KUEBLER - MAGNET SENSOR LI20 WITH MAGNETIC RING RI20

SERIE 8.LI20



- Robust and able to withstand vibration
- Easy to install
- High resolution
- IP67. Impervious to chips, oil, water, etc.



PRODUCT DESCRIPTION

The combination RI20/LI20 is used to measure length via a rotary shaft, e.g. in woodturning machines, materials handling, overhead cranes, etc. This sensor is more or less totally impervious to chips, oil, dust and water and thus can be used in troublesome environments, it is sealed and has no moving parts. The sensor is fitted to read on a yoke. This yoke is available for shaft dimensions 8-30 mm. There are three different yoke sizes; 31 mm, 41.2 mm and 45 mm.

The yoke RI20 has a pole distance of 2 mm. The distance between the sensor and the yoke should be 0.1 to 1.0 mm (recommended 0.4 mm). For the magnet sensor, the slope must not exceed $\pm 3^{\circ}$, the rotation must not exceed $\pm 3^{\circ}$ and the offset must not exceed ± 1 mm.

The following information is required to select the right combination:

- yoke size

- max. shaft rotation speed (given the frequency to following systems)

Pulses/revolution	Yoke	Magnet sensor	Max. revolutions (rpm)	
250	RI20.031.XXXX	LI20.11X1.2005	12000	
1000	RI20.031.XXXX	LI20.11X1.2020	2400	
2500	RI20.031.XXXX	LI20.11X1.2050	3900	
1024	RI20.041.XXXX	LI20.11X1.2016	7000	
360	RI20.045.XXXX	LI20.11X1.2005	12000	
3600	RI20.045.XXXX	LI20.11X1.2050	2700	

Please refer to the images below for ordering information.

Order code Sensor head Limes LI20	8.LI20 . X 1 X . 2 XXX _{Type} . 0 0 0		
 Model 1 = IP67, standard 2 = IP68 / IP69k and humidity tested 	• Type of connection 1 = cable, 2 m [6.56'] PUR A = radial cable, special length PUR *)	 <i>Reference signal</i> 2 = Index periodical 	Stock types 8.Ll20.1111.2005 8.Ll20.1111.2020
acc. to EN 60068-3-38, EN 60068-3-78 <i>Output circuit / power supply</i> 1 = RS422 / 4.8 26 V DC 2 = Push-pull / 4.8 30 V DC	*) Available special lengths (connection type A): 3, 5, 8, 10, 15 m [9.84, 16.40, 26.25, 32.80, 49.21'] order code expansion .XXXX = length in dm ex.: 8.LI20.111A.2005.0030 (for cable length 3 m)	Interpolation factor 005, 016, 020, 050	8.LI20.1111.2050 8.LI20.1121.2005 8.LI20.1121.2020 8.LI20.1121.2050

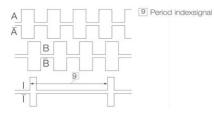
Order code Magnetic ring RI20	8.RI20 . XXX .	XXXX . 111 0	Min. order quantity for	non-stock types: 10 pieces
Outer diameter 031 = 31 mm [1.22"] 041 = 41.2 mm [1.62"] 045 = 45 mm [1.77"]	1000 = 10 mm [0.39"] 2000 = 2 1200 = 12 mm [0.47"] 2500 = 2	0 mm [0.79"] 1587	= 3/8" = 5/8" = 1" ³⁾	Stock types 8.RI20.031.0800.111 8.RI20.031.1000.111 8.RI20.031.1200.111 8.RI20.031.1500.111 8.RI20.041.0800.111 8.RI20.045.1200.111 8.RI20.045.1500.111 8.RI20.045.2500.111 8.RI20.045.2540.111 8.RI20.045.3000.111
Prefer code 8 1120 1/11/1/11 / 1/1/2/11	Bederoode 6 8120 VVVI		-	

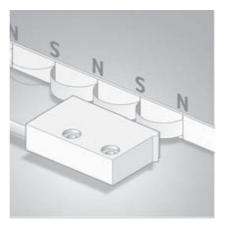
Order code Sensor head Limes LI20	8.L120 .X1XX . 2XXX			Order code Magnetic ring RI20	8.RI
Model 1 = PEC, standard 2 = PEG, transford sec. to EN 40085-3-78 Output: Crash / prover supply 1 = SS222 (AB 20 V DC 2 = Peeh-pul (4.8 20 V DC	Type of connection Connecti	Aeterence signal Setterence signal	Stock types BLIDS 1111 2005 BLIDS 1111 2005 BLIDS 1112 2005 BLIDS 1122 2005 BLIDS 1122 2005 BLIDS 1122 2006	Outer diameter 011 - 31 mm[122"] 041 - 412 mm[132"] 045 - 45 mm[177"]	O Some 0000 = 8 m 1000 = 10 m 1200 = 12 m 1500 = 15 m

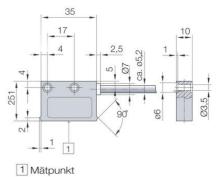
der code agnetic ring RI20			111	Min. order (puartity for non-stock types: 10 pieces
Outer diameter = 31 mm [1.22"] = 41.2 mm [1.82"] = 45 mm [1.77"]	O Scre diameter 0000 - 8 mm [0.327] 1000 - 10 mm [0.397] 1200 - 12 mm [0.397] 1500 - 15 mm [0.597]	1800 - 18 mm (0.71°) 2000 - 20 mm (0.79°) 2000 - 25 mm (0.97°) 2000 - 30 mm (0.18°) ¹⁰ 3000 - 30 mm (0.18°) ¹⁰	1587	= 30° = 50° = 1° 3	Shock types 8.R2(2) 031.000.111 8.R2(2) 031.000.111 8.R2(2) 031.100.111 8.R2(2) 031.100.111 8.R2(2) 041.800.111 8.R2(2) 045.200.111 8.R2(2) 045.200.111 8.R2(2) 045.200.111 8.R2(2) 045.200.111 8.R2(2) 045.200.111

Pin assi	gnment:	
	Signal 0 V, GND	Wire colour white
	UB	brown
	A	green
	Ā	yellow
	В	grey
	B	pink
	1	blue
	ī	red
Shield is	on the housing	

Shield is on the housing







Magnetring 8.RI20.031.XXXX.111, ø 31 mm

