



HF transponder, disk

RFID transponder

RFID

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
HF transponder, disk	6042212

Other models and accessories → www.sick.com/RFID_transponder

Detailed technical data

Features

Type	Hardtag	
Frequency band	HF (13.56 MHz)	
Carrier frequency	13.56 MHz	
RFID standard	ISO/IEC 15693, ISO/IEC 18000-3 “Mode 1”	
Read range	RFH505	2 cm ¹⁾
	RFH510	5.5 cm ¹⁾
	RFH515	6 cm ¹⁾
	RFH620	11 cm ¹⁾
	RFH630	19 cm ¹⁾
Special features	High Temperature, High Memory	
IC type	Fujitsu MB89R118	
Memory capacity (UII / user memory)	16,000 Bit (250 x 8 Byte)	
IC write cycle	≤ 10,000,000,000	
IC data retention time	< 10 years	

¹⁾ Typical value; actual value depends on environmental conditions.

Mechanics/electronics

Housing	PA 6
Housing color	Black
Enclosure rating	IP68
Weight	+ 3 g
Diameter	50 mm
Thickness	2.5 mm
Hole	5.2 mm
Design	Round
Mounting method	Screws, Rivets

Ambient data

Vibration resistance	IEC 68-2-6
Shock resistance	IEC 68-2-29
Ambient operating temperature	-20 °C ... +85 °C ¹⁾
Application temperature	+ 140 °C, 100 h, 1 ²⁾
Storage temperature	-40 °C ... +90 °C

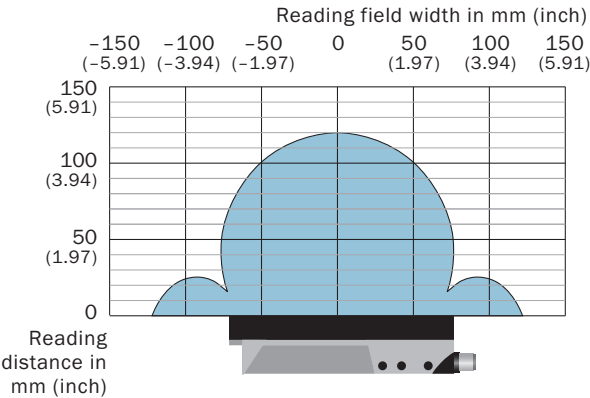
1) Max. temperature at which the RFID transponder can interact with the RFID read/write device.
2) Max. temperature the RFID transponder can withstand [maximum temperature; duration; cycles]. For optimal performance, the transponders should completely cool off before a new temperature cycle is started.

Classifications

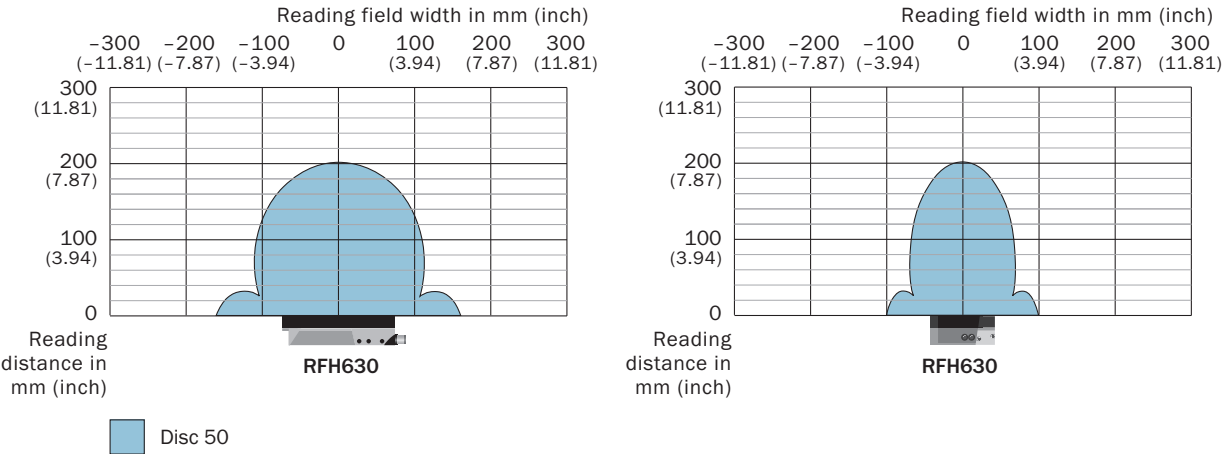
ECLASS 5.0	27280402
ECLASS 5.1.4	27280402
ECLASS 6.0	27280402
ECLASS 6.2	27280402
ECLASS 7.0	27280402
ECLASS 8.0	27280402
ECLASS 8.1	27280402
ECLASS 9.0	27280402
ECLASS 10.0	27280402
ECLASS 11.0	27280402
ECLASS 12.0	27280402
ETIM 6.0	EC002998
ETIM 7.0	EC002998
ETIM 8.0	EC002998
UNSPSC 16.0901	52161523

Reading field diagram

Reading field diagram RFH62x



Reading field diagram RFH63x



Assembly note





Recommended services

Additional services → www.sick.com/RFID_transponder

	Type	Part no.
Commissioning		
<ul style="list-style-type: none">• Product area: RFID• Range of services: Inspection of connection, alignment, optimization of parameters of the RFU/RFH as well as tests, Setup of previously defined functions of reading configuration, data processing and network, interfaces and inputs and outputs• Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses.• Duration: Additional work will be invoiced separately	Commissioning RFU/RFH	1610018
Maintenance		
<ul style="list-style-type: none">• Product area: RFID• Range of services: Inspection, analysis and restoring of defined functions, Checking and adjustment of reading configuration, data processing, network, interfaces and inputs and outputs as well as operating data• Duration: Additional work will be invoiced separately• Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses.	Maintenance RFU/RFH	1611424

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com