

VP40, 2/2 - Proportional flow control valve Direct actuated poppet valve (stainless steel)

- Port size: G1/4 (ND 4)
- Low hysteresis
- Good repeatability
- High flow rate
- High sensitivity response
- Short switching time
- Compact design
- Conforms with RoHS



Technical features

Medium:
Compressed air, filtered (40µm), lubricated or non-lubricated, water

Operation:
Proportional solenoid

Flow direction:
Fixed

Mounting:
Any, but preferably with solenoid vertical

Operating pressure p1:
20 bar (290 psi) max.

Pressure setting p2:
1 ... 16 bar (14 ... 232 psi)

Port size:
G1/4

Voltage:
12 V d.c.

Nominal power (PN):
22 W

Resistance (R20):
6,5

Duty cycle:
100 %

Hysteresis *1):
<3% (at max. p2)

Repeatability *1):
<1% (p2 max)

Degree of protection:
IP65 with connector

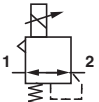
Ambient/Media temperature:
-10 ... +40°C (+14 ... +104°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

*1) Values at 20°C (+28°F) with dither 15% at 40 Hz

Materials:
Body: stainless steel
Seals: FPM

Drive electronics:
pQ05 See datasheet 7.5.100
pQ11 See datasheet 7.5.115
pQ12 See datasheet 7.5.120

Technical data, standard model

Symbol	Offrice (mm)	Port size	Pressure setting p2 (bar)	Operating pressure p1 max. (bar)	Rated current * In (mA)	Weight (kg)	Model
	4	G1/4	1...16	20	1800	1,35	4088126707901200

* These are typical values depending on ambient temperature and valve tolerances.

Accessory

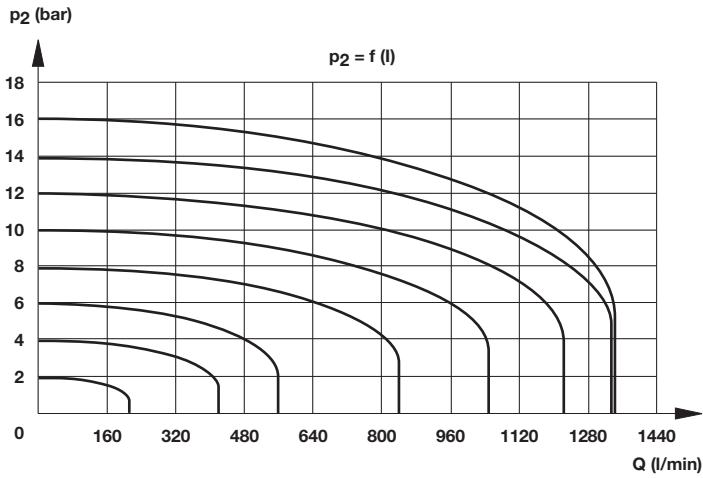
Connector
DIN EN 175301-803, form A



Model

0570275

Characteristic flow curves at p1 20 bar *, Medium: Compressed air

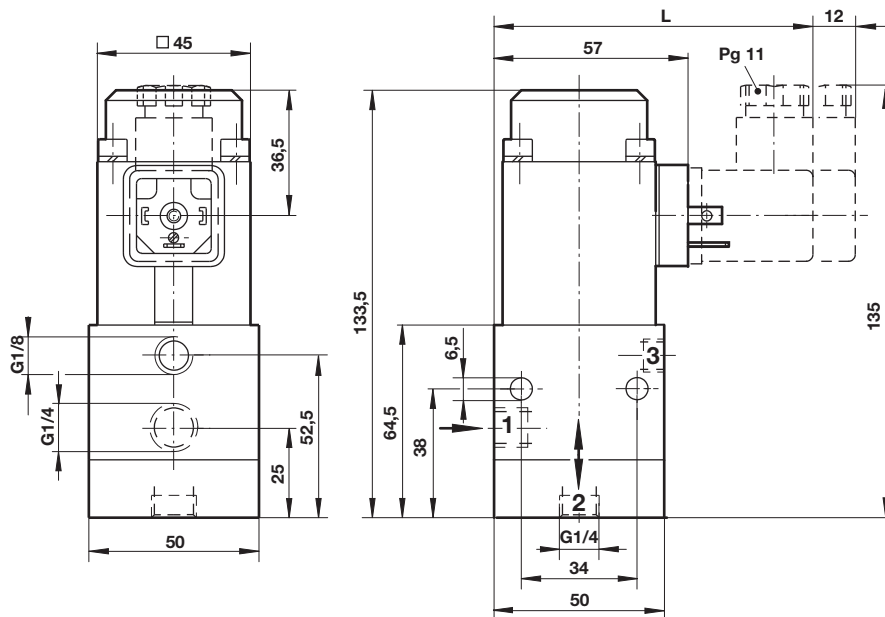


* The values are serve for the basic illustration and could be different to the end product due to the device tolerances.

Furthermore a deviation of the values during the operating time should be expected. This characteristic can be avoided by a regulated configuration.

Dimensions

Dimensions in mm
Projection/First angle



Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/ data**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering. Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.