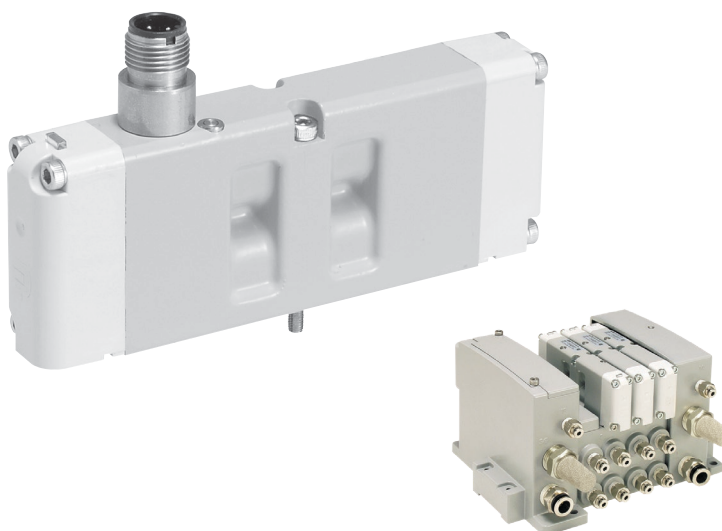




ISO 15407-1 VALVES



PRODUCT CATALOG

ISO 15407-1 Valves W66 Series

Product Overview

The ROSS® ISO 15407-1 valves W66 Series are base mounted spool and sleeve valves that conform to the ISO standards 15407-1 mounting interface. These ISO Size 01 (26mm) and 02 (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.

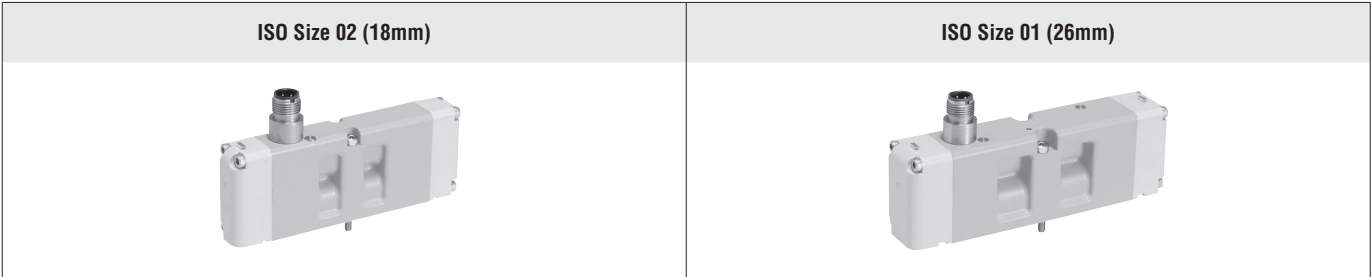
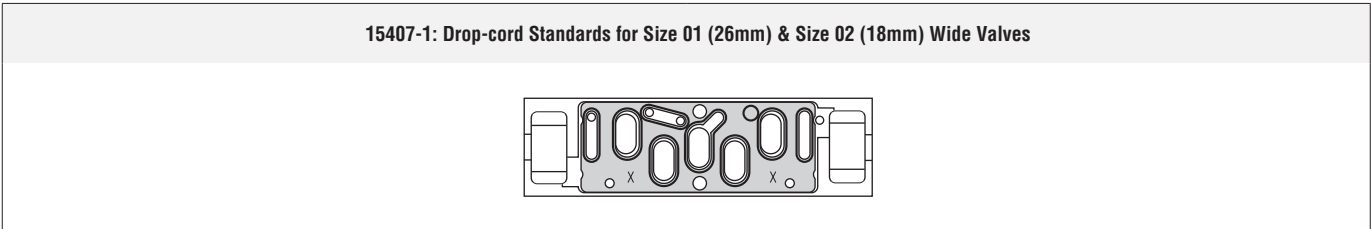


Illustration examples.



