

Z6R...

Load cell

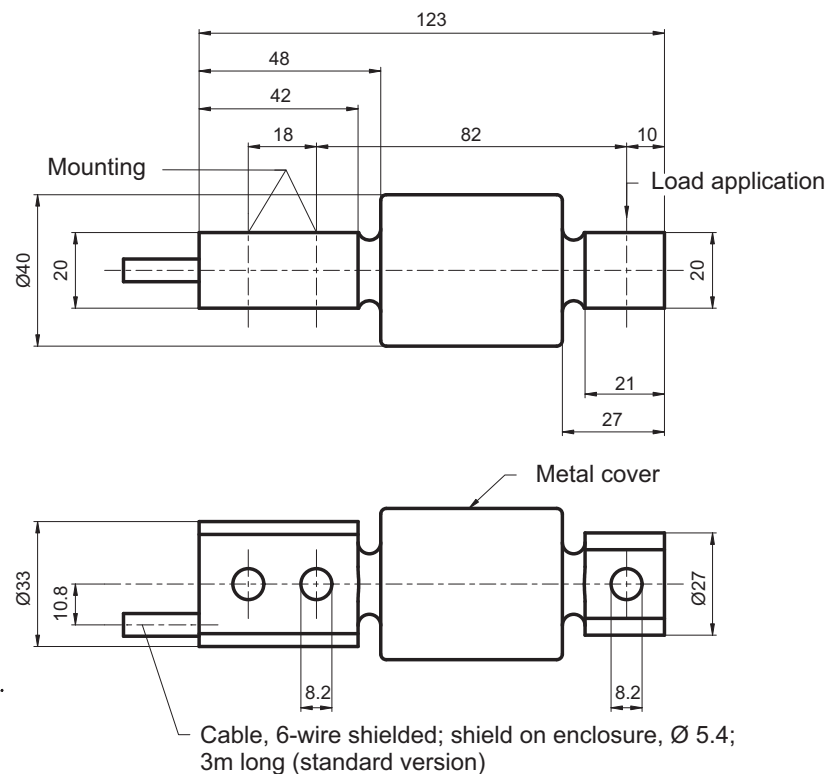


Special features

- Nominal (rated) loads: 20 kg ... 200 kg
- Welded-on robust cover
- Load cells made of rust-resistant materials
- Easy to clean
- Same dimensions like Z6F
- Verifiable up to 3000 divisions, test report as per OIML R60
- Six-wire circuit
- Optimized for parallel connection
- Meets EMC requirements as per EN 45501:2015
- Options:
Explosion protection designs as per ATEX and IECEx

Dimensions (in mm; 1 mm = 0.03937 inches)

