

inta

EVERYTHING HEAT PUMP



Made for the
installer

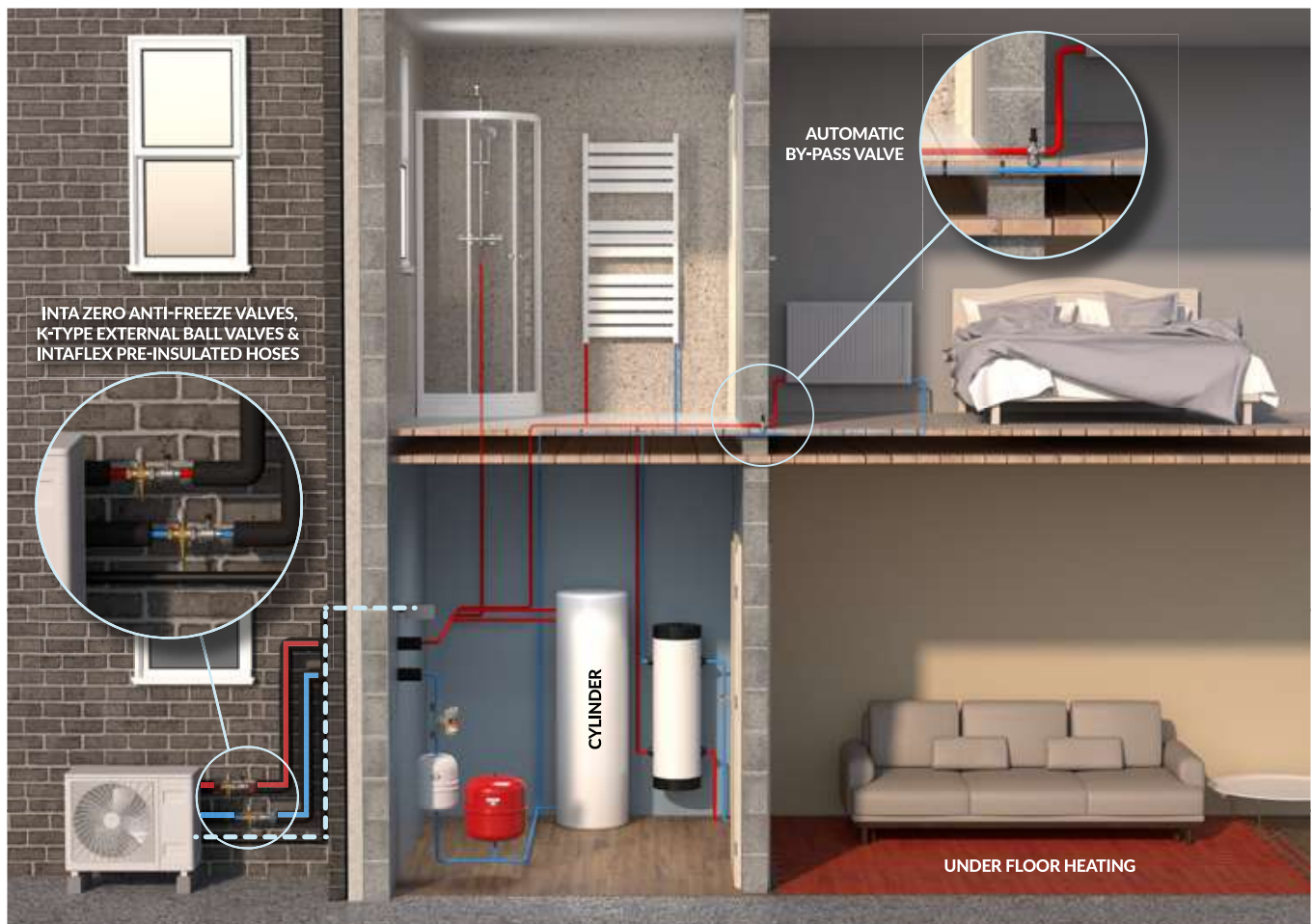
EVERYTHING HEAT PUMP

Inta heat pump system components have been specifically made with installers in mind.

Designed to be easy to install, our products are made with the highest quality materials and will keep your customers heat pump systems working effectively and efficiently.

