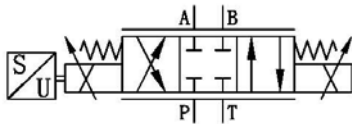




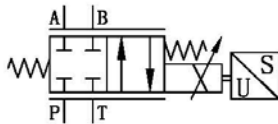
**Proportional Solenoid Valve**  
 direct actuating, with position sensor  
 Subplate to ISO4401-NG06  
**PHRS06**

**Switching symbol**

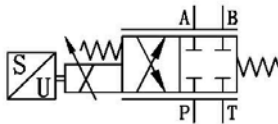
PHRS06...D02



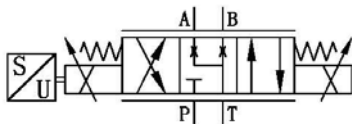
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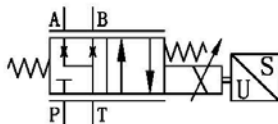
PHRS06...A02



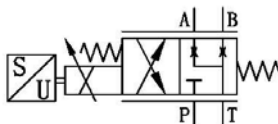
PHRS06...D33



PHRS06...B33



PHRS06...A33



- PHRS series is a new design of high precision and high sensitivity closed loop proportional control valve
- Linear flow characteristic due to the special design of the valve sleeve
- Small hysteresis by polishing moving parts
- Long life cycle times due to high surface hardness of the sleeve and spool
- For a load pressure independent flow we recommend our Load-Sensing Modular Valve **M2LS06**
- Electronic control by external amplifier see page 2

**Specifications**

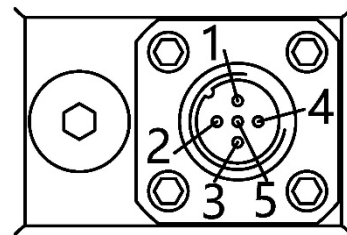
Port interface:	ISO4401-03-02-0-05
Installation:	Preferably horizontally
Weight:	With one solenoid 1.7kg With two solenoid 2.2kg
Operating pressure:	Ports P,A,B max. 350 bar Port T max. 210 bar
Flow ( $\Delta p=10\text{bar}$ ):	S2-0 max. 13 l/min S4-0 max. 30 l/min
Hysteresis:	<1%
Repeat accuracy:	<1%
Hydraulic oil:	DIN 51524-Part1/2
Viscosity range:	10 up to 600 mm <sup>2</sup> /s
Oil filtration:	max. 18/16/13 ISO4406
Oil temperature:	-20°C up to 70°C
Ambient temperature:	-20°C up to 50°C

## Electric specifications

Nominal current:	2.1A (12 VDC coil)
Duty cycle:	100%
Protection class:	IP65 according to DIN40050
Plug socket solenoid:	DIN EN 175301-803
Plug socket position sensor:	M12x1- 5 pin

## Position sensor, pin connection

<b>Pin 1</b>	supply 19-30V
<b>Pin 2</b>	output 2-10V
<b>Pin 3</b>	0V (Signal ground)
<b>Pin 4</b>	output 4-20mA
<b>Pin 5</b>	output middle position