Z6RA: Nominal (rated) loads 20 kg ... 200 kg



Minimum distances and bending radii of the cables, see page 8

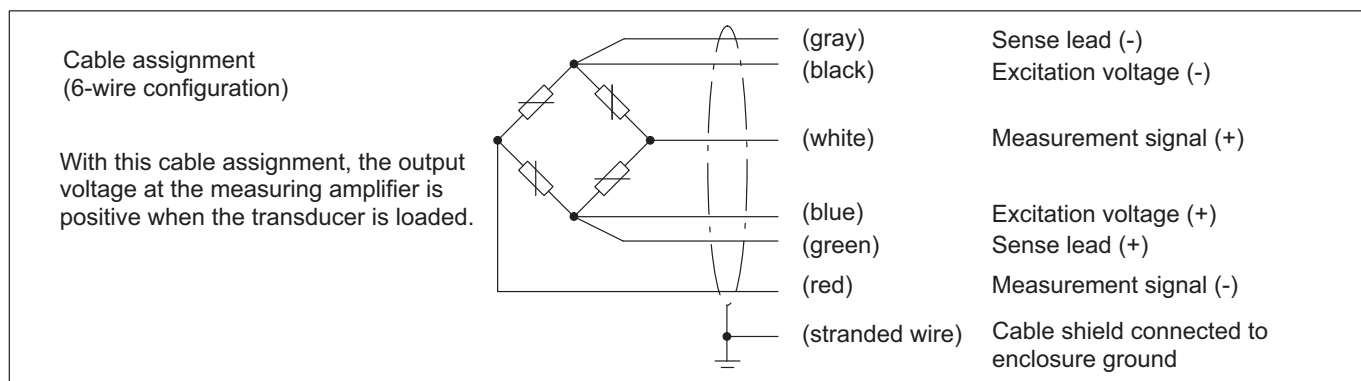
Specifications

Type			Z6R...	
Accuracy class per OIML R 60			D1	C3
Number of scale intervals	n_{LC}		1000	3000
Nominal (rated) load	E_{max}	kg	20; 50; 100; 200	
Minimum scale division	v_{min}	% of E_{max}	0.0360	0.0090
Ratio of minimum verification interval	Y		2777	11111
General specifications				
Nominal (rated) sensitivity	C_n	mV/V	2	
Sensitivity tolerance with load appl. in spec. direction		%	±0.1	±0.05
Temperature coefficient of sensitivity ¹⁾	TC_S	% of	±0.0500	±0.0080
Temperature coefficient of zero signal	TC_0	$C_n/10$ K	±0.0500	±0.0125
Relative reversibility error ¹⁾	d_{hy}	% of C_n	±0.0500	±0.0170
Non linearity ¹⁾	d_{lin}		±0.0500	±0.0180
Load creep in 30 min.	d_{DR}		±0.0490	±0.0166
Input resistance	R_{LC}	Ω	350...480	
Output resistance	R_0		356 ± 0.2	356 ± 0.12
Reference voltage	U_{ref}	V	5	
Nominal supply voltage range	B_u		0.5...12	
Insulation resistance	R_{is}	G Ω	> 5	
Nominal ambient temperature range	B_T	°C	-10...+40	
Operating temperature range	B_{tu}		-30...+70	
Storage temperature range	B_{tl}		-50...+85	
Limit load	E_L	% of E_{max}	150	
Breaking load	E_d		≥ 300	

Nominal (rated) load	E_{max}	kg	20	50	100	200
Relative permissible oscillatory stress		% of E_{max}	70			
Nominal (rated) displacement approx.	s_{nom}	mm	0.2			
Weight, approx.	G	kg	0.6			
Degree of protection (IP) as per EN60529 (IEC529)			IP68 (tougher test conditions: 2 m water column; 1000 h) / IP69K			
Material: Measuring body Cover Cable inlet gland Cable sheath			Stainless steel ²⁾ Stainless steel ²⁾ Stainless steel / Viton® PVC			

¹⁾ The values for linearity deviation, relative reversibility error and temperature effect on sensitivity are typical values. The sum of these values is within the cumulative error limits laid down by OIML R60.

