

# Bourdon tube pressure gauge

## For the process industry, Monel version

### Models 262.50, 263.50, 262.30 and 263.30

WIKA data sheet PM 02.33



For further approvals,  
see page 6

## Applications

- For gaseous and liquid aggressive media that are not highly viscous or crystallising, also in aggressive environments
- Oil and gas industry, chemical and petrochemical industries, power engineering and also water and wastewater technology
- Sour gas applications, also with NACE requirement

## Special features

- With case filling (model 263) for applications with high dynamic pressure loads and vibrations
- Models 262.30 and 263.30: safety version with solid baffle wall (Solidfront) designed in accordance with the requirements of EN 837-1 and ASME B40.100
- Suitability for particularly aggressive media, due to very high corrosion resistance
- EMICOGauge version, to avoid fugitive emissions
- QR code on dial links to instrument-specific information



Bourdon tube pressure gauge, model 262.30, NS 100 [4"]

## Description

The models 262 and 263 are high-quality Bourdon tube pressure gauges with wetted parts from extremely corrosion-resistant Monel.

The use of high-quality materials and the robust design are geared to applications in the chemical and process engineering industries with particularly aggressive acids or bases. The instrument is suitable for liquid and gaseous media, also in aggressive environments.

Scale ranges from 0 ... 0.6 to 0 ... 1,000 bar [0 ... 10 to 0 ... 15,000 psi] ensure the measuring ranges required for a wide variety of applications.

The safety version is made up of a non-splintering window, a solid baffle wall between measuring system and dial and a blow-out back. In the event of a failure, the user is protected at the front side, as media or components can only be ejected via the rear of the case.

For harsh operating conditions (e.g. vibrations), all instruments are also available with an optional liquid filling.

The QR code on the dial allows instrument-specific information such as the serial number, the order number, certificates and other product data to be retrieved from the internet easily and in the long term.

# Specifications

Basic information	
<b>Standard</b>	<ul style="list-style-type: none"> <li>■ EN 837-1</li> <li>■ ASME B40.100</li> </ul> <p>For information on the "Selection, installation, handling and operation of pressure gauges", see technical information IN 00.05.</p>
<b>Further version</b>	<ul style="list-style-type: none"> <li>■ For oxygen, oil- and grease-free</li> <li>■ Per NACE <sup>1)</sup> MR0175 / ISO 15156, use in H<sub>2</sub>S-containing environments in oil and gas production</li> <li>■ With pre-volume deflagration flame arrester<sup>2)</sup> for mounting to zone 0 (EPL Ga); model 910.21; see data sheet AC 91.02</li> <li>■ EMICOgauge, to avoid fugitive emissions; instrument hook-up with instrumentation valves → See page 10</li> </ul>
<b>Nominal size (NS)</b>	<ul style="list-style-type: none"> <li>■ Ø 63 mm [2 1/2"]</li> <li>■ Ø 100 mm [4"]</li> <li>■ Ø 160 mm [6"]</li> </ul>
<b>Connection location</b>	<ul style="list-style-type: none"> <li>■ Lower mount (radial)</li> <li>■ Lower back mount<sup>3)</sup></li> </ul>
<b>Window</b>	Laminated safety glass (NS 63 [2 1/2"]: polycarbonate)
<b>Case</b>	
Model 262.50, 263.50	Safety level "S1" per EN 837-1: with blow-out device
Model 262.30, 263.30	Safety level "S3" per EN 837-1: with solid baffle wall and blow-out back
Internal pressure compensation	For scale ranges $\leq 0 \dots 16$ bar [ $\leq 0 \dots 300$ psi] the case can be vented and resealed
Material	<ul style="list-style-type: none"> <li>■ Stainless steel 1.4301 (304)</li> <li>■ Stainless steel 1.4571 (316Ti)</li> </ul>
<b>Ring</b>	Bayonet bezel, stainless steel
<b>Mounting</b>	<ul style="list-style-type: none"> <li>■ Without</li> <li>■ Panel mounting flange, stainless steel</li> <li>■ Panel mounting flange, polished stainless steel</li> <li>■ Model 262.50, 263.50: surface mounting flange, stainless steel</li> <li>■ Model 262.30, 263.30: surface mounting lugs on the back, stainless steel</li> </ul>
<b>Case filling (model 263.50, 263.30)</b>	<ul style="list-style-type: none"> <li>■ Without</li> <li>■ Glycerine</li> <li>■ Glycerine-water mixture for NS 100 [4"] and 160 [6"] with scale range <math>\leq 0 \dots 2.5</math> bar [<math>\leq 0 \dots 40</math> psi] or for NS 63 [2 1/2"] with scale range <math>\leq 0 \dots 4</math> bar [<math>\leq 0 \dots 60</math> psi]</li> <li>■ Silicone oil</li> </ul>
<b>Movement</b>	<ul style="list-style-type: none"> <li>■ Stainless steel</li> <li>■ <i>everlast</i><sup>®</sup> version</li> </ul>

