



FL

PHOTOELECTRIC SENSORS T-STYLE M18 FOR CAR WASHES



- Sensors for car washes
- IP protection degree: head IP69K (sensor IP67)
- Wide angular range for an easy alignment
- Totally fulfilled resin
- Two versions: high and standard distance
- Synchronization through cable
- Coded emission: anti mutual-interference



CODE DESCRIPTION

		FL	I	D	/	0	N	-	0	C
series	FL	"T-style" housing photoelectric sensors with M18 optical head for car washes								
emission	I	Infrared emission								
emitter / re- ceiver	E	Standard distance emitter								
	H	High distance emitter								
	R	Standard distance receiver								
	D	High distance receiver								
type	0	Emitter								
	L	Light ON output state								
	D	Dark ON output state								
output logic	0	Emitter								
	N	NPN logic								
	P	PNP logic								
	T	PushPull logic								
housing	0	Plastic housing								
cable / plug exit	C	Radial cable (5 m length)								

FL TECHNICAL SPECIFICATIONS

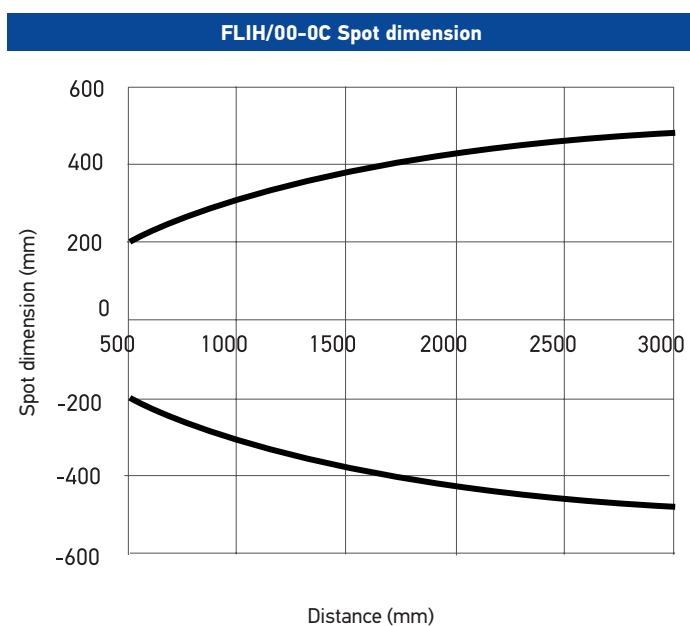
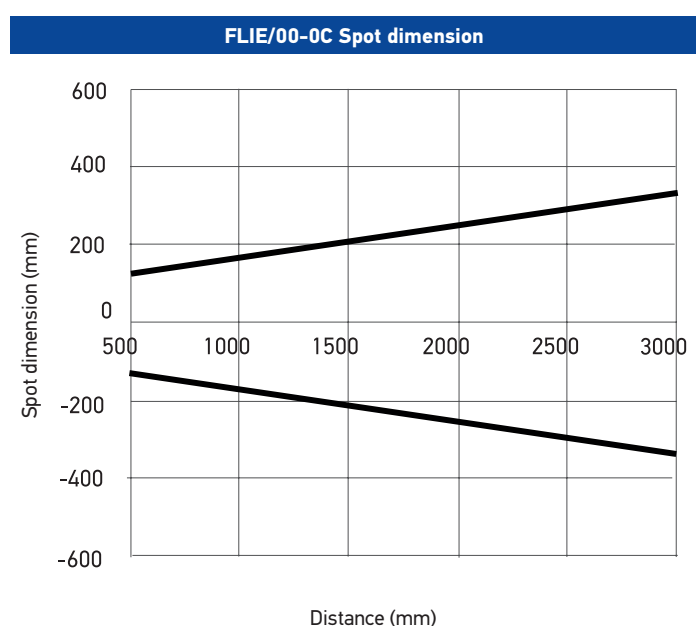
CYLINDRICAL
SENSORS