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 Size		Functions					Actuation	Maximum Flow C _v (NI/min)	Page
			5/2		5/3			Solenoid Control		
			Single	Double	Closed Center	Open Center	Pressure Center			
	1/8	1/4								
02 (18mm)	●		●	●	●	●	●	●	1.0 (980)	3 – 7
01 (26mm)		●	●	●	●	●		●	2.5 (2500)	
Single Sub-Bases. Manifold Bases and Manifold Accessories										8 – 9
Accessories										10 – 11

STANDARD SPECIFICATIONS

GENERAL	Function		5/2 Valve		
			5/3 Valve	Power Center, Closed Center, Open Center	
	Construction Design		Spool and Sleeve		
	Actuation		Electrical	Solenoid Pilot Controlled	
	Mounting		Sub-Base or Manifold		
	Connection		Threaded Port	NPT	
				G	
Manual Override		Flush; rubber, non-locking			
OPERATING CONDITIONS	Temperature		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)	
			ISO Size 01 (26mm)	25 psig (1.73 bar)	
		5/3 Valves	ISO Size 02 (18mm)	35 psig (2.41 bar)	
			ISO Size 01 (26mm)		
	Pilot Supply Pressure		Internal	Must meet minimum operating pressure	
External			Must be equal to or greater than inlet pressure		
ELECTRICAL DATA FOR SOLENOID PILOT	Solenoids		Current Flow	Power Consumption	Operating Voltage (each solenoid)
			DC	24 volts	5 watts
			AC	120 volts, 60 Hz	1.0 VA inrush, 2.0 VA holding
				230-240 volts, 60 Hz	
			Bi-polar, surge suppression (standard)		
			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 	Declaration of Conformity
CE 	EAC 

Ordering Information

5/2 Solenoid Pilot Controlled Valves

MODEL NUMBER CONFIGURATOR5-Way 2-Position Valves

Series

Valve Function

Revision Level

ISO Size

W66

76

A

0

4

61

W

5/3

0

1

02 (18mm)

01 (26mm)

0

1

Current	Voltage *	
DC	24 V	W
AC	110-120 V, 50/60 Hz	Z
	230-240 V, 60 Hz	Y

* For other voltages consult ROSS.

Actuation	Options	
Single Solenoid Pilot	Non-Locking Overrides	Internal Pilot
		External Pilot
	Locking Overrides	Internal Pilot
		External Pilot
Double Solenoid Pilot	Non-Locking Overrides	Internal Pilot
		External Pilot
	Locking Overrides	Internal Pilot
		External Pilot

61

81

71

91

67

87

77

97

Sub-bases and manifold bases ordered separately. Please see Sub-Base and Manifold pages.

ISO Size	Valve Actuation	Flow C _v (Nl/min)	Weight ≈ lb (kg)
02 (18mm)	Single Solenoid Pilot	0.55 (540)	0.3 (0.15)
	Double Solenoid Pilot	0.55 (540)	0.4 (0.16)
01 (26mm)	Single Solenoid Pilot	1.1 (1100)	0.6 (0.25)
	Double Solenoid Pilot		

Valve Schematics

Single Solenoid Pilot Controlled

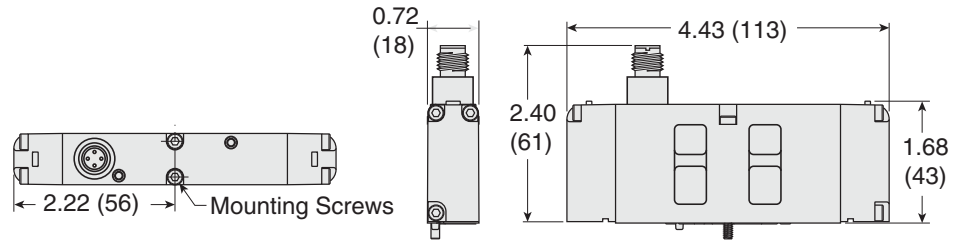
Double Solenoid Pilot Controlled

5/2 Solenoid Pilot Controlled Valves

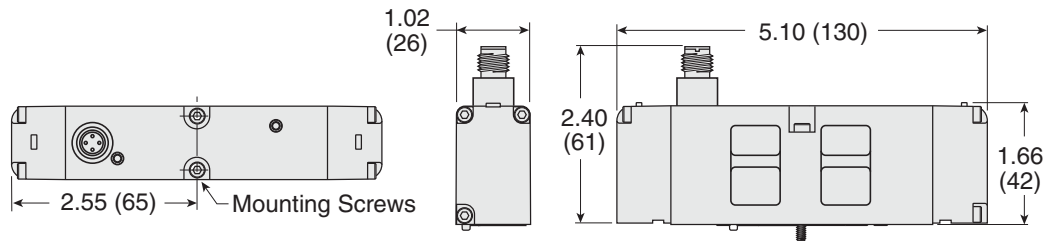
DIMENSIONS

Inches (mm)

