

COMPACT VALVE - 1/4

Series DS2

Cat No DS2 - 02 - 08

COMPACT VALVE - NPT 1/4 (G1/4)

Features

- Suitable for manifold mounting
- Mounting provision for individual unit
- Compact size
- Manual override
- Wide range of manifolds available
- Wide range of coil voltages



Important

To prevent malfunctioning of the valve while operating the manual override (or) while operating the solenoid coil, ensure to have a minimum air supply of 42 scfm (1200 lpm) to the valve through a tube of minimum $\varnothing 0.31$ ($\varnothing 8$) outer diameter (with minimum $\varnothing 0.22$ ($\varnothing 5.5$) internal diameter)

Technical Specification

Model	DS2	
Type	3/2	5/2 & 5/3
Design	Spool type	
Port Size	Inlet, Outlet, Exhaust - NPT 1/4 (G1/4), External pilot - NPT 1/8 (G1/8)	Inlet, Outlet - NPT 1/4 (G1/4), Exhaust, External pilot - NPT 1/8 (G1/8)
Medium	Compressed air, filtered, lubricated	
Working Pressure range in psi (bar)	30 - 115 (2 - 8)	
External pilot pressure (ER model) in psi (bar)	30 - 60 (2 - 4)	
Recommended oil for lubrication	ISO VG32 (Servo system 32)	
Ambient / Medium temperature	41° - 140° F (5° - 60° C)	
Flow rate in scfm (NI/min) @	42 (1200)	
Materials of construction	Aluminium, Nitrile, Brass, Acetal, PBT, Zinc	
Electrical		
Coil width in Inch (mm)	0.87 (22)	
Voltage (V) \pm 10%	AC (50 Hz) - 24, 48, 110, 220	
	DC - 12, 24, 48, 110	
Power consumption	AC - 6 VA, DC - 5 W	
Duty cycle	Continuous	
Class of insulation	Class F	
Type of coil protection	IP65	

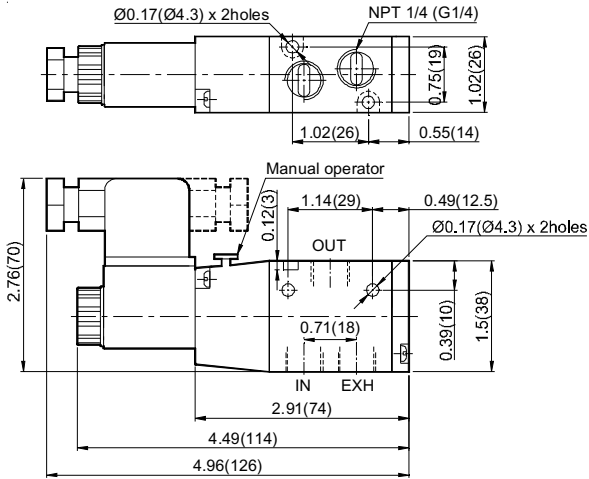
@ Supply pressure 87 psi (6 bar), Pressure drop $\Delta p = 14.5$ psi (1bar)

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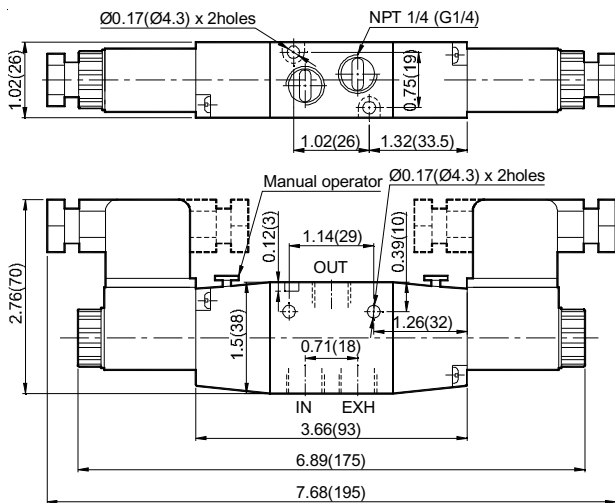
3 / 2 Single Solenoid pilot operated valve with spring return



