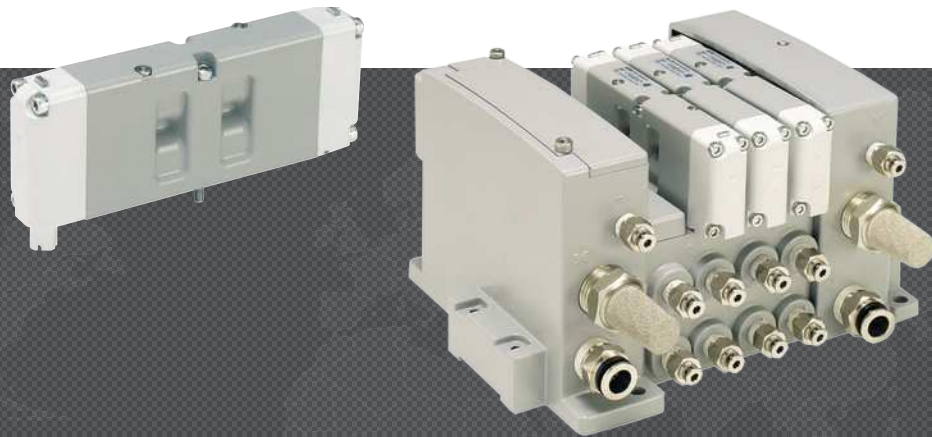




DIRECTIONAL CONTROL ISO 15407-2 VALVES W66 SERIES

PRODUCT CATALOG



ISO 15407-2 Valves W66 Series

Product Overview

The ROSS® 15407-2 valves W66 Series are base mounted spool and sleeve valves that conform to the ISO standards 15407-2 mounting interface. Manifold bases feature modular plug-together electrical connections terminating at end plates, offering a variety of terminal strip or multi-pin interfaces.

These ISO Size 0 (26mm) and 00 (18mm) valves are available as, 2- and 3-position, 5-ported 4-way valves. Solenoid pilot options include a locking or non-locking override, and either internal or external pilot supply. The spool and sleeve design means there are no seals to wear out.

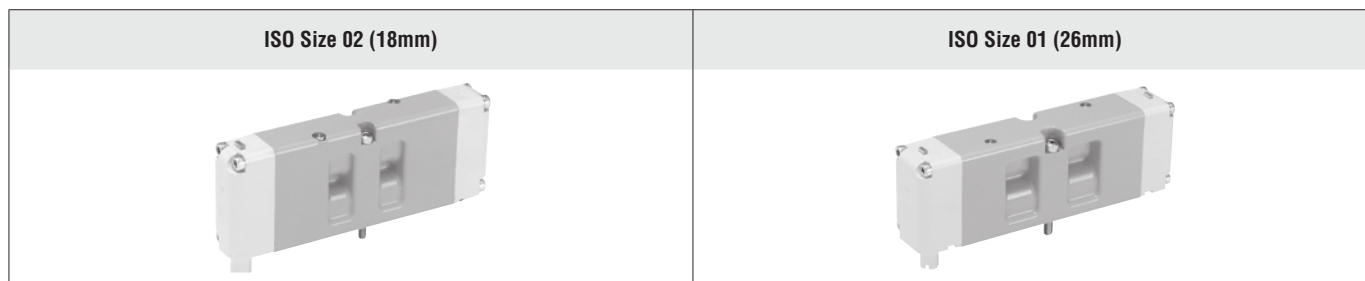
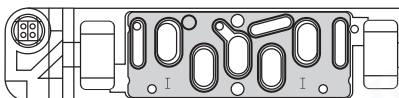


Illustration examples.

15407-2: Plug-in Standards for Size 01 (26mm) & Size 02 (18mm) Wide Valves



VALVE FEATURES

Spool and Sleeve Design	Spool and Sleeve construction for high dirt tolerance; no seals to wear out
Mounting Options	Individual sub-base or manifold base mounting
Pilot Supply	Internal or external; suitable for vacuum service (with external pilot supply)
Pilot Operation	Provides high shifting force with low power consumption

ISO Size	Port Sizes		Functions					Actuation	Maximum Flow C _v	Page
	1/8	1/4	5/2		5/3					
			Single	Double	Closed Center	Open Center	Pressure Center	Solenoid Control		
02 (18mm)	●		●	●	●	●	●	●	1.0	3 – 7
01 (26mm)		●	●	●	●	●	●	●		
Sub-Bases & Manifold Bases										8 – 9
Accessories and Options										10