## Amplifier EABD...R

### EABD 1 R

Command signal

1 = 0-10V

2 =  $\pm 10V$

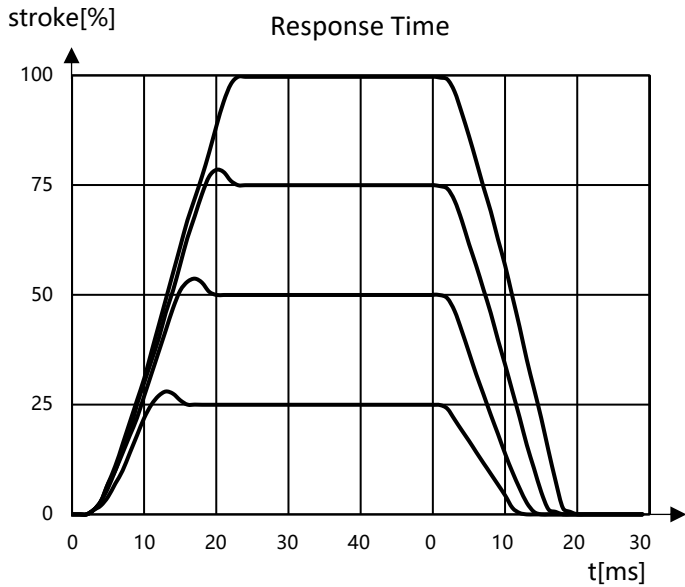
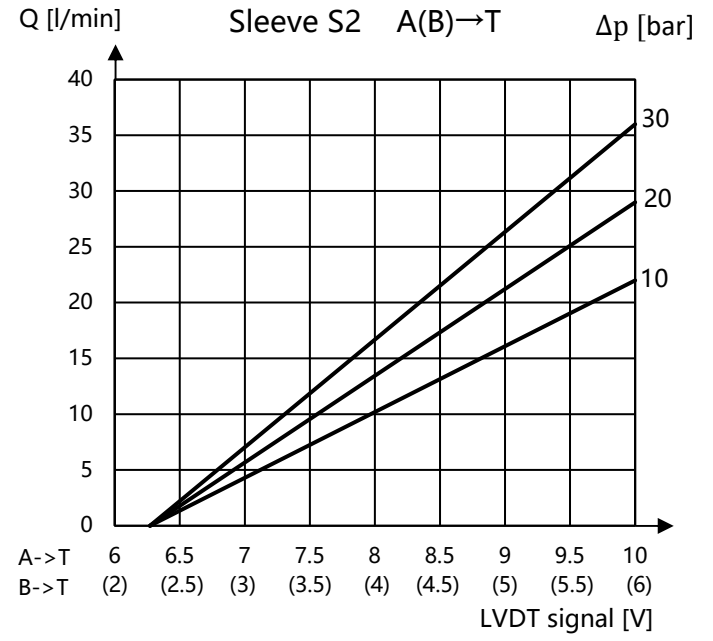
