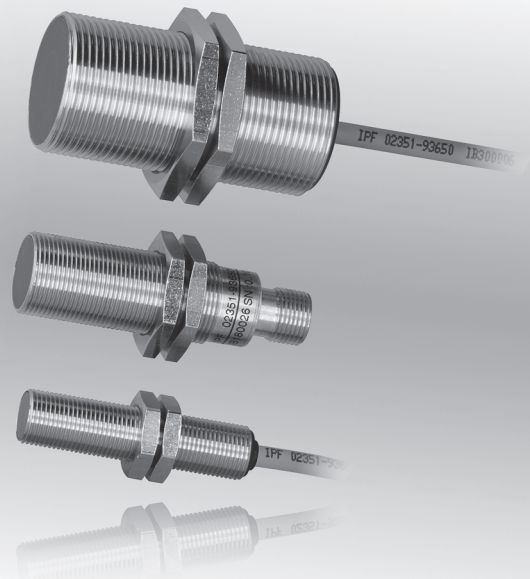
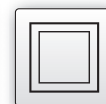


design	M8x1 M12x1 M18x1 M30x1.5	
semi-flush	measuring range	up to 20mm



- ✓ chrome-plated brass housing
- ✓ integrated amplifier
- ✓ large measuring ranges
- ✓ connection with cable, M8- or M12-connector

analog measurement systems
0 to 10 V DC and 4 to 20mA



description

Inductive analog sensors from *ipf electronic* are distinguished by a very large detection range, high precision, stability, repeat accuracy and low scattering.

The product range includes sizes from M8 to M30 in semi-flush, build-in versions.

Devices in the M8 design have a voltage output (0 ... 10V). Starting with the M12 design, an additional current output (4 ... 20mA) is available.

All the main protective functions such as short-circuit and overload protection, reverse polarity protection, induction and EMC-protection and power-on reset are built in.

To obtain the maximum measuring range, pay attention to the size of the object (standard target) and the surface finish (even surface). To ensure reliable device operation, you must comply with the fitting conditions on page 4.

application examples

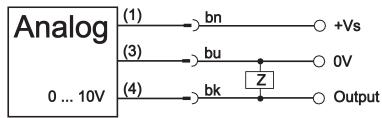
- ▶ punch check on metal parts with different dimensions
- ▶ distance and position measurement
- ▶ position recognition of rotatable machine parts using eccentrics

article-no.	IB080006	IB080076	IB120006	IB120026
operating range	0 ... 4mm	0 ... 4mm	0 ... 6mm	0 ... 6mm
output	0 ... 10V DC / -	0 ... 10V DC / -	0 ... 10V DC / 4 ... 20mA	0 ... 10V DC / 4 ... 20mA
TECHNICAL DATA				
measuring range	0 ... 4mm	0 ... 4mm	0 ... 6mm	0 ... 6mm
output signal	0 ... 10V DC	0 ... 10V DC	0 ... 10V DC 4 ... 20mA	0 ... 10V DC 4 ... 20mA
resolution	≤ 1µm	≤ 1µm	≤ 1µm	≤ 1µm
operating voltage	15 ... 30V DC	15 ... 30V DC	15 ... 30V DC	15 ... 30V DC
current consumption (w/o load)	≤ 10mA	≤ 10mA	≤ 12mA	≤ 12mA
load resistance	voltage: > 100kΩ	voltage: > 100kΩ	voltage: > 100kΩ current: < 1kΩ	voltage: > 100kΩ current: < 1kΩ
norm trimming plate	12x12x1mm	12x12x1mm	18x18x1mm	18x18x1mm
repeat accuracy	0.3mm	0.3mm	0.3mm	0.3mm
power-on delay time	≤ 50msec	≤ 50msec	≤ 50msec	≤ 50msec
correction factors (steel/aluminium/brass)	1.0 / 0.28 / 0.4	1.0 / 0.28 / 0.4	1.0 / 0.28 / 0.35	1.0 / 0.28 / 0.35
correction factors (stainless steel/copper)	0.68 / 0.25	0.68 / 0.25	0.47 / 0.2	0.47 / 0.2
display	-	-	-	-
short-circuit protection	+	+	+	+
reverse polarity protection	+	+	+	+
design	M8x1	M8x1	M12x1	M12x1
housing material	chrome-plated brass	chrome-plated brass	chrome-plated brass	chrome-plated brass
front cap material	PBTP	PBTP	PBTP	PBTP
length (thread/complete)	45mm / 45mm	45mm / 60mm	50mm / 50mm	44mm / 60mm
operating temperature	-25 ... +70°C	-25 ... +70°C	-25 ... +70°C	-25 ... +70°C
system of protection (EN 60529)	IP67	IP67	IP67	IP67
connection	2m, PUR-cable, 3-wire	M8-connector, 3-pin e.g. VK200071 , 2m angular, PUR	2m, PUR-cable, 4-wire	M12-connector, 4-pin e.g. VK205321 , 2m angular, PUR
connection accessories	-	-	-	-
mounting accessories (clip)	AY000047	AY000047	AY000049	AY000049

