FLUIDCO HYDRAULIC SYSTEMS

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Additional Data/Spec Sheet

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

Flange MS = 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.

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Performance Data

BMER475 [462cm³/rev.]

Pressure (MPa)

Flow (L/min)	1.75	3.5	7	10.5	14	Max.cont. 17.5	Peak 20.5
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**	

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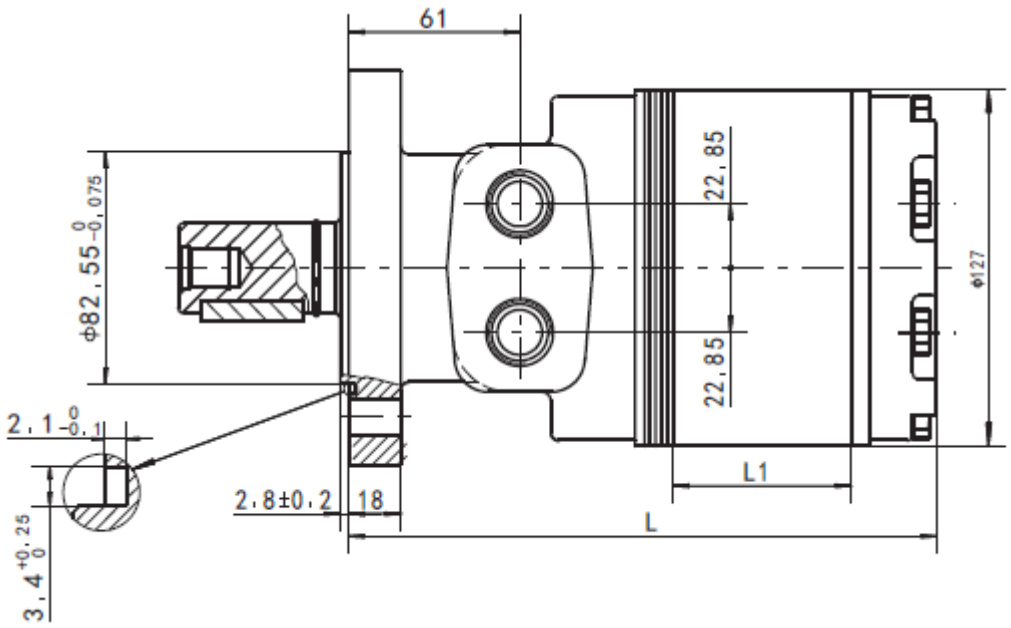
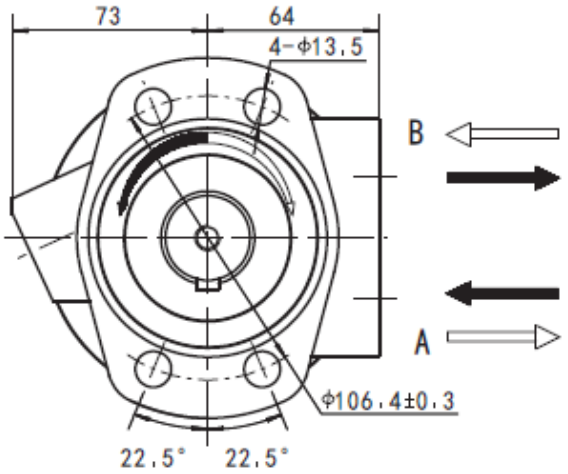
BMER-2 DIMENSIONS AND MOUNTING DATA

