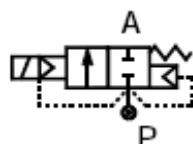
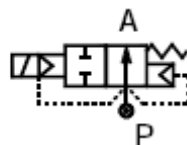


HIGH PRESSURE ELECTRO-VALVE

HEV 2/2 TYPE



Normal - close



Normal - open



The products respect the essential requirements for low tension electrical equipments according to HG 457/2003 (LV Directive 73/23/EEC + 93/68/EEC).

Products equipped with electromagnet (ensample 17 W) fulfil the essential requirements for equipments appropriate for potential explosive atmospheres, according to HG 752/2004 (ATEX Directive 94/9/EC), group II, category 2, G, protection type EEx d II CT6.

APPLICATION AREA

Electro-valves can be used in automation systems for warm and cold water circuit control, saturated vapour, petroleum and petrol products, air and other gases, etc.

The product is a check valve “all or nothing” with two ways and two positions. The normal-close version doesn't allow the fluid to flow if there isn't electric command in the bobbin. At the electric command, the check valve opens and allows the flow of all the fluid. The normal-open variant allows the fluid to flow without electric command. At the electric command in the bobbin, the check valve closes and doesn't allow the flow of the fluid.

RUNNING PRINCIPLE

The product is a check valve with forced action with membrane and requires a pressure difference between the entrance and the exit of minimum 0.2 bar.

PERFORMANCE FEATURES

Nominal diameter DN

12; 16; 20; 25; 32; 40; 50 – for fillet transition variants
25; 32; 40; 50 – for flange transition variants

Pressure PN

Maximum pressure 25...55 bar dependent on the DN for fillet transition variants.
6; 10; 16; 25; 40 bar; 150 Class (20bar) – for flange transition variants.

Minimum differential pressure between the entrance and the exit

0.2 bar

Maximum ambient temperature

+55° C

Minimum ambient temperature

Down to -25° C

Maximum sliminess of the fluid

40 cSt (mm²/s)

Electromagnet's type depends on the ambience and nominal pressure PN

Standard tensions

According to the codification table

Pressure variation limits

0,85-1,1Un

Connection duration

Continuous behaviour 100%

Isolation class

F (+155° C)

Bobbin isolation wire

H (+180° C)

Electromagnet under flame-proof construction EEx d II CT6 according to SR EN 50018 only for normal-close variant.

The number of the examination certificate ex. SECEEx. NMATEx.2004.12025X type.



FUNCTIONING CHARACTERISTICS

Working temperature

T_{min} / T_{max} depends on the seal material (named according to ISO 1629)

Material	Fluid	Temperature (° C)	
		-10	+90
NBR	Air, inert gases, water	-10	+90
FPM (VITON)	Mineral oil; black oil; diesel oil; combustible gases	-10	+18 0
EPDM	Hot water, steam	-10	+14 0

PHYSICAL CHARACTERISTICS

Seal materials

Rubber type NBR, EPDM, FPM (VITON)

Body materials

Brass according to STAS-95-90 to the fillet electro valves DN 12; 16; 20; 25;

Steel for OT moulding according to STAS 600-82 to the electro valves DN 32; 40 and 50 with interior fillet and to all flange variants

Lid materials

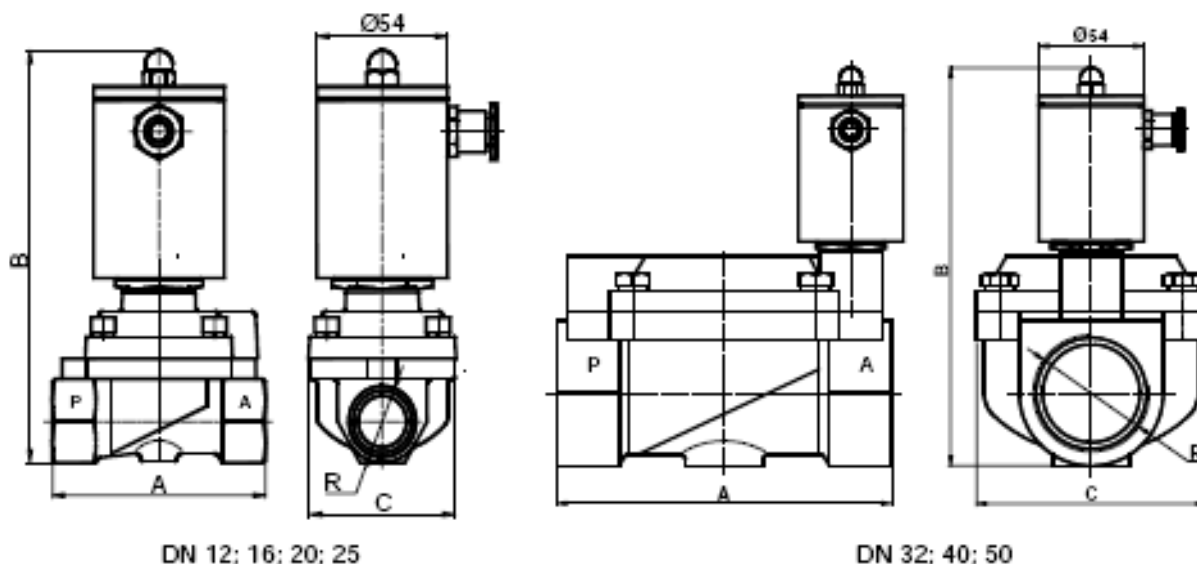
Brass according to STAS-95-90 to the fillet electro valves DN 12; 16; 20; 25;

