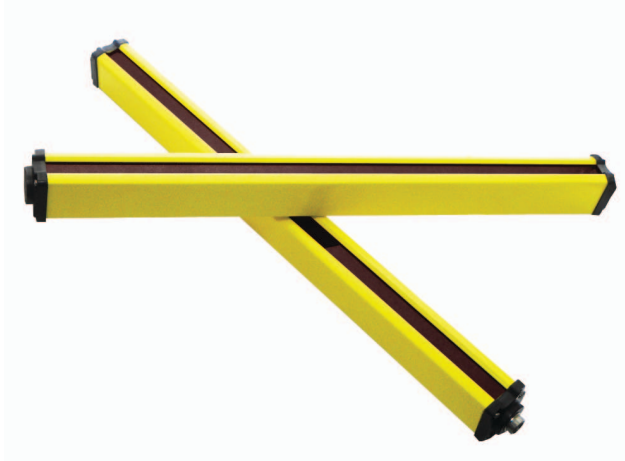


# Diffuse Area Sensor

# FAS



## SALIENT FEATURES

- ◆ 20, 30, 40, 50mm beam gap
- ◆ Dust and Vibration Resistant
- ◆ Status indication for each beam
- ◆ Upto 1240mm Protective Height

## Model Number Legend

**FAS** - □ - □ □ □

1      2      3      4

### 1. Series

FAS

### 2. Type

D:      Diffused

### 3. Protective Height

210:	210 mm	690:	690 mm
270:	270 mm	920:	920 mm
280:	280 mm	930:	930 mm
360:	360 mm	1240:	1240 mm
450:	450 mm		
600:	600 mm		

### Example:

FAS-D-270P

FAS Series - Diffused Type - 270mm protective height, PNP NO output

**NOTE:** Contact us for models not shown in catalogue.

### 5. Output

P:      PNP NO Output

N:      NPN NO Output

### #. Accessories included

Connector Cable : 1 Pair

### ◆ Interference/ Noise Proof

Unique scanning algorithm combined with a synchronised clock pulse ensures that external light disturbances both visible and infra-red do not interfere with the functioning of the light curtain. The sensor is protected against interference by external noise thus ensuring that the outputs continue to function even under noise prone environments.



### ◆ Diffuse

The light source and the receiver are housed in the same device. Diffused sensors detect objects when the light beam emitted towards the target, is reflected back to the sensor by the target.

### ◆ LED indication for each Beam

Red LED indication is provided to highlight the interruption to each beam. When any beam is blocked/ not-working the particular LED light up and output turns ON.

### ◆ Use in Vibration prone places

Optional vibration dampers are provided with the sensors enabling use of the same in places with shock or vibration like Press Shops and CNC machines.

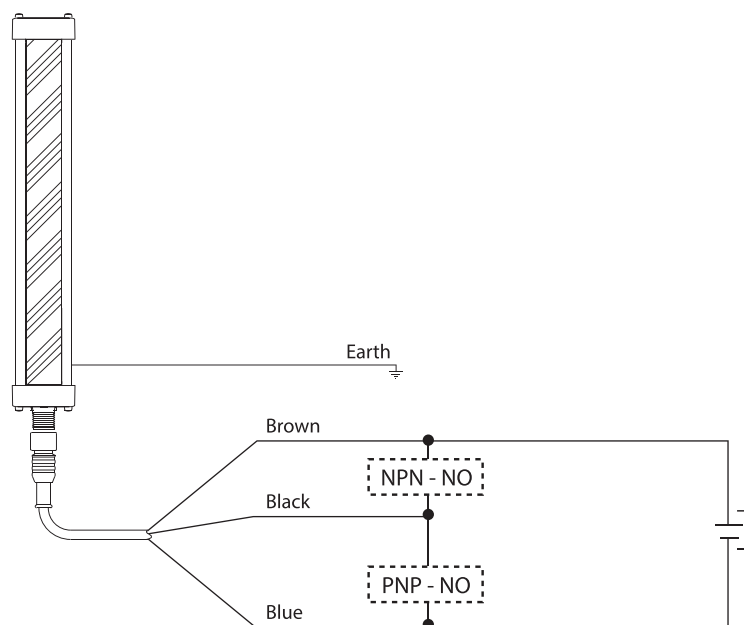
It is to be noted that the sensor when used without the damper could malfunction in these environments.

