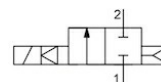


2/2-Way solenoid valve - pilot-operated Series 21X



de-energized closed

Design type	2/2-way solenoid valve with diaphragm seal, pilot-operated, de-energized closed
Connection	G1/2"...G1" according to ISO228/1
Materials	Body and Guide tube Stainless steel 1.4401, Internal parts Stainless steel similar 1.4104, Diaphragm material FKM
Mounting type	Installation in rigid piping system
Mounting position	any
Application range	gaseous and liquid media that do not attack the materials used
Viscosity	max. 12mm ² /s (cst)
Switching time	depending on operating pressure and medium
Medium temperature	depending on the sealing material and Solenoid coil
Ambient temperature	see table "Solenoid coils"

Electrical data:

Coil type	Type BDA, Connector width 32mm (Standard coil) Type BDV, Connector width 32mm (Coil for humid environment)
Electrical connection	connector according to EN175301-803 form A (see separate data sheet)
Voltage type	AC and DC voltage
Standard voltage	230V/50-60Hz, 24V/50-60Hz, 24VDC
Special voltages	12...380V/50Hz or 60Hz, 12...220VDC
Permissible voltage fluctuation	AC +10%/-15% DC +10%/-5%
Power consumption	see table "Power consumption of the solenoid coils"
Duty cycle	100% Duty cycle (continuous operation)
Degree of protection	IP65 according to EN 60529 with properly mounted device connector (protection against dust ingress and water jets)
Application note	When ordering, please specify voltage and type of current. We recommend always installing a strainer upstream to prevent malfunctions in the event of contamination of the medium. These valves can also be used for rough vacuum if the minimum differential pressure of 0.1 bar is present.



Type code

	21X	2	K	V	120	-	BDA	-	230V/50-60Hz
	1/2"	2							
	3/4"	3							
Connection	1"	4							
Seal	FKM		V						
	12mm				120				
	19mm				190				
Nominal size	25mm				250				
	BDA Standard coil - Approval CE						BDA		
Coil	BDV Coil for humid environment - Approval CE-CSA-UL-VDE						BDV		
	230V/50-60Hz						230V/50-60Hz		
	24V/50-60Hz						24V/50-60Hz		
	24VDC						24VDC		
	12...380V/50Hz or 60Hz								
Voltage	12...220VDC								

Applications of the individual sealing materials

Material	Medium temperature	Application examples
FKM	-10...140°C	Water, Air, Oils, Gasoline, Diesel, slightly aggressive gases and liquids

Solenoid coils

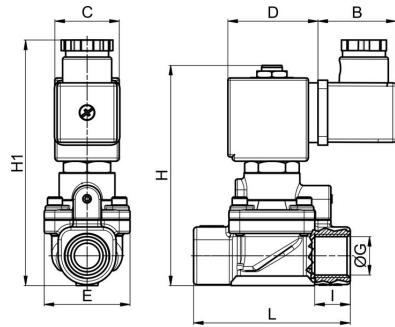
Type	Degree of protection	Insert	Ambient temperature	Approvals
BDA	IP65	Medium temperature up to max. 120°C	-10...+40°C	CE
BDV	IP65	Medium temperature up to max. 160°C, high humidity	-20...+60°C	CE-CSA-UL-VDE

Power consumption of the solenoid coils

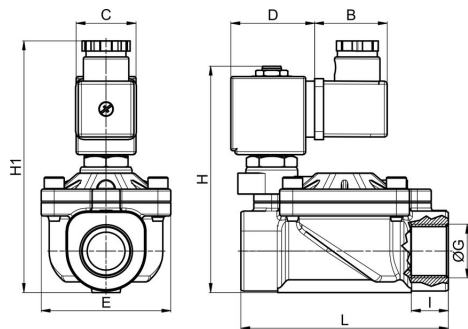
Voltage	Tightening torque (Alternating current) VA	Holding force (Alternating current) VA	Holding force (Direct current) operating temperature W	Type
24V/50-60Hz	25	14,5	-	BDA08024DS
42V/50Hz	25	14,5	-	BDA08042AS
48V/50Hz	25	14,5	-	BDA08048AS
110V/50-60Hz	25	14,5	-	BDA08110DS
115V/60Hz	25	14,5	-	BDA08115BS
220-230V/50-60Hz	25	14,5	-	BDA08223DS
380V/50-60Hz	25	14,5	-	BDA08380DS
12VDC	-	-	8	BDA08012CS
24VDC	-	-	8	BDA08024CS
110VDC	-	-	8	BDA08110CS
24V/50-60Hz	25	17	-	BDV08024DY
110V/50Hz 120V/60Hz	25	15	-	BDV08110AY
230V/50Hz 240V/60Hz	25	16	-	BDV08230AY
24VDC	-	-	11	BDV08024CY



Dimensions



Connection G	Nominal size DN[mm]	Pressure range [bar]	B	C	D	E	H	H1	I	L	Kv value [m³/h]	Weight [approx. kg]	Coil	Type
G1/2"	12	0,1 - 20	36	30	42	40	103	116	15	72	2,1	0,55	BD.	21X2KV120



Connection G	Nominal size DN[mm]	Pressure range [bar]	B	C	D	E	H	H1	I	L	Kv value [m³/h]	Weight [approx. kg]	Coil	Type
G3/4"	19	0,1 - 16	36	30	42	65	115	128	17	104	7,8	1,20	BD.	21X3KV190
G1"	25	0,1 - 16	36	30	42	65	115	128	17	104	9,6	1,10	BD.	21X4KV250

Illustrations non-binding
Design, dimensional and material changes reserved

Armatures / Solenoid valves for liquids and gases / 2/2-way solenoid valves - pilot operated / 2/2-way solenoid valve Series 21X