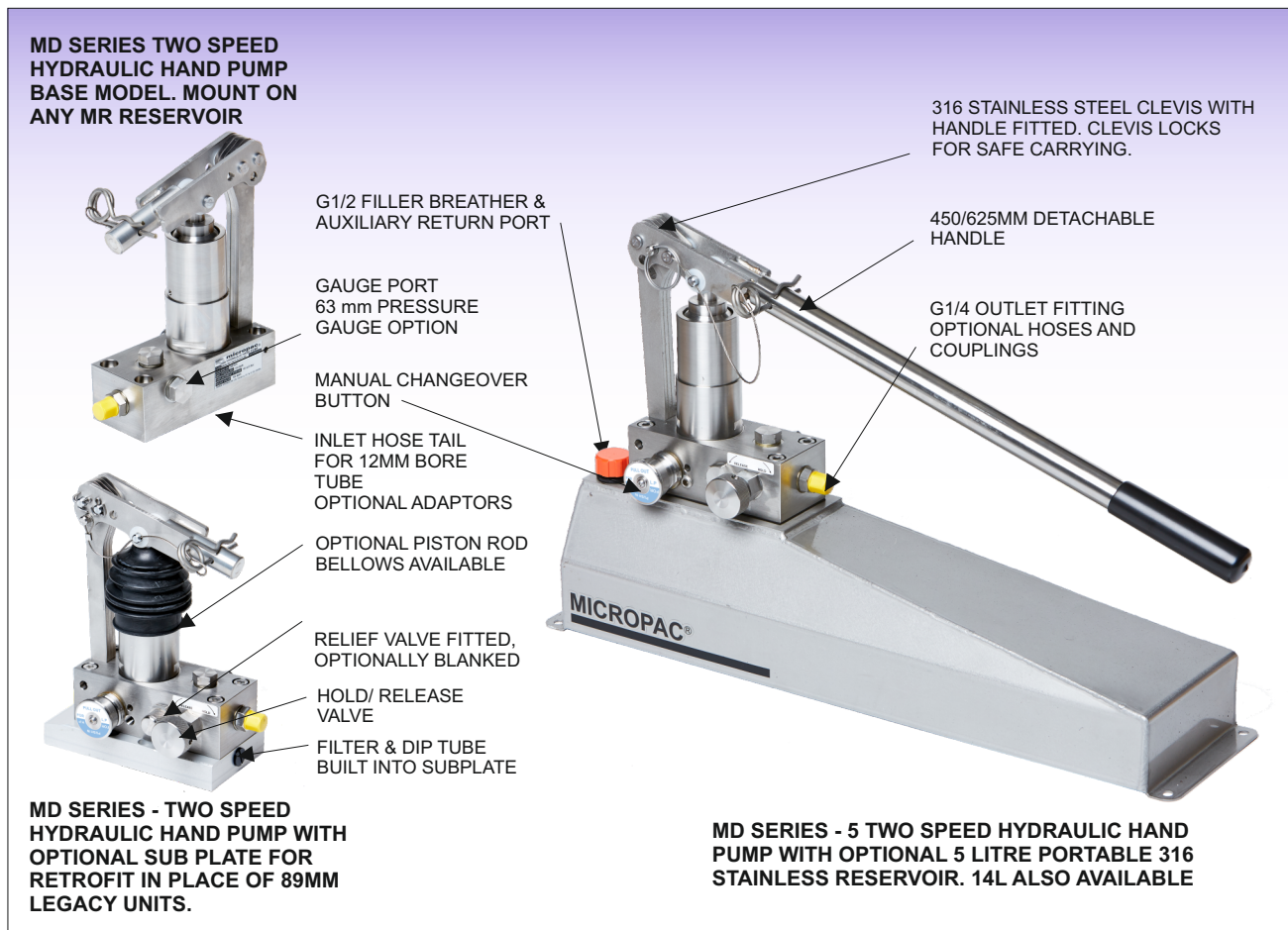


Micropac MD series Two Speed Stainless Hydraulic Hand Pump

A rugged two speed 450, 700 or 1000 bar hand pump with manual changeover in stainless 316 and industry standard retrofit.



