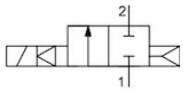
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2/2-Way solenoid valve - pilot-operated
Series 21H





normally closed

Design type	2/2-way solenoid valve with diaphragm seal-off, pilot-operated, normally closed
Connection	G3/8"...G3/4" according to ISO228/1
Materials	Body Brass, Internal parts brass and stainless steel similar to 1.4104, Diaphragm material NBR, EPDM or FKM
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 coil"
Mounting type	Installation in rigid piping system
Mounting position	any

Electrical data:

Coil type	Type BDA, Connector width 32mm (Standard coil) Type BDV, Connector width 32mm (Coil for humid environment) Type GDH/GDV, Connector width 32mm (Coil for higher pressures, 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 correctly mounted device connector (protection against dust ingress and water jets)
Application note	When ordering, please specify voltage and type of current. We always recommend installing a strainer upstream to prevent malfunctions in the event of contamination of the medium. These valves can also be used for rough vacuum, provided that the minimum differential pressure of 0.1 bar is present..

+43 512 52076
austria@stasto.eu
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Type code

		21H	7	K	B	120	-	BDA	-	230V/50-60Hz
	3/8"		7							
	1/2"		8							
Connection	3/4"		9							
	NBR				B					
	FKM				V					
Seal	EPDM				E					
	12mm					120				
Nominal size	18mm					180				
	BDA Standard coil - Approval CE							BDA		
	BDV Coil for humid environment - Approval CE-CSA-UL-VDE							BDV		
	GDV Coil for higher pressures - Coil for humid environment - Approval CE-CSA-UL-VDE							GDV		
Coil	GDH Coil for higher pressures - Coil for humid environment - Approval CE							GDH		
	230V/50-60Hz									230V/50-60Hz
	24V/50-60Hz									24V/50-60Hz
	24VDC									24VDC
	12...380V/50Hz or 60Hz									
Voltage	12...220VDC									

Possible applications of the individual sealing materials

Material	Medium temperature	Application examples
NBR	-10...90°C	Air, Water, neutral gases and liquids
EPDM	-10...140°C	Hot water, Steam, Oxygen
FKM	-10...140°C	Oils, Gasoline, Diesel

Solenoid coils

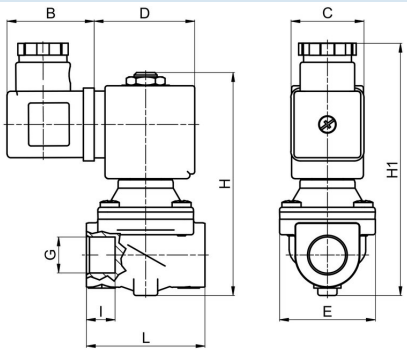
Type	Degree of protection	Insert	Ambient temperature	Approvals
BDA	IP65	Medium temperature up to max. 120°C	-10...+40°C	CE
BDV	IP65	Medium temperature up to max. 180°C, high humidity	-20...+60°C	CE-CSA-UL-VDE
GDH	IP65	Medium temperature up to max. 180°C, high humidity	-20...+40°C	CE
GDV	IP65	Medium temperature up to max. 180°C, high humidity	-20...+60°C	CE-CSA-UL-VDE

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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
12VDC	-	-	8	BDA08012CS
24V/50-60Hz	25	14,5	-	BDA08024DS
24VDC	-	-	8	BDA08024CS
42V/50Hz	25	14,5	-	BDA08042AS
48V/50Hz	25	14,5	-	BDA08048AS
110VDC	-	-	8	BDA08110CS
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
24VDC	-	-	11	BDV08024CY
24V/50-60Hz	25	17	-	BDV08024DY
110V/50Hz 120V/60Hz	25	15	-	BDV080110AY
230V/50Hz 240V/60Hz	25	16	-	BDV08230AY
12VDC	-	-	14	GDH14012CS
48VDC	-	-	14	GDH14048CS
220VDC	-	-	14	GDH14220CS
24VDC	-	-	14	GDV14024CY
24V/50-60Hz	43	26	-	GDV14024DY
230V/50Hz 240V/60Hz	43	27	-	GDV14230AY
110V/50Hz 120V/60Hz	43	23	-	GDV14110AY

Dimensions



Connection G	Nominal size DN[mm]	Pressure range [bar]		B	C	D	E	H	H1	I	L	Kv value [m 3 /h Water]	Weight [approx. kg]	Coil	Type
		AC	DC												
G3/8"	12	0,1-20	0,1-10	36	30	42	40	92	106	10	50	2,1	0,50	BD.	21H7K.
G3/8"	12	0,1-20	0,1-20	36	52	55	40	92	106	10	50	2,1	0,75	GD.	21H7K.
G1/2"	12	0,1-20	0,1-10	36	30	42	40	92	106	10	50	2,7	0,50	BD.	21H8K.
G1/2"	12	0,1-20	0,1-20	36	52	55	40	92	106	10	50	2,7	0,75	GD.	21H8K.
G3/4"	18	0,1-16	0,1-6	36	30	42	50	98	112	14	65	3,0	0,75	BD.	21H9K.
G3/4"	18	0,1-16	0,1-16	36	52	55	50	98	112	14	65	3,0	1,0	GD.	21H9K.

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+43 512 52076
austria@stasto.eu
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