1) General information about NACE standards; see data sheet IN 00.21

2) Only for instruments with Ex approval

3) Not available for NS 160 [6"]

Measuring element	
<b>Type of measuring element</b>	Bourdon tube, C-type or helical type
<b>Material</b>	Monel 400 (2.4360)
<b>Leak tightness</b>	<ul style="list-style-type: none"> <li>■ Helium tested, leakage rate: <math>&lt; 5 \cdot 10^{-3}</math> mbar l/s</li> <li>■ Helium tested, leakage rate: <math>&lt; 1 \cdot 10^{-6}</math> mbar l/s</li> </ul>

Accuracy specifications		
Accuracy class		
NS 63 [2 1/2"]	EN 837-1	Class 1.6
	ASME B40.100	±2 % of measuring span (grade A)
NS 100 [4"], 160 [6"]	EN 837-1	Class 1.0
	ASME B40.100	±1 % of measuring span (grade 1A)
Temperature error	On deviation from the reference conditions at the measuring system: ≤ ±0.4 % per 10 °C [≤ ±0.4 % per 18 °F] of full scale value	
Reference conditions		
Ambient temperature	+20 °C [68 °F]	

## Scale ranges

bar	kg/cm <sup>2</sup>
0 ... 0.6 <sup>1)</sup>	0 ... 40
0 ... 1	0 ... 60
0 ... 1.6	0 ... 100
0 ... 2.5	0 ... 160
0 ... 4	0 ... 250
0 ... 6	0 ... 400
0 ... 10	0 ... 600
0 ... 16	0 ... 1,000
0 ... 25	-
kPa	MPa
0 ... 60 <sup>1)</sup>	0 ... 4,000
0 ... 100	0 ... 6,000
0 ... 160	0 ... 10,000
0 ... 250	0 ... 16,000
0 ... 400	0 ... 25,000
0 ... 600	0 ... 40,000
0 ... 1,000	0 ... 60,000
0 ... 1,600	0 ... 100,000
0 ... 2,500	-
psi	
0 ... 10 <sup>1)</sup>	0 ... 1,000
0 ... 15	0 ... 1,500
0 ... 30	0 ... 2,000
0 ... 60	0 ... 3,000
0 ... 100	0 ... 4,000
0 ... 160	0 ... 5,000
0 ... 200	0 ... 6,000
0 ... 300	0 ... 7,500
0 ... 400	0 ... 10,000
0 ... 600	0 ... 15,000
0 ... 800	-

1) Not available for NS 63 [2 1/2"]

## Vacuum and +/- scale ranges

<b>bar</b>	
-0.6 ... 0 <sup>1)</sup>	-1 ... +5
-1 ... 0	-1 ... +9
-1 ... +0.6	-1 ... +15
-1 ... +1.5	-1 ... +24
-1 ... +3	-

<b>MPa</b>	
-0.06 ... 0 <sup>1)</sup>	-0.1 ... +0.5
-0.1 ... 0	-0.1 ... +0.9
-0.1 ... +0.06	-0.1 ... +1.5
-0.1 ... +0.15	-0.1 ... +2.4
-0.1 ... +0.3	-

<b>kPa</b>	
-60 ... 0 <sup>1)</sup>	-100 ... +500
-100 ... 0	-100 ... +900
-100 ... +60	-100 ... +1,500
-100 ... +150	-100 ... +2,400
-100 ... +300	-

<b>psi</b>	
-30 inHg ... 0	-30 inHg ... +100
-30 inHg ... +15	-30 inHg ... +160
-30 inHg ... +30	-30 inHg ... +200
-30 inHg ... +60	-30 inHg ... +300

1) Not available for NS 63 [2 1/2"]

## Further details on: Scale ranges

<b>Unit</b>	<input type="checkbox"/> bar <input type="checkbox"/> psi <input type="checkbox"/> kg/cm <sup>2</sup> <input type="checkbox"/> kPa <input type="checkbox"/> MPa
<b>Increased overload safety</b>	<input type="checkbox"/> Without <input type="checkbox"/> 2 times <input type="checkbox"/> 3 times <input type="checkbox"/> 4 times <input type="checkbox"/> 5 times
	The possibility of selection depends on scale range and nominal size
<b>Vacuum resistance</b>	<input type="checkbox"/> Without <input type="checkbox"/> Vacuum-resistant to -1 bar
<b>Dial</b>	
Scale colour	Black
Material	Aluminium
Customer-specific version	Other scales or customer-specific dials, e.g. with red mark, circular arcs or circular sectors, on request
<b>Pointer</b>	
Instrument pointer	Aluminium, black
Mark pointer / Drag pointer	<input type="checkbox"/> Without <input type="checkbox"/> Red mark pointer on dial, fixed <input type="checkbox"/> Red mark pointer on window, adjustable <input type="checkbox"/> Mark pointer on bayonet bezel, adjustable <input type="checkbox"/> Red drag pointer on window, adjustable
<b>Pointer stop pin</b>	<input type="checkbox"/> Without <input type="checkbox"/> At zero point (only for NS 63 [2 1/2"]) <input type="checkbox"/> At 6 o'clock (only for NS 100 [4"], 160 [6"])

