ROSS®

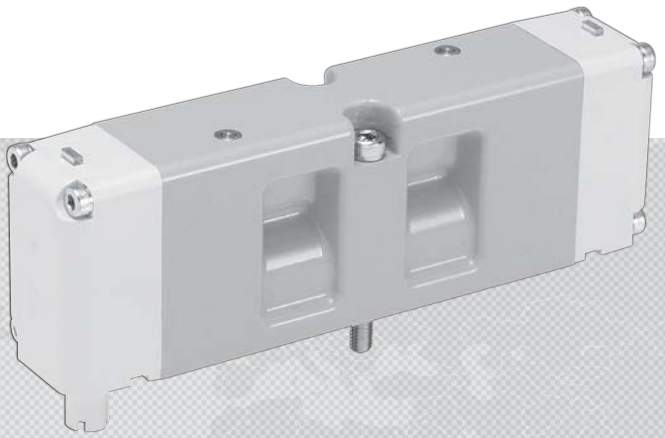
Flu-Tech
Fluid Control Specialists

บริษัท ฟลูเทค จำกัด
Flu-tech co.,ltd

PRODUCT INFORMATION

ISO 15407-2 VALVES

W66 SERIES



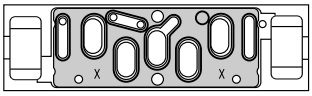
ROSS CONTROLS

ISO W66 SERIES VALVES – KEY FEATURES

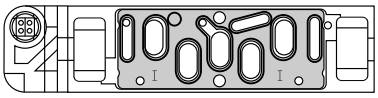
- ISO Sizes 02 (18mm) & 01 (26mm)
- Drop cord (15407-1) & Plug-In (15407-2) options
- 5/2 Single, 5/2 Double, & 5/3 Double Solenoid Pilot Controlled Valves
- Serial Bus Communication compatible
- UL, C-UL, and CE certified

Standard Definitions

15407-1: Drop-cord Standards for Size 01 (26mm) & Size 02 (18mm) Wide Valves



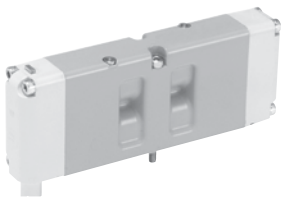
15407-2: Plug-in Standards for Size 01 (26mm) & Size 02 (18mm) Wide Valves



VALVE TYPE	VALVE SERIES	DESCRIPTION			AVAILABLE PORT SIZES								FUNCTIONS										Page
		Size	Spool & Sleeve	Poppet	1/8	1/4	3/8	1/2	3/4	1	1¼	1½	3/2 Single	5/2 Single	5/2 Double	5/3 Closed Center	5/3 Open Center	5/3 Pressure Center	Max Flow (Cv)	Solenoid Control	Direct Solenoid Control	Pressure Control	
ISO																							
ISO 15407-1	W66	02 (18mm)	■		■									■	■	■	■	■	0.55	■			C1.3 - C1.4
	W66	01 (26mm)	■			■								■	■	■	■	■	1.1	■			C1.3 - C1.4
Individual Sub-Bases, Sub-Base Manifolds & End Station Kits																							C1.5-C1.6
Accessories																							C1.6
ISO 15407-2	W66	02 (18mm)	■		■									■	■	■	■	■	0.55	■			C1.7 - C1.8
	W66	01 (26mm)	■			■								■	■	■	■	■	1.1	■			C1.7 - C1.8
Manifold Bases, End Station Manifold, Kits & Accessories																							C1.9
Accessories																							C1.10 - C1.11

C1

5-Way 2-Position Valves, Single Solenoid Pilot Controlled, Spring Return



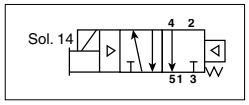
Choose your options (in red) to configure your valve model number.

W66	76	A	0	4	01	W

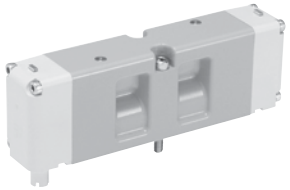
ISO Size	
02 (18mm)	0
01 (26mm)	1

Options		
Non-Locking Overrides	Internal Pilot - 01	
	External Pilot - 51	
Locking Overrides	Internal Pilot - 11	
	External Pilot - 21	

Voltage	
24 VDC	W
120 VAC	Z



5-Way 2-Position Valves, Double Solenoid Pilot Controlled



C

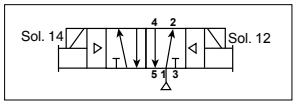
Choose your options (in red) to configure your valve model number.

