User manual for electrovalve series UM2N



General information

Solenoid valves series UM2N are universal direct solenoid valves, requiring no differential pressure between the input and the output. Depending on the type of used diaphragm (NBR, EPDM, FPM (Viton),UM2N solenoid valves can be used to control the flow of a wide range of factors. Thanks to its simple construction, the solenoid valve is trouble-free and durable, and the service is quick and easy.

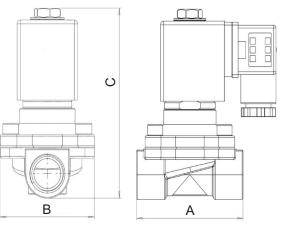
Technical parameters

						Coilu	power	_	oil voltage	
Model	Diaphragm material	Orifice	Flow KV	Thread	Working pressure		AC [VA]	DC	AC	Body material
UM2N NC - normaly close										
UM2N08	H *	2,5	0,19	1/4	0-10	13	18	12, 24	24, 42, 230	Brass, ss 304
UM2N10	H *	10	2	3/8	0,1-16	13	18	12, 24	24, 42, 230	Brass
UM2N10	H *	10	2	1/2	0,1-16	13	18	12, 24	24, 42, 230	Brass
UM2N15-M	N/H *	15	3,98	3/8	0-10	31	26	12, 24	24, 42,110, 230	Brass, ss 304
UM2N15-M	H *	15	3,98	1/2	0-10	31	26	12, 24	24, 42,110, 230	ss 304
UM2N15	N/E/H *	16	4	1/2	0-10	31	26	12, 24	24, 42,110, 230	Brass, ss 304
UM2N20	N/E/H *	20	7,25	3/4	0-10	31	26	12, 24	24, 42,110, 230	Brass, ss 304
UM2N25	N/E/H *	25	10	1	0-10	31	26	12, 24	24, 42,110, 230	Brass, ss 304
UM2N32	N/E/H *	32	20,6	1,1/4	0-10	38	28	12, 24	24, 230	Brass, ss 304
UM2N40	N/E/H *	40	24,2	1,1/2	0-10	38	28	12, 24	24, 230	Brass, ss 304
UM2N50	N/E/H *	50	40	2	0-10	38	28	12, 24	24, 230	Brass, ss 304
UM2N NO - normaly open										
UM2N10NO	N *	4	0,51	3/8	0-10	31	26	12, 24	24, 42,110, 230	Brass
UM2N15NO	N/E/H *	16	4	1/2	0-8	31	26	12, 24	24, 42,110, 230	Brass, ss 304
UM2N20NO	N/E/H *	20	7,25	3/4	0-8	31	26	12, 24	24, 42,110, 230	Brass, ss 304
UM2N25NO	N/E/H *	25	10	1	0-8	31	26		24, 42,110, 230	Brass, ss 304
UM2N32NO	N/E/H *	32	20,6	1,1/4	0-10	38	28		24, 230	Brass, ss 304
UM2N40NO	N/E/H *	40	24,2	1,1/2	0-10	38	28	12, 24	24, 230	Brass, ss 304
UM2N50NO	N/E/H *	50	40	2	0-10	38	28	12, 24	24, 230	Brass, ss 304

- * N NBR -10 do 90 °C water, air, gas, light oil
- E EPDM -20 do 130 °C hot water, liquids, steam
- H FPM (Viton) -10 do 150 °C high chemical resistance

Dimensions

	Α	В	С							
UM2N08	40,5	30	75							
UM2N10	62	32,5	79,4							
UM2N15	67	54	106							
UM2N20	73	55	117							
UM2N25	99	78	125							
UM2N32	116	84	131							
UM2N40	124	93	172							
UM2N50	172	124	195							
UM2N10-NO	70	56	122							
UM2N15-NO	70	56	122							
UM2N20-NO	72	56	127							
UM2N25-NO	100	77	137							
UM2N32-NO	114	85	176							
UM2N40-NO	123	91	184							
UM2N50-NO	170	117	203							



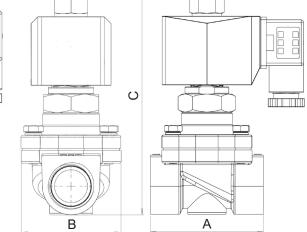


Fig. 1. Dimensions of electrovalves UM2N NC

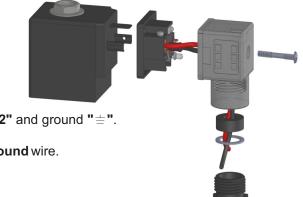
Fig. 2. Dimensions of electrovalves UM2N NO

Set contains

- valve
- coil with DIN plug and LED

Schemat podłączeń elektrycznych / Electrical connection

- 1. Unscrew and remove the screw from the plastic housing and unplug from the coil.
- 2. Use the removed screw to push the terminal block out of the plastic housing.



3. Terminal block have three places to connect electrical wire with symbols "1", "2" and ground "≡". for DC coil, connect to "1" your positive "+" wire and to "2" your negative "-" wire. for AC coil to "1" connect phase wire, to "2" connect neutral lead, and to "≡" ground wire.

Installation and operation

Fig. 3. Electrical connection of coil

- 1. Connect the inlet and outlet to the valve ports according to the flow direction arrow marked on valve body (see fig. 4). Joints should be sealed accordingly.
- 2. Put and screw the coil on to the armature tube of the valve. Attention!!! Do not energize the coil without installing it onto the valve or connect the coil to a different voltage than specified. This will burn the coil and could create fire hazards.
- 3. Standard valves are supplied with continuous duty coils. Parameters of coil you can find on sticker on the coil body. The coil temperature may rise significantly (up to 90°C) if energized for extended periods this is normal. To limit coil heating and power consumption the power save device can be used. Coil has protection rating IP65.

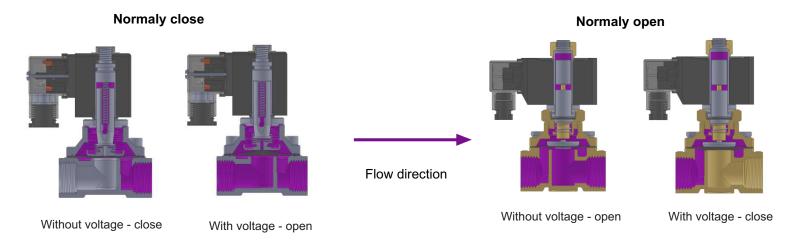


Fig. 4. Flow direction

Construction of electrovalves Normaly open Nut and pad Normaly close (Stainless Steel) Nut and pad Screw (Stainless Steel) (Stainless Steel) Coil Screw Coil armature (Stainless Steel) Cable choke plug (Stainless Steel) Coil armature Cable choke plug (Plastic) Plunger armature Terminal block with housing and gasket (Stainless Steel) (Plastic and rubber) Terminal block with housing and gasket (Plastic and rubber) Gasket Screws 4 pcs (Teflon) Spring Plunger (Stainless Steel) (Stainless Steel) (Stainless Steel 430C) Upper Valve Body Nut (Stainless Steel 430C) Diaphragm Upper Valve Body (Brass, ss304) (NBR, EPDM, FPM(Viton)) (Brass, ss304) Spring (Stainless Steel) Upper Valve Body (Brass, ss304) Lower Valve Body (Brass, ss304)

Měřící a regulační technika
UNIMAR CZ

UNIMaR CZ s.r.o. provozovna Hodkovická 101, 463 12 Liberec 23 obchod@unimarcz.eu www.unimarcz.cz, www.elventil.cz