

Data sheet

Solenoid valves 3/2-way direct-operated Type EV310B

Features



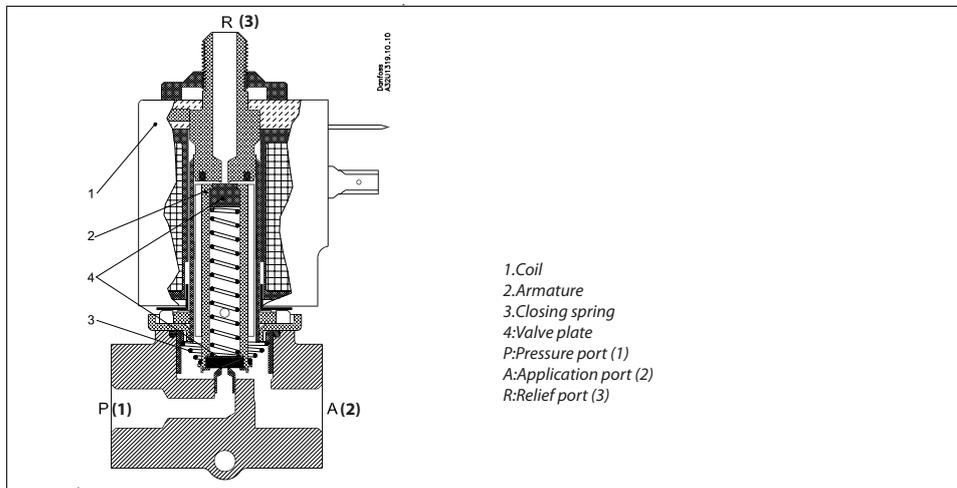
EV310B NC

- Very robust valves for industrial application, such as control
- For water, oil, compressed air and similar neutral media
- K_v value up to 0.40 m³/h
- Differential pressure: Up to 20 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +40°C
- Coil enclosure: Up to IP 65
- Connections: G 1/8, G 1/4 and G 3/8

Technical data

Installation	Optional, but vertical solenoid system is recommended
Pressure range	0 to 20 bar
Max. test pressure	50 bar
Time to open and to close	10 - 20ms (depending on the pressure)
Ambient temperature	max. +40°C
Medium temperature	-10° to +100°C
Viscosity	max. 50 cSt
Materials	Valve body: Brass, W.no. 2.0402 Armature: Stainless steel, W.no. 1.4105/ AISI 430FR Armature tube: Stainless steel, W.no. 1.4306 /AISI 304L Armature stop: Stainless steel, W.no. 1.4105 /AISI 430FR Springs: Stainless steel, W.no. 1.4310/ AISI 301 Seal material: FKM

Function NC



Coil voltage disconnected (closed):

When the voltage to the coil (1) is disconnected, the armature (2) with the valve plates (4) is pressed down by the closing spring (3) and closes the connection between P and A. At the same time, the connection between ports 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 (4) 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.

Ordering - Valve bodies

NC versions for AC (50/60Hz) and DC

Con- nec- tions	Seal mate- rial	k _v - value [m ³ /h]	DN [mm]	Media temp.		Type designation		Code no. without coil	Permissible differential pressure (bar)/ coil Type		
				Min. [°C]	Max. [°C]	Main type	Specification		BA		BD
									9 W a.c.	15 W d.c.	15 W a.c.
G 1/8	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 18 F NC 000	032U4900	20	20	20
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 18 F NC 000	032U4901	16	16	16
	FKM	0.30	3.0	-10	+100	EV310B 3,0 B	G 18 F NC 000	032U4902	7	7	7
G 1/4	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 14 F NC 000	032U4903	20	20	20
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 14 F NC 000	032U4904	16	16	16
	FKM	0.30	3.0	-10	+100	EV310B 3,0 B	G 14 F NC 000	032U4905	7	7	7
	FKM	0.40	3.5	-10	+100	EV310B 3,5 B	G 14 F NC 000	032U4906	5	5	5
G 3/8	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 38 F NC 000	032U4907	16	16	16
	FKM	0.30	3.0	-10	+100	EV310B 3,0 B	G 38 F NC 000	032U4908	7	7	7
	FKM	0.40	3.5	-10	+100	EV310B 3,5 B	G 38 F NC 000	032U4909	5	5	5

Features

EV310B NO

- Very robust valves for industrial application, such as control
- For water, oil, compressed air and similar neutral media
- K_v value up to 0.30 m³/h
- Differential pressure: Up to 20 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +40°C
- Coil enclosure: Up to IP 65
- Thread connections: G 1/8, G 1/4 and G 3/8
- Also available with manual override