W66	76	A	0	4	07	W

ISO Size	
02 (18mm)	0
01 (26mm)	1

Options		
Non-Locking Overrides	Internal Pilot - 07	
	External Pilot - 57	
Locking Overrides	Internal Pilot - 17	
	External Pilot - 27	

Voltage	
24 VDC	W
120 VAC	Z

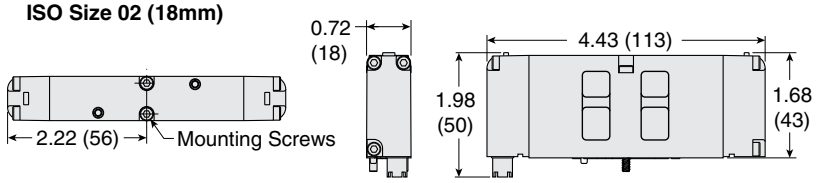


Technical Information

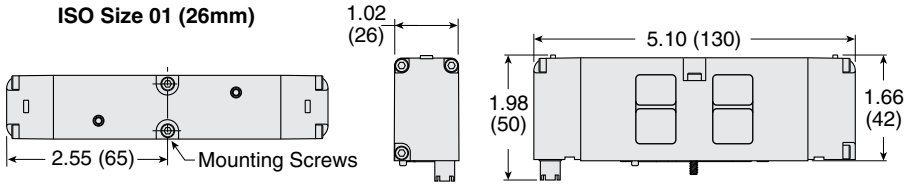
ISO Size	Valve Type	Avg. C_v	Weight lb (kg)
02 (18mm)	5/2 Single	0.55	0.3 (0.15)
	5/2 Double	0.55	0.4 (0.16)
01 (26mm)	5/2 Single	1.1	0.6 (0.25)
	5/2 Double	1.1	0.6 (0.25)

Valve Dimensions – inches (mm)

ISO Size 02 (18mm)



ISO Size 01 (26mm)



*** Manifold bases ordered separately, refer to page C1.9.**

Accessories ordered separately, refer to page C1.9-C1.10.

STANDARD SPECIFICATIONS (for valves on this page):

Construction Design	Spool and Sleeve
Mounting Type	Base
Voltage	24 volts DC; 110-120 volts AC *For other voltages, consult ROSS.*
Power Consumption (each solenoid)	6.0 watts on DC; 11 VA inrush, 8.5 VA holding on 50 or 60 Hz
Temperature	**Ambient/Media:** 5° to 120°F (-15° to 50°C)
Flow Media	Filtered air
Pilot Supply	Internal or External

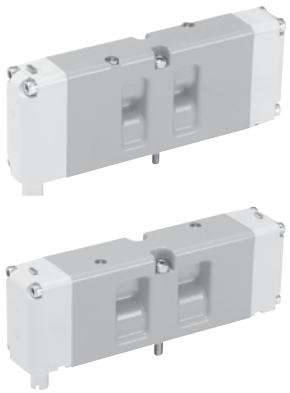
Operating Pressure	Vacuum to 145 psig (9.9 bar) **Pilot Supply - Internal or External:** **ISO Size 02 (18mm):** 30 psig (2.07 bar) **ISO Size 01 (26mm):** 25 psig (1.73 bar) *When external pilot supply, pressure must be equal to or greater than inlet pressure.*
Construction Material	**Valve Body:** Cast Aluminum **End Caps:** Polybutylene Terephthalate (PBT) **Fasteners:** Zinc Plated Steel **Coils:** Thermoset Plastic
Manual Override	Flush; Metal, non-locking

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

Solenoid Pilot Controlled Valves

ISO 15407-2
W66 Series

5-Way 3-Position Valves, Double Solenoid Pilot Controlled



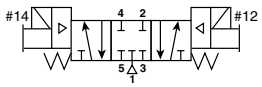
Choose your options (in red) to configure your valve model number.

W66	77	A	0	4	01	W

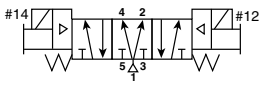
ISO Size	
02 (18mm)	**0**
01 (26mm)	1

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

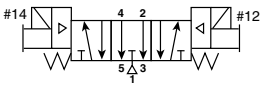
Voltage	
24 VDC	**W**
120 VAC	Z



Closed Center



Power Center



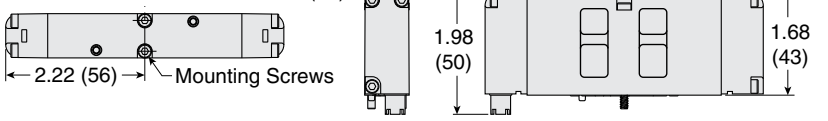
Open Center

Technical Information

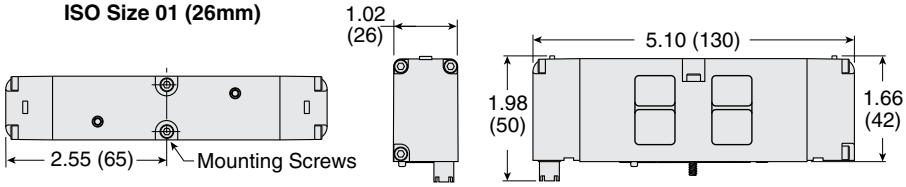
ISO Size	Avg. C_v	Weight lb (kg)
02 (18mm)	0.55	0.4 (0.16)
01 (26mm)	1.1	0.6 (0.25)

Valve Dimensions – inches (mm)

ISO Size 02 (18mm)



ISO Size 01 (26mm)



* **Manifold bases ordered separately, refer to page C1.9.**

Accessories ordered separately, refer to page C1.9-C1.10.

