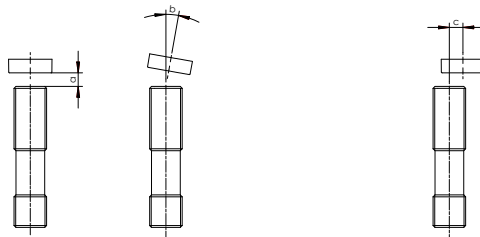


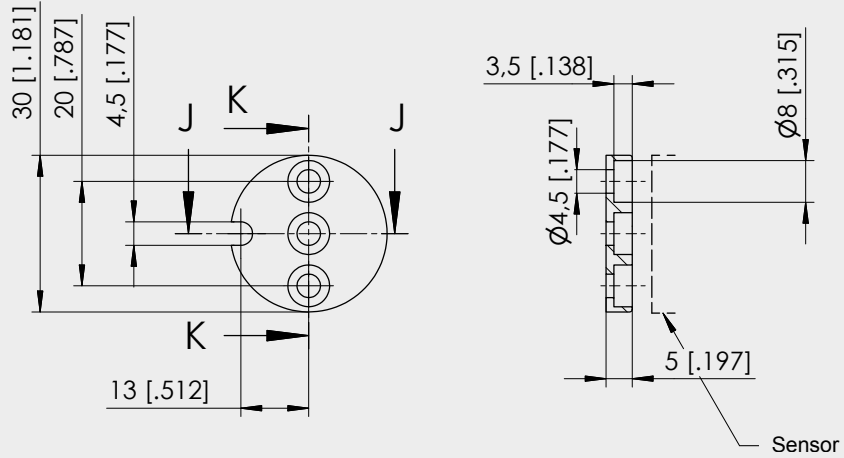
Measuring error by misalignment of the position magnet

Sensor	Position magnet	Air gap [mm]	Parallelism [°]	Error by axial misalignment [°]					
				0.2 mm	0.5 mm	1 mm	2 mm	3 mm	4 mm
PRAS1	PRMAG20	0 ... 6.5	0 ... 5	0.15	0.4	0.8	2.2	5.0	–
	PRMAG21	0 ... 4	0 ... 5	0.2	0.4	1.0	3.8	10	–
	PRMAG22	0 ... 9.5	0 ... 5	0.1	0.4	1.0	2.2	4.5	8.0
PRAS2	PRMAG20	0 ... 6	0 ... 5	0.15	0.4	0.8	2.2	5.0	–
	PRMAG21	0 ... 3.5	0 ... 5	0.2	0.4	1.0	3.8	10	–
	PRMAG22	0 ... 9.0	0 ... 5	0.1	0.4	1.0	2.2	4.5	8.0
PRAS5	PRMAG5-Z	0 ... 7.5	0 ... 5	0.1	0.2	0.6	1.5	4.5	8.5
	PRMAG20	0 ... 5.5	0 ... 5	0.15	0.4	0.8	2.2	5.0	–
	PRMAG21	0 ... 3	0 ... 5	0.2	0.4	1.0	3.8	10	–
	PRMAG22	0 ... 8.5	0 ... 5	0.1	0.4	1.0	2.2	4.5	8.0
PRAS20	PRMAG20	0 ... 7	0 ... 5	0.1	0.3	0.7	2.0	4.6	–
	PRMAG21	0 ... 2	0 ... 5	0.15	0.3	0.9	3.6	9.6	–
	PRMAG22	0 ... 10	0 ... 5	0.0	0.0	0.7	1.5	3.8	7.0
PRAS21	PRMAG20	0 ... 7.0	0 ... 5	0.1	0.3	0.7	2.0	4.6	–
	PRMAG21	0 ... 2	0 ... 5	0.15	0.3	0.9	3.6	9.6	–
	PRMAG22	0 ... 10	0 ... 5	0.0	0.0	0.7	1.5	3.8	7.0
PRAS27	PRMAG20	0 ... 7.5	0 ... 5	0.1	0.3	0.7	2.0	4.6	–
	PRMAG21	0 ... 2.5	0 ... 5	0.15	0.3	0.9	3.6	9.6	–
	PRMAG22	0 ... 10.5	0 ... 5	0.0	0.0	0.7	1.5	3.8	7.0



