

# SnifferPipe

## Aspirating Pipe & Fittings



SnifferPipe is a comprehensive range of high quality pipe, fittings and accessories for aspirating smoke detection systems such as the HART XL High Sensitivity Smoke Detection (HSSD)<sup>TM</sup> system.

### Air Sampling

SnifferPipe draws air from the protected area through sampling holes using an aspirating fan housed in the detection unit. The pipework is arranged in various configurations according to the application. Typically a pipe network system will comprise a network of pipe complete with sampling points, which are spaced at intervals similar to that of point detection. Pipe network systems can also be arranged to monitor across Air Handling Units (AHU) or in ducts.

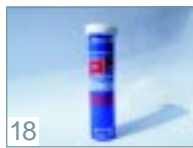
The pipework can be concealed behind suspended ceilings in order not to detract from the aesthetics of the environment it is protecting.

Three sampling techniques can be used:

- Standard pipe sampling systems (below ceiling; in ceiling or floor void)
- Capillary tube sampling (concealed; above ceiling or within cabinets)
- Return air sampling (within duct; AHU; return air grille)

Capillary tube sampling is a means of locating sampling points away from the main sampling pipe without creating complex networks. This is useful when the trunk pipe is not on the same horizontal or vertical plane as the desired sampling point. Typically, this method uses up to 1 m lengths of 10 mm (OD) flexible tubing that branches off from the trunk pipe and then penetrates a given surface. The associated flush-mounted and mini sampling points are designed to be as unobtrusive as possible.





## PIPE & FITTINGS

The sampling pipe and fittings are manufactured from red Acrylonitrile Butadiene Styrene (ABS) under a stringent quality control approved to BS 5391 Part 1:1976 and BS EN ISO 9001:1994.

The outstanding physical properties of ABS make the pipe and fittings ideal for aspirating pipework systems:

- Efficient and robust
- Smooth bore to facilitate air flow to the detector
- Lightweight and easy to install
- High resistance to chemicals and weathering
- Suitable for use over wide temperature range of -40 to +80°C

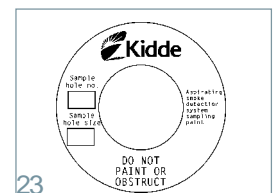
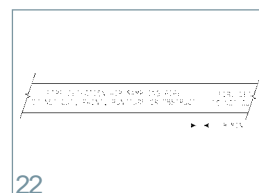
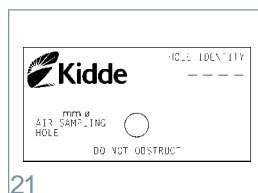
The red colour and clear markings printed along its length on opposite sides at 200mm intervals ensure the air sampling network is easily identifiable from other services. All sampling points are supplied with an identification label to prevent damage during decorating or other routine maintenance work.

The SnifferPipe range is based on pipework of a metric standard outside diameter (OD) of 25 mm and inside diameter (ID) of 21 mm. The following 25mm pipe, fittings and accessories are available from stock (32mm pipe, fittings and accessories are available on request):

Pic. No.	Description	Part Number
1	Air Sampling Pipe 25 mm 3m length 32 mm 3m length	21888 - K016 21888 - K026
2	Straight Socket 25mm	21888 - K020
3	90° Elbow 25mm	21888 - K017
4	45° Elbow 25mm	21888 - K018
5	Equal Tee Piece 25mm	21888 - K019
6	End Cap 25mm	21888 - K021
7	Union Socket 25mm	21888 - K024
8	Pipe Clip 25mm	21888 - K025
9	3/4" BSP Imperial to 25 mm Metric Adaptor*	21888 - K022
10	1" BSP imperial to 25/32 mm Metric Adaptor*	21888 - K023
11	Elutriator	53836 - K208
12	Mini Sampling Point Assembly c/w End Cap Adaptor** Mini Sampling Point Assembly c/w Remote Sample Point Adaptor**	21888 - K034 21888 - K047
13	Flush Sampling Point Assembly c/w End Cap Adaptor** Flush Sampling Point Assembly c/w Remote Sample Point Adaptor**	21888 - K035 21888 - K046
14	Capillary Tube (10 mm OD; 8 mm ID) 50 metre reel	21888 - K031
15	SnifferPipe Solvent Cement (250 ml)	21888 - K029
16	Pipe Cutters	21888 - K028
17	Wire Burn Test Box and Test Wire	21888 - K032 21888 - K033
18	13 g Smoke Pellets (6 per tube)	21888 - K030
19	Remote Sample Point Adaptor	21888 - K036
20	End Cap Adaptor	21888 - K037
21	Pipe Sampling Point Label	36215 - K326
22	Pipe Warning Label	39155 - H11
23	Mini Sampling Point Label	36215 - K235

\* Supplied as standard with HART XL Detection Unit

\*\* Includes 1 metre capillary tube



## Design, Installation & Commissioning

Aspirating smoke detectors will only work effectively when the pipe system has been designed, installed, and commissioned correctly.

SNIFF is easy to use pipe design and airflow calculation software from Kidde Fire Protection. It is Windows™ compatible and features isometric system design drawings from different angles, easy operation and clear displays.



All pipes should be airtight and permanently fixed using SnifferPipe ABS solvent cement. Solvent cement offers a simple and quick means of constructing high-integrity, leak-free joints.

Joint integrity is greatly reduced if surfaces are not properly prepared and absolutely clean.

The transport time of the air flow to the detector should be minimised to ensure the earliest possible detection of any pre-combustion particles in the air sample. To achieve this the SNIFF programme can calculate multiple pipe branches allowing the minimum amount of pipe to be used to cover an area.

To minimise flexing of the pipework (leading to possible damage to the network) it should be secured every 1.5 metres (5ft) or less.

Sampling holes appropriately sized to achieve the performance as specified and calculated by the system design, shall not be at more than 10 metre intervals for installations complying to BS5839 Part 1, along the length of the pipe.

Consideration should be given to manufacturers' recommendations and standards in relation to the number of sampling points and the distance of the sampling points from the ceiling or roof structure and forced ventilation systems.

The installer must be certified by Kidde Fire Protection or one of its distributors and should be familiar with the design considerations and the relevant standards, codes and regulatory requirements.

## Typical Applications

SnifferPipe network systems provide total protection in mission critical facilities:

When downtime must be minimised with high cost equipment:

- Clean rooms
- Computer rooms
- Telecommunications
- Broadcast facilities
- Server farms and Telco Hotels

Where smoke is difficult to detect in areas with high ceilings or high air flow:

- Atria
- Warehouses
- Cold storage
- Indoor stadiums

In extreme environments that pose a problem to conventional smoke detection:

- Power stations
- Mines
- Offshore

Where appearances are important and preservation of priceless objects is a priority:

- Modern offices
- Heritage buildings
- Cathedrals
- Museums
- Libraries

When extra time is necessary to affect safe and orderly evacuation:

- Airports
- Underground railway systems
- Hospitals
- Theatres
- Cinemas

**SnifferPipe Fast-Track Ordering & Delivery Service**  
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