

TESCOM™ Anderson Greenwood Instrumentation - Primary Isolation Valve

Series
P64

Root Valve

An integral one-piece double block and bleed root valve assembly for primary isolation of pressure take-offs, with screwed or welded connections.

General Application:

Suitable for double block and bleed applications on pressure and flow measurement services where the valve is either screwed or welded directly into the process pipe or vessel without the need for a flanged connection. Instruments may be mounted directly to the valve outlet or remotely with gauge lines/impulse pipe work.

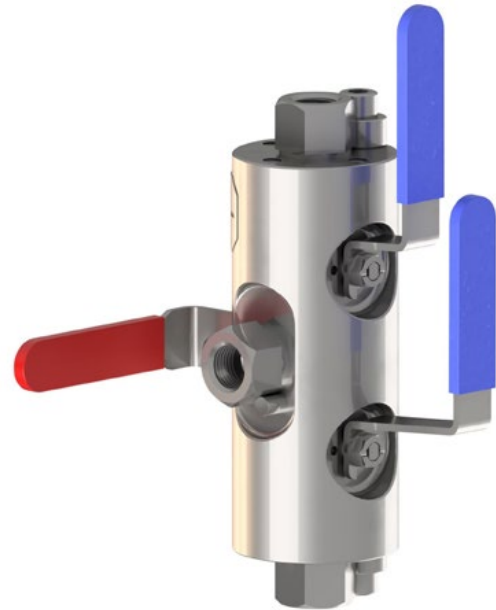
General Application

Technical Data

Materials	: CS, 316 SS, Duplex
Seats	: Soft
Connections	
Inlet	: 1/2" NPT; welded 1/2" to 2"
Outlet	: 1/2" NPT
Pressure (max)	: 10000 psig (690 barg)
Temperature (max)	: 400°F (204°C)

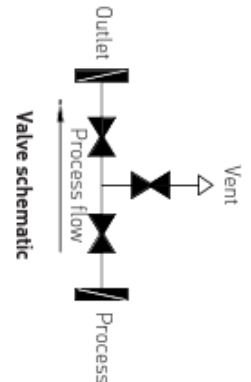
Features

- **One-piece body** combines a compact design with strength and reduced potential leak paths compared to conventional designs.
- **Threaded or welded inlet connection** allows direct connection to a pressure vessel without the need for a flanged connection.
- **Primary isolation ball valves** are precision machined and super finished for high performance pressure and temperature ratings. Designed and tested as standard to be fire safe and anti-static.
- **Camlock safety feature** is fitted on threaded connections, preventing accidental loosening of connection in service.
- Bolt-on outlet option allows choice of connections for dual instrument mounting.
- Firesafe design to meet API 607, BS6755 Part 2 (Optional)



Standard Features

- 1/2-inch NPT threaded female outlet as standard to ASME B1.20.1.
- Material thickness to ASME B16.34.
- 1/2-inch NPT threaded female vent connection to ASME B1.20.1.
- Weld inlet connections 1/2 to 2-inch sizes [15 mm to 50 mm] 150 lb rated to 2500 lb rated.
- API pressure ratings 3000 psig [204 barg], 5000 psig [340 barg] and 10,000 psig [680 barg] rated.
- Pressure testing to EN 12266-1
- Material traceability to EN 10204 3.1 (body only)



Product Overview

The P64 features two independently operable 3/8-inch [10 mm] bore ball valves for isolation service with an intermediate 3/8-inch [10 mm] bore ball valve for venting service.

Valve Body - Material Codes

Description	C	S	D
Valve body	CS A105	316 SS	Duplex SS

NOTE: 1. Carbon steel valve bodies are zinc plated and passivated as standard.

