

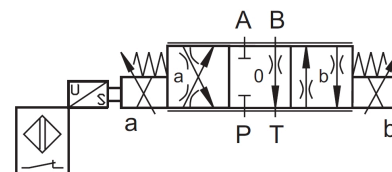
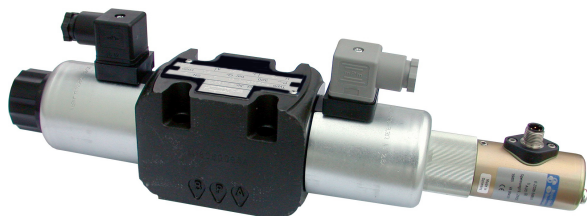
Proportional directional control valve type PIH (size 10)

operating pressure p_{max}

350 bar

volume flow V_{max}

100 L/min



Product characteristics

- As a controller, the electronic digital amplifier PVR6 by HAWE is recommended. It has been specially designed for this type of valve.
- very high repeatability
- design PIH43_

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Technical data

General

weight	6.7 kg
ambient temperature	-20 to +50 °C
mounting position	arbitrary (preferably horizontal)

Hydraulic parameters

Hydraulic fluid: mineral oil according to DIN 51524, other media on request

max. operating pressure	P, A, B = 320 bar T = 180 bar
hydraulic fluid temperature	-20 to +70 °C
viscosity	10-600 mm ² /s
permissible degree of pollution	max. class 19/16/13 according ISO 4406
response time for stroke	0-100 % → 40 ms 100-0 % → 40 ms
leakage	≤ 0.1 L/min (A→T) p _A = 100 bar U _A = 7.1 V - 7.9 V
hysteresis	≤ 0.5%
repeatability	≤ 0.5 %

Actuation

actuation	electromagnetic with proportional solenoid
voltage	DC voltage
nominal voltage	12 V
coil resistance (at 20 °C)	12V solenoid: 3.3 Ω
duty cycle	continuous operation

protection class	IP65 with plug
connection type	connector DIN43650-AF2-PG9

Inductive displacement transducer

nominal voltage	$U_B = 24 \text{ V DC } (\pm 20 \%)$
residual ripple of nominal voltage	$\leq 5 \%$
current consumption	$< 40 \text{ mA}$
output voltage (linear range)	P→A: $U_A = 7.5 \text{ to } 3 \text{ V}$ P→B: $U_A = 7.5 \text{ to } 12 \text{ V}$
load on output voltage	$\geq 10 \text{ k}\Omega$
responsivity	$2.25 \text{ V/mm } (\pm 3 \%)$
linearity	$\leq \pm 1.5 \%$
temperature drift	$\leq \pm 0.02 \text{ } \%/^{\circ}\text{C}$
residual ripple of output voltage	$\leq 20 \text{ mV}$

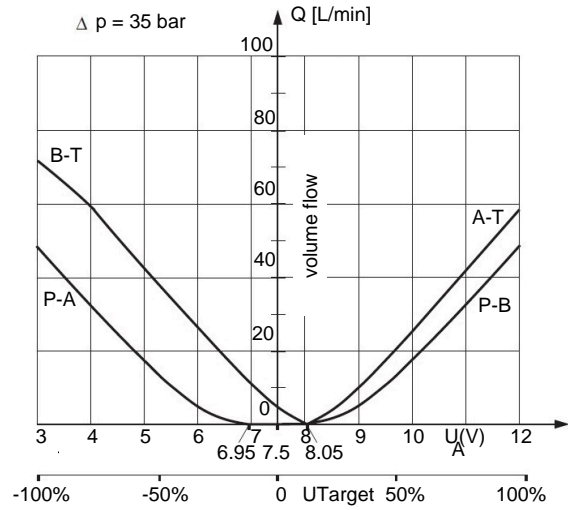
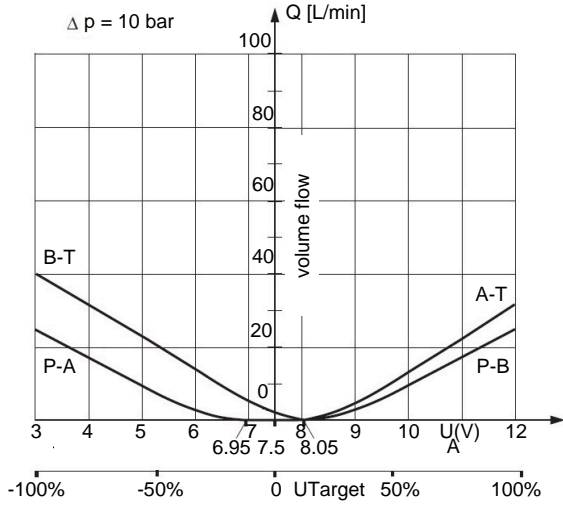
Digital signal at central position (PIN 4)

digital output U_o	low signal: $\leq 10 \mu\text{A} \times R_{LD}$ high signal: $\geq U_B - 2 \text{ V}$
minimum load resistance R_{LD}	220Ω
switching section	lower threshold voltage: $7.1 \text{ V } \pm 20 \text{ mV}$ upper threshold voltage: $7.9 \text{ V } \pm 20 \text{ mV}$

