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Subject to change.

Valid: From 01.04.2014 until 31.03.2015, unless otherwise agreed.

All dimensions in mm (inches).

By publishing this selection list all other lists become invalid.

All prices in Euro, excluding VAT.

We assume no liability for typing errors.

All prices are EXW Betzigau, excluding packaging costs.

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

Vibranivo®

Level limit switch
Series VN 1000/2000/5000/6000
Selection list

Overview

- Level limit detection in bulk goods / solids
- Compact unit
- Die-casted housing aluminium
- Wide range of applications, no maintenance
- Full, demand, empty detector
- ATEX, IEC-Ex, FM, CSA
- GOST-R and RTN Ex
- EHEDG
- 1935/2004/EC
- 2011/65/EU

GasEx and DustEx approvals
Staub Ex approvals
Hygiene approval
Food grade materials
RoHS conform

Series	VN 1000	VN 2000	VN 5000	VN 6000
	ATEX / IEC-Ex / GOST-R / RTN Ex / EHEDG Small housing Short oscillating rods Sensitivity > 50g/l (3lb/ft3) For extreme mech. load For mounting in down pipes Advantageous design to avoid bridges Also for interface applications	ATEX / IEC-Ex / GOST-R / RTN Ex / EHEDG Small housing Standard oscillating rods Sensitivity > 20 g/l (1.2lb/ft3) Option > 5g/l (0.3lb/ft3) Vibrasil® < 5g/l (0.3lb/ft3)	ATEX / IEC-Ex / FM / CSA / EHEDG Spacious housing Short oscillating rods Sensitivity > 50g/l (3 lb/ft3) For extreme mech. load For mounting in down pipes Advantageous design to avoid bridges Also for interface applications	ATEX / IEC-Ex / FM / CSA / EHEDG Spacious housing Standard oscillationg rods Sensitivity > 20g/l (1.2lb/ft³) Option > 5g/l (0.3lb/ft³) Vibrasil® < 5g/l (0.3lb/ft³)
Housing	Standard 		Standard d de 	
VN ..020 Short extension length	VN 1020 	VN 2020 	VN 5020 	VN 6020 
VN ..030 Pipe extension	VN 1030 	VN 2030 	VN 5030 	VN 6030 

SOLUTIONS

Overview

VN ..040
Pipe extension
(screwed)

Custom made
pipe for flexible
lenghts

VN 1040	VN 2040	VN 5040	VN 6040
			

VN ..050
Cable extension

VN 1050	VN 2050	VN 5050	VN 6050
			

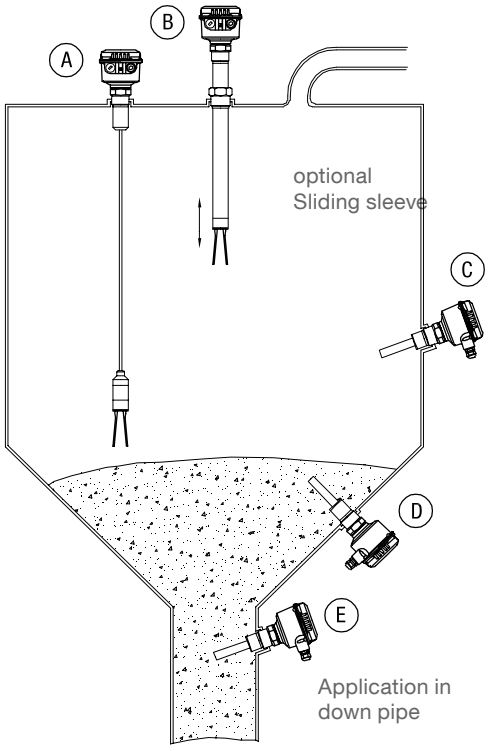
Specifications

Series			VN 1000	VN 2000	VN 5000	VN 6000
Approvals	**CE**		•	•	•	•
	ATEX / IEC-Ex:					
	Zone 20 and 20/21	Dust Ignition Proof	•	•	•	•
	Zone 0	Intrinsic Safe	•	•	•	•
	Zone 1	Flameproof / Increased Safety			•	•
	FM / CSA:					
	General purp.				•	•
	Cl. II, III Div. 1	Dust Ignition Proof			•	•
	Cl. I Div. 1	Intrinsic Safe			•	•
	Cl. I Div. 1	Explosionproof			•	•
	Zone 0	Intrinsic Safe			•	•
	Zone 1	Flameproof / Increased Safety			•	•
	GOST-R / RTN Ex:					
		Dust Ignition Proof	•	•		
	EHEDG:		•	•	•	•
Electronics	Relais SPDT	19..230V AC 19..55V DC	•	•	•	•
	Relais DPDT	19..230V AC 19..36V/55V DC	•	•	•	•
	PNP	18..50V DC	•	•	•	•
	2-wire without contact	19..230V AC/DC	•	•	•	•
	NAMUR	IEC 60947-5-6 2-wire		•		•
	8/16mA or 4-20mA	12.5-30/36V DC 2-wire	•	•	•	•

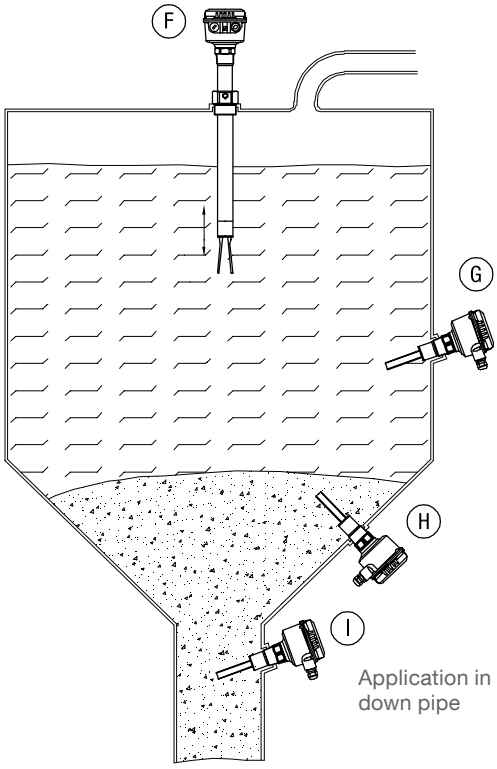
Extensions						
	VN ..020	Length of extension	165mm (6.47“)	235mm (9.25“)	165mm (6.47“)	235mm (9.25“)
		Ambient temperature	-40 .. +60°C (-40 .. +140°F)			
		Process temperature	-40 .. +150°C (-40 .. +302°F)			
		Process pressure	-1 .. +16bar (-14.5 .. +232 psi)			
		Process connection material / Extension	1.4301 (304) / 1.4541 (321) or 1.4404 (SS316L) / (food grade)			
	VN ..030	Length of extension	300 .. 4.000mm (11.8 .. 157”)			
		Ambient temperature	-40 .. +60°C (-40 .. +140°F)			
		Process temperature	-40 .. +150°C (-40 .. +302°F)			
		Process pressure	-1 .. +16bar (-14.5 .. +232 psi)			
		Process connection material / Extension	1.4301 (304) / 1.4541 (321) or 1.4404 (SS316L) / (food grade)			
	VN ..040	Length of extension	1.500mm (59”) or 4.000mm (157“))			
		Ambient temperature	-40 .. +60°C (-40 .. +140°F)			
		Process temperature	-40 .. +150°C (-40 .. +302°F)			
		Process pressure	-1 .. +16bar (-14.5 .. +232 psi)			
		Process connection material / Extension	1.4301 (304) / 1.4541 (321) or 1.4404 (SS316L) / (food grade)			
	VN ..050	Length of extension	750 … 20.000mm (27.6“ .. 787“)			
		Ambient temperature	-25 .. +60°C (-13 .. +140°F)			
		Process temperature	-25 .. +80°C (-13 .. +176°F)			
		Process pressure	-1 .. +6bar (-14.5 .. +87 psi)			
		Process connection material / Extension	1.4301 (304) / 1.4541 (321) Cable isolation: PUR (no food grade)			

Applications

Detection of solids



Detection of solids in water



Gas and Dust
(optional)

	A	B	C	D	E	F	G	H	I
VN 1020			•	•	•		•	•	•
VN 1030		•	•			•	•		
VN 1040		•	•						
VN 1050	•								
VN 2020			•	•	•				
VN 2030		•	•						
VN 2040		•	•						
VN 2050	•								
VN 5020			•	•	•		•	•	•
VN 5030		•	•			•	•		
VN 5040		•	•						
VN 5050	•								
VN 6020			•	•	•				
VN 6030		•	•						
VN 6040		•	•						
VN 6050	•								

