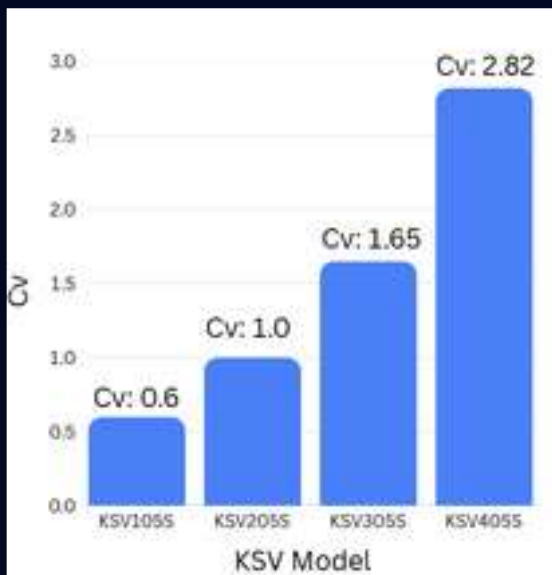




5/2, 5/3 SOLENOID VALVE

Series: KSV

Simple Valve for Precise
Pneumatic Application



+91-11-6929 6136



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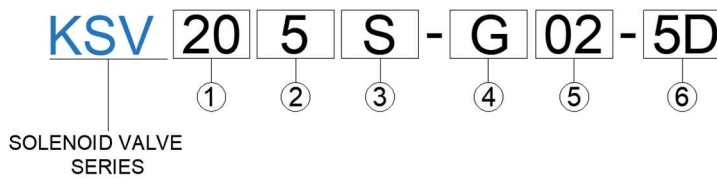


The **Kestech KSV5 Series** comprises a range of 5/2 and 5/3-way solenoid valves designed for high-precision pneumatic control. These valves are widely recognized for their **internal hole processing technology**, which minimizes friction, ensures a low starting pressure, and extends the unit's overall service life.

Characteristics of KSV5 Series Valve

- High Quality Oring and internal design extends the overall life
- Fast magnetization allows high frequency operation
- Valves are design to operate effectively without the use of additional oil & lubrication

HOW TO ORDER



Actuation	Symbol
5/2 Single Acting (S)	
5/2 Double Acting (D)	
5/3 Single Acting (Close Centre)	
5/3 Single Acting (Close Centre)	
5/3 Single Acting (Close Centre)	

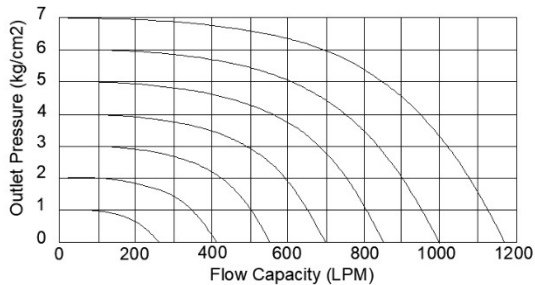
Sno.	Specification	Symbol	Description	
1	Body Size	10	Series 1000	
		20	Series 2000	
		30	Series 3000	
		40	Series 4000	
2	No of Port	5	5 Port	
3	Actuation Type	S	Single Acting	
		D	Double Acting	
		C	5/3 Centre Close	
		P	5/3 Pressure Centre	
		E	Exhaust Centre	
4	Thread Type	Nil	PT	
		G	G Thread	
		N	NPT Thread	
5	Port Size	01	1/8	Series 1000
		02	1/4	Series 2000
		03	3/8	Series 3000
		04	1/2	Series 4000
6	Coil Voltage	Nil	Without Coil	
		5D	24VDC Din Connector	
		4D	220 VAC Din Connector	
		6D	12 VDC Din Connector	
		3D	110 VAC Din Connector	

