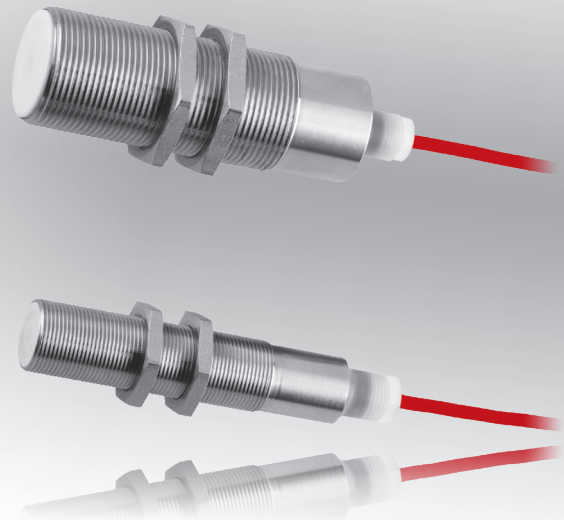


dimensions	M12x1 M18x1 M30x1.5	
flush	switching distance	2 to 10mm
non-flush	switching distance	4 to 15mm

- ✓ resistant to spray water or permanent submersion
- ✓ resistant to acids and bases
- ✓ insensitive to rapid temperature changes from -25°C to +120°C
- ✓ housing: V4A, front cap: teflon
- ✓ LED display with M18 and M30
- ✓ versions with DC or AC voltage
- ✓ switching frequency up to 1000kHz



**unaffected by atmospheric changes
degree of protection IP68 and IP69k**



description

The atmospheric-change-resistant inductive proximity switches from *ipf electronic* are intended for use in corrosive environments with constantly changing temperature and high humidity. Thus, permanent use in washing facilities is permissible.

A high resistance to corrosion while still providing mechanical stability under load is achieved through the combination of PTFE and titanium-stabilized stainless steel.

The built-in LED shines through the cable-side cover.

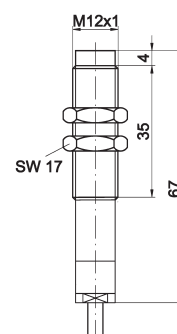
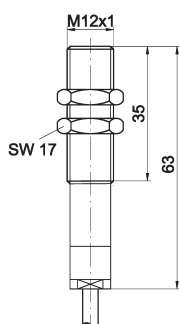
A Viton O-ring in the front cap as well as the compound around

the connection cable within the housing ensure outstanding impermeability.

application examples

- ▶ use in washing facilities
- ▶ use in climatic chambers
- ▶ foodstuffs and pharmaceutical industries
- ▶ use in aggressive environmental conditions
- ▶ roll stands in cold rolling mills

article-no.	IB1201K0	IN1201K0
switching distance (Sn)	2mm	4mm
mounting	flush	non-flush
output	pnp, no	pnp, no



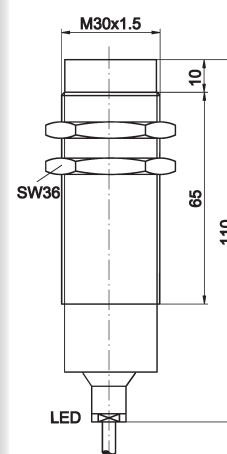
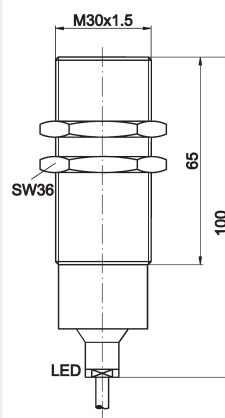
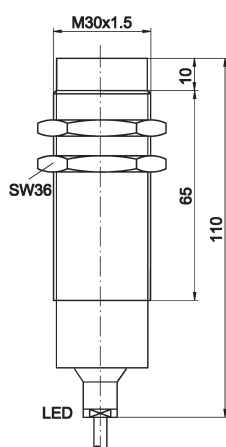
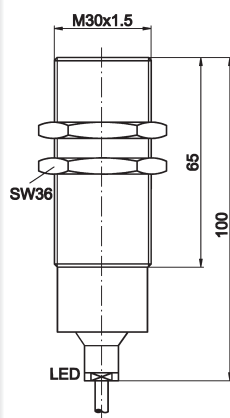
TECHNICAL DATA

