



Sd = 0 ... 2 mm

- very high resolution
- short response time



general data	
mounting type	quasi-flush
measuring distance Sd	0 ... 2 mm
resolution	< 0,001 mm (stat.) < 0,005 mm (dynam.)
repeat accuracy	< 0,02 mm
linearity error	± 100 µm
temperature drift	± 5 % (Full Scale)

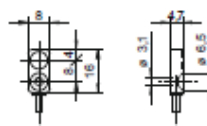
electrical data	
response time (factory characteristic)	< 1 ms
current consumption max. (no load)	10 mA
output circuit	voltage output
load resistance	> 3000 Ohm
short circuit protection	yes
reverse polarity protection	yes

mechanical data	
type	rectangular
housing material	die-cast zinc nickel plated
dimension	8 mm
housing length	16 mm

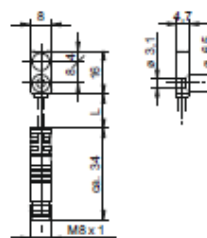
ambient conditions	
operating temperature	10 ... +60 °C
protection class	IP 67

connectors and mating connectors	
ESG 32SH0200	Connector M8, 3 pin, straight, 2 m
ESW 31SH0200	Connector M8, 3 pin, angular, 2 m
additional cable connectors and field wireable connectors: see accessories	

dimension drawing

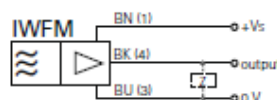


flylead connector version



standard cable length 200 mm (L)

connection diagram



order reference	output signal	voltage supply range +Vs	connection types
IWFM 08U6501	0 ... 5 VDC	10,8 ... 14,4 VDC	cable, 2 m
IWFM 08U6501/KS35	0 ... 5 VDC	10,8 ... 14,4 VDC	flylead connector M8
IWFM 08U9501	0 ... 10 VDC	15 ... 30 VDC	cable, 2 m
IWFM 08U9501/KS35	0 ... 10 VDC	15 ... 30 VDC	flylead connector M8



Sd = 0 ... 4 mm

- very high resolution
- short response time
- integrated current- and voltage output



general data

mounting type	flush
measuring distance Sd	0 ... 4 mm
linearity error	± 4 % (S = 0,5 ... 4 mm Full Scale)
temperature drift	± 4 % (Full Scale)

electrical data

voltage supply range +Vs	15 ... 30 VDC
current consumption max. (no load)	40 mA
output circuit	voltage - / current output
output signal	0 ... 10 V / 4 ... 20 mA
load resistance	> 1000 Ohm (Uout) / 330 ... 1000 Ohm (Iout)
voltage drop Vd	< 7,2 VDC (Iout)
short circuit protection	yes
reverse polarity protection	yes

mechanical data

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

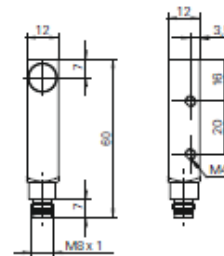
ambient conditions

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

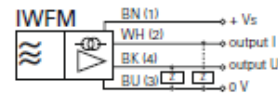
connectors and mating connectors

ESG 32AH0200	Connector M8, 4 pin, straight, 2 m
ESW 31AH0200	Connector M8, 4 pin, angular, 2 m
additional cable connectors and field wireable connectors: see accessories	

dimension drawing



connection diagram



order reference	resolution	repeat accuracy	response time (factory characteristic)
IWFM 12L9504/S35A	< 0,005 mm	< 0,01 mm	< 2 ms
IWFM 12L9505/S35A	< 0,001 mm	< 0,005 mm	< 30 ms



Sd = 1 ... 2 mm



general data

mounting type	flush
measuring distance Sd	1 ... 2 mm
reference distance	1,35 ... 1,65 mm
measuring speed	< 0,5 mm / ms
repeat accuracy	< 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. (no load)	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	cabl, 2 m

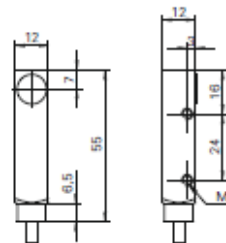
ambient conditions

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

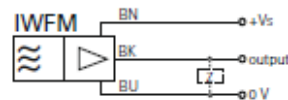
order reference

IWFM 12U9501/O1

dimension drawing



connection diagram





Sd = 0 ... 4 mm

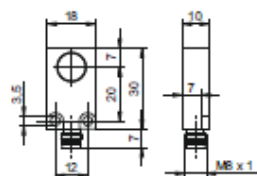
- very high resolution
- short response time
- linear analog output



general data	
mounting type	flush
measuring distance Sd	0 ... 4 mm
temperature drift	± 5 % (Full Scale)
voltage - / current output	
linearity error	± 4 % (S = 0,5 ... 4 mm Full Scale)
voltage output	
linearity error	± 0,4 %
electrical data	
voltage supply range +Vs	15 ... 30 VDC
short circuit protection	yes
reverse polarity protection	yes
voltage - / current output	
current consumption max. (no load)	40 mA
output signal	0 ... 10 V / 4 ... 20 mA
load resistance	> 1000 Ohm (Uout) / 330 ... 1000 Ohm (Iout)
voltage drop Vd	< 7,2 VDC (Iout)
voltage output	
current consumption max. (no load)	20 mA
output signal	0 ... 10 VDC
mechanical data	
type	rectangular
housing material	brass nickel plated
dimension	18 mm
housing length	30 mm
connection types	connector M8
ambient conditions	
operating temperature	-10 ... +70 °C
protection class	IP 67

connectors and mating connectors	
ESG 32AH0200	Connector M8, 4 pin, straight, 2 m
ESW 31AH0200	Connector M8, 4 pin, angular, 2 m
additional cable connectors and field wireable connectors: see accessories	
accessories	
10152385	Sensofix series 18/20 inductive rectangular
for details: see accessories section	

dimension drawing



connection diagrams



order reference	resolution	repeat accuracy	output circuit	response time (factory characteristic)	linearity error
IWFM 18L9504/S35A	< 0,005 mm	< 0,01 mm	voltage - / current output	< 2 ms	± 4 % (S = 0,5 ... 4 mm Full Scale)
IWFM 18L9505/S35A	< 0,001 mm	< 0,05 mm	voltage - / current output	< 30 ms	± 4 % (S = 0,5 ... 4 mm Full Scale)
IWFM 18U7504/S35A	< 0,005 mm	< 0,01 mm	voltage output	< 2,5 ms	± 0,4 %