²⁾ As per EN 10088-1

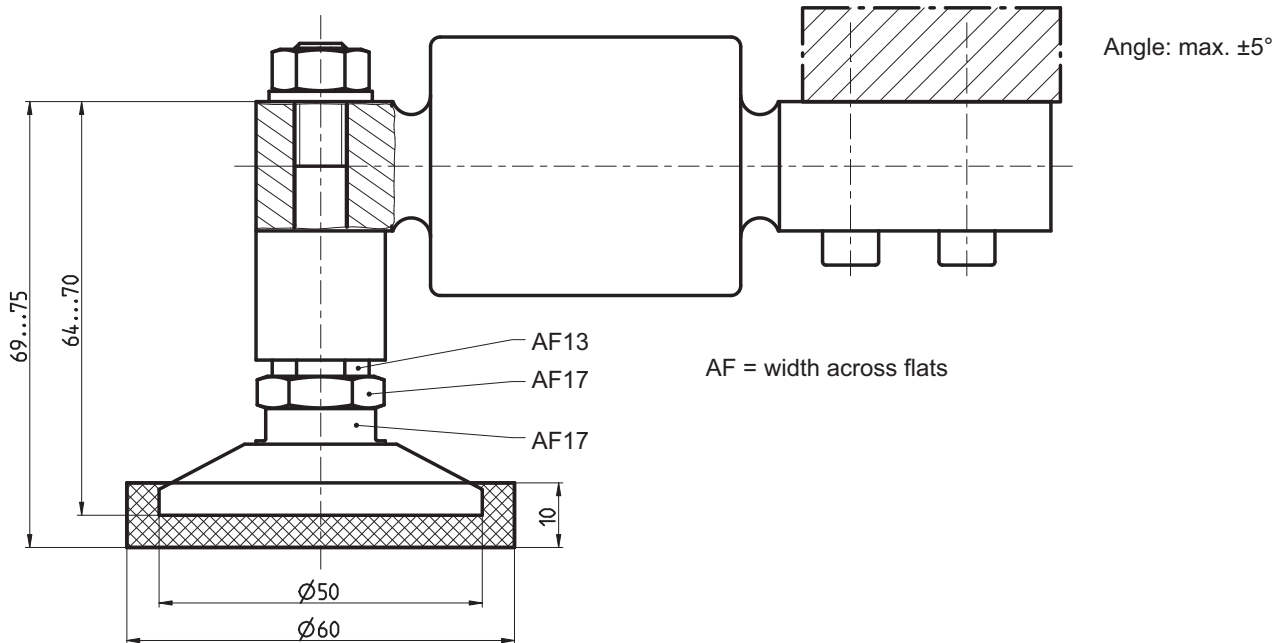


Installation aids, not included in scope of delivery (Dimensions in mm; 1 mm = 0.03937 inches)

All installation aids are made of non-rusting material. The rubber parts of the ZEL are made of chloroprene rubber.

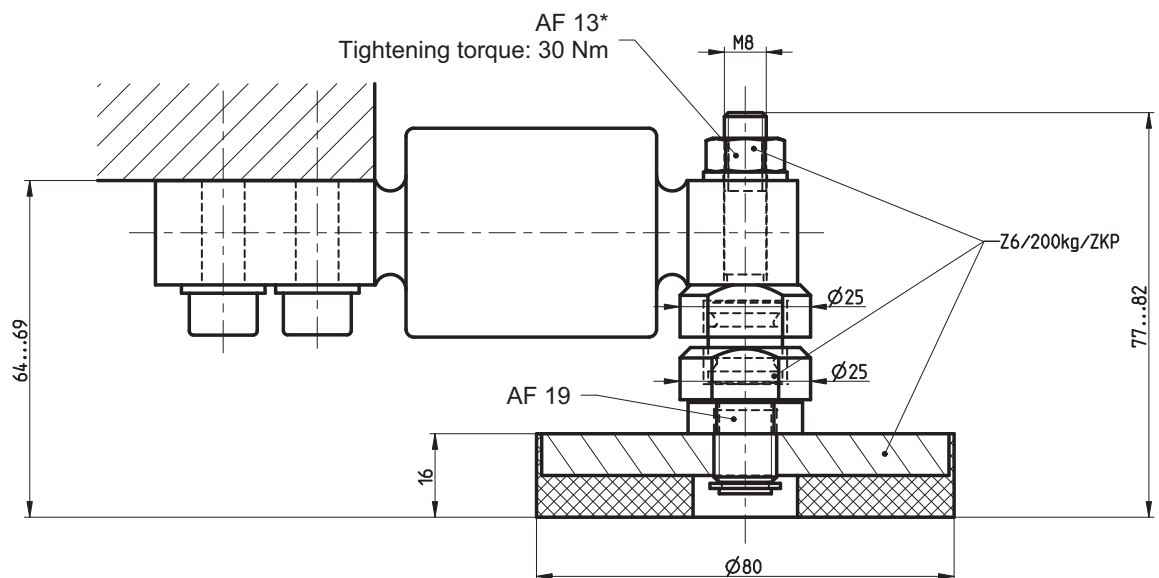
Oscillating loading foot PCX

for nominal rated loads 20 kg ... 200 kg (1-Z6/PCX/500kgSet); 1 Set consists of 4 pieces Z6/PCX/500 kg



