

Omron Electronic Components Europe (OCB-EU) offers innovative MEMS based sensor technologies for a variety of measurement and detection applications. These include mass flow measurement of gases at high and low flow rates in applications from medical equipment through HVAC and boilers to air intake filters. Omron also offers an innovative range of tilt sensors, which includes a subminiature Hall effect type ideal for portable equipment, and a pressure sensor that is capable of detecting minute changes in gas supply systems.

Omron is Europe's leading supplier of electromechanical PCB relays, and a leading supplier of micro switches, DIP switches, photomicrosensors, connectors, optical display devices, optical switches and multiplexers, MEMS sensors and components, modules and high frequency devices for wireless applications. Omron has subsidiary companies in ten major European countries.

Anglia is the largest privately owned electronic component distributor in the UK and supplies a very wide range of semiconductors, opto-electronics and interconnect products together with passive and electro-mechanical components.

Awarded the prestigious 'RoHS Trusted' Kitemark, Anglia supports OEM and EMS companies in every sector of electronics manufacturing. It aims to streamline logistics and reduce customers' transaction costs through services that include KAN-BAN, EDI, and customer-dedicated inventory culminating in accurate, on-time delivery.

Technical support spans a sampling service, telephone advice from product specialists and on-site visits from field applications engineers. An in-house design team adds expert resources, helps reduce final product costs and accelerates development times.



For further information, technical data or application advice on any of the Omron products please contact Anglia

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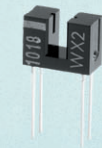
By email: omron@anglia.com

or visit the Omron section of our website at: www.anglia.com/omron

In addition to the range of Intelligent Sensors detailed in this brochure, Omron also offers one of the largest families of Photomicrosensors within the industry. Covering a wide variety of transmissive and reflective types, as well as actuator, micro displacement and multi-beam sensors, they provide a host of mounting methods that include through-hole, SMD, snap-in, solder tab and screw.



Photomicrosensors



Transmissive

Photo-transistor and Photo-IC range of transmissive type photomicrosensors with a vast range of sensing distances from 1mm to 17mm. Models include newly introduced surface mounting devices.



Reflective

Photo-transistor and Photo-IC reflective photomicrosensors with sensing distances from 1mm to 5mm.



Actuator

Actuator photomicrosensors including general purpose types, compact models and snap-in mounting models with connector.



Micro Displacement

Micro displacement sensors with easy control and ultra high resolution.



Multi-beam

Photo-IC high sensitivity multi-beam sensors with high resistivity to light interference.

For further details please contact Anglia



Intelligent Sensors

High accuracy air and gas flow sensors

D6F-01A1 / 02A1

Flow range	1LPM (D6F-01A1-110) 2LPM (D6F-02A1-110)
Compact Size	66(L) x 36(W) x 15.1(H)mm
Supply Voltage	10.8 - 26.4VDC
Analogue Output	1 to 5V
Accuracy	+/- 3%
Temp Range	-10 to +60°C
Gas Type	Air



D6F-03A3

Flow range	3LPM (D6F-03A3-000)
Ultra-Compact Size	36.6(L) x 8(W) x 16.8(H)mm
Supply Voltage	10.8 - 26.4VDC
Analogue Output	1 to 5V
Accuracy	+/- 5%
Temp Range	0 to +50°C
Gas Type	Air



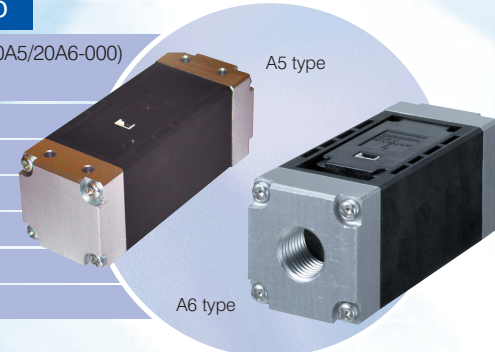
D6F-01N2 / 02L2 / 05N2

Flow Range	1LPM (D6F-01N2-000), 2LPM (D6F-02L2-000), 5LPM (D6F-05N2-000)
Compact Size	62(L) x 21.6(W) x 22.1(H)mm
Supply Voltage	10.8 - 26.4VDC
Analogue Output	1 to 5V
Accuracy	+/- 3%
Temp Range	-10 to +60°C
Gas Type	N2 type LNG (Liquified Natural Gas) L2 type LPG (Liquified Petroleum Gas)



