Capacity	14T	
Max. Front Diff.	10T	
Total Capacity	24T	
Outer Link	Steel	
Inner Link	Steel	
Link Pin Bushings	×	
Bracket Body	Steel	
Plate Body	Steel	
Outer Plate Cage	Steel	
Inner Plate Cage	Steel	
Bracket Bolt	Steel	
Guide Pulley	10T	
Tension Pulley	10T	
Cable Adjuster	Steel	
Average Weight	255g	280g

R Specifications

Cassettes

Model No.	CSRZ TAO	CSRZ TAS	CSRZ TBO	CSRZ TBQ
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Spline Type	Nine Spline	Nine Spline	Nine Spline	Nine Spline
Speeds	10-Speed	10-Speed	10-Speed	10-Speed
Number of Teeth	11-23T	11-28T	12-23T	12-25T
Gear Combination	11-12-13-14-15-16-17-19-21-23	11-12-13-14-15-17-19-21-24-28	12-13-14-15-16-17-18-19-21-23	12-13-14-15-16-17-19-21-23-25
Sprocket Material	7075 Aluminum / CNC	7075 Aluminum / CNC	7075 Aluminum / CNC	7075 Aluminum / CNC
Sprocket Finish	(M) Ceramic Coating	(M) Ceramic Coating	(M) Ceramic Coating	(M) Ceramic Coating
Light Weight Holes	N/A	N/A	N/A	N/A
Spacer Material	N/A	N/A	N/A	N/A
Lock Ring	Aluminum / Black Anodized	Aluminum / Black Anodized	Aluminum / Black Anodized	Aluminum / Black Anodized
Chain Compatibility	5.9mm	5.9mm	5.9mm	5.9mm
Average Weight	105g	107g	115g	120g

Model No.	CSRZ5 TAO	CSRZ5 TBQ	CSRZ5 TBR
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Spline Type	Campy Spline	Campy Spline	Campy Spline
Speeds	10-Speed	10-Speed	10-Speed
Number of Teeth	11-23T	12-25T	12-27T
Gear Combination	11-12-13-14-15-16-17-19-21-23	12-13-14-15-16-17-19-21-23-25	12-13-14-15-16-17-19-21-24-27
Sprocket Material	7075 Aluminum / CNC	7075 Aluminum / CNC	7075 Aluminum / CNC
Sprocket Finish	(M) Ceramic Coating	(M) Ceramic Coating	(M) Ceramic Coating
Light Weight Holes	N/A	N/A	N/A
Spacer Material	N/A	N/A	N/A
Lock Ring	Aluminum / Black Anodized	Aluminum / Black Anodized	Aluminum / Black Anodized
Chain Compatibility	5.9mm	5.9mm	5.9mm
Average Weight	105g	117g	121g

Cassettes

Model No.	CSRX TAO	CSRX TAQ	CSRX TAS	CSRX TBQ
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Speeds	10-Speed	10-Speed	10-Speed	10-Speed
Number of Teeth	11-23T	11-25T	11-28T	12-25T
Gear Combination	11-12-13-14-15-16-17-19-21-23	11-12-13-14-15-17-19-21-23-25	11-12-13-14-15-17-19-21-24-28	12-13-14-15-16-17-19-21-23-25
Spider Material	7075 Aluminum / Black Anodized	7075 Aluminum / Black Anodized	7075 Aluminum / Black Anodized	7075 Aluminum / Black Anodized
Sprockets On Spider	2	2	2	2
Sprocket Material	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel
Sprocket Finish	(S) Sandblast Satin	(S) Sandblast Satin	(S) Sandblast Satin	(S) Sandblast Satin
Light Weight Holes	●	●	●	●
Spacer Material	Aluminum / Black Anodized	Aluminum / Black Anodized	Aluminum / Black Anodized	Aluminum / Black Anodized
Lock Ring	6061 Aluminum / Black Anodized	6061 Aluminum / Black Anodized	6061 Aluminum / Black Anodized	6061 Aluminum / Black Anodized
Chain Compatibility	5.9mm	5.9mm	5.9mm	5.9mm
Average Weight	230g	239g	247g	249g

