

SOLENOID VALVES ISO K SUB-BASED VALVES – SOLENOID

Specification

Model	200 Series	300 Series	400 Series	600 Series	
Fluid	Air (to be filtered by 40µm filter element)				
Acting	Internal pilot or external pilot				
Lubrication ①	Not required				
Operating Pressure	Internal Pilot	0.2-1.0 Mpa (29-145psi)			
	External Pilot	0-1.0 Mpa (0-145psi)			
Control Pressure (External Pilot)	0.2-1.0 Mpa (29-145psi)				
Proof Pressure	1.5 Mpa (215psi)				
Temperature	-20 – 70°C				
Port Size (Manifold)	1/4"	3/8"	1/2"	3/4"	
Port Size (End Plate)	3/8"	1/2"	3/4"	1	
Voltage Range	AC: ± 15% DC: ± 10%				
Power Consumption	AC: 3.5VA DC: 3.0W				
Activating Time	10/20 Series	33/41ms	42/55ms	50/68ms	55/85ms
(0.5MPa) Open/Close	30 C/E/P Series	38/50ms	52/62ms	52/68ms	55/85ms
Insulation	Class B				
Protection	IP65				
Installation Size	ISO5599-1 standard				

① Note: once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.



Product Features

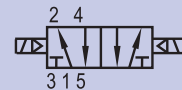
- 1 Succinct appearance and compact conformation.
- 2 The installation size conforms to the ISO 5599/1 standard.
- 3 Special seals improve flow rate and enhance lifetime of product.
- 4 The installation direction of the pilot O-ring can be adjusted to change the acting type to internal pilot, external pilot or air control.
- 5 The valve(s) should be installed together with the KELM™ single or parallel type manifolds.
- 6 Easy to install – various connection and installation methods for manifolds.
- 7 The manifold has an exhaust dampener – no need to connect to separate silencer.

Symbols

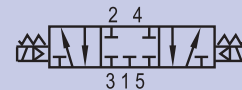
5/2 Solenoid/Spring



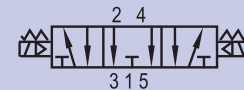
5/2 Solenoid/Solenoid



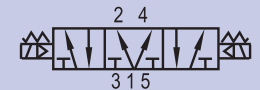
5/3 Solenoid/Solenoid,
Fully Sealed
Mid Position APB



5/3 Solenoid/Solenoid,
Supply Sealed
Mid Position COE



5/3 Solenoid/Solenoid,
Centre Open Pressurised
Mid Position COP



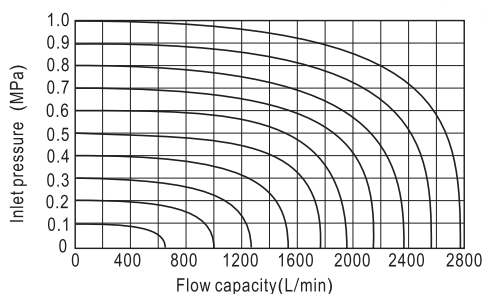
Ordering Code

Model	Code	Valve Type	Pilot Type	Voltage
K5SV:ISO standard solenoid valve	2 : 200 series 3 : 300 series 4 : 400 series 6 : 600 series	10 : Solenoid Spring 5/2 way 20 : Solenoid Solenoid 5/2 way 30C : Solenoid Spring Solenoid 5/3 way Fully Sealed 30E : Solenoid Spring Solenoid 5/3 way Supply Sealed 30P : Solenoid Spring Solenoid 5/3 way Centre Open Pressurised	I : Internal Pilot E : External Pilot	A : AC220V B : DC24V C : AC110V E : AC24V F : DC12V