Technical data

Installation	Optional, but vertical solenoid system is recommended
Pressure range	0 to 20 bar
Max. test pressure	50 bar
Time to open and to close	10 - 20ms (depending on the pressure)
Ambient temperature	max. +40°C
Medium temperature	-10° to +100°C
Viscosity	max. 50 cSt
Materials	Valve body: Brass, W.no. 2.0402 Armature: Stainless steel, W.no. 1.4105/ AISI 430FR Armature tube: Stainless steel, W.no. 1.4306 /AISI 304L Armature stop: Stainless steel, W.no. 1.4105 /AISI 430FR Springs: Stainless steel, W.no. 1.4310/ AISI 301 Seal material: FKM

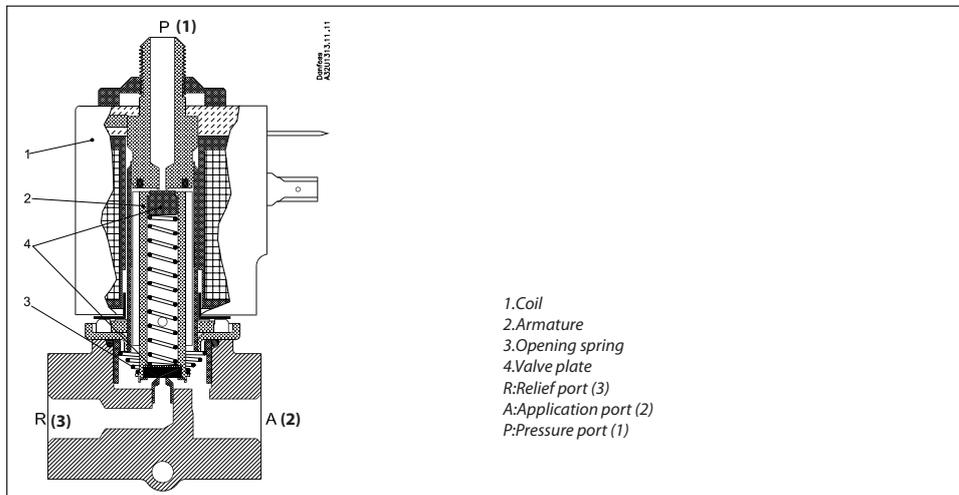
Ordering - Valve bodies
NO versions for AC (50/60Hz) and DC

Con- nec- tions	Seal mate- rial	k_v - value [m ³ /h]	DN [mm]	Media temp.		Type designation		Code no. without coil	Permissible differential pressure (bar)/ coil Type		
				Min. [°C]	Max. [°C]	Main type	Specification		Type		
									BA	BD	
9 W a.c.	15 W d.c.	15 W a.c.									
G 1/8	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 18 F NO 000	032U4926	20	20	20
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 18 F NO 000	032U4927	16	16	16
G 1/4	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 14 F NO 000	032U4929	20	20	20
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 14 F NO 000	032U4930	16	16	16
	FKM	0.30	3.0	-10	+100	EV310B 3,0 B	G 14 F NO 000	032U4931	7	7	7
G 3/8	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 38 F NO 000	032U4933	16	16	16
	FKM	0.30	3.0	-10	+100	EV310B 3,0 B	G 38 F NO 000	032U4934	7	7	7

Including manual override

G 1/8	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 18 F NO 040	032U4941	16	16	16
G 1/4	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 14 F NO 040	032U4943	20	20	20
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 14 F NO 040	032U4944	16	16	16

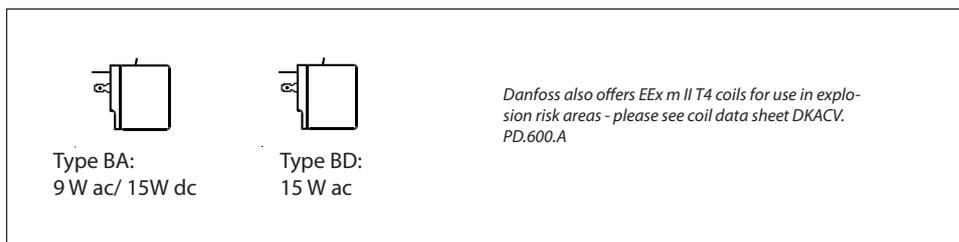
Function NO



Coil voltage disconnected (open):
When the voltage is disconnected, the armature (2) with the valve plates (4) is pressed down by the opening spring (3) and closes the connection between A and R. At the same time, the connection between ports 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. On valves with manual override the connection between P and A can be closed using a closing screw in the valve body.

