

**GoTo Products are
highlighted in yellow.**

Series 740 Valves

Pneumatic Directional Control

(Pages from SC-Master2 catalog)

The Drive & Control Company



Series 740 Valves

Specifications and features

Rexroth
Bosch Group

4 Way / 2 & 3 Position Solenoid & Air Pilot Operated Diaphragm-Poppet Valve

TECHNICAL DATA:

Port Sizes:

Integrated Fittings for 3/8", 5/16", and 8mm tubing
Push-in fitting styles bodies available for metric tubing only
(2 position only); see page 3.90.

Working Pressure:

20 PSI minimum
150 PSI maximum
External Pilots not available

Flow: $C_v=0.7$ - with Integrated Fittings

($C_v=1.3$ - comparable flow to threaded part valve)

Temperature Range:

Solenoid Valve +5°F to 122°F

Air Pilot +5°F to 140°F

Media:

Air (either lubricated or non-lubricated)

Materials:

Polyacetal Engineering plastic with Buna N seals and diaphragms

Combination Manual Override:

Locking & Non-Locking

ELECTRICAL DATA:

Standard Voltage (all coils are rated for continuous duty)	Power Consumption	
	Inrush	Holding
24 VAC-50/60 Hz, 110V-50 Hz/120V-60 Hz 220V-50 Hz/240V	6.4 VA	3.7 VA
6, 12, 24 VDC	2.7 W	

Voltage Tolerance: $\pm 10\%$ (Except for Explosion proof and Intrinsicly safe solenoids.)

NOTE: Electrical connectors must be ordered separately. One Per solenoid required. See complete listing on page 6.2.

Recommended Tubing

Standard 3/8" O.D. x .062" wall - poly tubing

* 5/16" O.D. x .040" wall - nylon tubing

* 8mm x 1.00mm wall poly tubing

* Requires optional tube nut kit (R432015289)

for valves with special tube nuts.

Valves designed for 10mm O.D. x 1mm wall poly tubing are also available.

Adapters available: 1/4" O.D. x .040 wall - poly tubing

Tube nuts are supplied with each valve for

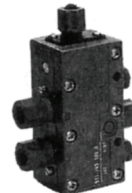
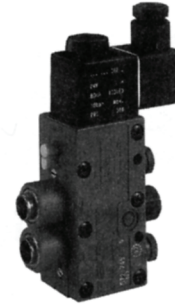
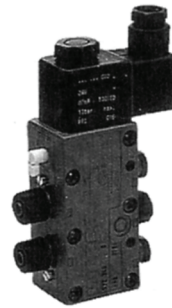
3/8" x .062 wall poly tubing

FEATURES:

- NEMA 4 electrical protection
- Dual UL Listed/CSA models available
- Brad Harrison® Coils available - consult factory
- Packaged as a unit with TASKMASTER™ cylinders in bore sizes 1 1/2" thru 4". See SC-200 sales catalog.
- Integrated Fittings
- Adjustable Built-in Flow Controls in R and S exhausts (two-position valves only)
- Cycle Life: 20-150 million cycles
- Response Time:
Supply pressure 85 PSI
Energized - (0-77 PSI) 18ms or less
De-energized - (85-8 PSI) 32 ms or less
Response times based on 24 VDC Single Solenoid

Standard fittings:
Single and double solenoid
Single and double air pilot

Push-in fittings:
Single and double solenoid
(Metric tubing only)



Series 740 Valves

Single and double solenoid, 4/2



4 Way / 2 Position Solenoid Operated Diaphragm Poppet Valve

NOTE: All dimensions expressed in $\frac{IN}{MM}$

NOTE: Electrical connector must be ordered separately. One per solenoid required. See complete listing on page 6.2.
All valves on this page come with 3/8" tube nuts designed to accommodate 3/8" x 0.062" wall poly tubing.

Valves with tube nuts for 5/16" (8mm) tubing, 10mm tubing, and push-in fitting style bodies available; see page 3.90.

DOUBLE SOLENOID OPERATED

The external non-locking manual override button may be pushed from one side to the other to select which delivery port is pressurized initially.

SINGLE SOLENOID WITH AIR SPRING RETURN



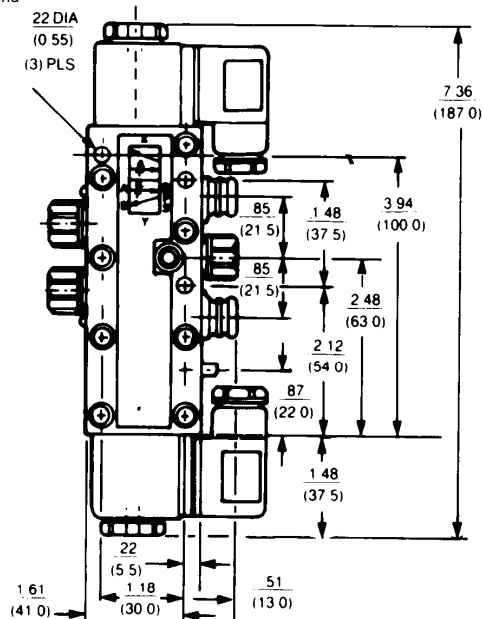
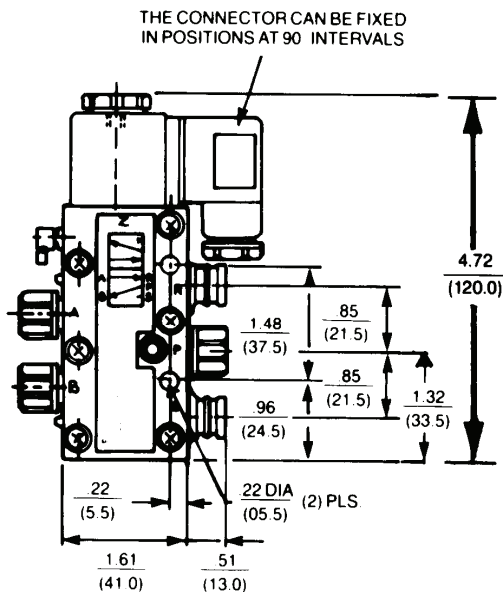
2 POSITION