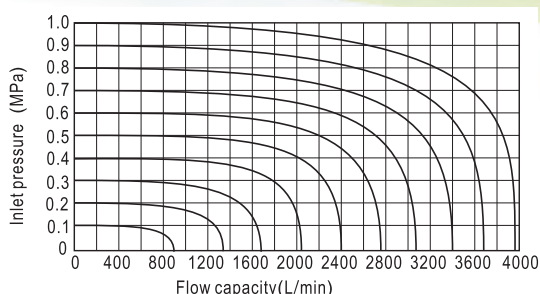
SOLENOID VALVES ISO K SUB-BASED VALVES - SOLENOID

Flow Charts

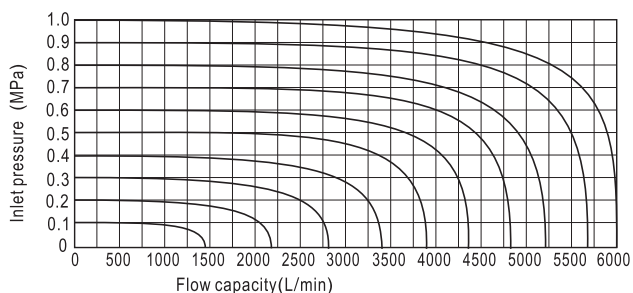
200 Series



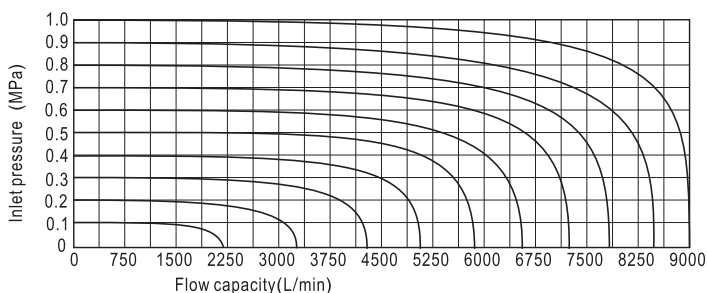
300 Series



400 Series

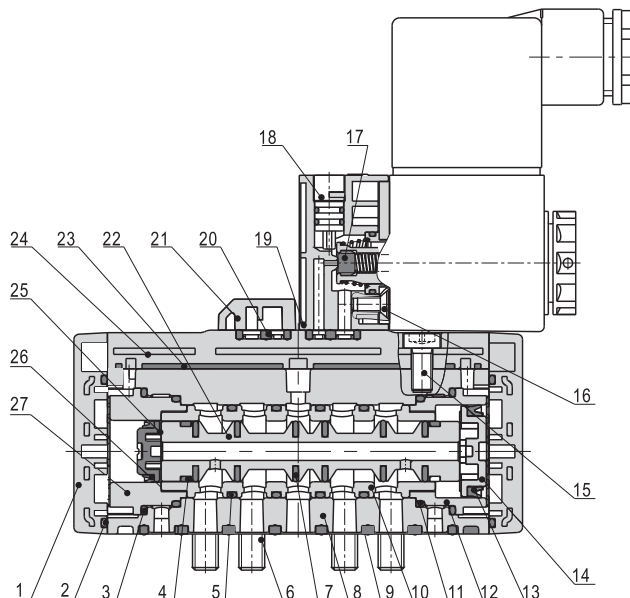


600 Series



Inner Structure

NO.	Item	NO.	Item	NO.	Item
1	Bottom cover	10	Spacer	19	Pilot kit
2	O-ring	11	O-ring	20	Gasket
3	O-ring	12	Big piston sheath	21	Cover plate
4	Wear ring	13	Big piston O-ring	22	Spool
5	O-ring	14	Big piston	23	Upper cover gasket
6	Screw	15	Screw	24	Upper cover
7	O-ring	16	Screw	25	Small piston
8	Body	17	Gasket	26	Small piston O-ring
9	Gasket	18	Manual override	27	Small piston sheath

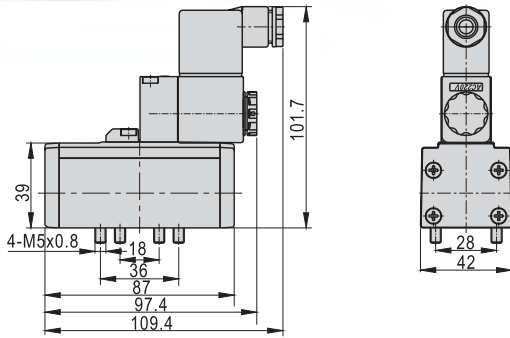


SOLENOID VALVES ISO K SUB-BASED VALVES – SOLENOID

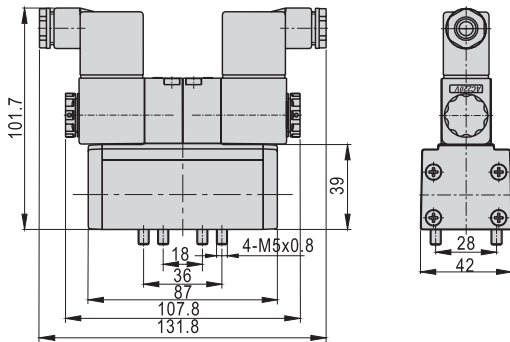
Dimensions – 200 Series

All sizes are in millimetres unless stated otherwise.