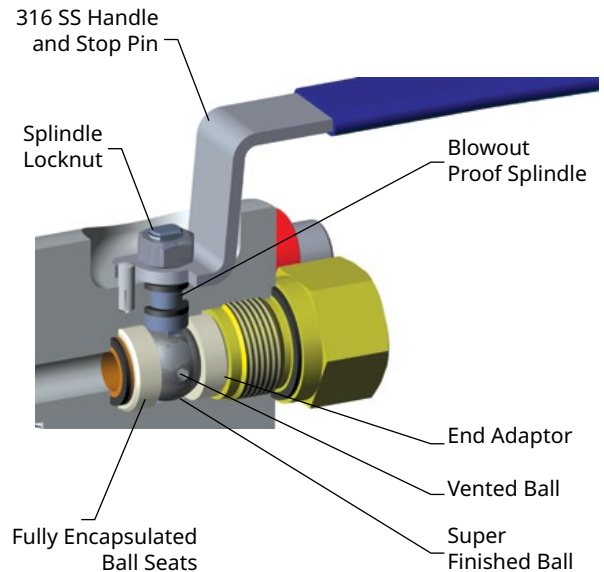
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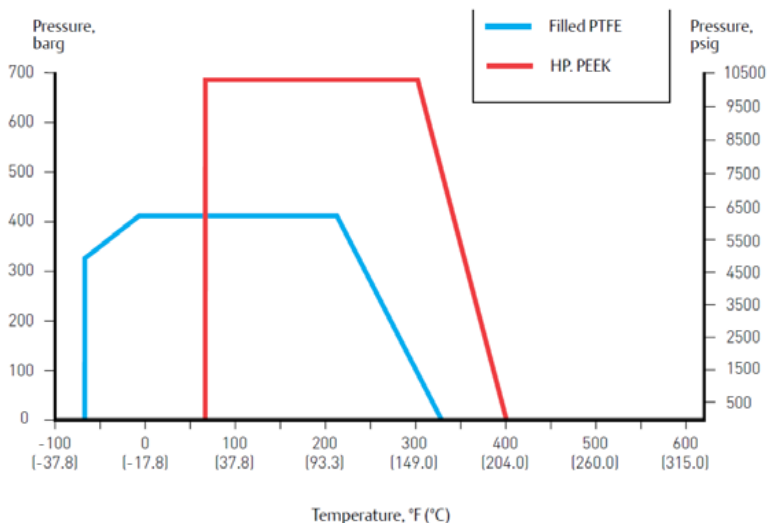
Root Valve

Quarter Turn Ball Valve Specifications Features and Benefits

- **316 SS handle and stop pin as standard** for corrosion resistance and strength.
- **Blowout proof** one-piece stem spindle.
- **Vented ball** provides upstream cavity relief, making the valve uni-directional.
- **Fully supported ball seats** minimize seat seal extrusion and allow high working pressures.
- **Super finished ball** for low operating torque and long life.
- **End adaptor** threads are fully isolated from process by primary and secondary static seals.
- **Spindle locknut** is vibration resistant to avoid working loose.
- **3/8-inch [10 mm] bore** fully roddable.
- **FIRESAFE** to API 607, BS6755 Part 2 (Optional).
- **Ball seats** choice of seat materials: Filled PTFE, or PEEK.
- **Anti-static design as standard.**
- **Pressure rating** up to 10,000 psig [680 barg].
- **Temperature rating** -70.6°F to 482°F [-57°C to +250°C].
- **Camlock safety feature** prevents accidental removal of thread connectors.



Pressure and Temperature Ratings Ball Valve



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Materials of Construction

Valve Body and Components - Materia Codes

Valve Type	Description	C1	L1	S	D
Root Valve	Valve Body	A105N	A350 LF2	316 S11	UNS-S31803
Root Valve	End Adaptors	316 SS	316 SS	316 SS	UNS-S31803

