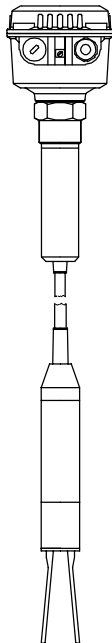
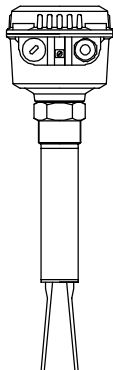
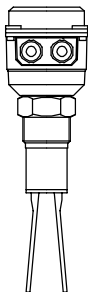


Serie VN 1000
VN 2000
VN 5000
VN 6000



说明手册

010516

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Westendstraße 5
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Fax: +49 (0)831 76879 E-Mail: info@uwt.de

此说明手册的范围:	类型	VN 1020 1030 1050 VN 2020 2030 2050 VN 5020 5030 5050 VN 6020 6030 6050
	认证	CE / TR-CU ATEX 1D 1/2D IEC-Ex t IIIC
	电子模块	继电器 (SPDT, DPDT) PNP 2 线无连接

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安全 / 警示须知	页	4
应用领域	页	4
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安装、维护和试运行只能由合格的技术人员来完成。

设备的终端连接必须遵从本地法规或 VDE 0100 (德国电气技术工程师法规)。

现场所有布线必须至少在 250V AC 下适当绝缘。温度额定值必须至少为 90° C (194° F)。

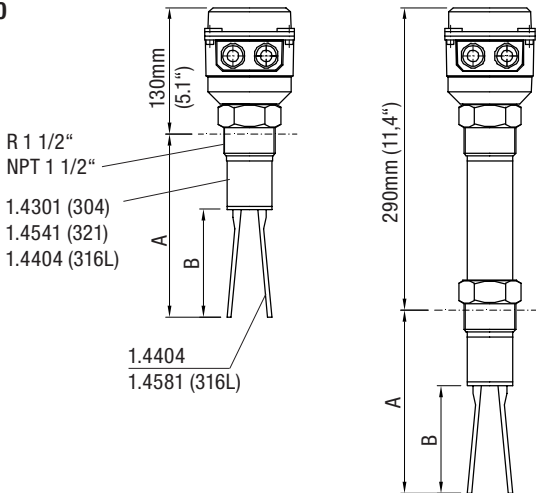
如果操作不熟练或不当, 设备的安全将无法得到保证。

应用领域

用于电源和散装材料物位限制检测的物位限制开关。

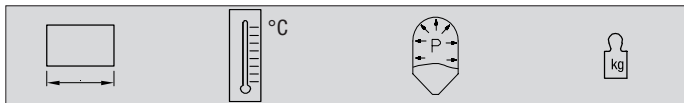


VN 1020 VN 2020

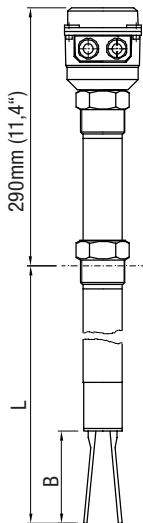
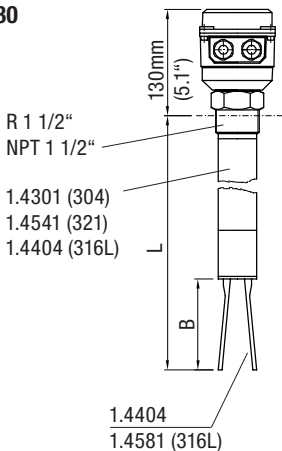


A, B →






	① →	② →
	-1 .. +16bar (-14.5 .. +232psi)	-1 .. +16bar (-14.5 .. +232psi)
	~ 1,6kg (3.5 lbs)	~ 2,3kg (5 lbs)