2 POSITION

NEW PART NO.	OLD PART NO.	VOLTAGE	OLD PART NO.	NEW PART NO.	VOLTAGE
5727495270	PW-067697-00001	110 VAC 50Hz/120 VAC 60Hz	R432016659	PW-067715-00001	110 VAC 50Hz/120 VAC 60Hz
R432016655	PW-067697-00002	220 VAC 50Hz/240 VAC 60Hz	R432016660	PW-067715-00002	220 VAC 50Hz/240 VAC 60Hz
R432016656	PW-067697-00003	6 VDC	R432016661	PW-067715-00003	6 VDC
R432016657	PW-067697-00004	12 VDC	R432016662	PW-067715-00004	12 VDC
5727490220	PW-067697-00005	24 VDC	R432016663	PW-067715-00005	24 VDC
R432016658	PW-067697-00006	24 VAC 50/60 Hz	R432016664	PW-067715-00006	24 VAC 50/60 Hz
R432002436		without coil	R432002437		without coil

Unique Manual Override Feature: Single solenoid valves are equipped with a convertible manual override button. Valve comes standard with *extended locking* override. By snipping tab off of plastic button, override becomes *non-locking extended*. By snipping button at first scored line, it becomes a *flush non-locking* override. By snipping at second scored line, a *flush locking* override is obtained, requiring a screwdriver to actuate.



Typical width of valve: 1.38" (35.0mm)

See next page for U.L. Listed, CSA Approved models.

Series 740 Valves

Double Solenoid 4/3 and U.L./CSA models



4 Way / 3 Position, Double Solenoid Operated Diaphragm Poppet Valve

NOTE: Electrical connector must be ordered separately. One per solenoid required. See complete listing on page 6.2.
All valves on this page come with 3/8" tube nuts designed to accommodate 3/8" x 0.062" wall poly tubing.

NEW PART NO.	OLD PART NO.	DESCRIPTION	SYMBOL
CLOSED CENTER VERSION			
R432016670	PW-067717-00001	110 VAC 50 Hz/120 VAC 60 Hz	
R432016671	PW-067717-00002	220 VAC 50 Hz/240 VAC 60 Hz	
R432016672	PW-067717-00003	6 VDC	
R432016673	PW-067717-00004	12 VDC	
R432016674	PW-067717-00005	24 VDC	
R432016675	PW-067717-00006	24 VAC 50/60 Hz	
R432002438		without coil	
EXHAUST OPEN CENTER VERSION			
R432016665	PW-067716-00001	110 VAC 50 Hz/120VAC 60 Hz	
R432016666	PW-067716-00002	220 VAC 50 Hz/240 VAC 60 Hz	
R432016667	PW-067716-00004	12 VDC	
R432016668	PW-067716-00005	24 VDC	
R432006669	PW-067716-00006	24 VAC 50/60 Hz	
R432002439		without coil	

Warning: Do not energize both solenoids at same time or all ports may be pressurized or exhausted.

4 Way / 2 Position, Solenoid Operated Dual U.L. Listed/CSA Models*

1/2" Conduit Solenoid Connector is pre-wired with 18" leads

NEW PART NO.	OLD PART NO.	DESCRIPTION
R432015884	P -069883-00001	110 VAC 50 Hz/120 VAC 60 Hz
R432015885	P -069883-00004	12 VDC Single Solenoid 2 Position
R432015886	P -069883-00005	24 VDC Single Solenoid 2 Position
R432015887	P -069883-00006	24 VAC 50/60 Hz Single Solenoid 2 Position
R432015881	P -069882-00001	110 VAC 50 Hz/120 VAC 60 Hz
R432030370	P -069882-00004	12 VDC Double solenoid 2 Position
R432015882	P -069882-00005	24 VDC Double Solenoid 2 Position
R432015883	P -069882-00006	24 VAC 50/60 Hz Double Solenoid 2 Position

**U.L./C.S.A. VALVES
COME COMPLETE
WITH SOLENOID CON-
NECTOR(S).**

**Dimensions are the same
as our standard models.**

* Indicator lights are not available for Dual U.L. Listed/CSA valves.

Series 740 Valves

Intrinsically safe solenoid valves, 4/2

4 Way 2 Position Intrinsically Safe Solenoid Valves for Hazardous Locations Classes I, II and III Div I Groups A, B, C, D, E, F and G

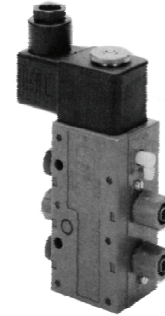
For use in low voltage (24VDC) intrinsically safe applications.
No other voltage is approved.

Comes with standard non-lighted DIN solenoid connector.

*** Must be connected to an FM Approved Zener Diode Barrier.**

Maximum valve pressure is 115 PSI.

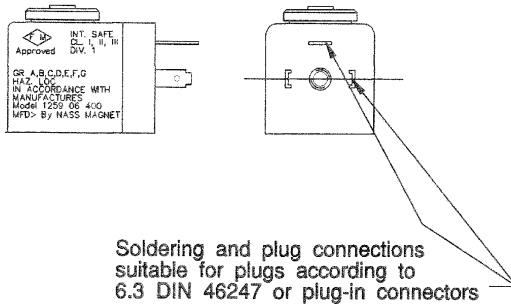
*FM Approved Barrier Manufacturers:
Stahl Incorporated—Woburn, MA
(Request Application Memo #35 and ADV-300.ISSV for Intrinsically Safe Valve information and Stahl Barrier part numbers.)



