

## safety pressure gauges "solid-front" all stainless steel construction for high pressures, DS 4", 6" (100-150mm)



PED 2014/68/UE

These instruments are built in conformity with the construction and safety specifications of EN 837-1/S3 e ASME B40.1. In case of leaks or break of the elastic element, the operator is protected by a solid separating wall placed on the front of the instrument and by the blow out back. They are mainly used on high pressure water jet technology like water cutting machines, hydro blasting pumps and turbines, hydrodemolition. The TIG welding between the case and the process socket, strengthens the instrument and assures a better tight in case of dampening fluid. The advantages of filling the case of the instrument with a dampening fluid are: reduced pointer fluctuation, reduced wear of rotating parts of the movement when pulsant vibrations and pulsations occur. Moreover condensation and corrosive atmospheres which could damage the internal parts are prevented.

### 1.22.1 - Standard Model

**Design:** S3 as per EN 837-2.

**Ranges:** 0...2500, 0...3000 and 0...4000 bar;  
0...30000, 0...40000 and 0...60000 psi/bar.

**Accuracy class:**  $\pm 1\%$  of F.S.V.

**Ambient temperature:**  $-40...+149\text{ }^{\circ}\text{F}$  ( $-40...+65\text{ }^{\circ}\text{C}$ ).

**Process fluid temperature:**  $-40...+302\text{ }^{\circ}\text{F}$  ( $-40...+150\text{ }^{\circ}\text{C}$ ).

**Thermal drift:**  $\pm 0,4\%$  /  $10\text{ }^{\circ}\text{C}$  of range (starting from  $68^{\circ}\text{F}$  -  $20^{\circ}\text{C}$ ).

**Working pressure:**

75% of FSV for static pressure;

66% of FSV for pulsating pressure.

**Over pressure limit:** 10% of FSV (temporary).

**Protection degree:** IP 55 as per IEC 529.

**Socket material:** AISI 316L st.st.

**Bourdon tube:** duplex st.st. seamless tube.

**Case:** stainless steel.

**Ring:** stainless steel, bayonet lock.

**Blow out disk:** stainless steel.

**Window:** safety glass.

**Movement:** stainless steel with internal limit stops.

**Dial:** aluminium, white with black markings.

**Pointer:** adjustable, aluminium, black.

### 1.22.2 - Fillable Model

**Protection degree:** IP 67 as per IEC 529.

**Pointer:** not adjustable, aluminium, black.

**Other features:** as Standard Model.

### 1.22.3 - Filled Model

**Damping liquid:** glycerine 98%, silicon oil.

**Ambient temperature:**

$+32...+149\text{ }^{\circ}\text{F}$  ( $0...+65\text{ }^{\circ}\text{C}$ ) with glycerine filling;

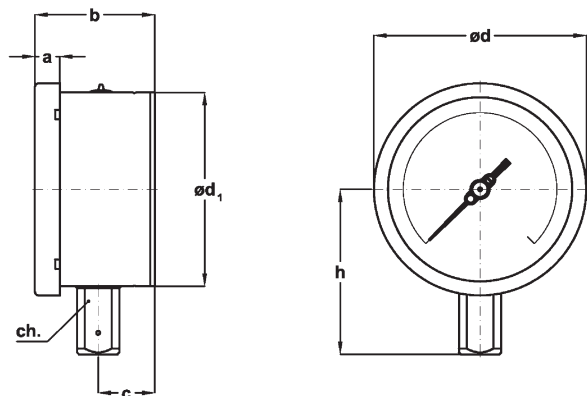
$-40...+149\text{ }^{\circ}\text{F}$  ( $-40...+65\text{ }^{\circ}\text{C}$ ) with silicon oil filling.

**Process fluid temperature:** max  $+149^{\circ}\text{F}$  ( $+65\text{ }^{\circ}\text{C}$ ).

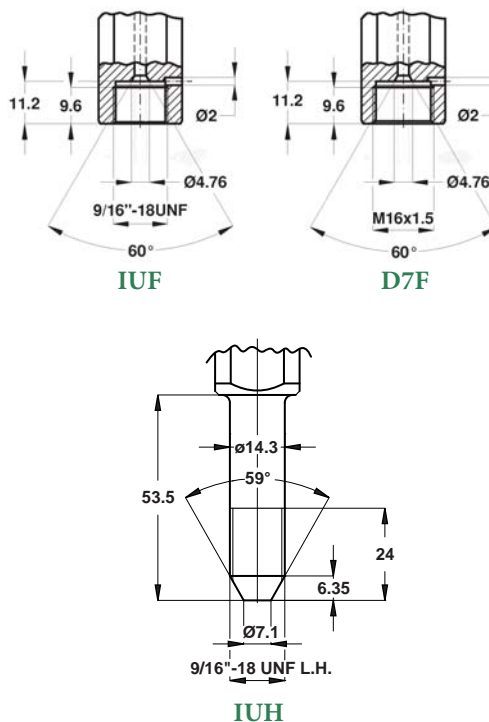
**Protection degree:** IP 67 as per IEC 529.

**Pointer:** not adjustable, aluminium, black.

**Other features:** as Standard Model.



**A - LOWER CONNECTION**



Mounting	DS	F	a	b	c	ø d	ø d <sub>1</sub>	h	ch	Weight (2)
Lower	<b>E</b> 4" (100)	<b>IUF</b> - 9/16-18 UNF-2B (1)	13	62	29,5	110,5	101	86	22	0,75 kg
		<b>D7F</b> - M16 x 1,5						120		
		<b>IUH</b> - 9/16-18 UNF-L.H.								
	<b>G</b> 6" (150)	<b>IUF</b> - 9/16-18 UNF-2B (1)	15	64	30	161	150,5	110	22	1,2 kg
<b>D7F</b> - M16 x 1,5		140								
<b>IUH</b> - 9/16-18 UNF-L.H.										

(1) suitable for following fittings:

- 1/4" F250C Autoclave
- 1/4" HF4 - HiP
- 1/4" Newport AMINCO HP
- 1/4" HP Butech

dimensions : mm

(2) add 0.95 lbs (0,43 kg) for DS 4" (100) and 1.76 lbs (0,8 kg) for DS 6" (150), when filled

**OPTIONS**

Model	standard	fillable	filled
<b>C</b> - Back flange, for lower connection pressure gauges	◆	◆	◆
<b>C40</b> - AISI 316L st. st. case, blow out disk and ring	◆	◆	◆
<b>P01</b> - Suitable for filling with silicon oil		◆	
<b>S10</b> - Silicone filling			◆
<b>T01</b> - Tropicalization	◆	◆	◆

**"HOW TO ORDER" SEQUENCE**

Section / Model/Case /Mounting/ Diameter / Range / Process connection / Options

1 22 1 A E D7F C  
2 G IUF C40...T01  
3 IUH

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