Gauge Isolators

Chemline SI Series Gauge Isolators allow inexpensive pressure gauges, or any other pressure instrument to be used in corrosive services. The upper chamber (gauge side) is filled with a stable fluid such as glycerine‡. A diaphragm separates it from the lower chamber which receives the media under pressure.

The 1/2" gauge connection allows use of the popular 4" and 4-1/2" diameter gauges. Pressure switches or transmitters may also be installed. Customers can easily fill isolators and install their own gauges.

CHEMLINE Plastics Limited

Your Pipeline To Quality

PVC, PP, PVDF

SERIES:	SI
INLET CONNECTION:	1/2" Threaded†
INSTRUMENT CONNECTION:	1/4" or 1/2" Threaded
DIAPHRAGM:	Teflon®

Isolate Pressure Instruments from Corrosive Media

Teflon® Diaphragm

Features

Easy to Mount Gauges

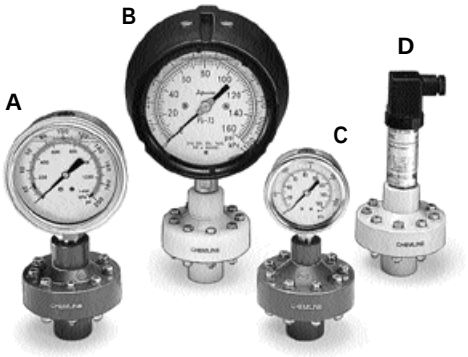
- It is easy to fill an isolator and field mount a gauge. No special equipment is required.
- Will accept popular 4" and 4-1/2" diameter gauges

High Chemical Resistance

- Several body materials are available for a wide range of applications
- Teflon® PTFE bonded Hypalon dished diaphragm for high chemical resistance and sensitivity

Heavy Duty Design for Safety

- Stainless steel fasteners
- Heavy wall connection ports



A PVC isolator with 4" gauge
B PVDF isolator with 4-1/2" gauge
C PVC isolator with 2" gauge
D PP isolator with pressure transmitter

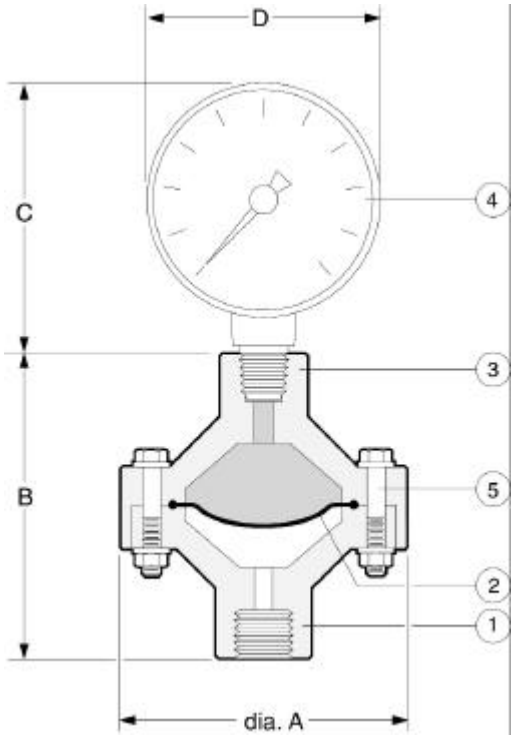
Optional Gauge – Isolators are available alone or with gauge mounted and prefilled with glycerine‡



† Other available inlet connections are 1/4" threaded, 1/2" socket or 1/2" to 1" flanged.
‡ Other fluids are available for special applications such as chlorine service.

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Gauge Isolators



PARTS

▲Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Lower Chamber	1	PVC, PP, PVDF
2▲	Diaphragm	1	Teflon® PTFE
3	Upper Chamber	1	PVC, PP, PVDF
4	Optional Gauge	1	See below
5	Hex Bolt, Nut & Washers	9 Sets	304 SS, M5x30

OPTIONS & ACCESSORIES

- Gauge mounted to isolator and prefilled with glycerine or special fluid for chlorine applications
- Flanged inlet connections
- Chemline will mount any pressure instrument supplied free issue by customer

OPTIONAL GAUGES

All gauges have MNPT bottom mount connectors. Dials and cases are filled with either glycerine or silicon for corrosion resistance and dampening. "Internals" are Bourdon tube and connector.

Gauge Diameter	Item No.	Description
2-1/2"	P025-**xx**	304 SS case, copper-alloy internals, glycerine filled, polycarbonate window, accuracy ±1.5% of span
4"	P040-**xx**	304 SS case, 316 SS internals,glycerine filled, safety glass window, accuracy ±1.0% of span
4-1/2"	P045-**xx**	Glass filled polyester (PBTP) case, blow out back, 316 SS internals, silicon filled, acrylic window, ±0.5% of span

xx – denotes maximum gauge pressure, i.e., 30, 60, 100, 160 or 200 psi.

DIMENSIONS INCHES

Inlet Size†	Instrument Connection	A	B	Optional Gauge Nominal Size	C	D(max)
1/2"	**1/4"**	3.22	3.38	**2-1/2"**	3.1	2.5
1/2"	**1/2"**	3.22	3.38	**4"**	4.5	4.0
1/2"	**1/2"**	3.22	3.38	**4-1/4"**	6.3	5.83

† 1/4" are also available.

WORKING PRESSURES PSI

WEIGHTS

Material	10 - 20°C 50 - 68°F	30°C 86°F	40°C 104°F	50°C 122°F	60°C 140°F	70°C 158°F	80°C 176°F	90°C 194°F	100°C 212°F	120°C 248°F	Net Weights Pounds*
PVC	150	115	85	60	15	–	–	–	–	–	1.0
PP	150	130	100	80	60	45	–	–	–	–	0.7
PVDF	150	150	150	125	105	85	70	60	45	15	1.3

Temperature Ranges - PVC: –10 to 60°C (14 to 140°F), **PP:** 8 to 80°C (46 to 176°F), **PVDF:** –30 to 120°C (–22 to 248°F).
NR = Not Recommended. * Weights are for unfilled 1/2" x 1/2" isolators without gauges. 1/2" x 1/4" isolators are 20% lighter.

ORDERING EXAMPLE

Chemline Gauge Isolator	**SI**	**A**	**005-**	**002**	**P**
Body Material	**A** - PVC	**B** - PP	**K** - PVDF		
Inlet Size	**002** - 1/4"	**005** - 1/2"(Standard)			
Instrument Connection	**002** - 1/4"	**005** - 1/2"			
Diaphragm	**P** - Teflon® PTFE bonded Hypalon				
Filling & Mounting	**G** - Add only if isolator is supplied filled with glycerine and gauge or pressure instrument is mounted by Chemline. Separate gauge item numbers are listed above.				

Example: Chemline SI Series Gauge Isolator, PVC, 1/2"x 1/4" FNPT inlet x instrument connections, Teflon®.

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