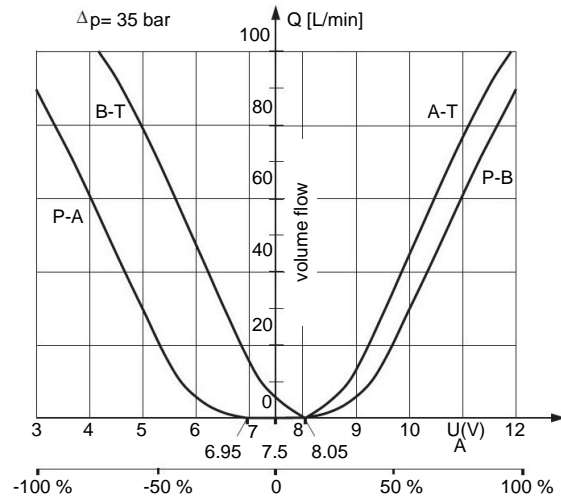
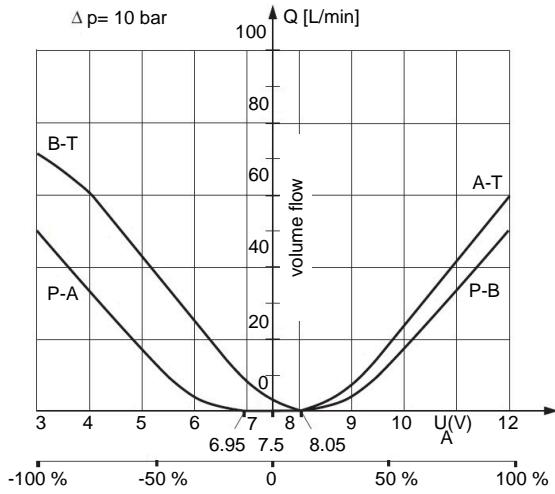
Characteristic lines

measured at +50 °C temperature of hydraulic fluid, viscosity 35 mm²/s, tolerance ±5 %

PIH43_PC10_25

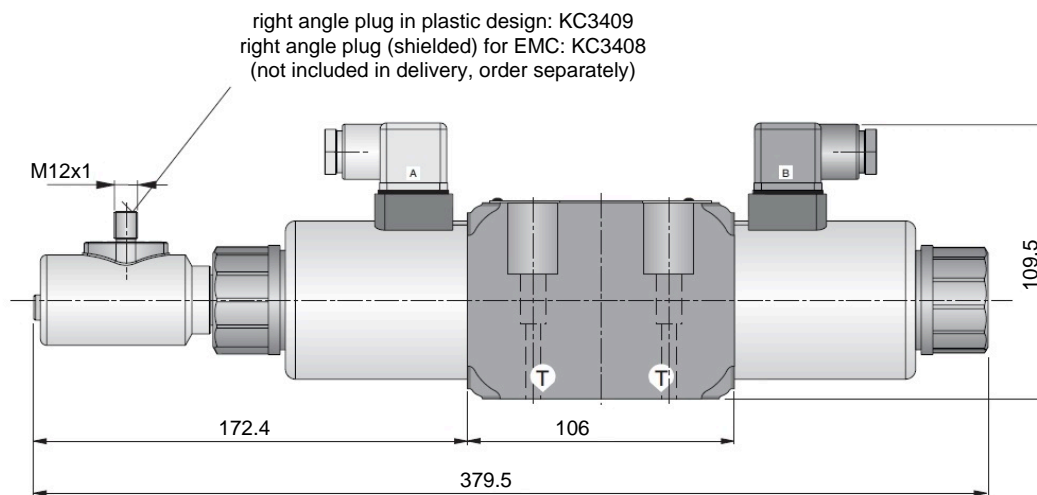
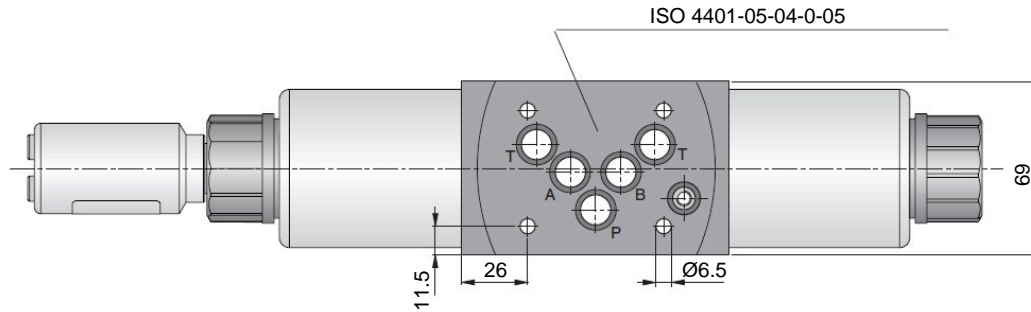


