



Data sheet

Direct-operated 3/2-way compact solenoid valves Type EV310A



EV310A covers a wide range of small competitive, direct-operated 3/2-way solenoid valves for use within industrial applications, for example as pilot valve.

Features

- For water, oil, compressed air and similar neutral media
- Differential pressure: Up to 20 bar
- Ambient temperature: Up to 50 °C
- Media temperature from -10 100 $^{\circ}\text{C}$
- Coil enclosure: Up to IP65
- Viscosity: Up to 20 cSt
- K_v values up to 0.08 m³/h

- Thread connection:
 - NC G 1/8 G 1/4
 - NO G 1/8
 - NC MAN G 1/8 G 1/4
- Flange connection:
 - NC FL 32 x 32 mm



Brass valve body, NC



				Differer	max. [bar]		Media temperature	
Connection ISO 228/1	Seal material	Orifice size	K _v - value [m³/h]	Water	Oil	Air	min. to max. [°C]	Code number
C1/	FKM	1.2	0.04	0 – 18	0 – 9	0 – 20	-10 – 100	032H8085
G ¹ / ₈	FKM	1.5	0.07	0 – 10	0 – 5	0 – 12	-10 – 100	032H8087
	FKM	1.2	0.04	0 – 18	0 – 9	0 – 20	-10 - 100	032H8095
G 1/4	FKM	1.5	0.07	0 – 10	0 – 5	0 – 12	-10 – 100	032H8097
	FKM	2	0.08	0 – 6.5	0 – 4	0 – 8	-10 – 100	032H8099

Brass valve body, NO



				Differential pressure, min. to max. [bar]						ar]		
			Coil type						Media			
Connection ISO 228/1	Seal material		K _v - value [m³/h]	AB AC	AB DC	AC AC	AC DC	AM AC	AM DC	AK DC	temperature min. to max. [°C]	Code number
61/	FKM	1.2	0.04	0 – 6	0 – 4	0 – 9	0 – 7	0 – 13	0 – 9	0 – 4	-10 – 100	032H8125
G ¹ / ₈	FKM	1.5	0.07	0 – 3	0 – 2	0 – 5	0 – 3.5	0 – 7	0 – 5	0 – 2	-10 – 100	032H8127

Technical data

Main type	EV310A NC/NO
Time to open [ms] 1)	7 – 10
Time to close [ms] 1)	7 – 10

¹⁾ The times are indicative.

Туре	EV310A NC/NO						
Installation	Vertical solenoid system is recommended						
Max. test pressure	50 bar						
Ambient temperature	Up to 50 °C						
Medium temperature	-10 − 100 °C	-10 − 100 °C					
Viscosity	Max. 20 cSt						
Materials	Valve body:	Brass	W.no. 2.0401				
	Valve orifice:	Stainless steel	W.no. 1.4305 / AISI 303				
	Armature:	Stainless steel	W.no. 1.4016 / AISI 430				
	Armature tube:	Stainless steel	W.no. 1.4303 / AISI 305				
	Armature stop:	Stainless steel	W.no. 1.4016 / AISI 430				
	Spring:	Stainless steel	W.no. 1.4310 / AISI 301				
	O-rings/valve plate:	FKM	_				



Brass valve body, NC MAN



			Differential pressure, min. to max. [bar]					*	Media	
Connection	Seal	Orifice	K _v - value		AC / AM		temperature min. to max.			
ISO 228/1	material	size	size [m³/h]	Water	Oil	Air	[°C]	Code number		
G 1/8	FKM	1.5	0.07	0 – 10	0 – 5	0 – 12	-10 - 100	032H8143		
G 1/4	FKM	1.5	0.07	0 – 10	0 – 5	0 – 12	-10 - 100	032H8153		

Technical data

Main type	EV310A NC Man
Time to open [ms] 1)	7 – 10
Time to close [ms] 1)	7 – 10

¹⁾ The times are indicative.