VN 1030
VN 2030

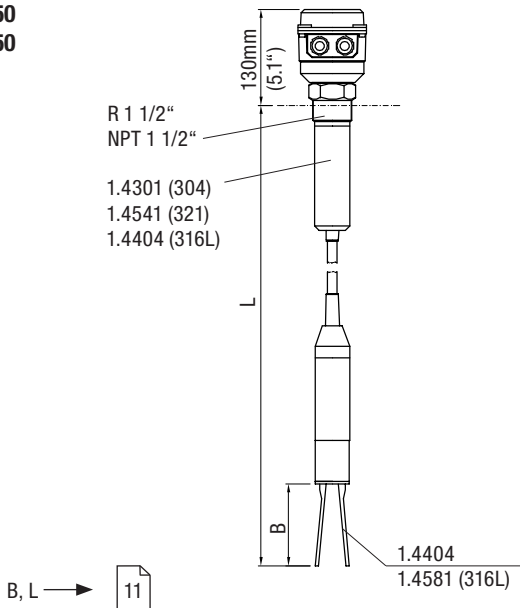







B, L →  11

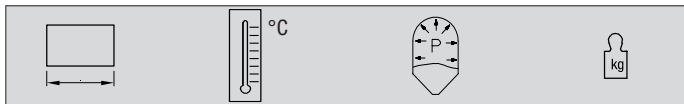
 °C	① / ② →  12	② →  12
	-1 .. +16bar (-14.5 .. +232psi)	-1 .. +16bar (-14.5 .. +232psi)
 kg	~ 1,6kg (3.5 lbs) +2,5kg/m (+5.5 lbs per 39.9") (L)	~ 2,3kg (5 lbs) +2,5kg/m (+5.5 lbs per 39.9") (L)



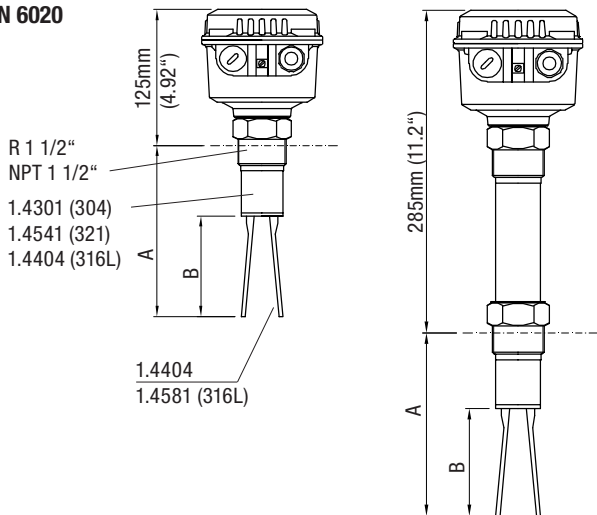
VN 1050
VN 2050










 °C	 →  12
	-1 .. +6bar (-14.5 .. +87psi)
 kg	~ 4,0 kg (8.8 lbs) + 0,5 kg/m (+1.1 lbs per 39.9") (L)



VN 5020
VN 6020



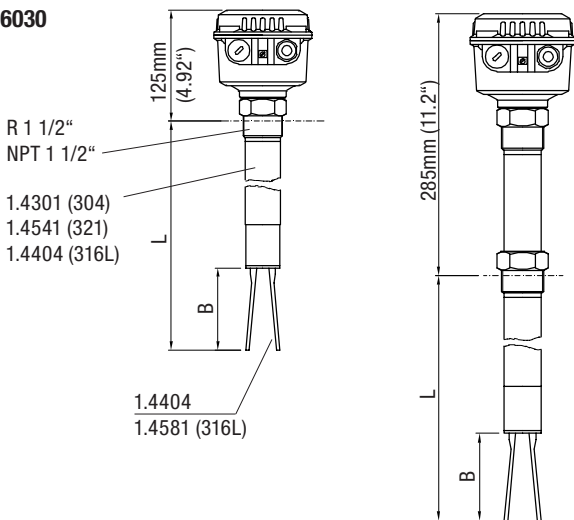
A, B → 

	 → 	 → 
	-1 .. +16bar (-14.5 .. +232psi)	-1 .. +16bar (-14.5 .. +232psi)
	~ 2,1kg (4.6 lbs)	~ 2,8kg (6.2 lbs)



VN 5030

VN 6030



B, L →

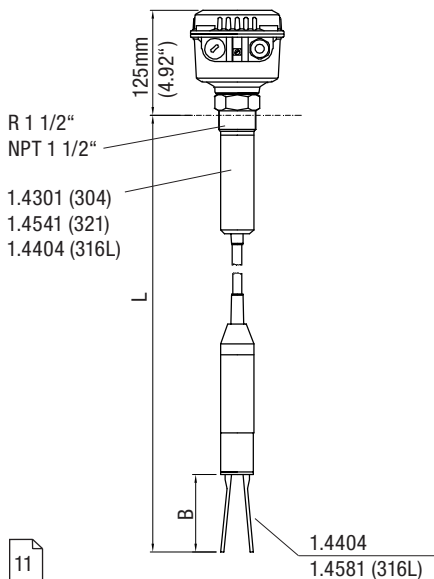


	① / ② →	② →
	-1 .. +16bar (-14.5 .. +232psi)	-1 .. +16bar (-14.5 .. +232psi)
	~2,1kg (4.6lbs) +2,5kg/m (+5.5 lbs per 39.9") (L)	~2,8kg (6.2lbs) +2,5kg/m (+5.5 lbs per 39.9") (L)



