Sd = 0 ... 4 mm

ANALOG

- Very high resolution
- Short response time
- Integrated current- and voltage output

general data

mounting type	shielded
measuring distance Sd	0 ... 4 mm
linearity error	± 160 µm
temperature drift	± 4% (Full Scale)
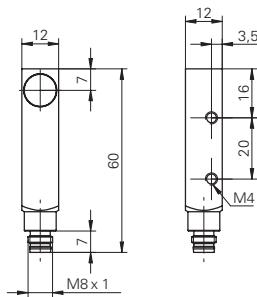
electrical data

voltage supply range +Vs	15 ... 30 VDC
current consumption max.	40 mA
short circuit protection	yes
reverse polarity protection	yes

analog output 1

output circuit	voltage output
output signal	0 ... 10 VDC
load resistance	> 1000 Ohm

analog output 2

|	
output circuit	current output
output signal	4 ... 20 mA
load resistance at +Vs min.	< 300 Ohm
load resistance at +Vs max.	< 1000 Ohm

mechanical data

type	rectangular
housing material	brass nickel plated
dimension	12 mm
housing length	60 mm
connection types	connector M8

ambient conditions

operating temperature	-10 ... +70 °C
protection class	IP 67

accessories

connectors	ESW 31A, ESG 32A

dimension drawing

connection diagram

IWFM

BN (1)	+ Vs
WH (2)	output I
BK (4)	output U
BU (3)	0 V
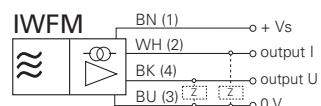
order reference	resolution	repeatability	response time (factory characteristic)
IWFM 12L9504/S35A	< 0,001 mm (stat.) < 0,005 mm (dynam.)	< 0,01 mm	< 2 ms
IWFM 12L9505/S35A	< 0,0005 mm (stat.) < 0,001 mm (dynam.)	< 0,005 mm	< 30 ms

Sd = 1 ... 2 mm

ANALOG

general data

mounting type	shielded
measuring distance Sd	1 ... 2 mm
reference distance	1,35 ... 1,65 mm
measuring speed	< 0,5 mm / ms
repeatability	< 0,02 mm
linearity error	± 80 µm
temperature coefficient	1 µm / (K mm)

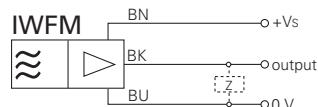### electrical data

voltage supply range +Vs	15 ... 30 VDC
current consumption max.	20 mA
output circuit	voltage output
output signal	1 ... 9 VDC
load resistance	> 1000 Ohm
residual output ripple	< 0,5 % Vs
short circuit protection	yes
reverse polarity protection	yes

mechanical data

type	rectangular
housing material	brass nickel plated
dimension	12 mm
housing length	55 mm
connection types	cable

ambient conditions

operating temperature	0 ... +60 °C
protection class	IP 67
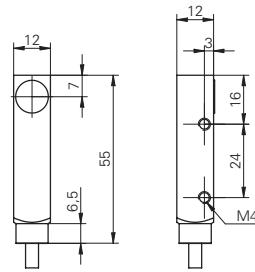
order reference

IWFM 12U9501/O1

dimension drawing

connection diagram