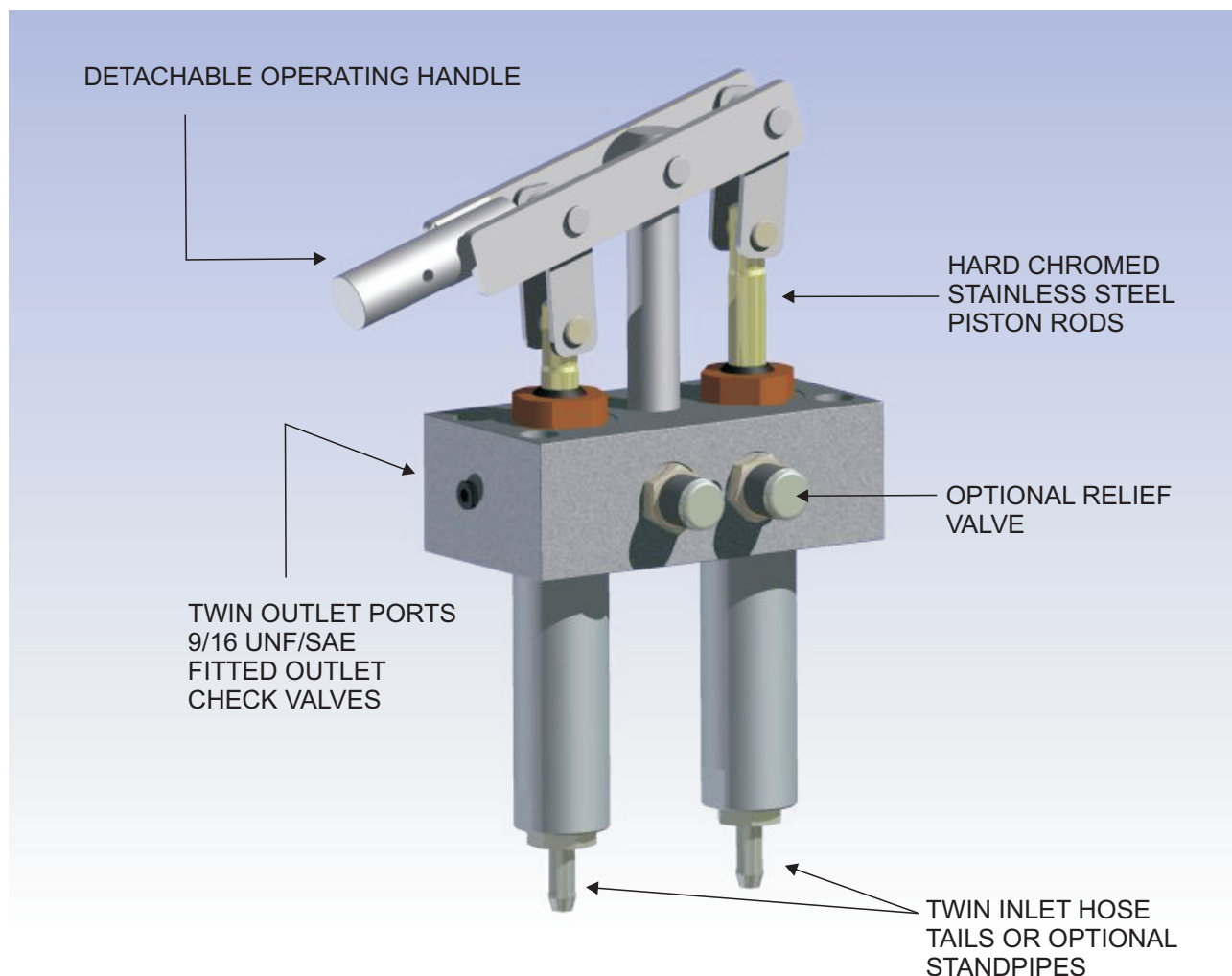




# Tandem Pump Unit

A specialist twin barrel pump for balanced and two speed operation.



TYPICAL APPLICATIONS: OPERATION WITH PRESSURISED INLETS, TANDEM/ SYNCHRONISED TWIN CIRCUIT OPERATION, TWO SPEED APPLICATIONS AND CARBON DIOXIDE SERVICE

## FEATURES

- Two hand pumps in one body.
- Tandem operation, so 100% synchronised.
- Safe operation on pressurised inlet.
- Totally balanced design.
- Double acting operation on up and down stroke.
- Replaceable seats for long service life.
- Soft seat and poppet check valves for low leakage, even on water.
- Temperature range -20°C to 80°C.
- 12cc + 12cc per double stroke to 207 bar.
- 12cc per double stroke to 407 bar on single barrel operation.
- 316 Stainless/Bronze construction
- Optional adjustable outlet relief valve.
- Other options available - please contact factory.
- Operating handle easily removable for storage.
- Suitable for use with oil, water or glycol.
- Nitrile seals standard - optional EPDM / Viton®.

