

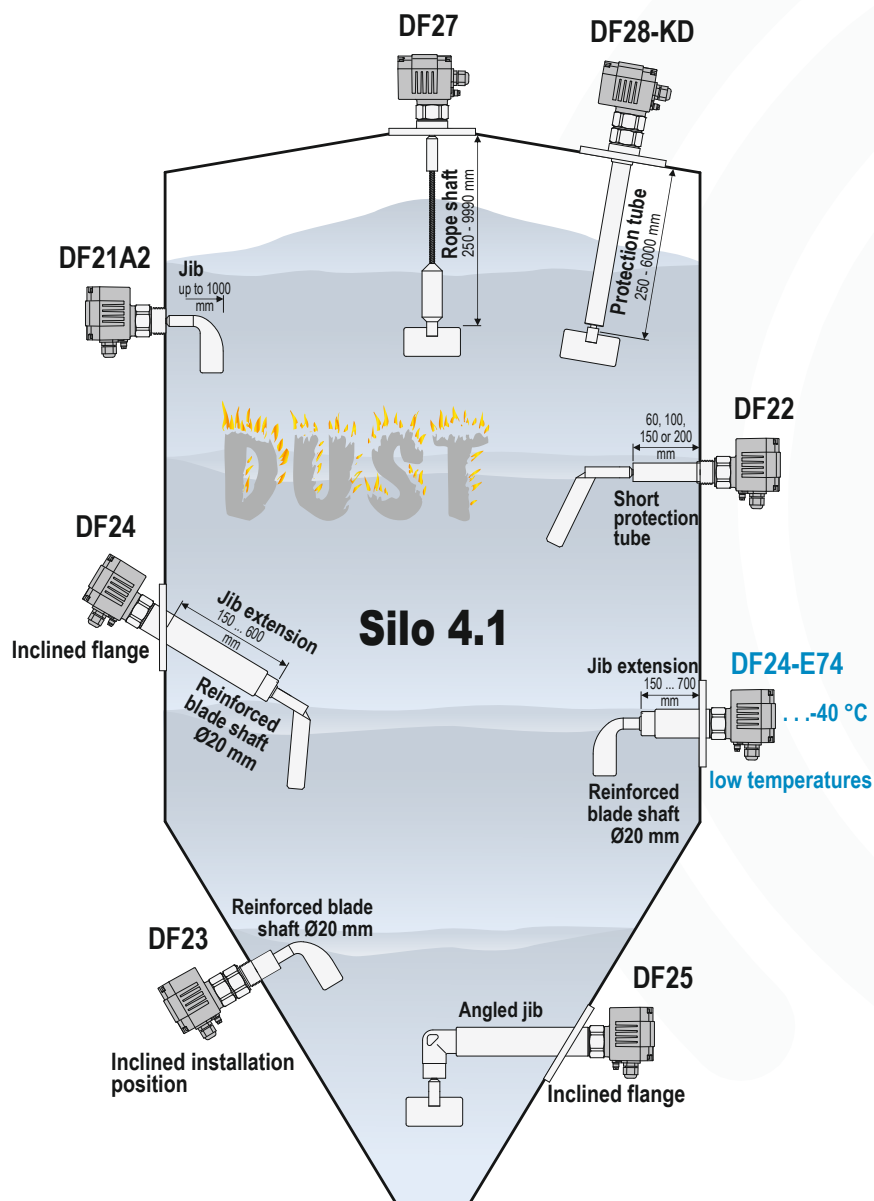
Level measurement	Guided wave radar	MOLOS _{wave}	1
	Yo-Yo sensing systems	MOLOS _{bob}	2
	Visualization	MOLOS _{visu}	3
level indicator	Rotation	MOLOS _{roto}	4
	Membrane	MOLOS _{membran}	5
	Vibration	MOLOS _{vibro}	6
	Microwave barrier	MOLOS _{barrier}	7
	Pendulum	MOLOS _{pendu}	8
Hose couplings	Coding	MOLOS _{code}	9
	Limit switch	MOLOS _{switch}	10
	Swivelling lever	MOLOS _{swing}	11
	Lockable couplings	MOLOS _{lock}	12
Bulk solids handling	Overfill protection	MOLOS _{safe}	13
	Silo filling device	MOLOS _{safe}	14
	Pressure gauge	MOLOS _{pressdec}	15
	Microwave flow sensor	MOLOS _{flow}	16
	Pinch valves	MOLOS _{valve}	17



Product features

- immune to dust, pressure and temperature
- applicable in potentially dust explosive atmospheres
- reliable, maintenance-free endurance runner

4 Application with combustible dust



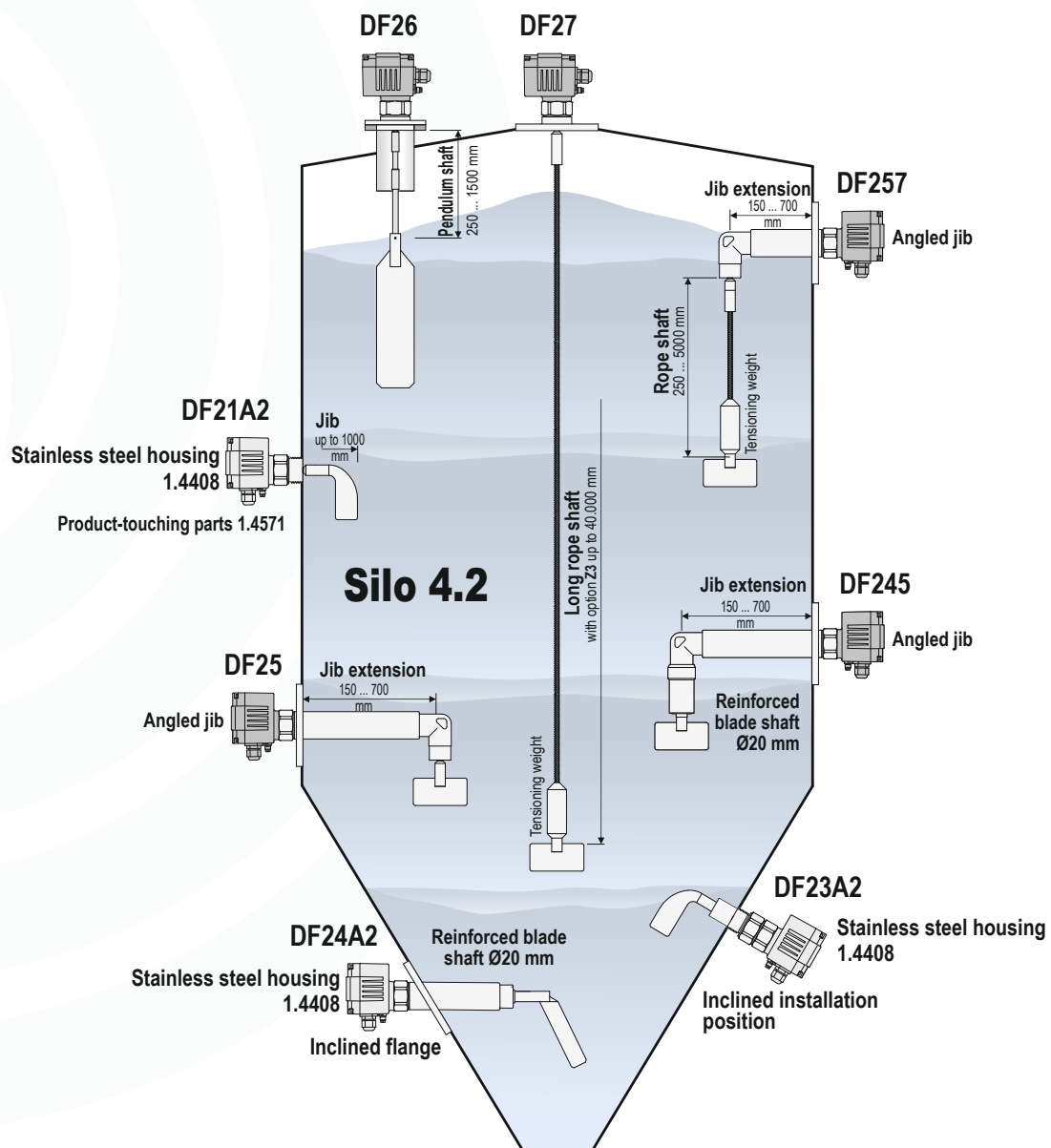


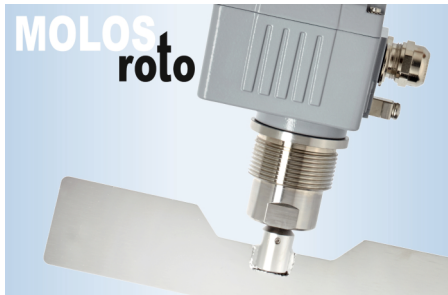
Product features

- DF27 and DF257 for detection of lower measurement heights
- DF23, DF24, and DF245 with reinforced blade shaft
- angled jib

4

Applicable to all bulk solids

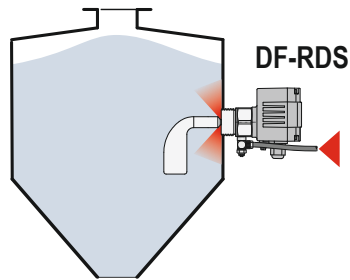




Product features

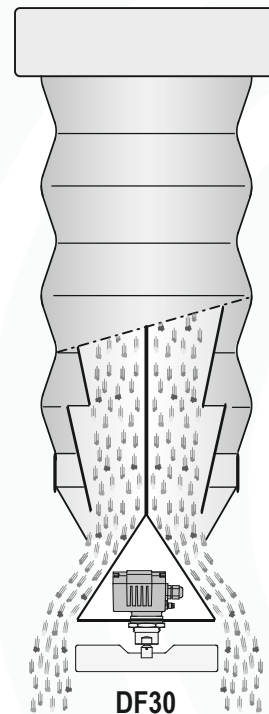
- application for bulk solids enriched with molasses, for example
- installation in the loading bellows closure cone
- damping of vibrations to protect against damage

4 Application for sticky bulk solids

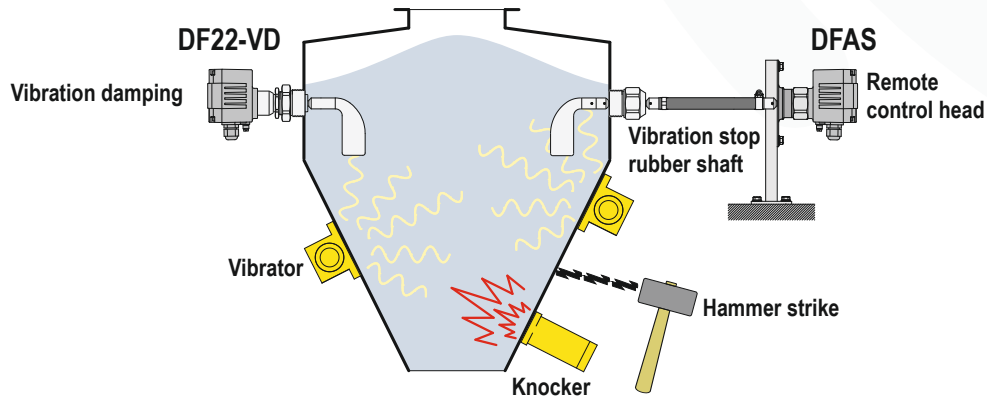


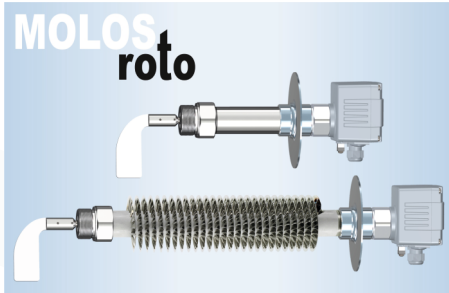
Ring gap flushing and overpressure encapsulation

Installed in loading bellows



Application in vibrations



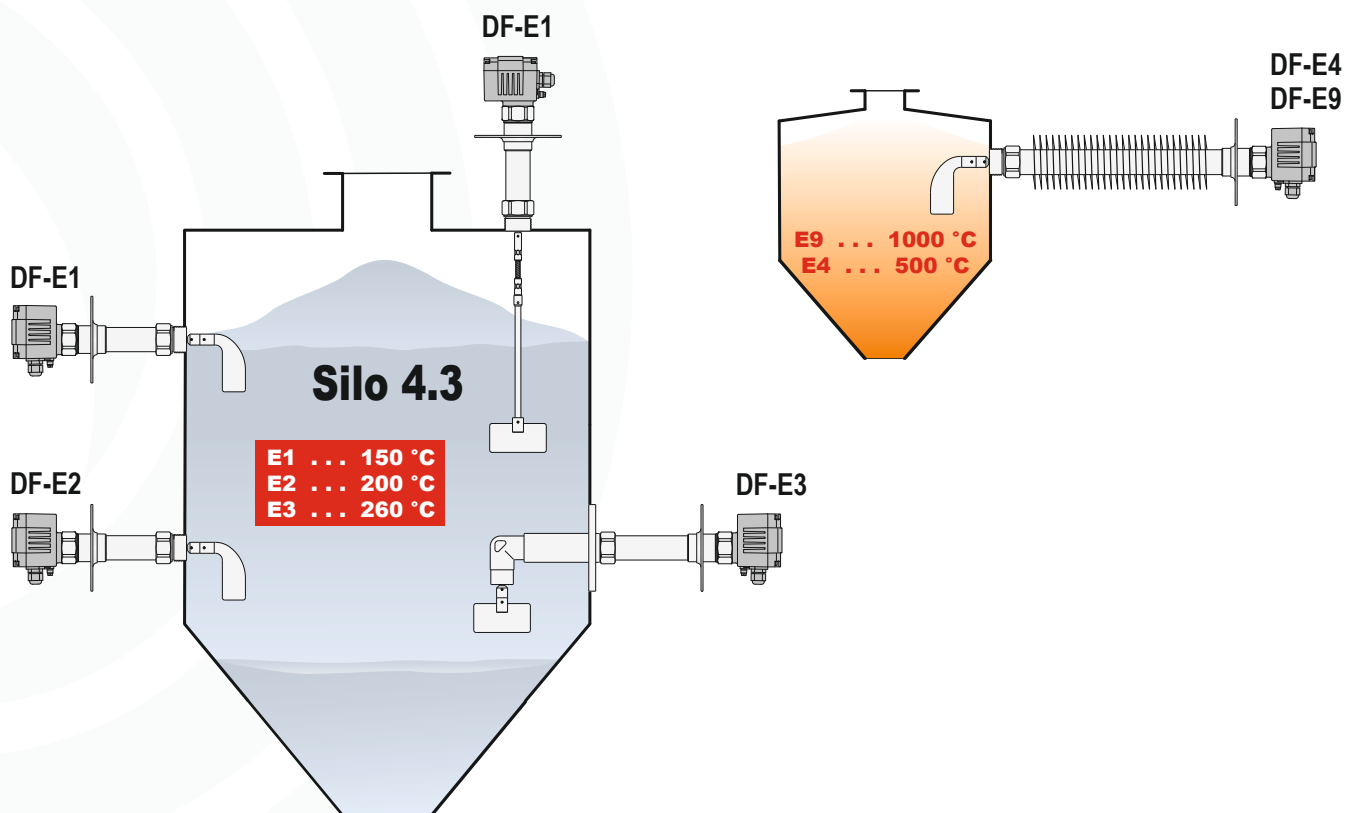


Product features

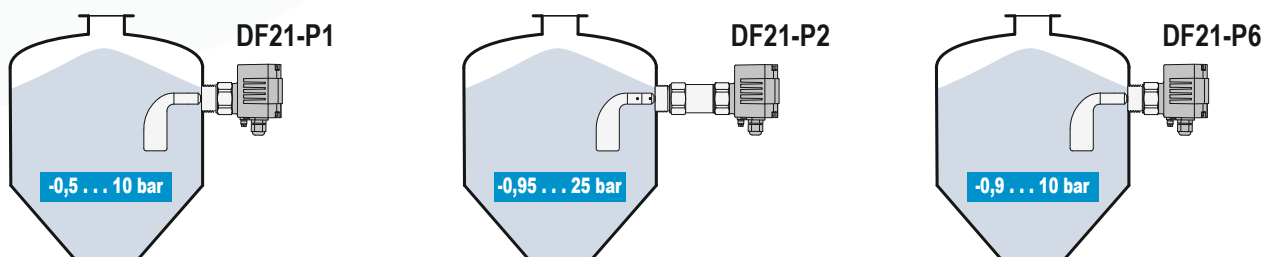
- process temperatures up to 500 °C (up to 1000 °C on request)
- pressure in the container up to 25 bar (higher pressures on request)

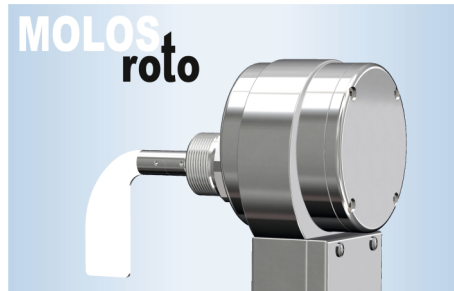
4

Application at high process temperatures



Application for high pressure in the container



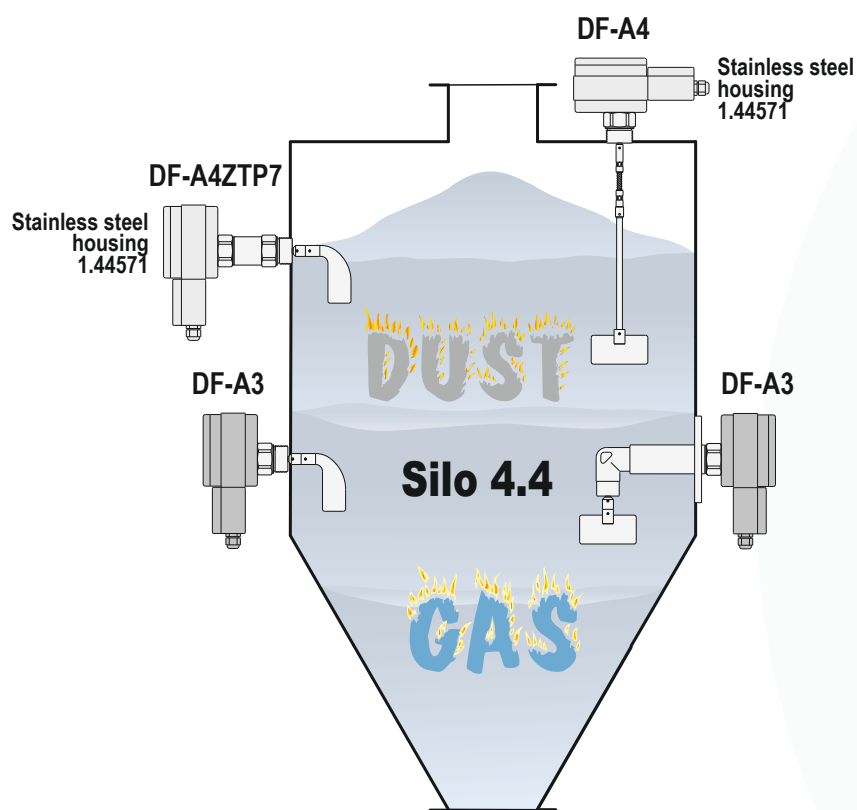


Product features

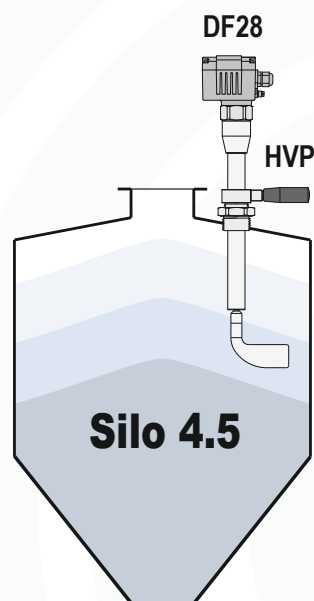
- applicable in potentially gas and dust explosive atmospheres
- height adjustment for different filling levels
- complete installation in Zone 20

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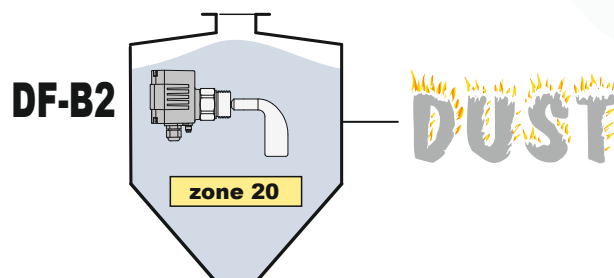
Application in the presence of gas



DF28 with height adjustment



Installation in containers with combustible dust in zone 20



Price information 2024-2025

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Level limit switch for bulk solids

	Content information	Page
any installation position	DF21 for a wide range of applications	08 - 11
	DF22 with short jib for a wide range of applications option: VD vibration dampening	12 - 15
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horizontal installation	DF245 with angled stable jib, 20 mm blade shaft and reinforced bearing	24 - 27
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	DF257 with angled jib and hanging rope shaft suitable as full, demand and empty indicator	32 - 35
vertical installation	DF26 with hanging pendulum shaft and anti-buckling protection up to 1.500 mm in length	36 - 39
	DF27 with hanging rope shaft and tensioning weight up to 10.000 mm in length	40 - 43
	DF28 with protection tube up to 6.000 mm length, any installation position up to 1000 mm options: SD1V protection roof, HVP height adjustment	44 - 49
	DF30 for loading bellows	50 - 51
	DFAS with remote control head and vibration stop rubber shaft	52 - 53
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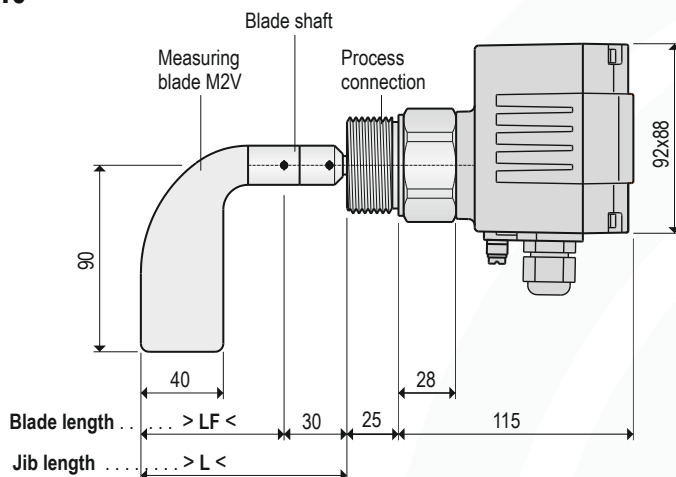
Full, empty and demand indicator (level limit switch)
for any mounting position

DF21

A1 aluminium

A2 stainless steel 1.4408 / 316

Compact housing

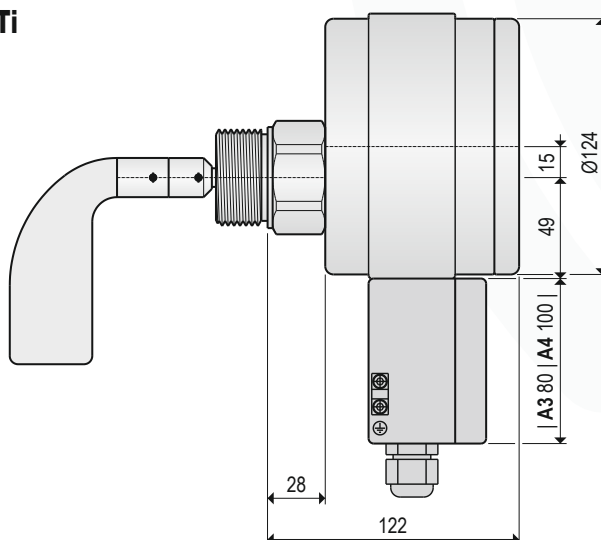


DF21

A3 aluminium

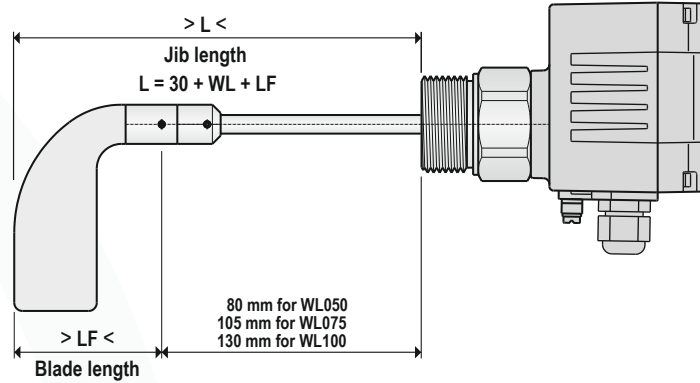
A4 stainless steel 1.4571 / 316Ti

Round housing



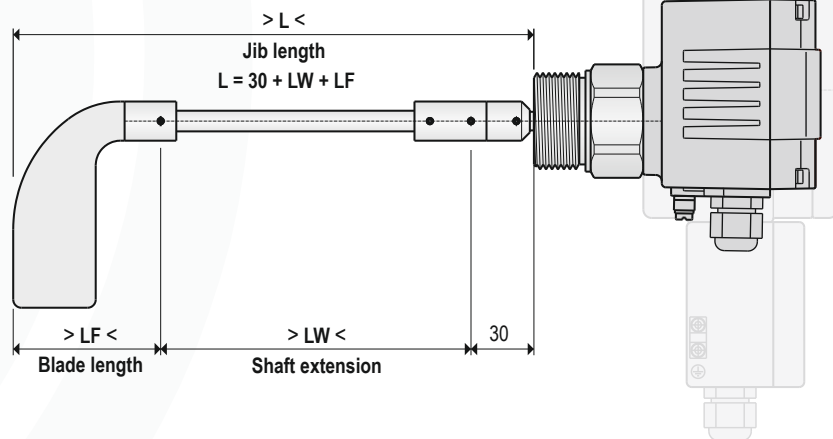
DF21

WL extended shaft



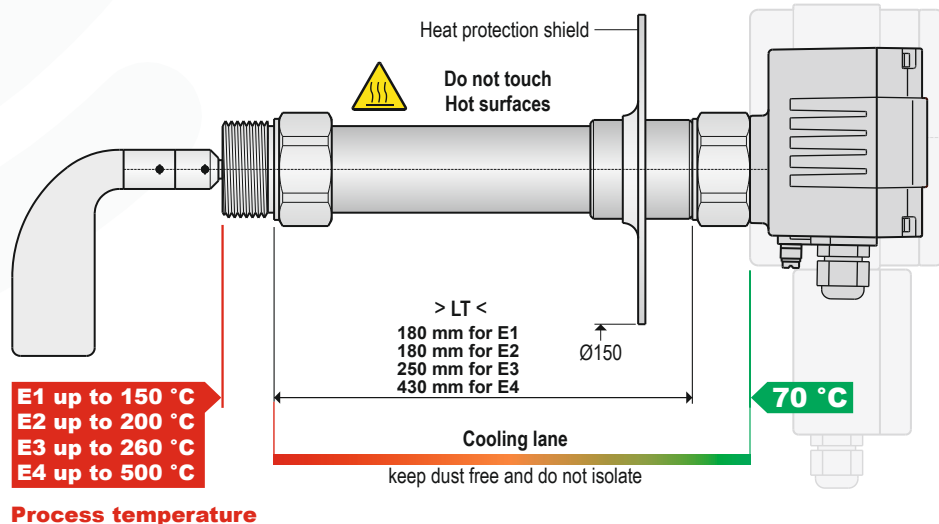
DF21

LW shaft extension



DF21

E1, E2, E3 or E4
Temperature decoupling



Offer information 2024-2025

DF21

Level indicator for bulk solids
compact and versatile applicable
Shaft length variable up to 1000 mm