VN 5050

VN 6050



B, L →



	-1 .. +6bar (-14.5 .. +87psi)
	~ 4,5 kg (9.9 lbs) + 0,5 kg/m (+1.1 lbs per 39.9") (L)

	A	B	L
VN 1020	165mm (6.5")	100mm (3.94")	
VN 1030		100mm (3.94")	max. 4.000mm (157.5")
VN 1050		100mm (3.94")	max. 7.000mm (276")

VN 2020	235mm (9.25") (1) 260mm (10.2")	170mm (6.69") (1) 195mm (7.68")	
VN 2030		170mm (6.69") (1) 195mm (7.68")	max. 4.000mm (157.5")
VN 2050		170mm (6.69") (1) 195mm (7.68")	max. 20.000mm (787")

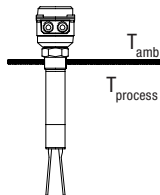
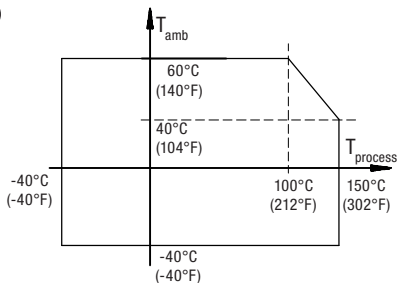
VN 5020	165mm (6.5")	100mm (3.94")	
VN 5030		100mm (3.94")	max. 4.000mm (157.5")
VN 5050		100mm (3.94")	max. 7.000mm (276")

VN 6020	235mm (9.25") (1) 260mm (10.2")	170mm (6.69") (1) 195mm (7.68")	
VN 6030		170mm (6.69") (1) 195mm (7.68")	max. 4.000mm (157.5")
VN 6050		170mm (6.69") (1) 195mm (7.68")	max. 20.000mm (787")

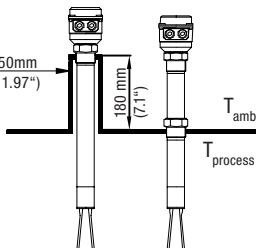
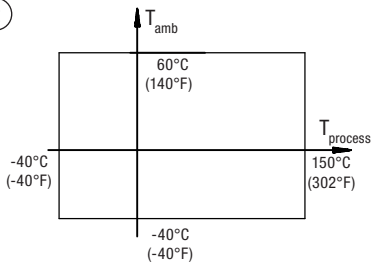
(1) 选项切换敏感度 > 5 g/l (0.3 lb/ft³)



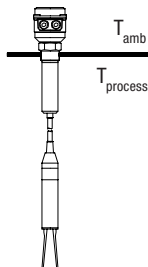
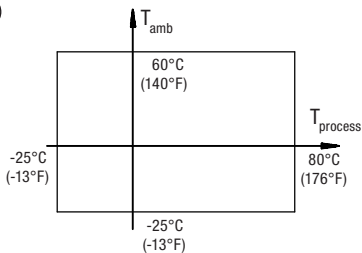
1



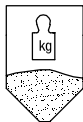
2



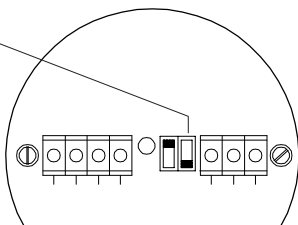
3



敏感度

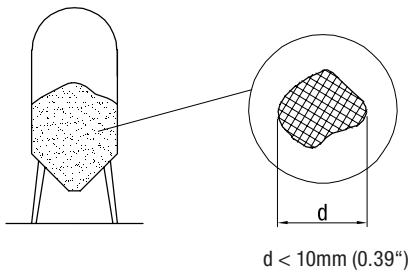


	B g/l	A g/l
VN 1000	50	150
VN 2000	20 / 5 ⁽¹⁾	75
VN 5000	50	150
VN 6000	20 / 5 ⁽¹⁾	75
	1g/l = 0.06 lb/ft ³	

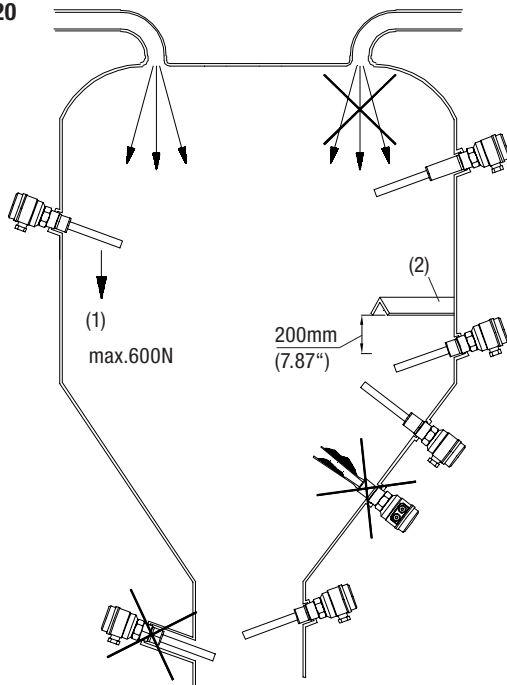


(1) 选项切换敏感度 > 5 g/l (0.3 lb/ft³)