Single Solenoid Model
Part No. R432008894
(old no. P - 028044-00005)

For Dimension, reference standard solenoid models.

Installation Information

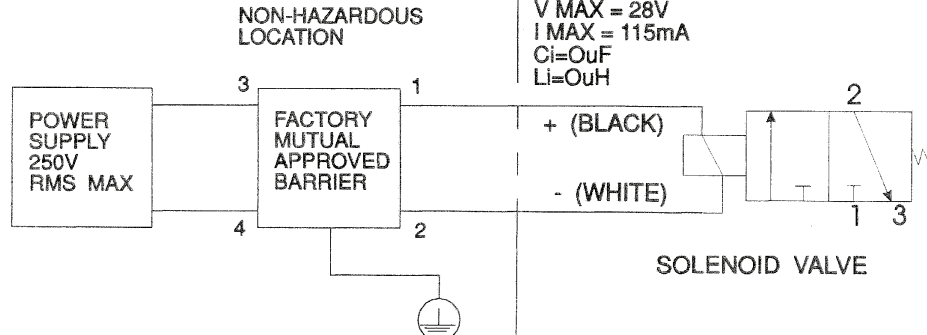


NOTES:

- (1) Maximum non-hazardous voltage not to exceed 250 V RMS.
- (2) Connect per barrier manufacturer's instructions.
- (3) Connect per ISA RP 12.6 instructions.
- (4) Maximum valve pressure: 115 psi.
- (5) Maximum inductance of solenoid operators when mounted on valve body not to exceed 375 mH.
- (6) Solenoid operator for 3/2 way function normally closed.

HAZARDOUS LOCATION CLASS I, II, & III, DIV. 1
GROUPS A, B, C, D, E, F AND G.

V MAX = 28V
I MAX = 115mA
Ci=OuF
Li=OuH



Series 740 Valves

Solenoid valves 4/2 with larger integrated fittings



4 Way / 2 Position Solenoid Operated

Standard Series 740 valve with tube nuts for 5/16" (0.040 wall) nylon tubing or 8mm (1mm wall) poly tubing.
Push-in fittings are for 10mm (1mm wall) poly tubing.

NOTE: Electrical connectors must be ordered separately. One per solenoid required. See complete listing on page 6.2.

2 Position — Standard fittings

	NEW PART NO.	OLD PART NO.	DESCRIPTION
Single Solenoid	R432016647	PW-027860-00001	110 VAC 50 Hz/120VAC 60 Hz Single Solenoid
	R432016648	PW-027860-00002	220 VAC 50 Hz/240VAC 60 Hz Single Solenoid
	R432016649	PW-027860-00005	24 VDC Single Solenoid
	R432016650	PW-027860-00006	24 VAC 50/60 Hz Single Solenoid
	NEW PART NO.	OLD PART NO.	DESCRIPTION
Double Solenoid	R432016651	PW-027897-00001	110 VAC 50 Hz/120VAC 60 Hz Double Solenoid
	R432016652	PW-027897-00002	220 VAC 50 Hz/240VAC 60 Hz Double Solenoid
	R432030385	PW-027897-00004	12 VDC Double Solenoid
	R432016653	PW-027897-00005	24 VDC Double Solenoid
	R432016654	PW-028797-00006	24 VAC 50/60 Hz Double Solenoid

2 Position — Push-in fittings (metric tubing only)

	NEW PART NO.	OLD PART NO.	DESCRIPTION
Single Solenoid	5727475280	572-747-528-0	220 VAC 50 Hz/240vac 60 Hz Single Solenoid
	5727470220	572-747-022-0	24 VDC Single Solenoid
	5727475302	572-747-530-2	Base Valve - No Solenoid*
	NEW PART NO.	OLD PART NO.	DESCRIPTION
Double Solenoid	5727485280	572-748-528-0	220 VAC 50 Hz/240vac 60 Hz Double Solenoid
	5727480220	572-748-022-0	24 VDC Double Solenoid
	5727485302	572-748-530-2	Base Valve - No Solenoid*

* Base valves are supplied without coil(s) or connector(s) which must be ordered separately (see page 3.95)

Series 740 Valve with 10mm Supply and Delivery Ports for higher flow applications—2 Position

NEW PART NO.	OLD PART NO.	DESCRIPTION
R432015405	P -068700-K0000	Single Solenoid
R432015410	P -068704-K0000	Double Solenoid

10mm Valves are supplied without coil(s) or connector(s) which must be ordered separately (see page 3.95)

Series 740 Valves

Extra corrosion resistant models

4 Way / 2 and 3 Position Solenoid Operated Corrosion Resistant Series 740 Valves

All fasteners and exposed metallic parts are 300 series stainless steel. These valves are recommended for most daily wash-down applications such as food processing, breweries and dairy plants, or anywhere else that corrosion can be a problem. Dimensions are the same as standard valves.

NOTE: Special strain relief solenoid connectors are furnished with these valves.

