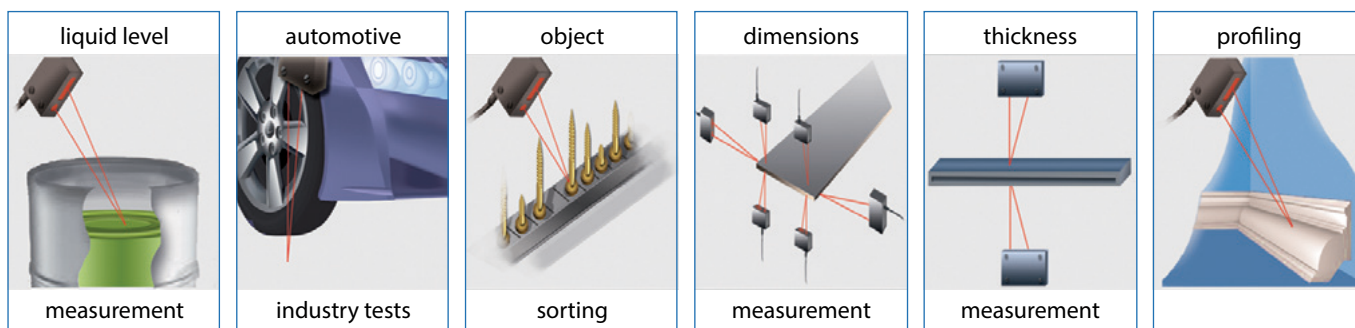


Position, dimensions, surface profiles, deformations, vibrations measurement, sorting and sensing presence or absence



- Universal high-speed laser sensors
- Measuring ranges from 2 to 750 mm
- Linearity $\pm 0.1\%$
- Resolution 0.01%
- Sampling rate 70 kHz
- RS232/RS485/Ethernet 0...10V
- Sensors with red or blue lasers

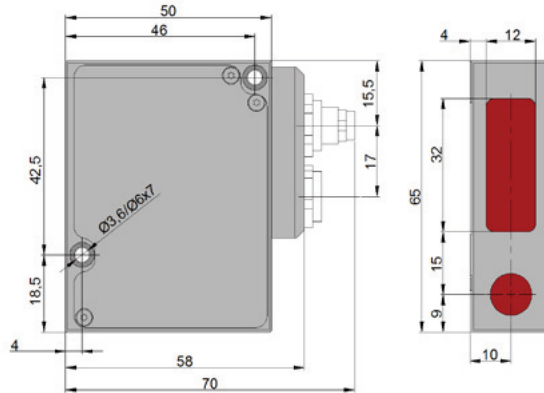


BASIC TECHNICAL DATA

Model RF603HS-	X/2	X/5	X/10	X/15	X/25	X/30	X/50	X/100	X/250	X/500	X/750	
Base distance X, mm	15	15	15, 25 60	15, 30 65	25, 45 80	35, 55 95	45, 65 105	60, 90 140	80	125	145	
Measurement range, mm	2	5	10	15	25	30	50	100	250	500	750	
Max. measurement frequency, kHz	70											
Linearity, % (of the range)	± 0.1 (70 kHz)											
Resolution, % (of the range)	0.01 (70 kHz)											
Temperature drift	0.02% of the range / °C											
Light source	red semiconductor laser (660 nm wavelength) or UV semiconductor laser (450 nm or 405 nm wavelength, BLUE version)											
Output power	≤ 4.8 mW					≤ 20 mW			< 80 mW			
Laser safety class	3R (IEC/EN 60825-1:2014)						3B (IEC/EN 60825-1:2014)					
Output interface:												
Parameterization	RS232 or RS485											
Data transfer	Ethernet (UDP)											
Analog	0...10 V											
Synchronization input	2.4 – 5 V (CMOS, TTL)											
Logic output	programmed functions, NPN: 100 mA max; 40 V max											
Power supply	9...36 V											
Power consumption	4.8 W											
Environmental resistance:												
Enclosure rating	IP67											
Vibration	20 g / 10...1000 Hz, 6 hours for each of XYZ axes											
Shock	30 g / 6 ms											
Operating ambient temperature	-10...+60 °C											
Permissible ambient light	30000 lx											
Relative humidity	5-95% (no condensation)											
Storage temperature	-20...+70 °C											
Housing material	aluminum											
Weight (without cable)	110 gram											

OVERALL DIMENSIONS

Sensors are equipped by cable gland or connector.



EXAMPLE OF DESIGNATION WHEN ORDERING

RF603HS(BLUE).F-X/D(R)-SERIAL-ANALOG-IN-AL-CC(R)(90)-M-H-P-B

(BLUE)	Blue (405 nm) laser option
F	Maximal sampling frequency, 60 or 120 or 180 kHz
X	Base distance (beginning of the range), mm
D	Measurement range, mm
(R)	Round shape laser spot option
SERIAL	The type of serial interface: (RS232 and Ethernet) – 232-ET or (RS485 and Ethernet) – 485-ET
ANALOG	Attribute showing an analog output presence 0...10V (U)
IN	User programmed signal, which has several purposes: 1) Trigger input (input of synchronization) 2) Encoder_A input
AL	User programmed signal, which has several purposes. It can be used as 1) logical output (indication of run-out beyond the range); 2) line of mutual synchronization of two and more sensors 3) line of hardware zero setting 4) hardware laser switch ON/OFF 5) Encoder_B input 6) status line input 7) input for Ethernet restart
CC(90X)(R)	Cable gland - CG, or cable connector - CC (Binder 712, IP67) Note 1: 90(X) option – angle cable connector Note 2: R option – robot cable
M	Cable length, m
H	Sensor with in-built heater
P	Sensor with protect air cooling housing
B	Sensor with spray guard
Example. RF603HS.60-140/100R-232-ET-U-IN-AL-24-CCR90A-3 – 60kHz sampling frequency, base distance – 140 mm, range – 100mm, round shape laser spot, RS232 and Ethernet serial port, 0...10V analog output, trigger input and AL input are available, cable connector, angle type, position "A", robot cable, 3 m cable length.	