



HYDRAULIC MOTOR REDUCTION UNIT GT25



Reduction Ratio 2.5:1

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

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



ADAN LIMITED

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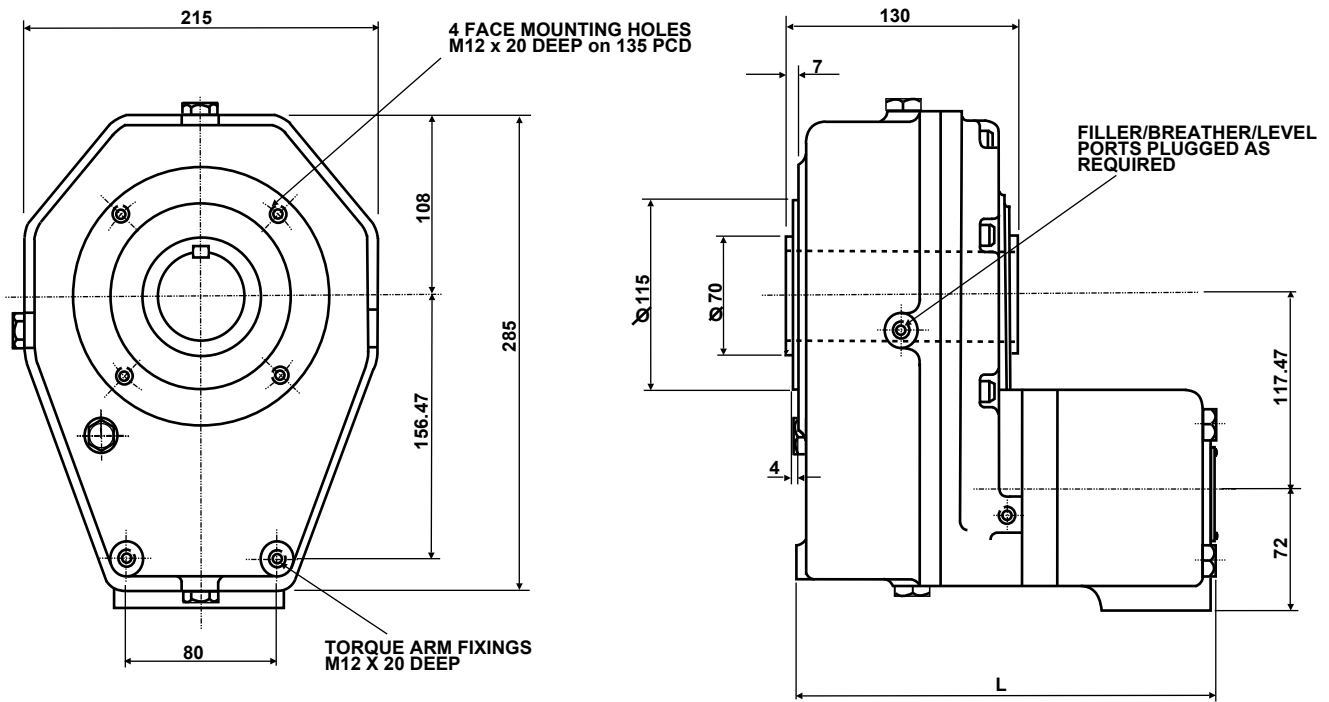
email: sales@adanltd.co.uk