1 - Inlet, 2 - Outlet, 3 - Exhaust

Ordering No*	NPT	DS235SR91	DS245SR91
	G	(DS235SR61)	(DS245SR61)
Type	Normally open		Normally closed
Symbol			

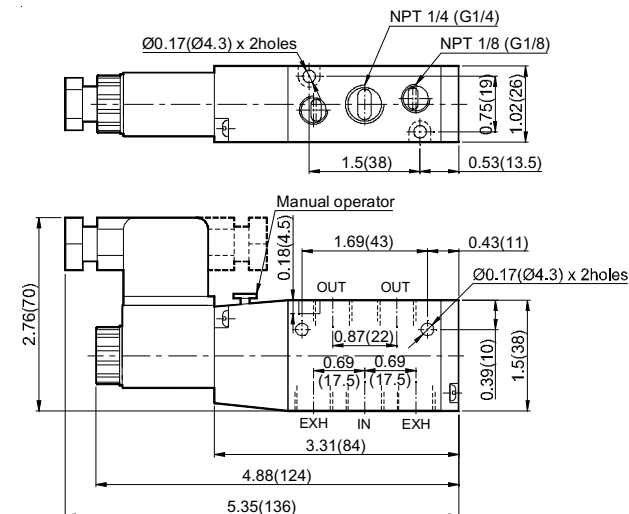
3 / 2 Double solenoid pilot operated valve



1 - Inlet, 2 - Outlet, 3 - Exhaust

Ordering No*	NPT	DS235SS91	DS245SS91
	G	(DS235SS61)	(DS245SS61)
Type	Normally open		Normally closed
Symbol			

5 / 2 Single solenoid pilot operated valve with spring return



1 - Inlet, 2,4 - Outlet, 3,5 - Exhaust

Ordering No*	NPT	DS255SR91
	G	(DS255SR61)
Symbol		

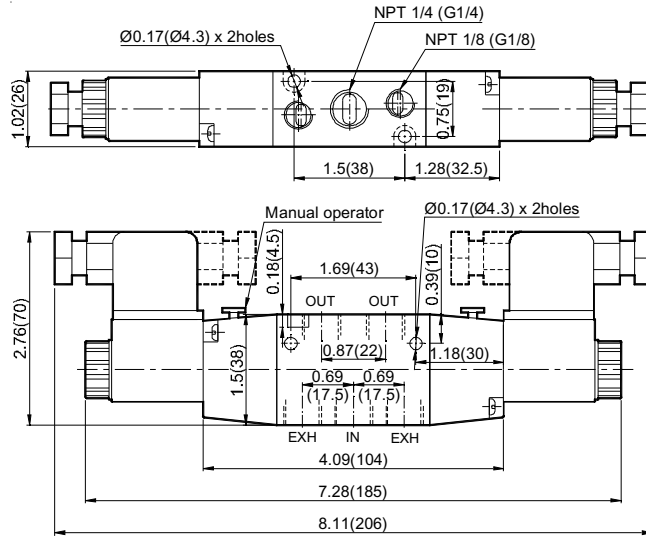
* For ordering No, voltage to be added. Refer page no. 2.3.18

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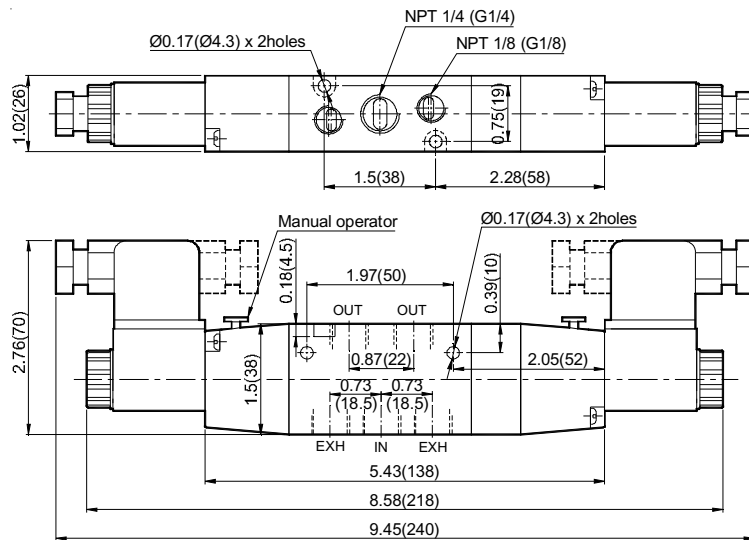
5 / 2 Double solenoid pilot operated valve



