



# FAIL SAFE HYDRAULIC MOTOR/BRAKE UNIT TYPE - MBW



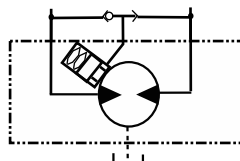
TYPE		MBW										
MOTOR SIZE		32	50	63	75	100	125	150	200	250	300	400
DISPLACEMENT	cm <sup>3</sup>	33.0	49.7	65.9	81.8	101.2	126.1	160.8	200.9	250.8	315.5	399.9
	in <sup>3</sup>	2.02	3.04	4.04	5.01	6.20	7.72	9.85	12.30	15.36	19.32	25.27
MAX. SPEED	rpm cont.	1400	775	750	750	600	475	375	300	240	190	160
	rpm int.	1600	1000	1000	940	750	600	450	375	300	240	200
MAX. TORQUE	Nm cont.	44	100	140	195	240	300	360	360	360	360	360
	lbf.in cont.	390	885	1240	1730	2120	2660	3190	3190	3190	3190	3190
	Nm int.	62	130	170	220	280	340	430	440	450	450	450
	lbf.in int.	550	1150	1505	1950	2480	3010	3810	3890	3982	3982	3982
MAX. PRESSURE DROP	bar cont.	100	140	140	175	175	175	165	130	100	85	70
	psi int.	1450	2030	2030	2540	2540	2540	2390	1890	1450	1230	1020
	bar int.	140	175	175	200	200	200	200	175	140	110	90
	psi int.	2030	2540	2540	2900	2900	2900	2900	2540	2030	1600	1310
MAX. OIL FLOW	lpm cont.	50	40	50	60	60	60	60	60	60	60	60
	gpm cont.	11	8.8	11	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
	lpm int.	55	50	62	75	75	75	75	75	75	75	75
	gpm int.	12.2	11	13.6	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5

**Spring applied pressure release**  
**Static brake torque 3950 lbf.in - 450 Nm**  
**Brake release pressure 380 psi - 26 bar**  
**Maximum brake pressure 300 bar**  
**Maximum drain line pressure 70 psi - 5 bar**  
**Motor drain line must be used if over this rating**

Maximum inlet pressure 3250 psi - 224 bar  
 Maximum pressure drop and speed must not be reached simultaneously.  
 Intermittent operation may occur for 10% max. of every minute.

At speeds lower than 10 rpm please consult our Technical Department.  
 Mineral based hydraulic fluids with anti-wear additives are recommended with a viscosity of 35 mm<sup>2</sup>/s at a temperature of 50°C.  
 Minimum recommended oil viscosity 13 mm<sup>2</sup>/s at operating temperature.  
 Recommended oil cleanliness ISO 19/14 with a nominal filtration of 25 micron or better.  
 Where non-flammable fluids are to be used it is advisable to consult our Technical Department.  
 Ambient temperature should be between -30°C and +90°C.  
 Normal operating temperature should be between +30°C and +60°C.  
 Maximum operating temperature +85°C.

SYMBOL c/w MSV



The policy of Adan Limited is one of continual development and the right is reserved to alter specifications without notice.

#### Motor / Brake Precautions

To ensure proper operation of the brake, a separate case drain back to tank must be used due to the possibility of return line pressure spikes. A simple schematic of a system utilizing a motor/ brake is shown in the diagram below.

To achieve proper brake release operation, it is necessary to bleed out any trapped air and fill brake release cavity and hoses before all connections are tightened. It is advisable that the brake release port should be positioned as near the top of the unit in the installed position.

#### Caution

All Adan motor / brakes are intended to operate as static parking brakes, the system should be designed to bring the load to a stop before the brake is applied.  
 With large displacement motors it is possible for the motor to produce higher torques than the brake will hold, it is critical that the maximum system pressure is limited in these applications. It is vital that the system relief be set low enough to ensure the motor is not able to produce more torque than the brake can hold.  
 Failure to do so may result in serious injury or death.



