

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 designed in compliance 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
- Scale ranges from 0 ... 0.6 to 0 ... 1,000 bar [0 ... 10 to 0 ... 15,000 psi]



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 of 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 operator is protected at the front side, as media or components can only be ejected via the back of the case.

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

Specifications

Basic information	
Standard	<ul style="list-style-type: none"> ■ EN 837-1 ■ ASME B40.100 <p>For information on the "Selection, installation, handling and operation of pressure gauges", see Technical information IN 00.05.</p>
Further version	<ul style="list-style-type: none"> ■ For oxygen, oil- and grease-free ■ Per NACE ¹⁾ MR0175 / ISO 15156, use in H₂S-containing environments in oil and gas production ■ Per NACE ¹⁾ MR0103 / ISO 17945, metals resistant to sulphide stress cracking ■ With pre-volume deflagration flame arrester ²⁾ for mounting to zone 0 (EPL Ga); model 910.21; see data sheet AC 91.02 ■ EMICOGauge, to avoid fugitive emissions; instrument hook-up with instrumentation valves → See page 10
Nominal size (NS)	<ul style="list-style-type: none"> ■ Ø 63 mm [2 ½"] ■ Ø 100 mm [4"] ■ Ø 160 mm [6"]
Connection location	<ul style="list-style-type: none"> ■ Lower mount (radial) ■ Lower back mount ³⁾
Window	Laminated safety glass (NS 63 [2 ½"]: Polycarbonate)
Case	
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 ≤ 0 ... 16 bar [≤ 0 ... 300 psi] the case can be vented and resealed
Material	<ul style="list-style-type: none"> ■ Stainless steel 1.4301 (304) ■ Stainless steel 1.4571 (316 Ti)
Ring	Bayonet ring, stainless steel
Mounting	<ul style="list-style-type: none"> ■ Without ■ Panel mounting flange, stainless steel ■ Panel mounting flange, polished stainless steel ■ Model 262.50, 263.50: Surface mounting flange, stainless steel ■ Model 262.30, 263.30: Surface mounting lugs on the back, stainless steel
Case filling (model 263.50, 263.30)	<ul style="list-style-type: none"> ■ Without ■ Glycerine ■ Glycerine-water mixture for NS 100 [4"] and 160 [6"] with scale range ≤ 0 ... 2.5 bar [≤ 0 ... 40 psi] or for NS 63 [2 ½"] with scale range ≤ 0 ... 4 bar [≤ 0 ... 60 psi] ■ Silicone oil
Movement	<ul style="list-style-type: none"> ■ Stainless steel ■ everlast[®] version

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	
Type of measuring element	Bourdon tube, C-type or helical type
Material	Monel 400 (2.4360)
Leak tightness	<ul style="list-style-type: none"> ■ Helium tested, leakage rate: < 5 · 10⁻³ mbar l/s ■ Helium tested, leakage rate: < 1 · 10⁻⁶ mbar l/s

Accuracy specifications		
Accuracy class		
NS 63 [2 ½"]	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	
0 ... 0.6 ¹⁾	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	

kg/cm ²	
0 ... 0.6 ¹⁾	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	
0 ... 60 ¹⁾	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	

MPa	
0 ... 0.06 ¹⁾	0 ... 4
0 ... 0.1	0 ... 6
0 ... 0.16	0 ... 10
0 ... 0.25	0 ... 16
0 ... 0.4	0 ... 25
0 ... 0.6	0 ... 40
0 ... 1	0 ... 60
0 ... 1.6	0 ... 100
0 ... 2.5	

psi	
0 ... 10 ¹⁾	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 ½"]

Vacuum and +/- scale ranges

bar	
-0.6 ... 0 ¹⁾	-1 ... +5
-1 ... 0	-1 ... +9
-1 ... +0.6	-1 ... +15
-1 ... +1.5	-1 ... +24
-1 ... +3	

