

Code PMS5	Projec S	Release 1.3	Title PRODUCT INFORMATION
--------------	-------------	----------------	------------------------------

**TECHHICAL CHARACTERISTICS OF MAGNETIC TRANSDUCER DMS-S**

**GENERAL CHARACTERISTICS**

- Small overall dimensions of the TRANSDUCER.
- MAGNETIC BAND PMB5 is composed of a magnetic strip, Which is polarized at regular distances of 5+5mm and supported by a stainless steel tape. Extremely easy to mount the operating machine



**MECHANICAL AND ELECTRICAL FEATURES**

<b>MECHANICAL</b> • Die-cast cast transducer. thread or with M3 through screws. • Liberal mounting tolerances.			<b>Cod. DMS-S</b>	
<b>ELECTRICAL</b> • Very flexible power cable. • High stability of the signals. • For applications where the max speed is than 1m/s, the use of a “special cable” is request.			<b>Reference signal</b> Constant pitch every 5mm (C) external (E)	
<b>CABLE (2 meters standard length)</b> Minimum bending Radius 60mm      8 CORES Φ5.3mm			<b>Pole pitch</b> 5+5mm	
<b>CONNECTIONS</b>			<b>Resolution (S)</b> 1-5(S)-10-25-50-100um	
	RS422	TTL	<b>Accuracy<sup>2</sup></b> ±40um/±10um(M)	
Blue	/A		<b>Repeatability</b> ±1 increment	
Yellow	A	A	<b>Cable</b> 8cores	
Brown	B	B	<b>Output type</b> Line-driver / push -pull	
Green	/B		<b>Msx.measuring frequency</b> 300Khz	
Grey	R	R	<b>Sensor – magnetic band distance</b> See drawings	
Black	/R		<b>Power supply</b> 5 ÷ 28Vdc ±5%	
RED	V+	V+	<b>Current consumpt .with load</b> 60mA max	
White	GND	GND	<b>Current consumption with load</b> 140mAmax(with 5V and Zo=120Ω) 115mAmax(with 12V and Zo=1.2KΩ) 90mAmax(with 28V and Zo=1.2KΩ)	
SHIELD	PE	PE	<b>Phase displacement</b> 90° ±5° electrical	
The sensor is normally supplied with a 2m cable. It is possible to require longer cable, considering the following maximum available length. Lmax=10m(sensor cable); Lmax=100m(2m sensor cable+cable extension <sup>1</sup> )			<b>Maximum speed</b> 6m/s(PMS 5)	
			<b>Vibration resistance</b> 【10H~2000Hz】 at 100m/s <sup>2</sup>	
			<b>Shock resiststance</b> 1000m/s (11ms)	
			<b>Class of protection</b> IP 67 DIN 40050/IEC 529	
			<b>Operating temperature</b> 0°~50°C	
			<b>Storage temperature</b> -20°~80°C	
			<b>Humidity</b> 100% not condensed	
			<b>Weight of transducer</b> 40g	
			<b>Electrical protections</b> Inversion power supply polarity short circuit on output post	

<sup>1</sup>Cable extension with power supply conductor’s section of 0.5mm<sup>2</sup>

<sup>2</sup>To obtain this accuracy value it’s necessary to respect the alignment tolerances values peescribed by manufacturer. Better accuracy results can be obtained by reducing the gap between the dendor and the magnetic band.

**ORDERING CODE**

MODEL	PITCH	RESOLUTION	ZERO MARKER	POWER SUPPLY	OUTPUT	CABLE	CONNECTION
<b>PMS</b>	<b>S</b>	<b>5</b>	<b>C</b>	<b>0528</b>	<b>L</b>	<b>M02/N</b>	<b>SC</b>
PMS	S=5+5mm X=2+2mm H=1+1mm	5=5um 10=10um 25=25um	C=constant pitch E=External N=No Zero Marker	0528 =5~28V 5=5V 24=24V	L=LINE-DRIVER P=PNP N=NPN	M01N=1m M02/N=2m M10/N=10m	SC=without conn C3=C3 C4=C4

**Example** → **PMS S10C 0528L M02/N SC**

# 磁栅尺 MAGNETIC TAPE

型号: PMB1-2-5

- 3M 背胶 Easy mounting by glueing
- 5mm 磁极距 5 mm pole length
- 易于安装 Easy Mounting
- 高精度 High accuracy
- 标准  $\pm 40 \mu\text{m}/\text{m}$  Standard  $\pm 40 \mu\text{m}/\text{m}$
- IP67 保护等级 Protection class IP67
- 防潮 Resistant to humidity
- 不锈钢材质 Stainless steel cover strip ( Upside and Downside )
- 最长50m Up to 50 m available (标准30M)
- 合成橡胶 Nitrile Rubber



磁条由三部分组成: 1. 胶磁 .2. 保护盖条 3. 载条。

The magnetic band is supplied with a non-magnetic stainless steel cover for physical protection; for its fixing

an adhesive tape is pre-mounted.