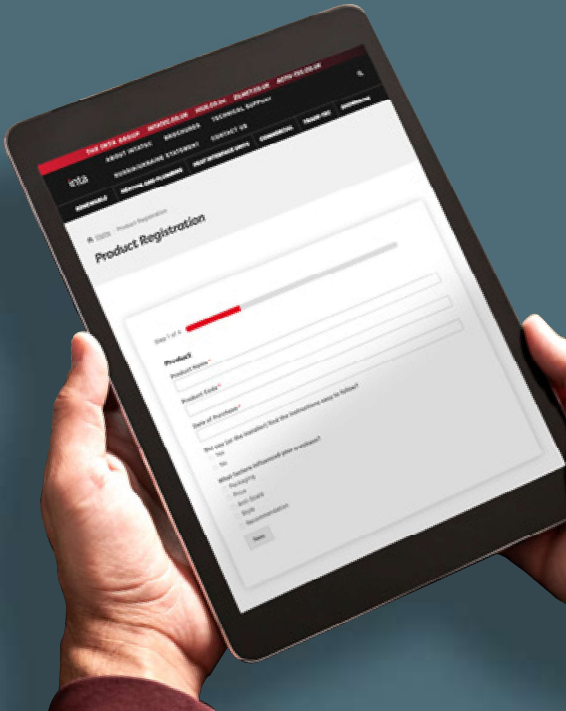
Intatec is a major supplier to companies that expect to receive quality products and exceptional service.

Our commitment is to manufacture products that can make a difference in efficiency and cost reduction, both now and in the future.





Scan the code or visit
intatec.co.uk



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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, insulation experts.

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



Scan for more information

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

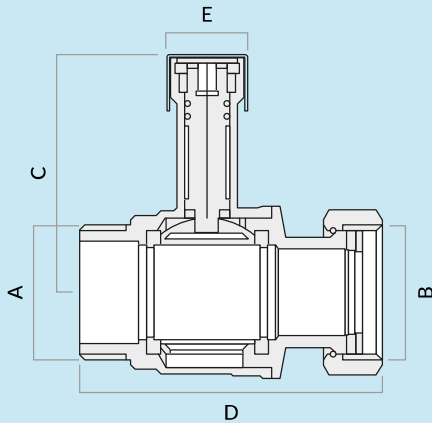


KTYPE

Extended External Ball Valves

- Solid brass construction
- Pressure rating of PN25
- Working temperature range of -10 to 90°C
- ISO228 threads
- Variety of connections to suit all installations
- Fixed key type adjuster allows the ball valve to be fully insulated without effecting its operation
- Supplied with an adjustment tool
- Supplied with a dust cover to protect the adjuster

DIMENSIONS



	A	B	C	D	E
HPBV11	1"	1"	63.8	77.5	23
HPBV114	1"	1 1/4"	63.8	77.5	23
HPBV114X2	1 1/4"	1 1/4"	72.3	95.5	23

CODE	DESCRIPTION
HPBV11	1" Female swivel x 1" male flat face extended key type ball valve
HPBV114	1 1/4" Female swivel x 1" male flat face extended key type ball valve
HPBV114X2	1 1/4" Female swivel x 1 1/4" male flat face extended key type ball valve



TECHNICAL SPECIFICATION

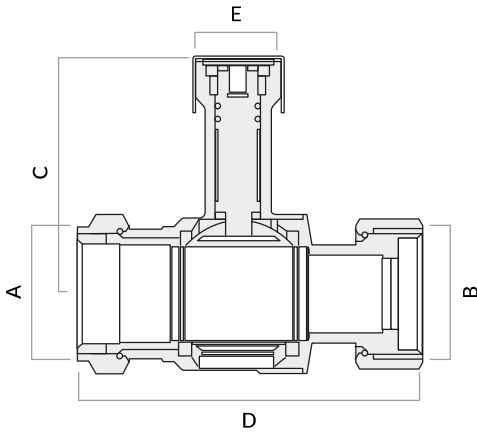
Maximum Inlet Pressure (static):	25 Bar
Working Temperature:	-10 to 90°C
Temperature Range:	-20 to 120°C
Thread Standard:	ISO228
KV-value:	HPBV11 (66m ³ /h) HPBV114 (66m ³ /h) HPBV114X2 (80m ³ /h)

HB Ball Valves are supplied with an adjustment key.