1 - Inlet, 2,4 - Outlet, 3,5 - Exhaust

Ordering No*	NPT	DS255SS91
	G	(DS255SS61)
Symbol		

5 / 3 Double solenoid pilot operated valve with spring centered



1 - Inlet, 2,4 - Outlet, 3,5 - Exhaust

Ordering No*	NPT	DS265SC91	DS275SC91	DS285SC91
	G	(DS265SC61)	(DS275SC61)	(DS285SC61)
Type	Blocked		Exhausted	Energised
Symbol				

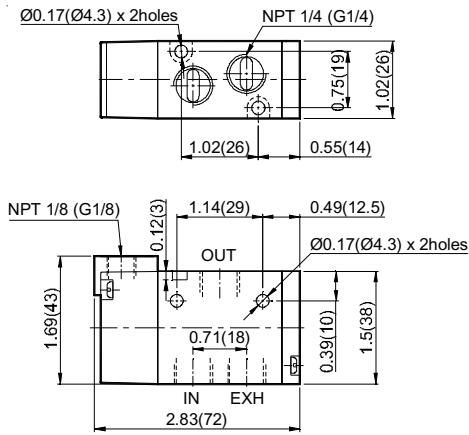
* For ordering No, voltage to be added. Refer page no. 2.3.18

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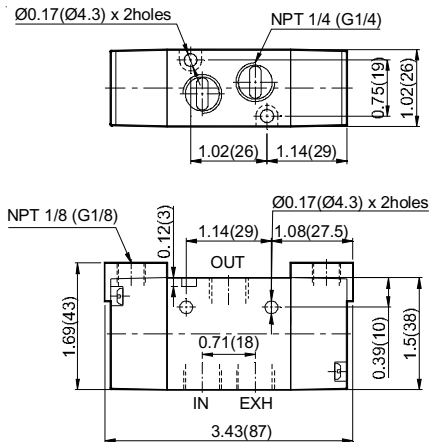
3 / 2 Single External pilot operated valve with spring return



1 - Inlet, 2 - Outlet, 3 - Exhaust 14 - External pilot

Ordering No	NPT	DS235ER91	DS245ER91
	G	(DS235ER61)	(DS245ER61)
Type	Normally open		Normally closed
Symbol			

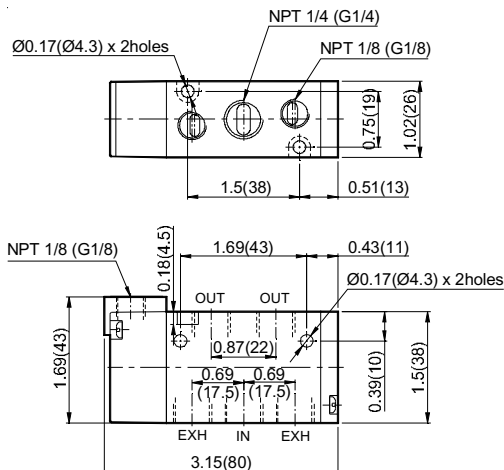
3 / 2 Double External pilot operated valve



1 - Inlet, 2 - Outlet, 3 - Exhaust 14,12 - External pilot

Ordering No	NPT	DS235EE91	DS245EE91
	G	(DS235EE61)	(DS245EE61)
Type	Normally open		Normally closed
Symbol			

5 / 2 Single External pilot operated valve with spring return



1 - Inlet, 2,4 - Outlet, 3,5 - Exhaust, 14,12 - External pilot

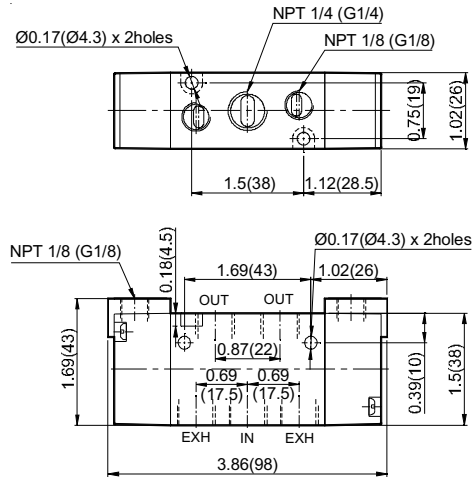
Ordering No	NPT	DS255ER91
	G	(DS255ER61)
Symbol		