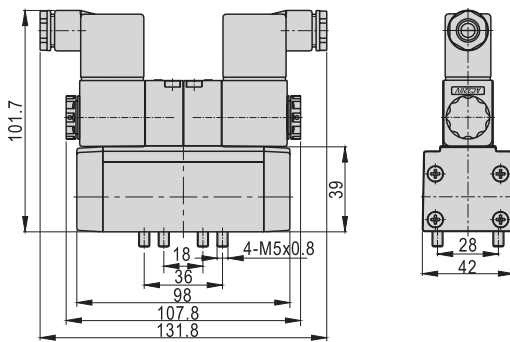
Single Solenoid



Double Solenoid



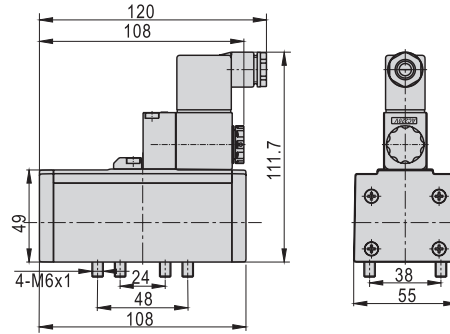
5/3 Double Solenoid



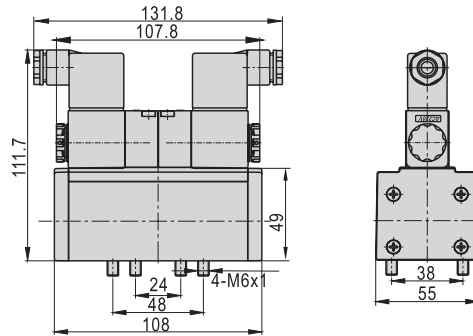
Dimensions – 300 Series

All sizes are in millimetres unless stated otherwise.

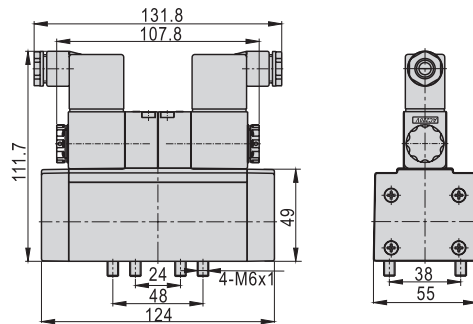
Single Solenoid



Double Solenoid



5/3 Double Solenoid



SOLENOID VALVES

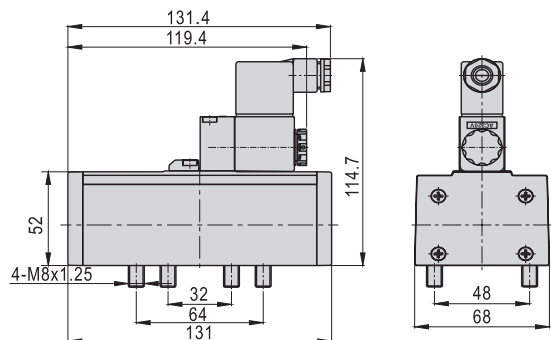
ISO K SUB-BASED VALVES –

SOLENOID

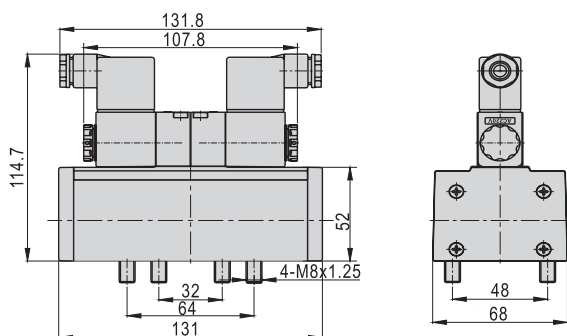
Dimensions – 400 Series

All sizes are in millimetres unless stated otherwise.

