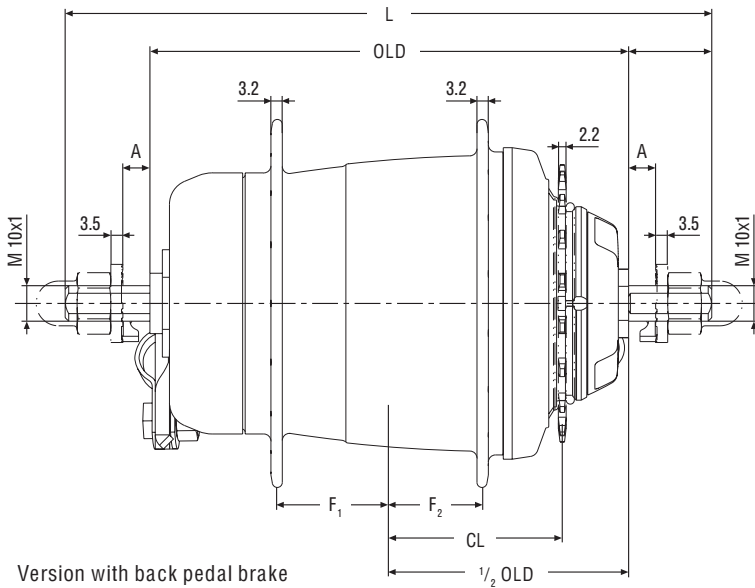
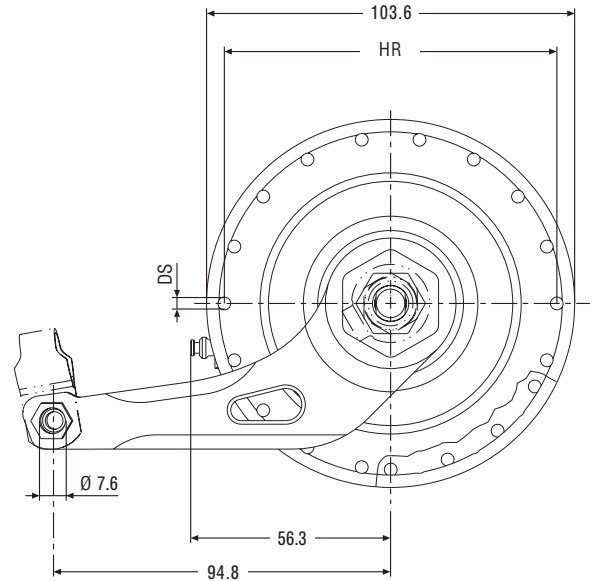


