Ordering NC

Connection ISO228/1	Seal material	k_v - value [m^3/h]	Media temp. Min. [°C]	Media temp. Max. [°C]	Type designation: Main type	Type designation: Specification	Pressure range all coil types: Min. [bar]	Pressure range all coil types: Max.[6] [bar]	Code no. without coil
G ½	EPDM[1]	4	-30	+120[4]	EV220B 15B	G 12E NC000	0.3	16	**032U7115**
	NBR[2]		-10	+90	EV220B 15B	G 12N NC000		16	**032U7170**
	FKM[3]		0	+100[5]	EV220B 15B	G 12F NC000		10	**032U7116**
G ¾	EPDM[1]	8	-30	+120[4]	EV220B 20B	G 34E NC000	0.3	16	**032U7120**
	NBR[2]		-10	+90	EV220B 20B	G 34N NC000		16	**032U7171**
	FKM[3]		0	+100[5]	EV220B 20B	G 34F NC000		10	**032U7121**
G 1	EPDM[1]	11	-30	+120[4]	EV220B 25B	G 1E NC000	0.3	16	**032U7125**
	NBR[2]		-10	+90	EV220B 25B	G 1N NC000		16	**032U7172**
	FKM[3]		0	+100[5]	EV220B 25B	G 1F NC000		10	**032U7126**
G 1 ¼	EPDM[1]	18	-30	+120[4]	EV220B 32B	G 114E NC000	0.3	16	**032U7132**
	NBR[2]		-10	+90	EV220B 32B	G 114N NC000		16	**032U7173**
	FKM[3]		0	+100[5]	EV220B 32B	G 114F NC000		10	**032U7133**
G 1 ½	EPDM[1]	24	-30	+120[4]	EV220B 40B	G 112E NC000	0.3	16	**032U7140**
	NBR[2]		-10	+90	EV220B 40B	G 112N NC000		16	**032U7174**
	FKM[3]		0	+100[5]	EV220B 40B	G 112F NC000		10	**032U7141**
G 2	EPDM[1]	40	-30	+120[4]	EV220B 50B	G 2E NC000	0.3	16	**032U7150**
	NBR[2]		-10	+90	EV220B 50B	G 2N NC000		16	**032U7175**
	FKM[3]		0	+100[5]	EV220B 50B	G 2F NC000		10	**032U7151**

[1]) EPDM is suitable for water and steam (steam max. +140° C / 4 bar).
[2]) NBR is suitable for oil, water and air
[3]) FKM is suitable for oil and air. For water at max. +60 °C
[4]) Low pressure steam, 4 bar:Max. +140°C
BA ac/dc and BB/BE dc coils: Max. +100°C
BO and BP coils: Max. +90°C
[5]) For water: Max. +60°C
BO and BP coils: Max. +90°C
[6]) For higher differential pressure than stated, please contact Danfoss.

Features

EV220BD for slightly aggressive liquids and gases.

- For robust industrial application
- For neutral and slightly aggressive liquids and gases.
- Contact Danfoss if you are in doubt about the valve's suitability for the medium in question.
- Differential pressure: Up to 16 bar
- Viscosity: Up to 50 cSt
- Ambient temperature: Up to +80°C
- Media temperature: from –30 to +140°C
- Coil enclosure: Up to IP 67
- Thread connections: From G ½ to G 2
- Water hammer damped
- Built in filter for protection of pilot system

Technical data

Main type	EV220B 15BD	EV220B 20BD	EV220B 25BD	EV220B 32BD	EV220B 40BD	EV220B 50BD
Installation	Optional, but vertical solenoid system is recommended.					
Pressure range	EPDM: 0.3 - 16 bar					
Max. test pressure	25 bar					
Time to open [1]	40 ms	40 ms	300 ms	1000 ms	1500 ms	5000 ms
Time to close [1]	350 ms	1000 ms	1000 ms	2500 ms	4000 ms	10000 ms
Ambient temperture	Type: BA 9 W ac/15 W dc Up to + 40°C Type: BB 10W ac/18 W dc Up to + 80°C Type: BE 10 W ac/18 W dc (IP67) Up to + 80°C Type: BG 12 Wac/20 W dc Up to + 80°C Type: BO 10 W ac/10 W dc Up to + 40°C Type:BP 16 W dc Up to + 55°C					
Medium temperature	EPDM: -30 - + 120°C and +140°C / 4 bar (low pressure steam)					
Viscosity	max. 50 cSt					
Materials	Valve body: Dezincification resistant brass CuZn36Pb2As/CZ132 Armature: Stainless Steel,..... W.no. 1.4105/AISI 430 FR Armature tube: Stainless Steel,..... W.no. 1.4306/AISI 304 L Armature stop: Stainless Steel,..... W.no. 1.4105/AISI 430 FR Springs Stainless Steel,..... W.no. 1.4310/AISI 301 Orifices: Stainless Steel,..... W.no. 1.4404/AISI 316L Valve seat: Stainless Steel,..... W.no. 1.4404/AISI 316L O-rings: EPDM Valve plate: EPDM Diaphragm: EPDM					

[1]) The times are indicative and apply to water. The exact times will depend on the pressure conditions. Closing times can be changed by replacement of the equalising orifice.

