

SIEMENS

SIMATIC Ident

RFID systems




MDS D525

Compact Operating Instructions

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

 DANGER
indicates that death or severe personal injury will result if proper precautions are not taken.
 WARNING
indicates that death or severe personal injury may result if proper precautions are not taken.
 CAUTION
indicates that minor personal injury can result if proper precautions are not taken.
NOTICE
indicates that property damage can result if proper precautions are not taken.


If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel


The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

 WARNING
Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

1 Characteristics

MDS D525	Characteristics	
	Area of application	Compact and rugged ISO transponder; suitable for screw mounting Use in assembly and production lines in the powertrain sector; ideal for mounting on motors, gearboxes, and work-piece holders Rugged packaging of the MDS D525; can therefore also be used under extreme environmental conditions without problems
	Memory size	8192 bytes of FRAM user memory
	Write/read range	See section "Field data (Page 3)".
	Mounting on metal	Yes
	ISO standard	ISO 15693
	Degree of protection	IP68/IPx9K

2 Ordering data

Table 2-1 Ordering data for MDS D525

	Article number
MDS D525	6GT2600-5AG00

3 Application example

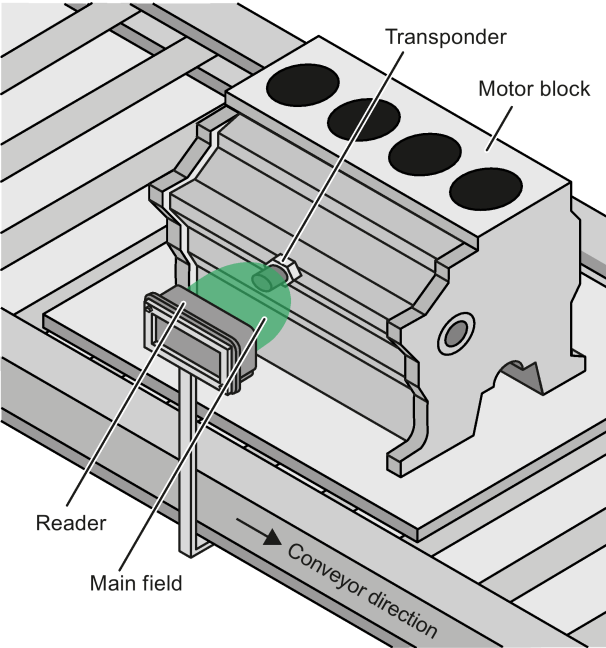


Figure 3-1 Application example

4 Field data

NOTICE

Requirements for using the MDS D525 with RF200 readers

Note that it is possible to process the MDS 525 transponder with the RF290R reader as of firmware version 2.0.0. With the other RF200 readers (RF210R, RF220R, RF240R, RF250R) it is possible to work with the MDS D525 transponder with firmware versions >1.5.

Table 4-1 Field data of the MDS D525, flush mounting in metal (metallic installation surface 100 x 100 mm)

	Operating distance (S _a)	Limit distance (S _g)	Transmission window (L)	Minimum distance from MDS to MDS
RF210R	1 to 6 mm	7 mm	12 mm	≥ 20 mm
RF220R	1 to 11 mm	13 mm	20 mm	≥ 25 mm
RF240R	1 to 15 mm	17 mm	30 mm	≥ 75 mm
RF250R with ANT 3	1 to 12 mm	20 mm	22 mm	≥ 80 mm
RF250R with ANT 12	0 to 8 mm	10 mm	12 mm	≥ 50 mm
RF250R with ANT 18	1 to 11 mm	16 mm	19 mm	≥ 60 mm
RF250R with ANT 30	1 to 12 mm	20 mm	22 mm	≥ 80 mm

5 Technical specifications

Table 5-1 Technical specifications for MDS D525

6GT2600-5AG00	
Product type designation	SIMATIC MDS D525
Memory	
Memory configuration	
• UID	• 8 bytes
• User memory	• 8192 bytes FRAM
• OPT memory	• 16 bytes FRAM
Read cycles (at < 40 °C)	> 10 ¹²
Write cycles (at < 40 °C)	> 10 ¹²
Data retention time (at < 40 °C)	> 10 years
Write/read distance (S _g)	Dependent on the reader used, see section "Field data (Page 3)"
MTBF (Mean Time Between Failures)	2 x 10 ⁶ hours

Mechanical specifications

Housing

• Material	• Plastic PA 6.6 GF
• Color	• Black
Recommended distance to metal	> 0 mm
Power supply	Inductive, without battery

Permitted ambient conditions

Ambient temperature

• During operation	• -25 to +85 °C
• During transportation and storage	• -40 to +125 °C

Degree of protection to EN 60529

- IP68
2 hours, 2 bar, +20 °C
- IPx9K
steam jet: 150 mm; 10 to 15 l/min; 100 bar; 75 °C

Shock-resistant to IEC 68-2-27	50 g ¹⁾
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Vibration-resistant to IEC 68-2-6	20 g ¹⁾
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Torsion and bending load	Not permitted
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Design, dimensions and weight

Dimensions (Ø x H)	24 x 10 mm (without set screw)
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Weight	35 g
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Type of mounting	1x transponder set screw M6 SW 22; ≤ 6 Nm
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¹⁾ The values for shock and vibration are maximum values and must not be applied continuously.

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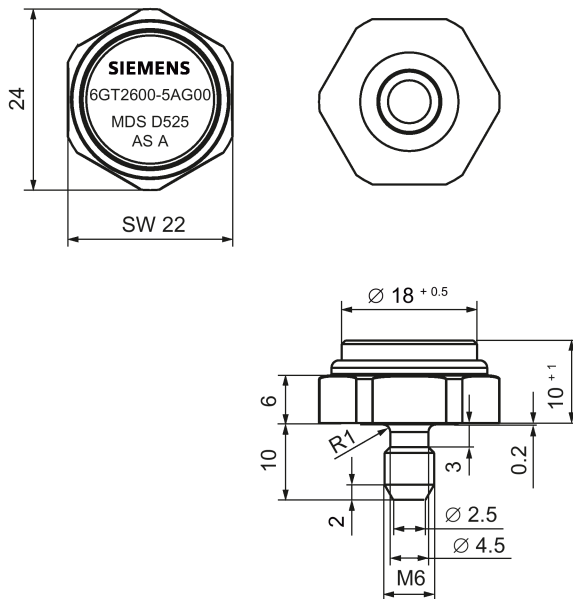


Figure 6-1 Dimensional drawing of MDS D525

All dimensions in mm

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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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