CORROSION RESISTANT MODELS

2 POSITION VALVES Without Indicator Lights

New Part Number	Old Part Number	Description
R432015590	P -069294-00001	110VAC-50Hz/120VAC-60Hz Single Sol.
R432015591	P -069294-00002	220VAC-50Hz/240VAC-60Hz Single Sol.
R432015592	P -069294-00004	12 VDC Single Solenoid
R432015593	P -069294-00005	24 VDC Single Solenoid
R432015594	P -069294-00006	24 VAC-50/60Hz Single Solenoid
New Part Number	Old Part Number	Description
R432015597	P -069297-00001	110VAC-50Hz/120VAC-60Hz Double Sol.
R432015598	P -069297-00002	220VAC-50Hz/240VAC-60Hz Double Sol.
R432015599	P -069297-00005	24 VDC Double Solenoid

2 POSITION VALVES With Indicator Lights

New Part Number	Old Part Number	Description
R432015613	P -069344-00001	110VAC-50Hz/120VAC-60Hz Single Sol.
R432015614	P -069344-00004	12 VDC Single Solenoid
R432015615	P -069344-00005	24 VDC Single Solenoid
R432015616	P -069344-00006	24 VAC-50/60Hz Single Solenoid
New Part Number	Old Part Number	Description
R432015617	P -069345-00001	110VAC-50Hz/120VAC-60Hz Double Sol.
R432015618	P -069345-00002	220V-50Hz/240V-60Hz Double Solenoid
R432015619	P -069345-00005	24 VDC Double Solenoid

Series 740 Valves

Air pilot, single and double

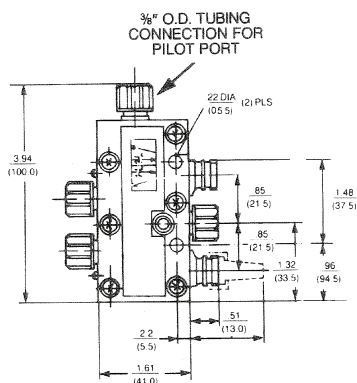
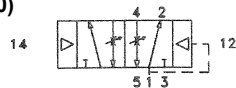
Rexroth
Bosch Group

4 Way / 2 Position Air Pilot Operated

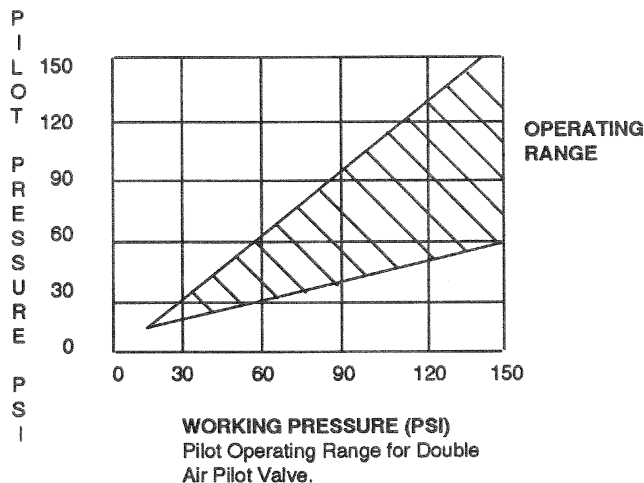
NOTE: All dimensions expressed in $\frac{IN}{MM}$

SINGLE AIR PILOT VALVES

Part No. R432013808
(old P - 067698-00000)

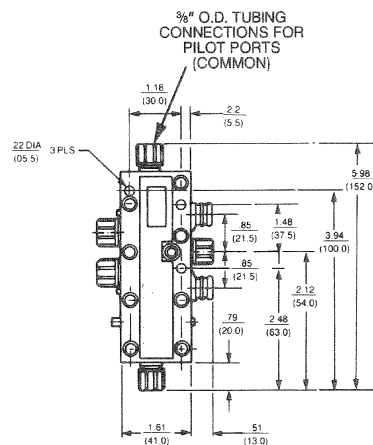
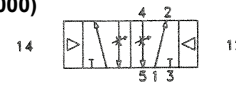


Typical width of valve: 1.38" (35.0mm)



DOUBLE AIR PILOT VALVES

Part No. R432013810
(old P - 067700-00000)



FOR DOUBLE AIR PILOT

Manual override standard. This unique, external non-locking manual override button for the double air pilot may be pushed from one side to the other to select which delivery port is pressurized.

DOUBLE AIR BLEEDER VALVE:
Part No. R432008442 (old P -026125-00000)

OPERATION

Exhausting either air pilot port while the opposite port is still pressurized will shift the valve. Valve features stainless steel fasteners for corrosion resistance.

NOTE: Snap valves are recommended for bleeder pilot valves; see page 4.2

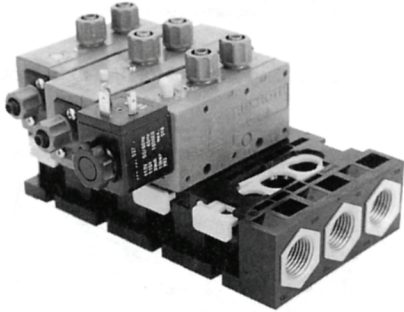
Series 740 Valves

Manifolds and gang stacking

Rexroth
Bosch Group

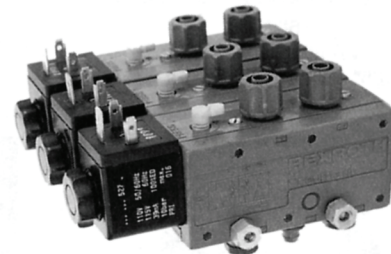
4 Way / 2 and 3 Position Manifold Mounts & Gang Stacking

Manifold Mounting, Snap-Together Assembly
See page 2.29 to order factory assembled manifolds.



NOTE: All dimensions expressed in $\frac{IN}{MM}$

Gang Stacking Arrangement



NEW PART NO.	OLD PART NO.	DESCRIPTION
R432013811	*P -067701-00000	Inlet Segment
R432013812	*P -067702-00000	End Segment
R432013813	*P -067703-00000	Station Segment
R432015880	*P -069881-00000	Single Subbase (Identical to inlet segment except rear cavities are blocked. Used to manifold mount one valve only.)