i-MOTION 9 TECHNICAL DATA / ASSEMBLY REQUIREMENTS



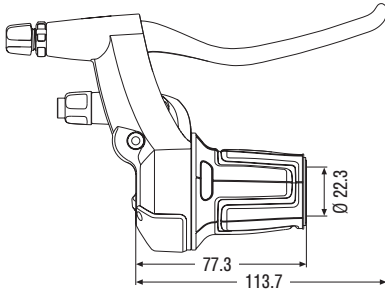
Version with back pedal brake



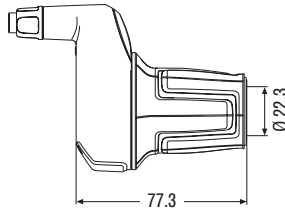
GEAR HUBS

		i-MOTION 9 with back pedal brake	i-MOTION 9 i-BRAKE compatible	i-MOTION 9 disc brake compatib.	i-MOTION 9 without brake	
Axle	Speeds	9	9	9	9	
	Brake	With back pedal brake	Adaptor for i-BRAKE (Page 94)	Adaptor for disc brake	without	
	Over Locknut Dim., OLD	135 mm	135 mm	135 mm	135 mm	
	Length, L	182 mm	182 mm	182 mm	182 mm	
	Ends Diameter	M 10x1	M 10x1	M 10x1	M 10x1	
	Dropout Width Dim., A	min. 4 mm / max. 10 mm	min. 4 mm / max. 10 mm	min. 4 mm / max. 10 mm	min. 4 mm / max. 10 mm	
	Spoke	Holes	36 or 32	36 or 32	36 or 32	36 or 32
		Hole Diameter, DS	2.8 mm	2.8 mm	2.8 mm	2.8 mm
		Hole Ref. ø, HR	93.6 mm	93.6 mm	93.6 mm	93.6 mm
		Flange Dist. to 1/2 OLD	F ₁ = 26.5 mm / F ₂ = 31.5 mm	F ₁ = 26.5 mm / F ₂ = 31.5 mm	F ₁ = 26.5 mm / F ₂ = 31.5 mm	F ₁ = 26.5 mm / F ₂ = 31.5 mm
Ratio	Overall	340 %	Gear steps ←	←	←	
	1st gear	0,542	↓ ←	←	←	
	2nd gear	0,621	14 % ←	←	←	
	3rd gear	0,727	17 % ←	←	←	
	4th gear	0,853	17 % ←	←	←	
	5th gear	1,000	17 % ←	←	←	
	6th gear	1,172	17 % ←	←	←	
	7th gear	1,375	17 % ←	←	←	
	8th gear	1,611	17 % ←	←	←	
	9th gear	1,844	14 % ←	←	←	
Chain	Chainline, CL	48.8 mm	48.8 mm	48.8 mm	48.8 mm	
	Ratio	1,73 – 1,90	min. 1,73	min. 1,73	min. 1,73	
	Dimensions	1/2" x 1/8" and 1/2" x 3/32"	1/2" x 1/8" and 1/2" x 3/32"	1/2" x 1/8" and 1/2" x 3/32"	1/2" x 1/8" and 1/2" x 3/32"	
Compatibility	Sprocket	18 / 19 / 20 / 21 / 22 teeth	18 / 19 / 20 / 21 / 22 teeth	18 / 19 / 20 / 21 / 22 teeth	18 / 19 / 20 / 21 / 22 teeth	
	Shifter	i-MOTION 9 IBS SL and i-MOTION 9 SL				
	Disc Brake	—	—	6 holes	—	
	Hand brake lever	—	i-BRAKE compatible (Page 95)	Disc brake compatible	—	
	Tandem	Not suitable for tandems, transport bicycles or similar				
Finish	Weight	2,400 g	1,950 g	1,900 g	1,900 g	
	Mat. Hub shell	Aluminum	Aluminum	Aluminum	Aluminum	
	Surface	Satin matt "Lux" anodized	Satin matt "Lux" anodized	Satin matt "Lux" anodized	Satin matt "Lux" anodized	

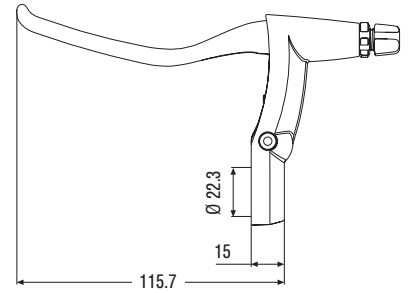
i-MOTION 9 TECHNICAL DATA / ASSEMBLY REQUIREMENTS



Shifter i-MOTION 9 IBS SL



Shifter i-MOTION 9 SL



Brake lever i-BRAKE BL

SHIFTER

	i-MOTION 9 IBS SL	i-MOTION 9 SL
Version	i-MOTION 9 IBS (integrated hand brake lever)	i-MOTION 9 (single shifter)
Shift cable lengths	1400 mm / 1500 mm / 1600 mm / 1700 mm	1400 mm / 1500 mm / 1600 mm / 1700 mm
Shifter type	SRS Twist shifter with integrated brake lever	SRS Twist shifter
Mounting location	right side of handlebar	right side of handlebar
Compat. Gear hub	i-MOTION 9	i-MOTION 9
Gear indicator	Window	Window
Barrel adjuster	Indexed	Indexed
Clamping diameter	22.3 mm	22.3 mm
Straight handlebar ends	Length = min. 150 mm	Length = min. 150 mm
Cable routing	Continuous cable housing (pre-assembled)	Continuous cable housing (pre-assembled)
Compatibility	Linear-Pull, i-BRAKE, Avid BB Disc	—
Ratio	2.32	—
Cable path	24 mm	—
Reach Adjust	Yes	—
Adjusting screw	Yes	—
Lever size	4-finger	—
Material	Aluminum, forged	—
Weight	272 g	195 g
Shift cable	Stainless steel	Stainless steel
Housing	Cast aluminum	Cast aluminum
Grip cover	Thermoplastic elastomer	Thermoplastic elastomer
Frame clamp	Aluminum	Aluminum
Finish	Mercury silver painted	Mercury silver painted

