

## WF Fork Sensors

**Fork width**  
2...225 mm

Fork Sensors

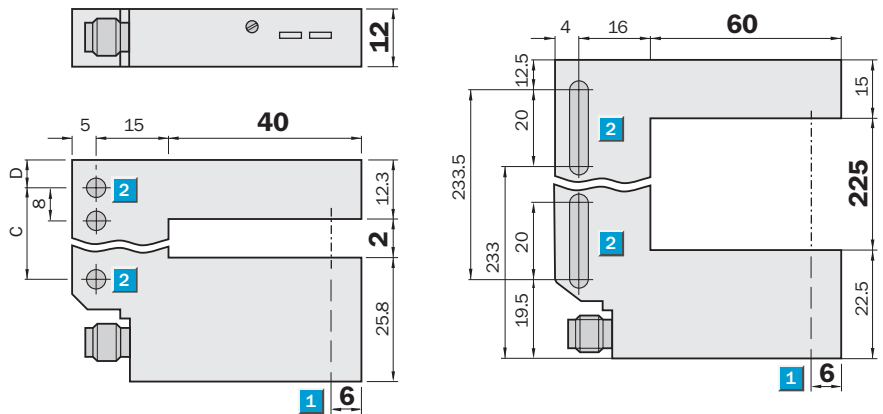
- Simple and accurate adjustment by potentiometer
- PNP and NPN output
- Light/Dark switching
- Solid aluminium housing



### Dimension illustration

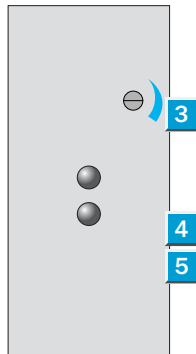
WF2-B4210

WF 225-B4150



### Setting options

All types

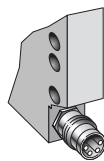


- 1 Optical axis
- 2 Mounting holes,  $\varnothing$  4.2 mm
- 3 Sensitivity control
- 4 Function indicator (red), lightbeam blocked
- 5 Function indicator (yellow), lightbeam made

### Connection type

WF2-B4210

WF225-B4150

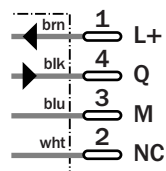


### Dimensions

Dimensions	A (mm)	B (mm)	C (mm)	D (mm)
	Fork width	Fork depth		
WF2	2	40	14	6.25
WF225	225	60	233.50	12.50

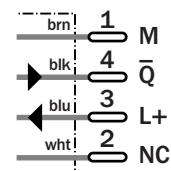
Light switching

4-pin, M 8



Dark switching

4-pin, M 8



Technical data		WF	2-B4210	225-B4150								
Fork width	2 mm											
	225 mm											
Light source	LED, infrared, modulated											
	LED, infrared, continuous											
Supply voltage $V_S$ <sup>1)</sup>	10 ... 30 V DC											
Current consumption <sup>2)</sup>	30 mA											
	40 mA											
Ripple <sup>3)</sup>	< 10%											
Switching output	PNP/NPN, light-/dark-switching											
Signal voltage HIGH at IA max.	$V_S - (< 2 V)$ PNP, Q											
Signal voltage LOW at IA max.	Approx. 0 V PNP, Q											
Output current IA	100 mA											
Response time <sup>4)</sup>	1 ms											
	30 $\mu$ s											
Switching frequency <sup>5)</sup>	500/s											
	10000/s											
Incandescent light immunity	3000 lux											
VDE protection class <sup>6)</sup>	III											
Enclosure rating	IP 65											
Circuit protection <sup>7)</sup>	B, C											
Ambient temperature <sup>8)</sup>	Operation -20 ... +60 °C											
	Storage -20 ... +80 °C											
Housing	Aluminium											
Weight	Approx. 36 g to 160 g <sup>9)</sup>											
	Approx. 36 g											

- <sup>1)</sup> Limit values
- <sup>2)</sup> Without load
- <sup>3)</sup> Must be within  $V_S$  tolerances
- <sup>4)</sup> With resistive load
- <sup>5)</sup> With light/dark ratio 1 : 1, no time delay
- <sup>6)</sup> Withstand voltage 50 V DC
- <sup>7)</sup> B = Outputs short-circuit protected
- C = Interference suppression
- <sup>8)</sup> Do not distort cable below 0 °C
- <sup>9)</sup> Depending on the fork width

Truth table				
Switching mode	Light switching (Q)		Dark switching ( $\bar{Q}$ )	
	yes	no	yes	no
Lightbeam made	yes	no	yes	no
Output NPN	LOW	HIGH	HIGH	LOW
Output PNP	HIGH	LOW	LOW	HIGH

Ordering information	
Type	Order no.
WF2-B4210	6012062
WF 225-B4150	6022139

**Great Britain**  
 Phone +44 (0)1727 83 11 21  
 E-Mail info@sick.co.uk

**USA**  
 Phone +1(952) 941-6780  
 tollfree +1-800-325-7425  
 E-Mail info@sickusa.com

**Australia**  
 Phone +61 3 9497 4100  
 tollfree +1800 33 48 02  
 E-Mail sales@sick.com.au

More representatives and agencies in all major industrial nations at [www.sick.com](http://www.sick.com)



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