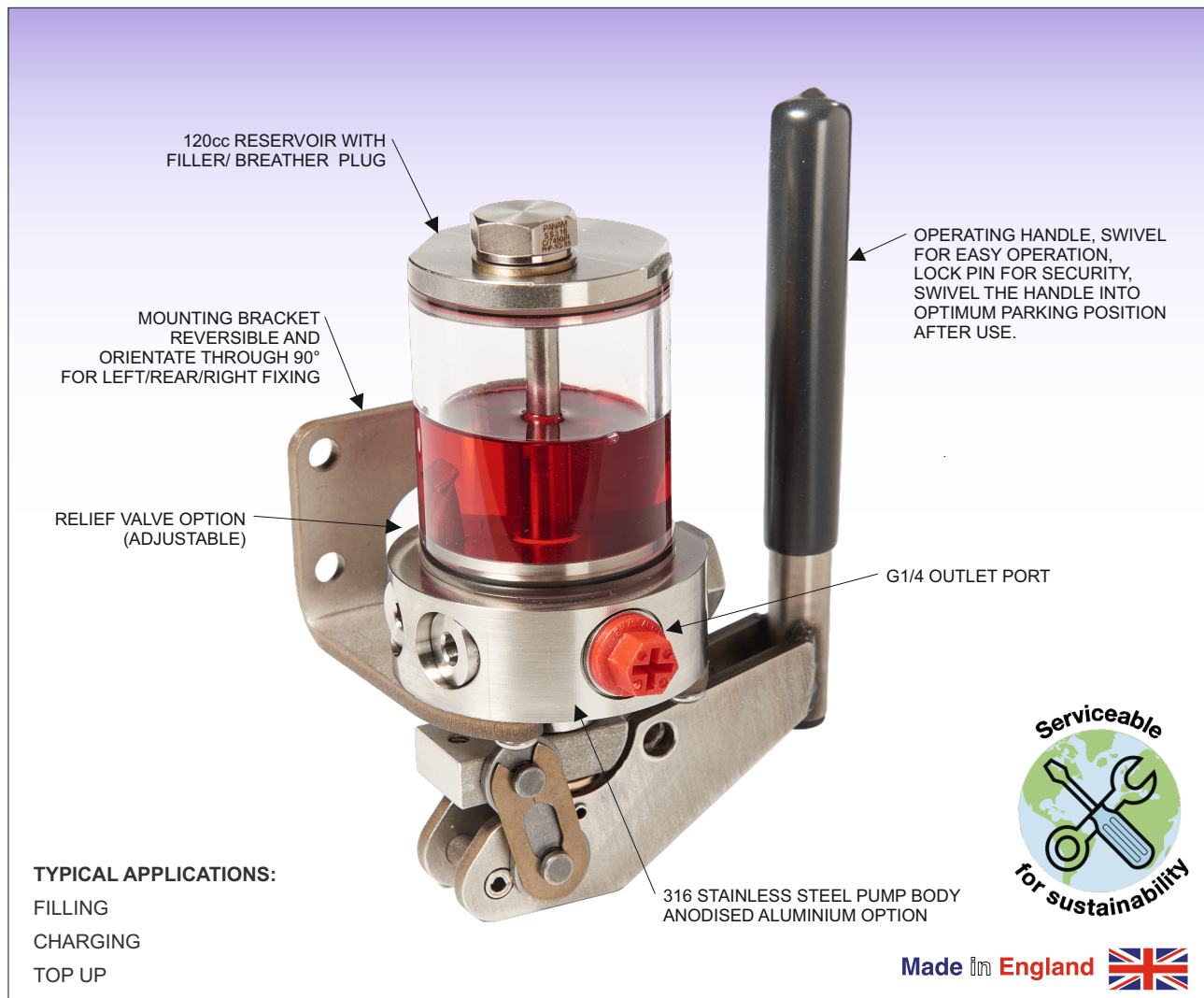




## Micropac® MPF Filling Unit Hydraulic Hand Pump & Reservoir



**A sturdy & compact filling solution for hydraulic systems**

### FEATURES

- Single acting - pumps on down stroke only
- Integral 120cc clear reservoir with filler plug
- Stainless steel pump body- aluminium option
- Displacement 0.6cc/ double stroke to 100 bar
- Compatible with water, oil and other fluids
- Reliable- British design & manufacture
- G1/4 outlet port for connection to system
- Long life hard chromed stainless piston rod
- User-adjustable relief valve optional
- User serviceable sealing & seating components
- Lockable operating handle when not in use
- Nitrile seals standard - optional EPDM/ Viton®
- Removable multiple orientation mounting bracket
- Larger reservoir options (2L) available to order
- Other displacements (5.6-11cc/stroke) available
- Factory support for product and application

# INSTALLATION & MAINTENANCE

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## APPLICATION

This equipment is suitable for use in both indoor and outdoor environments.

