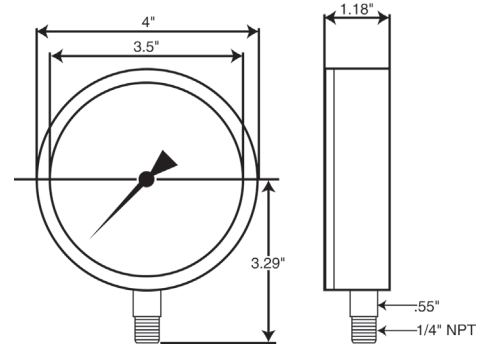


FIRE PROTECTION GAUGES

Plastic Back and Steel Back



6510160: AIR/WATER 300 PSI

6510161: WATER 300 PSI

6510163: AIR 300 PSI

6510162: AIR WITH RETARD 250 PSI

Application: Fluid medium which does not clog connection port or corrode copper alloy. Specifically designed for the fire sprinkler industry.

Size: 4" (100 mm)

Accuracy $\pm 3/2/3\%$ of span (ASME B40.1 Grade B)

Working Range

Steady: 3/4 of full scale value

Fluctuating: 2/3 of full scale value

Short time: full scale value

Operating Temperature

Ambient: -40°F to 140°F (-40°C to 60°C)

Media: max. 140°F (+60°C)

Temperature Error

Additional error when temperature changes from reference temperature of 68°F (20°C) +0.4% for every 18° F (10°C) rising or falling. Percentage of span.

Standard Features

Connection Material: copper alloy

Lower mount (LM) - not available for 1½" size

1/4" NPT limited to wrench flat area

Bourdon Tube: Material: copper alloy C-type

Movement: Copper alloy, silicone dampened

Dia: White plastic with stop pin - black & red lettering

Pointer: Black aluminum

Case: Black polycarbonate

ASSEMBLED IN U.S.A.

Approvals

UL listed (UL-393)

FM approved

Meets NFPA 25 Standards

Standard Scale

PSI

Window

Acrylic, ultrasonically welded to case

Standard Series • Type 110.10sp

Order Options

water

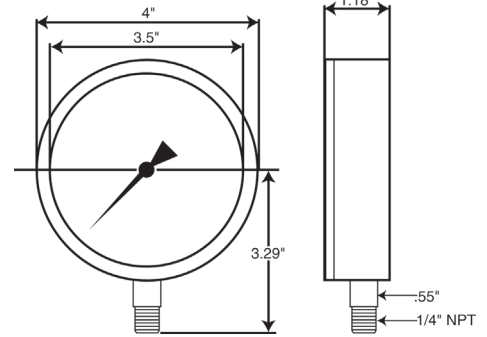
air/water

air

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

FIRE PROTECTION GAUGES

Black Steel Painted Case



6510164STL: AIR/WATER 300 PSI

6510165STL: WATER 300 PSI

6510166STL: AIR 300 PSI

6510166STL: AIR WITH RETARD 250 PSI

Application: Fluid medium which does not clog connection port or corrode copper alloy. Specifically designed for the fire sprinkler industry.

Size: 4" (100 mm)

Accuracy ± 3/2/3% of span (ASME B40.1 Grade B)

Working Range

Steady: 3/4 of full scale value

Fluctuating: 2/3 of full scale value

Short time: full scale value

Operating Temperature

Ambient: -40°F to 140°F (-40°C to 60°C)

Media: max. 140°F (+60°C)

Temperature Error

Additional error when temperature changes from reference temperature of 68°F (20°C) +0.4% for every 18° F (10°C) rising or falling. Percentage of span.

ASSEMBLED IN U.S.A.

Standard Features

Connection Material: copper alloy

Lower mount (LM) - not available for 1½" size

1/4" NPT limited to wrench flat area

Bourdon Tube: Material: copper alloy C-type

Movement: Copper alloy, silicone dampened

Dia: White plastic with stop pin - black & red lettering

Pointer: Black aluminum

Case: Black Painted Steel

Approvals

UL listed (UL-393)

FM approved

Meets NFPA 25 Standards

Standard Scale

PSI

Window

Acrylic, ultrasonically welded to case

Standard Series • Type 110.10sp

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

FIRE PROTECTION GAUGES

Plastic Back and Steel Back



NEMA and IP Ratings for Industrial Instrumentation

NEMA Ratings

The NEMA Rating system is a standard primarily used in North America for rating enclosures. The table below shows the equivalent IP ratings. NEMA standards meet or exceed the IP ratings listed, but the reverse cannot be assumed.

NEMA Rating	Description	Equiv. IP Rating
1	GENERAL PURPOSE. Intended for use indoors.	IP 10
2	GENERAL PURPOSE. Intended for use indoors with additional drip protection.	IP 11
3 & 3S	GENERAL PURPOSE WEATHER-RESISTANT. Intended for use outdoors with protection from windblown dust, rain and sleet, and undamaged by the formation of ice.	IP 54
3R	GENERAL PURPOSE WEATHER-RESISTANT. Intended for use outdoors with protection from falling rain and sleet, and undamaged by the formation of ice.	IP 14
4 & 4X	GENERAL PURPOSE WEATHER-PROOF. Intended for use indoors or out doors with protection from wash down environment and corrosion resistance.	IP 65
5	GENERAL PURPOSE DUST-TIGHT. Intended for use indoors or outdoors with protection from dust provided by gaskets.	IP 52
6 & 6P	GENERAL PURPOSE SUBMERSIBLE. Intended for use indoors or outdoors with protection from occasional submersion.	IP 67
7	HAZARDOUS. Intended for indoor use in Class I, Groups A, B, C, and D environments per NFPA rating system.	
8	HAZARDOUS. Intended for indoor or outdoor use in Class I, Groups A, B, C, and D environments per NFPA rating system.	
9	HAZARDOUS. Intended for indoor or outdoor use in Class II, Groups E, F, and G environments per NFPA rating system.	
12 & 12K	INDUSTRIAL USE. Intended for use in industrial applications with protection from dust and non corrosive liquid drip.	IP 52
13	INDUSTRIAL USE. Intended for use in industrial applications with protection from dust, spraying water, oil and non corrosive liquid drip.	IP 54

NEMA and IP Ratings for Industrial Instrumentation

IP Ratings

The IP Rating system (or International Protection Code) is a worldwide standard for rating enclosures. The rating is written as IP-"XY" where X and Y are replaced by the first and second digits as listed in the tables below.

Degree of protection from contact or foreign body

First Digit	Brief Description
0	No special protection. Generally not used for pressure or temperature instruments.
1	
2	
3	Protected against solid objects > 2.5 mm in diameter
4	Protected against solid objects > 1.0 mm in diameter
5	Dust protected
6	Dust-tight

Degree of water protection

Second Digit	Brief Description
0	No special protection. Generally not used for pressure or temperature instruments.
1	Protected against dripping water
2	Protection against dripping water when case is tilted up to 15°
3	Protected against spraying water
4	Protected against splashing water
5	Protected against a water jet
6	Protected against heavy jet spray
7	Protected against limited submersion
8	Protected against continuous submersion