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	
A2	Stainless steel 1.4408 / 316	

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	ATEX Ⓢ II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	ATEX Ⓢ II 1D IIIC Dust ^{D2}
A1B3	Aluminium, coated RAL 7001	ATEX Ⓢ II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	ATEX Ⓢ II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	ATEX Ⓢ II 1D IIIC Dust ^{D2}
A2B3	Stainless steel 1.4408 / 316	ATEX Ⓢ II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	ATEX Ⓢ II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	ATEX Ⓢ II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	ATEX Ⓢ II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	ATEX Ⓢ II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	ATEX Ⓢ II 2G IIC + II 1D IIIC Gas+Dust ^{D2}

Devices for use in zone 0 ATEX Ⓢ II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	
C2	110 ... 120 V AC 50 ... 60 Hz	
C3	48 V AC 50 ... 60 Hz	
C4	24 V AC 50 ... 60 Hz	
C5	24 V DC	
C6	12 V DC	
C7	48 V DC	
C9	Special voltages	on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	
H2	Signal lamp LED green installed in the device lid	
H81	Large signal lamp 230 V AC LED green mounted on the device lid	
H85	Large signal lamp 24 V DC LED green mounted on the device lid	

Bulk solids temperature / $T_{(process)}$

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R1 or R5 ...
E2	-25 °C ... +200 °C	only with shaft seal ring R5
E3	-25 °C ... +260 °C	only with shaft seal ring R5
E4	-25 °C ... +500 °C	only with shaft seal ring R8
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C
E9	up to +1000 °C	on request

Pressure in the container / p (Process)

P0 Standard -0.5 ... 5 bar ³⁾

P1	-0.5 bar ... 10 bar	
P2	-0.95 bar ... 25 bar ⁴⁾	gas-tight and leak-free
P6	-0.9 bar ... 10 bar	

DF21

Order code ...

Options

Process connection (product touching) made of material

	AlMgSi	1.4301	1.4571
G1 Thread G1 DIN EN ISO 228-1	X	X	
G2 Thread G1¼ DIN EN ISO 228-1	X	X	X
G3 Thread G1½ DIN EN ISO 228-1	X	X	X
G5 Thread M30x1,5	X	X	
G6 Thread M32x1,5	X	X	
F1 Flange F70 Ø110, 4xØ9, Lk90	X	X	X
F2 Flange F100 150x150, 4xØ18, Lk170	X	X	
F5 Flange DN32 PN10		X	X
F6 Flange DN100 PN6		X	X
F9 further flanges			on request
F42 Dairy coupling DN50/2 incl. grooved nut made of stainless steel 1.4404 / 316L			X
F46 Clamp coupling DN50/2			X

A Aluminium AlMgSi / *AlSi12
E Stainless steel 1.4301 / 304
I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti
X further materials on request

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)

Shaft seal ring (product touching) made of material

R0 Standard NBR, black (suitable for most bulk solids)

R1 PTFE/Viton® (FKM)
R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad 5)
R1DS PTFE/Viton® (FKM) with annular gap flushing and pressurized enclosure
R2 NBR bright for food
R5 filled PTFE bright for food
R5A filled PTFE bright for food with Chesterton-629 fat pad 5)
R5DS filled PTFE bright for food with annular gap flushing and pressurized enclosure
R8 Graphite only with bulk solids temperature E4

Measuring blade for light bulk solids (product touching) stainless steel 1.4301

M0 without measuring blade
S2 Socket blade 130x30 inclined fits through G2, G3, all flanges
T1 Blade T50 98x50 fits through F2, F6
T2 Blade T100 98x100 fits through F2, F6
T5 Blade T250 250x100 mounting possible from inside only
X1 Blade X50 98x50 fits through F2, F6
X2 Blade X100 98x100 fits through F2, F6
X3 Blade X200 180x100 mounting possible from inside only
K1 Hinged blade 200x30 - T230 fits through G2, G3, all flanges

Measuring blade reinforced (product touching) stainless steel 1.4301 1.4571

S2V Socket blade 130x30 inclined fits through G2, G3, all flanges	X	X
M1V Socket blade 90x28 fits through G1, G2, G3, all flanges	X	X
M2V Socket blade 90x40 fits through G3, all flanges	X	X
T1V Blade T50 98x50 fits through F2, F6	X	X
T2V Blade T100 98x100 fits through F2, F6	X	X
K3V Hinged blade 180x28 fits through G2, G3, all flanges	X	
Y3V Blade 98x45x4 suitable for small round containers	X	
M9 further measuring blades		on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib extension (product touching) stainless steel 1.4301 1.4571

Standard without extension > code WL and LW is omitted

WL Extended shaft		
0 5 0 50 mm longer	X	
0 7 5 75 mm longer	X	
1 0 0 100 mm longer	X	

LW Shaft extension	X	X
per started 100 mm	X	X

0 0 0 Length > enter in mm / last digit 0

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Accessories

Hexagonal nuts made of

	AlMgSi	1.4301	1.4571
-SM1 G1 DIN EN ISO 228-1	X	X	
-SM2 G1¼ DIN EN ISO 228-1	X	X	X
-SM3 G1½ DIN EN ISO 228-1	X	X	X
-SM5 M30x1.5		X	
-SM6 M32x1.5		X	

A Aluminium AlMgSi
E Stainless steel 1.4301 / 304
I Stainless steel 1.4571 / 316Ti
X further materials on request

Order code

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic
-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic
-SDE Pressure compensation element 1.4305 / 303
-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001
only approved for zone 22 and zone-free and only for compact housing A1 and A2

Delivery from stock

ordered until 12° - dispatched at 16°

Quantity discounts

5 - 9	3 %
10 - 24	5 %
25 - 50	10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

- 1) ATEX only possible for H1/H2 with option A1B3 or A2B3.
- 2) max. bulk solids temperature with B2 -20 °C ... +45 °C
- 3) pressure in the container with B1, B2, B3 -80 ... +80 mbar
- 4) with zone separating element DF-P2 (gas-tight and leak-free)
- 5) Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

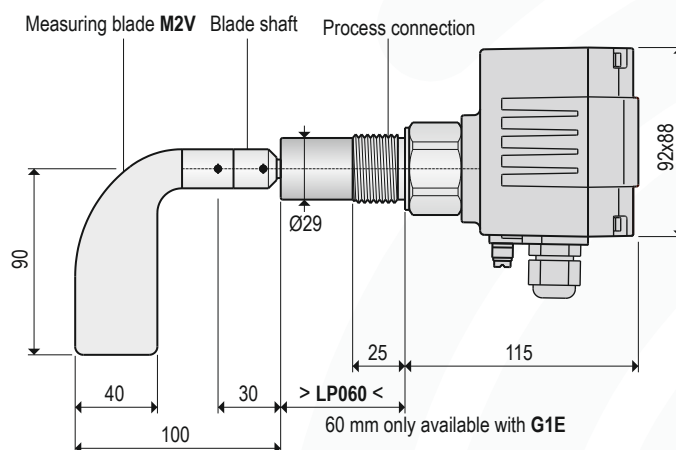
and are therefore not required in the order code, but are described in the device text.

Full, empty and demand indicator (level limit switch)
with short jib for any mounting position

DF22

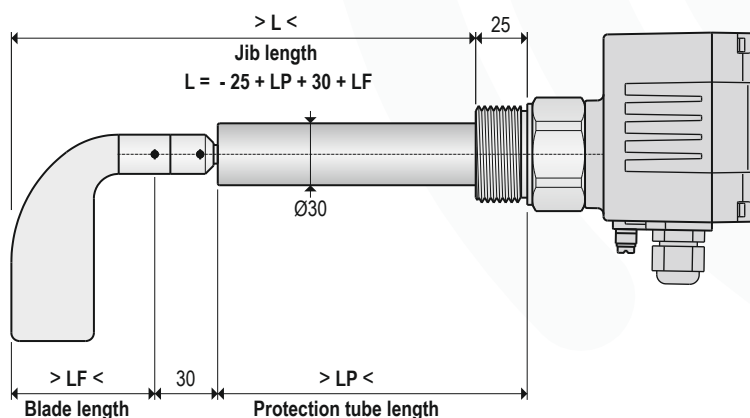
A1 aluminium
A2 stainless steel 1.4408 / 316
Compact housing
LP060 60 mm protection tube

4



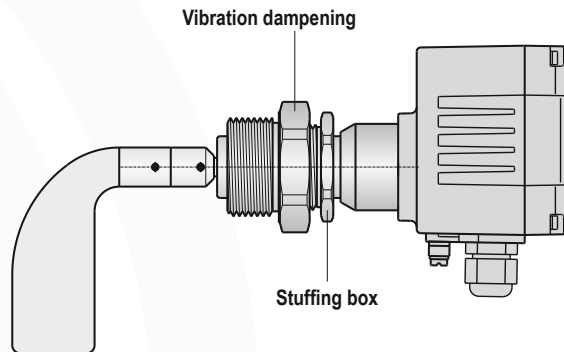
DF22

A1 aluminium
A2 stainless steel 1.4408 / 316
Compact housing
LP100 100 mm protection tube
LP150 150 mm protection tube
LP200 200 mm protection tube



DF22 ... LP060

VD vibration dampening for bulk solids temperatures up to 80 °C



For use of MOLOSroto level indicators near vibrators and beaters.
Dampens the transmission of vibration and shock to the device.

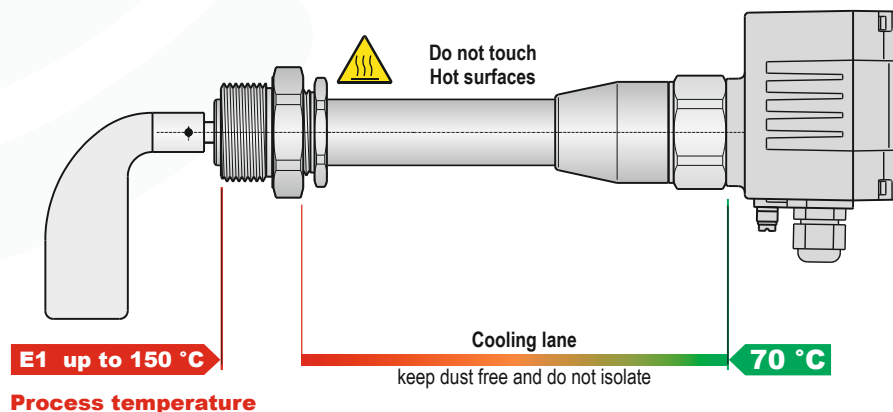
In case of large oscillations and knocking impacts, we recommend the solution with remote control head. (see page 52-53)

DF22 ... LP200

VDE vibration dampening for bulk solids temperatures up to 150 °C

For higher bulk goods temperatures up to 150 °C:

Choose protection tube length LP200 and install the DF22 with the vibration dampening as shown, so that a cooling lane is created.



Offer information 2024-2025

DF22

4 Level indicator for bulk solids
short protection tube up to 200 mm length

vertical and horizontal loadable

penetrates thin cakings
e.g. which arise due to frost

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	.....
A2	Stainless steel 1.4408 / 316	.....

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	.....	ATEX II 1/2D IIIC Dust	.....
A1B2	Aluminium, coated RAL 7001	.....	ATEX II 1D IIIC Dust D2	.....
A1B3	Aluminium, coated RAL 7001	.....	ATEX II 1/3D IIIB Dust	.....
A2B1	Stainless steel 1.4408 / 316	.....	ATEX II 1/2D IIIC Dust	.....
A2B2	Stainless steel 1.4408 / 316	.....	ATEX II 1D IIIC Dust D2	.....
A2B3	Stainless steel 1.4408 / 316	.....	ATEX II 1/3D IIIB Dust	.....

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	.....
C2	110 ... 120 V AC 50 ... 60 Hz	.....
C3	48 V AC 50 ... 60 Hz	.....
C4	24 V AC 50 ... 60 Hz	.....
C5	24 V DC	.....
C6	12 V DC	.....
C7	48 V DC	.....
C9	Special voltages	 on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5 5 rpm on request

Function monitoring

Standard without monitoring

D1	of the rotation	.....
D2	of the power supply	.....
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	.....

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	.....
H2	Signal lamp LED green installed in the device lid	.....
H81	Large signal lamp 230 V AC LED green mounted on the device lid	.....
H85	Large signal lamp 24 V DC LED green mounted on the device lid	.....

Bulk solids temperature / T_(Process)

E0 Standard -25 °C...+80 °C ²⁾

E7 Device heating 2.5 watt for temperatures up to -35 °C on request

Pressure in the container / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

P1	-0.5 bar ... 10 bar	.....
P0X	max. -0.5 bar ... 2 bar for devices with vibration dampening	.....

DF22

Order code ...

Options

Process connection (product touching) made of material

	AlMgSi	1.4301
G1 Thread G1 DIN EN ISO 228-1	X	X
G2 Thread G1¼ DIN EN ISO 228-1	X	X
G3 Thread G1½ DIN EN ISO 228-1	X	X
F1 Flange F70 Ø110, 4xØ9, Lk90	X	X
F2 Flange F100 150x150, 4xØ18, Lk170	X	X
F5 Flange DN32 PN10		X
F6 Flange DN100 PN6		X
F9 further flanges		on request
A Aluminium AlMgSi / *AlSi12		
E Stainless steel 1.4301 / 304		

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)	
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Shaft seal ring (product touching) made of material

R0 Standard NBR, black (suitable for most bulk solids)

R1 PTFE/Viton® (FKM)	
R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad ⁵⁾	
R2 NBR bright for food	

Measuring blade for light bulk solids (product touching)

	stainless steel	1.4301
M0 without measuring blade		
S2 Socket blade 130x30 inclined fits through G2, G3, all flanges		
T1 Blade T50 98x50 fits through F2, F6		
T2 Blade T100 98x100 fits through F2, F6		
X1 Blade X50 98x50 fits through F2, F6		
X2 Blade X100 98x100 fits through F2, F6		
X3 Blade X200 180x100 mounting possible from inside only		
K1 Hinged blade 200x30 - T230 fits through G2, G3, all flanges		

Measuring blade reinforced (product touching)

	stainless steel	1.4301
S2V Socket blade 130x30 inclined fits through G2, G3, all flanges		
M1V Socket blade 90x28 fits through G1, G2, G3, all flanges		
M2V Socket blade 90x40 fits through G3, all flanges		
T1V Blade T50 98x50 fits through F2, F6		
T2V Blade T100 98x100 fits through F2, F6		
K3V Hinged blade 180x28 fits through G2, G3, all flanges		
M9 further measuring blades		on request

Standard stainless steel 1.4301 / 304

Jib extension

LP Protection tube (product touching)	stainless steel	1.4301
0 6 0 60 mm long (only available for G1E)		
1 0 0 100 mm long		
1 5 0 150 mm long		
2 0 0 200 mm long		

Standard stainless steel 1.4301 / 304

Vibration dampening only available with G3E and up to 2 bar (product touching) made of stainless steel 1.4301 / 304

without dampening

VDN Sealing bellow made of NBR black	
Bulk solids temperature -25°C...+80°C	

VDE Sealing bellow made of silicone bright for food	
Bulk solids temperature -40°C...+150°C	
only with shaft seal ring R1 or R5	

Accessories

Hexagonal nuts made of

	AlMgSi	1.4301
-SM1 G1 DIN EN ISO 228-1	X	X
-SM2 G1¼ DIN EN ISO 228-1	X	X
-SM3 G1½ DIN EN ISO 228-1	X	X
A Aluminium AlMgSi		
E Stainless steel 1.4301 / 304		

Order code

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic	
-KV2 M20x1.5 brass, nickel-plated for ATEX devices	

Condensation protection made of material

-SDK Pressure compensation element plastic	
-SDE Pressure compensation element 1.4305 / 303	

-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001 only approved for zone 22 and zone-free and only for compact housing A1 and A2

Delivery from stock

ordered until 12° - dispatched at 16°

Quantity discounts

5 - 9	3 %
10 - 24	5 %
25 - 50	10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

- 1) ATEX only possible for H1/H2 with option A1B3 or A2B3.
- 2) max. bulk solids temperature with B2 -20 °C ... +45 °C
- 3) pressure in the container with B1, B2, B3 -80 ... +80 mbar
- 4) with zone separating element DF-P2 (gas-tight and leak-free)
- 5) Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code, but are described in the device text.

Full, empty and demand indicator (level limit switch)

with short reinforced jib, 20 mm blade shaft and reinforced bearing for any mounting position

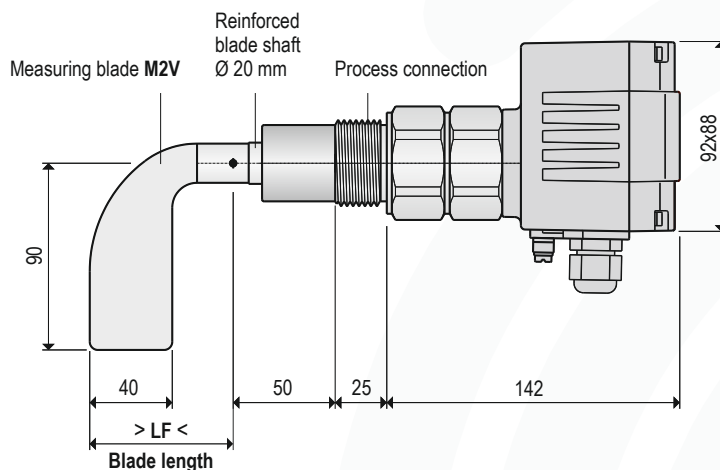
DF23

A1 aluminium

A2 stainless steel 1.4408 / 316

Compact housing

4

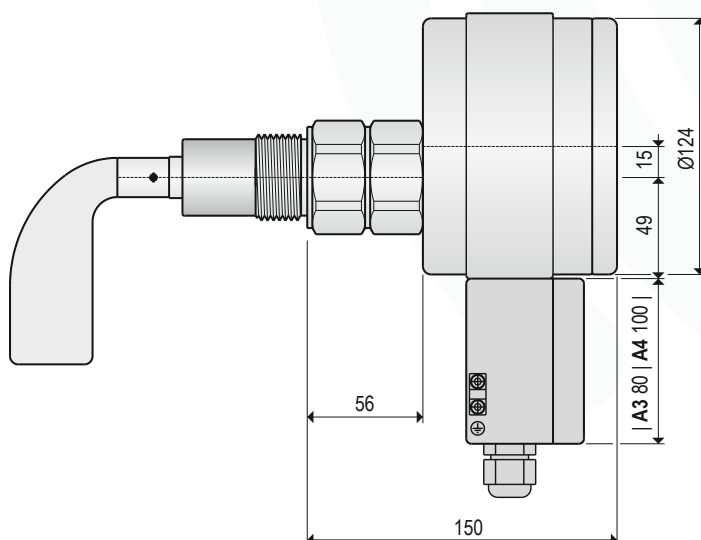


DF23

A3 aluminium

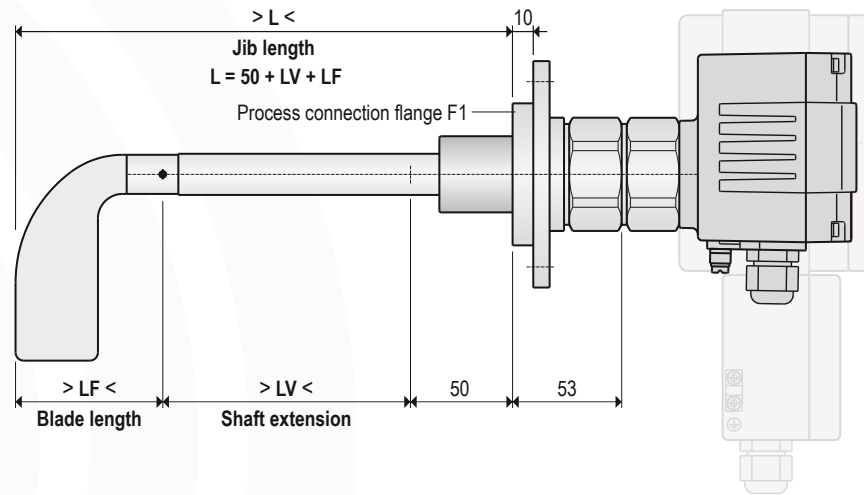
A4 stainless steel 1.4571 / 316Ti

Round housing



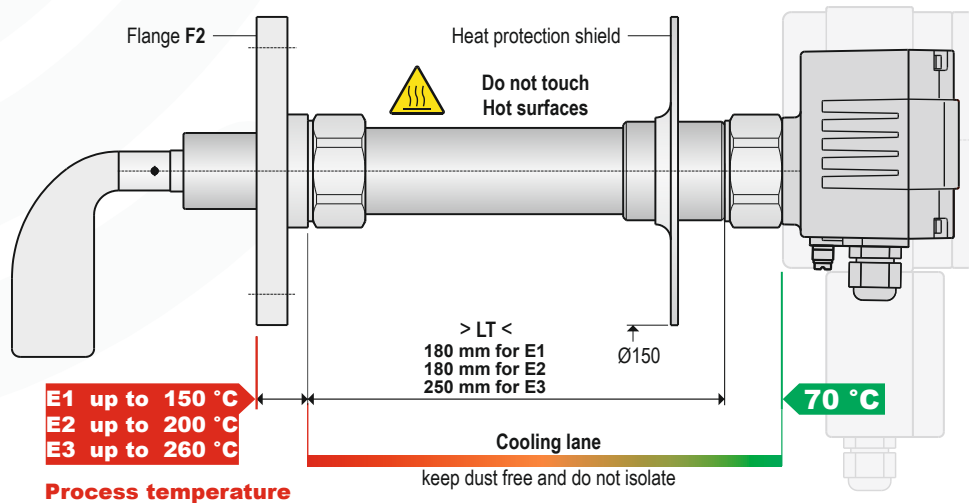
DF23

LV shaft extension



DF23

E1, E2, or E3
Temperature decoupling



Offer information 2024-2025

DF23

**Level indicator for heavy bulk solids
vertical and horizontal strong loadable
variable long blade shaft up to 2000 mm**

Protection roof not required

(do not use for light bulk solids in small containers)

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	.....
A2	Stainless steel 1.4408 / 316	.....

Compact housing C € conform and IP66 made of

		Certifications, certificates, approvals
A1B1	Aluminium, coated RAL 7001	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	ATEX II 1D IIIC Dust D2
A1B3	Aluminium, coated RAL 7001	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	ATEX II 1D IIIC Dust D2
A2B3	Stainless steel 1.4408 / 316	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

		Certifications, certificates, approvals
A3B1	Aluminium AlMgSi, anodized	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIC + II 1D IIIC Gas+Dust D2

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	.....
C2	110 ... 120 V AC 50 ... 60 Hz	.....
C3	48 V AC 50 ... 60 Hz	.....
C4	24 V AC 50 ... 60 Hz	.....
C5	24 V DC	.....
C6	12 V DC	.....
C7	48 V DC	.....
C9	Special voltages	 on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	.....
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	.....