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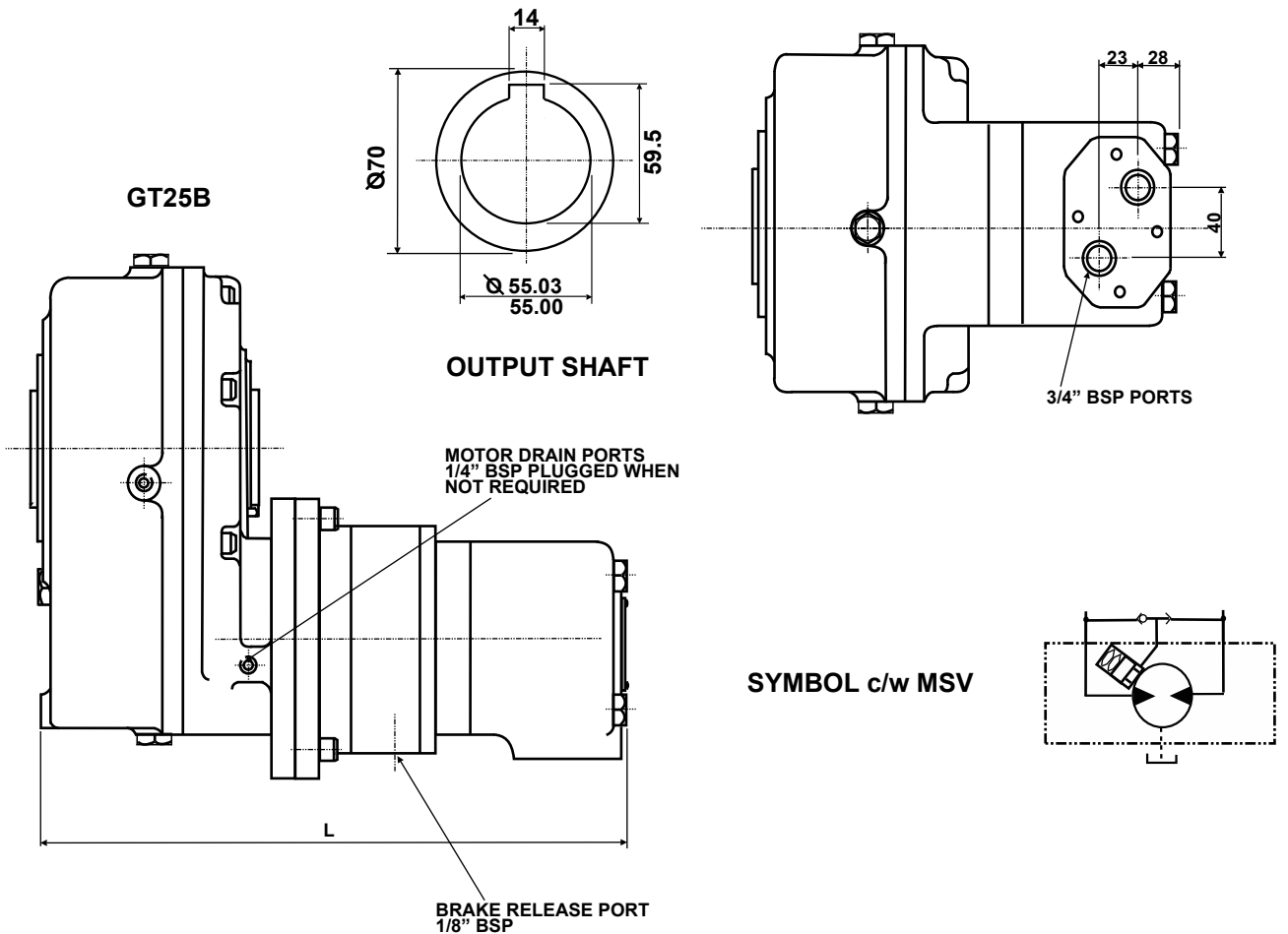
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GT25



