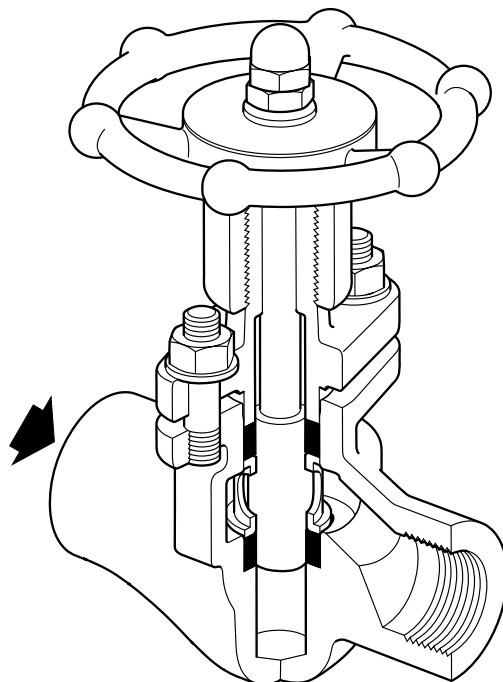




PV4 Piston Valve

Description

The PV4 is a piston isolation valve that has been designed for use on steam, condensate and other liquid systems.



Available types:

Screwed, butt weld and socket weld connections Carbon steel body/bonnet and stainless steel internals

Standards

This product fully complies with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

Certification

This product is available with certification to EN 10204 3.1.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

½"

Butt welded ends to EN 12627:1999BW - ASME B16.25

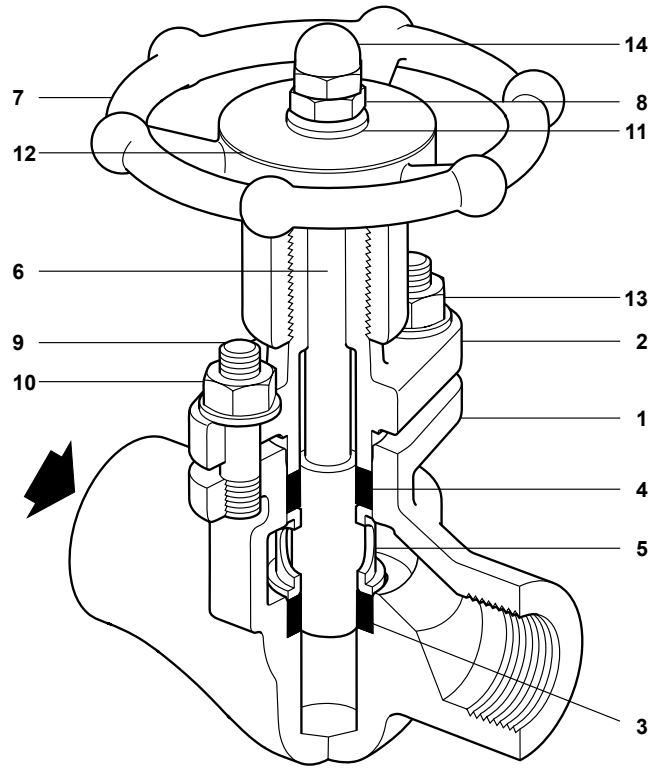
Screwed BSP (BS 21/DIN 2999) or NPT to (ASME B1.20.1)

Socket weld ends to ASME B 16.11

Kv values

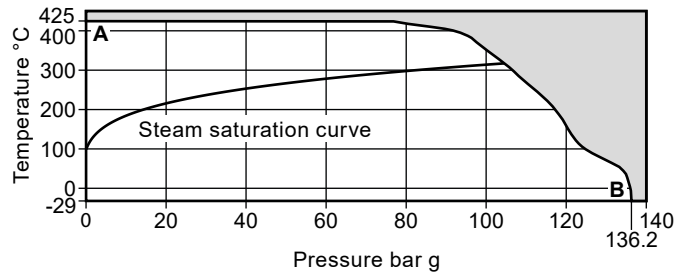
Screwed, socket weld and butt weld	Size	½"	For conversion: Cv (UK) = Kv x 0.963 Cv (US) = Kv x 1.156
	Kv	3	

Materials



No.	Part	Material	Connection	
1	Body	Carbon steel	Screwed (BSP/NPT/SW/BW)	A105N/1.0460
2	Bonnet	Carbon steel	Screwed (BSP/NPT/SW/BW)	A105N/1.0460
3	Lower sealing rings	Graphite laminate/Stainless steel		
4	Upper sealing rings	Graphite laminate/Stainless steel		
5	Lantern bush	Stainless steel		EN 1.4057/AISI 431
6	Piston	Stainless steel		EN 1.4057/AISI 431
7	Handwheel	Carbon steel		
8	Handwheel nut	Carbon steel		
9	Stud bolt	Carbon steel		ASTM A193 B7
10	Nut	Carbon steel		ASTM A194 2H
11	Washer	Stainless steel		
12	Name-plate	Stainless steel		
13	Belleville washer	Stainless steel		
14	Blind nut	Carbon steel		

Pressure/temperature limits



The product **must not** be used in this region.

