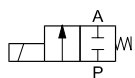


Solenoid valves  
2/2-way direct-operated  
Type EV210B

## 2/2-way direct-operated valves



De-energized closed

### Type EV210B NC for neutral liquids and gases DN 1.5 - 25 B

G 1/8 - G1

#### Features



- For robust industrial application, such as control and dosage
- For water, oil, compressed air and similar neutral media
- Kv-value up to 8.0 m<sup>3</sup>/h
- Differential pressure: Up to 30 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +80°C
- Coil enclosure: Up to IP 67
- Thread connections: From G 1/8 to G 1
- Also available with NPT thread. Please contact Danfoss.

#### Technical data

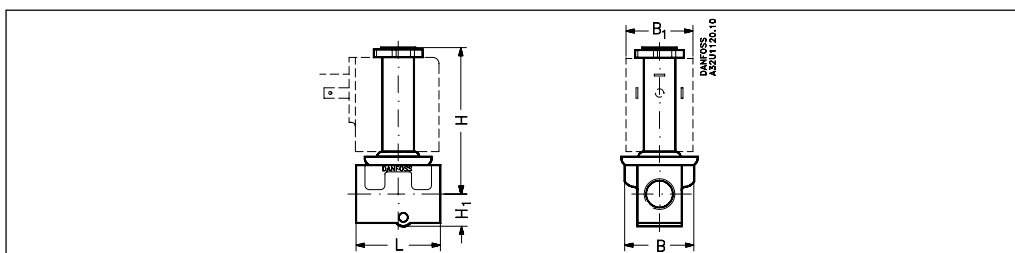
Type	EV210B 1.5-2 B	EV210B 3-4.5 B	EV210B 6 B	EV210B 8-10 B	EV210B 15 B	EV210B 20 B	EV210B 25 B
Installation	Optional, but vertical solenoid system is recommended (see PT.600.A)						
Pressure range	0 - 30 bar						
Max. test pressure	50 bar	50 bar	50 bar	50 bar	12 bar	12 bar	12 bar
Time to open	10 ms	20 ms	20 ms	20 ms	30 ms	40 ms	40 ms
Time to close	20 ms	20 ms	20 ms	30 ms	50 ms	50 ms	70 ms
Ambient temperature	Max. +80°C (depending on coil type, see data for the coil selected)						
Medium temperature	See specific valve data						
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:			See specific valve data			

<sup>1)</sup> The times are indicative and apply to water. The exact times will depend on the pressure conditions.

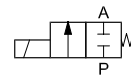
#### Coil options

					Danfoss also offers hum-free coils for noise sensitive applications and EEx m II T4 coils for use in explosion risk areas
Type: BD 15 W ac	Type: BA 9 W ac 15 W dc	Type: BB 10 W ac 18 W dc	Type: BE (IP67) 10 W ac 18 W dc	Type: BG 12 W ac 20 W dc	
See DKACV.PD.600.A					

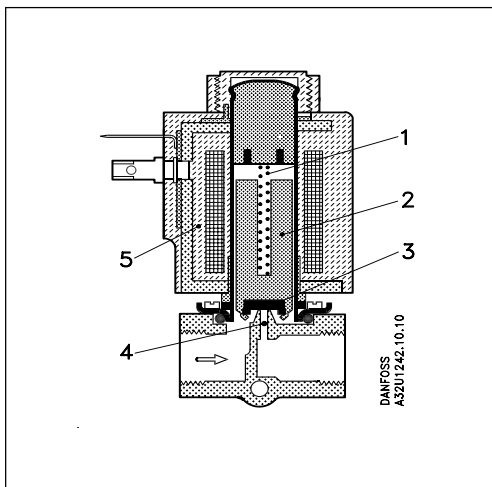
#### Dimensions and weight



Type	L [mm]	B [mm]	B <sub>1</sub> [mm]			H <sub>1</sub> [mm]	H [mm]	Weight without coil [kg]
			Coil type BA/BD	Coil type BB/BE	Coil type BG			
EV210B 1.5/2B	35.0	34.0	32	46	66	12.0	70.0	0.15
EV210B 3/4.5B	38.0	34.0	32	46	66	13.0	71.0	0.20
EV210B 6B	45.5	43.5	32	46	66	13.0	74.0	0.22
EV210B 8/10B	49.0	48.0	32	46	66	13.0	77.0	0.29
EV210B 15B	58.0	53.0	32	46	66	15.0	80.0	0.45
EV210B 20B	90.0	58.0	32	46	66	23.0	100.0	1.10
EV210B 25B	90.0	58.0	32	46	66	23.0	100.0	1.10