OLC 25 to the electro valves DN 32; 40 and 50 with interior fillet and to all flange variants.

If you request, the body and the lid can be made of different materials (ensample stainless steel).

CONSTRUCTIVE FORMS AND GAUGE DIMENSIONS

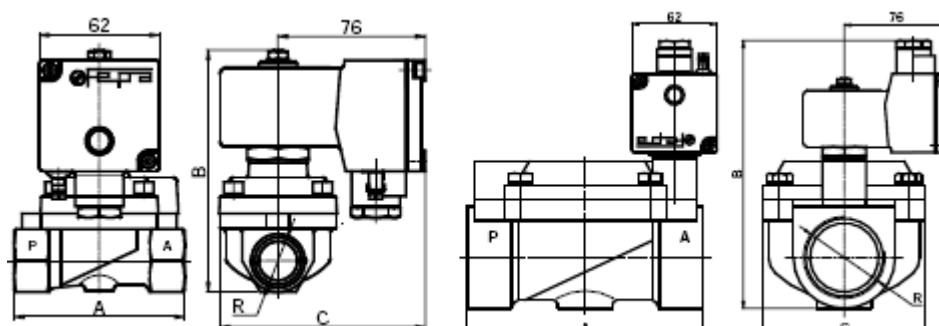
Electro valve with fillet transitions with electromagnet of 17W normal (1 at the d level of codification) HEV 2/2 XX.X.XX.1.X.00



Code	DN	P _{max} bar	* Transitions R	A mm	B mm	C mm
HEV 2/2 12.1.XX.1.X.00	12	55	Rp=1/2"	78	153	50
HEV 2/2 12.2.XX.1.X.00				78	173	50
HEV 2/2 16.1.XX.1.X.00	16	35	Rp=3/4"	88	161	60
HEV 2/2 16.2.XX.1.X.00				88	181	60
HEV 2/2 20.1.XX.1.X.00	20	35	Rp=3/4"	88	161	60
HEV 2/2 20.2.XX.1.X.00				88	181	60
HEV 2/2 25.1.XX.1.X.00	25	25	Rp=1"	98	172	70
HEV 2/2 25.2.XX.1.X.00				98	192	70
HEV 2/2 32.1.XX.1.X.00	32	35	Rp=1 1/4"	144	185	100
HEV 2/2 32.2.XX.1.X.00				144	205	100
HEV 2/2 40.1.XX.1.X.00	40	35	Rp=1 1/2"	144	185	100
HEV 2/2 40.2.XX.1.X.00				144	205	100
HEV 2/2 50.1.XX.1.X.00	50	25	Rp=2"	172	204	118
HEV 2/2 50.2.XX.1.X.00				172	224	118

* At your request, the transition dimension can be set.

Electro valve with fillet transitions with electromagnet IP65 with bobbin covered with epoxy resin (no 2 at d codification level: HEV 2/2 XX.X.XX.2.X.00)