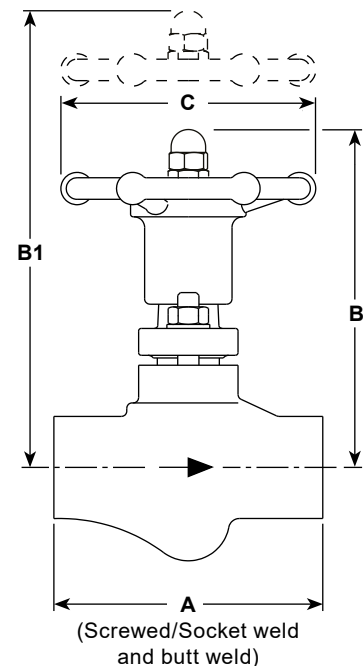
A - B API Class 800

Body design conditions	API Class 800
PMA Maximum allowable pressure	136.2 bar g @ 38 °C
TMA Maximum allowable temperature	425 °C @ 76.7 bar g
Minimum allowable temperature	-29 °C
PMO Maximum operating pressure for saturated steam service	104 bar g
TMO Maximum operating temperature	425 °C @ 76.7 bar g
Minimum operating temperature	- 29 °C
Note: For lower operating temperatures consult Spirax Sarco.	
Designed for a maximum cold hydraulic test pressure of:	204.3 bar g

Dimensions/weights (approximate) in mm and kg

Screwed, socket weld and butt weld

Size	A	B	B1	C	Weight
½"	85	102	118	95	1.2



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P174-04) supplied with the product.

Caution

Valve keys should not be used to operate these valves.

Installation note

Install the valve in the direction of flow given by the arrow on the body. The valve can be installed in any plane but not with the handwheel below the valve body.

Disposal

The product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

How to order

Example: 1 off Spirax Sarco ½" PV4 piston valve having screwed NPT connections. The valve is to be supplied with EN 10204 3.1 certification. The Kv is to be 3.0.

Spare parts

Spare parts are available as indicated. No other parts are supplied as spares.

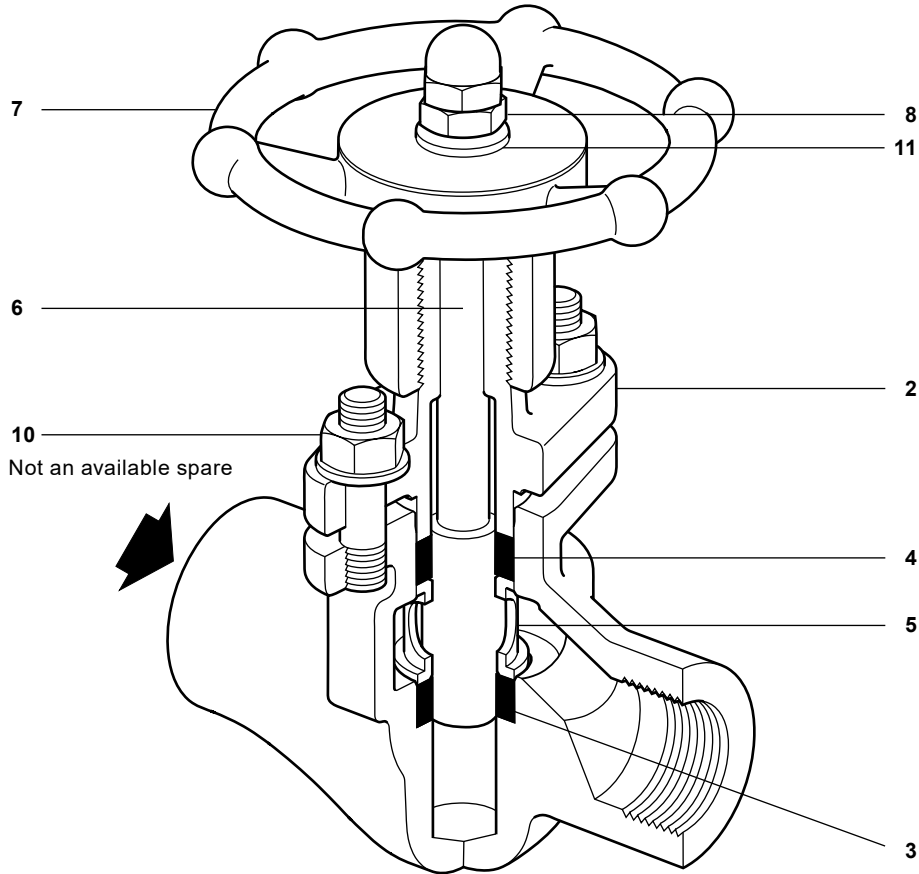
Available spares

Set of sealing rings	3 and 4
Bonnet assembly	2, 3, 4, 5, 6, 7, 8, and 11

How to order spares

Always order spares by using the description given above and state the size and type of valve.

Example: 1 - Bonnet assembly for a Spirax Sarco 1/2" PV4 piston valve.



Recommended tightening torques

Screwed, socket weld and butt weld

Item	Valve size	Bolting size Carbon steel body	No. of bolts	Torque	
				Nm	lbs ft
10	1/2"	5/16"-18 UNC	2	12	8.8

Caution: the torque of the studs is calculated to optimize the use of the product. An excessive torque can damage the valve internals (particularly if the product is open). The studs of valve can be retightened to extend the life of it, but only when it is closed and not more than the recommended torque.