



**HYDRA - line**  
**Ultra High Purity**  
**Perfluoroalkoxy (PFA) Wetted Parts**  
**Stainless Steel Pressure Measurement Devices**  
**H-Gauge**

**Pressure Systems**

**Application**

Liquid fluid mediums for ultra high purity liquid distribution systems that require high degrees of accuracy, ultra clean wetted surfaces, and a high degree of chemical resistance. This product is used when the device can be isolated from external vibration, surges and pressure shocks caused by pumps.

**Process-Connection**

In-Line 3/8", 1/2", 3/4" and 1" flare

**Pressure Measurement Device**

Design according to EN 837-1,  
2½" (63 mm) Gauge (lower mounting / center back mounting)  
or 2½" (63 mm) with electric contacts (lower mounting only)  
Gauge has 360° orientation

**Accuracy**

± 1.6 % of span

**Pressure Ranges**

Vacuum/Compound to 30"Hg/0/100 PSI/Bar  
Pressure from 30 PSI to 100 PSI/Bar  
or other equivalent units of pressure or vacuum.

**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 - 140°F (+5 ... +60°C)  
Media: 40°F - 140°F (+5 ... +60°C)  
Storage: -4°F - 140°F (-20 ... +60°C)

**Material**

All Wetted Parts: Perfluoroalkoxy (PFA)  
Gauge: Stainless Steel, Teflon® coated black

**Diaphragm**

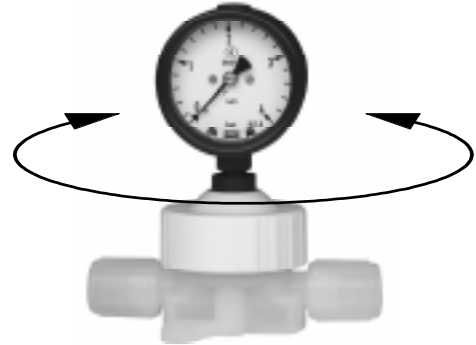
Vented three Layer Diaphragm Assembly  
(for compound-ranges single diaphragm)

**Filling Liquid**

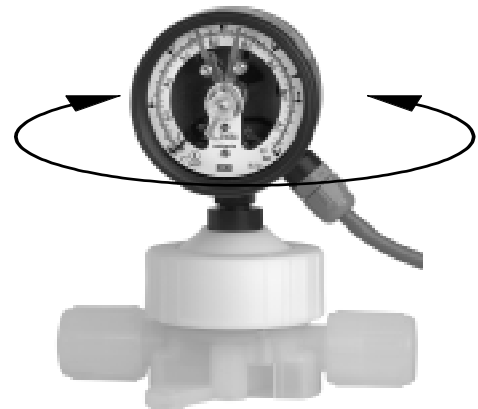
(Precision filled and **NOT** field refillable)  
50/50 Mix Semiconductor Grade IPA (Isopropyl Alcohol) /  
DI Water (KN 75)

**Electrical Contacts**

Double contacts acc. to technical datas and order code  
(see overleaf)



**HYDRA - line**, Model HG  
2½" (63mm) gauge stainless steel series with black Teflon®  
coating and in-line 1/2" flare process connection



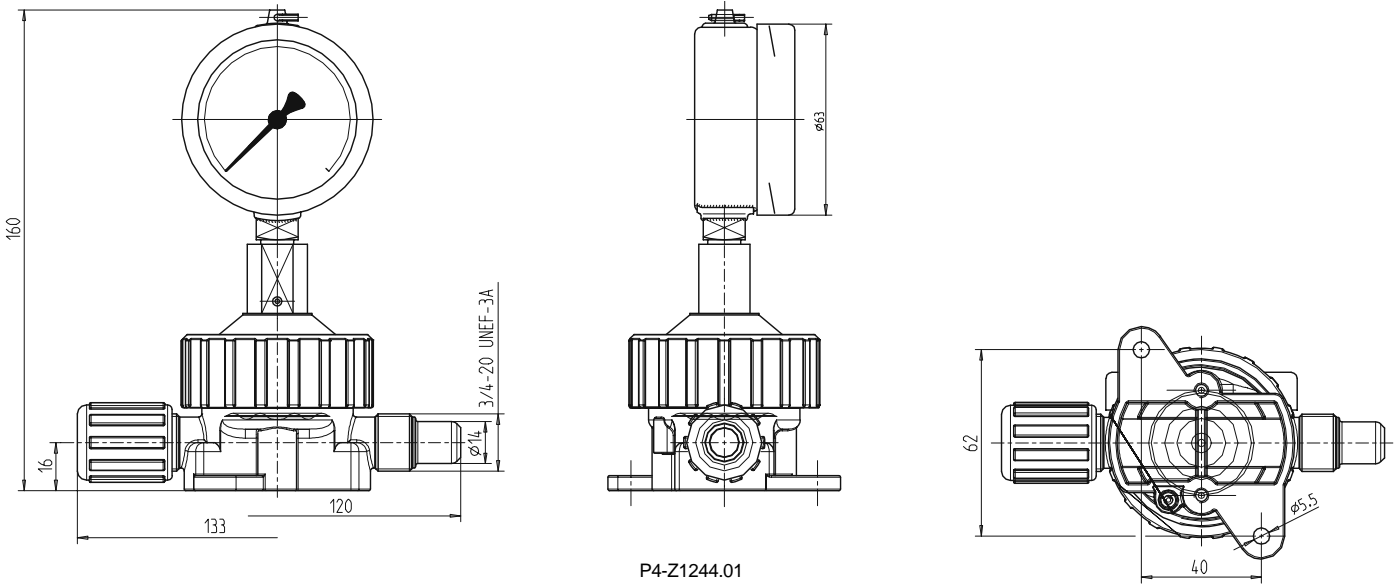
**HYDRA - line**, Model HG  
2½" (63mm) gauge stainless steel series, black Teflon®  
coating with electrical contacts and in-line 1/2" flare process  
connection

The offer for sale of this product does not infer or imply chemical compatibility with specific applications. Some applications of this product can and will cause diffusion of chemicals through the diaphragm materials.

