



## DPK4 / DPK4I

Duct probe units for MX/ZX fire detectors

### Features:

- Built-in MX/ZX detector base
  - DPK4 - with built-in MX/ZX detector base 5" – 5B
  - DPK4I - with built-in MX/ZX detector base 5" – 5BI
- DPK4 is suitable for addressable and conventional systems
- DPK4I with built-in line isolator for use with MX Technology systems
- Suitable for air velocities from 1 m/s to 20 m/s
- Can be used in combination with a wide range of detectors e.g. 801Ph, 813P, 601P or 601PH
- One-pipe air sampling system simplifies installation
- Range of aluminium probe tube available for air ducts up to 2700 mm
- Transparent lid allows detector to be seen
- Test hole on cover
- Sensitive flow indicator
- Simple service and maintenance
- Installer-friendly connection of cables
- Easy installation of duct probe tubes

### The DPK4 and DPK4I duct probe units

Smoke detectors are not normally mounted directly inside ducts because the airflow only allows the detector to sample air from a small section of the duct and such detectors would rapidly become dirty. Instead, ducting is protected by the use of probe units which gather air from a cross section of the duct and pass it through a smoke detector head.

For most applications, smoke or combustion products are likely to have travelled some distance ageing the smoke prior to reaching the probe unit. It is therefore normally recommended that an optical smoke detector be fitted, and this is often a requirement of Building regulations. The DPK4/DPK4I duct probe units use various standard Tyco optical smoke detectors.

The DPK4/DPK4I duct probe units have been developed to detect smoke in ventilation ducts. They offer significant benefits in terms of performance and installation. The system comprises a single duct probe tube and housing specially designed for optimum airflow through the smoke detector and suitable for use in incoming, outgoing and circulation air ducts of ventilation and conditioning systems. The duct probes can operate across a wide range of airflow speeds and are especially recommended for installations in ducts with air flow velocities between 1 m/s and 20 m/s.

Unlike more traditional duct probe units that employ an inlet and exhaust tube with sampling holes, the DPK4 unit uses a highly efficient single sampling tube that is slotted along its length. This allows the sampling tubes to be cut to the desired length whilst maintaining maximum efficiency.

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## SPECIFICATIONS

### Technical Information

A probe unit samples the air by diverting a small quantity into the probe housing. The shape of the housing then efficiently guides the air through the detector and back to the duct via the exhaust tube. On detecting smoke or combustion products, the detector goes into alarm; the detector LED indicator illuminates which can be seen through the transparent lid of the probe unit, enabling the detector in alarm to be easily located. The transparent lid allows that a detector in alarm mode can be seen without opening the duct probe unit.

### Installation

The duct probe should be installed with the air flow direction arrows corresponding to the direction of the air flow in the duct. The duct probe is position independent and can be installed on any side of the duct. We recommend that the duct probe is mounted at an equal distance from heating, cooling, or humidity devices, as flow monitors are. A distance of 3 times the duct diameter should be left before a damper, filter or change of the duct direction, and 5 times the diameter after these devices. The installation method depends on the duct type and its diameter.

### Technical Data

#### Mechanical specifications

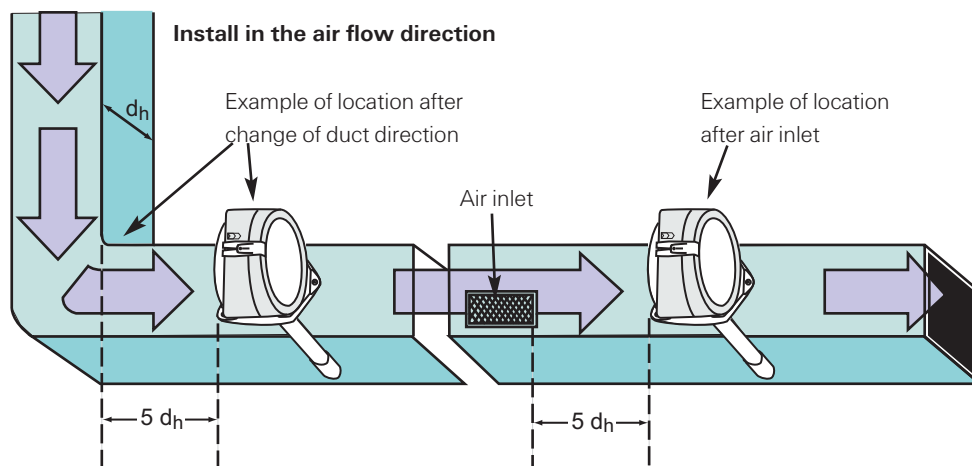
Dimensions (W x H x D)	180 x 235 x 183 mm
Cable Entry	4 x M20 Gland Entry Knock Outs
Material	ABS plastic
Colour	Grey (RAL 7001)
IP rating	IP 54
Weight (with base)	865 g

#### Environmental specifications

Permissible air speed	1 – 20 m/s
Ambient temperature	-20 to +70 °C
Humidity (max.)	up to 95 % rh (non condensing)

### Ordering Information

5 17.025.049	DPK4 - Duct Probe with MX/ZX detector base 5" - 5B
5 17.025.050	DPK4I - Duct Probe with MX/ZX detector base 5" with isolator - 5BI
5 17.025.051	DPK600 - Duct Probe Tube 600 mm
5 17.025.052	DPK1500 - Duct Probe Tube 1500 mm
5 17.025.053	DPK2800 - Duct Probe Tube 2800 mm
5 17.025.054	DPKM - Duct Probe Mounting bracket
5 17.025.055	DPKF - Filter



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