

2/2 Directional Control Valves DN 5 and 10

For aggressive gaseous and liquid fluids
Direct solenoid operated
Poppet valves
Internal thread G 1/4 and G 1/2
Operating pressure 0 to 10 bar



Catalog Register
A 12

Publication 7501658.06.03.96

**OBSOLETE
DOCUMENT**
Technical
Reference
Only

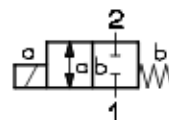
Description

Fluid:	Dependent on chemical resistance of material used
Flow direction:	DN 5 (optional) DN 10 (fixed)
Temperature min.:	FKM -10 °C PTFE and. EPDM -25 °C
Temperature max.:	Fluid +80 °C Ambience +55 °C
Switching cycles:	100/min
Mounting position:	Optional, preferably solenoid vertical
Material used	
- Body:	Stainless steel 1.4571
- Seat seal:	FKM (Viton) PTFE (Teflon) EPDM
- Inner parts:	Ferritic chrome steel

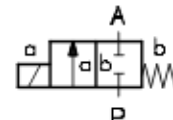
For contaminated fluids, insertion of a dirt trap is recommended.



DN 5



DN 10



Switching function:
Normally closed

Features

- Working from 0 bar up
- Suited for fine vacuum down to 1,33 · 10⁻² mbar
- Compact design

Other versions available on request

- Body and inner parts made of 1.4571
- Seat seal FKM (Viton)
- With manual override 351 (wheel) or 360 (push button)
- Solenoid in protection class (Ex)s, EEx e
- Solenoid in protection class (Ex)d 3n G5

Parameters

DN	Line connection	Operating pressure [bar]		k _v -value (C _v (US) ≈ k _v x 1.2)	Seat seal	Total weight	Sectional drawing	Dimensional drawing	Cat. No.	Cat. No.
		min.	max.			[kg]	No.	No.		

Valves with standard solenoid

5	G 1/4	0	10	0.46	FKM	0.8	01	01	2102304.0801	2102304.0807⁴⁾
5	G 1/4	0	10	0.46	PTFE	0.8	01	01	2102307.0801	2102307.0807³⁾
5	G 1/4	0	10	0.46	EPDM	0.8	01	01	2102316.0801	2102316.0807
5	NPT 1/4	0	10	0.46	FKM	0.8	01	01	2102306.0801	2102306.0807⁴⁾
5	NPT 1/4	0	10	0.46	EPDM	0.8	01	01	2102317.0801	2102317.0807
5	G 1/4	0	10	0.46	FKM	0.85	01	01	2102305.0801	2102305.0807
5	G 1/4	0	10	0.46	EPDM	0.85	01	01	2102303.0801	2102303.0807¹⁾
10	G 1/2	0	10	0.75	FKM	1.0	02	02	2102525.0801	2102525.0807⁵⁾
10	G 1/2	0	10	0.75	PTFE	1.0	02	02	2102524.0801	2102524.0807³⁾⁶⁾
10	G 1/2	0	10	0.75	EPDM	1.0	02	02	2102531.0801	2102531.0807³⁾
10	G 1/2	0	1.5	0.75	FKM	1.0	02	02	2102529.0801	2102529.0807²⁾
10	G 1/2	0	10	0.75	FKM	1.0	02	02	2102528.0801	2102528.0807⁷⁾

Valves with solenoid in protection class EEx d IIC T6/T5

5	G 1/4	0	10	0.46	FKM	1.25	01	03	2102311.3616	2102311.3617
5	G 1/4	0	10	0.46	PTFE	1.25	01	03	2102314.3616	2102314.3617⁶⁾
5	NPT 1/4	0	10	0.46	FKM	1.25	01	03	2102315.3616	2102315.3617
10	G 1/2	0	10	1.00	FKM	1.45	02	04	2102522.3616	2102522.3617
10	G 1/2	0	10	1.00	PTFE	1.45	02	04	2102523.3616	2102523.3617⁶⁾

State voltage [V] and frequency [Hz]

Solenoids

Standard voltages	DC	AC 40 to 60 Hz	Other voltages on request
	24 V	230 V	

Design to VDE 0580
100 % duty cycle

For more technical details on solenoids see:
Publication 7500784 (solenoids 0801/0807),
Publication 7502236 (solenoids 3616/3617).

