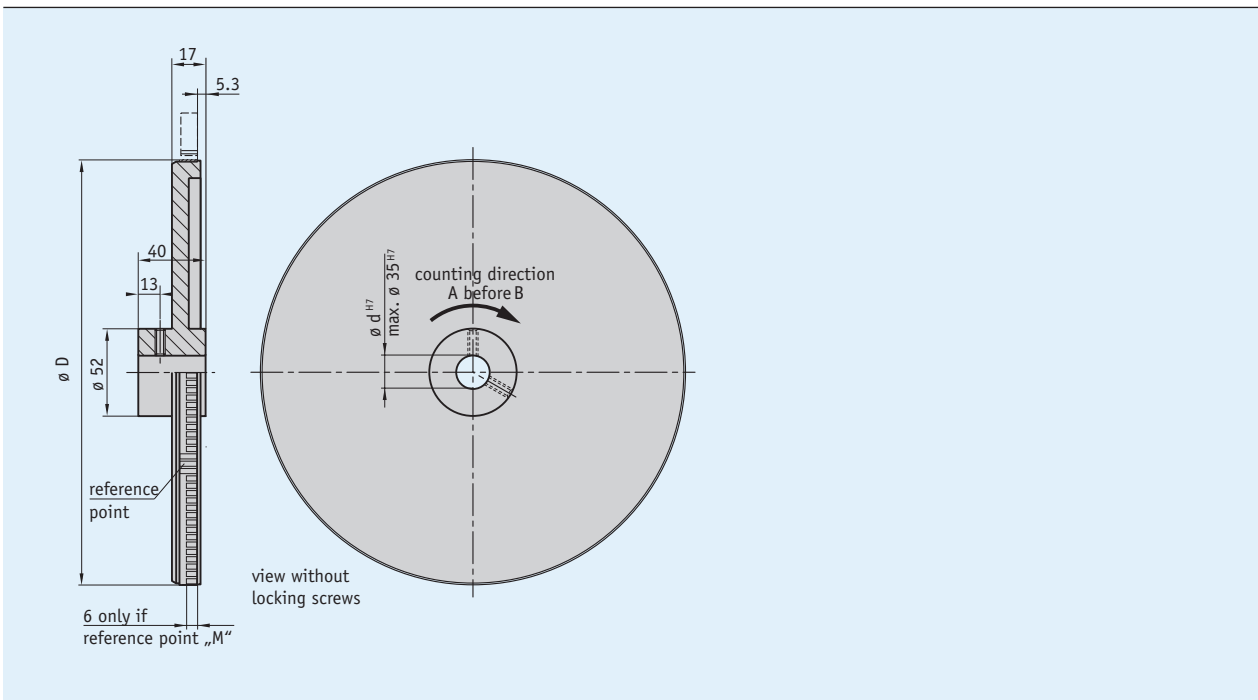


Profile

- Easy hollow-shaft mounting
- Rotary encoder system with IP67 protection category (in combination with MSK5000)
- Up to 200 000 pulses/revolution (800 000 increments)
- With reference point as an option



Mechanical data

Feature	Technical data	Additional information
Flange	aluminum	

Table of dimensions

Poles	64	96	160
Diameter D [mm]	102	153	255
Circumference U [mm]	320	480	800
Speed [min ⁻¹]	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	
System accuracy	±0.1°	at T _U = 20 °C
Measuring range	360°	

Pulses/revolution

Pole number	64	96	160	
Sensor scaling factor	1250	80000	120000	200000
	250	16000	24000	40000
	125	8000	12000	20000
	50	3200	4800	8000
	25	1600	2400	4000
	12.5	800	1200	2000

The table applies to the combination of MR500 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	64	64 poles	
	96	96 poles	
	160	160 poles	
		others on request	
Bore/diameter	20	ø20 mm	
		others on request	
Reference point	0	without	
	M	with	

Order key



Scope of delivery: MR500