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Subject to change.

All dimensions in mm (inches).

All prices in Euro (€) or USD (\$),  
excluding VAT.

All EURO prices are EXW Betzigau,  
all USD prices are EXW Memphis,  
excluding packaging costs.

Valid: From 01.10.2022 until 31.12.2022, unless otherwise agreed.

By publishing this selection list all other lists become invalid.

We assume no liability for typing errors.

Different variations to those specified are possible.  
Please contact our technical consultants.

## Overview

### Features

- Continuous level measurement of liquids and solids in standard applications in nearly all industries with 80 GHz FMCW radar
- Suitable for measurement of liquids in storage tanks and for water treatment
- Suitable for measurement of solids in small and medium storage silos and in open containers
- Measurement through the wall of a plastic tank is possible as well

#### Measurement range

- Up to 15 m (49.2 ft)

#### Mechanic

- Housing and antenna made of PVDF for high chemical resistance
- Simple mounting due to threaded process connection
- Accessories for further mounting options

#### Service

- Plug and play system, simple installation and commissioning
- Programming / communication wireless with standard mobile device or with push buttons

#### Approvals

- Approval for use in Hazardous Locations (Gas)
- 2011/65/EU RoHS conform



NR 7100 and  
 NR 7200 without Display  
 (non transparent lid)



NR 7200 with Display  
 (transparent lid)

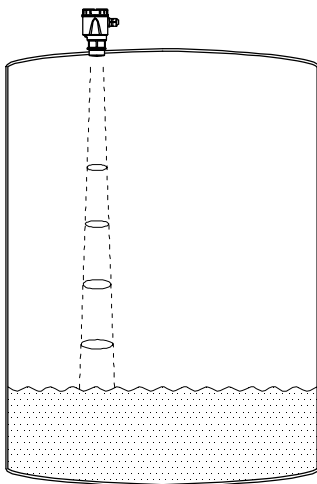


NR 7200  
 Plug on Display  
 With push buttons

## Application

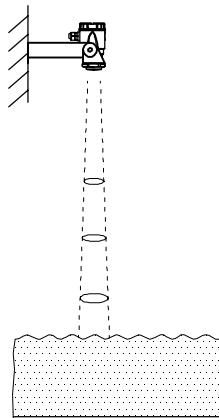
### Liquids measurement

Closed bins



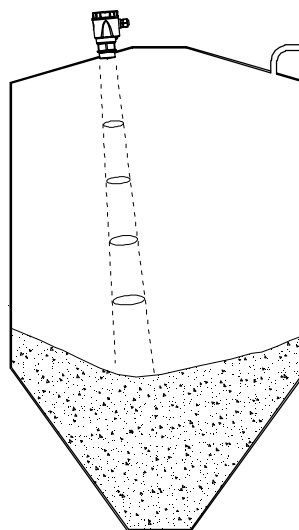
Vertical installation without aiming of the antenna

Open arrangements



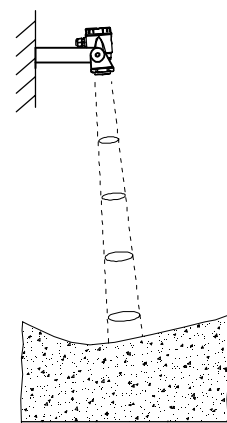
### Solids measurement

Closed bins



Aiming of the antenna to the center of the silo allows measurement down to the bottom

Open arrangements



## Specification

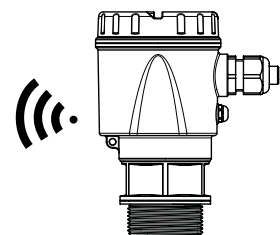
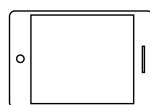
### Specification