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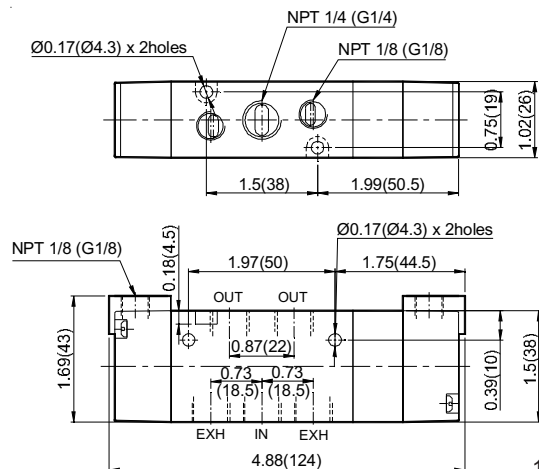
5 / 2 Double External pilot operated valve



1 - Inlet, 2,4 - Outlet, 3,5 - Exhaust, 14,12 - External pilot

Ordering No	NPT	DS255EE91
	G	(DS255EE61)
Symbol		

5 / 3 Double External pilot operated valve with spring centered



1 - Inlet, 2,4 - Outlet, 3,5 - Exhaust, 14,12 - External pilot

Ordering No	NPT	DS265EC91	DS275EC91	DS285EC91
	G	(DS265EC61)	(DS275EC61)	(DS285EC61)
Type	Blocked		Exhausted	Energised
Symbol				

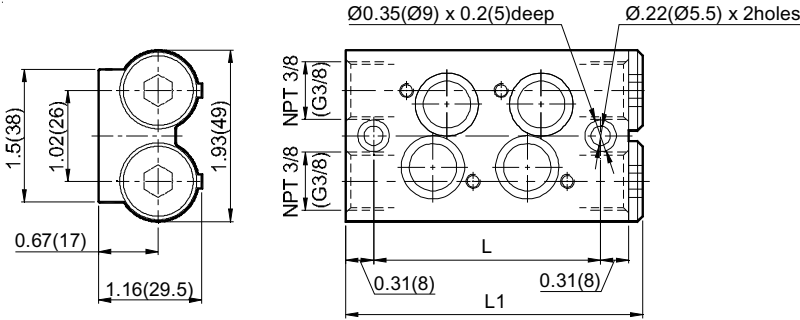
COMPACT VALVE - 1/4

Series DS2

Cat No DS2 - 02 - 08

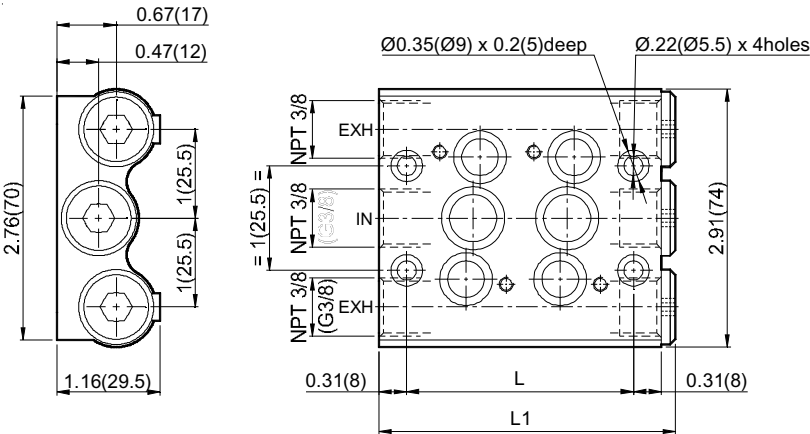
MANIFOLDS FOR COMPACT VALVE

Manifold - Type M051 (for 3/2 valves)