	FLID/**_**	FLIE/**_**	FLIH/**_**	FLIR/**_**
GENERAL DATA				
Operating principle	Receiver	Emitter		Receiver
DETECTION CAPABILITIES				
Nominal sensing distance	30 mm	8 m	30 mm	8 m
Hysteresis	±1 %			±1 %
FUNCTIONS				
Emitter / Receiver	Receiver	Emitter		
PL				
INPUT/OUTPUT				
Response time max	12 ms			10 ms
Output type	NPN, PNP, Push-Pull			NPN, PNP, Push-Pull
Output function	Dark on, Light on			Dark on, Light on
HMI/UI				
LED indicators	Green (RUN) Yellow (output status) Red (problem with output)	Green (RUN)	Green (RUN) Yellow (output status) Red (problem with output)	
ELECTRICAL DATA				
supply voltage	19.2 ... 28.8 Vdc			
Maximum DC load current	30 mA			30 mA
Short circuit protection	●			
Reverse polarity protection	●			
Impulsive overvoltage protections	●			
Delay to availability	≤200ms			
MECHANICAL DATA				
Housing material	PBT + PC			
Active part material	PC			
Optical location	90°			
Weight	570 g (the pair)			
Tightening torque	1 Nm			
TEST/CERTIFICATIONS				
Electromagnetic compatibility	IEC EN 60947-5-2			
ENVIRONMENTAL DATA				
Operating Temperature	-20 ... 60 °C (Without freeze)			
Mechanical Protection	IP67 (front-head IP69K)			
Storage temperature max	-30 ... 80 °C (without freeze)			

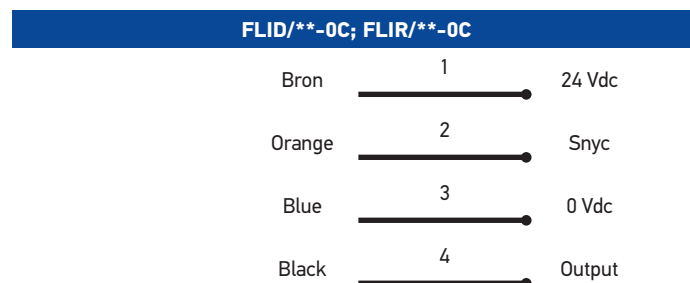
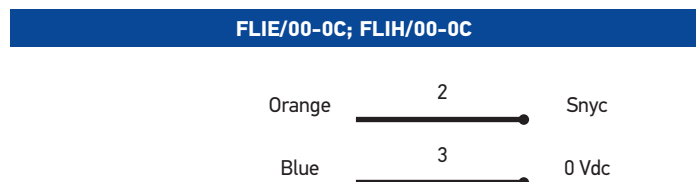
AVAILABLE MODELS

Operating principle	Nominal sensing distance	Housing material	Cable			
				NPN Dark on	PNP Dark on	Push-Pull Dark on
Emitter	30 mm	PBT + PC	FLIH/00-0C			
	8 m		FLIE/00-0C			
Receiver	30 mm			FLID/DN-0C	FLID/DP-0C	FLID/DT-0C
				FLID/LN-0C	FLID/LP-0C	FLID/LT-0C
	8 m			FLIR/DN-0C	FLIR/DP-0C	FLIR/DT-0C
				FLIR/LN-0C	FLIR/LP-0C	FLIR/LT-0C