Current draw:

Solenoid	DC	Solenoid	AC Inrush	Holding
0801	16 W	0807	18 VA	18 VA
3616	14 W	3617	15 VA	15 VA

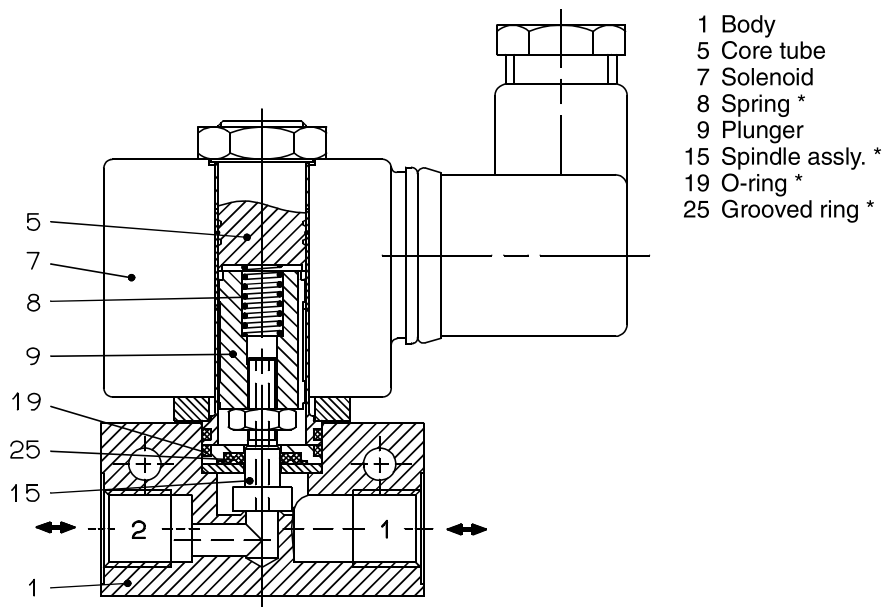
Degree of protection to DIN 40050 IP 65
Electric connection
Solenoid 080X: connector to DIN 43650,
Solenoid 36XX: 1/2-14 NPT threaded connection

These valves can only be operated with DC type solenoids. A rectifier is incorporated in the large socket of solenoid 0807 of the AC version.

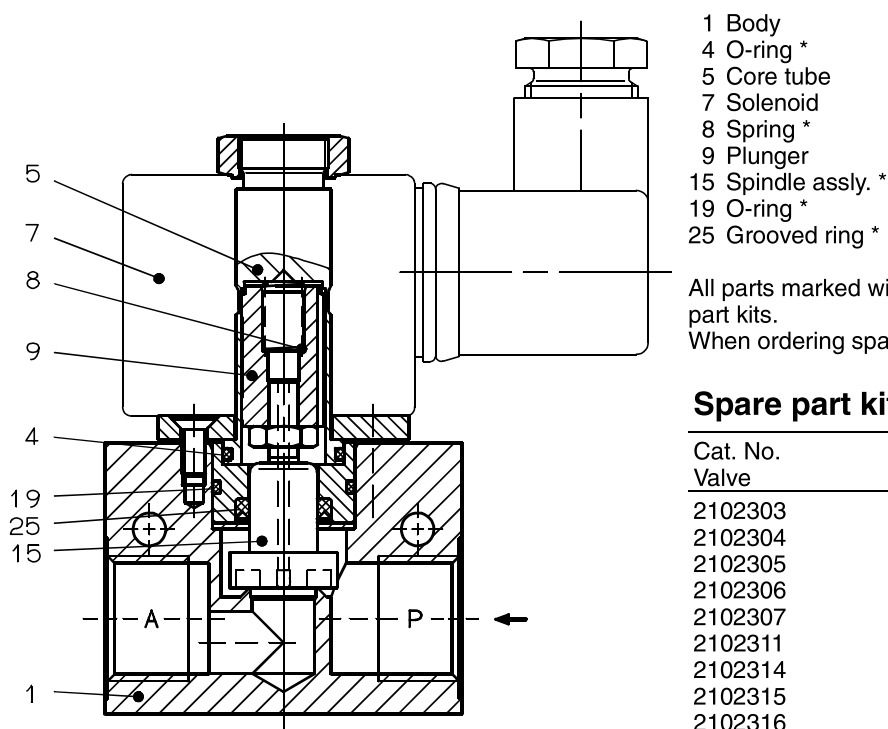
- 1) With manual override 355 (lever)
- 2) Design not pressure balanced (without sleeves), suited for fine vacuum
- 3) O-ring FKM (Viton)
- 4) Suited for oxygen
- 5) Grooved ring PTFE (Teflon)
- 6) Suited for liquid fluids only
- 7) Suited for dry operation and sterile air

Sectional drawings

01



02



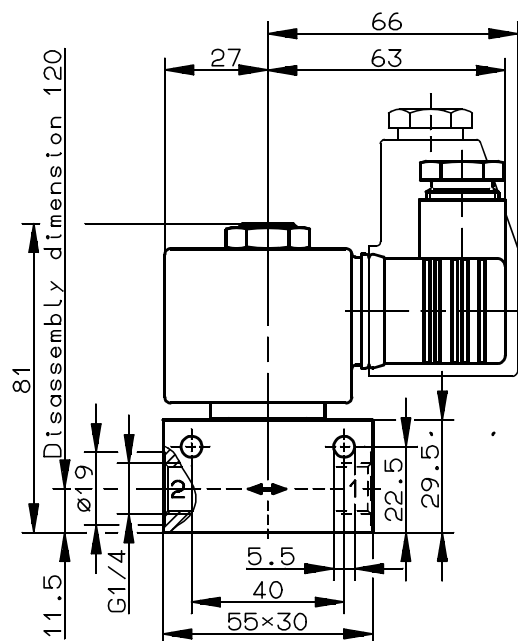
All parts marked with an asterisk are enclosed in spare part kits.
When ordering spares, please also state valve No.