DATA SHEETS, INSTALLATION
INSTRUCTIONS & MAINTENANCE

DIMENSIONS



	A	B	C	D	E
HPBV28	28mm	1"	64	83	23
HPBV35	35mm	1 1/4"	68.8	101.6	23

CODE	DESCRIPTION
HPBV28	1" Female swivel x 28mm extended key type ball valve
HPBV35	1 1/4" Female swivel x 35mm extended key type ball valve



TECHNICAL SPECIFICATION

Working Temperature: -10 to 90°C
 Maximum Inlet Pressure (static): 25 Bar
 Thread Standard: ISO228
 KV-value: HPBV28 (66m³/h)
 HPBV35 (80m³/h)

HB Ball Valves are supplied with an adjustment key.



DATA SHEETS, INSTALLATION
 INSTRUCTIONS & MAINTENANCE

*Supplied with a dust cover
 to protect the adjuster*

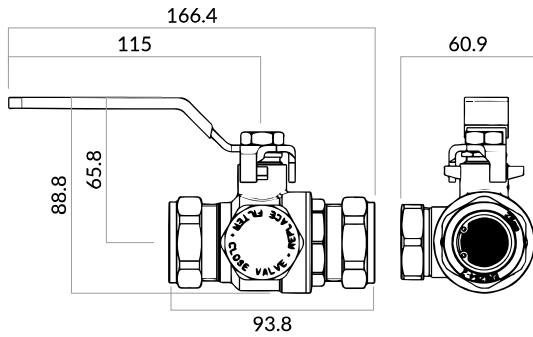


Ball Valves

Ball Valves With Filter

CODE	DESCRIPTION
BVF28	28mm Ball valve with 500 micron filter cartridge
BVF35	35mm Ball valve with 500 micron filter cartridge

DIMENSIONS



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE



TECHNICAL SPECIFICATION

Maximum Inlet Pressure (static):	25 Bar
Working Temperature:	-10 to 90°C
Temperature Range:	-20 to 120°C
Filter Mesh Size:	500um
Solid Brass Construction	
Lever Handle Ball Valve	
KV-value:	BVF28 (66m³/h) BVF35 (80m³/h)

Accessories

CODE	DESCRIPTION
INSUL28BALLVALVE	Insulation for 28mm / 1" ball valve
INSUL35BALLVALVE	Insulation for 35mm / 1 1/4" ball valve
INSULBOND	290ml Bond and seal
HPADAP114X1	1 1/4" female x 1" male heat pump adaptor (pair) inc washers
TRBVKEY	Adjustment tool for HP ball valves





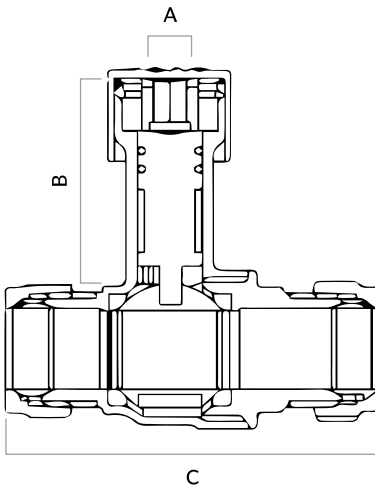
Extended Ball Valves



CODE	DESCRIPTION	BOX QTY
TR15KBV	15mm Extended ball valve K type	8
TR22KBV	22mm Extended ball valve K type	5
TR28KBV	28mm Extended ball valve K type	5
TR35KBV	35mm Extended ball valve K type	3
TRBVKEY	Key for extended ball valves	1

Note: Supplied with red & blue covers to suit installation
Adjustment tool sold separately.