**Function**



- 1. Closing spring
- 2. Armature
- 3. Valve plate
- 4. Valve orifice
- 5. Coil

*Coil voltage disconnected (closed):*

When the voltage is disconnected, the armature (2) with the valve plates (3) is pressed down against the valve orifice (4) by the closing spring (1) and the medium's pressure. The valve will be closed for as long as the voltage to the coil is disconnected.

*Coil voltage connected (open):*

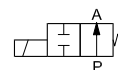
When voltage is applied to the coil (5), the armature (2) with the valve plates (3) is lifted clear of the valve orifice (4). The valve is now open for unimpeded flow and will be open for as long as there is voltage to the coil.



## 2/2-way direct-operated valves

G 1/8 - G 1/4

**Type EV210B NO**  
**for neutral liquids and gases**  
**DN 1.5 - 4.5 B**



De-energized  
open

### Features



- For robust industrial application, such as control and dosage
- For water, oil, compressed air and similar neutral media
- $K_v$  values up to 0.55 m<sup>3</sup>/h
- Differential pressure: Up to 30 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +80°C
- Coil enclosure: Up to IP 67
- Thread connections: G 1/8 and G 1/4
- Also available with NPT thread. Please contact Danfoss.

### Technical data

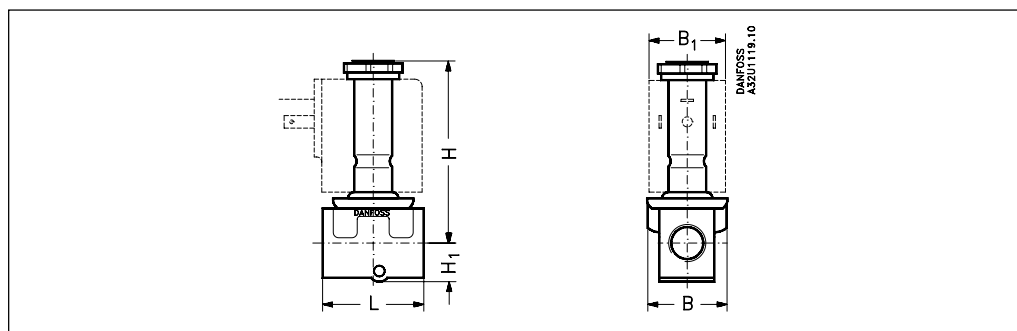
Installation	Optional, but vertical solenoid system is recommended (see PT.600.A)		
Pressure range	0 to 30 bar		
Max. test pressure	50 bar		
Time to open	10-30 ms		
Time to close 1)	20 ms		
Ambient temperature	max. +80°C (depending on coil type, see data for the coil selected)		
Medium temperature	See specific valve data		
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:	See specific valve data	

1) The times are indicative and apply to water. The exact times will depend on the pressure conditions.

### Coil options

					Danfoss also offers hum-free coils for noise sensitive applications and EEx m II T4 coils for use in explosion risk areas - please see coil data sheet DKACV.PD.600.A
Type: BD 15W ac	Type: BA 9 W ac 15 W dc	Type: BB 10 W ac 18 W dc	Type: BE (IP67) 10 W ac 18 W dc	Type: BG 12 W ac 20 W dc	

### Dimensions and weight



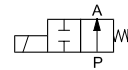
Type	L [mm]	B [mm]	B <sub>1</sub> [mm]			H <sub>1</sub> [mm]	H [mm]	Weight without coil [kg]
			Coil type BA/BD	Coil type BB/BE	Coil type BG			
EV210B 1.5/2 B NO	35.0	34.0	32	46	66	12.0	70.0	0.15
EV210B 3/4.5 B NO	38.0	34.0	32	46	66	13.0	71.0	0.2