→ Other scale ranges on request

Process connection	
<b>Standard</b>	<ul style="list-style-type: none"> <li>■ EN 837-1</li> <li>■ ISO 7</li> <li>■ ANSI/B1.20.1</li> </ul>
<b>Size</b>	
EN 837-1	<ul style="list-style-type: none"> <li>■ G 1/8 B, male thread</li> <li>■ G 1/4 B, male thread</li> <li>■ G 1/2 B, male thread</li> <li>■ M12 x 1.5, male thread</li> <li>■ M20 x 1.5, male thread</li> </ul>
ISO 7	<ul style="list-style-type: none"> <li>■ R 1/4, male thread</li> <li>■ R 1/2, male thread</li> </ul>
ANSI/B1.20.1	<ul style="list-style-type: none"> <li>■ 1/4 NPT, male thread</li> <li>■ 1/2 NPT, male thread</li> </ul>
<b>Restrictor</b>	<ul style="list-style-type: none"> <li>■ Without</li> <li>■ Ø 0.6 mm [0.024"], Monel</li> </ul>
<b>Material (wetted)</b>	
Process connection	Monel 400 (2.4360)
Bourdon tube	Monel 400 (2.4360)

→ Other process connections on request

Operating conditions		
<b>Medium temperature</b>		
Instruments without filling	-40 ... +200 °C [-40 ... +392 °F]	
Instruments with glycerine filling	-20 ... +100 °C [-4 ... +212 °F]	
Instruments with silicone oil filling	-40 ... +100 °C [-40 ... +212 °F]	
<b>Ambient temperature</b>		
Instruments without filling or with silicone oil filling	-40 ... +60 °C [-40 ... +140 °F]	
Instruments with glycerine filling	-20 ... +60 °C [-4 ... +140 °F]	
<b>Pressure limitation</b>		
NS 63 [2 1/2"]	Steady	3/4 x full scale value
	Fluctuating	2/3 x full scale value
	Short time	Full scale value
NS 100 [4"], 160 [6"]	Steady	Full scale value
	Fluctuating	0.9 x full scale value
	Short time	1.3 x full scale value
<b>Ingress protection per IEC/EN 60529</b>		
	<ul style="list-style-type: none"> <li>■ IP65</li> <li>■ IP66</li> <li>■ IP54 (for model 262.30, 263.30 with lower back mount)</li> </ul>	

## Approvals

Logo	Description	Region
	<b>EU declaration of conformity</b> Pressure Equipment Directive PS > 200 bar, module A, pressure accessory	European Union
	<b>UKCA</b> Pressure equipment (safety) regulations	United Kingdom
-	<b>CRN</b> Safety (e.g. electr. safety, overpressure, ...)	Canada

## Optional approvals

Logo	Description	Region
	<b>EU declaration of conformity</b> ATEX directive	European Union
	Hazardous areas - Ex h Gas II 2G Ex h IIC T6 ... T1 Gb X Dust II 2D Ex h IIIC T85°C ... T450°C Db X	
	<b>UKCA</b> Equipment and protective systems intended for use in potentially explosive atmospheres regulations	United Kingdom
	<b>EAC</b> Hazardous areas	Eurasian Economic Community
	<b>Ex Ukraine</b> Hazardous areas	Ukraine
	<b>PAC Kazakhstan</b> Metrology, measurement technology	Kazakhstan
-	<b>MChS</b> Permission for commissioning	Kazakhstan
-	<b>PAC Ukraine</b> Metrology, measurement technology	Ukraine
	<b>PAC Uzbekistan</b> Metrology, measurement technology	Uzbekistan
-	<b>PAC China</b> Metrology, measurement technology	China
	<b>DNV</b> Ships, shipbuilding (e.g. offshore)	International

## Manufacturer's information and certificates

Logo	Description
-	Emission protection in accordance with TA-Luft (VDI 2440) <sup>1)</sup>
-	Pressure Equipment Directive (PED) for maximum allowable pressure PS ≤ 200 bar

1) Only available for EMICOgauge, see page 12

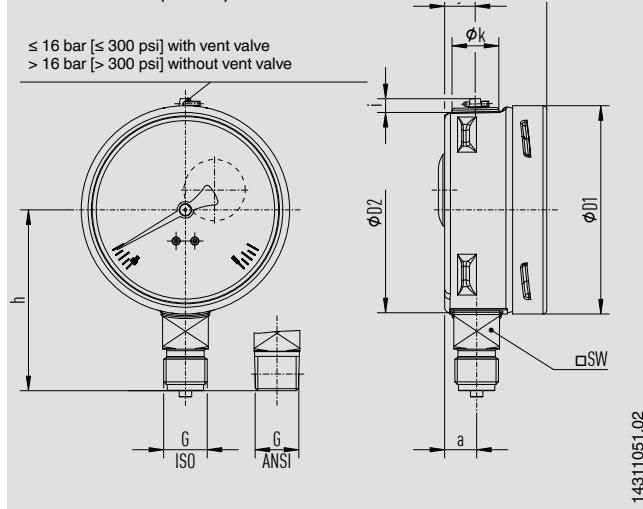
## Certificates (option)