For mounting		L	L1	Ordering No
2 valves	Inch (mm)	2.56 (65)	3.35 (85)	M0510202
4 valves	Inch (mm)	4.69 (119)	5.47 (139)	M0510204
6 valves	Inch (mm)	6.81 (173)	7.6 (193)	M0510206
8 valves	Inch (mm)	8.94 (227)	9.72 (247)	M0510208

Manifold - Type M003 (for 5/2, 5/3 valves)



For mounting		L	L1	Ordering No
2 valves	Inch (mm)	2.56 (65)	3.35 (85)	M0030202
4 valves	Inch (mm)	4.69 (119)	5.47 (139)	M0030204
6 valves	Inch (mm)	6.81 (173)	7.6 (193)	M0030206
8 valves	Inch (mm)	8.94 (227)	9.72 (247)	M0030208

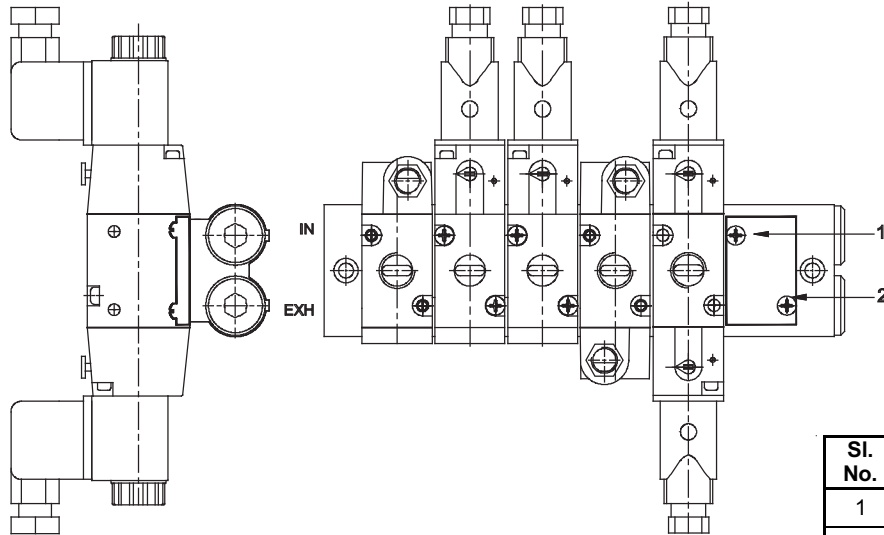
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ACCESSORIES FOR COMPACT VALVE

Cover plate assembly for Manifold Type M051

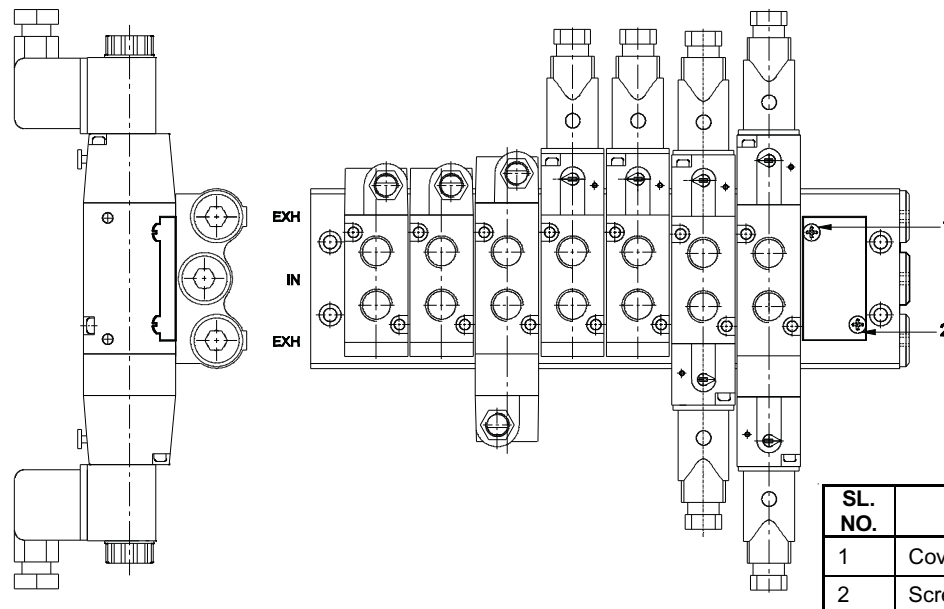


Sl. No.	Item	Qty.	Ordering No
1	Cover plate	1	A4C03
2	Screw – M4X0.7	2	

Application:

