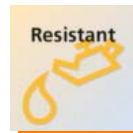
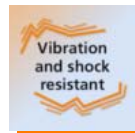


One for all – a single inductive sensor for three applications



Suitable for industrial, mobile, cooling and lubricating applications

- Large temperature range of -40...85 °C for greater flexibility
- Protection rating IP 65 to IP 69K for increased machine uptime
- Reliable detection due to improved sensor tolerances
- Reduced stock-keeping – one sensor for many applications



New standard

This newly developed generation of inductive sensors is the first to present one sensor that can be used for three different applications. Whether in factory automation, in applications with coolants and lubricants or in mobile applications – the new ifm technology platform distinguishes itself with universal and permanent usability while guaranteeing high performance, temperature stability and higher sensing ranges.

Resistant and reliable

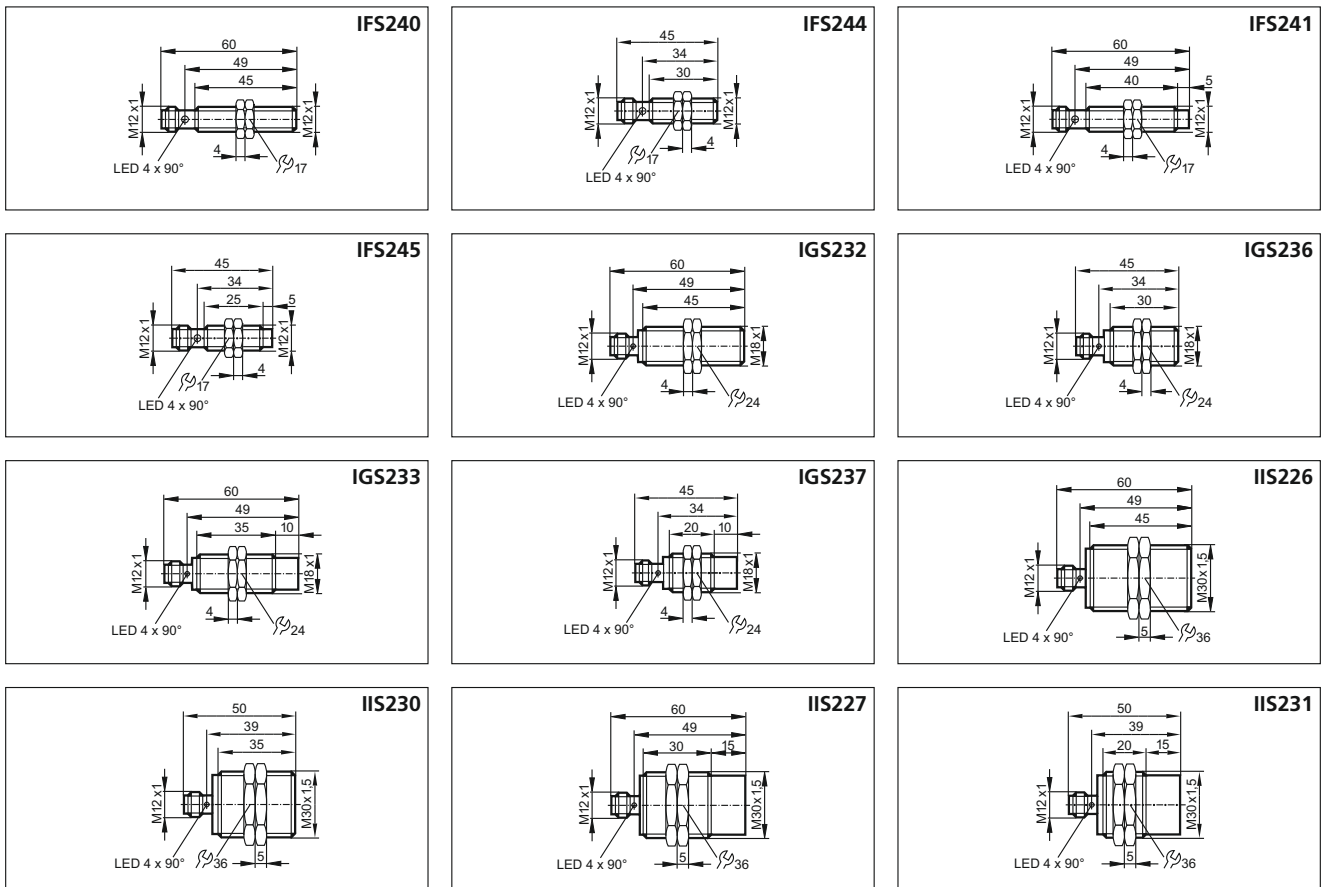
A large temperature range of -40...85 °C and protection ratings IP 65, IP 66, IP 67, IP 68 and IP 69K guarantee maximum reliability. This new generation meets the user's increased machine uptime requirements while offering a reliable switching function that assures the avoidance of standstills. All in all, a universal sensor for permanent use.



