



# MMG5B SERIES

## HYDRAULIC MOTOR

### REDUCTION UNIT 5:1 RATIO

with BRAKE



TYPE		MMG5B-T										
MOTOR SIZE		32 W-T	50 W-T	63 W-T	75 W-T	100 W-T	125 W-T	150 W-T	200 W-T	250 W-T	300 W-T	400 W-T
DISPLACEMENT per OUTPUT rpm	cm <sup>3</sup>	166.0	249.0	331.5	409.0	506.5	631.3	805.0	1006.0	1056.0	1579.5	2002.0
	in <sup>3</sup>	10.10	15.25	20.20	24.55	25.00	38.60	49.25	61.55	76.80	96.60	121.45
MAX. OUTPUT SPEED	rpm cont.	280	155	150	150	120	95	75	60	48	38	32
	rpm int.	320	200	200	188	150	120	90	75	60	48	40
MAX. OUTPUT TORQUE	Nm cont.	220	500	700	975	1200	1500	150	1500	1500	1500	1500
	lbf.in cont.	1947	4425	6200	8628	10620	13275	13275	13275	13275	13275	13275
MAX. PRESSURE DROP	bar cont.	100	140	140	175	175	175	165	130	100	85	70
	psi cont.	1450	2030	2030	2540	2540	2540	2390	1890	1450	1230	1020
	bar int.	140	175	175	200	200	200	200	175	140	115	90
	psi int.	2030	2540	2540	2900	2900	2900	2900	2540	2030	1665	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

**Maximum continuous output torque 13275 lbf.in (1500Nm)**

**This unit must have gearbox drain piped to tank without obstruction from the highest point see mounting positions.**

#### Basic Motor Detail

Spring applied pressure release  
 Static brake torque 2655 lbf.in - 300 Nm  
 Brake release pressure 362 psi - 25 bar  
 Maximum brake pressure 200 bar

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.

#### 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.

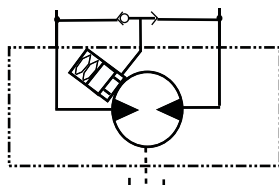
#### Caution

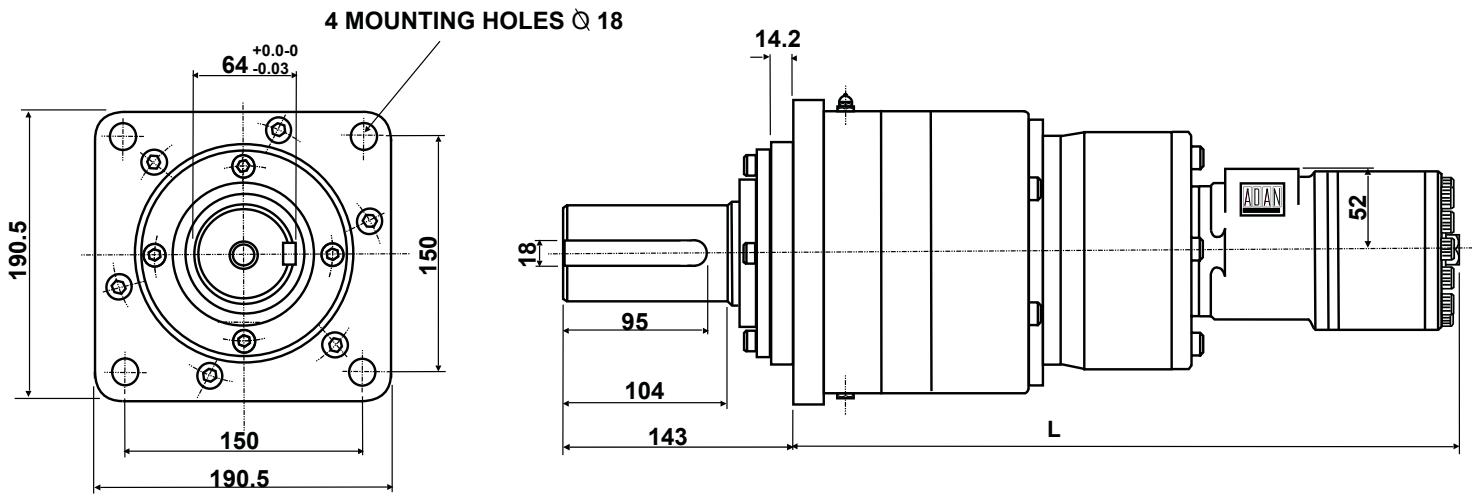
All Adan motor / brakes are intended to operate as static parking brakes, the system should be designed to bring the load to a stop before the brake is applied.

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.

