

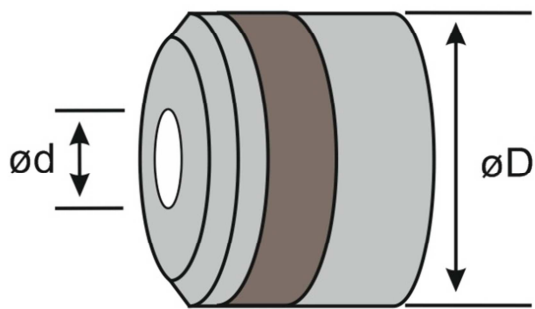


- **Bearingless magnetic encoder**
- **High rotational speed**
- **Insensitive to dirt, dust, water IP67**
- **High resistance to shocks, vibrations, pressure**

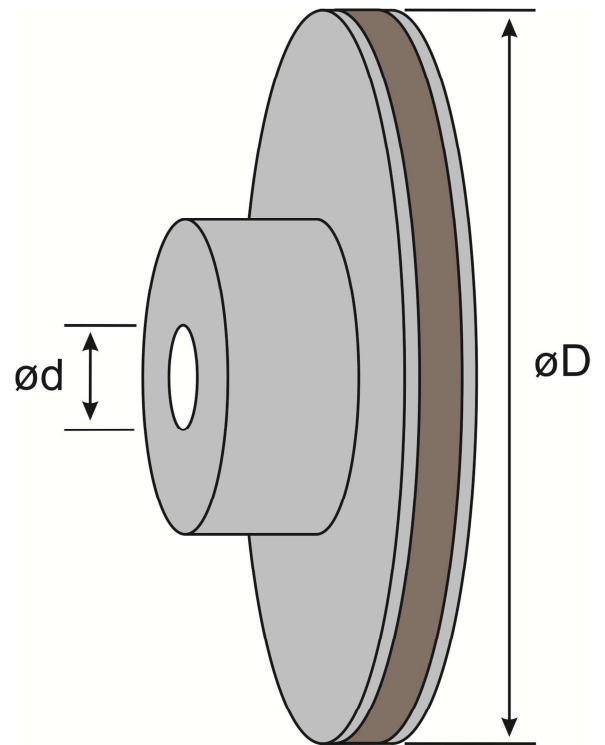
Heavy-duty magnetic rings consist of a magnetized layer of ferrite elastomer embedded in an aluminum housing. Together with the MSI-32 sensor, they form a system for measuring the angle or rotational speed.

The measurement is non-contact and has no wearing parts (bearings, seals, etc.).

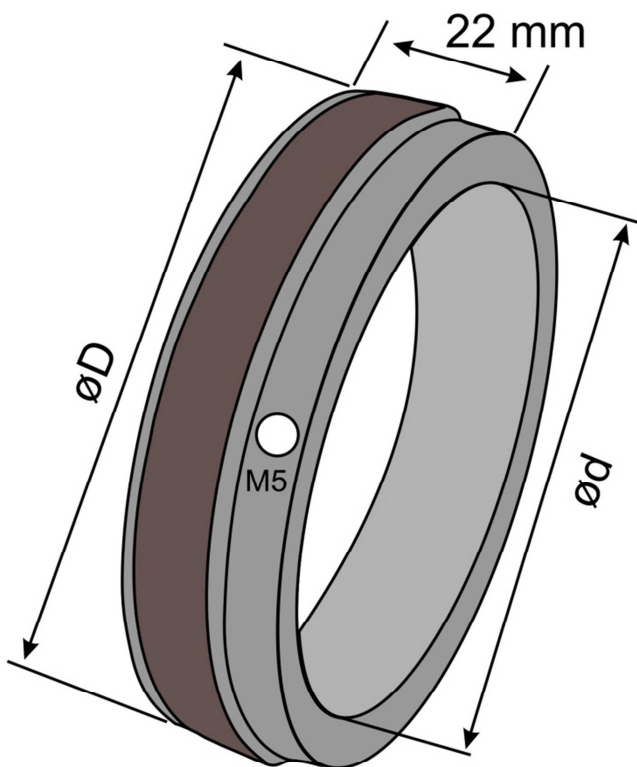
Magnetic encoders are a great solution for harsh, severe environments including woodworking, stone, metalworking, textile, printing, packaging, plastics processing, automation and assembly systems, laser/water cutting, electronic assembly equipment, construction machinery e.t.c.



