

# Cooling & Heating Division

## Pressure Reducing Valve

Typical Applications  
Steam & Compressed Air

# TPRV



## PRESSURE REDUCING VALVE (DIRECT ACTING)

### MAIN FEATURES

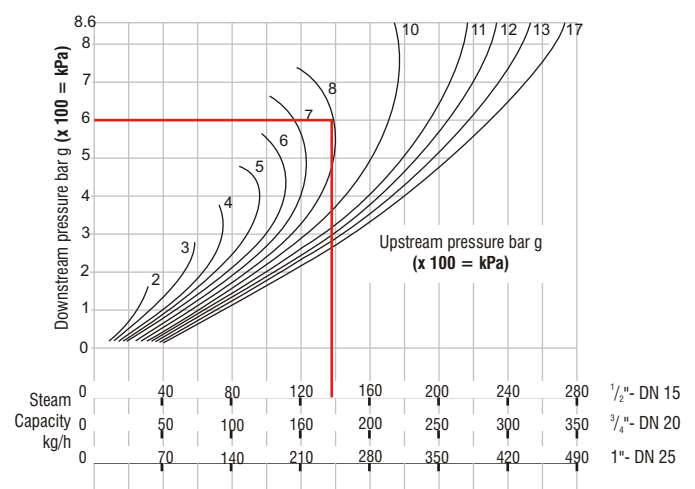
Thermax TPRV direct acting pressure reducing valve is suitable for steam and gases i.e. compressed air.

### INSTALLATION

TPRV is to be installed in a horizontal pipeline with the flow direction as indicated on the valve body with pressure adjustment cap on top.

### VALVE SELECTION

The curved lines labeled 2,3 etc. represent upstream pressures. Downstream pressures are read along the vertical line on the left hand side of the chart. Maximum steam capacities for different valve sizes are shown on the horizontal axis.



**Example:** To select a pressure reducing valve to pass 120kg/h of steam and reducing pressure from 8 to 6 bar. Extend horizontal line from 6 bar point on the vertical axis to cut 8 bar upstream curved line. From this point of intersection read vertically down to get capacities of different valve sizes as 1/2"-138kg/h, 3/4"-176kg/h and 1"-240kg/h. Select 1/2" valve.

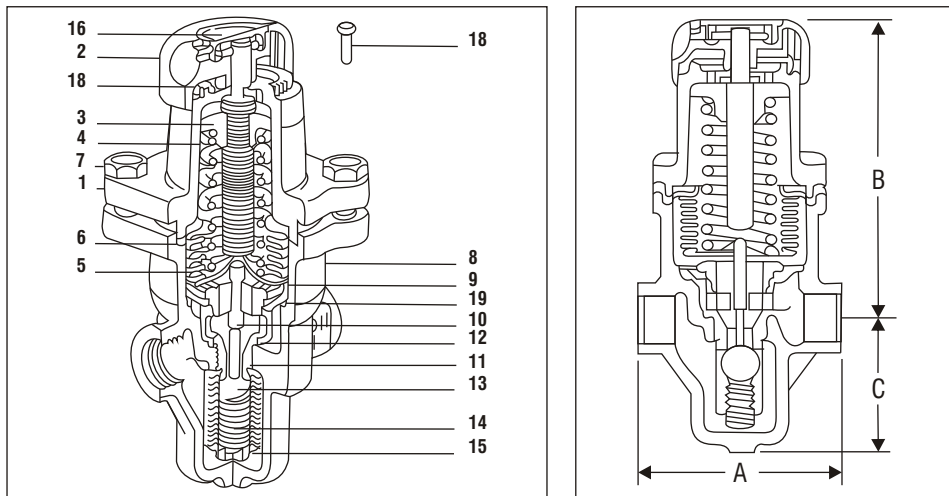
# SPECIFICATIONS

OPERATING CONDITIONS	
Max. Body Design	PN25
Max. Design Temp.	210°C
Max. Upstream Press	19 barg
Max. Downstream Press	8.6 barg
Max. Recommended turndown ratio at max. Flow	10:1
Max. Cold Hydraulic Test Pressure	38 barg

WEIGHTS			
Connections	SCREWED (BSP acc. To BS21 or NPT)		
Sizes (inch)	1/2	3/4	1
Weights (kg)	1.60	1.70	2.00

NO	PARTS	MATERIAL
1	Spring Housing	Al-Epoxy coated LM24
2	Adjustment Hand Wheel	Plastic - Polypropylene
3	Top Spring Nut	Cast Iron
4	Pressure Adjustment Spring	Silicon Chrome Spring Steel/BS 2803685 A55
5	Bellows	Stainless Steel AISI 316L / 316 TI
6	Bellows Gasket	Stainless Steel
7	Cover Bolt	M8 x 25 mm Steel Gr8.8
8	Body	SG Iron - GGG40.3
9	Guide Bush	Graphite Filled PTFE
10	Pushrod	Stainless Steel
11	Seat	Stainless Steel
12	Valve Seat Gasket	Stainless Steel
13	Valve	Stainless Steel AISI 316
14	Valve Spring	Stainless Steel AISI 316
15	Strainer Screen	Stainless Steel AISI 316
16	Top Cap	Polypropylene
17	Bulkhead Plate	Stainless Steel AISI 316
18	Tamperproof Pin	Mild Steel - Copper Plated

Note: Items 9,10,11,13,14, and 15 are an assembly.



Dimensions & Kvs				
Sizes (inch)	A	B	C	Kvs
1/2"	85	126	65	1.5
3/4"	98	126	65	2.5
1"	110	126	65	3.0

TPRV has a coloured identity disc indicating the adjustment range.

**Grey** : 0.14 - 1.70 barg      **Green** : 1.40 - 4.00 barg      **Orange** : 3.50 - 8.60 barg

**Special inspection and certification available on request**

In view of our constant endeavor to improve the quality of our products, we reserve the right to alter or change specifications without prior notice.



**THERMAX**

Sustainable Solutions in Energy & Environment

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