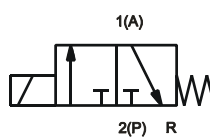


**3/2 way solenoid valve normally closed or normally open**

type 82, body brass  
direct operated, DN 1,2 – 2,5mm, G 1/8

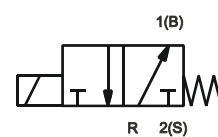


operating mode C



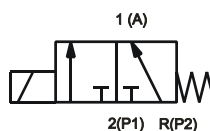
normally closed

operating mode D



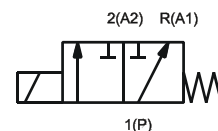
normally open

operating mode E



mixer function

operating mode F



distribution function

SPECIFICATION	
<b>general</b>	
type of construction	3/2-poppet valve, normally closed NC or normally open NO, coil 360° rotatable
operator	solenoid, or optional by manual override
ports	G 1/8, tube with M5 female thread
ambient temperature	-5°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) bzw 3°E
material	body and tube: brass inner parts : stainless steel sealing: see type selection
mounting	2 threads M4 or fixing holes diameter 3,2mm
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	PN 40 (bar)
response time	12 – 20ms
special equipment on request	stainless steel AISI303 in place of brass, coil type with cable, bright nickel-plated or chemical nickel-plated, coil EExmII T5, coils for temperature class H (180°C), other sealing materials

E & OE: We reserve the right to change design, dimensions or materials without notice.

type 82C, 3/2 way solenoid valve normally closed, pressure port at 2 (P)					
type * (order-nr.)	NW DN (mm)	maximum differential pressure in bar **		kv-value body nozzle (m <sup>3</sup> /h)	kv-value pole nozzle (m <sup>3</sup> /h)
		fluid compressed air	fluid water		
82C-1.1212CA-AC1DA.....	1,2	0 – 9	0 – 7	0,045	0,040
82C-1.1515BA-AC1DA.....	1,5	0 – 3	0 – 2,5	0,082	0,060
82C-1.2018BA-AC1DA.....	2,0	0 – 2	0 – 1,5	0,133	0,071
82C-1.2518BA-AC1DA.....	2,5	0 – 1	0 – 1	0,195	0,071
82C-1.1212FA-AC2DA.....	1,2	0 – 12	0 – 11	0,045	0,040
82C-1.1515FA-AC2DA.....	1,5	0 – 8	0 – 7	0,082	0,060
82C-1.2018DA-AC2DA.....	2,0	0 – 4,5	0 – 4	0,133	0,071
82C-1.2518DA-AC2DA.....	2,5	0 – 2,5	0 – 2,5	0,195	0,071
82C-1.1212GA-AC3AA.....	1,2	0 – 15	0 – 14	0,045	0,040
82C-1.1515GA-AC3AA.....	1,5	0 – 10	0 – 8	0,082	0,060
82C-1.2018FA-AC3AA.....	2,0	0 – 6	0 – 5,5	0,133	0,071
82C-1.2518EA-AC3AA.....	2,5	0 – 3,5	0 – 3,0	0,195	0,071
82C-1.1212CA-ACXFA.....	1,2	0 – 9	0 – 6,5	0,045	0,040
82C-1.1515CA-ACXFA.....	1,5	0 – 4,5	0 – 3	0,082	0,060
82C-1.2018BA-ACXFA.....	2,0	0 – 1,8	0 – 1,6	0,133	0,071
82C-1.2518BA-ACXFA.....	2,5	0 – 1,3	0 – 1	0,195	0,071

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

\*\* All specifications refer to fluids with a maximum viscosity of 21 cst. (3°E). Higher viscosities cause extended response time and need a special specification of the valve.

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
C1DA	7,5	5	3,0	IP65 / IP00	Connector (DIN 43650) type B industrial standard
C2DA	12,5	9	6,5	IP65 / IP00	Connector (DIN 43650) type B industrial standard
C3AA	15	11	6,3	IP65 / IP00	Connector DIN EN 175301 – 803 (DIN 43650), type A
CXFA	5,1	5,1	5,0	IP65	Coil explosion proof according to ATEX II 2G Ex mb II T4 II 2D ExtDA21 IP65 T130°C cable length 3 meter