Magneto Mount 4-Hole
Code: Port A, B
MS 7/8-14UNF





Displacement (cm³/rev.)	475
L1(mm)	39.4
L(mm)	186
Weight(kg)	13

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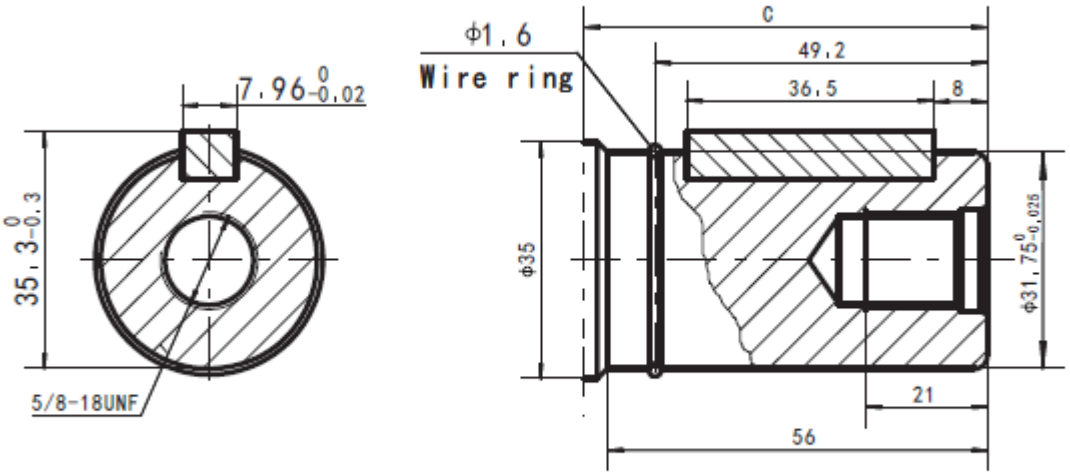
BMT SHAFT EXTENSIONS DIMENSIONS DATA

Shaft G2



Shaft G2: Cylindrical shaft Ø31.75
Parallel key 7.96x7x36.5

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

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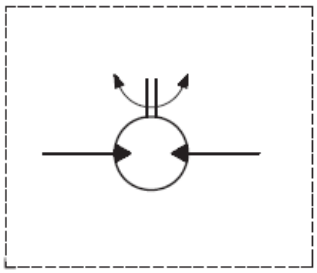
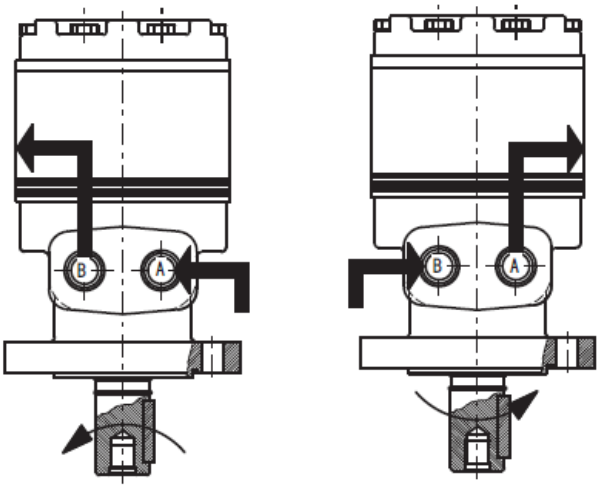
BMER-2 Series Hydraulic Motor

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.

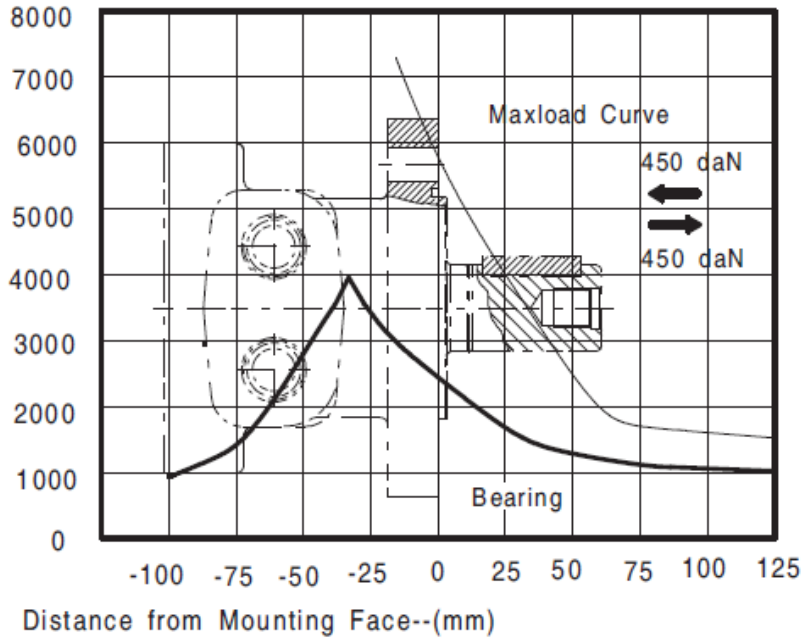




Axial and Radial forces

BMER-2 or M#/F# Mounting

Side Load-(daN)



The bearing curve represents allowable bearing loads for an L_{10} bearing life at $12x10^6$ revolutions. The maximum load curve is defined by bearing static load capacity. This curve should not be exceeded at any time including shock loads.

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