ISO Size 02 (18mm)



ISO Size 01 (26mm)



Downloadable CAD models available.

Ordering Information

5/3 Double Solenoid Pilot Controlled Valves

MODEL NUMBER CONFIGURATOR

5-Way 3-Position Valves

Series

Valve Function

Revision Level

ISO Size

W66

77

A

0

4

61

W

Current	Voltage *	
DC	24 V	W
AC	110-120 V, 50/60 Hz	Z
	230-240 V, 60 Hz	Y

* For other voltages consult ROSS.

Center Position	Options		
Closed Center	Non-Locking Overrides	Internal Pilot	61
		External Pilot	81
	Locking Overrides	Internal Pilot	71
		External Pilot	91
Power Center	Non-Locking Overrides	Internal Pilot	63
		External Pilot	83
	Locking Overrides	Internal Pilot	73
		External Pilot	93
Open Center	Non-Locking Overrides	Internal Pilot	67
		External Pilot	87
	Locking Overrides	Internal Pilot	77
		External Pilot	97

Sub-bases and manifold bases ordered separately. Please see Sub-Base and Manifold pages.

ISO Size	Valve Actuation	Flow C _v (NI/min)	Weight ≈ lb (kg)
02 (18mm)	Double Solenoid Pilot	0.55 (540)	0.4 (0.16)
01 (26mm)	Double Solenoid Pilot	1.1 (1100)	0.6 (0.25)

Valve Schematics

Closed Center

Power Center

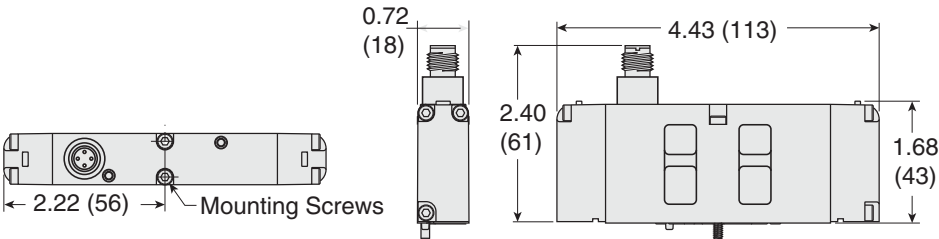
Open Center

5/3 Double Solenoid Pilot Controlled Valves

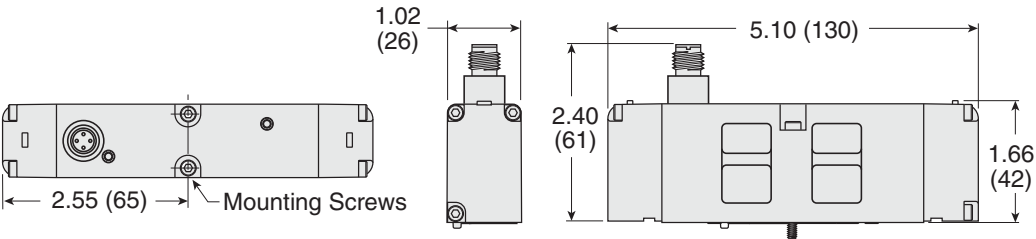
DIMENSIONS

Inches (mm)

ISO Size 02 (18mm)



ISO Size 01 (26mm)



Downloadable CAD models available.