Technical Specifications

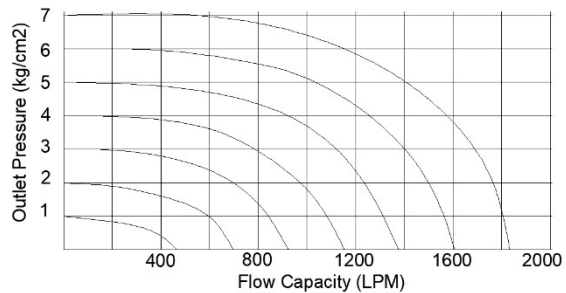
Model		KSV105S KSV205S KSV305S KSV405S	KSV105D KSV205D KSV305D KSV405D	KSV105C KSV205C KSV305C KSV405C	KSV105P KSV205P KSV305P KSV405P	KSV105E KSV205E KSV305E KSV405E
Type		5/2 Single	5/2 Double	5/3 Close Cen.	5/3 Pres. Cen.	5/3 Exh. Cen.
Fluid		40 µm filter air				
Pilot		Internal Pilot				
Cv	KSV1000	0.6	0.6	0.51	0.51	0.51
	KSV2000	1.0	1.0	0.8	0.8	0.8
	KSV3000	1.65	1.65	1.25	1.25	1.25
	KSV4000	2.82	2.82	2.35	2.35	2.35
Max Frequency		5 cycle/sec	5 cycle/sec	3 cycle/sec	3 cycle/sec	3 cycle/sec
Body Material		Aluminum Alloy				
Operating Pressure		1.5 – 8 kg/cm ²				
Proof Pressure		12 kg/cm ²				
Operating Temp.		-20~70°C(unfrozen)				