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	.....
H2	Signal lamp LED green installed in the device lid	.....
H81	Large signal lamp 230 V AC LED green mounted on the device lid	.....
H85	Large signal lamp 24 V DC LED green mounted on the device lid	.....

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R7
E2	-25 °C ... +200 °C	only with shaft seal ring R7
E3	-25 °C ... +260 °C	only with shaft seal ring R7
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C

Pressure in the container / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

P1	-0.5 bar ... 10 bar	.....
P2	-0.95 bar ... 25 bar ⁴⁾	gas-tight and leak-free
P6	-0.9 bar ... 10 bar	.....

DF23

Order code ...

Options

Process connection (product touching) made of material

	AlMgSi	1.4301	1.4571
G2 Thread G1½ DIN EN ISO 228-1	X	X	X
G3 Thread G1½ DIN EN ISO 228-1	X	X	X
G4 Thread G2 DIN EN ISO 228-1	X	X	X
F1 Flange F70 Ø110, 4xØ9, Lk90	X	X	X
F2 Flange F100 150x150, 4xØ18, Lk170	X	X	X
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16		X	X
F9 further flanges			on request

A Aluminium AlMgSi / *AlSi12

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti

X further materials on request

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring) on request

Shaft seal ring (product touching) made of material

R6 NBR bright for food

R6A NBR bright for food with Chesterton-629 fat pad ⁵⁾

R6DS NBR bright for food with annular gap flushing and pressurized enclosure

R7 filled PTFE bright for food

R7A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾

R7DS filled PTFE bright for food with annular gap flushing and pressurized enclosure

Measuring blade reinforced (product touching)

Standard stainless steel 1.4301 1.4571

M0 without measuring blade

S2V Socket blade 130x30 inclined fits through G2, G3, all flanges

M1V Socket blade 90x28 fits through G1, G2, G3, all flanges

M2V Socket blade 90x40 fits through G3, all flanges

T1V Blade T50 98x50 fits through F2, F6

T2V Blade T100 98x100 fits through F2, F6

Y3V Blade 98x45x4 suitable for small round containers

SG Socket blade 126x8 inclined fits through G2, G3, all flanges

TG T-blade 98x8 fits through all flanges

M9 further measuring blades on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib extension (product touching)

Standard without extension (LV0000 and I is omitted) stainless steel 1.4301 1.4571

LV Shaft extension > the first 100 mm

each additional > started 100 mm

0 0 0 0 Length > enter in 100 mm steps

maximum 2000 mm long

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Accessories

Hexagonal nuts made of

	AlMgSi	1.4301	1.4571
-SM1 G1 DIN EN ISO 228-1	X	X	
-SM2 G1½ DIN EN ISO 228-1	X	X	X
-SM3 G1½ DIN EN ISO 228-1	X	X	X

A Aluminium AlMgSi

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

X further materials on request

Order code

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic

-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic

-SDE Pressure compensation element 1.4305 / 303

-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001

only approved for zone 22 and zone-free

and only for compact housing A1 and A2

Delivery from stock

ordered until 12° - dispatched at 16°

Quantity discounts

5 - 9 3 %

10 - 24 5 %

25 - 50 10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

1) ATEX only possible for H1/H2 with option A1B3 or A2B3.

2) max. bulk solids temperature with B2 -20 °C ... +45 °C

3) pressure in the container with B1, B2, B3 -80 ... +80 mbar

4) with zone separating element DF-P2 (gas-tight and leak-free)

5) Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

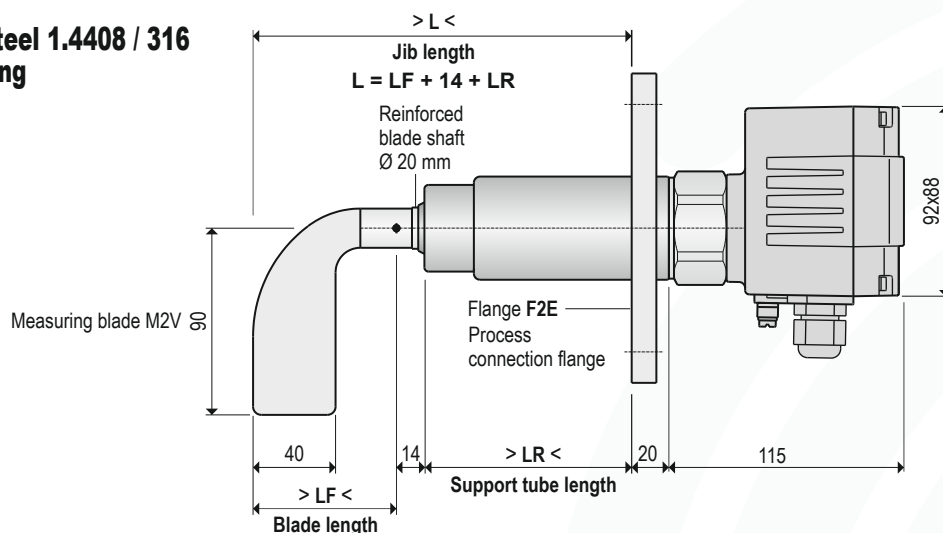
M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code, but are described in the device text.

Full, empty and demand indicator (level limit switch)
with long reinforced jib, 20 mm blade shaft and reinforced bearing for any mounting position

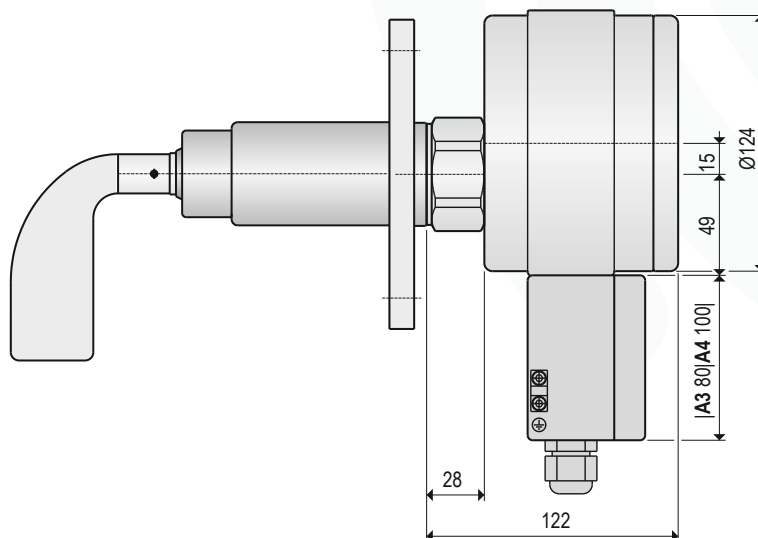
DF24

A1 aluminium
A2 stainless steel 1.4408 / 316
Compact housing



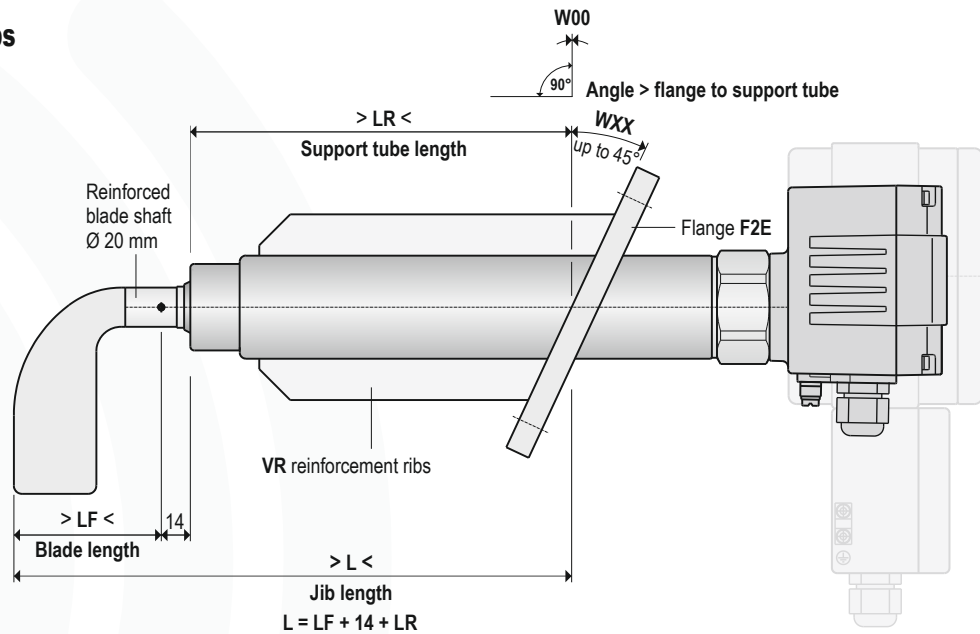
DF24

A3 aluminium
A4 stainless steel 1.4571 / 316Ti
Round housing



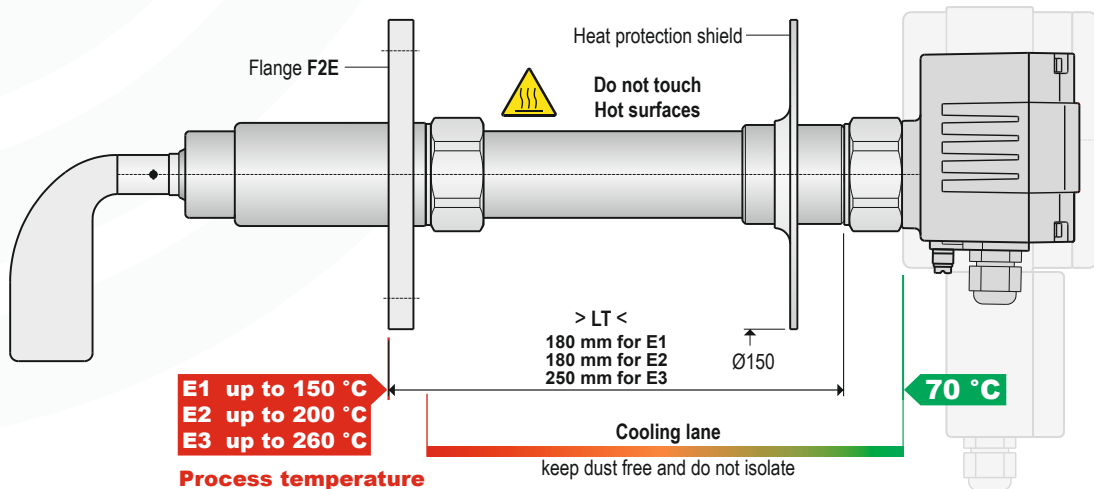
DF24

VR reinforcement ribs



DF24

E1, E2, or E3
Temperature decoupling



Offer information 2024-2025

DF24

4 Level indicator for heavy bulk solids
vertical and horizontal strong loadable

Variable length support tube up to 700 mm
penetrates thick silo walls and
thick wall caking

Protection roof not required

(do not use for light bulk solids in small containers)

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	
A2	Stainless steel 1.4408 / 316	

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	ATEX II 1D IIIC Dust D2
A1B3	Aluminium, coated RAL 7001	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	ATEX II 1D IIIC Dust D2
A2B3	Stainless steel 1.4408 / 316	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIC + II 1D IIIC Gas+Dust D2

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	
C2	110 ... 120 V AC 50 ... 60 Hz	
C3	48 V AC 50 ... 60 Hz	
C4	24 V AC 50 ... 60 Hz	
C5	24 V DC	
C6	12 V DC	
C7	48 V DC	
C9	Special voltages	on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	
H2	Signal lamp LED green installed in the device lid	
H81	Large signal lamp 230 V AC LED green mounted on the device lid	
H85	Large signal lamp 24 V DC LED green mounted on the device lid	

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C only with shaft seal ring R7	
E2	-25 °C ... +200 °C only with shaft seal ring R7	
E3	-25 °C ... +260 °C only with shaft seal ring R7	
E7	Device heating 2.5 watt for temperatures up to -35 °C	
E74	Device heating 3.5 watt for temperatures up to -40 °C	

Container pressure / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

DF24

Order code ...

Options

Process connection (product touching) made of material

	stainless steel	1.4301	1.4571
F2 Flange F100 150x150, 4xØ18, Lk170		X	
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16		X	X
F8 Flange DN125 PN6 Ø240, 8x18, Lk200		X	
F9 further flanges		on request	

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti

X further materials on request

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)

Shaft seal ring (product touching) made of material

R6 NBR bright for food

R6A NBR bright for food with Chesterton-629 fat pad ⁵⁾

R6DS NBR bright for food with annular gap flushing and pressurized enclosure

R7 filled PTFE bright for food

R7A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾

R7DS filled PTFE bright for food with annular gap flushing and pressurized enclosure

Measuring blade reinforced (product touching)

stainless steel 1.4301 1.4571

M0 without measuring blade

S2V Socket blade 130x30 inclined fits through G2, G3, all flanges X X

M1V Socket blade 90x28 fits through G1, G2, G3, all flanges X X

M2V Socket blade 90x40 fits through G3, all flanges X X

T1V Blade T50 98x50 fits through F2, F6 X X

T2V Blade T100 98x100 fits through F2, F6 X X

Y3V Blade 98x45x4 suitable for small round containers X

SG Socket blade 126x8 inclined fits through G2, G3, all flanges X

TG T-blade 98x8 fits through all flanges X

M9 further measuring blades on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib extension

LR Support tube length (product touching) stainless steel 1.4301 1.4571

1 5 0 150 mm long X X

2 0 0 200 mm long X X

2 5 0 250 mm long X X

3 0 0 300 mm long X X

3 5 0 350 mm long X X

4 0 0 400 mm long X X

4 5 0 450 mm long X X

5 0 0 500 mm long X X

Angle flange to support tube

W flange welded to support tube

0 0 Angle 90° X X

X X Angle enter up to max. 45° X X

Reinforcement ribs 2 ribs

Standard without ribs

VR Ribs and weld on X X

Standard stainless steel 304

I Stainless steel 1.4571 / 316Ti

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic

-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic

-SDE Pressure compensation element 1.4305 / 303

-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001

only approved for zone 22 and zone-free and only for compact housing A1 and A2

Quantity discounts

5 - 9	3 %
10 - 24	5 %
25 - 50	10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

¹⁾ ATEX only possible for H1/H2 with option A1B3 or A2B3.

²⁾ max. bulk solids temperature with B2 -20 °C ... +45 °C

³⁾ pressure in the container with B1, B2, B3 -80 ... +80 mbar

⁴⁾ with zone separating element DF-P2 (gas-tight and leak-free)

⁵⁾ Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

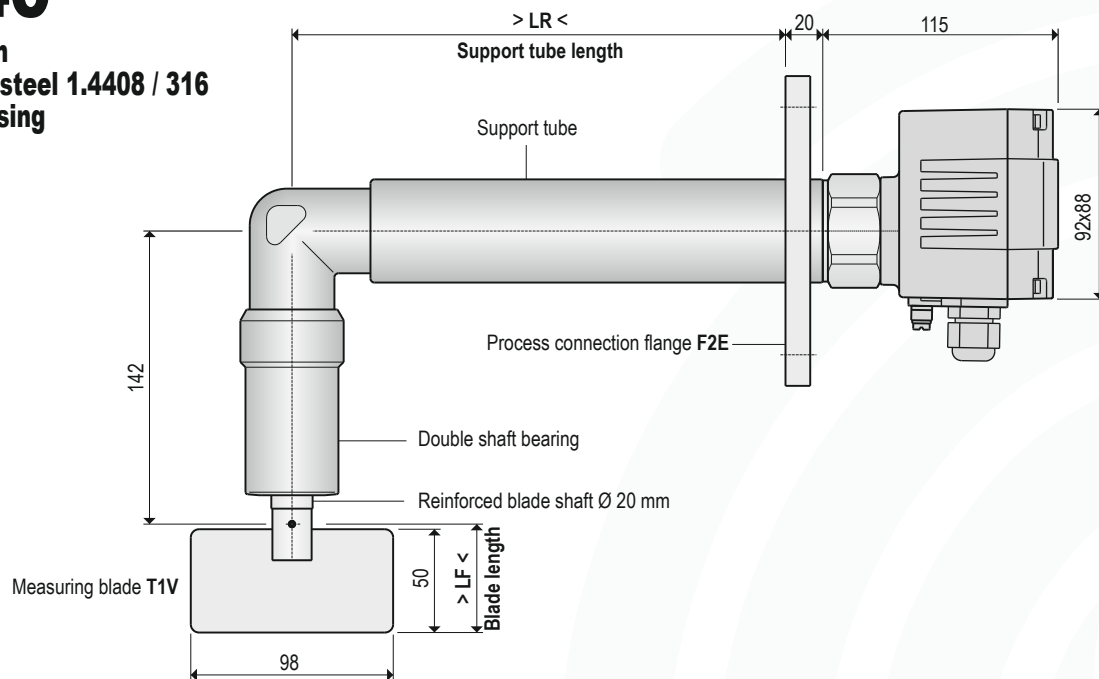
and are therefore not required in the order code, but are described in the device text.

Order code

Full, empty and demand indicator (level limit switch)
with angled stable jib, 20 mm blade shaft and reinforced bearing for horizontal mounting position

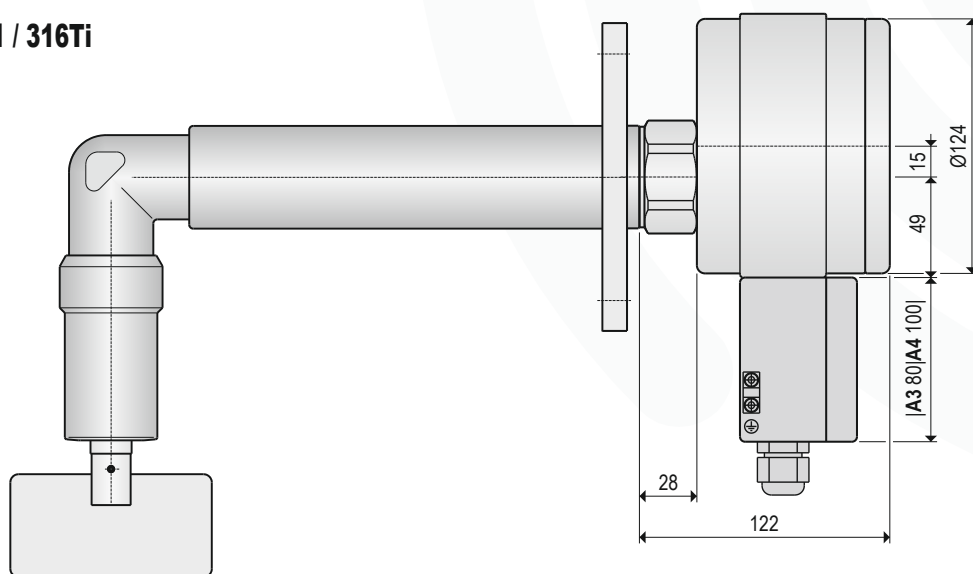
DF245

A1 aluminium
A2 stainless steel 1.4408 / 316
Compact housing



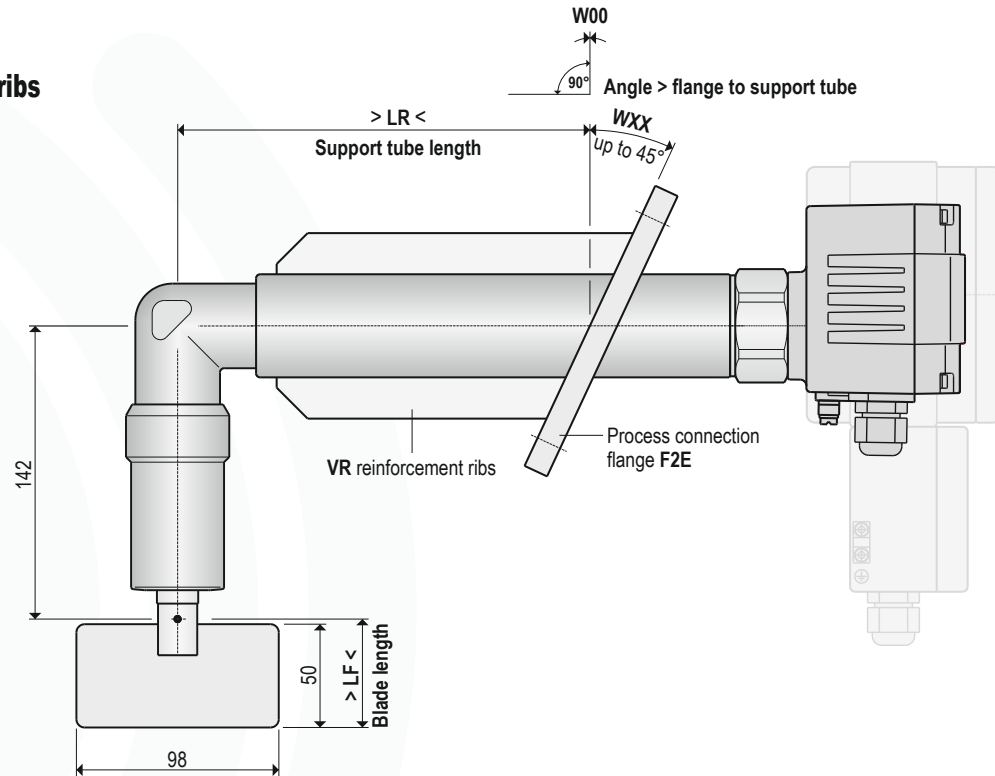
DF245

A3 aluminium
A4 stainless steel 1.4571 / 316Ti
Round housing



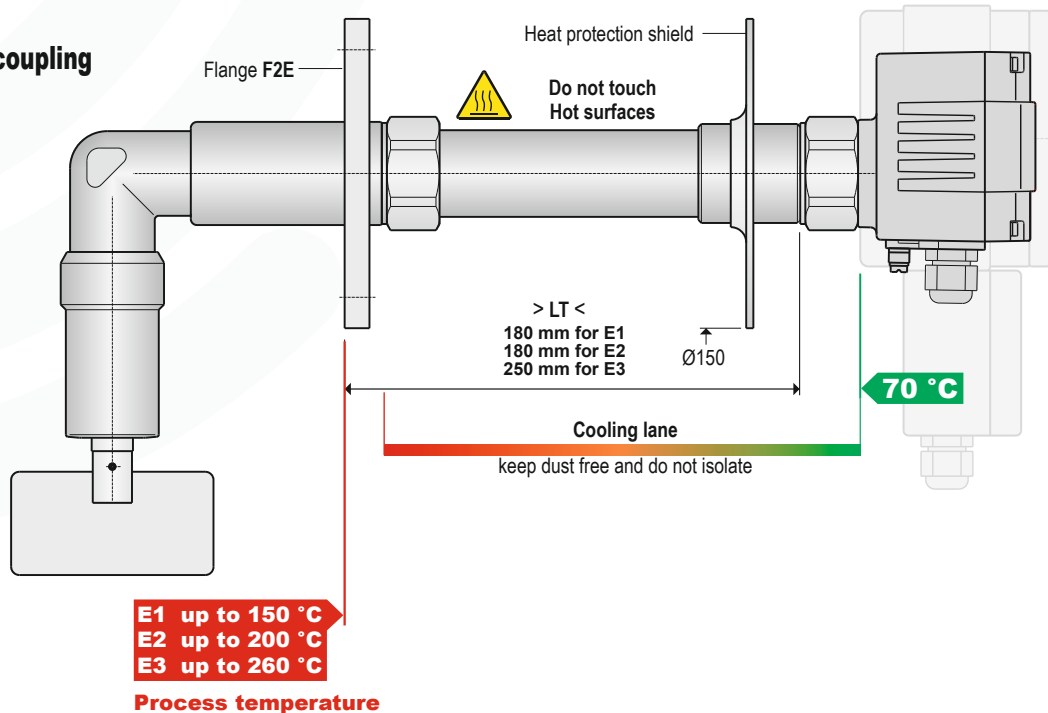
DF245

VR reinforcement ribs



DF245

E1, E2, or E3
Temperature decoupling



Offer information 2024-2025

DF245

Level indicator for bulk solids
vertical and horizontal very strong loadable

Variable length support tube up to 700 mm

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	.....
A2	Stainless steel 1.4408 / 316	.....

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	.....	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	.....	ATEX II 1D IIIC Dust D2
A1B3	Aluminium, coated RAL 7001	.....	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	.....	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	.....	ATEX II 1D IIIC Dust D2
A2B3	Stainless steel 1.4408 / 316	.....	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1D IIIC Gas+Dust D2

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	.....
C2	110 ... 120 V AC 50 ... 60 Hz	.....
C3	48 V AC 50 ... 60 Hz	.....
C4	24 V AC 50 ... 60 Hz	.....
C5	24 V DC	.....
C6	12 V DC	.....
C7	48 V DC	.....
C9	Special voltages	 on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	.....
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	.....

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	.....
H2	Signal lamp LED green installed in the device lid	.....
H81	Large signal lamp 230 V AC LED green mounted on the device lid	.....
H85	Large signal lamp 24 V DC LED green mounted on the device lid	.....

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R7
E2	-25 °C ... +200 °C	only with shaft seal ring R7
E3	-25 °C ... +260 °C	only with shaft seal ring R7
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C

Container pressure / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

DF245

Order code ...

