

ASME Safety Relief Valves

How to Order: M5100 Series ASME Relief Valves (20 to 1200 psig)

O-RING MATERIAL & TEMPERATURE

20 PTFE, -100° F to +300° F (-73°C to +149°C)
32 Viton®, -20° F to +400° F (-29°C to +204°C)
33 Neoprene, -40° F to +250° F (-40°C to +121°C)
59 Buna N, -40° F to +250° F (-40°C to +121°C)
62 Ethylene propylene, -20° F to +200° F (-29°C to +93°C)

BODY MATERIAL

N Naval brass
T1 316 stainless steel

SET PRESSURE*

Specify set pressure in psig
(20 – 1200 psig)

CONNECTIONS—INLET

M Male pipe
L Lockwire

VALVE SIZE

Pipe sizes in 1/8" increments

1 1/8"
2 1/4"
3 3/8"
4 1/2"
6 3/4"
8 1"

M51 59 N - 4 M(L) - 20

* Set Pressure
1/8", 3/4", 1": 20 to 1200 psi (1 – 83 bar)
1/4", 3/8", 1/2": 50 to 1200 psi (3 – 83 bar)

Please specify 'ASME' when placing your order.

Please consult your Circle Seal Controls distributor or our factory for information on special connections, lubricants, operating pressures and temperature ranges.

Dimensions (inches)

E ± .12
M ± .12

B Dia.

H Hex

A Size

1.90 approx.

Dash No.	A Size	E	M	B Dia. H Hex
-1M	1/8"	2.84	3.45	0.71
-2M	1/4"	3.16	4.06	1.00
-3M	3/8"	3.19	4.09	1.00
-4M	1/2"	3.86	5.51	1.25
-6M	3/4"	5.41	7.54	1.50
-8M	1"	5.59	7.72	1.50

Lift Handle

For 1/2", 3/4", and 1" valve sizes with set pressure of 451–1200 psi.

Ring Handle

For set pressures to a maximum of 1200 psi in 1/8" through 3/8" valves sizes to a maximum of 450 psi in 1/2" through 1" sizes.

E (10–450 psi Nom. C.P.) ± .12
M (451–2400 psi Nom. C.P.) ± .12

B Dia.

H Hex

A Size

Important

Complete part number MUST INCLUDE set pressure in psi. The ASME requires that valves be set at a “pop point”. The ASME refers to this as the set pressure. This point is higher than the traditional Circle Seal Controls definition of cracking pressure.

After a prolonged period of storage with no system pressure, these relief valves will evidence an apparent high set pressure on first pop; therefore, in receiving inspection tests, true set pressure should be determined after first pop.

The following Circle Seal Controls valves have been tested in accordance with procedures in Paragraph UG 131, Section V111 of the ASME Unified Pressure Vessel Code:

D500–2M	M5100–1M(L)	M5100–3M(L)	M5100–6M(L)
	M5100–2M(L)	M5100–4M(L)	M5100–8M(L)

ASME Certificate of Authorization, Number 4599

Note: These valves are not certified for steam or liquid service and are intended for air service applications only.

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For Your Safety

It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.