Certificates	
<b>Certificates</b>	<ul style="list-style-type: none"> <li>■ 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, indication accuracy)</li> <li>■ 3.1 inspection certificate per EN 10204 (e.g. material proof for wetted metal parts, indication accuracy)</li> <li>■ PCA calibration certificate, traceable and accredited in accordance with ISO/IEC 17025</li> <li>■ Calibration certificate by a national accreditation body, traceable and accredited in accordance with ISO/IEC 17025 on request</li> </ul>
<b>Recommended calibration interval</b>	1 year (dependent on conditions of use)

→ For approvals and certificates, see website

## Models 262.50 and 263.50, dimensions in mm [in]

### Lower mount (radial)



NS	Weight	
	Model 262.50	Model 263.50
63 [2 1/2"]	Approx. 0.16 kg [0.35 lb]	Approx. 0.20 kg [0.44 lb]
100 [4"]	Approx. 0.6 kg [1.32 lb]	Approx. 0.9 kg [1.98 lb]
160 [6"]	Approx. 1.1 kg [2.43 lb]	Approx. 2.0 kg [4.41 lb]

### Process connection with thread per EN 837-1

NS	G	Dimensions in mm [in]									
		h ±1	a	b	D1	D2	i	j	k	SW	
63 [2 1/2"]	G 1/4 B	54 [2.13]	9.5 [0.37]	33 [1.30]	63 [2.48]	62 [2.44]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
	G 1/8 B	51 [2.01]	9.5 [0.37]	33 [1.30]	63 [2.48]	62 [2.44]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
	M12 x 1.5	54 [2.13]	9.5 [0.37]	33 [1.30]	63 [2.48]	62 [2.44]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
100 [4"]	G 1/4 B	80 [3.15]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	G 1/2 B	87 [3.43]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	M12 x 1.5	80 [3.15]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	M20 x 1.5	87 [3.43]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
160 [6"]	G 1/4 B	111 [4.37]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	G 1/2 B	118 [4.65]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	M12 x 1.5	111 [4.37]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	M20 x 1.5	118 [4.65]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	

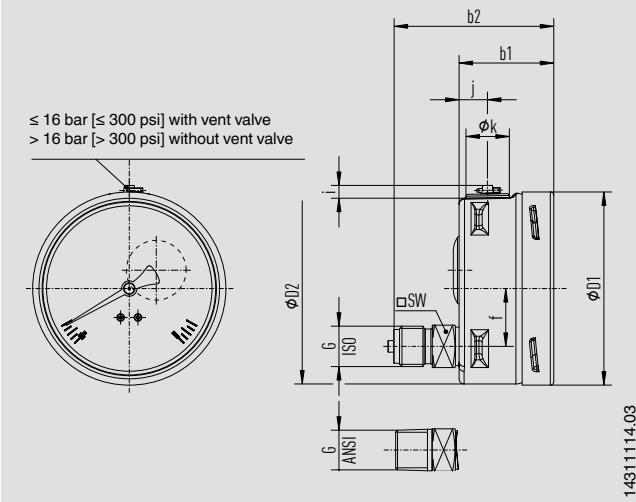
### Process connection with thread per ISO 7

NS	G	Dimensions in mm [in]									
		h ±1	a	b	D1	D2	i	j	k	SW	
63 [2 1/2"]	R 1/4	54 [2.13]	9.5 [0.37]	33 [1.30]	63 [2.48]	62 [2.44]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
100 [4"]	R 1/4	80 [3.15]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	R 1/2	86 [3.39]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
160 [6"]	R 1/4	111 [4.37]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	R 1/2	117 [4.60]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	

### Process connection with thread per ANSI/B1.20.1

NS	G	Dimensions in mm [in]									
		h ±1	a	b	D1	D2	i	j	k	SW	
63 [2 1/2"]	1/4 NPT	54 [2.13]	9.5 [0.37]	33 [1.30]	63 [2.48]	62 [2.44]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
	1/8 NPT	51 [2.01]	9.5 [0.37]	33 [1.30]	63 [2.48]	62 [2.44]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
100 [4"]	1/4 NPT	80 [3.15]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	1/2 NPT	86 [3.39]	15.5 [0.61]	49.5 [1.95]	101 [3.98]	99 [3.90]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
160 [6"]	1/4 NPT	111 [4.37]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	1/2 NPT	117 [4.60]	15.5 [0.61]	51.5 [2.03] <sup>1)</sup>	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	

## Lower back mount



NS	Weight	
	Model 262.50	Model 263.50
63 [2 1/2"]	Approx. 0.16 kg [0.35 lb]	Approx. 0.20 kg [0.44 lb]
100 [4"]	Approx. 0.6 kg [1.32 lb]	Approx. 0.9 kg [1.98 lb]

