

### NIR-9



- Kompakt dizayn
- Alüminyum gövde
- Kolay kurulum
- Yeni motor modeli
- Farklı montaj seçenekleri
- Rekabetçi fiyat
- ATEX onaylı model
- Ayarlanabilir hassasiyet



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### Açıklama

NIR-9 seviye ölçer, silo ve haznelerde depolanmış katı ürünlerin seviye ölçümü için uygundur. Ürünün nem ve iletken değerinden bağımsız olarak, dolu veya boş seviye kontrolü güvenli olarak ölçülür. Farklı ürün ve tank ebatları için, farklı dizayn ve materyallerden imal edilmiş pervane ve proses bağlantı şekilleri mevcuttur.

### Çalışma şekli

Bir senkron motor, şaft ile uzatılarak tank içerisine monte edilmiş dönen pervaneyi tahrik eder. Tank içerisindeki ürün pervane seviyesine ulaştığında pervane durur. Motor itme kuvveti ile orijinal pozisyonundan hareket eder. Burada, bir mikro şalter devreye girer ve alarm sinyali çıkış verir. Aynı anda ikinci bir mikro şalter de motoru durdurur. Tanktaki ürün seviyesi azalır ise yay kuvveti ile motor eski durumuna gelir ve mikro şalterler orijinal konumlarına gelir. Böylece motor tekrar çalışmaya başlar ve kontak alarm durumundan çıkar.

Yay pozisyonu değiştirilerek, şalter hassasiyeti 3 kademeli olarak ayarlanabilir.

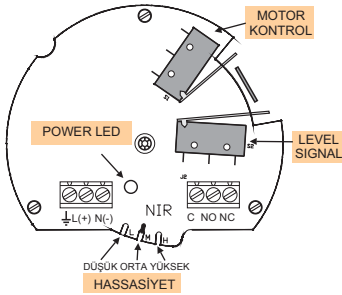
### Technical details

Measuring principle:	rotating vane
Medium temperature:	-20...+90 °C -20...+200 °C (NIR-92)
Ambient temperature:	-20...+60 °C
Pressure:	-0.5...+0.5 bar
Max. grain size:	50 mm
Min. bulk density:	0.038 g/cm <sup>3</sup> (depends on vane and sensibility)
Sensibility:	adjustable in 3 steps
Rotation speed:	5 r.p.m.

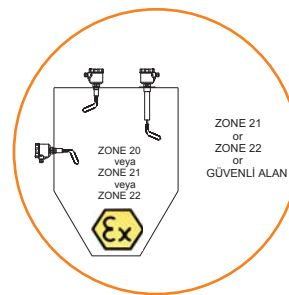
### Materials

Housing:	polyester coated aluminium 360° rotatable
Connection, cable, extension, tube, vane:	stainless steel, aluminium (page 4)

### Bağlantı



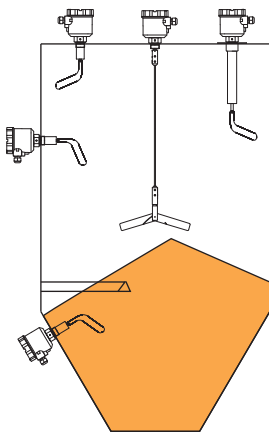
### ATEX Montaj



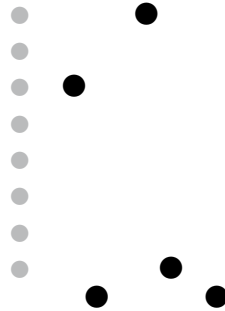
### Process connection (standard):

-NIR-910 / E910	G1 male stainless steel 1.4305
-NIR-920 / E920	G1 male stainless steel 1.4305
-NIR-962 / E962	G1 male stainless steel 1.4305
-NIR-95F / E95F	G1 male stainless steel 1.4305
-NIR-940 / E940	G 1 male aluminium
-NIR-930 / E930	G 1½ male stainless steel 1.4305
Other connections:	thread adapters for G 1¼, G 1½, 110 mm and 200 mm flanges

### Montaj Örnekleri



### Uygulamalar



### Vane types:

standard N, foldable vane V,  
cruciform vane X, aggregate  
vane A, reinforced vane R

### ATEX approval:

Ex II 2/1D Ex t IIIC T85°C Db/Da

### Power supply:

24 V<sub>DC</sub>, 24 V<sub>AC</sub>, 48 V<sub>AC</sub>,  
110 V<sub>AC</sub>, 230 V<sub>AC</sub>, 50/60 Hz  
power led

### Power consumption:

max. 2 VA

### Electrical connection:

2 x M20 x 1,5

### Contact:

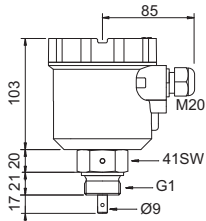
micro switch (SPDT)

max. 250 V<sub>AC</sub>, 2 A (max 125 VA)

