



Cat. No. FAS-A22

# FAS

## DIFFUSE AREA SENSORS



## INSTRUCTION SHEET

Thank you for selecting INNO for your requirement.

This sheet describes the procedure and precautions required for installing and operating the product.

Kindly read this sheet before operating or installing the product. Store the sheet for future reference.

### CAUTION FOR SAFETY

- ① Please keep this sheet for review before use of unit.
- ① Please observe the following:

**⚠ WARNING**  
Serious injury may occur if instructions are not followed

**⚠ CAUTION**  
Product failure or injury can occur if instructions are not followed

### ⚠ WARNING

- This is not a safety product and is not to be used with machinery that requires use of safety control.
- Do not disassemble or modify this unit. It may lead to electric shock/ fire.

Do not connect sensor to AC power supply.  
**RISK OF EXPLOSION !**



### ⚠ CAUTION

- This unit shall not be used outdoors.
- Do not use the unit in places where there is flammable or explosive gas.
- Please observe the rated specifications in Instruction Sheet.
- Do not use this unit beyond rated power and do not supply AC power at DC power type; do not connect without load.
- Please check the polarity of power and wrong wiring.
- Do not use this unit in places where there is vibration or impact.
- Do not use water or oil based detergent for cleaning the unit.
- Do not use excessive force to tighten the unit to the mounting plate and do not hammer the unit.

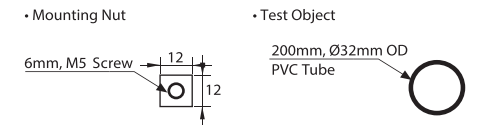
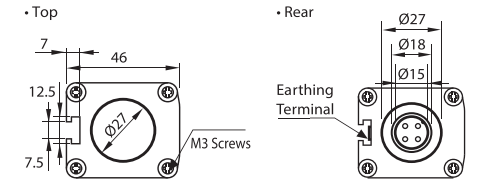
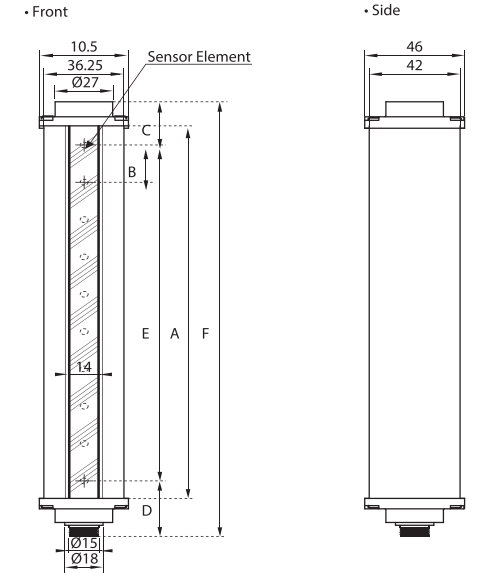
### SPECIFICATIONS

\*For details on Customized/ Special Models contact Seller

Sensing Type	Diffuse										
Type	NPN	FAS-D-210N	FAS-D-270N	FAS-D-280N	FAS-D-360N	FAS-D-450N	FAS-D-600N	FAS-D-690N	FAS-D-920N	FAS-D-930N	FAS-D-1240N
	PNP	FAS-D-210P	FAS-D-270P	FAS-D-280P	FAS-D-360P	FAS-D-450P	FAS-D-600P	FAS-D-690P	FAS-D-920P	FAS-D-930P	FAS-D-1240P
Sensing Distance	1000mm										
Beam Gap (Resolution)	30mm	30mm	40mm	40mm	30mm	40mm	30mm	40mm	30mm	40mm	
No. of Beams	8	10	8	10	16	16	24	24	32	32	
Protective Height	210mm	270mm	280mm	360mm	450mm	600mm	690mm	920mm	930mm	1240mm	
Response Time	ON to OFF: 10ms; OFF to ON: 75ms approx.										
Startup Time	2 sec. max.										
Aperture Angle (Receiver)	± 5°										
Light Source	IR LED										
Light Wavelength	940 nm										
Supply Voltage	12 - 24 VDC (10% Ripple)										
Protection Circuits	Reverse polarity, Output short circuit protection										
Control Output	PNP and NPN										
Shock Resistance	10 G										
Environmental Illuminance	500 lux max. (light opposite to receiver); if at 20° angle, Sunlight: 5,000 lux, Lamp: 3,000 lux										
Ambient Temperature	Operation: -10° ~ 55°C; Storage: -15° ~ 70°C (non- freezing; non- condensing)										
Ambient Humidity	Operation: 35 ~ 80% RH; Storage: 30 ~ 95% RH (non- condensing)										
Protection Class	IP54										
Sensor Material	Case: Powder coated Aluminium; Cap: ABS resin; Optical Cover: Polarized Red PMMA										
Connector Cables	3 meters, 3 core , oil Resistant PVC, bending radius -R 5mm;140g										

### DIMENSIONS

unit: mm



Model No.	A	B	C	D	E	F
FAS-D-210	270	30		35	190	330
FAS-D-270	330	30	50		250	390
FAS-D-280	340	40			260	400
FAS-D-360	780	40		40	340	840
FAS-D-450	510	30			430	570
FAS-D-600	660	40		40	580	720
FAS-D-690	750	30			670	810
FAS-D-920	980	40			900	1040
FAS-D-930	990	30		910	1050	
FAS-D-1240	1300	40		1220	1300	

All dimensions are in mm

Represented by:

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www.inno.sg

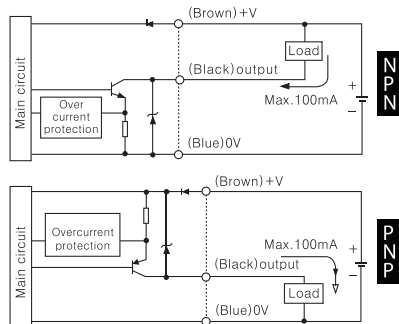
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### Connector

Pin	Cable colors	Function
①	Brown	Power Source(+V)
②	White	—
③	Blue	Power Source(0V)
④	Black	Output

M8 Connector pin ② is N.C.(Not Connected) terminal.

### OUTPUT CIRCUIT DIAGRAM



### CONNECTION DIAGRAM