GT25B

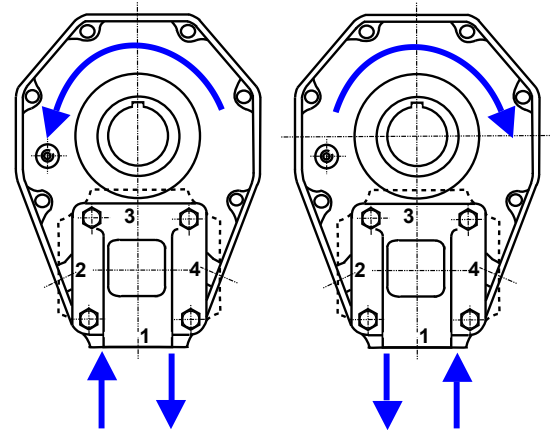
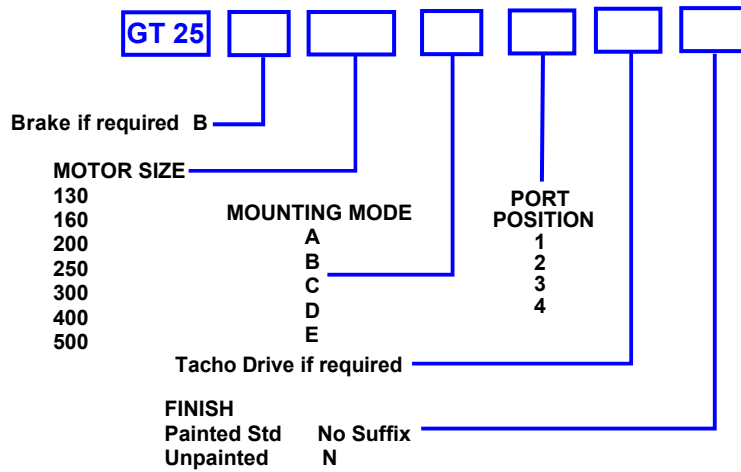


For performance graphs see MT performance sheets

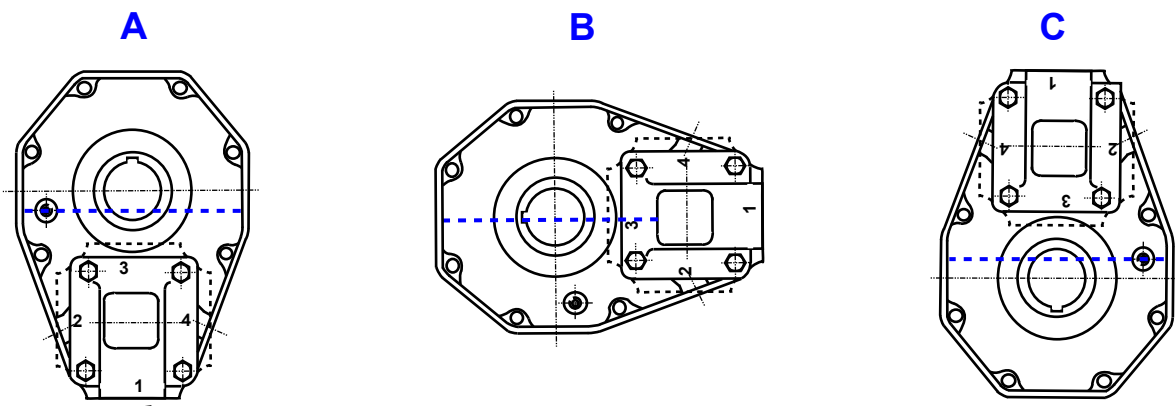
| | SIZE | 130 | 160 | 200 | 250 | 300 | 400 | 500 |
|--------------|------|------|------|------|------|------|------|------|
| GT25 L | mm | 229 | 232 | 237 | 243 | 253 | 263 | 277 |
| GT25B L | mm | 380 | 383 | 388 | 394 | 404 | 414 | 428 |
| GT25 WEIGHT | kg | 31.8 | 32.0 | 33.6 | 35.5 | 36.8 | 37.7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