VN ..020 Short extension length

VN 1020

VN 2020

VN 5020

VN 6020

Housings VN 5020 / 6020

Standard

d (flameproof)

de (flameproof / increased safety)

Food grade materials

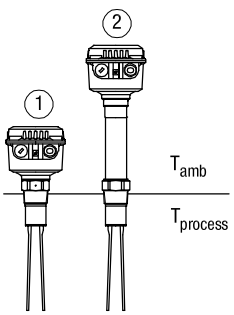
Cable entries (by default)
Depending on model selected, the following cable entries are supported (options see pos 23 on page 14):

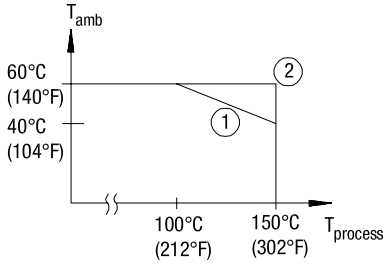
Version:	Cable entries:
ATEX/IEC-Ex flameproof (pos.2 T,D)	M20x1.5 (1x open conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,P,S,U)	NPT 1/2“ tapered ANSI B1.20.1 (1x open conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions see pages 17-20

pos. 3
Temperature extended shaft applications up to 150°C (302°F)

1 without
2 with





VN ..020 Short extension length

Basic type

VN 1020 .....
VN 2020 .....
VN 5020 .....
VN 6020 .....

pos. 2 **Certificate** (detailed Ex-markings: see page 20)

		Dust	Gas	Protection method
• • • •	0	CE	-	-
• • • •	W	ATEX	Zone 20 and 20/21	- Dust Ignition Proof
• • • •	Y	ATEX	Zone 20 and 20/21	Zone 0 and 0/1 Intrinsic Safe / Dust Ignition Proof
• •	R	ATEX	Zone 20/21	Zone 1 Flameproof / Increased Safety / Dust Ignition Proof
• •	T	ATEX	Zone 20/21	Zone 1 Flameproof / Dust Ignition Proof
• • • •	A	IEC-Ex	Zone 20 and 20/21	- Dust Ignition Proof
• • • •	B	IEC-Ex	Zone 20 and 20/21	Zone 0 and 0/1 Intrinsic Safe / Dust Ignition Proof
• •	C	IEC-Ex	Zone 20/21	Zone 1 Flameproof / Increased Safety / Dust Ignition Proof
• •	D	IEC-Ex	Zone 20/21	Zone 1 Flameproof / Dust Ignition Proof
• •	M	FM /CSA	-	- General purpose
• •	N	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	- Dust Ignition Proof
• •	P	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	Cl. I Div.1 / Zone 0 Intrinsic Safe / Dust Ignition Proof
• •	S	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	Zone 1 Flameproof / Increased Safety / Dust Ignition Proof
• •	U	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	Cl. I Div.1 / Zone 1 Explosion Proof / Dust Ignition Proof

For VN 1020, 2020: pos.2 0 includes GOST-R, pos.2 W includes RTN-Ex and GOST-R

pos. 3 **Temperature extended shaft**

• • • • 1 without (up to $T_{process}$ = 150°C (302°F) at T_{amb} < 40°C (104°F)) .....
• • • • 2 with (up to $T_{process}$ = 150°C (302°F) at T_{amb} > 40°C (104°F)) .....

pos. 4 **Electronic module**

				Available for certificates (pos.2) 0	W/A	Y/B	R/C	T/D	M	N	P	S	U
• • • •	E	Relay SPDT	19..230V AC 19..55V DC	•	•		•	•	•	•		•	•
• • • •	L	Relay DPDT	19..230V AC 19..55V DC	•	(1)		(3)	(3)	•	(1)		(3)	(3)
• • • •			19..230V AC 19..36V DC		(2)		(4)	(4)		(2)		(4)	(4)
• • • •	D	PNP	18..50V DC	•	•		•	•	•	•		•	•
• • • •	K	2-wire without contact	19..230V AC/DC	•	•		•	•	•	•		•	•
• •	M	NAMUR IEC 60947-5-6	2-wire			•					•		
• • • •	N	8/16mA or 4-20mA	12,5..36V* DC 2-wire	•	(1)	•	(3)	(3)					
• • • •	N	8/16mA	12,5..36V DC 2-wire		(2)		(4)	(4)					

*30V intrinsic safe

(1) without pos.26 1/2 (3) with pos.3.1, without pos.26 1/2
(2) with pos.26 1/2 (4) with pos.3.2 and/or pos.26 1/2

pos. 5 **Process connection**

• • • • A Thread R 1½ inch, conical DIN 2999 .....
• • • • B Thread NPT 1½ inch, conical ANSI B1.20.1 .....
• • • • P Triclamp 2" (DN 50) ISO 2852 .....
• • • • G Cap nut (only with EHEDG (pos.30(, not with pos.2 C,D,R,S,T,U) .....
• • • • L Flange DN 100 PN6, EN1092-1 (max. 6 bar (87psi)) .....
• • • • M Flange DN 100 PN16, EN1092-1 .....
• • • • S Flange 2" 150lbs ANSI B16.5 .....
• • • • T Flange 3" 150lbs ANSI B16.5 .....
• • • • U Flange 4" 150lbs ANSI B16.5 .....

pos. 8 **Material of process connection / extension "L"**

• • • • 1 Stainless steel 1.4301 (304) / 1.4541 (321)
• • • • 2 Stainless steel 1.4404 (316L)
Vibrating rods polished, Ra ≤ 0,75µm; Teflon coating on request

Further options and accessories: see page 14-16

Basic type

	A					3	1	
Position	1	2	3	4	5	6	7	8

← **Order code**

All positions are available with special design (use code "Z").

SOLUTIONS

VN ..030 Pipe extension

VN 1030

VN 2030

VN 5030

VN 6030

Housings VN 5030 / 6030

Standard

d (flameproof)

de (flameproof / increased safety)

Food grade materials

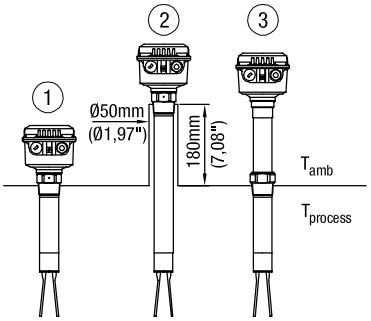
Cable entries (by default)
Depending on model selected, the following cable entries are supported (options see pos 23 on page 14):

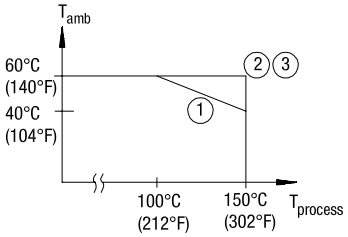
Version:	Cable entries:
ATEX/IEC-Ex flameproof (pos.2 T,D)	M20x1.5 (1x open conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,P,S,U)	NPT 1/2“ tapered ANSI B1.20.1 (1x open conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions see pages 17-20

pos. 3
Temperature extended shaft
applications up to 150°C (302°F)

1 without
2 without and with extended socket
3 with





VN ..030 Pipe extension

Basic type

VN 1030 .....
VN 2030 .....
VN 5030 .....
VN 6030 .....

pos. 2 **Certificate** (detailed Ex-markings: see page 20)

		Dust	Gas	Protection method
0	CE	-	-	
W	ATEX	Zone 20 and 20/21	-	Dust Ignition Proof
Y	ATEX	Zone 20 and 20/21	Zone 0 and 0/1	Intrinsic Safe / Dust Ignition Proof
R	ATEX	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
T	ATEX	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
A	IEC-Ex	Zone 20 and 20/21	-	Dust Ignition Proof
B	IEC-Ex	Zone 20 and 20/21	Zone 0 and 0/1	Intrinsic Safe / Dust Ignition Proof
C	IEC-Ex	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
D	IEC-Ex	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
M	FM /CSA	-	-	General purpose
N	FM /CSA	Cl. II, III, Div.1	-	Dust Ignition Proof
	CSA	A 20/21		
P	FM /CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 0	Intrinsic Safe / Dust Ignition Proof
	CSA	A 20/21		
S	FM /CSA	Cl. II, III, Div.1	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
	CSA	A 20/21		
U	FM /CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 1	Explosion Proof / Dust Ignition Proof
	CSA	A 20/21		

For VN 1030, 2030: Pos.2 0 includes GOST-R, Pos.2 W includes RTN-Ex and GOST-R

pos. 3 **Temperature extended shaft**

1 without (up to $T_{process}$ = 150°C (302°F) at T_{amb} < 40°C (104°F) or with extended socket) .....
2 with (up to $T_{process}$ = 150°C (302°F) at T_{amb} > 40°C (104°F)) without extended socket) .....

