



PicoDot™ series laser sensor with solid-state output

Wave length

Red
650 nm (convergent)
670 nm (retro-reflective)

Laser protection class
(EN 60825, IEC 60825)
Spot size at focal point

II
0,25 mm (at 50 mm – C50,
102 mm – C100 or 203 mm –
C200) (PD45V.6C... only)
sensitivity

Adjustment

Supply

Supply voltage
Ripple V_{pp}
No load current
Delay upon power up

10...30 V dc
 $\leq 10\%$
 ≤ 20 mA
< 1 s

Protection

reverse polarity
short-circuit (pulsed)
transient voltages

Output

Complementary
Continuous load current
Overload trip point
Switching frequency

light and dark operate
 ≤ 150 mA
 ≥ 220 mA typical at 20 °C
2,5 kHz

Material

Housing
Lens
Protection class
(IEC 60529/EN 60529)
Temperature range
Cable
Connector

ABS
acrylic
IP54
-10...+45 °C
2 m, PVC, 5 x 0,34 mm²
eurocon (M12 x 1)

Indicator LED's

Yellow
Green
Yellow flashing
Green flashing

light sensed
power-on
signal strength
short-circuit or output overload

Accessories

Brackets

SMB46L	30 487 47	protective bracket
SMB46S	30 487 48	protective bracket
SMB46U	30 487 46	protective bracket
SMB46A	30 525 18	precision adjustment bracket
SMB46DF	30 487 40	bracket for 2 sensors

Connectors

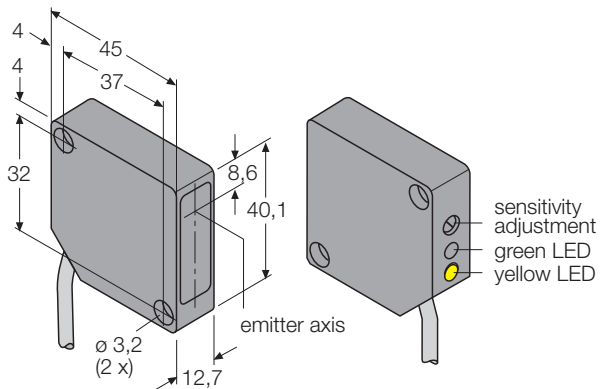
WAK4.5-2/P00	80 085 76	straight type
WWAK4.5-2/P00	80 085 83	right-angled type

Reflector

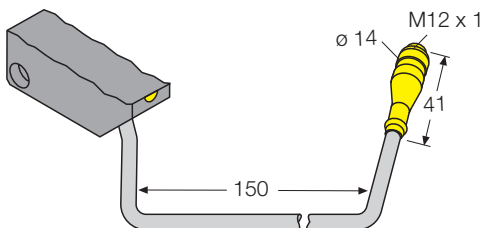
BRT-36X40BM	30 498 11	included with retro models
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Dimensions [mm]

● Cable

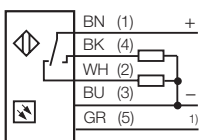


● Connector

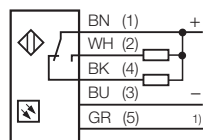


Wiring

pnp complementary



npn complementary

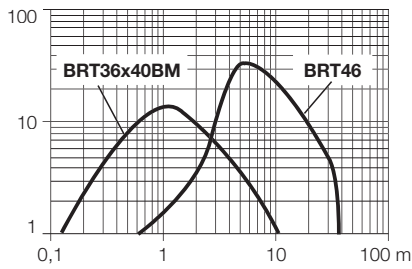


¹⁾ laser control (+ OFF, - ON)

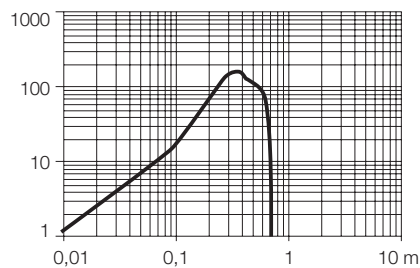
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Excess gain curve:
Excess gain in relation to the distance

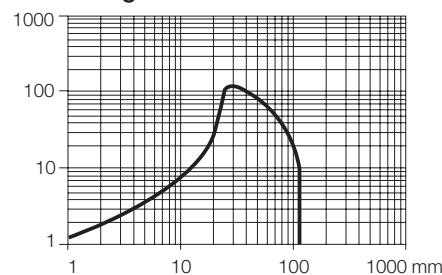
— Retro-reflective



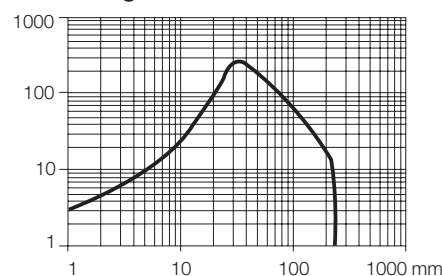
— Convergent 50 mm



— Convergent 100 mm



— Convergent 200 mm



	<i>Max. range</i>	<i>Light source</i>	<i>Output function</i>	<i>Connection</i>	<i>Type</i>	<i>Ident number</i>
	10 m	red	pnp	cable	polarised with BRT-36x40BM	30 586 20
	10 m	red	pnp	connector	PD45VP6LLP	30 586 22
	10 m	red	nnp	cable	PD45VP6LLPQ	30 572 02
	10 m	red	nnp	connector	PD45VN6LLP	30 586 19
	39 m	red	pnp	cable	polarised with BRT46	30 586 20
	39 m	red	pnp	connector	PD45VP6LLP	30 586 22
	39 m	red	nnp	cable	PD45VP6LLPQ	30 572 02
	39 m	red	nnp	connector	PD45VN6LLP	30 586 19
	58 mm	red	pnp	cable	PD45VP6C50	30 649 62
	58 mm	red	pnp	connector	PD45VP6C50Q	30 649 63
	58 mm	red	nnp	cable	PD45VN6C50	30 649 59
	58 mm	red	nnp	connector	PD45VN6C50Q	30 649 60
	115 mm	red	pnp	cable	PD45VP6C100	30 462 88
	115 mm	red	pnp	connector	PD45VP6C100Q	30 462 89
	115 mm	red	nnp	cable	PD45VN6C100	30 462 86
	115 mm	red	nnp	connector	PD45VN6C100Q	30 462 87
	216 mm	red	pnp	cable	PD45VP6C200	30 483 23
	216 mm	red	pnp	connector	PD45VP6C200Q	30 483 24
	216 mm	red	nnp	cable	PD45VN6C200	30 479 26
	216 mm	red	nnp	connector	PD45VN6C200Q	30 483 22

Subject to changes without notice • Edition 02.02 • P/N ED003 – 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.