

TPRS



Energy Environment Solutions for Sustainable Growth

Pressure Reducing Station STEAM ENGINEERING

Introduction

Thermax Pressure Reducing Station (TPRS) is a prefabricated ready to assemble module comprises of Direct acting pressure regulating valve, isolation valves, pipes and fittings intended to reduce steam pressure to designed conditions.

Features

- Designed as per best steam engineering practices
- Safety valve sized for full discharge capacity of the PRS
- Specially designed flow divider to ensure low noise levels
- Rugged in design
- Can be used in hazardous area without any electrical connections
- Operates even in low flow conditions
- Quick response to pressure changes
- Ready to install i.e. reduces installation time and field engineering
- Maintenance free and user friendly
- Both IBR certified and non IBR PRS available

Technical Specification

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Design Pressure	:	Inlet 10.5 kg/cm2 17.5 kg/cm2	Outlet 3.5 kg/cm2 8 kg/cm2	
Design Temperature :		Saturated steam temperature		
Capacity	:	100 - 8000 kg/h a	1 and higher	
Size	:	15 - 200 NB and higher		

Application

- · Process applications with continuous steady steam requirement
- Where high accuracy of control is not required
- · Where electricity & compressed air are not easily available
- Can be used even in hazardous area.
- This is a low maintenance system where skilled operators are not available



Sr No	Components
1	Moisture Separator
2	Thermodynamic Trap Module
3	Inlet Pressure Gauge with Siphon and Valve
4	Inlet Valve
5	Strainer
6	Bypass Valve

Sr No	Components
7	Pressure Reducing Valve (PRV)
8	Condensate Pot
9	Outlet Valve
10	Outlet Pressure Gauge with Siphon and Valve
11	Safety Relief Valve

Material List

Sr No	Description	Material of Construction	Specifications
1	Pipe	Forged Steel	ASTM A106 Gr. B
2	Flanges	Forged Steel	ASTM A105 / Equivalent *
3	Gate / Globe Valves or Bellow Seal Valves **	Cast Steel body SS trim Cast Steel body, SS Stellited trim and bellow in Titanium steel material	ASTM A216 Gr. WCB
4	Direct Acting PRV	Cast Steel body SS trim	ASTM A216 Gr. WCB
5	Safety Valve	Cast Steel body SS trim	ASTM A216 Gr. WCB

* Flanges may be fabricated from boiler quality plates if design standards permit it.

** Bellow seal valves are alternative to cast steel gate / globe valves if specified.



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