TYPICAL APPLICATIONS: ACTUATION, OVER-RIDES AND SHUTDOWN SYSTEMS, PRESSURE TESTING, FILLING AND CHARGING TO 1000 BAR
MULTI FLUID USE ON "SKYDROL" AND OTHER SPECIALIST MEDIA.
COMPACT STAINLESS PUMP TO REPLACE LEGACY ALLOY 2 SPEED UNITS

FEATURES

- Rugged construction with dirt excluder
- Universal fluid compatibility:
 - Oil, Water, Glycols and other fluids
- 316/1.4404 stainless for low corrosion
- Hard chrome plated 316 piston rod for long life
- Poppet outlet check valve for very low leakage
- Soft seat inlet and release valves for durability
- All valve seats replaceable for long service life
- Excellent engineering support over its life.
- Safe-touch manual changeover valve
- Optional piston rod bellows
- Replaces legacy 89mm square alloy pumps
- Three models for wide application;
 - LP 47cc / HP 5.2cc to 450 bar
 - LP 47cc / HP 4.0cc to 700 bar
 - LP 32cc / HP 2.6cc to 1000 bar
- Single acting - pumps on down stroke only
- Pump alone or integral 5L/14L portable reservoir
- Nitrile seals standard - optional EPDM / Viton®
- Universal mounting orientation
- Compatible with Micropac MR range of reservoirs
- Optional conversion plate for retrofit to 89mm units

INSTALLATION & MAINTENANCE

APPLICATION

This two speed pump offers easy operation by allowing rapid pre-filling at 47 or 32cc to 50 bar followed by high pressure operation to 450, 700 or 1000 bar depending upon the model. There is a manual changeover valve from the low to high pressure stages, giving safe operation and long service life. Corrosion proof materials and an optional bellows make this unit suitable for harsh conditions including offshore environments.

Because of our use of soft seat and poppet valves, the unit is suitable for hydraulic fluids including low viscosity types such as water-in-oil emulsions and offshore control liquids. Standard seals are nitrile rubber. Consult factory for special seal requirements for other fluids, including Viton®, EPDM and specialist aerospace/process compounds.

MATERIALS

MD-6: The materials of construction are 316/1.4404 stainless steel externally and 316 stainless plus small amounts of 303, 304, 420 & 431 stainless plus bronze wetted. Seals are PTFE, UHMWP, Polyurethane and Nitrile. The bellows is nitrile where ordered. An OEM alloy version is available. Contact the factory. We also offer a reservoir mounting plate for retrofit in place of legacy 89mm square alloy two speed pumps.

DISPLACEMENT

The unit is available in three displacement / pressure ratings, operating to 450, 700 or 1000 bar.

CONNECTIONS

The unit has a 9/16 UNF female thread on the outlet port fitted with a G1/4 male coned outlet adapter. Make a connection to this with an appropriate adaptor or fitting. Where applicable, the auxiliary port will be plugged or fitted with a pressure gauge. A second auxiliary port is plugged G1/4. The gauge port is G1/4(BS2779) flat bottom.

The inlet hose tail suits 12mm bore flexible tube. We supply an inlet strainer/tube, a gasket and mounting screws with the unit. 3/8 NPT female adapters are a standard option. We can offer other inlet and outlet terminations. A standpipe can be fitted to the inlet for easy piping into a system.

MAINTENANCE

The inlet and outlet check valves are easily serviced and use replaceable seats. Service kits are available comprising all seals, seats, balls and springs.