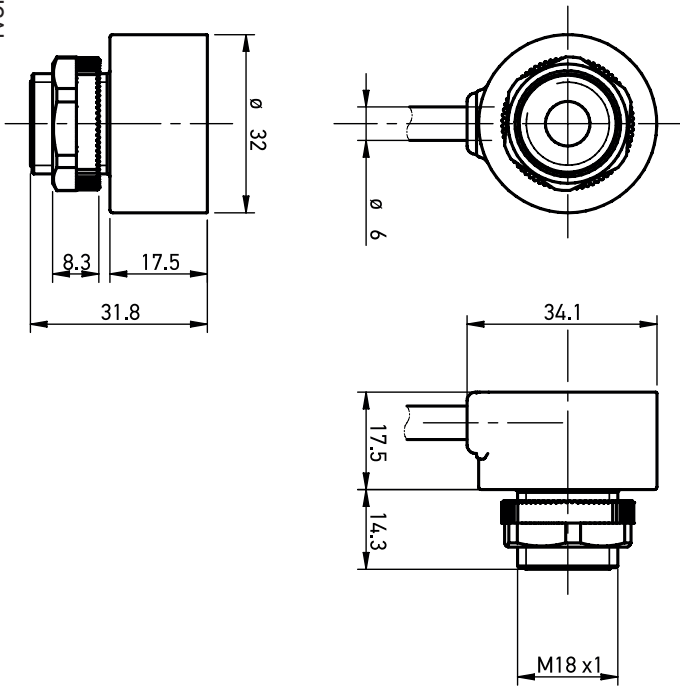
RESPONSE DIAGRAMS



PLUGS

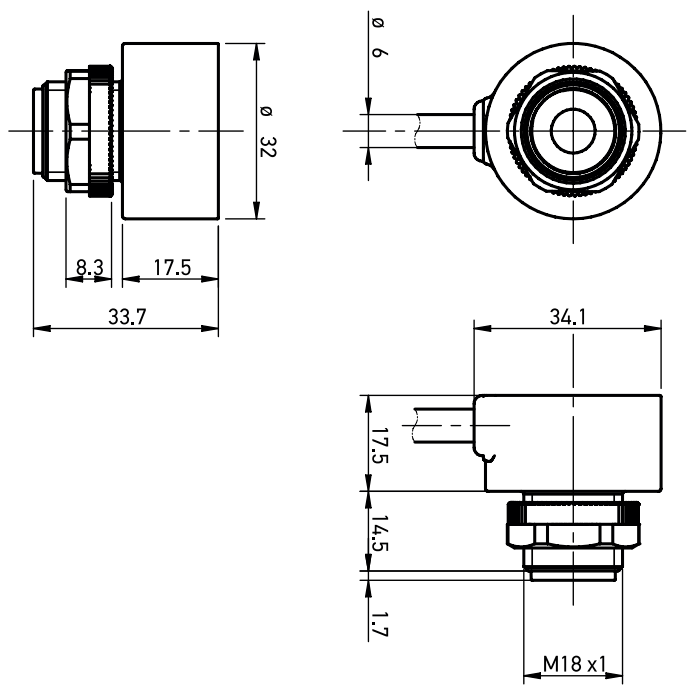


FLIR/**_**



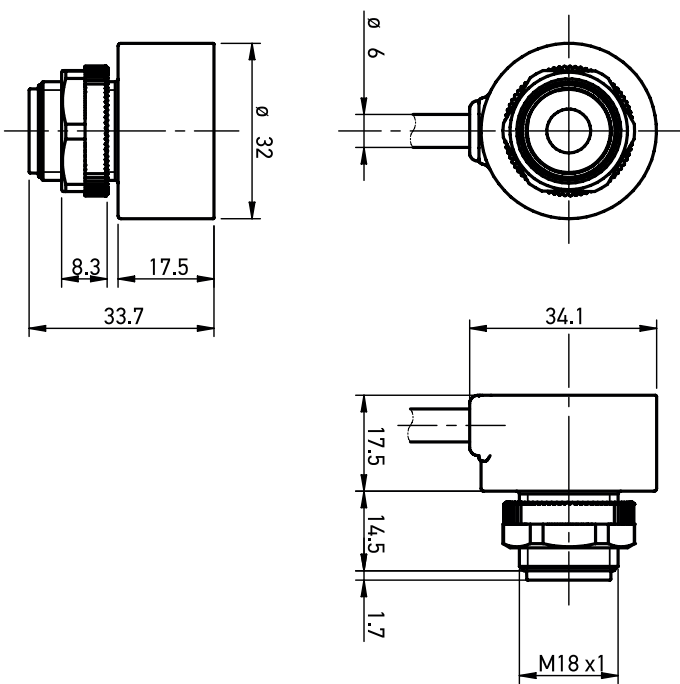
(mm)

FLIH/**_**



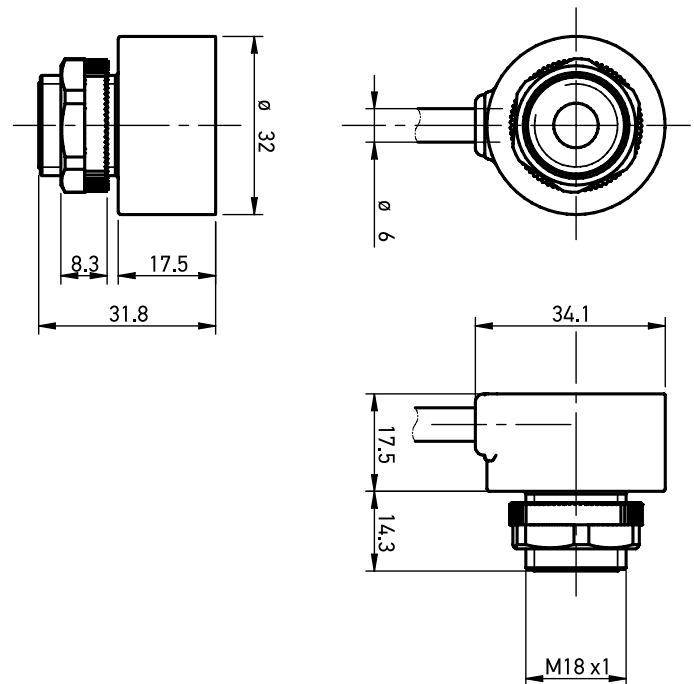
(mm)

FLID/**_**



(mm)

FLIE/**_**



(mm)