

## General Servo H

Servo H series consists of a complete range of hand operated, pneumatic proportional valves, intended for remote control.

Servo H series are designed for many different applications, both mobile and industrial. Servo H series can be applied to control directional hydraulic spool valves and servo cylinders for hook arms systems, front and end loaders, mobile cranes and portal systems.

Other applications are speed control of air motor, assembling, sawing and cutting systems.

## Design and function Servo H

The modular valve series Servo H can be easily combined with push buttons actuated Valve H series, and electric indicator modules. Each module can be assembled in random order for the best possible solution for the application and optimum ergonomics for operator. A connection flange for central air supply and central exhaust function makes the configuration very compact.

Robust design and choice of materials, sealing and production technique's makes Valve H series a reliable product. Servo modules are constructed from sections of two pressure reducing valves, with linear characteristics for proportional control.

Single Servo H series are available with lever in-line or lever 90° rotated. Depending on the application, the lever can be equipped with pneumatic or electric switch for "high flow" function. Double integrated servo modules are always 90° rotated and can be equipped with of without electric switch.

A stand-alone module can be chosen where space is at a premium. Stand-alone modules can not be combined with other modules.

Pneumatic and electric connections for outlet signals are located on bottom side of the modules. Modules will be standard delivered with push-in connectors Ø 4 mm for pneumatic signals. Electrical connections can be made via an electrical connection block.

Symbols for movements, servo function and on/off functions can be shown by using pictograms. Pictogram can be assembled into the knob of the servo or front of a module.

All components can be assembled in random order. Each module will be delivered with special connection screws. This gives you the freedom of assembling the unit as required. All modules are supplied with o-rings for a reliable leak free seal between modules.

Parker can deliver complete assembled units or single modules. This provides the best possible flexible delivery options for you. Ask your local Parker Sales offices for best possible solution.



### Servo H1

Pneumatic proportional valve. Available handle actuations:  
- lever in line  
- lever 90° rotated



### Servo H2

Pneumatic proportional valve, with pneumatic push-button integrated into the lever, for extra pneumatic signal. Available handle actuations:  
- lever 90° rotated



### Servo H3

Pneumatic proportional valve, Stand-alone module, available in different version, normal actuation (H1), with electric switch integrated in lever (H5) and with mechanical lock (H4).



### Servo H4

Pneumatic proportional valve, with mechanical lock. Available handle actuations:  
- lever in line  
- lever 90° rotated



### Servo H5

Pneumatic proportional valve, with electrical switch integrated into the lever, for extra electric signal. Available handle actuations:  
- lever in line  
- lever 90° rotated



### Servo H6

Pneumatic proportional valve, with 3 position electric switch integrated in to lever. Available handle actuations:  
- lever in line  
- lever 90° rotated



### Servo-double

Double proportional valve, both levers always 90° rotated. Each type of handle actuation is available.  
- H1+H1  
- H1+H5  
- H1+H6

## Ordering-key Servo H

1                      2                      3                      4                      5

**SERVO**   -   **H5**   -   **90**   -   **4**   -   -

Type of Servo Module	
<b>H1</b>	Single proportional valve
<b>H2</b>	Single proportional valve, pneumatic push button integrated in to lever (only 90° rotated)
<b>H3</b>	Single proportional valve, stand alone version
<b>H4</b>	Single proportional valve, mechanical lock for fixed preset position from lever
<b>H5</b>	Single proportional valve with electric switch integrated in to lever
<b>H6</b>	Single proportional valve with 3 positions electric switch
<b>H1+H1</b>	Double proportional valve
<b>H1+H5</b>	Double proportional valve, - one lever without extra button - one lever with electric switch,
<b>H1+H6</b>	Double proportional valve - one lever without extra button - one lever with 3 positions electric switch