## Process connection with thread per EN 837-1

NS	G	Dimensions in mm [in]									
		h ±1	b	D1	D2	e	i	j	k	SW	
63 [2 1/2"]	G 1/4 B	57 [2.24]	33 [1.30]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
	G 1/8 B	54 [2.13]	33 [1.30]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
	M12 x 1.5	57 [2.24]	33 [1.30]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
100 [4"]	G 1/4 B	76 [2.99]	49.5 [1.95]	101 [3.98]	99 [3.90]	30 [1.181]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	G 1/2 B	83 [3.27]	49.5 [1.95]	101 [3.98]	99 [3.90]	30 [1.181]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	M12 x 1.5	76 [2.99]	49.5 [1.95]	101 [3.98]	99 [3.90]	30 [1.181]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	M20 x 1.5	83 [3.27]	49.5 [1.95]	101 [3.98]	99 [3.90]	30 [1.181]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	

## Process connection with thread per ISO 7

NS	G	Dimensions in mm [in]									
		h ±1	b	D1	D2	e	i	j	k	SW	
63 [2 1/2"]	R 1/4	57 [2.24]	33 [1.30]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
100 [4"]	R 1/4	76 [2.99]	49.5 [1.95]	101 [3.98]	99 [3.90]	30 [1.181]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	R 1/2	82 [3.23]	49.5 [1.95]	101 [3.98]	99 [3.90]	30 [1.181]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	

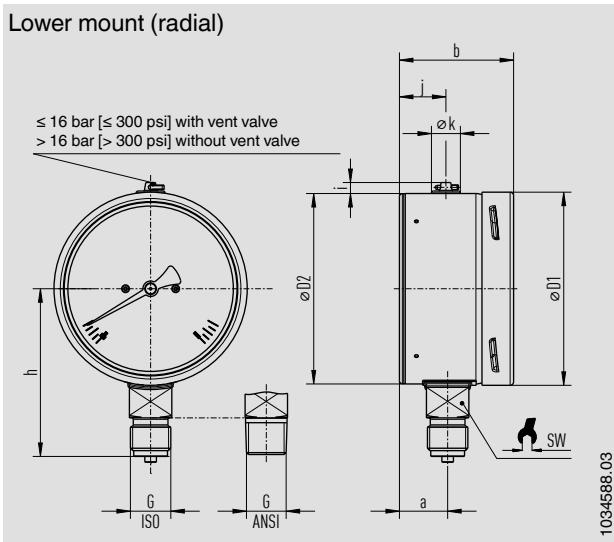
## Process connection with thread per ANSI/B1.20.1

NS	G	Dimensions in mm [in]									
		h ±1	b	D1	D2	e	i	j	k	SW	
63 [2 1/2"]	1/4 NPT	54 [2.13]	33 [1.30]	63 [2.48]	62 [2.44]	50 [1.97]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
	1/8 NPT	51 [2.01]	33 [1.30]	63 [2.48]	62 [2.44]	50 [1.97]	6 [0.24]	10 [0.39]	15 [0.59]	14 [0.55]	
100 [4"]	1/4 NPT	80 [3.15]	49.5 [1.95]	101 [3.98]	99 [3.90]	50 [1.97]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	
	1/2 NPT	86 [3.39]	49.5 [1.95]	101 [3.98]	99 [3.90]	50 [1.97]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]	

1) Plus 16 mm [0.630 in] with scale ranges ≥ 0 ... 100 bar [≥ 0 ... 1,500 psi]

## Models 262.30 and 263.30, dimensions in mm [in]

Lower mount (radial)



NS	Weight	
	Model 262.30	Model 263.30
63 [2 1/2"]	Approx. 0.20 kg [0.44 lb]	Approx. 0.26 kg [0.57 lb]
100 [4"]	Approx. 0.65 kg [1.43 lb]	Approx. 1.08 kg [2.38 lb]
160 [6"]	Approx. 1.30 kg [2.87 lb]	Approx. 2.34 kg [4.94 lb]

### Process connection with thread per EN 837-1

NS	G	Dimensions in mm [in]									
		h ±1 [0.04]	a	b	D1	D2	i	j	k	SW	
63 [2 1/2"]	G 1/4 B	54 [2.13]	17.5 [0.69]	42 [1.65]	63 [2.48]	62 [2.44]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
	G 1/8 B	51 [2.01]	17.5 [0.69]	42 [1.65]	63 [2.48]	62 [2.44]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
	M12 x 1.5	54 [2.13]	17.5 [0.69]	42 [1.65]	63 [2.48]	62 [2.44]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
100 [4"]	G 1/4 B	87 [3.43]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	G 1/2 B	87 [3.43]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	M12 x 1.5	80 [3.15]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	M20 x 1.5	87 [3.43]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
160 [6"]	G 1/4 B	111 [4.37]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	
	G 1/2 B	118 [4.65]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	
	M12 x 1.5	111 [4.37]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	
	M20 x 1.5	118 [4.65]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	