* Required O-rings included

ORDERING EXAMPLE
(4 Station Manifold):
1 - Inlet segment
1 - End segment
2 - Station segments

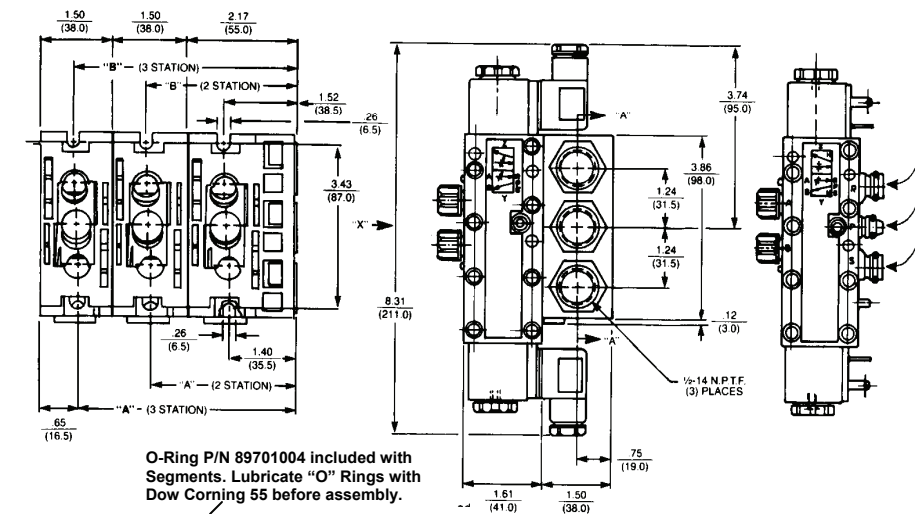
SHEAR PLUG KNOCKOUT
Ganged assembly-common supply pressure obtainable by knockout shear plugs

Mounting Accessories Kit
Part Number **R432013852**
Includes O-ring (for sealing between the valve bodies) and an inlet port blanking cap. (Bolts and Nuts are not included).

Part No. R432013853
O-Ring Kit (included with manifold segments)

Stack can be held together and mounted with readily available 1/8" "all thread" material.

MANIFOLDS - OUTLINE DIMENSIONS

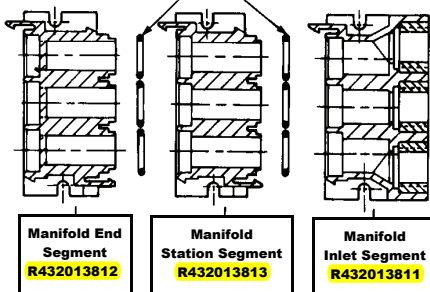


MANIFOLD INSTALLATION NOTE:

The first and last segment should always be securely mounted to a plate. If more than five valves are used, every third valve segment should also be securely mounted.

No. of Stations	A	B
2	2.89	3.01
	(73.5)	(76.5)
3	4.39	4.51
	(111.5)	(114.5)
4	5.89	6.00
	(149.5)	(152.5)
5	7.38	7.50
	(187.5)	(190.5)
6	8.88	9.00
	(225.5)	(228.5)
7	10.37	10.49
	(263.5)	(266.5)
8	11.87	11.99
	(301.5)	(304.5)
9	13.37	13.48
	(339.5)	(342.5)
10	14.86	14.98
	(377.5)	(380.5)

NOTE: Yellow lock tab on manifold segments are scored. This allows the end to be broken off (if desired), making it tamper resistant, thus requiring a screwdriver to remove valve.

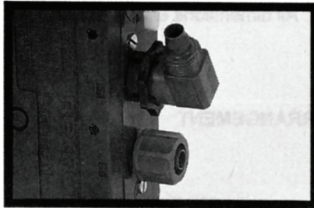


Manifold End Segment
R432013812

Manifold Station Segment
R432013813

Manifold Inlet Segment
R432013811

ACCESSORIES



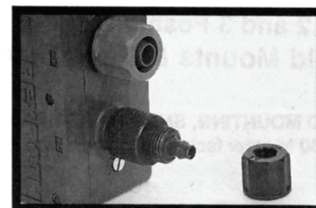
R432015301

Elbow Fitting with nuts for
3/8" & 5/16" O.D. tubing



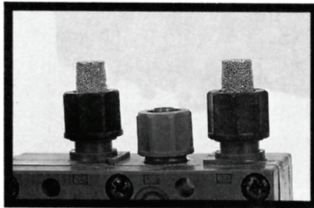
R432015479

Reducer Elbow Fitting with nut
for 1/4" O.D. (.040" wall) tubing



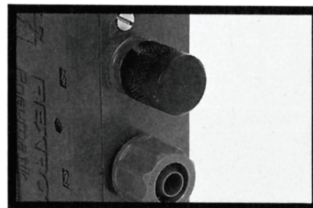
R432015475

Reducer Fitting with nut
For 1/4" O.D. tubing



R432013850

Exhaust Tube Nut & Silencer
(2 kits shown)

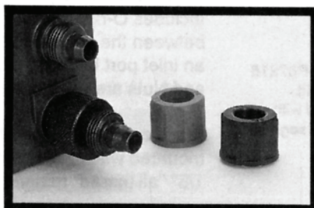


8919905502 (3/8", 5/16" or 8 mm)
8919905512 (10 mm)
Blanking Cap
(converts 4-way to 3-way)



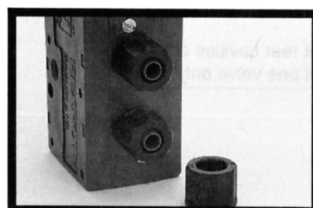
R432013852

Sheer Plug Knockout for
Stacking



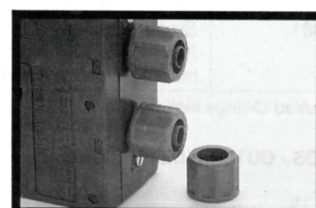
R432015513

Exhaust Fitting Adapter Kit
(converts the standard exhaust fitting to a
tube fitting for external piping)



