

PP1 Series Piping Packages for VG1000 Series Ball Valves

Description

PP1 Series Piping Packages are designed to provide an easier way to deploy control valve solutions to a job site. Built around Johnson Controls® field-proven VG1000 Series Ball Valves using standard components, each piping package is tested under 100 psig (689 kPa) for 24 hours and then reduced to 40 psig (276 kPa) before shipping to ensure leak-free control valve solutions.

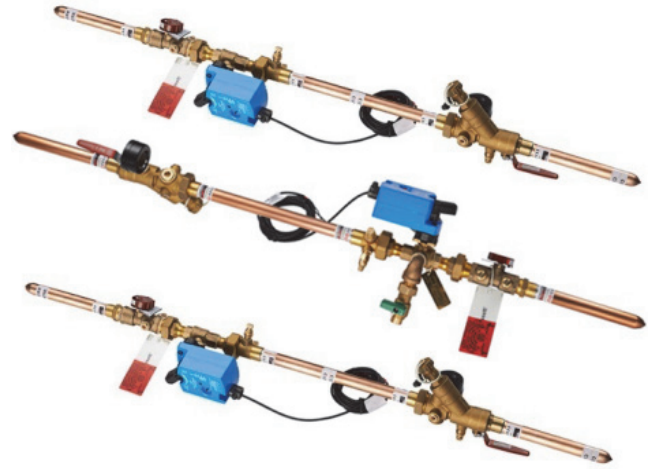
Johnson Controls piping packages are manufactured by United Association of Journeymen & Apprentices of the Plumbing and Pipe Fitting Industry of USA and Canada pipe fitters and provide defect-free solutions for 3/4 to 1-1/4 in. pipe sizes for both two-way and three-way applications.

Johnson Controls piping packages significantly reduce site labor. A piping package can be secured using the ProPress® fitting system or by soldering to fasten it to the piping infrastructure.

Refer to the *PP1 Series Piping Packages for VG1000 Series Ball Valves Product Bulletin (LIT-12011974)* for important product application information.

Features

- Assembly in a Factory Environment Following the Recommended Component Manufacturer Procedure
- 100% Tested under 100 psig (689 kPa) for 24 hours
- VG1000 Series Ball Valves
- Manufactured by United Association of Journeymen & Apprentices of the Plumbing and Pipe Fitting Industry of USA and Canada Pipe Fitters



PP1 Series Piping Packages

Repair Information

If the PP1 Series Piping Package fails to operate within its specifications, replace the unit. For a replacement piping package, contact the nearest Johnson Controls representative.



WARNING

This product is made of copper alloy, which contains lead. The product is therefore not to be used on drinking water.



WARNING

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

WARNING: BRASS MAY CONTAIN LEAD

To fulfill our obligations towards Article 33, in accordance to the European REACH Regulation No 1907/2006 EC, we hereby inform you that this article contains the following Substances of Very High Concern mentioned on the Candidate list:

- Lead

PP1 Series Piping Packages for VG1000 Series Ball Valves (Continued)

Selection Charts

Two-Way Automatic Flow Control Valve Models

Code Number	GPM	Pip Size, in.	Supply Pipe	Return Pipe			
			Y-Strainer with a Union End Ball Valve	Automatic Flow Control Valve	Union Connection	VG1000 Series Ball Valve	
						Size, in. (DN)	Cv
PP12BA005-1	0.5	3/4	UBY 3/4"S x 3/4"S	AC 3/4"S x 1/2"M	UA 3/4"S x 1/2"M	1/2 (DN15)	1.2
PP12BA010-1	1						
PP12BA015-1	1.5						
PP12BA020-1	2						1.2, 1.9, 2.9
PP12BA025-1	2.5						
PP12BA030-1	3						
PP12BA035-1	3.5						1.2, 1.9, 2.9, 4.7
PP12BA040-1	4						
PP12BA045-1	4.5						2.9, 4.7, 7.4
PP12BA050-1	5						
PP12BA055-1	5.5						
PP12CA060-1	6	1	UBY 1"S x 1"S	AC 1"S x 3/4"M	UA 1"S x 3/4"M	3/4 (DN20)	4.7, 7.4
PP12CA070-1	7						
PP12CA080-1	8						
PP12CA090-1	9						4.7, 7.4, 11.8
PP12CA100-1	10						
PP12DA110-1	11	1-1/4	UBY 1-1/4"S x 1 1/4"	AC 1-1/4"S x 1"M	UA 1-1/4"S x 1"M	1 (DN25)	7.4, 11.8, 18.7
PP12DA120-1	12						
PP12DA130-1	13						
PP12DA140-1	14						
PP12DA150-1	15						
PP12DA160-1	16						11.8, 18.7
PP12DA170-1	17						
PP12DA180-1	18						
PP12DA190-1	19						
PP12DA200-1	20						
PP12DA210-1	21						
PP12DA220-1	22						