Options

Process connection (product touching) made of material

	stainless steel	1.4301	1.4571
F2 Flange F100 150x150, 4xØ18, Lk170		X	
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16		X	X
F8 Flange DN125 PN6 Ø240, 8x18, Lk200		X	
F9 further flanges			on request

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti

X further materials on request

Wellenlager aus Werkstoff

Standard Kugellager Stahl

Z Kugellager Edelstahl 1.4401 (1. Wellenlager hinter dem Wellendichtring)

Shaft seal ring (product touching) made of material

R6 NBR bright for food

R6A NBR bright for food with Chesterton-629 fat pad ⁵⁾

R6DS NBR bright for food with annular gap flushing and pressurized enclosure

R7 filled PTFE bright for food

R7A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾

R7DS filled PTFE bright for food with annular gap flushing and pressurized enclosure

Measuring blade reinforced (product touching)

M0 without measuring blade

T1V Blade T50 98x50..... fits through F2, F6

T2V Blade T100 98x100..... fits through F2, F6

M9 further measuring blades on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib extension

LR Support tube length (product touching) stainless steel 1.4301 1.4571

1 5 0 145 mm long

2 0 0 195 mm long

2 5 0 245 mm long

3 0 0 295 mm long

3 5 0 345 mm long

4 0 0 395 mm long

4 5 0 445 mm long

5 0 0 495 mm long

further length on request

Angle flange to support tube

W flange welded to support tube

0 0 Angle 90°

X X Angle enter up to max. 45°

Reinforcement ribs 2 ribs

Standard without ribs

VR Ribs and weld on

Standard stainless steel 304

I Stainless steel 1.4571 / 316Ti

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic

-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic

-SDE Pressure compensation element 1.4305 / 303

-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001

only approved for zone 22 and zone-free and only for compact housing A1 and A2

Quantity discounts

5 - 9 3 %

10 - 24 5 %

25 - 50 10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

1) ATEX only possible for H1/H2 with option A1B3 or A2B3.

2) max. bulk solids temperature with B2 -20 °C ... +45 °C

3) pressure in the container with B1, B2, B3 -80 ... +80 mbar

4) with zone separating element DF-P2 (gas-tight and leak-free)

5) Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code, but are described in the device text.

Order code

with angled stable jib for horizontal mounting position

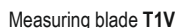
A1 aluminium
A2 stainless steel 1.4408 / 316
Compact housing

A1 aluminium

A2 stainless steel 1.4408 / 316

Compact housing

4

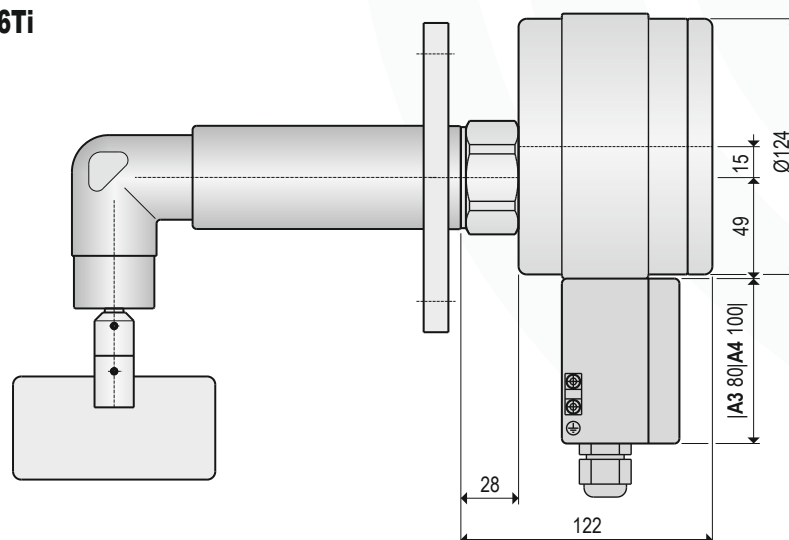


A3 aluminium
A4 stainless steel 1.4571 / 316Ti
Round housing

A3 aluminium

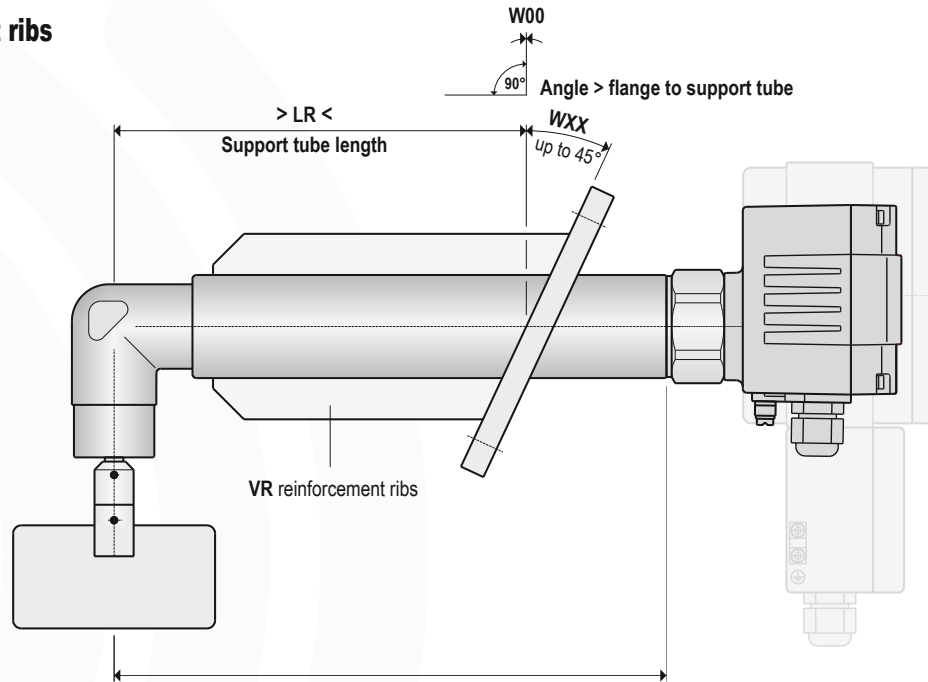
A4 stainless steel 1.4571 / 316Ti

Round housing



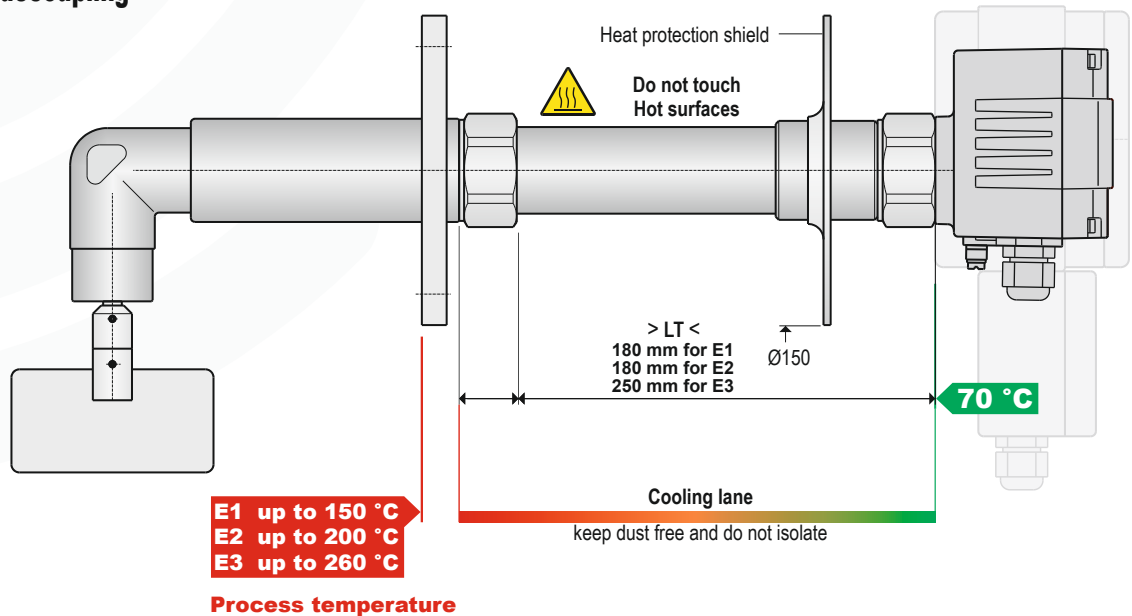
DF25

VR reinforcement ribs



DF25

E1, E2, or E3
Temperature decoupling



Offer information 2024-2025

DF25

Level indicator for bulk solids
vertical very strong loadable

Variable length support tube up to 700 mm

Versatile applicable

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	.....
A2	Stainless steel 1.4408 / 316	.....

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	.....	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	.....	ATEX II 1D IIIC Dust D2
A1B3	Aluminium, coated RAL 7001	.....	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	.....	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	.....	ATEX II 1D IIIC Dust D2
A2B3	Stainless steel 1.4408 / 316	.....	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1D IIIC Gas+Dust D2

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	.....
C2	110 ... 120 V AC 50 ... 60 Hz	.....
C3	48 V AC 50 ... 60 Hz	.....
C4	24 V AC 50 ... 60 Hz	.....
C5	24 V DC	.....
C6	12 V DC	.....
C7	48 V DC	.....
C9	Special voltages	 on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	.....
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	.....

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	.....
H2	Signal lamp LED green installed in the device lid	.....
H81	Large signal lamp 230 V AC LED green mounted on the device lid	.....
H85	Large signal lamp 24 V DC LED green mounted on the device lid	.....

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R1 or R5
E2	-25 °C ... +200 °C	only with shaft seal ring R5
E3	-25 °C ... +260 °C	only with shaft seal ring R5
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C

Pressure in the container / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

DF25

Order code ...

Options

Process connection (product touching) made of material

	stainless steel	1.4301	1.4571
F2 Flange F100 150x150, 4xØ18, Lk170		X	
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16		X	X
F8 Flange DN125 PN6 Ø240, 8x18, Lk200		X	
F9 further flanges		on request	

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti

X further materials on request

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)

Shaft seal ring (product touching) made of material

R0 Standard NBR, black (suitable for most bulk solids)

R1 PTFE/Viton® (FKM)

R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad ⁵⁾

R1DS PTFE/Viton® (FKM) with annular gap flushing and pressurized enclosure

R2 NBR bright for food

R5 filled PTFE bright for food

R5A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾

R5DS filled PTFE bright for food with annular gap flushing and pressurized enclosure

Measuring blade for light bulk solids (product touching)

M0 without measuring blade stainless steel 1.4301

T1 Blade T50 98x50 fits through F2, F6

T2 Blade T100 98x100 fits through F2, F6

X1 Blade X50 98x50 fits through F2, F6

X2 Blade X100 98x100 fits through F2, F6

X3 Blade X200 180x100 mounting possible from inside only

Measuring blade reinforced (product touching)

T1V Blade T50 98x50 fits through F2, F6 stainless steel 1.4301 1.4571

T2V Blade T100 98x100 fits through F2, F6 X X

M9 further measuring blades on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib extension

LR Support tube length (product touching) stainless steel 1.4301 1.4571

1 5 0 145 mm long X X

2 0 0 195 mm long X X

2 5 0 245 mm long X X

3 0 0 295 mm long X X

3 5 0 345 mm long X X

4 0 0 395 mm long X X

4 5 0 445 mm long X X

5 0 0 495 mm long X X

further length on request

Angle flange to support tube

W flange welded to support tube

0 0 Angle 90° X X

X X Angle enter up to max. 45° X X

Reinforcement ribs 2 ribs

Standard without ribs

VR Ribs and weld on X X

Standard stainless steel 304

I Stainless steel 1.4571 / 316Ti

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic

-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic

-SDE Pressure compensation element 1.4305 / 303

-DAE Pressure compensation element RST-DAE-SSM12Ex

stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001

only approved for zone 22 and zone-free

and only for compact housing A1 and A2

Quantity discounts

5 - 9 3 %

10 - 24 5 %

25 - 50 10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

¹⁾ ATEX only possible for H1/H2 with option A1B3 or A2B3.

²⁾ max. bulk solids temperature with B2 -20 °C ... +45 °C

³⁾ pressure in the container with B1, B2, B3 -80 ... +80 mbar

⁴⁾ with zone separating element DF-P2 (gas-tight and leak-free)

⁵⁾ Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code,

but are described in the device text.

Order code

Full, empty and demand indicator (level limit switch)
with angled jib, hanging rope shaft and tensioning weight for horizontal mounting position

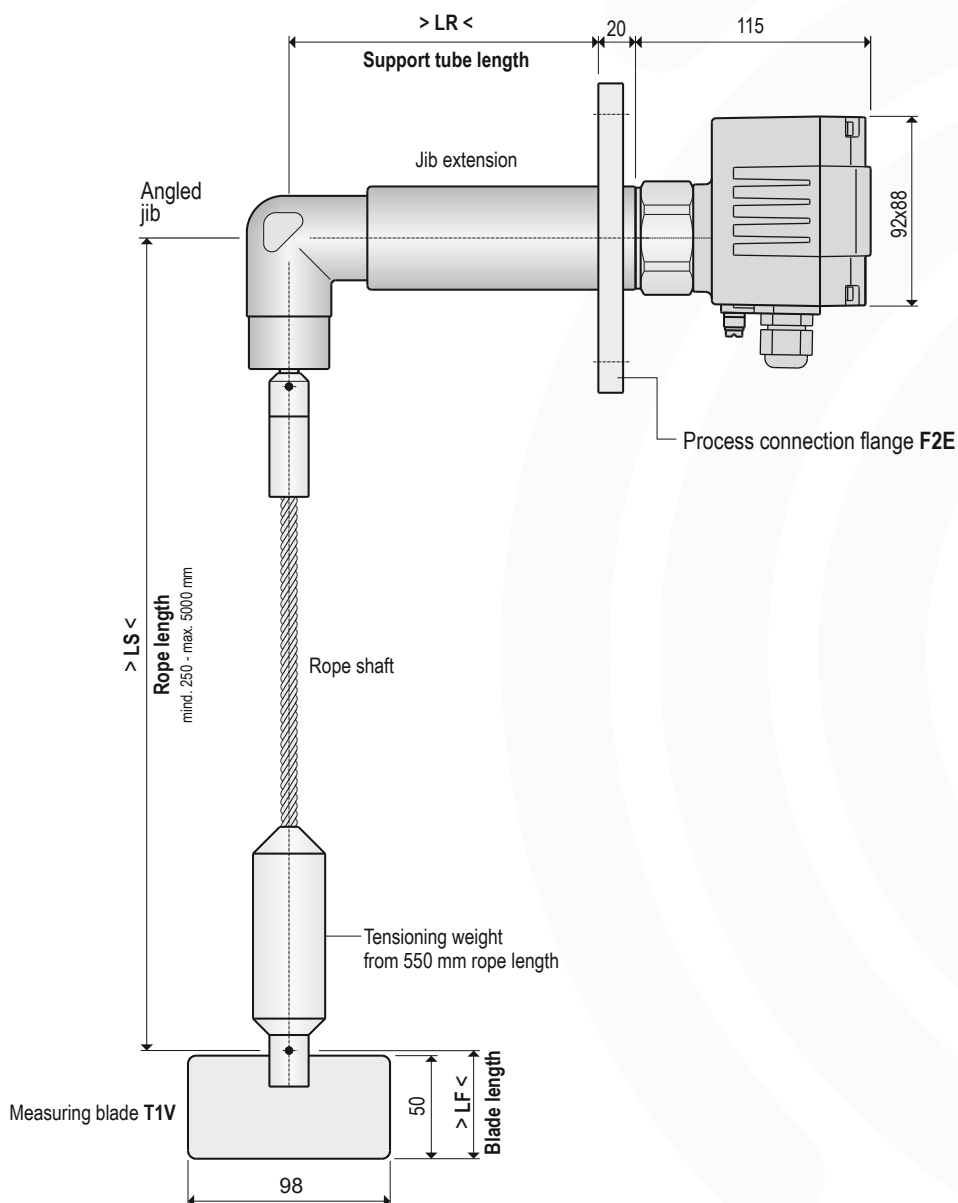
DF257

A1 aluminium

A2 stainless steel 1.4408 / 316

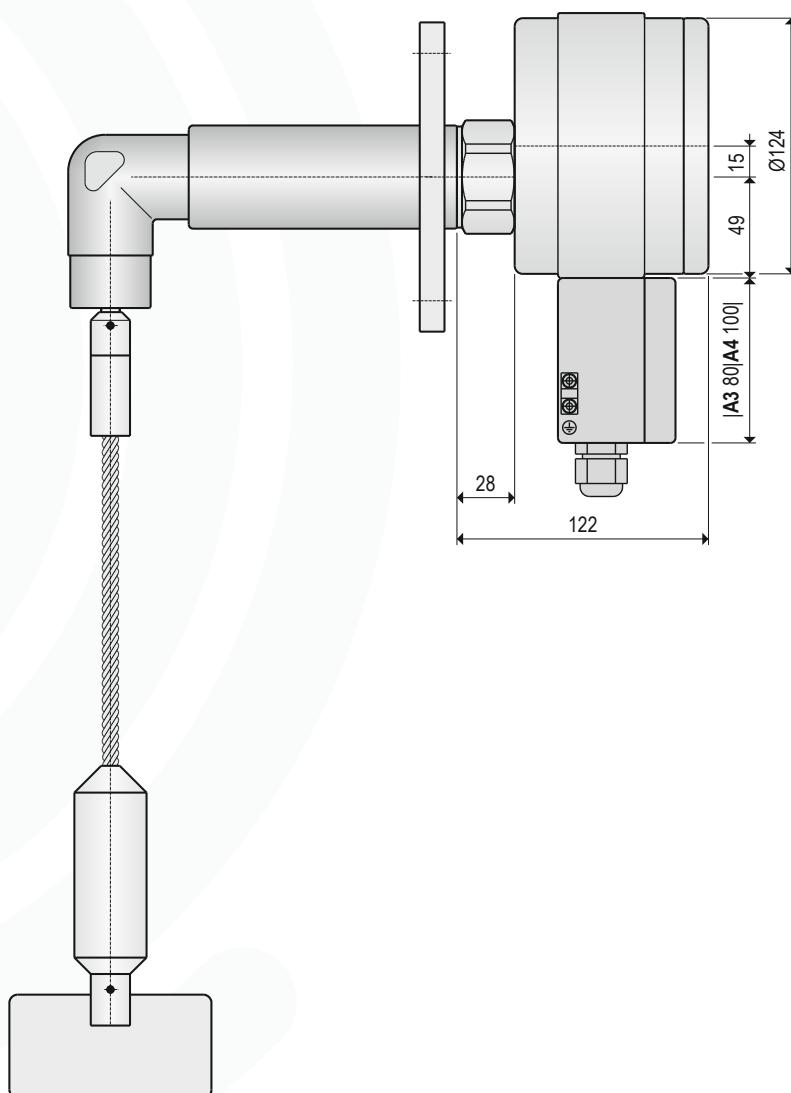
Compact housing

4



DF257

A3 aluminium
A4 stainless steel 1.4571 / 316Ti
Round housing



Offer information 2024-2025

DF257

Level indicator for bulk solids
vertical very strong loadable
variable length support tube up to 700 mm

Rope shaft for lower measuring level

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	.....
A2	Stainless steel 1.4408 / 316	.....

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	.....	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	.....	ATEX II 1D IIIC Dust D2
A1B3	Aluminium, coated RAL 7001	.....	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	.....	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	.....	ATEX II 1D IIIC Dust D2
A2B3	Stainless steel 1.4408 / 316	.....	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1D IIIC Gas+Dust D2

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	.....
C2	110 ... 120 V AC 50 ... 60 Hz	.....
C3	48 V AC 50 ... 60 Hz	.....
C4	24 V AC 50 ... 60 Hz	.....
C5	24 V DC	.....
C6	12 V DC	.....
C7	48 V DC	.....
C9	Special voltages	 on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	.....
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	.....

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	.....
H2	Signal lamp LED green installed in the device lid	.....
H81	Large signal lamp 230 V AC LED green mounted on the device lid	.....
H85	Large signal lamp 24 V DC LED green mounted on the device lid	.....

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R1 or R5
E2	-25 °C ... +200 °C	only with shaft seal ring R5
E3	-25 °C ... +260 °C	only with shaft seal ring R5
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C

Pressure in the container / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

DF257

Order code ...

Options

Process connection (product touching) made of material

	stainless steel	1.4301	1.4571
F2 Flange F100 150x150, 4xØ18, Lk170		X	
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16		X	X
F8 Flange DN125 PN6 Ø240, 8x18, Lk200		X	
F9 further flanges		on request	

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti if selected, measuring blade and jib also made of 1.4571/316Ti

X further materials on request

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)

Shaft seal ring (product touching) made of material

R0 Standard NBR, black (suitable for most bulk solids)

R1 PTFE/Viton® (FKM)

R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad ⁵⁾

R1DS PTFE/Viton® (FKM) with annular gap flushing and pressurized enclosure

R2 NBR bright for food

R5 filled PTFE bright for food

R5A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾

R5DS filled PTFE bright for food with annular gap flushing and pressurized enclosure

Measuring blade for light bulk solids (product touching)

M0 without measuring blade stainless steel 1.4301

T1 Blade T50 98x50 fits through F2, F6

T2 Blade T100 98x100 fits through F2, F6

X1 Blade X50 98x50 fits through F2, F6

X2 Blade X100 98x100 fits through F2, F6

X3 Blade X200 180x100 mounting possible from inside only

Measuring blade reinforced (product touching)

T1V Blade T50 98x50 fits through F2, F6 stainless steel 1.4301 1.4571

T2V Blade T100 98x100 fits through F2, F6 X X

M9 further measuring blades on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib extension

LR Support tube length (product touching) stainless steel 1.4301 1.4571

1 5 0 145 mm long X X

2 0 0 195 mm long X X

2 5 0 245 mm long X X

3 0 0 295 mm long X X

3 5 0 345 mm long X X

4 0 0 395 mm long X X

4 5 0 445 mm long X X

5 0 0 495 mm long X X

further length on request

Angle flange to support tube

W Flange welded to support tube

0 0 Angle 90° X X

X X Angle enter up to max. 45° X X

Standard 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Rope shaft (product touching) made of material

LS Rope length stainless steel 1.4401/316

per started 100 mm

0 0 0 0 Length > enter in mm

last digit 0

min. 250, max. 5000 mm

Tensioning weight X X

1.4301 / 304

I 1.4571 / 316Ti

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic

-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic

-SDE Pressure compensation element 1.4305 / 303

-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001

only approved for zone 22 and zone-free

and only for compact housing A1 and A2

Quantity discounts

5 - 9 3 %

10 - 24 5 %

25 - 50 10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

¹⁾ ATEX only possible for H1/H2 with option A1B3 or A2B3.

²⁾ max. bulk solids temperature with B2 -20 °C ... +45 °C

³⁾ pressure in the container with B1, B2, B3 -80 ... +80 mbar

⁴⁾ with zone separating element DF-P2 (gas-tight and leak-free)

⁵⁾ Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code, but are described in the device text.