### ADAN LIMITED

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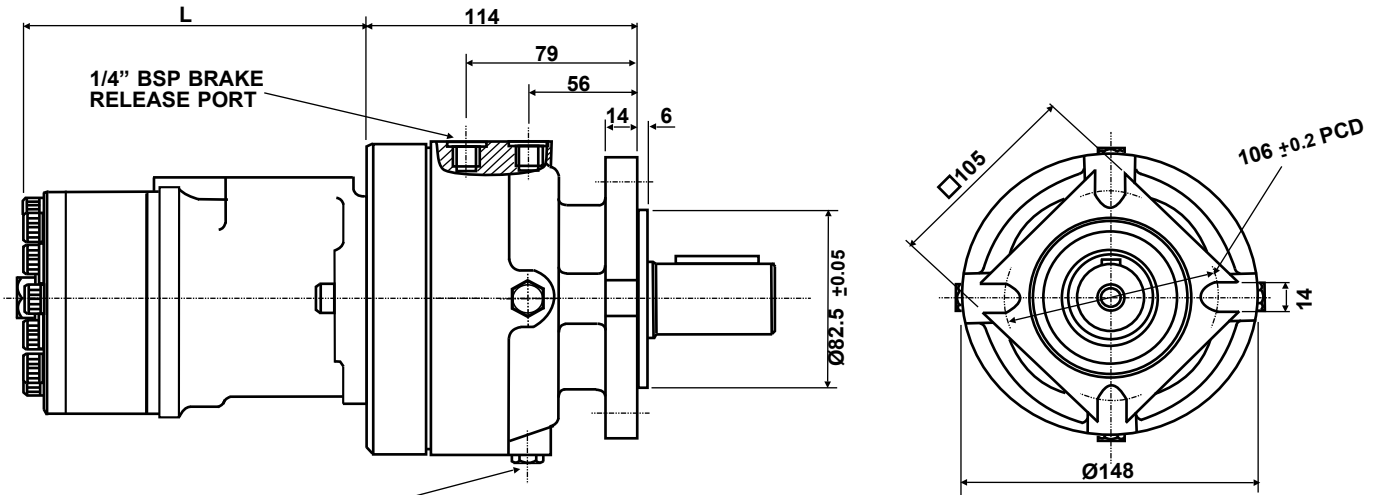
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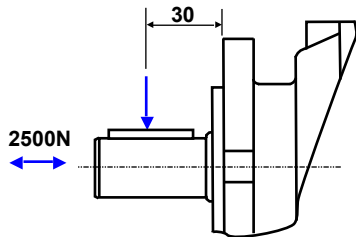
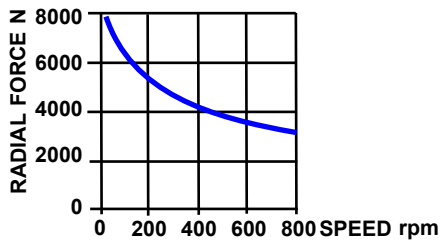


4 OFF: FILLER / LEVEL / DRAIN PLUGS 1/4 BSP  
 NOTE! UNIT SHIPPED DRY  
 FILL WITH 50-120cc HYDRAULIC OIL BEFORE USE.  
 FIT BREATHER IN HIGHEST PORT OR PIPE TO TANK  
 WITH MAX. 0.5 BAR PRESSURE.

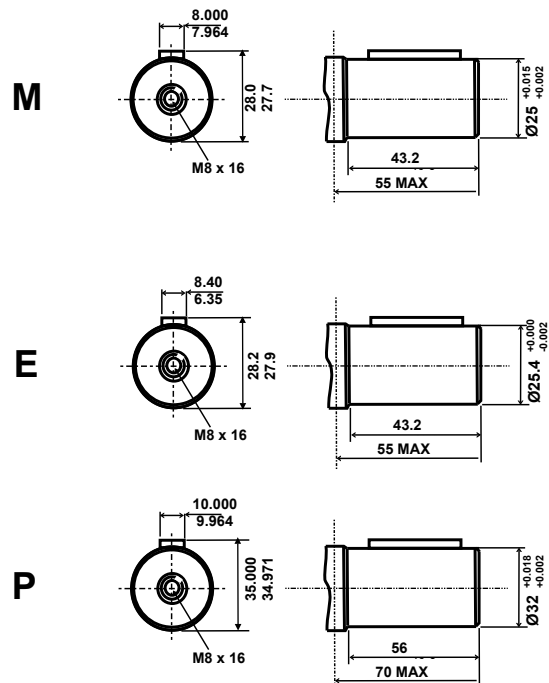
*For motor performance see W performance graphs*

MBW SIZE	32	50	75	100	125	150	200	250	300	400
DIM L mm	136.0	139.0	144.7	148.0	152.5	158.5	165.4	174.1	185.5	200.0
WEIGHT kgs	15.4	15.6	16.0	16.3	16.5	16.7	17.2	17.7	18.1	19.1

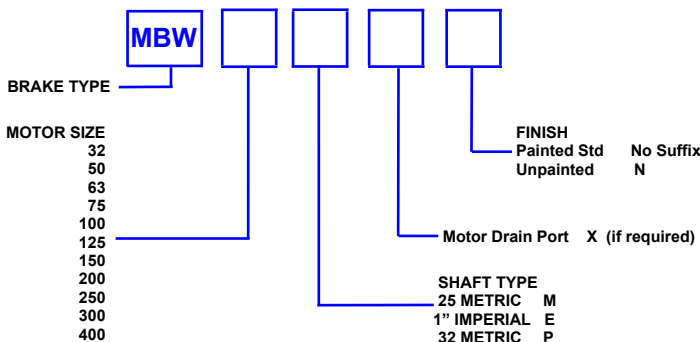
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