

# Bourdon Tube Pressure Gauges 4000 bar

Bayonet Ring Case Stainless Steel, Solid Front/Blow-out Back Nom. Sizes 100 160

Standard (RSCh) or with Liquid Filling (RSChG) Accuracy Class 1,0

Models

**RSCh**  
**RSChG**

## Application

High pressure measurement up to 4000 bar (60,000 psi)

## Nominal Case Size

100 mm (4"), 160 mm (6")

## Accuracy

Class 1.0 according to EN 837-1 (i.e. max.  $\pm 1.0\%$  of full scale value)

## Pressure Ranges

0-4000 bar, 0-50,000 psi, 0-60,000 psi

## Pressure Limitations

Steady pressure: full scale value

Cyclic pressure: 65% of full scale value

Temporary: 100% of full scale value

## Protection Type (EN 60 529 / IEC 529)

Model RSCh: IP 54 / Model RSChG: IP 65

Further information about advantages, applications, specifications, temperature limitations and pressure ranges of Bourdon tube pressure gauges of accuracy class 1.0 to 2.5 can be found on **general information leaflet 1000**.



## Standard Configuration

### Process Connection

High pressure connection for 1/4" tube, with 60° cone, female thread M 16x1.5, nom. size 160 (6") version Mgh for gauge holder bracket

### Wetted Parts

Version – 3 : Socket: 316 stainless steel (1.4404<sup>1)</sup>)

Bourdon tube: NiFe alloy, helical,  
nom. size 160 (6") screwed together,  
nom. size 100 (4") argon arc welded

### Movement

Stainless steel

### Dial

Aluminum alloy, black figures, white background

### Pointer

Aluminum alloy, black

### Case © and Ring

304 stainless steel (1.4301) safety case with bayonet ring

### Case Filling (Model RChG only)

Glycerine

### Window

Laminated safety glass, 4 mm (.16") thick for nom. size 100 (4"), 6 mm (.24") thick for nom. size 160 (6"), marked with "SAFETY GLASS"

### Safety Features

Solid front between measuring system and dial and a full blow-out safety back, both 304 stainless steel (1.4301). Should the Bourdon tube rupture, the entire case back separates, allowing full relief. Filled versions nom. size 100 (4") additionally with pressure equalizing membrane, nom. size 160 (6") top ventilation device

### Accessories for Nom. Size 160:

Gauge holder bracket aluminum black, distance 60 mm (2.36"), model no. Z-067001, included to shipment for standard version (Mgh) of nom. size 160 (6"),

<sup>1)</sup> respectively nom. size 160 may still be supplied with socket made of 1.4401 as long as there is stock in store, details upon request

## Special Configuration

- HP connection 9/16-18 UNF (for 1/4" tube) and others upon request
- Pressure ranges 0-3000 bar or 0-40,000 psi, others upon request
- Special scales, e.g. dual ranges, or with fine division (knife-edge pointer)
- Micro-adjustable pointer, mechanism aluminum
- Stationary red pointer on the dial upon request
- Other than vertical installation, e.g. 90° to the right (when looking on the dial)
- Other versions of a gauge holder bracket for nom. size 160 (6"):  
Aluminum black, distance 100 mm (3.94") = ordering no. Z-067002  
Aluminum black, distance 160 mm (6.3") = ordering no. Z-067003  
Stainless steel, distance 100 mm (3.94") = ordering no. Z-063002  
Stainless steel, distance 160 mm (6.3") or 60 mm (2.36") upon request
- Electrical accessories (compare data sheets 9000 ff) upon request

## How to Order:

Please specify:

Model code: **RSCh** = no case filling, IP 54  
**RSChG** = liquid filled case (glycerine), IP 65  
RSCh(G)= fillable case, IP 65

Nominal case size: **100, 160**

Ordering code for wetted parts: **-3**, compare left

Code letters for case configuration: **Rh or Fr**, (compare reverse side)  
Standard case version = without code letters

Pressure range: **0-4000 bar, 0-50,000 psi, 0-60,000 psi**  
(others see above)

Special options: (see above)

