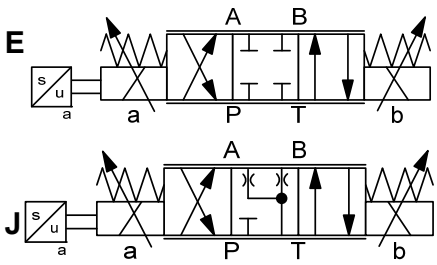
HYDAC INTERNATIONAL

4/3- Proportional Solenoid Valve direct acting, with position transducer

Subplate to ISO4401

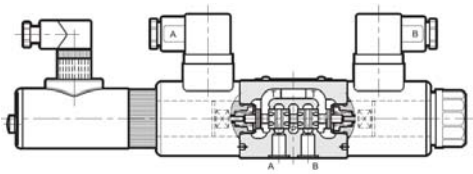
P4WER 06

SYMBOL



Up to 40 l/min
Up to 350 bar

FUNCTION



The P4WER 06 is a direct acting solenoid valve which combines the directional control with the velocity control of the consumer.
The controlled nominal flow is proportional to the electrical input signal at the coil.
Analogue to his size the coil creates a force and moves the piston against the spring. Herewith the corresponding cross section diameters are opened which determines the flow rate in dependence of the pressure differential.
For the electrical control of the valve there are electronic modules available (see brochure 5.249.0 PEK-WAR).

FEATURES

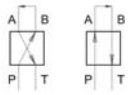
- High flow rate due to optimized casted housing
- Small hysteresis by super finish of moving parts
- Long life cycle times by armature switching under oil
- Minimal wear by hardened and ground valve piston
- Simple exchangeability by international standardized hole pattern to ISO 4401
- Electronic control by PEK-WAR see brochure 5.249.0
- Integrated position transducer

SPECIFICATIONS

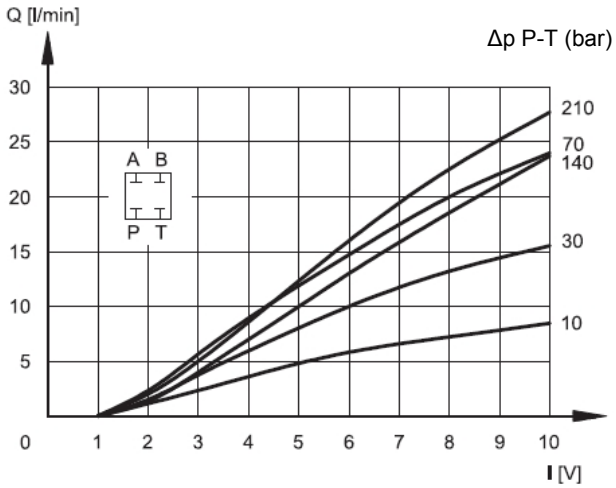
Operating pressure:	ports P,A,B max. 350 bar port T max. 210 bar
Nominal flow:	max. 40 l/min
Hysteresis:	(in % of Qmax) < 1,5 %
Repeat accuracy:	(in % of Qmax) < +/- 1,0 %
Switch-on time:	(0-100%) 30 ms
Switch-off time:	(100-0%) 25 ms
Media operating temp.range:	-20°C up to +80°C
Ambient temperature range:	-20°C up to +60°C
Hydraulic fluid:	Hydraulic fluid to DIN 51524 part 1/ 2
Viscosity range:	10 mm^2/s up to 400 mm^2/s
Filtration:	Class 18/16/13 up to 19/17/14 according to ISO4406
Supply voltage:	DC voltage
Nominal current:	1,88 A at 12V DC
Resistance at 20°C:	3,66 Ohm at 12V DC
Coil duty rating:	100% (continuous)
Electromagnetic compatibility: (EMC)	Emissions to EN 50081-1 compatibility to EN 50082-2 to Norm 89/336 CEE
IP rating:	IP65
Installation:	no orientation restrictions
Hint:	Vent system and valve before setting in motion
Hole pattern:	ISO4401-03-02-0-05
Weight:	2,3 kg