Coil voltage connected (closed):
When voltage is applied to the coil (1), the armature (2) with the valve plates (4) is lifted and closes the connection between ports P and A. At the same time, the connection between ports A and R is opened. The connection between P and A will be closed for as long as there is voltage to the coil.

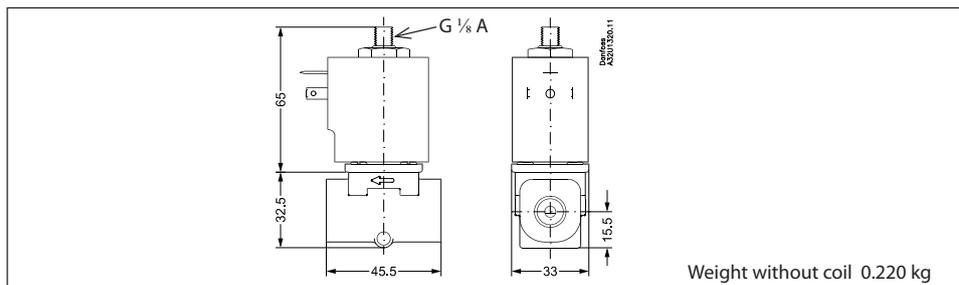
Coil options



Ordering - coils

See separate data sheet for coils DKACV.PD.600.A

Dimensions and weight



Features

EV310B NC FL32

- Very robust valves for industrial application, such as control
- For water, oil, compressed air and similar neutral media
- K_v value up to 0.15 m³/h
- Differential pressure: Up to 20 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +40°C
- Coil enclosure: Up to IP 65
- Flange connection: 32 × 32 mm
- Also available with manual override

Technical data

Installation	Optional, but vertical solenoid system is recommended
Pressure range	0 to 20 bar
Max. test pressure	50 bar
Time to open and to close	10 - 20ms (depending on the pressure)
Ambient temperature	max. +40°C
Medium temperature	-10° to +100°C
Viscosity	max. 50 cSt
Materials	Valve body: Brass, W.no. 2.0402 Armature: Stainless steel, W.no. 1.4105/ AISI 430FR Armature tube: Stainless steel, W.no. 1.4306 /AISI 304L Armature stop: Stainless steel, W.no. 1.4105 /AISI 430FR Springs: Stainless steel, W.no. 1.4310/ AISI 301 Seal material: FKM

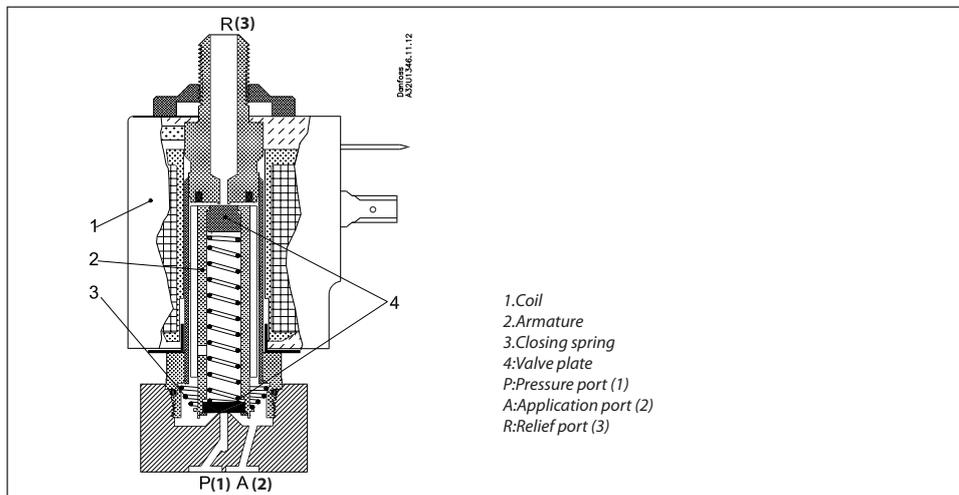
Ordering - Valve bodies

Connections	Seal material	k_v value [m ³ /h]	DN [mm]	Media temp.		Type designation		Code no. without coil	Permissible differential pressure (bar)/ coil Type		
				Min. [°C]	Max. [°C]	Main type	Specification		BA		BD
									9 W a.c.	15 W d.c.	
Flange 32x32	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	FL32 F NC 000	032U4911	20	20	20
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	FL32 F NC 000	032U4912	16	16	16

Including manual override

Flange 32x32	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	FL32 F NC 040	032U4923	16	16	16
--------------	-----	------	-----	-----	------	--------------	---------------	-----------------	----	----	----