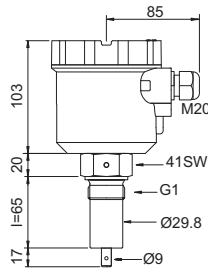
### Protection:

IP 66

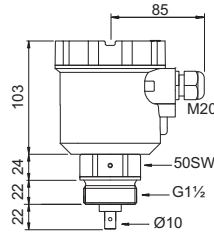
**NIR-94(E94)...**



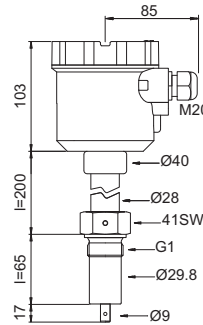
**NIR-91(E91)...**



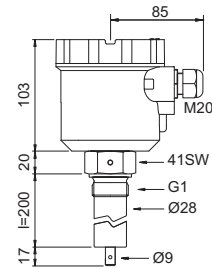
**NIR-93(E93)...**



**NIR-92(E92)...**

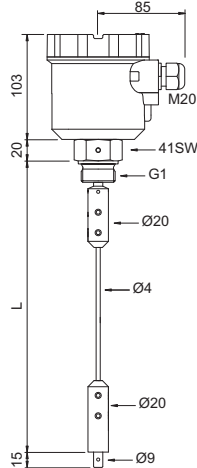


**NIR-96(E96)...**

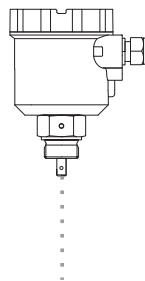


**MAXIMUM LEVEL SWITCH  
(Vertical Mounting)**

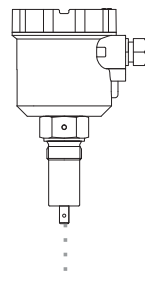
**NIR-95F(E95F)...**



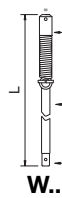
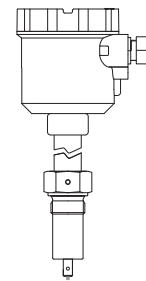
**NIR-94(E94)...**



