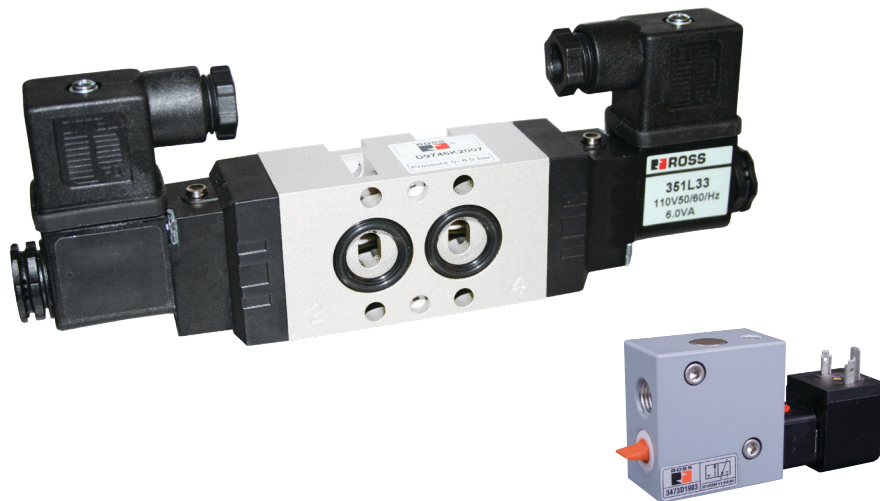




NAMUR VALVES



PRODUCT CATALOG

NAMUR Interface Valves 95 Series

Product Overview

The ROSS® NAMUR Interface 95 Series are directional control valves, assembled according to the standard interface for actuator mountings.

These valves stand out for their solid, compact construction, high flow capacity, and fast response time.

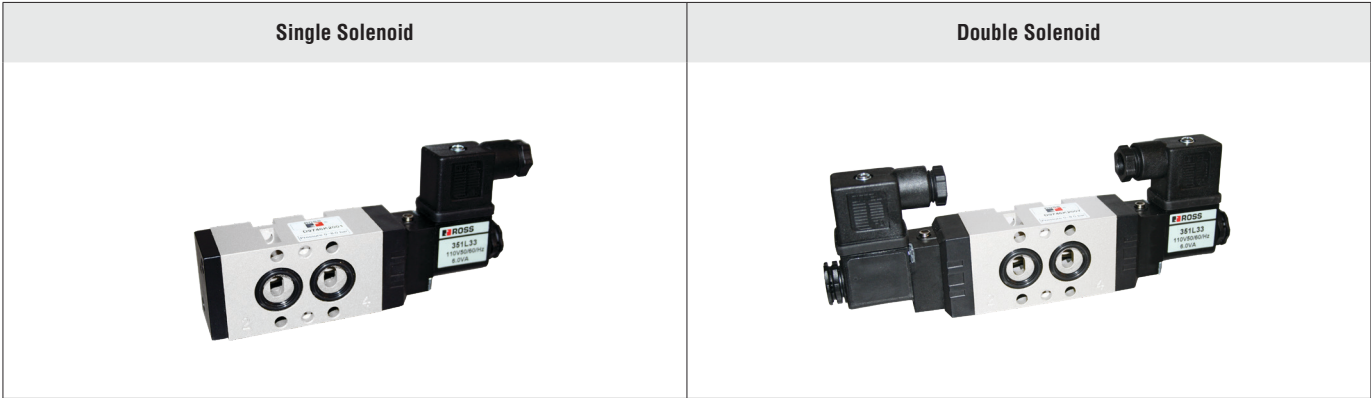
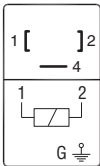
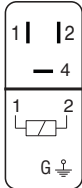


Illustration examples.

