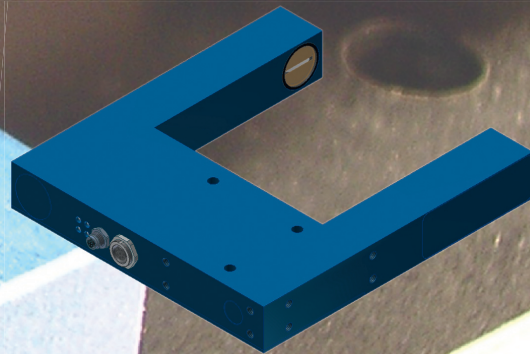
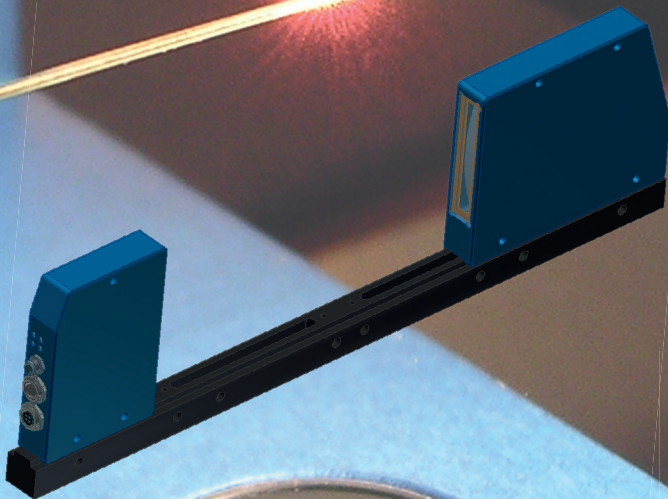
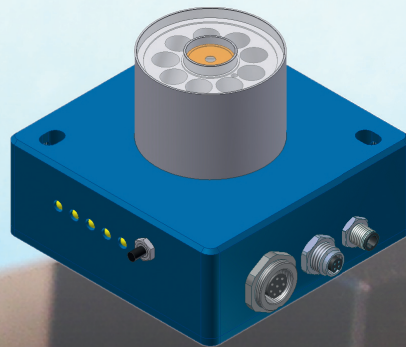
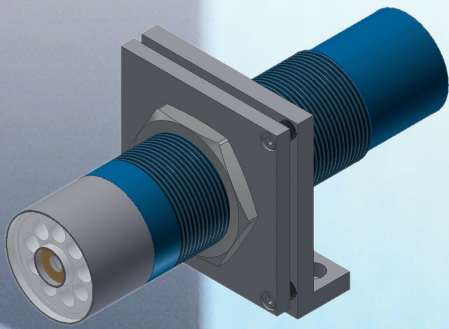


ipf
electronic



**sensing systems
transmitter-receiver systems
fork systems**

with external programming possibility

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line sensors



Line sensors are used everywhere where accurate positioning is required as well as where the dimensions of an object have to be established with a great degree of accuracy (e.g. the diameter of a wire). In light barriers, the user can select between various working widths with a resolution of up to 1024 pixels (max.). At the same time, an analog output (voltage output and current output) provides information about the position and/or size of the object. Furthermore there is a digital signal available which provides information about the quality and/or the position of the object. The triangulation diffuse reflection sensors also have a line detector which enables an exact distance measurement, even with difficult surfaces such as shiny metal.

industrial sectors

- ✓ automobile industry
- ✓ plastics industry
- ✓ metal processing industry
- ✓ wood industry
- ✓ paper and film industry
- ✓ steel mills
- ✓ furniture industry
- ✓ wire industry

applications

- ✓ web edge guiders
- ✓ width measurement
- ✓ diameter recording
- ✓ quality control
- ✓ contour control
- ✓ positioning
- ✓ height measurement
- ✓ position control
- ✓ wire thickness measurement



sensing systems

reflex line sensorsn

- ✓ various optical filters are available (w=white light filter, r=red light filter, b=blue light filter or uv=black glass filter)
- ✓ ring illumination with 9 LEDs
- ✓ CCD line detector, 512 pixels (1024 sub pixels)
- ✓ external TEACH/RESET button
- ✓ RS232 interface and Windows® user interface
- ✓ 2 analog outputs
- ✓ (voltage 0...+10V DC and current 4...20mA)
- ✓ switch status display via 5 LEDs (1x green, 2x red, 2x yellow)
- ✓ lens cover made from scratch resistant glass
- ✓ establishing the position and/or width of the object to be measured in the reflex mode
- ✓ operating voltage 24V DC ± 10%
- ✓ current consumption typ. 220mA



