



CRAN
Communications Regulatory Authority of Namibia

OUR REF: TAP/03/2024/ IFM

Physical Address: Communications House, No 56 Robert Mugabe Avenue, Windhoek, Namibia
Postal Address: Private Bag 13309, Windhoek, Namibia **Tel:** +264 61 222 666 **Fax:** +264 61 222 790
Email: cran@cran.na **Fax2Email:** +264 085 642 748 **Website:** www.cran.na

ENQUIRIES: SHELEEN KAVIKAIRIUA

14TH March 2024

MR. SAM SHIVUTE

Commissioner
Namibia Revenue Agency
Moltke Street, Windhoek
Namibia

PER EMAIL:

Johanna.Amukushu@namra.org.na

Dear Custom Officials,

TYPE APPROVAL EXEMPTION – IFM ELECTRONIC PTY LTD

Kindly note that the Authority has reviewed the documentations describing equipment to be imported into Namibia by **ifm Electronic (Pty) Ltd** and hereby confirms that, the following models: **R2D100 and R2D200** do not require type approval.

This letter therefore, serves only as an exemption for the equipment mentioned above and may not be used for other consignments without the consent of the Authority.

In light of trade facilitation, the Authority thus requests Customs to please allow the equipment to pass the border as they do not require Type Approval.

For any further information or clarity please do not hesitate to contact Mr. Sheleen Kavikairiua, Manager: Licensing Standards & Regulatory Compliance, at Tel: 061 222 666 or via email: skavikairiua@cran.na

Yours faithfully,


MRS. EMILIA NGHIKEMBUA
CHIEF EXECUTIVE OFFICER



Board Members:

Dr. Tulimevava Mufeti (Chairperson); Mr. Elvis Nashilongo (Vice-Chairperson); Ms. Jeanine Du Toit (Member);
Ms. Florette Nakusera (Member); Mr. Gerhard Coeln (Member); Ms. Aletha Haufiku (Member); Mr. Veikko Alexander (Member)

Chief Executive Officer: Mrs. Emilia Nghikembua

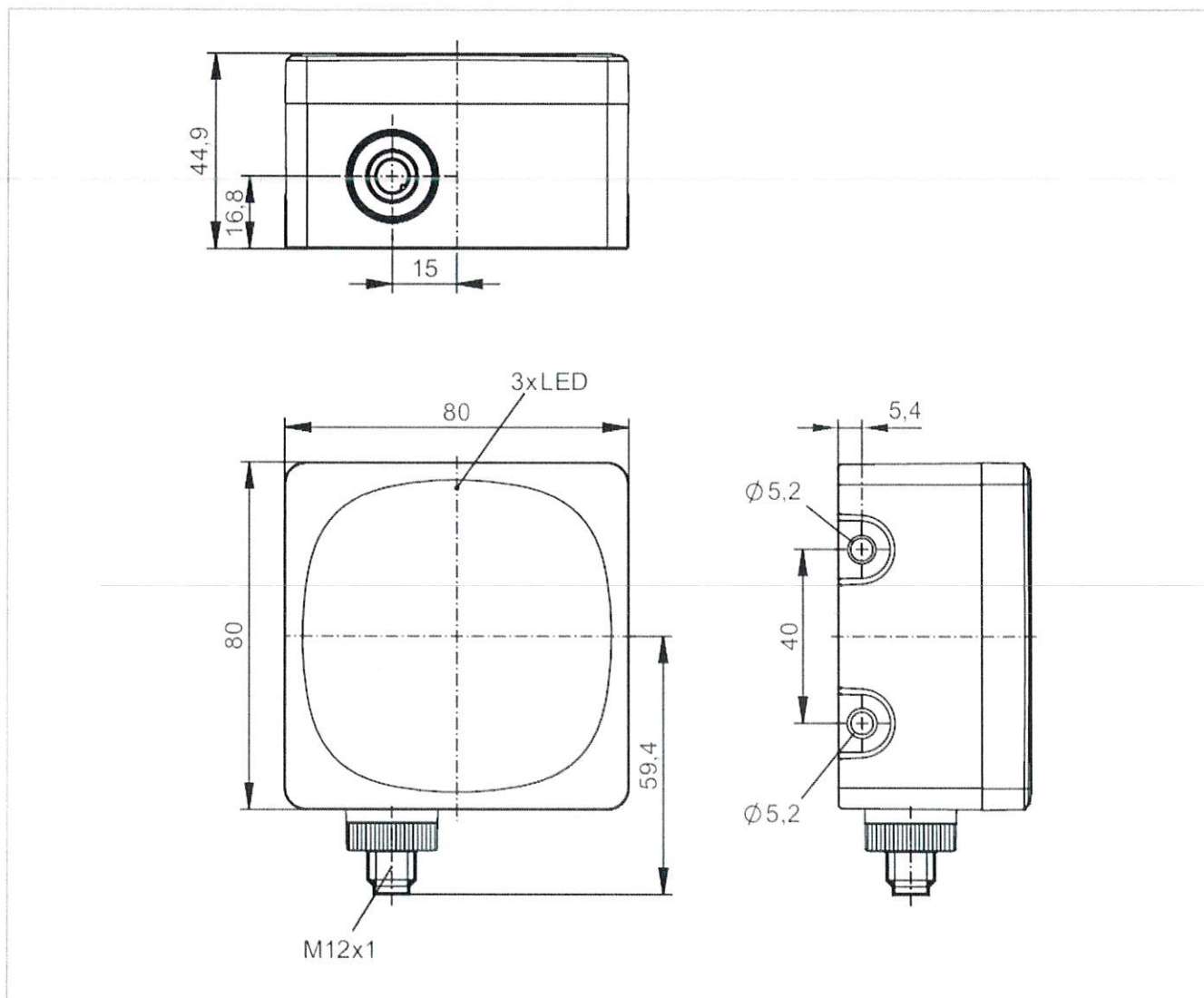
Executive: Governance, Risk & Compliance Management: Mr. Tanswell Davies