VALVE FEATURES

Spool Design	Resilient seal spool construction
Mounting	NAMUR Interface; Standard actuator interface according VDI/VDE384
Construction	Solid compact construction with high flow capacity
Reliability	Consistent fast response times over the life of the valve
Solenoid Pilot	Solenoid and connector included

Solenoid Pinouts

DIN EN 175301-803 Micro-Mini	DIN EN 175301-803 Form B
 1 - Positive 2 - Negative 4 - Ground	 1 - Positive 2 - Negative 4 - Ground

Actuation	Valve Function		Inlet Port Size	Maximum Flow C _v (Nl/min)	Page
			1/4		
Solenoid Control	5/2	Single Solenoid	●	1.3 (1300)	3 – 5
		Double Solenoid	●		
Accessories – Silencers					10

STANDARD SPECIFICATIONS						
GENERAL	Function		5/2 Valve			
	Construction Design		Spool			
	Actuation		Electrical	Solenoid Pilot Controlled		
	Mounting	Type	NAMUR Interface			
		Orientation	Any, preferably vertical			
	Connection		Threaded	NPT		
G						
Manual Override	Solenoid Pilot Controlled	Pushbutton, non-locking				
OPERATING CONDITIONS	Temperature		Ambient	41° to 140°F (5° to 60°C)		
			Media			
	Flow Media		Filtered air			
	Operating Pressure		22.5 to 150 psig (1.5 to 10 bar)			
	Pilot Supply		Internal			
ELECTRICAL DATA FOR SOLENOID PILOT VALVES	Solenoids		Current Flow	Operating Voltage		Power Consumption (each solenoid)
			DC	24 volts		2.5 watts
			AC	110 volts, 50/60 Hz		5.5 VA holding
			Rated for continuous duty			
	Enclosure Rating		IP 65, IEC 60529			
	Electrical Connection		EN 175301-803	Port Size	1/8	Micro-Mini
					1/4	Form B
3/8						
1/2						
CONSTRUCTION MATERIAL	Valve Body		Bar Stock Aluminum			
	Poppet		Stainless Steel			
	Seals		Buna-N			
IMPORTANT NOTE: Please read carefully and thoroughly all of the CAUTIONS, WARNINGS on the inside back cover.						

Ordering Information

95 Series Solenoid Pilot Controlled Valves

MODEL NUMBER CONFIGURATOR5-Way 2-Position Valves

Port Thread

NPT

Leave Blank

G

D

Series

95

Actuation

Solenoid Pilot

7

Valve Function

5/2

6

Revision Level

K

2

Current

DC

AC

Voltage

24 V

110-120 V, 50/60 Hz

W

Z

Solenoid Pilot

Single Solenoid

Double Solenoid

01

02

Port Size

1/4

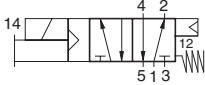
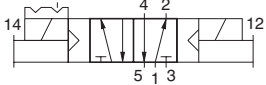
01W

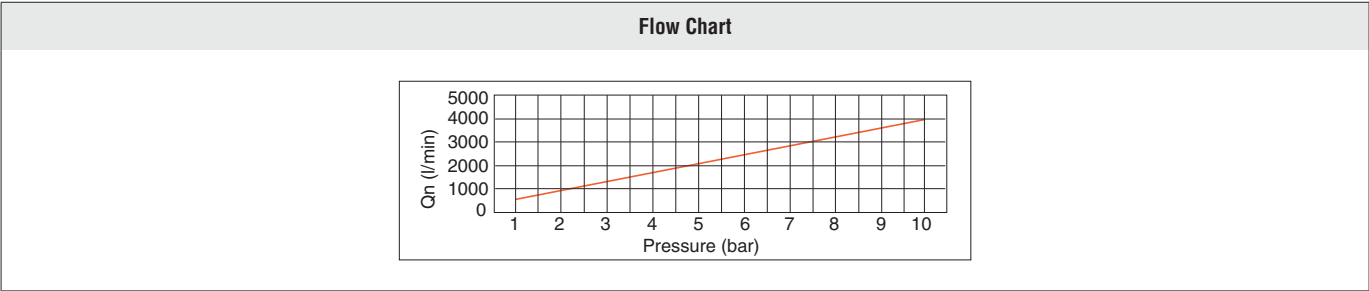
Model Number examples: 9576K2901W, D9573K300Z.

For other options, consult ROSS.

Valves available with installed prewired connectors, please consult ROSS.

