

## HYDRAULIC MOTOR REDUCTION UNIT GT25



Reduction Ratio 2.5:1

TYPE		GT25							
SIZE		130	160	200	250	300	400	500	
DISPLACEMENT	cm <sup>3</sup>	355.0	402.5	502.5	625.0	825.0	1027.5	1310.0	
per OUTPUT rpm	in <sup>3</sup>	21.5	24.5	30.75	38.0	50.5	62.75	80.0	
MAX. OUTPUT	rpm cont.	290	250	250	200	152	120	96	
SPEED	rpm int.	330	310	300	240	184	146	114	
MAX. OUTPUT	Nm cont.	937.5	1175	1475	1825	2375	2700	3075	
TORQUE	lbf.in cont.	8296.9	10398.7	13053.7	16151.2	21018.7	23895.0	27213.7	
Without Brake	Nm int.	1075	1400	1775	2200	2850	3150	3200	
See notes	lbf.in int.	9513.7	12390.0	15708.7	19470.0	25222.5	27877.5	28320.0	
MAX. PRESSURE	bar cont.	200	200	200	200	200	180	150	
	psi cont.	2900	2900	2900	2900	2900	2610	2175	
DROP Without Brake	bar int.	240	240	240	240	240	210	180	
Williout Brake	psi int.	3480	3480	3480	3480	3480	3045	2610	
Max Pressure Drop		200	200	190	140	100	90	75	
With Brake	bar int.	240	230	200	150	110	100	80	
MAX. OIL FLOW	Ipm cont.	100	100	125	125	125	125	125	
	gpm cont.	22	22	27.5	27.5	27.5	27.5	27.5	
	lpm int.	125	125	150	150	150	150	150	
	gpm int.	27.5	27.5	33.0	33.0	33.0	33.0	33.0	

Note Maximum continuous output torque 3200 Nm 28300 lbf.in without Brake Maximum continuous output torque 2825 Nm 25000 lbf.in with Brake

Spring applied pressure release
Static brake torque 10,000 lbf.in - 1130 Nm
Brake release pressure 450 psi - 31 bar
Maximum brake pressure 300 bar
Motor drain line must be used, back to tank
without obstruction.

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 mm²/s at a temperature of 50°C.

Minimum recommended oil viscosity 13 mm²/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 symbol diagram.

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

It is advisable that the brake release port should be positioned as near the top of the unit in the installed position.

#### Caution

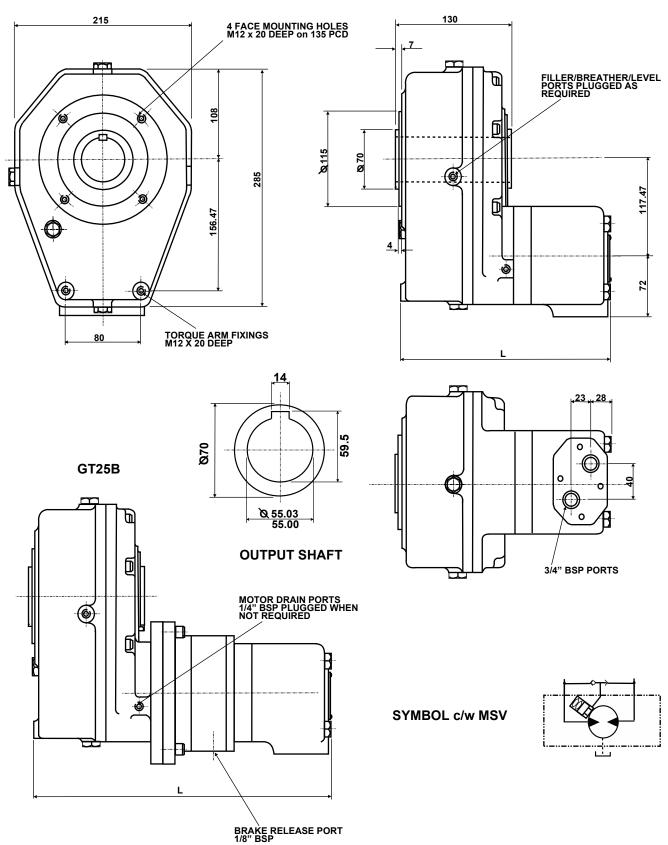
All Adan motor / brakes are intended to operate as static parking brakes, the system should be designed to bring the load to a stop before the brake is applied.

