

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

## **Features**



## **EV310B NC**

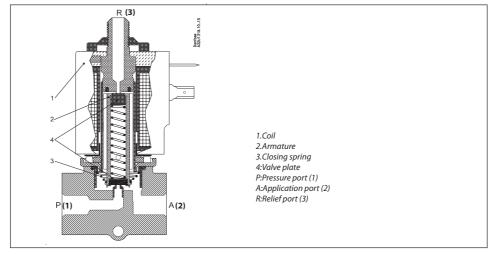
- Very robust valves for industrial application, such as control
- For water, oil, compressed air and similar neutral media
- K, value up to 0.40 m<sup>3</sup>/h
- Differential pressure: Up to 20 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +40°C
- Coil enclosure: Up to IP 65
- Connections: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

## **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

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

# **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-	Seal	k <sub>γ</sub> .	DN	Media	temp.	Type designati	on	Code no.	Permissible differential pressure (bar)/ coil Type				
nec- tions	mate- rial	vaľue [m3/h]	[mm]	Min. [°C]	Max. [°C]	Main type	Specification	without coil	9 W	A 15 W	BD 15 W		
									a.c.	d.c.	a.c.		
	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 18 F NC 000	032U4900	20	20	20		
G 1/8	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		
	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		
G 1/4	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		
	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 38 F NC 000	032U4907	16	16	16		
G 3/8	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		

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## **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 m<sup>3</sup>/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-	Seal	k <sub>γ</sub> .	DN	Media	temp.	Type de	signation	Code no.	Permissible differential pressure (bar)/ coil Type				
nec- tions	mate- rial	value [m3/h]	[mm]	Min.	Max.		c .c	without coil	В	A	BD		
		[1113/11]		[°C]	[°C]	Main type	Specification		9 W a.c.	15 W d.c.	15 W a.c.		
C 1/	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 18 F NO 000	032U4926	20	20	20		
G 1/8	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 18 F NO 000	032U4927	16	16	16		
	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 14 F NO 000	032U4929	20	20	20		
G 1/4	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		
C 3/	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 38 F NO 000	032U4933	16	16	16		
G 3/8	FKM	0.30	3.0	-10	+100	EV310B 3,0 B	G 38 F NO 000	032U4934	7	7	7		

## **Including manual override**

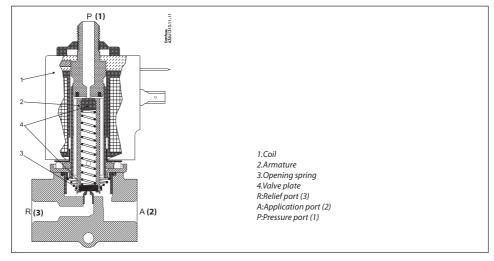
G 1/8	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 18 F NO 040	032U4941	16	16	16
G 1/4	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	G 14 F NO 040	032U4943	20	20	20
G %	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	G 14 F NO 040	032U4944	16	16	16

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

#### **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 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

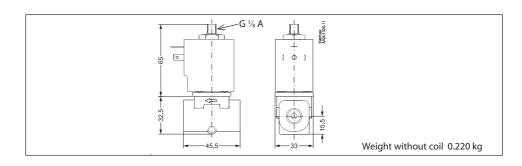
## **Coil options**



# Ordering - coils

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

## **Dimensions and weight**



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

## 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 m<sup>3</sup>/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

	Seal	k <sub>y -</sub>	DN	Media	lia temp. Type de		Type designation		1	missible ferential ure (bar	
Connec- tions	mate- rial	value [m3/h]	[mm]	Min. [°C]	Max. [°C]	Main type	Specification	Code no. without coil	9 W a.c.	Type A 15 W d.c.	BD 15 W a.c.
Flange	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	FL32 F NC 000	032U4911	20	20	20
32x32	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	FL32 F NC 000	032U4912	16	16	16

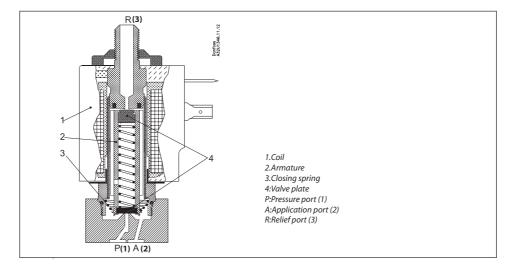
# Including manual override

Flange 32x32	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	FL32 F NC 040	032U4923	16	16	16	
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# 3/2-way direct-operated valves Type EV310B