BRAKE LEVER

	SRAM i-BRAKE BL	
	i-BRAKE 60 BL, left	i-BRAKE 60 BL, right
Mounting location	left side of handlebar	right side of handlebar
Clamping diameter	22.3 mm	→
Compatibility	Linear-Pull, i-BRAKE, Avid BB Disc	→
Ratio	2.32	→
Cable path	24 mm	→
Reach Adjust	Yes	→
Adjusting screw	Yes	→
Lever size	4-finger	4-finger
Weight	95 g	95 g
Housing	Cast aluminum	→
Lever	Aluminum, forged	→
Frame clamp	Aluminum	→
Finish	Mercury silver painted	→

i-MOTION 9

TECHNICAL DATA / ASSEMBLY REQUIREMENTS

CYCLE FRAME

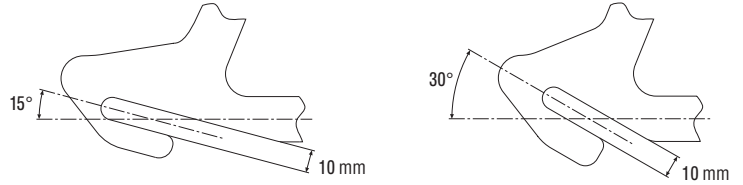
Frame strength must be such that, the rear part of the frame does not undergo any permanent deformation when a max. braking torque of 250 Nm (2200 in.lbs.) is applied to the rear wheel.

DROPOUTS

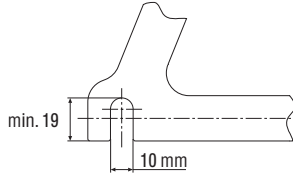
Only flat and not off-set versions.
Dropout thickness: 4 – 10 mm.
The dropouts must be parallel.

Dropout dimensions: *see figures on right.*

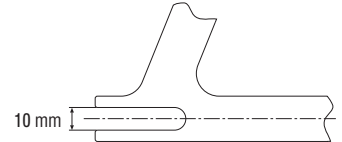
Standard dropouts



Vertical dropout



Dropout open towards rear



RETAINING WASHERS

The following table shows the permissible combinations of dropout and retaining washer.

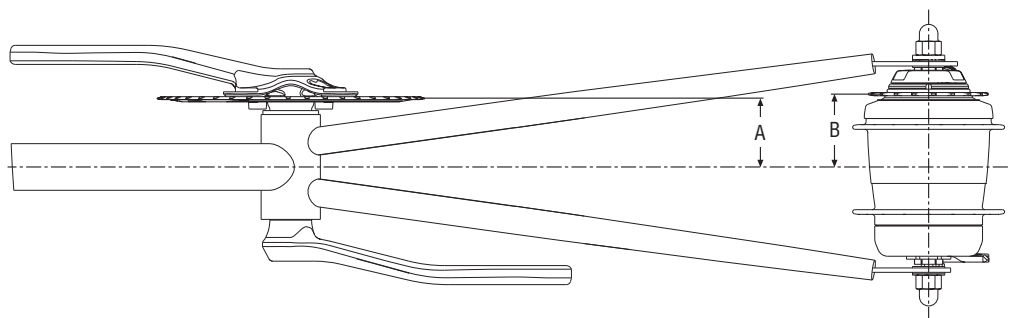
Type of dropout				
Necessary Retaining washer on the left axle end (not drive side)	 15L – blue dot	 30L – yellow dot	 white dot	 180 – orange dot
Necessary Retaining washer on the right axle end (drive side)	 15R – red dot	 30R – green dot	 white dot	 180 – purple dot

CRANKSET

The crankset and bottom bracket specifications must conform to the following details.