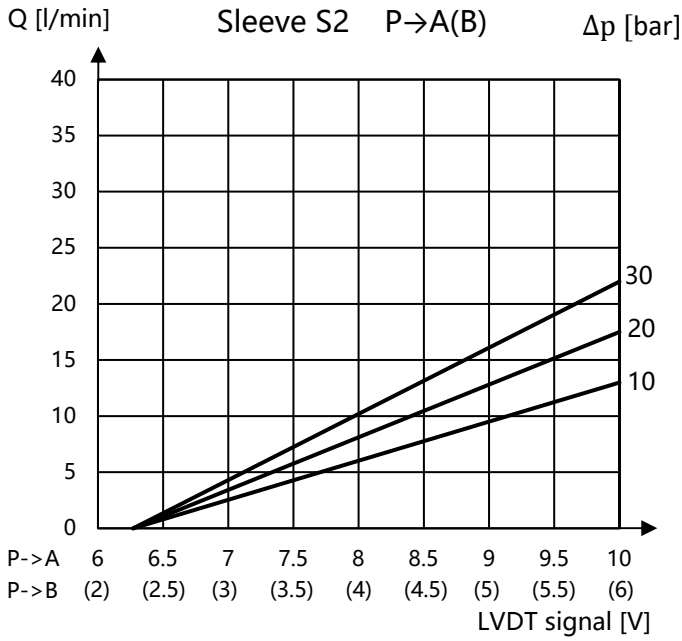
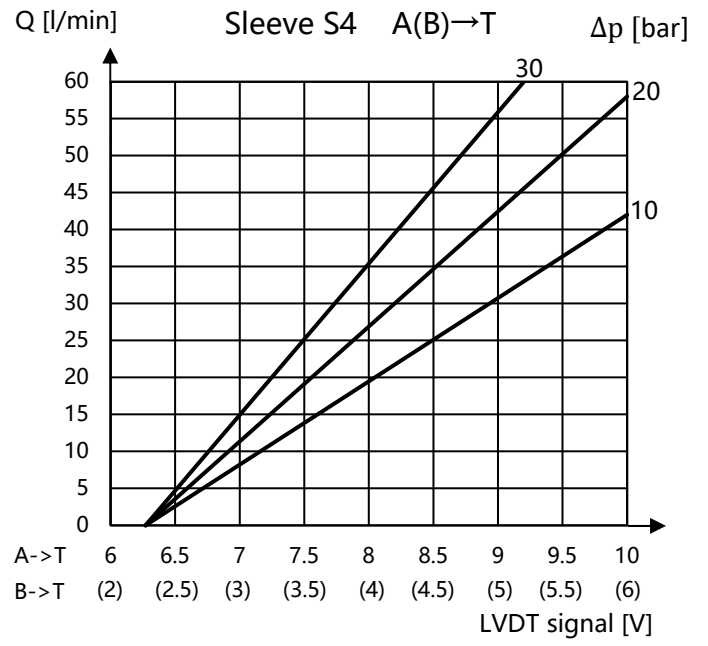
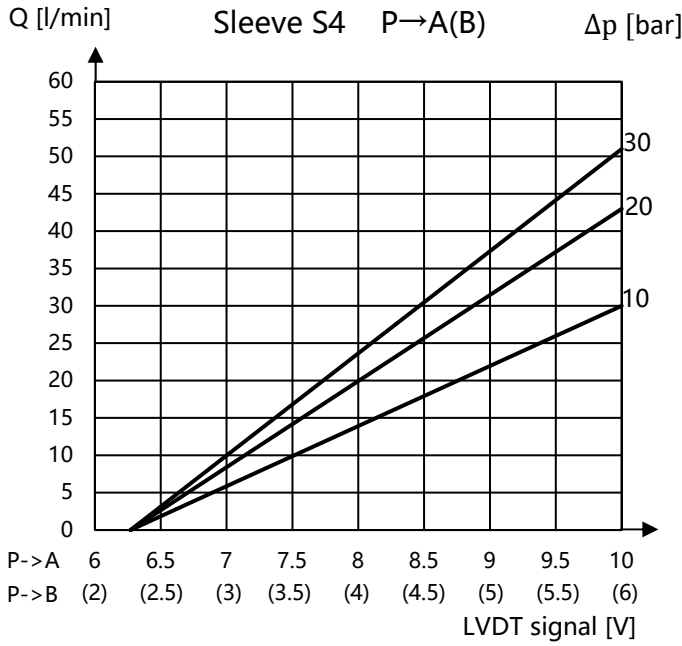
3 = 4-20mA