## **Function NC FL32**



Coil voltage disconnected (closed):

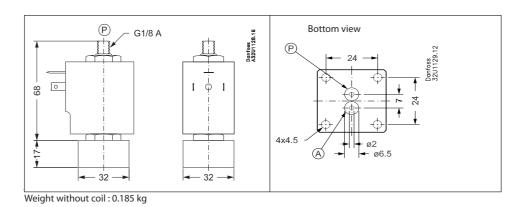
When the voltage to the coil (1) is disconnected, the armature (2) with the valve plates (4) is pressed down by the closing spring (3) and closes the connection between P and A. At the same time, the connection between ports A and R is opened.

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

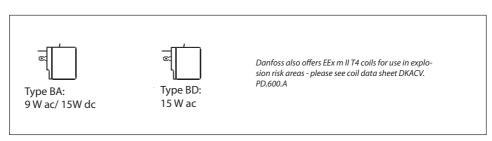
On valves with manual override the connection between P and A can be opened using an opening screw in the valve body. Coil voltage connected (open):

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

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

# Features



# **EV310B NO FL32**

- Very robust valves for industrial application, such as control
- For water, oil, compressed air and similar neutral media
- K<sub>v</sub> value up to 0.15 m<sup>3</sup>/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**

	Seal	k <sub>v -</sub>	DN	Media	temp.	Type de	signation	Code no.		missible ferentia ure (bar	ľ
Connec- tions	mate- rial	value [m3/h]	[mm]	Min. [°C]	Max. [°C]	Main type	Specification	without coil	9 W a.c.	Type A 15 W d.c.	BD 15 W a.c.
Flange	FKM	0.08	1.5	-10	+100	EV310B 1,5 B	FL32 F NO 000	032U4936	20	20	20
32x32	FKM	0.15	2.0	-10	+100	EV310B 2,0 B	FL32 F NO 000	032U4937	16	16	16

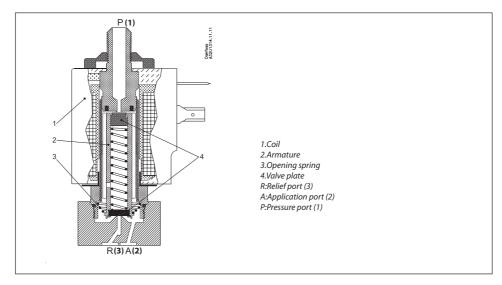
# Including manual override

Flange 32x32	FKM 0	0.15 2.0	-10	+100	EV310B 2,0 B	FL32 F NO 040	032U4948	16	16	16	Ì
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# 3/2-way direct-operated valves Type EV310B

## **Function NO FL32**



# Coil voltage disconnected (open):

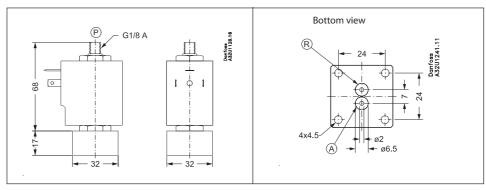
When the voltage is disconnected, the armature (2) with the valve plates (4) is pressed down by the opening spring (3) and closes the connection between A and R. At the same time, the connection between ports P and A is open.

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):

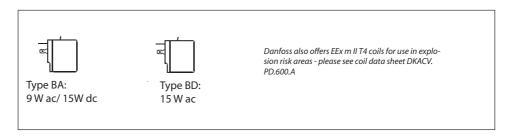
When voltage is applied to the coil (1), the armature (2) with the valve plates (4) is lifted and closes the connection between P and A. At the same time, the connection between ports A and R is opened. The connection between P and A will be closed for as long as there is voltage to the coil

## **Dimensions and weight**



Weight without coil: 0.185 kg

# **Coil options**



## Ordering - coils

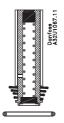
See separate data sheet for coils DKACV.PD. 600.A

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# Spare parts kit



The spare parts kit comprises an armature with mounted spring

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

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