ORDERING CODE

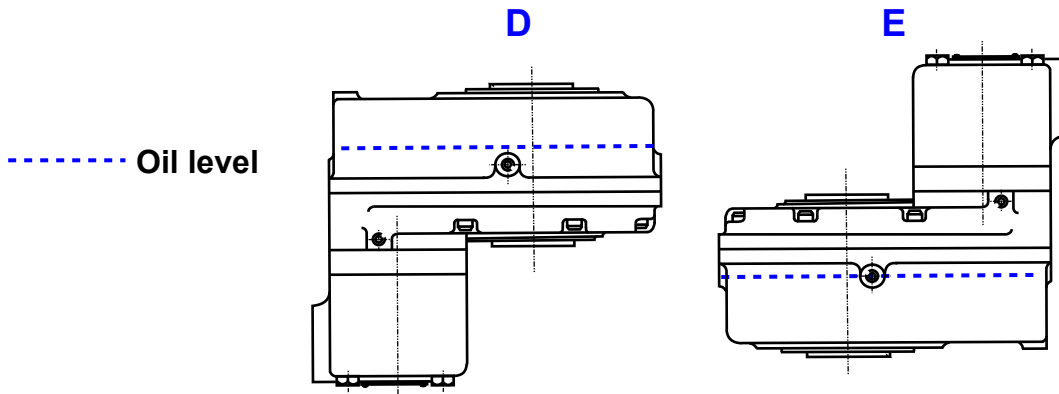
SHAFT ROTATION



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 °C |
|------------|------------------------|
| ISO VG 150 | -10 > +30 |
| ISO VG 220 | +10 > +45 |
| ISO VG 320 | +30 > +60 |

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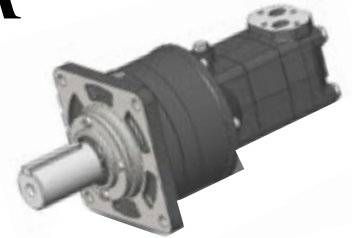
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HYDRAULIC MOTOR REDUCTION UNIT MGF5 & MG5-T



Reduction Ratio 5:1

| TYPE | | MGF5-T/MGT5-T | | | | | | |
|---|-----------------|---------------|---------|---------|---------|---------|---------|---------|
| SIZE | | 130 | 160 | 200 | 250 | 300 | 400 | 500 |
| DISPLACEMENT per OUTPUT rpm | cm ³ | 710.0 | 805.0 | 1005.0 | 1250.0 | 1650.0 | 2055.0 | 2620.0 |
| | in ³ | 43.0 | 49.0 | 61.5 | 76.0 | 101.0 | 125.5 | 160.0 |
| MAX. OUTPUT SPEED | rpm cont. | 145 | 125 | 125 | 100 | 76 | 60 | 48 |
| | rpm int. | 165 | 150 | 150 | 120 | 92 | 73 | 57 |
| MAX. OUTPUT TORQUE Without Brake See Notes | Nm cont. | 1875 | 2350 | 2950 | 3650 | 4750 | 5400 | 6100 |
| | lbf.in cont. | 16593.7 | 20797.5 | 26107.5 | 32302.5 | 42037.5 | 47790.0 | 53985.0 |
| | Nm int. | 2350 | 2800 | 3550 | 4400 | 5700 | 6300 | 6850 |
| MAX. PRESSURE DROP Without Brake | lbf.in int. | 20797.7 | 24780.0 | 31417.5 | 38940.0 | 50445.0 | 55755.0 | 60622.5 |
| | bar cont. | 200 | 200 | 200 | 200 | 200 | 180 | 160 |
| | psi cont. | 2900 | 2900 | 2900 | 2900 | 2900 | 2610 | 2320 |
| MAX. PRESSURE DROP With Brake | bar int. | 240 | 240 | 240 | 240 | 240 | 210 | 180 |
| | psi int. | 3480 | 3480 | 3480 | 3480 | 3480 | 3045 | 2610 |
| | bar cont. | 200 | 200 | 200 | 200 | 200 | 180 | 145 |
| MAX. OIL FLOW | psi cont. | 2900 | 2900 | 2900 | 2900 | 2900 | 2610 | 2102 |
| | bar int. | 240 | 240 | 240 | 240 | 230 | 180 | 145 |
| | psi int. | 3480 | 3480 | 3480 | 3480 | 3335 | 2610 | 2102 |
| MAX. OIL FLOW | lpm 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 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