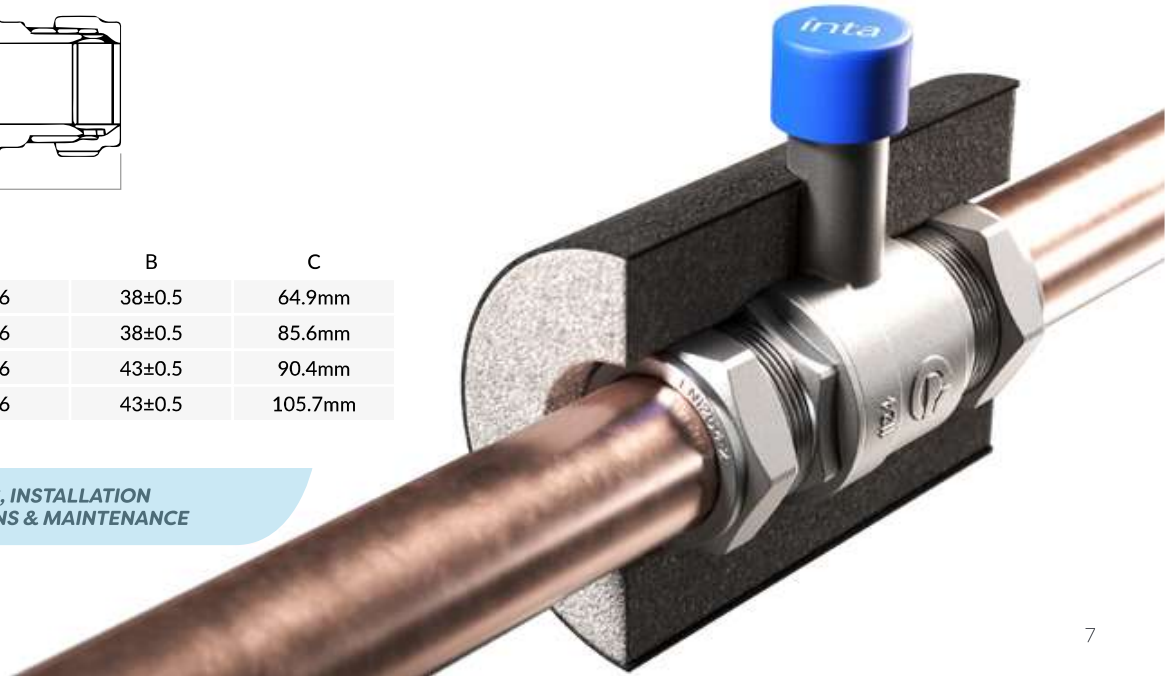
DIMENSIONS



SIZE	A	B	C
15mm	SW6	38±0.5	64.9mm
22mm	SW6	38±0.5	85.6mm
28mm	SW6	43±0.5	90.4mm
35mm	SW6	43±0.5	105.7mm

TECHNICAL SPECIFICATION

Maximum Inlet Temperature: 110°C
 Max Operating Pressure: 25 Bar
 KV-value: TR15KBV (15m³/h)
 TR22KBV (37m³/h)
 TR28KBV (66m³/h)
 TR35KBV (80m³/h)



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE



The most reliable anti-freeze valve

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.

Preventing the influence of ambient temperatures

The Inta Zero has been designed and engineered to avoid negative influences from low ambient temperatures by directly positioning the element in the system water flow, permitting accurate system discharge only when it is truly needed.

Protection from system debris

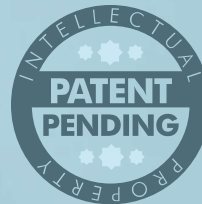
A protective ring has been included in the construction to prevent system debris from clogging the operation of the valve.

Operating when needed

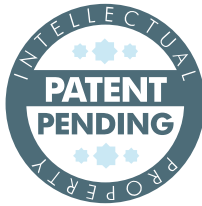
Double O-rings and reduced surface friction treatment on the operating member also ensure correct operation and reliability even after years of non-movement.



