

Compact sensors



**QH23 series
dc operation**

Wave length	Red	680 nm
Adjustment		sensitivity
Supply		
Supply voltage		10...30 V dc
Ripple V_{pp}		$\leq 10 \%$
No load current		≤ 25 mA
		≤ 20 mA (emitter/receiver)
Delay upon power up		100 ms
Protection		reverse polarity short-circuit (pulsed)

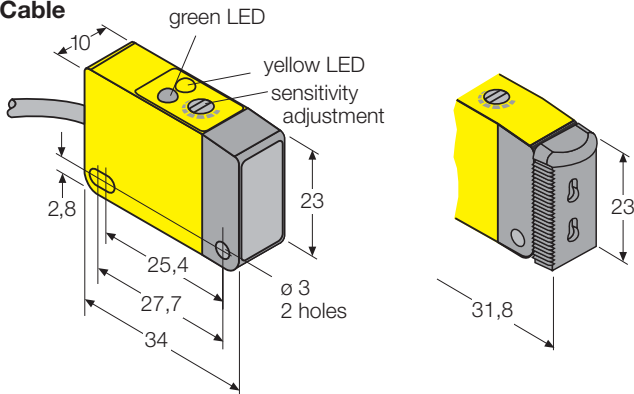
Output		
Programmable	(see wiring)	light and dark operate or light operate and alarm
Continuous load current		≤ 150 mA
Overload trip point		≥ 220 mA typical at 20 °C
Switching frequency		≤ 500 Hz ≤ 5 kHz (QH23...FPY)

Material		
Housing		ABS
Lens		acrylic
Protection class		IP67
(IEC 60529/EN 60529)		
Temperature range		-20...+55 °C
Cable		2 m, PVC, 4 x 0,5 mm ²
Connector		picocon (ø 8 mm)

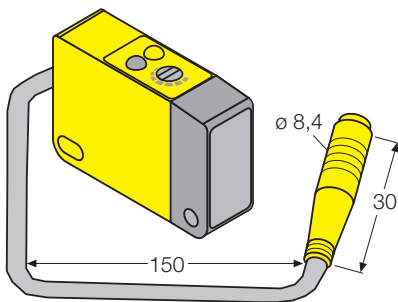
Indicator LED's		
Yellow		light sensed
Green		supply voltage
Yellow flashing		low gain
Green flashing		output overload

Dimensions [mm]