R2D200

Radar distance sensor

R2DBAF6KG/US/IO-Link



Application		
Radio approval for	EU/RED; United Kingdom; USA; Canada	
Note on radio approval	The list of countries applying the European Radio Equipment Directive 2014/53/EU (RED) can be found under "Downloads".	
Electrical data		
Operating voltage	[V]	10...30 DC; (to SELV/PELV ; energy-limited circuits according to IEC/UL 61010-1 3rd ed. cl. 9.4)
Current consumption	[mA]	< 300; (mean value: 150 mA)
Power consumption	[W]	21; (maximum)
Protection class		III
Reverse polarity protection		yes
Max. power-on delay time	[ms]	1000
Operating frequency [GHz]		77...81

R2D200

Radar distance sensor

R2DBAF6KG/US/IO-Link

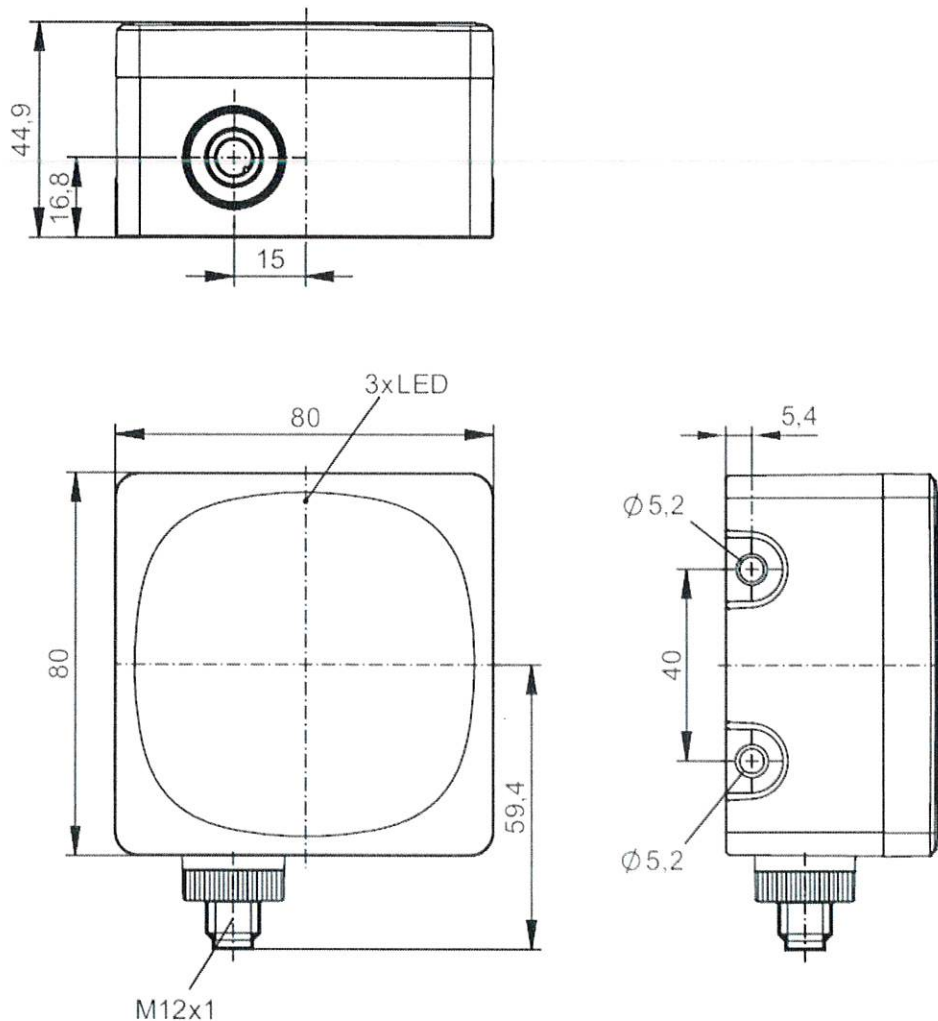


Software / programming		
Parameter setting options	only via IO-Link	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM3 (230,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Function class	Designation
	0x0030	BLOB transfer
	0x4000	Identification and Diagnosis
	0x8101	Locator
	0x8102	ProductURI
SIO mode	yes	
Required master port type	A	
Min. process cycle time [ms]	3.2	
IO-Link process data (cyclical)	function	bit length
	distance	32
	speed	32
	Power	8
	RCS	8
	sensor inclination	1
	device status	4
	binary switching information	4
IO-Link functions (acyclical)	application specific tag; operating hours counter; number of trigger events; internal temperature; ROI setting; Schaltverzögerungen; Sender abschaltbar	
Supported DeviceIDs	Type of operation	DeviceID
	default	1519
Note	For further information please see the IODD PDF file under "Downloads"	
Operating conditions		
Ambient temperature [°C]	-40...80	
Note on ambient temperature	without using the analogue output: -40...85 °C	
Storage temperature [°C]	-40...85	
Protection	IP 65; IP 66; IP 67; IP 69K; (with mounted connectors or protective caps)	
Tests / approvals		
EMC	DIN EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	DIN EN 61000-4-3 HF radiated	10 V/m
	DIN EN 61000-4-4 Burst	2 kV
	DIN EN 61000-4-6 HF conducted	10 V
	DIN EN 61000-6-2	immunity / industrial environments
	EN 55032 emission	Class A
Impact resistance	IEC 62262	IK06 (1J)
Vibration resistance	DIN EN 60068-2-6 Fc	10 g 10 frequency cycles, 1 octave/minute, in 3 axes
Shock resistance	DIN EN 60068-2-27 Ea	50 g 11 ms half-sine; 10 shocks each in every direction along the 3 coordinate axes
Continuous shock resistance	DIN EN 60068-2-29 Eb	40 g 6 ms half-sine; 4,000 shocks each in every direction along the 3 coordinate axes

R2D100

Radar distance sensor

R2DAAF6KG/US/IO-Link



Application

Radio approval for

EU/RED; United Kingdom

Note on radio approval

The list of countries applying the European Radio Equipment Directive 2014/53/EU (RED) can be found under "Downloads".

Electrical data

Operating voltage	[V]	10...30 DC; (to SELV/PELV ; energy-limited circuits according to IEC/UL 61010-1 3rd ed. cl. 9.4)