散装材料

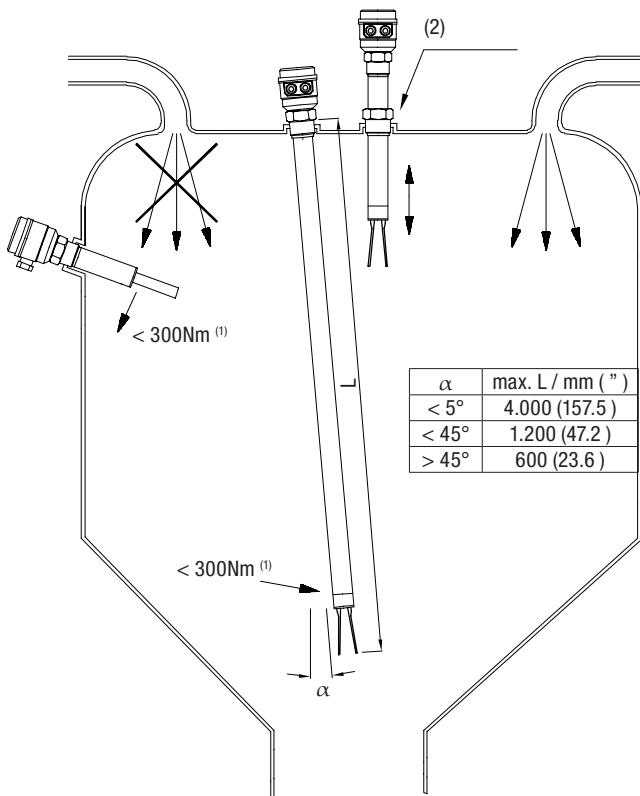


VN 1020
VN 2020
VN 5020
VN 6020



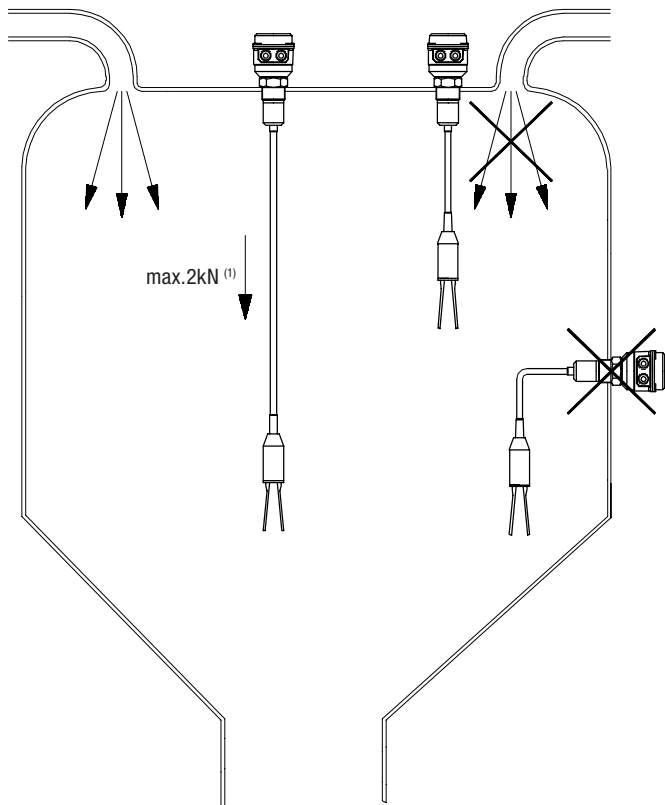
- (1) 传感器的最大负荷
- (2) 能承受高机械负载的三角架（遮篷）

VN 1030
VN 2030
VN 5030
VN 6030



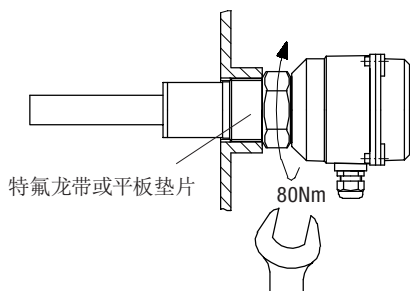
- (1) 传感器的最大负荷
(2) 滑动套管: 拧紧20Nm紧索螺套

VN 1050
VN 2050
VN 5050
VN 6050

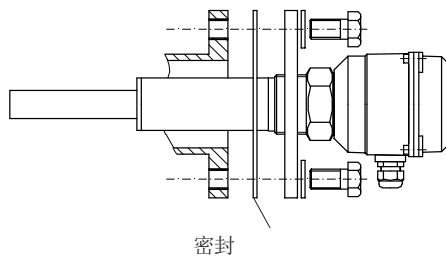


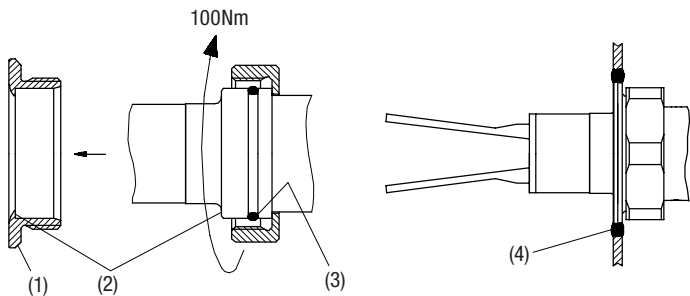
(1) 传感器的最大负荷

固定线圈

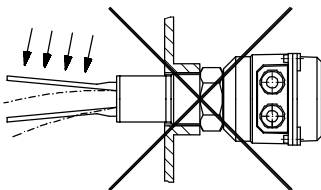
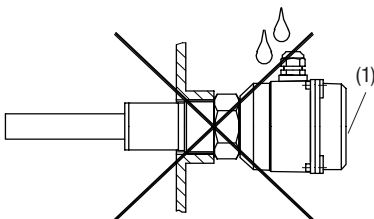
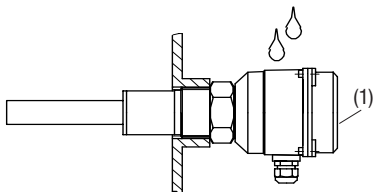


固定凸缘

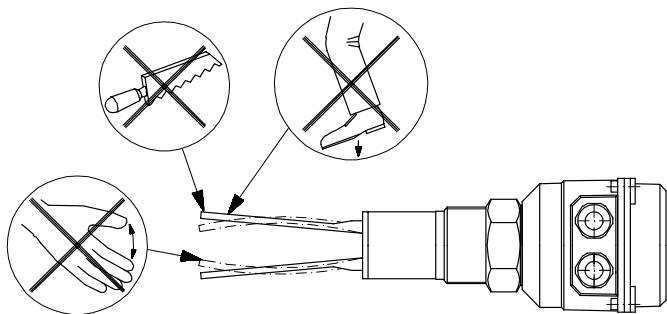




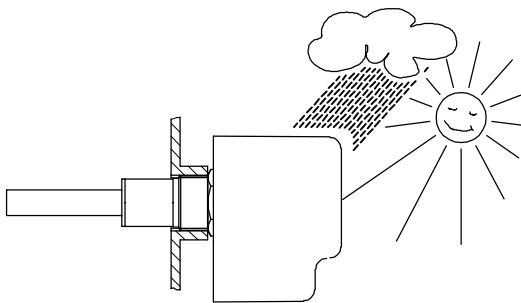
- (1) 规定使用已认证的焊入套筒
- (2) 金属与金属镀层之间无缝隙
- (3) 密封
- (4) 焊接（遵守卫生规定）



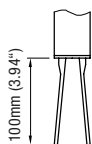
(1) 入口保护
IP 66 / IP67



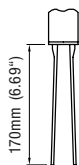
选项: 气象保护罩

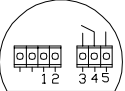
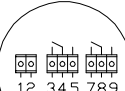
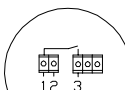
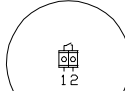


Ex, 只许可22区

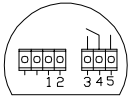
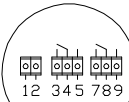
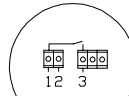
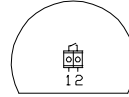


	CE / ATEX / IEC-Ex: VN 1020 VN 1030		CE / ATEX / IEC-Ex: VN 5020 VN 5030	
	CE: VN 1050	ATEX / IEC-Ex: VN 1050	CE: VN 5050	ATEX / IEC-Ex: VN 5050
<p>19...230V 50/60 Hz 19...55V DC</p>	pl100932	pl100120	pl100932	pl100120
<p>19...230V 50/60 Hz 19...55V DC</p>	pl100247	pl100052	pl100247	pl100052
<p>18...50V DC PNP</p>	pl100246	pl100123	pl100246	pl100123
<p>19...230V AC/DC</p>	pl100242	pl100122	pl100122	pl100172



