BDC ELECTRONIC
TORINO-ITALY

CYLINDRICAL
INDUCTIVE
SENSORS
METAL
HOUSING

LOW SPEED SENSOR Timed – a.c.

Use of the sensor:

On power-on the yellow LED blinks and the output stays OFF for 8 minutes. After this initial waiting time the yellow LED stays fixed and the output switches in ON state (active condition), driving the relay which will drive the motor. During the first 20 sec. of the "active condition" the output stay ON independently by the rotational speed. After this time the rotation speed is monitored and the sensor goes in the "alarm condition" if the speed is down 4 rpm (8 pulse/min) or up 13 rpm (26 pulse/min). During the "alarm condition" the yellow LED switches off, red LED blinks and the output stays OFF for an alarm waiting time of 8 minutes. Once ended the alarm waiting time, the sensor restarts the "active condition". If "alarm condition" is repeated for 8 consecutive times, the sensor goes in the "permanent alarm condition", the output stays OFF and the red LED shows the last alarm condition until the sensor is switched off. After any right restart (the speed is ok after initial 20 sec. of "active condition") or power-on the consecutive alarm counter is resetted.

It is possible to skip out the 8 minutes of initial waiting time or the 8 minutes of alarm rest time just by connecting for a while the by-pass input (black wire) to the brown wire as showed in the connection diagram.
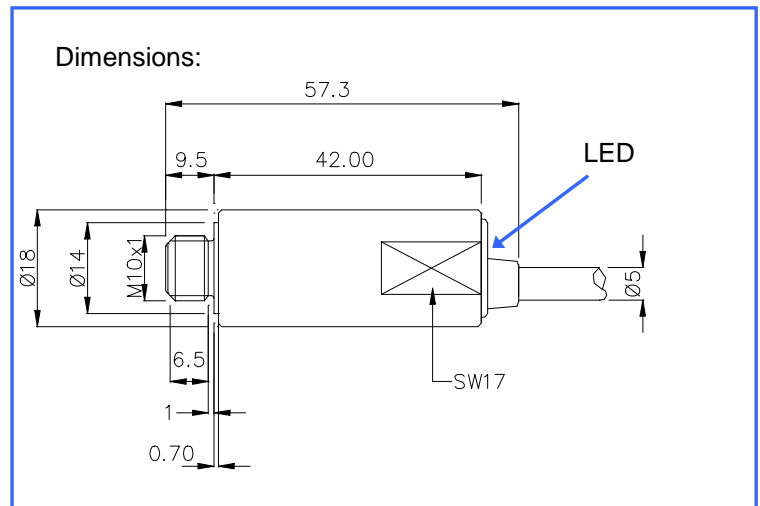
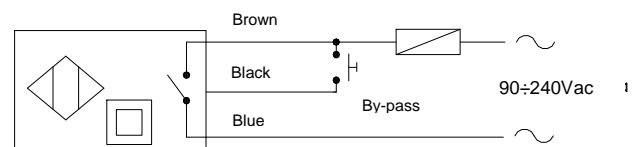The sensor is protected against over voltage and short-circuit of the load.

Technical data:

Working voltage:	90÷240Vac
Electrical system frequency:	40÷60 Hz
Off-state current at 220V:	<2.2 mA
Minimum operational current:	8 mA
Rated operational current:	200 mA
Voltage drop:	<8V
Sensing distance (Sn):	2 mm
Switching hysteresis (H):	<10% Sn
Repeat accuracy (R):	<2% Sn
Max switching frequency:	25 Hz
Working temperature range:	-20÷ +70°C
Max thermal drift of sensing distance Sn:	±10%
Degree of protection:	IP67
Low speed alarm threshold:	<4rpm
High speed alarm threshold:	>13rpm
Max tightening torque SW17:	8 Nm
Housing material:	anodized aluminium
Cable:	Grey PVC 3x0.50mm^2 CEI2022 II 90°C 300V length 2 m

Dimensions:

Status display:

Yellow LED blinking.=	8min Initial waiting time
Yellow LED fixed on =	Output ON; speed OK
Red LED blinking. =	8min alarm rest time
Red LED fixed on =	8 consecutives alarms

(last alarm was under or over speed detection)

Red LED slow blinking =	8 consecutives alarms

(last alarm was a short circuit detection)

Connection Diagram:

Electromagnetic compatibility (EMC) according to EN60947-5-2
Class 2 equipment according to EN61140
Shock and vibration according to IEC 68-2-27 and IEC 68-2-6

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ORDERING CODE :
ALS10/4609AKS-B