## 2/2-way direct-operated valves

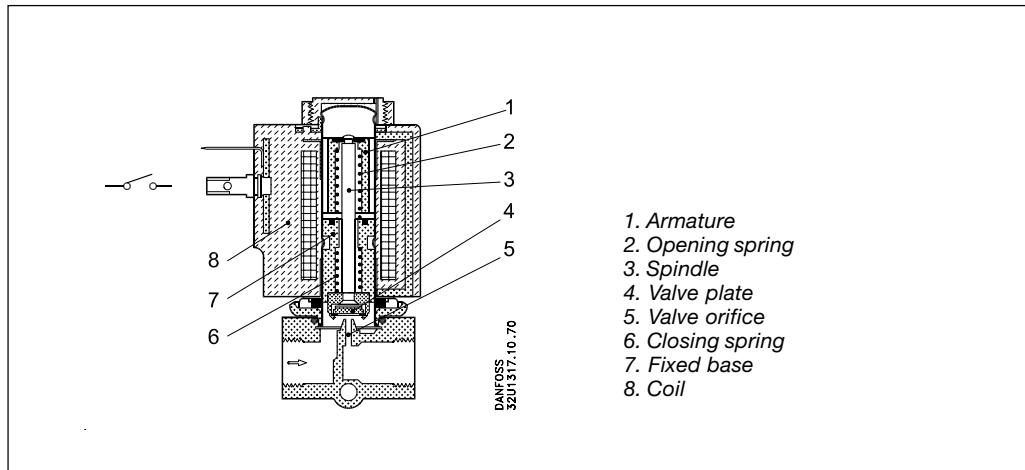
G<sup>1/8</sup> - G<sup>1/4</sup>

**Type EV210B NO**  
for neutral liquids and gases  
**DN 1.5 - 4.5 B**

De-energized  
open



### Function



**Coil voltage disconnected (open):**  
When the voltage to the coil (8) is disconnected, the valve orifice (5) is open, the opening spring (2) lifting the spindle (3) with the valve plate (4) clear of the orifice. The valve will be open for as long as the supply voltage to the coil is disconnected.

**Coil voltage connected (closed):**  
When voltage is applied to the coil, the magnetic field draws the valve's armature (1) down to touch the fixed base (7). The spindle (3) with the valve plate (4) is now pressed down against the valve orifice (5) by the closing spring (6). The valve will be closed for as long as there is voltage to the coil.

### EV210B NO versions for AC and DC current Brass bodies

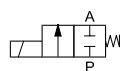
Conn:	Seal material **	Kv	DN	Media temp		Type designation		Code no. without coil	Permissible differential pressure (Bar)/Coil type							
				Min.	Max.	Main type	Specification		BA		BD		BB		BG	
				°C	°C				9W a.c.	15W d.c.	15W a.c.	10W a.c.	18W d.c.	12W a.c.	20W d.c.	
G <sup>1/8</sup>	EPDM	0.08	1,5	- 30	+ 120	EV210B 1,5 B	G 18 E NO000	032U3630	30	30	30	30	30	30	30	
	FKM	0.08	1,5	- 10	+ 100	EV210B 1,5 B	G 18 F NO000	032U3631	30	30	30	30	30	30	30	
G <sup>1/8</sup>	EPDM	0.15	2,0	- 30	+ 120	EV210B 2,0 B	G 18 E NO000	032U3632	12	12	12	12	12	12	12	
	FKM	0.15	2,0	- 10	+ 100	EV210B 2,0 B	G 18 F NO000	032U3633	12	12	12	12	12	12	12	
G <sup>1/8</sup>	EPDM	0.30	3,0	- 30	+ 120	EV210B 3,0 B	G 18 E NO000	032U3634	5	5	5	5	5	5	5	
	FKM	0.30	3,0	- 10	+ 100	EV210B 3,0 B	G 18 F NO000	032U3635	5	5	5	5	5	5	5	
G <sup>1/4</sup>	EPDM	0.15	2,0	- 30	+ 120	EV210B 2,0 B	G 14 E NO000	032U3636	12	12	12	12	12	12	12	
	FKM	0.15	2,0	- 10	+ 100	EV210B 2,0 B	G 14 F NO000	032U3637	12	12	12	12	12	12	12	
G <sup>1/4</sup>	EPDM	0.30	3,0	- 30	+ 120	EV210B 3,0 B	G 14 E NO000	032U3638	5	5	5	5	5	5	5	
	FKM	0.30	3,0	- 10	+ 100	EV210B 3,0 B	G 14 F NO000	032U3639	5	5	5	5	5	5	5	
G <sup>1/4</sup>	EPDM	0.55	4,5	- 30	+ 120	EV210B 4,5 B	G 14 E NO000	032U3640	2	2	2	2	2	2	2	
	FKM	0.55	4,5	- 10	+ 100	EV210B 4,5 B	G 14 F NO000	032U3641	2	2	2	2	2	2	2	