### Examples for Ordering Information:

- RSCh 100-3, 0-4000 bar
- RSChG 160-3, Fr, 0-50,000 psi



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**1640**

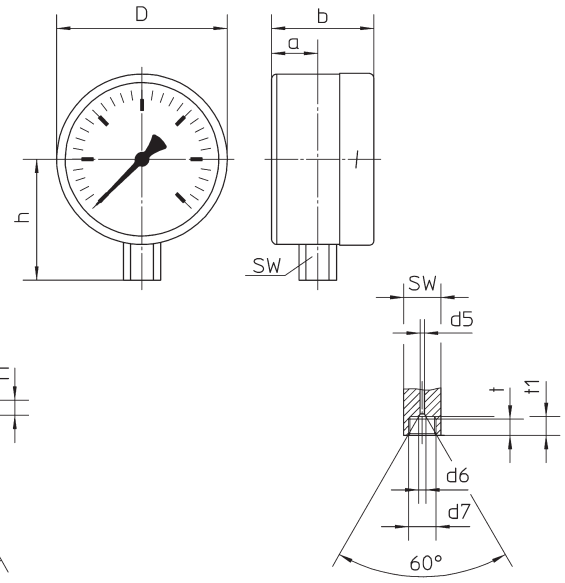
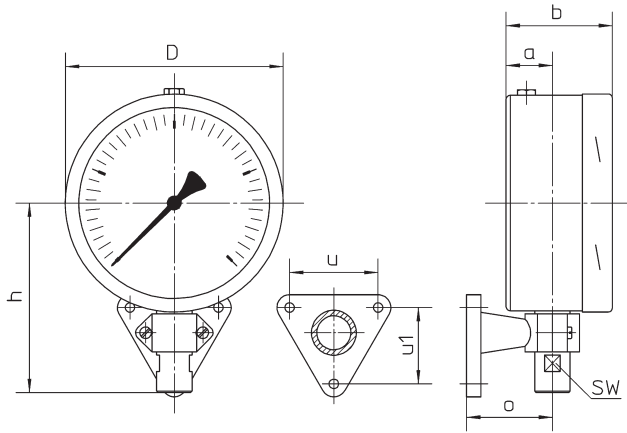
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# Case Configuration, Code Letters, Dimensional Data and Weight

Bottom connection,  
standard case, no code letters required when ordering

**Nom. Size 160:** for gauge holder bracket (**Mgh**)

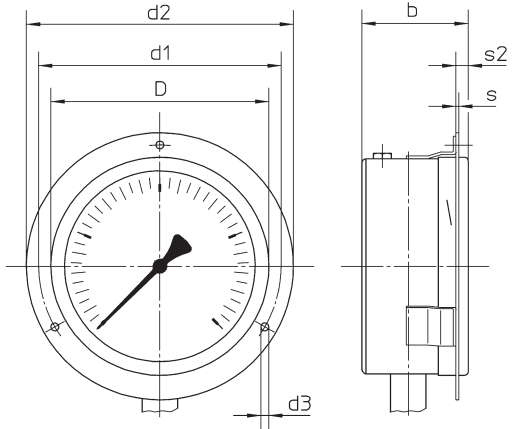
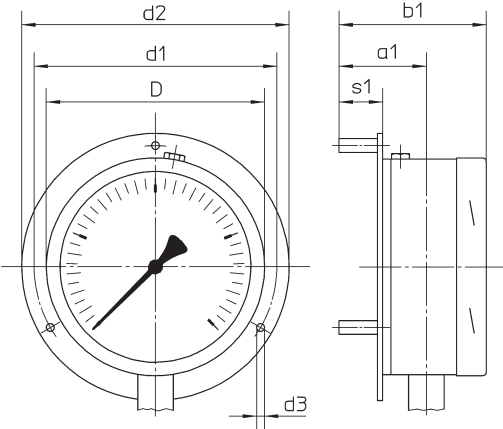
**NG 100**



This standard version Mgh for RSCh 160 includes a gauge holder bracket aluminum black, distance 60 mm (2.36), model no. Z-067001.

Bottom connection,  
rear mounting flange,  
code letters: **Rh**

Bottom connection,  
Front mounting flange,  
code letters: **Fr**



Version **Rh** includes 3  
separate mounting spacers.

Version **Fr** = 3 mounting brackets  
welded to the case and a  
separate three-hole flange

## Dimensions (mm / inches) and Weight (kg / lb)

Nom. Size	a	a1	b	b1	D	d1	d2	d3	d4	d5	d6	d7	d8	h ±1	o	s	s1	s2	s3	t	t1	u	u1	SW
100 4"	27 1.06	52 2.05	60 2.36	90 3.54	101 3.98	116 4.57	132 5.2	4.8 .19	M4	2.5	4.3	M16x1.5	—	71 2.8	—	1 .04	26 1.02	7 .28	8 .31	9.5	11	—	—	22
160 6"	34 1.34	64 2.52	78 3.07	108 4.25	161 6.34	178 7.1	196 7.72	5.8 .23	M5	.1	.17	HP	26 1.02	139 5.47	63 2.48	1.5 0.06	32 1.26	8 .31	9 .35	.37	.43	65 2.56	56 2.2	.87

**Weight:** RSCh 160 approx. 2.00 kg    RSCh 100 approx. 0.65  
RSChG 160 approx. 3.10 kg    RSChG 100 approx. 1.00

The information in this leaflet is given in good faith, but we reserve the right to make changes without notice.