STANDARD SPECIFICATIONS

GENERAL	Function		5/2 and 5/3 Valve		
	Construction Design		Spool and Sleeve		
	Actuation		Electrical – Solenoid Pilot Controlled		
	Mounting		Sub-Base or Manifold		
	Connection		Threaded; G, NPT		
	Manual Override		Flush; rubber, non-locking		
OPERATING CONDITIONS	Temperature	Solenoid Pilot Controlled	Ambient	5° to 120°F (-15° to 50°C)	
			Media		
	Flow Media		Filtered air		
	Operating Pressure		Vacuum to 145 psig (Vacuum to 9.9 bar)		
	Pilot Supply Pressure	5/2 Valves	ISO Size 02 (18mm)	30 psig (2.07 bar)	
		5/3 Valves	ISO Size 01 (26mm)	25 psig (1.73 bar)	
External Pilot Supply		Must be equal to or greater than inlet pressure			
ELECTRICAL DATA FOR SOLENOID PILOT	Solenoids		Bi-polar, surge suppression (standard)		
	Operating Voltage (each solenoid)		24 volts DC 120 volts AC 60 Hz 230-240 volts AC, 60 Hz		
	Power Consumption		24 V DC – 6 watts 120 V AC – 11 VA inrush, 8.5 VA holding 230-240 V AC – 11 VA inrush, 8.5 VA holding		
	Indicator Light		One per solenoid		
CONSTRUCTION MATERIAL	Valve Body		Cast Aluminum		
	End Caps		Polybutylene Terephthalate (PBT)		
	Fasteners		Zinc Plated Steel		
	Coils		Thermoset Plastic		

IMPORTANT NOTE: Please read carefully and thoroughly all of the CAUTIONS, WARNINGS on the inside back cover.

PRODUCT CREDENTIALS

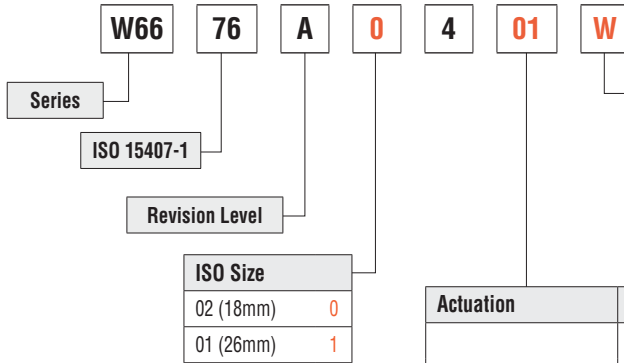
CSA Certificate of Compliance 	CE Conformity Declaration 	EAC Conformity Declaration 	CRN Certification Available for appropriately tested valves
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Ordering Information

5/2 Solenoid Pilot Controlled Valves

MODEL NUMBER CONFIGURATOR

5-Way 2-Position Valves



Voltage*	
24 volts DC	W
110-120 volts AC, 50/60 Hz	Z
230-240 volts AC, 60 Hz	Y
* For other voltages consult ROSS.	

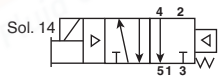
Actuation	Options	
Single Solenoid Pilot	Non-Locking Overrides	Internal Pilot 01
		External Pilot 51
	Locking Overrides	Internal Pilot 11
		External Pilot 21
Double Solenoid Pilot	Non-Locking Overrides	Internal Pilot 07
		External Pilot 57
	Locking Overrides	Internal Pilot 17
		External Pilot 27

* Sub-bases and manifold bases ordered separately. Please see Sub-Bases and Manifolds section.

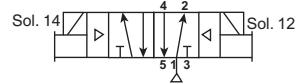
ISO Size	Valve Actuation	Flow C _v	Weight lb (kg)
02 (18 mm)	Single Solenoid Pilot	0.55	0.3 (0.15)
	Double Solenoid Pilot	0.55	0.4 (0.16)
01 (26mm)	Single Solenoid Pilot	1.1	0.6 (0.25)
	Double Solenoid Pilot		

