

## FEATURES

- Bimetal helix system
- Hermetically sealed
- Every angle entry
- External zero adjustment
- ATEX approved

## APPLICATION

- Liquid & gaseous mediums
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Food & Beverages
- Nuclear power plants

Every angle, External zero adjustable



### STANDARD PARAMETERS

Accuracy	: CL 1.0 (Class 1)
Ambient temperature	: -20...+60°C
Over range limits	: 110% full scale
Stem pressure rating	: 25 bar (Without thermowell)
Weld joints	: TIG argon arc welding

### MATERIAL OF CONSTRUCTION

Sensing element	: Coiled bimetal strip
Case & Ring material	: AISI 304 SS
Stem & Process connection material	: AISI 316 SS
Dial	: Aluminum, black graduation on white background
Pointer	: Slotted zero adjustable, aluminum, black powder coated
Gaskets	: NBR
Window	: Sheet glass

### STANDARD SPECIFICATIONS

Dial size	: DN80 / DN100 / DN125 / DN150
Range	: -80...0...600°C / -110...0...1100°F
Mounting pattern	: Every Angle mounting, Centre Back connection
Stem size	: 6.0 mm
Ingress protection	: IP 65
Zero adjustment	: External
Stem length	: 25 mm to 1500 mm*
Process connection type	: Adjustable connection
Process connection	: 1/2" NPT (M) / 1/2" BSP (M)

### STANDARD SPECIFICATIONS : DAMPENING LIQUID FILLED, GLYCERIN

Gaskets & Filling plugs	: NBR
Dampening liquids	: Glycerin 99.7% (-20°C to 65°C) [Up to range 100°C]
Window	: Shatterproof safety glass

### STANDARD SPECIFICATIONS : DAMPENING LIQUID FILLED, SILICON

Gaskets & Filling plugs	: NBR
Dampening liquids	: Silicon oil [Up to range 200°C]
Window	: Shatterproof safety glass