The cover plate assembly can be used to plug the unutilised position in a manifold. For eg., if it is required to mount only 5 valves on manifold no. M0510206, the sixth position can be plugged and made dummy using a cover plate assembly. (refer picture above)

Cover plate assembly for Manifold Type M003



SL. NO.	Item	Qty.	Ordering No
1	Cover plate	1	A4C02
2	Screw – M4X0.7	2	

Application:

The cover plate assembly can be used to plug the unutilised position in a manifold. For eg., if it is required to mount only 7 valves on manifold no. M0030208, the eighth position can be plugged and made dummy using a cover plate assembly. (refer picture above)

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How to order

1. Solenoid valve + “ Connectors without LED ”

While ordering Solenoid operated valves, please mention the suffix given below along with the model number to indicate the required voltage

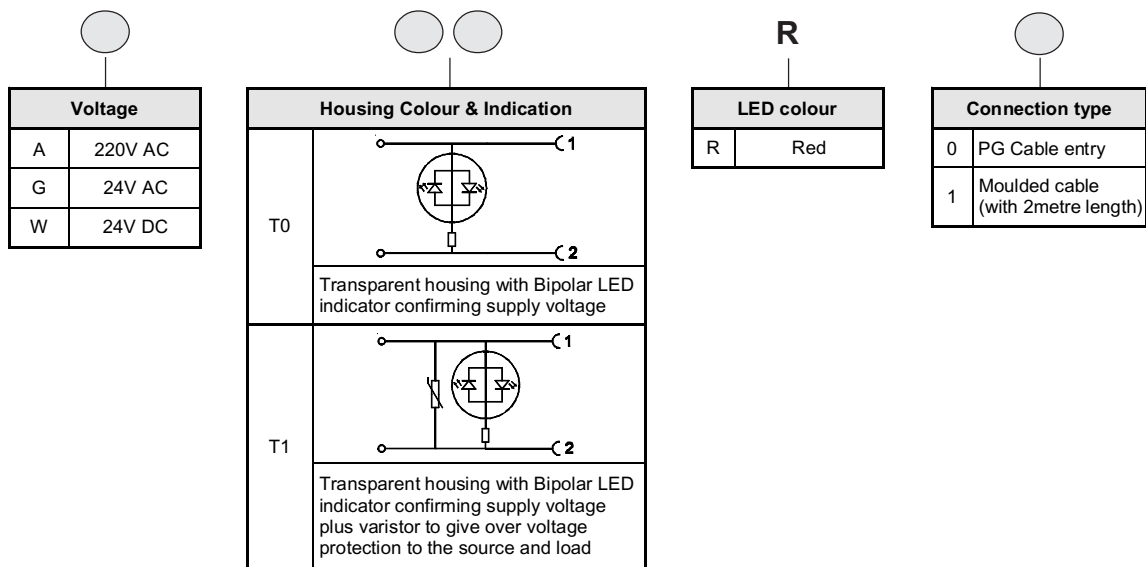
A	220V AC	Q	110V DC
B	110V AC	S	48V DC
D	48V AC	W	24V DC
G	24V AC	R	12V DC

Example

- The ordering no. for 3/2 NC Single solenoid valve, 24V D.C coil with PG cable is **DS245SR91-W**
- The ordering no. for 3/2 NC Single solenoid valve, 24V D.C coil with Moulded cable is **DS245SR91-W1**

2 Solenoid valve + “ Connectors with LED ”

While ordering Solenoid operated valves with LED connectors, given below in the corresponding tables.



Example

The Ordering no for 3/2 NC Single solenoid valve (NPT 1/4), 24V DC, connectors with LED of Transparent colour housing with Bipolar LED and varistor, Red colour LED with moulded cable: **DS245SR91-WT1R1**