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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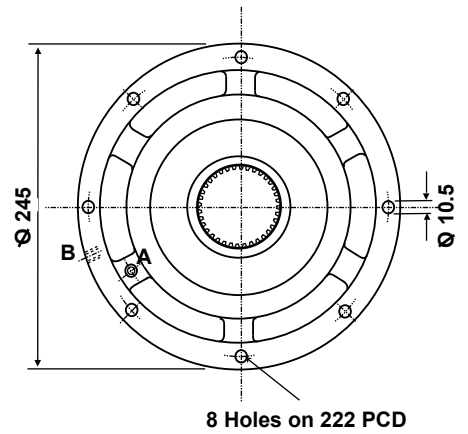
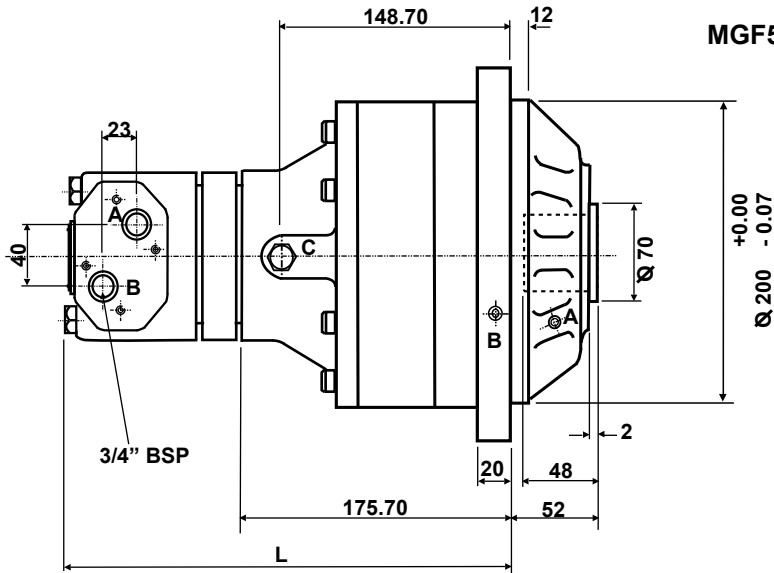
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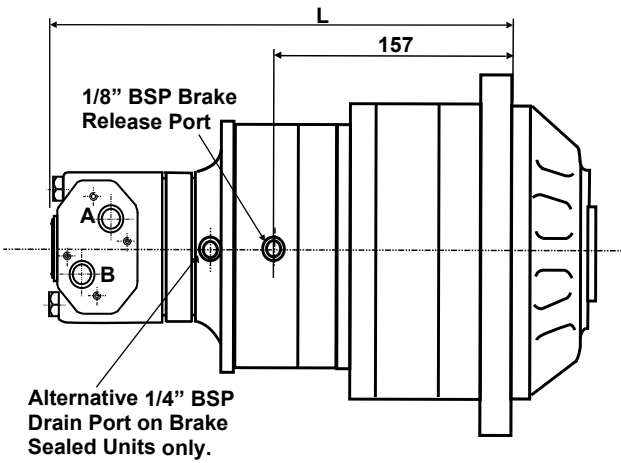
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MGF5



