



NORTH AMERICAN HYDRAULICS

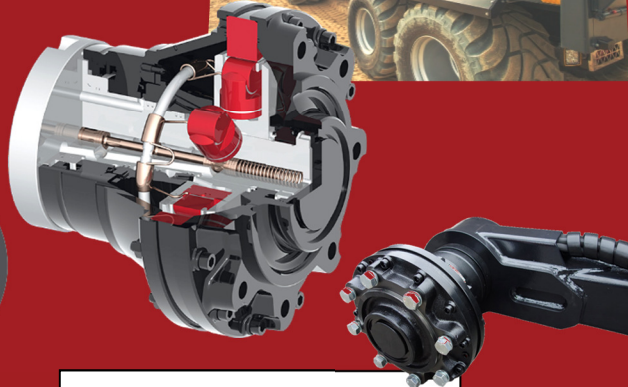
Solution Providers

BLACK BRUIN HYDRAULIC MOTORS

ON-DEMAND WHEEL DRIVES



- More Tractive Effort
- Easy to Freewheel
- Reduced Ground Damage
- Less Tractor Power Needed With Improved Efficiency
- Low Cost of Maintenance With Fewer Components
- Available With Strong Certified Brakes



HIGH TORQUE
WHERE IT IS NEEDED

B240



B250



B260



B270

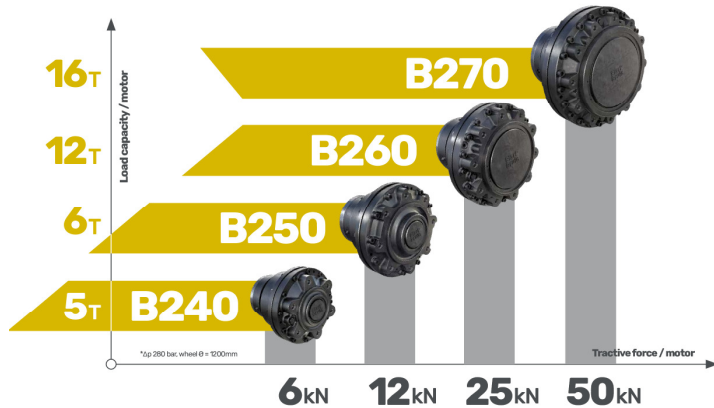


Drum and Disc Brakes



Black Bruin
No power like it.

NAHI, LLC – CUSTOMER SERVICE • 225-751-0500 • www.nahi.com



Technical Details - Motors

Motor Model Code – Freewheeling Hub Motors					
B200 Series Model Code AAAA-BBBB-CCCC / D					
A: Frame	AAAA-BBBB-CCCC/D	B240	B250	B260	B270
B200 series frames	B240	•			
	B250		•		
	B260			•	
	B270				•
B: Displacement	AAAA-BBBB-CCCC/D	B240	B250	B260	B270
B240 displacements	0063 : 630 ccm/rev	•			
	0080 : 800 ccm/rev	•			
B250 displacements	0100 : 1000 ccm/rev		•		
	0125 : 1250 ccm/rev		•		
	0160 : 1600 ccm/rev		•		
B260 displacements	0200 : 2000 ccm/rev			•	
	0250 : 2500 ccm/rev			•	
	0315 : 3150 ccm/rev			•	
B270 displacements	0400 : 4000 ccm/rev				•
	0500 : 5000 ccm/rev				•
	0630 : 6300 ccm/rev				•
C: Displacement Control	AAAA-BBBB-CCCC/D	B240	B250	B260	B270
1-speed	1N00 : Fixed displacement	•	•	•	•
2-speed valve	2N0R : Right side – CW preferred	•	•	•	•
	2N0L : Left side – CCW preferred	•	•	•	•
Freewheeling valve	FW10 : Type 1 – Open freewheeling position	•	•	•	
	FW20 : Type 2 – Closed freewheeling position	•	•	•	
D: Accessory	AAAA-BBBB-CCCC/D	B240	B250	B260	B270
No drum brake	NZ : Fittings for one-time lubrication	•	•	•	•
	GZ : Fittings for regular lubrication	•	•	•	•
Drum brake	MRJ40-0 : Brake size 320x75	•			
	MRJ50-0 : Brake size 400x80		•		
	MRJ60-R : Brake size 420x220 – Right side			•	
	MRJ60-L : Brake size 420x220 – Left size			•	

Technical Details – Motors

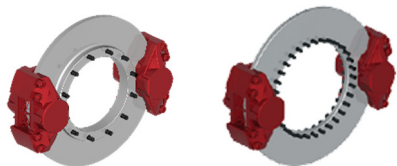
Motor Type	B240	B250	B260	B270
Displacement (in³)	38.5 / 48.8	61.0 / 76.3 / 97.6	122.0 / 152.6 / 192.2	244.1 / 305.1 / 384.4
Multi-speed type	1 or 2-speed	1 or 2-speed	1 or 2-speed	1 or 2-speed
Maximum rotating speed (rpm)				
Full displacement	240 / 185	200 / 160 / 125	175 / 140 / 110	125 / 100 / 80
½ displacement	360 / 275	300 / 240 / 185	220 / 180 / 145	160 / 130 / 105
Freewheeling	600	500	400	350
Mechanical freewheeling type				
Motor depressurization	1 or 2-speed motor	1 or 2-speed motor	1 or 2-speed motor	1 or 2-speed motor
Internal pilot valve control	1-speed motor only	1-speed motor only	1-speed motor only	1-speed motor only
Maximum torque (lb-ft)				
Intermittent pressure ¹⁾	1655 / 2083 / 2648	3311 / 4138 / 5296	8814 / 11019 / 13881	17635 / 21990 / 27740
Peak pressure	1932 / 2434 / 3090	3865 / 4824 / 6181	9913 / 12398 / 15614	10970 / 13700 / 17270
Maximum working pressure (psi)				
Intermittent pressure ¹⁾	4350	4350	5800	5800
Peak pressure	5075	5075	6525	6525
Maximum output power (horse power)				
Full displacement	47	67	120	176
½ displacement	28	40	72	108
Weight (pounds)	130	203	330	628
Maximum shaft load (pounds) ²⁾	8800	11,900	27,560	33,950
Grease ring sealing	Available			

1) Intermittent operation: permissible values for maximum 10% of every minute

2) Load values are for one wheel motor. Values given are applicable for most applications with appropriate wheel offset. Specific calculation has to be done for every application.

Black Bruin
No power like it.

Technical Details – Brakes and Motors



B250
caliper disc brake

B260
caliper disc brake



B240
drum brake

B250
drum brake

B260
drum brake

Technical Details – Caliper Discs

Caliper Disc Brake	B240	B250	B260	B270
Operation	In Development	Pressure Operated	Pressure Operated	Ask
Maximum brake torque (ft lbs)		7670	8110	
Maximum brake pressure (psi)		2175	2175	
Weight (pounds)		72.8	70.5	

Technical Details – Drum Brakes

Drum Brake	B240	B250	B260	B270
Certification	Pressure Operated	Pressure Operated	Pressure Operated	Ask
Operation	Mechanically operated	Mechanically operated	Mechanically operated	
Maximum brake torque (ft lbs)	6340	9960	14,825	
Maximum actuation torque (lb ft)	1000	1175	2065	
Lever actuation direction	Bidirectional	Bidirectional	CW or CCW	
Weight (pounds)	79.4	136.7	265.6	

Main Dimensions - Motors

Dimension	B240	B250	B260	B270	B240 with drum brake	B250 with drum brake	B260 with drum brake	B250 with disc brake	B260 with disc brake
A (inches)	11.02	12.28	13.23	13.23	11.59	12.91	18.50	12.28	13.23
B (inches)	10.32	10.98	12.48	14.84	10.89	11.61	17.76	10.98	12.48
C (inches)	11.10	13.46	16.38	16.38	13.74	17.48	18.11	13.50	16.38
D (inches)	8.07	10.83	13.19	16.73	8.07	10.83	13.19	10.83	13.19
Hub interface ¹⁾	6xM18x1.5	8xM20x1.5	10xM22x1.5	12xM22x1.5	6xM18x1.5	8xM20x1.5	10xM22x1.5	8xM20x1.5	10xM22x1.5
E (inches)	6.30	8.69	11.06	15.	6.33	8.69	11.06	8.69	11.06
F (inches)	6.50	7.87	9.45	9.45	7.17	8.86	9.25	7.87	9.45
G (inches)	5.51	6.89	7.87	10.23	5.51	6.89	7.87	6.89	7.87
Shaft interface	6xM16x2.0	8xM16x2.0	12xM20x1.5	16xM20x1.5	6xM16x2.0	8xM16x2.0	12xM20x1.5	8xM16x2.0	12xM20x1.5
H (inches)	-	9.29	10.24	10.24	-	-	-	-	-
Disc interface	-	12xM12x1.75	32xM10x1.5	32xM10x1.5	-	-	-	-	-
I (inches)	-	-	-	-	2.85	3.37	6.06	-	-
Lever distance	-	-	-	-	-	-	-	-	-
J (inches)	-	-	-	-	-	-	-	18.98	19.84
Ø w/brake calipers	-	-	-	-	-	-	-	-	-

1) Alternative hub interfaces available

In-built freewheeling valve

In-built 2-speed valve

Well-sealed, compact structure

Features

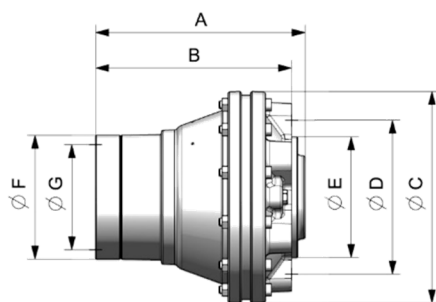
Multiple displacements

Unique mechanical freeheeling

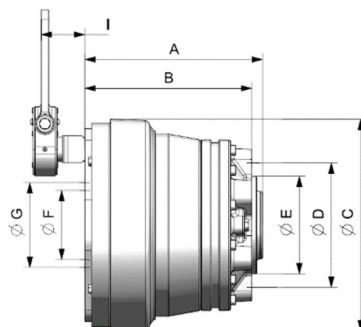
Black Bruin

No power like it.

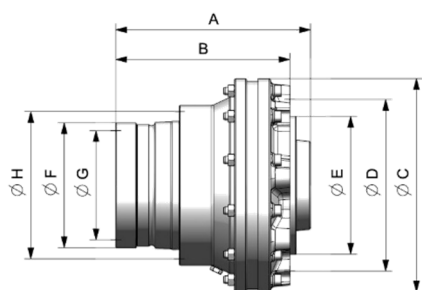
Technical Details – Dimensions



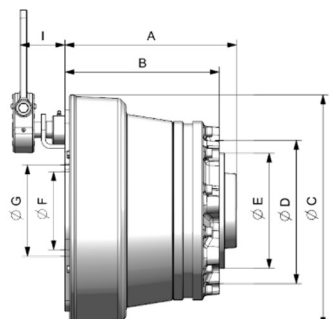
B240
standard motor



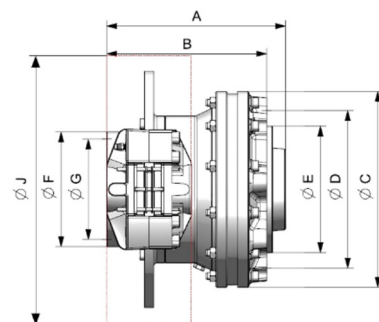
B240 with
drum brake



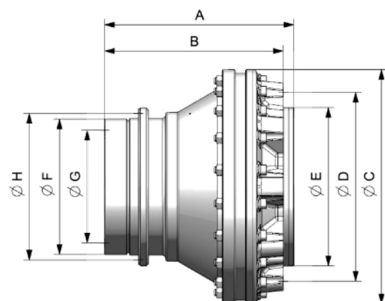
B250
standard motor



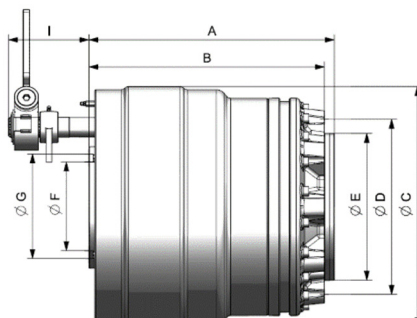
B250 with
drum brake



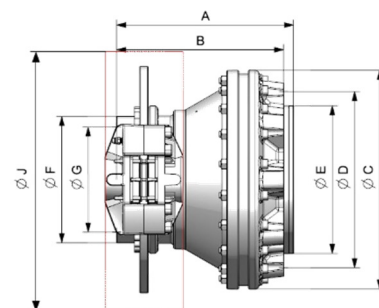
B250 with
caliper disc brake



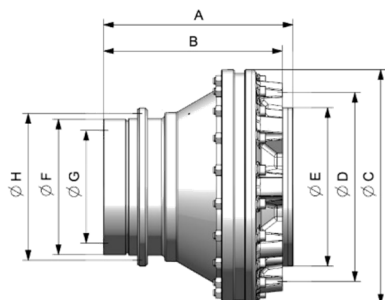
B260
standard motor



B260 with
drum brake



B260 with
caliper disc brake



B270
standard motor

**Black
Bruin**
No power like it.