

This certificate is issued for the following:

PRESSURE REDUCING VALVES

Model 42T

Sizes 1-1/2 to 16 inch NPS

Prepared for:

Bermad Inc 9424 W Little York Rd Houston, TX 77040-3316 United States

FM Approvals Class: 1362 (dated January 2020)

Approval Identification: PR453812 Approval Granted: December 28, 2020 Superseded by: RR226635 Approval Granted: March 8, 2021

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

David B. Fuller

VP, Manager – Fire Protection

FM Approvals

1151 Boston-Providence Turnpike

Norwood, MA 02062





Valve Size		End		Rated Working Pressure		Flow Range		Outlet Pressure Range		Friction Loss, psi	
in	(mm)	Connection	Description	psi	(kPa)	gpm	(m³/hr)	psi	(kPa)		Remarks
1 1/2		Class #150 flanged PN16 flanged Grooved Threaded	Straight	250	(1720)	20- 106	(4-24)		1620)	1.8 at 100 gpm (at 380 L/min)	a, b, c, d
1 1/2		Class #300 flanged PN25 flanged Grooved Threaded	Straight	365	(2515)	20- 106	(4-24)		1620)	1.8 at 100 gpm (at 380 L/min)	a, b, c, d
2		Class #150 flanged PN16 flanged Grooved	Straight	250	(1720)	20- 172	(4-39)	HARRIAARRIAARI	(205- 1620)	5.2 at 200 gpm (at 760 L/min)	a, b, c, d





Valve Size		End		Rated Working Pressure		Flow	Flow Range		utlet essure ange	Friction Loss, psi	
in	(mm)	Connection	Description	psi	(kPa)	gpm	(m³/hr)	psi	(kPa)		Remarks
2	(50)	Class #300 flanged PN25 flanged	Straight	365	(2515)	20- 172	(4-39)		(205- 1620)	5.2 at 200 gpm (at 760 L/min)	a, b, c, d
2 1/2	(65)	Class #150 flanged PN16 flanged Grooved	Straight	250	(1720)	20-247	(4-56)	30- 235	(205- 1620)	5.0 at 250 gpm (at 950 L/min)	a, b, c, d
2 1/2	(65)	Class #300 flanged PN25 flanged Grooved	Straight	365	(2515)	20- 247	(4-56)	30- 235	(205- 1620)	5.0 at 250 gpm (at 950 L/min)	a, b, c, d
3	(80)	Class #150 flanged PN16 flanged Grooved	Straight	250	(1720)	20- 360	(4-82)		(205- 1620)	3.5 at 400 gpm (at 1515 L/min)	a, b, c, d





Va	lve Size	End		Rated Working Pressure		Flow Range		Outlet Pressure Range		Friction Loss, psi	
in	(mm)	Connection	Description	psi	(kPa)	gpm	(m³/hr)	psi	(kPa)	(kPa)	Remarks
3	(80)	Class #300 flanged PN25 flanged Grooved	Straight	365	(2515)	20- 360	(4-82)	30- 235	(205- 1620)	3.5 at 400 gpm (at 1515 L/min)	a, b, c, d
4	(100)	Class #150 flanged PN16 flanged Grooved	Straight	250	(1720)	20- 640	(4-145)		(205- 1620)	4.0 at 750 gpm (at 2840 L/min)	a, b, c, d
4	(100)	Class #300 flanged PN25 flanged Grooved	Straight	365	(2515)	20- 640	(4-145)		(205- 1620)	4.0 at 750 gpm (at 2840 L/min)	a, b, c, d
6	(150)	Class #150 flanged PN16 flanged Grooved	Straight	250	(1720)	20- 1450	(4-330)	30- 235	(205- 1620)	3.1 at 1500 gpm (at 5680 L/min)	a, b, c, d





Valve Size in (mm)		End		Rated Working Pressure		Flow Range		Outlet Pressure Range		Friction Loss, psi	
		Connection	Description	psi	(kPa)	gpm	(m³/hr)	psi	(kPa)	(kPa)	Remarks
6	(150)	Class #300 flanged PN25 flanged Grooved	Straight	365	(2515)	20- 1450	(4-330)	30- 235	(205- 1620)	3.1 at 1500 gpm (at 5680 L/min)	a, b, c, d
8	(200)	Class #150 flanged PN16 flanged Grooved	Straight	250	(1720)	20- 2570	(4-580)	30- 235	(205- 1620)	3.6 at 3000 gpm (at 11355 L/min)	a, b, c, d
8	(200)	Class #300 flanged PN25 flanged Grooved	Straight	365	(2515)	20- 2570	(4-580)	30- 235	(205- 1620)	3.6 at 3000 gpm (at 11355 L/min)	a, b, c, d
10	(250)	Class #150 flanged PN16 flanged Grooved	Straight	250	(1720)	45- 4000	(10- 910)	30- 235	(205- 1620)	9.5 at 4900 gpm (at 18550 L/min)	a, b, c, d





Valv	e Size	End		Rated Working Pressure		Flow Range		Outlet Pressure Range		Friction Loss, psi	
in	(mm)	Connection	Description	psi	(kPa)	gpm	(m³/hr)	psi	(kPa)	(kPa)	Remarks
10		Class #300 flanged PN25 flanged Grooved	Straight	365	(2515)	45- 4000	(10- 910)		(205- 1620)	9.5 at 4900 gpm (at 18550 L/min)	a, b, c, d
12		Class #150/#300 flanged PN16/PN25 flanged	Straight	300	(2065)	100- 5821	(25- 1320)		(205- 1620)	8.1 at 5930 gpm (at 22450 L/min)	a, b, c, d
14		Class #150/#300 flanged PN16/PN25 flanged	Straight	300	(2065)	100- 7198	(25- 1635)		(205- 1620)	10.0 at 7100 gpm (at 26880 L/min)	a, b, c, d
16		Class #150/#300 flanged PN16/PN25 flanged	Straight	300	(2065)	100- 9555	(25- 2170)		(205- 1620)	14.5 at 9300 gpm (at 35205 L/min)	a, b, c, d





Remarks:

- a. Must be installed with an FM Approved pressure relief valve size 1/2 inch or larger
- b. Approved when supplied with a main control valve body in one the following materials: ASTM A536 ductile iron, ASTM A351 stainless steel, ASTM A216 steel, ASTM B148 nickel aluminum bronze, ASTM A351 duplex and ASTM B336 hastelloy
- c. Approved when supplied with a pilot valve body in one the following materials: ASTM B584 brass, ASTM A351 stainless steel, ASTM B148 nickel aluminum bronze, ASTM B336 hastelloy and ASTM B367 titanium
- d. Approved with supplied with alternate "non-return" trim (product code 20)