SUITABLE FOR USE WITH HIGH WATER TEMPERATURES GENERATED BY R290 REFRIGERANT HEAT PUMPS



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

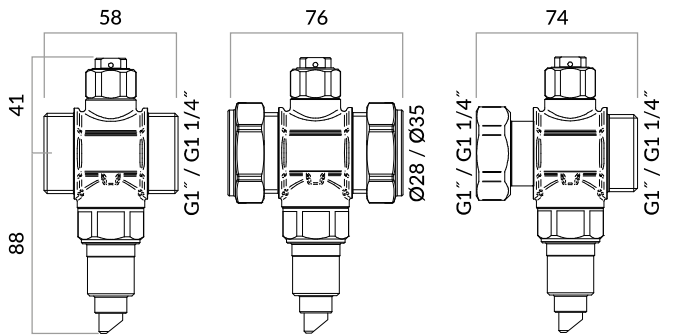


Intra Zero anti-freeze valves

CODE	DESCRIPTION
ZERO28	Intra Zero - Anti-freeze valve 28mm
ZERO28ZG	Intra Zero - Anti-freeze valve 28mm with zero guard
AFCOMPACT	Intra Zero - Anti-freeze 28mm professional installer pack
ZERO35	Intra Zero - Anti-freeze valve 35mm
ZERO35ZG	Intra Zero - Anti-freeze valve 35mm with zero guard
AFCOMPACT35	Intra Zero - Anti-freeze 35mm professional installer pack
ZERO001	Intra Zero - Anti-freeze valve 1" male
ZERO001ZG	Intra Zero - Anti-freeze valve 1" male with zero guard
AFCOMPACT1	Intra Zero - Anti-freeze 1" professional installer pack
ZERO114	Intra Zero - Anti-freeze valve 1 1/4" male
ZERO114ZG	Intra Zero - Anti-freeze valve 1 1/4" male with zero guard
AFCOMPACT114	Intra Zero - Anti-freeze 1 1/4" professional installer pack
ZERO1SW	Intra Zero - Anti-freeze valve 1" male x 1" female swivel
ZERO1SWZG	Intra Zero - Anti-freeze valve 1" male x 1" female swivel with zero guard
AFCOMPACTSW	Intra Zero - Anti-freeze 1" swivel professional installer pack
ZERO14SW	Intra Zero - Anti-freeze valve 1 1/4" male x 1 1/4" female swivel
ZERO14SWZG	Intra Zero - Anti-freeze valve 1 1/4" male x 1 1/4" female swivel with zero guard
AFCOMPACT-SW35	Intra Zero - Anti-freeze 1 1/4" swivel professional installer pack
ZEROGUARD	Anti-freeze valve guard

Professional installer packs contain:
2 x Anti-freeze valves, 2 x Insulation, 2 x ZEROGUARD and 1x tube of Bond & Seal.

DIMENSIONS



ZERO001 - ZERO114

ZERO28 - ZERO35

ZERO1SW - ZERO14SW

TECHNICAL SPECIFICATION

Maximum Inlet Pressure (Static):	10 Bar
Medium:	Water
Sensitivity:	+/-1°C
Opening Temperature:	3°C
Closing Temperature:	4°C
Working Temperature Range:	0 to 80°C
Ambient Temperature Range:	-30 to 60°C
Maximum Discharge Flow Rate at 3 Bar:	1.5 L/H
Kv:	ZERO001 (55m³/h) ZERO114 (70m³/h) ZERO28 (64m³/h) ZERO35 (70m³/h) ZERO1SW (33m³/h) ZERO14SW (52m³/h)



BUILDING REGULATIONS PART L COMPLIANCE

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

FULLY INSULATED

The Intra Zero's thermostatic element sits directly in the system's water flow, allowing it to accurately react to the temperature of the system, regardless of ambient temperature. This means the Intra Zero can be fully insulated to help maintain the COP and SCOP of your system without affecting the operation.

Building Regulations Part L Compliant heat pump hose insulation

Building regulations Part L states that all external pipework on an air source heat pump system should be fully insulated to reduce heat loss and maintain system efficiency.

Where every watt counts

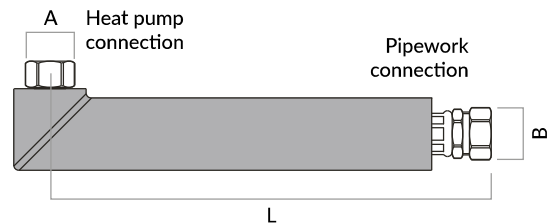
In systems where every watt counts, Inta's pre-insulated hoses have been designed for external use to prevent heat losses and to help maintain the COP and SCOP of the system, preventing losses of energy, contributing to an efficient system and preventing higher costs to run than expected.



