

# Bourdon Tube Pressure Gauges

Bayonet ring case stainless steel  
DW-Line (Double Weld)

**RCh/RChG**  
**63 – 3vDW**

## DW-Line

In order to meet special requirements even more effectively, especially in the food/bio/pharmaceutical industries, we have developed the DW-Line pressure gauges for chemical seal mounting. DW – Double Weld are Bourdon tube pressure gauges, which are welded to the chemical seal. The case of the pressure gauge is welded to the circular connecting piece (DW1) and the circular connecting piece is welded to the chemical seal (DW2). For this purpose, the circular connecting piece has a d8x5 process connection and the chemical seal has a corresponding bore.

## Standard Versions

Information on general and metrological features (e.g. load limits/temperature resistance) and standard pressure ranges/scale divisions can be found in model overview 1000.

**Accuracy** (DIN EN 837-1)  
Class 1.6

**Case**  
With bayonet ring, stainless steel 304 (1.4301)

**Degree of Protection** (DIN EN 60 529/IEC 529)  
IP54  
IP65 for model RChG with closed blow-out plug

**Blow-out Device**  
Blow-out plug at the top of the case coverage

**Case Ventilation**  
Via Blow-out plug, ventilation required for internal pressure compensation for measuring spans  $\leq 10$  bar and also recommended for other pressure ranges if the operating conditions permit

**Case Filling**  
Model RChG: glycerin

**Nominal Case Size**  
63 mm (2½")

**Wetted Parts**  
Connection: stainless steel 316L (1.4404)  
Bourdon tube: stainless steel 316L (1.4404)  
gas-shielded arc welding  
 $\leq 100$  bar (1 500 psi) c-form  
 $\geq 160$  bar (2 000 psi) helical form

**Case Configuration**  
Connection: welded  
Position of the connection:  
- bottom connection  
- centre back connection (rm)

**Pressure Ranges** (DIN EN 837-1)  
0 – 1 bar to 0 – 600 bar (0 – 15 psi to 0 – 10 000 psi)

**Process Connection**  
Welded connection piece d8x5 for welding to the chemical seal

**Window**  
Laminated safety glass



**Movement**  
Stainless steel

**Dial**  
Aluminum white, scale black

**Pointer**  
Aluminum black

**Safety Category According to DIN EN 837-1**  
S2 safety pressure gauge, proved

## Ordering Information, Standard Pressure Ranges, Options

See pages 3 and 4

## Further Options

- Position of connection radial at 3 o'clock, 9 o'clock, 12 o'clock or other than vertical installation (90°):
  - for unfilled models
  - for filled models with pressure equalising membrane
- GOST version for Russia and Kazakhstan

## Special Versions Upon Request

- Other pressure ranges and/or special scales, e.g. dual scale bar/psi, coloured fields or ranges, dial inscriptions, negative scale
- Min./max. drag indicator
- Case parts 316L (1.4404)
- Increased degree of protection, e.g. IP65 without case filling
- Other case fillings
- Model RChG for ambient temperatures down to  $-40$  °C ( $-40$  °F)
- Other position of connection

## Accessory

Chemical seals: see catalogue heading 7

# Case Configurations, Code Letters, Dimensional Data and Weight, Blow-out Device

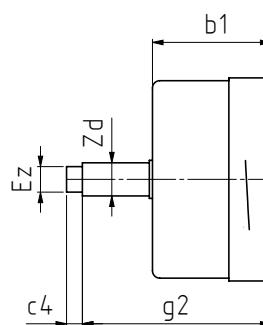
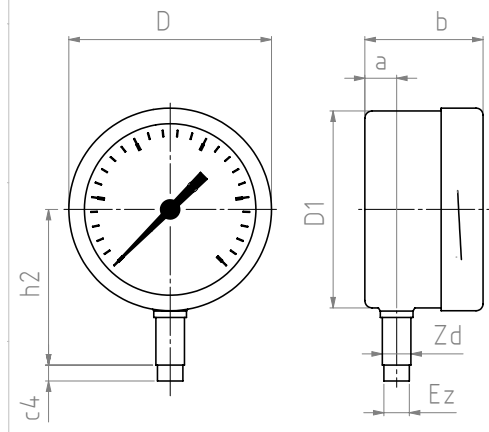
## Bottom Connection

## Centre Back Connection

without mounting device

without code letters

code letters rm

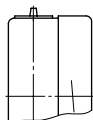


### Dimensional Data (mm/inch) and Weight (kg/lb)

NCS	a	b	b1	c4	D	D1	Ez	g2	h2 <sup>±1</sup>	Zd <sup>+0.5</sup>	approx. weight	
											RCh	RChG
63	10	33	37	5	64	62	8	59	49	10	0.18	0.25
2½"	0.39	1.3	1.46	0.2	2.52	2.44	0.31	2.32	1.93	0.39	0.4	0.55

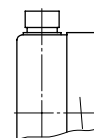
## Blow-out Device

Blow-out plug no. 19



## Optional

Blow-out plug no. 24  
(reclosable, IP65)



