



ABSOLUTE RMRnL400 Series

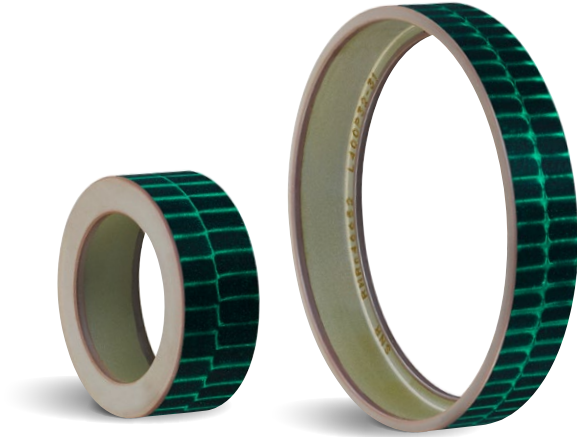
Vernier/Nonius magnetic rings

TECHNICAL DATASHEET

The magnetic rings in the RMRnL400 series are part of the Vernier/Nonius range dual track magnetic rings from SNR.

Combined with the TTSa46648 range of tube sensors, they form **ABSOLUTE**, SNR's absolute angle measurement system.

They measure the angular position of a rotating shaft as soon as it is powered up.



BENEFITS

- Robustness
- Performance
- Easy to install and operate

APPLICATIONS

- Autonomous vehicles
- Multi-axis robots
- Polluted industrial environments
- Electric motors, etc.

DESIGNATIONS

The RMMnL400 range magnetic rings includes the following part numbers:

For Ø 36.7 mm shaft

Combined with TTSa46648L400P16-15BiSS18 or TTSa46648L400P16-15SSI18 sensor

Reference	Type	Magnetic pattern	Pole length (mm)	Pole pairs (pp)
RMRn46651L400P16-15	Radial	Nonius dual track	4	16/15

For Ø 77.4 mm shaft

Combined with TTSa46648L400P32-31BiSS19 or TTSa46648L400P32-31SSI19 sensor

Reference	Type	Magnetic pattern	Pole length (mm)	Pole pairs (pp)
RMRn46652L400P32-31	Radial	Nonius dual track	4	32/31

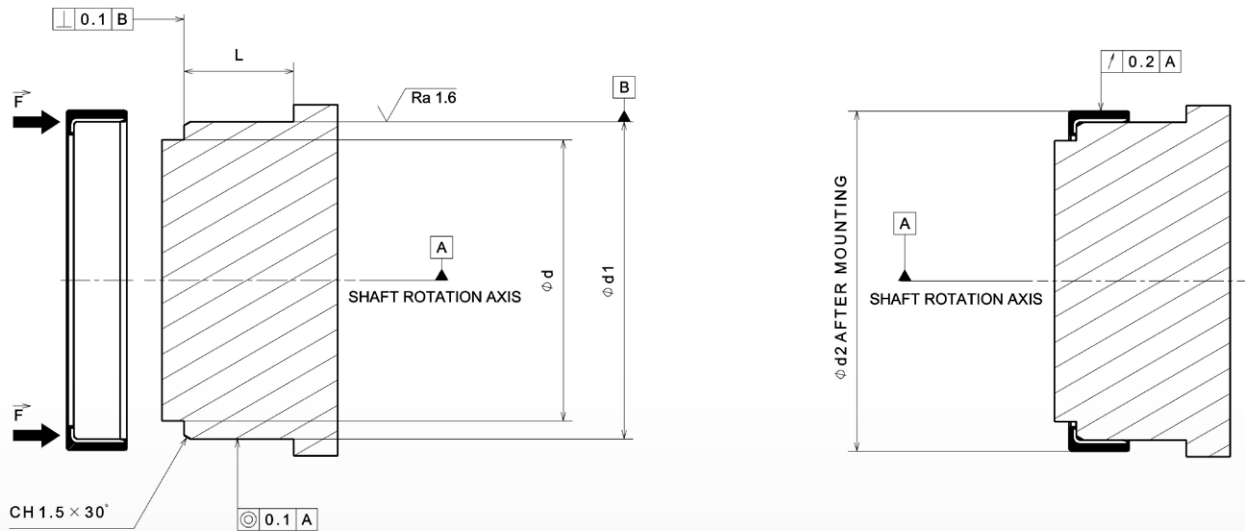
SPECIFICATIONS

Operating temperatures

Symbol	Parameter	Minimum (°C)	Maximum (°C)
T _{ope}	Operating temperature	-40	105
T _{sto}	Storage temperature	-40	125

MECHANICAL CHARACTERISTICS AND ASSEMBLY TOLERANCES

Magnetic rings



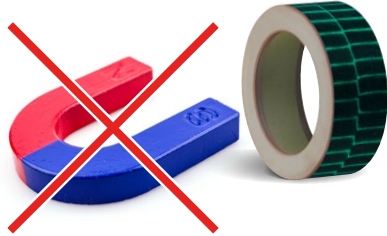
Reference	Symbol	Parameter	Minimum	Typ.	Maximum	Unit
RMRn46651L400P16-15	D	External diameter	36.5	36.6	36.7	mm
	W	Width	13.5	13.7	13.9	mm
	AS	Axial offset	5.3	5.8	6.3	mm
	We	Weight	-	18	-	g
	d	Shaft diameter	-	-	25.15	mm
	d1	Shrink diameter	31.87	31.9	31.93	mm
	d2	Diameter after assembly	36.55	36.7	36.91	mm
	L	Shrink length	12.5	-	-	mm
	F	Dismantling force	500	-	-	N

Reference	Symbol	Parameter	Minimum	Typ.	Maximum	Unit
RMRn46652L400P32-31	D	External diameter	77.25	77.4	77.55	mm
	W	Width	13.5	13.7	13.9	mm
	AS	Axial offset				mm
	We	Weight	-	44	-	g
	d	Shaft diameter	-	-	65.95	mm
	d1	Shrink diameter	72.27	72.3	72.33	mm
	d2	Diameter after assembly	77.3	77.5	77.76	mm
	L	Shrink length	12.5	-	-	mm
	F	Dismantling force	500	-	-	N

HANDLING

Avoid shocks or impacts during transport, handling and assembly.

TTSa46648 sensors and RMRnL400 magnetic rings are very sensitive to magnetic fields. They must be kept away from all sources of magnetic disturbance such as magnets, relays and mobile phones.



MAINTENANCE

RMMnL400 magnetic rings should be cleaned with a soft cloth.

STORAGE

Before and after use, TTSa46648 sensors and RMMnL400 magnetic rings should be stored in their original packaging in a cool, dry place.

RECYCLING

Magnetic rings may become soiled during use. When they are discarded, they must be collected through the hazardous industrial waste (HIW) management system, in accordance with the local regulations in force.