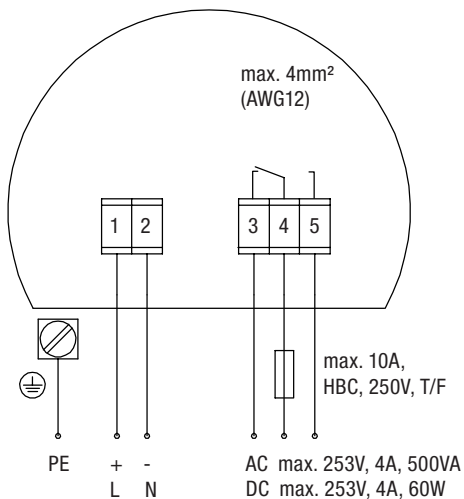
	CE / ATEX / IEC-Ex: VN 2020 VN 2030 CE: VN 2050	ATEX / IEC-Ex: VN 2050	CE / ATEX / IEC-Ex: VN 6020 VN 6030 CE: VN 6050	ATEX / IEC-Ex: VN 6050
 <p>19...230V 50/60 Hz 19...55V DC</p>	pl100930	pl100124	pl100930	pl100124
 <p>19...230V 50/60 Hz 19...55V DC</p>	pl100193	pl100050	pl100193	pl100050
 <p>18...50V DC PNP</p>	pl100176	pl100127	pl100176	pl100127
 <p>19...230V AC/DC</p>	pl100182	pl100126	pl100126	pl100126



	CE / ATEX / IEC-Ex: VN 2020 VN 2030 CE: VN 2050	ATEX / IEC-Ex: VN 2050	CE / ATEX / IEC-Ex: VN 6020 VN 6030 CE: VN 6050	ATEX / IEC-Ex: VN 6050
 <p>19...230V 50/60 Hz 19...55V DC</p>	pl100931	pl100128	pl100931	pl100128
 <p>19...230V 50/60 Hz 19...55V DC</p>	pl100194	pl100051	pl100194	pl100051
 <p>18...50V DC PNP</p>	pl100173	pl100131	pl100173	pl100131
 <p>19...230V AC/DC</p>	pl100187	pl100130	pl100130	pl100130

所有电子模块：过压类别II

继电器 SPDT



(1)

19...230V +10% ⁽³⁾ 50/60Hz 8VA

19... 50V +10% DC 1,5W

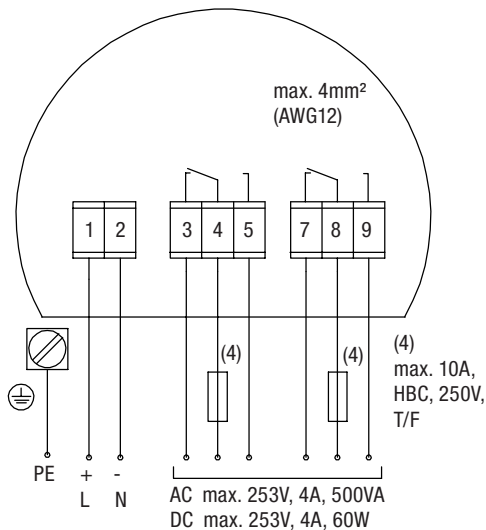
(2)



(1) 电源

(2) 绝缘电压

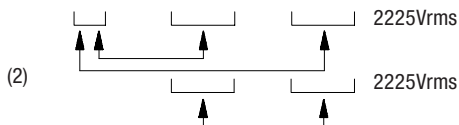
(3) 从EN 61010包括10%



(1)