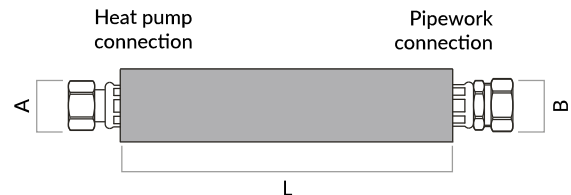
Heat pump hoses product range

CODE	DESCRIPTION
HPHOSE300	2 pack 300mm Primary Pro pre-insulated hoses 1" female swivel x 28mm
HPHOSE300B	2 pack 300mm Primary Pro pre-insulated hoses 1" female swivel elbow x 28mm
HPHOSE500	2 Pack 500mm Primary Pro pre-insulated hoses 1" female swivel x 28mm
HPHOSE500B	2 Pack 500mm Primary Pro pre-insulated hoses 1" female swivel elbow x 28mm
HPHOSE50028B	2 Pack 500mm Primary Pro pre-insulated hoses 1 1/4" female swivel elbow x 28mm
HPHOSE50035	2 Pack 500mm Primary Pro pre-insulated hoses 1 1/4" female swivel x 35mm
HPHOSE50035B	2 Pack 500mm Primary Pro pre-insulated hoses 1 1/4" female swivel elbow x 35mm
HPHOSE750	2 Pack 750mm Primary Pro pre-insulated hoses 1" female swivel x 28mm
HPHOSE750B	2 Pack 750mm Primary Pro pre-insulated hoses 1" female swivel elbow x 28mm
HPHOSE75035	2 pack 750mm Primary Pro pre-insulated hoses 1 1/4" female swivel x 35mm
HPHOSE75035B	2 pack 750mm Primary Pro pre-insulated hoses 1 1/4" female swivel elbow x 35mm

DIMENSIONS



CODE	A	B	L
HPHOSE300B	1"	28mm	300mm
HPHOSE500B	1"	28mm	500mm
HPHOSE50028B	1 1/4"	28mm	500mm
HPHOSE50035B	1 1/4"	35mm	500mm
HPHOSE750B	1"	28mm	750mm
HPHOSE75035B	1 1/4"	35mm	750mm



CODE	A	B	L
HPHOSE300	1"	28mm	300mm
HPHOSE500	1"	28mm	500mm
HPHOSE50035	1 1/4"	35mm	500mm
HPHOSE750	1 1/4"	35mm	500mm
HPHOSE75035	1 1/4"	35mm	750mm