# INSTALLATION & MAINTENANCE

## APPLICATION

In using twin separate hand pumps in a single body and operated in tandem, the design is totally balanced. Accordingly, a pressurized inlet can be used without the normal safety problem of the handle rising violently on the "up" stroke and requiring higher load on the "down" stroke.

Typical applications using pressurized inlets are pumping carbon dioxide for filling fire extinguishers or certain manual over ride applications for the offshore industry.

Two independent hand pumps which are of the same displacement but synchronised can also be used to control two separate hydraulic cylinders which need to be kept in tandem despite differing loads. This pump unit can be very effective at low flows where a proprietary hydraulic flow splitter valve is often very poor.

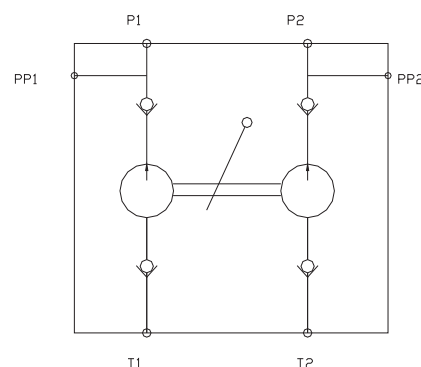
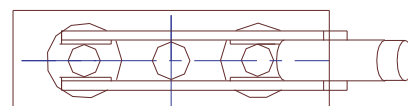
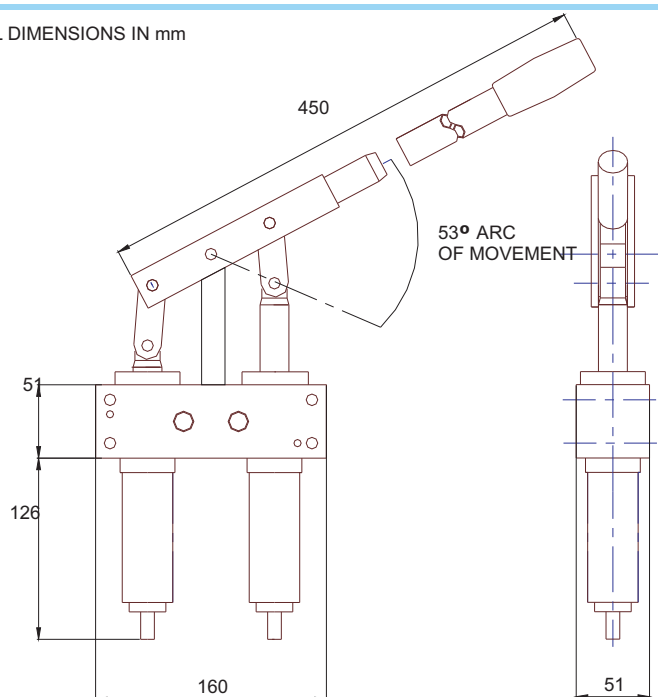
Two separate hand pumps in a single body allows a two speed pump to be produced, with one barrel unloaded manually or automatically at a set pressure. An external ball valve needs to be piped in.

## MATERIALS

The materials of construction are 316 stainless steel, CW307G bronze. Small amounts of 303, 304, 420, 431. Seals are PTFE, UHMWP, Nitrile, Nylon, PVC, Homopolymer

## DIMENSIONS

ALL DIMENSIONS IN mm



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

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## DISPLACEMENT

12cc + 12cc to 207 bar (407 when one barrel is unloaded).

## CONNECTIONS

The unit has two  $\frac{9}{16}$  UNF SAE female ports, each filled with  $\frac{1}{4}$  BSP male cone adapter. Make a connection to this port using an appropriate hose or adapter. The inlet connectors are two hose tails for 9.52mm bore tube. 9.52mm diameter standpipes can be fitted or optional  $\frac{3}{8}$  NPT female adapters.

## COMMISSIONING

The pump should be operated after installation to leak test and bleed the hydraulic circuit. Failure to do so will result in reduced pump displacement and a spongy action.

## MAINTENANCE

The inlet and outlet check valves are also easily serviced. Seals are replaced using standard tools. Service kits are available.

## 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 and other relevant instructions.



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# ORDER SHEET FOR TANDEM PUMP UNIT

Model of Pump	
Body Material	
3	316 Stainless
A	Aluminium
S	Special
Displacement	
12	12 + 12cc Per Double
S	Special
Handle	
4	450mm
O	No Handle
Seal Material	
N	Nitrile
S	Special
Test fluid	
O	Oil
W	Water
G	Glycol
Relief Valve	
R	Relief Valve
O	No Relief
S	Special

M H

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