\*\*NBR available as option

### Ordering - coils

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

## 2/2-way direct-operated valves



De-energized closed

**Type EV210B NC**  
**for aggressive liquids and gases**  
**DN 1.5 - 4.5 SS**

G 1/8 - G 1/4

### Features



- For robust industrial application, such as control and dosage
- For neutral and aggressive liquids and gases. Contact Danfoss if you are in doubt about the valve's suitability for the medium in question.
- Kv: Up to 0.55 m<sup>3</sup>/h
- Differential pressure: Up to 30 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +80°C
- Coil enclosure: Up to IP 67
- Thread connections: From G 1/8 to G 1/4

### Technical data

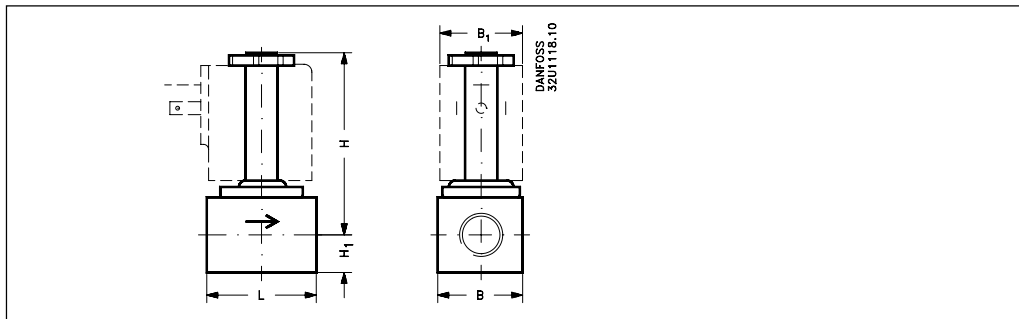
Installation	Optional, but vertical solenoid system is recommended (see PT.600.A)	
Pressure range	0 - 30 bar	
Max. test pressure	50 bar	
Time to open <sup>1)</sup>	10 ms - 30 ms	
Time to close <sup>1)</sup>	20 ms	
Ambient temperature	max. +80°C (depending on coil type, see data for the coil selected)	
Medium temperature	See specific valve data	
Viscosity	max. 50 cSt	
Materials	Valve body:	Stainless steel, W.no. 1.4404/AISI 316L
	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:	See specific valve data

<sup>1)</sup> The times are indicative and apply to water. The exact times will depend on the pressure conditions.