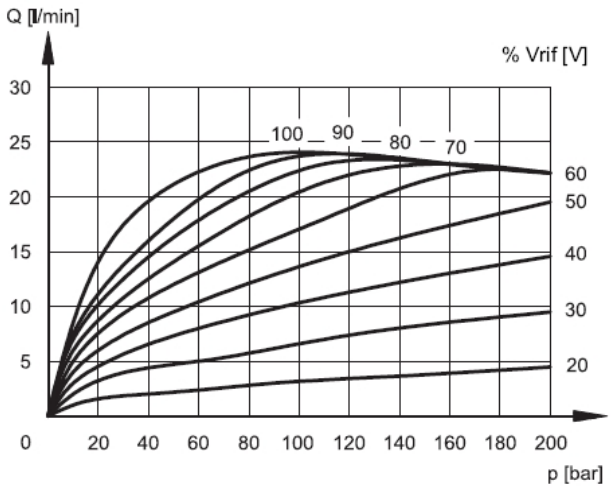
PERFORMANCE

measured at ν= 33 mm²/s and T_{oil} = 46° C (The related Δp is measured between lines P and T of the valve)



E08





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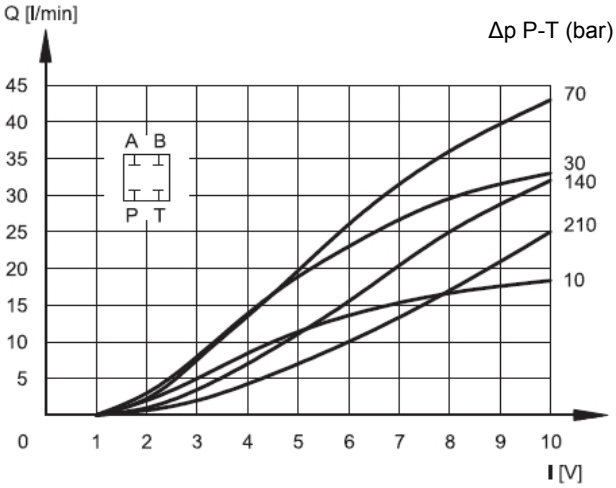