Flow Chart

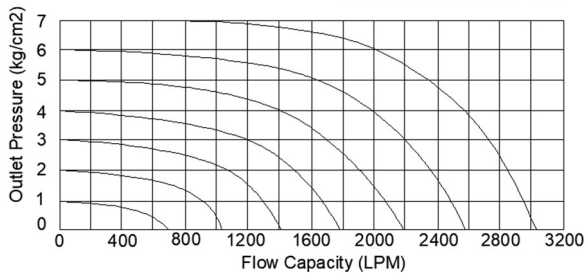
MODEL: KSV105S-G01



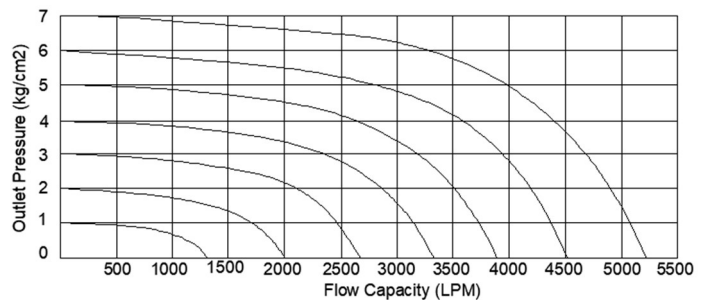
MODEL: KSV205S-G02



MODEL: KSV305S-G03

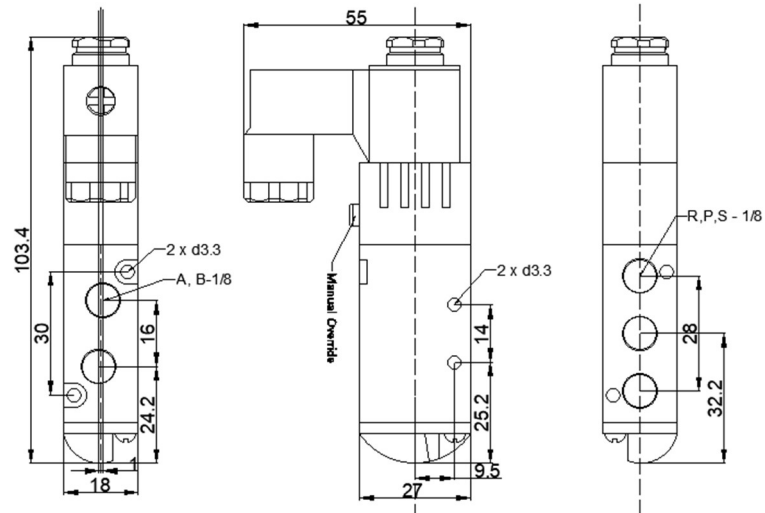


MODEL: KSV405S-G04

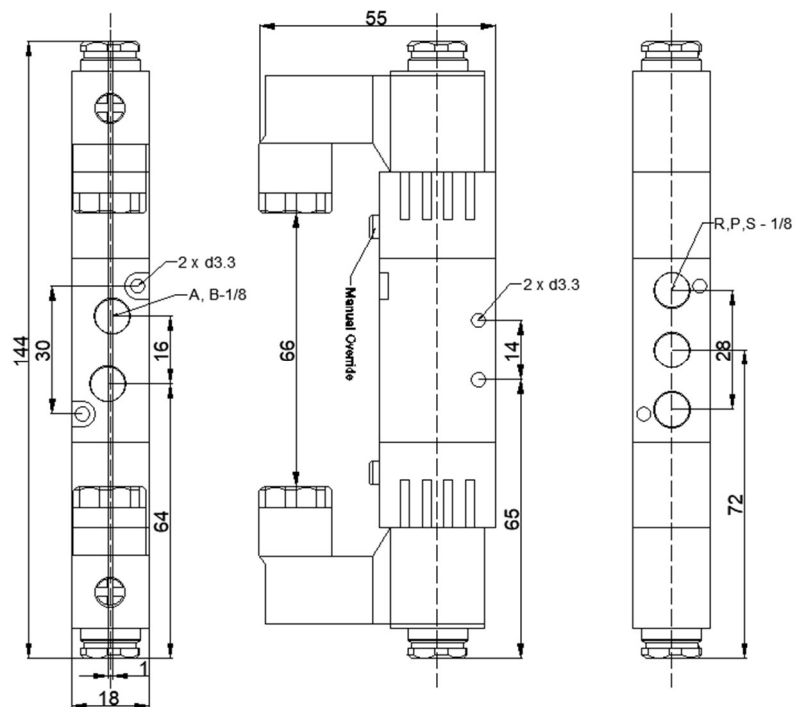