### Coil options

					Danfoss also offers hum-free coils for noise sensitive applications and EEx m II T4 coils for use in explosion risk areas - please see coil data sheet DKACV.PD.600.A
Type: BD 15W ac	Type: BA 9 W ac 15 W dc	Type: BB 10 W ac 18 W dc	Type: BE (IP67) 10 W ac 18 W dc	Type: BG 12 W ac 20 W dc	

### Dimensions and weight



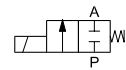
Type	L [mm]	B [mm]	B <sub>1</sub> [mm]			H <sub>1</sub> [mm]	H [mm]	Weight without coil [kg]
			Coil type BA/BD	Coil type BB/BE	Coil type BG			
EV210B 1.5/2 SS	35.0	34.0	32	46	66	12.0	70.0	0.15
EV210B 3/4.5 SS	38.0	34.0	32	46	66	13.0	71.0	0.2

## 2/2-way direct-operated valves

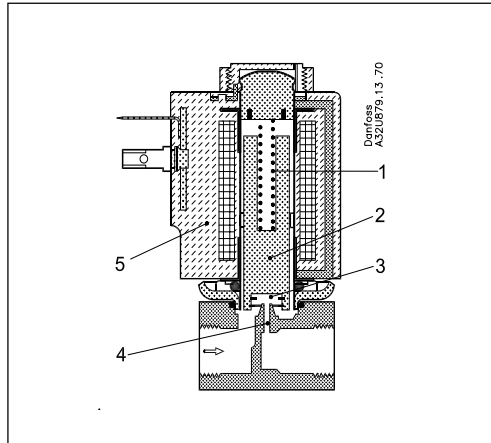
G 1/8 - G 1/4

**Type EV210B NC**  
for aggressive liquids and gases  
**DN 1.5 - 4.5 SS**

De-energized  
closed



### Function



1. Closing spring
2. Armature
3. Valve plate
4. Valve orifice
5. Coil

#### Coil voltage disconnected (closed):

When the voltage is disconnected, the armature (2) with the valve plate (3) is pressed down against the valve orifice (4) by the closing spring (1) and the medium's pressure.

The valve will be closed for as long as the voltage to the coil is disconnected.

#### Coil voltage connected (open):

When voltage is applied to the coil (5), the armature (2) with the valve plate (3) is lifted clear of the valve orifice (4).

The valve is now open for unimpeded flow and will be open for as long as there is voltage to the coil.

## EV210B NC versions for AC and DC current

### Stainless steel bodies

Conn.	Seal material**	Kv m <sup>3</sup> /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		BB		BG	
									9W a.c.	15W d.c.	15W a.c.	10W a.c.	18W d.c.	12W a.c.	20W d.c.	
G1/8	EPDM*	0.08	1,5	- 30	+ 120	EV210B 1,5 SS	G 18 E NC000	032U3645	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	FKM	0.08	1,5	-10	+ 100	EV210B 1,5 SS	G 18 F NC000		032U3646	30.0	30.0	30.0	30.0	30.0	30.0	30.0
G1/8	EPDM*	0.15	2,0	- 30	+ 120	EV210B 2,0 SS	G 18 E NC000	032U3647	30.0	20.0	30.0	30.0	30.0	30.0	30.0	30.0
	FKM	0.15	2,0	-10	+ 100	EV210B 2,0 SS	G 18 F NC000		032U3648	30.0	20.0	30.0	30.0	30.0	30.0	30.0
G1/8	EPDM*	0.30	3,0	- 30	+ 120	EV210B 3,0 SS	G 18 E NC000	032U3649	15.0	9.0	24.0	20.0	13.0	30.0	25.0	
	FKM	0.30	3,0	-10	+ 100	EV210B 3,0 SS	G 18 F NC000		032U3650	15.0	9.0	24.0	20.0	13.0	30.0	25.0
G1/4	EPDM*	0.15	2,0	- 30	+ 120	EV210B 2,0 SS	G 14 E NC000	032U3651	30.0	20.0	30.0	30.0	30.0	30.0	30.0	30.0
	FKM	0.15	2,0	-10	+ 100	EV210B 2,0 SS	G 14 F NC000		032U3652	30.0	20.0	30.0	30.0	30.0	30.0	30.0
G1/4	EPDM*	0.30	3,0	- 30	+ 120	EV210B 3,0 SS	G 14 E NC000	032U3653	15.0	9.0	24.0	20.0	13.0	30.0	25.0	
	FKM	0.30	3,0	-10	+ 100	EV210B 3,0 SS	G 14 F NC000		032U3654	15.0	9.0	24.0	20.0	13.0	30.0	25.0
G1/4	EPDM*	0.55	4,5	- 30	+ 120	EV210B 4,5 SS	G 14 E NC000	032U3655	8.0	3.5	12.0	10.0	4.5	13.0	9.0	
	FKM	0.55	4,5	-10	+ 100	EV210B 4,5 SS	G 14 F NC000		032U3656	8.0	3.5	12.0	10.0	4.5	13.0	9.0