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.





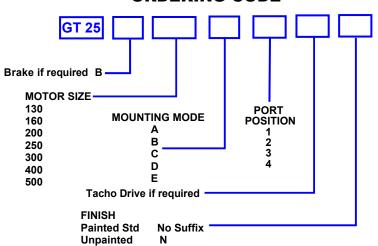


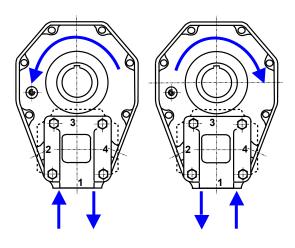
## For performance graphs see MT performance sheets

	SIZE	130	160	200	250	300	400	500
GT25 L	mm	229	232	237	243	253	263	277
GT25B L	mm	380	383	388	394	404	414	428
GT25 WEIGHT	kg	31.8	32.0	33.6	35.5	36.8	37.7	38.6
GT25B WEIGHT	kg	52.8	53.0	54.6	56.5	57.8	58.7	59.6

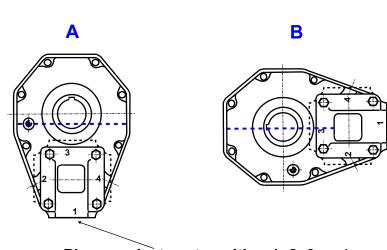
### **ORDERING CODE**

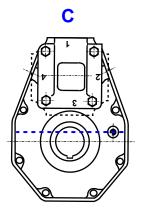
### **SHAFT ROTATION**



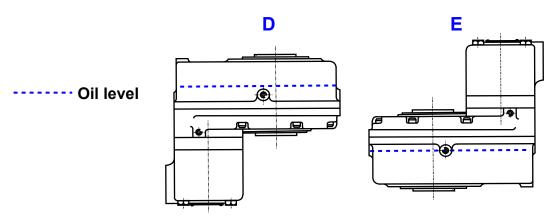


### **MOUNTING POSITIONS**





Please select port position 1, 2, 3 or 4



Note! All units are supplied dry.

Fill unit with EP oil with anti foaming additives before use. Select the grade appropriate to temperature from chart based on ISO 3448. It is recommended to replace the oil after the first 50 hours, then every 1000 hours or 6 months.

Fit breather in highest drain port.

Viscosity	Ambient Temperature <sup>o</sup> C
ISO VG 150	-10 > +30
ISO VG 220	+10 > +45
ISO VG 320	+30 > +60





# HYDRAULIC MOTOR REDUCTION UNIT MGF5 & MG5-T



### Reduction Ratio 5:1

TYPE		MGF5-T/MGT5-T							
SIZE		130	160	200	250	300	400	500	
DISPLACEMENT	cm <sup>3</sup>	710.0	805.0	1005.0	1250.0	1650.0	2055.0	2620.0	
per OUTPUT rpm	in <sup>3</sup>	43.0	49.0	61.5	76.0	101.0	125.5	160.0	
MAX. OUTPUT	rpm cont.	145	125	125	100	76	60	48	
SPEED	rpm int.	165	150	150	120	92	73	57	
MAX. OUTPUT	Nm cont.	1875		2950					
TORQUE	lbf.in cont.	16593.7	20797.5	26107.5	32302.5	42037.5	47790.0	53985.0	
Without Brake	Nm int.	2350	2800	3550	4400	5700	6300	6850	
See Notes	lbf.in int.	20797.7	24780.0	31417.5	38940.0	50445.0	55755.0	60622.5	
MAY DDECCUDE	bar cont.	200	200		200	200		160	
MAX. PRESSURE	psi cont.	2900	2900	2900	2900	2900	2610	2320	
DROP	bar int.	240	240	240	240	240	210	180	
Without Brake	psi int.	3480	3480	3480	3480	3480	3045	2610	
MAX. PRESSURE	bar cont.	200	200	200	200	200	180	145	
	psi cont.	2900	2900	2900	2900	2900	2610	2102	
DROP With Brake	bar int.	240	240	240	240	230	180	145	
	psi int.	3480	3480	3480	3480	3335	2610	2102	
MAX. OIL FLOW	Ipm cont.	100	100	125	125	125	125	125	
	gpm cont.	22	22	27.5	27.5	27.5	27.5	27.5	
	Ipm int.	125	125	150	150	150	150	150	
	gpm int.	27.5	27.5	33.0	33.0	33.0	33.0	33.0	