### Specifications

Supply voltage:	19-30 VDC
Max supply current:	3A
Duty cycle:	100%
Mechanical connection:	Snap-on module according EN 50022
Dimension:	Width 23mm; Height 99mm; Depth 114mm



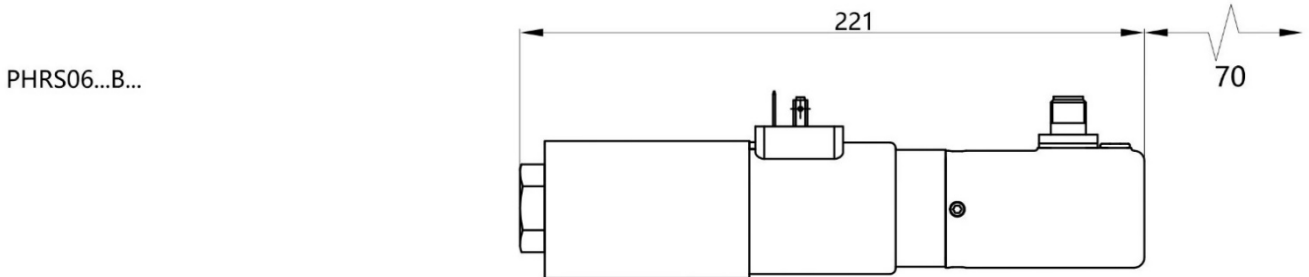
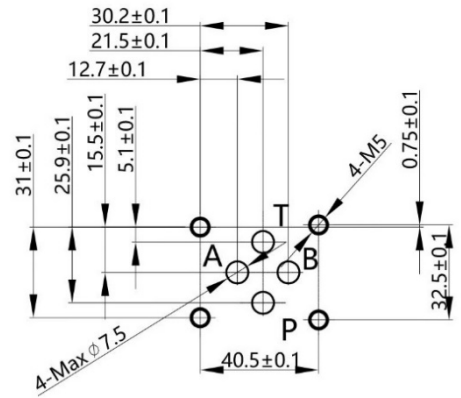
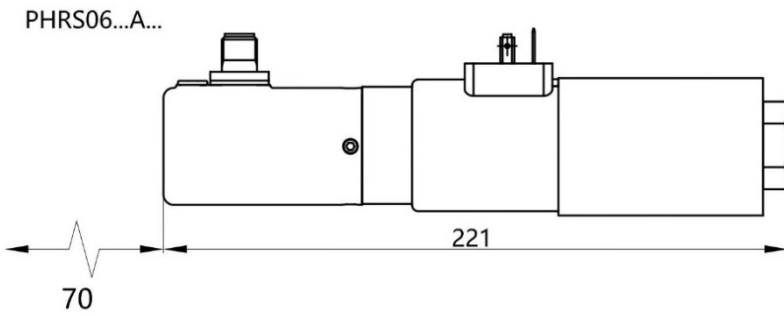
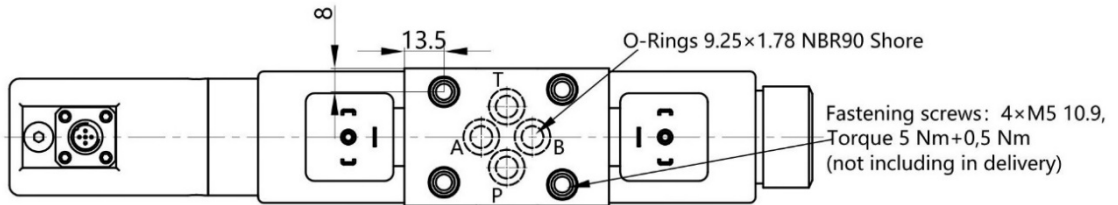
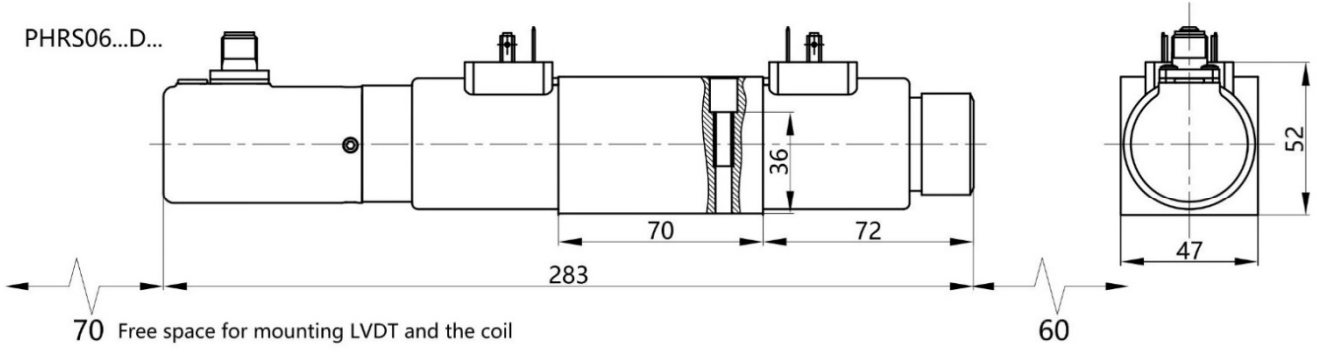
# Performance



# Dimensions

This part is rotatable  
 M12x1 plug  
 (not including in delivery)

All dimensions in mm.



## Type Code

**PHRS 06 D 02 S2-0 N 20**

### Model

Proportional directional valve  
High flow linearity  
Close loop control by position sensor  
Solenoid actuation

### Port size

06 accordingly ISO4401-03-02-0-05

### Solenoid actuation

A = 4/2 valve solenoid at A side  
B = 4/2 valve solenoid at B side  
D = 4/3 valve solenoid at both sides

### Switching symbol

02, 33 (See page 1)

### Nominal flow

S2-0 = 13 L/min (flow with  $\Delta p$  10 bar)  
S4-0 = 30 L/min (flow with  $\Delta p$  10 bar)

### Seal material

N = NBR  
V = FKM (Viton)

### Solenoid voltage and connector

20 = 12VDC with DIN plug

### Note

The technical information in this data sheet refers to the specified operating conditions and applications. For deviating applications and/or operating conditions, please contact us. The technical information is subject to change without notice.