### Process connection with thread per ISO 7

NS	G	Dimensions in mm [in]									
		h ±1 [0.04]	a	b	D1	D2	i	j	k	SW	
63 [2 1/2"]	R 1/4	54 [2.13]	17.5 [0.69]	42 [1.65]	63 [2.48]	62 [2.44]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
100 [4"]	R 1/4	80 [3.15]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	R 1/2	86 [3.39]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
160 [6"]	R 1/4	111 [4.37]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	
	R 1/2	117 [4.61]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	

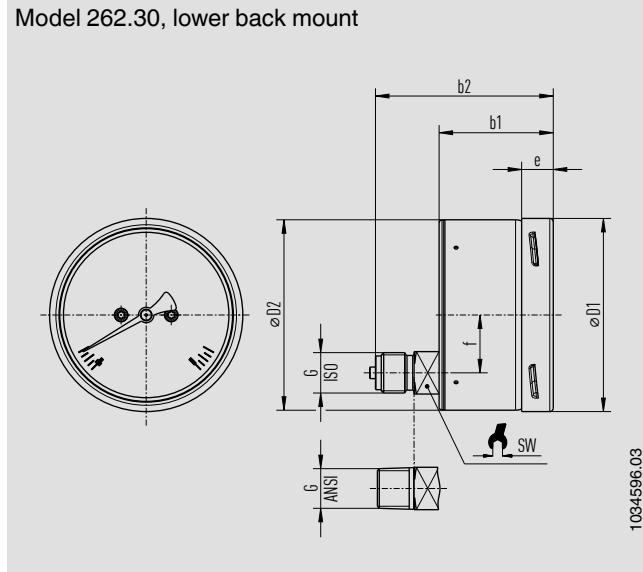
### Process connection with thread per ANSI/B1.20.1

NS	G	Dimensions in mm [in]									
		h ±1 [0.04]	a	b	D1	D2	i	j	k	SW	
63 [2 1/2"]	1/4 NPT	54 [2.13]	17.5 [0.69]	42 [1.65]	63 [2.48]	62 [2.44]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
	1/8 NPT	51 [2.01]	17.5 [0.69]	42 [1.65]	63 [2.48]	62 [2.44]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
100 [4"]	1/4 NPT	80 [3.15]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	1/2 NPT	86 [3.39]	25 [0.98]	59.5 [2.34]	100 [3.94]	100 [3.94]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
160 [6"]	1/4 NPT	111 [4.37]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	
	1/2 NPT	117 [4.61]	27 [1.06] <sup>1)</sup>	65 [2.56] <sup>2)</sup>	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]	

1) With scale range ≥ 0 ... 100 bar [1,500 psi] a = 41.5 [1.63]

2) With scale range ≥ 0 ... 100 bar [1,500 psi] b = 79 [3.11]

Model 262.30, lower back mount



NS	Weight, model 262.30
63 [2 1/2"]	Approx. 0.20 kg [0.44 lb]
100 [4"]	Approx. 0.65 kg [1.43 lb]

**Process connection with thread per EN 837-1**

NS	G	Dimensions in mm [in]						
		b1	b2	D1	D2	e	f	SW
63 [2 1/2"]	G 1/4 B	42 [1.65]	61 [2.4]	63 [2.48]	62 [2.44]	14.5 [0.57]	18.5 [0.73]	14 [0.55]
	G 1/8 B	42 [1.65]	61 [2.4]	63 [2.48]	62 [2.44]	14.5 [0.57]	18.5 [0.73]	14 [0.55]
	M12 x 1.5	42 [1.65]	61 [2.4]	63 [2.48]	62 [2.44]	14.5 [0.57]	18.5 [0.73]	14 [0.55]
100 [4"]	G 1/4 B	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]
	G 1/2 B	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]
	M12 x 1.5	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]
	M20 x 1.5	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]

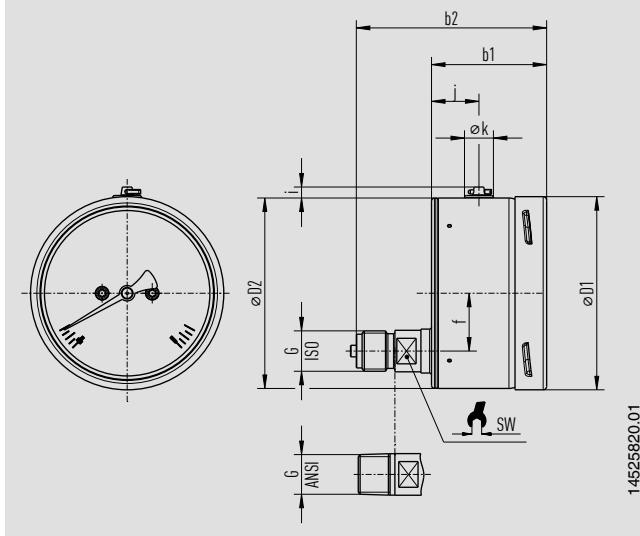
**Process connection with thread per ISO 7**