pos. 4 **Electronic module**

				Available for certificates (pos.2)									
				0	W/A	Y/B	R/C	T/D	M	N	P	S	U
E	Relay SPDT	19..230V AC	19..55V DC	•	•		•	•	•	•		•	•
L	Relay DPDT	19..230V AC	19..55V DC	•	(1)				•	(1)			
		19..230V AC	19..36V DC		(2)		•	•		(2)		•	•
D	PNP	18..50V DC		•	•		•	•	•	•		•	•
K	2-wire without contact	19..230V AC/DC		•	•		•	•	•	•		•	•
M	NAMUR IEC 60947-5-6	2-wire				•					•		
N	8/16mA or 4-20mA 12,5..36V*	DC 2-wire		•	(1)	•							
N	8/16mA 12,5..36V	DC 2-wire			(2)		•	•					

*30V intrinsic safe

(1) without pos.26 1/2
(2) with pos.26 1/2

pos. 5 **Process connection**

A Thread R 1½ inch, conical DIN 2999 .....
B Thread NPT 1½ inch, conical ANSI B1.20.1 .....
P Triclamp 2" (DN 50) ISO 2852 .....
G Cap nut (only with EHEDG (pos.30), not with pos.2 C,D,R,S,T,U) .....
L Flange DN 100 PN6, EN1092-1 (max. 6 bar (87psi)) .....
M Flange DN 100 PN16, EN1092-1 .....
S Flange 2" 150lbs ANSI B16.5 .....
T Flange 3" 150lbs ANSI B16.5 .....
U Flange 4" 150lbs ANSI B16.5 .....

pos. 7 **Length of extension "L"**

Z (starting from 0mm) per 100mm (3.94") or part thereof; min. 300mm (11.8"), max. 4000mm (157")

pos. 8 **Material of process connection / extension "L"**

1 Stainless steel 1.4301 (304) / 1.4541 (321)
2 Stainless steel 1.4404 (316L)
Vibrating rods polished, Ra ≤ 0,75µm; Teflon coating on request

Basic type

	B					3	Z		-	L=	mm
Position	1	2	3	4	5	6	7	8			

← **Order code**

All positions are available with special design (use code "Z").

SOLUTIONS

VN ..040 Pipe extension (screwed)

VN 1040

VN 2040

VN 5040

VN 6040

Housings VN 5040 / 6040

Standard

d (flameproof)

de (flameproof / increased safety)

Food grade materials

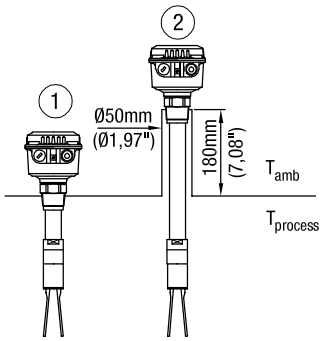
Cable entries (by default)
Depending on model selected, the following cable entries are supported (options see pos 23 on page 14):

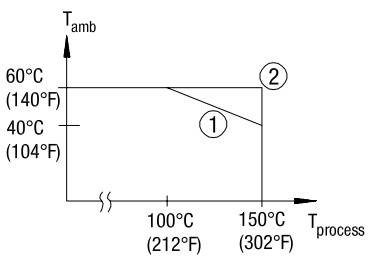
Version:	Cable entries:
ATEX/IEC-Ex flameproof (pos.2 T,D)	M20x1.5 (1x open conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,P,S,U)	NPT 1/2“ tapered ANSI B1.20.1 (1x open conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions see pages 17-20

applications up to 150°C (302°F)

1 without extended socket
2 with extended socket





VN ..040 Pipe extension (screwed)

Basic type

VN 1040 .....
VN 2040 .....
VN 5040 .....
VN 6040 .....

pos. 2 **Certificate** (detailed Ex-markings: see page 20)

		Dust	Gas	Protection method
0	CE	-	-	
W	ATEX	Zone 20 and 20/21	-	Dust Ignition Proof
Y	ATEX	Zone 20 and 20/21	Zone 0 and 0/1	Intrinsic Safe / Dust Ignition Proof
R	ATEX	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
T	ATEX	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
A	IEC-Ex	Zone 20 and 20/21	-	Dust Ignition Proof
B	IEC-Ex	Zone 20 and 20/21	Zone 0 and 0/1	Intrinsic Safe / Dust Ignition Proof
C	IEC-Ex	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
D	IEC-Ex	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
M	FM /CSA	-	-	General purpose
N	FM /CSA	Cl. II, III, Div.1	-	Dust Ignition Proof
	CSA	A 20/21		
P	FM /CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 0	Intrinsic Safe / Dust Ignition Proof
	CSA	A 20/21		
S	FM /CSA	Cl. II, III, Div.1	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
	CSA	A 20/21		
U	FM /CSA	Cl. II, III, Div.1	Cl. I Div.1 / Zone 1	Explosion Proof / Dust Ignition Proof
	CSA	A 20/21		

For VN 1040, 2040: Pos.2 0 includes GOST-R, Pos.2 W includes RTN-Ex and GOST-R

pos. 4 **Electronic module**

				Available for certificates (pos.2)									
				0	W/A	Y/B	R/C	T/D	M	N	P	S	U
E	Relay SPDT	19..230V AC 19..55V DC	.....	•	•		•	•	•	•		•	•
L	Relay DPDT	19..230V AC 19..55V DC	.....	•	•				•	•			
		19..230V AC 19..36V DC	.....				•	•				•	•
D	PNP	18..50V DC	.....	•	•		•	•	•	•		•	•
K	2-wire without contact	19..230V AC/DC	.....	•	•		•	•	•	•		•	•
M	NAMUR IEC 60947-5-6	2-wire	.....			•					•		
N	8/16mA or 4-20mA 12,5..36V*	DC 2-wire	.....	•	•	•							
N	8/16mA 12,5..36V	DC 2-wire	.....				•	•					

*30V intrinsic safe

pos. 5 **Process connection**

A	Thread R 1½ inch,	conical DIN 2999 .....
B	Thread NPT 1½ inch,	conical ANSI B1.20.1 .....
P	Triclamp 2" (DN 50)	ISO 2852 .....
L	Flange DN 100 PN6,	EN1092-1 (max. 6 bar (87psi)) .....
M	Flange DN 100 PN16,	EN1092-1 .....
S	Flange 2" 150lbs	ANSI B16.5 .....
T	Flange 3" 150lbs	ANSI B16.5 .....
U	Flange 4" 150lbs	ANSI B16.5 .....

pos. 7 **Length of extension "L"**

L	1.500mm (59")	(cuttable cable length) .....
M	4.000mm (157")	(cuttable cable length) .....

pos. 8 **Material of process connection / extension "L"**

1 Stainless steel 1.4301 (304) / 1.4541 (321)
2 Stainless steel 1.4404 (316L)
Vibrating rods polished, Ra ≤ 0,75µm; Teflon coating on request

Further options and accessories: see page 14-16

Basic type

	C		1			3		
Position	1	2	3	4	5	6	7	8

Order code

All positions are available with special design (use code "Z").

SOLUTIONS

VN ..050 Cable extension

VN 1050

VN 2050

VN 5050

VN 6050

Housings VN 5050 / 6050

Standard

d (flameproof)

de (flameproof / increased safety)

Cable entries (by default)
Depending on model selected, the following cable entries are supported (options see pos 23 on page 14):

Version:	Cable entries:
ATEX/IEC-Ex flameproof (pos.2 T,D)	M20x1.5 (1x open conduit + 1x Ex-d blind plug)
FM and CSA (pos.2 M,N,P,S,U)	NPT 1/2“ tapered ANSI B1.20.1 (1x open conduit + 1x Ex-d blind plug)
All other versions	M20x1.5 (1x screwed cable gland + 1x blind plug)

Dimensions see pages 17-20

VN ..050 Cable extension

Basic type

VN 1050 .....
VN 2050 .....
VN 5050 .....
VN 6050 .....

pos. 2 **Certificate** (detailed Ex-markings: see page 20)