Valve Schematic

Single Solenoid Pilot Controlled



Double Solenoid Pilot Controlled



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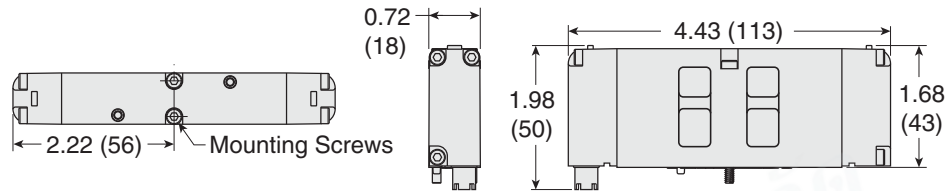
845/3-4 หมู่ 3 ถ.เทพารักษ์ ต.เทพารักษ์ อ.เมือง จ.สมุทรปราการ 10270
 845/3-4 Thepharak RD., T.Thepharak, A.Muang, Samutprakarn 10270 THAILAND
 Tel. 0 2384 6060, Fax 0 2384 5701, Email : sales@flutech.co.th, www.flutech.co.th

5/2 Solenoid Pilot Controlled Valves

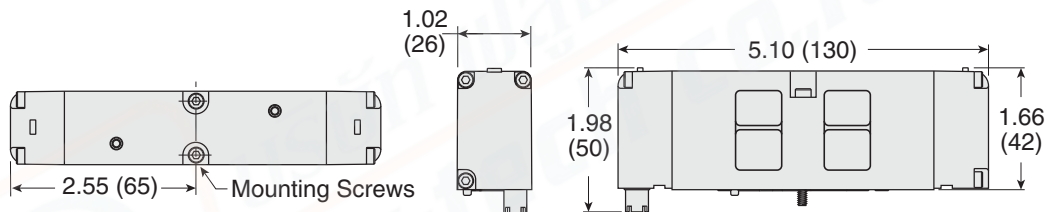
DIMENSIONS

Inches (mm)

ISO Size
02 (18mm)



ISO Size
01 (26mm)



For additional information, and to assist you with piping and connectivity designs, our products are available in downloadable 2D drawings and 3D CAD models in a wide range of options including native formats. Please visit www.rosscontrols.com.



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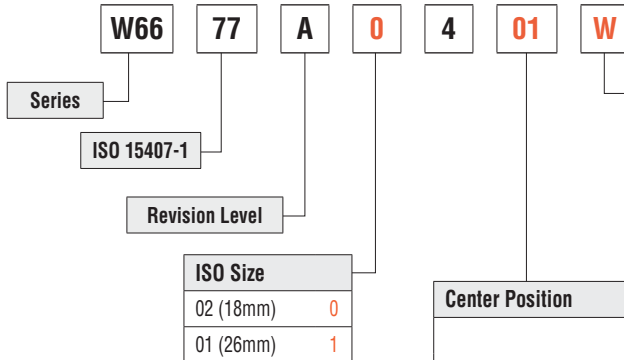
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845/3-4 Thepharak RD., T.Thepharak, A.Muang, Samutprakarn 10270 THAILAND
Tel. 0 2384 6060, Fax 0 2384 5701, Email : sales@flutech.co.th, www.flutech.co.th

Ordering Information

5/3 Double Solenoid Pilot Controlled Valves

MODEL NUMBER CONFIGURATOR

5-Way 3-Position Valves



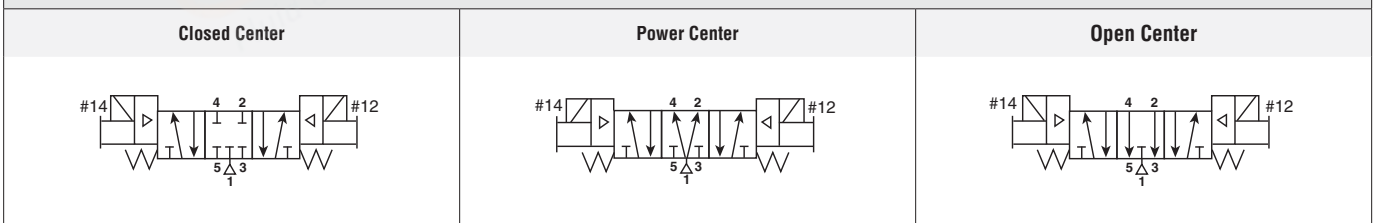
Voltage*	
24 volts DC	W
110-120 volts AC, 50/60 Hz	Z
230-240 volts AC, 60 Hz	Y
* For other voltages consult ROSS.	

Center Position	Options		
Closed Center	Non-Locking Overrides	Internal Pilot	01
		External Pilot	51
	Locking Overrides	Internal Pilot	11
		External Pilot	21
Power Center	Non-Locking Overrides	Internal Pilot	03
		External Pilot	53
	Locking Overrides	Internal Pilot	13
		External Pilot	23
Open Center	Non-Locking Overrides	Internal Pilot	07
		External Pilot	57
	Locking Overrides	Internal Pilot	17
		External Pilot	27

* Sub-bases and manifold bases ordered separately. Please see Sub-Bases and Manifolds section.

