

Data Sheet

1209-XRA Pressure Gauges

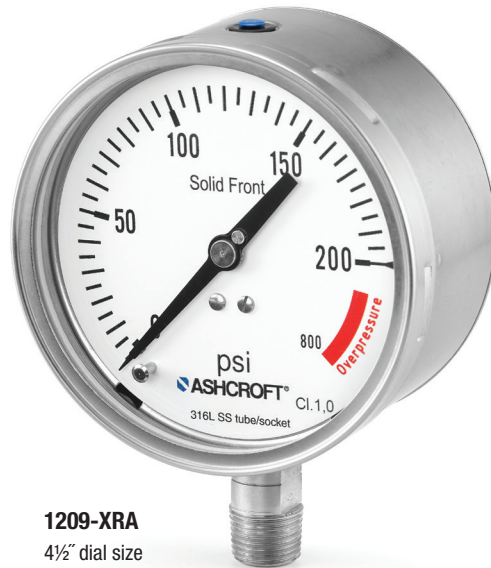
All stainless steel high overpressure solid front gauge

FEATURES

- Overpressure up to 417% of range (option XRA)
- Solid front all welded stainless steel case
- 4½" case size
- Weatherproof protection IP65
- Dry, liquid filled or **PLUS!**™ Performance option

TYPICAL USES

- Offshore oil rigs
- Chemical and petrochemical plants
- Machine equipment
- Food and beverage industry
- Pulp and paper
- Power plants



1209-XRA
4½" dial size



SPECIFICATIONS

Accuracy:	±0.5% of span (ASME B40.100 Grade 2A)
Dial Size:	4½"
Range:	15 psi to 600 psi
Process Connection:	¼ NPT Male, ½ NPT Male
Case Style:	Solid front with full pressure relief back
Movement:	304 Stainless steel, adjustable
Window Material:	Acrylic (STD.), safety glass (OPT.)
Pointer:	Micrometer adjustable, aluminum
Weather Protection:	IP65
Mounting:	Stem, surface (STD.), flush, pipe, remote (OPT.)
Dampening:	Liquid fill, PLUS! ™ Performance, throttle screw, dampeners, capillary, diaphragm seals and snubbers

WETTED COMPONENTS

Model	Bourdon Tube	Process Connection	Joints
1209	316L Stainless steel	316L Stainless steel	Welded

NON-WETTED COMPONENTS

Model	Case	Ring	Back Cover
1209	316L Stainless steel	316L Stainless steel	316L Stainless steel

KEY BENEFITS

- Full pressure relief back for safety
- Socket welded to case for superior leak integrity
- Protects when sudden pressure surge occurs at start-up or during process pressure spikes

MIN./MAX. TEMPERATURE LIMITS

	Ambient	Process	Storage
Dry	-40 to 200 °F (-40 to 93 °C)	-40 to 200 °F (-40 to 93 °C)	-40 to 200 °F (-40 to 93 °C)
PLUS! ™	-40 to 200 °F (-40 to 93 °C)	-40 to 200 °F (-40 to 93 °C)	-40 to 200 °F (-40 to 93 °C)
Glycerin	20 to 150 °F (-7 to 66 °C)	20 to 150 °F (-7 to 66 °C)	20 to 150 °F (-7 to 66 °C)
Silicone	-40 to 150 °F (-40 to 66 °C)	-40 to 150 °F (-40 to 66 °C)	-40 to 150 °F (-40 to 66 °C)
Halocarbon®	-40 to 150 °F (-40 to 66 °C)	-40 to 150 °F (-40 to 66 °C)	-40 to 150 °F (-40 to 66 °C)

Note: Other than discoloration of the dial and hardening of the gasketing that may occur as ambient or process temperatures exceeds 150 °F, non-liquid-filled gauges with standard glass windows, can withstand continuous operating temperatures up to 250 °F (121 °C). Liquid-filled gauges can withstand 200 °F (93 °C) but glycerin fill and acrylic window will tend to yellow. Accuracy at temperatures above or below the reference ambient temperature of 68 °F (20 °C) will be affected by approximately 0.4% per 25 °F. Gauges with welded joints will withstand 750 °F (400 °C), 450 °F (232 °C) with silver brazed joints for short times without rupture, although other parts of the gauge will be destroyed and calibration will be lost. For continuous use and for process or ambient temperatures above 250 °F (121 °C), a diaphragm seal or capillary or siphon is recommended.