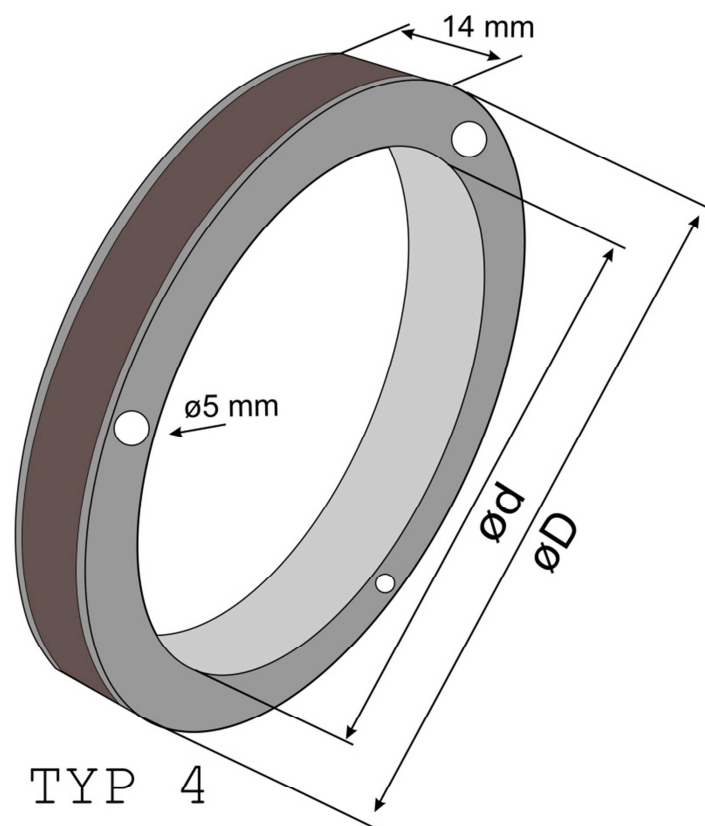
TYP 1



TYP 2



TYP 3



TYP 4

Number of poles	36	50		90			100		
External diameter $\varnothing D$ mm	35	50		90			100		
Type	1	2	3	2	3	4	2	3	4
Internal diameter $\varnothing d$ mm	10	10	30	10	70	70	10	80	80
Speed max. obr/min	10700	7500		4125			3750		
Other on request									

How to order a ring:

MRI-32- number of poles – type

(MRI-32-100-3 - means ring with 100 poles, type 3)

Number of pulses per revolution resulting from the number of poles of the MRI-32 wheel in combination with the selected divider in the MSI-32 sensor:

Number of poles : 36				
MSI-32-....	divider	pulses per revolution	increments per revolution	resolution °
50	16	576	2304	0.15625
66	12	432	1728	0.208333333
80	10	360	1440	0.25
100	8	288	1152	0.3125
160	5	180	720	0.5
200	4	144	576	0.625
266	3	108	432	0.833333333
400	2	72	288	1.25
800	1	36	144	2.5

Number of poles: 50				
MSI-32-....	divider	pulses per revolution	increments per revolution	resolution °
50	16	800	3200	0.1125
50	12	600	2400	0.15
50	10	500	2000	0.18
50	8	400	1600	0.225
50	5	250	1000	0.36
50	4	200	800	0.45
50	3	150	600	0.6
50	2	100	400	0.9
50	1	50	200	1.8

Number of poles : 90				
MSI-32-....	divider	pulses per revolution	increments per revolution	resolution °
90	16	1440	5760	0.0625
90	12	1080	4320	0.083333333
90	10	900	3600	0.1
90	8	720	2880	0.125
90	5	450	1800	0.2
90	4	360	1440	0.25
90	3	270	1080	0.333333333
90	2	180	720	0.5
90	1	90	360	1

Number of poles: 100				
MSI-32-....	divider	pulses per revolution	inkrementów/obrót	resolution °
50	16	1600	6400	0.05625
66	12	1200	4800	0.075
80	10	1000	4000	0.09
100	8	800	3200	0.1125
160	5	500	2000	0.18
200	4	400	1600	0.225
266	3	300	1200	0.3
400	2	200	800	0.45
800	1	100	400	0.9

How to order a suitable sensor for the above-mentioned rings:

MSI-32-80 means a sensor with a divider 10, which in combination with for example, a 36-pole pole ring will give 360 pulses per revolution, i.e. a resolution of 0.25 ° (1440 increments)