Connection	Sensing range [mm]	Electrical design	Switching frequency [Hz]	Order no. Output function normally open	Order no. Output function normally closed
Type M12 · Dimensions: length [mm]				60	45
M12 connector	4 f	DC PNP	700	IFS240	IFS244
	7 nf	DC PNP	700	IFS241	IFS245
	4 f	DC NPN	700	IFS242	IFS246
	7 nf	DC NPN	700	IFS243	IFS247
Type M18 · Dimensions: length [mm]				60	45
M12 connector	8 f	DC PNP	400	IGS232	IGS236
	12 nf	DC PNP	300	IGS233	IGS237
	8 f	DC NPN	400	IGS234	IGS238
	12 nf	DC NPN	300	IGS235	IGS239
Type M30 · Dimensions: length [mm]				60	50
M12 connector	15 f	DC PNP	100	IIS226	IIS230
	22 nf	DC PNP	100	IIS227	IIS231
	15 f	DC NPN	100	IIS228	IIS232
	22 nf	DC NPN	100	IIS229	IIS233

Installation: f = flush / nf = non flush

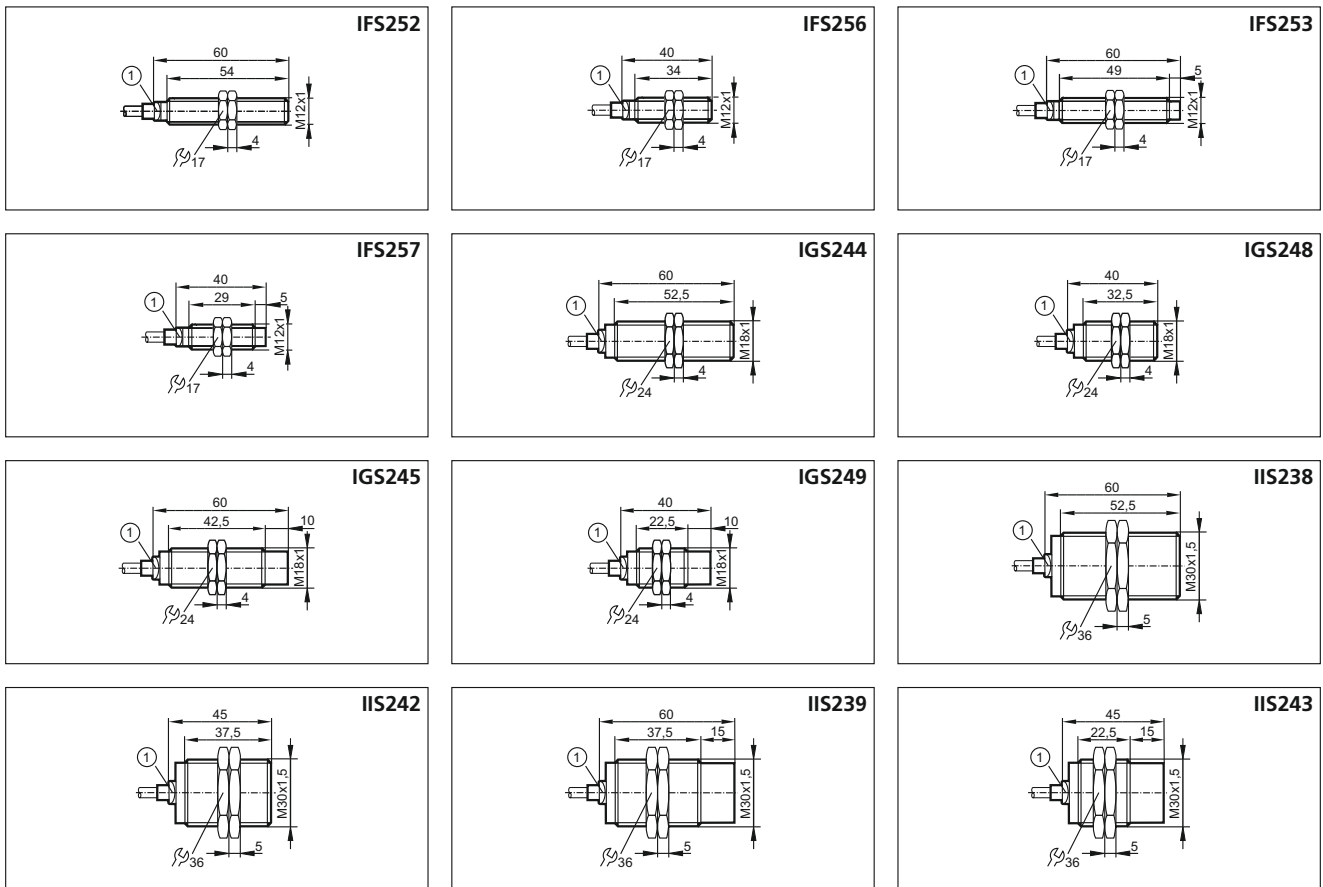
Dimensions



Connection	Sensing range [mm]	Electrical design	Switching frequency [Hz]	Order no. Output function normally open	
Type M12 · Dimensions: length [mm]				60	40
PUR cable 2m	4 b	DC PNP	700	IFS252	IFS256
	7 nb	DC PNP	700	IFS253	IFS257
	4 b	DC NPN	700	IFS254	IFS258
	7 nb	DC NPN	700	IFS255	IFS259
Type M18 · Dimensions: length [mm]				60	40
PUR cable 2m	8 b	DC PNP	400	IGS244	IGS248
	12 nb	DC PNP	300	IGS245	IGS249
	8 b	DC NPN	400	IGS246	IGS250
	12 nb	DC NPN	300	IGS247	IGS251
Type M30 · Dimensions: length [mm]				60	45
PUR cable 2m	15 b	DC PNP	100	IIS238	IIS242
	22 nb	DC PNP	100	IIS239	IIS243
	15 b	DC NPN	100	IIS240	IIS244
	22 nb	DC NPN	100	IIS241	IIS245



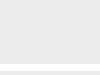


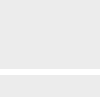


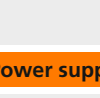
Installation: f = flush / nf = non flush

Dimensions