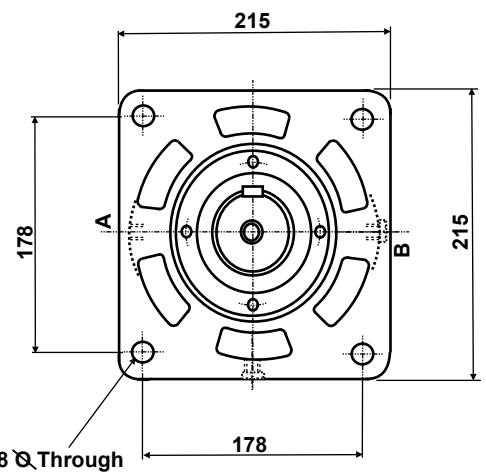
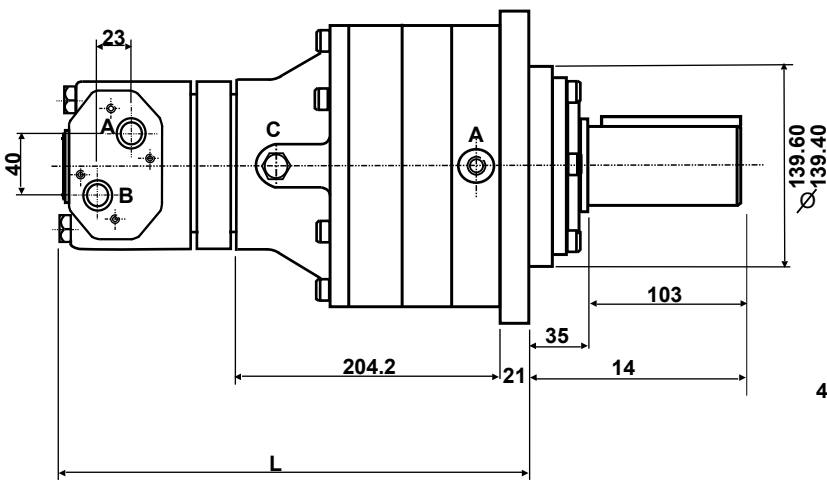
MGF5-B



Ports A,B & C alternative gearbox drain connections 1/8" BSP. Standard units supplied with one plug & transit plug. Sealed units one port plugged the other fitted with a breather. Port C is a motor drain connection only on standard units.

Gearbox unit available with multi-disc Fail safe brake. Static rating 10,000 lbf. In 1100 Nm Brake Release Pressure 450 psi 31 bar

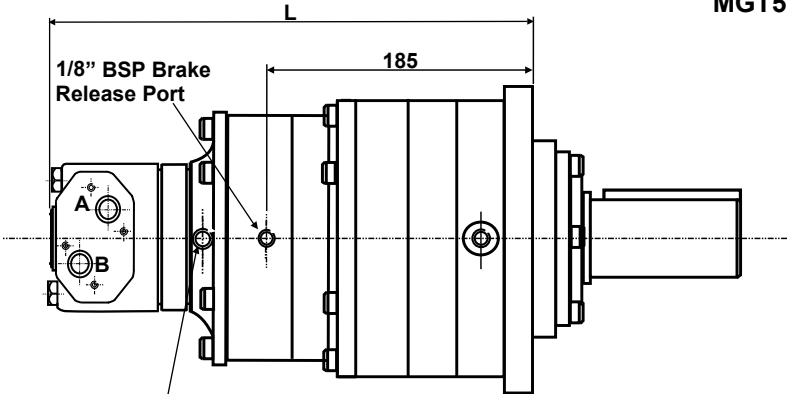
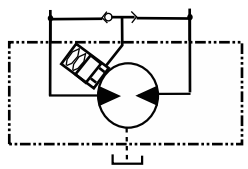
MGT5



4 Holes 18 Ø Through

MGT5-B

SYMBOL c/w MSV



Ports A,B & C alternative gearbox drain connections 1/4" BSP. Standard units supplied with two plugs and a transit plug. Sealed units two ports plugged the other fitted with a breather. See overleaf for mounting details.