Size	Flow Cv (NI/min)	≈ Weight lb (kg)
Port 1, 3, 5		
1/4	1.3 (1300)	0.70 (0.32)

Valve Schematics	
Single Solenoid, Spring Return	Double Solenoid, Detented
	

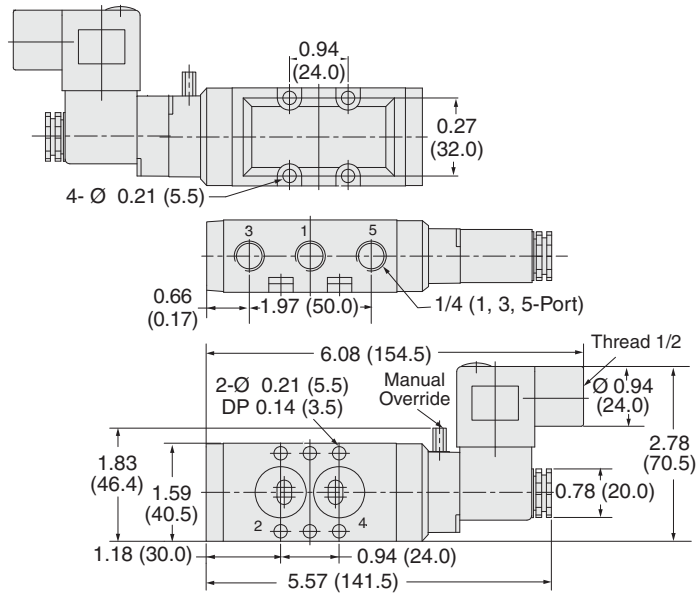


95 Series Solenoid Pilot Controlled Valves

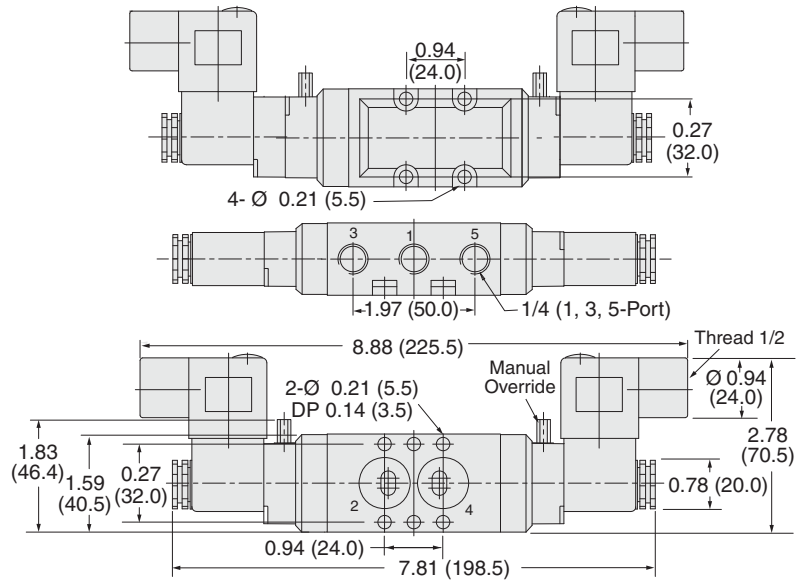
DIMENSIONS

Inches (mm)

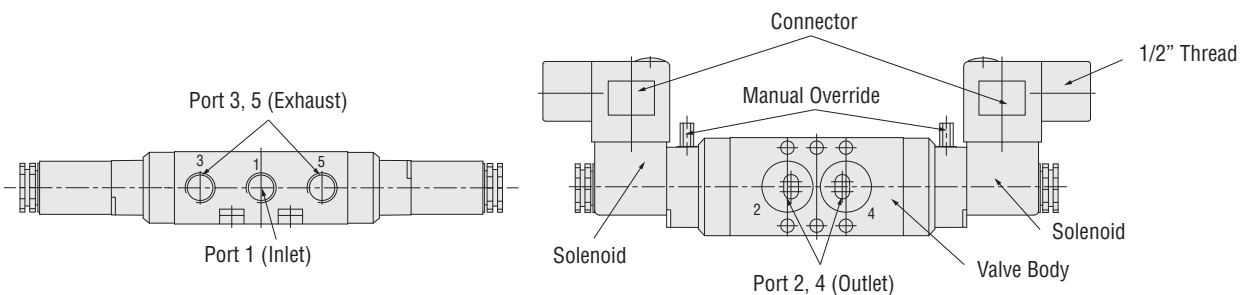
Single Solenoid Valve



Double Solenoid Valve



Downloadable CAD models available.



NAMUR Interface Washdown Valves 34 Series

Product Overview

The ROSS® NAMUR Interface 34 Series are directional control valves, assembled according to the standard interface for actuator mountings.

These valves stand out for their solid, compact construction, high flow capacity, and fast response time.

