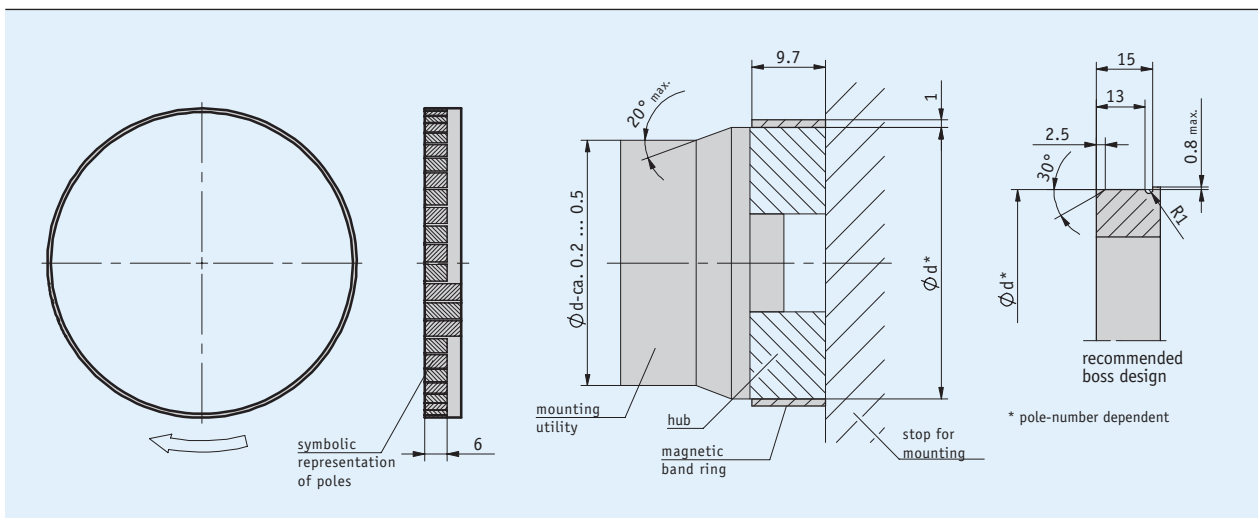


Profile

- 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

Table of dimensions

Poles	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 n [min ⁻¹]	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

System data

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

■ Pulses/revolution

Pole number	36	50	64	96	160	188
Sensor scaling factor	1250	45000	62500	80000	120000	235000
	250	9000	12500	16000	24000	47000
	125	4500	6250	8000	12000	23500
	50	1800	2500	3200	4800	9400
	25	900	1250	1600	2400	4700
	12.5	450	625	800	1200	2350

The table applies to the combination of 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	Specification	Additional information
Pole number	36	36 poles	
	50	50 poles	
	64	64 poles	
	96	96 poles	
	160	100 poles	
	188	188 poles	
		others on request	
Reference point	0	without	
	M	with	

■ Order key

MBR500 - -

Scope of delivery: MBR500, Mounting instructions