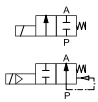


Solenoid valves
2/2-way direct- and servo-operated
Types EV215B and EV225B


 De-energized
closed

**Types EV215B and EV225B
for steam
DN 3 SS, DN 6-25 BD**

G 1/4 - G 1

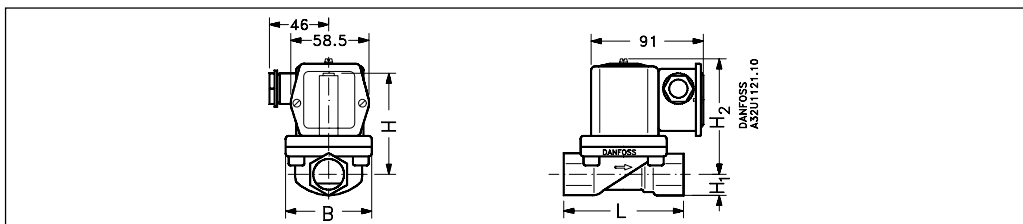
Features


- For robust industrial application
- For steam with a temperature of up to 185°C
- EV225B valves are particularly suitable for applications requiring dirt-resistant valves
- Steam pressure: Up to 10 bar
- Ambient temperature: Up to 40°C
- Coil enclosure: IP 43
- Thread connections: From G 1/4 to G 1
- Regarding NPT thread, please contact Danfoss.

Technical data, valve

Type	EV215 B	EV225B
Installation	Vertical solenoid system is recommended (see DKACV.PT.600.A)	
Pressure range	max. 10 bar	
Max. test pressure	25 bar	
Time to open ¹⁾	max. 0.2 s	
Time to close ¹⁾	max. 2.0 s	
Ambient temperature	max. 40°C at a medium temperature of 185°C	
Medium temp.	185°C with ac coil / 160°C with dc coil	
Materials		
Valve body:	St. steel, W. no. 1.4404 / AISI 316L	DZR brass
Armature/ armature stop	Stainless steel, W. no. 1.4105 / AISI 430FR	
Armature tube:	Stainless steel, W. no. 1.4306 / AISI 304L	
Spring:	Stainless steel, W. no. 1.4310 / AISI 301	
Diaphragm:		PTFE
Valve plate:	PTFE	
Valve seat		Stainless steel, W.no. 1.4305 / AISI 303
External gasket:	O-ring: FKM. Gasket: PTFE	

¹⁾ The times are maximum values and apply to steam. The exact times will depend on the pressure conditions.

Dimensions and weight


Valve type	L [mm]	B [mm]	H [mm]	H ₁ [mm]	H ₂ *) [mm]	Weight with coil [kg]
EV215B 3 SS	38	34	65.5	11.5	76.5	0.56
EV225B 6 BD	62	46	75	13	87	0.78
EV225B 10 BD	62	46	75	13	87	0.82
EV225B 15 BD	81	56	77	15	88.5	0.96
EV225B 20 BD	98	72	84	18	95	1.4
EV225B 25 BD	106	72	90	21	103	1.8

*) In the case of dc coils 5 mm is added to the H₂ measurement.

2/2-way direct- and servo-operated solenoid valves

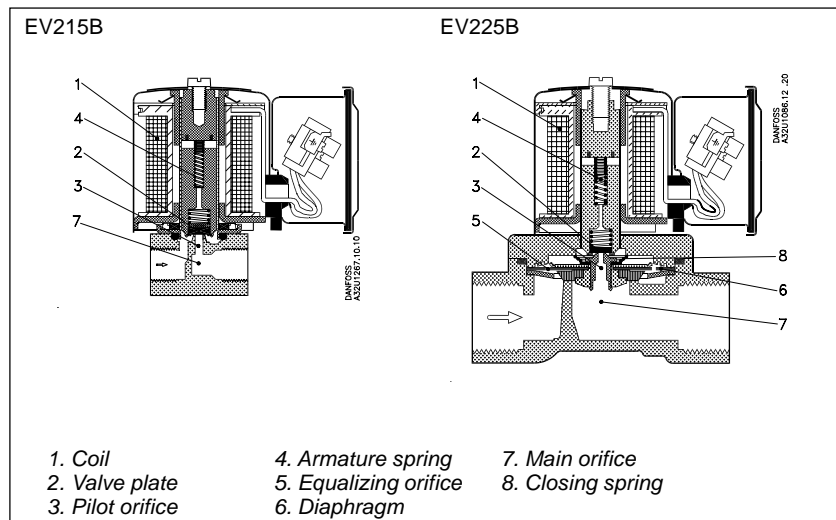
G 1/4 - G 1

Types EV215B and EV225B
for steam
DN 3 SS, DN 6-25 BD

De-energized
closed



Function



Coil voltage disconnected (closed):
When the voltage is disconnected, the valve plate (2) is pressed down against the pilot orifice (3) by the armature spring (4). The pressure across the diaphragm (6) is built up via the equalizing orifice (5). The diaphragm/piston closes the main orifice (7) as soon as the pressure across the diaphragm/piston is equivalent to the inlet 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 (1), the pilot orifice (3) is opened. As the pilot orifice is larger than the equalizing orifice (5), the pressure across the diaphragm (6) drops and therefore it is lifted clear of the main orifice (7). The valve is now open for unimpeded flow and will be open for as long as the minimum differential pressure across the valve is maintained, and for as long as there is voltage to the coil.