<b>Process</b>	Measurement range	NR 7100: up to 8 m (26.3 ft) NR 7200: up to 15 m (49.2 ft)
	Ambient temperature	-40 .. +70°C (-40 .. 158°F) -25 .. +70°C (-13 .. 158°F) for Plug on Display (NR 7200)
	Process temperature	NR 7100: -40 .. +60°C (-40 .. 140°F) NR 7200: -40 .. +80°C (-40 .. 176°F)
	Process overpressure	-1 .. +3,0 bar (-14.5 .. +43.5 psi)
<b>Process</b>	Frequency	80 GHz FMCW
	Beam angle	8°
	Accuracy of measurement	Liquids: ≤ 2 mm (0.08") at distance >0,25m (0.82ft) Solids: depending on application
	Response time	Max. 3 seconds (with sudden distance change)
	Dielectric constant of material measured	≥ 1,1 (under ideal conditions)
<b>Mechanics</b>	Ingress protection	Type 4X, IP66/67
	Enclosure	Rotable 330° Material: PVDF NR 7200 with Plug on Display: Lid transparent to enable reading
	Antenna and process connection	Material: PVDF, FDA certification (for foodstuff and pharmaceutical)
	Process sealing (with G-thread)	Material: FKM EPDM (FDA certification, EG1935/2004)
<b>Electronics</b>	Power supply	4-20 mA 2-wire loop according to NE43 NR 7100: 12 .. 35 V DC NR 7100: 15 .. 35 V DC with use of Plug on Display
	Programming / communication	Wireless: Effective range typ. 25m (82ft) HART (NR 7200): Version 7.0 (not programmable via PACTware/DTM) Plug on Display (NR 7200): Graphic LCD, illuminated, 3 push buttons, bar graph representing level
<b>Approvals</b>	General purpose	CE / cFMus / UKCA
	Intrinsically safe zone 0, 0/1	NR 7100: not applicable NR 7200: ATEX / IEC-Ex/ cFMus / UKEX / INMETRO / KCs
	Intrinsically safe Cl. I Div.1	NR 7100: not applicable NR 7200: cFMus
	Radio approvals	According to country-specific standards for radar devices and wireless communication

### Wireless programming / communication

with standard mobile device via UWT LevelApp:

- Tablet or Smartphone (iOS- or Android-operating system)



## NR 7100

### Basic type

<b>NR 7100</b>	.....	•
pos.2	<b>Certificate</b>	
	0 CE / cFMus / UKCA General purpose .....	•
pos.3	<b>Process temperature</b>	
	1 max. 60°C (140°F) .....	•
pos.4	<b>Process pressure</b>	
	1 3 bar .....	•
pos.5	<b>Electronic module</b>	
	A 2-wire 4-20 mA .....	•
pos.6	<b>Process connection</b>	
	A Thread G 1 1/2" DIN ISO 228-1 .....	•
	B Thread NPT 1 1/2" ANSI B 1.20.1 .....	•
	C Thread R 1 1/2" EN 10226 .....	•
pos.7	<b>Measurement range</b>	
	1 max. 8 m (26.3ft) .....	•
pos.8	<b>Cable entry</b>	
	A M20 x 1,5 cable gland .....	•
	B NPT 1/2" conduit .....	•
pos.9	<b>Plug on Display</b>	
	0 without Display, only programmable with mobile device and UWT LevelApp .....	•

### Basic type

NR	7100	E	0	1	1	A		1		0
Position	1	2	3	4	5	6	7	8	9	

← **Order code**

<sup>(1)</sup> Available certificates on request

## NR 7200

### Basic type

<b>NR 7200</b>	.....	•															
pos.2	<b>Certificate</b> (detailed Ex-markings: see page 6)																
	<table border="1"> <thead> <tr> <th></th> <th>Gas</th> <th>Protection method</th> </tr> </thead> <tbody> <tr> <td>0 CE / UKCA / cFMus</td> <td>-</td> <td>General purpose</td> </tr> <tr> <td>S ATEX / IEC-Ex / UKEX / cFMus cFMus</td> <td>Zone 0, 0/1 Cl. I Div.1</td> <td>Intrinsically safe</td> </tr> <tr> <td>F INMETRO</td> <td>Zone 0, 0/1</td> <td>Intrinsically safe</td> </tr> <tr> <td>B KCs</td> <td>Zone 0, 0/1</td> <td>Intrinsically safe</td> </tr> </tbody> </table>		Gas	Protection method	0 CE / UKCA / cFMus	-	General purpose	S ATEX / IEC-Ex / UKEX / cFMus cFMus	Zone 0, 0/1 Cl. I Div.1	Intrinsically safe	F INMETRO	Zone 0, 0/1	Intrinsically safe	B KCs	Zone 0, 0/1	Intrinsically safe	• • • •
	Gas	Protection method															
0 CE / UKCA / cFMus	-	General purpose															
S ATEX / IEC-Ex / UKEX / cFMus cFMus	Zone 0, 0/1 Cl. I Div.1	Intrinsically safe															
F INMETRO	Zone 0, 0/1	Intrinsically safe															
B KCs	Zone 0, 0/1	Intrinsically safe															
pos.3	<b>Process temperature</b>																
	2 max. 80°C (176°F) .....	•															
pos.4	<b>Process pressure</b>																
	1 3 bar .....	•															
pos.5	<b>Electronic module</b>																
	H 2-wire 4-20 mA, HART <sup>(1)</sup> .....	•															
pos.6	<b>Process connection</b>																
	A Thread G 1 1/2" DIN ISO 228-1 .....	•															
	B Thread NPT 1 1/2" ANSI B 1.20.1 .....	•															
	C Thread R 1 1/2" EN 10226 .....	•															
pos.7	<b>Measurement range</b>																
	2 max. 15 m (49.2ft) .....	•															
pos.8	<b>Cable entry</b>																
	A M20 x 1,5 cable gland .....	•															
	B NPT 1/2" conduit .....	•															
pos.9	<b>Plug on Display</b>																
	0 without Display, only programmable with mobile device and UWT LevelApp (non transparent lid) .....	•															
	1 with Display (transparent lid) .....	•															

