

## Primary Isolation Valves

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

#### TECHNICAL DATA

**Materials**

CS, 316 SS, Duplex

**Seats:**

Metal and 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.
- Camlock safety feature on threaded outlet connections prevents accidental loosening in service.
- Primary isolation ball valves are precision machined and super finished for high performance pressure and temperature ratings. Designed to be fire safe and anti-static.
- Heavy duty needle type globe valve, graphite packed as standard, ensuring bubble-tight shut-off on venting port.
- Bolt-on outlet option allows choice of connections for dual instrument mounting.
- Firesafe design to meet API 607, BS6755 Part 2 (optional)

# P63 SERIES

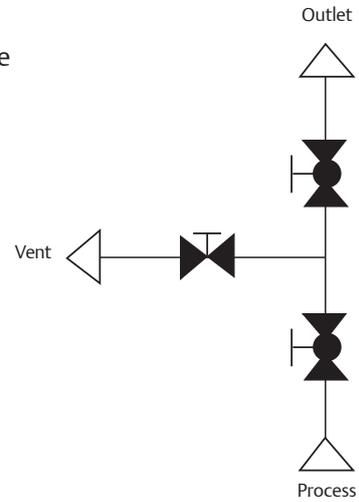
## Primary Isolation Valves

### Product Overview

The P63 features two independently operable 3/8" (10 mm) bore ball valves for isolation service with an intermediate 0.2 inch (5 mm) bore 'HD' globe style needle valve for venting service

### General notes

Standard pressure testing to EN 12266-1.  
Standard material traceability to EN 10204 3.1 (body only).  
Material thickness to ANSI B16.34.



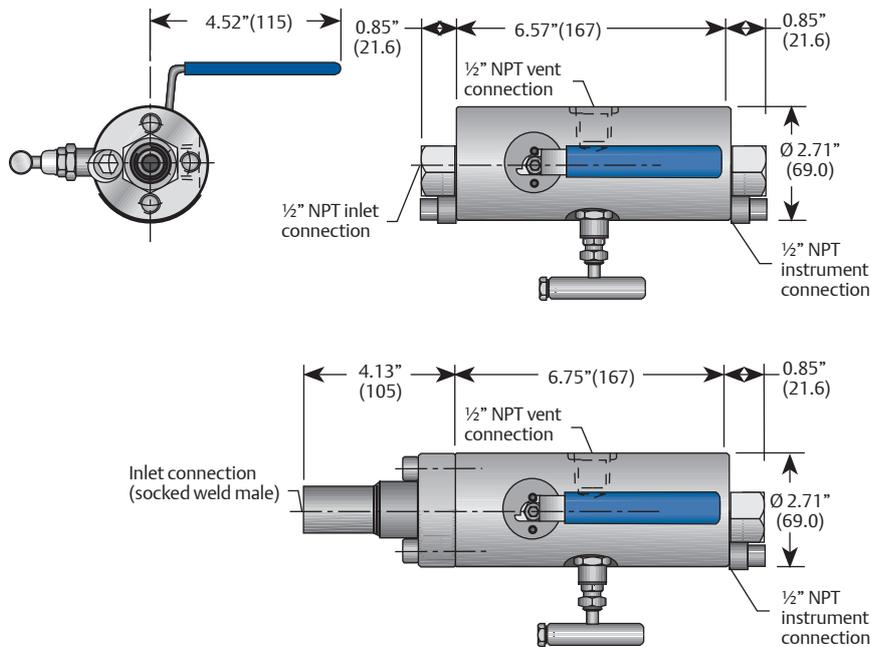
### Valve Body - Material Codes

Description	C	S	D
Valve body	220M07	316 S11	UNS-31803

### NOTE:

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

### Dimensions, inches (mm)



### NOTE

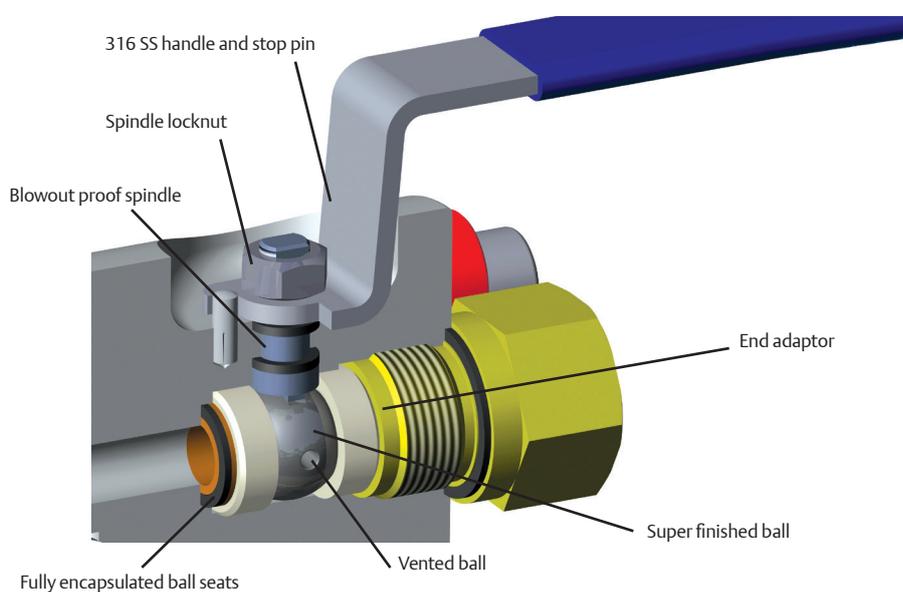
Valve weight 13.6 lb (6.2 kg).