Туре	EV310A NC Man	EV310A NC Man							
Installation	Vertical solenoid system is recommended.								
Max. test pressure	50 bar								
Ambient temperature	Up to 50 ℃								
Medium temperature	-10 – 100 °C								
Viscosity	Max. 20 cSt								
Materials	Valve body:	Brass	W.no. 2.0401						
	Valve orifice:	Stainless steel	W.no. 1.4305 / AISI 303						
	Armature:	Stainless steel	W.no. 1.4016 / AISI 430						
	Armature tube:	Stainless steel	W.no. 1.4303 / AISI 305						
	Armature stop:	Stainless steel	W.no. 1.4016 / AISI 430						
	Spring:	Stainless steel	W.no. 1.4305 / AISI 303						
	Other parts:	Stainless steel	W.no. 1.4016 / AISI 430F						
	O-rings/valve plate:	FKM	_						
	Manual override	Polymer	Polysulfon black						

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Brass valve body, NC FL



				Differential pressure, min. to max. [bar]		Media		
Connection	Seal	Orifice	K _v - value	AC / AM		temperature min. to max.	Code	
ISO 228/1	material	size	[m³/h]	Water	Oil	Air	[°C]	number
32 x 32	FKM	1.5	0.08	0 – 10	0 – 5	0 – 12	-10 - 100	032H8183

Technical data

Main type	EV310A NC FL
Time to open [ms] 1)	7 – 10
Time to close [ms] 1)	7 – 10

¹) The times are indicative.

EV310A NC FL						
Vertical solenoid system is recommended.						
50 bar						
Up to 50 ℃						
-10 − 100 °C						
Max. 20 cSt						
Valve body:	Brass	W.no. 2.0401				
Valve orifice:	Stainless steel	W.no. 1.4305 / AISI 303				
Armature:	Stainless steel	W.no. 1.4016 / AISI 430				
Armature tube:	Stainless steel	W.no. 1.4303 / AISI 305				
Armature stop:	Stainless steel	W.no. 1.4016 / AISI 430				
Springs:	Stainless steel	W.no. 1.4310 / AISI 301				
O-rings/valve plate:	FKM	_				
	Vertical solenoid system is recomm 50 bar Up to 50 °C -10 – 100 °C Max. 20 cSt Valve body: Valve orifice: Armature: Armature tube: Armature stop: Springs:	Vertical solenoid system is recommended. 50 bar Up to 50 °C -10 – 100 °C Max. 20 cSt Valve body: Brass Valve orifice: Armature: Stainless steel Armature tube: Stainless steel Armature stop: Springs: Stainless steel Stainless steel				

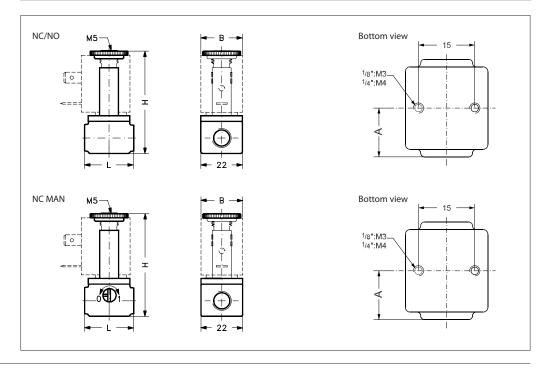
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Dimensions and weight, NC, NO and NC MAN

		L	B [mm] Coil type		н	А	Weight without
	Thread ISO 228/1	[mm]	AB / AC	AM / AK	[mm]	[mm]	coil [kg]
	G 1/8	26	22	33	54	13	0.085
ĺ	G 1/4	35	22	33	59	17.5	0.110

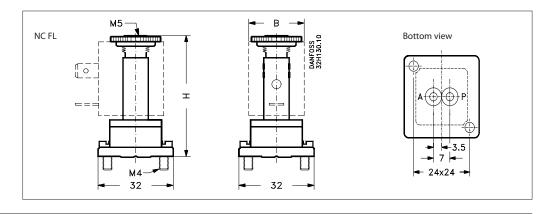
Dimensions



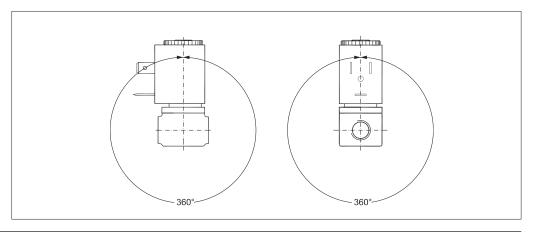
Dimensions and weight, NC FL

	B [mm] Coil type		н	Weight without	
Flange [mm]	AC	AM	[mm]	coil [kg]	
32 x 32	22	33	50.5	0.085	