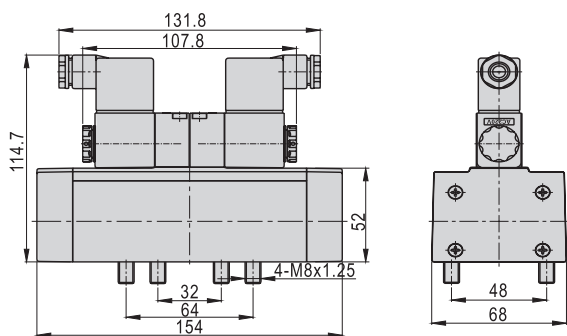
Single Solenoid



Double Solenoid



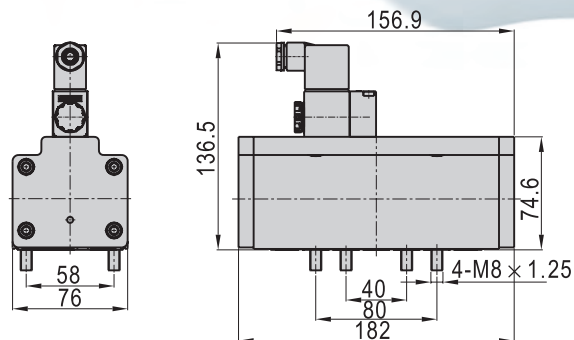
5/3 Double Solenoid



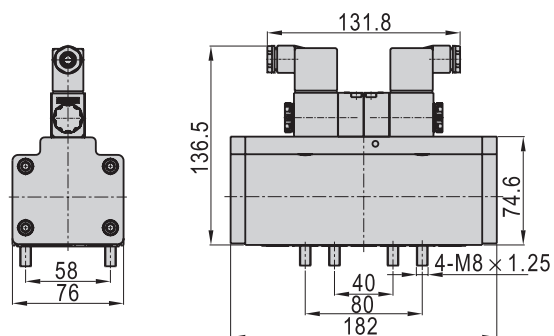
Dimensions – 600 Series

All sizes are in millimetres unless stated otherwise.

Single Solenoid



Double Solenoid



PILOT, LOGIC & SPECIALIST VALVES

ISO K SUB-BASED VALVES – PILOT

Specification



Model	200 Series	300 Series	400 Series	600 Series
Fluid	Air (to be filtered by 40µm filter element)			
Acting	Extend pilot			
Lubrication ①	Not required			
Operating Pressure	Single Air Control	0.2-1.0 Mpa (29-145psi)		
	Double Air Control	-0.09-1.0 Mpa (-13-145psi)		
Control Pressure (External Pilot)	0.2-1.0 Mpa (29-145psi)			
Proof Pressure	1.5 Mpa (215psi)			
Temperature	-20 – 70°C			
Port Size (Manifold)	1/4"	3/8"	1/2"	3/4"
Port Size (End Plate)	3/8"	1/2"	3/4"	1
Installation Size	ISO5599-1 standard			

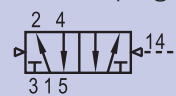
① Note: once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.

Product Features

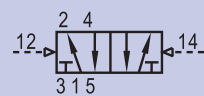
- 1 Succinct appearance and compact conformation.
- 2 The installation size conforms to the ISO 5599/1 standard.
- 3 Special seals improve flow rate and enhance lifetime of product.
- 4 The installation direction of the pilot O-ring can be adjusted to change the acting type to internal pilot or external pilot.
- 5 The valve(s) should be installed together with the KELM™ single or parallel type manifolds.
- 6 Easy to install – various connection and installation methods for manifold.
- 7 The manifold of 200/300/400 series has an exhaust throttle function – no need to connect to another throttle valve.
- 8 Due to the external pilot, the working pressure of the double pilot control valve can be zero or vacuum.

Symbols

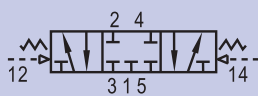
5/2 Pilot/Spring



5/2 Pilot/Pilot



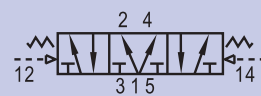
5/3 Pilot/Pilot, Fully Sealed Mid Position APB



5/3 Pilot/Pilot, Supply Sealed Mid Position COE



5/3 Pilot/Pilot, Centre Open Pressurised Mid Position COP



Ordering Code

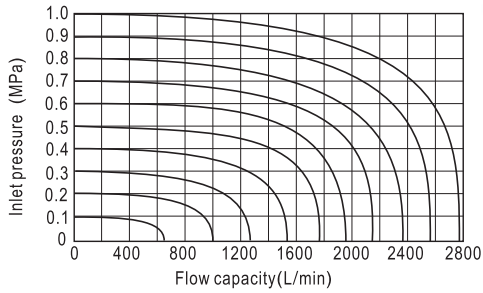
K 5 A V	—	4	—	30	—	I	—	C
Model		Code		Valve Type		Pilot Type		Voltage
K5AV:ISO standard pilot valve		2 : 200 series 3 : 300 series 4 : 400 series 6 : 600 series		10 : Solenoid Spring 5/2 way 20 : Solenoid Solenoid 5/2 way 30C : Solenoid Spring Solenoid 5/3 way Fully Sealed 30E : Solenoid Spring Solenoid 5/3 way Supply Sealed 30P : Solenoid Spring Solenoid 5/3 way Centre Open Pressurised		I : Internal Pilot E : External Pilot		A : AC220V B : DC24V C : AC110V E : AC24V F : DC12V