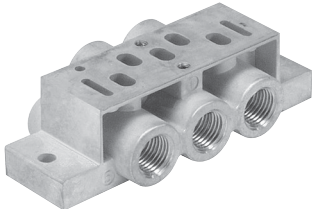
Single Sub-Bases, Manifold Bases and Accessories

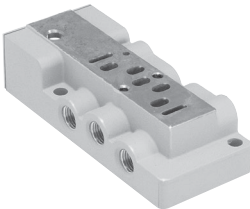
SINGLE SUB-BASES WITH SIDE PORTS

ISO Size	Outlet Port	Model Number *	
		NPT Thread	G Thread **
02 (18mm)	1/8	RPL02-01-80	RPL02-01-70
01 (26mm)	1/4	RPS5511130P	RPS5511140P

* Can be used for external, single, or double remote pilot.

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





MANIFOLD BASES WITH END PORTS

MANIFOLD MODEL NUMBER CONFIGURATOR

RPSHU11

ISO 15407-1

5

4

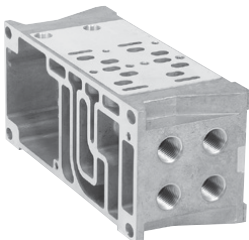
0

1

P

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

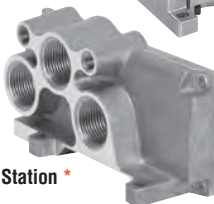
Gasket Options	
1, 3, 5 Ports Open and Pilots Open	1
1, 3, 5 Ports Closed and Pilots Open	2
1 Port Closed, 3, 5 Ports Open and Pilots Closed	3
1 Port Open, 3, 5 Ports Closed and Pilots Open	4
1, 3, 5 Ports Open and Pilots Closed	5
1, 3, 5 Ports Closed and Pilots Closed	6
1 Port Closed, 3, 5 Ports Open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



END STATION

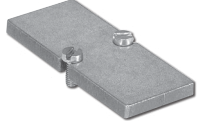
END STATION MODEL NUMBER CONFIGURATOR			
RPSHU31	LO	1	0 P
Valve Type		Left Hand End Station	
Non Plug-in	Internal Pilot	RPSHU31	
	External Pilot		
Right Hand End Station Ports		Thread Type	
Exhaust and Inlet Ports Size		NPT	0
1/2		G	1*
3/4		* G thread model conforms to ISO 1179-1 w 228-1 thread.	
1		Hi-Flow Right Hand End Station *	
2			





* Hi-Flow Right Hand End Station included.

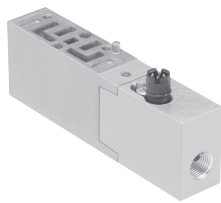
BLANK STATION

Blank Station	ISO Size	Model Number *	
	02 (18mm)	RDX02BLK	
	01 (26mm)	RDX01BLK	
	* Includes: Blank Station Plate, Gasket, and Mounting Bolts.		

INTERPOSED SUPPLY & EXHAUST MODULES

Interposed Modules

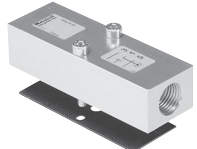
ISO Size	Outlet Port	Model Number *	
		NPT Thread	G Thread
	02 (18mm)	Supply	RPS562600P
Exhaust		RPS562700P	RPS562701P
01 (26mm)	Supply	RPS552600P	RPS552601P
	Exhaust	RPS552700P	RPS552701P
* Used on Size 00 & Size 0 valves to provide a pressure or exhaust path to individual valves.			



INTERPOSED FLOW CONTROL

Interposed Flow Control	ISO Size	Model Number *	
	02 (18mm)	RPS5642P	
	01 (26mm)	RPS5542P	
	* 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.		

INTERMEDIATE AIR SUPPLY BASE

Intermediate Air Supply Base	ISO Size	Port Size	Thread Type	Model Number *	
	02 (18mm)	1/8	NPT	RD02P-01-80	
	01 (26mm)	1/4	NPT	RD01P-02-80	
	* Includes: Air Supply Base, Gasket and Mounting Bolts.				

GASKET KITS MANIFOLD TO MANIFOLD

Gasket Kits Manifold to Manifold	Pilots Status	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 PRESSURE REGULATORS

Pressure
Regulators

MODEL NUMBER CONFIGURATOR

RPS5637

1

6

6

P

Basic Series	
ISO Size 02 (18mm)	RPS5637
ISO Size 01 (26mm)	RPS5537

Regulator Function	
Single Port Regulator	1
Independent Dual Port Regulator	2

#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

#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 Single Port 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.