Dimensions

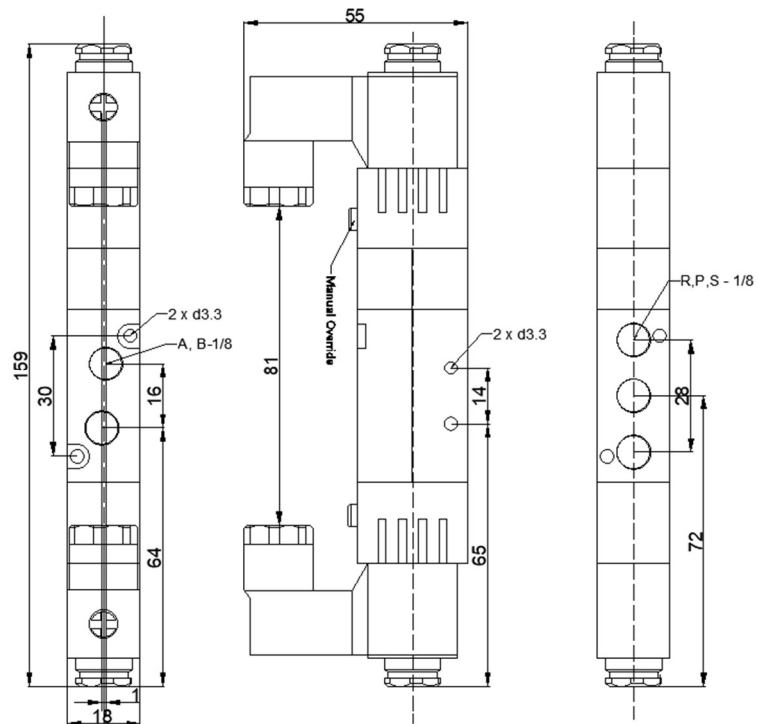
Model: KSV105S



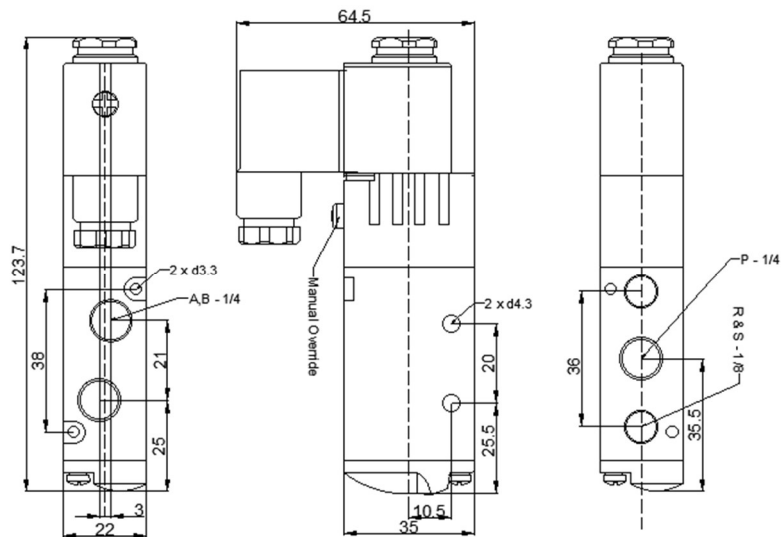
Model: KSV105D



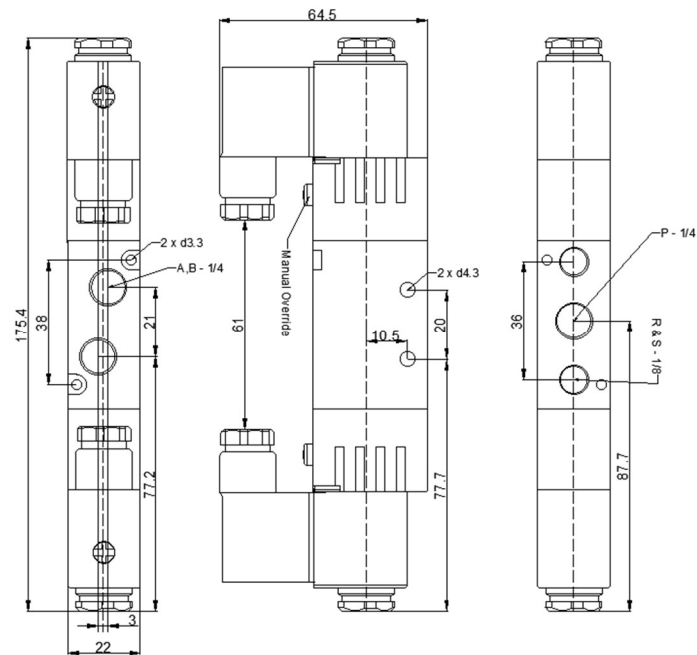
Model: KSV105C/P/E



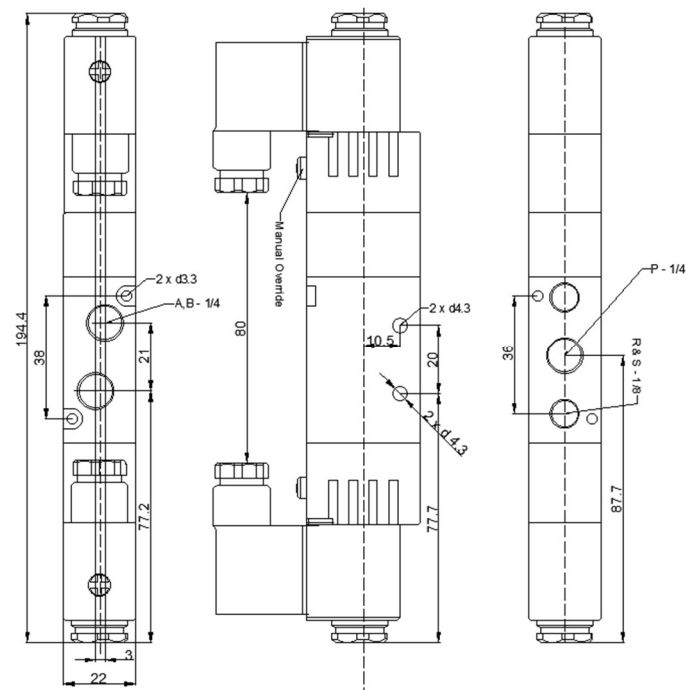