PIH43_PC10_50

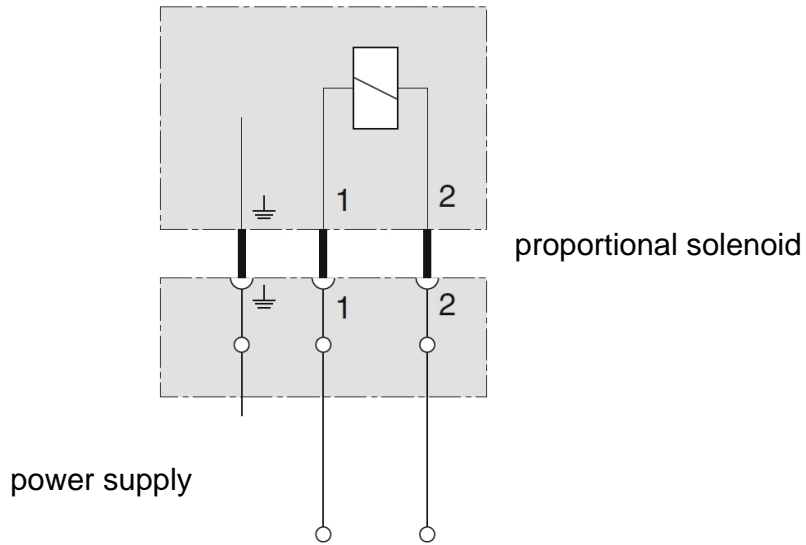


Dimensions and connections

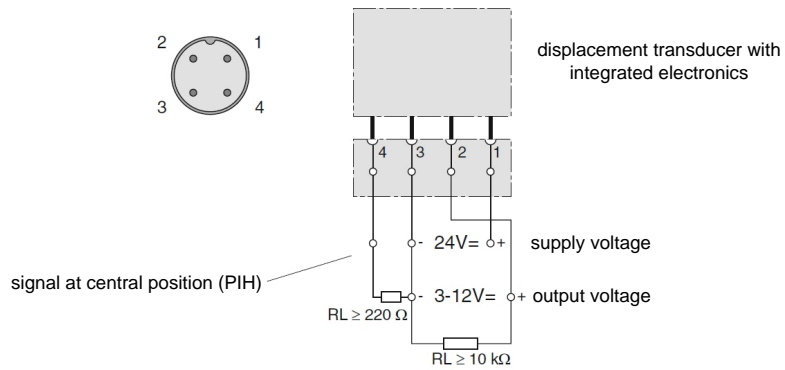
Dimensions are given in mm.



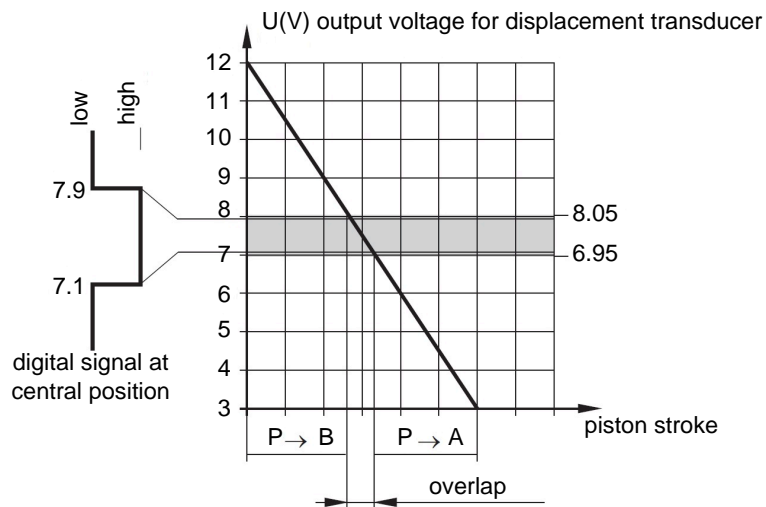
Proportional solenoid



Inductive displacement transducer



Output value displacement transducer



Order information

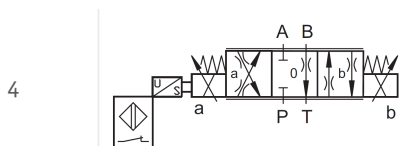
Type code

P	I	H	4	3	0	PC10	N	25
displacement transducer		symbol (piston type)	type	volume flow symmetry	electrical data	PC10	volume flow Q_N	

displacement transducer

I with displacement transducer and center position signal

symbol (piston type)



further symbols possible upon instructions

type

3 two proportional solenoids, working in opposition to one another, midposition centered by force

volume flow symmetry

0 symmetrical
 $Q_N P \rightarrow B = Q_N P \rightarrow A$

electrical data

N 12 VDC

volume flow Q_N

at a valve pressure difference of 10 bar on each side

$Q_N P \rightarrow B = Q_N P \rightarrow A$

25 25 L/min

50 50 L/min

Contact details

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