## Primary Isolation Valves

### Quarter Turn Ball Valves

Unidirectional quarter-turn ball valves have a straight through, roddable 3/8" (10 mm) bore. Their super-finished ball provides low operating torque and long life and is vented to provide upstream cavity relief. They offer a choice of filled PTFE, Devlon V® or Peek ball seats which are fully-supported to minimize seal extrusion and allow high working pressures with end adaptor threads being fully isolated from the process by primary and secondary static seals. Each valve features a blowout-proof one piece stem with a vibration-resistant locking nut and a strong, corrosion-resistant stainless steel handle and stop pin as standard.

- Pressure rating: up to 10000 psig (680 barg)
- Temperature rating: -70.6°F to 400°F (-57°C to +204°C)



#### NOTE

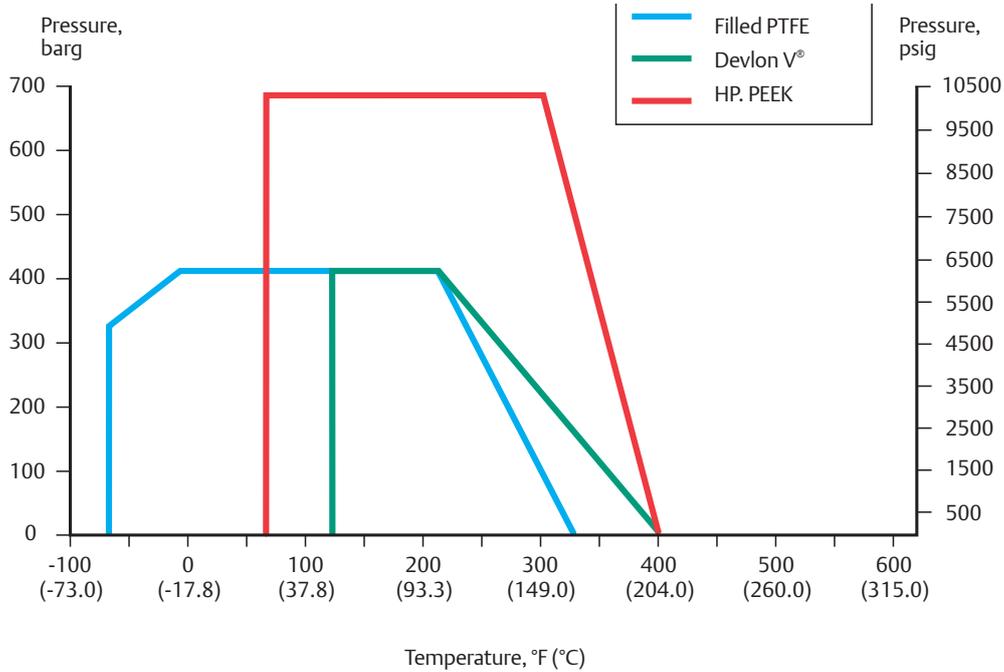
1. Devlon V® is a registered trademark of Devol Engineering Ltd.

# P63 SERIES

## Primary Isolation Valves

### Pressure and Temperature Ratings

Keyblok



#### NOTE

1. Devlon V® is a registered trademark of Devol Engineering Ltd.

### Ball Valve Components - Trim Codes

Item	Description	S	D
1	Handle/stop pin	316 SS	316 SS
2	Stem seal (2 off)	Graphite	Graphite
3	Ball seat	PTFE, Devlon® or PEEK	PTFE, Devlon® or PEEK
4	Housing static seal	Graphite	Graphite
5	Seat housing	A276-316	A276-31803
6	Ball	A479-316	A479-31803
7	Primary static seal	Graphite	Graphite
8	Secondary static seal	Graphite	Graphite
9	Locknut	316 SS	316 SS
10	Spindle	A479-316	A479-31803

