

ROTAPULS • ROTACOD

Incremental encoders • Absolute encoders

Magnetic bearingless encoders

- Robust magnetic sensing with protection up to IP69K
- Hollow shaft diameter up to Ø250 mm
- Resolution 180000 pulses/turn or more

Description				
	MIK36 • MSK36 • MMK36	SGSM • SGSD	SMG	SMRI2 • SMRI5
Description	Size 36, with hub-shaft. Incremental and absolute.	Magnetic encoder. Single or redundant version. High environmental protection.	Gear sensor. High resolution and precision. High counting frequency.	Magnetic ring encoders with several diameters. Resolutions up to 180000 PPR or more.
Sensing method	magnetic	magnetic	magnetic	magnetic
Resolution max.	2048 PPR 13 Bit 13 x 16 Bit	1024 PPR	>25000 PPR	180000 PPR
Output circuit	Line Driver 1Vpp SSI	Push-Pull Line Driver	Push-Pull Line Driver 1Vpp	Push-Pull Line Driver
Power supply	+10÷30Vdc	+5Vdc ±5% +10÷30Vdc	+5Vdc ±5%	+5Vdc ±5% +10÷30Vdc
Shaft diameter max.	hollow shaft Ø10 mm	hollow shaft Ø50 mm	hollow shaft Ø100 mm	hollow shaft Ø250 mm
Electrical connections	cable M12 connector	cable	cable M12 connector	cable M12 connector
Operating temperature	-25°C +85°C (-13°F +185°F)	-40°C +85°C (-40°F +185°F)	-20°C +85°C (-4°F +185°F)	-25°C +85°C (-13°F +185°F)
Shaft rotational speed	30000 rpm max.	6000 rpm max.	50000 rpm max.	25000 rpm max.
Protection max.	IP68	IP68	IP68	IP67
Application	Contactless sensing Washdown	Contactless sensing Washdown	High speed spindle motors	Torque motors





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Magnetic bearingless encoders and arc-encoders

- Contactless and wearless magnetic sensing
- Hollow shaft up to Ø110 mm
- Resolution up to 262144 counts/turn or more



	 SMRA	 SMLA	 SMR5H	 SMAB new
Description	Absolute bearingless. Self-centering clamp ring.	Absolute, contactless. For arcs and segmented rings.	Incremental, contactless. Internal sensing on arcs and rings.	Low profile absolute encoder. Axial sensing.
Sensing method	magnetic	magnetic	magnetic	magnetic
Resolution max.	14 Bit	14 Bit	it depends on ring	18 Bit
Output circuit	SSI BiSS	SSI BiSS	Push-Pull Line Driver	SSI
Power supply	+5Vdc ±5% +10÷30Vdc	+5Vdc ±5% +10÷30Vdc	+5Vdc ±5% +10÷30Vdc	+10÷30Vdc
Shaft diameter max.	hollow shaft Ø110 mm	-	-	hollow shaft Ø80 mm
Electrical connections	cable M12 connector	cable M12 connector	cable	cable
Operating temperature	-25°C +85°C (-13°F +185°F)	-25°C +85°C (-13°F +185°F)	-25°C +85°C (-13°F +185°F)	-25°C +85°C (-13°F +185°F)
Shaft rotational speed	15000 rpm max.	15000 rpm max.	it depends on ring	15000 rpm max.
Protection max.	IP68	IP68	IP67	IP69K
Application	Torque motors	Robotics	Robotics	Robotics