Ordering

Conec-tion ISO 228/1	Seal material	k_{v}-value [m^3/h]	Media temp.		Type designation		Pressure range all coil types		**Code no. without coil**
			Min. [°C]	Max. [°C]	Maintype	Specification	Min. [bar]	Max.[3] [bar]	Approved by WRAS
G ½	EPDM[1]	4	-30	+120[2]	EV220B 15BD	G 12E NC000	0.3	16	**032U5815**
G ¾	EPDM[1]	8	-30	+120[2]	EV220B 20BD	G 34E NC000	0.3	16	**032U5820**
G 1	EPDM[1]	11	-30	+120[2]	EV220B 25BD	G 1E NC000	0.3	16	**032U5825**
G 1 ¼	EPDM[1]	18	-30	+120[2]	EV220B 32BD	G 114E NC000	0.3	16	**032U5832**
G 1 ½	EPDM[1]	24	-30	+120[2]	EV220B 40BD	G 112E NC000	0.3	16	**032U5840**
G 2	EPDM[1]	40	-30	+120[2]	EV220B 50BD	G 2E NC000	0.3	16	**032U5850**

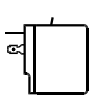
[1]) EPDM is suitable for water and steam (steam max. +140° C / 4 bar).
[2]) Low pressure steam, 4 bar: Max. +140°C
BA ac/dc and BB/BE dc coils: Max. +100°C
BO and BP coils: Max. +90°C
[3]) For higher differential pressure than started, please contact Danfoss.

Ordering

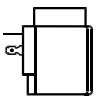
Connection ISO 228/1	Seal material	k_V-value	Media temp.		Type designation		Pressure range all coil types		Code no. without coil
			Min. [°C]	Max. [°C]	Maintype	Specification	Min. [bar]	Max.[5] [bar]	
G ½	EPDM[1] FKM[2]	4	-30 0	+120[3] +100[4]	EV220B 15SS EV220B 15SS	G 12E NC000 G 12F NC000	0.3	16 10	**032U8500** **032U8506**
G ¾	EPDM[1] FKM[2]	8	-30 0	+120[3] +100[4]	EV220B 20SS EV220B 20SS	G 34E NC000 G 34F NC000	0.3	16 10	**032U8501** **032U8507**
G 1	EPDM[1] FKM[2]	11	-30 0	+120[3] +100[4]	EV220B 25SS EV220B 25SS	G 1E NC000 G 1F NC000	0.3	16 10	**032U8502** **032U8508**
G 1 ¼	EPDM[1] FKM[2]	18	-30 0	+120[3] +100[4]	EV220B 32SS EV220B 32SS	G 114E NC000 G 114F NC000	0.3	16 10	**032U8503** **032U8509**
G 1 ½	EPDM[1] FKM[2]	24	-30 0	+120[3] +100[4]	EV220B 40SS EV220B 40SS	G 112E NC000 G 112F NC000	0.3	16 10	**032U8504** **032U8510**
G 2	EPDM[1] FKM[2]	40	-30 0	+120[3] +100[4]	EV220B 50SS EV220B 50SS	G 2E NC000 G 2F NC000	0.3	16 10	**032U8505** **032U8511**

1 EPDM is suitable for water and steam (steam max. +140° C / 4 bar).
2) FKM is suitable for oil and air. For water at max. +60 °C
3) Low pressure steam, 4 bar:Max. +140°C
BA ac/dc and BB/BE dc coils: Max. +100°C
BO and BP coils: Max. +90°C
4) For water: Max. +60°C
BO and BP coils: Max. +90°C
5) For higher differential pressure than stated, please contact Danfoss.

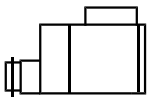
Coil options



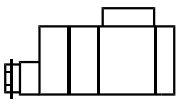
Type: BA
9 W ac
15 W dc



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

Danfoss also offers hum-free coils for noise sensative applications and EEx m II T4 coils for use in explosion risk areas - please see coil data sheet IC.PD.600.A

Ordering Coils

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