

Data sheet

Direct-operated 2/2-way solenoid valves for steam Type EV215B



EV215B is a direct operated 2/2-way solenoid valve for use in steam applications.

The design is based on a PTFE valve plate, ensuring high reliable function even in connection with contaminated steam.

Valve body in stainless steel for ensuring a long life even in connection with aggressive steam media.

Features and versions:

- 2/2-way
- Specifically designed for steam applications, 160 °C or 185 °C
- Direct operated
- Ambient temperature: Up to 40°C
- Thread connections: G 1/4"
- Stainless steel valve body
- DN 3
- NC (normally closed)
- EV215B used with BQ coil a.c. voltage up to 185 °C
- EV215B used with BN coil d.c. voltage up to 160 °C
- EV215B used with BB coil a.c. voltage up to 160 °C d.c. voltage up to 140 °C

DZR brass valve body, NC



Conne- ction ISO228/1	Seal mate- rial	Ori- fice size [mm]	k _v - value [m ³ /h]	Differential pressure min. to max. [bar]				Media temperature min. to max. [°C]			Code number
				Coil type BQ 10 W a.c.	Coil type BN 20 W d.c.	Coil type BB 10 W a.c.	Coil type BB 18 W d.c.	BQ	BN d.c. BB a.c.	BB d.c.	
G 1/4	PTFE	3	0.3	0 – 10	0 – 5	0 – 5	0 – 3.6	0 – 185	0 – 160	0 – 140	032U3801

Technical data, NC

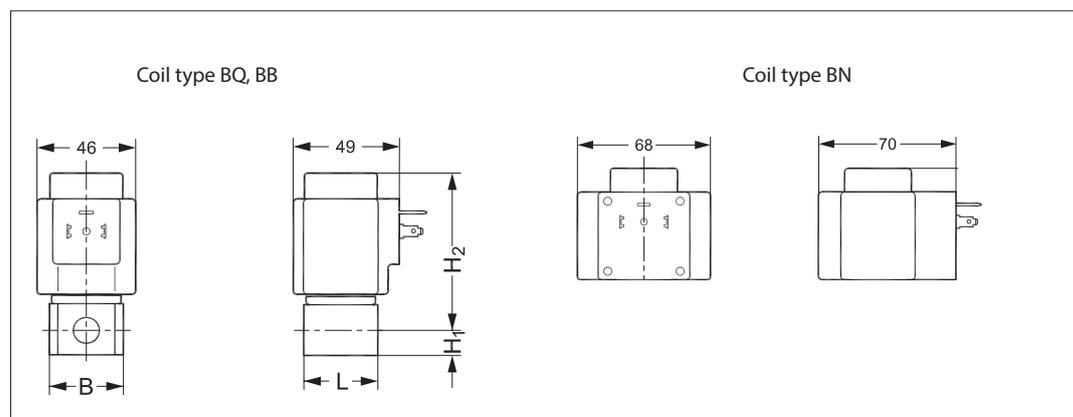
Main type	EV215B
Time to open [ms] ¹⁾	20
Time to close [ms] ¹⁾	20

¹⁾ The times are indicative. The exact times will depend on the pressure conditions.

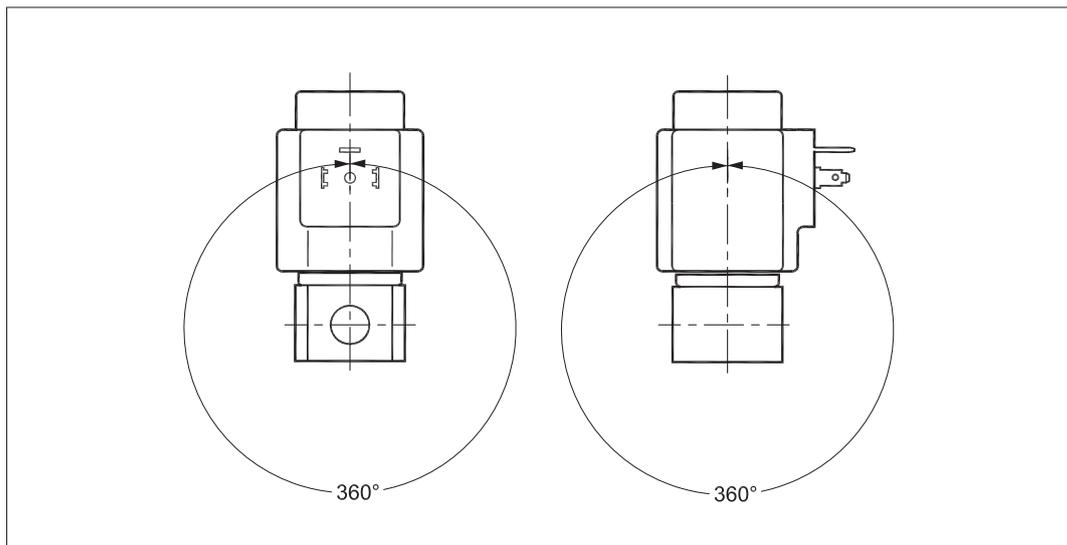
Installation	Vertical solenoid system is recommended		
Max. test pressure	25 bar		
Ambient temperature	Max. 40 °C at a medium temperature of 185 °C		
Viscosity	Max. 50 cSt		
Materials	Valve body	Stainless steel	W. no. 1.4404
	Armature / armature stop	Stainless steel	W. no. 1.4105 / AISI 430FR
	Spring	Stainless steel	W. no. 1.4306 / AISI 304L
	Armature tube	Stainless steel	W. no. 1.4310 / AISI 301
	Valve plate	PTFE	
	External gasket	O-ring: AFLAS	