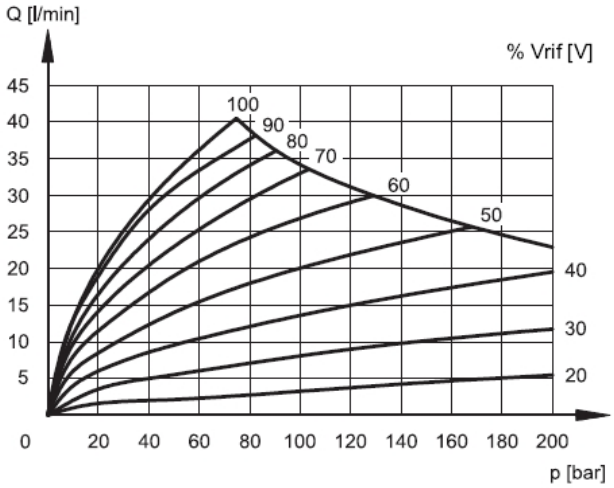

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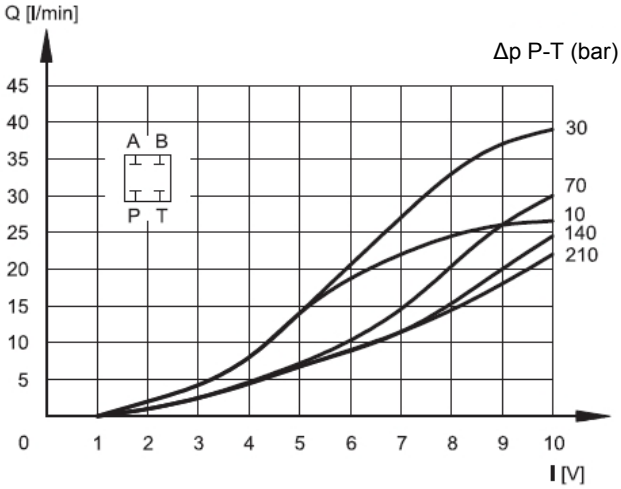
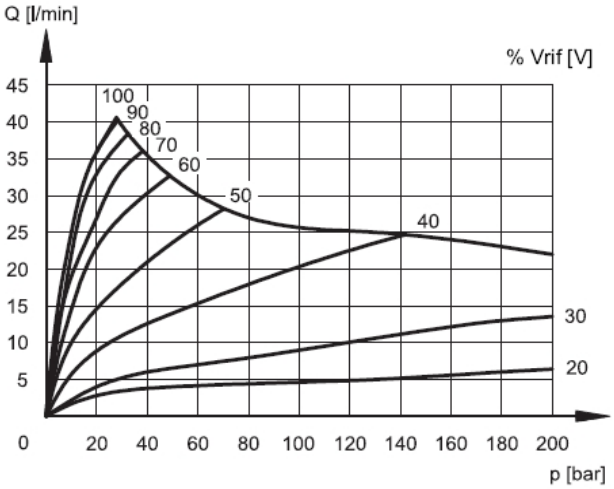
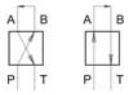


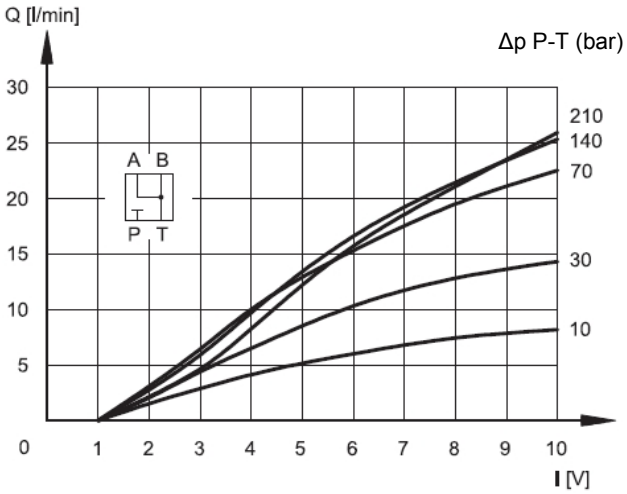


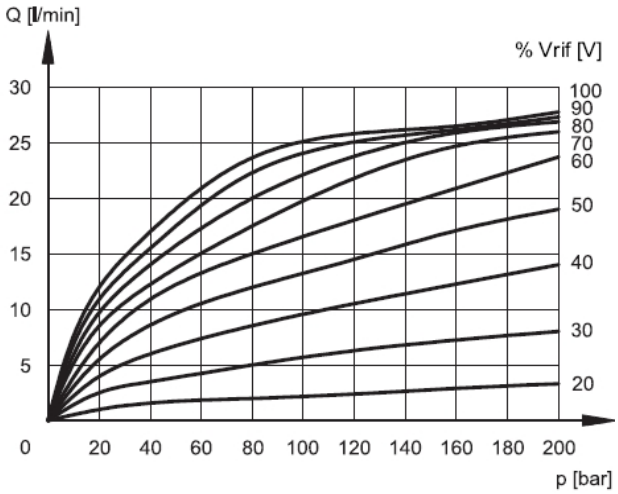
PERFORMANCE

measured at ν= 33 mm²/s and T_{oil} = 460° C (The related Δp is measured between lines P and T of the valve)



J08





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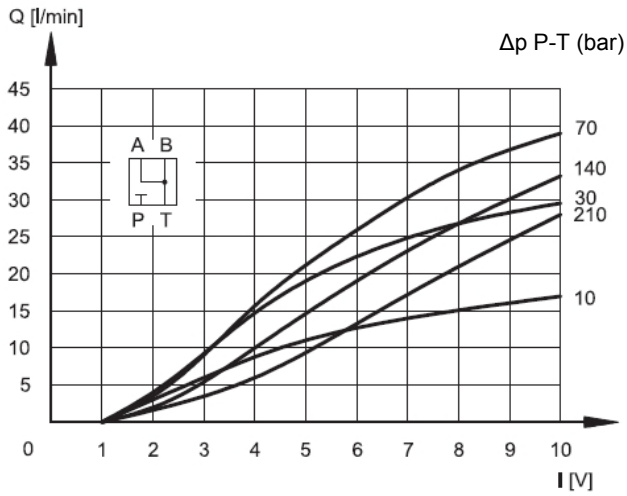