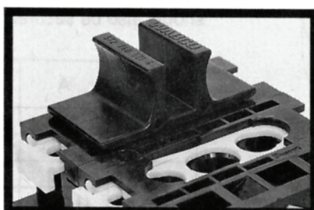
R432015289

Tube Nuts (3 ea.) for 5/16"
(.040" wall) O.D. nylon tubing
or 8mm (1mm wall) O.D. poly
tubing



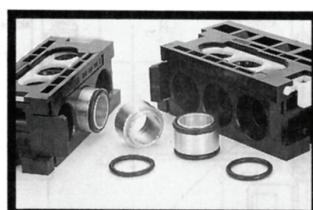
R432015287

Tube Nuts (3 ea.) for 3/8"
O.D. (.062" wall) poly tubing



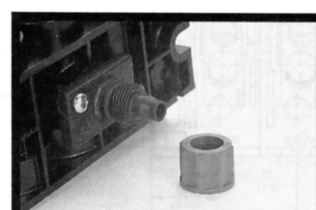
R432015511

Manifold Blanking Plate
(use to block one segment)



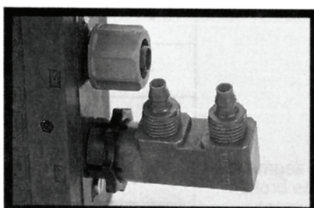
R432015330

Manifold Bushing Kit
for two supply pressures



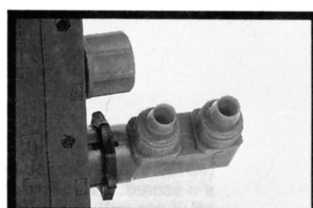
R432015512

Individual Manifold Supply Pressure
Kit-mounts underneath manifold
segment (not included)



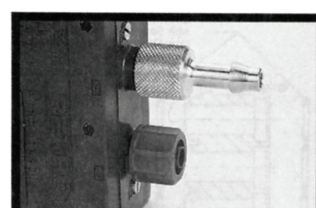
R432015527

Double Elbow Fitting for 1/4"
O.D. tubing



R432015526

Double Elbow Fitting for 3/8" &
5/16" O.D. tubing



R432015525

Barb Fitting for 1/4" I.D.
Reinforced Hose

Repair Kits and Parts

Part No.	Old Part No.	Description
R432013884	P -067916-00000	Single Solenoid Body Repair Kit
R432013885	P -067917-00000	Double Solenoid Body Repair Kit (includes 3 position valves also)
R432013854	P -067817-00000	Air Pilot Operator Kit
R432013816	P -067705-K0000	Single Solenoid Body Assembly
R432013814	P -067704-K0000	Double Solenoid Body Assembly
R432015687	P -069541-00000	Solenoid Repair Kit, includes armature, plunger/spring & seal
8994702802	H -899470-02802	Solenoid Retainer Kit
R432013839	P -067782-00000	Valve Latch & Spring
R432013853	P -067816-00000	Valve Manifold Station "O" Ring Kit, (to attach valve to manifold)

Solenoid Kits

(Includes Armature, Coil, & Mtg. Hardware)

Part No.	Old Part No.	Description
R432015349	P -068648-00000	24 VAC-50/60Hz
R432013840	P -067783-00000	110VAC-50Hz/120VAC-60Hz
R432013841	P -067784-00000	220VAC-50Hz/240VAC-60Hz
R432029180	P -067785-00000	6 VDC
R432013842	P -067786-00000	12 VDC
R432013843	P -067787-00000	24 VDC

U.L. & C.S.A. Approved Coils

Part No.	Old Part No.	Description
R432015782	P -069713-K0001	110VAC-50Hz/120VAC-60Hz
R432015786	P -069713-00002	220VAC-50Hz/240VAC-60Hz
R432015789	P -069713-00006	24 VAC-50/60Hz
R432015783	P -069713-K0004	12 VDC
R432015784	P -069713-K0005	24 VDC

Standard Coils

Part No.	Model Number	Description
R432011985	P -048835-00001	110VAC-50Hz/120VAC-60Hz
R432011986	P -048835-00002	220VAC-50Hz/240VAC-60Hz
R432011988	P -048835-00004	12 VDC
R432011989	P -048835-00005	24 VDC
R432011990	P -048835-00006	24 VAC-50/60Hz

Coils for Corrosion Resistant Valves

Part No.	Model Number	Description
5428457072	H -542845-07072	110VAC-50Hz/120VAC-60Hz
5428457082	H -542845-07082	220VAC-50Hz/240VAC-60Hz
5420507012	H -542050-07012	12 VDC
5450507022	H -542050-07022	24 VDC
5428457022	H -542845-07022	24 VAC-50/60Hz

Solenoid Connectors and Cables

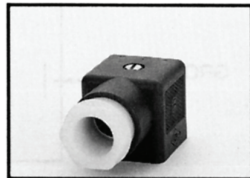


Solenoid Connectors for Ceram™, Series 740, and CD-7™ Valves (DIN 43650-FORM A/ISO 4400 30MM)

STRAIN RELIEF CONNECTORS NON-LIGHTED



8941000302*
(Old Part No. H -894100-00302)
(Standard)

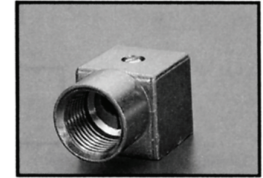


**Part No. R432013747
(Old Part No. P -067325-00000)
(for use with wireways)

1/2" CONDUIT CONNECTORS NON-LIGHTED

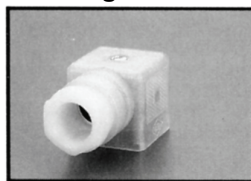


Part No. R432015626
(Old Part No P -069390-00000)
(Molded Engineering Plastic)



Part No. R432015781**
(Old Part No. P -069707-00000)
(Metallic)