ISO Size	Valve Actuation	Flow C _v	Weight lb (kg)
02 (18 mm)	Double Solenoid Pilot	0.55	0.4 (0.16)
01 (26mm)	Double Solenoid Pilot	1.1	0.6 (0.25)

Valve Schematic



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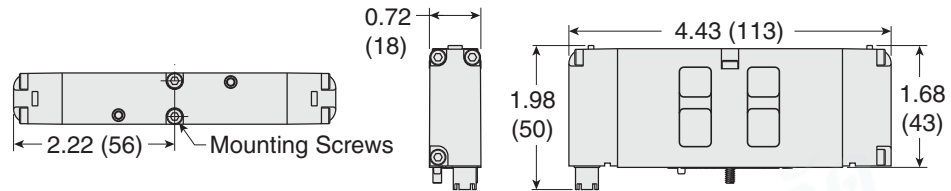
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5/3 Double Solenoid Pilot Controlled Valves

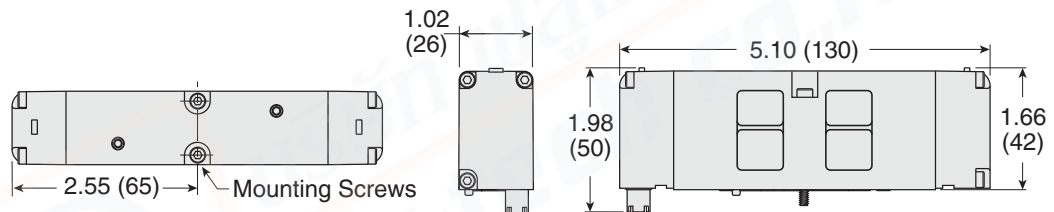
DIMENSIONS

Inches (mm)

ISO Size 1



ISO Size 2.5



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Manifold Accessories

MANIFOLD BASES WITH END PORTS

MANIFOLD MODEL NUMBER CONFIGURATOR

RPSHU11 **5** **4** **J** **1** **P**

ISO 15407-1

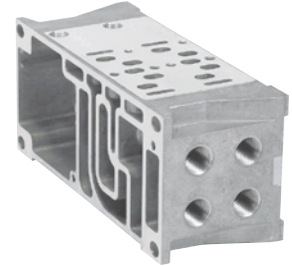
ISO 15407-1 Size	Port Size	
ISO Size 02 (18mm)	1/8 NPT	1
	1/8 G	2
ISO Size 01 (26mm)	1/4 NPT	3
	1/4 G	4

Circuit Board Address Configuration

Interconnect, Single Address	J
Interconnect, Double Address	M

Gasket Options

1, 3, 5 Ports Open and Pilots Open	1
1, 3, 5 Ports Closed and Pilots Open	2
1 Port Closed, 3, 5 Ports Open and Pilots Closed	3
1 Port Open, 3, 5 Ports Closed and Pilots Open	4
1, 3, 5 Ports Open and Pilots Closed	5
1, 3, 5 Ports Closed and Pilots Closed	6
1 Port Closed, 3, 5 Ports Open and Pilots Closed	7
1 Port Open, 3, 5 Ports Closed and Pilots Open	8



END STATIONS

END STATION MODEL NUMBER CONFIGURATOR

RPSHU20 **L2** **1** **0** **P**

Valve Type

Non Plug-in (Internal Pilot)	RPSHU20
Non Plug-in (External Pilot)	RPSHU2X

Thread Type

NPT	0
G	1*

* G thread model conforms to ISO 1179-1 w 228-1 thread.

Left Hand End Station Type

25-Pin-D-Sub (top)# L2

Industrial Communication

ROSS Serial Bus	L6^
Turck BL67 with Valve Driver Module - For 16 Outputs	T1*
Turck BL67 with Valve Driver Module - For 32 Outputs	T2*

RPSHU11 gaskets included in each end station model number.
 ^ Valve Driver Module and 24 Output Cable installed. Must order communication modules separately. Must Order Bases with Circuit Boards.
 * Turck Network and P2M Ethernet node communication module ordered separately.