MPa	
-0.06 ... 0 ¹⁾	-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	

kPa	
-60 ... 0 ¹⁾	-100 ... +500
-100 ... 0	-100 ... +900
-100 ... +60	-100 ... +1,500
-100 ... +150	-100 ... +2,400
-100 ... +300	

psi	
-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 ½"]

Further details on: Scale ranges

Unit	<ul style="list-style-type: none"> ■ bar ■ psi ■ kg/cm² ■ kPa ■ MPa
Increased overload safety	<ul style="list-style-type: none"> ■ Without ■ 2 times ■ 3 times ■ 4 times ■ 5 times <p>The possibility of selection depends on scale range and nominal size</p>
Vacuum resistance	<ul style="list-style-type: none"> ■ Without ■ Vacuum-resistant to -1 bar
Dial	
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
Pointer	
Instrument pointer	Aluminium, black
Mark pointer/drag pointer	<ul style="list-style-type: none"> ■ Without ■ Red mark pointer on dial, fixed ■ Red mark pointer on window, adjustable ■ Mark pointer on bayonet ring, adjustable ■ Red drag pointer on window, adjustable
Pointer stop pin	<ul style="list-style-type: none"> ■ Without ■ At zero point (only for NS 63 [2 ½"]) ■ At 6 o'clock (only for NS 100 [4"], 160 [6"])

Other scale ranges on request

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









Other process connections on request

Operating conditions		
Medium temperature		
Unfilled instruments	-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]	
Ambient temperature		
Unfilled instruments or with silicone oil filling	-40 ... +60 °C [-40 ... +140 °F]	
Instruments with glycerine filling	-20 ... +60 °C [-4 ... +140 °F]	
Pressure limitation		
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
Ingress protection per IEC/EN 60529	<ul style="list-style-type: none"> ■ IP65 ■ IP66 ■ IP54 (for model 262.30, 263.30 with lower back mount) 	

Approvals

Logo	Description	Country
	EU declaration of conformity Pressure equipment directive PS > 200 bar, module A, pressure accessory	European Union
-	CRN Safety (e.g. electr. safety, overpressure, ...)	Canada

Optional approvals

Logo	Description	Country
 	EU declaration of conformity ATEX directive 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	European Union
	EAC Hazardous areas	Eurasian Economic Community
	PAC Russia Metrology, measurement technology	Russia
	PAC Kazakhstan Metrology, measurement technology	Kazakhstan
-	MChS Permission for commissioning	Kazakhstan
	PAC Belarus Metrology, measurement technology	Belarus
	PAC Uzbekistan Metrology, measurement technology	Uzbekistan
-	CPA Metrology, measurement technology	China
	DNV GL Ships, shipbuilding (e.g. offshore)	International

Manufacturer's information and certificates

Logo	Description
-	Emission protection in accordance with TA-Luft (VDI 2440) ¹⁾

1) only for EMICOGauge → See page 12

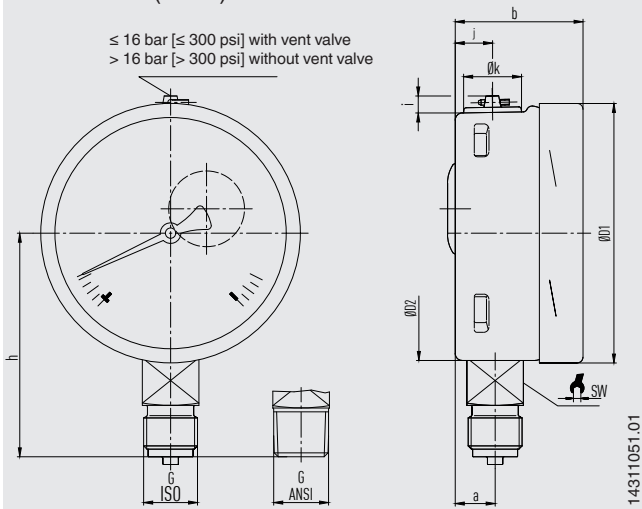
Certificates (option)