Basic type

<b>NR 7200</b>	<b>F</b>	<b>2</b>	<b>1</b>	<b>H</b>	<b>2</b>					← <b>Order code</b>
Position	1	2	3	4	5	6	7	8	9	

<sup>(1)</sup> HART not programmable via PACTware/DTM

## Options / Dimensions / Detailed Ex-markings

### Options

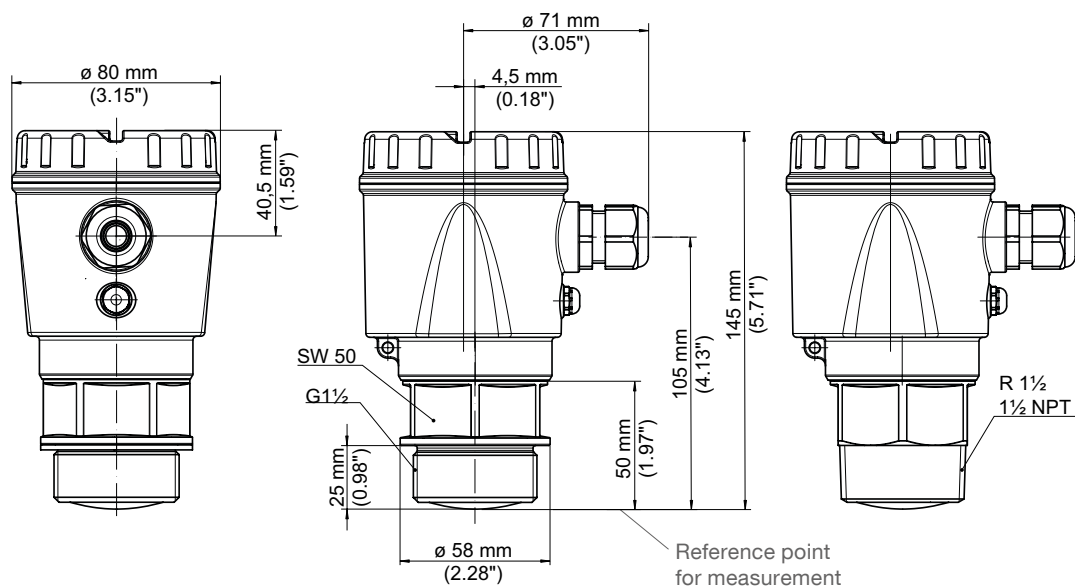
pos.11 x	<b>Guarantee extension to 5 years</b> .....	•
	<b>Overfill certificate</b> <sup>(1)</sup>	
pos.12 a	WHG .....	•
	<b>Foodstuff-/Pharmaceutical certificate</b> <sup>(1) (2)</sup>	
pos.13 a	FDA, EG1935/2004 .....	•
	<b>Inspection certificate</b> <sup>(1) (2)</sup>	
pos.14 a	Inspection certificate, EN 10204 clause 3.1, incl. test data .....	•
pos.14 b	Inspection certificate, EN 10204 clause 3.1, incl. test data, quality- and testplan .....	•
	<b>Additional cleaning procedure</b> <sup>(1) (2)</sup>	
pos.15 a	Oil-, grease and silicone oil-free, incl. inspection certificate, EN 10204 clause 3.1 .....	•
	<b>Measuring point identification</b> <sup>(1)</sup>	
pos.17 a	Measuring point identification, max. 19 characters .....	•

<sup>(1)</sup> Available for NR 7200

<sup>(2)</sup> The documents are enclosed with the delivered goods

### Dimensions

NR 7100  
 NR 7200



### Detailed Ex-markings

pos.2 **Certificate**

S	ATEX	II 1G, 1/2G Ex ia IIC T4 ... T1 Ga, Ga/Gb
	IEC-Ex	Ex ia IIC T4 ... T1 Ga, Ga/Gb
	cFMus	IS Class I, Div.1, Gp.A-D T4 CI I, Zn 0, 0/1 AEx ia IIC T4 Ga, Ga/Gb
	UKEX	II 1G, 1/2G Ex ia IIC T4 ... T1 Ga, Ga/Gb
F	INMETRO	Ex ia IIC T4 ... T1 Ga, Ga/Gb
B	KCs	Ex ia IIC T4 Ga, Ga/Gb

## Accessories

Minimum order value for separate orders of spare parts or accessories is 75 €.