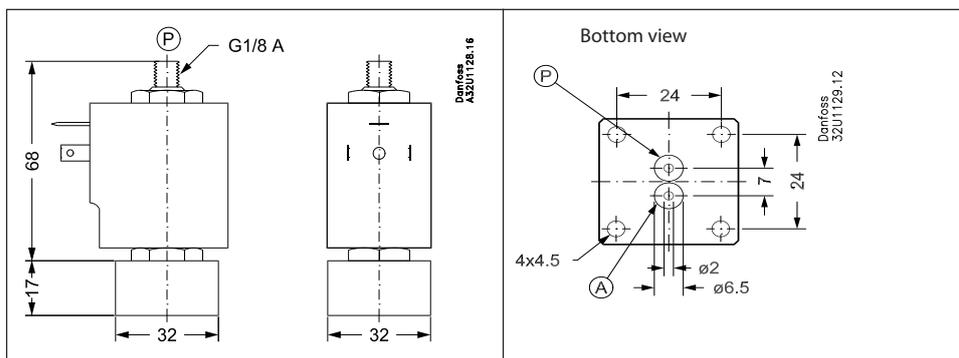
Function NC FL32



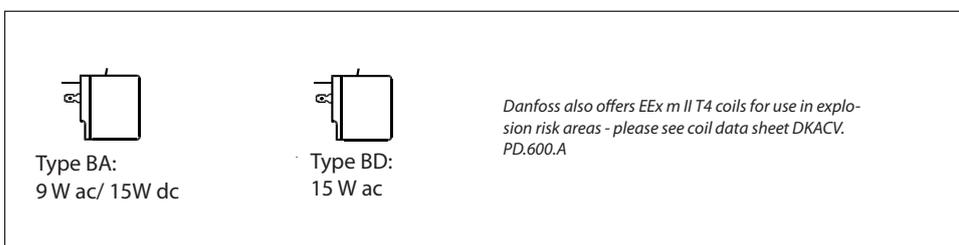
Coil voltage disconnected (closed):
When the voltage to the coil (1) is disconnected, the armature (2) with the valve plates (4) is pressed down by the closing spring (3) and closes the connection between P and A. At the same time, the connection between ports A and R is opened.
The connection between P and A will be closed for as long as the voltage to the coil is disconnected.
On valves with manual override the connection between P and A can be opened using an opening screw in the valve body.

Coil voltage connected (open):
When voltage is applied, the armature (2) with the valve plates (4) 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.

Dimensions and weight



Coil options



Ordering - coils

See separate data sheet for coils DKACV.PD.600.A

Features

EV310B NO FL32

- Very robust valves for industrial application, such as control
- For water, oil, compressed air and similar neutral media
- K_v value up to 0.15 m³/h
Differential pressure: Up to 10 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +40°C
- Coil enclosure: Up to IP 65
- Flange connection: 32 × 32 mm
- Also available with manual override

Technical data

Installation	Optional, but vertical solenoid system is recommended
Pressure range	0 to 10 bar
Max. test pressure	50 bar
Time to open and to close	10 - 20ms (depending on the pressure)
Ambient temperature	max. +40°C
Medium temperature	-10° to +100°C
Viscosity	max. 50 cSt
Materials	Valve body: Brass, W.no. 2.0402 Armature: Stainless steel, W.no. 1.4105/ AISI 430FR Armature tube: Stainless steel, W.no. 1.4306 /AISI 304L Armature stop: Stainless steel, W.no. 1.4105 /AISI 430FR Springs: Stainless steel, W.no. 1.4310/ AISI 301 Seal material: FKM