Order code

Full indicator (level limit switch)

with hanging pendulum shaft for vertical mounting position

DF26

A1 aluminium

A2 stainless steel 1.4408 / 316

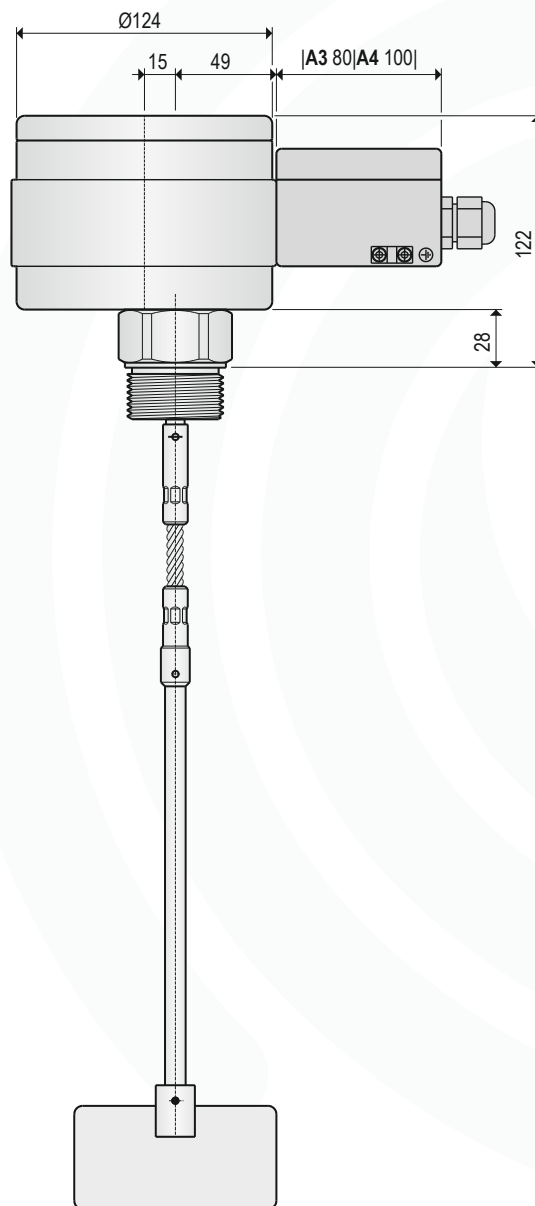
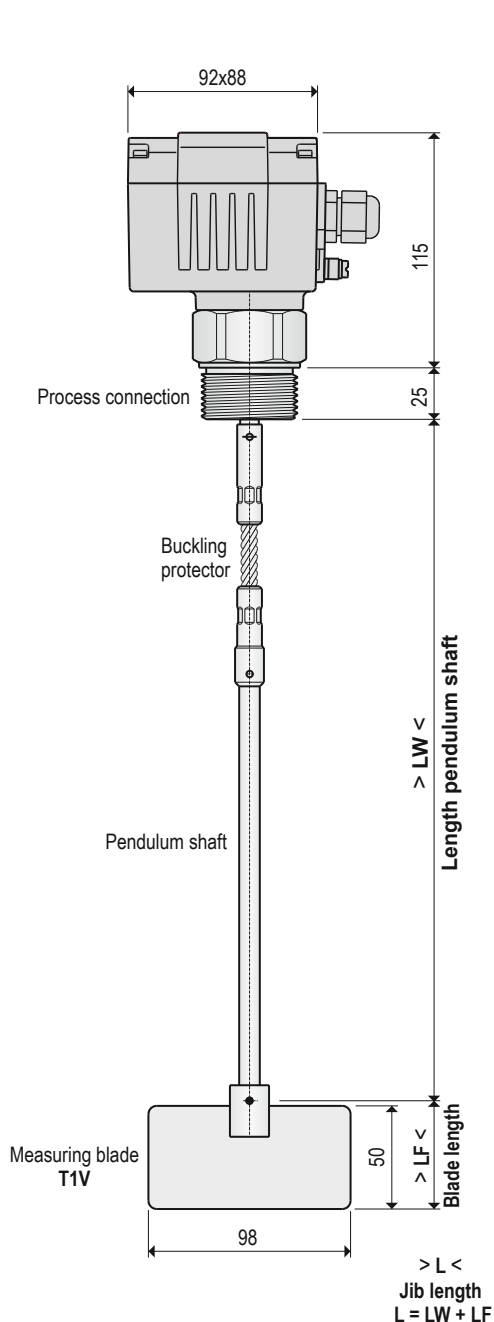
Compact housing

DF26

A3 aluminium

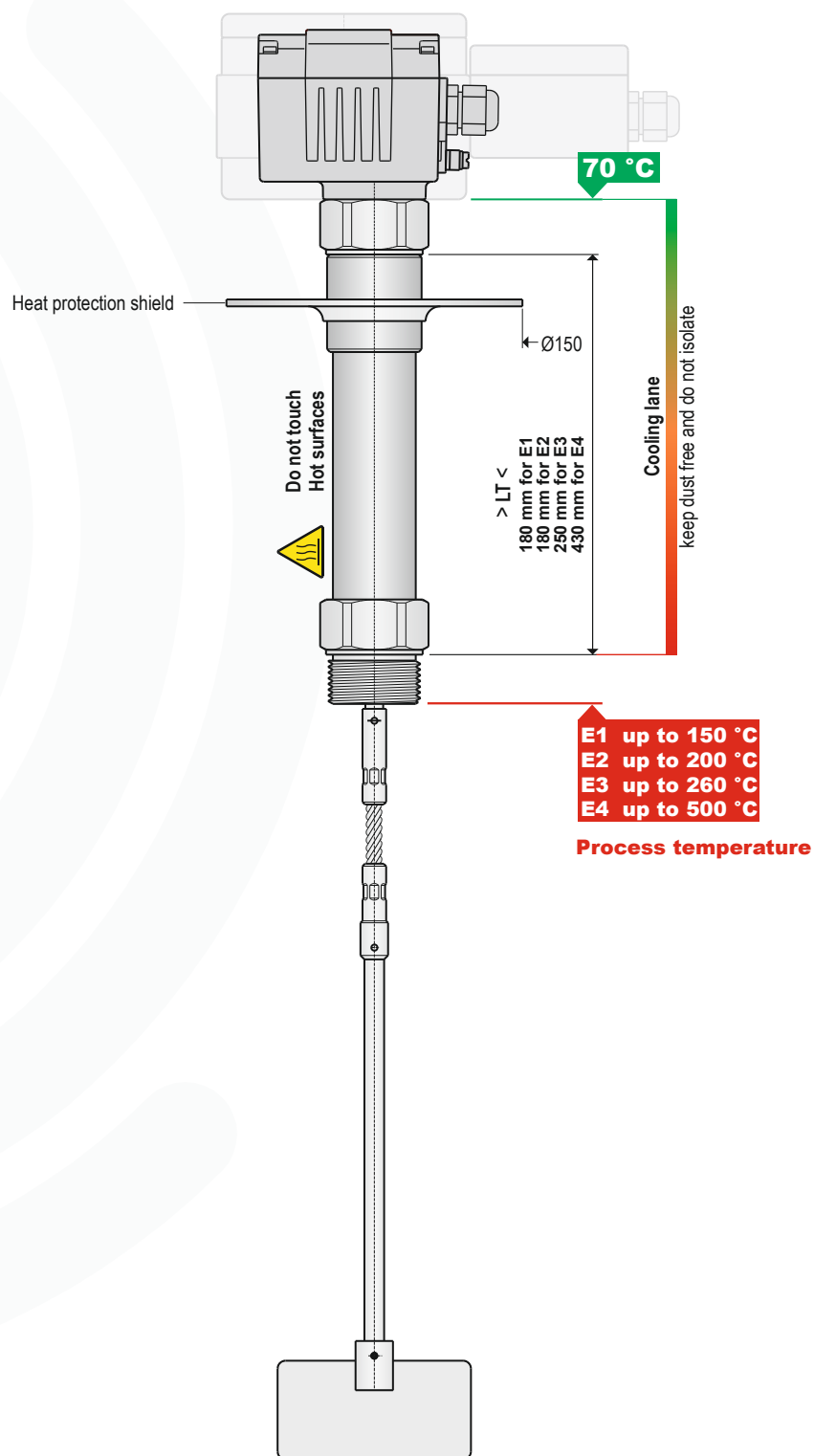
A4 stainless steel 1.4571 / 316Ti

Round housing



DF26

E1, E2, E3 or E4
Temperature decoupling



Offer information 2024-2025

DF26

Level indicator for bulk solids
vertical installation in silos and containers

Variable length pendulum shaft
up to 1500 mm

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	.....
A2	Stainless steel 1.4408 / 316	.....

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	.....	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	.....	ATEX II 1D IIIC Dust ^{D2)}
A1B3	Aluminium, coated RAL 7001	.....	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	.....	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	.....	ATEX II 1D IIIC Dust ^{D2)}
A2B3	Stainless steel 1.4408 / 316	.....	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1D IIIC Gas+Dust ^{D2)}

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	.....
C2	110 ... 120 V AC 50 ... 60 Hz	.....
C3	48 V AC 50 ... 60 Hz	.....
C4	24 V AC 50 ... 60 Hz	.....
C5	24 V DC	.....
C6	12 V DC	.....
C7	48 V DC	.....
C9	Special voltages	 on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	.....
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	.....

Signal lamps¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	.....
H2	Signal lamp LED green installed in the device lid	.....
H81	Large signal lamp 230 V AC LED green mounted on the device lid	.....
H85	Large signal lamp 24 V DC LED green mounted on the device lid	.....

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R1 or R5
E2	-25 °C ... +200 °C	only with shaft seal ring R5
E3	-25 °C ... +260 °C	only with shaft seal ring R5
E4	-25 °C ... +500 °C	only with shaft seal ring R8
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C
E9	up to +1000 °C	 on request

Pressure in the container / p_(Process)

P0 Standard -0.5 ... 5 bar³⁾

P1	-0.5 bar ... 10 bar	.....
P2	-0.95 bar ... 25 bar ⁴⁾	gas-tight and leak-free
P6	-0.9 bar ... 10 bar	.....

DF26

Order code ...

Options

Process connection (product touching) made of material

	AlMgSi	1.4301	1.4571
G1 Thread G1 DIN EN ISO 228-1	X	X	
G2 Thread G1½ DIN EN ISO 228-1	X	X	X
G3 Thread G1½ DIN EN ISO 228-1	X	X	X
G4 Thread G2 DIN EN ISO 228-1	X	X	
G9 further threads			on request
F1 Flange F70 Ø110, 4xØ9, Lk90	X	X	X
F2 Flange F100 150x150, 4xØ18, Lk170	X	X	
F5 Flange DN32 PN10		X	X
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16 Ø220, 8x18, Lk180		X	X
F8 Flange DN125 PN6 Ø240, 8x18, Lk200		X	
F9 further flanges			on request

A Aluminium AlMgSi / *AlSi12
E Stainless steel 1.4301 / 304
I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti
X further materials on request

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)

Shaft seal ring (product touching) made of material

R0 Standard NBR, black (suitable for most bulk solids)

R1 PTFE/Viton® (FKM)
R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad ⁵⁾
R1DS PTFE/Viton® (FKM) with annular gap flushing and pressurized enclosure
R2 NBR bright for food
R5 filled PTFE bright for food
R5A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾
R5DS filled PTFE bright for food with annular gap flushing and pressurized enclosure
R8 Graphite only with bulk solids temperature E4

Measuring blade for light bulk solids (product touching)

	stainless steel	1.4301
M0 without measuring blade		
T0 Blade T200 68x220 fits through F1, F2, F6		
T1 Blade T50 98x50 fits through F2, F6		
T2 Blade T100 98x100 fits through F2, F6		
T5 Blade T250 250x100 mounting possible from inside only		
X1 Blade X50 98x50 fits through F2, F6		
X2 Blade X100 98x100 fits through F2, F6		
X3 Blade X200 180x100 mounting possible from inside only		
K1 Hinged blade 200x30 - T230 fits through G2, G3, all flanges		

Measuring blade reinforced (product touching)

	stainless steel	1.4301	1.4571
TOV Blade T200 68x220 fits through F1, F2, F6		X	X
T1V Blade T50 98x50 fits through F2, F6		X	X
T2V Blade T100 98x100 fits through F2, F6		X	X
K3V Hinged blade 180x28 fits through G2, G3, all flanges		X	
M9 further measuring blades			on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib (product touching)

	stainless steel	1.4301	1.4571
LW Length pendulum shaft per started 100 mm		X	X
0 0 0 0 Length > enter in mm / last digit 0			
minimum 250 mm, maximum 1500 mm			

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Accessories

Hexagonal nuts made of

	AlMgSi	1.4301	1.4571
-SM1 G1 DIN EN ISO 228-1	X	X	
-SM2 G1½ DIN EN ISO 228-1	X	X	X
-SM3 G1½ DIN EN ISO 228-1	X	X	X

A Aluminium AlMgSi

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

X further materials on request

Order code

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic
-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic
-SDE Pressure compensation element 1.4305 / 303
-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices
-SH Weather protection hood PVC RAL 7001 only approved for zone 22 and zone-free and only for compact housing A1 and A2

Delivery from stock

ordered until 12° - dispatched at 16°

Quantity discounts

5 - 9	3 %
10 - 24	5 %
25 - 50	10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

- 1) ATEX only possible for H1/H2 with option A1B3 or A2B3.
- 2) max. bulk solids temperature with B2 -20 °C ... +45 °C
- 3) pressure in the container with B1, B2, B3 -80 ... +80 mbar
- 4) with zone separating element DF-P2 (gas-tight and leak-free)
- 5) Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code, but are described in the device text.

Full indicator (level limit switch)

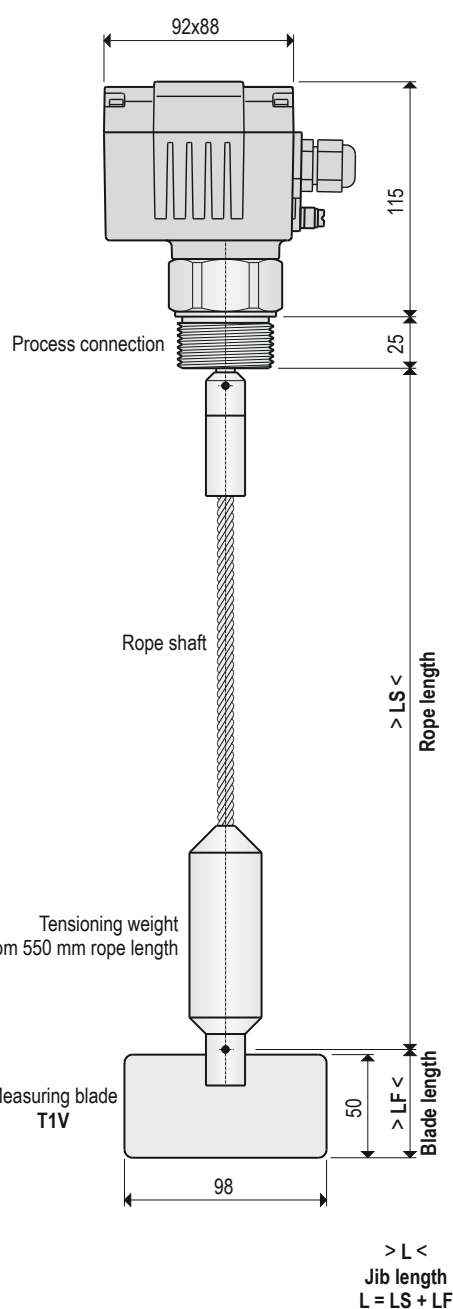
with hanging rope shaft and tensioning weight for vertical mounting position

DF27

A1 aluminium

A2 stainless steel 1.4408 / 316

Compact housing

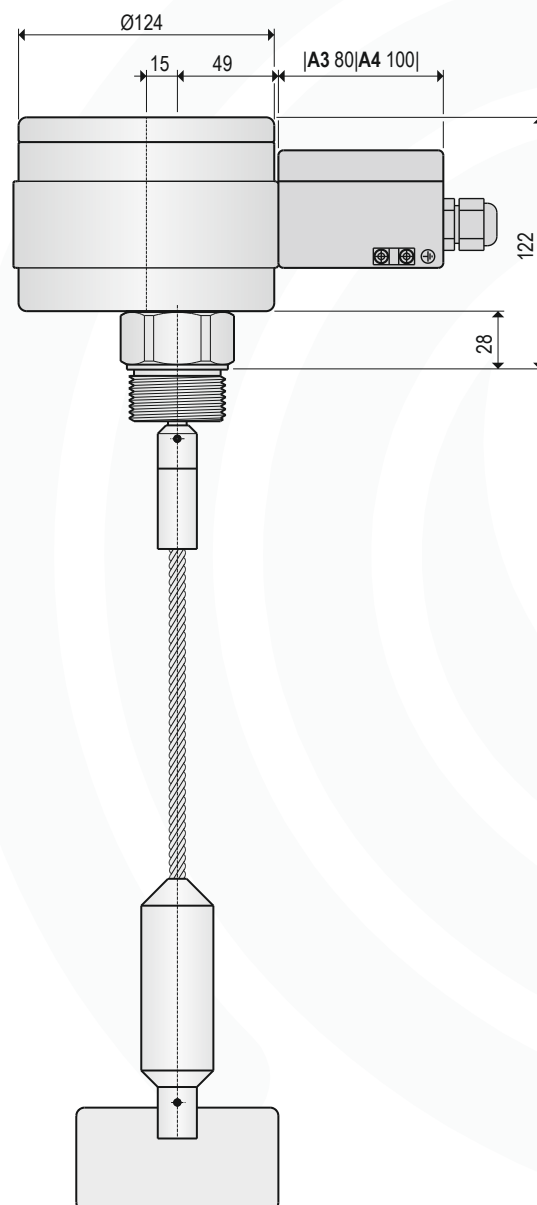


DF27

A3 aluminium

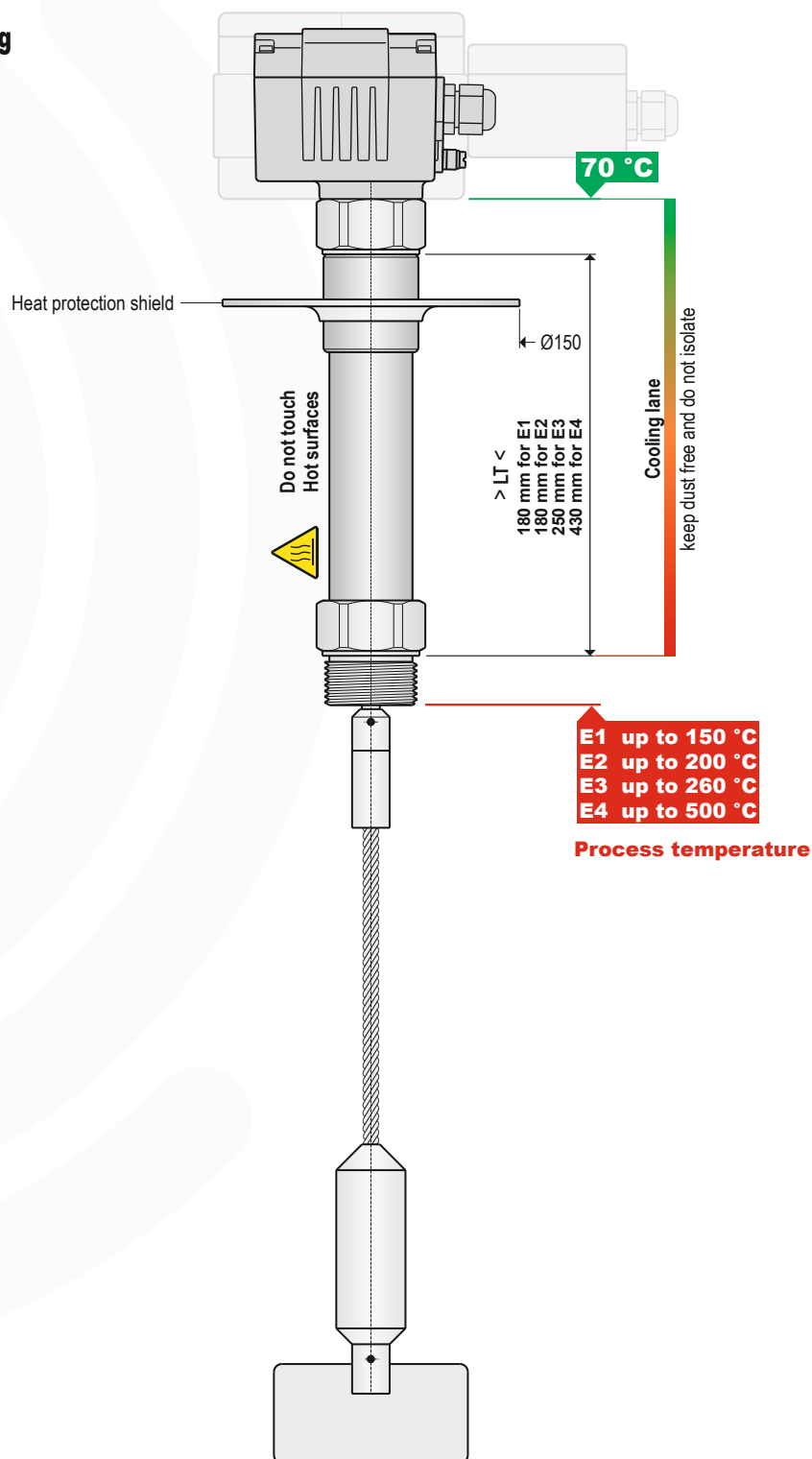
A4 stainless steel 1.4571 / 316Ti

Round housing



DF27

E1, E2, E3 or E4
Temperature decoupling



Offer information 2024-2025

DF27

Level indicator for bulk solids
vertical installation in silos and containers

Variable length rope shaft up to 10.000 mm
thus also applicable as empty indicator

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	
A2	Stainless steel 1.4408 / 316	

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	ATEX II 1D IIIC Dust D2
A1B3	Aluminium, coated RAL 7001	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	ATEX II 1D IIIC Dust D2
A2B3	Stainless steel 1.4408 / 316	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	ATEX II 2G IIC + II 1D IIIC Gas+Dust D2

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	
C2	110 ... 120 V AC 50 ... 60 Hz	
C3	48 V AC 50 ... 60 Hz	
C4	24 V AC 50 ... 60 Hz	
C5	24 V DC	
C6	12 V DC	
C7	48 V DC	
C9	Special voltages	on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	
H2	Signal lamp LED green installed in the device lid	
H81	Large signal lamp 230 V AC LED green mounted on the device lid	
H85	Large signal lamp 24 V DC LED green mounted on the device lid	

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R1 or R5
E2	-25 °C ... +200 °C	only with shaft seal ring R5
E3	-25 °C ... +260 °C	only with shaft seal ring R5
E4	-25 °C ... +500 °C	only with shaft seal ring R8
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C
E9	up to +1000 °C	on request

Pressure in the container / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

P1	-0.5 bar ... 10 bar	
P2	-0.95 bar ... 25 bar ⁴⁾	gas-tight and leak-free
P6	-0.9 bar ... 10 bar	

DF27

Order code ...

Options

Process connection (product touching) made of material

	AlMgSi	1.4301	1.4571
G1 Thread G1 DIN EN ISO 228-1	X	X	
G2 Thread G1½ DIN EN ISO 228-1	X	X	X
G3 Thread G1½ DIN EN ISO 228-1	X	X	X
G4 Thread G2 DIN EN ISO 228-1	X	X	
G9 further threads			on request
F1 Flange F70 Ø110, 4xØ9, Lk90	X	X	X
F2 Flange F100 150x150, 4xØ18, Lk170	X	X	
F5 Flange DN32 PN10		X	X
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16 Ø220, 8x18, Lk180		X	X
F8 Flange DN125 PN6 Ø240, 8x18, Lk200		X	
F9 further flanges			on request

A Aluminium AlMgSi / *AlSi12

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti

X further materials on request

Shaft bearing made of material

Standard ball-bearing steel

Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)

Shaft seal ring (product touching) made of material

R0 Standard NBR, black (suitable for most bulk solids)

R1 PTFE/Viton® (FKM)

R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad 5)

R1DS PTFE/Viton® (FKM) with annular gap flushing and pressurized enclosure

R2 NBR bright for food

R5 filled PTFE bright for food

R5A filled PTFE bright for food with Chesterton-629 fat pad 5)

R5DS filled PTFE bright for food with annular gap flushing and pressurized enclosure

R8 Graphite only with bulk solids temperature E4

Measuring blade for light bulk solids (product touching) stainless steel 1.4301

M0 without measuring blade

T0 Blade T200 68x220 fits through F1, F2, F6

T1 Blade T50 98x50 fits through F2, F6

T2 Blade T100 98x100 fits through F2, F6

T5 Blade T250 250x100 mounting possible from inside only

X1 Blade X50 98x50 fits through F2, F6

X2 Blade X100 98x100 fits through F2, F6

X3 Blade X200 180x100 mounting possible from inside only

K1 Hinged blade 200x30 - T230 fits through G2, G3, all flanges

TOV Blade T200 68x220 fits through F1, F2, F6

T1V Blade T50 98x50 fits through F2, F6

T2V Blade T100 98x100 fits through F2, F6

K3V Hinged blade 180x28 fits through G2, G3, all flanges

M9 further measuring blades on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Rope shaft (product touching) made of material

LS Length rope shaft stainless steel 1.4401/316 per started 100 mm

0 0 0 0 Length > enter in mm / last digit 0

minimum 250 mm, maximum 9990 mm

Tensioning weight X X

I Stainless steel 1.4571 / 316Ti

Accessories

Hexagonal nuts made of

	AlMgSi	1.4301	1.4571
-SM1 G1 DIN EN ISO 228-1	X	X	
-SM2 G1½ DIN EN ISO 228-1	X	X	X
-SM3 G1½ DIN EN ISO 228-1	X	X	X

A Aluminium AlMgSi

E Stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

X further materials on request

Order code

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic

-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

-SDK Pressure compensation element plastic

-SDE Pressure compensation element 1.4305 / 303

-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

-SH Weather protection hood PVC RAL 7001

only approved for zone 22 and zone-free

and only for compact housing A1 and A2

Delivery from stock

ordered until 12° - dispatched at 16°

Quantity discounts

5 - 9	3 %
10 - 24	5 %
25 - 50	10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

1) ATEX only possible for H1/H2 with option A1B3 or A2B3.

2) max. bulk solids temperature with B2 -20 °C ... +45 °C

3) pressure in the container with B1, B2, B3 -80 ... +80 mbar

4) with zone separating element DF-P2 (gas-tight and leak-free)

5) Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code, but are described in the device text.

