



SARUM
HYDRAULICS
Designers & Manufacturers of Micropac® Hydraulics

Micropac® MC series Compact Hydraulic Hand Pump

**316 STAINLESS STEEL VERSION
WITH 175cc RESERVOIR**

175cc RESERVOIR
OPTION WITH FILLER/
BREATHER CAP

OPTIONAL 3
OR 4 WAY
BALL VALVE

INTEGRAL 20cc RESERVOIR OPTION
WITH FILLER/BREATHER CAP

OUTLET PORT NPT-1/8
OPTIONAL RANGE OF CONNECTORS

OPERATING HANDLE-
DETACHABLE

PRESSURE RELIEF
VALVE (OPTIONAL)

PRESSURE HOLD/
RELEASE VALVE
(OPTIONAL)

SIDE MOUNTING HOLES (OTHER SIDE).
OPTIONAL BASE-MOUNTING BRACKET

**CARBON STEEL VERSION
WITH INTEGRAL RESERVOIR**

TYPICAL APPLICATIONS:
CONTROL SYSTEMS, OPERATING PILOT VALVES & SMALL ACTUATORS
CALIBRATION, IN-PROCESS TESTING, BRAKING SYSTEMS.

**Serviceable
for sustainability**

**MADE IN
BRITAIN**

TYPICAL APPLICATIONS

MC PUMP + MINIATURE
5600N PULL CYLINDER
FOR OEM VEHICLE SEAT

MC PUMP FOR PAG
REFRIGERATION
FIELD SERVICE KIT

MC PUMP FOR MECHANICAL BRAKE
RELEASE ON EARTHMOVER
VERTICAL MOUNT

A compact and versatile hydraulic hand pump & reservoir FEATURES

- Rugged construction; side or base mounting
- Compact design; detachable operating handle
- Plated carbon steel and 316 stainless options
- 20cc or 175cc reservoir with filler breather
- Compatible for use with mineral oil
- Long life- hard chrome piston rod/ bronze bearing
- Single acting operation - pumps on down stroke
- Inlet and outlet check valves built-in
- Output 0.6cc/stroke; 400bar max. pressure
- Low operating hand load- 100N at 400 bar
- Optional pressure hold/ release and relief valves
- Nitrile rubber sealing; other options available
- Operating temperature range -20°C to 80°C
- Optional outlet adaptors and 3 or 4 way valves
- Factory support for application and use
- British designed and manufactured

INSTALLATION & MAINTENANCE

APPLICATION

The unit is suitable for applications requiring manual generation of hydraulic power e.g. control system pilots, small actuators or calibration. The small displacement from this compact unit will limit application in larger systems.

The unit is suitable for use with mineral oil and other similar viscosity fluids. Standard seals are nitrile rubber - check compatibility for medium. If in doubt, consult factory.

For applications using low viscosity liquids, we recommend use of our MW series hand pumps with positive sealing poppet-type check valves.

MATERIALS

MC-O: zinc plated carbon steel body, clevis and handle; other bronze and stainless steel components.

MC-3: 316 stainless body, reservoir, clevis & handle; other small amounts of 302/303/304/420/431 stainless steel and CW307 bronze.

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 and regulatory 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 2016, the unit is not required to be CE or UKCA marked.

INSTALLATION

Ensure that mounting surface is flat and can withstand pump handle operating force.

The body is tapped M8 in two places for mounting onto a vertical surface. These mounting holes must not be drilled out or otherwise modified in any way.

INSTALLATION continued

Mount the pump on a suitable plate and secure with 2 suitable M8 fixings (not supplied). An optional right angle mounting bracket is available for base mounting onto a horizontal surface.

Mounting orientation must only be as shown on page 1 (pump inlet has to be flooded, reservoir filler cap not leak-tight as it has a breather element).

CONNECTIONS

Make connection to the outlet port with suitable 1/8" NPT adaptor or tube fitting.

Where a pressure gauge is required, this can be mounted into the outlet line using a tee.

A 3 or 4 way rotary valve can also be supplied for the outlet; contact the factory.

COMMISSIONING

The reservoir may be filled by unscrewing the filler cap and topping up to desired level with clean fluid; do not over fill. Always refit filler cap after top up.

Fit operating handle to handle spigot. If fitted, close the release/ hold valve by screwing knob in fully clockwise; do not over-tighten. Operate the pump handle by moving out and in. Bleed system of air as required then operate pump to achieve maximum required pressure. Check for leaks in the system.

To release pressure, unscrew release/ hold valve knob, slowly for a controlled release.

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 strainer is easily accessible for cleaning. The inlet and outlet check valves are also easily serviced. Seals are easily replaced using standard tools. Service kits are available.