Model: KSV205S



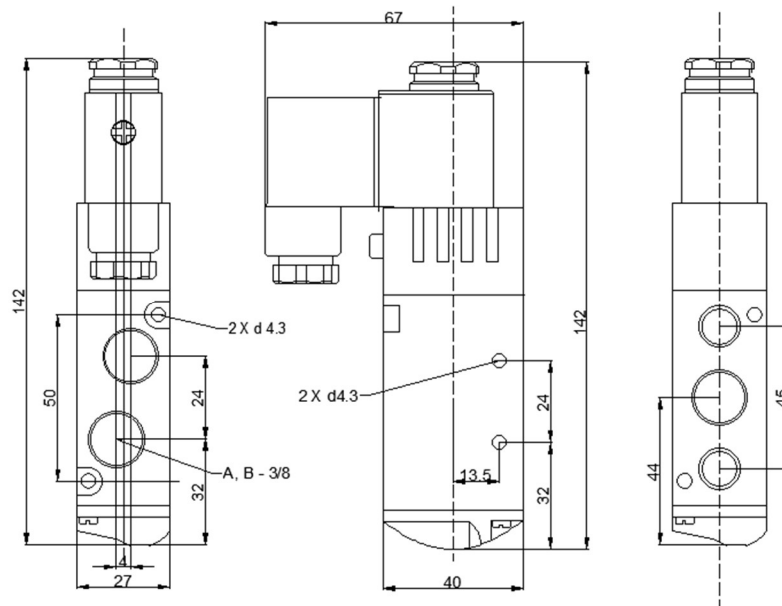
Model: KSV205D



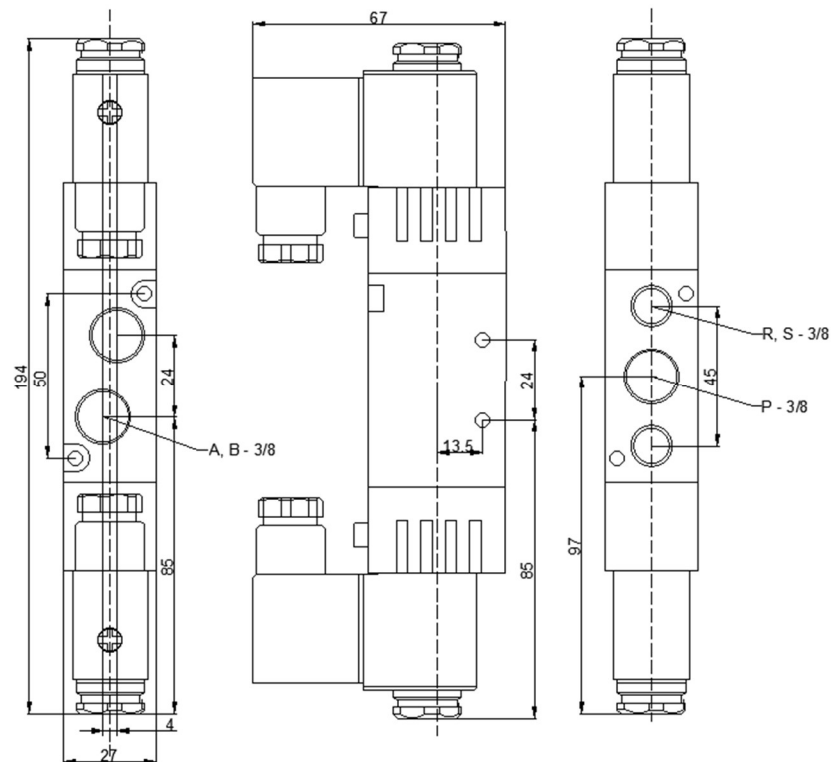
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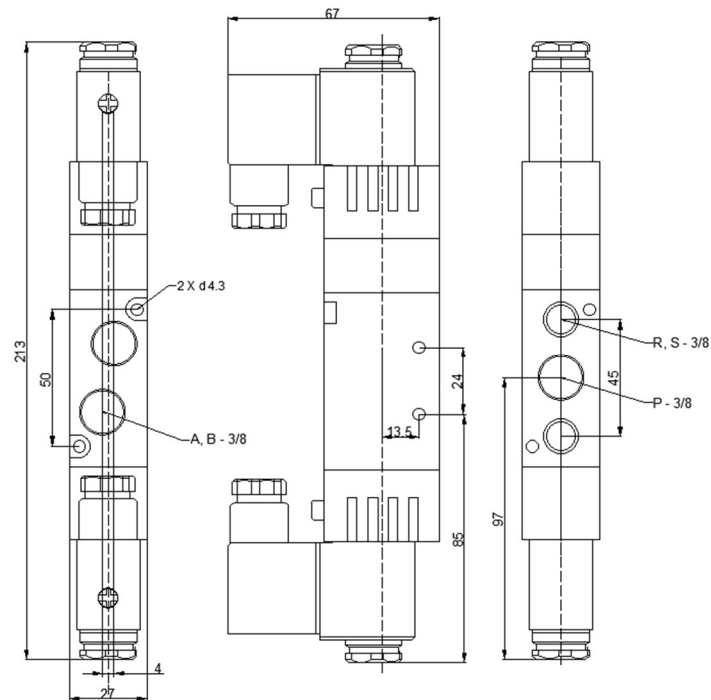
Model: KSV305S