Spare part kits

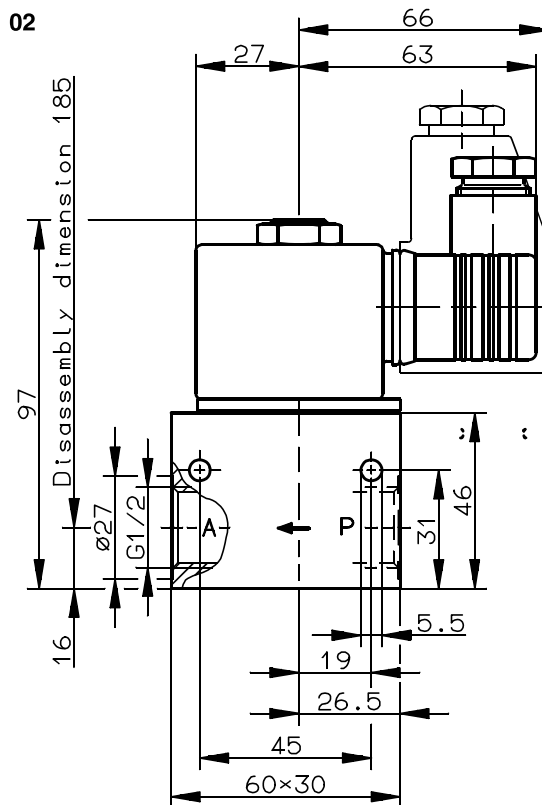
Cat. No. Valve	Cat. No. Spare parts kit
2102303	0604145
2102304	0603464
2102305	0604144
2102306	0603464
2102307	0604164
2102311	0605242
2102314	0607616
2102315	0605242
2102316	0609597
2102317	0609597
2102522	0605050
2102523	0605440
2102524	0605430
2102525	0605553
2102528	0606557
2102529	0606565
2102531	0606566

Dimensional drawings

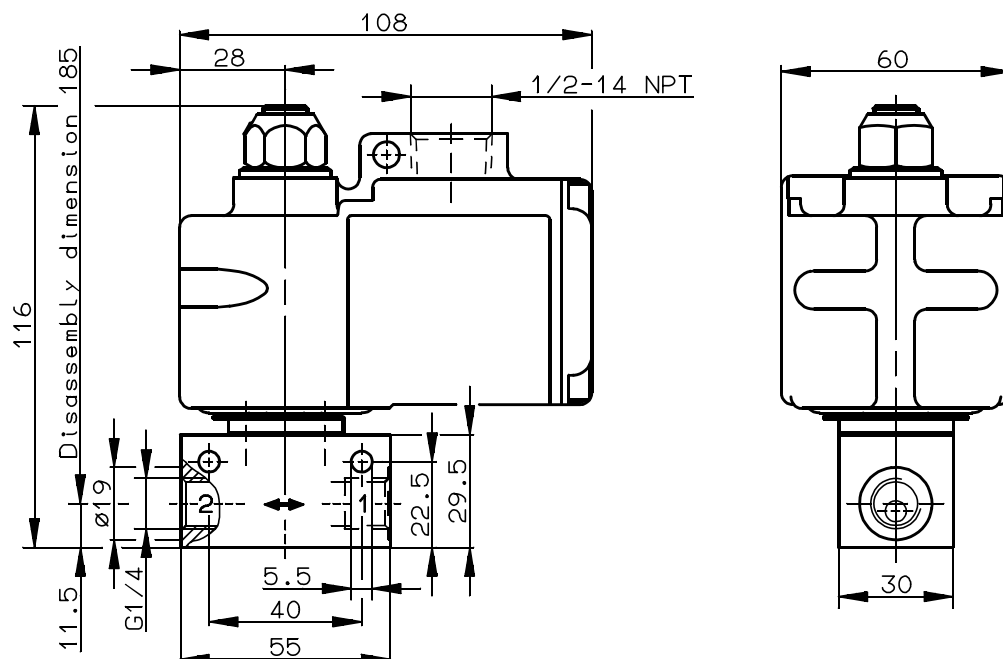
01



02



03



Dimensional drawings

04