		Dust	Gas	Protection method
0	CE	-	-	
W	ATEX	Zone 20 and 20/21	-	Dust Ignition Proof
Y	ATEX	Zone 20 and 20/21	Zone 0 and 0/1	Intrinsic Safe / Dust Ignition Proof
R	ATEX	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
T	ATEX	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
A	IEC-Ex	Zone 20 and 20/21	-	Dust Ignition Proof
B	IEC-Ex	Zone 20 and 20/21	Zone 0 and 0/1	Intrinsic Safe / Dust Ignition Proof
C	IEC-Ex	Zone 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
D	IEC-Ex	Zone 20/21	Zone 1	Flameproof / Dust Ignition Proof
M	FM /CSA	-	-	General purpose
N	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	-	Dust Ignition Proof
P	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	Cl. I Div.1 / Zone 0	Intrinsic Safe / Dust Ignition Proof
S	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	Zone 1	Flameproof / Increased Safety / Dust Ignition Proof
U	FM /CSA CSA	Cl. II, III, Div.1 A 20/21	Cl. I Div.1 / Zone 1	Explosion Proof / Dust Ignition Proof

For VN 1050, 2050: Pos.2 0 includes GOST-R, Pos.2 W includes RTN-Ex and GOST-R

pos. 4 **Electronic module**

			Available for certificates (pos.2)									
			0	W/A	Y/B	R/C	T/D	M	N	P	S	U
E	Relay SPDT	19..230V AC 19..55V DC	•	•		•	•	•	•		•	•
L	Relay DPDT	19..230V AC 19..55V DC	•					•				
		19..230V AC 19..36V DC		•		•	•		•		•	•
D	PNP	18..50V DC	•	•		•	•	•	•		•	•
K	2-wire without contact	19..230V AC/DC	•	•		•	•	•	•		•	•
M	NAMUR IEC 60947-5-6	2-wire			•					•		
N	8/16mA or 4-20mA	12,5..36V* DC 2-wire	•		•							
N	8/16mA	12,5..36V DC 2-wire		•		•	•					

*30V intrinsic safe

pos. 5 **Process connection**

A Thread R 1½ inch, conical DIN 2999 .....
B Thread NPT 1½ inch, conical ANSI B1.20.1 .....
L Flange DN 100 PN6, EN1092-1 (max. 6 bar (87psi)) .....
M Flange DN 100 PN16, EN1092-1 .....
S Flange 2" 150lbs ANSI B16.5 .....
T Flange 3" 150lbs ANSI B16.5 .....
U Flange 4" 150lbs ANSI B16.5 .....

pos. 7 **Length of extension "L"**

Z ((starting from 0mm) per 100mm (3.94") or part thereof; min. / max. see below .....

pos. 8 **Material of process connection / extension "L"**

1 Stainless steel 1.4301 (304) / 1.4541 (321) .....
2 Stainless steel 1.4404 (316L) .....
Vibrating rods polished, Ra ≤ 0,75µm; Teflon coating on request

Further options and accessories: see page 14-16

Extension "L":
min. 750mm (29,6")
max. 7.000mm (276") for VN 1050/5050
max. 20.000mm (787") for VN 2050/6050
max. 10.000mm (394") for VN 2050/6050 with pos.4M

Basic type

	D		1			3	Z	1	-	L= mm
Position	1	2	3	4	5	6	7	8		

Order code

All positions are available with special design (use code "Z").

SOLUTIONS

Options

VN 1020	VN 2020	VN 5020	VN 6020	VN 1030	VN 2030	VN 5030	VN 6030	VN 1040	VN 2040	VN 5040	VN 6040	VN 1050	VN 2050	VN 5050	VN 6050		
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	pos. 11x	**Guarantee extension to 5 years**
•	•	1	1	•	•	1	1	•	•	1	1	•	•	1	1	pos. 21	**Weather protection cover** (for Ex only approved for Zone 2 or 22 or Div. 2)

Mounting set for flange mounting

process connection flange	for counter flange with	consists of screws*	nuts*	washers*	sealing**		
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	pos. 22c	L	hole ø18	4 x M16x60	4 x M16	4 pcs	1 piece
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	pos. 22d	L	thread M16	4 x M16x40		4 pcs	1 piece
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	pos. 22e	M	hole ø18	4 x M16x60	8 x M16	8 pcs	1 piece
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	pos. 22f	M	thread M16	4 x M16x40		8 pcs	1 piece

* material stainless steel A2 **max. 250°C (482°F), material not food grade

Cable entry

Selection of the following options only necessary, if a deviation from the default cable gland / conduit is required:

•	•	2	2	•	•	2	2	•	•	2	2	•	•	2	2	pos. 23x	M20x1,5 2x screwed cable gland
		3	3			3	3			3	3			3	3	pos. 23y	M20x1,5 1x screwed cable gland +1x blind plug
•	•	4	4	•	•	4	4	•	•	4	4	•	•	4	4	pos. 23a	NPT 1/2" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug)
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	pos. 23b	NPT 3/4" tapered ANSI B1.20.1 (1x conduit + 1x Ex-d blind plug) on req.

Sliding sleeve (max. 16bar (232psi), max. 150°C (302°F))
process connection as follows or flange as choosen; with Triclamp on request
Not for Ex applications Zone 0/1 (Cat. 1/2) with separation wall

				•	•	•	•									pos. 25w	G2" ISO 228 material 1.4301 (304)
				•	•	•	•									pos. 25x	G2" ISO 228 material 1.4404 (316L)
				•	•	•	•									pos. 25u	NPT 2" ANSI B1.20.1 material 1.4301 (304)
				•	•	•	•									pos. 25v	NPT 2" ANSI B1.20.1 material 1.4404 (316L)
				5	5	5	5									pos. 25t	Flange 1.4301 / 1.4541 (304/321)
				5	5	5	5									pos. 25s	Flange 1.4404 (316L)

Special versions

	•		•		•		•		•		•		•		•	pos. 26x	Enhanced sensitivity (> 5g/l (0,3lb/ft³))
	6		6		6		6		6		6		6		6	pos. 26a	Vibrasil 70 (sensitivity <5g/l (0,3lb/ft³))
	6		6		6		6		6		6		6		6	pos. 26b	Vibrasil 90 (sensitivity <5g/l (0,3lb/ft³))
6		6		6		6		6		6		6		6		pos. 26c	Adjustable sensitivity for interface applications (only with CE)
•	•	7	7	•	•	7	7									pos. 26.1	Separate housing cable length 1,5m (59")
•	•	7	7	•	•	7	7									pos. 26.2	Separate housing cable length 4,0m (157")

Signal lamp

8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	pos. 27a	Bulb in cable gland, 2W green
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	pos. 27c	Bulb in cable gland, 2W red
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	pos. 27b	LED (glass window in lid)
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	pos. 29	**Plug 4-pole** (incl. PE)

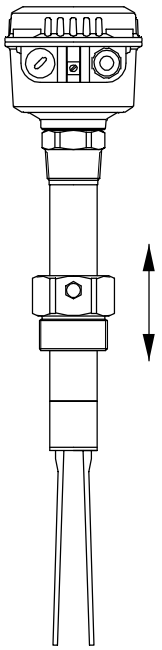
EHEDG approval

11	11	11	11	11	11	11	11									Pos. 30a	Without flush welding socket
11	11	11	11	11	11	11	11									Pos. 30b	Process connection flush welding socket ø80 made of aluminium
11	11	11	11	11	11	11	11									Pos. 30c	Process connection flush welding socket ø80 made of 1.4301 (304)
11	11	11	11	11	11	11	11									Pos. 30d	Process connection flush welding socket ø80 made of 1.4404 (316L)

1 Available for all versions except explosionproof / flameproof versions (pos.2 C,D,R,T,S,U)
2 Available for all versions except flameproof version (pos.2 D,T,U)
3 Available for FM/CSA versions (pos.2 M,N,P,S) except flameproof version (pos.2 U)
4 Available for CE, ATEX, IEC-Ex (pos.2 0,W,Y,R,T,A,B,C,D)
5 Flange and material as selected in pos.5 and 8. For FM/CSA on request.
6 Available only with electronic module "Relais SPDT" (pos.4 E), Vibrasil 70 only with flange DN100/4"
7 Available for all versions. Electronic module "8/16mA" and "8/16mA or 4-20mA" (pos.4 N) not for FM/CSA
8 Available for CE (pos.2 0), not in combination with weather protection cover (pos 21) and cable entries pos.23 x,a,b.
For electronic module Relais SPDT and DPDT (pos. 4.E,L) three bulbs (24V, 115V and 230V) will be delivered. For PNP (pos.4.D) a 24V bulb will be delivered. For other electronics on request.
9 Available for all versions except explosionprooof / flameproof version (pos.2 C,D,R,T,S,U), not with weather protection cover (Pos. 21)
10 Available only for CE (pos.2 0)
11 Available only for cap nut (pos.5 G). Not with pos.22, 25, 26a. With pos.30a the flush welding socket must be manufactured on site.