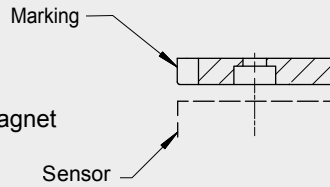
Sensor	Position magnet	Air gap [mm]	Parallelism [°]	Error by axial misalignment [°]					
				0.2 mm	0.5 mm	1 mm	2 mm	3 mm	4 mm
PRDS1	PRMAG20	0 ... 4.5	0 ... 5	0.15	0.4	0.8	2.2	5.0	–
	PRMAG21	0 ... 2.0	0 ... 5	0.2	0.4	1.0	3.8	10	–
	PRMAG22	0 ... 7.5	0 ... 5	0.1	0.4	1.0	2.2	4.5	8.0
PRDS2	PRMAG20	0 ... 4	0 ... 5	0.15	0.4	0.8	2.2	5.0	–
	PRMAG21	0 ... 1.5	0 ... 5	0.2	0.4	1.0	3.8	10	–
	PRMAG22	0 ... 7	0 ... 5	0.1	0.4	1.0	2.2	4.5	8.0
PRDS5	PRMAG5-Z	0 ... 5.5	0 ... 5	0.1	0.2	0.6	1.5	4.5	8.5
	PRMAG20	0 ... 3.5	0 ... 5	0.15	0.4	0.8	2.2	5.0	–
	PRMAG21	0 ... 1	0 ... 5	0.2	0.4	1.0	3.8	10	–
	PRMAG22	0 ... 6.5	0 ... 5	0.1	0.4	1.0	2.2	4.5	8.0
PRDS27	PRMAG20	0 ... 4.5	0 ... 5	0.15	0.4	0.8	2.2	5.0	–
	PRMAG22	0 ... 7.5	0 ... 5	0.0	0.0	0.7	1.5	3.8	7.0

PRMAG20

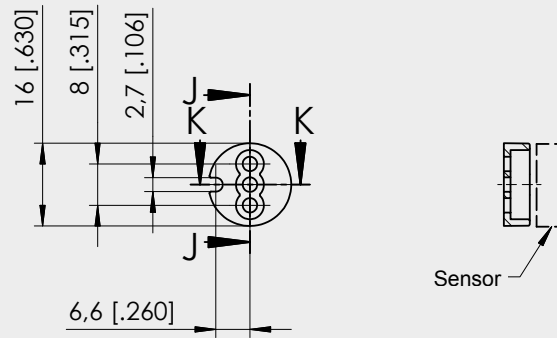


Weight 11 g approx.,
moment of inertia 1.2 kgmm²

A misalignment of the position magnet
has an effect on the linearity

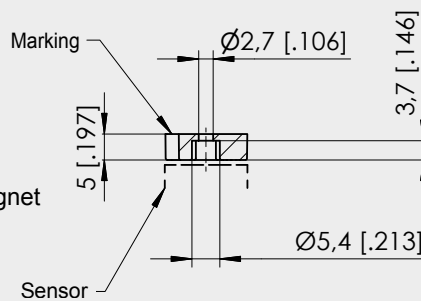


PRMAG21



Weight 3 g approx.,
moment of inertia 0.1 kgmm²

A misalignment of the position magnet
has an effect on the linearity



Dimensions in mm [inch]