NS	G	Dimensions in mm [in]						
		b1	b2	D1	D2	e	f	SW
63 [2 1/2"]	R 1/4	42 [1.65]	61 [2.4]	63 [2.48]	62 [2.44]	14.5 [0.57]	18.5 [0.73]	14 [0.55]
100 [4"]	R 1/4	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]
	R 1/2	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]

**Process connection with thread per ANSI/B1.20.1**

NS	G	Dimensions in mm [in]						
		b1	b2	D1	D2	e	f	SW
63 [2 1/2"]	1/4 NPT	42 [1.65]	61 [2.4]	63 [2.48]	62 [2.44]	14.5 [0.57]	18.5 [0.73]	14 [0.55]
	1/8 NPT	42 [1.65]	61 [2.4]	63 [2.48]	62 [2.44]	14.5 [0.57]	18.5 [0.73]	14 [0.55]
100 [4"]	1/4 NPT	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]
	1/2 NPT	59.5 [2.34]	93 [3.66]	101 [3.98]	100 [3.94]	17 [0.67]	30 [1.18]	22 [0.87]

Model 263.30, lower back mount



NS	Weight, model 263.30
63 [2 1/2"]	Approx. 0.28 kg [0.62 lb]
100 [4"]	Approx. 1.08 kg [2.38 lb]

**Process connection with thread per EN 837-1**

NS	G	Dimensions in mm [in]									
		b1	b2	D1	D2	f	i	j	k	SW	
63 [2 1/2"]	G 1/4 B	42 [1.65]	68 [2.68]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
	G 1/8 B	42 [1.65]	68 [2.68]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
	M12 x 1.5	42 [1.65]	68 [2.68]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
100 [4"]	G 1/4 B	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	G 1/2 B	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	M12 x 1.5	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	M20 x 1.5	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	

**Process connection with thread per ISO 7**

NS	G	Dimensions in mm [in]									
		b1	b2	D1	D2	f	i	j	k	SW	
63 [2 1/2"]	R 1/4	42 [1.65]	68 [2.68]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
100 [4"]	R 1/4	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	R 1/2	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	

**Process connection with thread per ANSI/B1.20.1**

NS	G	Dimensions in mm [in]									
		b1	b2	D1	D2	f	i	j	k	SW	
63 [2 1/2"]	1/4 NPT	42 [1.65]	68 [2.68]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
	1/8 NPT	42 [1.65]	68 [2.68]	63 [2.48]	62 [2.44]	18.5 [0.73]	6 [0.24]	18 [0.71]	15 [0.59]	14 [0.55]	
100 [4"]	1/4 NPT	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	
	1/2 NPT	59.5 [2.34]	100 [3.94]	101 [3.98]	100 [3.94]	30 [1.18]	6 [0.24]	24 [0.94]	15 [0.59]	22 [0.87]	

# EMICOgauge

## Instrument hook-up with instrumentation valves

The EMICOgauge instrument hook-up, consisting of pressure gauge and instrumentation valve, minimises the number of leakage points and thus reduces the risk of media escaping into the environment. In order to guarantee the system's leak tightness, an additional leak test is carried out in advance, for each component.

During mounting, the 360° swivel adapter connection of the EMICOgauge enables quick alignment of the pressure gauge with simultaneous pressure sealing. With this design, maintenance and dismounting of the pressure gauge and valve are also easy. WIKA can guarantee the leak tightness of the assembly for up to 20 mounting and dismounting operations.

There are a very large number of possible combinations of pressure gauges and the attachable valve models IV1x, IV2x and IVM. Since special pressure connections are often required for specific applications, a large number of variants have been defined for the EMICOgauge in order to avoid adapters, which would otherwise be needed, with their 2 additional sealing points.



**EMICOgauge consisting of model 262.30, NS 100 [4"] and mounted instrumentation valve**

### Advantages

- Significantly reduced risk of fugitive emissions, since the version for "fugitive emissions" complies with TA-Luft (VDI 2440)
- Fully tested and ready-to-install solution of an instrument-valve assembly
- Reduction of leakage paths in pressurised systems
- 360° swivel connection (swivel adapter) enables easy replacement and positioning of pressure gauges
- For various applications in chemical and petrochemical plants such as gas processing and production

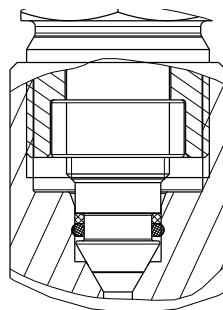
### Specifications

<b>Basic information for pressure gauges</b>	
<b>Nominal size (NS)</b>	Ø 100 mm [4"]
<b>Scale range</b>	Between 0 ... 0.6 bar and 0 ... 420 bar
<b>Connection location</b>	As well as corresponding measuring spans for other units and +/- scale ranges

<b>Assembly</b>	
<b>Mounting type</b>	EMICOgauge connection: 360° swivel connection (swivel adapter) with special pressure sealing Spare part: 5 x seal set consisting of O-ring and support ring; item no. 14525042
<b>Instrumentation valve</b>	■ Instrument version of IVM → See data sheet AC 09.17 ■ Model IV10, IV11 or IV20 → See data sheets AC 09.22 and AC 09.19

### Special pressure sealing

The redundant sealing, consisting of metal-to-metal seat and an additional O-ring seal with support ring, ensures the required leak tightness of the measuring assembly in addition to a long service life.

