

Additional Data/Spec Sheet

BMER-2 Series Geroler Gear Type – Hydraulic Orbital Motors – Disc Distribution Motors

Flange MD = Ø13.5 Magneto Mount, pilot Ø82.55x2.8 – Shaft G2 = Ø31.75 Cylindrical Shaft, parallel key 7.9x7x36.5

BMER-2 SERIES HYDRAULIC MOTOR

BMER-2 series motor adapt the advanced Geroler gear set designed with high speed distribution flow and high pressure, and have good stability in low speed , and can keep high volume efficiency. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in needle roller bearings that permit high axial and radial forces. The case can offers capacities of high pressure and high torque in the wide of applications.
- * Advanced design in high speed distribution flow, which can automatically compensate in operating with high volume efficiency and long life , provide smooth and reliable operation.
- * Lowest leakage rate, most accurate timing methods. Commutator rotates 6x faster than shaft speed. It make the distribution in a high precision reduces life-cycle cost, maintain high volume efficiencies and can run very smoothly at low speed, gear box not required.

Main Specification

Type		BMER 125	BMER 160	BMER 200	BMER 230	BMER 250	BMER 300	BMER 350	BMER 375	BMER 400	BMER 475	BMER 540	BMER 650	BMER 750
Geometric displacement (cm ³ /rev.)		118	156	196	228	257	296	345	371	405	462	540	647	745
Max. speed (rpm)	cont.	360	375	330	290	290	250	220	200	185	160	140	115	100
	int.	490	470	425	365	350	315	270	240	220	195	170	138	120
Max. torque (N•m)	cont.	325	450	530	625	700	810	905	990	1010	1085	980	1015	1050
	int.	380	525	600	710	790	930	1035	1140	1180	1180	1240	1250	1180
	peak	450	590	750	870	980	1120	1285	1360	1360	1260	1380	1380	1370
Max. output (kW)	cont.	12.0	15.0	15.5	16.0	17.5	18.0	17.5	16.5	15.5	14.5	11.5	10.0	8.0
	int.	14.0	17.5	18.0	19.0	20.0	21.0	20.0	19.0	18.0	16.5	15.0	12.0	10.0
Max. pressure drop (MPa)	cont.	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	19	17.5	14	12	10.5
	int.	24	24	24	24	24	24	24	24	22.5	19	17.5	15.5	12
	peak	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	25	20.5	20.5	17.5	14
Max. flow (L/min)	cont.	45	60	70	70	75	80	80	75	75	75	75	75	75
	int.	60	75	85	85	90	95	95	90	90	90	90	90	90

*Continuous pressure:Max.value of operating motor continuously.

*Intermittent pressure:Max.value of operating motor in 6 seconds per minute .

*Peak pressure:Max.value of operating motor in 0.6 second per minute.

Performance Data

BMER475 [462cm³/rev.]

Pressure (MPa)

