

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"	1750 l/min (Cv = 1.8)
ESV body standard temp. range (NBR) ⁽³⁾		-20°C to 80°C (-4°F to 176°F)

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).

Note (3): Temperature range for all series besides Wide Temperature version. Refers only to ESV body temperature rating. Coil temperature rating is separate, refer to coil specifications.

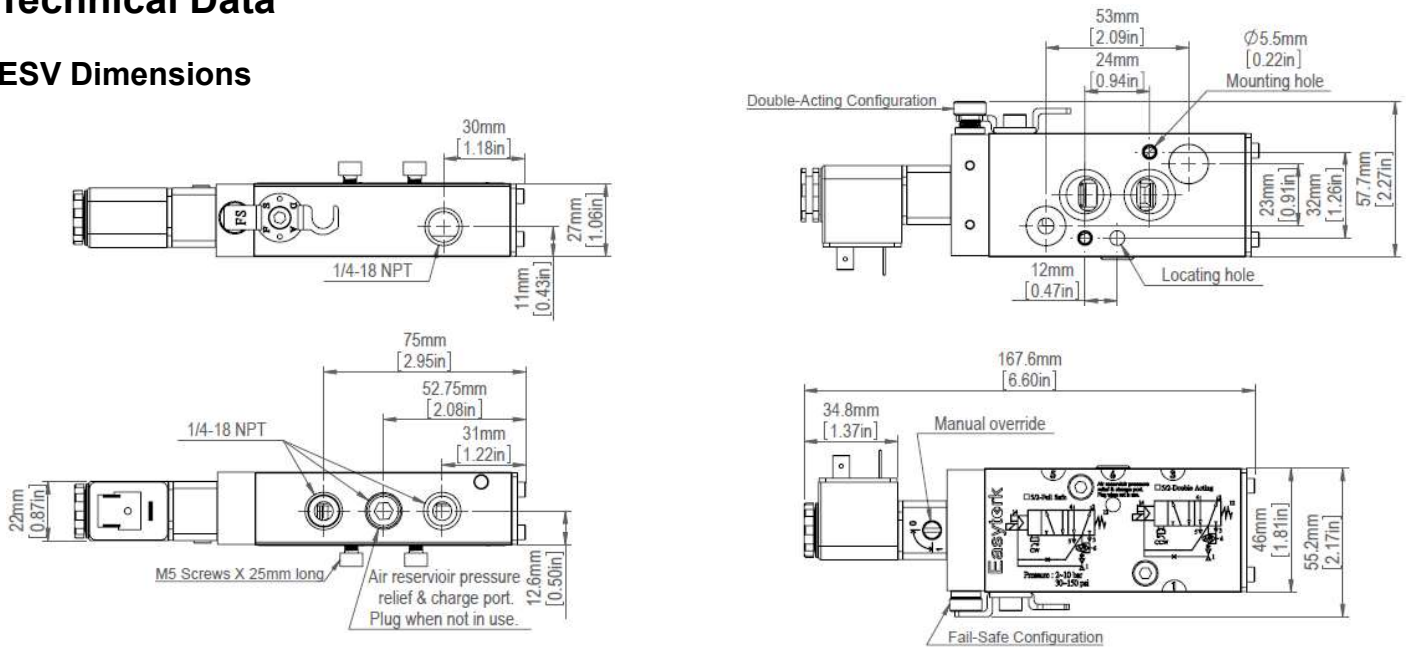
Coil Specifications

Coil	Connection	Note	Width (mm)
Standard	DIN 43650 industrial form B connection or 1/2" conduit with 18" leads	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	DIN 43650 industrial form B connection or 1/2" conduit with 18" leads	NEMA 4X	22
Low Power (1.1W)	DIN 43650 industrial form B connection or 1/2" conduit with 18" leads	NEMA 4X	22

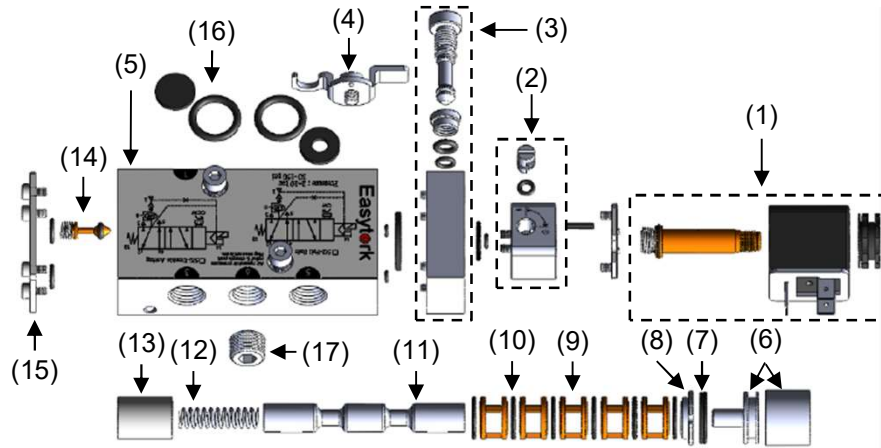
Coil	Voltage Tolerance	Ambient Temp.	Duty Cycle	Voltage	Frequency (Hz)	Output	Max. Pressure
Standard	+/- 10%	-20°C to 50°C (-4°F to 122°F)	100%	24 DC	-	2.0 W	10 bar (150 psi)
				110 AC	50	4.1 VA	10 bar (150 psi)
				110 AC	60	3.3 VA	10 bar (150 psi)
				230 AC	50	3.9 VA	10 bar (150 psi)
				230 AC	60	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	+/- 10%	-40°C to 50°C (-40°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)
Low Power (1.1W, 22mm coil)	+/- 10%	-20°C to 50°C (-4°F to 122°F)	100%	24 DC	-	1.1 W	8 bar (120 psi)

Technical Data

ESV Dimensions



Bill of Material



Ref No	Description	Standard Version	Chemical Version	Quantity
1	Coil & Armature System	Polyamide 6.6 / Brass	Polyamide 6.6 / Stainless Steel	1
2	Pilot System	Polyamide 6.6	Stainless steel (SS303)	1
3	DA / FS switch system	Nickel-plated steel + aluminum	Stainless steel (SS303)	1 set
4	Anti-tamper system	Nickel-plated steel	Stainless steel (SS303)	1 set
5	Valve body*	Aluminum	Stainless steel (SS303)	1
6	Piston sleeve* / piston	Aluminum	Aluminum	1
7	Piston seal*	NBR	NBR	1
8	Retainer	Aluminum	Aluminum	1
9	Spacer	Brass	Brass	5
10	Lip seal*	NBR	NBR	6
11	Spool*	Stainless Steel	Stainless Steel	1
12	Spring	Stainless steel (SS304)	Stainless steel (SS304)	1
13	Sleeve	Aluminum	Aluminum	1
14	Internal check valve	Brass w/ stainless steel spring	Brass w/ stainless steel spring	1
15	All bolting / plate	Stainless steel (SS304)	Stainless steel (SS304)	1 lot
16	O-ring and seal plate	NBR	NBR	
17	Plug	Nickel-plated steel	Nickel-plated steel	

Note (*): Items marked with an asterisk require thin film of lubricant.