

2-way solenoid valves with
Clip-on coils for neutral
liquids and gases



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Introduction

The Danfoss range of general purpose solenoid valves is a series of modern 2-way valves for use with neutral liquids and gases.

If there is need for servicing, spare parts sets for all valve types are available from a world wide network of Danfoss distributors.

These products are based on more than 50 years of experience in the design, production and application of high quality solenoid valves.

Valve Types

Direct acting valves, type EVI, with no minimum differential pressure requirement. For smaller flow volumes.

Pilot operated valves, type EVSI, which require a minimum differential pressure for correct operation. For medium to large flow volumes.

Materials in NC and NO valves

	EVI 1.5 - 10	EVSI 6 - 22	EVSI 6 - 22	EVSI 15 - 50	EVSI 15 - 50
For media ¹⁾	OLW	W	OLW	OLW	WD
Armature and magnet	17% stainless chrome steel				
Armature tube and spring	18% stainless steel, AISI 304				
Valve body	Brass MS 58 ²⁾				
O-ring	NBR ^{3) 4)}	EPDM	FKM	NBR ⁴⁾	EPDM
Valve plate	NBR ^{3) 4)}	EPDM	FKM	NBR ⁴⁾	EPDM
Diaphragm	-	EPDM	FKM	FKM	EPDM

¹⁾ Media Codes:

O = Oil
L = Inert Gas (incl. Air)
W = Water
D = Steam

²⁾ EVSI 50 – gun metal



³⁾ EVI 10 – FKM

⁴⁾ NBR also known as Buna "N" or Nitrile

Ordering

Valve body and coil to be ordered separately (except recognized valves).

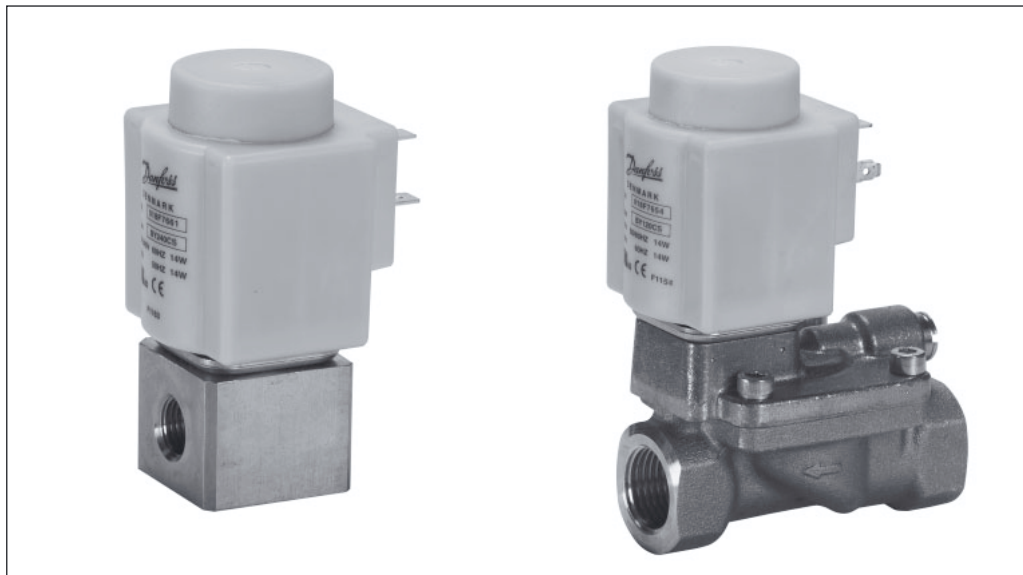
Approvals

-  certified no. 52727
-  file no. MH7648
- UR file no. MH7648 (types EVI 1.5U - 3U and EVSI 6U - 50U)

Data sheet

Type EVI 1.5 - 3U and EVSI - 50U, NC
Component approved in Canada (CSA) and USA (UL)
Not intended for field installation