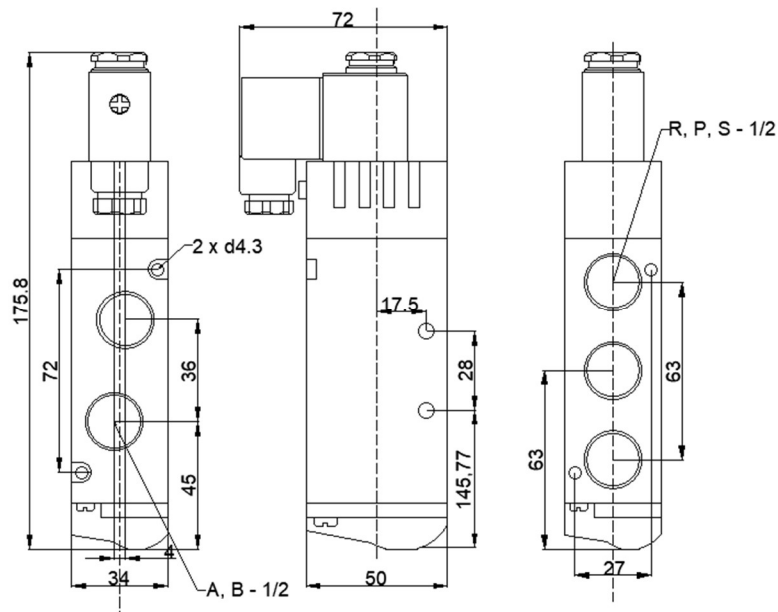
Model: KSV305D



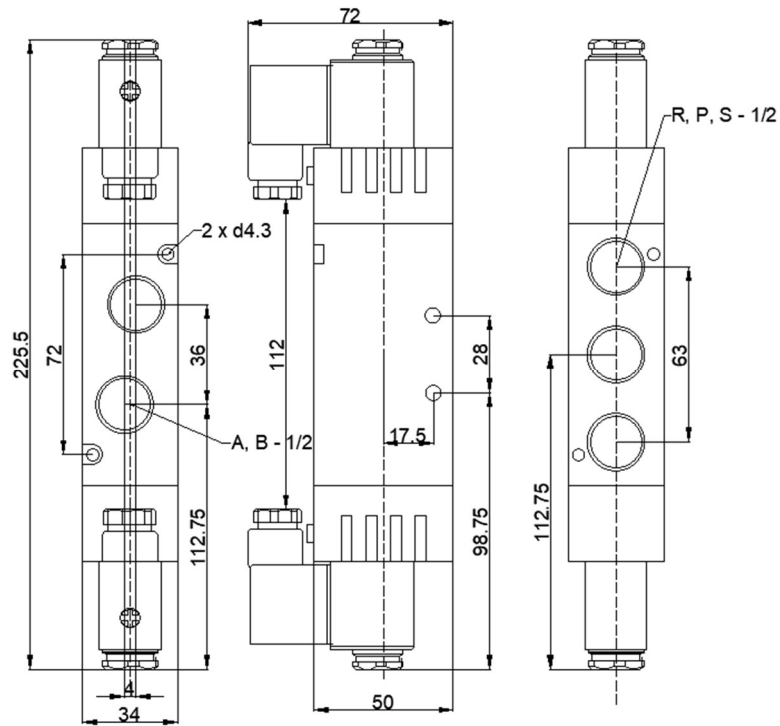
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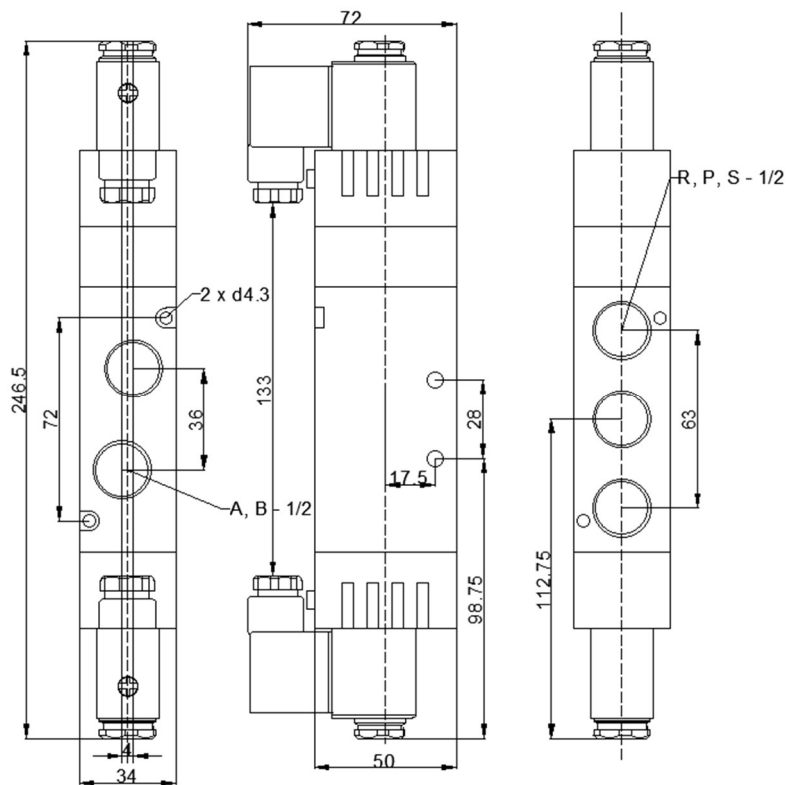
Model: KSV405S