Maximum continuous output torque 6250Nm 55312 lbf.in without Brake Unit

Maximum continuous output torque 5650Nm 50000 lbf.in with Brake Unit

Spring applied pressure release
Static brake torque 10,000 lbf.in - 1130 Nm
Brake release pressure 450 psi - 31 bar
Maximum brake pressure 300 bar
Motor drain line must be used, back to tank without obstruction.

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 mm²/s at a temperature of 50°C.

Minimum recommended oil viscosity 13 mm²/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

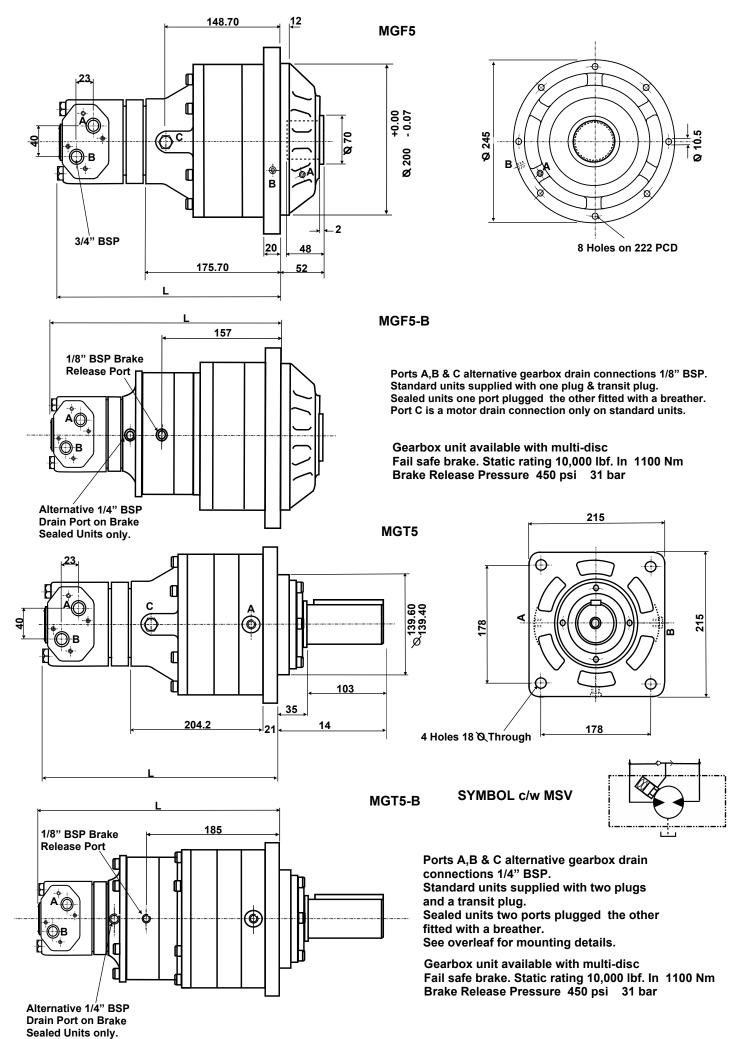
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Failure to do so may result in serious injury or death.