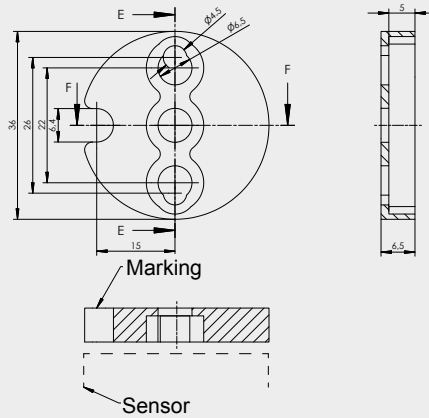
Dimensions informative only

For guaranteed dimensions please consult factory

PRMAG22

Weight 17 g approx.,
moment of inertia 3 kgmm²

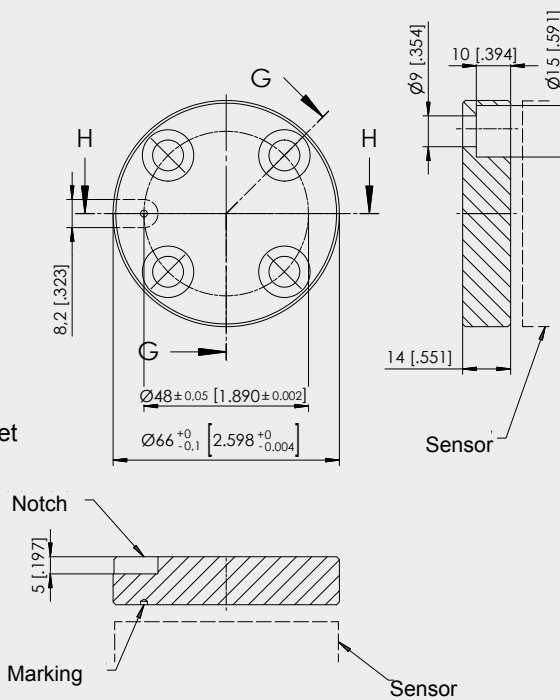
A misalignment of the position magnet
has an effect on the linearity



PRMAG5Z

Weight 100 g approx.,
moment of inertia 55 kgmm²

A misalignment of the position magnet
has an effect on the linearity



Dimensions in mm [inch]

Dimensions informative only

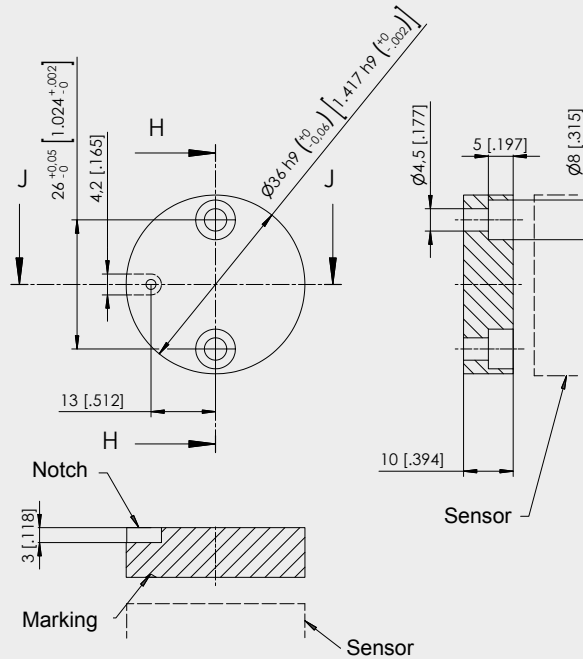
For guaranteed dimensions please consult factory

Accessories

Position magnets for angle sensors with Dust-Ex-proof

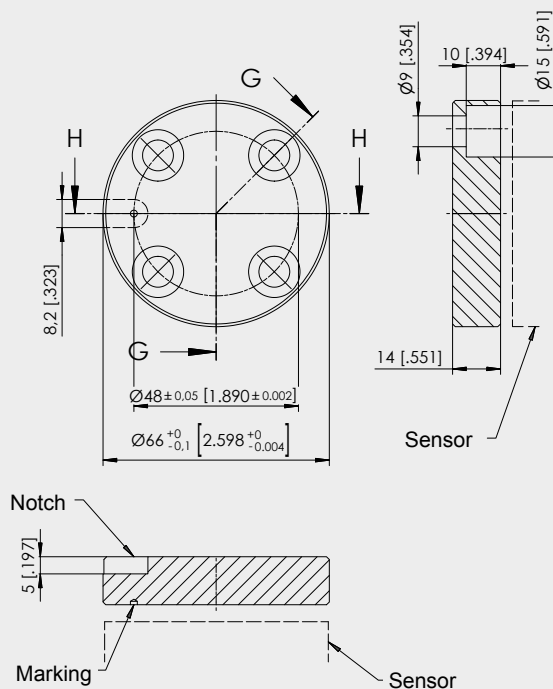
PRMAG2Z-EX

Weight ca. 22 g approx.
moment of inertia 4.5 kgmm²
A misalignment of the position magnet has an effect on the linearity