Full indicator (level limit switch)

with protection tube for vertical mounting position (up to 1000 mm tube length also for any mounting position)

DF28

A1 aluminium

A2 stainless steel 1.4408 / 316

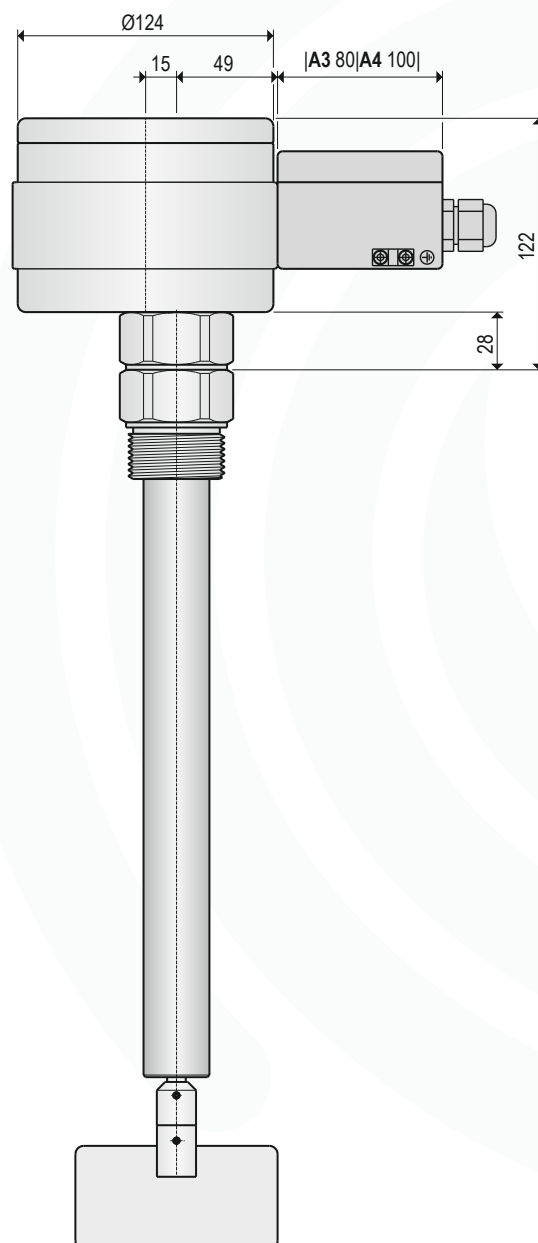
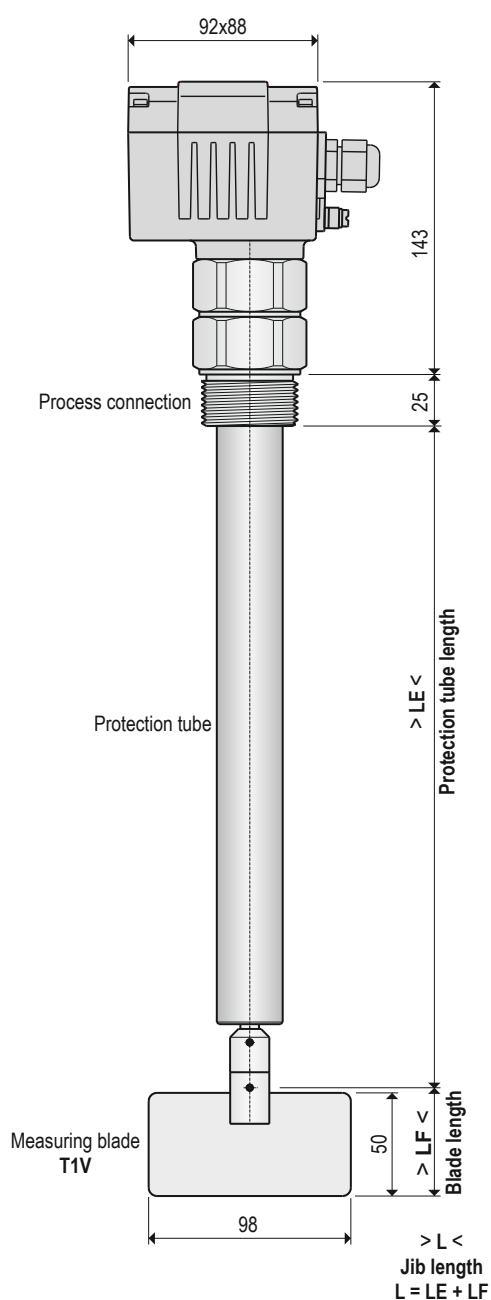
Compact housing

DF28

A3 aluminium

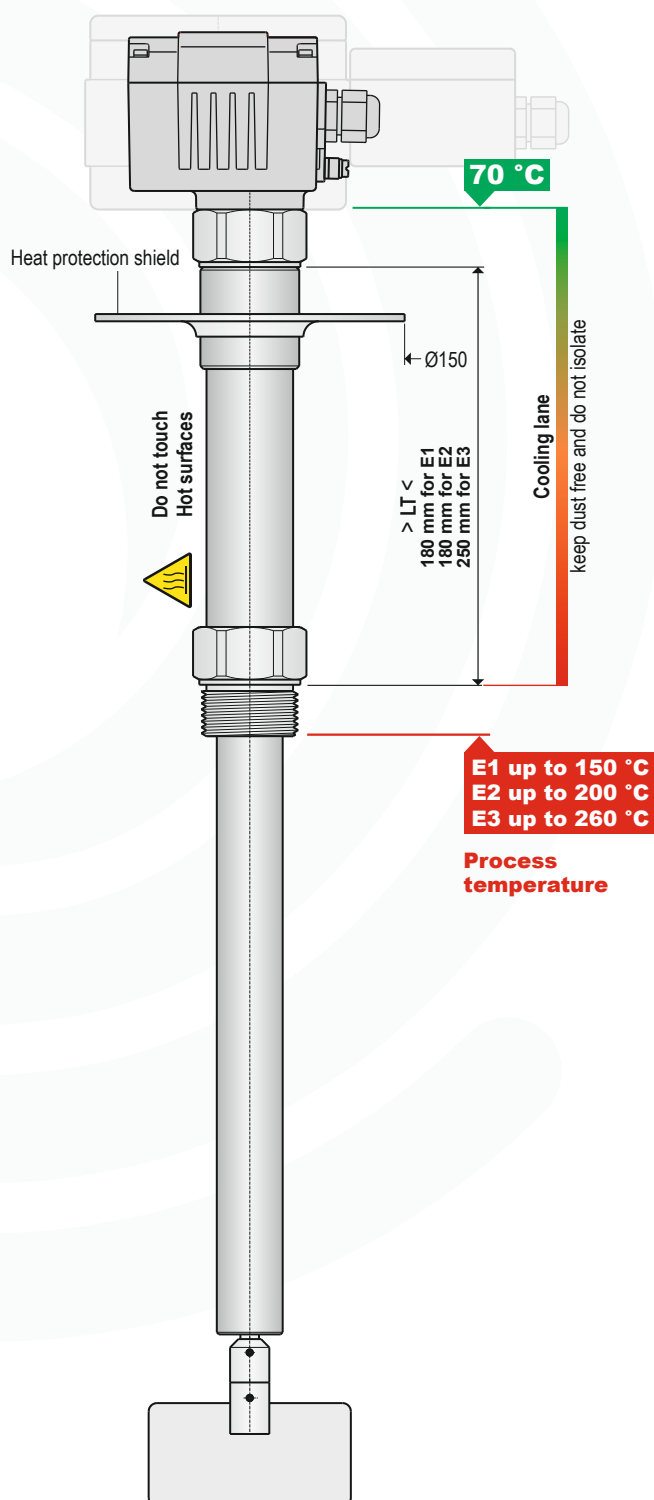
A4 stainless steel 1.4571 / 316Ti

Round housing



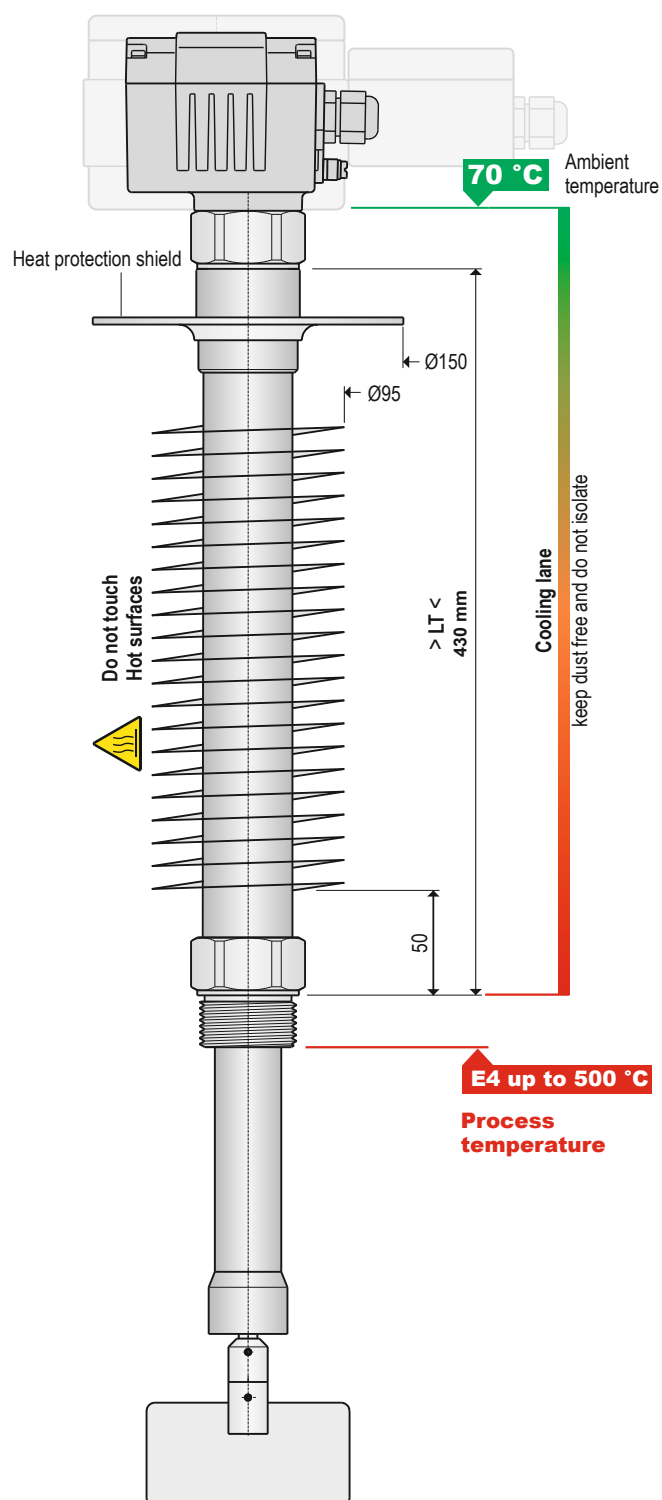
DF28

E1, E2 or E3
Temperature decoupling



DF28

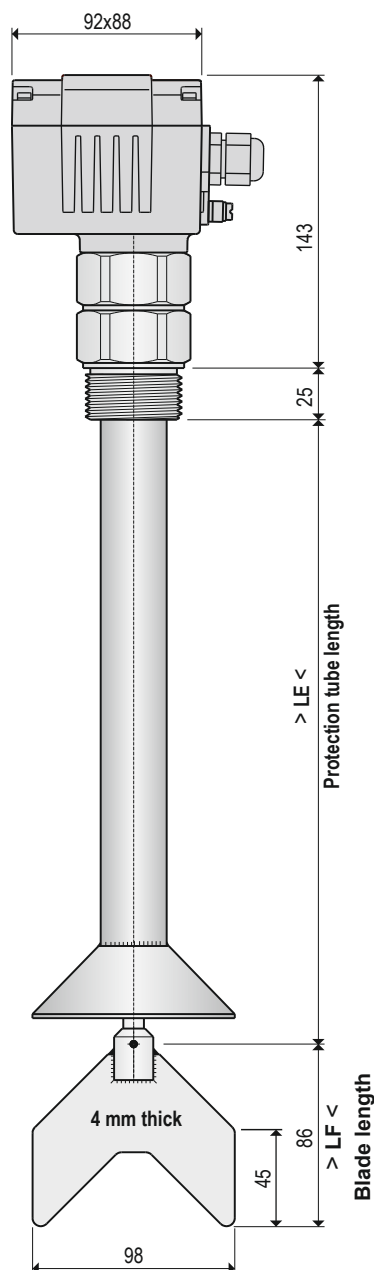
E4
Temperature decoupling



Full indicator (level limit switch)
with protection tube and protection roof for vertical mounting position

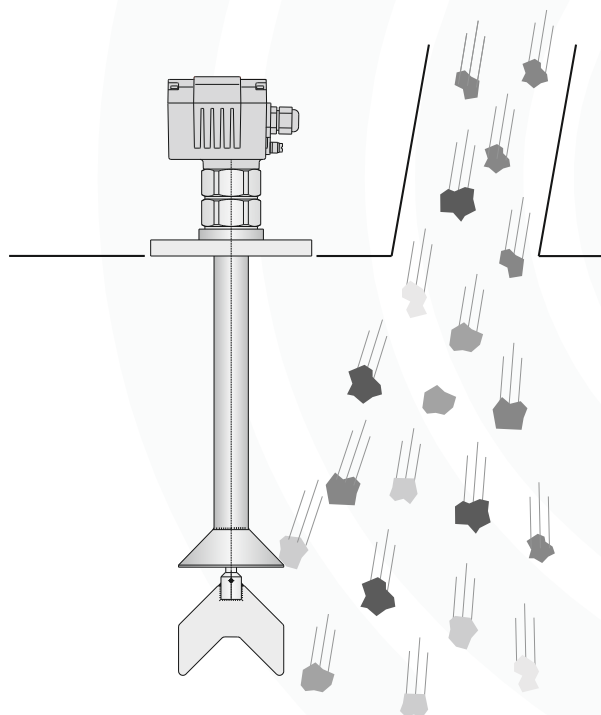
DF28

SD1V protection roof
Y3V measuring blade



Level indicator for heavy bulk solids with
horizontally loadable jib
variable long protection tube up to 2000 mm

Protection of the measuring blade from impacting
bulk solids



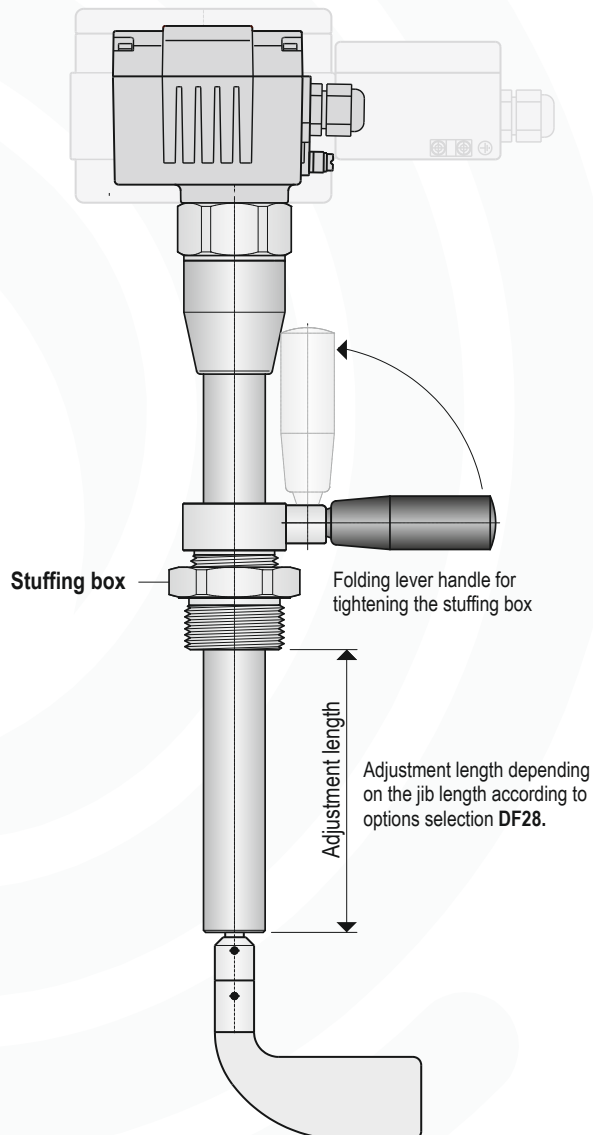
Full indicator (level limit switch)

with protection tube and level adjustment for vertical mounting and variable setting of the measurement level

DF28

HVP8

Level adjustment



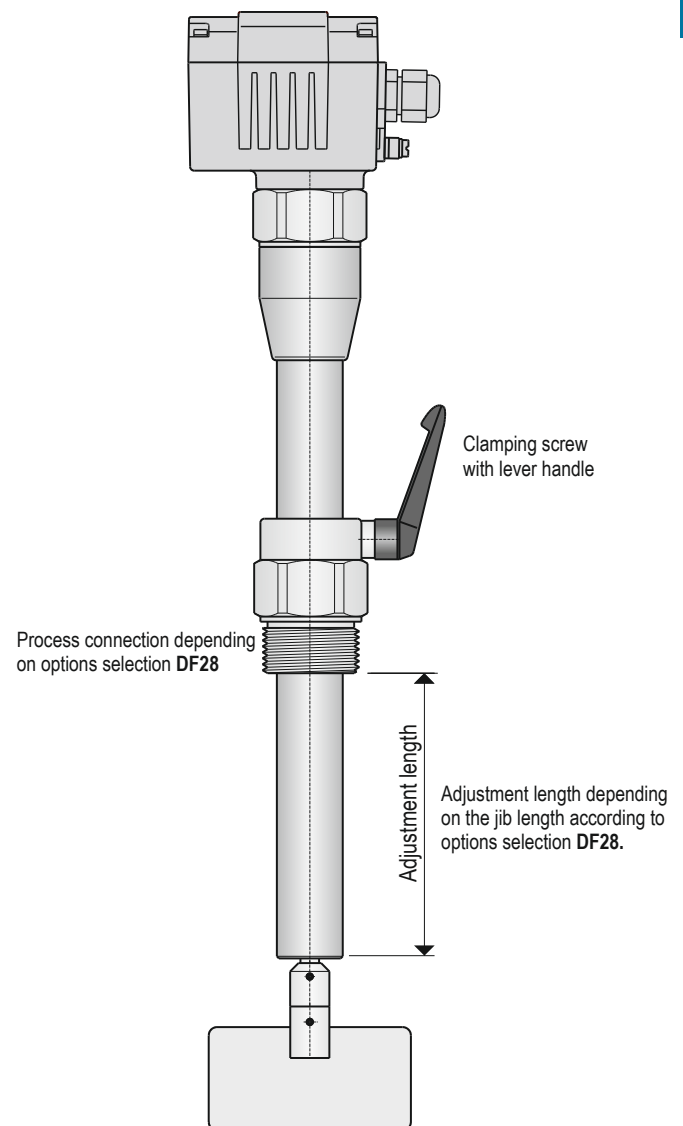
HVP8 Level adjustment device for dust- and pressure-tight operation

Material	1.4301 / 304 or 1.4571 / 316Ti
Process connection	G3 (G1½)
Sealing	NBR black Silicone bright for food
Bulk goods temperature	-25 °C ... +150 °C
Pressure in container	-0.9 bar ... 1 bar
Type of protection	ATEX II 2G/- IIC _{Gas} + ATEX II 1D/- IIIC _{Dust}

DF28

HVP9

Level adjustment



HVP9 Level adjustment device only suitable for dust-free and pressure-free operation.

Material	Aluminium or 1.4301 / 304
Process connection	G2 (G1¼) or G3 (G1½)
Bulk goods temperature	-25 °C ... +200 °C
Pressure in container	±0 bar

Offer information 2024-2025

DF28

Level indicator for bulk solids
with long horizontally loadable jib

Variable length protection tube
up to 6000 mm (split design possible)

Basic device

Options

Compact housing C € conform and IP66 made of material

A1	Aluminium, coated RAL 7001	.....
A2	Stainless steel 1.4408 / 316	.....

Compact housing C € conform and IP66 made of

Certifications, certificates, approvals

A1B1	Aluminium, coated RAL 7001	.....	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	.....	ATEX II 1D IIIC Dust D2
A1B3	Aluminium, coated RAL 7001	.....	ATEX II 1/3D IIIB Dust
A2B1	Stainless steel 1.4408 / 316	.....	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	.....	ATEX II 1D IIIC Dust D2
A2B3	Stainless steel 1.4408 / 316	.....	ATEX II 1/3D IIIB Dust

Round housing C € conform and IP66 made of

Certifications, certificates, approvals

A3B1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A3CB1	Aluminium AlMgSi, anodized	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4B1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIB + II 1/2D IIIC Gas+Dust
A4CB1	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1/2D IIIC Gas+Dust
A4CB2	Stainless steel 1.4571 / 316Ti	.....	ATEX II 2G IIC + II 1D IIIC Gas+Dust D2

Devices for use in zone 0 ATEX II 1GD/- only with attached ZTP7 see page 54-55

further approvals on request

Supply voltage / Supply

C1	220 ... 240 V AC 50 ... 60 Hz	.....
C2	110 ... 120 V AC 50 ... 60 Hz	.....
C3	48 V AC 50 ... 60 Hz	.....
C4	24 V AC 50 ... 60 Hz	.....
C5	24 V DC	.....
C6	12 V DC	.....
C7	48 V DC	.....
C9	Special voltages	 on request

Measuring blade speed

U0 Standard 1 rpm (suitable for most applications)

U5	5 rpm	
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Function monitoring

Standard without monitoring

D1	of the rotation and the power supply	
D2	of the power supply	.....
D9	of the rotation with a pulsating signal (only with C5 24 V DC)	.....

Signal lamps ¹⁾

H0 Standard with function LEDs

H1	Collar for function LEDs installed in the device lid	.....
H2	Signal lamp LED green installed in the device lid	.....
H81	Large signal lamp 230 V AC LED green mounted on the device lid	.....
H85	Large signal lamp 24 V DC LED green mounted on the device lid	.....

Bulk solids temperature / T_(process)

E0 Standard -25 °C...+80 °C ²⁾

E1	-25 °C ... +150 °C	only with shaft seal ring R1 or R5
E2	-25 °C ... +200 °C	only with shaft seal ring R5
E3	-25 °C ... +260 °C	only with shaft seal ring R5
E4	-25 °C ... +500 °C	only with shaft seal ring R8
E7	Device heating 2.5 watt	for temperatures up to -35 °C
E74	Device heating 3.5 watt	for temperatures up to -40 °C
E9	up to +1000 °C	 on request

Pressure in the container / p_(Process)

P0 Standard -0.5 ... 5 bar ³⁾

P1	-0.5 bar ... 10 bar	.....
P2	-0.95 bar ... 25 bar ⁴⁾	gas-tight and leak-free
P6	-0.9 bar ... 10 bar	.....

DF28

Order code ...

Options

Process connection (product touching) made of material

	AlMgSi	1.4301	1.4571
G2 Thread G1¼ DIN EN ISO 228-1	X	X	X
G3 Thread G1½ DIN EN ISO 228-1	X	X	X
G4 Thread G2 DIN EN ISO 228-1	X	X	
G9 further threads			on request
F1 Flange F70 Ø110, 4xØ9, Lk90	X	X	X
F2 Flange F100 150x150, 4xØ18, Lk170	X	X	
F5 Flange DN32 PN10		X	X
F6 Flange DN100 PN6		X	X
F7 Flange DN100 PN16 Ø220, 8x18, Lk180		X	X
F8 Flange DN125 PN6 Ø240, 8x18, Lk200		X	
F9 further flanges			on request
A Aluminium AlMgSi / *AlSi12			
E Stainless steel 1.4301 / 304			
I Stainless steel 1.4571 / 316Ti if 1.4571/316Ti is selected, measuring blade and jib are also made of 1.4571/316Ti			
X further materials			on request

Shaft bearing made of material

Standard ball-bearing steel	
Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)	

Shaft seal ring (product touching) made of material

R0 Standard NBR, black (suitable for most bulk solids)	
R1 PTFE/Viton® (FKM)	
R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad ⁵⁾	
R1DS PTFE/Viton® (FKM) with annular gap flushing and pressurized enclosure	
R2 NBR bright for food	
R5 filled PTFE bright for food	
R5A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾	
R5DS filled PTFE bright for food with annular gap flushing and pressurized enclosure	
R8 Graphite only with bulk solids temperature E4	

Measuring blade for light bulk solids (product touching) stainless steel 1.4301

M0 without measuring blade	
S2 Socket blade 130x30 inclined fits through G2, G3, all flanges	
T0 Blade T200 68x220 fits through F1, F2, F6	
T1 Blade T50 98x50 fits through F2, F6	
T2 Blade T100 98x100 fits through F2, F6	
T5 Blade T250 250x100 mounting possible from inside only	
X1 Blade X50 98x50 fits through F2, F6	
X2 Blade X100 98x100 fits through F2, F6	
X3 Blade X200 180x100 mounting possible from inside only	
K1 Hinged blade 200x30 - T230 fits through G2, G3, all flanges	

Messflügel verstärkt (produktberührend) Edelstahl 1.4301 1.4571

S2V Socket blade 130x30 inclined fits through G2, G3, all flanges	X	X
M1V Socket blade 90x28 fits through G1, G2, G3, all flanges	X	X
M2V Socket blade 90x40 fits through G3, all flanges	X	X
T0V Blade T200 68x220 fits through F1, F2, F6	X	X
T1V Blade T50 98x50 fits through F2, F6	X	X
T2V Blade T100 98x100 fits through F2, F6	X	X
K3V Hinged blade 180x28 fits through G2, G3, all flanges	X	
Y3V Mess-Flügel 98x45 fits through all flanges	X	
TG T-blade 98x8 fits through all flanges	X	
M9 further measuring blades		on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Jib (product touching)

LE Length protection tube per started 100 mm	X	X
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0 0 0 0 Length > enter in mm / last digit 0
minimum 250 mm, maximum 6000 mm

Standard without protection roof

SD1V Protection roof only with blade Y3V and only up to max. 2000 mm long

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

KD Bearing and sealing ring

at the end of the protection tube

Order code

Level adjustment device made of

	AlMgSi	1.4301	1.4571
HVP8 dust- and pressure-tight operation only with process connection G3 ATEX II 2G/- IIC + ATEX II 1D/- IIC		X	X
HVP9 dust-free and pressure-free operation only with process connection G2 or G3	X	X	
A Aluminium AlMgSi			
E Stainless steel 1.4301 / 304			
I Stainless steel 1.4571 / 316Ti			
Selection gasket only for HVP8			
NBR NBR black			
SIK Silicone bright for food			

Order code

append to order code from the price information

Accessories

Hexagonal nuts made of

	AlMgSi	1.4301	1.4571
-SM2 G1¼ DIN EN ISO 228-1	X	X	X
-SM3 G1½ DIN EN ISO 228-1	X	X	X
A Aluminium AlMgSi			
E Stainless steel 1.4301 / 304			
I Stainless steel 1.4571 / 316Ti			
X further materials			on request

Order code

Additional cable gland made of material

-KV1 Standard M20x1.5 plastic	
-KV2 M20x1.5 brass, nickel-plated for ATEX devices	

Condensation protection made of material

-SDK Pressure compensation element plastic	
-SDE Pressure compensation element 1.4305 / 303	
-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices	

-SH Weather protection hood PVC RAL 7001

only approved for zone 22 and zone-free
and only for compact housing A1 and A2

Quantity discounts

5 - 9	3 %
10 - 24	5 %
25 - 50	10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

- 1) ATEX only possible for H1/H2 with option A1B3 or A2B3.
- 2) max. bulk solids temperature with B2 -20 °C ... +45 °C
- 3) pressure in the container with B1, B2, B3 -80 ... +80 mbar
- 4) with zone separating element DF-P2 (gas-tight and leak-free)
- 5) Chesterton-629 food approved grease.