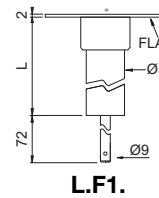
**NIR-91(E91)...**



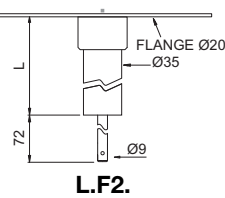
**NIR-92(E92)...**



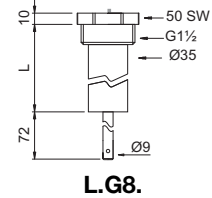
**W...**



**L.F1.**



**L.F2.**



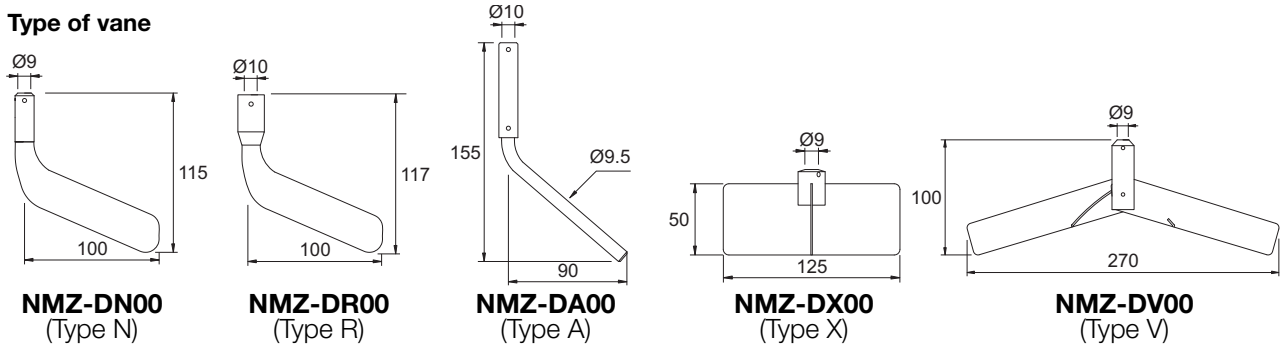
**L.G8.**

**Order Details (Example: NIR-91 0 N G6 0 0)**

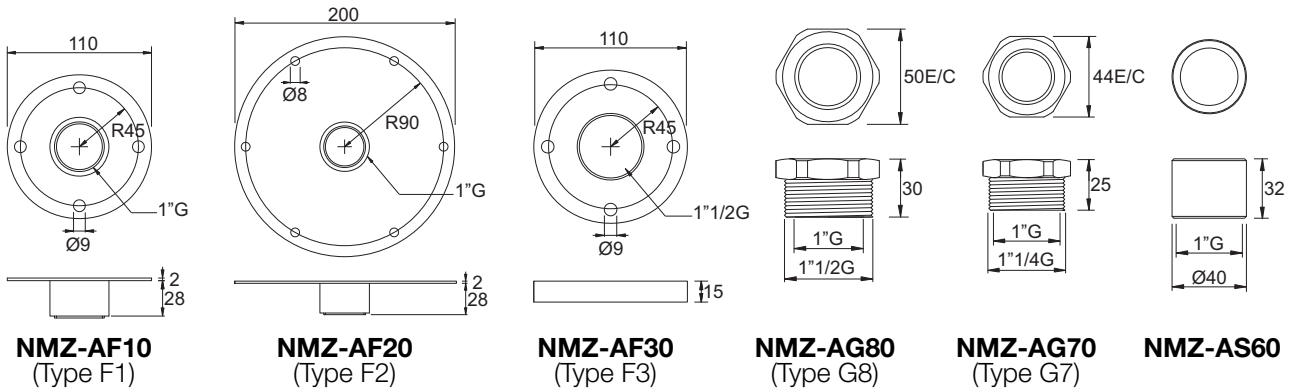
Model	Extension	Vane	Process connection	Supply voltage	Option
<b>NIR-91...</b> <b>NIR-E91... (ATEX)</b> (neck pipe l = 65 mm)	<b>0</b> = without extension <b>W</b> <sup>2)</sup> = extension without protection pipe (until 1.500 mm)	<b>0</b> = without	<b>G6</b> = G1 <b>G7</b> = G1 ¼	<b>0</b> = 230 V <sub>AC</sub>	<b>0</b> = without <b>Y</b> = special
<b>NIR-92...</b> <b>NIR-E92... (ATEX)</b> (t <sub>max</sub> : 200 °C)	<b>L</b> <sup>1)2)</sup> = extension with protection pipe (until 4.000 mm)	<b>N</b> = standard	<b>G8</b> = G1 ½	<b>4</b> = 110 V <sub>AC</sub>	
<b>NIR-94...</b> <b>NIR-E94... (ATEX)</b> (aluminium thread)	<b>Y</b> = special length	<b>V</b> = foldable	<b>F1</b> = flange 110 mm	<b>2</b> = 24 V <sub>AC</sub>	
<b>NIR-95...</b> <b>NIR-E95... (ATEX)</b> (flexible cable)	<b>F</b> = flexible cable max. 10 m <b>0</b> = without extension	<b>X</b> = cruciforme (only with F2 connection)	<b>F2</b> = flange 200 mm	<b>5</b> = 48 V <sub>AC</sub>	
<b>NIR-96...</b> <b>NIR-E96... (ATEX)</b> (neck pipe l = 200 mm)	<b>2</b> = 200 mm <b>Y</b> <sup>2)</sup> = special length	<b>Y</b> = special	<b>YY</b> = special	<b>3</b> = 24 V <sub>DC</sub>	
<b>NIR-93...</b> <b>NIR-E93... (ATEX)</b> (reinforced)	<b>0</b> = without	<b>0</b> = without <b>R</b> = reinforced <b>A</b> = aggregate <b>Y</b> = special	<b>G8</b> = G1 ½ <b>F3</b> = flange 110mm reinforced G1 ½ <b>YY</b> = special	<b>Y</b> = special	

<sup>1)</sup>only for G8, F1 and F2 connections <sup>2)</sup> specify length in clear text

Type of vane



Process connections



Accessories / Spare parts (Example: NMZ-A G8 0)

Model		Option
NMZ-	A = process connections	<b>G7</b> = Thread adapter stainless steel 1.4305, 1 ¼" GM-1"GF <b>G8</b> = Thread adapter stainless steel 1.4305, 1 ½" GM-1"GF <b>F1</b> = Flange stainless steel 1.4305, Ø110 mm, 1"GF <b>F2</b> = Flange stainless steel 1.4305, Ø200 mm, 1"GF <b>F3</b> = Reinforced flange stainless steel 1.4301, Ø110 mm, 1 ½"GF <b>S6</b> = Welding sleeve stainless steel 1.4404, 1"G <b>YY</b> = Special
	D = Type of vanes	<b>0</b> = without <b>Y</b> = special
	E = Extensions	<b>L8</b> = Protection pipe stainless steel 1.4301, G1 ½ <b>L1</b> = Protection pipe with F1 flange stainless steel 1.4301 <b>L2</b> = Protection pipe with F2 flange stainless steel 1.4301 <b>W1</b> = Without protection pipe and flexible union stainless steel 1.4301 <b>F1</b> = Flexible cable Ø4 mm stainless steel 1.4305 <b>YY</b> = Special