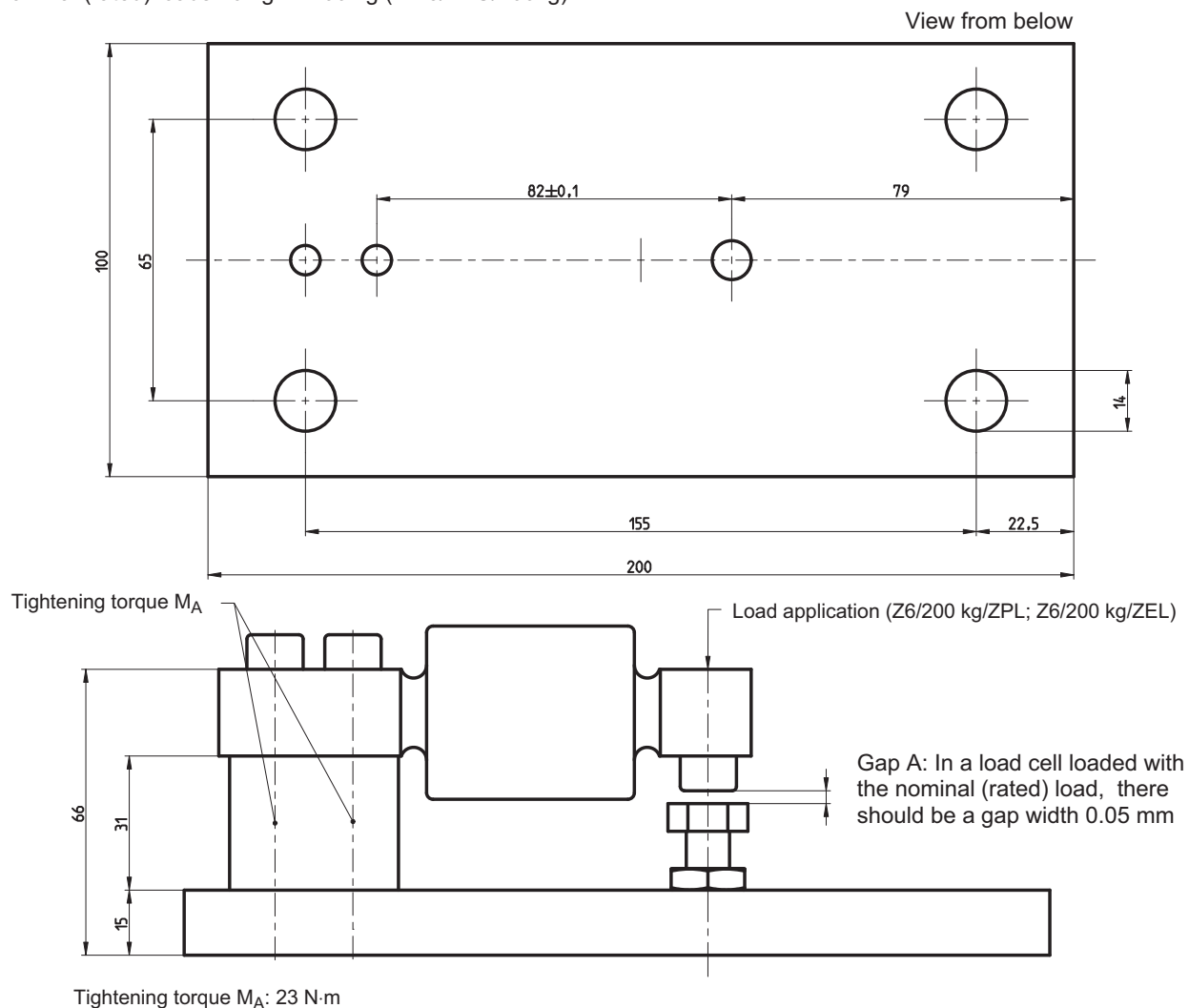
Oscillating loading foot for ZKP

for nominal rated loads 20 kg ... 200 kg (1-Z6/200kg/ZKP)