Model No.	CSRS TAO	CSRS TAQ	CSRS TAS	CSRS TBQ
Function	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™	Fluid Drive Plus™
Speeds	10-Speed	10-Speed	10-Speed	10-Speed
Number of Teeth	11-23T	11-25T	11-28T	12-25T
Gear Combination	11-12-13-14-15-16-17-19-21-23	11-12-13-14-15-17-19-21-23-25	11-12-13-14-15-17-19-21-24-28	12-13-14-15-16-17-19-21-23-25
Spider Material	7075 Aluminum	7075 Aluminum	7075 Aluminum	7075 Aluminum
Sprockets On Spider	2	2	2	2
Sprocket Material	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel	Hi-Tensile Steel
Sprocket Finish	(S) Sandblast Satin	(S) Sandblast Satin	(S) Sandblast Satin	(S) Sandblast Satin
Light Weight Holes	●	●	●	●
Spacer Material	Engineering Polymers	Engineering Polymers	Engineering Polymers	Engineering Polymers
Lock Ring	Steel	Steel	Steel	Steel
Chain Compatibility	5.9mm	5.9mm	5.9mm	5.9mm
Average Weight	238g	247g	255g	257g

R Specifications

Cassettes

Model No.	CSR96 9AQ	CSR96 9BQ
Function	Fluid Drive Plus™	Fluid Drive Plus™
Speeds	9-Speed	9-Speed
Number of Teeth	11-25T	12-25T
Gear Combination	11-12-13-15-17-19-21-23-25	12-13-14-15-17-19-21-23-25
Sprocket Material	Hi-Tensile Steel	Hi-Tensile Steel
Sprocket Finish	(S) Sandblast Satin	(S) Sandblast Satin
Light Weight Holes	●	●
Spacer Material	Engineering Polymers	Engineering Polymers
Lock Ring	Steel	Steel
Chain Compatibility	6.6mm	6.6mm
Average Weight	280g	290g

Model No.	CSR86 8AO	CSR86 8BQ
Function	Fluid Drive Plus™	
Speeds	8-Speed	
Number of Teeth	11-23T	12-25T
Gear Combination	11-12-13-15-17-19-21-23	12-13-15-17-19-21-23-25
Sprocket Material	Hi-Tensile Steel	
Sprocket Finish	(S) Sandblast Satin	
Light Weight Holes	●	
Spacer Material	Engineering Polymers	
Lock Ring	Steel	
Chain Compatibility	7.1~7.3mm	
Average Weight	235g	281g

Model No.	CSR63 7AP	CSR63 7BP
Function	Fluid Drive Plus™	Fluid Drive Plus™
Speeds	7-Speed	7-Speed
Number of Teeth	11-24T	12-24T
Gear Combination	11-12-14-16-18-21-24	12-13-14-16-18-21-24
Sprocket Material	Hi-Tensile Steel	Hi-Tensile Steel
Sprocket Finish	(S) Sandblast Satin	(S) Sandblast Satin
Light Weight Holes	●	●
Spacer Material	Engineering Polymers	Engineering Polymers
Lock Ring	Steel	Steel
Chain Compatibility	7.1~7.3mm	7.1~7.3mm
Average Weight	190g	208g

Freewheels

Model No.	MFR30 7CQ	MFR3S 7CP	MFR2A 6DP
Speeds	7-Speed	7-Speed	6-Speed
Function	Fluid Drive™	Fluid Drive™	Fluid Drive™
Lockring Type	●	●	●
Number of Teeth	13-25T	13-24T	14-24T
Gear Combination	13-15-17-19-21-23-25	13-14-16-18-20-22-24	14-16-18-20-22-24
Sprocket Finish	(C) Chrome / (U) Zinc	(1) Zinc	(2) Brown + EDB
Sprocket Material	Steel	Steel	Steel
Spacer Material	Engineering Polymers	Engineering Polymers	Engineering Polymers
Chain Compatibility	7.3mm	7.3mm	7.3~7.8mm
Average Weight	440g	430g	393g