Ordering

Con- nection ISO 228/1	Seal material	k _v - value [m ³ /h]	Media temp.		Type designation		Code no.		Permissible diff. pressure (bar)/Coil type		
			ac coil Max.	dc coil Max.			(without appendix)		Min.	Max.	
			[°C]	[°C]	Main type	Specification	with ac coil	with dc coil		10 W ac	17 W dc
G 1/4	PTFE	0.3	185	160	EV215B 3 SS	G 14T NC000	032U3001	032U3011	0	10	10
G 1/4	PTFE	0.9	185	160	EV225B 6 BD	G 14T NC000	032U3002	032U3012	0.2	10	10
G 3/8	PTFE	2.2	185	160	EV225B 10 BD	G 38T NC000	032U3003	032U3013	0.2	10	10
G 1/2	PTFE	2.2	185	160	EV225B 10 BD	G 12T NC000	032U3004	032U3014	0.2	10	10
G 1/2	PTFE	3.0	185	160	EV225B 15 BD	G 12T NC000	032U3005	032U3015	0.2	10	10
G 3/4	PTFE	5.0	185	160	EV225B 20 BD	G 34T NC000	032U3006	032U3016	0.2	10	10
G 1	PTFE	6.0	185	160	EV225B 25 BD	G 1T NC000	032U3007	032U3017	0.2	10	10

Appendix

Coil voltage	Coil output	Appendix ¹⁾
24 V, 50 Hz	10 W ac	82
48 V, 50 Hz	10 W ac	87
110 V, 50 Hz	10 W ac	83
220-230 V, 50 Hz	10 W ac	84
240 V, 50 Hz	10 W ac	85
380-400 V, 50 Hz	10 W ac	86
220 V, 60 Hz	10 W ac	90
24 V dc	17 W dc	02

¹⁾ To order valve body without coil use appendix 99

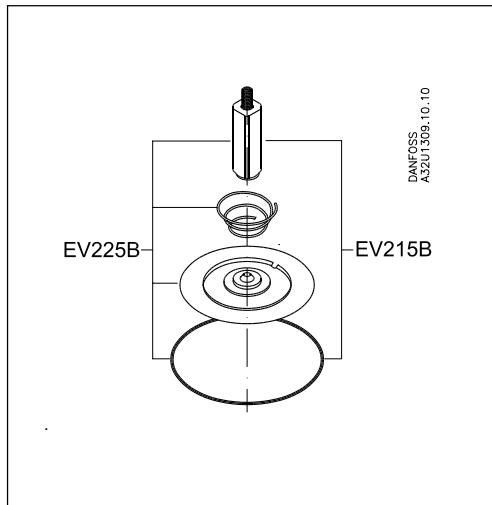
Example: Code no. for EV225B 15 BD valve with 230 V 50 Hz coil is **032U3005.84**

Technical data, coil

Voltage tolerances	230 V and 400 V ac coils: +6%, -15%. Other ac coils: +10%, -15%. dc coils: ±10%
Power consumption, pulling	ac coil: 50 VA
Power consumption, holding	ac coil: 20 VA, 10 W ac / dc coil: 17 W
Insulation of coil windings	Class H according to IEC 85
Connection	Terminal box; Pg 13.5
Coil enclosure, IEC 529	IP 43
Ambient temperature	max. 40°C
Duty rating	Continuous

for 2/2-way direct- and servo-operated solenoid valves
Types EV215B and EV225B

Spare parts kits



Spare parts kit for EV215B

The spare parts kit comprises an armature with valve plate, spring and O-ring.

Spare parts kit for EV225B

The spare parts kit comprises an armature with valve plate and spring, closing spring, diaphragm and O-ring.

Type	Code no.
EV215B	032U3170
EV225B DN 6-10	032U3171
EV225B DN 15	032U3172
EV225B DN 20-25	032U3173

Spare coils



Coil voltages	Code no.
24 V, 50 Hz (10 W ac)	032K1436.82
48 V, 50 Hz (10 W ac)	032K1436.87
110 V, 50 Hz (10 W ac)	032K1436.83
220-230 V, 50 Hz (10 W ac)	032K1436.84
240 V, 50 Hz (10 W ac)	032K1436.85
380-400 V, 50 Hz (10 W ac)	032K1436.86
110 V, 60 Hz (10 W ac)	032K1436.91
220 V, 60 Hz (10 W ac)	032K1436.90
24 V dc (17 W dc)	032K1409.02

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