

product type designation



MDS D522 transponder for screwing

transponder MDS D522 only for RF200/RF300 Gen2 for screwing into metal, ISO 15693, chip type FUJITSU MB89R112, 8192 bytes FRAM user memory 20x 6 mm(DxH); M20x 1 thread minimum order quantity 5 units.

suitability for operation | RF200, RF300

radio frequencies

operating frequency / rated value	13.56 MHz
range / maximum	35 mm; range is reader dependent: observe http://support.automation.siemens.com/WWW/view/en/67384964
protocol / with radio transmission	ISO 15693
transfer rate / with radio transmission / maximum	26.5 kbit/s
product feature / multitag-capable	Yes

electrical data

product component / backup battery	No
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memory

type of memory	FRAM
storage capacity / of the user memory	8192 byte
type of memory organization	UID (fixed code) 8 bytes, user memory 8192 bytes, configuration memory 40 bytes
number of read cycles / at ambient temperature < 40 °C / maximum	1000000000000
number of write cycles / at ambient temperature < 40 °C / maximum	1000000000000
data retention time / at ambient temperature < 40 °C / not less than	10 y
property of memory	Block-by-block write protection of the user memory
type of transponder chip used	Fujitsu MB89R112

mechanical data

material	PA6.6 GF / brass, nickel-plated
color	black / silver
tightening torque / of the screw for securing the equipment / maximum	1 N·m
mounting distance / relating to metal surfaces / recommended / minimum	0 mm

ambient conditions

ambient temperature	
• during read/write access	-25 ... +85 °C
• outside the read/write area	-40 ... +100 °C
• during storage	-40 ... +100 °C
protection class IP	IP68
shock resistance	According to DIN EN 60721-3-7 Class 7 M3
shock acceleration	500 m/s ²
vibrational acceleration	200 m/s ²

design, dimensions and weights	
height	6 mm
diameter	20 mm
net weight	13 g
fastening method	Thread M20 x 1, glue
product features, product functions, product components / general	
product feature	
• silicon-free	Yes
• printable	No
standards, specifications, approvals	
certificate of suitability	
• IECEx	No
MTBF	228 y
further information / internet-Links	
Internet-Link	
• to web page: selection aid TIA Selection Tool	https://support.industry.siemens.com/cs/ww/en/view/67384964
• to website: Industrial communication	http://www.siemens.com/ident/rfid
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx-Download-Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
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