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 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)

Brake Calipers

Model No	BCRS	BCR91	BCR90	BCR81	BCR80	BCR30
Type	Dual-Pivot Device	Dual-Pivot Device	Dual-Pivot Device	Dual-Pivot Device	Dual-Pivot Device	Dual-Pivot Device
Reach	39~49mm	39~49mm	39~49mm	39~49mm	39~49mm	39~49mm
Quick Release	● (Index)	● (Index)	● (Index)	● (Index)	● (Index)	×
Convex Washers	●	×	×	×	×	×
Spring Adjustment	●	●	●	●	●	●
Arm Material	Forged Aluminum	Aluminum	Forged Aluminum	Aluminum	Forged Aluminum	Forged Aluminum
Adjuster Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
QR Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	×
Mounting Bolt	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly
Pivot Bolt	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly
Other Bolts	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly	Chromoly
Pad Type	Adj. Angle Cartridge	Cartridge Type	Cartridge Type	Normal Pad Type	Normal Pad Type	Normal Pad Type
Rim Compatibility	Aluminum Rim	Aluminum Rim	Aluminum Rim	Aluminum Rim	Aluminum Rim	Aluminum Rim
Finish	High-Polish Anodized	ED Black	High-Polish Anodized	ED Black	High-Polished Anodized	High-Polish Anodized
Average Weight	184g (Wheel)	175g (Wheel)	184g (Wheel)	190g (Wheel)	181g (Wheel)	176g (Wheel)

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)

Specifications

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	Aluminum (Cylindrical)	Steel (Cylindrical)
	Stopper	Steel	Alloy	SCM415
Bearing	Sealed Cartridge x 4	Sealed Cartridge x 2	Sealed Cartridge x 2	Sealed Cartridge x 2
Cup Thread	(B) BSA: BC1.37x24T	(B) BSA: BC1.37x24T / (M) M36x24T**	(B) BSA: BC1.37x24T / (M) M36x24T**	(B) BSA: BC1.37x24T / (M) M36x24T**
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	(C) 108* / (G) 113 / (J) 118mm	(C) 108* / (G) 113 / (J) 118mm	(C) 108* / (G) 113 / (J) 118mm
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	BBS15	BBS08	BBS05
Type	Square Taper	Square Taper	Square Taper	Square Taper
Material	Axle	Steel	Steel	Steel
	Cups	Aluminum	Engineering Polymers	Steel (with Waterproof Seal)
	Sleeve	Aluminum (Cylindrical)	Steel (Cylindrical)	Engineering Polymers
	Stopper	Engineering Polymers	Engineering Polymers	×
Bearing	Sealed Cartridge x 2	Sealed Cartridge x 2	Seal Cartridge x 2	Ball Cage
Cup Thread	(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**
Shell Width	(S) 68 / (M) 70 / (L) 73mm	(S) 68 / (M) 70 / (L) 73mm	(S) 68 / (M) 70 / (L) 73mm	(S) 68 / (M) 70mm
Spindle Length	(A) 103* / (B) 107 / (F) 111 / (G) 113 / (5) 115 / (H) 116 / (J) 118 / (K) 119 / (N) 122 / (U) 127 / (X) 131mm	(A) 103* / (B) 107 / (F) 111 / (G) 113 / (5) 115 / (H) 116 / (J) 118 / (K) 119 / (N) 122 / (U) 127 / (X) 131mm	(A) 103* / (B) 107 / (F) 111 / (G) 113 / (5) 115 / (H) 116 / (J) 118 / (K) 119 / (N) 122 / (U) 127 / (X) 131mm	(I) 117.5 / (Q) 124mm
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 Alloy / (B) Black	(B) Black w/ Gray Cups	(B) Black	(B) Black
Average Weight	260g (68/L113.5mm)	338g (68/L113.5mm)	280g (68/L113.5mm)	360g (68/L120mm)

*Only shell width 68mm.

