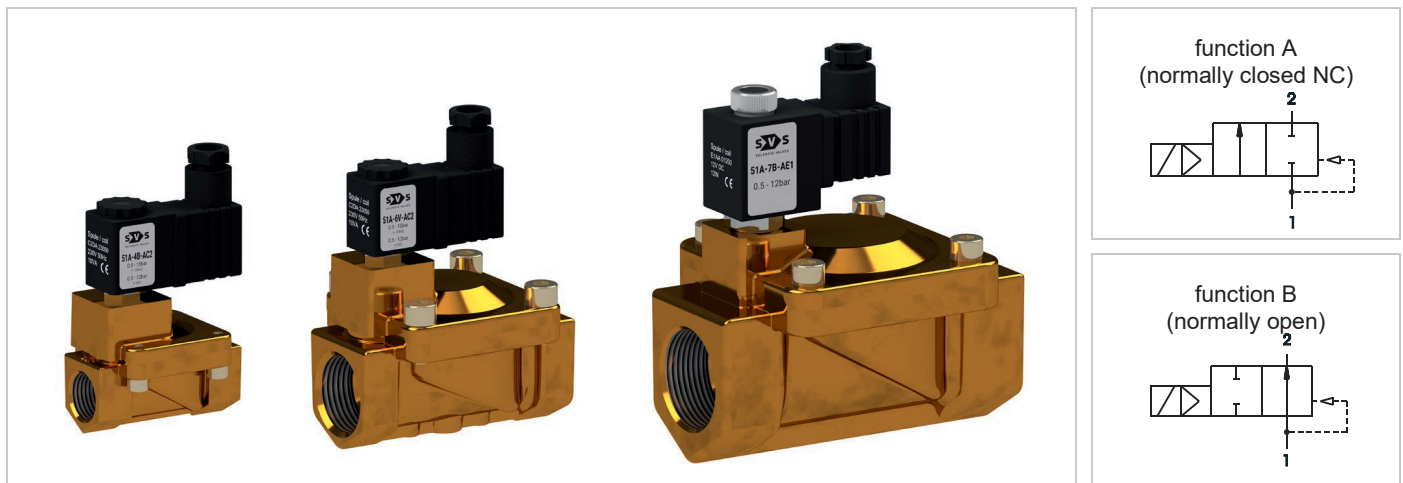


## 2/2 way solenoid valve normally closed or normally open

type 51, body brass

pilot operated, DN 15-50mm, G3/8 – G2



SPECIFICATION	
<b>General</b>	
type of construction	2/2-poppet valve, with diaphragm, normally closed NC or normally open NO, coil 360° rotatable
operator	solenoid, manual override
ports	G3/8 – G2
ambient temperature	-20 °C to +50 °C, higher allowed ambient temperatures on request
fluid temperature	dependent on sealing material and coil
viscosity	max. 21mm <sup>2</sup> /s (cst) or 3°E
material	body brass, inner parts stainless steel and brass, sealing see type selection
mounting	installation into fixed piping system
installation	in any position, preferable vertical fixed solenoid coil
unit of supply	without connector
<b>electrical data</b>	
voltage	DC voltage or AC voltage
standard voltage	24V DC, 24V AC, 230V AC
special voltage on request	6V-200V DC, 12V-240V, 50Hz or 60Hz
acceptable voltage tolerance	+/- 10%
power consumption	see specifications at solenoid coils
coil type	temperature class F (155°C), winding class H (180°C)
duty cycle	100% ED (DB), continuous operation
protection class	IP65 according DIN EN 60529 (DIN 40050) with correctly mounted connector
<b>pneumatic – hydraulic</b>	
flow medium	all liquids and gases, which don't attack the used material
max. body housing pressure	G3/8 to G1 PN 20 (bar), above PN 16 (bar)
response time	depending on operating pressure and fluid
special equipment on request	stainless steel 1.4301 (AISI304) in place of brass, coil type with cable, bright nickel-plated or chemical nickel-plated, coils for temperature class H (180°C)