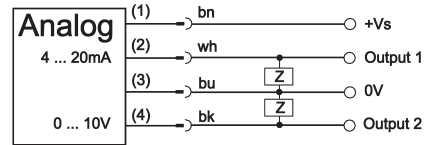
article-no.	IB180006	IB180026	IB300006	IB300026
operating range	0 ... 10mm	0 ... 10mm	0 ... 20mm	0 ... 20mm
output	0 ... 10V DC / 4 ... 20mA	0 ... 10V DC / 4 ... 20mA	0 ... 10V DC / 4 ... 20mA	0 ... 10V DC / 4 ... 20mA
TECHNICAL DATA				
measuring range	0 ... 10mm	0 ... 10mm	0 ... 20mm	0 ... 20mm
output signal	0 ... 10V DC 4 ... 20mA	0 ... 10V DC 4 ... 20mA	0 ... 10V DC 4 ... 20mA	0 ... 10V DC 4 ... 20mA
resolution	≤ 2µm	≤ 2µm	≤ 5µm	≤ 5µm
operating voltage	15 ... 30V DC	15 ... 30V DC	15 ... 30V DC	15 ... 30V DC
current consumption (w/o load)	≤ 12mA	≤ 12mA	≤ 12mA	≤ 12mA
load resistance	voltage: > 100kΩ current: < 1kΩ	voltage: > 100kΩ current: < 1kΩ	voltage: > 100kΩ current: < 1kΩ	voltage: > 100kΩ current: < 1kΩ
norm trimming plate	30x30x1mm	30x30x1mm	60x60x1mm	60x60x1mm
repeat accuracy	0.3mm	0.3mm	0.3mm	0.3mm
power-on delay time	≤ 50msec	≤ 50msec	≤ 50msec	≤ 50msec
correction factors (steel/aluminium/brass)	1.0 / 0.18 / 0.28	1.0 / 0.18 / 0.28	1.0 / 0.2 / 0.3	1.0 / 0.2 / 0.3
correction factors (stainless steel/copper)	0.6 / 0.15	0.6 / 0.15	0.65 / 0.17	0.65 / 0.17
display	-	-	-	-
short-circuit protection	+	+	+	+
reverse polarity protection	+	+	+	+
design	M18x1	M18x1	M30x1.5	M30x1.5
housing material	chrome-plated brass	chrome-plated brass	chrome-plated brass	chrome-plated brass
front cap material	PBTP	PBTP	PBTP	PBTP
length (thread/complete)	50mm / 50mm	42mm / 63.5mm	60mm / 60mm	52mm / 73.5mm
operating temperature	-25 ... +70°C	-25 ... +70°C	-25 ... +70°C	-25 ... +70°C
system of protection (EN 60529)	IP67	IP67	IP67	IP67
connection	2m, PUR-cable, 4-wire	M12-connector, 4-pin	2m, PUR-cable, 4-wire	M12-connector, 4-pin
connection accessories	-	e.g. VK205321 , 2m angular, PUR	-	e.g. VK205321 , 2m angular, PUR
mounting accessories (clip)	AY000051	AY000051	AY000061	AY000061