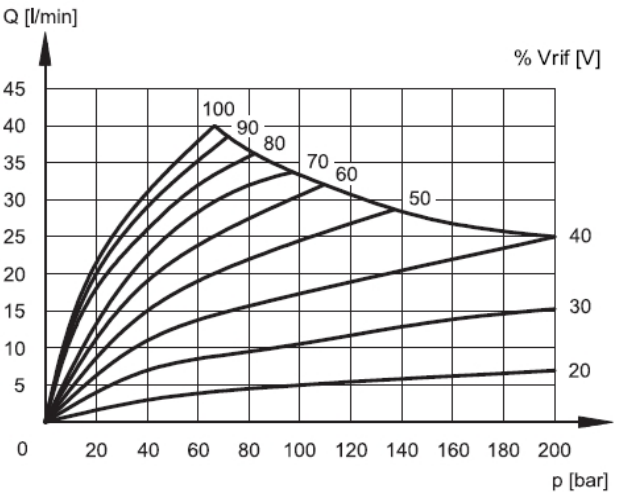

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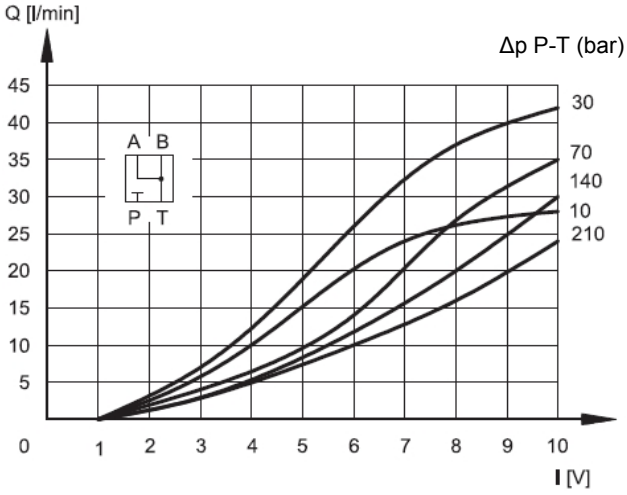
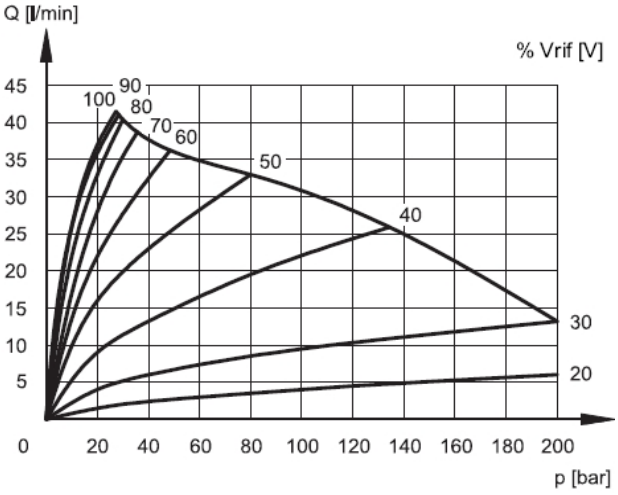
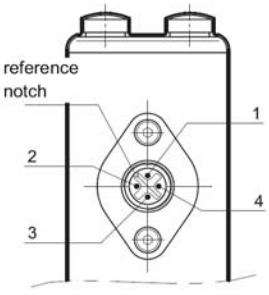
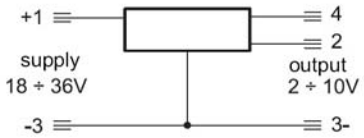




position transducer – electrical connection

Pin 1	supply 18 ÷ 36 V	Pin 8c	
Pin 2	output 2 ÷ 10 V	Pin 24a	
Pin 3	0 V	Pin 22c	
Pin 4	NC	NC	

