



Data sheet

Direct-operated 2/2-way solenoid valves for steamType 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 AC voltage up to 185 °C
- EV215B used with BN coil DC voltage up to 160 °C
- EV215B used with BB coil AC voltage up to 160 °C DC voltage up to 140 °C
- Connection: ISO 228/1

Approvals

All valves are UL/UR approved:





Stainless steel valve body, NC



Connection	Seal	Orifice size	K _V -		min. t	al pressure o max. ar]			ia tempei nin. to ma [°C]		Code no.
ISO228/1	mate- rial	[mm]	value [m³/h]	Coil type BQ AC	Coil type BN DC	Coil type BB AC	Coil type BB DC	BQ	BN DC BB AC	BB DC	Code no.
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

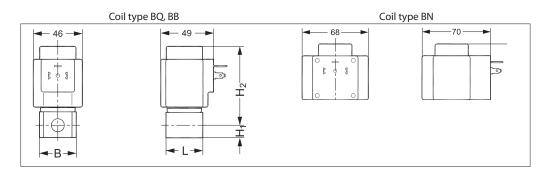
Main type	EV215B
Time to open [ms] 1)	20
Time to close [ms] 1)	20

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

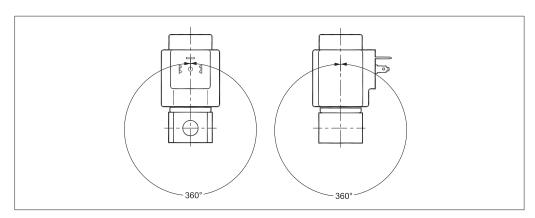
Installation	Vertical solenoid system is recommended						
Max. working pressure (MWP)	10 bar						
Max. test pressure	25 bar (UL 429: 24.1 bar)						
Ambient temperature Max. 40 °C at a medium temperature of 185 °C							
Viscosity	Max. 50 cSt						
	Valve body	Stainless steel	W. no. 1.4404				
	Armature / armature stop	Stainless steel	W. no. 1.4105 / AISI 430FR				
Materials	Spring	Stainless steel	W. no. 1.4306 / AISI 304L				
Materials	Armature tube	Stainless steel	W. no. 1.4310 / AISI 301				
	Valve plate	PTFE					
	External gasket	O-ring: AFLAS					

Dimensions and weight

Туре	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



BB012DS

BB024DS

Duty rating



Coil type BQ AC Steam coil to 185 °C



	Tambient	Supply	Voltage	Frequency	Power co	nsumption		
Туре	[°C]	voltage [V]	variation	[Hz]	[W]	[VA]	Approval	Code no.
BO024CS	-40 – 40	24	-15%, 10%	50	10	17	c FU us	018F4517
BQ024C3	-40 – 40	24	-15%, 10%	60	9.0	16	C TLUS 018F43	01074517
BQ120BS	-40 – 40	110 / 120	-15%, 6%	60	13.5	19	c FU ®us	018F4519
BO240CS	-40 – 40	230	-15%, 6%	50	10	17	c Al us	04054544
BQ240C3	-40 – 40	208 / 240	-6%, 6%	60	9.5	16	C 7744 US	018F4511

Coil type BN DC Steam coils to 160 °C



	Tambient	Supply	Voltage	Frequency	Power co	nsumption		
Туре	[°C]	voltage [V]	variation	[Hz]	[W]	[VA]	Approval	Code no.
BN024DS	-40 – 50	24	±10%	DC	20	-	c FU °us	018F6968

Coil type BB AC Steam coils to 160 °C



	Tambient	Supply	Voltage	Frequency	Power co	nsumption	
Туре	[°C]	voltage [V]	variation	[Hz]	[W]	[VA]	Code no.
BB024AS	-40 - 80	24	-15%, 10%	50	11	19	018F7358
BB115AS	-40 – 50	115	-15%, 10%	50	11	19	018F7361
BB230AS	-40 – 80	220 / 230	-15%, 10%	50	11	19	018F7351
BB240AS	-40 – 80	240	-15%, 10%	50	11	19	018F7352
BB440CS	-40 – 80	400	±10%	50	14	24	018F7353
BB440C5	-40 – 80	440	±10%	60	15	24	018F/353
BB024BS	-40 - 80	24	-15%, 10%	60	14	23	018F7365
BB110CS	-40 – 50	110	±10%	50	15	28	018F7360
BBTTUCS	-40 - 50	110	±10%	60	13	22	018F7360
PRODUCE	40 50	220 / 230	±10%	60	13	24	01057363
BB230CS	-40 – 50	220 / 230	±10%	50	16	31	018F7363

Type BB DC Steam coils to 140 °C

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

DC

DC

14

16

018F7396

018F7397

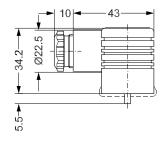
±10%

±10%

Accessories: Cable plug



Туре	Code no.
GDM 2011 (grey), cable plug according to DIN 43650-A PG11	042N0156



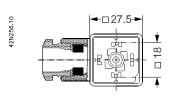
-40 - 50

-40 – 50

12

24

Continuous





Spare part kit

Туре	Code number
EV215B	032U3170

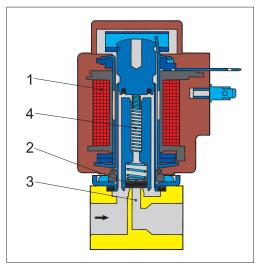


Spare parts kit comprises:

Armature with valve plate Spring O-ring

Function NC

EV215B



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 the orifice (3).

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

- 1. Coil
- Valve plate
- Valve plate
 Orifice
 Closing spring



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