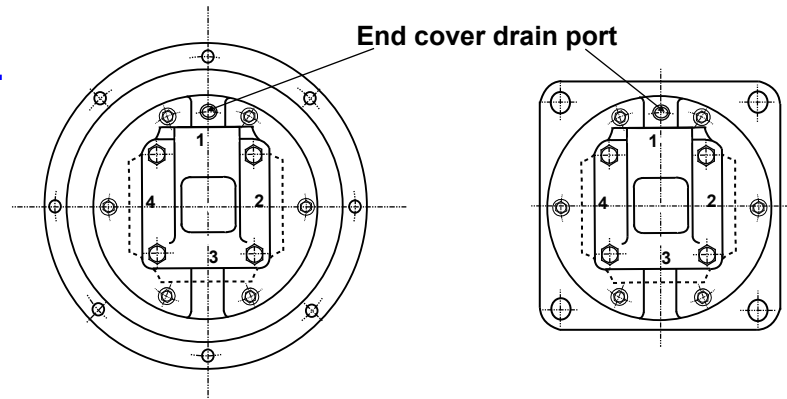
Gearbox unit available with multi-disc Fail safe brake. Static rating 10,000 lbf. In 1100 Nm Brake Release Pressure 450 psi 31 bar

Alternative 1/4" BSP Drain Port on Brake Sealed Units only.

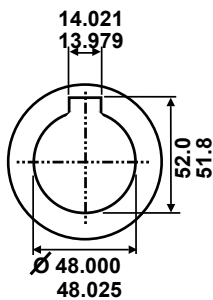
| | SIZE | 130 | 160 | 200 | 250 | 300 | 400 | 500 |
|--------------|------|-------|-------|-------|-------|-------|-------|-------|
| MGF5 L | mm | 269.5 | 272.5 | 277.5 | 283.5 | 293.5 | 303.5 | 317.5 |
| MGF5 WEIGHT | kg | 49.3 | 49.8 | 50.3 | 50.8 | 51.8 | 52.8 | 54.3 |
| MGF5B L | mm | 344 | 347 | 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

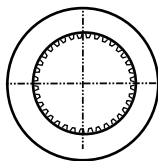
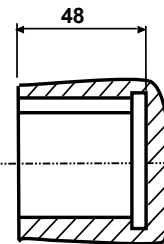
Please note with OCV Valve fitted in position 1, the end cover drain port will be positioned 180° from the position shown.



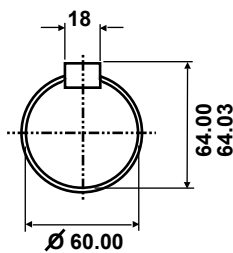
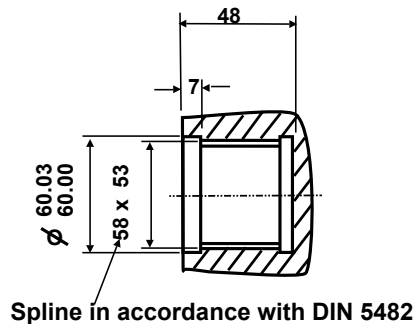
SHAFT VARIANTS



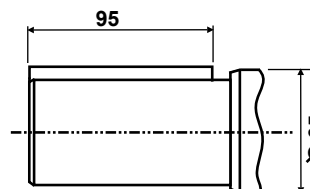
MGF5 KEYED SHAFT DETAIL



MGF5 SPLINED SHAFT DETAIL



MGT5 MALE SHAFT DETAIL



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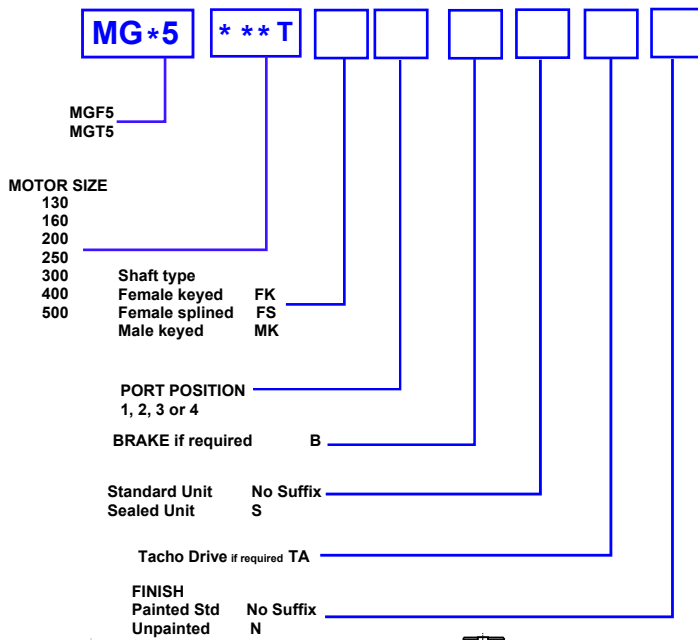