Right Hand End Station Ports

1/2 Exhaust and Inlet Ports	1
3/4 Exhaust and Inlet Ports	2

End Plate Type	Type/Port Size	Avg. C _v
Right Hand	1/2	6.07
	3/4	8.35



Left Hand End Station
25-pin D-Sub (top)



Hi-Flow Right Hand
End Station

BLANK STATIONS

Blank Stations	ISO Size	Model Number*
	02 (18mm)	RPS5634P
	01 (26mm)	RPS5534P

* Includes: Blank Station Plate, Gasket, and Mounting Bolts.



GASKET KITS

Gasket Kits Manifold to Manifold	Pilots Status	Kit Diagram Reference	Description	Kit Number
	Pilots Opened	1	Supply & Exhaust & Pilots Open	RPSHU11P
		2	Supply Closed, Exhaust & Pilots Open	RPSHU12P
		3	Supply & Exhaust Closed, Pilots Open	RPSHU13P
		4	Supply & Pilots Open, Exhaust Closed	RPSHU14P
	Pilots Blocked	5	Supply & Exhaust Open, Pilots Closed	RPSHU15P
		6	Supply & Pilots Closed, Exhaust Open	RPSHU16P
		7	Supply & Exhaust & Pilots Closed	RPSHU17P
		8	Supply Open, Exhaust & Pilots Closed	RPSHU18P



1 – Supply & Exhaust & Pilots Open



3 – Supply & Exhaust Closed, Pilots Open



5 – Supply & Exhaust Open, Pilots Closed



7 – Supply & Exhaust & Pilots Closed



2 – Supply Closed, Exhaust & Pilots Open



4 – Supply & Pilots Open, Exhaust Closed



6 – Supply & Pilots Closed, Exhaust Open



8 – Supply Open, Exhaust & Pilots Closed

INTERPOSED SUPPLY & EXHAUST MODULES

Interposed Supply & Exhaust Modules	ISO Size	Outlet Port	Model Number*	
			G Thread	NPT Thread
	02 (18mm)	Supply	RPS561600P	RPS561601P
Exhaust		RPS561700P	RPS561701P	
01 (26mm)	Supply	RPS551600P	RPS551601P	
	Exhaust	RPS551700P	RPS551701P	

* Used on Size 00 & Size 0 valves to provide a pressure or exhaust path to individual valves.

INTERPOSED FLOW CONTROL

Interposed Flow Controls	ISO Size	Model Number*
	02 (18mm)	RPS5635P
	01 (26mm)	RPS5535P

* Both adjustment screws are located on the 12 end of the unit. Interposed Flow Control mounts with its own studs, which means the valve uses standard bolts for mounting. Interposed Flow Control is not to be used as a shut off device and is not bubble tight when needles are fully turned down.

Manifold Accessories

INTERPOSED PRESSURE REGULATORS

MODEL NUMBER CONFIGURATOR

RPS5638 **1** **6** **6** **P**

Basic Series	
ISO Size 02 (18mm)	RPS5638
ISO Size 01 (26mm)	RPS5538

Regulator Function	
Common Pressure Regulator	1
Independent Pressure Regulator	2

#4 Port Regulator /Gauge*	
2-60 psig w/o Gauge	2
5-125 psig w/o Gauge	3
2-60 psig w/Gauge	5
5-125 psig w/Gauge	6

#2 Port Regulator/Gauge*	
2-60 psig w/o Gauge	2
5-125 psig w/o Gauge	3
2-60 psig w/Gauge	5
5-125 psig w/Gauge	6

Pressure Regulators

* For Common Pressure Regulator Option, Regulator Gauge callout must be the same number for both Port #4 and Port #2. (Example: 166)

Remote Air Pilot Operated for hard-to-reach pressure control Unregulated Pilot Pressure to valve for consistent valve shifting regardless of pressure adjustment.

Dual Interposed Regulator
Size 02 - 18mm



Single Interposed Regulator
Size 01 - 26mm



GAUGE ADAPTER

Gauge Adapter Kit

Description	Kit Number
Gauge Kit	RPS5651160P
1/8" Female to 1/8" Female Coupling	R207P-2*
1/8" Male to 1/8" Male Long Nipple	RVS215PNL-2-15*
* Included in Gauge Kit RPS5651160P.	
Included with all Size 02 Regulators. Both kits are required on all Size 01 & 02 Regulators when the Regulator is on the last Station on the Right (14) End.	



SILENCERS

Silencers

Port Size	Thread Type	Model Number		Flow Avg. C _v	Pressure Range psig (bar)
		R/Rp Thread	NPT Thread		
1/4	Male	D5500A2003	5500A2003	2.1	0-290 (0-20) maximum



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