### Material for mounting

#### Mounting bracket <sup>(1)</sup>

Material 1.4404 (316L).

Incl.: Counter nut G 1 1/2" made of PP, 4 screws ø6 x 40 mm, washers, dowel ø8 x 40 mm

Suitable for installation with Ex-applications <sup>(3)</sup>

zu400754	Mounting bracket, vertically rotatable	L=80mm (3.2")	.....	•
zu400755	Mounting bracket, vertically rotatable	L=200mm (7.9")	.....	•

#### Mounting plate rectangular <sup>(1)</sup>

Process pressure max. 0,1 bar (1.45 psi). Details to fitting counter flanges see page 11

Incl. counter nut G 1 1/2" made of PP and flat sealing betw. mounting plate and G 1 1/2" process connection

Not intendend for installation with Ex-applications

Mounting plate rectangular: Material: Fitting screws for counter flange (not included):

zu400761	Fitting to DN80 / 3"	1.4404 (316L)	M16x60 (4 pieces) .....	•
zu400762	Fitting to DN100 / 4"	1.4404 (316L)	M16x60 (4 pieces) .....	•
zu400763	Fitting to DN150 / 6"	1.4404 (316L)	M20x80 (4 pieces) .....	•

#### Mounting flange rectangular <sup>(1) (2)</sup>

Temperature range -40 ... 80 °C (-40 ... 176 °F), process pressure max. 0,1 bar (1.45 psi)

Details to fitting counter flanges see page 11

Not intendend for installation with Ex-applications

Mounting flange rectangular: Material: Fitting screws for counter flange (not included):

zu400764	Fitting to DN50 / 2"	PP	M12x60 (4 pieces) .....	•
zu400765	Fitting to DN80 / 3"	PP	M16x60 (4 pieces) .....	•
zu400766	Fitting to DN100 / 4"	PP	M16x60 (4 pieces) .....	•
zu400767	Fitting to DN150 / 6"	PP	M20x80 (4 pieces) .....	•

#### Variable seal <sup>(1)</sup>

For aiming of the antenna in solids.

Temperature range -40 ... 80 °C (-40 ... 176 °F), process pressure max. 0,1 bar (1.45 psi)

Used in combination with mounting flange rectangular, details see page 12

Not intendend for installation with Ex-applications

Variable seal: Material: Fitting screws for counter flange (not included):

zu400772	Fitting to DN100 PN16	EPDM	M14x100 (4 pieces) .....	•
zu400773	Fitting to DN150 PN16	EPDM	M14x100 (4 pieces) .....	•

#### Standard flange <sup>(1) (2)</sup>

DN flanges: type A (flat faced) , ASME flanges: raised face

Suitable for installation with Ex-applications <sup>(3)</sup>

Flange: Material: Fitting screws for counter flange (not included):

zu400776	DN50 PN6, EN 1092-1	1.4541 (321)	M12x60 (4 pieces) .....	•
zu400777	DN50 PN6, EN 1092-1	1.4404 (316L)	M12x60 (4 pieces) .....	•
zu400778	DN50 PN16, EN 1092-1	1.4541 (321)	M16x60 (4 pieces) .....	•
zu400779	DN50 PN16, EN 1092-1	1.4404 (316L)	M16x60 (4 pieces) .....	•
zu400780	DN80 PN6, EN 1092-1	1.4541 (321)	M16x60 (4 pieces) .....	•
zu400781	DN80 PN6, EN 1092-1	1.4404 (316L)	M16x60 (4 pieces) .....	•
zu400782	DN80 PN16, EN 1092-1	1.4541 (321)	M16x60 (8 pieces) .....	•
zu400783	DN80 PN16, EN 1092-1	1.4404 (316L)	M16x60 (8 pieces) .....	•
zu400784	DN100 PN6, EN 1092-1	1.4541 (321)	M16x60 (4 pieces) .....	•
zu400785	DN100 PN6, EN 1092-1	1.4404 (316L)	M16x60 (4 pieces) .....	•
zu400786	DN100 PN16, EN 1092-1	1.4541 (321)	M16x60 (8 pieces) .....	•
zu400787	DN100 PN16, EN 1092-1	1.4404 (316L)	M16x60 (8 pieces) .....	•
zu400788	DN150 PN6, EN 1092-1	1.4541 (321)	M16x60 (8 pieces) .....	•
zu400789	DN150 PN6, EN 1092-1	1.4404 (316L)	M16x60 (8 pieces) .....	•
zu400790	DN150 PN16, EN 1092-1	1.4541 (321)	M20x80 (8 pieces) .....	•
zu400791	DN150 PN16, EN 1092-1	1.4404 (316L)	M20x80 (8 pieces) .....	•
zu400792	2" 150lbs ASME B16.5	1.4541 (321)	M16x60 (4 pieces) .....	•
zu400793	2" 150lbs ASME B16.5	1.4404 (316L)	M16x60 (4 pieces) .....	•
zu400794	3" 150lbs ASME B16.5	1.4541 (321)	M16x100 (4 pieces) .....	•
zu400795	3" 150lbs ASME B16.5	1.4404 (316L)	M16x100 (4 pieces) .....	•
zu400796	4" 150lbs ASME B16.5	1.4541 (321)	M16x100 (8 pieces) .....	•
zu400797	4" 150lbs ASME B16.5	1.4404 (316L)	M16x100 (8 pieces) .....	•
zu400798	6" 150lbs ASME B16.5	1.4541 (321)	M20x80 (8 pieces) .....	•
zu400799	6" 150lbs ASME B16.5	1.4404 (316L)	M20x80 (8 pieces) .....	•

