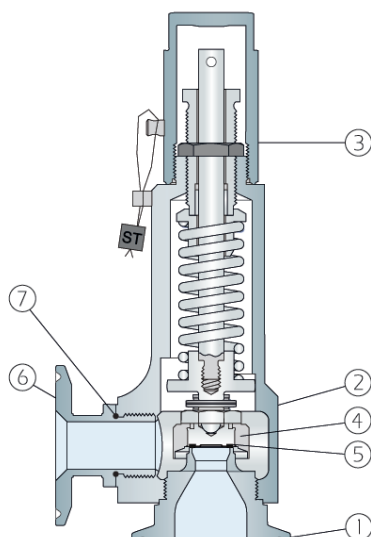




The Type 481 safety relief valve is intended for use in high purity steam, liquid and gas applications. Opening with a gradual action, the maximum capacity of the valve will be achieved when the overpressure reaches 10% of the set pressure. This opening characteristic allows small volumes typically associated with pressure peaks or thermal expansion to be vented. Standard valves can be set between 0.3 and 16 barg, whilst a high pressure option is available for set pressures up to 68 barg. The Type 481 is both ASME Section VIII Division I and CE Category IV approved.



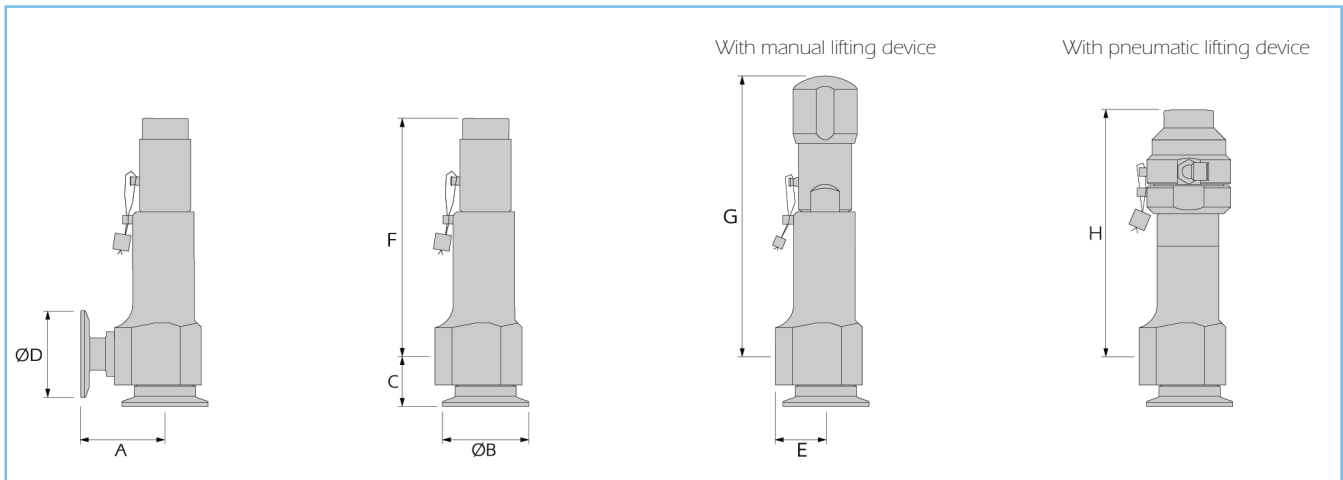
- P Pressure Rating**
Up to 16 barg or 68 barg for high pressure option
- T Temperature Rating**
Up to 150°C or 205°C with Kalrez seat seal
- Orifice Diameter**
10mm
- Connections**
3/4" or 1" ASME BPE clamp inlet
3/4" or 1" ASME BPE clamp, 1/2" BSP female outlet
- Seal Materials**
Seat seal - EPDM, Viton or Kalrez
- Set Pressure Range**
Standard valves - 0.3 - 16 barg
High pressure valves - 16.1 - 68 barg
- Surface Finish**
Wetted inlet surfaces - 0.5 microns Ra
Wetted outlet surfaces - 1.5 - 3.2 microns Ra
External surfaces - Satin finish (1.5 microns Ra)
- Options**
Enhanced surface finish and electropolishing
Manual and pneumatic lifting devices
- Available Certification**
 - CofC** Certificate of Conformity
 - MTR's** Material Certification
 - FDA** FDA Elastomer compliance certificates
 - USP** USP Elastomer compliance certificates
 - ADI** Certified 'Animal Derived Ingredient' free

Part	Description
1	Inlet fitting/seat 316L stainless steel
2	Body 316L stainless steel
3	Cap 316L stainless steel
4	Disc assembly 316L stainless steel
5	Seat seal* EPDM, Viton or Kalrez
6	Outlet fitting 316L stainless steel
7	Outlet fitting seal EPDM or Viton

*16 barg rated valves have a moulded seat seal. Valves set above 16 barg have a captive O-ring

TYPE 481

Safety valve



	ASME BPE Connections		Dimensions(mm)								Weight(kg)
	Inlet	Outlet	A	ØB	C	ØD	E	F	G	H	
	3/4" Clamp	1/2" BSP	-	25	41	-	30	163	189	170	1.4
	3/4" Clamp	3/4" or 1" Clamp	50	25	41	50.5	-	163	189	170	1.4
	1" Clamp	1/2" BSP	-	50.5	30	-	30	163	189	170	1.4
	1" Clamp	3/4" or 1" Clamp	50	50.5	30	50.5	-	163	189	170	1.4



Discharge Capacities

Set pressure(barg)	Saturated steam(Kg/h)	Air@0°C(Nm³/h)	Water@20°C(Kg/h)
1.0	38	49	1550
2.0	60	77	2190
3.0	80	105	2685
4.0	100	132	3100
5.0	120	159	3470
6.0	140	186	3790
7.0	160	213	4100
8.0	180	240	4384
9.0	200	267	4650
10.0	220	294	4900
12.0	259	348	5370
14.0	298	402	5800
16.0	337	456	6200
16.1 - 60.0	Contact Staitech	Contact Staitech	Contact Staitech

Valve capacities with 10% overpressure according to DIN EN ISO 4126

Maximum capacity achieved at set pressure +10%. Re-seating pressure achieved at set pressure -10%

Discharge capacities according to ASME Section VIII, Division 1 available upon request

Coefficients of discharge(Kdr):

For set pressures ≤ 16 barg steam and gasses - 0.45, liquids - 0.37. For set pressures ≥ 16 barg steam and gasses - 0.37, liquids - 0.33



Packaging

Individually capped and bagged



Service Parts

16 barg rated valves - seat assembly comprising parts 5 & 6
60 barg rated valves - seat seal part 5



Specification

See product selector sheet for specification & ordering detail

Staitech

Staitech Ltd • PO Box 152 • Stroud

Glos • GL6 8YT • UK

Tel: +44 (0) 1453 882736 • Fax: +44 (0) 1453 882744

Email: sales@staitech.com • Web: www.staitech.com

Specifications subject to change without notice. 481-TB-07/14