

# AVC690 & AVO690 Datasheet

ACTUATED VALVE FOR PNEUMATIC & HYDRAULIC CONTROL PANELS

Gas    Liquid    Diaphragm    Piston    Normally Open    Normally Closed   |   Max Inlet: 690 bar (10,000 psi)   |   Max Outlet: 690 bar (10,000 psi)   |   Cv 0.8



## INTRODUCING THE AVC690 & AVO690...

The AVC690 (normally closed) and AVO690 (normally open) are compact actuated valves suitable for gas and liquid applications, and designed to have a very high cycle life.

They can be used to aid high pressure cycle testing for Research and Development lab work. They are also used in pneumatic and hydraulic control panels, and can be used in a range of sectors including oil & gas, hydrogen, amongst others.

## SPECIFICATION

Max. Rated Inlet Pressure	690 bar (10,000 psi)
Outlet Ranges	Up to 690 bar (10,000 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	Bubble tight
Weight	1kg (2.2lbs)

## STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603) HT Brass CZ114/CW721R (UNS C67500)
Main Valve	ASTM A479 316/316L Stainless Steel
Loading Spring	ASTM A240 301 Stainless Steel (UNS S30100)
Seat	PEEK™ (450G)
Piston	ASTM A479 316/316L Stainless Steel
O-Rings	FPM/FKM
Filter	40 Microns*

*Note:* Valve rating may be limited by connection type, Cv and/or seat material. Contact the office for specific pressure or temperature requirements.  
\* 30 micron filter also available

## FEATURES AND BENEFITS

<b>1</b> HIGH-FLOW CV 0.8	<b>2</b> SOLENOID VALVE OPTION	<b>3</b> FAIL SAFE OPERATION	<b>4</b> LOW ACTUATION PRESSURE	<b>5</b> OPTIONAL FILTER SIZE
High flow for most process applications.	Solenoid valves in control voltages of 12V or 24V.	Available as normally open or normally closed.	3.8 bar (55 psi) actuation pressure.	40 micron filter as standard - 30 micron also available.

Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues. Pressure Tech Ltd support with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.



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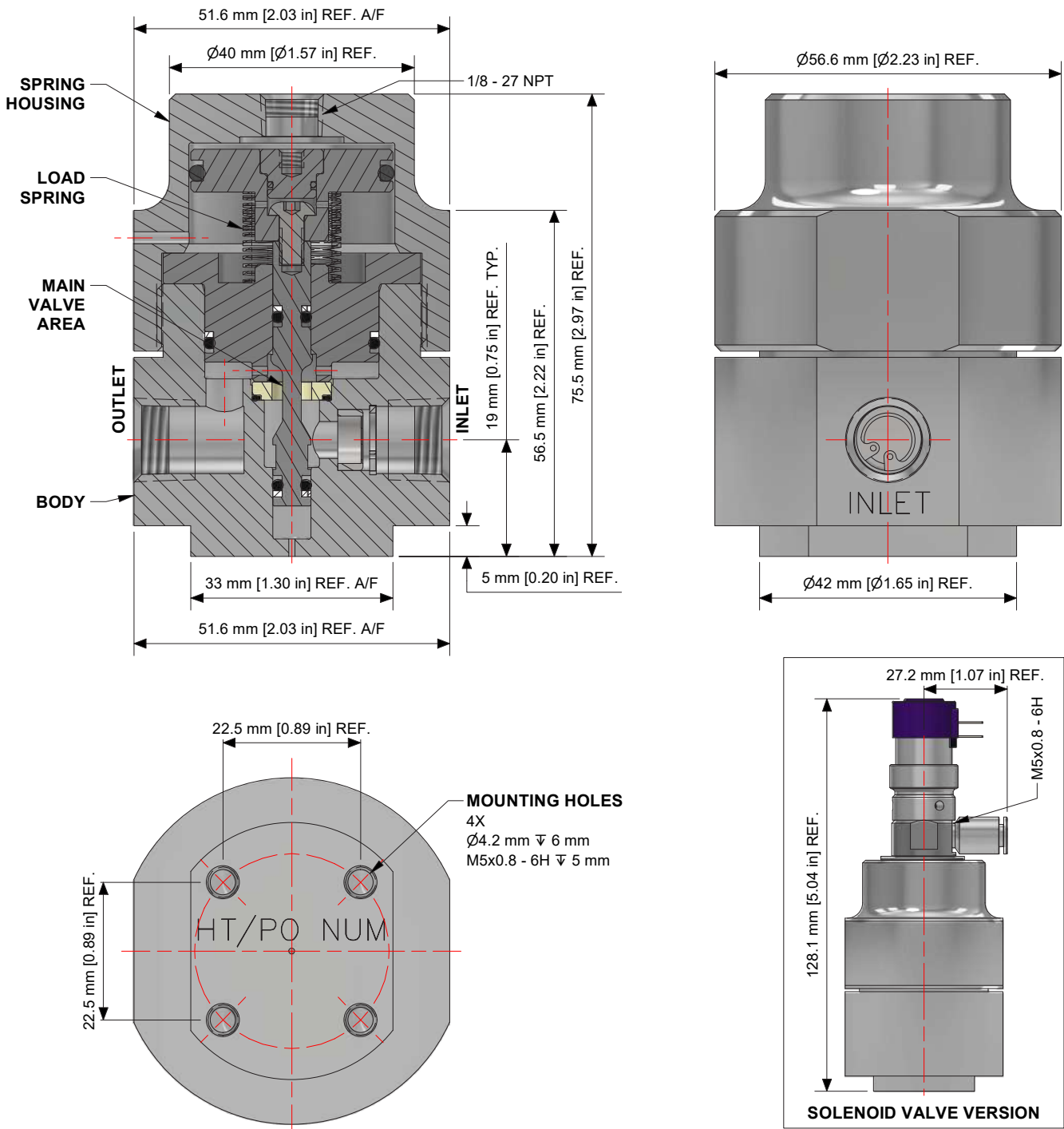
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## DRAWING AND INSTALLATION DIMENSIONS