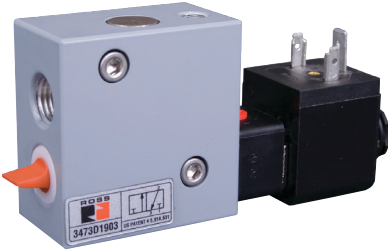
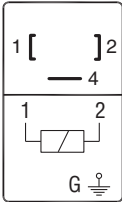
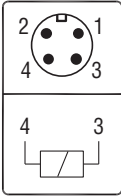
Valve with EN DIN Electrical Connector	Valve with M12 Electrical Connector
	

Illustration examples.

VALVE FEATURES

Ball-Poppet Design	Patented Ball-poppet internals; Faster and more precise operation than a spool valve
Mounting	NAMUR Interface; Standard actuator interface according VDI/VDE384
Construction	Corrosion resistant epoxy powder coat
Solenoid Pilot	Solenoid Pilot – Low wattage, fast shifting, repeatable, long life
“Duck-bill” Protected Exhaust Port(s)	Limits wash down fluids from entering the valve; Minimizes the collection point for contamination
Reliability	Near zero internal leakage for the life of the valve, self cleaning valve seats, sure shifting

Solenoid Pinouts

DIN EN 175301-803 Form A	M12
 1 - Positive 2 - Negative 4 - Ground	 3 - Positive 4 - Negative

Actuation	Valve Function	Inlet Port Size	Maximum Flow C _v (NI/min)	Page
		1/4		
Solenoid Control	3/2	●	1.3 (1300)	7– 9
	5/2	●		
Accessories – Connectors				10

STANDARD SPECIFICATIONS					
GENERAL	Function		3/2 Valve		
			5/2 Valve		
	Construction Design		Ball-Poppet		
	Actuation		Electrical	Solenoid Pilot Controlled	
	Mounting	Type	NAMUR Interface		
		Orientation	Any, preferably vertical		
	Connection		Threaded	NPT	
Manual Override	Solenoid Pilot Controlled	Pushbutton, non-locking			
OPERATING CONDITIONS	Temperature		Ambient	4° to 122°F (-10° to 50°C)	
			Media		
			For temperatures below 40° F (4° C) air must be free of water vapor to prevent formation of ice.		
	Flow Media		Filtered air		
	Operating Pressure		29 to 116 psig (2 to 8 bar)		
	Pilot Supply		Internal		
ELECTRICAL DATA FOR SOLENOID PILOT VALVES	Solenoids		Current Flow	Operating Voltage	Power Consumption (each solenoid)
			DC	24 volts	0.7 watts
			AC	110 volts, 50/60 Hz	5.8 watts nominal, 6.5 watts maximum
			Rated for continuous duty		
	Enclosure Rating		IP 65, IEC 60529		
	Electrical Connection		EN 175301-803	Form A	
			M12		
CONSTRUCTION MATERIAL	Valve Body		Bar Stock Aluminum		
	Poppet		Stainless Steel		
	Seals		Buna-N		
STANDARD	NEMA 4X (enclosure constructed for indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; and also provides protection in highly corrosive environments.				
IMPORTANT NOTE: Please read carefully and thoroughly all of the CAUTIONS, WARNINGS on the inside back cover.					

Ordering Information

34 Series 3/2 Solenoid Pilot Controlled Valves

MODEL NUMBER CONFIGURATOR

3-Way 2-Position Valves

34

7

3

D

1

9

04

W

Series

Actuation

Valve Function

Revision Level

Solenoid Pilot

3/2 Normally Closed

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

Electrical Connection	
EN 175301-803	Form A 00
M12	04

Port Size
1/4

Model Number examples: 3473D1904W, 3473D1900W.

For other voltages, consult ROSS.

Note: 10-24 and M5 mounting fasteners available upon request.