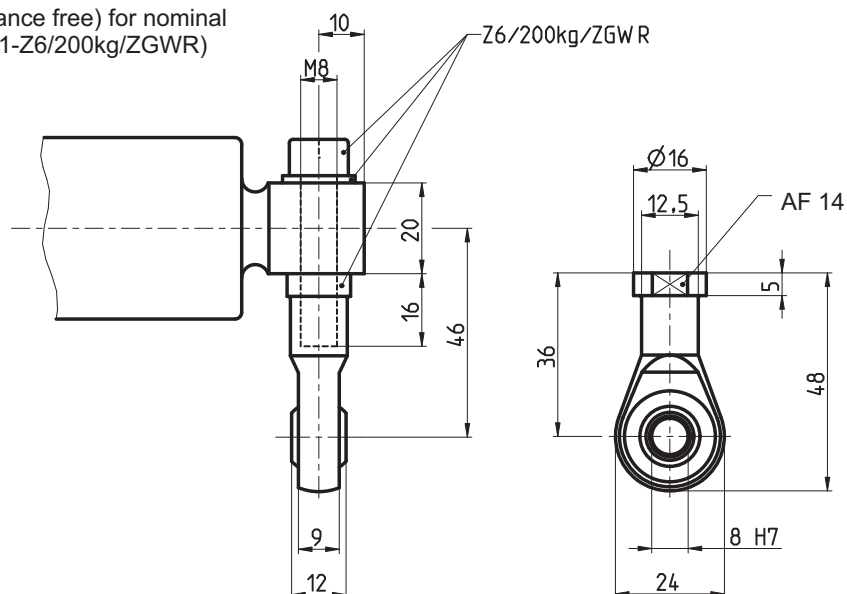


Base plate / Mounting set

for nominal (rated) loads 20 kg ... 200 kg (1-Z6/ZPU/200kg)

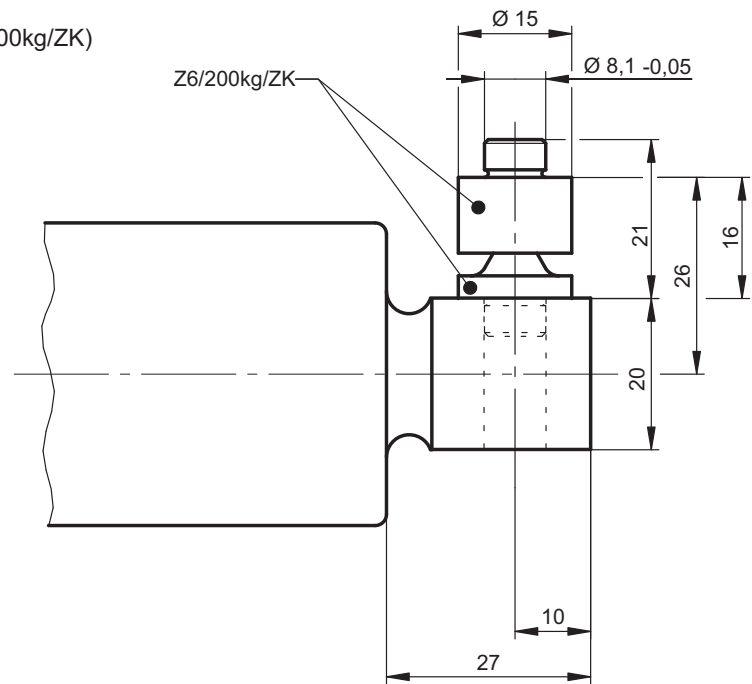


Knuckle eye ZGWR (maintenance free) for nominal (rated) loads 20 kg ... 200 kg (1-Z6/200kg/ZGWR)