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

SPECIFICATION

Displacement/ double stroke: 0.6cc

Max. operating pressure: 400 bar

Max. flow: 24cc/min (typical)

Nom. operating hand load: 132N nom. @ 400 bar

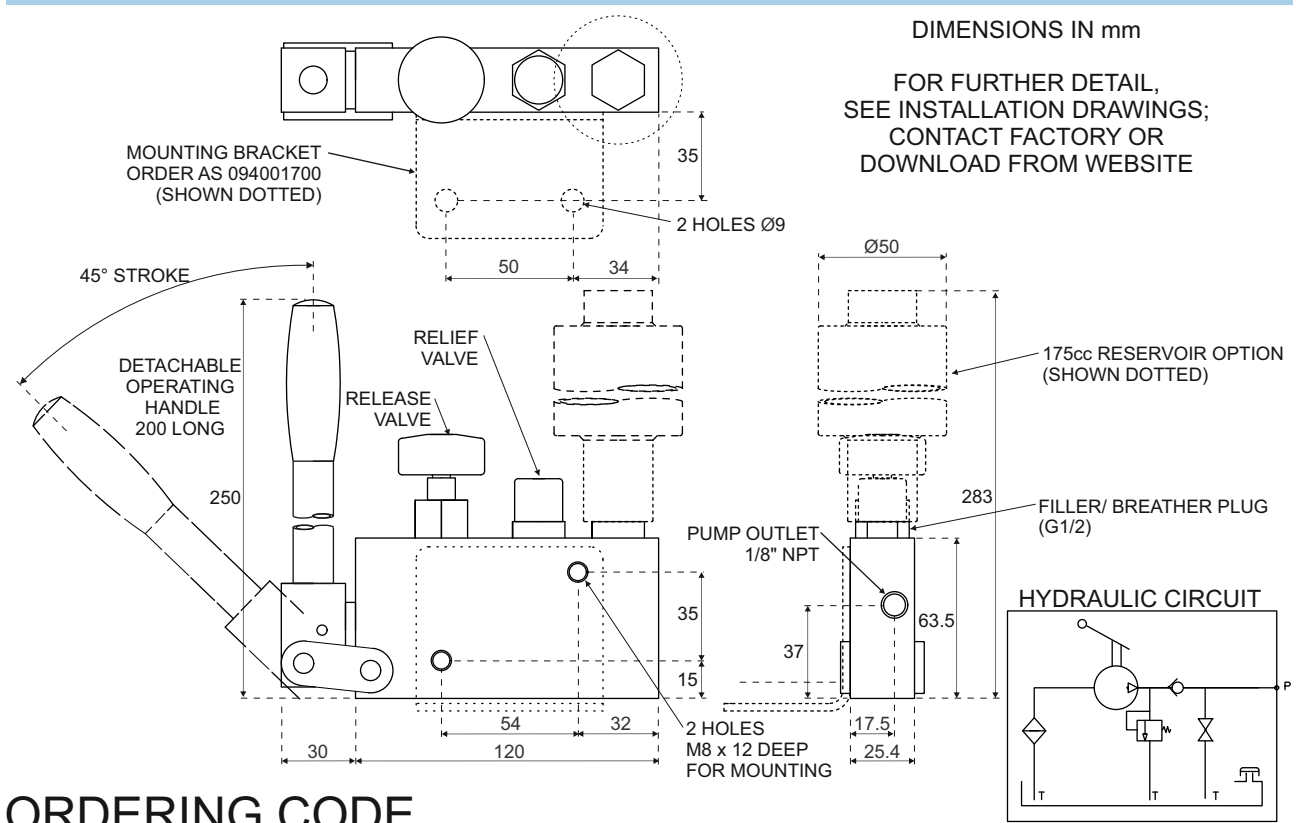
Compatibility: mineral oil

Ambient operating temperature range: -20 to 40°C

Media operating temperature range: -20 to 80°C

Weight: 1.8kg (steel), 1.95kg (316). 175cc- add 0.6kg

DIMENSIONS



ORDERING CODE

Model of pump	
Body material	
0	Carbon steel
3	316 stainless steel
Displacement/ stroke	
06	0.6cc
Pressure hold/ release valve	
0	Not fitted
R	Fitted
4	4 way valve (max 170 bar)
Pressure relief valve	
0	Not fitted
R	Fitted
Operating handle	
0	Not fitted
2	200mm long, detachable
Reservoir	
0	Integral 20cc
R	External 175cc

MC

Unit Conversions
Bar to psi - multiply bar by 14.504
Litres to US Gallons - divide litres by 3.785
cc to cu. in. - divide cc by 16.387

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

Sarum Hydraulics Limited
Unit 1 Danebury Court, Salisbury, SP4 6EB, UK
Tel: 44(0)1722 328388 Fax: 44(0)1722 414307
email: pumpsales@sarum-hydraulics.co.uk
www.sarum-hydraulics.co.uk

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