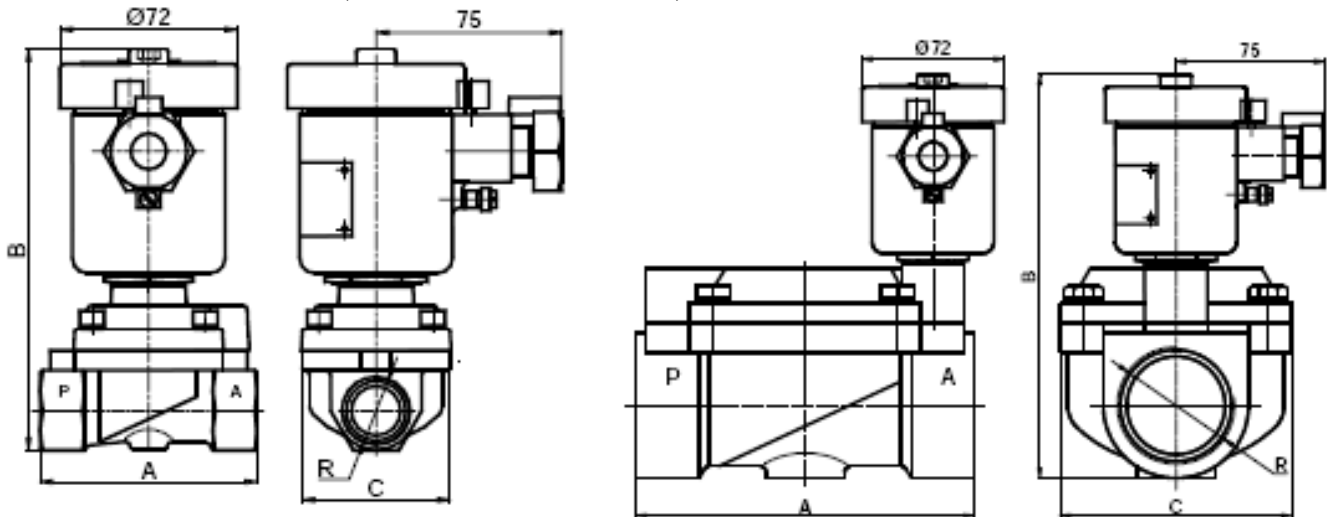
DN 12: 16: 20: 25

DN 32: 40: 50

Code	DN	P _{max} bar	* Transitions R	A mm	B mm	C mm
HEV 2/2 12.1.XX.2.X.00	12	55	Rp=1/2"	78	116	106
HEV 2/2 12.2.XX.2.X.00				78	135	106
HEV 2/2 16.1.XX.2.X.00	16	35	Rp=3/4"	88	152	106
HEV 2/2 16.2.XX.2.X.00				88	175	106
HEV 2/2 20.1.XX.2.X.00	20	35	Rp=3/4"	88	152	106
HEV 2/2 20.2.XX.2.X.00				88	175	106
HEV 2/2 25.1.XX.2.X.00	25	25	Rp=1"	98	163	106
HEV 2/2 25.2.XX.2.X.00				98	185	106
HEV 2/2 32.1.XX.2.X.00	32	35	Rp=1 1/4"	144	177	100
HEV 2/2 32.2.XX.2.X.00				144	200	100
HEV 2/2 40.1.XX.2.X.00	40	35	Rp=1 1/2"	144	177	100
HEV 2/2 40.2.XX.2.X.00				144	200	100
HEV 2/2 50.1.XX.2.X.00	50	25	Rp=2"	172	194	118
HEV 2/2 50.2.XX.2.X.00				172	215	118

* At your request, the transition dimension can be set.

Electro valve with fillet transitions with 17W electromagnet under flame-proof construction EEx d II CT6 (no 3 at d codification level): HEV 2/2 XX.1.XX.3.X.00



