

ESV Technical Data

ESV Specifications

Technical Specification		
Operating pressure ⁽¹⁾⁽²⁾	2 - 10 bar (30 - 150 psi)	
Operating medium	Air (dry or lubricated)	
Flow l/min (Cv)	Port size: 1/4"	1000 l/min (Cv = 1.0)
Note (1): For Intrinsically-Safe and Low Power version, 2 - 8 bar (30 - 120 psi).		
Note (2): If required, consult factory for minimum pressure setting for over 2 bar (30 psi).		

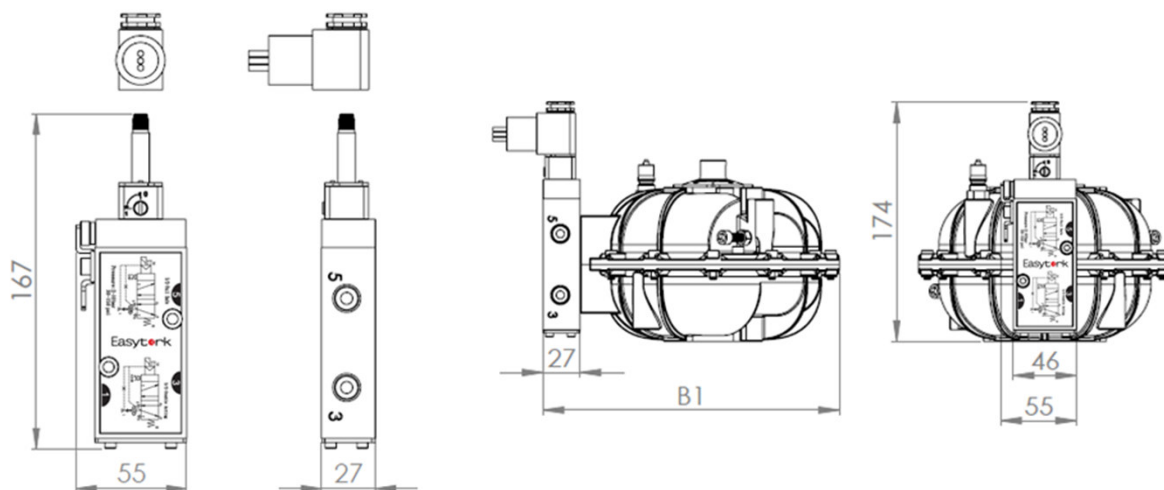
Coil Specifications

Coil	Connection	Note	Width (mm)
Standard	DIN 43650 industrial form B connection or 1/2" conduit without cord	NEMA 4X	22
Explosion Proof	1/2" conduit with 24" leads	NEMA 4, 4X, 7C, 7D, 9 CSA & FM Approved CL. I; Zone1 Ex m II T4; AEx m II CL. I; Div.1; GR. A, B, C, D CL. II; GR. E, F, G CL. III T4 Ta=-20°C to +60°C	36
ATEX EX	3m cable & strain relief	Ex m II T5 PTB 03 ATEX 2018 X Ex II 2 G EEx m II T5 Ex II 2 D IP65 T95°C	22
Intrinsically-Safe	EN175301-803-A/ISO4400	Exia CL. I; GR. A, B, C, D CL. II; GR. E, F, G CL. III; Div. 1; T5	30
Low Temperature	3m cable flexible at low temperature RADOX 155 3G1	Ex II 2 G EEx m II T4 Ex II 2 D IP65 T130°C	36
Low Power	EN175301-803-A/ISO4400	NEMA 4X	30