Certificates	
Certificates	<ul style="list-style-type: none"> ■ 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, indication accuracy) ■ 3.1 inspection certificate per EN 10204 (e.g. material proof for wetted metal parts, indication accuracy) ■ PCA calibration certificate, traceable and accredited in accordance with ISO/IEC 17025 ■ Calibration certificate by a national accreditation body, traceable and accredited in accordance with ISO/IEC 17025 on request
Recommended calibration interval	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 ½"]	approx. 0.16 kg [0.35 lbs]	approx. 0.20 kg [0.44 lbs]
100 [4"]	approx. 0.6 kg [1.32 lbs]	approx. 0.9 kg [1.98 lbs]
160 [6"]	approx. 1.1 kg [2.43 lbs]	approx. 2.0 kg [4.41 lbs]

Process connection with thread per EN 837-1

NS	G	Dimensions in mm [in]								
		h ±1	a	b	D1	D2	i	y	k	SW
63 [2 ½"]	G ¼ 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 ⅝ B	51 [2.01]								
	M12 x 1.5	54 [2.13]								
100 [4"]	G ¼ 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 ½ B	87 [3.43]								
	M12 x 1.5	80 [3.15]								
	M20 x 1.5	87 [3.43]								
160 [6"]	G ¼ B	111 [4.37]	15.5 [0.61]	49.5 [1.95]	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]
	G ½ B	118 [4.65]								
	M12 x 1.5	111 [4.37]								
	M20 x 1.5	118 [4.65]								

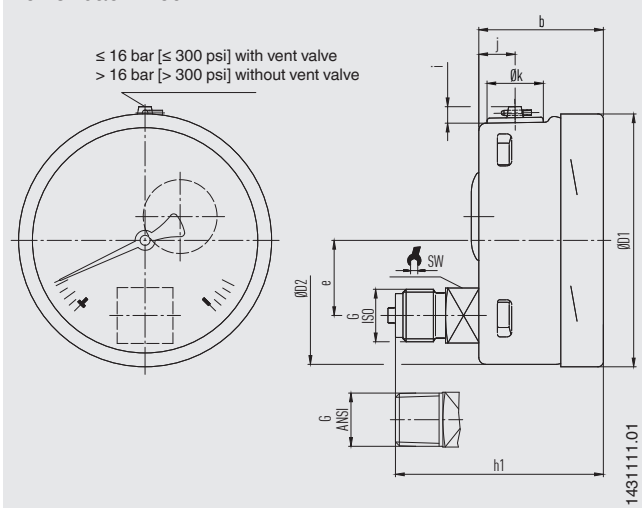
Process connection with thread per ISO 7

NS	G	Dimensions in mm [in]								
		h ±1	a	b	D1	D2	i	y	k	SW
63 [2 ½"]	R ¼	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 ¼	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 ½	86 [3.39]								
160 [6"]	R ¼	111 [4.37]	15.5 [0.61]	49.5 [1.95]	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]
	R ½	117 [4.60]								

Process connection with thread per ANSI/B1.20.1

NS	G	Dimensions in mm [in]								
		h ±1	a	b	D1	D2	i	y	k	SW
63 [2 ½"]	¼ 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]
	⅝ NPT	51 [2.01]								
100 [4"]	¼ 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]
	½ NPT	86 [3.39]								
160 [6"]	¼ NPT	111 [4.37]	15.5 [0.61]	49.5 [1.95]	161 [6.34]	159 [6.26]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]
	½ NPT	117 [4.60]								

Lower back mount



NS	Weight	
	Model 262.50	Model 263.50
63 [2 ½"]	approx. 0.16 kg [0.35 lbs]	approx. 0.20 kg [0.44 lbs]
100 [4"]	approx. 0.6 kg [1.32 lbs]	approx. 0.9 kg [1.98 lbs]
160 [6"]	approx. 1.1 kg [2.43 lbs]	approx. 2.0 kg [4.41 lbs]