34 Series 5/2 Solenoid Pilot Controlled Valves

MODEL NUMBER CONFIGURATOR

5-Way 2-Position Valves

34

7

6

C

1

9

00

W

Series

Actuation

Valve Function

Revision Level

Solenoid Pilot

5/2

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

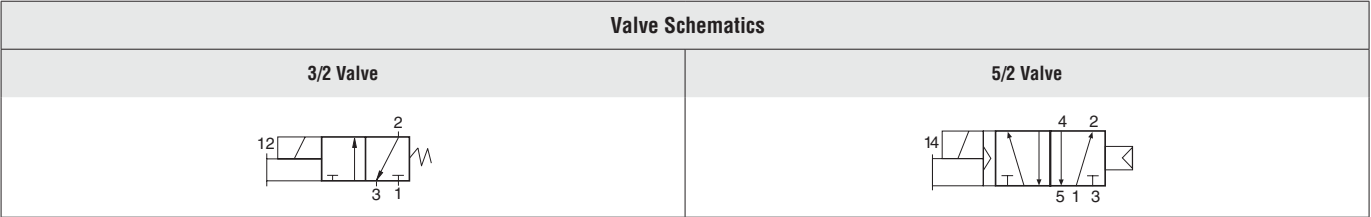
Electrical Connection	
EN 175301-803	Form A 00
M12	04

Port Size
1/4

Model Number examples: 3476C1904W, 3476C1900W.

For other voltages, consult ROSS.

Note: 10-24 and M5 mounting fasteners available upon request.



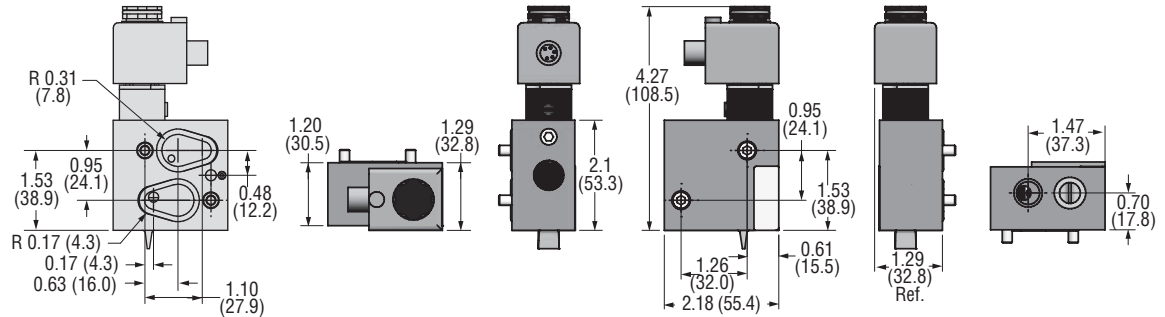
95 Series Solenoid Pilot Controlled Valves

Valve Function	Size	Flow C _v (NI/min)	Mounting Bolts	≈ Weight lb (kg)
	Port 1, 3, 5			
3/2	1/4	0.25 (250)	10-32	0.8 (0.3)
5/2	1/4	0.25 (250)	10-32	0.9 (0.4)

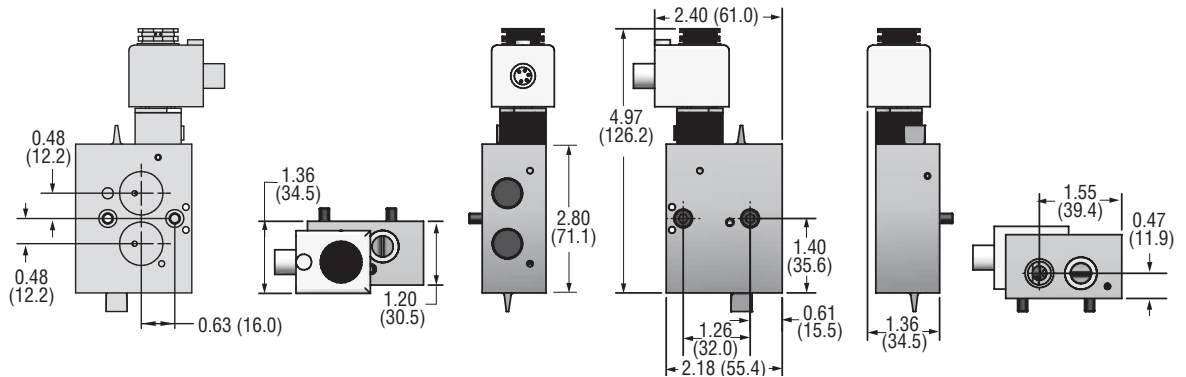
DIMENSIONS

Inches (mm)