PILOT, LOGIC & SPECIALIST VALVES

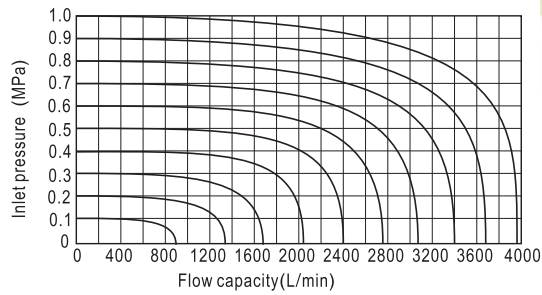
ISO K SUB-BASED VALVES - PILOT

Flow Charts

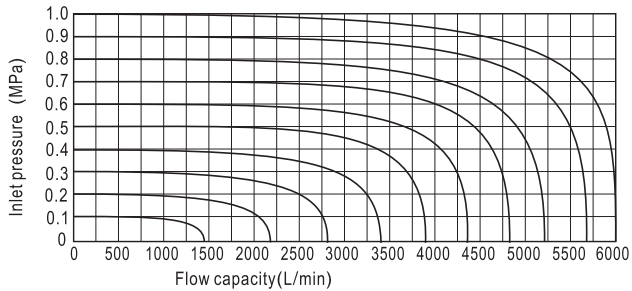
200 Series



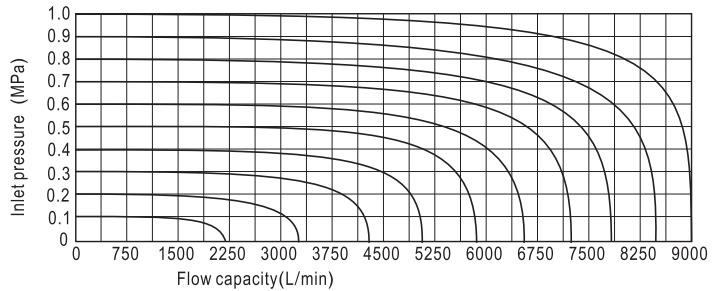
300 Series



400 Series

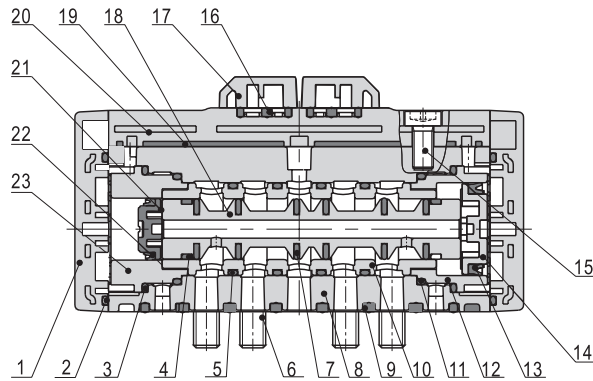


600 Series



Inner Structure

NO.	Item	NO.	Item	NO.	Item
1	Bottom cover	9	Gasket	17	Cover plate
2	O-ring	10	Spacer	18	Spool
3	O-ring	11	O-ring	19	Upper cover gasket
4	Wear ring	12	Big piston sheath	20	Upper cover
5	O-ring	13	Big piston O-ring	21	Small piston
6	Screw	14	Big piston	22	Small piston O-ring
7	O-ring	15	Screw	23	Small piston sheath
8	Body	16	Gasket		



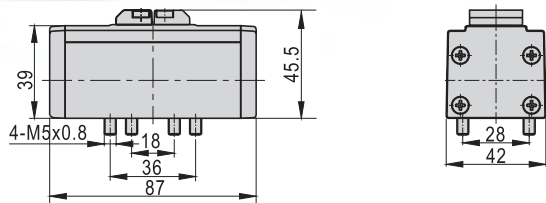
PILOT, LOGIC & SPECIALIST VALVES

ISO K SUB-BASED VALVES – PILOT

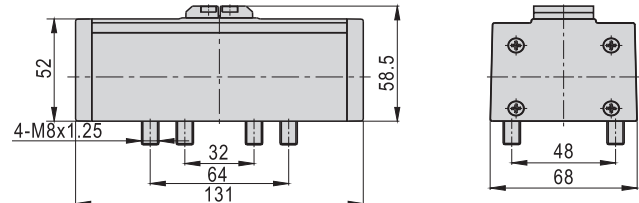
Dimensions

All sizes are in millimetres unless stated otherwise.