Model: KSV405D



Model: KSV405C/P/E



Coil Specifications

Item	Specification			
Standard Voltage	AC220V	AC110V	DC24V	DC12V
Scope of Voltage	AC±15%		DC±10%	
Power Consumption	4.5VA	4.5VA	3.0W	2.5W
Protection	IP65			
Temp. Classification	B Class			
Electrical Entry	Terminal (Din Connector)			
Activating Time	0.05 Sec			

How To Order (Coil)

SD 2 - 5D |

Coil Series ① ②

Sno.	Specification	Symbol	Description
1	Valve Series	1	Series 1000
		2	Series 2000/3000/4000
2	Coil Voltage	5D	DC 24V
		6D	DC 12V
		4D	AC 220V
		3D	AC 110V

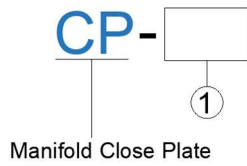
How To Order (Manifold Block)

MB 20 5 -

MANIFOLD BLOCK KSV Series ① ② ③

Sno.	Specification	Symbol	Description
1	Valve Series	10	Series 1000
		20	Series 2000
2	Valve Port	5	5 Port
3	No of Station	02	2 Station
		03	3 Station
		04	4 Station
		05	5 Station
		06	6 Station
		07	7 Station
		08	8 Station
		09	9 Station
		10	10 Station

How To Order (Blank Plate for Manifold)



Sno.	Specification	Symbol	Description
1	Valve Series	10	Series 1000
		20	Series 2000



Precautions

Always maintain the minimum required pressure.

If the supply pressure drops below this threshold—even if the electrical coil is energized—the valve will fail to shift or may "stutter," causing inconsistent cylinder movement.

Use a filter-regulator upstream. Debris or heavy carbon deposits from old compressors can easily block the pilot orifice.

If using a lubricator, ensure it is set correctly. Over-lubrication can cause "stiction" (sticky friction) in the pilot chamber, while the wrong oil can swell the O-rings. Use only ISO VG32 turbine oil or equivalent.

Ensure that the exhaust ports (Ports R/S) are not restricted.

High back-pressure in the exhaust line can oppose the pilot pressure, preventing the spool from returning to its home position. Avoid manifold piping that is undersized for the total volume of air being exhausted.

While most valves can be mounted in any direction, avoid installing them in areas with high-impact vibration that aligns with the spool's travel axis.

Ensure the power supply to the solenoid is stable. A voltage drop of more than **10%** can prevent the pilot plunger from lifting, meaning the pilot air will never reach the main spool.

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