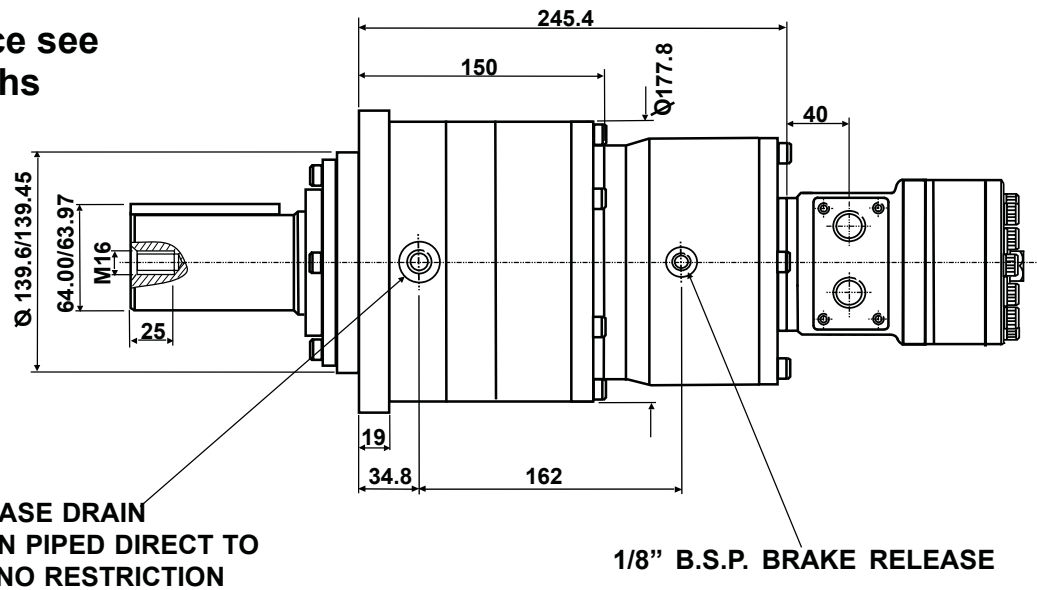
Failure to do so may result in serious injury or death.

SYMBOL c/w MSV





For motor performance see  
'W' performance graphs

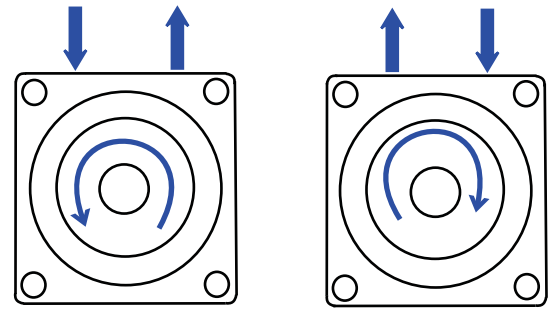


MMG5B	50	75	100	150	200	300	400
DIMN L mm	365.9	371.2	374.6	384.6	391.9	409.2	425.9
WEIGHT kg	52.6	52.8	53.1	53.5	54.0	54.9	55.9

# ADAN REDUCTION UNIT

# TYPE MMG5B

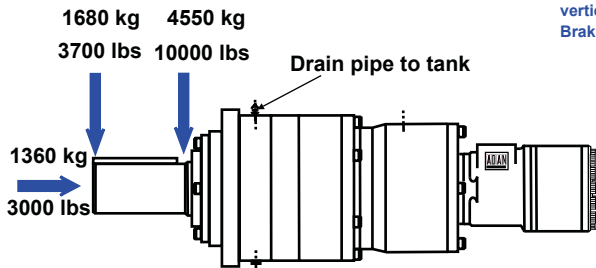
Hydraulic motor reduction brake unit comprising the Adan T series motor with the oil immersed multi-disc type spring actuated hydraulically release brake unit. Combined with the proven 5:1 ratio planetary gearbox. These units are built to operate under the most arduous conditions for long periods with minimum maintenance and have been successfully employed in the industrial, mobile, agricultural, mining and marine fields.



SHAFT ROTATION

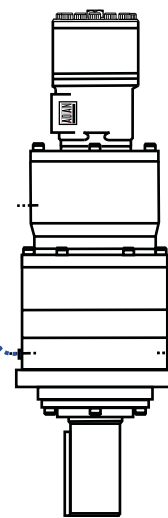
## MOUNTING POSITIONS

Note MMG5B must be piped to tank without restriction from appropriate port as shown.

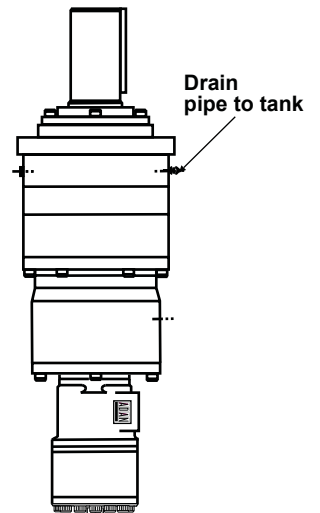


A

Drain must run vertical to at least Brake Release Port.

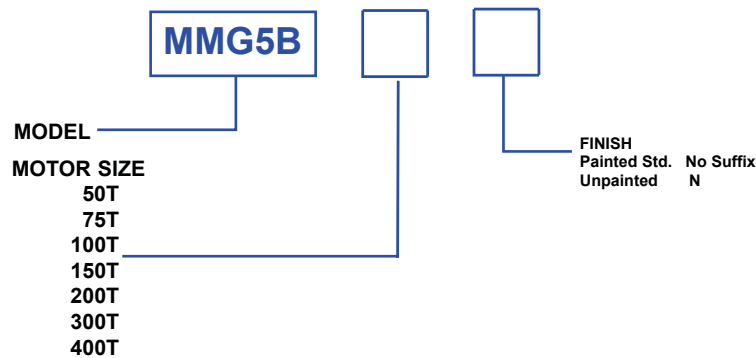


B



C

## ORDERING CODE



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



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