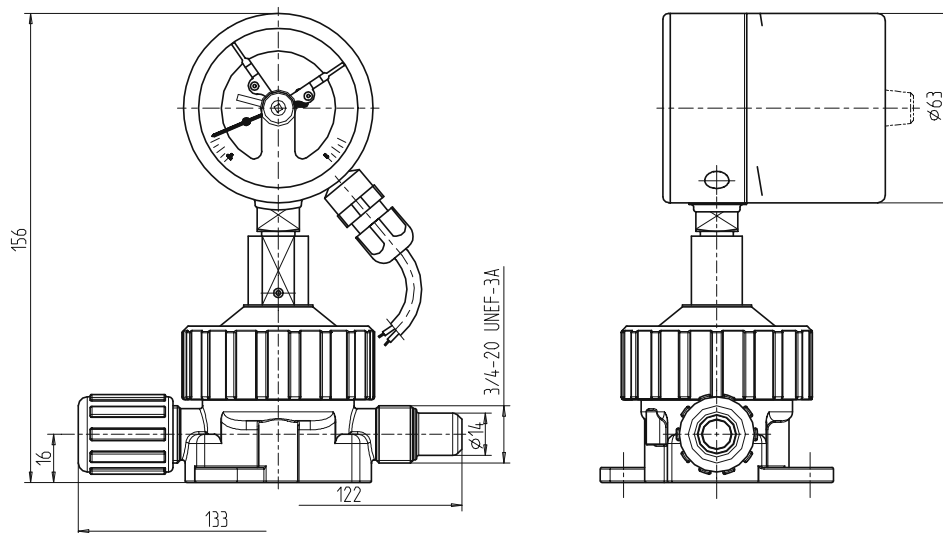
**SP H-Gauge**  
**(SP 99.20)**

## Dimensions

**HYDRA -line** , Model HG, 63mm gauge stainless steel series with black Teflon<sup>®</sup> coating and in-line 1/2" flare process connection



**HYDRA -line** , Model HG, 63mm gauge stainless steel series, black Teflon<sup>®</sup> coating with electrical contacts and in-line 1/2" flare process connection



Process connection	Dimensions mm/in										
	KEY	H	L	L1	Ød	G	F	ØD	B1	B2	Ød2
3/8" flare	mm	156	118	127	10.7	5/8"-20 UN	16	23	40	62	5.5
	in	6.14	4.65	5.00	0.42		0.63	0.91	1.57	2.44	0.22
1/2" flare	mm	156	122	131	25.8	3/4"-20 UNEF-3A	16	27	40	62	5.5
	in	6.14	4.80	5.16	1.0		0.63	1.06	1.57	2.44	0.22
3/4" flare	mm	162	122	133	94.8	1"-20 UNEF-2A	19	34.5	40	62	5.5
	in	6.38	4.80	5.24	3.73		0.75	1.36	1.57	2.44	0.22
1" flare	mm	186.5	165	179	113.8	1 7/16"-12 UN	25	46	56	78	6.5
	in	7.34	6.50	7.05	4.48		0.98	1.81	2.20	3.07	0.26

### Electric Alarm Contacts

Electric alarm contacts make or break an electric control circuit depending on the position of the instrument's pointer. Points of contact actuation are adjustable over the full extension of the scale graduation. The gauges feature a hub in the window for an adjustment key. Contact Actuation is made when there is an upper or lower deviation of the set desired value by the instrument pointer.

### Electronic Contact Model 830E

The electronic contact is intended to be connected to a PLC control unit (SPS) or for direct switching of small loads. The switch outputs have a PNP characteristic.

### Specifications

Range of operating voltage	DC 10 ... 30 V
Switching current	100 mA

### Make contact (function index 1)

This contact makes, when the rising pressure approaches the set-point.

Example:

Set-point at 30 psi, pressure at 15 psi ▮  
contact is open

Set-point at 30 psi, pressure at 45 psi ▮  
contact is closed

### Break contact (function index 2)

This contact brakes, when the rising pressure approaches the set-point.

Example:

Set-point at 30 psi , pressure at 15 psi ▮  
contact is closed

Set-point at 30 psi, pressure at 45 psi ▮  
contact is open

Electrical contacts of a gauge are denoted as follows:

XXX.YY

XXX: model number of contact

YY: Contact function index

**Example:**

830.12 E: electronic contact,  
first contact makes, second contact brakes

THE MEASURE OF  
**Total Performance™**

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**Ordering Information:**

State computer part number (if available) / type number / size / range / connection size and location / options required.

Specifications given in this price list represent the state of engineering at the time of printing. Modifications may take place and the specified materials may change without prior notice.

05/01



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