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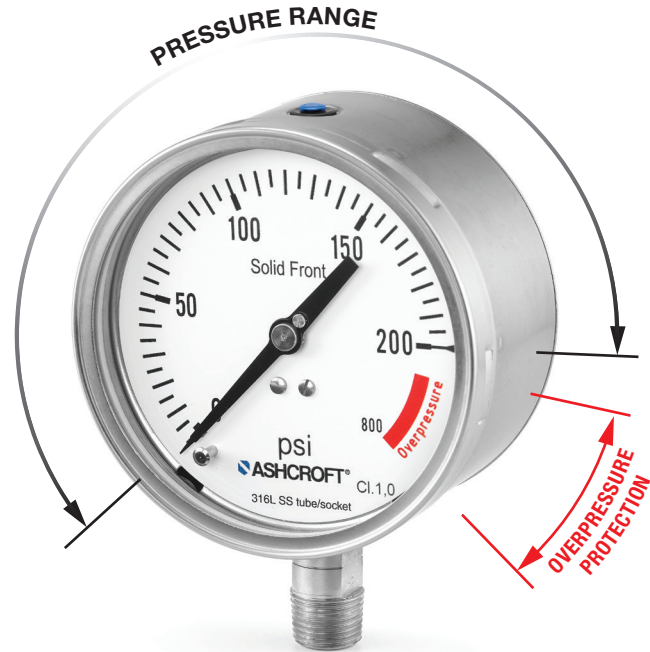
1209-XRA Pressure Gauges

All stainless steel high overpressure solid front process gauge

PRESSURE RANGE TABLES

PSI RANGES

Pressure Range	Overpressure Protection (psi)	Overpressure Protection (% of Range)
15#	60	400%
20#	80	400%
30#	120	400%
60#	240	400%
100#	400	400%
120#	480	400%
160#	600	375%
200#	800	400%
300#	1000	333%
400#	1000	250%
500#	1250	250%
600#	1500	250%



MPA RANGES

Pressure Range	Overpressure Protection (mPa)	Overpressure Protection (% of Range)
0.1MP	0.4	400%
0.16MP	0.64	400%
0.25MP	1	400%
0.4MP	1.6	400%
0.6MP	2.4	400%
1MP	4	400%
1.6MP	6	375%
2.5MP	10	400%
4MP	13	333%

BAR RANGES

Pressure Range	Overpressure Protection (bar/kg)	Overpressure Protection (% of Range)
1BR	4BR	400%
1.6BR	6BR	375%
2.5BR	10	400%
4BR	16	400%
6BR	25	417%
10BR	40	400%
16BR	60	375%
25BR	80	320%
40BR	100	250%

KPA RANGES

Pressure Range	Overpressure Protection (kPa)	Overpressure Protection (% of Range)
100KP	400	400%
160KP	640	400%
250KP	1000	400%
400KP	1600	400%
600KP	2400	400%
1000KP	4000	400%
1600KP	6000	375%
2500KP	10,000	400%
4000KP	13,320	333%

KILOGRAM RANGES

Pressure Range	Overpressure Protection (bar/kg)	Overpressure Protection (% of Range)
1KSC	4	400%
1.6KSC	6	375%
2.5KSC	10	400%
4KSC	16	400%
6KSC	25	417%
10KSC	40	400%
16KSC	60	375%
25KSC	80	320%
40KSC	100	250%

All specifications are subject to change without notice. All sales subject to standard terms and conditions.

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Data Sheet

1209-XRA Pressure Gauges

All stainless steel high overpressure solid front process gauge

ORDERING CODE	Example:	451209	S	D	04	L	30#	-XRA
Dial Size/Model Code								
451209 - 4½" Stainless steel, solid front process gauge per ASME B40.100		451209						
System (tube and process connection)								
S - Stainless steel system			S					
Case Fill								
D - Dry Case				D				
L - Liquid filled case, glycerin (STD.)								
Process Connection Sizes								
02 - ¼ NPT Male								
04 - ½ NPT Male						04		
Process Connection Location								
L - Lower connection only						L		
Range (coding examples only, see range table for all standard ranges)								
Single Scales								
30# - 30 psi							30#	
2.5KSC - 2.5 kg/cm²								
250KP - 250 kPa								
Options (if choosing an option(s) must include an "X")								
RA - High overpressure (Refer to page 2 for available ranges)								-X_ RA
EP - Maximum pointer, adjustable								
GV - Silicone case fill								
GX - Halocarbon® case fill								
LL - PLUS! ™ Performance								
NH - Stainless steel tag wired to case								
SG - Safety glass								
VS - Underload stop								
C3 - Material test report to EN 10204.3.1								
C4 - Traceable calibration certificate								
D3 - DuraVis™ Retroreflective Dial (4½" and dry case only)								
6B - Cleaned for oxygen service								

DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings.