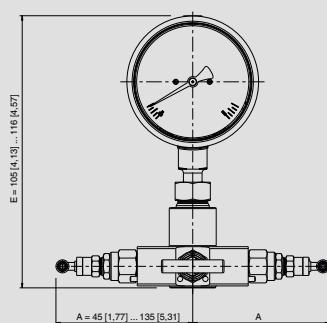


Process connection	
<b>Standard</b>	
Model IVM	<ul style="list-style-type: none"> <li>■ In line with ASME B16.5, RF or RJ</li> <li>■ In line with EN 1092-1, form B1 or B2</li> </ul>
Model IV10, IV11 or IV20	<ul style="list-style-type: none"> <li>■ ANSI/B1.20.1</li> <li>■ EN 837-1</li> </ul>
<b>Size</b>	
In line with ASME B16.5, RF or RJ	Flange 1/2" ... 2" / class 150 ... class 2500
In line with EN 1092-1, form B1 or B2	Flange DN 15 ... DN 25 / PN 16 ... PN 100
ANSI/B1.20.1	1/2 NPT, male thread or 1/2 NPT, female thread
EN 837-1	G 1/2 B male
<b>Material (wetted)</b>	
Process connection	Monel 400 (2.4360)
Seal	O-ring: FKM; support ring: PEEK

Operating conditions	
<b>Medium temperature</b>	
With pressure gauge without filling	-20 ... +150 °C [-4 ... +302 °F]
With pressure gauge with filling	-20 ... +100 °C [-4 ... +212 °F]
<b>Ambient temperature</b>	
Ambient temperature	-20 ... +60 °C [-4 ... +140 °F]
<b>Leak tightness of the overall system</b>	
Leak tightness of the overall system	Fulfils the fugitive emission requirements per TA Luft (VDI 2440), helium tested, leakage rate: < 1 · 10 <sup>-4</sup> mbar l/s

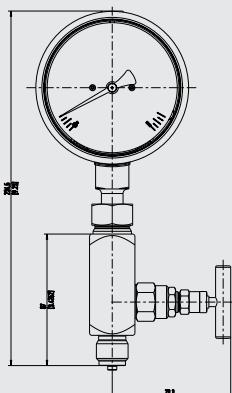
### Examples of EMICOGauge, model 262.30, NS 100 [4"] and mounted instrumentation valve

With valve model IVM



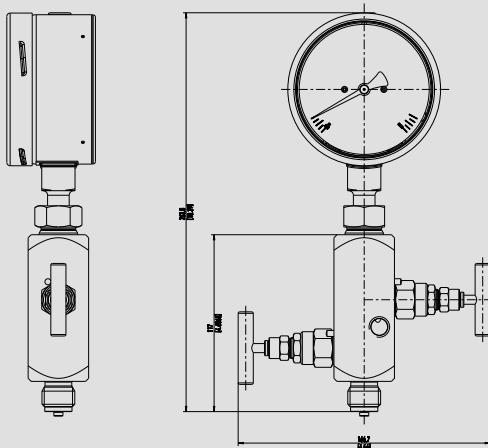
14521733.01

With valve model IV10



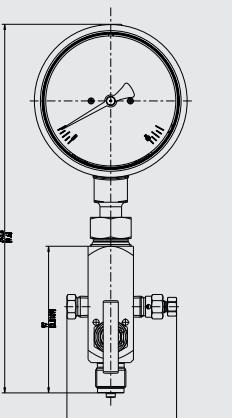
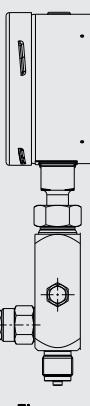
14521736.01

With valve model IV20



14521735.01

With valve model IV11



14522516.01

## Accessories and spare parts

Model	Description	
	<b>910.17</b>	Seals → See data sheet AC 09.08
	<b>910.15</b>	Syphons → See data sheet AC 09.06
	<b>910.13</b>	Overpressure protector → See data sheet AC 09.04
	<b>IV10, IV11</b>	Needle valve and multiport valve → See data sheet AC 09.22
	<b>IV20, IV21</b>	Block-and-bleed valve → See data sheet AC 09.19
	<b>IVM</b>	Monoflange, process and instrument version → See data sheet AC 09.17
	<b>BV</b>	Ball valve, process and instrument version → See data sheet AC 09.28
	<b>IBF2, IBF3</b>	Monoblock with flange connection → See data sheet AC 09.25

### Ordering information

Model / Nominal size / Scale range / Process connection / Connection location / Options

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We reserve the right to make modifications to the specifications and materials.

In case of a different interpretation of the translated and the English data sheet, the English wording shall prevail.

