

ISO Hub Specifications and Wheel Building Information

Front Hub Type	Axle Type	Axle Width (mm)	Flange Diameter Drive Side & Non-Drive Side (mm)	Center to Flange Drive Side (mm)	Center to Flange Non-Drive Side (mm)	Frame Attachment Options	Available Spoke Hole Drilling	Upgrade and Conversion Options	Weight – Steel (grams)	Weight – Ceramic (grams)
ISO B 15x110mm Front	one piece	110	57.4	26.9	26.9	15mm TA	24, 28, 32	4	176	172
ISO B 15x100mm Front	one piece	100	57.4	31.3	22.2	15mm TA	24, 28, 32	4	176	172
ISO AB Front	one piece	110	57.4	36.3	27.3	15/20mm TA	28, 32	7	182	178
ISO SD QR Front	two piece	100	57.4	31.3	22.2	QR	28, 32, 36	4	166	163
ISO SD 15mm Front (24H)	one piece	100	54.7	31.2	22.5	15mm TA	24.0	4	164	161
ISO SD 15mm Front	one piece	100	57.4	31.3	22.2	15mm TA	28, 32, 36	4	164	161
ISO LD 15mm Front	one piece	100	57.4	31.6	23.3	15mm TA	28, 32, 36	5	197	193
ISO LD 20mm Front	one piece	110	57.4	31.6	23.3	20mm TA	28, 32, 36	5	207	203
ISO 24mm Front	one piece	110	57.4	26.5	27.8	24mm	28, 32, 36	6	240	-
Lefty® SuperMax	one piece	Lefty	57.4	35.4	26.6	Lefty®	28, 32	-	215****	211****
Lefty® LD	one piece	Lefty	57.4	35.4	19.6	Lefty®	28, 32, 36	5	200	196*****
Universal Disc Front	two piece	100	53.0	31.5	23.0	QR	32, 36	-	150	-

Rear Hub Type	Axle Type	Axle Width (mm)	Flange Diameter Drive Side & Non-Drive Side (mm)	Center to Flange Drive Side (mm)	Center to Flange Non-Drive Side (mm)	Frame Attachment Options	Available Spoke Hole Drilling	Upgrade and Conversion Options	Weight – Steel (grams)	Weight – Ceramic (grams)
ISO B Rear	one piece	148	57.4	24.0	36.3	12mm TA	24, 28, 32	3	341**	337**
ISO 135 x QR Rear	one piece	135	57.4	20.1	33.9	QR/FB	28, 32, 36	1, 3	336	331
ISO 135 x 10/12mm Rear	one piece	135	57.4	20.1	33.9	10/12mm TA	28, 32, 36	1, 3	320**	315**
ISO 142 x 12mm Rear	one piece	142	57.4	20.1	33.9	12mm TA	28, 32, 36	1, 3	325	320
ISO DH G1 150 x 10/12mm Rear	one piece	150	57.4	25.0	38.5	10/12mm TA	32, 36	3	336**	-
ISO DH G2 150 x 10/12mm Rear	one piece	150	57.4	28.5	39.6	10/12mm TA	32, 36	3	338	333
ISO DH G2 157 x 12mm Rear	one piece	157	57.4	28.5	39.6	12mm TA	32, 36	3	344	339
ISO SS 135mm FB Rear	one piece	135	57.4	32.3	31.0	QR/FB	28, 32, 36	-	411***	406***
ISO SS 142 x 12mm Rear	one piece	142	57.4	32.3	31.0	12mm TA	28, 32, 36	-	364	358
Universal Disc Rear	one piece	135	53.0	21.0	34.0	QR/FB	32, 36	1, 3	282	-
Universal Single Speed Rear	one piece	135	53.0	32.0	34.2	QR/FB	32, 36	-	427***	-
Tandem Disc Rear Hub	two piece	140	53.0	23.5	31.5	QR	32, 36	2, 3	284	-
Tandem Disc Rear Hub	one piece	145	53.0	26.0	29.0	QR/FB	32, 36	3	366	-
Tandem Disc Rear Hub	one piece	160	53.0	33.7	33.7	QR/FB	32, 36	3	388	-

G1: Generation one – Serial number begins with 1910

G2: Generation two – Serial number begins with 2910

Frame Attachment Options

QR: Quick Release Only

TA: Thru-axle Only

QR/FB: Quick Release or FunBolts (FunBolts only compatible with rear one piece axle)

Small Part Weights

* Add 48g if hub features a stainless steel driveshell

** Add 27g if hub features an XD driveshell

** Add 5g if using 10mm thru axle

*** Weight includes 18t stainless steel cog (37g), single speed cog spacers (6g), single speed cog lock ring (4g), and FunBolts (42g)

**** Weight includes Cannondale ® axle bolt (4g)

***** Weight includes 1mm disc spacer (3g), Cannondale ® axle bolt

Upgrade and Conversion Options

1. Convertible to 135 QR/FB axle, 135 x 10mm TA, 135 x 12mm TA, 142 x 12mm TA, and 135 two piece QR axle

2. Convertible to 130mm, 135mm, and 140mm axle widths when using a two piece axle

3. Convertible to stainless steel driveshell or XD driveshell

4. Convertible to QR, 100x15mm TA, and 110x15mm TA

5. Convertible to 15mm, 20mm, and Lefty ® axle (Lefty® conversion only works on LD hubs with serial number prefix 1720)

6. Convertible to 15mm, 20mm, 24mm (starting with serial number prefix 1710)

7. Convertible to 110x20mm Boost, 110x15mm Boost with Torque Caps

Wheel Building Specifications

Spoke Gauge: 13, 14, or 15 gauge

Spoke Lacing Pattern: 2-or-more cross

Spoke Hole Diameter: 2.5mm

Max Spoke Tension: 120kgf, 1200N