19...230V +10% ⁽³⁾ 50/60Hz 18VA

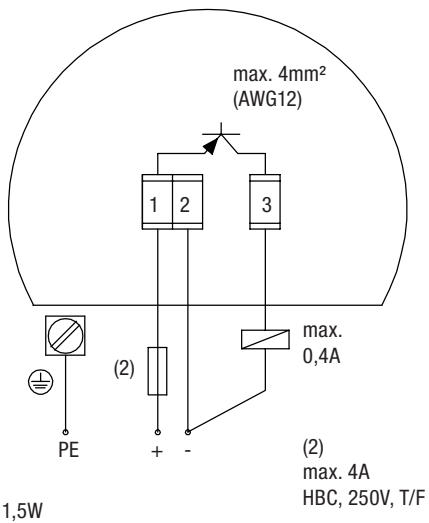
19... 50V +10% ⁽³⁾ DC 2W



(1) 电源

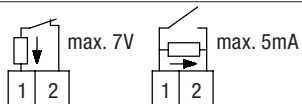
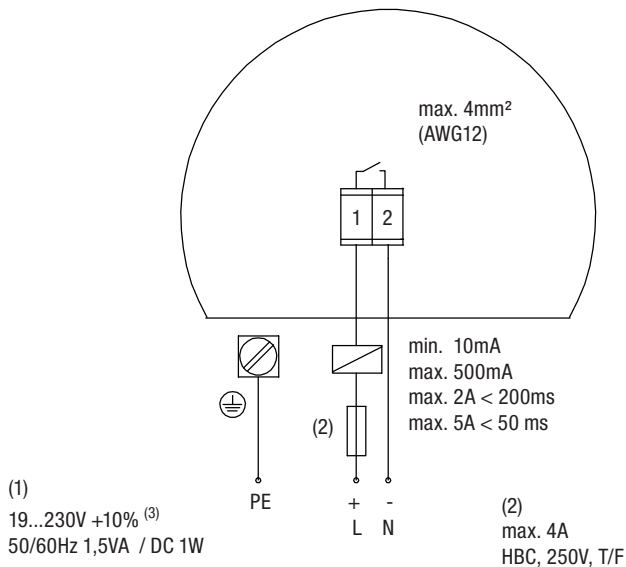
(2) 绝缘电压

(3) 从EN 61010包括10%



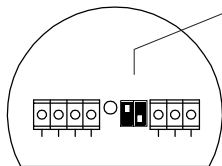
- (1) 电源
(3) 从EN 61010包括10%

2 线无连接



- (1) 电源
(3) 从EN 61010包括10%

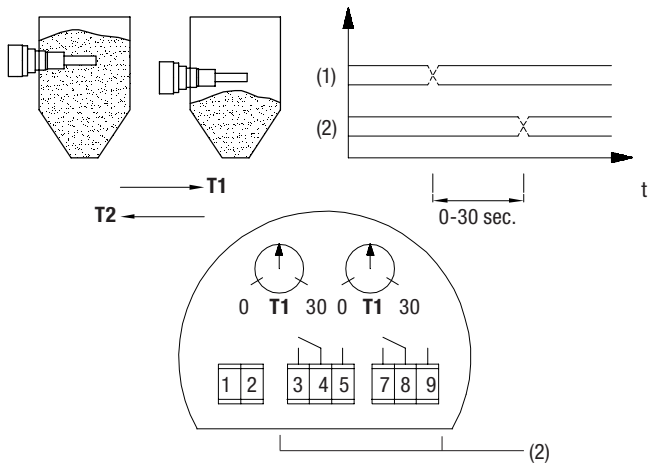
切换逻辑电路



	FSL	FSH	
			(1)
			(2)
			(3)
			(4)
			(5)
			(1)
			(2)
			(3)
			(4)
			(5)

- (1) = 继电器SPDT
- (2) = 继电器DPDT
- (3) = PNP
- (4) = 2 线无连接
- (5) = LED 信号

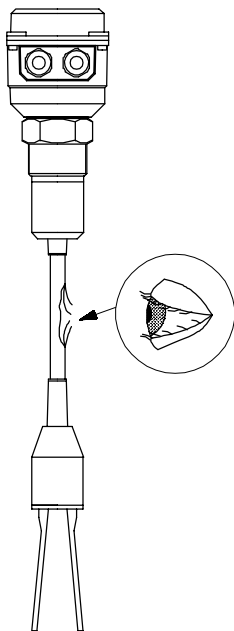
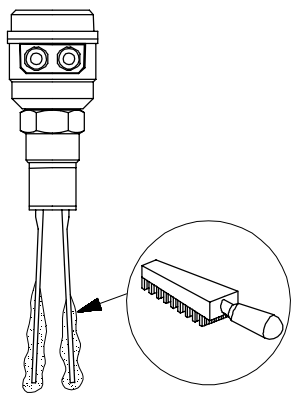
信号延迟 (继电器DPDT)



(1) = 等级

(2) = 继电压输出

Cleaning



分离外罩 (选择: 价格列表 pos. 26)

