



6100 & 6200 Series

Ball and Poppet Check Valves



Features

- O-ring seat provides leak-tight shutoff
- Internal design guides flow around or inside spring, not through coils, when valve is open
- All models are tested in production to assure a leak-tight body joint and seat
- Ball and poppet designs are available as standard
- Ball type provides effective leak-tight closure with minimum flow resistance
- Poppet models provide large flows with a minimum of chatter and fluctuation
- Valves are available with various cracking pressures, from 1/8 to 25 psig (0 to 2 bar).
- 2-piece body permits interchangeability of end connections
- Special High Tolerance NPT Thread

Applications

- Prevents reversed flow to protect solenoids, regulators, and pumps
- Locks pressure in hydraulic cylinders
- Low pressure inline relief valve
- Vent valve to purge a system

Technical Data

Body Material*	316 stainless steel, brass, Monel®
Maximum Operating Pressure	Brass: 3000 psig @ 70° F (414 bar @ 21° C) Stainless steel, Monel®: 6000 psig @ 70° F (414 bar @ 21° C)
Standard cracking pressure	2 psig
Operating Temperature Range	Buna N: -40° F to +200° F (-40° C to +93° C) Viton®: -20° F to +350° F (-29° C to +177° C)
Orifice Sizes	0.187" (4.75mm), 0.422" (10.7mm)
Cv Factors	0.3, 2.4

* Consult factory for other materials

check valves

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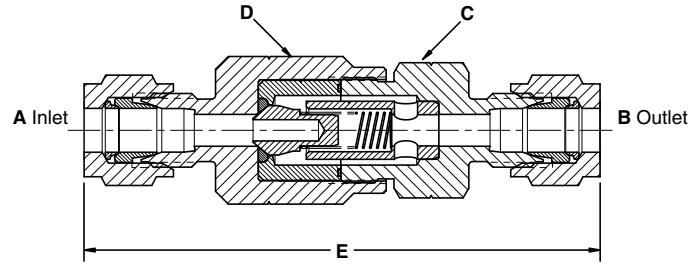
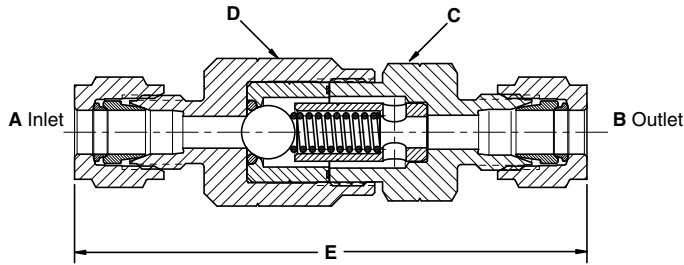
6100 & 6200 Series

Materials of Construction

Part	Ball Type			Poppet Type
	Brass	316 Stainless Steel	Monel®	316 Stainless Steel
Body	Brass	316 stainless steel	Monel®	316 stainless steel
Ball/Poppet	302 stainless steel	316 stainless steel	Monel®	316 stainless steel
Spring	302 stainless steel	316 stainless steel	Monel®	316 stainless steel
O-ring seat	Buna N	Viton®	Viton®	Viton®/Buna N*
Gasket (body)	Mylar®	Teflon®	Teflon®	Teflon®/Buna N*

* For poppet check valves with 3/8" and 1/2" NPT female connections.

Dimensions



6100 Series Ball Check Valves

A & B Connections		C Hex	D Hex	E
1/8" NPT female	inch	1/16	3/4	2 3/8
	mm	17	19	60
1/8" NPT male	inch	1/16	3/4	2 3/8
	mm	17	19	60
1/4" NPT female	inch	3/4	3/4	2 1/2
	mm	19	19	64
1/4" NPT male	inch	1/16	3/4	2 3/8
	mm	17	19	60
1/4" NPT male x 1/4" Gyrolok®	inch	1/16	3/4	2 3/4
	mm	17	19	70
6mm Gyrolok®	inch	1/16	3/4	3
	mm	17	19	76
1/4" Gyrolok®	inch	1/16	3/4	3
	mm	17	19	76
3/8" Gyrolok®	inch	1	3/4	3 1/8
	mm	25	19	79

6200 Series Poppet Check Valves

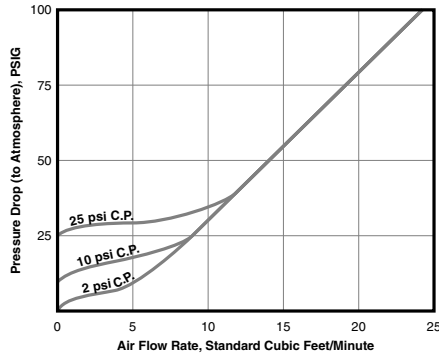
A & B Connections		C Hex	D Hex	E
1/4" NPT female	inch	3/4	3/4	2 1/2
	mm	19	19	64
1/4" NPT male	inch	1/16	3/4	2 3/8
	mm	17	19	60
1/4" Gyrolok®	inch	1/16	3/4	3
	mm	17	19	76
3/8" Gyrolok®	inch	1	3/4	3 3/8
	mm	25	19	79
1/2" Gyrolok®	inch	1 1/4	1 1/4	3 1/2
	mm	32	32	89