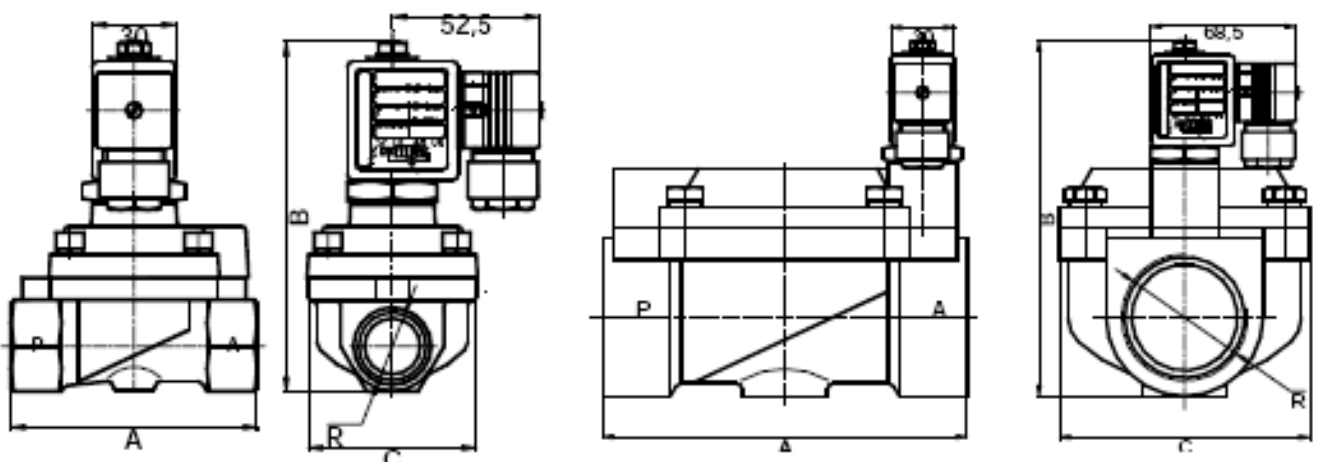
DN 12; 16; 20; 25

DN 32; 40; 50

Code	DN	P _{max} bar	* Transitions R	A mm	B mm	C mm
HEV 2/2 12.1.XX.3.X.00	12	55	R _p =1/2"	78	155	50
HEV 2/2 16.1.XX.3.X.00	16	35	R _p =3/4"	88	163	60
HEV 2/2 20.1.XX.3.X.00	20	35	R _p =3/4"	88	163	60
HEV 2/2 25.1.XX.3.X.00	25	25	R _p =1"	98	173	70
HEV 2/2 32.1.XX.3.X.00	32	35	R _p =1 1/4"	144	188	100
HEV 2/2 40.1.XX.3.X.00	40	35	R _p =1 1/2"	144	188	100
HEV 2/2 50.1.XX.3.X.00	50	25	R _p =2"	172	206	118

* At your request, the transition dimension can be set.

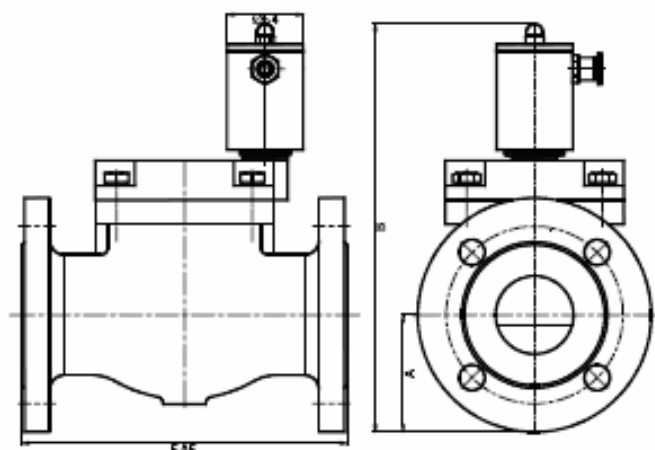
Electro valve of P_{max}= 10 bar with fillet transitions with 8W electromagnet and fisa-cupla ISO 4400 (no. 4 at d codification level) HEV 2/2 XX.X.XX.4.X.00



Code	DN	p _{max} bar	* Transitions R	A mm	B mm	C mm
HEV 2/2 12.1.XX.4.X.00	12	10	Rp=1/2"	78	115	50
HEV 2/2 12.2.XX.4.X.00				78	136	50
HEV 2/2 16.1.XX.4.X.00	16	10	Rp=3/4"	88	124	60
HEV 2/2 16.2.XX.4.X.00				88	144	60
HEV 2/2 20.1.XX.4.X.00	20	10	Rp=3/4"	88	124	60
HEV 2/2 20.2.XX.4.X.00				88	144	60
HEV 2/2 25.1.XX.4.X.00	25	10	Rp=1"	98	135	70
HEV 2/2 25.2.XX.4.X.00				98	155	70
HEV 2/2 32.1.XX.4.X.00	32	10	Rp=1 1/4"	144	148	100
HEV 2/2 32.2.XX.4.X.00				144	168	100
HEV 2/2 40.1.XX.4.X.00	40	10	Rp=1 1/2"	144	148	100
HEV 2/2 40.2.XX.4.X.00				144	168	100
HEV 2/2 50.1.XX.4.X.00	50	10	Rp=2"	172	167	118
HEV 2/2 50.2.XX.4.X.00				172	187	118

* At your request, the transition dimension can be set.

