

ISO Hub Specifications and Wheel Building Information

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 Front	one piece	110	57.4	26.9	26.9	15mm TA	28, 32	-	176	172
ISO B Rear	one piece	148	57.4	24.0	36.3	12mm TA	28, 32	3	341**	337**
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	57.4	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*****
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 Front	two piece	100	53.0	31.5	23.0	QR	32, 36	-	150	-
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 and 100x15mm thru axle

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)

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