

# TYPE APPROVAL CERTIFICATE

DNV·GL

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No. **84 617 - 95 HH**

Company **WIKA  
Alexander Wiegand SE & Co. KG  
Alexander-Wiegand-Str. 30  
63911 Klingenberg, GERMANY**

Product Description **BOURDON TUBE PRESSURE GAUGES**

Type **MODEL 213.53, 212.20, 232.30, 232.50, 262.30  
262.50, 213.40, 233.30, 233.50, 263.30, 263.50**

Environmental Category • **None**

Technical Data /  
Range of Application **TECHNICAL DATA**

**MODEL 213.53, STAINLESS STEEL CASE WITH LIQUID FILLING**

Nominal size: **50, 63, 80 and 100 mm**  
Design: **according to EN 837-1**  
Accuracy class: **1.6 / 1.0 per EN 837-1**  
Protection: **IP65 per EN 60 529**  
Scale ranges: **according to EN 837-1 or equiv.other units pressure or vacuum**  
Operating temperature: **-20°C up to 60°C (ambient), max. 60°C (medium)**  
Working pressure: **3/4 of full scale value (steady), 2/3 of full scale value (fluctuating), full scale value (short time) (50 and 63 mm)**  
Working pressure: **full scale value (steady), 0.9 x full scale value (fluctuating), 1.3 x full scale value (short time) (80 and 100 mm)**  
Pressure elements: **Cu-alloy, stainless steel acc.to manufacturer`s specification**

**RANGE OF APPLICATION**

**For gaseous and liquid media that will not obstruct the pressure system or attack copper alloy and stainless steel parts.**

Test Standard • **GL Regulations for the Performance of Type Tests, Part 6 - Test Requirements for Mechanical Components and Equipment.**

Documents • **Test Report dated: 1995-07-04**  
• **ISO9001: 2008 cert. registrations no.: 001830 QM08, dated: 2015-07-07**  
• **Audit report AZ 001830 dated: from 2015-06-15 to 2015-06-19**  
• **Audit report AZ 519222 dated: from 2015-05-18 to 2015-05-22**  
• **Audit report REF NO. 407007 dated: from 2013-07-08 to 2013-07-12**  
• **Datasheet Makrolon 2807 dated: 2008-11-25**  
• **DNV GL-Ref. Nr.:14-093824, 15-051413**

Remarks • **DOCUMENTS, TECHNICAL DATA, LIMITATIONS, MARKING and PRODUCTION PLACES see page 2 to 4.**

Valid until **2020-12-12**

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File No. **II.B.01**

**Hamburg, 2015-11-03**

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*i.v. Hanspeter Raschle* *i.A. P. Gierhan*  
Hanspeter Raschle Peter Gierhan

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## DOCUMENTS

- WIKA data specification PM 02.06 dated: 05/2015
- WIKA data specification PM 02.04 dated: 06/2015
- WIKA data specification PM 02.02 dated: 06/2015
- WIKA data specification PM 02.01 dated: 02/2015
- WIKA data specification PM 02.12 dated: 03/2015

## TECHNICAL DATA

### MODEL 212.20, INDUSTRIAL SERIES

Nominal size: 100 and 160 mm  
Design: acc. to EN 837-1  
Accuracy class: 1.0 per EN 837-1  
Protection: IP54 per EN 60 529  
Scale ranges: acc. to EN 837-1 or equiv. other units pressure or vacuum  
Operating temperature: -40°C up to 60°C (ambient), max. 60°C (medium)  
Working pressure: full scale value (steady), 0.9 x full scale value (fluctuating), 1.3 x full scale value (short time)  
Pressure elements: Cu-alloy acc. to manufacturer`s specification

## LIMITATIONS

The measuring range 2.5 bar and less of the model 212.20 may not be used for adverse service conditions where pulsation or vibration exist.