transmitter-receiver systems

laser line sensors

- ✓ line laser 1mW, laser class 2
- ✓ working distance up to 2000mm
- ✓ integrated interference filter
- ✓ RS232 interface and Windows® user interface
- ✓ 2 digital inputs, 2 digital outputs
- ✓ analog output 0 ... +10V DC
- ✓ status display via 4 bicolor LEDs (2x red/green, 2x yellow/green)
- ✓ robust, industrial-grade aluminium housing
- ✓ lens cover made from scratch resistant glass
- ✓ operating voltage 24V DC ± 10%
- ✓ current consumption typ. 200mA



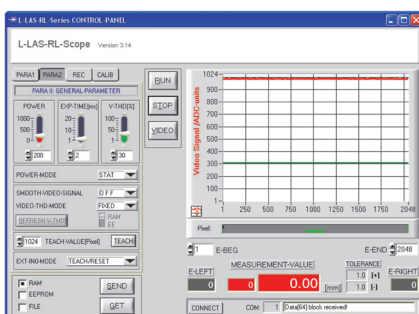
fork systems

laser line sensors

- ✓ line laser 1 mW, laser class 2
- ✓ integrated interference filter
- ✓ RS232 interface and Windows® user interface
- ✓ 2 digital inputs, 2 digital outputs
- ✓ 1 analog voltage output 0 ... +10V DC
- ✓ status display via 4 bicolor LEDs (2x red/green, 2x yellow/green)
- ✓ compact aluminium housing
- ✓ operating voltage 24V DC ± 10%
- ✓ current consumption typ. 220mA

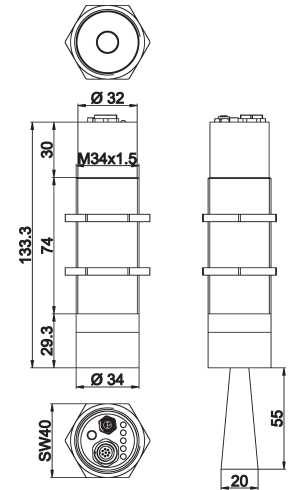
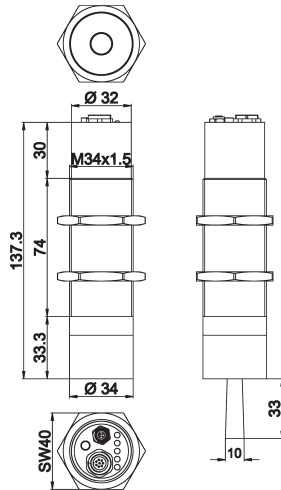


windows®-software

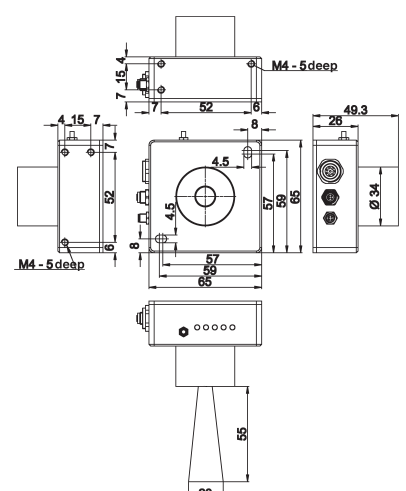
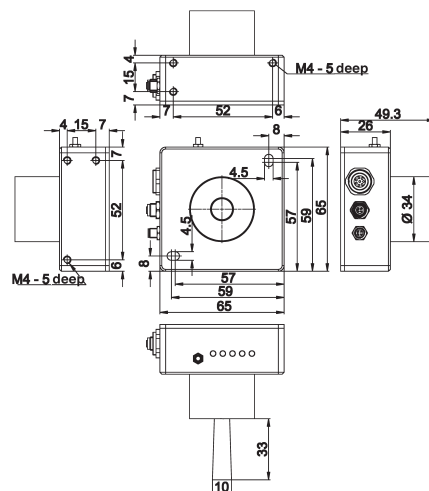


