

# FAIL SAFE HYDRAULIC MOTOR/BRAKE UNIT



## TYPE - MSB/MBSW

TYPE MOTOR SIZE		MBS/MBSW SERIES							
		75	100	125	150	200	250	300	400
DISPLACEMENT	cm <sup>3</sup> in <sup>3</sup>	81.8 4.91	101.3 5.00	126.3 7.72	161.0 9.85	-		315.9 19.32	
MAX. SPEED	rpm cont. rpm int.	810 1000	750 900	600 720	450 560	375 450	300 360	240 285	190 230
MAX. TORQUE	Nm cont. Ibf.in cont.	240 2120	305 2700	275 3320		625 5531	640 5664	640 5664	640 5664
	Nm int. Ibf.in int.	310 2740	390 3450	490 4340	600 5310	640 5664	640 5664	640 5664	640 5664
MAX. PRESSURE DROP	bar cont. psi int.	210 3050	210 3050	210 3050	210 3050	210 3050	175 2540	140 2030	118 1668
	bar int. psi int.	275 3990	275 3990	275 3990	260 3770	225 3260	175 2540	140 2030	11 1668
MAX. OIL FLOW	lpm cont. gpm cont.	65 14.3	75 16.5	75 16.5	75 16.5	75 16.5	75 16.5	75 16.5	75 16.5
	lpm int. gpm int.	80 17.6	90 19.8	90 19.8	90 19.8	90 19.8	90 19.8	90 19.8	90 19.8

Spring applied pressure release Static brake torque 5600 lbf.in - 640 Nm Brake release pressure 550 psi - 39 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  $+30^{\circ}$ C and  $+60^{\circ}$ C. Maximum operating temperature  $+85^{\circ}$ C.

SYMBOL c/w MSV

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#### 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.

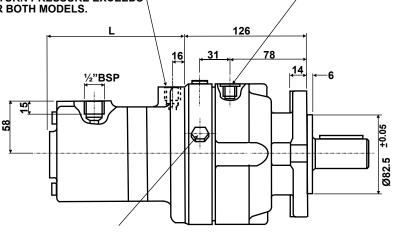


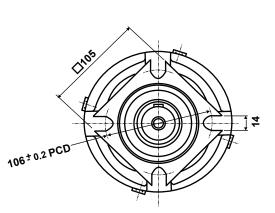
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### MBS

**BRAKE PILOT PORT 1/4"BSP** 

MOTOR DRAIN PORT 1/4" BSP UNIT MUST BE DRAINED TO TANK IF RETURN PRESSURE EXCEEDS 5 BAR BOTH MODELS.



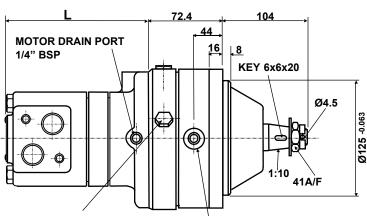


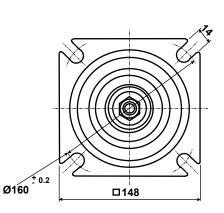
4 OFF: FILLER/DRAIN PLUGS 1/4 BSP

NOTE! UNIT SHIPPED DRY FILL WITH 50-120 cc HYDRAULIC OIL BEFORE USE. FIT BREATHER IN HIGHEST POINT

75 100 125 150 200 250 300 400 MBS DIM L 261.5 264.5 269.5 275.5 278.5 291.5 302.5 316.5 mm WEIGHT kgs 18.5 18.7 19.0 19.4 19.9 20.5 21.2 22.0

**MBSW** 





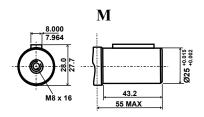
4 OFF: FILLER/DRAIN PLUGS 1/4 BSP NOTE! UNIT SHIPPED DRY FILL WITH 50-120cc HYDRAULIC OIL BEFORE USE. (FIT BREATHER IN HIGHEST PORT)

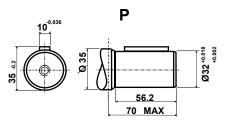
BRAKE RELEASE PORT 1/4" BSP

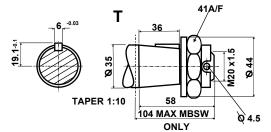
MBSW		75	100	125	150	200	250	300	400
DIM L	mm	207.9	210.9	215.9	221.9	224.9	237.9	248.9	262.9
WEIGHT	kgs	17.5	17.7	18.0	18.4	18.9	19.5	20.2	21.0

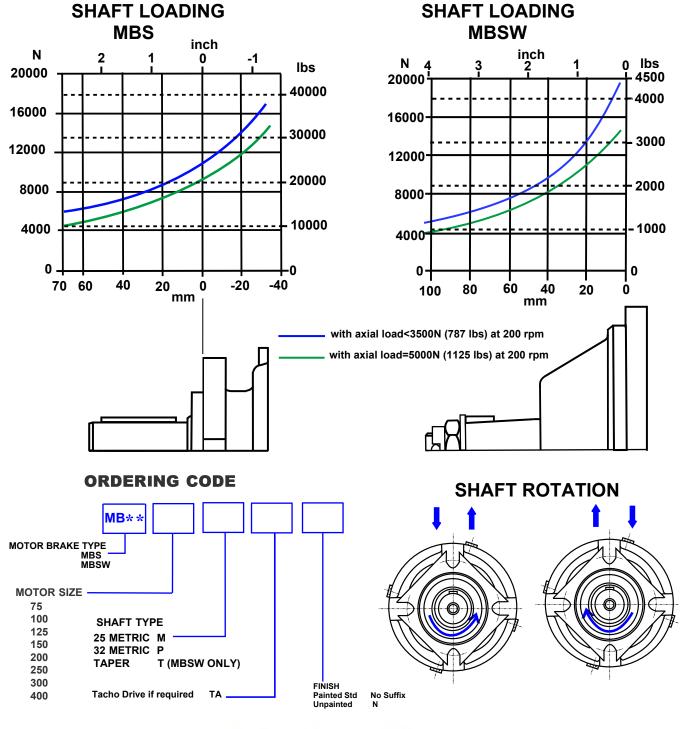


SHAFT OPTIONS











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