**Italian-Cup with All RH Thread.

Bottom Brackets

Specifications

Model No.	BBT08	
Type	Cottered	
Material	Axle	Steel
	Cups	Engineering Polymers
	Sleeve	Steel (Cylindrical)
	Stopper	Engineering Polymers
Bearing	Seal Cartridge x 2	
Cup Thread	(B) BSA: BC1.37x24T / (5) 35mm / (8) 38mm / (4) 40mm	
Shell Width	(S) 68	
Spindle Length	(6) 136	
Finish	(B) Black	
Average Weight	280g (68/L136mm)	

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)
Material	Cups	Aluminum	Aluminum	Aluminum
	Sleeve	Clear Composite	Clear Composite	Black Composite
	Spacers	Composite	Composite	Composite
Bearing	Oversized Sealed Cartridge x 2	Sealed Cartridge x 2	Oversized Sealed Cartridge x 2	Sealed Cartridge x 2
Shimano Compatible	×	● (MTB)	×	● (MTB)
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	Gold Anodized	Gold Anodized	Silver Anodized	Silver Anodized
Average Weight	127g	93g	127g	93g

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

Model No.	BBM97 (S1)	BBM97 (S0)
Type	Integrated BB for FCM99/97 (S1)	Integrated BB for FCM99/98/97 (S0)
Material	Cups	Aluminum
	Sleeve	Clear Composite
	Spacers	Composite
Bearing	Oversized Sealed Cartridge x 2	Sealed Cartridge x 2
Shimano Compatible	×	● (MTB)
Cup Thread	BC 1.37 x 24T	BC 1.37 x 24T
Shell Width	68* / 73mm	68* / 73mm
Finish	Silver Anodized	Silver Anodized
Average Weight	127g	93g

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

Specifications

Bottom Brackets

Model No.		BBRZ3 (D1)	BBRZ (D1)	BBRZ (D0)	BBRX (D1)
Type		Optional BB for FCRZ (D1/D2)	Integrated BB for FCRZ (D1/D2)	Integrated BB for FCRZ (D0)	Integrated BB for FCRX (D1)
Material	Cups	Aluminum	Aluminum	Aluminum	Aluminum
	Sleeve	Clear Composite	Clear Composite	Black Composite	Clear Composite
	Spacers	×	×	×	×
Bearing		Ceramic Sealed Cartridge x 2	Oversized Sealed Cartridge x 2	Sealed Cartridge x 2	Oversized Sealed Cartridge x 2
Shimano Compatible		×	×	×	×
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		(R) Red Anodized	(S) Silver Anodized	(G) Gold Anodized	(S) Silver Anodized
Average Weight		112g	112g	93g	125g

Model No.		BBRS (S1)	BBRS (S0)
Type		Integrated BB for FCRS (S1)	Integrated BB for FCRS (S0)
Material	Cups	Aluminum	Aluminum
	Sleeve	Clear Composite	Black Composite
	Spacers	×	×
Bearing		Oversized Sealed Cartridge x 2	Sealed Cartridge x 2
Shimano Compatible		×	● (ROAD)
Cup Thread		BC 1.37 x 24T	BC 1.37 x 24T
Shell Width		68mm	68mm
Finish		(S) Silver Anodized	(S) Silver Anodized
Average Weight		125g	93g