switching distance (Sn)	2mm	4mm
mounting	flush	non-flush
output signal	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 4mA	≤ 4mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.0V DC	2.0V DC
norm measuring plate	acc. to EN 60947-5-2	acc. to EN 60947-5-2
hysteresis	< 10%	< 10%
repeat accuracy	< 3%	< 3%
switching frequency	1kHz	1kHz
pressure resistance (max.)	10bar	10bar
display (signal)	-	-
short-circuit protection	+	+
reverse polarity protection	+	+
dimensions	M12x1mm	M12x1mm
length (thread/complete)	35mm/63mm	35mm/67mm
housing material	stainless steel 1.4571	stainless steel 1.4571
material (front cap)	PTFE	PTFE
operating temperature	-25 ... +120°C	-25 ... +120°C
degree of protection (EN 60529)	IP68/IP69K	IP68/IP69K
connection	2m FEP-cable 3-wire	2m FEP-cable 3-wire
mounting accessories (clip)	AY000099	AY000099

article-no.	IB1804K0	IN1804K0	IB1841K0	IN1841K0
switching distance (Sn)	5mm	7mm	5mm	7mm
mounting	flush	non-flush	flush	non-flush
output	pnp, no / nc	pnp, no / nc	AC, no	AC, no

TECHNICAL DATA				
switching distance (Sn)	5mm	7mm	5mm	7mm
mounting	flush	non-flush	flush	non-flush
output signal	pnp, no / nc	pnp, no / nc	AC, no	AC, no
operating voltage	10 ... 30V DC	10 ... 30V DC	20 ... 250V AC	20 ... 250V AC
current consumption (w/o load)	≤ 4mA	≤ 4mA	≤ 2.5mA	≤ 2.5mA
minimum load current	-	-	< 5mA	< 5mA
output current (max. load)	200mA	200mA	400mA	400mA
voltage drop (max. load)	2.0V DC	2.0V DC	5.0V AC	5.0V AC
norm measuring plate	acc. to EN 60947-5-2	acc. to EN 60947-5-2	acc. to EN 60947-5-2	acc. to EN 60947-5-2
hysteresis	< 10%	< 10%	< 10%	< 10%
repeat accuracy	< 3%	< 3%	< 3%	< 3%
switching frequency	1kHz	1kHz	25Hz	25Hz
pressure resistance (max.)	10bar	10bar	10bar	10bar
display (signal)	yellow LED	yellow LED	yellow LED	yellow LED
short-circuit protection	+	+	-	-
reverse polarity protection	+	+	+	+
dimensions	M18x1mm	M18x1mm	M18x1mm	M18x1mm
length (thread/complete)	60mm/95mm	60mm/103mm	60mm/95mm	60mm/103mm
housing material	stainless steel 1.4571	stainless steel 1.4571	stainless steel 1.4571	stainless steel 1.4571
material (front cap)	PTFE	PTFE	PTFE	PTFE
operating temperature	-25 ... +120°C	-25 ... +120°C	-25 ... +120°C	-25 ... +120°C
degree of protection (EN 60529)	IP68/IP69K	IP68/IP69K	IP68/IP69K	IP68/IP69K
connection	2m FEP cable 4-wire	2m FEP cable 4-wire	2m FEP cable 3-wire	2m FEP cable 3-wire
mounting accessories (clip)	AY000100	AY000100	AY000100	AY000100

article-no.	IB3004K0	IN3004K0	IB3041K0	IN3041K0
switching distance (Sn)	10mm	15mm	10mm	15mm
mounting	flush	non-flush	flush	non-flush
output	pnp, no / nc	pnp, no / nc	AC, no	AC, no