Electro valve with flange ISO 7005-1 PN 16; 25; 40 with electromagnet of 17W normal HEV 2/2 XX.X.XX.1.X.03 and with flange ISO 7005-1 PN 20 (Class 150) HEV 2/2 XX.X.XX.1.X.04

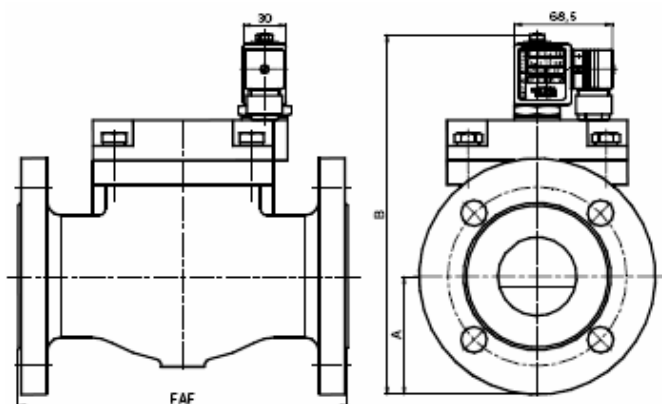


PN 6 / flange ISO 7005-1 PN 6			
DN	FAF	A	B
mm	mm	mm	mm
25	127	50	245
32	146	60	255
40	159	65	260
50	190	70	260

PN10;16;25; 40 / flange ISO 7005-1 PN40			
DN	FAF	A	B
mm	mm	mm	mm
25	160	57,5	250
32	180	70	265
40	200	75	270
50	230	82,5	288

150 Class / flange ISO 7005-1 PN20			
DN	FAF	A	B
mm	mm	mm	mm
25	160	55	250
32	180	60	255
40	200	65	260
50	230	75	270

Electro valve $P_{max}=10$ bar with flange ISO 7005-1 PN 6; 10 with electromagnet of 8W and double-fiche
 ISO 4400: HEV 2/2 XX.X.XX.4.X.01; HEV 2/2 XX.X.XX.4.X.02



PN10 / flange ISO 7005-1 PN40			
DN	FAF	A	B
mm	mm	mm	mm
25	160	57,5	220
32	180	70	240
40	200	75	245
50	230	82,5	252

PN 6 / flange ISO 7005-1 PN6			
DN	FAF	A	B
mm	mm	mm	mm
25	127	50	210
32	146	60	230
40	159	65	235
50	190	70	245

HEV 2/2	a	b	c	d	e	f	Description codification level
Codification level	XX	X	XX	X	X	XX	
							a. Nominal diameter - DN
	12						12
	16						16
	20						20
	25						25
	32						32
	40						40
	50						50
							b. Electro valve condition
	1						Normal close - NI
	2						Normal open - ND
							c. Input tension U_n
		01					12 VDC
		02					24 VDCc
		03					48 VDC
		04					60 VDC
		05					110 VDC
		06					220 VDC
		07					12 VAC 50/60Hz
		08					24 VAC 50/60Hz
		09					42 VAC 50/60Hz
		10					48 VAC 50/60Hz
		11					110 VAC 50/60Hz
		12					120 VAC 50/60Hz
		13					220 VAC 50/60Hz
							d. Electro-magnet type
		1					For normal conditions (no explosion danger, 17 W electro-magnet)
		2					With IP 65 electro-magnet covered with epoxy resin (for rough work conditions)
		3					ExD skid d II CT6, SR EN 50018 (only for 1 at b level)
		4					with electro-magnet of 8 W and double-fiche ISO 4400 ($P_{max}=10$ bar)
							e. Seal materials/ temperature T_{max}/T_{min}
		0					Nitrile rubber – NBR/ water, air blend with gases or petrol liquids at -10 ⁰ C/+90 ⁰ C
		1					EPDM rubber (etilen-propilen-dienic) / water, hot water, steam, at -10 ⁰ C/+150 ⁰ C
		2					Fluorine rubber – FPM (Viton) – mineral oil, black oil, diesel oil etc. at -10 ⁰ C/+180 ⁰ C
							f. Transition type (to be linked with a-nominal diameter level)
		00					With interior cylindrical thread for ISO 7 R _D pipe
		01					With flange ISO 7005 PN 6 / DN 25; 32; 40; 50
		02					With flange ISO 7005 PN 10; PN 16; PN 25 / DN 25; 32; 40; 50
		03					With flange ISO 7005 PN 40 / DN 25; 32; 40; 50
		04					With flange ISO 7005-1, Class: 150 (PN 20) DN 25; 32; 40; 50
		05					With other type of flange and other DN (specified in the command)
							NOTE: to be specified in the command the working pressure (PN), the standard of the flange and seal surface. Normally, the electro-valve is delivered with the fore enumerated flange types and the seal surface is PU.