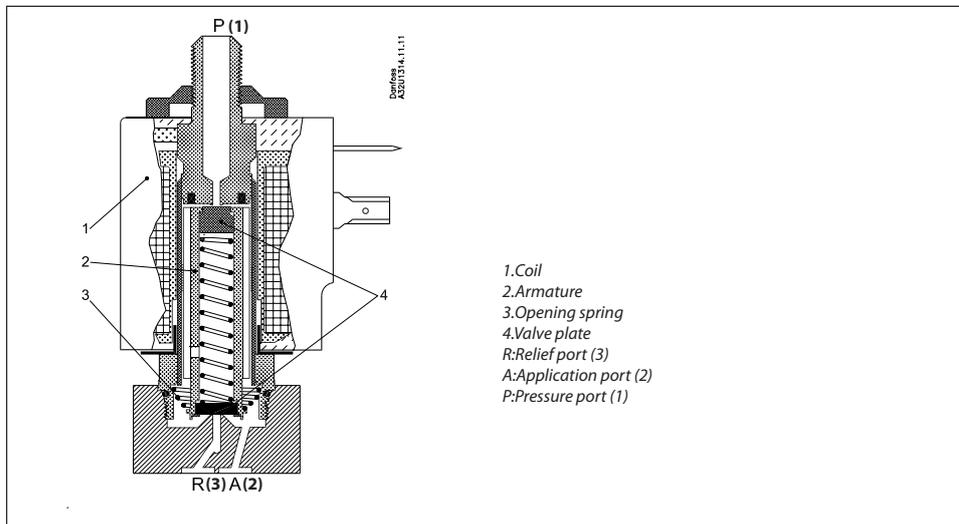
Ordering - Valve bodies

Connections	Seal material	k_v -value [m ³ /h]	DN [mm]	Media temp.		Type designation		Code no. without coil	Permissible differential pressure (bar)/ coil Type		
				Min. [°C]	Max. [°C]	Main type	Specification		Type		
									BA	BD	
9 W a.c.	15 W d.c.	15 W a.c.									
Flange 32x32	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	FL32 F NO 000	032U4936	20	20	20
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	FL32 F NO 000	032U4937	16	16	16

Including manual override

Flange 32x32	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	FL32 F NO 040	032U4948	16	16	16
-----------------	-----	------	-----	-----	------	--------------	---------------	-----------------	----	----	----

Function NO FL32

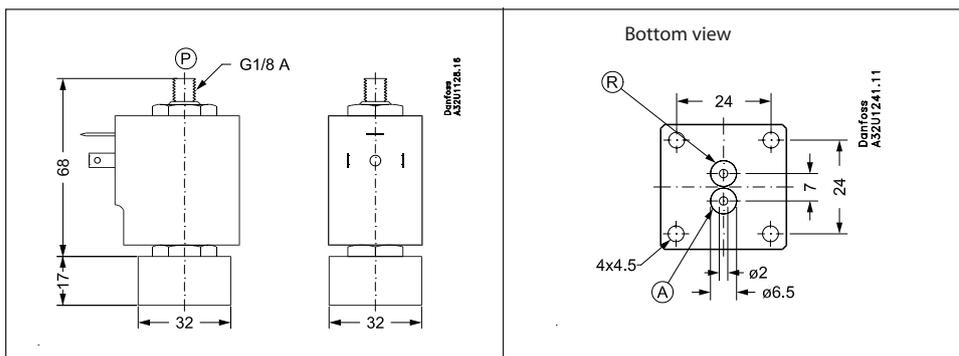


- 1.Coil
- 2.Armature
- 3.Opening spring
- 4.Valve plate
- R:Relief plate (3)
- A:Application port (2)
- P:Pressure port (1)

Coil voltage disconnected (open):
When the voltage is disconnected, the armature (2) with the valve plates (4) is pressed down by the opening spring (3) and closes the connection between A and R. At the same time, the connection between ports 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. On valves with manual override the connection between P and A can be closed using a closing screw in the valve body.

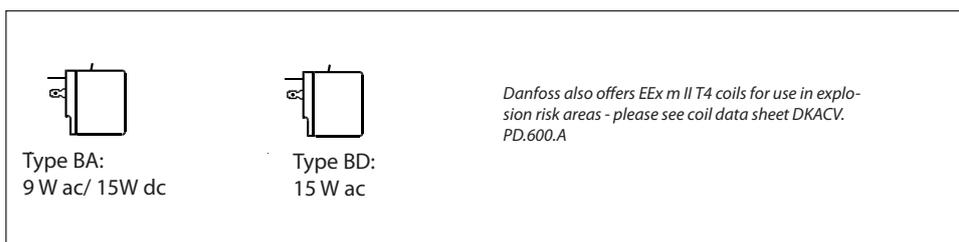
Coil voltage connected (closed):
When voltage is applied to the coil (1), the armature (2) with the valve plates (4) is lifted and closes the connection between P and A. At the same time, the connection between ports A and R is opened. The connection between P and A will be closed for as long as there is voltage to the coil.

Dimensions and weight



Weight without coil : 0.185 kg

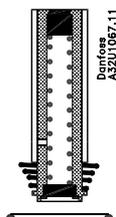
Coil options



Ordering - coils

See separate data sheet for coils DKACV.PD.600.A

Spare parts kit



The spare parts kit
 comprises an armature
 with mounted spring

Type	Seal Material	Code no.	
		Thread conn.	Fl. version
NC	FKM	032U2033	032U2034
NO	FKM	032U2035	032U2036