

## Data sheet

Sheet No.: MFS A-01.01 RevA

Date: October 2010

MFS A01

# Manifolds MFS-3 and MFA-3 for BHH, BHHF and BL Actuators

MFS-3



Manifold ( 6 Cetop-3 stations )  
with top and bottom part

- Compactness and unique design
- Throttle/stop valves on each station
- System bleed valve on each manifold
- Hand pump connections for emergency operation
- Unlimited mounting possibilities and free combination of manifolds 4 and 6 stations

### Main data: (Inches in parenthesis)

Max. working pressure	: 135 bar	(1958 PSi)
Max. test pressure	: 205 bar	(2973 PSi)
Pipe connection	: 1/4 BSP.P	
Weight: MFS-3, 4 stations	: 2.9 kg	(6.4 lbs)
MFS-3, 6 stations	: 4.4 kg	(9.7 lbs)
MFA-3, 4 stations	: 2.5 kg	(5.5 lbs)
MFA-3, 6 stations	: 3.8 kg	(8.4 lbs)
Bottom part	: 1.8 kg	(4.0 lbs)
Top part	: 0.9 kg	(2.0 lbs)

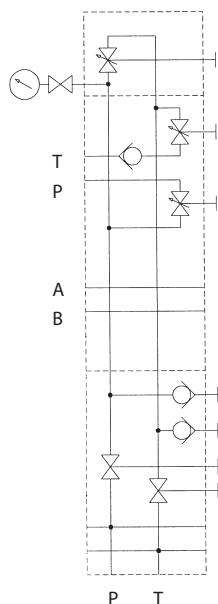
Pressure drop from P ->A ->B ->T through 1 pc solenoid valve at 6 l/min. = 19 bar and 3 l/ min. = 7 bar.  
Pressure drop from P ->A ->B ->T through solenoid valves at 3 l/min. in 6 controls = 37 bar.  
Measured at 45 cSt.

### The manifold:

The manifolds are the elements of complete systems in a stacking design. The manifolds are available with 4 and 6 Cetop R35H size 3 stations in the versions MFS-3 (straight) and MFA-3 (angle). The design of the manifolds allows placement behind each other in a solenoid valve cabinet and the rear row will still be visible, as it is angled (MFA-3).

Very compact hydraulic systems can be built on each station. All stations have common pressure (P) and tank (T) ports and each Cetop R35H control station has separate user ports A and B. Just beside the A and B user port there are two throttle/stop valves on each station. The throttle/stop valves on P and T port are regulating the flow.

If some of the stacking elements are to be exchanged, the throttle/stop valves on P and T port should be closed. It is then possible to take off each stacking element without losing the hydraulic system pressure. The manifolds are provided with screws and recess for cabinet mounting.

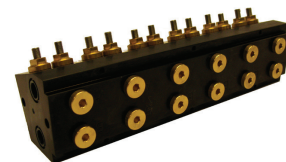


Functional symbols

MFS-3



MFA-3



Manifolds with 6 Cetop-3 stations

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## Data sheet

Sheet No.: MFS A-01.02 RevA

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# MFS A01

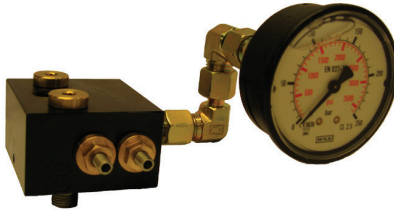
### Description:

The compact manifold design is based on a modular mounting of the basic elements:

Manifold, bottom part and top part.

These elements are assembled into one unit by means of assembly bushes (included).

This assembly is carried out without any kind of piping.



Top part

### Top part:

In the top part a system bleed valve, stop valve and pressure gauge (0-250 bar) (0-3625 PSI) are incorporated (P-line pressure).

For bleeding (de-airing) the pressure line P to the tank line T, the bleed valve is to be opened. The stop valve is used for relief of pressure gauge.



Bottom part

### Bottom part:

In the bottom part two hand pump connections on the P and T port are incorporated for emergency operation of the whole manifold.

Before using the hand pump connection, the two stop valves incorporated in the P and T port should be closed. There are three possibilities for mounting of P and T ports.



Cover plate

### Cover plate C3:

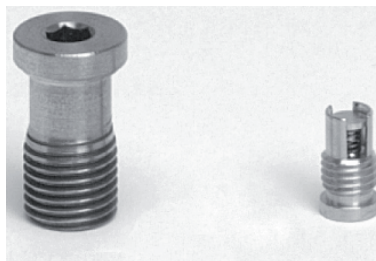
The cover plate is used for blanking off Cetop-3 connections not used on the manifold.

### Non-return valve:

The non-return valve is used in the manifold (T-line) in order to prevent flow in one direction and allow free flow in the other.

When using a hydraulic position indicator VPI, there must always be a non-return valve.

The non-return valve is as standard mounted in all MFS-3 and MFA-3 manifolds.



Assembly bushing and non-return valve

### Assembly:

For assembly of manifolds, bottom part and top part only a 6 mm Allen key 320 mm (12.6 in) in length is needed.

The Allen key is led into the P- and T-line, respectively, and the parts are screwed together with the standard mounted assembly bushes.

Note: Not Certified dimensional drawings. Such drawings are available on request. Contact factory with correct model designation and serial number.

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