

Solenoid Valve Type 157



Product description

Type 157 is a high-quality, direct-acting 2/2-way pivoted armature solenoid valve that can be used for opening or closing. The magnetic system and the media chamber are separated from one another by a separating diaphragm system. The valve is especially suitable for aggressive media.

Function

A solenoid valve is a valve which is actuated by an electromagnet. Their tasks are to release, shut off, dose, distribute or mix gases and liquids. The solenoid valves can switch very fast, and guarantee high reliability and a long lifetime at a low actuator power. Solenoid valves with position measuring can be operated as servo valves.

Applications

- Water treatment
- Process/chemical engineering
- Plant/mechanical engineering
- Semiconductor industry
- Environmental engineering
- Medical engineering
- Apparatus engineering
- Analytical technology

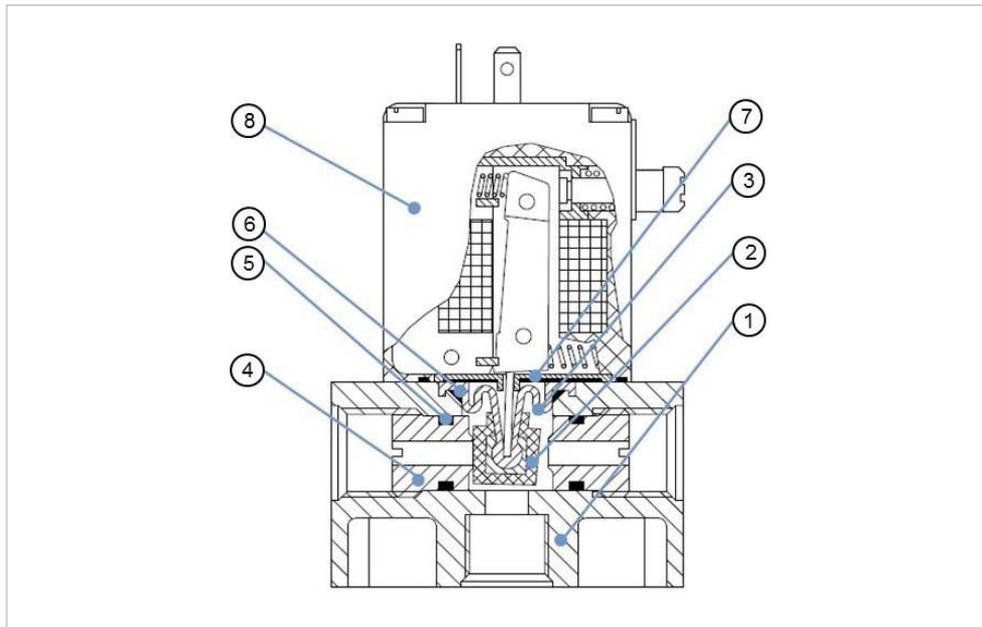
Benefits/features

- PVC-U material: threaded socket with cylindrical female pipe thread Rp
- Modes of operation: A, B
- Handle with ratchet setting
- Electrical connection with cable plug
- Protection rating IP65
- Pivoted armature valve with emergency manual override
- Direct-acting with isolating diaphragm
- Gasket materials are highly media-resistant

Flow media

Suited for aggressive media

Technical data



- ① Valve housing
- ② Gasket
- ③ Rotating stem
- ④ Seat
- ⑤ O-ring
- ⑥ PTFE
- ⑦ Isolating membrane
- ⑧ Epoxy

Specification		
Nominal diameter	DN2 – DN8	
Valve housing	PVC (resistant according to DIN 8062, 8061)	
Seal material media	FKM/EPDM	Oxidizing acids and substances, oils and saline solutions, exhaust gases, technical vacuum
Media temperatures	PVC + FKM	-10 to +50 °C
Housing + gasket (combination of materials)		
Ambient temperature	Max. +50 °C	
Viscosity	Max. 37 mm ² /s	
Voltage tolerance	±10%	
Switching frequency	Max. 100/min with AC Max. 10/min with UC	
Rated duty	Continuous duty	VA housing 100 % ED and with universal current (UC)
	Intermittent operation	With PVC 10 % ED (10 min)
Electrical connection with AC and DC	Appliance plug for cable Ø 6 – 7 mm (in scope of delivery) or cable connection	
Protection rating	IP65 with appliance socket	
Mounting position	As desired, preferably with actuator on top	

Electrical power consumption

Nominal diameter (mm)	Mechanism	Kv value ¹⁾ water (l/min)	Pressure range ²⁾		Power consumption Inrush (electrical)		Power consumption Operation(electrical)		Weight (kg)
			A (bar)	DC (bar)	AC (VA)	DC (W)	AC (VA/W)	DC (W)	
4	A	5	0-2	0-4	30	40	15/8	8-12	0.5
6	A	10	0-1	0-2	30	40	15/8	8-12	0.5
8	A	16.7	0-1	0-1	30	40	15/8	8-12	0.5

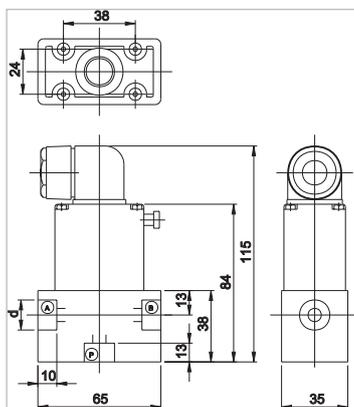
- 1) Kv value (l/min) at +20 °C, 1 bar pressure at valve inlet and free outlet
- 2) Pressure data (bar) excess pressure to atmospheric pressure

Switching time

Switching time ¹⁾	Open	Close
Mode of operation	(ms)	(ms)
A, B	15 - 20	15 - 20

- 1) Switching time (ms) measured at valve outlet at 6 bar and +20 °C
- Open Pressure buildup 0 % to 90 %
- Close Pressure buildup 100 % to 10 %

Dimensions



Housing material	Inch (inch)	B (mm)	E (mm)	F (mm)
PVC	G 3/8	91	35	65

Possible connections			
Mode of operation	Port 1	Port 2	Port 3
A	P	A	-
B	P	B	-

i For further information on accessories, refer to the online product catalog at www.gfps.com.

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