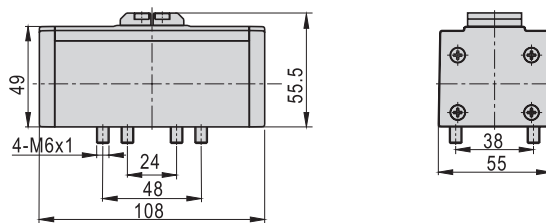
200 Series



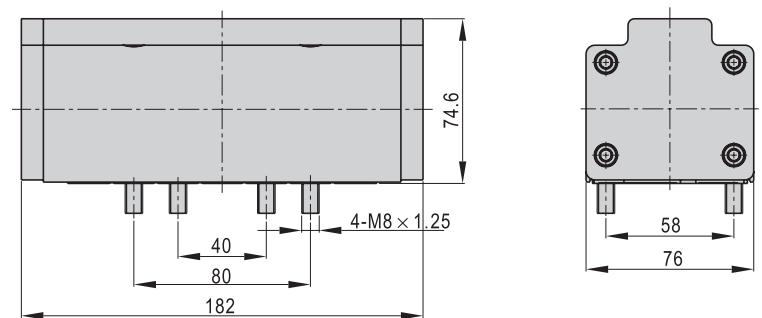
400 Series



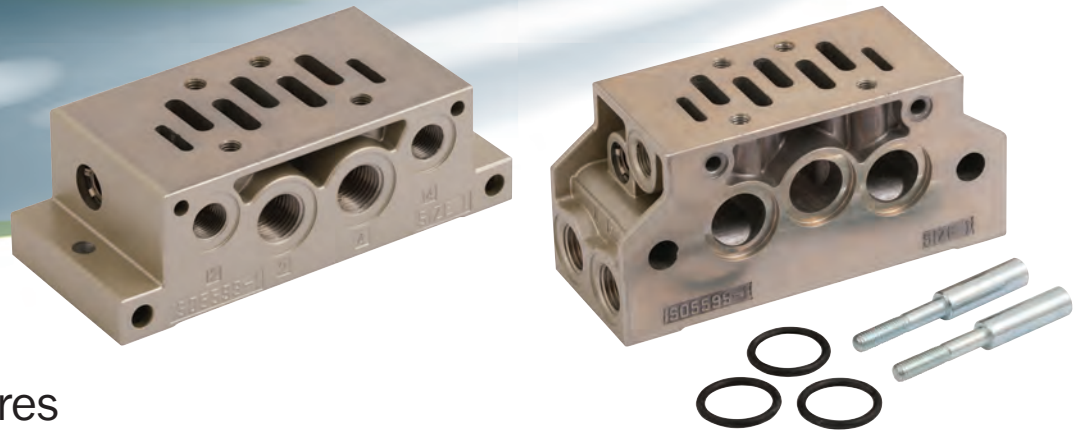
300 Series



600 Series



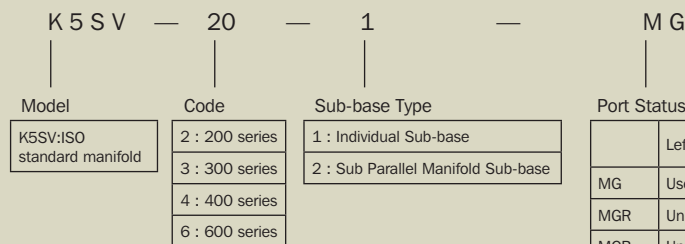
PILOT, LOGIC & SPECIALIST VALVES ISO K SUB-BASED MANIFOLDS



Product Features

- 1 Use with ISO Solenoid and ISO Pilot valves of the same series to save space and costs.
- 2 Easy fault finding with common air intake and exhaust unified wiring.
- 3 Flexible System can be expanded easily.

Ordering Code



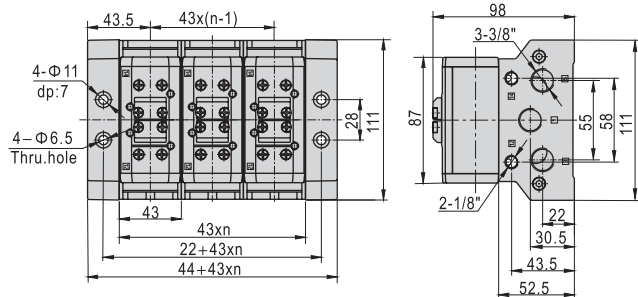
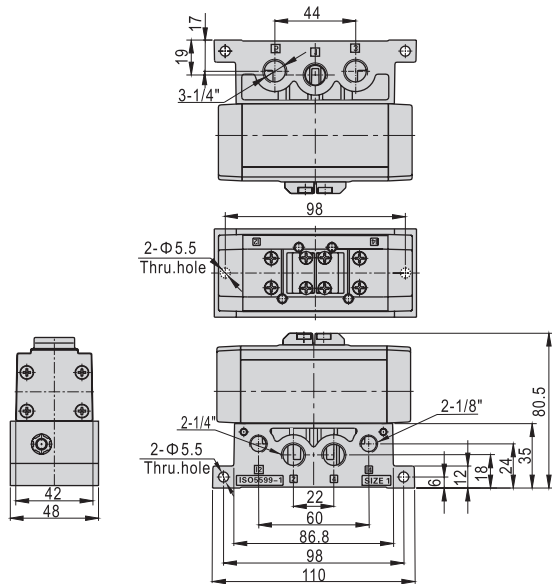
	Left Side Port	Right Side Port	Bottom Port	Centralised Pilot Port	Individual Pilot Port
MG	Use	Unused	Unused	Unused	Use
MGR	Unused	Use	Unused	Unused	Use
MGB	Unused	Unused	Use	Unused	Use
MGW	Use	Unused	Unused	Use	Unused
MGWR	Unused	Use	Unused	Use	Unused
MGWB	Unused	Unused	Use	Use	Unused