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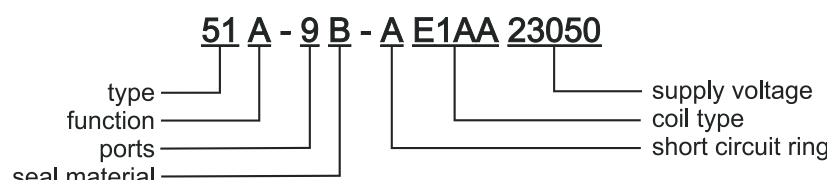
type 51A, normally closed					
type * (order-nr.)	NW DN (mm)	ports	maximum differential pressure in bar **		kv-value (m <sup>3</sup> /h)
			coil <b>C2DA</b>		
			~ (50Hz)	= (DC)	
51A – 3. – AC...	15	G3/8	0,5 – 16	0,5 – 12	3,0
51A – 4. – AC...	15	G1/2			3,4
51A – 5. – AC...	19	G3/4			4,8
51A – 6. – AC...	25	G1			8,5

type 51A, normally open					
type * (order-nr.)	NW DN (mm)	ports	maximum differential pressure in bar **		kv-value (m <sup>3</sup> /h)
			coil <b>E1AA</b>		
			~ (50Hz)	= (DC)	
51A – 7. – AE...	40	G 1 1/4	0,5 – 12	0,5 – 12	15
51A – 8. – AE...	40	G 1 1/2			19,5
51A – 9. – AE...	48	G 2			30,5

\* Type designation (order-nr.) must be completed with sealing material, coil and supply voltage.

sealing material	Code	fluid temperature	applicable for	standard voltage	Code
NBR (Perbunan)	<b>B</b>	max. 80°C	neutral gases and liquids	24V = DC	<b>02400</b>
EPDM	<b>E</b>	max. 130°C	hot water, steam, not for oil and grease	24V ~ (50Hz)	<b>02450</b>
FPM	<b>V</b>	max. 130°C	oil, petrol, oxygen	230V ~ (50Hz)	<b>23050</b>

coil power consumption at 20 °C, protection class, interface					
coil type	inrush power ~ (50Hz) VA	rated power ~ (50Hz) VA	power = (DC) (W)	protection class with/without connector	interface
C2DA	13	10	6,5	IP65 / IP00	Connector (DIN 43650) type B industrial standard
E1AA	32	14	12	IP65 / IP00	Connector DIN EN 175301-803 (DIN 43650) type A

ORDER CODE	
	<b>51 A - 9 B - A E1AA 23050</b> 
type	type 51
function	A = normally closed, B = normally open
ports	3 = G3/8, 4 = G1/2, 5 = G3/4, 6 = G1, 7 = G1 1/4, 8 = G1 1/2, 9 = G2
seal material	B = NBR (Perbunan), E = EPDM, V = FPM
short circuit ring	A = copper short circuit ring, X = without short circuit ring (on request)
coil type	see specifications of the particular coil
supply voltage	always 5-digit, see code of standard voltage

## 2/2 way solenoid valve normally closed or normally open

type 51, body brass

pilot operated, DN 15-50mm, G3/8 – G2

type 51B, normally open					
type * (order.-nr. )	NW DN (mm)	ports	maximum differential pressure in bar **		kv-value (m <sup>3</sup> /h)
			coil <b>C2DA</b>		
			~ (50Hz)	= (DC)	
51B – 3. – AC...	15	G3/8	0,5 – 10	0,5 – 10	3,0
51B – 4. – AC...	15	G1/2			3,4
51B – 5. – AC...	19	G3/4			4,8
51B – 6. – AC...	25	G1			8,5