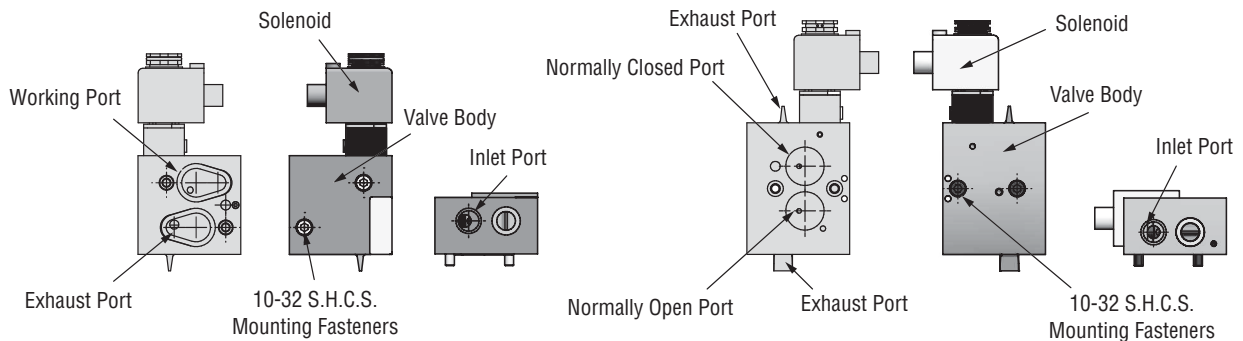
3/2 Valve



5/2 Valve



Downloadable CAD models available.



Accessories

EXHAUST SILENCERS (for 95 Series Only)

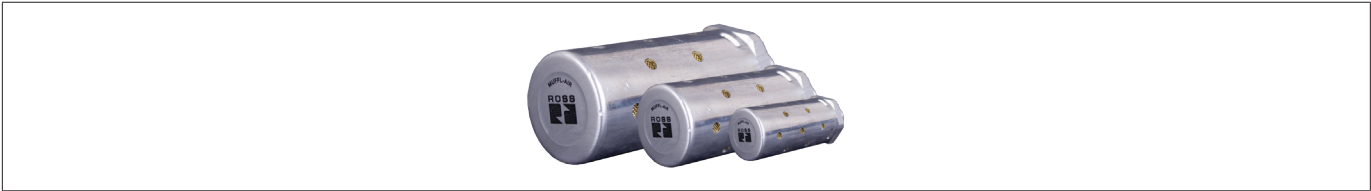


Illustration example.

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)	
	1/4	Male	2.3 (2300)	5500A2003	D5500A2003	2.2 (6)	0.81 (21)	0.07 (0.03)

ELECTRICAL CONNECTORS

Cable Grip	
Without Light	With Light

Illustration examples.

Connectors	Connector					Model Number			
	Type	Connection	Fitting Connection	Quantity Included	Cord Diameter mm	Without Light	Lighted Connector		
							24 V DC	120 V AC	230 V AC
	DIN EN 175301-803 Form A	Solenoid	Cable grip	1	8 to 10	937K87	936K87-W	936K87-Z	936K87-Y
			1/2" NPT conduit	1	–	723K77	724K77-W	724K77-Z	724K77-Y
	DIN EN 175301-803 Form B	Solenoid	Cable grip	1	8 to 10	–	1767L77	1781L77	–
	DIN EN 175301-803 Micro-Mini	Solenoid	Cable grip	1	8 to 10	–	1766L77	1780L77	–
	M12	Consult ROSS.							

Connector Pinouts		
DIN EN 175301-803		M12
Form A & Micro-Mini	Form B	
	1 - Black 2 - Black 4 - Green/Yellow (Ground)	1 - Normally Closed 2 - Normally Closed 3 - Blue (Negative) 4 - Brown (Positive)

CAUTIONS, WARNINGS And STANDARD WARRANTY



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

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 Group 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 Group 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 Group location.
4. Each ROSS Group Product should be used within its specification limits. In addition, use only ROSS Group components to repair ROSS Group 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 Group recommends a filter with a 5-micron rating for normal applications.
2. All standard ROSS Group 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 Group 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 Group's obligation under this warranty is limited to repair, replacement or refund of the purchase price paid for products which the ROSS Group 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 Group freight prepaid.

THE WARRANTY EXPRESSED ABOVE IS IN LIEU OF AND EXCLUSIVE OF ALL OTHER WARRANTIES AND THE ROSS GROUP EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ROSS GROUP 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 GROUP 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 GROUP MAY EXTEND THE LIABILITY OF THE ROSS GROUP AS SET FORTH HEREIN.



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