PRMAG5-EX

Weight ca. 275 g approx.
moment of inertia 150 kgmm²
A misalignment of the position magnet has an effect on the linearity

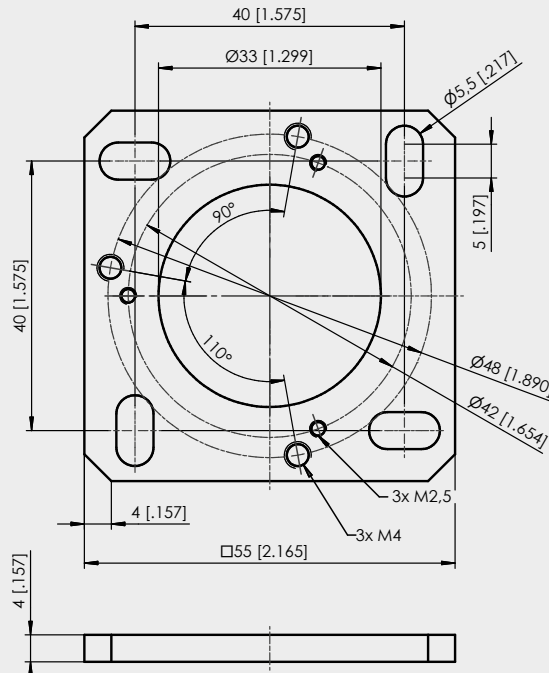


EX - Explanation (II 3D Ex tD A22 IP65 T80°C X)

- II** = for all Explosive Areas, excluding Surface and Underground Mining Systems
- 3D** = Equipment Category 3, applicable in Zone 22; D = dust
- Ex** = meets the requirements of the European Ex-Directive
- tD** = type of ignition protection: protection by enclosure "tD"
- A22** = measurement of the surface temperature acc. to procedure A for applications in Zone 22
- IP65** = IP Protection Class
- T80°C** = maximum surface temperature
- X** = tested with low impact energy

PRPT-BPL1

(screw mounting)
For PRAS2, PRDS2,
PRAS3, PRDS3



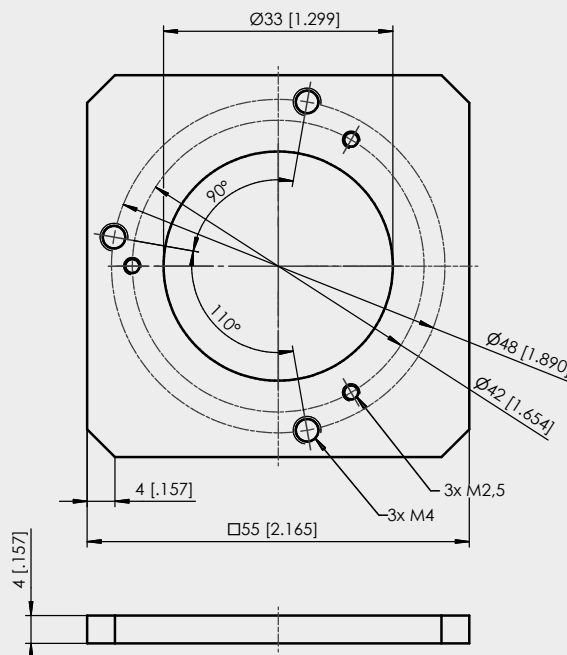
In combination with the
mounting clamps
PRPT-BFS1 (3 x M2.5)
or
in combination with the
mounting bracket
PRPT-BFS2 (3 x M4).

Dimensions in mm [inch]

Weight 30 g approx.
Dimensions informative only.
For guaranteed dimensions please consult factory.