● **Cable**

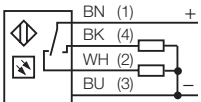


● **Connector**

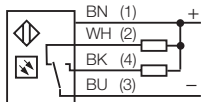


Wiring

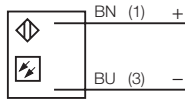
pnp complementary



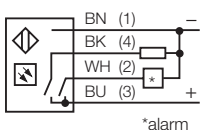
nnp complementary



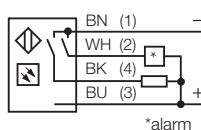
emitter



pnnp light op. + alarm



nnp light op. + alarm



Accessories

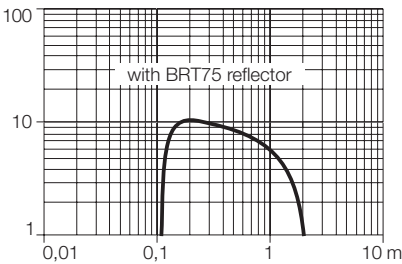
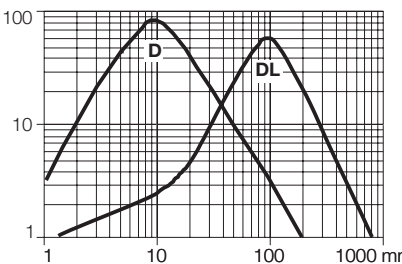
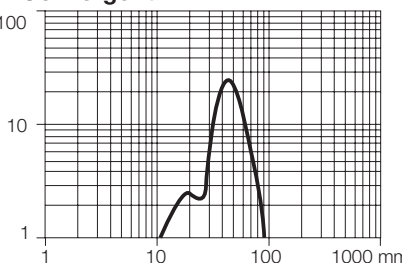
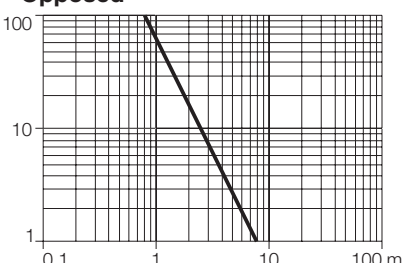
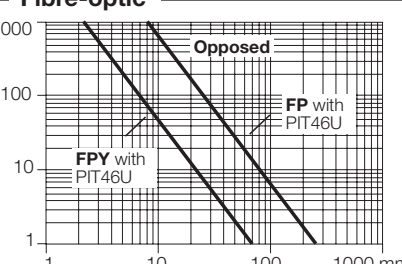
Bracket		
Bottom mounting bracket		included

Connectors		
KP4-2/S90	80 072 90	straight type
WKP4-2/S90	80 073 26	right-angled type

QH23 series

dc operation

Excess gain curve:
Excess gain in relation to the distance

	Max. range/Fibre type	Light source	Output function	Connection	Type	Ident number	
Retro-reflective 	2 m	red	pnp	cable	with polarising filter QH23SP6LP	30 488 02	
	2 m	red	pnp	connector	QH23SP6LPQ	30 488 13	
	2 m	red	npn	cable	QH23SN6LP	30 488 01	
	2 m	red	npn	connector	QH23SN6LPQ	30 488 12	
Diffuse 	200 mm	red	pnp	cable	QH23SP6D	30 488 09	
	200 mm	red	pnp	connector	QH23SP6DQ	30 488 20	
	200 mm	red	npn	cable	QH23SN6D	30 488 08	
	200 mm	red	npn	connector	QH23SN6DQ	30 488 19	
	800 mm	red	pnp	cable	QH23SP6DL	30 488 04	
	800 mm	red	pnp	connector	QH23SP6DLQ	30 488 15	
	800 mm	red	npn	cable	QH23SN6DL	30 488 03	
	800 mm	red	npn	connector	QH23SN6DLQ	30 488 14	
Convergent* 	50 mm	red	pnp	cable	QH23SP6CV50	30 488 74	
	50 mm	red	pnp	connector	QH23SP6CV50Q	30 488 75	
	50 mm	red	npn	cable	QH23SN6CV50	30 488 72	
	50 mm	red	npn	connector	QH23SN6CV50Q	30 488 73	
Opposed 	8 m	red	(emitter) pnp	cable cable	QH236E QH23SP6R	30 488 07 30 488 06	
			npn	cable	QH23SN6R	30 488 05	
	8 m	red	(emitter) pnp	connector connector	QH236EQ QH23SP6RQ	30 488 18 30 488 17	
			npn	connector	QH23SN6RQ	30 488 16	
	Fibre-optic 	plastic	red	pnp	cable	QH23SP6FP	30 488 11
		plastic	red	pnp	connector	QH23SP6FPQ	30 488 22
plastic		red	npn	cable	QH23SN6FP	30 488 10	
plastic		red	npn	connector	QH23SN6FPQ	30 488 21	
plastic		red	pnp	cable	QH23SP6FPY	30 488 35	
plastic		red	pnp	connector	QH23SP6FPYQ	30 488 37	
plastic		red	npn	cable	QH23SN6FPY	30 488 34	
plastic		red	npn	connector	QH23SN6FPYQ	30 488 36	

* spot size at focus (convergent mode): QH23...CV50: \varnothing 2,25 mm.

Subject to changes without notice • Edition 02.02 • P/N ED030 – excerpt from EC001/0102



These sensors do not include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in either an energised or de-energised output condition. These products should not be used as sensing devices for personnel safety.