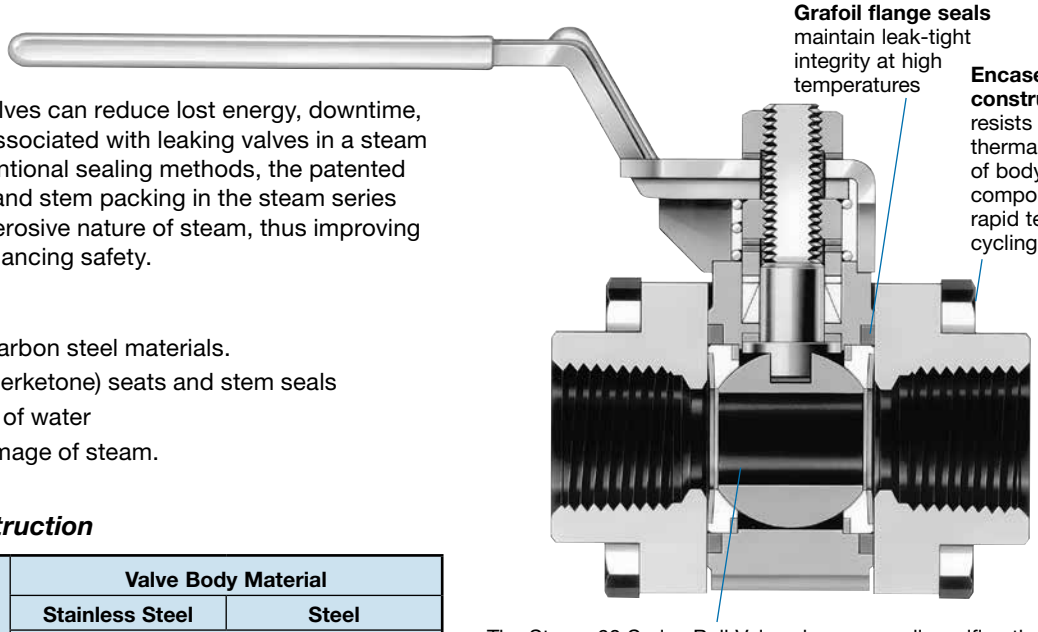
Special-Application Valves

Steam Service (S60P Series)

Steam service ball valves can reduce lost energy, downtime, and safety hazards associated with leaking valves in a steam system. Unlike conventional sealing methods, the patented designs of the seats and stem packing in the steam series ball valves resist the erosive nature of steam, thus improving performance and enhancing safety.



Features

- Stainless steel or carbon steel materials.
- PEEK (polyetheretherketone) seats and stem seals
  - resist absorption of water
  - resist erosive damage of steam.

Materials of Construction

Component	Valve Body Material	
	Stainless Steel	Steel
	Material Grade/ASTM Specification	
Packings, stem bearing	*Molybdenum disulfide-coated PEEK*	
Seats (2)	*Carbon filled PEEK*	
Back sheets (2)	*S62P, S65P, S67P, S68P series—Grafoil; S63P series—N/A*	
Flange seals (2)	*Grafoil*	
Body fasteners (8)	Grade B8M class 2/ A193	Zinc phosphate-coated grade
Lubricant	*PTFE-based*	

Wetted components listed in *italics*.
All other components same as shown on page 4.

The Steam 60 Series Ball Valves have a smaller orifice than the standard valves for improved seat sealing performance after thermal cycling. The maximum C_v of the Steam 60 Series valves is shown in the table below. User should compare this to the C_v in the end connection tables above, to see if the maximum C_v is reduced.

Valve Series	Orifice in. (mm)	Maximum C_v
S62P	0.245 (6.2)	2.3
S63P	0.472 (12.0)	11.6
S65P	0.84 (21.3)	40
S67P	1.20 (30.5)	84.7
S68P	1.45 (36.8)	125

Pressure-Temperature Ratings

Valve Series	62	63, 65	67, 68	62, 63, 65	67, 68
Material	Stainless Steel			Steel	
Temperature, °F (°C)	Working Pressure, psig (bar)				
–20 (–28) to 100 (37)	2500 (172)	2500 (172)	2000 (137)	2500 (172)	2000 (137)
150 (65)	2420 (166)	2320 (159)	1920 (132)	2250 (155)	1820 (125)
200 (93)	2350 (161)	2150 (148)	1830 (126)	2010 (138)	1650 (113)
250 (121)	2280 (157)	1980 (136)	1750 (120)	1770 (121)	1480 (101)
300 (148)	2200 (151)	1910 (131)	1670 (115)	1520 (104)	1310 (90.2)
350 (176)	2120 (146)	1840 (126)	1600 (110)	1280 (88.1)	1140 (78.5)
400 (204)	2050 (141)	1770 (121)	1530 (105)	1040 (71.6)	970 (66.8)
450 (232)	1980 (136)	1700 (117)	1460 (100)	800 (55.1)	800 (55.1)
500 (260)	1910 (131)	1660 (114)	1410 (97.1)	710 (48.9)	710 (48.9)
550 (287)	1100 (75.7)	1100 (75.7)	1100 (75.7)	620 (42.7)	620 (42.7)
600 (315)	200 (13.7)	200 (13.7)	200 (13.7)	200 (13.7)	200 (13.7)

Steel valves with Swagelok tube fitting end connections: 375°F (190°C) max.

Saturated Steam Ratings

Stainless Steel Valves

1050 psig at 550°F (72.3 bar at 287°C)

Carbon Steel Valves

680 psig at 500°F (46.8 bar at 260°C)

Ordering Information

To order, insert **S** before the series designator and replace **T** with **P.**

Example: SS-**S**62**P**S4

To order steel valve body material, replace **SS** with **S.**

Example: **S**-S62PS4

Seal Kits

Seal kits contain stem springs, gland, packing support, packings, stem bearing, seats, seat springs, back sheets, flange seals, lubricant and instructions.

Kit components are the same materials and grades listed in **Materials of Construction.**

Select a kit ordering number.

Valve Series	Kit Ordering Number
S62P	SS-91K-S62P
S63P	SS-91K-S63P
S65P	SS-91K-S65P
S67P	SS-91K-S67P
S68P	SS-91K-S68P