Chains

Model	CN11Z (T)	CN11X (S)
Speed	11-Speed	11-Speed
Pitch	1/2" x 11/128"	1/2" x 11/128"
Pin Material	Chromized SCM / Hollow Pin	Chromized SCM / Hollow Pin
Pin Power	≥ 200kgf	≥ 200kgf
Roller Material	SCM435 + Teflon®*	SCM435 + Teflon®*
Outer Plate Material	SCM435 + Teflon® / Hollow Plate*	SCM435 + Teflon® / Hollow Plate*
Inner Plate Material	SCM430 + Teflon® / Hollow Plate*	SCM430 + Teflon® / Hollow Plate*
Tensile Strength	≥ 820kgf	≥ 820kgf
Finish	(T) Titanium-Nitride	(S) Silver Ni-PO4
Connect End Pin	×	×
Connect Guide Pin	CNP11 (included)	CNP11 (included)
Connect Easy Link	CNU11 (optional)	CNU11 (optional)
Average Weight	245g (110 Links)	245g (110 Links)

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Model	CNR1Z (T)	CNR1X (S)	CNR10 (S)	CN10S (S)	CN10S (1)
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	SCM435 + Teflon®*	SCM435 + Teflon®*	SCM435	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 Ni-PO4	(S) Silver Ni	(S) Silver Ni	(1) Silver/Gray
Connect End Pin	×	×	×	×	×
Connect Guide Pin	CNP10 (included)	CNP10 (included)	CNP10 (included)	CNP10 (included)	CNP10 (included)
Connect Easy Link	CNQ10 / CNU10 (optional)	CNQ10 / CNU10 (optional)	CNQ10 / CNU10 (optional)	CNQ10 / CNU10 (optional)	CNQ10 / CNU10 (optional)
Average Weight	244g (110 Links)	244g (110 Links)	246g (110 Links)	263g (110 Links)	263g (110 Links)

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Specifications

Chains

Model	CNM9Z (T)	CNM9X (S)	CNM99 (S)	CNM94 (S)	CNM94 (Y)
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 + Teflon®*	SCM435 + Teflon®*	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	≥ 920kgf	
Finish	(T) Titanium-Nitride	(S) Silver Ni-PO4	(S) Silver Ni	(S) Silver Ni	(Y) Gray
Connect End Pin	×	×	×	●	
Connect Guide Pin	CNP09 (included)	CNP09 (included)	CNP09 (included)	CNP09 (optional)	
Connect Easy Link	CNQ09 / CNU09 (optional)	CNQ09 / CNU09 (optional)	CNQ09 / CNU09 (optional)	CNQ09 / CNU09 (optional)	
Average Weight	254g (110 Links)	254g (110 Links)	256g (110 Links)	273g (110 Links)	

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Model	CNM89 (S)	CNM84 (S)	CNM84 (Y)	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	SCM420		Steel	Steel
Pin Power	≥ 150kgf	≥ 150kgf		≥ 150kgf	≥ 80kgf
Roller Material	Steel	Steel		Steel	Steel
Outer Plate Material	SAE1035	SAE1035		SAE1008	SAE1008
Inner Plate Material	SAE1035	SAE1035		SAE1008	SAE1008
Tensile Strength	≥ 820kgf	≥ 920kgf		≥ 820kgf	≥ 820kgf
Finish	(S) Silver Ni	(S) Silver Ni	(Y) Gray	(Y) Gray	(B) Black
Connect End Pin	●	●		●	●
Connect Guide Pin	×	×		×	×
Connect Easy Link	CNQ87 / CNU87 (optional)	CNQ87 / CNU87 (optional)		CNQ87 / CNU87 (optional)	×

Chains

Model	CNS22 (D)	CNS12 (S)	CNS10 (D)	CNS10 (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	≥ 80kgf	≥ 80kgf
Roller Material	Steel	Steel	Steel	Steel
Outer Plate Material	SAE1008	SAE1008 / Hollow Plate	SAE1008	SAE1008
Inner Plate Material	SAE1008	SAE1008	SAE1008	SAE1008
Tensile Strength	≥ 820kgf	≥ 920kgf	≥ 820kgf	≥ 820kgf
Finish	(D) Dacromet	(S) Silver Ni	(D) Dacromet	(B) Black
Connect End Pin	●	●	●	●
Connect Guide Pin	×	×	×	×
Connect Easy Link	×	×	×	×

