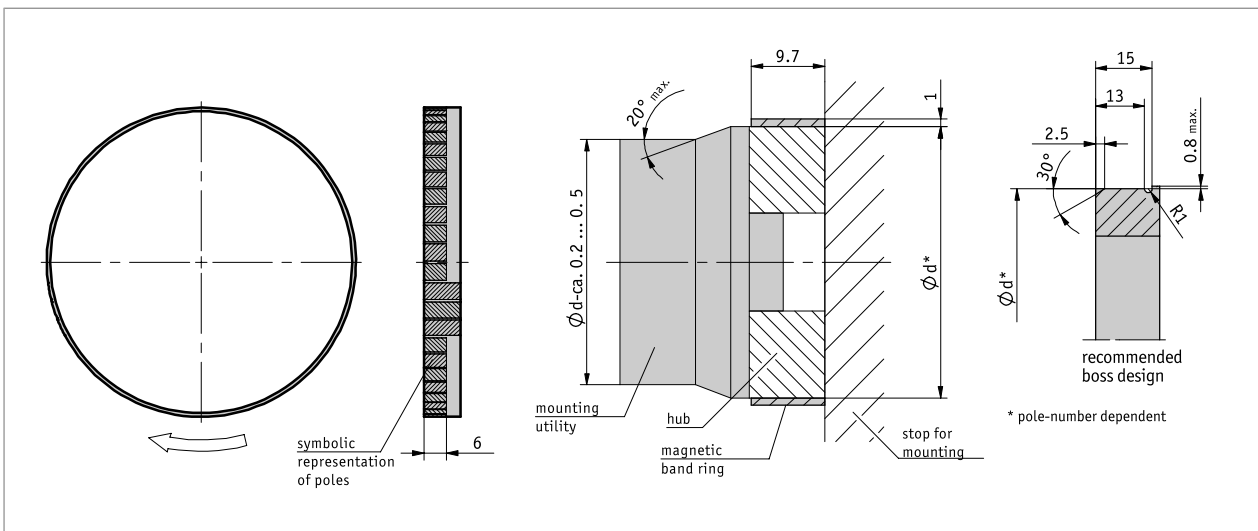


Magnetic band ring MBR500

Incremental, flexible magnetic band ring for self-assembly, pole length 5 mm

Profile

- With reference point as an option
- Easy mounting on self-made carrier



Mechanical data

Feature	Technical data	Additional information
Band width	9.7 mm	
Band thickness	1 mm	without cover strip or adhesive carrier tape
Mounting type	adhesive connection	recommended two-component adhesive: Uhu Plus 300 Endfest

■ Dimensions

Pole	36	50	64	96	160	188
Diameter d [mm]	57.5 ±0.03	79.8 ±0.03	102 ±0.03	153 ±0.03	254.8 ±0.03	299.4 ±0.03
Diameter with MBR500 [mm]	59.5 ±0.03	81.8 ±0.03	104 ±0.03	155 ±0.03	256.8 ±0.03	301.4 ±0.03
Circumference U with MBR500 [mm]	186.93	256.98	326.73	486.95	806.76	946.88
Speed [rpm]	"variable"	"variable"	"variable"	"variable"	"variable"	"variable"

■ Speed

Maximum speeds are calculated in relation to circumferential speed, with the circumference of the magnetic ring being decisive. The circumferential speed of the MSK5000 sensor is variable; it results from the selection of pulse interval and scaling factor (see table MSK5000). Speed is calculated according to the formula:

Formula:

$$n = \frac{v \times 60000}{U}$$

Example:

$$n = \frac{6 \times 60000}{320} = 1125$$

Legend:

n [min⁻¹] speed
 v [m/s] circumferential speed
 60000 extension factor
 (60 s/min x 1000 mm/m)
 U [mm] circumference

Magnetic band ring MBR500

Incremental, flexible magnetic band ring for self-assembly, pole length 5 mm

System data

Feature	Technical data	Additional information
Pole length	5 mm	
Measuring range	360 °	

■ pulses/revolution

"Pole number"	36	50	64	96	160	188
Scaling factor of sensor	1250	45000	62500	80000	120000	200000
	250	9000	12500	16000	24000	40000
	125	4500	6250	8000	12000	20000
	50	1800	2500	3200	4800	8000
	25	900	1250	1600	2400	4000
	12.5	450	625	800	1200	2000
						235000
						47000
						23500
						9400
						4700
						2350

Table applies to the combination MBR500 with MSK5000

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-20 ... 70 °C	
Storage temperature	-20 ... 70 °C	
Relative humidity	100 %	condensation admissible

Order

■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
"Pole number"	A	36 poles	
		50 poles	
		64 poles	
		96 poles	
		100 poles	
		188 poles	
		others on request	
reference point	B	without	
		with	

■ Order key

MBR500 - -



Scope of delivery:

MBR500, Installation Instructions