Features



- For water
- Ambient temperature: Up to 120°F (50°C)
- Brass valve body
- Gasket materials: NBR for EVI 1.5U - 3U, EPDM for EVSI 6U -50U
- Media temperature:
 EVI 1.5U - 3U, EVSI 6U - 18U:
 14°F (−10°C) to 194°F (+90°C)
 EVSI 15U - 50U
 −22°F (−30°C) to 212°F (+100°C)
- Test pressure:
 EVI-U 1.5, 2, 3 end EVSI 16-10:
 Max. 710 psi (50 bar)
 EVSI-U 12, 18: 225 psi (16 bar)
 EVSI-U 15, 20: 280 psi (20 bar)
- Always supplied with coil fitted with 9.5 W AC, 24 V/60 Hz, 120 V/60 Hz or 240 V/60 Hz

Ordering

In the ordering table below, a code number, type designation and suffix coil voltage are stated for each valve.
 Please use this information for ordering.

Example:
 EVI 3 U - 032U7605.32,
 240 V/60 Hz, NPT 1/4 in.

Suffix coil voltage

9.5 W AC	Suffix
24 V/60 Hz	19
120 V/60 Hz	21
240 V/60 Hz	32

Direct operated type EVI-U

Connection NPT [inch]	Orifice Size [inch]	Flow value		Opening diff. pressure				Max. Wrk. Press.		Media ¹⁾	Type	Code no. with coil
		C _v USgal/min	k _v m ³ /h	Min		Max.		psi	bar			
1/8	1/16	0.06	0.05	0	0	284	20	500	35	W	EVI 1.5 U	032U7601
1/8	1/12	0.06	0.05	0	0	284	20	500	35	W	EVI 2 U	032U7603
1/4	1/8	0.35	0.30	0	0	284	20	500	35	W	EVI 3 U	032U7605
3/8	1/8	0.35	0.30	0	0	284	20	500	35	W	EVI 3 U	032U7606

Data sheet

Type EVI 1.5 - 3U and EVSI - 50U, NC
 Component approved in Canada (CSA) and USA (UL)
 Not intended for field installation

Servo operated type EVSI-U

Connection NPT [inch]	Orifice Size [inch]	Flow value		Opening diff. pressure				Max. Wrk. Press.		Media ¹⁾	Type	Code no. with coil
		C _v USgal/min	k _v m ³ /h	Min		Max.		psi	bar			
1/4	1/4	0.82	0.7	0	0	145	10	350	25	W	EVSI 6 U	032U7607
3/8	1/4	0.82	0.7	0	0	145	10	350	25	W	EVSI 6 U	032U7608
3/8	3/8	1.76	1.5	1.4	0.1	145	10	350	25	W	EVSI 10 U	032U7609
1/2	3/8	1.76	1.5	1.4	0.1	145	10	350	25	W	EVSI 10 U	032U7610
1/2	1/2	2.93	2.5	4.3	0.3	145	10	142	10	W	EVSI 12 U	032U7611
1/2	9/16	4.7	4	4.3	0.3	145	10	225	16	W	EVSI 15 U	032U7613
3/4	3/4	7	6	4.3	0.3	145	10	142	10	W	EVSI 18 U	032U7612
3/4	3/4	9.4	8	4.3	0.3	145	10	225	16	W	EVSI 20 U	032U7614
1	1	12.9	11	4.3	0.3	145	10	180	12.5	W	EVSI 25 U	032U7615
1 1/4	1 1/4	21	18	4.3	0.3	145	10	180	12.5	W	EVSI 32 U	032U7616
1 1/2	1 1/2	28	24	4.3	0.3	145	10	180	12.5	W	EVSI 40 U	032U7617
2	2	46.8	40	4.3	0.3	145	10	180	12.5	W	EVSI 50 U	032U7618

Further technical information for the valve types EVI and EVSI, see data sheet DKACV.PK.600.B2.22

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