Execution	
-	Standard
SU	Special execution

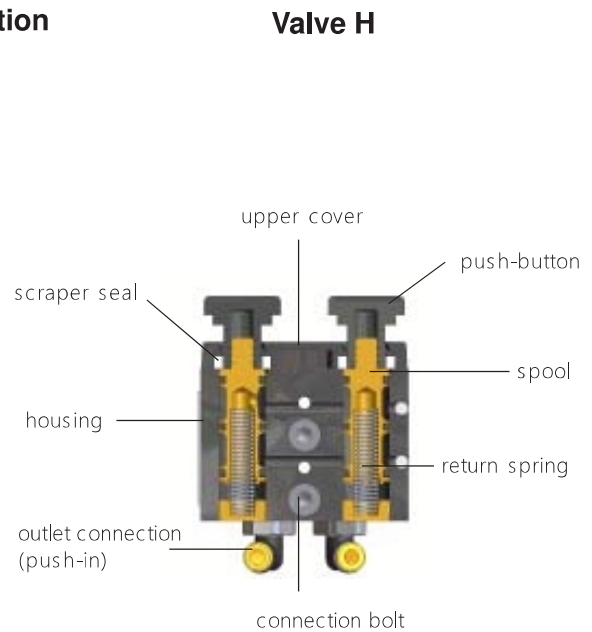
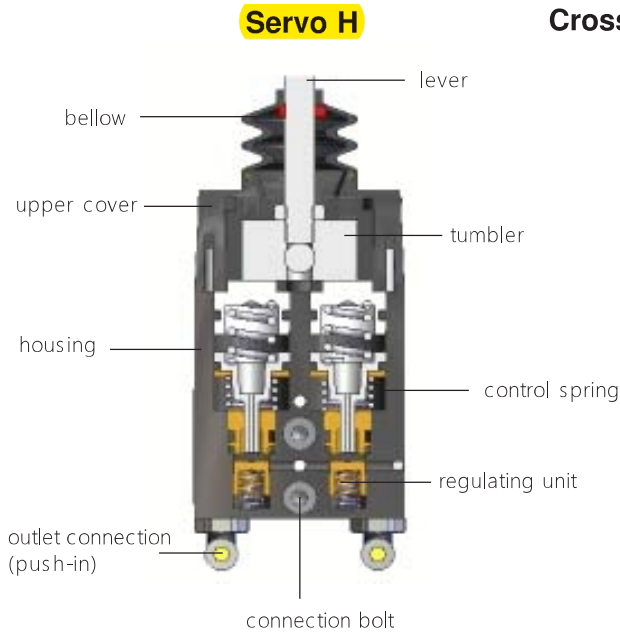
Port connections (outlet)	
<b>11</b>	1/8" BSP
<b>4</b>	Push in Ø 4 (standard)
<b>6</b>	Push in Ø 6

Assembling direction of lever	
<b>0</b>	in-line
<b>90</b>	Handle actuation 90° rotated

## Standard order codes

Single	Order code	Double	Order code
Servo H1-0-4	<b>3500600</b>	Servo H1+H1-4	<b>3501200</b>
Servo H1-90-4	<b>3501400</b>	Servo H1+H5-4	<b>3501900</b>
Servo H2-90-4	<b>3501500</b>	Servo H1+H6-4	<b>3522800</b>
Servo H3+H1-0-4	<b>3500800</b>		
Servo H3+H4-0-4	<b>3512900</b>		
Servo H3+H5-0-4	<b>3519300</b>		
Servo H4-0-4	<b>3500900</b>		
Servo H4-90-4	<b>3501600</b>		
Servo H5-0-4	<b>3501000</b>		
<b>Servo H5-90-4</b>	<b>3501700</b>		
Servo H6-0-4	<b>3514600</b>		

For central air supply and exhaust of a module or complete pre-assembled Servo H-unit a connection flange is always required. More information can be found on page 8.



## Technical data

### Pneumatic

Working medium	: Compressed air
Supply pressure	: max. 8 bar
Control pressure	: 0-8 bar linear characteristics
Flow rate	: 187 l/min.
Hysteresis	: max. 1 bar
Temperature ranges	: -10°C / +70°C
Air quality	: Filtered to min. 50 micron, lubricated or non-lubricated, dried to dewpoint of +3°C. Once lubrication is applied, this must be maintained.
Lever force	: 4 Nm fully actuated at 8 bar

### Port connections inlet:

Central air supply (P)	: Push-in connector $\varnothing 6$ mm
Central exhaust (R)	: Push-in connector $\varnothing 6$ mm

### Port connections outlet:

ServoH	: Push-in connector $\varnothing 4$ mm
Valve H	: Push-in connector $\varnothing 4$ mm
	: Other port connections on request

### Weight:

Flange set	: 0,22 kg
Valve H	: 0,26 kg
Servo H	: 0,38 kg
Servo H-90	: 0,60 kg
Servo H+H	: 0,66 kg

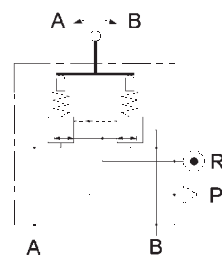
### Electrical:

Two position contact	: resistive load 2A - 24 VDC 5A - 250 VAC
	: inductive load 3A - 250 VAC

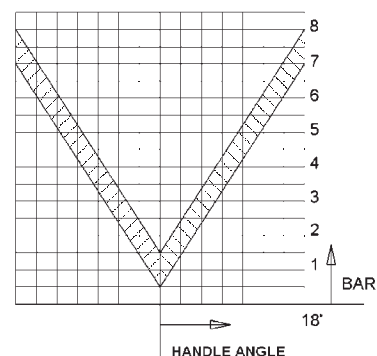
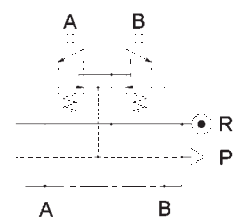
### Materials:

Valve body	: Anodised aluminium
Top cover	: Thermoplastic
Knob	: Thermoplastic
Lever	: Stainless steel
Seals	: Nitrile rubber
Spool	: Brass
Screws	: Stainless steel

### Servo H

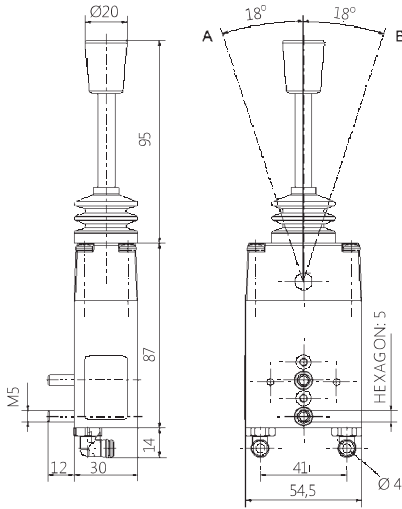


### Valve H

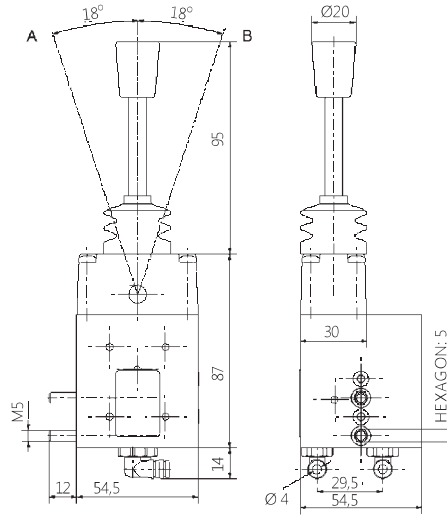


## Dimensions

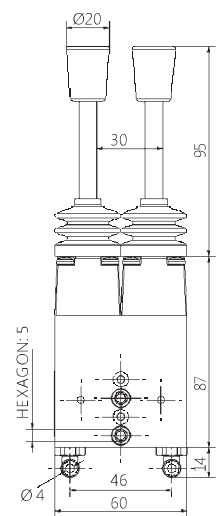
**Servo H... in line**



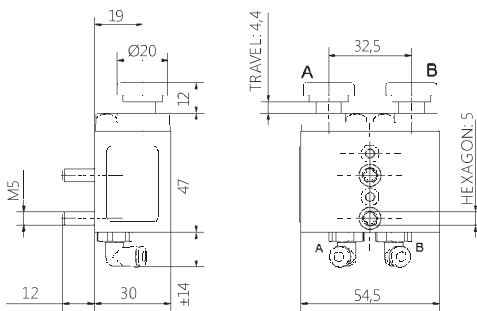
**Servo H... 90° rotated**



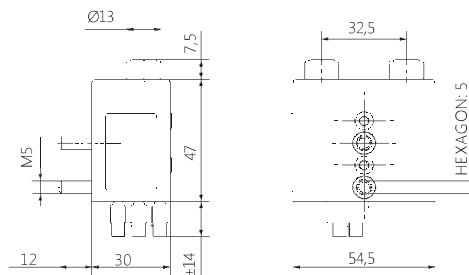
**Servo double**



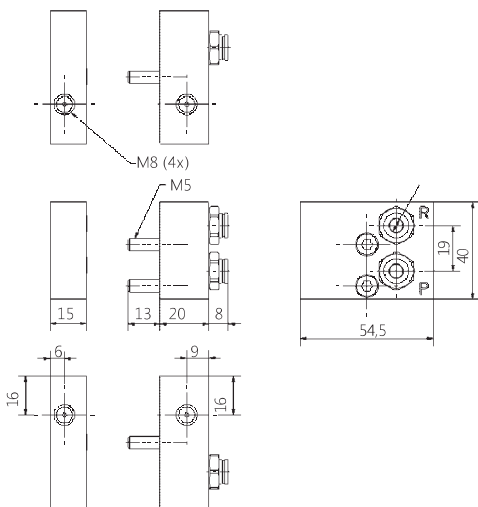
**Valve H...**



**EML-24-GR**



**CFH6**



**Example Servo H:**

Pre-assembled complete set

- 1 x CFH6
- 1 x EML-24-GR
- 1 x Servo H1-0-4
- 2 x valve H1-4
- 1 x valve H2-4

