

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

<u>Danfoss</u>



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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.

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

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

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 = OilL = 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

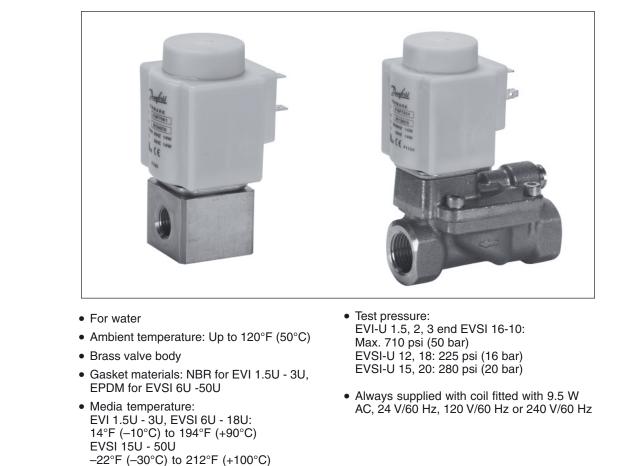
- **()** certified no. 52727
- (1) file no. MH7648
- UR file no. MH7648 (types EVI 1.5U 3U and EVSI 6U - 50U)

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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



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	Orifice Size	Flow value Opening diff. pressure					Max. Wr	k. Press.	Media 1)	Туре	Code no. with	
		C _v	k _v	M		Ma						coil
[inch]	[inch]	USgal/min	m³/h	psi	bar	psi	bar	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	Orifice Size	Flow value		Ope	ening di	ng diff. pressure Max. Wrk. Press.		Media 1)	Туре	Code no. with		
[inch]	[inch]	C, USgal/min	k _v ∣m³/h	M psi	lin bar	Ma psi	ax. bar	psi	bar			coil
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	EVIS 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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Data sheet	Coils						
Introduction	The coils are spec aggressive enviro temperature fluctu refrigeration syste The Clip-on faster installation and ma dismount. A Danfo without any tools a the coil by means The coils are avail Danfoss solenoid	nment of high hum Jations that you fin ms. hing system ensurd akes the coils easy oss Clip-on coil car at all, and it is simp of a screwdriver. lable for the entire	Del.				
Features	 Encapsulated conversion even under extrement Standard coils for the standard coils a terminals 	reme conditions for a.c. or d.c.	 Standard coils from 24 V to 240 V, 50, 60 or 50/60 Hz Coils can be fitted without the use of tools 				
Approvals	N UL recognize	d with EVI, EVSI					
Technical data	Ambient temperate 14 W a.c. coil for N $-40 \rightarrow +122^{\circ}F$ 14 W a.c. coil for N $-40 \rightarrow +122^{\circ}F$ 20 W d.c. coil for N $-40 \rightarrow +122^{\circ}F$	NC (normally close	Permissible voltage variation 14 W a.c. coils: +10/ –15% 20 W d.c. coils: ±10%. Enclosure IP 00				
Connection	<i>DIN plugs</i> Can be fitted with o DIN 43560-A	cable plugs accord	ding to				
	Can be fitted with o DIN 43560-A			Code no.			
	Can be fitted with o	cable plugs accord Voltage V	ding to Frequency Hz	Code no. With DIN spade terminals	Power consumption		
	Can be fitted with o DIN 43560-A Valve type	Voltage V	Frequency				
	Can be fitted with on DIN 43560-A	Voltage V nt a.c.	Frequency Hz		consumption		
Connection Drdering	Can be fitted with o DIN 43560-A Valve type	Voltage V nt a.c. 208-240	Frequency Hz 60				
	Can be fitted with of DIN 43560-A	Voltage V nt a.c.	Frequency Hz	With DIN spade terminals	consumption Holding:		

For direct current coils please ask Danfoss

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