## Accessories

### Screws for flange fixing

Suitable for installation with Ex-applications <sup>(3)</sup>

		Screws:	Nuts:	Washers:	Material:	
zu107002	M12 x 60	4 pieces	4 pieces	8 pieces	Stainless steel	•
zu107005	M14 x 100	4 pieces	4 pieces	8 pieces	Stainless steel	•
zu107000	M16 x 60	4 pieces	4 pieces	8 pieces	Stainless steel	•
zu107010	M16 x 60	8 pieces	8 pieces	16 pieces	Stainless steel	•
zu107011	M16 x 100	4 pieces	4 pieces	8 pieces	Stainless steel	•
zu107012	M16 x 100	8 pieces	8 pieces	16 pieces	Stainless steel	•
zu107020	M20 x 60	8 pieces	8 pieces	16 pieces	Stainless steel	•
zu107018	M20 x 80	4 pieces	4 pieces	8 pieces	Stainless steel	•
zu107019	M20 x 80	8 pieces	8 pieces	16 pieces	Stainless steel	•

### Flange sealings

Fitting to mounting plates, mounting flanges, standard flanges EN 1092-1 (PN6, PN16), ASME B16.5 (150 lb)

Temperature range -40 ... 200 °C (-40 ... 392 °F)

Not intended for installation with Ex-applications

	Flange sealing:	Material:	
di300134	DN50 / 2"	AFM30	•
di300122	DN50 / 2"	Silicone	•
di300145	DN80 / 3"	AFM30	•
di300123	DN80 / 3"	Silicone	•
di300146	DN100 / 4"	AFM30	•
di300124	DN100 / 4"	Silicone	•
di300147	DN150 / 6"	AFM30	•
di300126	DN150 / 6"	Silicone	•

### Hygienic connections (adapter) <sup>(1)</sup>

Suitable for installation with Ex-applications <sup>(3)</sup>

zu400705	Triclamp DN50 (2") DIN 32676 Type A (DIN 11851), DIN 32676 Type C (ASME BPE 2009), 1.4404 (316L)	•
zu400706	Triclamp DN60,3 (2 1/2") DIN 32676 Type B (DIN 11851), DIN 32676 Type C (ASME BPE 2009), 1.4404(316L)	•
zu400707	Triclamp DN65 (3") DIN 32676 Type A (DIN 11851), DIN 32676 Type C (ASME BPE 2009), 1.4404 (316L)	•
zu400708	Slotted nut DN50 DIN 11851, 1.4404 (316L)	•
zu400709	Slotted nut DN65 DIN 11851, 1.4404 (316L)	•

<sup>(1)</sup> Fitting to process connection NR 7000 with thread G 1 1/2" DIN ISO 228-1 (pos.6 A).

<sup>(2)</sup> Flanges are delivered with thread G 1 1/2". They are threaded on the G 1 1/2" process connection of NR 7000. Sealing between flange and G 1 1/2" process connection is done by a flat sealing (included).

<sup>(3)</sup> Mounting with Ex applications: The components must be professionally mounted and installed in accordance with the manufacturer specification and the applicable national regulations, e.g. planning and installation in accordance with IEC/EN 60079-14.

## Complementary products (from outside companies)

### Isolated barrier

Connection to NR 7200 with protection method Intrinsically Safe.