PRPT-BPL2

(welding assembly)
For PRAS2, PRDS2,
PRAS3, PRDS3



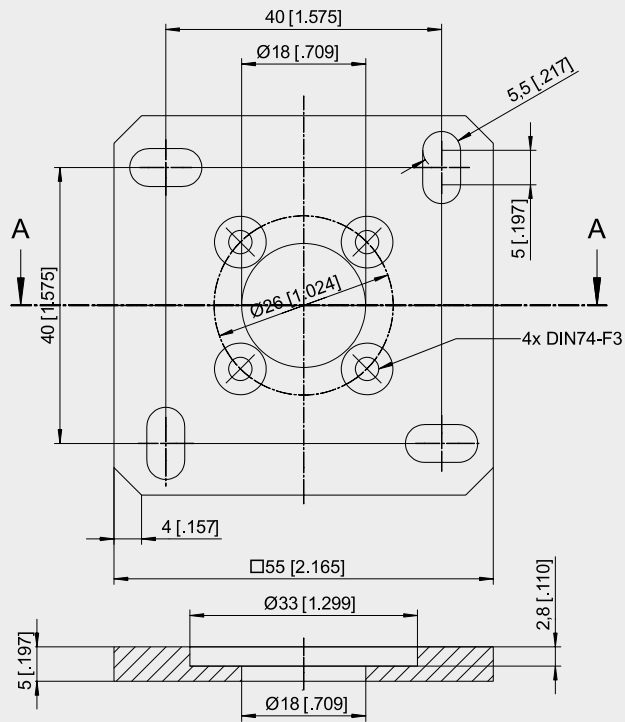
In combination with the
mounting clamps
PRPT-BFS1 (3 x M2.5)
or
in combination with the
mounting bracket
PRPT-BFS2 (3 x M4).

POSIROT®
Accessories
Mounting Plates



PRPT-BPL3

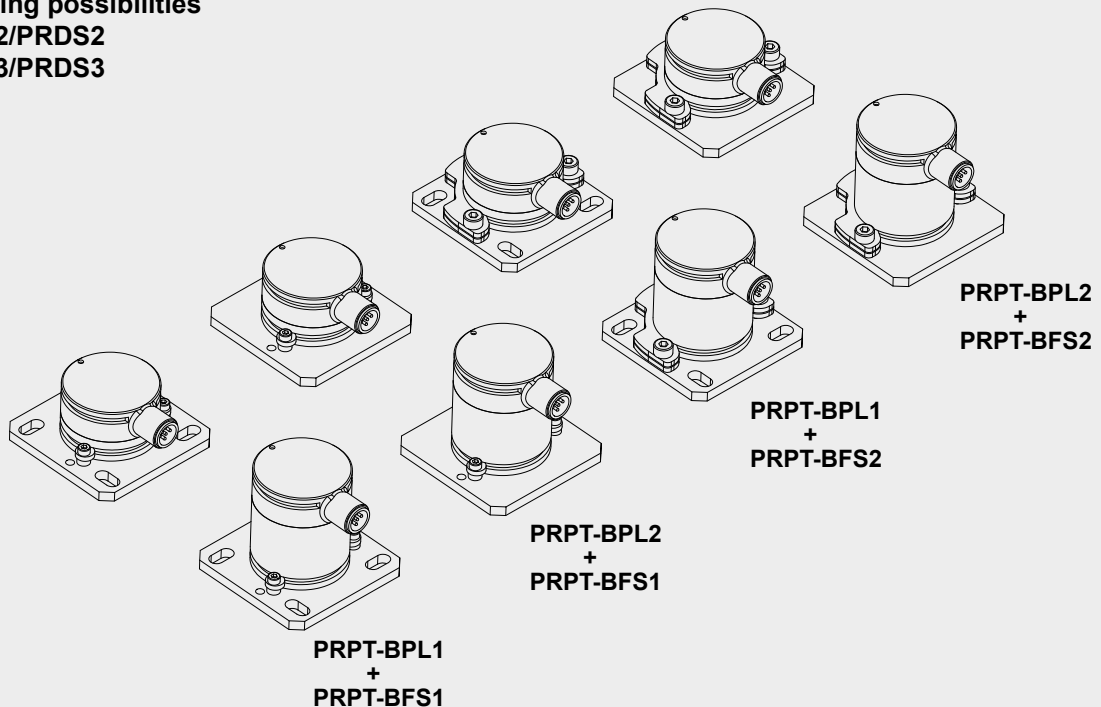
For PRAS3, PRDS3



Dimensions in mm [inch]

Weight 30 g approx.
 Dimensions informative only.
 For guaranteed dimensions please consult factory.