Process connection with thread per EN 837-1

NS	G	Dimensions in mm [in]								
		h ±1	b	D1	D2	e	i	y	k	SW
63 [2 ½"]	G ¼ 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 ⅝ B	54 [2.13]								
	M12 x 1.5	57 [2.24]								
100 [4"]	G ¼ 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 ½ B	83 [3.27]								
	M12 x 1.5	76 [2.99]								
	M20 x 1.5	83 [3.27]								
160 [6"]	G ¼ B	76 [2.99] ¹⁾	49.5 [1.95]	161 [6.34]	159 [6.26]	50 [1.97]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]
	G ½ B	83 [3.27] ¹⁾								
	M12 x 1.5	76 [2.99] ¹⁾								
	M20 x 1.5	83 [3.27] ¹⁾								

Process connection with thread per ISO 7

NS	G	Dimensions in mm [in]								
		h ±1	b	D1	D2	e	i	y	k	SW
63 [2 ½"]	R ¼	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 ¼	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 ½	82 [3.23]								
160 [6"]	R ¼	76 [2.99] ¹⁾	49.5 [1.95]	161 [6.34]	159 [6.26]	50 [1.97]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]
	R ½	82 [3.23] ¹⁾								

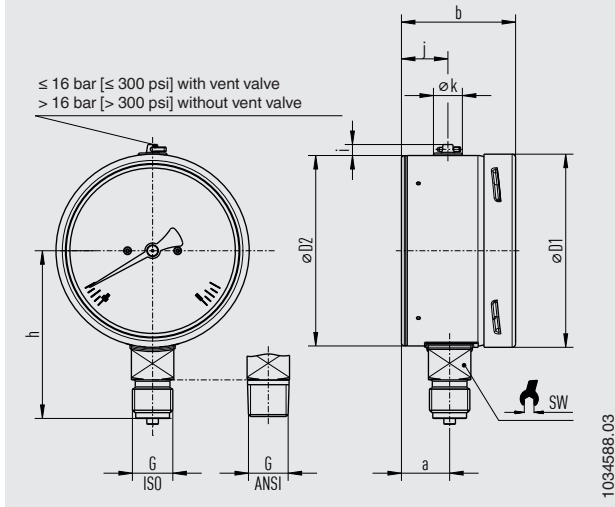
Process connection with thread per ANSI/B1.20.1

NS	G	Dimensions in mm [in]								
		h ±1	b	D1	D2	e	i	y	k	SW
63 [2 ½"]	¼ 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]
	⅝ NPT	51 [2.01]								
100 [4"]	¼ 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]
	½ NPT	86 [3.39]								
160 [6"]	¼ NPT	76 [2.99] ¹⁾	49.5 [1.95]	161 [6.34]	159 [6.26]	50 [1.97]	6.5 [0.26]	14.5 [0.57]	22.5 [0.89]	22 [0.87]
	½ NPT	82 [3.23] ¹⁾								

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 ½"]	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	y	k	SW
63 [2 ½"]	G ¼ 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 ⅝ B	51 [2.01]								
	M12 x 1.5	54 [2.13]								
100 [4"]	G ¼ 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 ½ B	87 [3.43]								
	M12 x 1.5	80 [3.15]								
	M20 x 1.5	87 [3.43]								
160 [6"]	G ¼ B	111 [4.37]	27 [1.06] ¹⁾	65 [2.56] ²⁾	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]
	G ½ B	118 [4.65]								
	M12 x 1.5	111 [4.37]								
	M20 x 1.5	118 [4.65]								

Process connection with thread per ISO 7

NS	G	Dimensions in mm [in]								
		h ±1 [0.04]	a	b	D1	D2	i	y	k	SW
63 [2 ½"]	R ¼	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 ¼	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 ½	86 [3.39]								
160 [6"]	R ¼	111 [4.37]	27 [1.06] ¹⁾	65 [2.56] ²⁾	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]
	R ½	117 [4.61]								