## TECHNICAL DATA

### MODEL 232.30, 232.50, 262.30, 262.50, PROCESS INDUSTRY SERIES

Nominal size: 63, 100 and 160 mm  
Accuracy class: 1.6 / 1.0 per EN 837-1  
Design: acc. to EN 837-1  
Protection: IP54 per EN 60 529  
Scale ranges: acc. to EN 837-1 or equiv. other units pressure or vacuum  
Operating temperature: -40°C up to 60°C (ambient), max. 200°C (medium)  
Working pressure: (63 mm) 3/4 of full scale value (steady), 2/3 of full scale value (fluctuating), full scale value (short time)  
Working pressure: (100 and 160 mm) full scale value (steady), 0.9 x full scale value (fluctuating), 1.3 x full scale value (short time)  
Pressure element: stainless steel or nickel-copper alloy acc. to manufacturer`s specification

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*Hanspeter Raschle*  
Hanspeter Raschle

*Peter Gierhan*  
Peter Gierhan

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## TECHNICAL DATA

### MODEL 213.40, FORGED BRASS CASE WITH LIQUID FILLING

Nominal Design: **63 and 100 mm**  
acc. to EN 837-1  
Accuracy class: **1.6 / 1.0 per EN 837-1**  
Protection: **IP65 per EN 60 529**  
Scale ranges: **acc. to EN 837-1 or equiv. other units pressure or vacuum**  
Operating temperature: **-20°C up to 60°C (ambient), max. 60 °C (medium)**  
Working pressure: **3/4 of full scale value (steady), 2/3 of full scale value (fluctuating), full scale value (short time)**  
(63 mm)  
Working pressure: **full scale value (steady), 0.9 x full scale value (fluctuating), 1.3 x full scale value (short time)**  
(100 mm)  
Pressure elements: **Cu-alloy, stainless steel acc. to manufacturer`s specification**

### MODEL 233.30, 233.50, 263.30, 263.50, PROCESS INDUSTRY SERIES WITH LIQUID FILLING

Nominal size: **63, 100 and 160 mm**  
Design: **acc. to EN 837-1**  
Accuracy class: **1.6 / 1.0 per EN 837-1**  
Protection: **IP65 per EN 60 529**  
Scale ranges: **acc. to EN 837-1 or equiv. Other units pressure or vacuum**  
Window material: **NS 63: Polycarbonate/ NS 100, 160: laminated glass**  
Operating temperature: **-20°C up to 60°C (ambient), max. 100°C (medium)**  
Window material: **Makrolon 2807, Polycarbonate**  
Operating temperatur: **-20°C up to 60°C (ambient), max. 150°C (medium)**  
Working pressure: **3/4 of full scale value (steady), 2/3 of full scale value (fluctuating), full scale value (short time)**  
(63 mm)  
Working pressure: **full scale value (steady), 0.9 x full scale value (fluctuating), 1.3 x full scale value (short time)**  
(100 and 160 mm)  
Pressure element: **stainless steel or nickel-copper alloy acc. To manufacturer`s specification**

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*Hanspeter Raschle*  
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*Peter Gerhan*  
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## MARKING:

Each device shall bear legible and durable marking on the body or on a plate fixed securely to the body as follows:

- Manufacturer`s Mark • Type •

## PRODUCTION PLACES:

**WIKA**  
63911 Klingenberg  
GERMANY

**WIKA Alexander Wiegand SE & Co. KG**  
Alexander-Wiegand-Str. 30  
63911 Klingenberg  
GERMANY

Nominal size 50 mm, 63 mm, 80 mm, 100 mm and 160

**WIKA Polska spółka z ograniczoną  
odpowiedzialnością sp. k.**  
ul. Legska 29 /35  
87-800 Wloclawek  
POLAND

Nominal size 50 mm; 63 mm, 80 mm, 100 mm and 160

**WIKA Polska spółka z ograniczoną  
odpowiedzialnością SGF spółka**  
ul. Legska 29 /35  
87-800 Wloclawek  
POLAND

Nominal size 50mm, 63 mm, 80 mm, 100 mm and 160

- The selection of the pressure gauges for the corresponding application and the right installation is to be in accordance with the instructions of the manufacturer.

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*i.V. Hanspeter Raschle*  
Hanspeter Raschle

*i.A.P. Peter Gierhan*  
Peter Gierhan