STANDARD SPECIFICATIONS (for valves on this page):

Construction Design	Spool and Sleeve
Mounting Type	Base
Voltage	24 volts DC; 110-120 volts AC *For other voltages, consult ROSS.*
Power Consumption (each solenoid)	6.0 watts on DC; 11 VA inrush, 8.5 VA holding on 50 or 60 Hz
Temperature	**Ambient/Media:** 5° to 120°F (-15° to 50°C)
Flow Media	Filtered air
Pilot Supply	Internal or External

Operating Pressure	Vacuum to 145 psig (9.9 bar)
	Pilot Supply - Internal or External: 35 psig (2.41 bar)
	When external pilot supply, pressure must be equal to or greater than inlet pressure.
Construction Material	Valve Body: Cast Aluminum End Caps: Polybutylene Terephthalate (PBT) Fasteners: Zinc Plated Steel Coils: Thermoset Plastic
Manual Override	Flush; Metal, non-locking

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

Manifold Bases, End Station Kits Blank Station and Gasket Kits

for ISO 15407-2 Valves W66 Series

Manifold Bases with End Ports

Choose your options (in red) to configure your model number.

RPSHU11	5	4	J	1	P

Basic Series

ISO Size 02 (18mm) ISO Size 01 (26mm)	RPSHU11

Port Size

ISO Size 02 (18mm)	
1/8 NPT	1
1/8 BSPP	2
ISO Size 01 (26mm)	
1/4 NPT	3
1/4 BSPP	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 Station Kits

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

Choose your options (in red) to configure your model number.

RPSHU20	L2	1	0	P

Valve Type

Plug-in (internal pilot)	RPSHU20
Plug-in (external pilot)	RPSHU2X

Thread Type

NPT	0
G	1*

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

Left Hand End Station Type

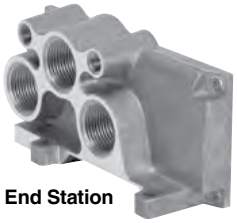
25-Pin-D-Sub (top)#	L2
Industrial Communication	
ROSS Serial Bus	L6^
Turck BL67 with Valve Driver Module - For 16 Outputs	T1*
Turck BL67 with Valve Driver Module - For 32 Outputs	T2*

RPSHU11 gaskets included in each end station kit.
^ 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



Hi-Flow - Right Hand End Station

Blank Station Kits

ISO Size	Kit Number	Description
02 (18mm)	RPS5634P	Kit includes: Blank Station Plate, Gasket, and Mounting Bolts.
01 (26mm)	RPS5534P	

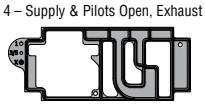
Gasket Kits – Manifold to Manifold

	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

4 – Supply & Pilots Open, Exhaust Closed

2 – Supply Closed, Exhaust & Pilots Open



5 – Supply & Exhaust Open, Pilots Closed

3 – Supply & Exhaust Closed, Pilots Open

6 – Supply & Pilots Closed, Exhaust Open

7 – Supply & Exhaust & Pilots Closed

8 – Supply Open, Exhaust & Pilots Closed

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

C1

C

Interposed Pressure Regulators

Choose your options (in red) to configure your model number.

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**

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

#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**

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

ISO Size 02 (18mm)
(Dual Interposed Regulator Shown)

ISO Size 01 (26mm)
(Single Interposed Regulator Shown)

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

Gauge Adapter Kit

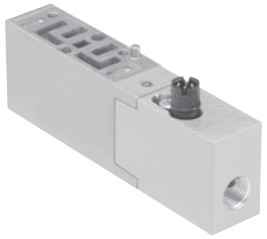
Description	Model Number	Description
Gauge Kit	RPS5651160P	Included with all Size 02 Regulators. Both kits are required on all Size 01 & 02 Regulators when the Regulator is on the last Station on the Right (14) End.
1/8" Female to 1/8" Female Coupling	R207P-2*	
1/8" Male to 1/8" Male Long Nipple	RVS215PNL-2-15*	

*Included in Gauge Kit RPS5651160P.

Interposed Supply & Exhaust Modules

ISO Size		Model Number	
		NPT Threads	G Threads
02 (18mm)	Supply	RPS561600P	RPS561601P
	Exhaust	RPS561700P	RPS561701P
01 (26mm)	Supply	RPS551600P	RPS551601P
	Exhaust	RPS551700P	RPS551701P

Quantity 1. Used on Size 02 & Size 01 valves to provide a pressure or exhaust path to individual valves.



Interposed Flow Controls

ISO Size	Model Number	Description
02 (18mm)	RPS5635P	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.
01 (26mm)	RPS5535P	

Silencers

Port Size	Thread Type	Model Number		Avg. C_v	Dimensions inches (mm)		Weight lb (kg)
		NPT Threads	R/Rp Threads		Width	Length	
1/4	Male	5500A2003	D5500A2003	2.7	0.9 (21)	2.2 (55)	0.1 (0.1)

Pressure Range: 0 to 290 psig (0 to 20 bar) maximum. **Flow Media:** Filtered air.

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