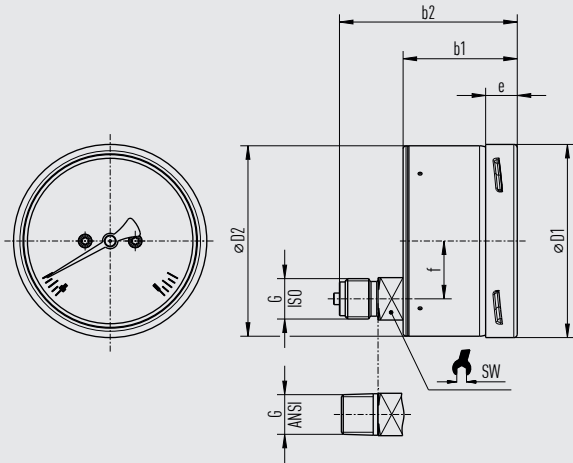
Process connection with thread per ANSI/B1.20.1

NS	G	Dimensions in mm [in]								
		h ±1 [0.04]	a	b	D1	D2	i	y	k	SW
63 [2 ½"]	¼ 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]
	⅝ NPT	51 [2.01]								
100 [4"]	¼ 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]
	½ NPT	86 [3.39]								
160 [6"]	¼ NPT	111 [4.37]	27 [1.06] ¹⁾	65 [2.56] ²⁾	159 [6.26]	159 [6.26]	6 [0.24]	18.5 [0.73]	15 [0.59]	22 [0.87]
	½ NPT	117 [4.61]								

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 lbs]
100 [4"]	approx. 0.65 kg [1.43 lbs]

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							
	M12 x 1.5							
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							
	M12 x 1.5							
	M20 x 1.5							

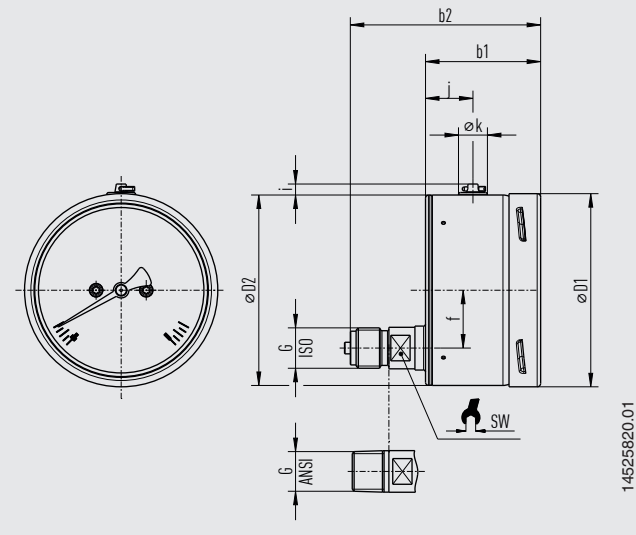
Process connection with thread per ISO 7

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							

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							
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							

Model 263.30, lower back mount



NS	Weight, model 263.30
63 [2 ½"]	approx. 0.28 kg [0.62 lbs]
100 [4"]	approx. 1.08 kg [2.38 lbs]

Process connection with thread per EN 837-1

NS	G	Dimensions in mm [in]								
		b1	b2	D1	D2	f	i	y	k	SW
63 [2 ½"]	G ¼ 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 ⅜ B									
	M12 x 1.5									
100 [4"]	G ¼ 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 ½ B									
	M12 x 1.5									
	M20 x 1.5									

Process connection with thread per ISO 7

NS	G	Dimensions in mm [in]								
		b1	b2	D1	D2	f	i	y	k	SW
63 [2 ½"]	R ¼	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 ¼	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 ½									

Process connection with thread per ANSI/B1.20.1

NS	G	Dimensions in mm [in]								
		b1	b2	D1	D2	f	i	y	k	SW
63 [2 ½"]	¼ 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]
	⅜ NPT									
100 [4"]	¼ 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]
	½ NPT									