Coil	Voltage Tolerance	Ambient Temp.	Duty Cycle	Voltage	Frequency (Hz)	Output	Max. Pressure
Standard	+/- 10%	-20°C to 50°C (-4°F to 122°F)	100%	24 DC	-	2.0 W	10 bar (150 psi)
				110 AC	50	4.1 VA	10 bar (150 psi)
				110 AC	60	3.3 VA	10 bar (150 psi)
				230 AC	50	3.9 VA	10 bar (150 psi)
				230 AC	60	3.2 VA	10 bar (150 psi)
Explosion Proof	+/- 10%	-20°C to 60°C (-4°F to 140°F)	100%	24 DC	-	4.6 W	10 bar (150 psi)
				120 AC	60	6.8 VA	10 bar (150 psi)
				230 AC	50	7.5 VA	10 bar (150 psi)
ATEX EX	+/- 10%	-20°C to 50°C (-4°F to 122°F)	100%	24 DC	-	5.0 W	10 bar (150 psi)
				110 AC	50/60	3.8 VA	10 bar (150 psi)
				230 AC	50/60	5.1 VA	10 bar (150 psi)
Intrinsically-Safe (Barrier not included)		-40°C to 50°C (-40°F to 122°F)	100%	24 DC	-		8 bar (120 psi)
				Current > 37 mA			
Low Temperature (Ex-Proof)	+/- 10%	-50°C to 50°C (-58°F to 122°F)	100%	24 DC	-	2.6 W	10 bar (150 psi)
				110 AC	50/60	2.4 VA	10 bar (150 psi)
				230 AC	50/60	2.7 VA	10 bar (150 psi)
Low Power (Standard)	+/- 10%	-20°C to 50°C (-4°F to 122°F)	100%	24 DC	-	0.7 W	8 bar (120 psi)

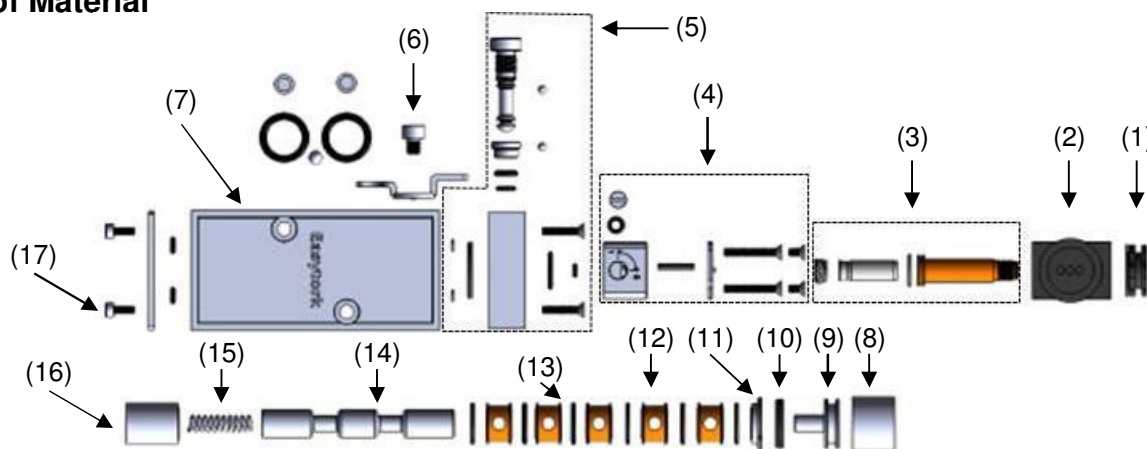
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ESV Dimensions



Note: Figures in drawings in mm.

Bill of Material



Ref No	Description	Standard Version	Chemical Version	Quantity
1	Coil retention nut	Polyamide 6.6	Polyamide 6.6	1
2	Solenoid body	Polyamide 6.6	Polyamide 6.6	1
3	Solenoid stem	Brass	Stainless steel (SS303)	1 set
4	Pilot / manual override	Aluminum	Stainless steel (SS304)	1 set
5	DA / FS switch system	Aluminum	Stainless steel (SS304)	1 set
6	Anti-tamper system	NPS	Stainless steel (SS304)	1 set
7	Valve body*	Aluminum	Stainless steel (SS304)	1
8	Piston sleeve*	Aluminum	Aluminum	1
9	Piston	Aluminum	Aluminum	1
10	Piston seal*	NBR	NBR	1
11	Retainer	Aluminum	Aluminum	1
12	Spacer	Brass	Brass	5
13	Lip seal*	NBR	NBR	6
14	Spool*	Aluminum	Aluminum	1
15	Spring	Stainless steel (SS304)	Stainless steel (SS304)	1
16	Sleeve	Aluminum	Aluminum	1
17	All bolting	Stainless steel (SS304)	Stainless steel (SS304)	1 lot

* Items marked with an asterisk require thin film of lubricant.