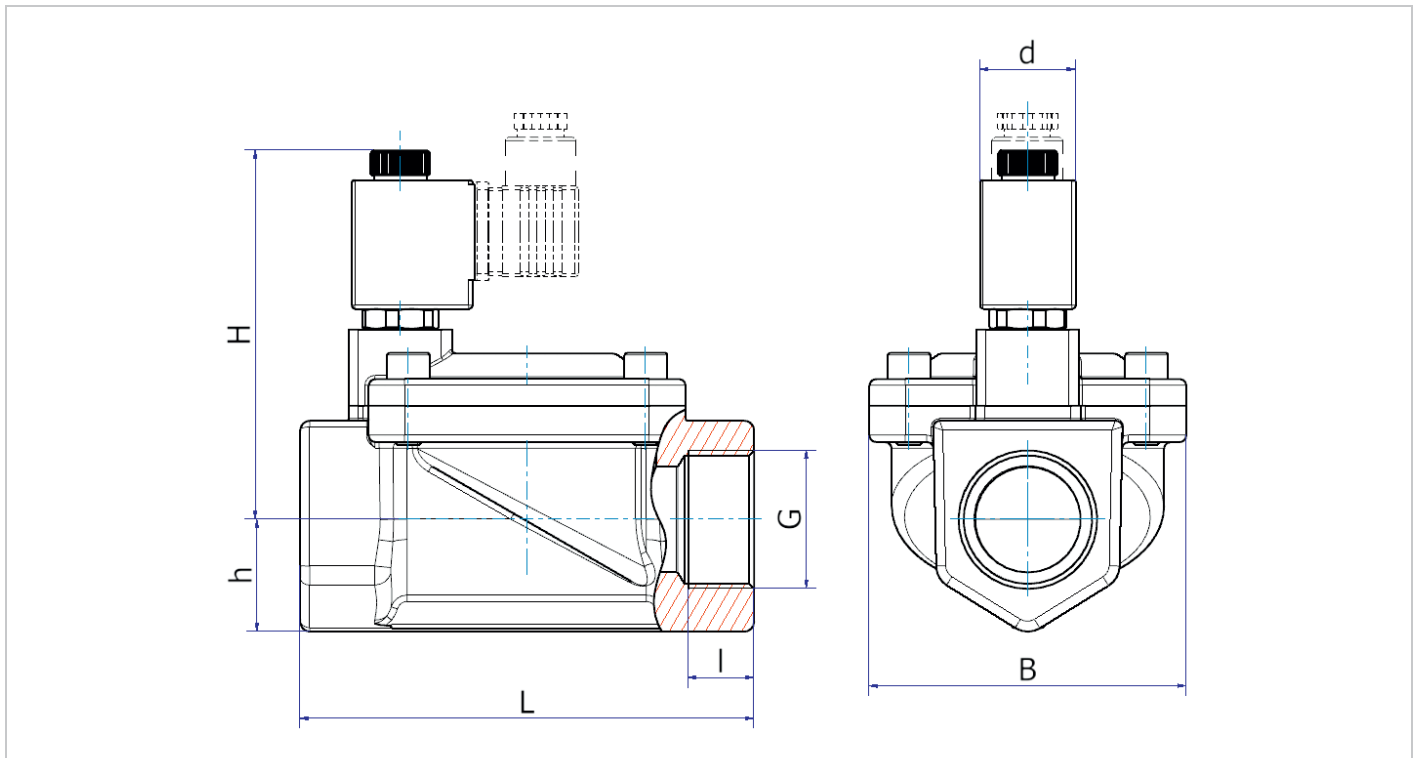
type 51B, normally open					
type * (order.-nr. )	NW DN (mm)	ports	maximum differential pressure in bar **		kv-value (m <sup>3</sup> /h)
			coil <b>E1AA</b>		
			~ (50Hz)	= (DC)	
51B – 7. – AE...	40	G1 1/4	0,5 – 10	0,5 – 10	15
51B – 8. – AE...	40	G1 1/2			19,5
51B – 9. – AE...	48	G2			30,5

\* Type designation (order-nr.) must be completed with sealing material, coil and supply voltage.

## 2/2 way solenoid valve normally closed or normally open

type 51, body brass

pilot operated, DN 15-50mm, G3/8 – G2



**dimension table for type 51A (normally closed) in mm**

type	B	d	G	h	H	I	L	weight * (approx. kg.)
		C2, E1			C2, E1			
51A – 3. – AC...	48	22	G 3/8	15	76	12	65	0,52
51A – 4. – AC...			G 1/2					
51A – 5. – AC...	57,8	22	G 3/4	18	78,5	12	74,5	0,72
51A – 6. – AC...	69,8		G 1	22,1	89,6		96	1,07
51A – 7. – AE...	96	30	G 1 1/4	34,1	112	17	137,5	1,63
51A – 8. – AE...	96		G 1 1/2	34,1	112	19	137,5	2,22
51A – 9. – AE...	119	30	G 2	34,5	124,5	22	168	4,14

**dimension table for type 51B (normally open) in mm**

type	B	d	G	h	H	I	L	weight * (approx. kg.)
		C2, E1			C2, E1			
51B – 3. – AC...	48	22	G 3/8	15	77,5	12	65	0,53
51B – 4. – AC...			G 1/2					
51B – 5. – AC...	57,8	22	G 3/4	18	80	12	74,5	0,73
51B – 6. – AC...	69,8		G 1	22,1	91,1		96	1,08
51B – 7. – AE...	96	30	G 1 1/4	34,1	118	17	137,5	1,85
51B – 8. – AE...	96		G 1 1/2	34,1	118	19	137,5	2,24
51B – 9. – AE...	119	30	G 2	34,5	130,2	22	168	4,16