

# 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 38 030:2008.

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

### 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 12 x 1.5 including chuck cone for cutting ring

L 6 according to DIN EN ISO 8434-1

NCS 80, 100 (3", 4"): M 16 x 1.5 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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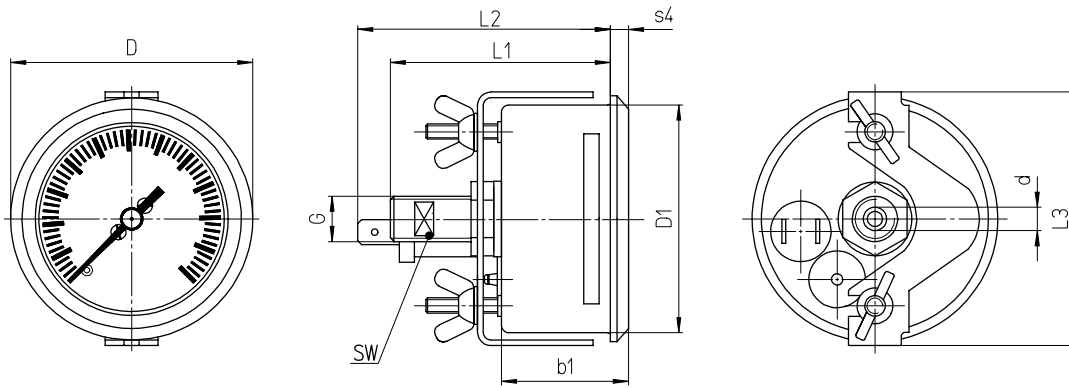
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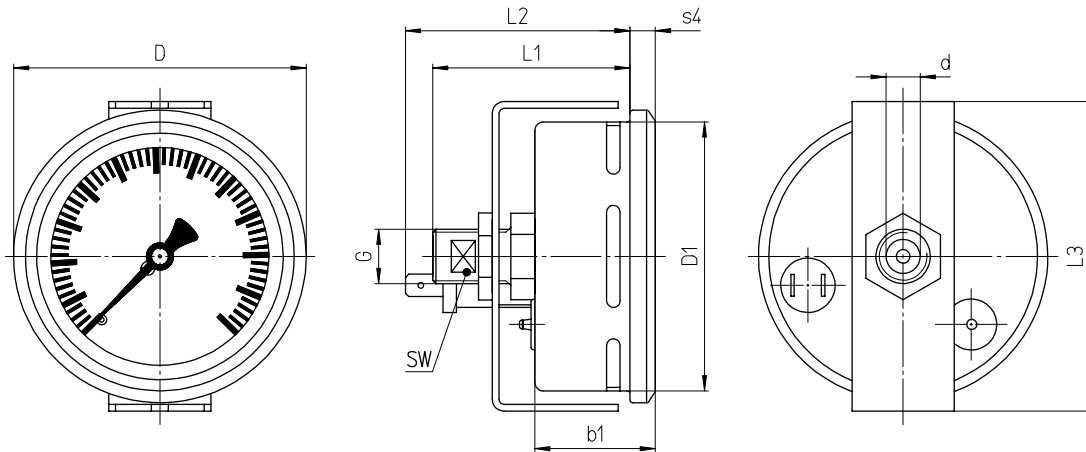
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# Case Configuration, Dimensions and Weight

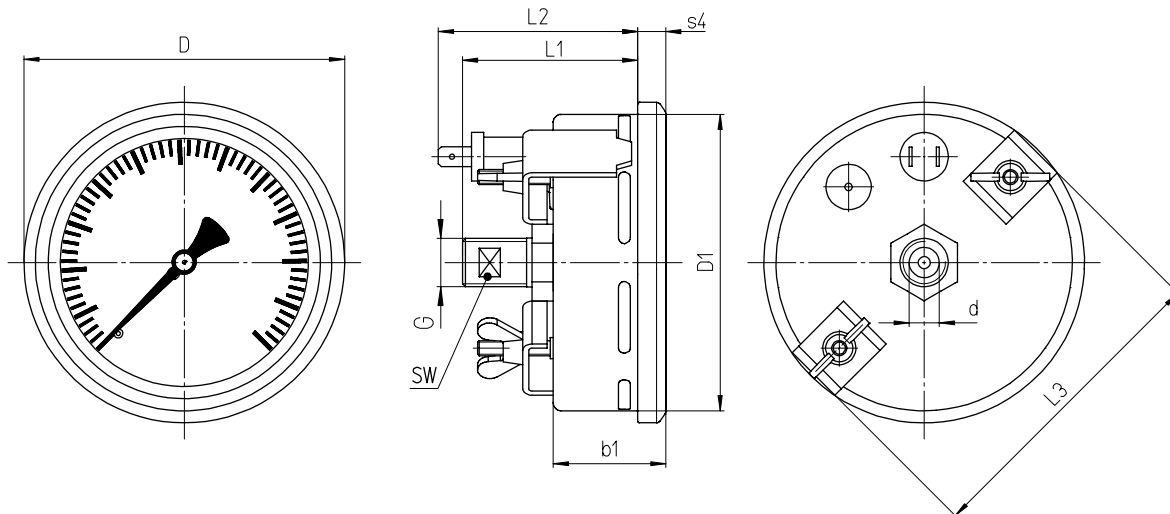
## Rg 60-1 Fz rmBFr



## 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 <sup>B11 1)</sup>	G							
60	33	65	59	L6	M 12 x 1.5	59	67	67	5	8	61 ± 0.5	0.20
2.36	1.3	2.56	2.32	.24		2.32	2.64	2.64	.2	.31	2.4 ± 0.02	.44
80	35.5	86	79	L10	M 16 x 1.5	58	66	91	7.5	13	81 ± 0.5	0.35
3	1.4	3.39	3.1			.39	2.28	2.6	3.58		.3	.77
100	37	106	99	.39		57	65	101	10	.51	102 ± 1	0.39
4	1.46	4.17	3.89			2.24	2.56	3.98	.39		4.02 ± 0.04	.86

<sup>1)</sup>Tolerance class according to ISO 286-2

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