Two-Way Manual Flow Control Valve Models

Code Number	GPM	Pipe Size, in.	Supply Pipe	Return Pipe			
			Y-Strainer with a Union End Ball Valve	Manual Balancing Valve	Union Connection	VG1000 Series Ball Valve	
						Size, in. (DN)	Cv
PP12BM001-1	0.5–7	3/4	UBY 3/4"S x 3/4"S	MC 3/4"S x 1/2"M	UA 3/4"S x 1/2"M	1/2 (DN15)	1.2, 1.9, 2.9, 4.7
PP12CM001-1	1.5–14	1	UBY 1"S x 1"S	MC 1"S x 1/2"M	UA 1"S x 1/2"M		4.7, 7.4
PP12CM002-1				MC 1"S x 3/4"M	UA 1"S x 3/4"M	3/4 (DN20)	4.7, 7.4, 11.7
PP12DM001-1	4.5–31	1-1/4	UBY 1 1/4"S x 1 1/4"S	MC 1-1/4"S x 1"M	UA 1 1/4"S x 1"M	1 (DN25)	7.4, 11.7, 18.7

PP1 Series Piping Packages for VG1000 Series Ball Valves (Continued)

Three-Way Manual Flow Control Valve Models

Code Number	GPM	Pipe Size, in.	Supply Pipe	Return Pipe				Bypass Pipe
			Y-Strainer with a Union End Ball Valve	Manual Balancing Valve	Union Connection	VG1000 Series Ball Valve		Ball Valve
						Size, in. (DN)	Cv	
PP18BM001-1	0.5–7	3/4	UBY 3/4"S x 3/4"S	MC 3/4"S x 1/2"M	UA 3/4"S x 1/2"M	1/2 (DN15)	1.2, 1.9, 2.9, 4.7	UBV 1/2"S x 1/2"M
PP18CM001-1	1.5–14	1	UBY 1"S x 1"S	MC 1"S x 1/2"M	UA 1"S x 1/2"M		4.7, 7.4	UBV 3/4"S x 3/4"M
PP18CM002-1				MC 1"S x 3/4"M	UA 1"S x 3/4"M	3/4 (DN20)	4.7, 7.4, 11.7	
PP18DM001-1	4.5–31	1-1/4	UBY 1 1/4"S x 1 1/4"S	MC 1-1/4"S x 1"M	UA 1 1/4"S x 1"M	1 (DN25)	7.4, 11.7, 18.7	UBV 1"S x 1"M

Technical Specifications

Y-Strainer with a Union End Ball Valve	
Product Code	UBY
Body	Forged brass C37000
Ball	Full port chrome plated
Ball Seal	Teflon®
Stem	Explosion-proof
O-Rings	Ethylene propylene diene monomer (EPDM)
Filter Screen	20 mesh, stainless steel
Maximum Seat Pressure Rating	400 psig (2,758 kPa)
Operating Temperature	-4°F to 250°F (20°C to 121°C)

Union Connection	
Product Code	UA
Body	Forged brass C37000
O-Ring	EPDM
Maximum Pressure	400 psig
Maximum Operating Temperature	-4°F to 250°F (20°C to 121°C)

Combination Commissioning Valve and Automatic Flow Limiting Valve	
Product Code	AC
Body	Brass C37710
Ball	Chrome plated brass C37710
Ball Seat	Teflon
O-Ring	EPDM
Diaphragm	Reinforced EPDM
Spring	Stainless steel
Tail Piece, Nut	Brass
Stem	Blowout-proof
Maximum Seat Pressure Rating	400 psig (2,758 kPa)
Operating Temperature	-4°F to 250°F (20°C to 121°C)
Flow Rate Accuracy	±5%

PP1 Series Piping Packages for VG1000 Series Ball Valves (Continued)

Cartridge (Included in Combination Commissioning Valve and Automatic Flow Limiting Valve)	
Body	Brass C36000 or equivalent
Spring	304 stainless steel
Diaphragm and O-Ring	EPDM
Orifice	Brass C36000 or equivalent

Calibrated Manual Balancing Valve with Shut-Off Ball Valve	
Product Code	MC
Body	Brass ASTM B584-844
Ball	Brass ASTM B16 C36000
Ball Seal	Glass and carbon-filled Teflon
Stem O-Ring	EPDM
Maximum Working Pressure	300 psig (2,069 kPa)
Operating Temperature	-4°F to 250°F (20°C to 121°C)

Pressure Gauge	
Case	Black painted steel
Dial	Black figures on white background
Tube and Sprocket	Bronze
Accuracy	ASME B40.100, Grade B, $\pm 3.75\%$ (0 to 25 psig [0 to 172 kPa]: 3%, 25 to 75 psig [172 to 517 kPa]: 2%, 75 to 100 psig [517 to 689 kPa]: 3%)
Operating Temperature	-40°F to 150°F (-40°C to 65°C)

Ball Valve (Three-Way Valve Models)	
Product Code	UBV
Body	Brass C37000
Handle	Chrome plated steel with plastic cover
Ball	Chrome plated
Ball Seal	Teflon
O-Ring	EPDM
Union Seal	Viton O-ring
Stem	Explosion-proof
Maximum Seat Pressure Rating	400 psig (2,758 kPa)
Operating Temperature	-4°F to 250°F (20°C to 121°C)

Pipe	
Copper Pipe	Type L