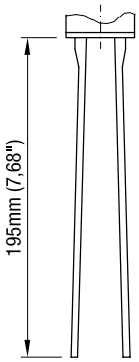
Options

pos. 25
Sliding sleeve

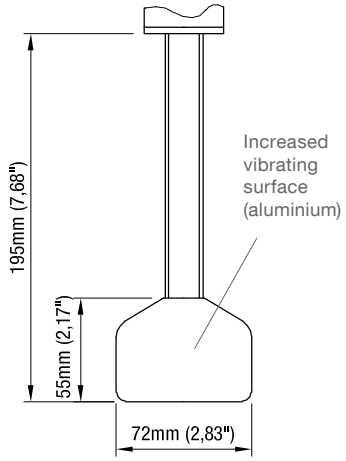


pos. 26x
Enhanced sensitivity

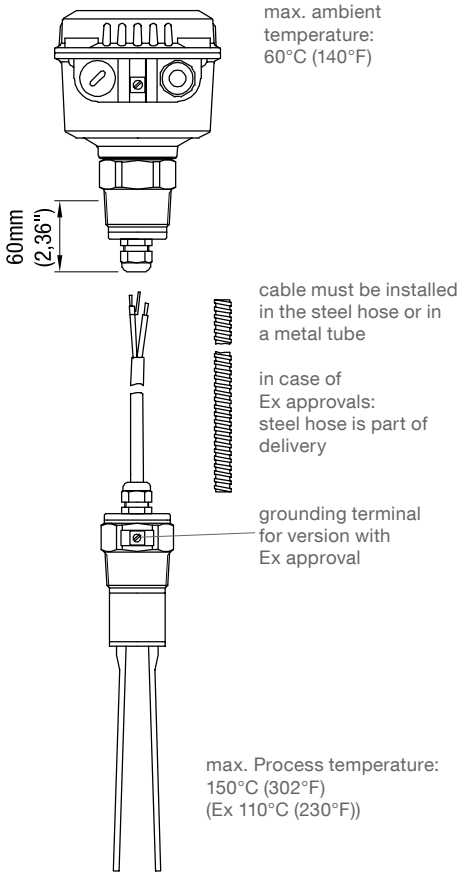
pos. 26b
Vibrasil® 90



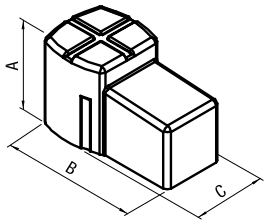
pos. 26a
Vibrasil® 70



pos. 26 1-2
Separate housing

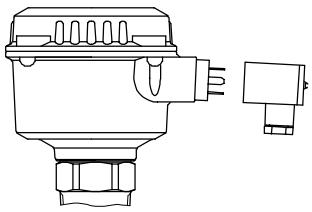


pos. 21
Weather protection cover



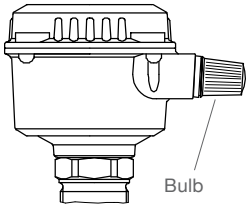
	VN 10..0 VN 20..0	VN 50..0 VN 60..0
A	100mm (3.94“)	130mm (5.12“)
B	165mm (6.5“)	200mm (7.87“)
C	88mm (3.46“)	125mm (4.92“)

pos. 29
Plug 4-pole

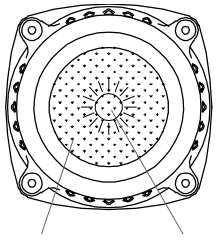


Signal lamp

pos. 27a, c
Bulb in cable gland

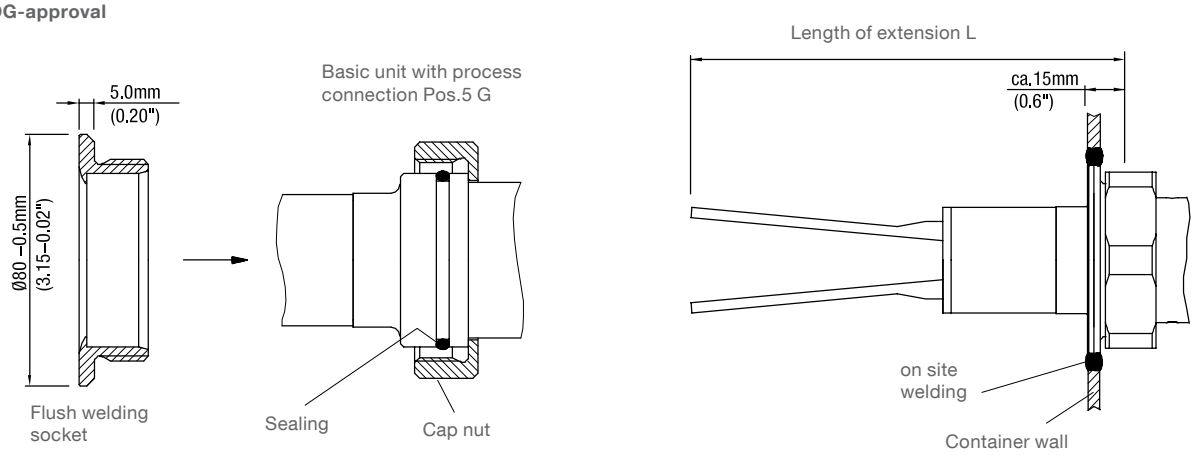


pos. 27b
LED (glass window in lid)



Options / Accessories

Pos. 30
EHEDG-approval



NAMUR Isolating Switching Amplifier Protection method [EEx ia] IIC
(for Electronic module pos.4 M)

Terminal housing. Switchable signal output logic. Each channel has one independent output.

Channels	Signal output	Monito-ring*	Supply	Manufacturer / Type	Price
				Turck	
1	Relay (2x SPST)	x	20-125VDC, 20-250VAC	IM1-12EX-R	
	2 transistor outputs (short-circuit proof, floating)	x		IM1-12EX-T	
2	Relay (2x SPST)	x	20-125VDC, 20-250VAC	IM1-22EX-R	
	2 transistor outputs (short-circuit proof, floating)	x		IM1-22EX-T	
4	Relais (4x SPST)	x	20-125VDC, 20-250VAC	IM1-451EX-R	
	4 transistor outputs (short-circuit proof, floating)	x		IM1-451EX-T	

* Input circuit monitoring for wire-break, partial for short-circuit.
Partial additional monitoring signal output.

Other types and manufacturers on request.

8/16mA Limit Value Monitor
(for Electronic module pos.4 N)

Limit Value Monitor Type IM43-13-R .....
Input: 1 channel 4-20mA
Output: 3 Limit Value Relays for monitoring of 3 limit values of a current signal.
Terminal housing. Supply: 20-125VDC, 20-250VAC. Manufacturer: Turck.
Use in Hazardous Locations only with additional connected Isolating Transducer IM33.

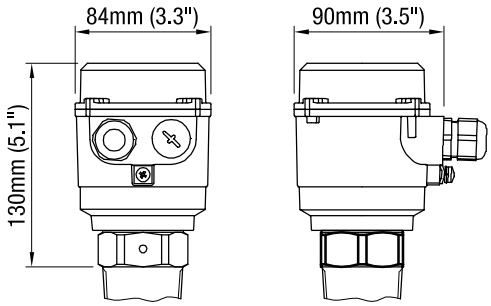
Isolating Transducer Type IM33-11Ex-Hi/24VDC (1 channel) .....
Isolating Transducer Type IM33-11Ex-Hi/24VDC (2 channels) .....
Protection method [EEx ia] IIC.
Terminal housing.
Input/Output: 0/4-20mA (galvanic isolated). Supply: 19-29V DC.