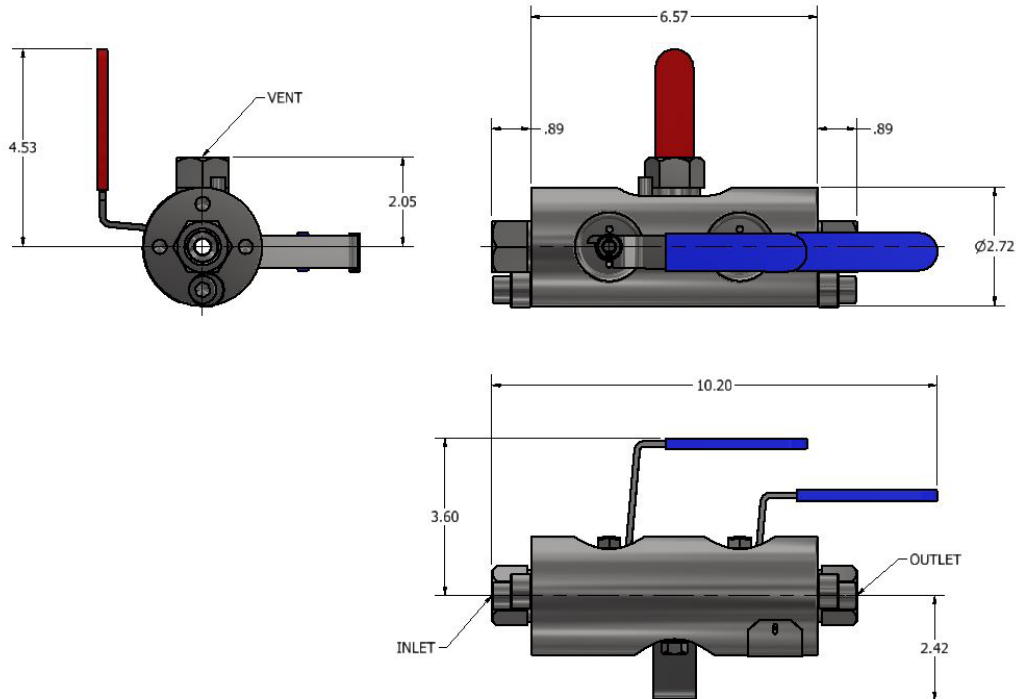
Standard Trim Combinations

Body	Trim
C	S
S	S
D	D

Ball Valve Components - Trim Codes

Item	Description	S	D
1	Handle/Stop Pin	316 SS	316 SS
2	Steam Seal (2 off)	Graphite	Graphite
3	Ball Seat	PTFE or PEEK	PTFE or PEEK
4	Housing Static Seal	Graphite	Graphite
5	Seat Housing	316 SS	Duplex SS
6	Ball	316 SS	Duplex SS
7	Primary Static Seal	Graphite	Graphite
8	Secondary Static Seal	Graphite	Graphite
9	Locknut	316 SS	316 SS
10	Spindle	316 SS	Duplex SS

Dimensions: mm (inches)



Availability, design and specifications are subject to change without notice.
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Selection Guide

P64	V	C	S	047B	047B	PV
ROOT VALVE TYPE	BALL VALVE SEAT MATERIAL	BODY MATERIAL	TRIM MATERIAL	INLET CONNECTION	OUTLET CONNECTION	OPTIONS
P64 Threaded x Threaded Double Block & Bleed	V Filled PTFE	C A105	S 316 SS	04 1/2" NPS	04 1/2" NPS	MP04 Multiport Outlet 1/2" NPT
				06 3/4" NPS	06 3/4" NPS	PV Plugged Vent
P641 Threaded x Threaded Double Block & Bleed, 10k psi (PEEK seat as standard)	E PEEK	D Duplex SS	D Duplex SS	08 1" NPS	08 1" NPS	SG (Sour Gas) meets the requirements of NACE MR0175/ISO 15156-3 Corrigendum 2 (for Chloride conditions ≤ 50 mg/l [ppm] and NACE MR0103-2005)
				2 Male	2 Male	PO Plugged Outlet
				7 Female	7 Female	PV - Plugged Vent Vent Options (please specify compressing fittings, if required)
				B NPT	B NPT	QV 1/4" NPT (f) vent
				C Butt Weld (XXS)	C Butt Weld (XXS)	BVL Lockable ball valve handles (specify number required)
				D Socket Weld (XXS)	D Socket Weld (XXS)	BD Bi-directional Ball valves (Isolation Only)

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