Baumer

DATA SHEET

MDRM 18U9501

Industrial automation components

Manufacturer	Baumer
Catalog number	mdrm-18u9501
Category	Industrial automation components
Product type	Industrial automation components
Status	Active product

Technical specification

Weight	1.36 kgs
Angular Range	160° linear °
Resolution	0.09°
System Accuracy	±0.25%
Operating Temperature Range	-40°C to +85°C
Protection Class	IP67
Housing Material	Brass nickel-plated
Sensing Face Material	PBTP
Supply Voltage	5 VDC
Output Signal	0.5 to 4.5 VDC
Response Time	<4 ms
Current Consumption (No Load)	10 mA

Description

The Baumer MDRM 18U9501 is a magnetic angle sensor designed for precise angular position measurement in industrial automation applications. This sensor offers a 160° linear angular range with a resolution of 0.09°, ensuring high accuracy in rotational measurements. It operates over a temperature range of -40°C to +85°C and features an IP67 protection class, making it suitable for harsh industrial environments. The sensor is housed in a cylindrical threaded brass nickel-plated casing with a 18 mm diameter, and its sensing face is made of PBTP material. It is powered by a 5 VDC supply and provides a voltage output signal ranging from 0.5 to 4.5 VDC. The sensor's response time is less than 4 ms, and it has a maximum current consumption of 10 mA without load. The maximum working distance is 5 mm when used with the magnet rotor MSFS, and it can tolerate axial misalignment up to 0.4 mm. This sensor is ideal for applications requiring precise angular position feedback in automated systems.