

2/2 - way solenoid valve - pilot-operated, 3/4" to 2" series 21W



design	2/2-way solenoidvalve with diaphragm, pilot-operated, normally closed or normally open
connection	G3/4" to G2" according to ISO228/1
materials	body brass, inner parts brass and stainless steel similar 1.4104, diaphragm material NBR (Perbunan), EPDM or FKM
type of fixing	installed into rigid pipework
mounting position	any
application	gaseous and liquid fluids which do not affect the used materials
viscosity	max. 12 mm ² /s (cst) respectively 2°E
switching time	dependent on operating pressure and medium
medium temperature	dependent on sealing material and coil
ambient temperature	-20°C to +50°C
scope of supply	with connector acc. to EN175301-803-form A (previous DIN43650)-cable inlet M16x1,5
special version	higher ambient temperature on request
electrical specification	
type of current	AC and DC
standard voltage	230V/50-60Hz, 24V/50-60Hz, 24VDC
special voltage	12 to 400V/50Hz or 60Hz, 12 to 220VDC
acceptable voltage tolerance	± 10%
consumption	see to the table "power consumption of coils"
duty cycle	100% duty cycle (continuous operation)
protection class	IP65 according to EN 60529 for a correctly mounted connector (protection against the penetration of dust and jet water)
direction for use	please specify voltage and type of current by order. we always recommend connecting a strainer in front of the valve, otherwise malfunction can occur in the event of contaminated medium. these valves can also be used for rough vacuum if the minimum differential pressure of 0,2 bar does exit.

order code

21W	3	K	B	190	MR	BDA -	230/50-60Hz
	3 G3/4"	K normally closed Z normally open	B NBR(Perbunan)	nominal diameter (10 ⁻¹ mm)			
	4 G1"		V FKM				
	5 G1 1/4"		E EPDM				
	6 G1 1/2"						
	7 G2"						
					MR manual operation/adjustable closing delay (only for normally closed valves)		
						BDA standard coil	230V/50-60Hz
						BDP coil for humid area	24V/50-60Hz
						Y1 coil for ATEX areas with cable length of 3m only for NC types	24VDC
							12-400V/50Hz
							12-400V/60Hz
							12-220VDC

application of the individual seal materials

material	medium temperature	examples of use
NBR(Perbunan)	-10 to 90°C	air, water, neutral gases and liquids
EPDM	-10 to 140°C	hot water, steam, oxygen
FKM	-10 to 140°C	oils, petrol, diesel

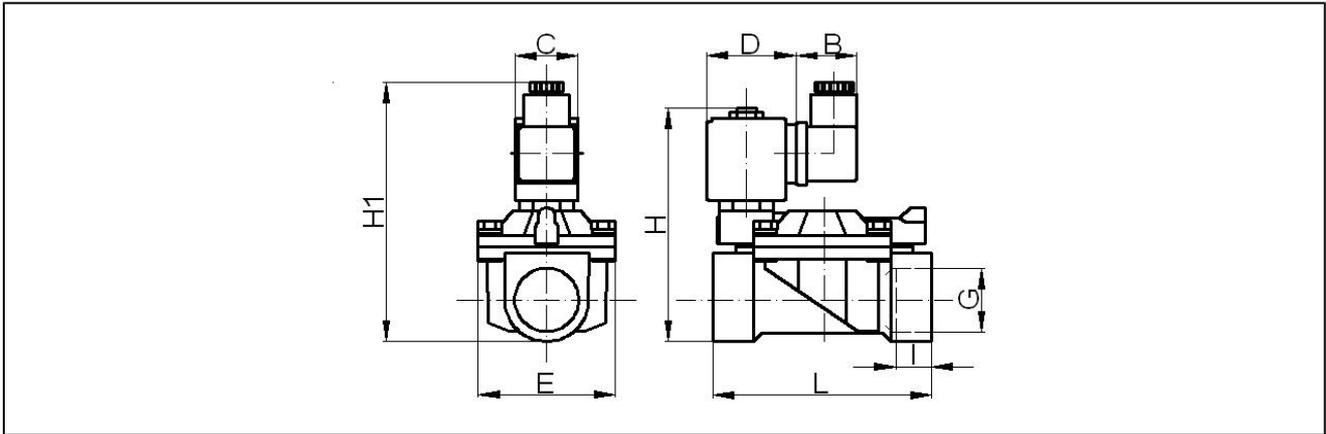
coils

type	protection class	use
BDA	IP65	medium temperature to a maximum of 120°C
BDP	IP65	medium temperature to a maximum of 160°C, high humidity
Y1	Ex II 2G EExmII T4 Ex II 2D IP65 T130°C	in areas where there is a risk of explosion, zone 1/2/21/22, ignition class T4, maximum medium temperature 70°C

consumption of the coils

	coil BDA	coil BDP	coil Y1
pull in power in VA (AC)	25	25	-
holding power in VA (AC)	14,5	14,5	-
holding power in W (AC)	8	8	max. 9,2
holding power in W (DC) operating temperature	8	8	max. 10,1

dimensions



connection G	nominal diameter DN[mm]	pressure range [bar]	B	C	D	E	H	H1	L	I	kv value [m ³ /h water]	weight [approx. kg]	coil	type
G3/4"	19	0,2-16	28	30	42	65	105	119	104	17	8,4	1,2	BD.	21W3..190
G3/4"	19	0,2-16	28	36	43	65	105	141	104	17	8,4	1,3	Y1	21W3..190
G1"	25	0,2-16	28	30	42	65	112	126	104	17	11,4	1,2	BD.	21W4..250
G1"	25	0,2-16	28	36	43	65	112	148	104	17	11,4	1,3	Y1	21W4..250
G11/4"	35	0,2-10	28	30	42	98	125	139	144	21	24,0	2,7	BD.	21W5..350
G11/4"	35	0,2-10	28	36	43	98	125	161	144	21	24,0	2,8	Y1	21W5..350
G11/2"	40	0,2-10	28	30	42	98	125	139	144	21	31,2	2,7	BD.	21W6..400
G11/2"	40	0,2-10	28	36	43	98	125	161	144	21	31,2	2,8	Y1	21W6..400
G2"	50	0,2-10	28	30	42	118	141	155	172	25	45,0	4,9	BD.	21W7..500
G2"	50	0,2-10	28	36	43	118	141	177	172	25	45,0	5,0	Y1	21W7..500

illustrations are for information only and are non-binding
all designs, configurations, measurements and materials are subject to change without prior notice