

Combi Gauges for Rail Cars

According to DIN 38 030:2009-02

With one Measuring Unit

Models **Rg...Fz**
RChg...Fz

Application

Pressure gauges **NCS 60** Model **Rg 60 – 1 Fz rmBFR**,
NCS 80 Model **RChg 80 – 1 Fz rmBFR**,
NSC 100 Model **RChg 100 – 1 Fz rmBFR**,

are applied for rail cars, especially for pneumatic brake systems and are in accordance with the norm DIN 38 030:2009-02.

The instruments are provided with u-clamps for panel mounting and they combine direct and indirect lighting.

Standard Version according to DIN 38030:2009-02

Accuracy

Class 1.6: NCS 60 (2.36")

Class 1.0: NCS 80, 100 (3", 4")

Position of Installation

70° – 90° (position of adjustment 80°)

Case

NCS 60 (2.36") steel, galvanised

NCS 80, 100 (3", 4") 1.4301 (304 stainless steel)

with crimped-on ring, aluminum, black anodised

Temperature Limitations

Storage/Transport: -40° to +70° C (-40° to +158° F)

Operation: Ambience -40° to +60° C (-40° to +140° F)

Medium max. +60° C (+140° F)

Case Protection Type (EN 60529 / IEC 529)

IP 54 in front of the panel

Blow-out Device

Blow-out plug in the back of the case

Lighting

Directly 1 x BA9s 24 V / 2 W and

indirectly by lighting apertures in the case

Nominal Case Sizes

60, 80, 100 mm (2.36", 3", 4")

Wetted Parts

Connection: brass

Bourdon tube: bronze, soft soldered, c-form

Case Configuration

Position of the connection: centre back connection (rm)

Mounting device: u-clamp for panel mounting (BFR)

Pressure Ranges

0 – 6, 0 – 10 and 0 – 12 bar

Process Connection

NCS 60 (2.36"): M 12x1.5 including chuck cone for cutting ring
L 6 according to DIN EN ISO 8434-1

NCS 80, 100 (3", 4"): M 16x1.5 including chuck cone for cutting ring
L 10 according to DIN EN ISO 8434-1

Including restrictor screw in the pressure inlet port,
orifice Ø 0.8 mm (0.03")

Window

Reflex-reduced laminated safety glass

Movement

Brass / German Silver

Dial

Aluminum black, white scale, with zero stop (stop pin)



Pointer

Aluminum, colour yellow (RAL 1016)

Safety Category according to EN 837-1

S1 pressure gauges with blow-out device

Options and others

- Instruments without combination of lighting, meaning either direct or indirect lighting
- Other pressure ranges, e. g. 0 – 16 bar
- Other than 70° – 90° installation
- Process connection with cutting ring and union nut
- Other process connections upon request
- Restrictor screw brass, orifice Ø 1.0 mm (0.04"), in the inlet port
- Selectable colours for pointer, e. g. red (RAL 3026) or white (RAL 9010)
- Dial inscription (ZA) according to your demand, in terms of colour matching the pointer
- Coloured marks matching the pointer
- LED lighting for operating voltages of more than 32 V up to max. 130 V for NCS 80 and 100
- BA9 LED light 24 – 32 V, 48 – 75 V, 110 – 150 V

Ordering Information:

Model: **Rg 60 – 1 Fz rmBFR**
RChg 80 – 1 Fz rmBFR
RChg 100 – 1 Fz rmBFR

Pressure range: **0 – 6 bar, 0 – 10 bar, 0 – 12 bar**

Process connection: **L 6 (NCS 60)**
L 10 (NCS 80, 100)

Specifics: e. g. dial inscriptions (**ZA**),
other position of installation etc.
(see above)

Example:

- RChg 80 – 1 Fz rmBFR, 0 – 12 bar, L 10
ZA: "brake cylinder" white



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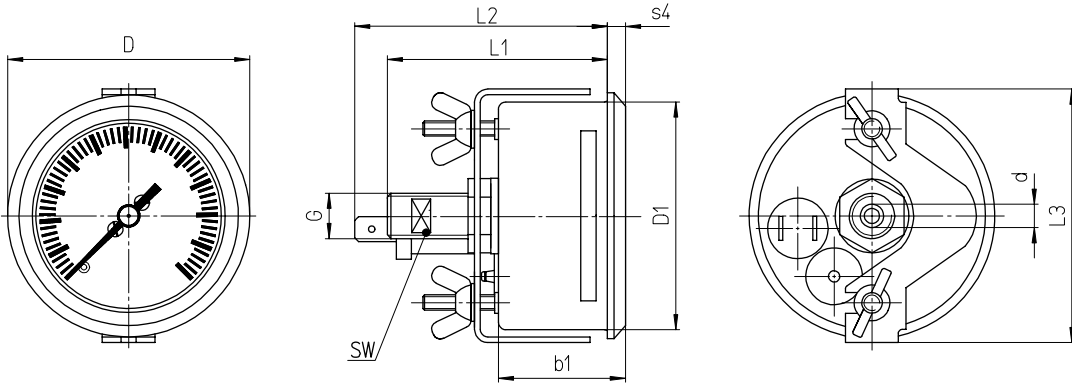
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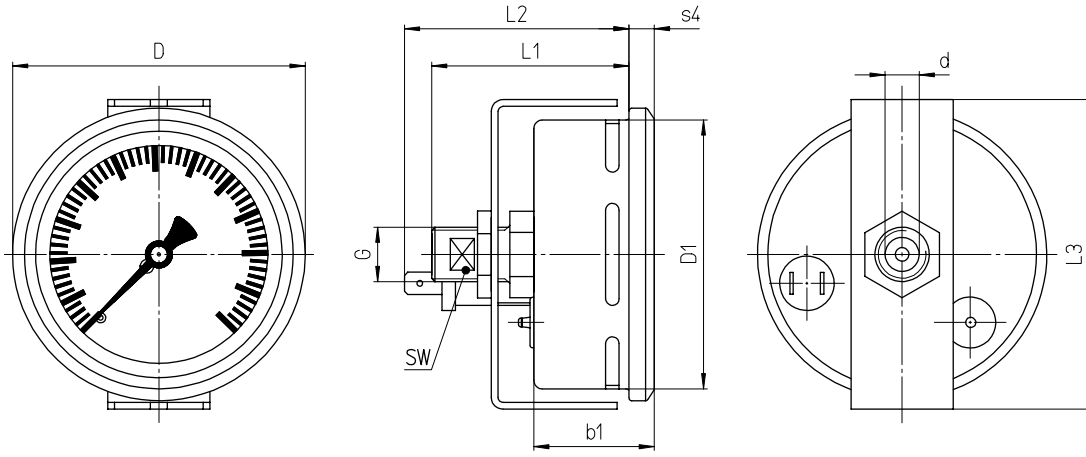
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Case Configuration, Dimensions and Weight

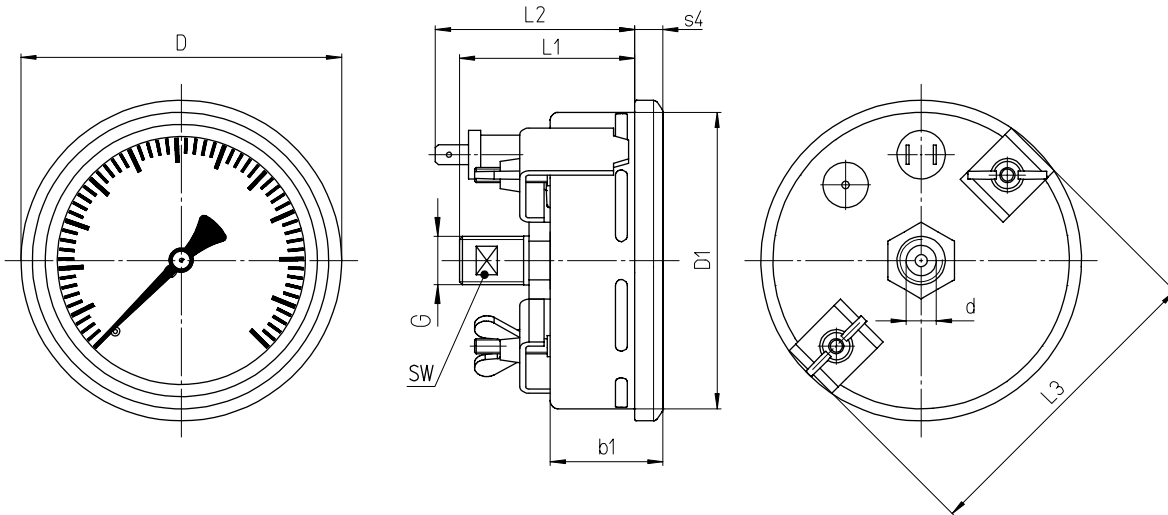
Rg 60 – 1 Fz rmBFR



RChg 80 – 1 Fz rmBFR



RChg 100 – 1 Fz rmBFR



Dimensional data (mm / inches) and weights (kg / lb)

NCS	b1	D	D1	Process connection EN ISO 8434-1		L1	L2	L3	s4	SW	recommended panel cut out Ø	Weight (approx.)
				d ^{B11 1)}	G							
60	33	65	59	L6 .24	M 12x1.5	59	67	67	5	8	61 ± 0.5	0.20
2.36	1.3	2.56	2.32			2.32	2.64	2.64	.2	.31	2.4 ± 0.02	.44
80	35.5	86	79	L10 .39	M 16x1.5	58	66	91	7.5	13	81 ± 0.5	0.35
3	1.4	3.39	3.1			2.28	2.6	3.58	.3	.51	3.19 ± 0.02	.77
100	37	106	99			57	65	101	10		102 ± 1	0.39
4	1.46	4.17	3.89			2.24	2.56	3.98	.39		4.02 ± 0.04	.86

¹⁾Tolerance class according to ISO 286-2