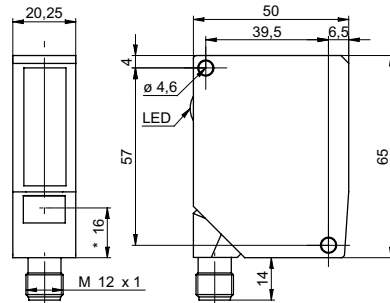


Distance sensors

OADR 20 (Laser, variable sensing range)

sample drawing



* emitter axis

general data

adjustment	external
power on indication	LED green
soiled lens indicator	LED red / LED red blinking
light source	pulsed red laser diode
wave length	650 nm
laser class	2

measuring distance Sd = 30 ... 130 mm

Teach-in range min.	> 3 mm
resolution	0,005 ... 0,06 mm
linearity error	± 0,015 ... ± 0,2 mm

measuring distance Sd = 50 ... 300 mm

Teach-in range min.	> 5 mm
resolution	0,01 ... 0,33 mm
linearity error	± 0,03 ... ± 1 mm

measuring distance Sd = 100 ... 600 mm

Teach-in range min.	> 10 mm
resolution	0,015 ... 0,67 mm
linearity error	± 0,05 ... ± 2 mm

electrical data

response time / release time	< 0,9 ms
voltage supply range +Vs	12 ... 28 VDC
current consumption max.	100 mA
output circuit	analog
output signal	4 ... 20 mA / 0 ... 10 VDC
load resistance (analog I)	< (+Vs - 6 V) / 0,02 A
load resistance (analog U)	> 100 kOhm
output current	< 100 mA
alarm output	PNP
short circuit protection	yes
reverse polarity protection	yes, Vs to GND

sample picture



laser warning



remarks

For objects with a reflectivity < 7 % (OADR 2016x80/S14F) the response time/release time is increased automatically up to 2.8 ms.

Distance sensors

OADR 20 (Laser, variable sensing range)

mechanical data

width / diameter	20,3 mm
height / length	65 mm
depth	50 mm
type	rectangular
housing material	stainless steel 1.4404 (A4)
front (optics)	PMMA
connection types	connector M12 8 pin, rotatable

ambient conditions

operating temperature	0 ... +50 °C
protection class	IP 69K

order reference	measuring distance Sd	beam width	beam diameter	beam type	beam height
OADR 20I6460/S14F	30 ... 130 mm	-	2 ... 1 mm	point	-
OADR 20I6472/S14F	50 ... 300 mm	-	2 mm	point	-
OADR 20I6480/S14F	100 ... 600 mm	-	2 mm	point	-
OADR 20I6560/S14F	30 ... 130 mm	2 ... 1 mm	-	line	3 ... 5 mm
OADR 20I6572/S14F	50 ... 300 mm	2,5 mm	-	line	4 ... 12 mm
OADR 20I6580/S14F	100 ... 600 mm	2,5 mm	-	line	5,5 ... 21 mm