ORDER CODE	82 C - 1 B 20 18 B A - A C2DA 02400					
	type	function	ports	seal material	nominal size seat body	nominal size seat pole
type	type 82, body and tube brass					
function	C = normally closed, D = normally open, E = mixer function, F = distribution function					
ports	1 = G1/8 (body)					
seal material	B = NBR (Perbunan), E = EPDM, V = FPM					
nominal size seat body	12 = 1,2 mm, 15 = 1,5 mm, 20 = 2,0 mm, 25 = 2,5 mm					
nominal size seat pole	12 = 1,2 mm, 15 = 1,5 mm, 18 = 1,8 mm					
external core spring	Depends to the valve type, see specifications of the particular type					
internal core spring	A = 3/2 NC, B = 3/2 NO					
short circuit ring	A = copper short circuit ring, X = without short circuit ring					
coil type	see specifications of the particular coil					
supply voltage	always 5-digit, see code of standard voltage					

**type 82D, 3/2 way solenoid valve normally open, pressure port at 3 (R)**

type * (order-nr.)	NW DN (mm)	maximum differential pressure in bar **		kv-value body nozzle (m³/h)	kv-value pole nozzle (m³/h)
		~ (50Hz)	=(DC)		
82D-1.1212AB-AC1DA.....	1,2	0 – 2,8	0 – 1,8	0,045	0,040
82D-1.1515AB-AC1DA.....	1,5	0 – 1,8	0 – 0,6	0,082	0,060
82D-1.2018AB-AC1DA.....	1,8	0 – 1,2	0 – 0,5	0,133	0,071
82D-1.1212AB-AC2DA.....	1,2	0 – 3,8	0 – 3	0,045	0,040
82D-1.1515AB-AC2DA.....	1,5	0 – 2,5	0 – 1,5	0,082	0,060
82D-1.2018AB-AC2DA.....	1,8	0 – 1,7	0 – 1,3	0,133	0,071
82D-1.1212AB-AC3AA.....	1,2	0 – 5,8	0 – 4	0,045	0,040
82D-1.1515AB-AC3AA.....	1,5	0 – 4	0 – 2	0,082	0,060
82D-1.2018AB-AC3AA.....	1,8	0 – 2,5	0 – 1,8	0,133	0,071
82D-1.1212AB-ACXFA.....	1,2	0 – 3	0 – 2,5	0,045	0,040
82D-1.1515AB-ACXFA.....	1,5	0 – 2	0 – 1	0,082	0,060
82D-1.2018AB-ACXFA.....	1,8	0 – 1,5	0 – 0,8	0,133	0,071

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

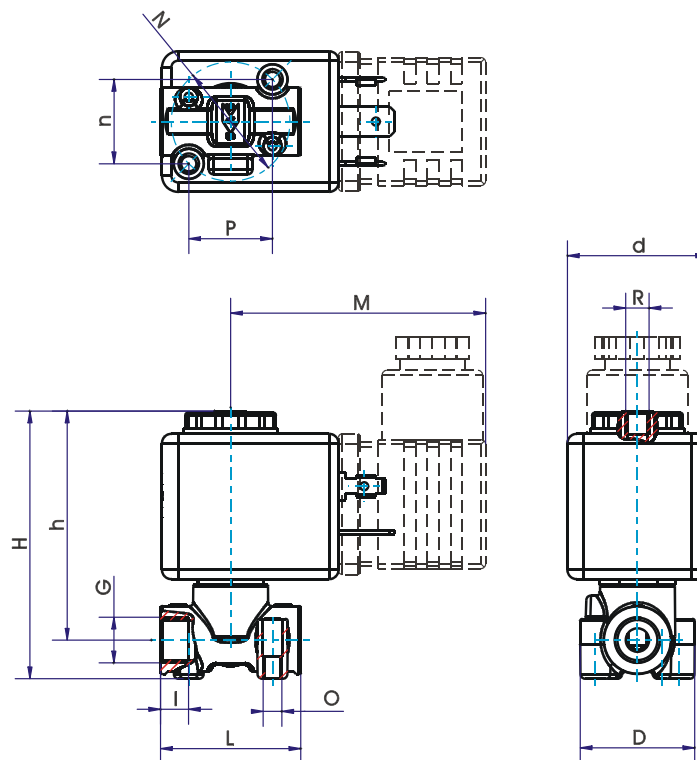
\*\* All specifications refer to fluids with a maximum viscosity of 21 cst. (3°E). Higher viscosities cause extended response time and need a special specification of the valve.

**type 82E, 3/2 way solenoid valve with mixer function**

technical data on request according to the input pressures at 2 and R.

**type 82F, 3/2 way solenoid valve with distribution function**

technical data on request according to the pressure level at 1,2 und R.



**dimension table for type 82 in mm, weight approx. in g**

with coil	P	N	n	M	h	H	G	O	I	L	R	D	d	weight (g)
C1DA	18	25	18	49	49	58	G 1/8	M4	6	30	M5	24.5	22	110
C2DA				110										
C3AA				30									165	
CXFA				22									360	