The unit is intended for low volume applications such as filling, charging and top up of hydraulic systems. Pumping operation is single acting; fluid is displaced only as the handle moves towards the reservoir.

The hand pump displacement is 0.6cc per stroke single acting up to a maximum pressure of 100 bar. Other pump displacement/ pressure ranges are available to special order; please enquire.

Sealing options are nitrile, fluorocarbon and ethylene propylene elastomers, specified at time of ordering.

Depending on specification, the pump may be fitted with an adjustable pressure relief valve; this is factory set to the maximum operating pressure of the unit (100 bar), unless otherwise specified. The relief valve is not classified as a 'safety accessory'.

The pump operating handle is lockable in the 'up' position.

The unit is intended for direct mounting onto a suitable vertical surface behind or to either side of the pump; the bracket may be removed to rotate in 90° steps in order to facilitate this. The mounting bracket is also reversible such that four mounting holes are either in line with or below the pump unit.

## MATERIALS

The materials of construction are 316 stainless steel (body and piston rod), aluminium bronze (bearing and piston), 302/ 303/ 304/ 420/ 431 stainless steel, nylon, acetal resin, PVC and filled PTFE/ elastomer sealing.

## SAFETY

This unit is a component forming part of a hydraulic pressure system. If forming part of a permanent installation, the system should be designed, operated and maintained in accordance with statutory requirements and other relevant instructions. A risk assessment covering safe installation, operation and maintenance should always be carried out prior to use.

Under the EU Pressure Equipment Directive (PED) 2014/68/EU and the UK Pressure Systems (Safety) Regulations, the unit is not required to be CE or UKCA marked.

## SPECIFICATION

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Displacement per double stroke/ max. operating pressure:

0.6cc/ 100 bar

Also available to order:

5.6c/ 16 bar; 8.2cc/11bar, 11cc / 8 bar

Max. flow (typical):

0.6cc/stroke = 25cc/ minute

Nom. operating hand load: 42N

## INSTALLATION

Before mounting the unit, consider ergonomics of pump handle operation; refer to pump dimensions section. The mounting surface must be able to withstand handle forces during pumping to maximum required pressure. The pump should be mounted onto a vertical surface using the bracket supplied such that the reservoir is directly above the pump body. Refer to pump dimensions section for mounting bracket detail.

The unit is intended for mounting using 4 x M8 fixing screws (not supplied); drill and tap mounting plate to suit or use through holes and nuts when mounting onto sheet (5mm or thinner).

Remove mounting bracket from pump unit if required and orientate to suit application. Refit bracket to pump. Mount unit in position using the four fixing screws.

## CONNECTIONS

The outlet connection is a G1/4 female port. Make connection to system pipework or hose using suitable fitting or adaptor and bonded seal (where required).

## COMMISSIONING

The reservoir may be filled by unscrewing the vented filler cap and topping up to desired level with clean fluid. Always refit filler cap after top up.

Operate the handle by moving through full length of stroke. Bleed through connecting pipework or hose if required. Operate until desired maximum required pressure is achieved or if topping up, desired volume of fluid is displaced. Check for leaks in the system.

To set relief valve, remove cap, adjust set screw whilst operating hand pump to achieve maximum pressure requirement, then refit cap.

## MAINTENANCE

**Maintenance operations should only be carried out by a competent service engineer.**

The inlet and outlet check valves are serviceable and employ replaceable seats. Service kits are available comprising all seals, seats, balls and springs.

The reservoir fluid should be kept clean.

If using aqueous media, ensure that the reservoir is protected from low temperatures to prevent against risk of freezing.

Sarum Hydraulics Ltd also offer a servicing facility; please advise before returning the unit to us.