The line sensors can be easily parameterized with the aid of the Windows® user interface. For this, the sensor is connected with the PC via the serial interface cable **VK207U44**. After parameterization has taken place, the PC can be disconnected again (press the STOP button). The sensor system then works in the stand alone mode.

article-no.	OY340140	OY340145
reference distance	33mm	55mm
operating range	33mm ±3mm	55mm ±5mm
measuring range	typical 10mm ±5mm	typical 20mm ±10mm
resolution	typical 10µm	typical 20µm
smallest detectable object	typical 0.05mm	typical 0.1mm
in- / outputs	1x digital / 3x digital	1x digital / 3x digital
connection	8-pin SPS / 4-pin PC	8-pin SPS / 4-pin PC
mounting accessories	mounting bracket AO000164 / flange AO000165	mounting bracket AO000164 / flange AO000165

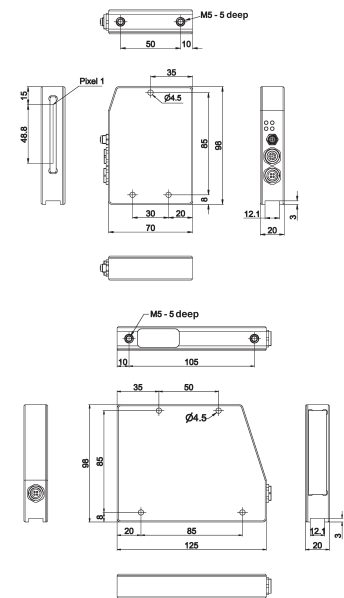
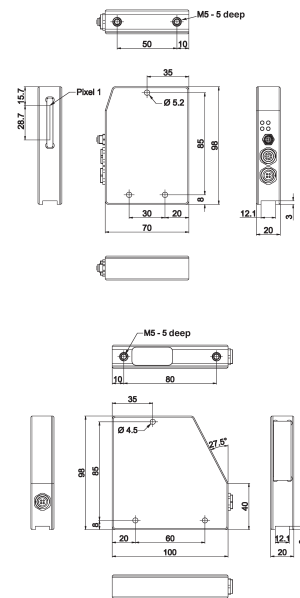


article-no.	OY650140	OY650145
reference distance	33mm	55mm
operating range	33mm ±3mm	55mm ±5mm
measuring range	typical 10mm ±5mm	typical 20mm ±10mm
resolution	typical 10µm	typical 20µm
smallest detectable object	typ. 0.05mm	typical 0.1mm
in- / outputs	2x digital / 2x digital	2x digital / 2x digital
connection	8-pin SPS / 4-pin PC	8-pin SPS / 4-pin PC

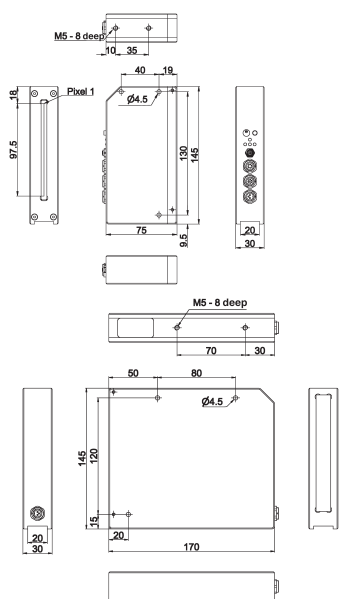
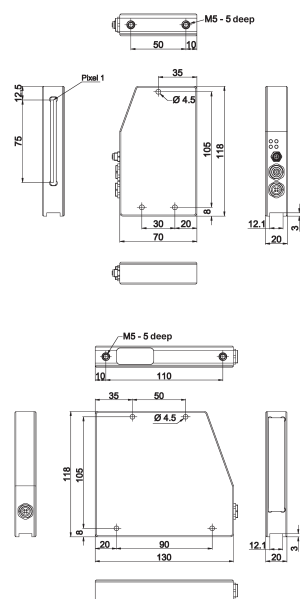


article-no.	PG400140	PGK00140
transmitting element	laser line, red light, 9.5 x 1.5mm	laser line, red light, 9.5 x 1.5mm
measuring range	typical 6.4mm	typical 6.4mm
resolution	typical 4µm	typical 4µm
gap	40mm	100mm
sensor surface (active)	CCD line detector 512 pixels	CCD line detector 256 pixels
connection	8-pin SPS / 4-pin PC	8-pin SPS / 4-pin PC
article-no.	PG400145	PGK00145
transmitting element	laser line, red light, 16 x 1mm	laser line, red light, 16 x 1mm
measuring range	typical 16mm	typical 16mm
resolution	typical 16µm	typical 16µm
gap	40mm	100mm
sensor surface (active)	CCD line detector 256 pixels	CCD line detector 256 pixels
connection	8-pin SPS / 4-pin PC	8-pin SPS / 4-pin PC