Mounting possibilities
PRAS2/PRDS2
PRAS3/PRDS3



Accessories Connector Cables

Connector cable for POSIROT®- POSITILT® sensors 4 pins M12

Suitable for 5-pin
sensor connectors
M12A5 and M12R5

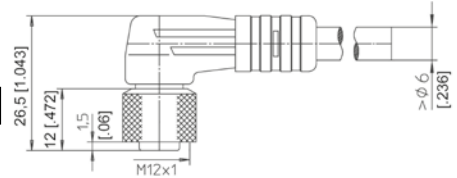
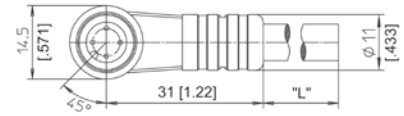
The 4-core screened cable is supplied with a mating 4-pin 90° M12 connector at one end and 4 wires at the other end. Available lengths are 2, 5 and 10 m.

Order code:

KAB - XM - M12/4F/W - LITZE

IP69K: **KAB - XM - M12/4F/W/69K - LITZE**

Length in m



Connector cable for POSIROT®- POSITILT® sensors 4 pins M12

Suitable for 5-pin
sensor connectors
M12A5 and M12R5

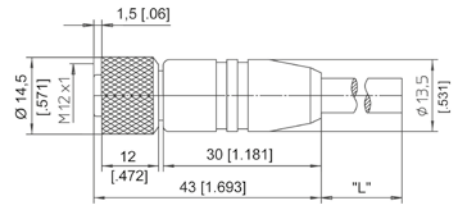
The 4-core screened cable is supplied with a mating 4-pin M12 connector at one end and 4 wires at the other end. Available lengths are 2, 5 and 10 m.

Order code:

KAB - XM - M12/4F/G - LITZE

IP69K: **KAB - XM - M12/4F/G/69K - LITZE**

Length in m



Signal wiring M12, 4 pin

Connector pin / cable color

1	2	3	4
Brown	White	Blue	Black

Connector cable for POSIROT®- POSITILT® sensors 8 pins M12

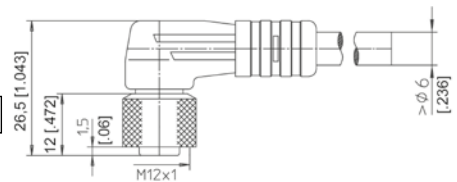
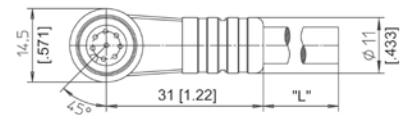
The 8-core screened cable is supplied with a mating 8-pin 90° M12 connector at one end and 8 wires at the other end. Available lengths are 2, 5 and 10 m.

Order code:

KAB - XM - M12/8F/W - LITZE

IP69K: **KAB - XM - M12/8F/W/69K - LITZE**

Length in m



Connector cable for POSIROT®- POSITILT® sensors 8 pins M12

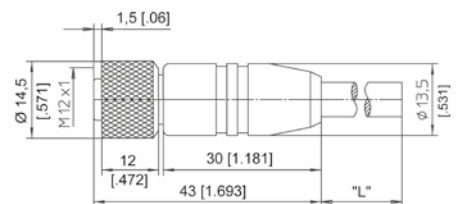
The 8-core screened cable is supplied with a mating 8-pin M12 connector at one end and 8 wires at the other end. Available lengths are 2, 5 and 10 m.

Order code:

KAB - XM - M12/8F/G - LITZE

IP69K: **KAB - XM - M12/8F/G/69K - LITZE**

Length in m



Signal wiring M12, 8 pin

Connector pin / cable color

1	2	3	4	5	6	7	8
White	Brown	Green	Yellow	Grey	Pink	Blue	Red