Model	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 Ni	(S) Silver Ni	(S) Silver Ni	(S) Silver Ni
Connect End Pin	○ (optional)	○ (optional)	○ (optional)	○ (optional)
Connect Guide Pin	CNPX1 (included)	CNPX1 (included)	CNPX3 (included)	CNPX3 (included)
Connect Easy Link	×	×	×	×

Guide Pins

Model	CNP11	CNP10	CNP09	CNPX1	CNPX3
Chain Compatibility	11-Speed	10-Speed	9-Speed	CNX 1/8"	CNX 3/32"
Pin Width	5.5mm	5.9mm	6.7mm	9.6mm	7.8mm

Easy Q Links

Model	CNQ10	CNQ09	CNQ87
Chain Compatibility	10-Speed	9-Speed	8 / 7-Speed
Pitch	1/2" x 11/128"	1/2" x 11/128"	1/2" x 3/32"

Easy U Links

Model	CNU11	CNU10	CNU09	CNU87
Chain Compatibility	11-Speed	10-Speed	9-Speed	8 / 7-Speed
Pitch	1/2" x 11/128"	1/2" x 11/128"	1/2" x 11/128"	1/2" x 3/32"

Specifications

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
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 4.5mm	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.	OCBKW	OCBKB	OCBXP	OCB2X	OCB2P
Type	Brake Outer Casing	Brake Outer Casing	Brake Outer Casing	Brake Outer Casing	Brake Outer Casing
Description	Kevlar® Wrapped*	Kevlar® Braided*	Braided SP	Braided 2P	2P
Brake Compatibility	All	All	All	All	All
For Cable Diameter	Ø 1.6mm / Ø 1.5mm	Ø 1.6mm / Ø 1.5mm	Ø 1.6mm / Ø 1.5mm	Ø 1.6mm / Ø 1.5mm	Ø 1.6mm / Ø 1.5mm
Inner Plastic Lining	●	●	●	●	●
Inner Metal Structure	Straight Steel Wire x 18	Straight Steel Wire x 18	Straight Steel Wire x 18	Curled Flat Steel Coil	Curled Flat Steel Coil (Low-Density)
Reinforcement Lining	Kevlar® Wrapped*	Kevlar® Braided*	Braided Nylon	Braided Nylon	×
Outer Lining	Composite	Composite	Composite	Composite	Composite
Outer Dimension	Ø 5.0mm	Ø 5.0mm	Ø 5mm	Ø 5mm	Ø 5mm
Ferrule Material	Alloy	Alloy	Alloy	Alloy	Brass
Ferrule Diameter	Ø 6mm	Ø 6mm	Ø 6mm	Ø 6mm	Ø 6mm
Ferrule Finish	Silver	Silver	Silver	Silver	Chrome
Color	(M) Smoke / (S) Silver / (B) Black	(M) Smoke / (S) Silver / (B) Black	(S) Silver / (Options)	(S) Silver / (Options)	(B) Black / (Y) Gray / (Options)
Pre-Cut Length	To Order	To Order	To Order	To Order	To Order
Roll Length	500m / 50m / 40m / 30m	500m / 50m / 40m / 30m	500m / 50m / 40m / 30m	500m / 50m / 40m / 30m	500m / 50m / 40m / 30m

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

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

Disc Pads - HAYES® Type

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

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

Disc Pads - AVID® Type

Model No.	DPA10
Compatible Systems	Juicy BB7

Springs are included with necessary models

Disc Pads - FORMULA® Type

Model No.	DPF10
Compatible Systems	Oro

Springs are included with necessary models

Disc Pads - TEKTRO® Type

Model No.	DPT10
Compatible Systems	Io





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