## Ordering Information

Basic Model: Bourdon Tube Pressure Gauge with Bayonet Ring Case		RCh																																																																																																																																												
<b>Case filling:</b>	without glycerin fillable version	without code letters <b>G</b> <b>(G)</b>																																																																																																																																												
<b>Nominal case size:</b>	case Ø 63 mm (2½")	<b>63</b>																																																																																																																																												
<b>Wetted material:</b>	stainless steel	<b>- 3</b>																																																																																																																																												
<b>Case configuration:</b>	connection case/circular connecting piece welded position of the connection bottom connection centre back connection	<b>vDW</b> without code letters <b>rm</b>																																																																																																																																												
<b>Pressure ranges:</b>	<table border="0"> <tr> <td>-1200 / 0 mbar</td> <td>-30 "Hg</td> <td>-</td> <td>0 psi</td> <td></td> </tr> <tr> <td>-1 / 0 bar</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-1 / +0.6 bar</td> <td>-30 "Hg</td> <td>-</td> <td>15 psi</td> <td></td> </tr> <tr> <td>-1 / +1.5 bar</td> <td>-30 "Hg</td> <td>-</td> <td>30 psi</td> <td></td> </tr> <tr> <td>-1 / +3 bar</td> <td>-30 "Hg</td> <td>-</td> <td>60 psi</td> <td></td> </tr> <tr> <td>-1 / +5 bar</td> <td>-30 "Hg</td> <td>-</td> <td>100 psi</td> <td></td> </tr> <tr> <td>-1 / +9 bar</td> <td>-30 "Hg</td> <td>-</td> <td>160 psi</td> <td></td> </tr> <tr> <td>-1 / +15 bar</td> <td>-30 "Hg</td> <td>-</td> <td>200 psi</td> <td></td> </tr> <tr> <td></td> <td>-30 "Hg</td> <td>-</td> <td>300 psi</td> <td></td> </tr> <tr> <td>0 - 1 bar</td> <td>0</td> <td>-</td> <td>15 psi</td> <td></td> </tr> <tr> <td>0 - 1.6 bar</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0 - 2.5 bar</td> <td>0</td> <td>-</td> <td>30 psi</td> <td></td> </tr> <tr> <td>0 - 4 bar</td> <td>0</td> <td>-</td> <td>60 psi</td> <td></td> </tr> <tr> <td>0 - 6 bar</td> <td>0</td> <td>-</td> <td>100 psi</td> <td><b>e.g. 0 - 6 bar</b></td> </tr> <tr> <td>0 - 10 bar</td> <td>0</td> <td>-</td> <td>160 psi</td> <td></td> </tr> <tr> <td>0 - 16 bar</td> <td>0</td> <td>-</td> <td>200 psi</td> <td></td> </tr> <tr> <td></td> <td>0</td> <td>-</td> <td>300 psi</td> <td></td> </tr> <tr> <td>0 - 25 bar</td> <td>0</td> <td>-</td> <td>400 psi</td> <td></td> </tr> <tr> <td>0 - 40 bar</td> <td>0</td> <td>-</td> <td>600 psi</td> <td></td> </tr> <tr> <td>0 - 60 bar</td> <td>0</td> <td>-</td> <td>800 psi</td> <td></td> </tr> <tr> <td></td> <td>0</td> <td>-</td> <td>1 000 psi</td> <td></td> </tr> <tr> <td>0 - 100 bar</td> <td>0</td> <td>-</td> <td>1 500 psi</td> <td></td> </tr> <tr> <td>0 - 160 bar</td> <td>0</td> <td>-</td> <td>2 000 psi</td> <td></td> </tr> <tr> <td></td> <td>0</td> <td>-</td> <td>3 000 psi</td> <td></td> </tr> <tr> <td>0 - 250 bar</td> <td>0</td> <td>-</td> <td>4 000 psi</td> <td></td> </tr> <tr> <td></td> <td>0</td> <td>-</td> <td>5 000 psi</td> <td></td> </tr> <tr> <td>0 - 400 bar</td> <td>0</td> <td>-</td> <td>6 000 psi</td> <td></td> </tr> <tr> <td>0 - 600 bar</td> <td>0</td> <td>-</td> <td>10 000 psi</td> <td></td> </tr> </table>	-1200 / 0 mbar	-30 "Hg	-	0 psi		-1 / 0 bar					-1 / +0.6 bar	-30 "Hg	-	15 psi		-1 / +1.5 bar	-30 "Hg	-	30 psi		-1 / +3 bar	-30 "Hg	-	60 psi		-1 / +5 bar	-30 "Hg	-	100 psi		-1 / +9 bar	-30 "Hg	-	160 psi		-1 / +15 bar	-30 "Hg	-	200 psi			-30 "Hg	-	300 psi		0 - 1 bar	0	-	15 psi		0 - 1.6 bar					0 - 2.5 bar	0	-	30 psi		0 - 4 bar	0	-	60 psi		0 - 6 bar	0	-	100 psi	<b>e.g. 0 - 6 bar</b>	0 - 10 bar	0	-	160 psi		0 - 16 bar	0	-	200 psi			0	-	300 psi		0 - 25 bar	0	-	400 psi		0 - 40 bar	0	-	600 psi		0 - 60 bar	0	-	800 psi			0	-	1 000 psi		0 - 100 bar	0	-	1 500 psi		0 - 160 bar	0	-	2 000 psi			0	-	3 000 psi		0 - 250 bar	0	-	4 000 psi			0	-	5 000 psi		0 - 400 bar	0	-	6 000 psi		0 - 600 bar	0	-	10 000 psi		
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<b>Options:</b>	see page 4																																																																																																																																													

Example:

**RCh 63 - 3vDW rm, 0 - 6 bar, d8x5**