### ◆ Reduce Down-time

Heavy duty connectors are provided so that the faulty sensor can be replaced with minimum downtime. Also the transmitters & receivers are independent and can be replaced separately.

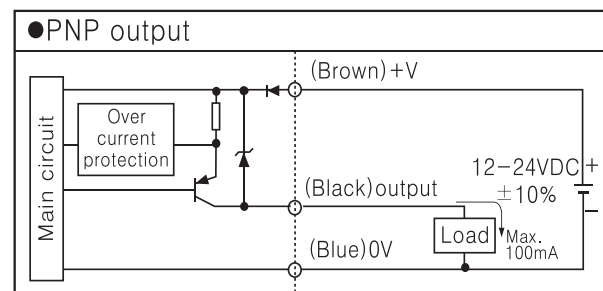
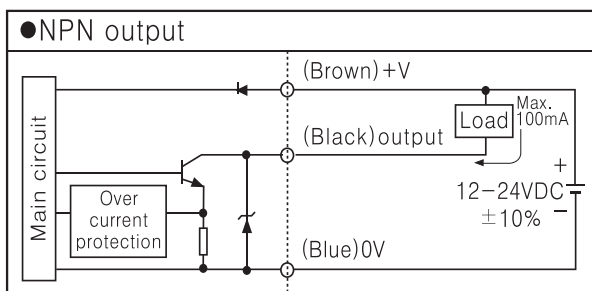
## Connections

Output:



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									

## Control Output Diagram



# Sensor Dimension Drawing

FAS

Proximity Sensors

Photoelectric Sensors

Measurement Sensors

Vision & Safety Sensors

Control

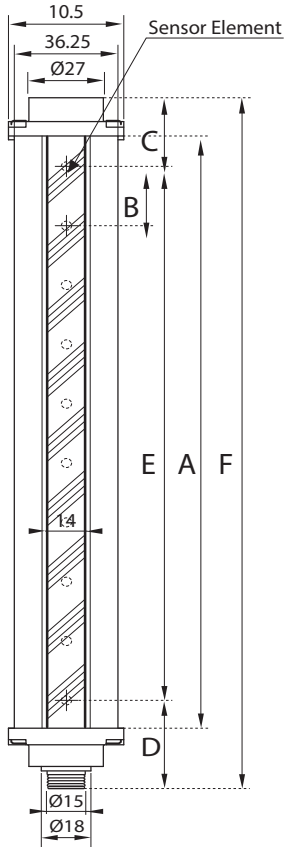
Weighing

Automation

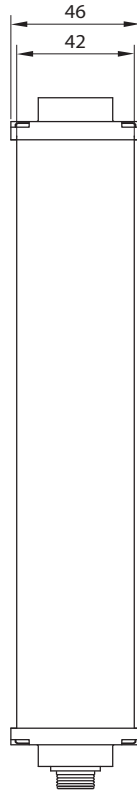
Components

All dimensions are in mm

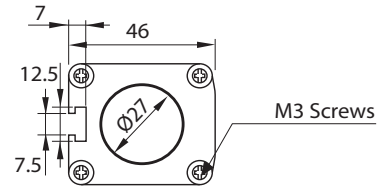
• Front



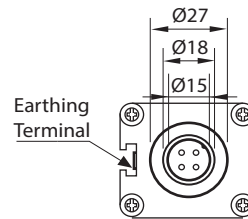
• Side



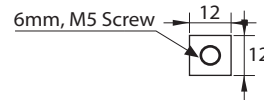
• Top



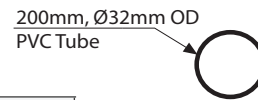
• Rear



• Mounting Nut



• Test Object



Model No.	A	B	C	D	E	F
FAS-D-210_	270	30	50	35	190	330
FAS-D-270_	330	30			250	390
FAS-D-280_	340	40			260	400
FAS-D-360_	780	40	40	35	340	840
FAS-D-450_	510	30			430	570
FAS-D-600_	660	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		

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