Dimensions and weight:

Type	L [mm]	B [mm]	H [mm]	H1 [mm]	H2 [mm]	Weight with coil BQ, BB [Kg]	Weight with coil BN [Kg]
EV215B 3	35	35	87	12.5	74.5	0.51	0.79



Mounting angle



Coil type BQ a.c.
Steam coil to 185 °C



Coil voltage	Voltage tolerances	Power consumption, inrush	Coil output [W]	Max media temperature [°C]	Coil appendix	Code number
24 V 50 Hz	+10%, -15%	44 VA	10	185	16	018F4517
110 V 60 Hz	+10%, -15%	44 VA	10	185	20	018F4519
230 V 50 Hz	+6%, -15%	44 VA	10	185	31	018F4511
220 V 60 Hz	+10%, -15%	44 VA	10	185	29	018F4520

Coil type BN d.c.
Steam coils to 160 °C



Coil voltage	Voltage tolerances	Power consumption, inrush [W]	Coil output [W]	Max media temperature [°C]	Coil appendix	Code number
24 V d.c.	±10%	20	20	160	02	018F6968

Coil type BB a.c.
Steam coils to 160 °C



Coil voltage	Voltage tolerances	Power consumption, inrush	Coil output [W]	Max media temperature [°C]	Coil appendix	Code number
24 V 50 Hz	+10%, -15%	44 VA	10	160	16	018F7358
24 V 60 Hz	+10%, -15%	44 VA	10	160	14	018F7365
115 V 50 Hz	+10%, -15%	44 VA	10	160	22	018F7361
110 V 60 Hz	+10%, -15%	44 VA	10	160	21	018F7360
230 V 50Hz	+6%, -15%	44 VA	10	160	31	018F7351
230 V 60 Hz	+6%, -15%	44 VA	10	160	32	018F7363
240 V 50 Hz	+10%, -15%	44 VA	10	160	33	018F7352
380 V 50 Hz	+10%, -15%	44 VA	10	160	37	018F7353

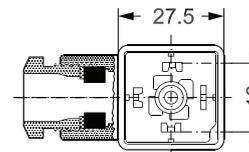
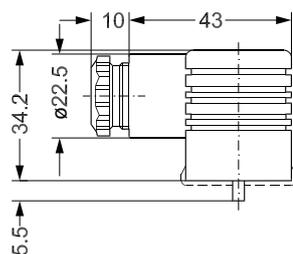
Type BB d.c.
Steam coils to 140 °C

12 V d.c.	±10%	18 W	18	140	01	018F7396
24 V d.c.	±10%	18 W	18	140	02	018F7397

Technical data	Type BQ, BN, BB
Insulation of coil windings	Class H according to IEC 85
Connection	GDM 2011 (grey) Cable plug according to DIN 43650-A PG11
Coil enclosure, IEC 529	IP65
Ambient temperature	Max. 40°C
Duty rating	Continuous

Accessories:
Cable plug

Type	Code number
GDM 2011 (grey), cable plug according to DIN 43650-A PG11	042N0156



Spare part kit

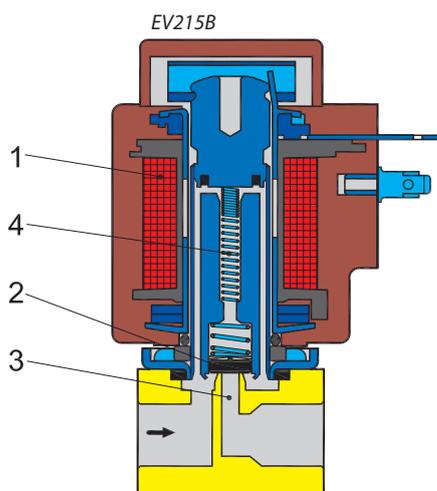


Spare parts kit comprises:

- Armature with valve plate
- Spring
- O-ring

Type	Code number
EV215B	032U3170

Function NC



- 1. Coil
- 2. Valve plate
- 3. Orifice
- 4. Closing spring

Coil voltage disconnected (closed):

When the voltage is disconnected, the closing spring (4) with the valve plate (2) is pressed down against the pilot orifice (3) by the closing spring (4) 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 (1), the closing spring (4) with the valve plate (2) is lifted clear of the orifice (3). The valve is now open for flow and will be open for as long as there is voltage to the coil.

Steam capacity diagrams

Example
 Capacity for EV225 10 BD; inlet pressure (p_1) of 6 bar absolute; differential pressure at 1 bar:
 Approx. 100 kg/h / 80 kW

