

# Type 652 Pressure Regulator

For steam, liquids and gases

652-TB  
08/02

# Staitech

## Type 652 Pressure Regulator

The Type 652 pressure regulator is manufactured in a grade of stainless steel equivalent to 316/316L, and is intended for non-critical steam, gas and liquid applications.

For steam duty, a resilient Flouraz seat seal is used, together with a PTFE diaphragm protective film. For liquid and gas applications, an alternative EPDM seat seal may also be used.

The Type 652 regulator requires an external sensing line, which should be installed downstream of the valve. For applications involving hazardous mediums, a sealed spring chamber with vent line connection is available.

Features offered by the Pressure Regulator include:

- 316/316L stainless steel construction - provides optimum corrosion resistance.
- Self acting design - eliminates need for external power source.
- Wide range of spring and trim options - allows valve specification to be matched to system requirements.

### Product specification

Sizes 1/2", 3/4", 1", 1-1/4", 1-1/2" & 2"

Connections BSP, Flanged or Tri-Clamp® compatible

Maximum kvs(m<sup>3</sup>/h):

1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
4.0	5.0	6.0	12.0	16.0	18.0

Set pressure ranges(barg):

0.02 - 0.12, 0.1 - 0.5, 0.3 - 1.1, 0.8 - 2.5,  
2.0 - 5.0, 4.0 - 8.0 & 6.0 - 12.0

Maximum reduction ratio(P1/P2):

Range	1/2" -1" valves	1-1/4"-2" valves
0.02 - 0.12	80	50
0.1 - 0.5	40	25
0.3 - 1.1	30	20
0.8 - 12	20	12

Maximum operating pressure 12 barg

Maximum operating temperature:

Steam	190°C
Liquids and gases	130°C

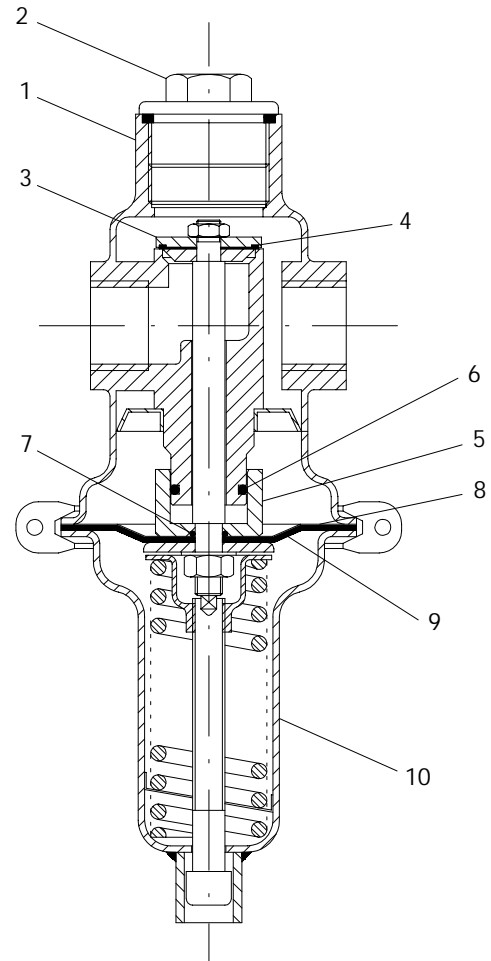
Shut off 0.05% of selected kvs

Surface finish:

Internal body surfaces: Machined/vacu-blast finish  
External surfaces: Vacu-blast finish

Options Sealed spring chamber, oxygen service valve

Note: Glass bead vacu-blasting produces a mottled satin finish



### Materials of construction

1.	Body and seat	AISI 316 Stainless steel
2.	Cap	AISI 316 Stainless steel
3.	Valve assembly	AISI 316 Stainless steel
4.	Seat seal	Flouraz or EPDM
5.	Piston	AISI 316 Stainless steel
6.	Piston seal	EPDM or PTFE/Silicone
7.	Lower piston seal	EPDM or PTFE/Silicone
8.	Diaphragm protection film(optional)	PTFE
9.	Diaphragm	EPDM
10.	Spring chamber	AISI 316 Stainless steel

Full parts breakdown available upon request. FDA compliant elastomers available upon request.

### Sizing

Consult Staitech for product selection, confirming:

- Application & flow medium
- Flow medium inlet & outlet pressures
- Flow medium maximum & minimum flowrates

Dimensions See over for dimensions

Dimensions(mm)

	A	A	A	B	C/D	C/D	C/D	C/D	C/D
	BSP	Tri-Clamp	Flanged		0.02-0.12	0.1-0.5	0.3-1.1	0.8-5.0	4-12
1/2"	85	130	130	76	300/360	300/264	300/200	235/138	235/138
3/4"	91	150	150	76	300/360	300/264	300/200	235/138	235/138
1"	85	160	160	76	300/360	300/264	300/200	235/138	235/138
1-1/4"	130	180	180	90	300/360	300/264	300/200	235/138	235/138
1-1/2"	145	200	200	90	300/360	300/264	300/200	235/138	235/138
2"	185	230	230	90	300/360	300/264	300/200	235/138	235/138

Weight(kg)

Spring range	0.02-0.12	0.1-0.5	0.3-1.1	0.8-12
1/2" - 1" Screwed & Tri-Clamp	13.5	7.1	6.1	3.1
1/2" - 1" Flanged	14.4	8.0	7.0	4.0
1-1/4" - 2" Screwed & Tri-Clamp	15.3	8.9	7.9	4.9
1-1/4" - 2" Flanged	18.4	12.0	11.0	8.0