Dimensions

Housing versions

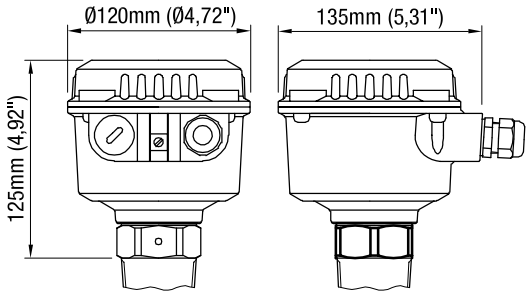
Series VN 1000 / 2000

Standard



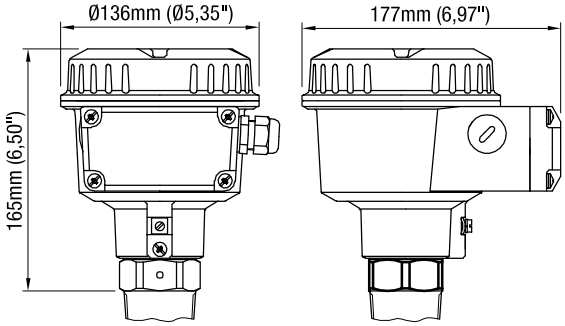
Series VN 5000 / 6000

Standard



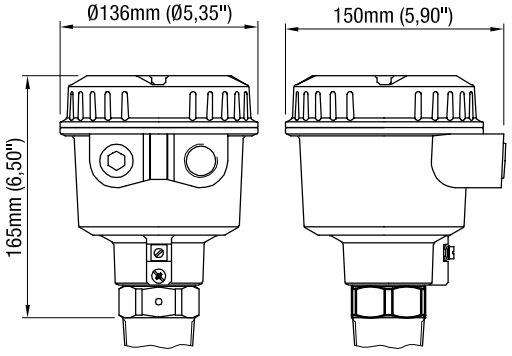
de

Explosionproof with increased safety terminal box



d

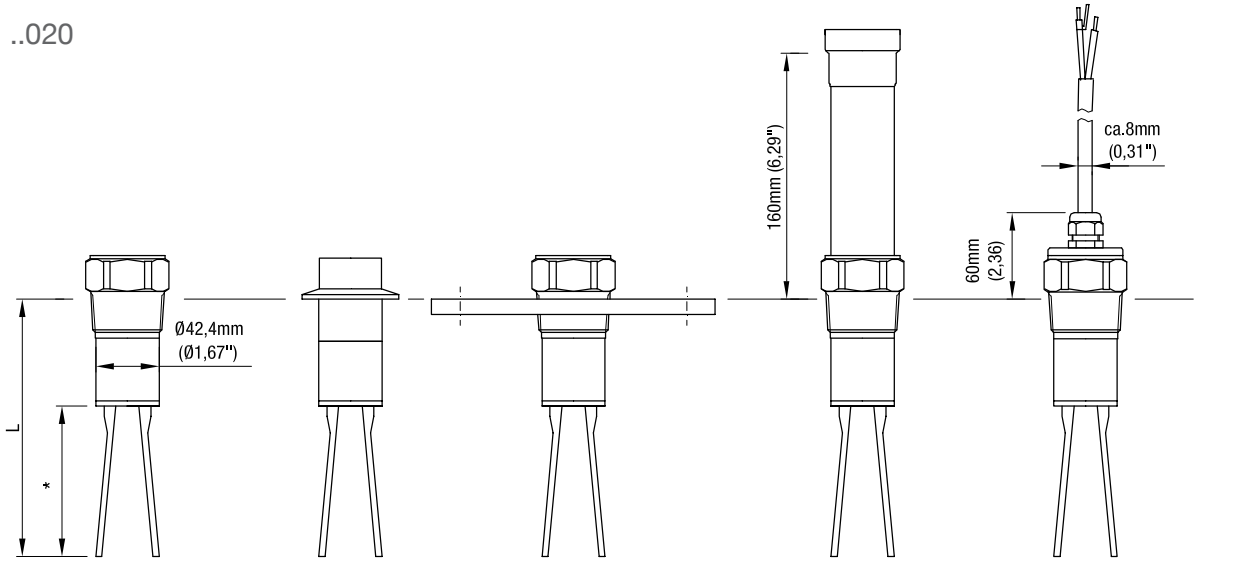
Flameproof / explosionproof



Dimensions

Extensions

VN ..020



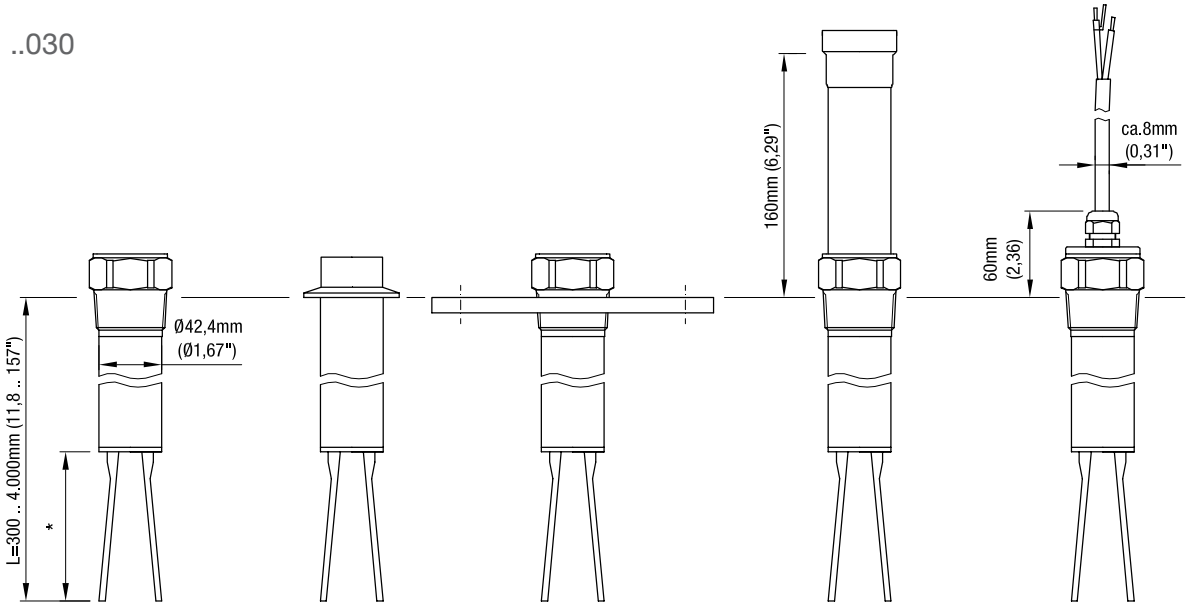
Thread | Triclamp | Flange | Temperature extended shaft (pos. 3.2) | With option separate housing (pos. 26.1/ 26.2)

Cap nut: see page 16

	L	
	without option	with option: Enhanced sensitivity (pos. 26x) Vibrasil® 70 (pos. 26a) Vibrasil® 90 (pos. 26b
VN 1020 VN 5020	165mm (6.5“)	
VN 2020 VN 6020	235mm (9.25”)	260mm (10.24“)

* see page 19 bottom right

VN ..030



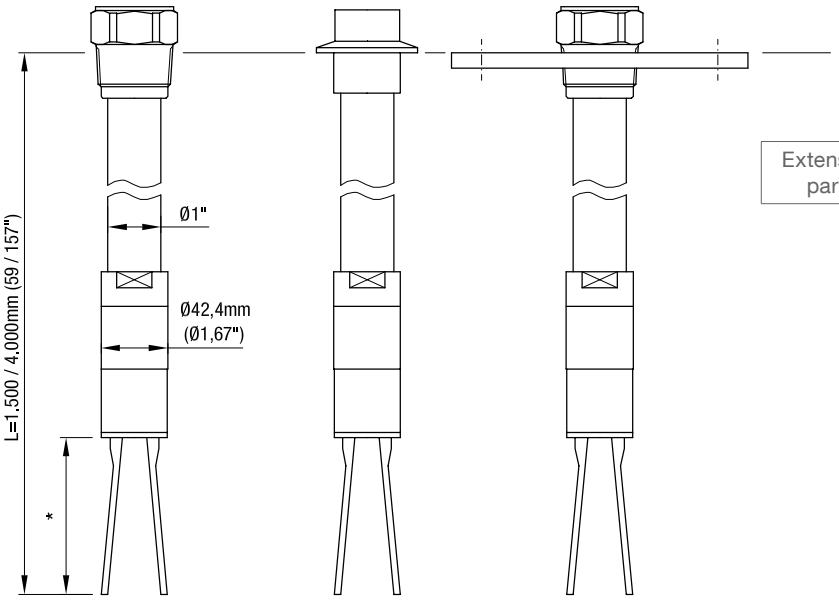
Thread | Triclamp | Flange | Temperature extended shaft (pos. 3.2) | With option separate housing (pos. 26.1/ 26.2)