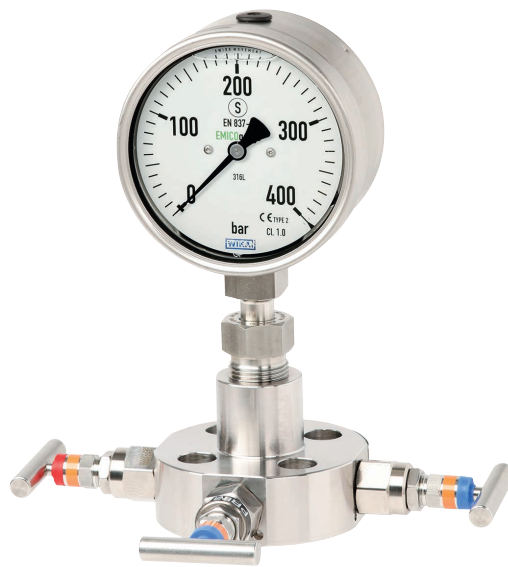
EMICOgauge

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 individual 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.

The possible combinations of pressure gauges and the attachable valve models IV1x, IV2x and IVM are very large. 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

Basic information for pressure gauges

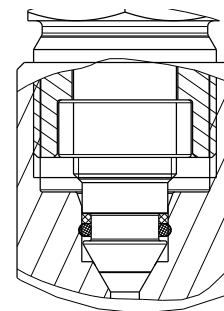
Nominal size (NS)	Ø 100 mm [4"]
Scale range	Between 0 ... 0.6 bar and 0 ... 420 bar As well as corresponding measuring spans for other units and +/- scale ranges
Connection location	Lower mount (radial)

Assembly

Mounting type	EMICOgauge connection: 360° swivel connection (swivel adapter) with special pressure sealing Spare part: 5 x sealing set consisting of O-ring and support ring; article no. 14525042
Instrumentation valve	<ul style="list-style-type: none"> ■ 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 from metal/metal seat and an additional O-ring sealing with support ring ensures the required leak tightness of the measuring assembly in addition to a long service life.



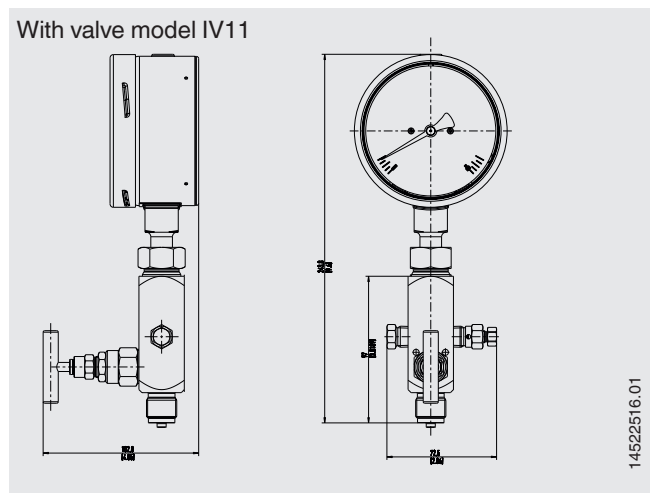
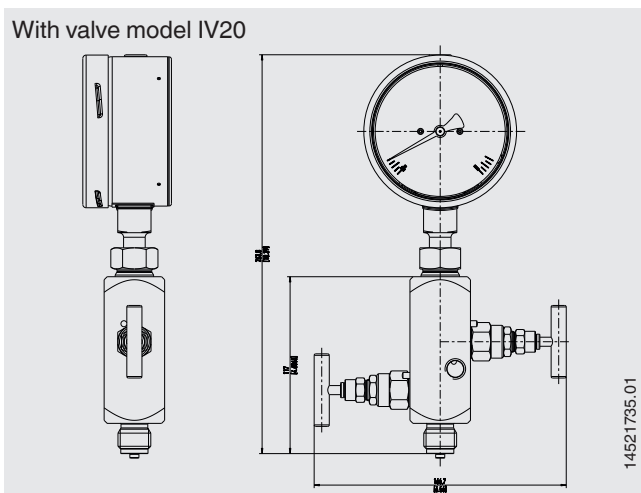
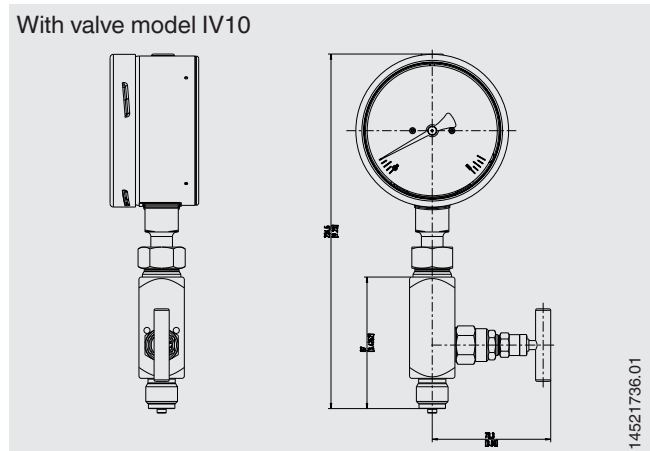
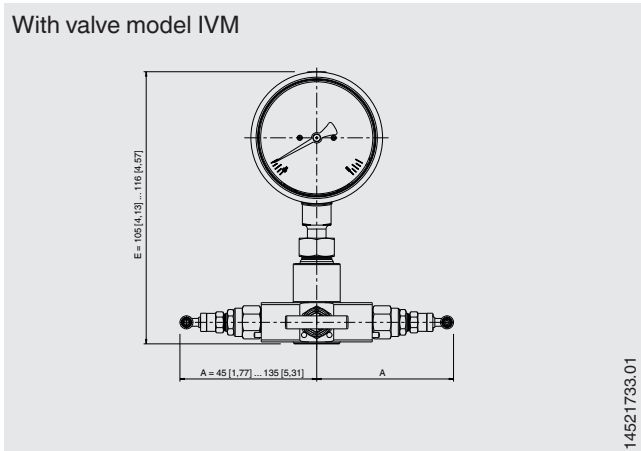
Process connection