1 - A flexible magnetic tape made of plastic material ( Resistant to debris, liquids and oils )

2 - Cover Strip ( Upside ) :A magnetised steel tape used to create a shield against any external magnetic disturb.

Although, it' s glued to the upper plastic layer in.

3 - Cover Strip ( Downside ) The third part is the most rigid one and therefore is supplied separately due to transport

And application needs. It must be stick to

## 磁尺参数特性

工作温度范围  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$

磁极距 5mm

精度等级  $\pm 40 \mu\text{m} / \text{m}$

温度系数  $11 \pm 1 \mu\text{m} / \text{K}$

存储温度  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$

Magnetic Tape Specifications

Operating temperature  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$

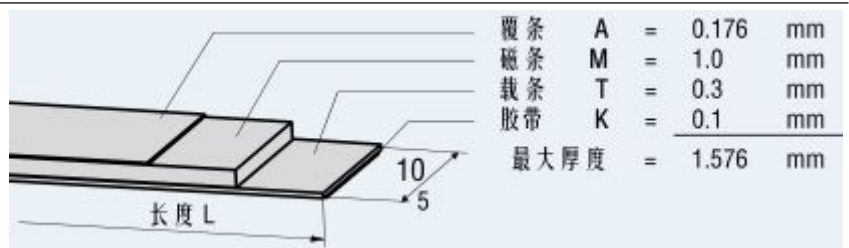
Pole Pitch 5 mm

Accuracy Class  $\pm 40 \mu\text{m} / \text{m}$

Temperature coefficient  $11 \pm 1 \mu\text{m} / \text{K}$

Storage temperature  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$

Special material stainless steel carrier



名称	数据	备注
磁极距	5 mm	
测量长度	无限制	
磁尺宽度	10 mm 或 5 mm	
厚度	1.4 mm	无覆条
精度等级	$50 \mu\text{m} / 100 \mu\text{m}$	
温度系数	$(11 \pm 1) \times 10^{-6} / \text{K}$	弹性钢
	$(16 \pm 1) \times 10^{-6} / \text{K}$	不锈钢
工作温度	$-20 \cdots +70^{\circ}\text{C}$	
存储温度	$-40 \cdots +70^{\circ}\text{C}$	
空气湿度	100 % rF	防凝露
安装方式	胶带粘接	预装双面胶
覆带材料	不锈钢	

# 磁栅尺传感器 (读数头) MAGNETIC READER SENSORS

型号:PMS1-5-10-25-50-100

特点 sign:

- 成品可调整分辨率 Finished product can adjust resolution
- 宽供电电压5v-30v Wide supply voltage 5v-30v
- 工作状态指示 Status indication
- 最高分辨率达 0,0025 mm High Resolution Up to 0,0025 mm Resolution
- 高精度 High Accuracy
- 螺旋电缆选项 Spiral or Cable Option
- 测试距离最长100m Measuring Lengths Up to 100 m
- 可应用于油污环境 Resistant to Humidity
- 金属外壳 Sturdy Metal Case
- 防护等级 IP67 Protection Class IP67

磁头与5+5 磁极距磁条配套使用，磁头与磁带有效感应距离0.1-2.5mm，0.8-1.5mm 使用最佳，宽电压供电，工作状态指示灯，分辨率可调。德国技术，质量保证。

The reader sensors can be used with 5+5 magnetic tape, The reader sensor glides contactless over the Profile with gap up to 0,1 - 2.5 mm., wide voltage supply, Spiral or pure cable models are available.

German technology, quality assurance.

应用 Applications :

- 加工中心 Machining Centers
- PVC 切割机 PVC Cutting Machines
- 木材切割机 Wood Cutting Machines
- 车床, 铣床, 钻床, 磨床 Lathes, Milling, Drilling, Grinding Machines
- 金属板材加工机 Sheet Metal Working Machines
- 石材机 Marble Machines
- 焊机 Welding Machines
- 折弯机 Bending Machines
- 火花机 Electrical Discharge Machines
- 机器人/物料搬运 Robotics / Material Handling
- 玻璃加工机械 Glass Working Machinery

安装尺寸图/installation size