Independent Dual Port Regulator Size 02 - 18mm	Single Port Regulator Size 01 - 26mm
	

GAUGE ADAPTER KITS

Gauge Adapter

Description	Model Number
Gauge Adapter 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 Adapter 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.	



10

© 2025, ROSS®. All Rights Reserved.

EXHAUST SILENCERS



Illustration example.

Silencers	SPECIFICATIONS		Silencer Material		Pressure Range psig (bar)		Schematic	
			Aluminum		0-290 (0-20) maximum			
	Port Size	Thread Type	Flow C _v (NI/min)	Model Number		Dimensions inches (mm)		Weight ≈ lb (kg)
				NPT Thread	R/Rp Thread	Length	Hex Size (D)	
	1/8	Male	1.3 (1300)	5500A1003	D5500A1003	2.0 (5)	0.81 (21)	0.07 (0.03)
	1/4	Male	2.3 (2300)	5500A2003	D5500A2003	2.2 (6)	0.81 (21)	0.07 (0.03)
	1/2	Male	6.8 (6700)	5500A4003	D5500A4003	3.6 (9)	1.25 (32)	0.2 (0.1)
	3/4	Male	7.2 (7100)	5500A5013	D5500A5013	3.6 (9)	1.25 (32)	0.2 (0.1)

CAUTIONS, WARNINGS And STANDARD WARRANTY



ROSS OPERATING VALVE, ROSS CONTROLS®, ROSS DECCO®, and AUTOMATIC VALVE INDUSTRIAL, collectively the “ROSS Global Family”.

PRE-INSTALLATION or SERVICE

1. Before servicing a valve or other pneumatic component, be sure all sources of energy are turned off, the entire pneumatic system is shut down and exhausted, and all power sources are locked out (ref: OSHA 1910.147, EN 1037).
2. All ROSS Global Family Products, including service kits and parts, should be installed and/or serviced only by persons having training and experience with pneumatic equipment. Because any product can be tampered with and/or need servicing after installation, persons responsible for the safety of others or the care of equipment must check ROSS Global Family Products on a regular basis and perform all necessary maintenance to ensure safe operating conditions.
3. All applicable instructions should be read and complied with before using any fluid power system to prevent harm to persons or equipment. In addition, overhauled or serviced valves must be functionally tested prior to installation and use. If you have any questions, call your nearest ROSS Global Family location.
4. Each ROSS Global Family Product should be used within its specification limits. In addition, use only ROSS Group components to repair ROSS Global Family Products.

WARNINGS:

Failure to follow these instructions can result in personal injury and/or property damage.

FILTRATION and LUBRICATION

1. Dirt, scale, moisture, etc., are present in virtually every air system. Although some valves are more tolerant of these contaminants than others, best performance will be realized if a filter is installed to clean the air supply, thus preventing contaminants from interfering with the proper performance of the equipment. The ROSS Global Family recommends a filter with a 5-micron rating for normal applications.
2. All standard ROSS Global Family filters and lubricators with polycarbonate plastic bowls are designed for compressed air applications only. Use the metal bowl guard, where provided, to minimize danger from high pressure fragmentation in the event of bowl failure. Do not expose these products to certain fluids, such as alcohol or liquefied petroleum gas, as they can cause bowls to rupture, creating a combustible condition and hazardous leakage. Immediately replace crazed, cracked, or deteriorated bowls.
3. Only use lubricants which are compatible with materials used in the valves and other components in the system. Normally, compatible lubricants are petroleum base oils with oxidation inhibitors, an aniline point between 180°F (82°C) and 220°F (104°C), and an ISO 32, or lighter, viscosity. Avoid oils with

phosphate type additives which can harm polyurethane components, potentially leading to valve failure which risks personal injury, and/or damage to property.

WARNINGS:

Failure to follow these instructions can result in personal injury and/or property damage.