Lighted



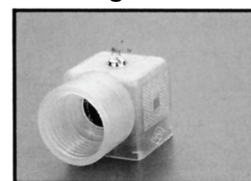
Part No. Old Part No.
**R432013726 P -067261-00000 120 VAC
**R432013728 P -067262-00000 240 VAC
**R432013729 P -067264-00000 12 VDC
**R432013730 P -067265-00000 24 VDC
**R432015629 P -069417-00000 24 VAC

3/8" CONDUIT CONNECTOR NON-LIGHTED



Part No. R432015404***
(Old Part No. P -068674-00000)

Lighted



Part No. Old Part No.
R432008421 P -026078-00001 120VAC***
R432008422 P -026078-00002 240 VAC***
R432008423 P -026078-00004 12 VDC***
R432008424 P -026078-00005 24 VDC***
R432008425 P -026078-00006 24 VAC***

Solenoid Connectors For MINIMASTER™, Series 581 and Series 830 Valves ONLY (INDUSTRIAL FORM[§] 22MM)

Non-Lighted



*8941004702
Old Part No. H -894100-04702

STRAIN RELIEF CONNECTORS

Part No. Old Part No.
*R432013878 P -067854-00000 120 VAC
*R432013879 P -067855-00000 240 VAC
*R432013880 P -067857-00000 12 VDC
*R432013881 P -067858-00000 24 VDC
*R432008426 P -026079-00000 24 VAC

Lighted

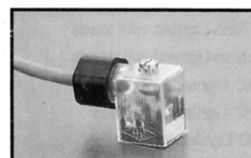


§ Not FORM B.

Solenoid Connectors for Series 840, Series 579, & Series TC Valves ONLY (Micro-Form C)

VOLTAGE (lighted version)	PART NO.	OLD PART NO.
120 VAC/DC (Without Lead)	R432011981	P -048824-00001
120 VAC/DC (W/3' LEAD)	R432011961	P -048803-00001
120 VAC/DC (W/6' LEAD)	R432011963	P -048804-00001
24 VAC/DC (Without Lead)	R432011982	P -048824-00005
24 VAC/DC (w/3' LEAD)	R432011962	P -048803-00005
24 VAC/DC (W/6' LEAD)	R432011964	P -048804-00005

Solenoid Connector Lighted



Strain Relief Solenoid Connector Non-Lighted



Part No.
8941012202
(Old part no.
H -894101-02202)

Recommended Wire Size for Solenoid Connector: 18-22 gauge wire Cable diameter: .080" to .265" O.D.
R432008830 (Old Part No. P -027609-00000) 1/2" conduit connector for 840 wireway.

*0.236-0.315 O.D. Cable Diameter, **0.315-0.394 O.D. Cable Diameter, ***Cable Diameter up to 0.200
All connectors this page: Maximum Wire Size A.W.G. #14. (14 gage may not fit in lighted connector.)

NOTICES TO PRODUCT USERS

1. WARNING: FLUID MEDIA

Bosch Rexroth pneumatic devices are designed and tested for use with filtered, clean, dry, chemical free air at pressures and temperatures within the specified limits of the device. For use with media other than air or for human life support systems, Bosch Rexroth must be consulted. Hydraulic cylinders are designed for operation with filtered, clean, petroleum based hydraulic fluid; operation using fire-resistant or other special types of fluids may require special packing and seals. Consult the factory.

2. WARNING: MATERIAL COMPATIBILITY

Damage to product seals or other parts caused by the use of non-compatible lubricants, oil additives or synthetic lubricants in the air system compressor or line lubrication devices voids Bosch Rexroth's warranty and can result in product failure or other malfunction. See lubrication recommendations below.

AIR LINE LUBRICANTS! In service higher than 18 cycles per minute or with continuous flow of air through the device, an air line lubricator is recommended. * (Do not use line lubrication with vacuum products.) However, the lubricator must be maintained since the oil will wash out the grease, and lack of lubrication will greatly shorten the life expectancy. The oils used in the lubricator must be compatible with the elastomers in the device. The elastomers are normally BUNA-N, NEOPRENE, VITON, SILICONE and HYTREL. Bosch Rexroth recommends the use of only petroleum-based oils without synthetic additives, and with an aniline point between 180° and 210° F.

COMPRESSOR LUBRICANTS! All compressors (with the exception of special "oil free" units) pass oil mist or vapor from the internal crankcase lubricating system through to the compressed air. Since even small amounts of non-compatible lubricants can cause severe seal deterioration (which could result in component and system failure) special care should be taken in selecting compatible compressor lubricants. It is recommended that users review the National Fluid Power Association "Recommended Guide Lines For Use Of Synthetic Lubricants In Pneumatic Fluid Power Systems" (NFPA T1-1978).

3. WARNING: INSTALLATION AND MOUNTING

The user of these devices must conform to all applicable electrical, mechanical, piping and other codes in the installation, operation or repair of these devices.

INSTALLATION! Do not attempt to install, operate or repair these devices without proper training in the technique of working on pneumatic or hydraulic systems and devices, unless under trained supervision. Compressed air and hydraulic systems contain high levels of stored energy. Do not attempt to connect, disconnect or repair these products when system is under pressure. Always exhaust or drain the pressure from system before performing any service work. Failure to do so can result in serious personal injury.

MOUNTING! Devices should be mounted and positioned in such manner that they cannot be accidentally operated.

4. WARNING: APPLICATION AND USE OF PRODUCTS

The possibility does exist for any device or accessory to fail to operate properly through misuse, wear or malfunction. The user must consider these possibilities and should provide appropriate safe guards in the application or system design to prevent personal injury or property damage in the event of malfunction.

5. WARNING: CONVERSION, MAINTENANCE AND REPAIR

When a device is disassembled for conversion to a different configuration, maintenance or repair, the device must be tested for leakage and proper operation after being reassembled and prior to installation.