connection

IB08



IB12, IB18, IB30

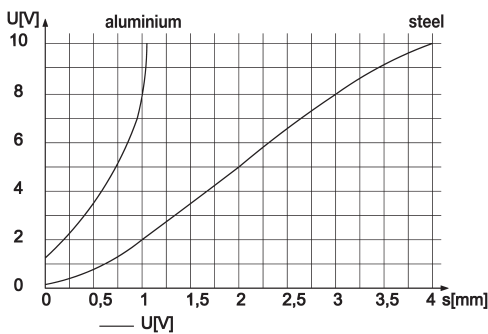


wire colors: bn = brown (1), wh = white (2), bu = blue (3), bk = black (4)

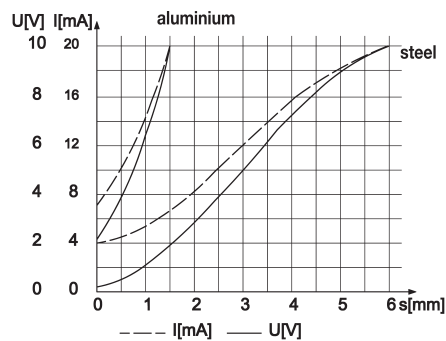
IB080006 and **IB080076** only analog output 0 to 10V DC

response curves

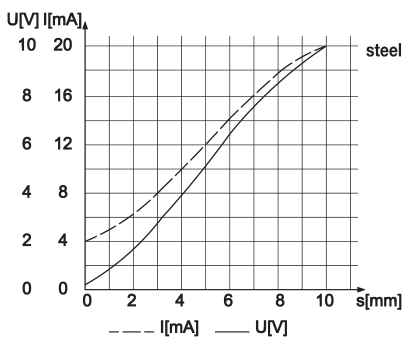
IB08



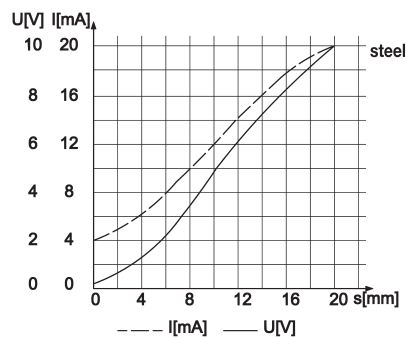
IB12



IB18



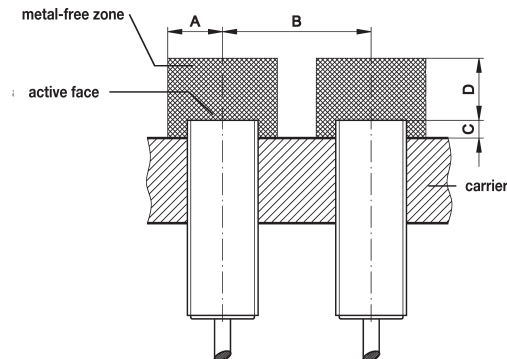
IB30



mounting parameters

	IB080006	IB120006	IB180006	IB300006
	IB080076	IB120026	IB180026	IB300026
installation dimension A	8mm	12mm	19mm	35mm
installation dimension B	20mm	30mm	44mm	80mm
installation dimension C*	1mm	2mm	4mm	6mm
installation dimension D	12mm	18mm	30mm	60mm

* when mounting into carrier material "metal"



This data sheet contains the standard versions only. Kindly request the availability of other output- and connection functions.

We will be pleased to supply the matching cable socket for your devices with connector. Please refer to the list in catalog chapter "accessories" under "cable sockets **ipf** -SENSORFLEX®" or search our website for "VK".

Warning: Never use these devices in applications where the safety of a person depends on their functionality.