6100 & 6200 Series

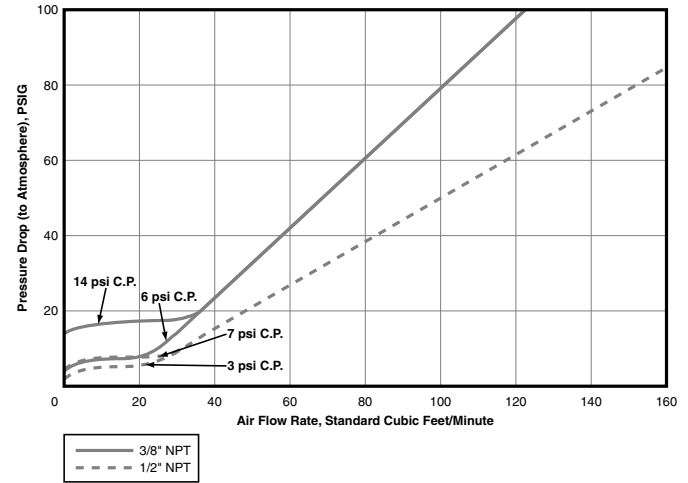
Flow Diagrams

Air

For all models except 3/8" and 1/2" NPT female

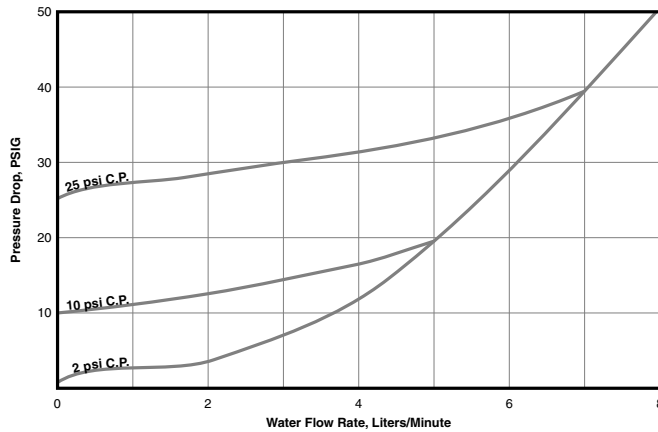


3/8" and 1/2" NPT female models

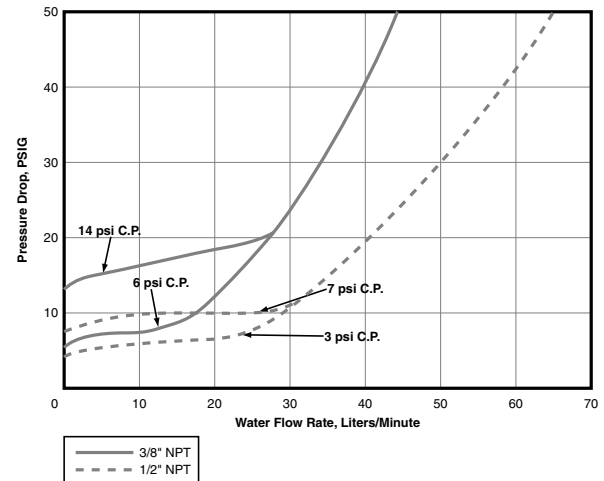


Water

For all models except 3/8" and 1/2" NPT female



3/8" and 1/2" NPT female models



How to Order: Standard Valves (factory preset at cracking pressure of 2 psig)

6100 Series Ball Check Valves

A & B Connections	Part Number			
	Brass	Monel®	316 St. Steel	Orifice
1/8" NPT female	6113F2B	—	6133F2Y	0.187
1/8" NPT male	6113M2B	—	6133M2Y	0.187
1/4" NPT female	6113F4B	—	6133F4Y	0.187
1/4" NPT male	6113M4B	—	6133M4Y	0.187
1/4" Gyrolok®	6113G4B	6133G4M	6133G4Y	0.187
3/8" Gyrolok®	6113G6B	6133G6M	6133G6Y	0.187
1/4" NPT male x 1/4" Gyrolok®	6113H4B	—	—	0.187
6mm Gyrolok®	—	—	6133G6YMM	0.187

6200 Series Poppet Check Valves

A & B Connections	Part Number	
	316 St. Steel	Orifice
1/4" NPT female	6233F4Y	0.187
1/4" NPT male	6233M4Y	0.187
1/4" Gyrolok®	6233G4Y	0.187
3/8" Gyrolok®	6233G6Y	0.187
1/2" NPT female	6253F8Y	0.422
1/2" Gyrolok®	6253G8Y	0.422

Other Differential Cracking Pressures

Cracking Pressure	Digit	Description
1/2 psig	-1	All check valves except 3/8" and 1/2" female NPT models can be furnished with other than the standard 2 psig cracking pressure. To order, change the fourth digit ("3") of the desired valve part number. Example: 6115G4B is a 6100 Series brass ball check valve with 1/4" Gyrolok® ends and a 10 psig cracking pressure
10 psig	-5	
25 psig	-6	

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FOR YOUR SAFETY

IT IS SOLELY THE RESPONSIBILITY OF THE SYSTEM DESIGNER AND USER TO SELECT PRODUCTS SUITABLE FOR THEIR SPECIFIC APPLICATION REQUIREMENTS AND TO ENSURE PROPER INSTALLATION, OPERATION AND MAINTENANCE OF THESE PRODUCTS. MATERIAL COMPATIBILITY, PRODUCT RATINGS AND APPLICATION DETAILS SHOULD BE CONSIDERED IN THE SELECTION. IMPROPER SELECTION OR USE OF PRODUCTS DESCRIBED HEREIN CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.