Supply 18-30V DC, interface 4-20mA/4-20mA, galvanic isolation

Possible manufacturer	Product / series	Type	Amount of channels	Protection method	Ex ratings for connection NR 7200 (field side)
Pepperl+Fuchs	Isolated barrier, K-System, Transmitter Power Supply	KCD2-STC-Ex1	1	[Ex ia Ga] [Ex ia Da]	U <sub>0</sub> =25,2 V I <sub>0</sub> =100 mA P <sub>0</sub> =630mW
		KFD2-STC5-Ex2	2	[Ex ia Ga] [Ex ia Da]	U <sub>0</sub> =26,2 V I <sub>0</sub> =115 mA P <sub>0</sub> =784mW

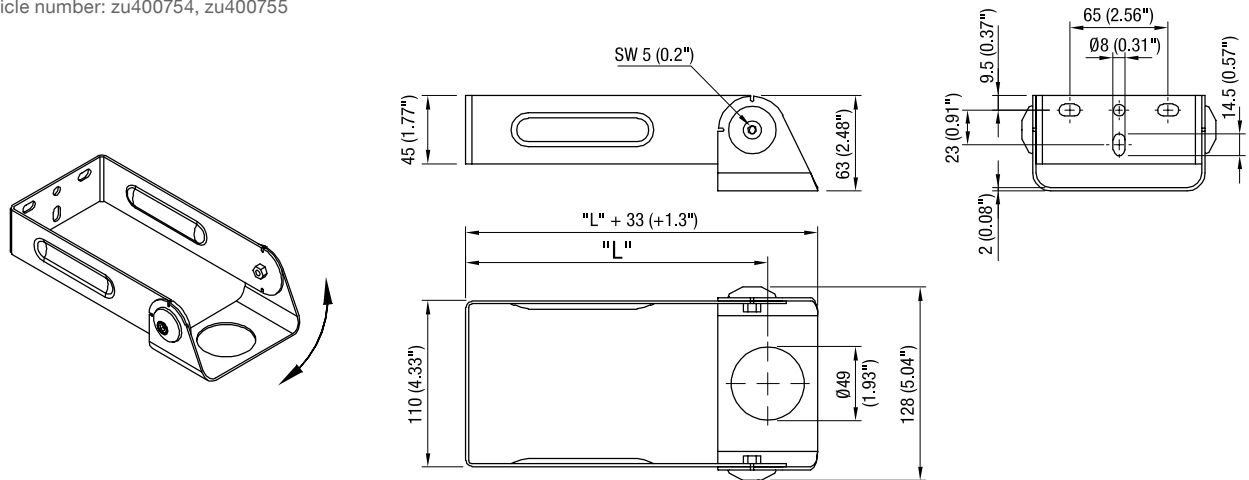


## Accessories - dimensions

### Mounting bracket

#### Mounting bracket, vertically rotatable

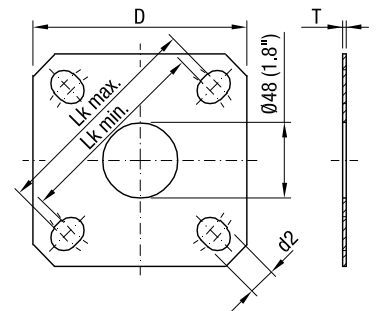
Article number: zu400754, zu400755



### Mounting plate

#### Mounting plate rectangular, 1.4404 (316L), 2 .. 3mm (0.08 .. 0.12")

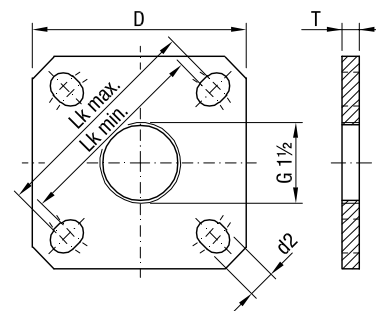
Article-number	d2 mm (Inch)	Lk min. mm (Inch)	Lk max. mm (Inch)	D mm (Inch)	T (thickness) mm (Inch)	Fitting to counter flanges
zu400761	19,1 (0.75)	150,0 (5.90)	160,0 (6.3)	150,0 (5.90)	2 (0.08)	DN80 PN6 EN 1092-1 DN80 PN16 EN 1092-1 3" ASME B16.5 150 lb
zu400762	19,1 (0.75)	170,0 (6.69)	190,5 (7.5)	170,0 (6.69)	2 (0.08)	DN100 PN6 EN 1092-1 DN100 PN16 EN 1092-1 4" ASME B16.5 150 lb
zu400763	21,0 (0.82)	225,0 (8.86)	241,3 (9.5)	215,0 (8.46)	3 (0.12)	DN150 PN6 EN 1092-1 DN150 PN16 EN 1092-1 6" ASME B16.5 150 lb