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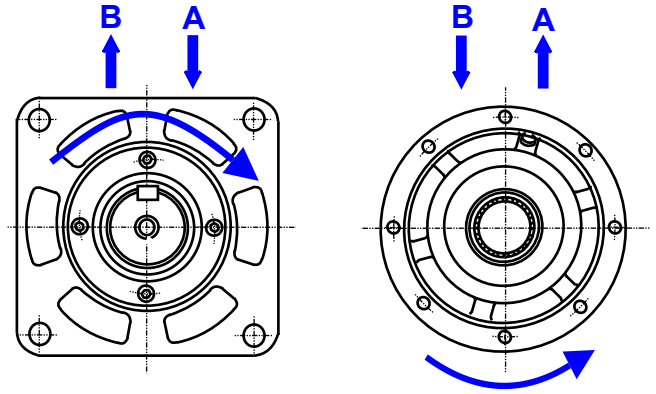
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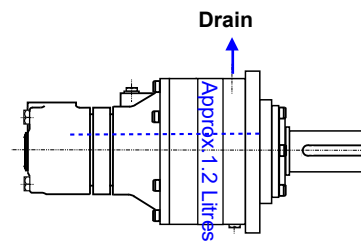
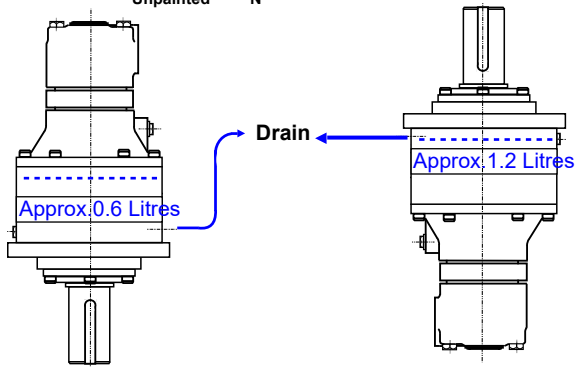
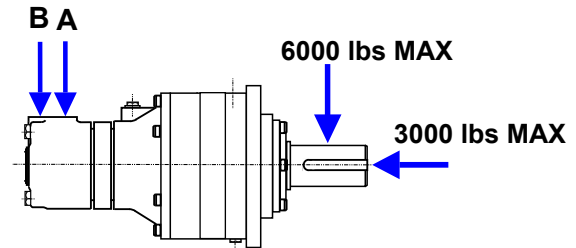
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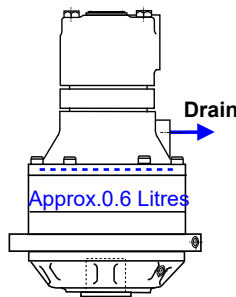
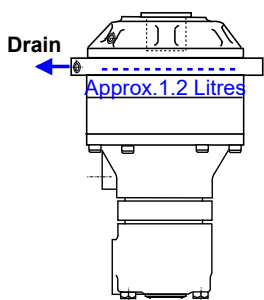
SHAFT ROTATION



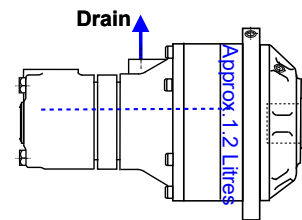
MALE SHAFT LOADINGS



MOUNTING POSITIONS



----- Oil level



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 °C |
|------------|------------------------|
| ISO VG 150 | -10 > +30 |
| ISO VG 220 | +10 > +45 |
| ISO VG 320 | +30 > +60 |

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