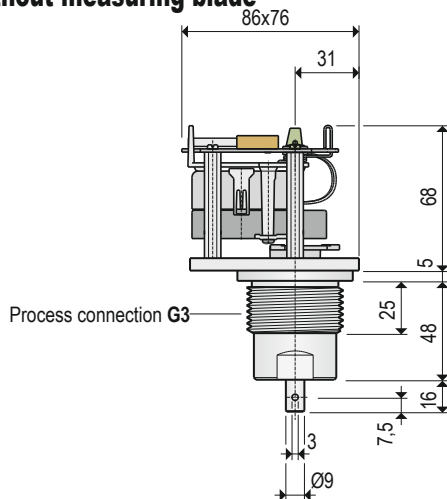
U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

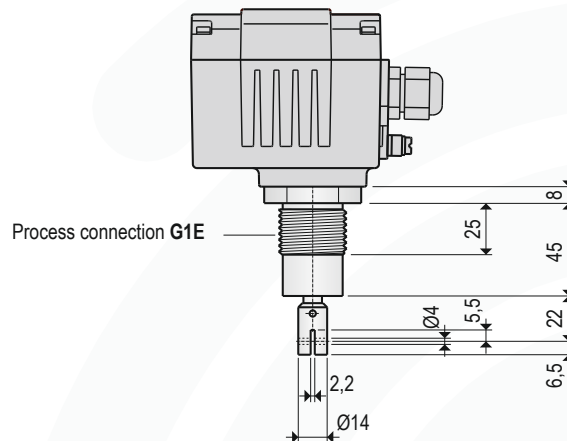
and are therefore not required in the order code, but are described in the device text.

Offer information 2024-2025

A0 without housing
M0 without measuring blade



M7 measuring blade connection piece



DF30

Full indicator for bulk solids
(level limit switch)
for installation in the loading bellow

Short reaction time at blade speed 5 rpm

Basic device

Options

Compact housing C € conform and IP66 made of material	
A0	without housing mounted on a installation plate
A1	Aluminium, coated RAL 7001
A2	Stainless steel 1.4408 / 316

Compact housing C € conform and IP66 made of		Certifications, certificates, approvals
A1B1	Aluminium, coated RAL 7001	ATEX II 1/2D IIIC Dust
A1B2	Aluminium, coated RAL 7001	ATEX II 1D IIIC Dust D2
A2B1	Stainless steel 1.4408 / 316	ATEX II 1/2D IIIC Dust
A2B2	Stainless steel 1.4408 / 316	ATEX II 1D IIIC Dust D2

Betriebsspannung / Supply

C1	220 ... 240 V AC 50 ... 60 Hz
C2	110 ... 120 V AC 50 ... 60 Hz
C3	48 V AC 50 ... 60 Hz
C4	24 V AC 50 ... 60 Hz
C5	24 V DC
C6	12 V DC
C7	48 V DC
C9	Special voltages on request

Measuring blade speed

U0	Standard 1 rpm (suitable for most applications)
U5	5 rpm

Function monitoring

Standard	without monitoring
D1	of the rotation
D2	of the power supply
D9	of the rotation with a pulsating signal (only with C5 24 V DC)

Signal lamps

H0	Standard with function LEDs
----	-----------------------------

Bulk solids temperature / T_(process)

E0	Standard -25 °C...+80 °C 2)
E7	Device heating 2.5 watt for temperatures up to -35 °C
E74	Device heating 3.5 watt for temperatures up to -40 °C

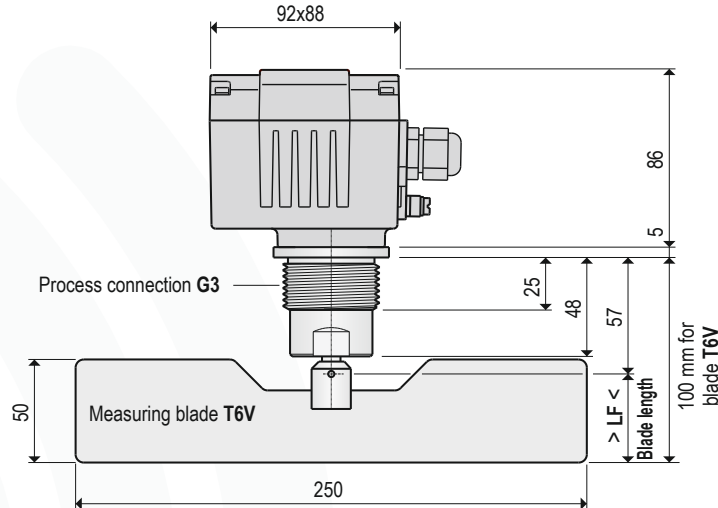
Pressure in the container / p_(Process)

P0	Standard -0.5 ... 5 bar 3)
----	----------------------------

DF30

Order code ...

T6V measuring blade



Options

Process connection (product touching) made of material

	AlMgSi	1.4301	1.4571
G1 Thread G1 DIN EN ISO 228-1	X	X	
G3 Thread G1½ DIN EN ISO 228-1	X	X	X

	AlMgSi	1.4301	1.4571
A Aluminium AlMgSi			
E Stainless steel 1.4301 / 304			
I Stainless steel 1.4571 / 316Ti			

Shaft bearing made of material

	Standard	ball-bearing	steel
Z Ball-bearing stainless steel 1.4401 / 316 (1. shaft bearing behind the shaft seal ring)			

Shaft seal ring (product touching) made of material

	R0 Standard	NBR, black (suitable for most bulk solids)
R1 PTFE/Viton® (FKM)		
R1A PTFE/Viton® (FKM) with Chesterton-629 fat pad ⁵⁾		
R2 NBR bright for food		
R5 filled PTFE bright for food		
R5A filled PTFE bright for food with Chesterton-629 fat pad ⁵⁾		

Measuring blade for light bulk solids (product touching) stainless steel 1.4301

	M0 without measuring blade	
T1 Blade T50 98x50		
T2 Blade T100 98x100		
T6 Blade VG250 250x50		
M7 Measuring blade connection piece		

Measuring blade reinforced (product touching) stainless steel 1.4301 1.4571

	T1V	T2V	T6V	M9
Blade T50 98x50				
Blade T100 98x100				
Blade VG250 250x50				
further measuring blades				on request

Standard stainless steel 1.4301 / 304

I Stainless steel 1.4571 / 316Ti

Order code

Accessories

Hexagonal nuts made of	AlMgSi	1.4301	1.4571
-SM1 G1 DIN EN ISO 228-1	X	X	
-SM3 G1½ DIN EN ISO 228-1	X	X	X

	A	E	I
Aluminium AlMgSi			
Stainless steel 1.4301 / 304			
Stainless steel 1.4571 / 316Ti			

Order code

Additional cable gland made of material

	-KV1 Standard M20x1.5 plastic	-KV2 M20x1.5 brass, nickel-plated for ATEX devices

Condensation protection made of material

	-SDK Pressure compensation element plastic	-SDE Pressure compensation element 1.4305 / 303	-DAE Pressure compensation element RST-DAE-SSM12Ex stainless steel 1.4305 / 303 for ATEX devices

Delivery from stock

ordered until 12⁰⁰ - dispatched at 16⁰⁰

Quantity discounts

	5 - 9	3 %
	10 - 24	5 %
	25 - 50	10 %



Explanations

D2) only available together with D2 or D1

Also note the additional special conditions in the explosion protection information when using the devices in zone 20 (II 1D).

- max. bulk solids temperature with B2 -20 °C ... +45 °C
- pressure in the container with B1, B2, B3 -80 ... +80 mbar
- Chesterton-629 food approved grease.

U0 H0 E0 P0 R0 are standard features of the device

M0 device without measuring blade (provided by the customer)

and are therefore not required in the order code, but are described in the device text.

Full, empty and demand indicator

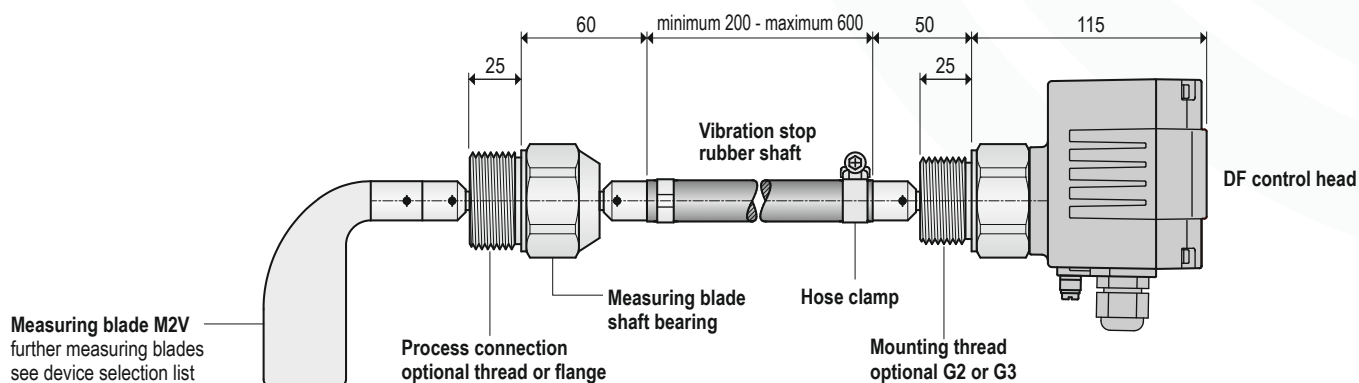
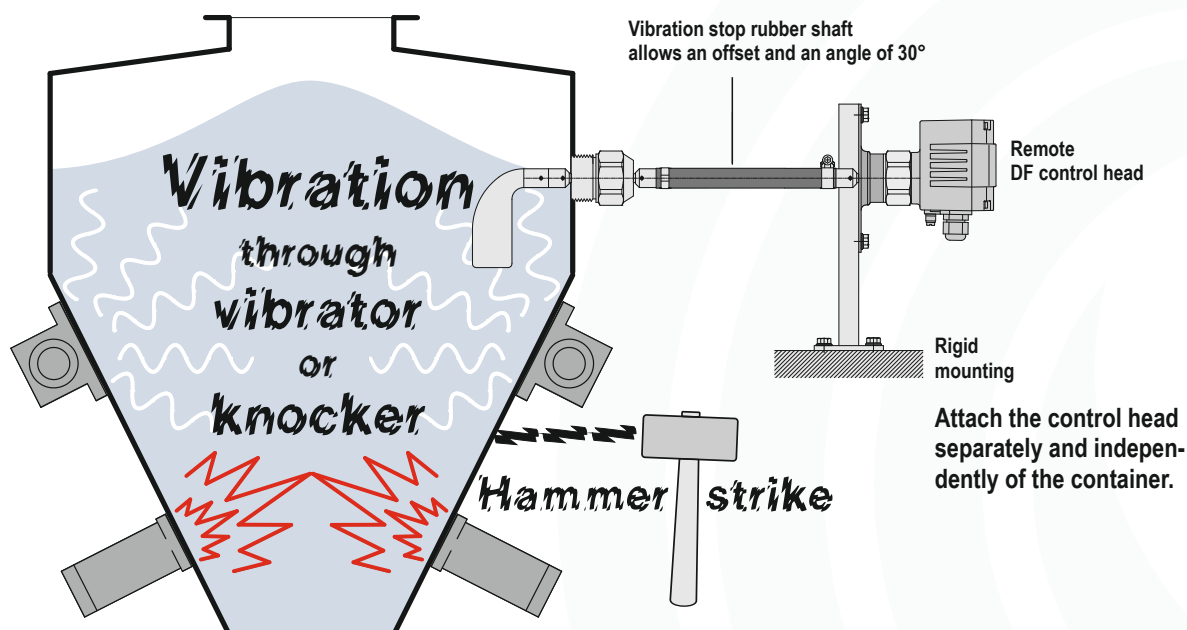
with remote control head and vibration stop rubber shaft for any mounting position

DFAS

4

Level indicator for bulk solids

the vibration stop rubber shaft prevents damage from the control head in case of strong vibrations and large knockers.



Offer information 2024-2025

Accessories

Hexagonal nuts made of		1.4301	1.4571
-SM2	G1¼ DIN EN ISO 228-1	X	X
-SM3	G1½ DIN EN ISO 228-1	X	X
E Stainless steel		1.4301 / 304	
I Stainless steel		1.4571 / 316Ti	

Order code

Delivery from stock

ordered until 12⁰⁰ - dispatched at 16⁰⁰



Quantity discounts		
5 - 9	3 %	
10 - 24	5 %	
25 - 50	10 %	



Explanations

¹⁾ pressure in the container with B3
-80 mbar ... +80 mbar

U0 H0 E0 P0 R0 are standard features of the device
and are therefore not required in the order code, but are described
in the device text.

Basic device

Options

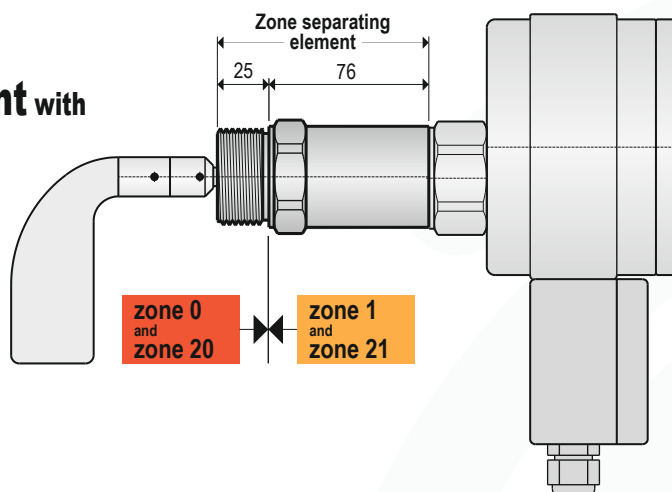
Compact housing C € conform and IP66 made of material	
A1	Aluminium, coated RAL 7001
A2	Stainless steel 1.4408 / 316
Compact housing C € conform and IP66 made of	
A1B3	Aluminium, coated RAL 7001
A2B3	Stainless steel 1.4408 / 316
Mounting thread made of Aluminium AlMgSi	
G2A-	Thread G1¼ DIN EN ISO 228-1
G3A-	Thread G1½ DIN EN ISO 228-1
Mounting thread made of stainless steel 1.4301 / 304	
G2E-	Thread G1¼ DIN EN ISO 228-1
G3E-	Thread G1½ DIN EN ISO 228-1
Supply voltage / Supply	
C1	220 ... 240 V AC 50 ... 60 Hz
C2	110 ... 120 V AC 50 ... 60 Hz
C3	48 V AC 50 ... 60 Hz
C4	24 V AC 50 ... 60 Hz
C5	24 V DC
C9	Special voltages on request
Measuring blade speed	
U0	Standard 1 rpm (suitable for most applications)
U5	5 U/min
Function monitoring	
Standard without monitoring	
D1	of the rotation and of the power supply
D2	of the power supply
Signal lamps	
H0 Standard with function LEDs	
H1	Collar for function LEDs installed in the device lid
H2	Signal lamp LED green installed in the device lid
Bulk solids temperature / T_(process)	
E0	Standard -25 °C...+80 °C
Pressure in the container / p_(Process)	
P0	Standard -0,5 ... 5 bar ¹⁾
Process connection (product touching) made of material	
G1	Thread G1 DIN EN ISO 228-1
G2	Thread G1¼ DIN EN ISO 228-1
G3	Thread G1½ DIN EN ISO 228-1
F1	Flange F70 Ø110, 4xØ9, Lk90
F2	Flange F100 150x150, 4xØ18, Lk170
E	Stainless steel 1.4301 / 304
I	Stainless steel 1.4571 / 316Ti
Shaft seal ring made of material	
R0	Standard NBR, black
R1	PTFE/Viton® (FKM)
R2	NBR bright for food
R5	filled PTFE bright for food
Shaft bearing made of material	
Standard ball-bearing steel	
Z	Ball-bearing stainless steel 1.4401 / 316
Measuring blade reinforced made of	
S2V	Socket blade 130x30 inclined
M1V	Socket blade 90x28
M2V	Socket blade 90x40
T1V	Blade T50 98x50
T2V	Blade T100 98x100
Standard stainless steel 1.4301 / 304	
I	Stainless steel 1.4571 / 316Ti

DFAS Order code

DF-ZT

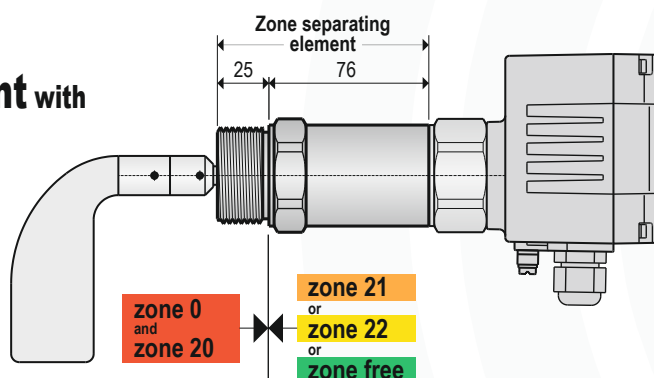
Zone separating element with
A3 aluminium
A4 stainless steel 1.4571 / 316Ti
Round housing

4



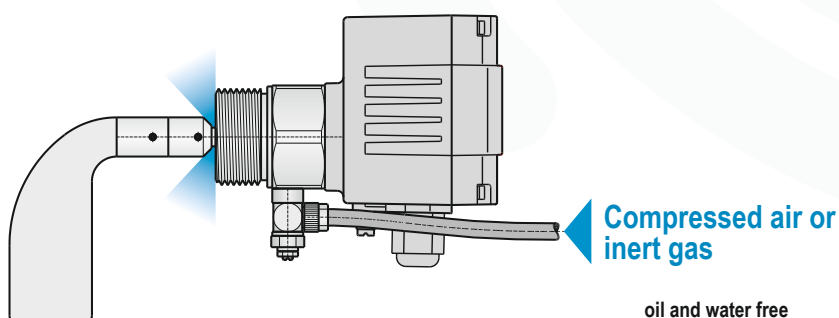
DF-ZT

Zone separating element with
A1 aluminium
A2 stainless steel 1.4408 / 316
Compact housing



R.DS

Annular gap flushing
and pressurized enclosure



oil and water free
minimum 4 bar, maximum 8 bar
consumption approx. 0.2 NI/min

Offer information 2024-2025

DF-ZT

Application for hazardous areas of
zone 0 and zone 20 in silo/container

installed between process connection and housing

Basic device

Options

Process connection (product touching) made of material

G2I	Thread G1¼	DIN/ISO 228	stainless steel 1.4571 / 316Ti	.....
G3I	Thread G1½	DIN/ISO 228	stainless steel 1.4571 / 316Ti	.....

DF-ZTP7-

Order code

for type of protection: **ATEX**  **II 1G/- IIB** **Gas**

ATEX  **II 1D/- IIIC** **Dust**

only with shaft seal ring **R1, R5, R6 or R7**

DF-ZTCP7-

Order code

for type of protection: **ATEX**  **II 1G/- IIC** **Gas**

ATEX  **II 1D/- IIIC** **Dust**

only with shaft seal ring **R1, R5, R6 or R7**

Housing material **1.4571 / 316Ti**

Process connection **G2I (G1¼) or G3I (G1½)** and all flanges made of **1.4571 / 316Ti**

Bulk solids temperature **-25 °C ... 180 °C**

Pressure in the vessel **-0.9 bar ... 10 bar**

Response delay approx. **3.00 sec.** at 1 rpm (**Standard**)
approx. **0.60 sec.** at 5 rpm

These technical data are maximum values and refer only to the zone separation elements described here.
These data must be reduced or taken into account depending on the selection of options and the devices used.

R.DS

Prevents the sticking of the sealing ring lip

Cleans the annular gap

Moisture cannot penetrate the shaft bearing

Options

Shaft seal ring (product touching) made of material

R1DS	PTFE/Viton® (FKM)	for all DF except DF23 and DF24	.....
R5DS	filled PTFE bright for food	for all DF except DF23 and DF24	.....
R6DS	NBR bright for food	for DF23 and DF24	.....
R7DS	filled PTFE bright for food	for DF23 and DF24	.....
R8DS	Graphite	only with bulk solids temperature E4 (high temperature)	.....

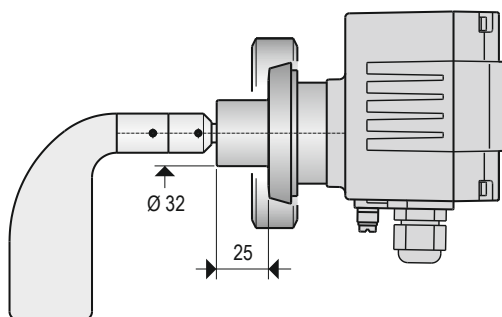
Order code see in the price information for DF devices

Offer information 2024-2025

F42

Process connection dairy coupling

4



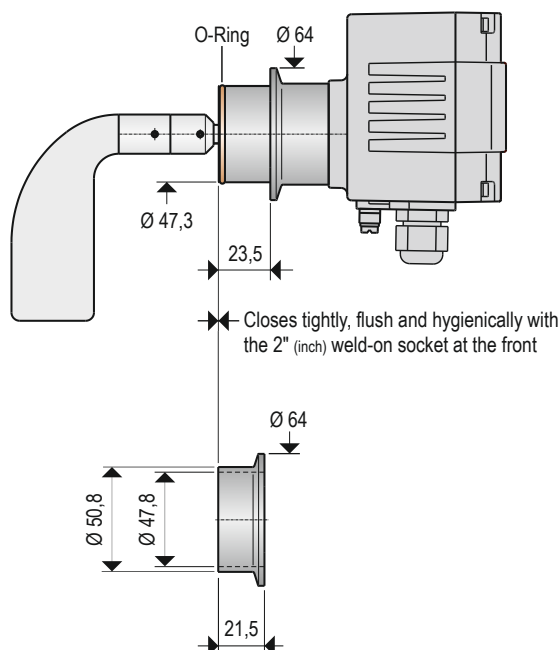
Process connection

F42 Milk pipe cone socket DN50/2 (product touching) made of material 1.4571/316Ti
Delivery incl. groove nut made of 1.4404 / 316L

Connection size Milk pipe DN50 / 2

F46

Process connection clamp coupling



Process connection

F46 clamp coupling DN 2" (product touching) made of material 1.4571/316Ti

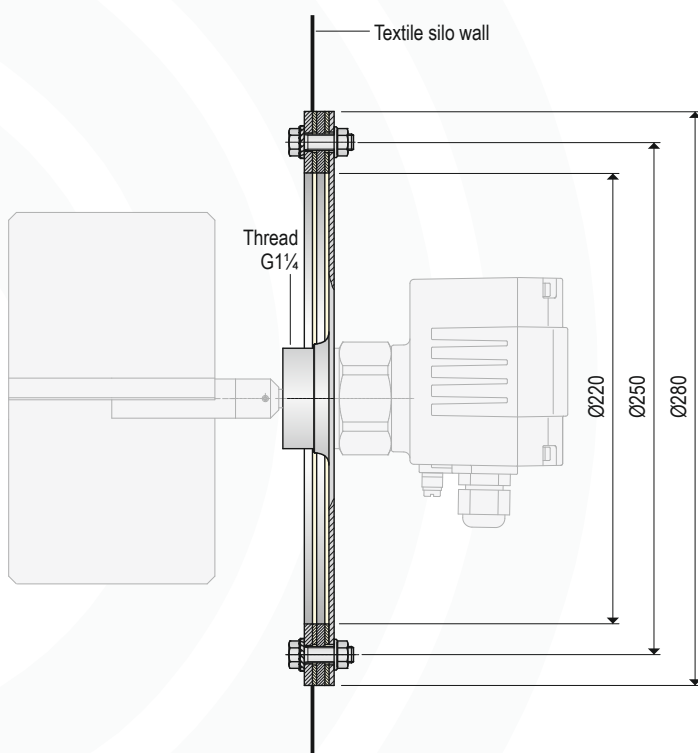
Weld-on socket

184012003M clamp 2 inch (product touching) made of material 1.4404/316L
polished with conical insertion to protect the O-ring

Order code

DF-MG2

Mounting flange for flexible textile silos



DF-MG2 Mounting flange for textile silo with IG1 1/4
(product touching) made of material steel, galvanized
(product touching) made of material 1.4301/304 ... on request

Order code

for steel, galvanized

Type of protection

ATEX II 1D/2D IIIC Dust

for stainless steel 1.4301/304

Ordercode **DF-MG2E**

Type of protection

ATEX II 1G/2G IIC Gas

ATEX II 1D/2D IIIC Dust

Offer information

This offer information is valid from 01.01.2024.