PILOT, LOGIC & SPECIALIST VALVES ISO K SUB-BASED MANIFOLDS

Dimensions

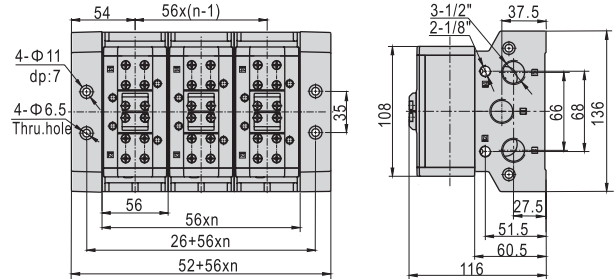
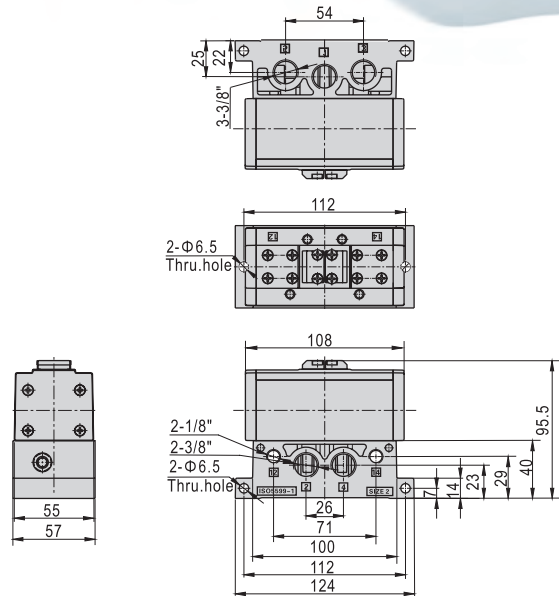
All sizes are in millimetres unless stated otherwise.

200 Series



Note: n means the number of stations.

300 Series



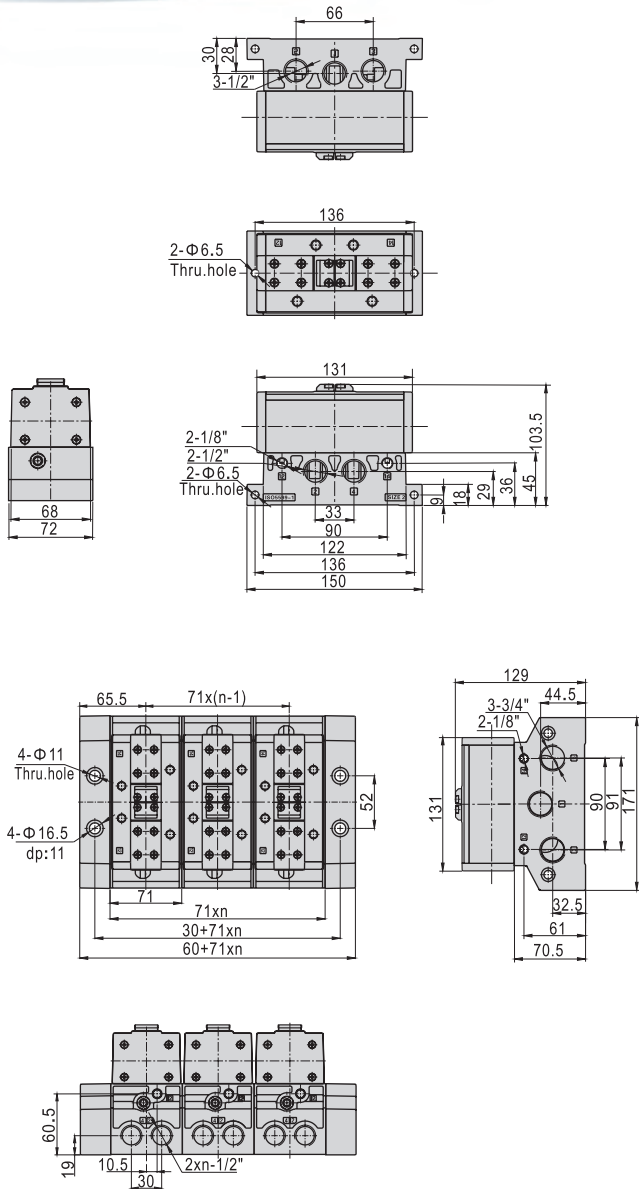
Note: n means the number of stations.

