



Colour detection sensor

Series WLCS-M-40

- 4 channels "Teach In"
- Response time 0.6 ms / 1600 Hz
- Fibre optics with focus optics
- Option: RS232 interface
- "plug & play"

Features:

- "Teach-In"
- Multi-Teach function
- Supply typ. **18-36 VDC**
inverse polarity and short circuit protected
- Outputs: 4x potential free
- Adaption of fibre optics for any application
- Distance* ≤ 50 mm
- Protection **IP 65**
- Solid housing for rough industrial environment
- Insensitive to standoff due to evaluation of colour and intensity (C und C+ I)
- Resolution colour ≤ 10 bit
intensity ≤ 10 bit
- External teach
- CE

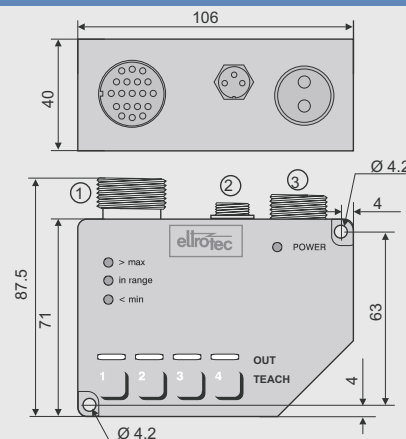
Applications:

- Colour selection
- Colour equality recognition
- Detection of colour codes
- Position recognition
- Detection of seal
- All kind of colour detection tasks (between 390-750 nm)

Advantages:

- Application specific learning of tolerances by multi-teach for every channel
- Additionally adjustment of tolerances for each colour-channel with potentiometer
- Adaption for fibre optics **FASOP**
- Easy to use
- No selectivity gaps in the visible colour range

Dimensions

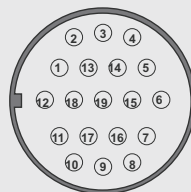


All dimensions in mm

- ① Connector M23
- ② Serial interface (optional)
- ③ Fasop adapter for fibre optics, see "FASOP" fibre optic catalogue Standard type: FAR-T-A2.0-2.5-1200-67°

Wiring connections

Plug connector M23

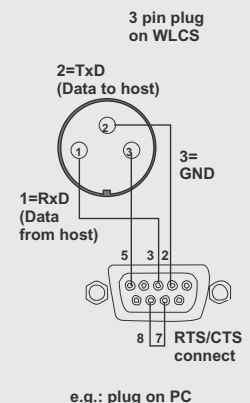


Outputs
100 mA, potential free
unassigned polarity

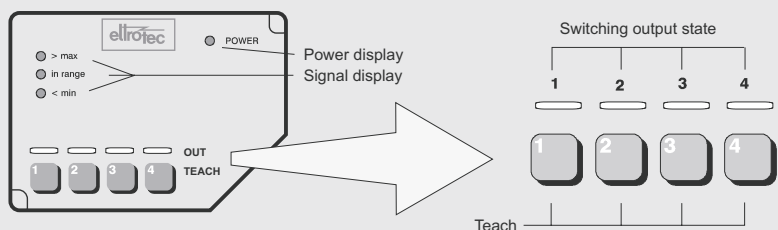
Inputs
10-40 V,
PNP type

1	GN	KEY ENABLE
2	GY	Output INTENSITY
3	PK	N.C.
4	RD	Output Col.4
5	WH	Output Col.2
6	BU	Supply GND
7	VT	N.C.
8	GYPK	N.C.
9	RDBU	Hold
10	WHGN	EXT. TEACH Col.1
11	BNGN	EXT. TEACH Col.2
12	YE	PE
13	WHYE	Common for output
14	N.C.	N.C.
15	BK	Output Col.1
16	YEBN	Output Col.3
17	WHGY	EXT. TEACH Col.3
18	GYBN	EXT. TEACH Col.4
19	BN	Supply +18-30 VDC

