

Hubs

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

Hubs

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

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		140mm	175mm	
Spoke Holes	36H			36H		
Pitch Circle Diameter	38mm	45mm		38mm	45mm	
Flange Width	72mm	57mm		72mm	57mm	
Center to Flange	Right	36mm	23.5mm	23.5mm	36mm	23.5mm
	Left	36mm	33.5mm	33.5mm	36mm	33.5mm
QR Lever Material	6061 Aluminum			N/A (Nutted)		
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	