



Pack Contents

2x Heat Pump Ball Valve 28mm
2x Ball Valve Insulation
2x Zero Anti-freeze Valve 28mm
2x Anti-freeze Insulation
2x Anti-vacuum Guard
1x Heat Pump Hose with Elbow 500mm (Pack of 2)
2x 28mm x 1" Adaptor
2x 1 1/4" Female x 1" Male Adaptor
1x Bond & Seal

Product

INHPKIT1 - 28mm Heat Pump Installer Pack

Technical Specification

Zero Anti-Freeze Valve

Max Inlet Pressure (static):	10 Bar
Medium:	Water
Sensitivity:	$\pm 1^{\circ}\text{C}$
Opening Temperature:	3°C
Closing Temperature:	4°C
Working Temperature Range:	0 to 80°C
Ambient Temperature Range:	-30 to 60°C
Max Discharge Flow Rate @ 3 Bar:	1.5 L/H ZERO1SW
Kv:	$64\text{m}^3/\text{h}$

Hose

Max Inlet Pressure (static):	10 Bar
Max Inlet Temperature:	90°C
Medium:	Water, Water+Glycol up to 50%

Insulation

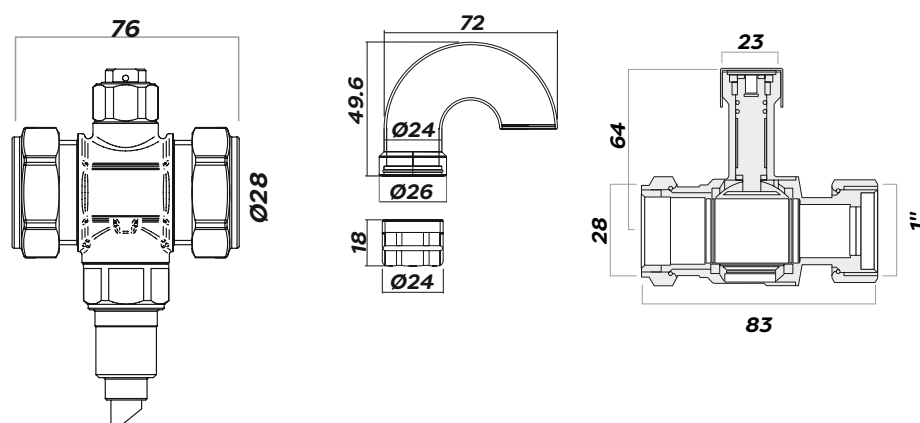
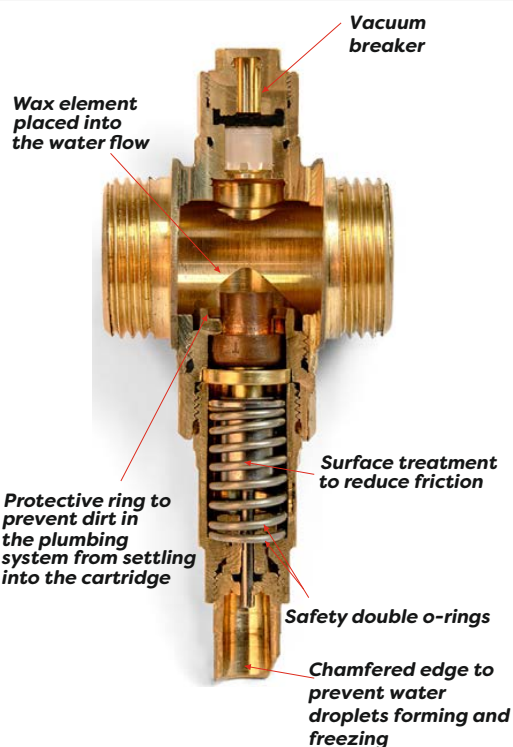
Wall Thickness:	19mm
Material:	Treated Closed Cell Polyethylene
Temperature Range:	-45°C to 105°C
Thermal Conductivity:	$\lambda = 0.034 \text{ W/mk at } 0^{\circ}\text{C}$