Max.cont. Peak

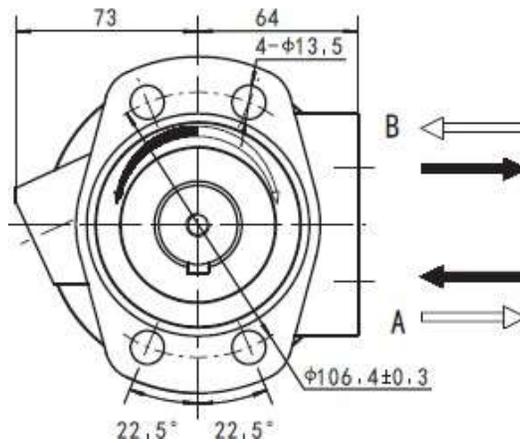
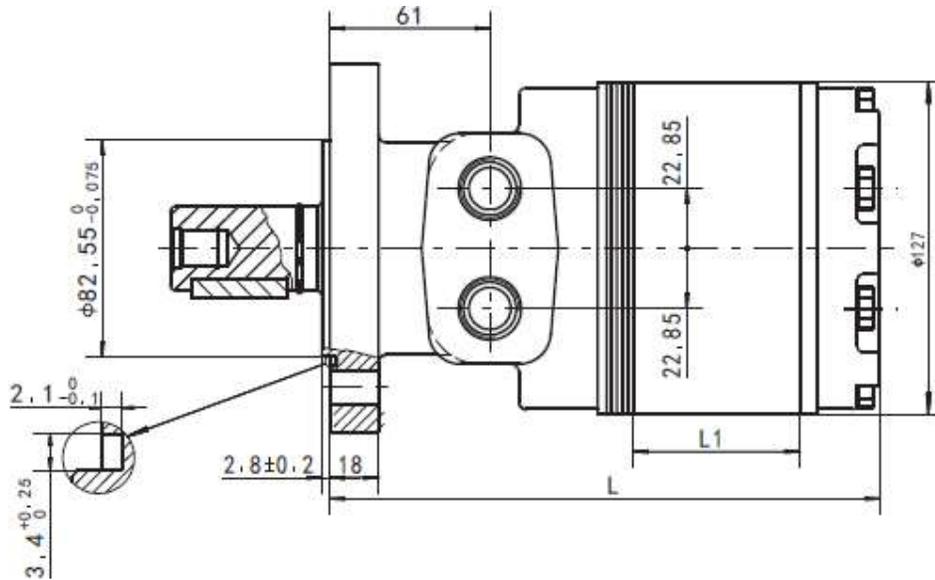
		1.75	3.5	7	10.5	14	17.5	20.5	
Flow (L/min)	2	93 2	186 1						
	4	98 7	202 6	405 5	608 5	805 4			
	8	98 15	206 14	430 13	652 13	844 12	1005 10	1180 8	
	15	94 31	202 30	441 28	654 28	875 26	1056 23	1238 20	
	25	94 52	202 51	441 48	654 45	875 43	1056 39	1238 35	
	34	75 72	180 71	420 68	660 65	850 61	1085 55	1266 44	
	45		144 96	380 95	627 93	835 90	1062 84	1261 73	
	53		116 113	346 112	573 111	795 107	1008 102	1212 90	
	60		82 128	318 128	539 127	790 124	975 119	1186 110	
	68		58 146	272 145	520 144	740 141	955 136	1156 125	
	Max. cont.	75			230 161	480 160	702 158	920 153	1116 140
		85			200 182	454 180	662 177	876 168	
	Max.int.	90			150 194	378 193	615 190	840 182	

BMER-2 DIMENSIONS AND MOUNTING DATA

Magneto Mount 4-Hole

Code: Port A, B

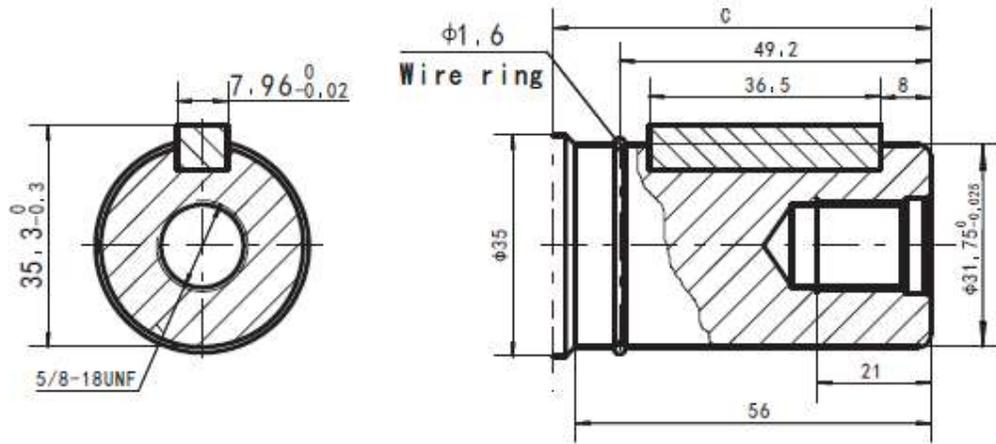
MD G1/2



Displacement (cm ³ /rev.)	475
L1(mm)	39.4
L(mm)	186
Weight(kg)	13

BMT SHAFT EXTENSIONS DIMENSIONS DATA

Shaft G2

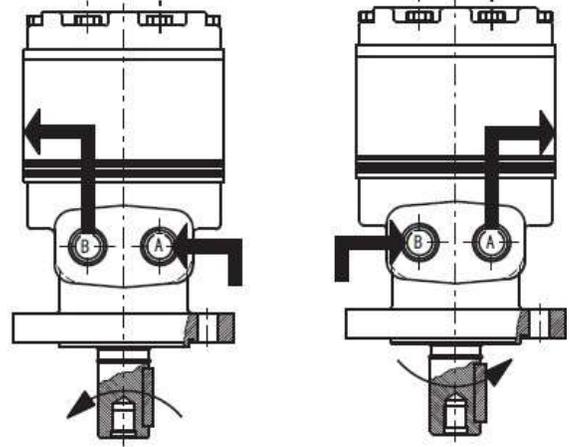
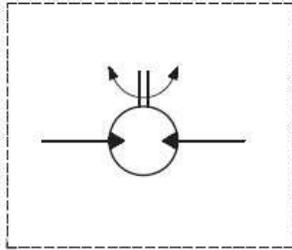


Shaft G2: Cylindrical shaft $\text{Ø}31.75$
Parallel key 7.96x7x36.5

From Mounting Flange to Shaft End Dimension C	
Shaft Code	Magneto Mount (mm)
G2	61

BMER-2 Series Hydraulic Motor

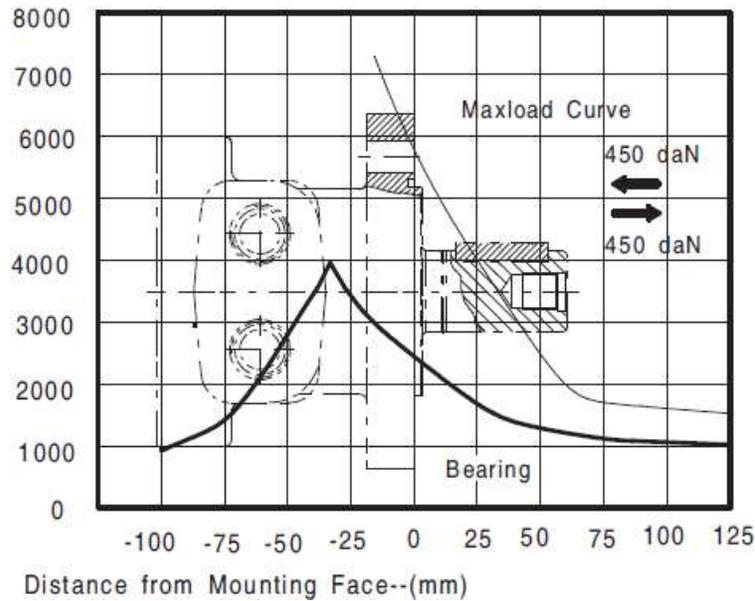
Direction of shaft rotation: Reverse timed
 When facing shaft end of motor, shaft to rotate:
 Clockwise when port "B" is pressurized.
 Counter-clockwise when port "A" is pressurized.



Axial and Radial forces

BMER-2 or M#/F# Mounting

Side Load-(daN)



The bearing curve represents allowable bearing loads for an L_{10} bearing life at 12×10^6 revolutions. The maximum load curve is defined by bearing static load capacity. This curve should not be exceeded at any time including shock loads.