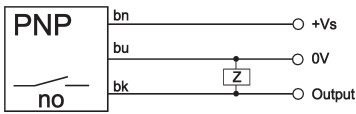


TECHNICAL DATA

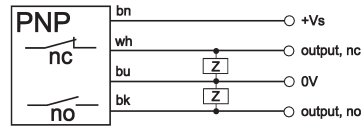
switching distance (Sn)	10mm	15mm	10mm	15mm
mounting	flush	non-flush	flush	non-flush
output signal	pnp, no / nc	pnp, no / nc	AC, no	AC, no
operating voltage	10 ... 30V DC	10 ... 30V DC	20 ... 250V AC	20 ... 250V AC
current consumption (w/o load)	≤ 4mA	≤ 4mA	≤ 2.5mA	≤ 2.5mA
minimum load current	-	-	< 5mA	< 5mA
output current (max. load)	200mA	200mA	400mA	400mA
voltage drop (max. load)	2.0V DC	2.0V DC	5.0V AC	5.0V AC
norm measuring plate	acc. to EN 60947-5-2	acc. to EN 60947-5-2	acc. to EN 60947-5-2	acc. to EN 60947-5-2
hysteresis	< 10%	< 10%	< 10%	< 10%
repeat accuracy	< 3%	< 3%	< 3%	< 3%
switching frequency	1kHz	1kHz	25Hz	25Hz
pressure resistance (max.)	10bar	10bar	10bar	10bar
display (signal)	yellow LED	yellow LED	yellow LED	yellow LED
short-circuit protection	+	+	-	-
reverse polarity protection	+	+	+	+
dimensions	M30x1.5mm	M30x1.5mm	M30x1.5mm	M30x1.5mm
length (thread/complete)	65mm/100mm	65mm/110mm	65mm/100mm	65mm/110mm
housing material	stainless steel 1.4571	stainless steel 1.4571	stainless steel 1.4571	stainless steel 1.4571
material (front cap)	PTFE	PTFE	PTFE	PTFE
operating temperature	-25 ... +120°C	-25 ... +120°C	-25 ... +120°C	-25 ... +120°C
degree of protection (EN 60529)	IP69K	IP69K	IP69K	IP69K
connection	2m FEP cable 4-wire	2m FEP cable 4-wire	2m FEP cable 3-wire	2m FEP cable 3-wire
mounting accessories	AY000101	AY000101	AY000101	AY000101

connection

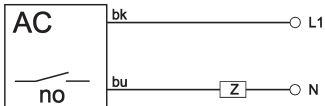
cable device DC M12



cable device DC M18, M30



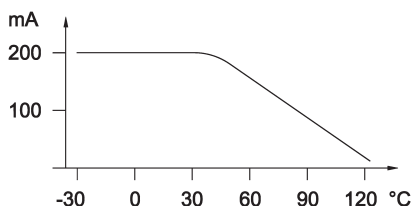
cable device AC M18, M30



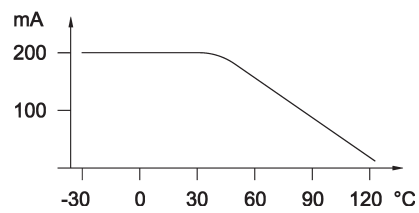
wire colors: bn = brown (1), wh = white (2), bu = blue (3), bk = black (4)

output current as a function of temperature

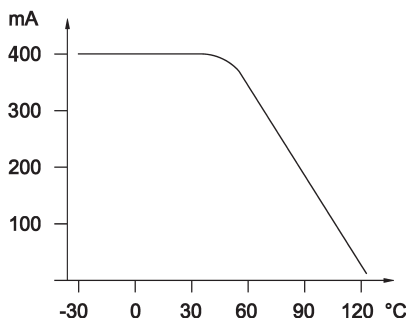
Ix1201K0



Ix1804K0, Ix3004K0

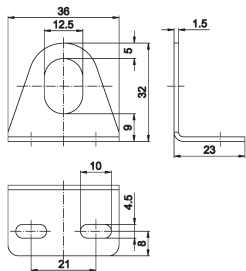


Ix1841K0, Ix3004K0

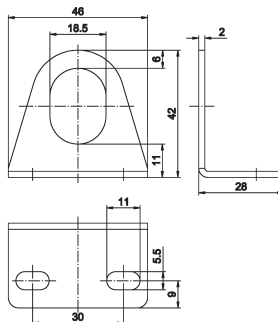


mounting accessories (clip)

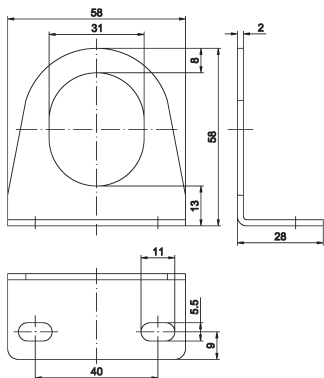
AY000099 for M12x1, stainl. steel



AY000100 for M18x1, stainl. steel



AY000101 for M30x1.5, stainl. steel



ACCESSORIES

article-no.	description	note
AY000099	mounting clip \varnothing 12mm	stainl. steel
AY000100	mounting clip \varnothing 18mm	stainl. steel
AY000101	mounting clip \varnothing 30mm	stainl. steel

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

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

This data sheet as well as your personal contact can be found at www.ipf-electronic.com