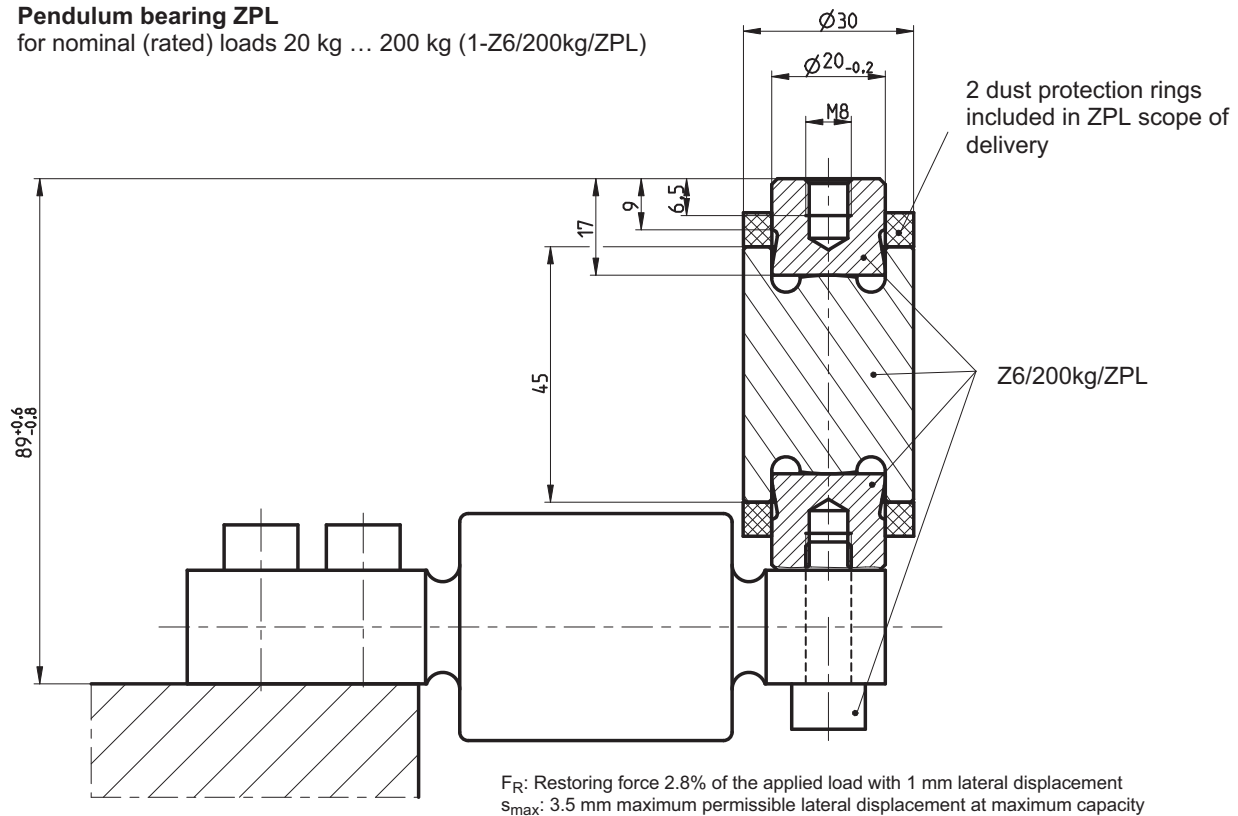
Cone, conical pan ZK

for nominal (rated) loads 20 kg ... 200 kg (1-Z6/200kg/ZK)

