VPTSHE CM–06 Subplate Installation Dimensions

Subplates: G341/01(G1/4) G342/01(G3/8) G502/01(G1/2)
Valve fixing screws: 4-M5x45 DIN 912-10.9; M_t=8.9 Nm
The surface, connecting with the valve, should be Ra0.8 roughness, and 0.01/100mm flatness.

VPTSHE CM–10 Subplate Installation Dimensions

Subplates: G341/01(G1/4) G342/01(G3/8) G502/01(G1/2)
Valve fixing screws: 4-M6x40 DIN 912-10.9; M_t=8.9 Nm
The surface, connecting with the valve, should be Ra0.8 roughness, and 0.01/100mm flatness.

Electrical connection, plug–in connectors

Plug-in connector: the plug-in connector should be met with the standard: DIN EN 175 201-804

PIN allocation of the component Plug

	Plug-in connector	A1 Connector type A1	Connector type F1
Supply	A	24VDC(u(t)=19.4~35V);I_{max}=2A	
voltage	B	0V	
Reference potential(actual value)	C	Link to F; R_e>50KΩ	Link to F; R_e<10Ω
Differential amplifier input	D	Com. Value ± 10V;R_e>50KΩ	Com. Value 4···20mA; R_e>100Ω
	E	Reference potential set value	
Measuring the output (actual value)	F	Actual value ± 10V, (Current limiter 5mA)	
	PE	Link to the valve body and low-temperature subjects	

Com. value : Positive command value (0 to 10 V or 12 to 20 mA) at D and reference potential to E causes flow from P to A and B to T. Negative command value (0 to 10 V or 12 to 4 mA) at D and reference potential to E causes flow from P to B and A to T. For valves with a solenoid on side "a" (spool variants EA and WA) a positive command value at D and reference potential to E (NS 6: 4 to 20 mA and NS 10: 12 to 20 mA) causes flow from P to B and A to T.

Actual value : The actual value (0~10V or 12mA) on the F.C enables the connection from port P to port A.

Connection cable : Recommendation:
-up to 25 m cable length type LiYCY 5 x 0.75 mm^2
-up to 50 m cable length type LiYCY 5 x 1.0 mm^2 External diameter 6.5 to 11 mm
Connect screen to PE only on the supply side

Model description

VPTSH – E – ⁎ – ⁎ – ⁎ – 2X – G24 – ⁎ – ⁎ – ⁎ – ⁎ *

Directional proportional valve

No code Without integrated electronics
With integrated electronics

CM - SPOOL WITH DISPLACEMENT SENSOR

Spool symbols

With spool symbols:
P→A: qvmax B→T:qv/2
P→B: qv/2 A→T:qvmax

DN 6
DN 10

Nominal flow at valve pressure differential Δp = 10 bar

	DN 6
07	7 L/min
15	15 L/min
30	26 L/min
	DN 10
30	30 L/min
60	60 L/min

Further details in clear text

Omit Nitrile rubber sealing
V NBR seals suitable for mineral oil (HL, HLP) to DIN 51 524

No code BFW BFWN
A1 Command value input±10V
F1 Command value input4~20mA

[2]K4 Electrical connection For BFW (type) with plug component DIN EN 175301-803 See page A.3.3
[2]K31 with plug component DIN 43 650-AM2 See page A.3.4

Special protection
No code Without special protection
[1]J Seawater-resistant(only for DN6)

No code 24V 24 VDC

2X Component series 20 to 29 (20 to 29 unchanged installation and connection dimensions)

1.Other types of electrical protection on request
2.Only available with DN6: We can only supply "31" in sea water resistant design "J" !

Block circuit diagram / connection allocation

Introductions:

The electrical signal launched from controlled amplifier (e.g.actual value) must not be used for the safety protection of the switch device.

1. Contacts PE should be linked to the low-temperature subject and valve body.
2. Ramp time could be adjustable within the scope 0~02.5s outside, as well as T_{up} and T_{down}.
3. Zero point outside is adjustable.

Characteristic curves (measured with HLP46, Qoil =40℃ ± 5℃) DN6

8 l/min nominal flow at differential pressure 10 bar

16 l/min nominal flow at differential pressure 10 bar

32 l/min nominal flow at differential pressure 10 bar

Transient function with stepped form of electrical input signal

1 △p=10 bar Constant
2 △p=20 bar Constant
3 △p=30 bar Constant
4 △p=50 bar Constant
5 △p=100 bar Constant

△p= Valve differential pressure (inlet pressure P_p minus load pressure P_L and minus return pressure P_T)

Characteristic curves (measured with HLP46, Qoil =40℃ ± 5℃) DN10

25 l/min nominal flow at differential pressure 10 bar

50 l/min nominal flow at differential pressure 10 bar

75 l/min nominal flow at differential pressure 10 bar

Transient function with stepped form of electrical input signal

1 △p=10 bar Constant
2 △p=20 bar Constant
3 △p=30 bar Constant
4 △p=50 bar Constant
5 △p=100 bar Constant

△p= Valve differential pressure (inlet pressure P_p minus load pressure P_L and minus return pressure P_T)