

R-3710 Series

Restrictors

Description

The R-3710 Series Restrictors limit pressure and flow direction in pneumatic operating systems.

Refer to *R-3710 Series Restrictors Product Bulletin (LIT-7171610)* for important product information.

Features

- available with fixed and variable sized orifices
- fixed restrictors come in two orifice sizes, and are color coded for easy identification.
- red for 0.005 in. (0.13 mm)
- aqua for 0.007 in. (0.18 mm)
- available in a variety of styles



R-3710-3005 Restrictor



R-3710-3105 Restrictor



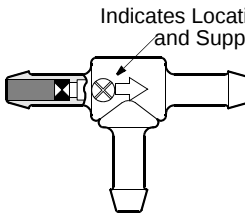
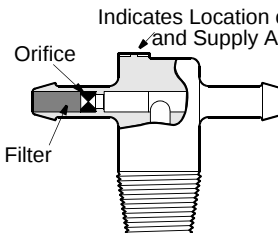
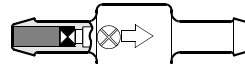
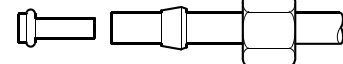
R-3710-2005 Restrictor



R-3710-1005 Restrictor

Selection Charts

R-3710 Series Restrictors (Part 1 of 2)

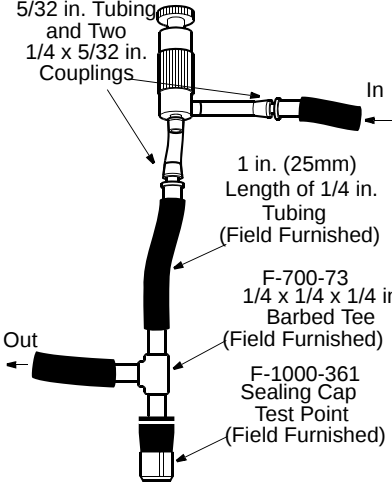
Code Number	Description
T-Fitting With Barbs	
R-3710-3005 R-3710-3007 R-3710-3205 R-3710-3207	Inline T-coupling with barbed fittings for 1/4 in. O.D. polytubing.
	
T-Fitting with Barbs and 1/8 in. NPT	
R-3710-3105 R-3710-3107	T-fitting with barbs for 1/4 in. O.D. polytubing and 1/8 in. NPT for screwing directly into actuator or controller.
	
Straight Coupling	
R-3710-2005 R-3710-2007	Straight coupling inline, with barbed fittings for 1/4 in. O.D. polytubing.
	
Inserted Restrictor	
R-3710-1005 R-3710-1007	Restrictor for inserting 1/4 in. O.D. polyethylene or copper tubing. Used with compression fittings, either inline or at the controller.
	

R-3710 Color/Size Information (Part 1 of 2)

Code Number	Color / Size
R-3710-3005	Red 0.005 in. Orifice 1/4 in. x 1/4 in. x 1/4 in.
R-3710-3007	Aqua 0.007 in. Orifice 1/4 in. x 1/4 in. x 1/4 in.
R-3710-3205	Red 0.005 in. Orifice 1/4 in. x 5/32 in. x 5/32 in.
R-3710-3207	Aqua 0.007 in. Orifice 1/4 in. x 5/32 in. x 5/32 in.
R-3710-3105	Red 0.005 in. Orifice 1/4 in. x 1/4 in. x 1/8 in. NPT
R-3710-3107	Aqua 0.007 in. Orifice 1/4 in. x 1/4 in. x 1/8 in. NPT
R-3710-2005	Red 0.005 in. Orifice 1/4 in. x 1/4 in.
R-3710-2007	Aqua 0.007 in. Orifice 1/4 in. x 1/4 in.
R-3710-1005	Red 0.005 in. Orifice
R-3710-1007	Aqua 0.007 in. Orifice

Restrictors (Continued)

R-3710 Series Restrictors (Part 2 of 2)

Code Number	Description
Inline Adjustable	
R-3710-2010	Inline adjustable restrictor, pin valve type. Test gauge plugs are available on high and low side of restrictor. R-3710-2010 Adjustable Pin Valve With Two 3/4 in. (19mm) Lengths of 5/32 in. Tubing and Two 1/4 x 5/32 in. Couplings  1 in. (25mm) Length of 1/4 in. Tubing (Field Furnished) F-700-73 1/4 x 1/4 x 1/4 in. Barbed Tee (Field Furnished) F-1000-361 Sealing Cap Test Point (Field Furnished)

R-3710 Color/Size Information (Part 2 of 2)

Code Number	Color / Size
R-3710-2010	5/32 in. Tube Connections for Poly tubing

Repair Information

If the R-3710 Series Restrictor fails to operate within its specifications, replace the unit. For a replacement restrictor, contact the nearest Johnson Controls® representative.

Technical Specifications

R-3710 Series Restrictors		
Material	R-3710-3005, 3007, -3205, -3207, -3105, -3107, -2005, -2007	Thermoplastic
	R-3710-1005, -1007	Elastomeric O-Ring, Zinc Plated Compression Nut, (Identifies Restrictor location) and Thermoplastic Ferrule
	R-3710-2010	Brass
Maximum Pressure	R-3710-3005, 3007, -3205, -3207, -3105, -3107, -2005, -2007, -1005, -1007	25 psig (175 kPa)
	R-3710-2010	100 psig (700 kPa)
Maximum Temperature		180°F (82°C)
Output Flow Capacity at 20 psig	R-3710-3005, -3205, -3105, -2005, -1005	25 SCIM (6.8 mLs)
	R-3710-3007, -3207, -3107, -2007, -1007	45 SCIM (12.3 mLs)
	R-3710-2010	Adjustable