* see page 19 bottom right

Cap nut: see page 16

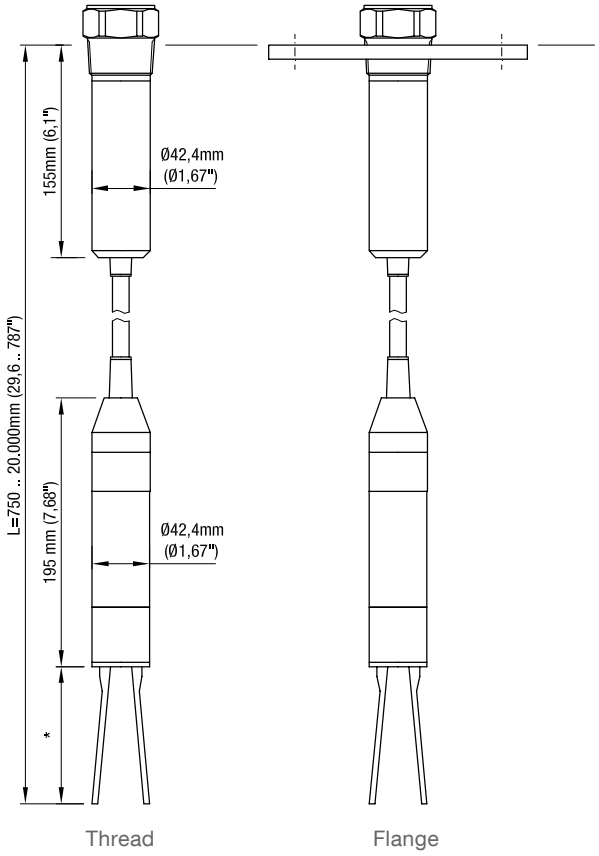
Dimensions

VN ..040



* see below right

VN ..050

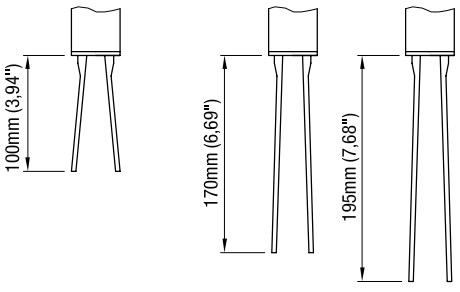


* see right

* Length of oscillating rods

VN 10..0
VN 50..0

VN 20..0
VN 60..0

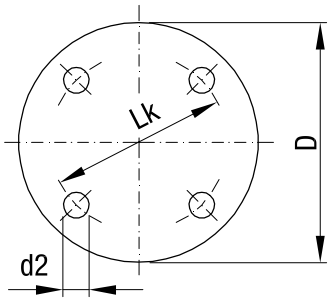


with option
Enhanced sensitivity (pos.26x)
Vibrasil® 70 (pos.26a)
Vibrasil® 90 (pos.26b)

Dimensions / Detailed Ex-markings

Flanges

Code	type	number of holes	d2	Lk	D	T (thickness)
L	Flange DN100 PN6	4	18mm (0.71“)	170mm (6.69“)	210mm (8.27“)	16mm (0.63“)
M	Flange DN100 PN16	8	18mm (0.71“)	180mm (7.09“)	220mm (8.66“)	20mm (0.79“)
S	Flange 2“ 150lbs	4	19.1mm (0.75“)	120.7mm (4.75“)	152.4mm (6.01“)	19.1mm (0.75“)
T	Flange 3“ 150lbs	4	19.1mm (0.75“)	152.4mm (6.01“)	190.5mm (7.5“)	23.9mm (0.94“)
U	Flange 4“ 150lbs	8	19.1mm (0.75“)	190.5mm (7.5“)	228.6mm (9“)	23.9mm (0.94“)



Detailed Ex-markings

pos. 2		Certificate	Housing
	0	CE	Standard
	W	ATEX II 1D Ex t IIIC T! Da IP6X and 1/2D Ex t IIIC T! Da/Db IP6X	Standard
	Y	ATEX II 1G Ex ia IIC T! Ga and 1/2G Ex ia IIC T! Ga/Gb and ATEX II 1D Ex t IIIC T! Da IP6X and 1/2D Ex t IIIC T! Da/Db IP6X	Standard
	R	ATEX II 2G Ex de [ia]* IIC T! Gb and 1/2D Ex t IIIC T! Da/Db IP6X	de
	T	ATEX II 2G Ex d [ia]* IIC T! Gb and 1/2D Ex t IIIC T! Da/Db IP6X	d
	A	IEC-Ex t IIIC T! Da IP6X and t IIIC T! Da/Db IP6X	Standard
	B	IEC-Ex ia IIC T! Ga and ia IIC T! Ga/Gb IEC-Ex t IIIC T! Da IP6X and t IIIC T! Da/Db IP6X	Standard
	C	IEC-Ex de [ia]* IIC T! Gb and t IIIC T! Da/Db IP6X	de
	D	IEC-Ex d [ia]* IIC T! Gb and t IIIC T! Da/Db IP6X	d
	M	FM / CSA general purpose	Standard
	N	FM / CSA DIP Cl. II, III Div. 1 Gr. E,F,G CSA Ex DIP A20/21	Standard
	P	FM / CSA IS Cl. I, II, III Div. 1 Gr. A-G FM Cl. I Zone 0 and 0/1 AEx ia IIC CSA Cl. I Zone 0 and 0/1 Ex ia IIC and CSA Ex DIP A20 and A20/21	Standard
	S	FM Cl. I Zone 1 AEx de [ia]* IIC and FM / CSA Cl. II,III Div. 1 Gr. E,F,G CSA Cl. I Zone 1 Ex de [ia]* IIC and CSA Ex DIP A20/21	de
	U	FM XP-IS Cl. I,II,III Div. 1 Gr. B-G* and FM Cl. I Zone 1 AEx d [ia] IIC* CSA XP-IS Cl. I,II,III Div. 1 Gr. B-G* CSA Cl. I Zone 1 Ex d [ia]* IIC and CSA Ex DIP A20/21	d

* [ia] or IS is not available for versions VN ..020 without temperature extended shaft (pos. 3.1)
(In this case no intrinsic safe connection between Electronic module and Vibrating fork is used)

Electrical installation

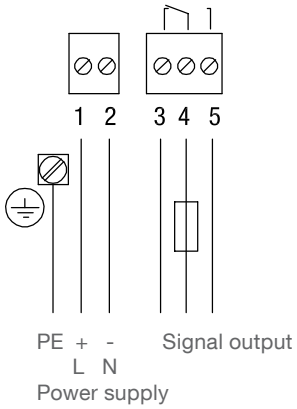
Universal voltage
Relay SPDT

Power supply:
19..230V 50-60Hz +10% 8VA
19..55V DC +10% 1,5W

Signal output:
Floating relay SPDT

VN 1000/ 2000:
AC max. 253V, 4A, 500VA at cos Phi = 1
DC max. 253V, 4A, 60W
VN 5000/ 6000:
AC max. 250V, 8A, non inductive
DC max. 30V, 5A, non inductive

Fuse on signal output: max 10A



Universal voltage
Relay DPDT

Power supply::
19..230V 50-60Hz +10% 18VA
19..55V (36V*) DC +10% 2W

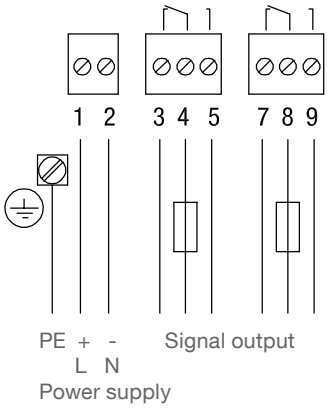
Signal output:
Floating relay DPDT

VN 1000/ 2000:
AC max. 253V, 4A, 500VA at cos Phi = 1
DC max. 253V, 4A, 60W

VN 5000/ 6000:
AC max. 250V, 8A, non inductive
DC max. 30V, 5A, non inductive

Fuse on signal output: max 10A

* Version with intrinsic safe connection between electronic module and vibration fork (see pos.4 in price list)



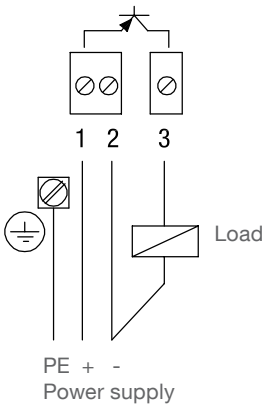
3-wire
PNP

Power supply:
18 .. 50V DC +10% 1,5W

Fuse: max 4A

Signal output:
max. 0,4A

Load for example:
PLC, relay, contactor, bulb



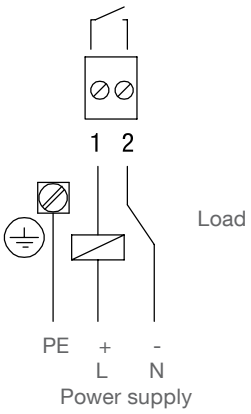
Electrical installation

2-wire
without contact

Power supply:
19..230V 50/60Hz +10% 1,5VA
19..230V DC +10% 1W

Load:
max. 0,5A permanent
(detailed ratings see
“Technical data”)