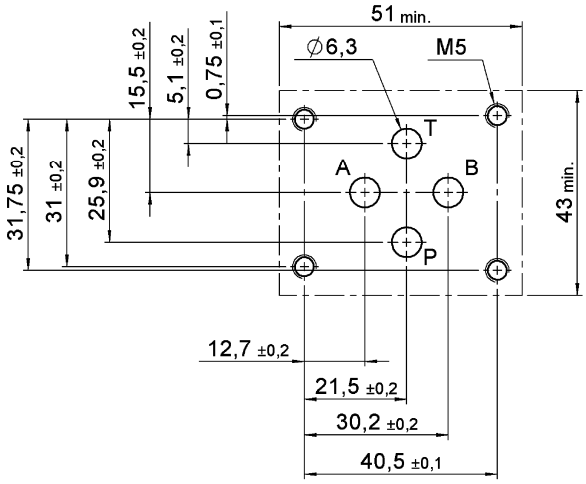




Standard models	Part No.
P4WER 06 E08 D01-12PG/V	3539255
P4WER 06 E16 D01-12PG/V	3539261
P4WER 06 E26 D01-12PG/V	3539264
P4WER 06 J08 D01-12PG/V	3539276
P4WER 06 J16 D01-12PG/V	3539280
P4WER 06 J26 D01-12PG/V	3539281

Other types on request

Hole pattern to ISO 4401-03-02-0-05



MODEL CODE

P4WER 06 E 16 D01- 12PG /V

Name
Proportional solenoid valve
Subplate mounting

Nominal size
6

Symbol
E
J

Nominal flow
08= 8 l/min
16= 16 l/min
26= 26 l/min
At Δp=10 bar P-T

Type
D01 = Standard type with manual override

Nominal voltage
12= 12 V DC

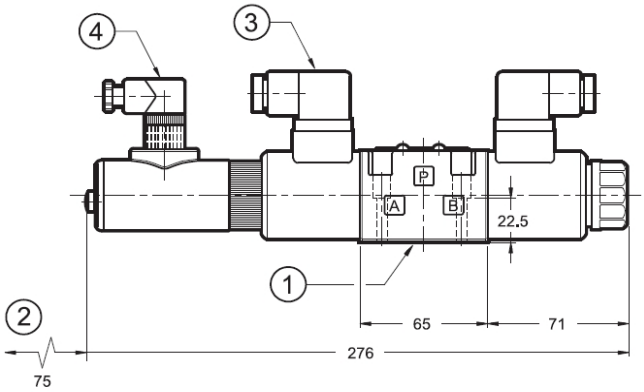
Coil connector
PG= DIN plug to EN175301-803

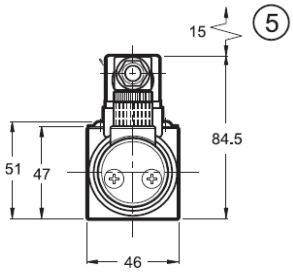
Seal material
V= FPM (Standard)
N= NBR (optional)

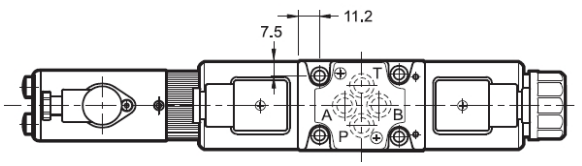
DIMENSIONS

1) Mounting plate with O-rings:
4 x O-Ring 9.25 x 1.78 NBR
2) Position transducer and free space for mounting the coil
3) DIN plug to EN175301-803
4) Electrical plug 4-poles M12S/10 for position transducer (incl.)
5) Free space for mounting the DIN plug

Fastening screws:
4x Allen screw M5 x 30 10.9, Torque: 5 Nm + 0,5 Nm
All dimensions in mm.
Fastening elements are not in the scope of delivery.







Annotation
The technical information in this brochure are relating to the operating conditions and applications.
At deviant applications and/or operating conditions please contact the technical dept.
Technical information are subject to technical modifications.

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