PILOT, LOGIC & SPECIALIST VALVES ISO K SUB-BASED MANIFOLDS

Dimensions

All sizes are in millimetres unless stated otherwise.

400 Series



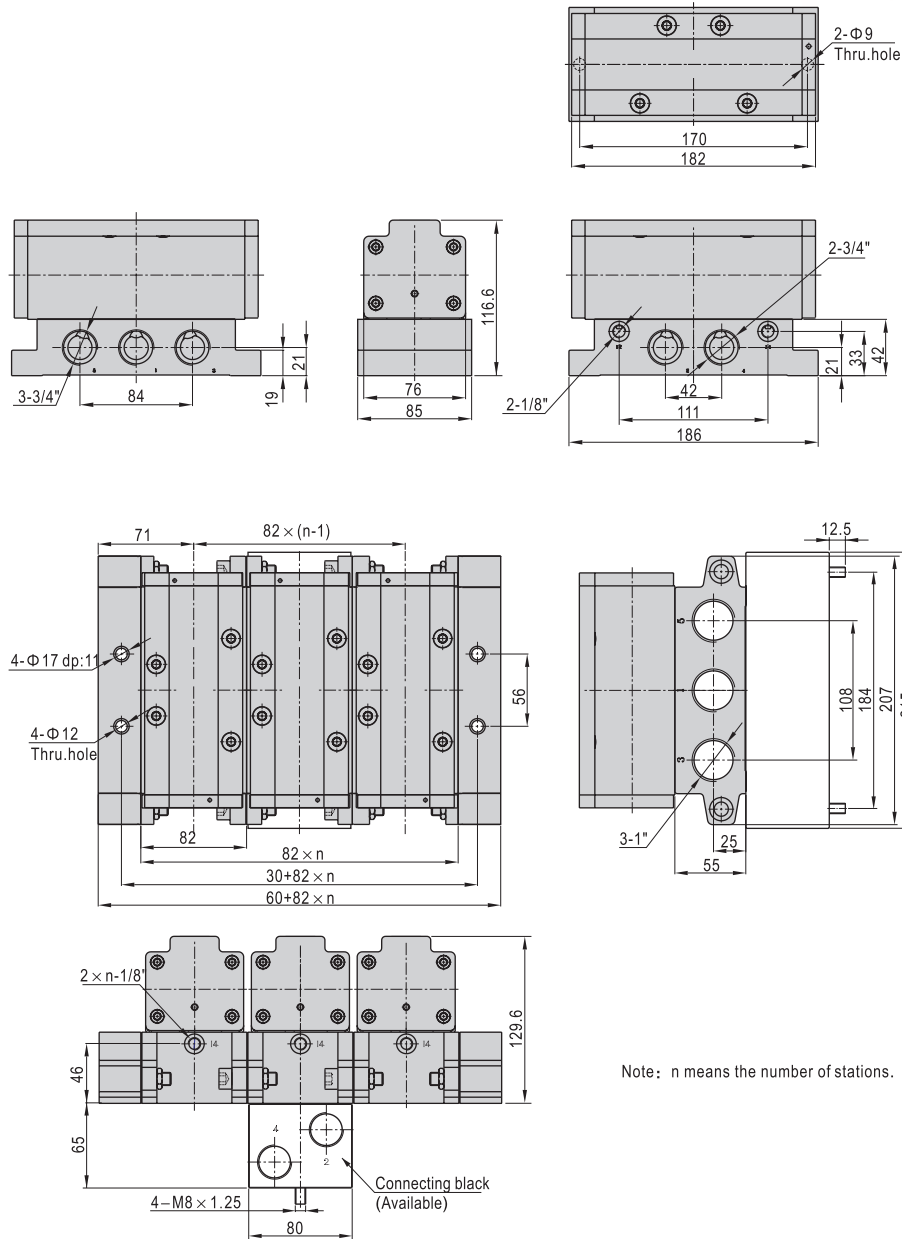
Note: n means the number of stations.

PILOT, LOGIC & SPECIALIST VALVES ISO K SUB-BASED MANIFOLDS

Dimensions

All sizes are in millimetres unless stated otherwise.

600 Series



Note: n means the number of stations.