Please contact the office for further information.



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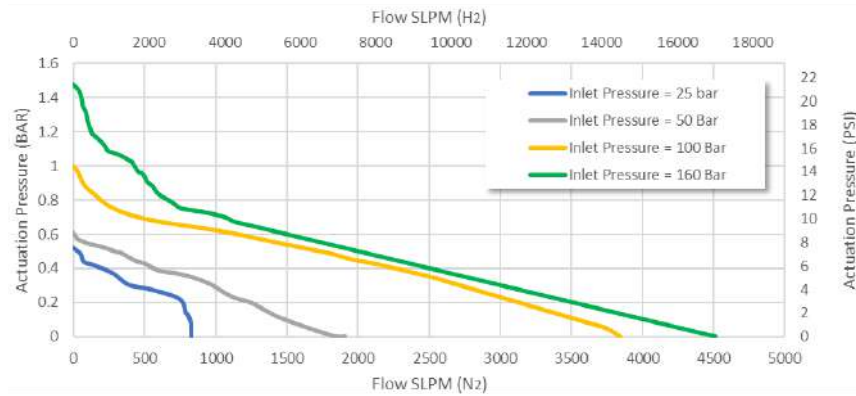
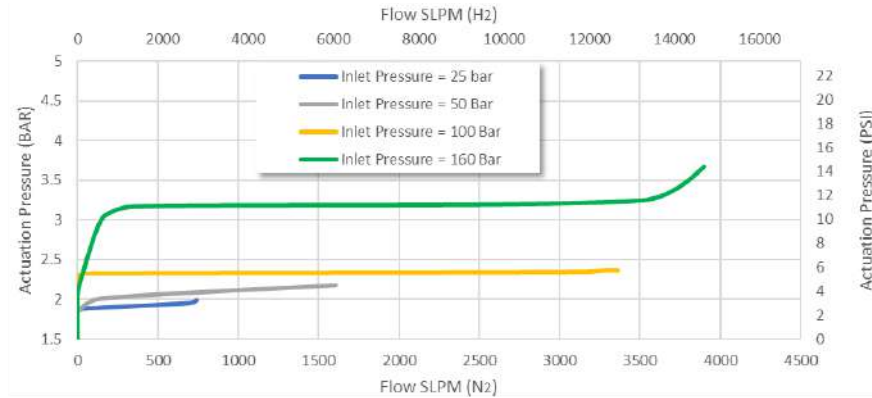
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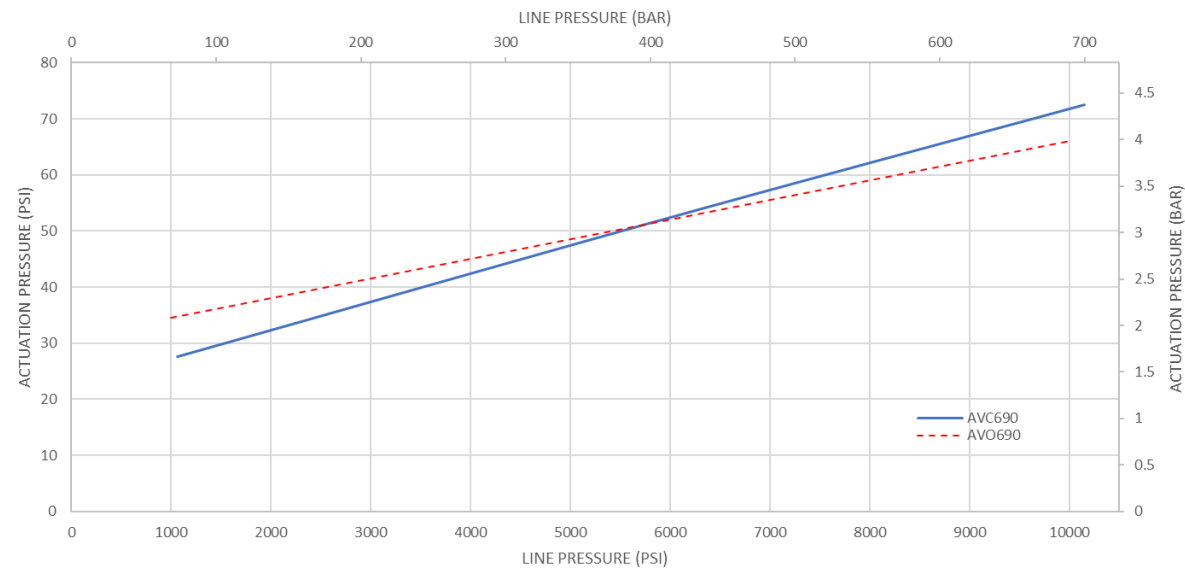
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## FLOW CURVE