Compatibility: water, water-glycol, mineral oil (nitrile seals). Fluorocarbon and EPDM sealing options-check compatibility first; if in doubt, consult factory.

Ambient operating temperature range: -20 to 40°C

Media operating temperature range:

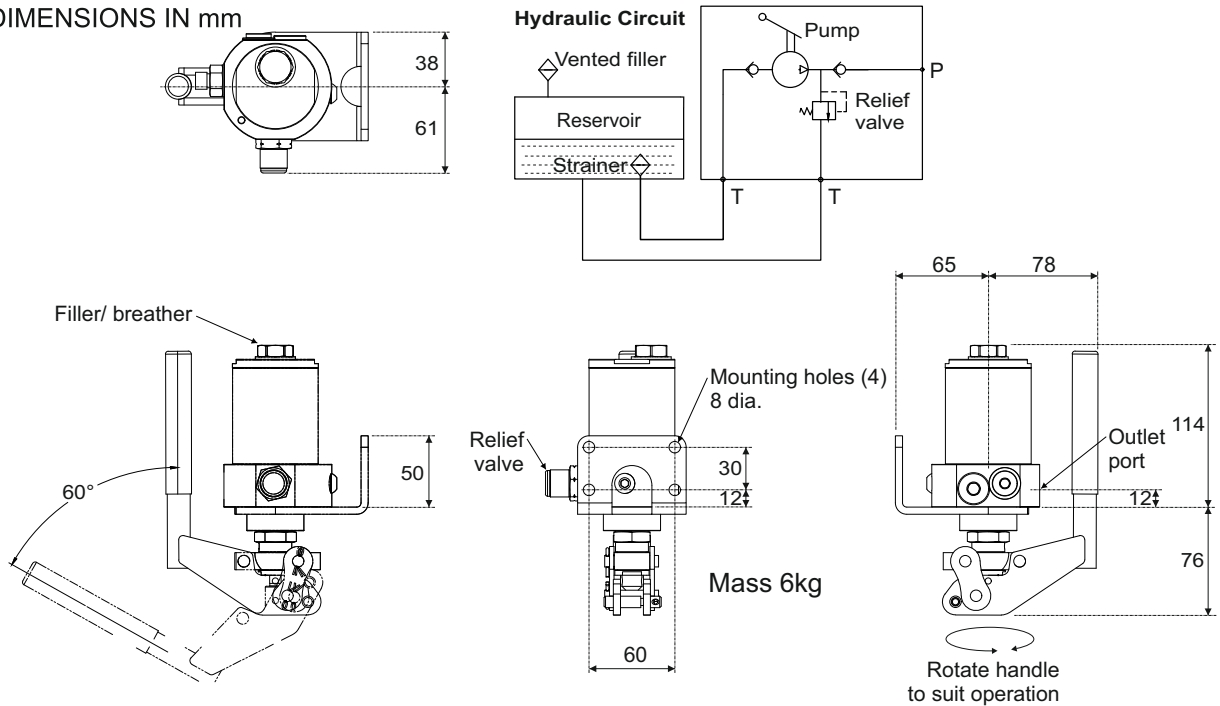
Nitrile: -35 to 80°C

Fluorocarbon: -26 to 80°C

EPDM: -50 to 80°C

# DIMENSIONS

ALL DIMENSIONS IN mm



# ORDERING CODES

<b>Model</b>			
MPF	Pump with integral reservoir		
<b>Body material</b>			
3	316 stainless steel "A" Anodised aluminium body to special order- please enquire		
<b>Displacement/ max. pressure</b>			
06	0.6cc /100 bar	56	5.6cc / 16 bar
82	8.2cc / 11 bar	11	11cc/ 8 bar
<b>Seal material</b>			
N	Nitrile	E	EPDM
V	Viton		
<b>Test fluid</b>			
W	Water	K	Kerosene
O	Oil	S	Special
<b>Relief valve</b>			
O	Not fitted		
R	Fitted (relief pressure to suit)		
<b>Reservoir</b>			
12	120cc reservoir, clear		
Other sizes and materials- please enquire			

M	P	F	-	-	-	-	-	-	-
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We are a long established ISO 9001:2015 certified designer and manufacturer of hydraulic equipment. Full details of other products in our range are available from:



We invest heavily and continuously in product development. Specifications are therefore liable to change without prior notification.

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