Standard	
Model IVM	<ul style="list-style-type: none"> ■ In line with ASME B16.5, RF or RJ ■ In line with EN 1092-1, form B1 or B2
Model IV10, IV11 or IV20	<ul style="list-style-type: none"> ■ ANSI/B1.20.1 ■ EN 837-1
Size	
In line with ASME B16.5, RF or RJ	Flange ½" ... 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	½ NPT, male thread or ½ NPT, female thread
EN 837-1	G ½ B male
Material (wetted)	
Process connection	Monel 400 (2.4360)
Sealing	O-ring: FKM; support ring: PEEK





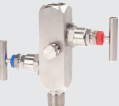



Operating conditions

Medium temperature	
With unfilled pressure gauge	-20 ... +150 °C [-4 ... +302 °F]
With filled pressure gauge	-20 ... +100 °C [-4 ... +212 °F]
Ambient temperature	
	-20 ... +60 °C [-4 ... +140 °F]
Leak tightness of the overall system	
	Fulfills the fugitive emission requirements per TA Luft (VDI 2440), helium tested, leakage rate: $< 1 \cdot 10^{-4}$ mbar l/s

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



Accessories and spare parts for models 262 and 263

Model	Description
	910.17 Sealings → See data sheet AC 09.08
	910.15 Syphons → See data sheet AC 09.06
	910.13 Overpressure protector → See data sheet AC 09.04
	IV10, IV11 Needle valve and multipoint valve → See data sheet AC 09.22
	IV20, IV21 Block-and-bleed valve → See data sheet AC 09.19
	IVM Monoflange, process and instrument version → See data sheet AC 09.17
	BV Ball valve, process and instrument version → See data sheet AC 09.28
	IBF2, IBF3 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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WIKAL Alexander Wiegand SE & Co. KG
 Alexander-Wiegand-Straße 30
 63911 Klingenberg/Germany
 Tel. +49 9372 132-0
 Fax +49 9372 132-406
 info@wika.de
 www.wika.de