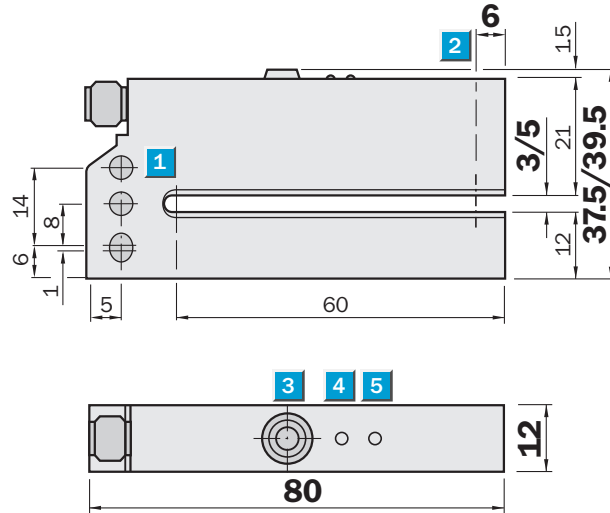


WF 3T/5T Teach-In Fork Sensor

Dimension illustration

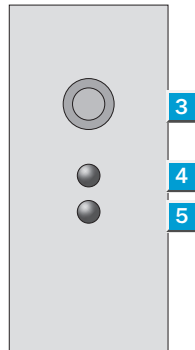


Setting options

WF 3T-B4210

WF 5T-B4210

- 1 Mounting holes, \varnothing 4.2 mm (3x)
- 2 Optical axis
- 3 Teach In key
- 4 Function indicator LED red
- 5 Function indicator LED yellow, light path unobstructed

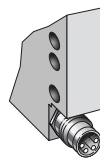


- Standard and fine adjustment with Teach-In function
- Teach-In: Teach key or via "ET" input line
- Universal switching output

Connection type

WF 3T-B4210

WF 5T-B4210

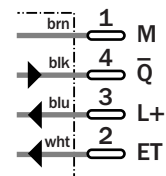
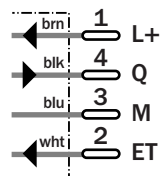


light switching

4pin, M 8

dark switching

4pin, M 8



Technical data		WF	3T-B 4210	5T-B 4210								
Fork width	3 mm											
	5 mm											
Light sender	LED, infrared, continuous											
Supply voltage V_S ¹⁾	10 ... 30 V DC											
Current consumption ²⁾	40 mA											
Ripple ³⁾	< 10%, < 5 V_{pp}											
Switching output	PNP/NPN, light/dark switching											
Signal voltage HIGH	$V_S - (< 2 V)$ PNP, Q											
Signal voltage LOW	Approx. 0 V PNP, Q											
Output current I_A max.	100 mA											
Response time ⁴⁾	50 μ s											
Switching frequency ⁵⁾	10 000/s											
Teach In via key												
Teach In adjustment ET	ET on V_S											
Standard adjustment	1 impulse 0.3 ... 4 s											
Fine adjustment	1 impulse 0.3 ... 4 s + pause 0.3 ... 1.3 s											
	+ 1 impulse 0.3 ... 4 s											
Incandescent light immunity	3000 lux											
VDE protection class ⁶⁾	III											
Enclosure rating	IP 65											
Circuit protection ⁷⁾	B, C											
Ambient temperature ⁸⁾	Operation -20 ... +60 °C											
	Storage -20 ... +80 °C											
Housing	Aluminium											
Weight	Approx. 60 g											

¹⁾ Limit values

²⁾ Without load

³⁾ Must be within V_S tolerances

⁴⁾ With resistive load

⁵⁾ With light/dark ratio 1 : 1,

no time delay

⁶⁾ Withstand voltage 50 V DC

⁷⁾ B = Outputs short-circuit protected

C = Interference suppression

⁸⁾ Do not distort cable below 0 °C

Teach-In

The switching threshold is set for this fork sensor by a simple Teach-In procedure. This can be set manually or via the "ET" (External Teach) input line.

Procedure

- Place the background material (without label) in the light spot.
- Activate the Teach signal using the Teach key or via the "ET" (ET on L+) input line:
(1x push button): standard adjustment with standard switching hysteresis (red LED is flashing),
(2x push button): fine adjustment with small switching hysteresis (yellow LED is flashing).

Notes

- Lockable Teach key: push Teach key for approx. 6 s, red LED must light.
- Release Teach key: push Teach key for approx. 6 s, red LED must switch off.
- In case of current failure or production start, the Teach-In value is stored in a memory.

Ordering information

Type	Order no.
WF 3T-B4210	6 020 874
WF 5T-B4210	6 021 220

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