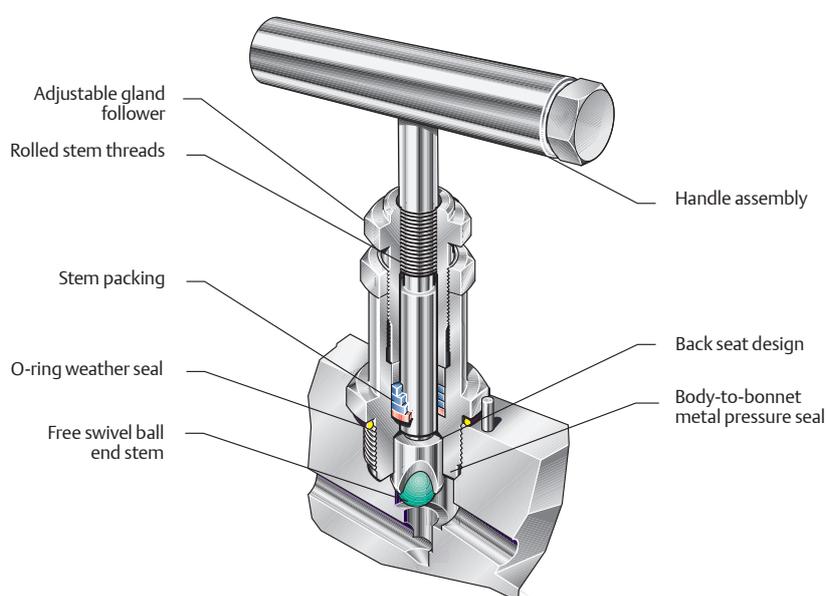
### Standard Trim Combinations

Body	Trim
C	S
S	S
D	D

## Primary Isolation Valves

### 'HD' Needle-Type Globe Valve

The HD needle-type globe valve has a rotating stem with a free-swivel ball-end seat for repetitive bubble-tight shut-off and rolled threads for low operating torque, located above the spindle packing and isolated from the process. The stem seal is either graphite or PTFE rings and a backseat design provides secondary stem sealing and prevents stem blowout. A body-to-bonnet metal pressure seal below the threads prevents corrosion and ensures the bonnet threads are in loaded compression for additional strength and an O-ring weather seal protects bonnet retention threads from harsh environments. An adjustable gland follower allows easy access to adjust the packing gland and the valve features a T-bar handle with locking bolt to secure it firmly on the stem.



### 'HD' Needle Type Globe Valve Components - Trim Codes

Item	Description	S	D
1	Gland follower	Austenitic SS	A276-31803
2	Stem	A479-316	A479-31803
3	Locknut	Austenitic SS	Austenitic SS
4	Stem packing	PTFE or graphite	PTFE or graphite
5	O-ring weather seal	Buna-N Nitrile	Buna-N Nitrile
6	Ball (stem tip)	316 SS	Ceramic
7	Bonnet locking pin	Austenitic SS	Austenitic SS
8	Handle assembly	Austenitic SS	Austenitic SS

# P63 SERIES

## Primary Isolation Valves

### Selection Guide

P63		V	C	S	-047B			
BASIC SERIES		BALL VALVE SEAT MATERIAL	BODY MATERIAL	TRIM MATERIAL	INLET CONNECTION			
<b>Ball valve type</b>								
<b>P63</b>	threaded x threaded double block and bleed	<b>V</b> Filled PTFE	<b>C</b> CS 220 M07	<b>S</b> SS 316	<b>04</b> 1/2" NPS	<b>2</b> Male	<b>B</b> NPT	
<b>P631</b>	threaded x threaded double block and bleed - 10,000 psi (PEEK seat and PTFE packing as standard)	<b>E</b> PEEK	<b>S</b> SS 31611	<b>D</b> Duplex UNS S31803	<b>06</b> 3/4" NPS	<b>7</b> Female	<b>C</b> Butt weld (XXS)	
		<b>N</b> Devlon V®	<b>D</b> Duplex UNS S31803				<b>08</b> 1" NPS	<b>D</b> Socket weld (XXS)
				<b>Standard trim combinations</b> C and S Body = S Trim, D body = D Trim				

-047B

PV

OUTLET CONNECTIONS				OPTIONS	
<b>04</b> 1/2 NPS	<b>2</b> Male	<b>B</b> NPT		<b>MP04</b>	Multiport outlet 1/2" NPT
<b>06</b> 3/4 NPS	<b>7</b> Female	<b>C</b> Butt weld (XXS)		<b>QV</b>	1/4" NPT (f) vent
<b>08</b> 1 NPS		<b>D</b> Socket weld (XXS)		<b>PO</b>	Plugged outlet
				<b>KFGTX</b>	Kidney flange adaptor
				<b>SS</b>	Full 316 SS trim
				<b>PV</b>	Plugged vent
				<b>VO</b>	Vent option (please specify compression fittings, if required)
				<b>BVL</b>	Lockable ball valve handles (specify number required)
				<b>CB</b>	Ceramic ball tip (vent valve only)
				<b>AT</b>	Anti-tamper vent (needle valve only)
				<b>ST</b>	Stellite ball tip (vent valve only)
				<b>SG</b>	NACE MR0175 latest revision
				<b>PT</b>	PTFE packed needle valve