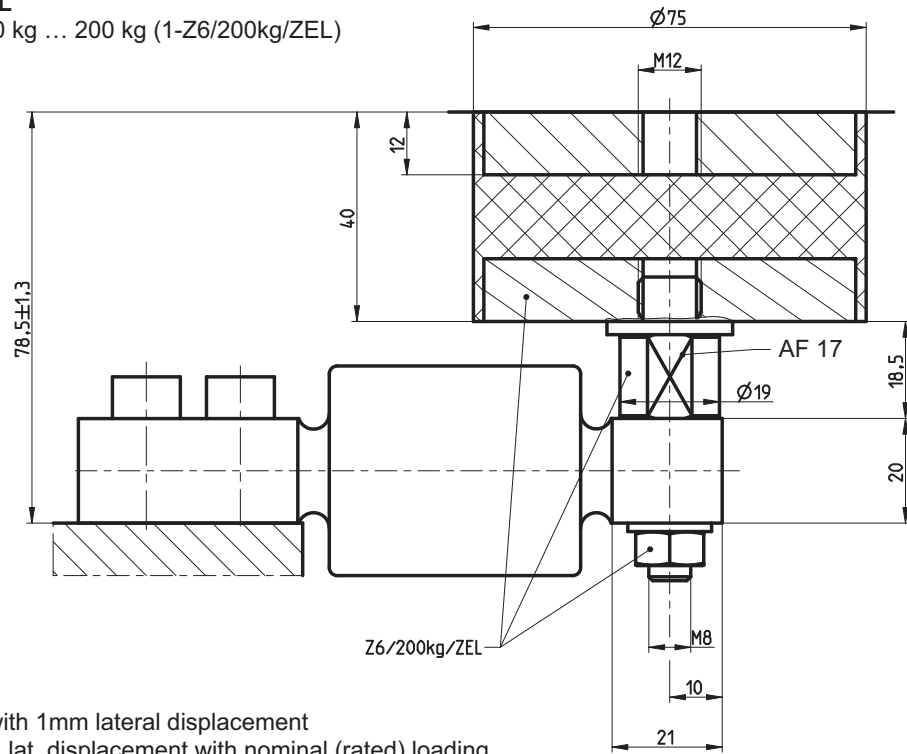


Pendulum bearing ZPL

for nominal (rated) loads 20 kg ... 200 kg (1-Z6/200kg/ZPL)



for nominal (rated) loads 20 kg ... 200 kg (1-Z6/200kg/ZEL)



F_R : Force feedback 163 N, with 1mm lateral displacement

s_{\max} : 3 mm, Maximum perm. lat. displacement with nominal (rated) loading

Placing orders

When placing an order please specify the ordering numbers from the following table. If you need other versions (accuracy class, explosion protection, other cable lengths or materials, etc.) for the available products, please look in the overview "Z6R Load cells, optional versions" on the next page. You can generate specific ordering numbers there from your individual requirements.

Type	Z6R	
Accuracy class	D1 (OIML)	C3 (OIML)
Maximum capacities	Ordering number	
20 kg	1-Z6RAD1/20KG-1	1-Z6RAC3/20KG-1
50 kg	1-Z6RAD1/50KG-1	1-Z6RAC3/50KG-1
100 kg	1-Z6RAD1/100KG-1	1-Z6RAC3/100KG-1
200 kg	1-Z6RAD1/200KG-1	1-Z6RAC3/200KG-1

Z6R Load cells, optional versions

Order no.	
K-Z6R	
Code	Option 1: Design
A	Z6R
Code	Option 2: Accuracy
D1	D1 (OIML)
C3	C3 (OIML)
Code	Option 3: Capacity
20	20 kg
50	50 kg
100	100 kg
200	200 kg
Code	Option 4: Explosion protection
N	No Explosion protection
AI1/21	IECEx-ATEX zone 1/21
AI2/21	IECEx-ATEX zone 2/21
Code	Option 5: Cable length
S3	3 m (standard)
6	6 m
3T	3 m TPE cable sheath
6T	6 m TPE cable sheath
12T	12 m TPE cable sheath
Code	Option 6: Miscellaneous
N	Without