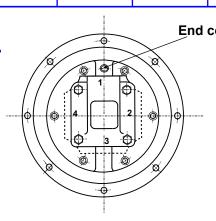
DIMENSIONS \_\_\_\_\_\_ MG5-T SERIES



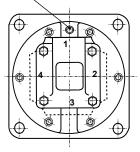
	SIZE	130	160	200	250	300	400	500
MGF5 L	mm	269.5	272.5	277.5	283.5	293.5	303.5	317.5
MGF5 WEIGHT	kg	49.3	49.8	50.3	50.8	51.8	52.8	54.3
MGF5B L	mm	344	347	352	358	368	378	392
MGF5B WEIGHT	kg	69.3	69.8	70.3	70.8	71.8	72.8	74.3
MGT5 L	mm	301.5	304.5	309.5	315.5	325.5	335.5	349.5
MGT5 WEIGHT	kg	44.3	44.8	45.3	45.8	46.8	47.8	49.3
MGT5B L	mm	357.5	351.5	356.5	362.5	372.5	382.5	396.5
MGT5B WEIGHT	kg	64.3	64.8	65.3	65.8	66.8	67.8	69.3

## **MOTOR PORT POSITIONS**

Please note with OCV Valve fitted in position 1, the end cover drain port will be positioned 180° from the position shown.

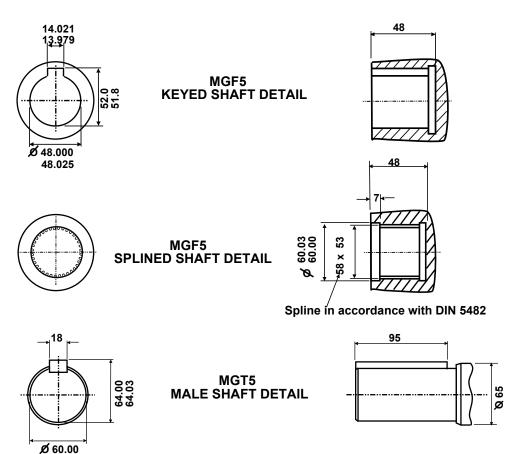


End cover drain port

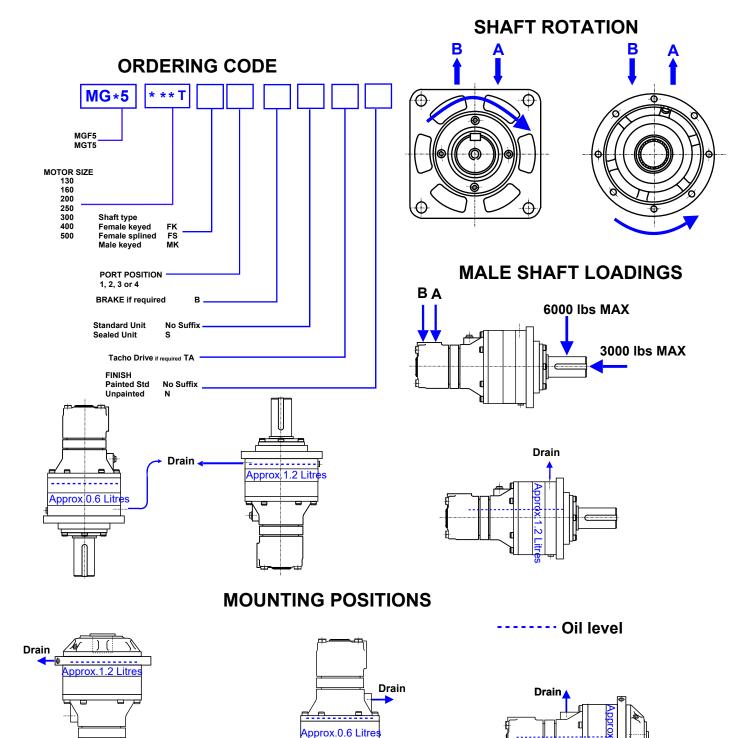


### **SHAFT VARIANTS**

**MG5-T SERIES** 







All unsealed units must be drained to tank from the highest point as shown.

Sealed units fill with EP oil with anti foaming additives before use. Select the grade appropriate to temperature from chart based on ISO 3448. It is recommended to replace the oil after the first 50 hours, then every 1000 hours or 6 months.

Fit breather in highest drain port.

Viscosity	Ambient Temperature <sup>o</sup> C
ISO VG 150	-10 > +30
ISO VG 220	+10 > +45
ISO VG 320	+30 > +60