## VALVE ACTUATION PRESSURE VS LINE PRESSURE



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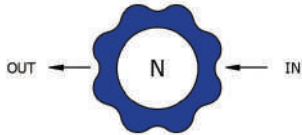
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## PORTING CONFIGURATIONS



## ORDERING INFORMATION

To build a Pressure Tech part number, simply combine the characters identified below in sequence:

AVO690 - S - 250 - V - P - 01N - S12	
<b>FAIL SAFE CONDITION</b> AVC690 – Normally Closed AVO690 – Normally Open	<b>SOLENOID VALVE OPTION*</b> BLANK – No Solenoid Valve S12 – Fitted with 12V Solenoid Valve S24 – Fitted with 24V Solenoid Valve
<b>BODY MATERIAL**</b> B – HT Brass CZ114/CW721R (max. inlet 414 bar/6,000 psi) S – ASTM A479 316/316L Stainless Steel	<b>INLET/OUTLET CONNECTION**</b> 01B – 1/8" BSPP (Cv 0.5 with 1/8") 01N – 1/8" NPT (Cv 0.5 with 1/8") 02B – 1/4" BSPP 02N – 1/4" NPT 03B – 3/8" BSPP 03N – 3/8" NPT SAE4 – 7/16" -18 #4 SAE SAE6 – 9/16" -18 #6 SAE
<b>CONTROL PRESSURE</b> 250 – Up to 250 bar (3,625 psi) 414 – Up to 414 bar (6,000 psi) 690 – Up to 690 bar (10,000 psi)	<b>SEAT MATERIAL**</b> A – Acetal (POM) K – PCTFE (max. inlet 250 bar/3,625 psi) M – Polysulfone (PSU) N – Polyamide Imide (PAI) P – PEEK™ V – Tecasint®
<b>O-RING MATERIAL**</b> F – FFKM/FFPM N – NBR V – FKM/FPM	

TRADEMARKS: PEEK™ is a trademark of Victrex PLC

\* 3/2 solenoid valve as standard (2/2 available on request)

\*\* Other connections/materials may be available

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