K-Z6R - A - - - - - - N

Options

Ex protection versions per IECEx and ATEX

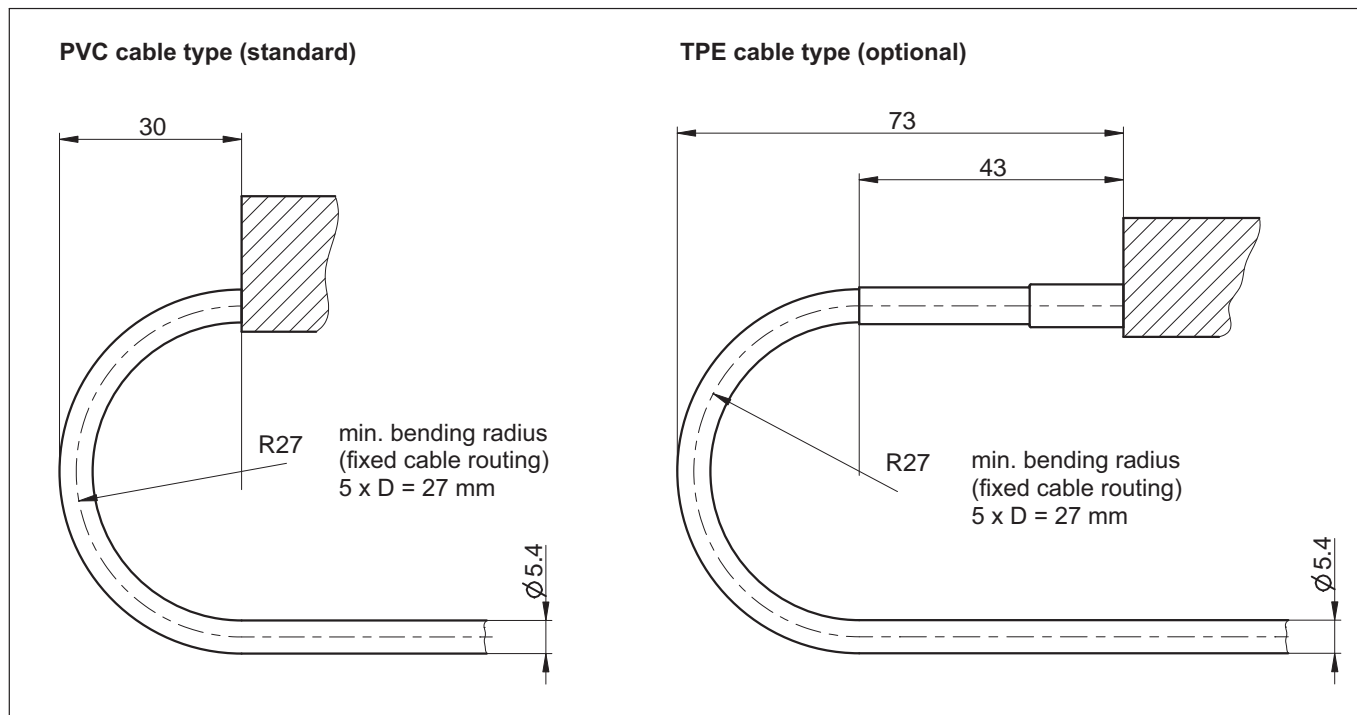
AI1/21 IECEx+ATEX zone 1/21 intrinsically safe, II 2G Ex ia IIC T6/T4 Gb, II 2D Ex ia IIIC T125°C Db *

AI2/21** IECEx+ATEX zone 2/21 not intrinsically safe, II 3G Ex ec IIC T6/T4 Gc, II 2D Ex tb IIIC T125°C Db *

* With EU type examination certificate (BVS13ATEX E 108 X) and IECEx Certificate of Conformity (IECEx BVS 13.0109 X)

** Option AI2/21 IEC + ATEX zone 2/21 includes zone 2/22

Minimum distances and bending radii of the cables (with fixed cable routing)



Subject to modifications.
All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability.

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