1) LED (yellow)


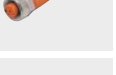


Accessories

Type	Description	Order no.
Mounting accessories		
	Angle bracket for type M12, stainless steel	E10735
	Angle bracket for type M18, stainless steel	E10736
	Angle bracket for type M30, stainless steel	E10737
	Mounting clamp, with end stop for types M12, PC	E11994
	Mounting clamp, with end stop for types M18, PC	E11995
	Mounting clamp, with end stop for types M30, PC	E11996
	Mounting sleeve, M16 x 1 - Ø 12 mm, 34 mm	E10806
	Mounting sleeve, M24 x 1.5 - Ø 18 mm, 36 mm	E10807
	Mounting sleeve, M36 x 1.5 - Ø 30 mm, 36 mm	E10808

Power supplies

	Plastic housing, 24 V DC, 2.5 A	DN1031
	Metal housing, 24 V DC, 3.3 A	DN4011

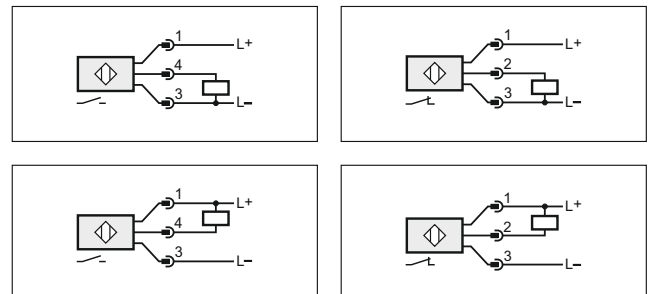
Connection technology

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 5 m black, PUR cable	EVC002
	Socket, M12, 2 m black, PUR cable	EVC004
	Socket, M12, 5 m black, PUR cable	EVC005

Further technical data

Operating voltage	[V DC]	10...30 DC; "supply class 2" to cULus
Current consumption	[mA]	< 10
Reverse polarity protection		•
Short-circuit protection		•
Overload protection		•
Voltage drop	[V]	< 2.5
Current rating	[mA]	100
Ambient temperature	[°C]	-40...85
Protection		IP 65 / IP 66 / IP 67 / IP 68 / IP 69K
EMC		EN 61000-4-2 ESD: EN 61000-4-3 HF radiated: EN 61000-4-4 Burst: EN 61000-4-6 HF conducted: EN 55011:
Switching status indication	LED	4 kV CD / 8 kV AD 10 V/m (80...1000 MHz) 2 kV 10 V (0.15...80 MHz) class B yellow
Housing materials		Brass white bronze coated, PBT; PEI
Accessories (supplied)		2 lock nuts, brass

Wiring diagram M12 connector



Wiring diagram PUR cable 2m