### Mounting flange

#### Mounting flange rectangular, PP, 10 .. 18mm (0.39 .. 0.71")

Article-number	d2 mm (Inch)	Lk min. mm (Inch)	Lk max. mm (Inch)	D mm (Inch)	T (thickness) mm (Inch)	Fitting to counter flanges
zu400764	19,1 (0.75)	110,0 (4.33)	125,0 (4.92)	125,0 (4.92)	10...12 (0.39...0.47)	DN50 PN6 EN 1092-1 DN50 PN16 EN 1092-1 2" ASME B16.5 (150 lb)
zu400765	19,1 (0.75)	150,0 (5.90)	160,0 (6.3)	150,0 (5.90)	10...12 (0.39...0.47)	DN80 PN6 EN 1092-1 DN80 PN16 EN 1092-1 3" ASME B16.5 150 lb
zu400766	19,1 (0.75)	170,0 (6.69)	190,5 (7.5)	170,0 (6.69)	10...12 (0.39...0.47)	DN100 PN6 EN 1092-1 DN100 PN16 EN 1092-1 4" ASME B16.5 150 lb
zu400767	21,0 (0.82)	225,0 (8.86)	241,3 (9.5)	215,0 (8.46)	15...18 (0.59...0.71)	DN150 PN6 EN 1092-1 DN150 PN16 EN 1092-1 6" ASME B16.5 150 lb

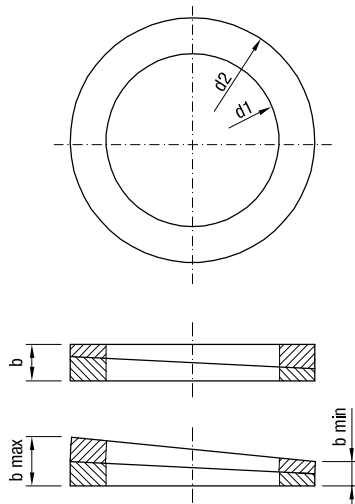


## Accessories - dimensions

### Variable seal

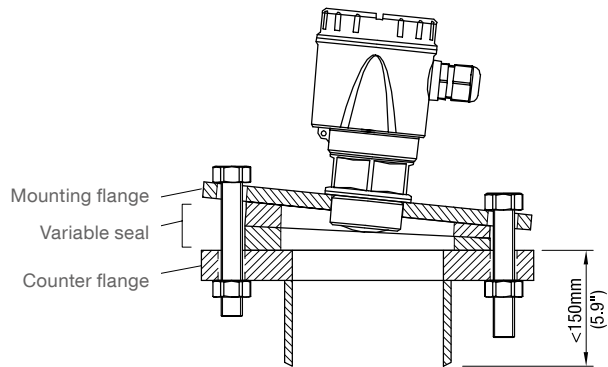
Variable seal Article number	d1 mm (Inch)	d2 mm (Inch)	b mm (Inch)	b max mm (Inch)	b min mm (Inch)	Fitting Mounting flange rectangular	Fitting to counter flanges
zu400772	115,0 (4.53)	162,0 (6.34)	24 (0.94)	33 (1.30)	14 (0.55)	zu400766	DN100 PN16 EN 1092-1
zu400773	169,0 (6.65)	218,0 (8.58)	27 (1.06)	39 (1.54)	14 (0.55)	zu400767	DN150 PN16 EN 1092-1
zu400774	115,0 (4.53)	171,0 (6.73)	24 (0.94)	33 (1.30)	14 (0.55)	zu400766	4" ASME B16.5 150 lb
zu400775	168,0 (6.61)	219,0 (8.62)	27 (1.06)	39 (1.54)	14 (0.55)	zu400767	6" ASME B16.5 150 lb

**Variable seal**



The variable seal consists of an upper and lower disk which can be rotated against each other. This allows to continuously adjust an angle from 0° to 8°.

**Mounting**



The variable seal is being clamped between Mounting flange and counter flange.

Fixing torque of the screws 5-10Nm.

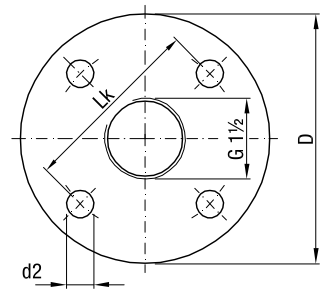
Observe:

- Max. length of socket
- Grease or oil may damage the seal
- Avoid multiple use, this may reduce the tightness