Plug connector and wiring RS232 interface



Operating and display elements



Technical data

General data	Type ***	WLCS- M-40, WLCS-M-40 / RS232
	Working Range*	with fibre optics typical 1-25 mm with optic up to 50 mm
	Detectable objects	typ. ≥ 1 mm
Electrical data	Power supply	18-30 VDC (ripple < 200 mV) / $I \leq 240$ mA
	Switching frequency	1000 Hz / 32 Hz with filter
	Response time	0.6 ms / 1600 Hz / (-3 dB)
	Filter	average via 32 measurements / $f_A \leq 32$ Hz
	Outputs	4 x opto-decoupled, potential free short circuit protected
	Output current / channel	max. 100 mA
	Inputs	4 x EXT. TEACH (PNP) 1 x KEY ENABLE, 1 x HOLD (PNP)
	Interface (optional)	RS 232
Light source	White LED	LED without selectivity gaps
	Life time	typ. 20.000 h at 25 °C / 90% Power
	Spot diam.with fibre optic cable A2.0 (10mm standoff)	16 mm (67° fibre optics) 7 mm (22° fibre optics)
Data on ambiente conditions	perm. operating temperature	0 to +50 °C (55 °C)**
	perm rel. humidity	80 % (not condensing)
	Protection	IP 65
Mechanical data	Housing	Aluminium, black anodized
	Weight	app. 360 g

** Reduced life time of LED

*** -M40 from 04/2004

-M-4 up to 03/2004

Ordering information

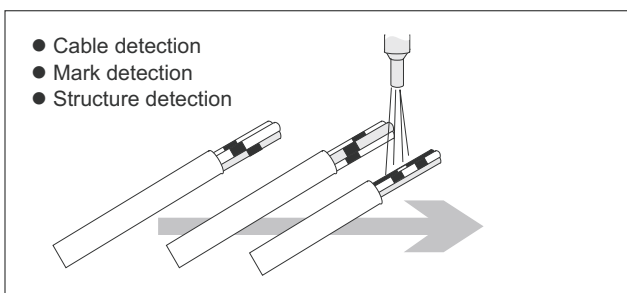
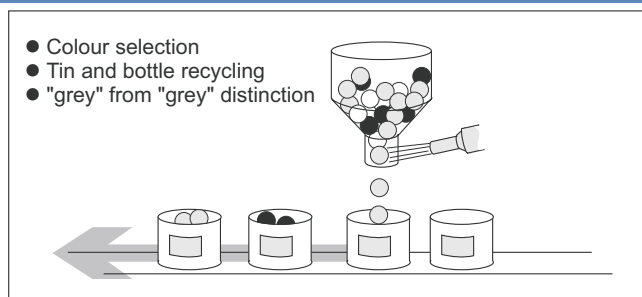
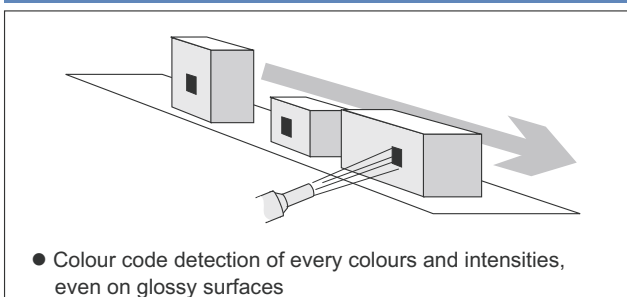
Sensor	Part No.	Accessories	Part No.
WLCS-M-40	10232732	cable with plug M23	
WLCS-M-40/RS232 with serial interface	10232733	length 2 m	11232275
		length 5 m	11232276
		RS 232 interface cable	11232277

For fibre optics see our Fasop catalogue or www.eltrotec.com

(more than 2000 types available. User defined fibtr optics for any tasks on request)

Request for our comprehensive program of colour sensors. Get the right Eltrotec-sensor for your task! (www.eltrotec.com)

Applications



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