Dimensions



Mounting angle





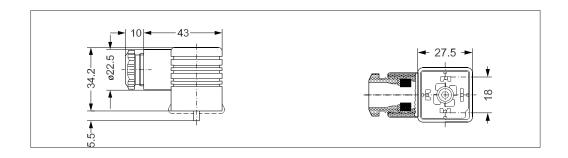
Below coils can be used with EV310A

Coil	Туре	Power consumption	Enclosure	Features
St. Million	АМ	7.5 W AC 9.5 W DC	IP00 with spade connector, IP65 with cable plug	Cable plug
Description of the second of t	AC	7 W AC 10 W DC	IP00 with spade connector, IP65 with cable plug	Industrial plug
DENMARK DENMARK ON DESTROY TYPE 199925 199925 249 Stront 4.5W C N0759	AB	4.5 W AC 5 W DC	IP00 with spade connector, IP65 with cable plug	Industrial plug
	AK	3 W DC	IP00 with spade connector, IP65 with cable plug	Cable plug

Accessories: Cable plug

Application	Code number
GDM 2011 (grey) cable plug according to DIN 43650-A PG11	042N0156

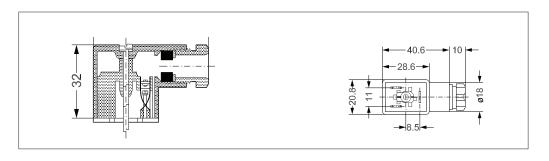




Industrial plug

Application	Code number
GM 209 (Black) cable plug according to DIN 43650-B PG9	042N0139

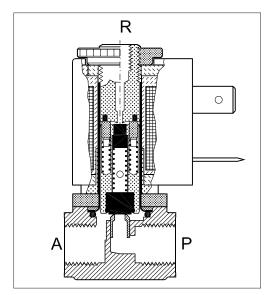






Function, NC / NC MAN

1.Opening spring 2.Armature 3.Valve plate 4.Coil P:Pressure gate A:Working gate R:Relief gate



Coil voltage disconnected (closed):

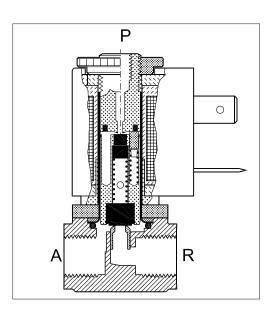
When the voltage to the coil (4) is disconnected, the armature (2) with the valve plates (3) is pressed down by the closing spring (1) and closes the connection between P and A. At the same time, the connection between gates A and R is opened. The connection between P and A will be closed for as long as the voltage to the coil is disconnected.

Coil voltage connected (open):

When voltage is applied, the armature (2) with the valve plates (3) is lifted and closes the connection between A and R. At the same time, the connection between P and A is opened. The connection between P and A will be open for as long as there is voltage to the coil.

Function, NO

1.Opening spring 2.Armature 3.Valve plate 4.Coil P:Pressure gate A:Working gate R:Relief gate



Coil voltage disconnected (open):

When the voltage is disconnected, the armature (2) with the valve plates (3) is pressed down by the opening spring (1) and closes the connection between A and R. At the same time, the connection between P and A is open. The connection between P and A will be open for as long as the voltage to the coil is disconnected.

Coil voltage connected (closed):

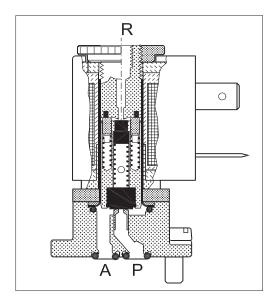
When voltage is applied to the coil (4), the armature (2) with the valve plates (3) is lifted and closes the connection between P and A. At the same time, the connection between gates A and R is opened.

The connection between P and A will be closed for as long as there is voltage to the coil.



Function, NC FL

1.Closing spring 2.Armature 3.Valve plate 4.Coil P:Pressure gate A:Working gate R:Relief gate



Coil voltage disconnected (open):

When the voltage to the coil (4) is disconnected, the armature (2) with the valve plates (3) is pressed down by the closing spring (1) and closes the connection between P and A. At the same time, the connection between gates A and R is opened. The connection between P and A will be closed for as long as the voltage to the coil is disconnected.

Coil voltage connected (closed):

When voltage is applied, the armature (2) with the valve plates (3) is lifted and closes the connection between A and R. At the same time, the connection between P and A is opened. The connection between P and A will be open for as long as there is voltage to the coil.

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