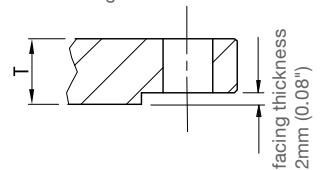
## Accessories - dimensions

### Standard flange

Article-number	Type	Number of holes	d2 mm (Inch)	Lk mm (Inch)	D mm (Inch)	T (thickness) mm (Inch)
zu400776/ -777	DN50 PN6	4	14,0 (0.55)	110,0 (4.33)	140,0 (5.51)	14,0 (0.55)
zu400778/ -779	DN50 PN16	4	18,0 (0.71)	125,0 (4.92)	165,0 (6.5)	18,0 (0.71)
zu400780/ -781	DN80 PN6	4	18,0 (0.71)	150,0 (5.91)	190,0 (7.48)	16,0 (0.63)
zu400782/ -783	DN80 PN16	8	18,0 (0.71)	160,0 (6.3)	200,0 (7.87)	20,0 (0.79)
zu400784/ -785	DN100 PN6	4	18,0 (0.71)	170,0 (6.69)	210,0 (8.27)	16,0 (0.63)
zu400786/ -787	DN100 PN16	8	18,0 (0.71)	180,0 (7.09)	220,0 (8.66)	20,0 (0.79)
zu400788/ -789	DN150 PN6	8	18,0 (0.71)	225 (8.85)	265 (10.43)	18,0 (0.71)
zu400790/ -791	DN150 PN16	8	22,0 (0.87)	240,0 (9.45)	285,0 (11.2)	22,0 (0.87)
zu400792/ -793	ASME 2" 150 lbs	4	19,1 (0.75)	120,7 (4.75)	152,4 (6.01)	19,1 (0.75)
zu400794/ -795	ASME 3" 150 lbs	4	19,1 (0.75)	152,4 (6.01)	190,5 (7.5)	23,9 (0.94)
zu400796/ -797	ASME 4" 150 lbs	8	19,1 (0.75)	190,5 (7.5)	228,6 (9.0)	23,9 (0.94)
zu400798/ -799	ASME 6" 150 lbs	8	22,2 (0.87)	241,3 (9.5)	279,4 (11.0)	25,4 (1.0)



ASME flanges raised face:



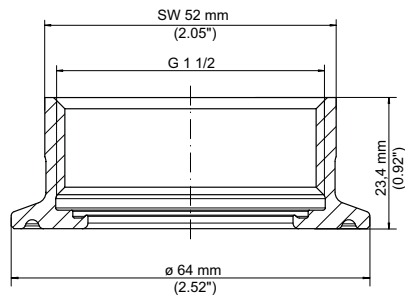
DN flanges: EN 1092-1 type A, flat faced  
 ASME flanges: B16.5 raised face

### Hygienic connections (adapter)

#### Triclamp

Article number: zu400705

DN50 (2")

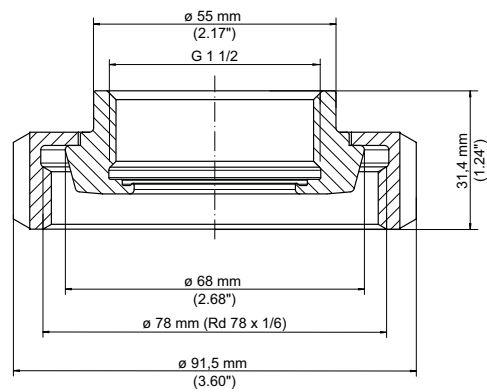


O-ring sealing EPDM  
 -40 .. +80 °C (-40 .. +176 °F)  
 Ra < 0,76um

#### Slotted nut

Article number: zu400708

DN50

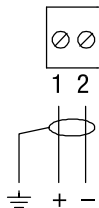


O-ring sealing EPDM  
 -40 .. +80 °C (-40 .. +176 °F)

## Electrical installation

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### 4-20 mA



4-20 mA 2-wire loop  
NR 7100: 12 .. 35 V DC  
NR 7100: 15 .. 35 V DC (use of Plug on Display)

With version "Intrinsically safe" (NR 7200 Pos.2 S, X, F, B) connection is done to an approved intrinsically safe circuit (barrier):

$U_i=30\text{ V}$   $I_i=131\text{ mA}$   $P_i=983\text{mW}$

The effective internal capacitance  $C_i$  and inductance  $L_i$  is negligibly small.

NR 7200 with Display: The terminals are located underneath the Display. Remove the Display to connect the wires.

Wire cross section: 0,2 mm<sup>2</sup> to 2,5 mm<sup>2</sup> (AWG 24 to 14)

Use of standard 2-wire cables. If electromagnetic interference is expected which is above the test values of EN 61326-1 for industrial areas, shielded cable should be used. Connect the cable screening to ground potential at one end on the supply side.

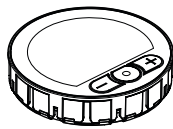
## Spare parts

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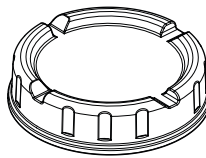
Minimum order value for separate orders of spare parts or accessories is 75 €.

	Spare part Article number	
Plug on Display (for NR 7200)	zu400713	•
Lid blue (for NR 7100 and NR 7200 without Plug on Display)	zu400714	•
Lid transparent (for NR 7200 with Plug on Display)	zu400715	•
Lid sealing (O-Ring)	zu400716	•
Counter nur G 1 1 / 2", material PP	zu300182	•

**Plug on Display**



**Lid**



**Lid sealing**