D6F-10A5 / 20A5 / 50A5 -10A6 / 20A6 / 50A6

Flow Range	10LPM (D6F-10A5/10A6-000), 20LPM (D6F-20A5/20A6-000) 50LPM (D6F-50A5/A6-000)
Compact Size	78(L) x 30(W) x 30(H)mm
Supply Voltage	10.8 - 26.4VDC
Analogue Output	1 to 5V
Accuracy	+/- 3%
Temp Range	-10 to +60°C
Gas Type	Air



Precision air flow detection sensors

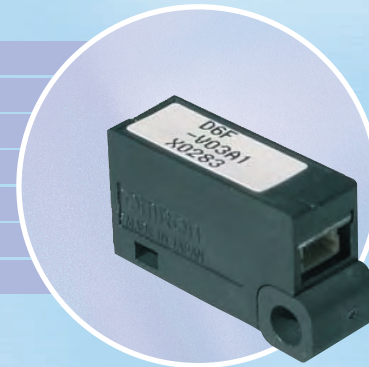
D6F-W01A1 / W04A1

Flow range	1m/s (D6F-W01A1) 4m/s (D6F-W04A1)
Ultra Compact Size	39(L) x 20(W) x 9(H)mm
Supply Voltage	10.8 - 26.4VDC
Analogue Output	1 to 5V
Accuracy	+/- 5%
Temp Range	-10 to +60°C
Gas Type	Air



D6F-V03A1

Flow range	3m/s (D6F-V03A1)
Ultra Compact Size	24(L) x 14(W) x 8(H)mm
Supply Voltage	3.15 - 3.45VDC
Analogue Output	0.5 to 2V
Accuracy	+/- 10%
Temp Range	-10 to +60°C
Gas Type	Air



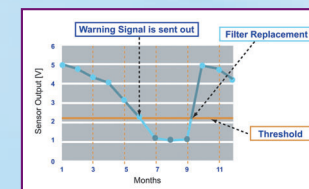
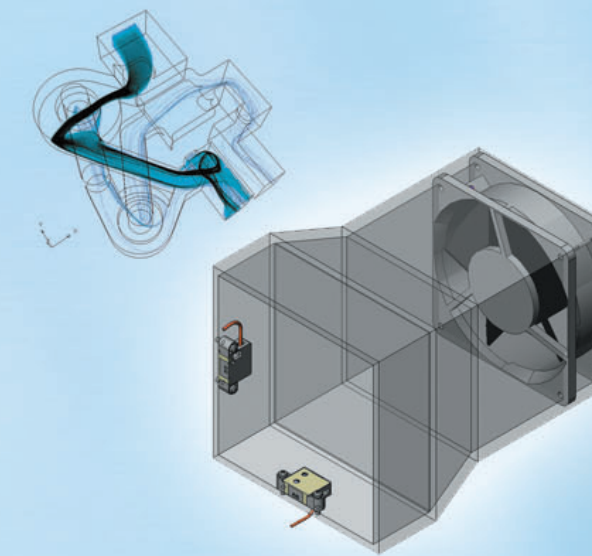
Application

Clogged Filter Detection

The sensor detects the pressure drop over the filter. The moment this drop exceeds a given threshold, a warning signal indicating the need for filter replacement is sent out.

The D6F-W/V with a patented Dust Segregation System (DSS) offers an innovative solution to the age old problem of maintaining 'as new' output characteristics even in moderately dusty HVAC applications.

The housing design is based on a centrifugal principle to segregate particulates from the air. Most particulates cannot pass through the sensing area and are discharged through the exhaust route. As a result of the numerical analysis, the efficiency of the Dust Segregation System separates up to 99.5% of dry particulates. The D6F-W01A1 and D6F-W04A1 airflow sensors can measure air velocity from 0-1m/s and 0-4m/s with an accuracy of +/-5% full scale deflection. The low cost D6F-V03A1 measures air velocity up to 3m/s.



Subminiature PCB Mounting Sensor

D6BN-1

- Detects the inclination of the Sensor within an activated angle range between 40° and 80° (left and right) and a reset angle range between 50° and 10°
- Subminiature SMD PCB mounting model
- Highly reliable solid-state type by Hall IC
- Very low current consumption with a maximum of 10μA



Mechanical Tilt Sensor

D7E-3

- Pure mechanical tilt sensor
- Activated angle range between 50° and 80°
- Tilt in any direction through 360°
- Sealed enclosure
- Output capacity from 0.1mA at 5VDC to 100mA at 30VDC



Pressure Sensor

D8M-D82

- Digital output
- High noise immunity
- Pressure range 0 to 4.9kPa
- Current consumption 100mA ±5% at output 3VDC
- Operating temperature range -10°C to 60°C
- Protection structure IP40