AVOID INTAKE/EXHAUST RESTRICTION

1. Do not restrict air flow in the supply line. To do so could reduce the pressure of the supply air below minimum requirements for the valve and thereby causing erratic action.
2. Do not restrict a valve's exhaust port as this can adversely affect its operation. Exhaust silencers must be resistant to clogging and must have flow capacities at least as great as the exhaust capacities of the valves. Contamination of the silencer can result in reduced flow and increased back pressure.

WARNINGS:

Failure to follow these instructions can result in personal injury and/or property damage.

SAFETY APPLICATIONS

1. Mechanical Power Presses and other potentially hazardous machinery using a pneumatically controlled clutch and brake mechanism must use a press control double valve with a monitoring device. A double valve without a self-contained monitoring device should be used only in conjunction with a control system which assures monitoring of the valve. All double valve installations involving hazardous applications should incorporate a monitoring system which inhibits further operation of the valve and machine in the event of a failure within the valve mechanism.
2. Safe Exhaust (dump) valves without a self-contained monitoring device should be used only in conjunction with a control system which assures monitoring of the valve. All Safe Exhaust valve installations should incorporate a monitoring system which inhibits further operation of the valve and machine in the event of a failure within the valve mechanism.
3. Per specifications and regulations, the ROSS L-O-X® and L-O-X® with EEZ-ON®, N06 and N16 Series operation products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

WARNINGS: *Failure to follow these instructions can result in personal injury and/or property damage.*

STANDARD WARRANTY

All products sold by the ROSS Global Family are warranted for a one-year period [with the exception of Filters, Regulators and Lubricators (“FRLs”) which are warranted for a period of seven (7) years] from the date of purchase. All products are, during their respective warranty periods, warranted to be free of defects in material and workmanship. The ROSS Global Family's obligation under this warranty is limited to repair, replacement or refund of the purchase price paid for products which the ROSS Global Family has determined, in its sole discretion, are defective. All warranties become void if a product has been subject to misuse, misapplication, improper maintenance, modification or tampering. Products for which warranty protection is sought must be returned to the ROSS Global Family freight prepaid.

THE WARRANTY EXPRESSED ABOVE IS IN LIEU OF AND EXCLUSIVE OF ALL OTHER WARRANTIES AND THE ROSS GLOBAL FAMILY EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ROSS GLOBAL FAMILY MAKES NO WARRANTY WITH RESPECT TO ITS PRODUCTS MEETING THE PROVISIONS OF ANY GOVERNMENTAL OCCUPATIONAL SAFETY AND/OR HEALTH LAWS OR REGULATIONS. IN NO EVENT IS THE ROSS GLOBAL FAMILY LIABLE TO PURCHASER, USER, THEIR EMPLOYEES OR OTHERS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A BREACH OF THE WARRANTY DESCRIBED ABOVE OR THE USE OR MISUSE OF THE PRODUCTS. NO STATEMENT OF ANY REPRESENTATIVE OR EMPLOYEE OF THE ROSS GLOBAL FAMILY MAY EXTEND THE LIABILITY OF THE ROSS GLOBAL FAMILY AS SET FORTH HEREIN.



GLOBAL LOCATIONS

	AMERICAS	USA	ROSS CONTROLS	Tel: +1-248-764-1800	www.rosscontrols.com
		Canada	ROSS CANADA	Tel: +1-416-251-7677	www.rosscanada.com
		Brazil	ROSS BRASIL	Tel: +55-11-4335-2200	www.rosscontrols.com.br
	EUROPE	Germany	ROSS EUROPA	Tel: +49 (0)6103-7597-100	www.rosseuropa.com
		France	ROSS FRANCE	Tel: +33(0)1-49-45-65-65	www.rossfrance.com
		United Kingdom	ROSS UK	Tel: +44 (0)1254 872277	www.rossuk.co.uk
	ASIA & PACIFIC	India	ROSS CONTROLS INDIA	Tel: +91-44-2624-9040	www.rosscontrolsindia.com
		China	ROSS CONTROLS CHINA	Tel: +86-21-6915-7961	www.rosscontrolschina.com
		Japan	ROSS ASIA	Tel: +81-42-778-7251	www.rossasia.co.jp



www.automaticvalve.com



www.rossdecco.com



www.manufactis.net



www.masterpneumatic.com



www.pneumatrol.com



www.ubsafe.com