\* Depending on range & stem diameter

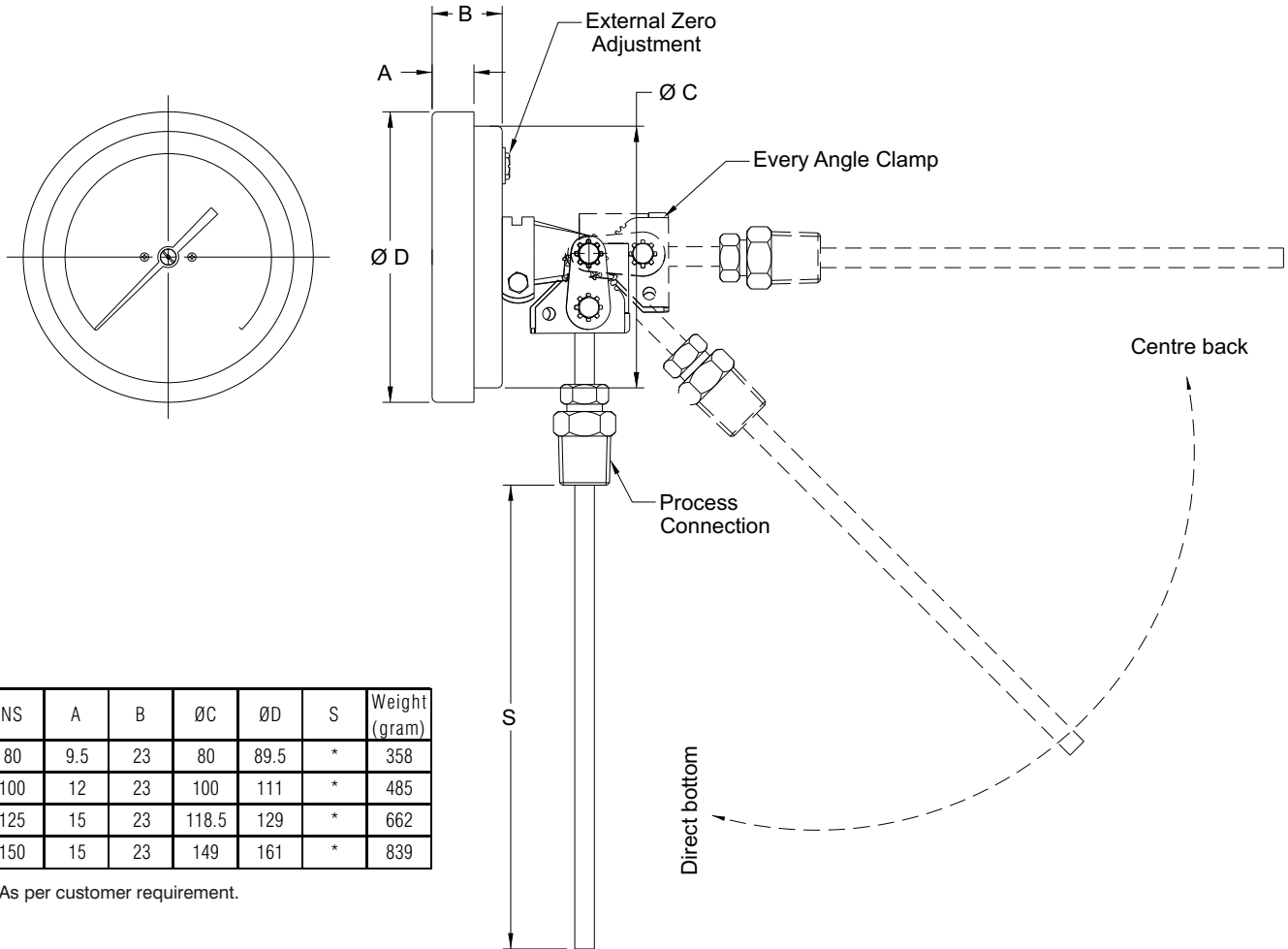
## REFERENCE



EN 13190

## DIMENSIONAL DRAWING

Mounting Pattern: R1

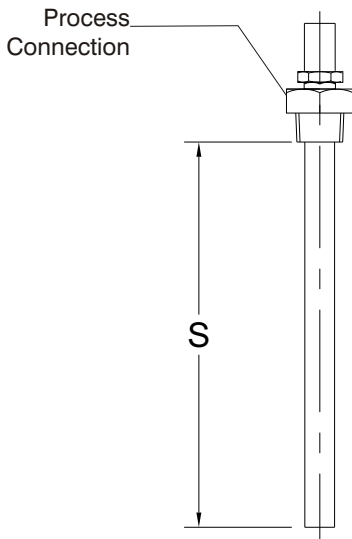


NS	A	B	ØC	ØD	S	Weight (gram)
80	9.5	23	80	89.5	*	358
100	12	23	100	111	*	485
125	15	23	118.5	129	*	662
150	15	23	149	161	*	839

\* As per customer requirement.

All dimensions are in mm.

## STEM LENGTH CHART



Stem Diameter	6 mm & ¼"	8 mm	10 mm	12 mm
Range (°C)	Min. Stem Length			
	(mm)	(mm)	(mm)	(mm)
0...50	130	110	110	110
0...60	110	95	95	95
0...80	95	70	70	70
0...100	75	70	70	70
0...120	70	60	60	60
0...150	60	50	50	50
0...200	50	45	45	45
0...250	40	35	35	35
0...300	60	50	50	50
0...400	50	45	45	45
0...500	45	40	40	40
0...600	40	35	35	35

1. All length mentioned above are to be considered below thread only.
2. For other reduced length, contact factory before ordering.

### NOTES

1. For other connections, please contact factory.
2. Equivalent scales available in °F, °C/°F, °F/°C. Please contact factory for details.

### ORDERING CODES

#### 1. DIAL SIZE

<b>03</b>	80 mm / 3"
<b>04</b>	100 mm / 4"
<b>05</b>	125 mm / 4½"
<b>06</b>	150 mm / 6"

**04**

#### 2. RANGE

**XXX** Refer "Range Table"

**C16**

#### 3. MOUNTING PATTERN

**R1** Every Angle mounting,  
Centre back connection

**R1**

#### 4. STEM DIAMETER

<b>M60</b>	6.0 mm
<b>I14</b>	¼" (6.35 mm)
<b>M80</b>	8.0 mm
<b>M95</b>	9.5 mm
<b>M10</b>	10 mm
<b>M12</b>	12 mm

**M60**

#### 5. INGRESS PROTECTION

<b>ER</b>	IP 65
<b>ES</b>	IP 66
<b>ET</b>	IP 67
<b>EU</b>	Hermetically sealed

**ER**

#### 6. STEM LENGTH

**XXXX** Up to 1,500 mm

**150**

#### 7. PROCESS CONNECTION TYPE

<b>KX</b>	Fixed connection
<b>KW</b>	Adjustable connection
<b>BW</b>	Swivel / Revolving connection

**KW**

#### 8. PROCESS CONNECTION

<b>14N</b>	½" NPT (M)
<b>14B</b>	½" BSP (M)
<b>12N</b>	¼" NPT (M) <sup>2</sup>
<b>12B</b>	¼" BSP (M) <sup>2</sup>
<b>14M</b>	M20 X 1.5 mm (M)
<b>13B</b>	3/8" BSP (M) <sup>3</sup>
<b>T15</b>	1.5" Triclover
<b>15N</b>	¾" NPT (M)
<b>15B</b>	¾" BSP (M)
<b>16M</b>	M27 X 2 mm (M)
<b>04N</b>	½" NPT (F)
<b>05N</b>	¾" NPT (F)

**14N**

#### 9. OTHER OPTIONS

<b>BH</b>	Case & Ring in AISI 316 SS (R1)
<b>GC</b>	Shatterproof safety glass
<b>OA</b>	Dampening liquid, silicon oil (200°C)
<b>RA</b>	Rubber parts, Viton
<b>TA</b>	5 - point factory calibration certificate
<b>TM</b>	Material test certificate 2.2
<b>XF</b>	SS tag plate, AISI 304 SS
<b>XG</b>	SS tag plate, AISI 316 SS
<b>XT</b>	Dial tag marking
<b>XR</b>	Custom designed dial
<b>EG</b>	Dampening liquid, glycerin (65°C)

**XX**

**Ordering Example : T502-04-C16-R1-M60-ER-150-KW-14N**

### RANGE TABLE

RANGE(°C)	CODE	RANGE(°C)	CODE	RANGE(°C)	CODE
-20...+40	C01	0...50	C13	0...200	C20
-20...+60	C02	0...60	C14	0...250	C21
-30...+70	C08	0...80	C15	0...300	C22
-30...+120	C05	0...100	C16	0...400	C23
-50...+100	C11	0...120	C17	0...500	C24
-80...+120	C12	0...150	C18	0...600	C25

#### NOTES

- For other connections, please contact factory.
- 1/4" connections are available up to 1/4" (6.35 mm) stem diameter only.
- 3/8" connections are available up to 10 mm stem diameter only.