



Process
Automation

Our product brands:
IMI MAXSEAL®

ICO3S Direct Acting Hydraulic Solenoid Valves

Electromagnetically Actuated,
Directly Controlled



Breakthrough
engineering for
a better world

ICO3S – Direct Acting Hydraulic Solenoid Valve

Key Benefits

- Stainless Steel 1.4404 (316L)
- Pressure up to 700 bar (10,000 psi)
- Flow rate: 6.0 l/min (typical)
- 3/2 normally closed
- 12V, 24V, 48/50V, 110V & 125V DC
- 1/4" NPT, 1/4" BSP & Manifold Mount
- 1/2" NPT & M20 Conduit
- 100% duty cycle, 25 year life
- Integral filter
- IP66
- SIL 3 Capable ($\lambda_s = 196$, $\lambda_d = 84$ FITS)
- Globally certified for use in hazardous areas



Technical Features

Market Leading Flow Rate	Cv of 0.028 with an inbuilt last chance filter (6LPM Typical) Options up to a Cv of 0.08 (14LPM Typical)*
Multiple Pressure Variants	Variants from 250 bar up to 850 bar*
Low Power Consumption	3W (standard) and 1W (Low Power)
Highest Safety	SIL3 Capable ($\lambda_s = 196$, $\lambda_d = 84$ FITS) Each valve is individually tested Globally certified for Hazardous areas and is IP66
Temperature Range	-30°C to 90°C (-22°F to 194°F)
Leakage	Less than 2ml/hr
Medium	Water Glycol and hydraulic mineral oil (For other media please contact Thompson Valves Ltd.)
Cycle	100% Duty cycle, 25yr life up to 1 million cycles
Operation	3/2 NC (10 bar tank line restriction)

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »Technical features data«. Before using these products with fluids other than those specified, for non-industrial applications, lifesupport systems or other applications not within published specifications, consult Thompson Valves Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided. System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

Option Selector



★★★★4★★★★★S★

Valve Type	Substitute
ICO3S Ex d	YO
ICO3S Ex mbe	YZ
ICO3S Ex ia	YX
Operation Pressure	Substitute
50-250 bar @0.05 Cv and 5W	C
50-350 bar @0.028 Cv	X
50-414 bar @0.028 Cv	Z
200-570 bar @0.028 Cv	A
50-570 bar @0.02 Cv	D
350-700 bar @0.02 Cv	B
Operation	Substitute
Automatic	A
Lever manual reset	L
Lever manual override	M
Nominal Media Connection	Substitute
1/4 NPT	X1
Manifold	NH
1/4" NPT Porting Block	A1
1/4" BSP Porting Block	E1

Voltage	Substitute
24 V d.c.	L
48 / 50 V d.c. (50 V)	B
110 V d.c.	D
125 V d.c.	E
*Other variants available	
Conduit Connection	Substitute
M20 x 1.5mm	1
1/2 NPT	2
Seat / Seal Material	Substitute
NBR	H
FPM	V
Other Options	Add Suffix
Cv of 0.08 only at 250 bar (6W)	-HF
1 Watt *	-LP
1.9 W only at 0.02 Cv	-RP
90/180/270 anti clockwise turn	90/180/270
InMetro	-IMN

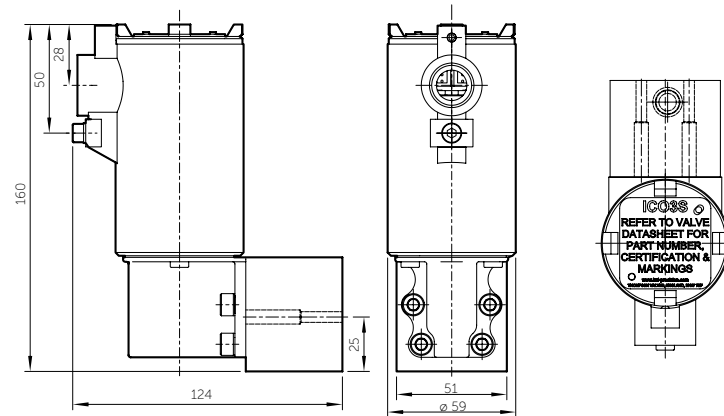
*Contact Thompson Valves Ltd. for bespoke requirements.

Dimensions

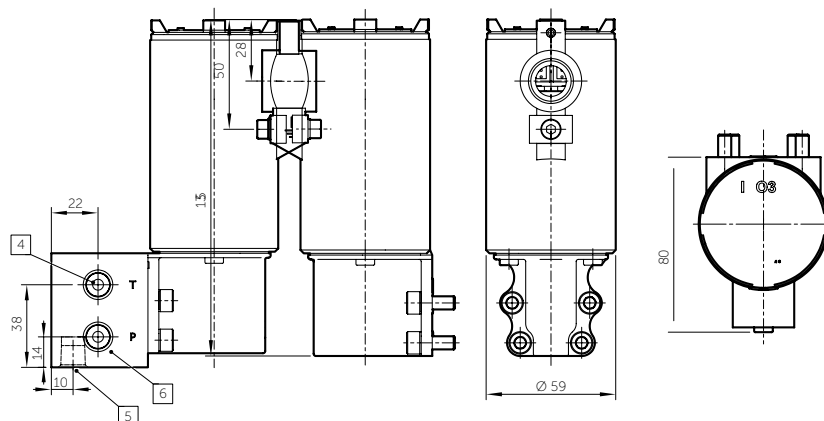
Dimensions in mm
Projection/First angle



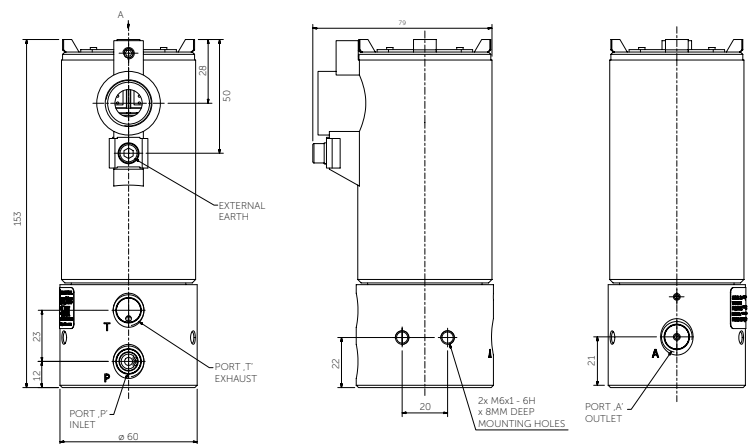
①



②



③



IMI operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, the Czech Republic, Germany, India, Mexico, the UK and the USA.

Supported by distributors worldwide.

For further information visit

www.imi-critical.com

Process Automation

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