KUEBLER - LIMES MAGNETIC SENSOR
LI20 MAGNETIC TAPE B1

SERIE 8.LI20.

- Resolution up to 0.01 mm
- Contactless measuring technology
- Status LED
- IP67 Impervious to chips, oil, water, etc.

Product description

Linear sensor used to measure linear movements with high accuracy, for example in woodworking machines, lathes, material handling, overhead cranes etc. The sensor is almost entirely non-sensitive to chips, oil, dust and water and can thus be used in troublesome environments, it is sealed and has no moving parts. This sensor is fitted to read a magnetic tape with a self-adhesive underside. This sensor is available with different resolutions, and if the recipient (counter/PLC) has a multiplication function, a resolution of 10 µm can be achieved. See electrical data (Resolution, Accuracy) for more information.

Magnetic tape B1 has a polar distance of 2 mm. For the combination LI20/B1, the distance between sensor and tape must be 0.1 to 1.0 mm (0.4 mm is recommended). For the magnet sensor, the slope must not exceed ±3°, the rotation must not exceed ±3° and the offset must not exceed ±1 mm.
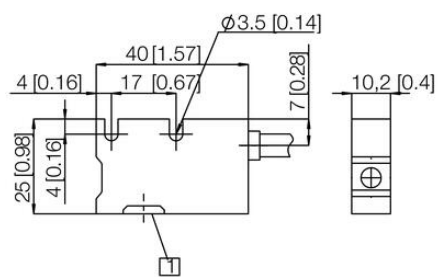
The following information is required to select the right combination:
- requirement on accuracy (from 0.4 mm to 0.01 mm)
- the movement's speed (taking into account frequency to subsequent systems and the sensor's max. speed)
- the movement's length (to order the magnetic scale's length = required length of measurement + 1 dm)
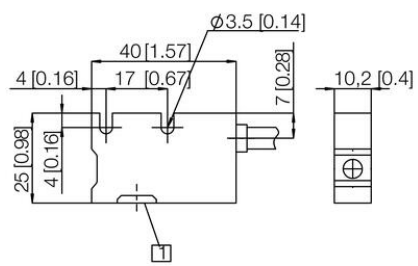
Please refer to the images below for ordering information.

Order code sensor head Limes LI20

8.LI20 . X1X1 . 2XXX
Type a b c d e f

a Model
1 = IP67, standard
2 = IP68 / IP69k and humidity tested
    acc. to EN 60068-3-38, EN 60068-3-78

b Pulse edge interval
1 = standard

c Output circuit / power supply
1 = RS422 / 4.8 ... 26 V DC
2 = Push-pull / 4.8 ... 30 V DC

d Type of connection
1 = cable, 2 m [6.56'] PUR

e Reference signal
2 = index periodic

f Code (resolution) [1]
005 = 100 µm
020 = 25 µm
050 = 10 µm

Stock types
8.LI20.1111.2005
8.LI20.1111.2020
8.LI20.1111.2050
8.LI20.1121.2005
8.LI20.1121.2020
8.LI20.1121.2050

Order code magnetic band Limes B1

8.B1 . 10 . 010 . XXXX
Type a   b

a Width
10 = 10 mm

b Length
0010 = 1 m   0060 = 6 m
0020 = 2 m   0100 = 10 m
0040 = 4 m   0200 = 20 m
0050 = 5 m

Optional on request
- other lengths up to 70 m

Stock types
8.B1.10.010.0010

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Ø3.5 [0.14]

40 [1.57]

4 [0.16]   17 [0.67]   7 [0.28]   10,2 [0.4]

25 [0.98]   4 [0.16]

1 mätområde

Ø3.5 [0.14]

40 [1.57]

4 [0.16]   17 [0.67]   7 [0.28]   10,2 [0.4]

25 [0.98]   4 [0.16]

1 mätområde