MAINTENANCE AND REPAIR! Maintenance periods should be scheduled in accordance with frequency of use and working conditions. All Bosch Rexroth products should provide minimum of 1,000,000 cycles of maintenance free service when used and lubricated as recommended. However, these products should be visually inspected for defects and given an "in system" operating performance and leakage test once a year. Where devices require major repair as result of the one million cycles, one year, or routine inspection, the device must be disassembled, cleaned, inspected, parts replaced as required, rebuilt and tested for leakage and proper operation prior to installation. See individual catalogs for specific cycle life estimates.

6. PRODUCT CHANGES

Product changes including specifications, features, designs and availability are subject to change at any time without notice. For critical dimensions or specifications, contact factory.

*Many Bosch Rexroth pneumatic components can operate with or without air line lubrication; see individual sales catalogs for details.

--Refer to the appropriate service catalog for parts and service information.

LIMITATIONS OF WARRANTIES & REMEDIES

Bosch Rexroth warrants its products sold by it to be free from defects in material and workmanship to the following:

For twelve months after shipment Bosch Rexroth will repair or replace (F.O.B. our works), at its option, any equipment which under normal conditions of use and service proves to be defective in material or workmanship at no charge to the purchaser. No charge will be made for labor with respect to defects covered by this Warranty, provided that the work is done by Bosch Rexroth or any of its authorized service facilities. However, this Warranty does not cover expenses incurred in the removal and reinstallation of any product, nor any downtime incurred, whether or not proved defective.

All repairs and replacement parts provided under this Warranty policy will assume the identity, for warranty purposes, of the part replaced, and the warranty on such replacement parts will expire when the warranty on the original part would have expired. Claims must be submitted within thirty days of the failure or be subject to rejection.

This Warranty is not transferable beyond the first using purchaser. Specifically, excluded from this Warranty are failures caused by misuse, neglect, abuse, improper operation or filtration, extreme temperatures, or unauthorized service or parts. This Warranty also excludes the use of lubricants, fluids or air line additives that are not compatible with seals or diaphragms used in the products. This Warranty sets out the purchaser's exclusive remedies with respect to products covered by it, whether for negligence or otherwise. Neither, Bosch Rexroth nor any of its affiliates will be liable for consequential or incidental damages or other losses or expenses incurred by reason of the use or sale of such products. Our liability (except as to title) arising out of the sale, use or operation of any product or parts, whether on warranty, contract or negligence (including claims for consequential or incidental damage) shall not in any event exceed the cost of replacing the defective products and, upon expiration of the warranted period as herein provided, all such liability is terminated. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHETHER FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. No attempt to alter, amend or extend this Warranty shall be effective unless authorized in writing by an officer of Bosch Rexroth Corporation.

Bosch Rexroth reserves the right to discontinue manufacture of any product, or change product materials, design or specifications without notice.

The Drive & Control Company

Bosch Rexroth Corporation
Pneumatics
1953 Mercer Road
Lexington, KY 40511-1021
Telephone (859) 254-8031
Facsimile (859) 281-3491
www.boschrexroth-us.com/brp

Bosch Rexroth
Regional Sales Offices:

Central

Bosch Rexroth Corporation
2150 Point Boulevard, Suite 800
Elgin, IL 60123
Telephone (224) 293-3551
Facsimile (847) 551-9812

Great Lakes

Bosch Rexroth Corporation
2730 Research Drive
Rochester Hills, MI 48309
Telephone (248) 267-4000
Facsimile (248) 853-2033

Northeast

Bosch Rexroth Corporation
99 Rainbow Road
East Granby, CT 06026
Telephone (860) 844-8377
Facsimile (860) 844-8595

Bosch Rexroth Corporation
2315 City Line Road
Bethlehem, PA 18017-2131
Telephone (610) 694-8300
Facsimile (610) 694-8467

Southeast

14001 South Lakes Drive
Charlotte, NC 28273
Telephone (800) 438-5983
Facsimile (704) 583-0523

Southwest

1520 Selene Drive
Carrollton, TX 75006
Telephone (800) 739-7684

West

Bosch Rexroth Corporation
7901 Stoneridge Drive, Suite 220
Pleasanton, CA 94588
Telephone (925) 227-1074
Facsimile (925) 227-1081

Bosch Rexroth Corporation
13766 Alton Parkway, Suite 147
Irvine, CA 92618-1622
Telephone (949) 609-1640
Facsimile (888) 873-3434

Bosch Rexroth
U.S. Business Unit Offices

Bosch Rexroth Corporation
Corporate Headquarters
5150 Prairie Stone Parkway
Hoffman Estates, IL 60192-3707
Telephone (847) 645-3600
Facsimile (847) 645-6201

Bosch Rexroth Corporation
Electric Drives and Controls
5150 Prairie Stone Parkway
Hoffman Estates, IL 60192-3707
Telephone (847) 645-3600
Facsimile (847) 645-6201

Bosch Rexroth Corporation
Controls and Systems
2315 City Line Road
Bethlehem, PA 18017-2131
Telephone (610) 694-8300
Facsimile (610) 694-8467

Bosch Rexroth Corporation
Linear Motion and Assembly
Technologies
816 E. Third Street
Buchanan, MI 49107
Telephone (800) 322-6724
Facsimile (269) 695-3446

14001 South Lakes Drive
Charlotte, NC 28273
Telephone (800) 438-5983
Facsimile (704) 583-0523

Bosch Rexroth Corporation
Drives
8 Southchase Court
Fountain Inn, SC 29644-9018
Telephone (864) 967-2777
Facsimile (864) 967-8900

The data specified herein only serves to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The given information does not release the user from obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

©This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth Corp. without their consent it may not be reproduced or given to third parties.