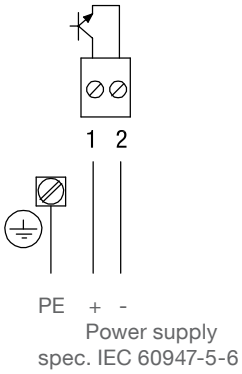
Load for example:
relay, contactor, bulb



NAMUR
IEC 60947-5-6

Power supply:
ca. 7..9 V DC
intrinsic safe
(spec. IEC 60947-5-6)

<1mA or > 2,2mA
(spec. IEC 60947-5-6)



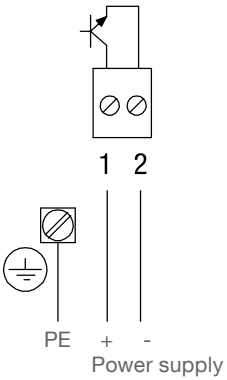
8/16mA
or 4-20mA

Power supply:
Non intrinsic safe version:
12.5..36V DC +0%

Intrinsic safe version:
12,5..30V DC +0%

Signal output
Setting 8/16mA:
8mA or 16mA

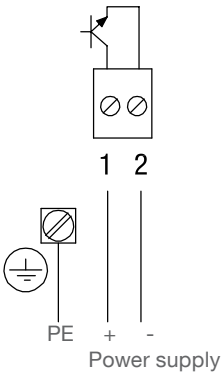
Setting 4-20mA:
Output current depends on the vibration amplitude of the fork: 6mA for dampened vibration and 20mA for full vibration.



8/16mA

Power supply:
12,5..36V DC +0%

Signal output
8mA or 16mA



Spare parts

Electronic modules VN 1000 / VN 5000

Electronic module	Electronic module number	VN 1020	VN 1020 VN 1030 separate housing	VN 1030 VN 1040	VN 1050	VN 5020	VN 5020 temp. extended shaft	VN 5020 VN 5030 separate housing	VN 5030 VN 5040	VN 5050	Prices Electronic module
		Electronic modules are used for following certificates (see pos. 2 of price list):			Electronic modules are used for following certificates (see pos. 2 of price list):	Electronic modules are used for following certificates (see pos. 2 of price list):					
Relay (SPDT) 19..230V AC 19..55V DC	**pl100932**	0, W, A	0	0, W, A	0	O, M, W, A, N, R, C, S, T, D, U	O, M, W, A, N	0, M	O, M, W, A, N	0, M	
	pl100120 *		W, A		W, A		R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	
Relay (DPDT) 19..230V AC 19..55V DC	**pl100247**	0, W, A	0	0, W, A	0	O,M,W,A, N,R,C,S, T,D,U	O, M, W, A, N	0,M	O, M, W, A, N	0, M	
19..230V AC 19..36V DC	**pl100052 ***		W, A		W, A		R, C, S, T, D, U	W,A,N,R,C,S, T,D,U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	
PNP 18..50V DC	**pl100246**	0, W, A	0	0, W, A	0	O, M, W, A, N, R, C, S, T, D, U	O, M, N	0, M	O, M, W, A, N	0, M	
	pl100123*		W, A		W, A		R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	
2-wire without contact 19..230V AC/DC	**pl100242**	0, W, A	0	0, W, A	0						
	pl100122					O, M, W, A, N, R, C, S, T, D, U	O,M, W,A,N	0, M	O, M, W, A, N	0, M	
	pl100122 *		W, A		W, A		R,C,S,T,D,U	W, A, N, R, C, S, T, D, U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	
8/16mA 2-wire	**pl100062***		W, A		W, A		R,C,T,D	W, A, R, C, T, D	R, C, T, D	W, A, R, C, T, D	
8/16mA or 4-20mA 2-wire intrinsic safe	**pl100093**	0	0	0	0	0	0	0	0	0	
	pl100090 **	W, A, Y, B	Y, B	W, A, Y, B	Y, B	W, A, Y, B, R, C, T, D	W, A, Y, B	Y, B	W, A, Y, B	Y, B	

* Intrinsic safe connection between Electronic module and Vibrating fork
** Intrinsic safe from supply and intrinsic safe between Electronic module and Vibrating fork

Spare parts

Electronic modules VN 2000 / VN 6000

Elektronikmodul	Sensitivity (see pos. 26)	Electronic module number	VN 2020	VN 2020 VN 2030 separate housing	VN 2030 VN2040	VN 2050	VN 6020	VN 6020 temp. extended shaft	VN 6020 VN 6030 separate housing	VN 6030 VN 6040	VN 6050	Prices Electronic module
			Electronic modules are used for following certificates (see pos. 2 of price lists):				Electronic modules are used for following certificates (see pos. 2 of price lists):					
Relay (SPDT) 19..230V AC 19..55V DC	20g/l (1,2lb/ft³)	**pl100930**	0, W, A	0	0, W, A	0	0, M, W, A, N, R, C, S, T, D, U	0, M, W, A, N	0, M	0, M, W, A, N	0, M	
	5g/l (0,3lb/ft³)	**pl100931**										
	Vibrasil® 70	**pl100312**	0, W, A		0, W, A	0	0, M, W, A, N, R, C, S, T, D, U			0, M, W, A, N	0, M	
	Vibrasi® 90	**pl100310**						R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	
	20g/l (1,2lb/ft³)	**pl100124 ***		W, A		W, A						
	5g/l (0,3lb/ft³)	**pl100128 ***										
Relay (DPDT) 19..230V AC 19..55V DC	20g/l (1,2lb/ft³)	**pl100193**	0, W, A	0	0, W, A	0	0, M, W, A,N, R, C, S, T, D, U	0, M, W, A, N	0, M	0, M, W, A, N	0, M	
	5g/l (0,3lb/ft³)	**pl100194**										
19..230V AC 19..36V DC	20g/l (1,2lb/ft³)	**pl100050 ***	0, W, A		0, W, A	0	0, M, W, A, N, R, C, S, T, D, U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	R, S, T, U	W, N, R, S, T, U	
	5g/l (0,3lb/ft³)	**pl100051 ***		W, A		W, A						
PNP 18..50V DC	20g/l (1,2lb/ft³)	**pl100176**	0, W, A	0	0, W, A	0	0, M, W, A, N, R, C, S, T, D, U	0, M, W, A, N	0, M	0, M, W, N	0, M	
	5g/l (0,3lb/ft³)	**pl100173**										
	20g/l (1,2lb/ft³)	**pl100127 ***		W, A		W, A		R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	
	5g/l (0,3lb/ft³)	**pl100131 ***										
2-wire without contact 19..230V AC/DC	20g/l (1,2lb/ft³)	**pl100182**	0, W, A	0	0, W, A	0						
	5g/l (0,3lb/ft³)	**pl100187**										
	20g/l (1,2lb/ft³)	**pl100126**					0, M, W, A, N, R, C, S, T, D, U	0, M, W, A, N	0, M	0, M, W, A, N	0, M	
	5g/l (0,3lb/ft³)	**pl100130**										
	20g/l (1,2lb/ft³)	**pl100126 ***		W, A		W, A		R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	R, C, S, T, D, U	W, A, N, R, C, S, T, D, U	
	5g/l (0,3lb/ft³)	**pl100130 ***										
NAMUR EC 60947-5-6 2-wire intrinsic safe	20g/l (1,2lb/ft³)	**pl100081 ****	Y, B	Y, B	Y, B	Y, B	Y, B, P	Y, B, P	Y, B, P	Y, B, P	Y, B, P	
	5g/l (0,3lb/ft³)	**pl100082 ****										
8/16mA 2-wire	20g/l (1,2lb/ft³)	**pl100060***		W, A		W, A		R,C,T,D	W, A, R, C, T, D	R, C, T, D	W, A, R, C, T, D	
	5g/l (0,3lb/ft³)	**pl100061***										
8/16mA or 4-20mA	20g/l (1,2lb/ft³)	**pl100094**	0	0	0	0	0	0	0	0	0	
	5g/l (0,3lb/ft³)	**pl100098**										
8/16mA or 4-20mA 2-wire intrinsic safe	20g/l (1,2lb/ft³)	**pl100091 ****	W, A, Y, B	Y, B	W, A, Y, B	Y, B	W, A, Y, B, R, C, T, D	W, A, Y, B	Y, B	W, A, Y, B	Y, B	
	5g/l (0,3lb/ft³)	**pl100092 ****										

* Intrinsic safe connection between Electronic module and Vibrating fork
** Intrinsic safe from supply and intrinsic safe between Electronic module and Vibrating fork

SOLUTIONS