A = 48.8 mm ± 5 mm

B = 48.8 mm (rear chainline)

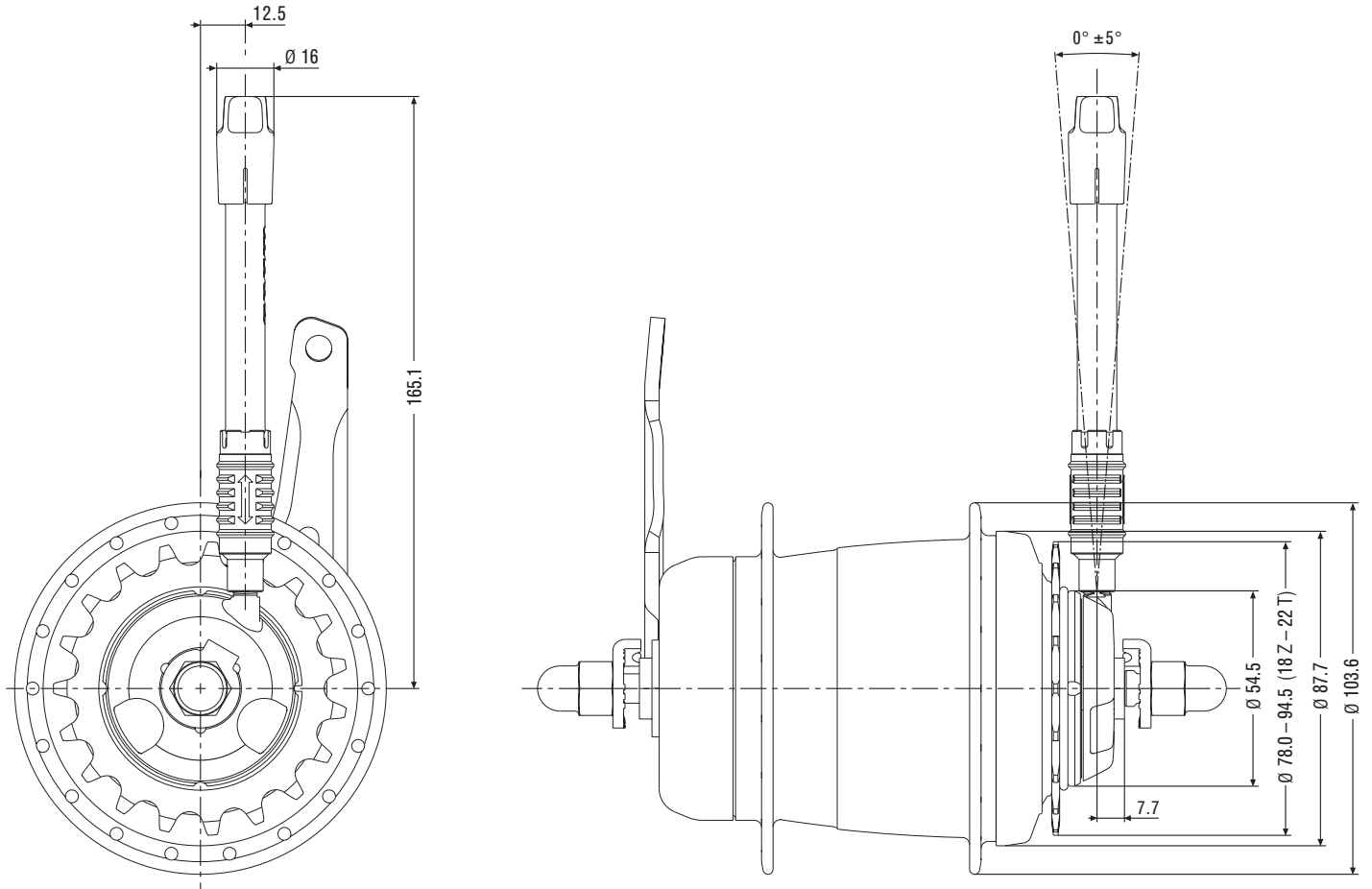


i-MOTION 9

TECHNICAL DATA / ASSEMBLY REQUIREMENTS

FRAME AND CHAIN GUARD

For the frame and chain guard layout, the dimensions listed below have to be considered.



SHIFT CABLE ROUTING

Shift cable routing only along the chainstay
Only continuous cable housing (no open cable routing).
See the adjoining figure for attachment points.