Current consumption	[mA]	< 300; (mean value: 150 mA)
Power consumption	[W]	21; (maximum)
Protection class		III
Reverse polarity protection		yes
Max. power-on delay time	[ms]	1000
Operating frequency [GHz]		60...64
Average spectral density EIRP [dBm/MHz]		-15

R2D100



Radar distance sensor

R2DAAF6KG/US/IO-Link

Average transmitter power EIRP [dBm]	15
---	----

Inputs / outputs

Total number of inputs and outputs	3
------------------------------------	---

Inputs

Inputs	IN1	activation/deactivation of the radar
--------	-----	--------------------------------------

Outputs

Total number of outputs	2
-------------------------	---

Output signal	OUT1	switching signal; IO-Link
	OUT2	switching signal; analogue signal

Short-circuit protection	yes
--------------------------	-----

Type of short-circuit protection	pulsed
----------------------------------	--------

Overload protection	yes
---------------------	-----

Analogue

Analogue current output	[mA]	4...20, invertible; (scalable)
-------------------------	------	--------------------------------

Max. load	[Ω]	500; (< 250 Ω: U _b 16...30 V DC; 250...500 Ω: U _b 18...30 V DC)
-----------	-----	---

Analogue voltage output	[V]	0...10, invertible; (scalable)
-------------------------	-----	--------------------------------

Min. load	[Ω]	2000
-----------	-----	------

Digital

Electrical design	PNP/NPN; (parameterisable)
-------------------	----------------------------

Output function	normally open / normally closed; (parameterisable)
-----------------	--

Max. voltage drop switching output DC	[V]	2.5
---------------------------------------	-----	-----

Permanent current rating of switching output DC	[mA]	200
---	------	-----

Detection zone

Range	[m]	0.1...50; (referred to E23014)
-------	-----	--------------------------------

Angle of aperture cylindrical	[°]	horizontal 140
		vertical 50

Measuring/setting range

Measuring range	[m]	0.1...50; (see diagram:)
-----------------	-----	--------------------------

Sampling rate	[Hz]	20
---------------	------	----

Accuracy / deviations

Hysteresis	[mm]	5; (parameterisable)
------------	------	----------------------

Temperature coefficient analogue output	[% of the span / 10 K]	± 0,1
---	------------------------	-------

Repeatability analogue output	[% of the span]	< 0,1
-------------------------------	-----------------	-------

Linearity error of analogue output	[% of the span]	± 0,15
------------------------------------	-----------------	--------

Precision analogue output	[% of the span]	± 0,2 (in addition to the accuracy specifications in the further data section)
---------------------------	-----------------	--

Software / programming

Parameter setting options	only via IO-Link
---------------------------	------------------