\* 140°C / 3,6 bar low pressure steam

- Low pressure steam:     DN 1.5-3:     Use coil type BB og BG  
  DN 4.5:         Use coil type BG

- EPDM versions are WRAS approved

### Ordering - coils

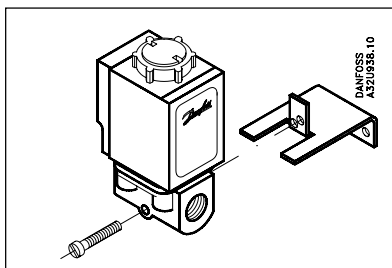
See separate data sheet for coils DKACV.PD.600.A



**Spare parts**

**for solenoid valves  
2/2-way direct-operated  
Type EV210B**

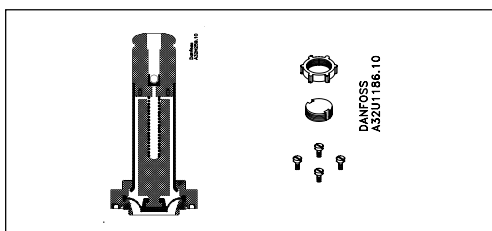
**Mounting fittings, NC/NO**



For EV210B 1.5 B - 4.5 B in connection with synthetic tubes, pipes and similar.

Description	Code no.
Brackets	<b>032U1040</b>

**Optional  
Isolating diaphragm kit**



The kit consists of assembled isolating unit, O-ring, 4 screws, locking button and nut for the coil. Suitable for orifice sizes up to DN 3 mm.

Seal material	Code no.
EPDM	<b>042U1009</b>
FKM	<b>042U1010</b>

**Power kit for EV210B**

The power kit enables the EV210B valve to handle higher differential pressure. The kit can be used on valves up to G $\frac{1}{2}$  connection and with a DN of max 10 mm. Please contact Danfoss for further specifications.

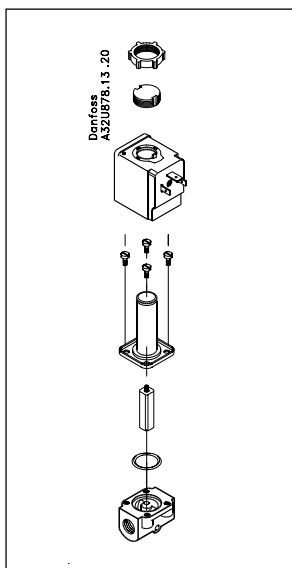
Seal material	Code no.*
EPDM	<b>032U5275</b>
FKM	<b>032U5276</b>

\*Only for use on NC versions

**Spare parts**

**for solenoid valves  
2/2-way direct-operated  
Type EV210B**

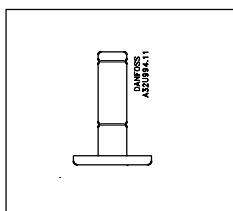
**Spare parts kit, NC**



The spare parts kit comprises a locking button, nut for the coil, armature with valve plate and spring, and an O-ring.

FKM	EPDM	Function
<b>EV210B 1.5/2/3/4.5</b>		
032U2003	032U6000	NC
<b>EV210B 6/8/10</b>		
032U2011	032U2006	NC
<b>EV210B 15</b>		
032U2012	032U2013	NC
<b>EV210B 20</b>		
032U2014	032U2017	NC
<b>EV210B 25</b>		
032U2018	032U2019	NC

**Spare part kit, NO**



FKM	EPDM	Function
<b>EV210B 1.5/2/3/4.5</b>		
032U2004	032U2005	NO



---

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

---