COMMISSIONING

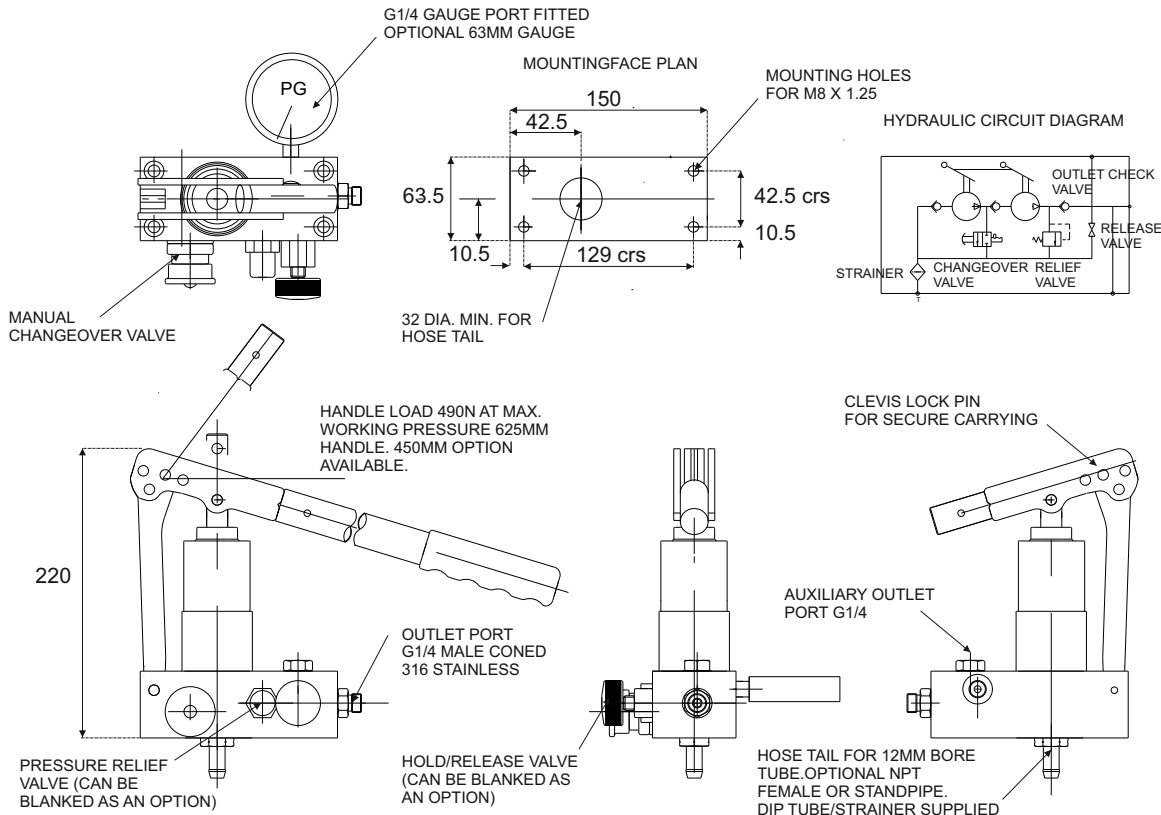
Operate hand pump and pressurise to maximum pressure. Check for leaks in the system. Set relief valve (if required).

SAFETY

This pump is a component forming part of a hydraulic pressure system. The system should be designed, operated and maintained in accordance with statutory requirements and other relevant instructions.

DIMENSIONS

ALL DIMENSIONS ARE IN MM



We are a long established ISO 9001 designer and manufacturer of hydraulic equipment. Full details of other products in our range are available from:

micropac®

We invest heavily and continuously in product development.

Specifications are therefore liable to change without prior notification.

®Micropac is a Registered Trade Mark.

ORDER CODES FOR MICROPAC MD 316 TWO SPEED HAND PUMP

| Model of Pump | |
|-----------------------------|-----------------------------------|
| Materials of construction | |
| 6 | Offshore 316 Stainless |
| Displacement / Max pressure | |
| 45 | LP 47cc / HP 5.2cc up to 450 bar |
| 70 | LP 47cc / HP 4.0cc up to 700 bar |
| 10 | LP 32cc / HP 2.6cc up to 1000 bar |
| Handle | |
| 4 | 450mm |
| 6 | 625mm |
| O | No Handle |
| Seal Material | |
| N | Nitrile / polyurethane |
| V | Viton / polyurethane |
| E | EPDM for "Skydrol" |
| S | Special |
| Test fluid | |
| W | Water |
| O | Oil |
| S | Special |
| Release Valve | |
| R | Fitted |
| O | No Release |
| S | Special |
| Pressure Gauge | |
| G | Fitted |
| O | No Gauge |
| S | Special |
| Relief Valve Pressure | |
| R | Fitted |
| O | No Relief Valve |
| S | Special |
| Options | |
| - | Pump alone |
| 5 | On 5L 316 Portable |
| 14 | On 14L 316 Portable |
| H | Subplate for 89mm refit |

| | | | | | | | | | |
|----|---|--|--|--|--|--|--|--|--|
| MD | 6 | | | | | | | | |
|----|---|--|--|--|--|--|--|--|--|

We offer options of a piston rod bellows, an adaptor plate for legacy 89mm retrofit and 4 way directional control valve. Contact the factory.