The previous offer lists are hereby invalid. No liability can be accepted for printing errors.

We only deliver according to our "General Terms and Conditions", which you can view and download at www.mollet-level.com.

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Selection aid for measuring blades

4

Measuring blade		Blade size	Spring force setting	
			light	medium
S2 S2V	Socket blade	130x30	$\frac{0,20}{0,35}$	$\frac{0,30}{0,50}$
M1V	Socket blade	90x28	$\frac{0,15}{0,30}$	$\frac{0,20}{0,50}$
M2V	Socket blade	90x40	$\frac{0,10}{0,20}$	$\frac{0,15}{0,30}$
TO TOV	Measuring blade T200	68x220	$\frac{0,15}{0,30}$	$\frac{0,25}{0,50}$
T1 T1V	Measuring blade T50	98x50	$\frac{0,15}{0,30}$	$\frac{0,25}{0,50}$
T2 T2V	Measuring blade T100	98x100	$\frac{0,10}{0,20}$	$\frac{0,20}{0,45}$
T5	Measuring blade T250	250x100	$\frac{0,015}{0,02}$	$\frac{0,02}{0,03}$
T9	Measuring blade T410	400x100	$\frac{0,005}{0,01}$	$\frac{0,01}{0,02}$
X1	Measuring blade X50	98x50	$\frac{0,15}{0,30}$	$\frac{0,25}{0,50}$
X2	Measuring blade X100	98x100	$\frac{0,10}{0,20}$	$\frac{0,20}{0,45}$
X3	Measuring blade X200	180x100	$\frac{0,025}{0,05}$	$\frac{0,075}{0,15}$
K1	Hinged blade T230	200x30	$\frac{0,05}{0,08}$	$\frac{0,07}{0,12}$
K3V	Hinged blade reinforced	185x28	$\frac{0,08}{0,12}$	$\frac{0,10}{0,15}$
Y3V	Measuring blade	98x45	$\frac{0,15}{0,30}$	$\frac{0,25}{0,50}$
SG	Measuring blade	126x8	$\frac{0,45}{0,55}$	$\frac{0,65}{0,75}$
TG	Measuring blade	98x8	$\frac{0,50}{0,60}$	$\frac{0,70}{0,80}$

Filling level up to 100 mm above measuring blade
Filling level until measuring blade is compl. covered

We will be pleased to provide you with a comprehensive list of the bulk density of all common bulk solids at our website.

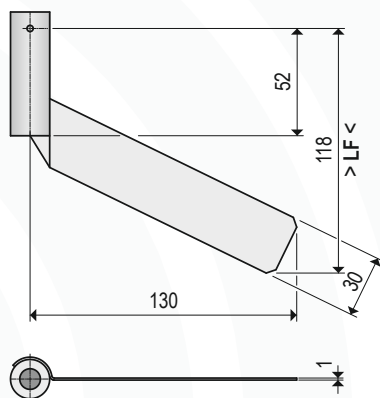
Fluidized bulk solids are lighter, especially also during filling and discharge.

This must be taken into account when selecting the measuring blade and setting the spring force.

Bulk density in t/m³ or kg/l
Lowest bulk density up to which the measuring blade can be used.

Offer information 2024-2025

S2 Socket blade

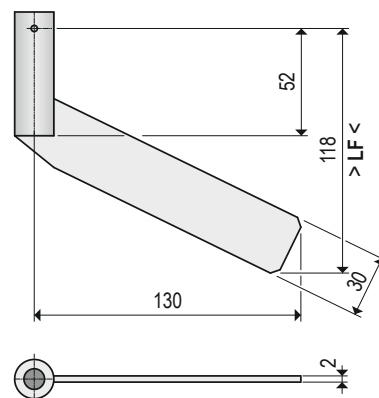


(product touching) stainless steel

-S2 1.4301 / 304

Order code

S2V Socket blade reinforced



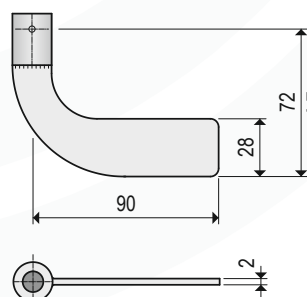
(product touching) stainless steel

-S2V 1.4301 / 304

-S2VI 1.4571 / 316Ti

Order code

M1V Socket blade reinforced



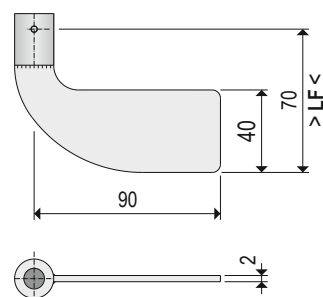
(product touching) stainless steel

-M1V 1.4301 / 304

-M1VI 1.4571 / 316Ti

Order code

M2V Socket blade reinforced



(product touching) stainless steel

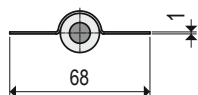
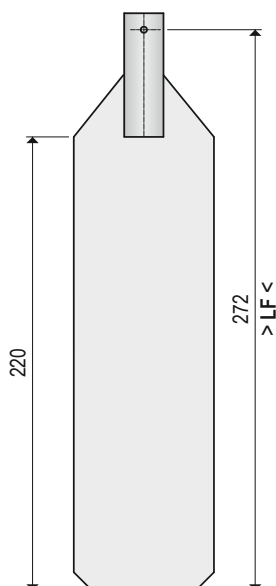
-M2V 1.4301 / 304

-M2VI 1.4571 / 316Ti

Order code

Offer information 2024-2025

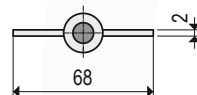
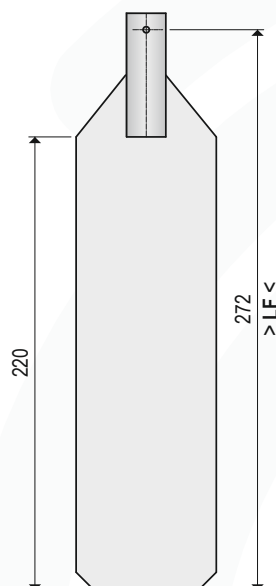
T0 Measuring blade



(product touching) stainless steel
-TO 1.4301 / 304

Order code

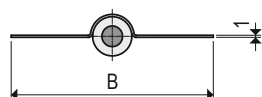
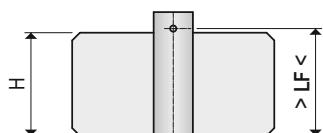
TOV Measuring blade reinforced



(product touching) stainless steel
-TOV 1.4301 / 304
-TOVI 1.4571 / 316Ti

Order code

T. Measuring blade

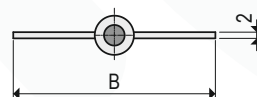
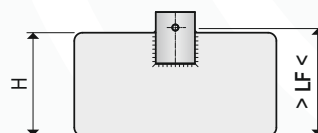


(product touching) stainless steel

	B	H	LF	
-T1	98	50	52	1.4301 / 304
-T2	98	100	102	1.4301 / 304
-T3	200	100	102	1.4301 / 304
-T5	250	100	102	1.4301 / 304
-T9	400	100	102	1.4301 / 304

Order code

T.V Measuring blade reinforced

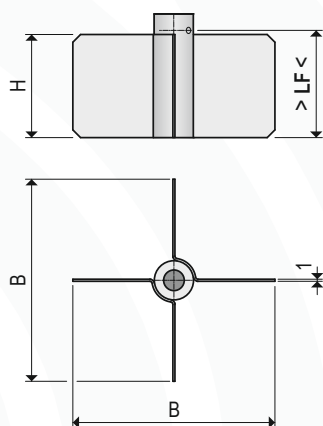


(product touching) stainless steel

	B	H	LF	
-T1V	98	50	52	1.4301 / 304
-T2V	98	100	102	1.4301 / 304
-T1VI	98	50	52	1.4571 / 316Ti
-T2VI	98	100	102	1.4571 / 316Ti

Order code

X Measuring blade



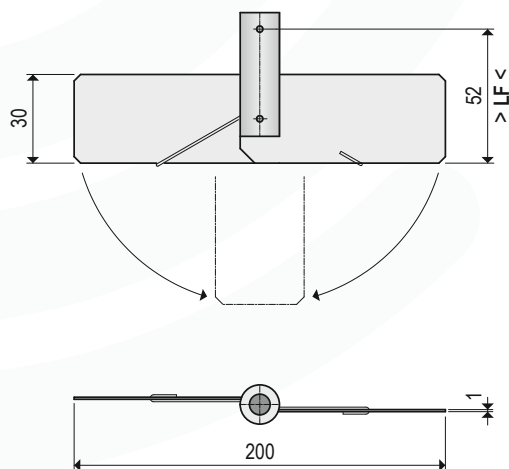
	B	H	LF	(product touching) stainless steel
-X1	98	50	52	1.4301 / 304
-X2	98	100	102	1.4301 / 304
-X3	180	100	102	1.4301 / 304

Order code



4

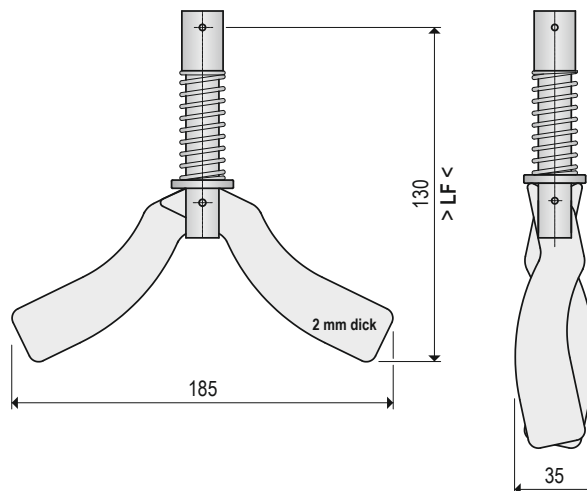
K1 Hinged blade



	(product touching) stainless steel
-K1	1.4301 / 304

Order code

K3V Hinged blade reinforced

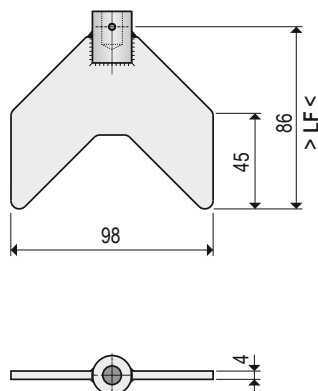


	(product touching) stainless steel
-K3V	1.4301 / 304

Order code

Offer information 2024-2025

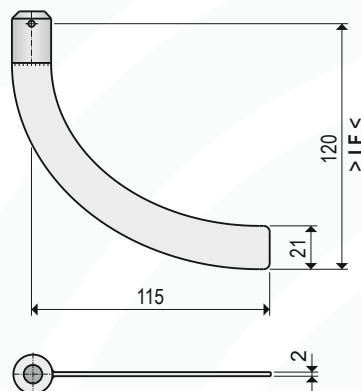
Y3V Measuring blade



(product touching) stainless steel
-Y3V 1.4301 / 304

Order code

M8V Socket blade reinforced

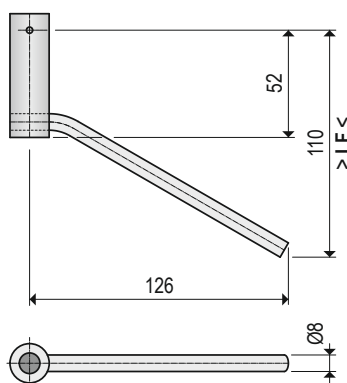


(product touching) stainless steel

M8V 1.4301
M8VI 1.4571

Order code

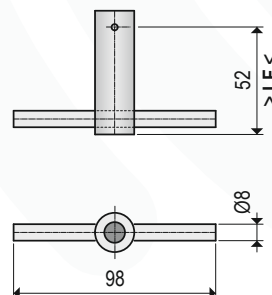
SG Measuring blade reinforced



(product touching) stainless steel
-SG 1.4301 / 304

Order code

TG Measuring blade reinforced

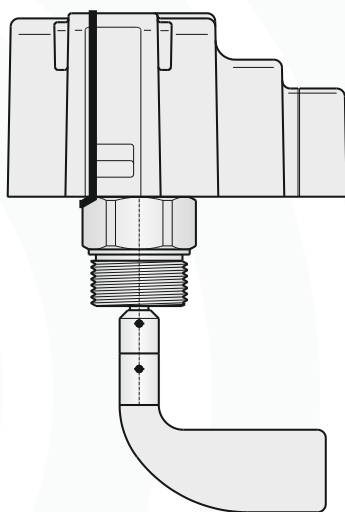


(product touching) stainless steel
-TG 1.4301 / 304

Order code

SH

Weather protection hood

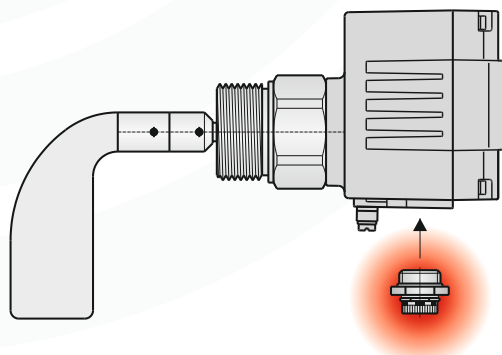


Condensation protection made of material

-SH Weather protection hood PVC RAL 7001 with storm tape

SD

Pressure compensation element



Condensation protection made of material

-SDK Pressure compensation element plastic

-SDE Pressure compensation element stainless steel

-DAE Pressure compensation element RST-DAE-SSM12Ex

stainless steel 1.4305 / 303 for ATEX devices

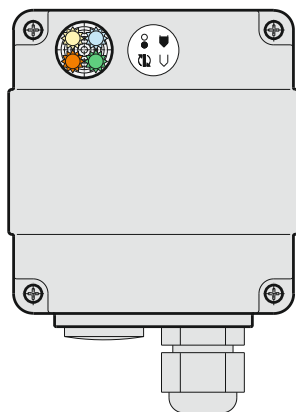
ATEX Ⓢ II 2G Ex e IIC Gb Ⓢ

ATEX Ⓢ II 2D Ex t IIC Db **Dust**

Offer information 2024-2025

H1 Collar

4



Signal lamps

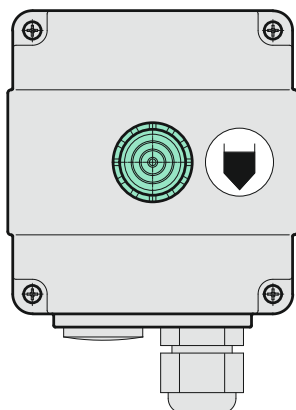
H1 Collar for function LEDs installed in the device lid

with this collar the LED's mounted on the PCB are visible from the outside

yellow Voltage present
blue Silo/container full
green Silo/container empty
red Fault on device (only with the selection D1 or D2)

Order code see in the price information for the DF devices

H2 Signal lamp



Signal lamps

H2 Signal lamp green with calotte installed in the device lid

Selectable level indication:
Silo/container full or silo/container empty (demand)

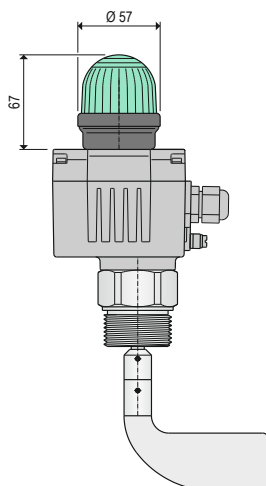
H3 Signal lamp

Signal lamps

H3 H1 and H2 together

Order code see in the price information for the DF devices

H8 Signal lamp



Signal lamps

H81 large signal lamp 230 V AC LED green mounted on the device lid

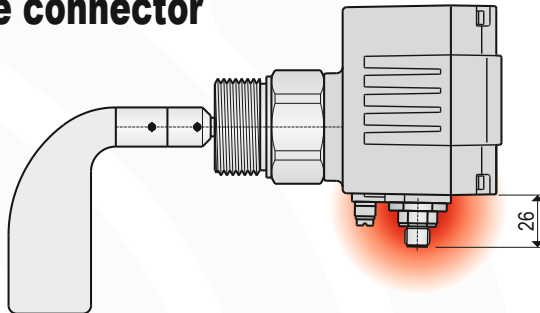
H85 large signal lamp 24 V DC LED green mounted on the device lid

Selectable level indication:
Silo/container full or silo/container empty (demand)

Order code see in the price information for the DF devices

ST1 ST2

Device connector



Device connector

-ST1 Connector RSFM 4 3-pin + PE
(Sensor plug M12x1)

Housing material Brass, nickel plated
Type of protection IP68/IP66 according to DIN EN 60529
Voltages up to 240 V AC

Device connector

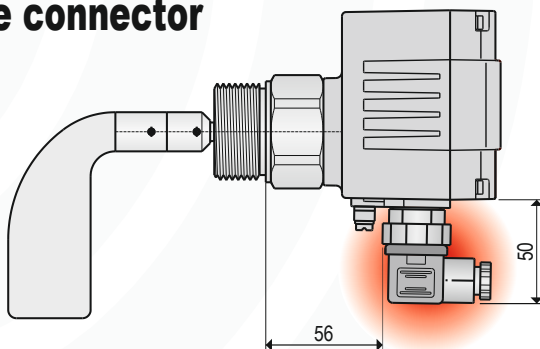
-ST2 Connector RSFM 5 4-pin + PE
(Sensor plug M12x1)

Housing material Brass, nickel plated
Type of protection IP68/IP66 according to DIN EN 60529
Voltages up to 240 V AC

Order code append to the order code from the price information

ST3

Device connector



Device connector

-ST3 Connector GDM 3-pin + PE
with coupling socket and seal

Housing material Plastic, black
Type of protection IP65 according to DIN EN 60529

Device connector

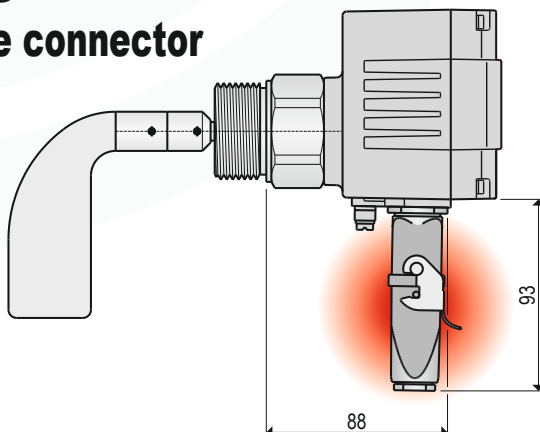
-ST3B9 Connector GDM 3-pin + PE for ATEX devices
with coupling socket and seal

Housing material Plastic, black
Type of protection IP65 according to DIN EN 60529
ATEX Ⓜ II 3D Ex tc IIC Dc **Dust**

Order code append to the order code from the price information

ST5

Device connector



Device connector

-ST5 Connector HTS 5-pin + PE
with coupling socket and seal

Housing material Aluminium, hammer stroke silver
Type of protection IP66 according to DIN EN 60529

Order code append to the order code from the price information

Offer information 2024-2025

DF

Calottes, signal lamp and housing lid

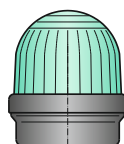
4



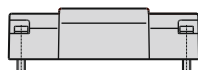
DF-KL1



DF-KL2



HLK200



DF-GD

Options

Calottes

- DF-KL1 for function LEDs with sealing ring (H1)
DF-KL2 for signal lamp with sealing ring (H2)

Large signal lamp

- HLK200-1 LED green 230 V AC (H81)
HLK200-5 LED green 24 V DC (H85)

Housing lid made of aluminium

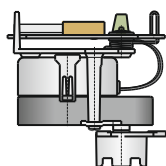
- DF-GD0 solo
DF-GD1 for function LEDs (H1)
DF-GD2 for signal lamp (H2)
DF-GD3 for function LEDs and signal lamp (H3)
DF-GD8 for large signal lamp (H8)

Housing lid made of stainless steel 1.4408 / 316

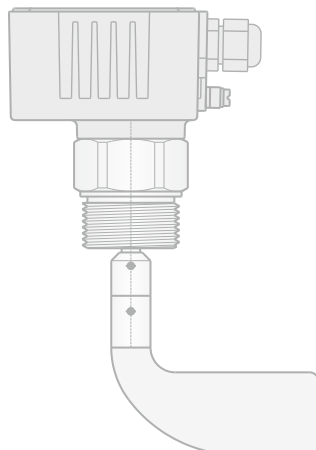
- DF-GD0VA solo
DF-GD1VA for function LEDs (H1)
DF-GD2VA for signal lamp (H2)
DF-GD3VA for function LEDs and signal lamp (H3)
DF-GD8VA for large signal lamp (H8)

DFPM

Printed circuit board with motor



DFPM



Basic device

Options

Supply voltage

- C1 220...240 V AC (50 ... 60 Hz)
C2 110...120 V AC (50 ... 60 Hz)
C3 48 V AC (50 ... 60 Hz)
C4 24 V AC (50 ... 60 Hz)
C5 24 V DC
C6 12 V DC
C7 48 V DC
C9 Special voltages on request

Measuring blade speed

- U1 **Standard** 1 rpm
U5 5 rpm

Function monitoring

Standard without monitoring

- D1 of the rotation
D2 of the power supply
D9 of the rotation with a pulsating signal

Signal lamps

- H0 with function LEDs
H2 Signal lamp LED, green
H8 Connexion for large signal lamp
H9 without function LEDs

Heating

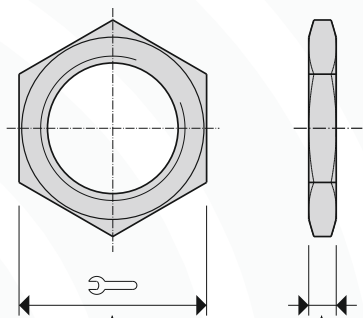
Standard without heating

- E7 Device heating 2.5 watt
E74 Device heating 3.5 watt

DFPM

Order code

SM Hexagon nuts



SM1 G1	41	6	G1
SM2 G1¼	50	8	G2
SM3 G1½	55	8	G3
SM4 G2	70	10	G4
SM5 M30x1,5	41	6	G5
SM6 M32x1,5	41	6	G6

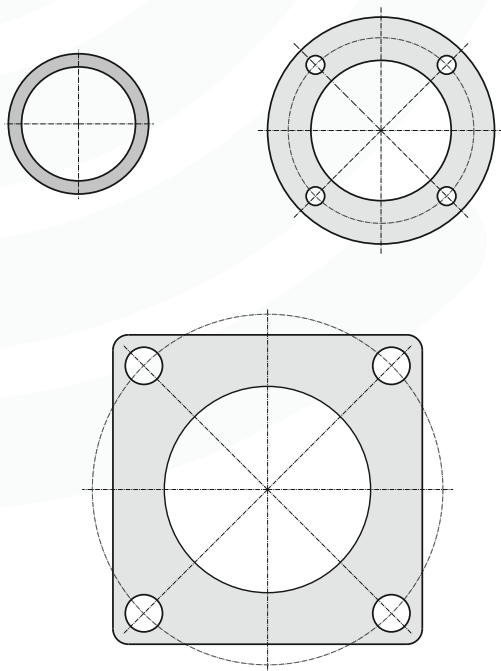
for process connection

Options

Hexagon nuts	made of material	AlMgSi	1.4301	1.4571
-SM1 G1	DIN EN ISO 228-1	X	X	
-SM2 G1¼	DIN EN ISO 228-1	X	X	X
-SM3 G1½	DIN EN ISO 228-1	X	X	X
-SM4 G2	DIN EN ISO 228-1 ... on request			
-SM5 M30x1,5			X	
-SM6 M32x1,5			X	
A	Aluminium AlMgSi			
E	Stainless steel 1.4301 / 304			
I	Stainless steel 1.4571 / 316Ti			
X	further materials			on request

Order code

DR Seals for process connections



Options

Process connection seals for temperatures up to	made of material
G1E0 Thread G1 DIN/ISO 228	+80 °C NBR brighth*
G2E0 Thread G1¼ DIN/ISO 228	+80 °C NBR brighth*
G2E3 Thread G1¼ DIN/ISO 228	+150 up to +260 °C Klingsil green
G2E4 Thread G1¼ DIN/ISO 228	+500 °C Stainless steel*
G2E9 Thread G1¼ DIN/ISO 228	+1000 °C Stainless steel*
G3E0 Thread G1½ DIN/ISO 228	+80 °C NBR brighth*
G3E3 Thread G1½ DIN/ISO 228	+150 up to +260 °C Klingsil green
G3E4 Thread G1½ DIN/ISO 228	+500 °C Stainless steel*
G3E9 Thread G1½ DIN/ISO 228	+1000 °C Stainless steel*
G5E0 Thread M30x1,5	+80 °C NBR brighth*
G6E0 Thread M32x1,5	+80 °C NBR brighth*
F1E0 Flange F70 Ø110, 4xØ9, Lk90	+80 °C NBR brighth*
F1E3 Flange F70 Ø110, 4xØ9, Lk90	+150 up to +260 °C Klingsil green
F2E0 Flange F100 150x150, 4xØ18, Lk170	+80 °C NBR brighth*
F2E3 Flange F100 150x150, 4xØ18, Lk170	+150 up to +260 °C Klingsil green

DR Order code

* suitable for food