Ball Valve

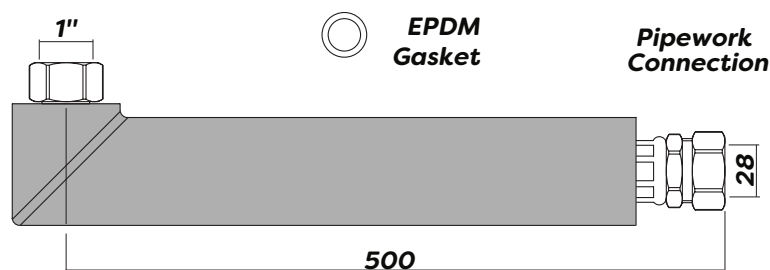
Max Inlet Pressure (static):	25 Bar
Max Inlet Temperature:	-10 to 90°C
KV:	$66\text{m}^3/\text{h}$



The insulation is strictly for external use only!



Heat Pump Connection



Zero Anti-Freeze

The patented Inta Zero Anti-Freeze Valves have been specifically designed to quickly and accurately react to the water temperature in the heat pump circuit and do not need the influence of the ambient temperature to operate.

Building regulations Part L states that all external fittings on an Air Source Heat Pump System must be fully insulated to reduce heat loss and maintain system efficiency. Inta Zero Anti-Freeze Valves will still maintain correct operation and discharge the water at the same temperature even when a system is correctly insulated.

The Inta Zero Anti-Freeze valves have been Independently tested using a controlled Ambient Temperature between -1°C to 1°C and starting water temperature 10°C to demonstrate the possibility of insulating the Inta

Zero Valve without affecting the performance: Without Insulation

Water Discharge Temperature = 2.49°C

Time taken to begin discharge = 1 hour 4mins

With Insulation

Water Discharge Temperature = 2.03°C

Time taken to begin discharge = 4hour 3mins

Warning!

If the Inta Zero valves are insulated, then due care must be taken to ensure that all external pipework and fittings are fully and appropriately insulated and sealed. Failure to do so could prevent the proper operation of the Zero valve resulting in colder areas of a system being damaged by freezing. The Anti-vacuum valve must be kept clear at all times, Intatec recommend using the ZEROGUARD anti-vacuum cover (inspected on annual service).

Heat Pump Hose

Building regulations Part L states that all external pipework on an Air Source Heat Pump System must be fully insulated to reduce heat loss and maintain system efficiency.

In systems where every watt counts, Inta's Pre-insulated hoses have been designed for external use to prevent heat losses and to help maintain the COP and SCOP of the system, preventing losses of energy, contributing to an efficient system and preventing higher costs to run than expected.

The waterproof finish prevents the insulation from absorbing water and moisture that could result in an unintended outcome of the insulation becoming a conductor for heat loss.

It's essential that all joints are bonded and sealed correctly to prevent any capillary traction occurring. The surface finish must be re-treated, the joints and seals inspected and resealed if necessary using Primary Pro Bond / Seal during an annual inspection to maintain the product performance.

Additional Information

- Pre-insulated to reduce system heat loss preserving system efficiency
- Designed to connect directly to the heat pump
- Available with a straight or bent heat pump connection to suit a variety of units and installations
- Supplied in pairs to suit the flow and return of your heat pump
- Additional piece of insulation provided to insulate the connections
- Full range of ASHP control valves including magnetic filters, anti-freeze valves, balancing valves etc available.
- The Primary Pro insulation is waterproof and UV resistant making it suitable for all weather conditions. Must be inspected annually and retreated, with joints resealed if necessary using Primary Pro Bond & Seal

Maximising Heat Pump Efficiency

Insulating and sealing the external pipework and any external fittings is of paramount importance, not only for the efficiency of the heat pump and system but also to protect the external fittings from the elements.

This is why we have partnered up with Primary Pro, heat pump and insulation experts.

We use their insulation to protect our valves and keep your system running as efficiently as possible.

For more information on how to correctly install and seal your insulation, please scan the QR for the Primary Pro Youtube channel:

