design	**37 x 73 x 60mm**	
sensing range	black (6%)	**0.2 … 5m**
	gray (18%)	**0.2 … 8m**
	white (90%)	**0.2 … 20m**

- ✓ **robust metal housing**
- ✓ **analog output 4 … 20mA / 0 … 10V**
- ✓ **2 push-pull outputs**
- ✓ **laser protection class 2**
- ✓ **LED-display**
- ✓ **connection with 8-pin M12-connector**

radiated light technology
versatile programming

description

With the time-of-flight measuring method, the distance of an object is determined using the propagation time of a light pulse emitted by the sensor transmitter, reflected by the object and then received by the sensor receiver.

The measurement principle is suitable for large ranges with simultaneous immunity to ambient light interference.

The measuring range depends on the object's degree of reflection. White objects (90% reflectivity) can be detected up to 20m distance, while the sensing range for black objects (6% reflectivity) is 5m.

The display shows the current measured value.

The switching outputs can be programmed freely (see „technical data").

The analog output is switchable between 4 … 20mA and 0 … 10V. Thereby, attention must be paid to the maximum (current), respectively minimal load (voltage)!

Via the key pad with 4 buttons the device is easy to parameterize.

application examples

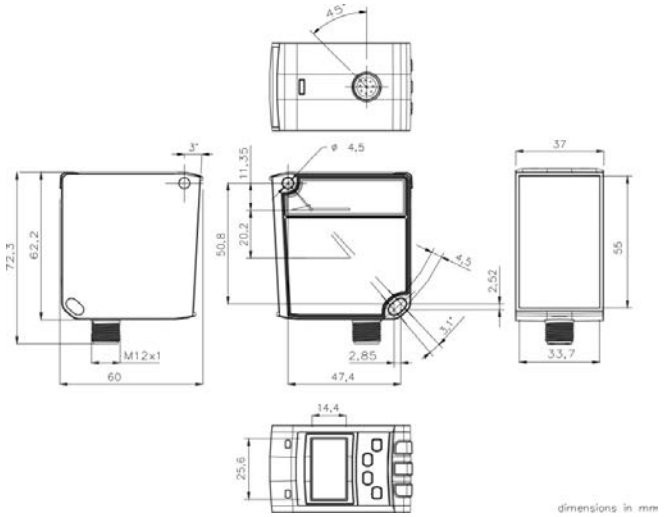
- sag monitoring of web material
- position monitoring of moving objects
- distance measurement / position determination
- monitoring of feed systems

keys:	
▲▼	entry into main menu (simultaneously 5sec)
▲	previous menu item
▼	next menu item
SET:	submenu / store
ESC:	back

LED-displays:	
left:	switching output 1 (yellow)
centre:	switching output 2 (yellow)
right:	operating (green) measuring range exceedance (red)

factory setting	
response time (average)	45ms (slow)
analog output	4 … 20mA
mode RS485-output	none
RS 485-connection	off
input function	teach-in (switching output 1)
logic of switching outputs	light-on mode
mode of switching outputs	push-pull
switching point 1	500mm
switching point 2	500mm
hysteresis	10mm
scalable range (min.)	200mm
scalable range (max.)	20.000mm

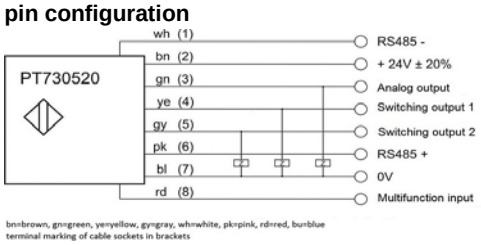
article-no.	**PT730520**
sensing range	**0.2 … 20m (white object)**



TECHNICAL DATA

sensing range	0.2 ... 20m (90% white) / 0.2 ... 8m (18% gray) / 0.2 ... 5m (6% black)
analog output	programmable: 0.2 … 10V / 4 … 20mA
linearity error	± 0.03% FS (voltage) / ± 0.02% FS (current)
switching outputs	programmable: PNP / NPN / push pull / light on- / dark on mode / alarm
output current (max. load)	100mA per output
operating voltage	24V DC ± 20%
current consumption (without load)	typ. 125mA
response time	„slow“: typ. 45ms / „medium“: typ. 30ms / „fast“: typ. 15ms
repeatability (white object)	1mm up to sensing range 10m / 2mm up to sensing range 20m
resolution	1mm / 16bit
accuracy (white object)	7mm (response time „slow“)
warm-up period	typ. 20min.
short-circuit protection	+
reverse polarity protection	+
transmitting element	laser diode, red
wavelength	658nm
laser protection class	2
dimensions	37 x 73 x 60mm
material (housing)	zinc alloy ZAMA 13
material (front screen)	PMMA
temperature (operating)	-15 ... +50°C
temperature (storage)	-25 … +70°C
degree of protection (EN60529)	IP 67
mounting accessories (bracket)	**AP000040**
connection	M12-connector, 8-pin
connection accessories	i. e. **VK205A25**

pin configuration



bn=brown, gn=green, ye=yellow, gy=gray, wh=white, pk=pink, rd=red, bu=blue
terminal marking of cable sockets in brackets

Warning: Never use these devices in applications where the safety of a person depends on their functionality.