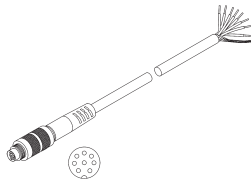
article-no.	PE280140 / PS280040	PE500140 / PS500040
transmitting element	laser line, red light, 35mm light curtain	laser line, red light, 50mm light curtain
measuring range	typical 28mm	typical 48mm
resolution	typical 4μm	typical 16μm
sensor surface (active)	CCD line detector 2048 pixels	CCD line detector 768 pixels
connection	8-pin SPS / 4-pin PC 4-pin transmitter + receiver	8-pin SPS / 4-pin PC 4-pin transmitter + receiver
mounting accessories	cross-arm e.g. AP000032	cross-arm e.g. AP000032



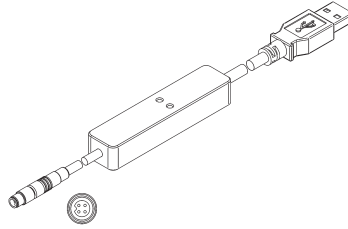
article-no.	PE750140 / PS750040	PEK00140 / PSK00040
transmitting element	laser line, red light, 75mm light curtain	laser line, red light, 100mm light curtain
measuring range	typical 73mm	typical 98mm
resolution	typical 16μm	typical 8μm
sensor surface (active)	CCD line detector 1152 pixels	CCD line detector 1536 pixels
connection	8-pin SPS / 4-pin PC 4-pin transmitter + receiver	8-pin SPS / 4-pin PC 4-pin transmitter + receiver
mounting accessories	cross-arm e.g. AP000032	cross-arm e.g. AP000032



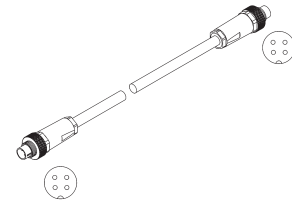
connection cable VK207B45



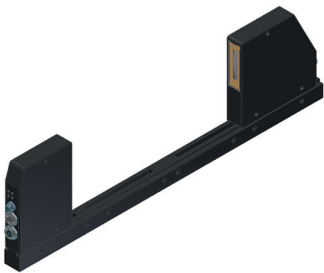
VK207U44



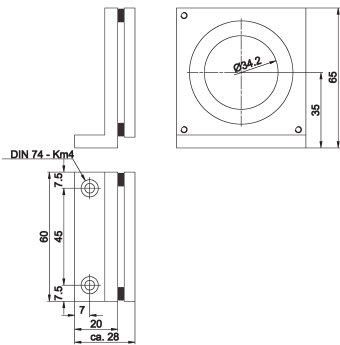
VK107F46



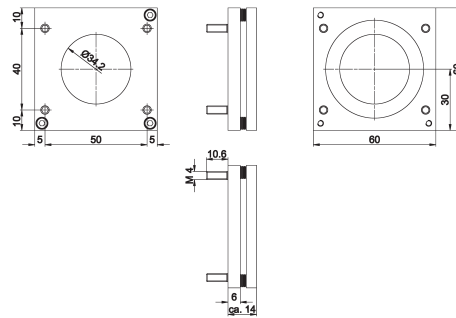
cross-arm AP000032



bracket AO000165



flange AO000164



ACCESSORIES

article-no.	description	note
VK207B45	2m PLC-cable	for 8-pin flange socket PLC
VK207U44	2m PC-cable	for 5-pin flange socket PC
VK107F46	1m connection cable	connection transmitter / receiver
AP000032	cross-arm 400mm	for transmitter-receiver systems
AP000033	cross-arm 600mm	for transmitter-receiver systems
AP000034	cross-arm 800mm	for transmitter-receiver systems
AO000164	bracket	for sensing systems
AO000165	flange	for sensing systems