VN 1020

VN 2020

VN 5020

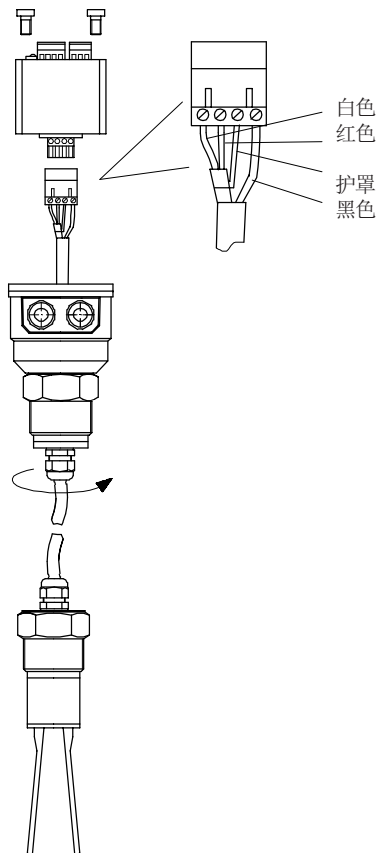
VN 6020

VN 1030

VN 2030

VN 5030

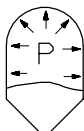
VN 6030



ATEX II 1D 1/2D + IEC-Ex t IIIC Da, Da/Db

说明

许可 相关压力

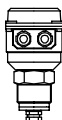


-0,2...+0,1bar
(-2.9...+1.45psi)

区域界限

VN 1020/1030
VN 2020/2030
VN 5020/5030
VN 6020/6030

VN 1020
VN 2020
VN 5020
VN 6020

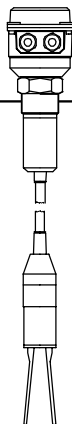
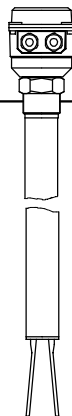
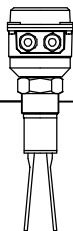


VN 1030
VN 2030
VN 5030
VN 6030

VN 1050
VN 2050
VN 5050
VN 6050

(1) 1D 2D
(2) Da Db
(3) 20 21

(1) 1D 1D
(2) Da Da
(3) 20 20

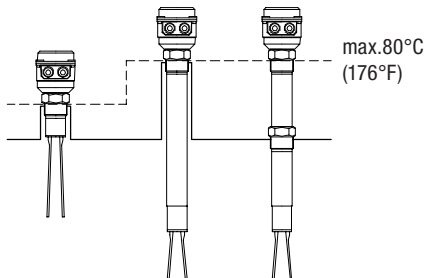


(1) 类别 (2) EPL (IEC-Ex) (3) 区域



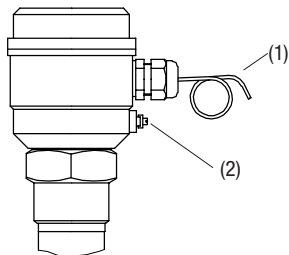
60°C (140°F)	80°C (176°F)	120°C (248°F)	
	90°C (194°F)	120°C (248°F)	
	100°C (212°F)	120°C (248°F)	
	110°C (230°F)	120°C (248°F)	
	120°C (248°F)	120°C (248°F)	
	130°C (266°F)	130°C (266°F)	
	140°C (284°F)	140°C (284°F)	
	150°C (302°F)	150°C (302°F)	

在安装时如果能确保螺纹部分在最高温度为 80°C (176°F) 的情况下正常使用, 那么, 表中的数据是有效的。



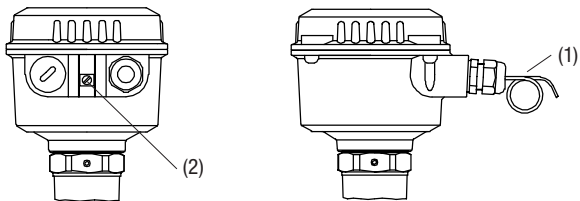
VN 1000

VN 2000



VN 5000

VN 6000



(1) 电缆及连接缆应避免受到拉力

(2) 连接工厂的等电位连接

安装和现场布线必须分别遵从各自国家的合格安装法规。

盖子关闭时才能进行试运行。

有电流通过时，不要将盖子（罩）挪开。

开启盖子之前要确保没有粉尘沉积或涡流。

必须这样进行安装，以避免由于打击或摩擦 以避免由于打击或摩擦而使铝外壳与钢之间产生火花。

如果把整个装置安装在区域20中（即：没有区域20与区域21之间的隔离墙），那么电源电压的短路电流就不允许超过10千安（要遵守EN60079-14的细节）

电缆旋接：

必须按照安装该设备所在国家的规定对电缆进行旋接。

不再使用的电缆接线必须用允许的绝缘塞给锁起来。

如果可以的话，必须使用由制造商提供的部件。对于由制造商提供的电缆旋接装置，必须预先规定一个拉力卸载。

连接电缆的直径必须符合电缆旋接装置的接头区域。

如果使用了非制造商所提供的部件，就必须确保下列事项：

这些部件必须具有一个许可，该许可符合物位信号器的许可（证书和防护级）。

所允许的工作温度必须符合物位信号器的最低环境温度，以及提高了10 Kelvin 的最大环境温度。这些部件必须按照制造商的使用说明书进行安装。