TECHNICAL SPECIFICATION

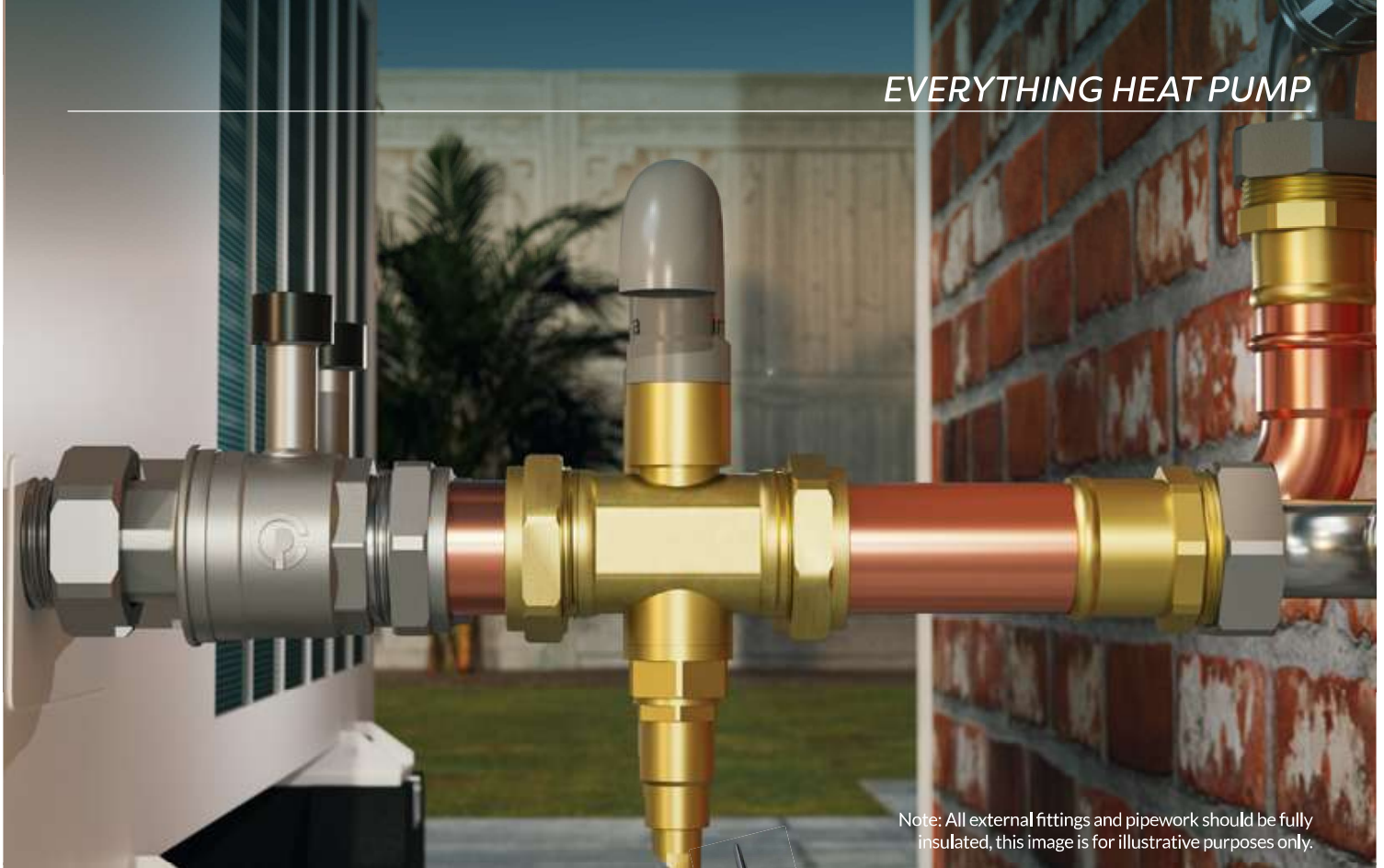
HOSE

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

INSULATION

Wall Thickness: 19mm +/-3mm
 Material: Treated Closed Cell Polyethylene
 Temperature Range: -45°C to 105°C
 Thermal Conductivity: $\lambda = 0.034 \text{ W/mk at } 0^\circ\text{C}$
 Water Vapour Diffusion Resistance: $\mu \geq 39,300$

THE INSULATION IS STRICTLY FOR EXTERNAL USE ONLY!



Note: All external fittings and pipework should be fully insulated, this image is for illustrative purposes only.

The water-resistant finish prevents the insulation from absorbing water and moisture which 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 heat loss from 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.

- Pre-insulated to reduce system heat loss, preserving system efficiency.
- Designed to connect directly to the heat pump.
- Available with a straight or angled heat pump connection to suit a variety of units and installations.
- Supplied in pairs to suit the flow and return of your heat pump.
- An additional piece of insulation provided to insulate the connections.
- The Primary Pro insulation is water 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 and Seal.
- Suitable for external use only



BOND & SEAL

Primary Pro developed a hybrid polymer sealant that professionally bonds and seals insulation.

Primary Pro Bond & Seal

CODE	DESCRIPTION
INSULBOND	290ml Bond & Seal



Supplied pre-insulated with Primary Pro's water and UV resistant insulation



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE



Create the ultimate Hybrid Heating System

Create an efficient hybrid system for your customers, without needing to replace the full heating system.

Inta Hydra is a new hybrid solution for homes which currently have a working combi boiler installed. You can install an energy-efficient heat pump without removing your existing combi boiler and without adding a hot water storage tank. Current hybrid system methods can prove to be too expensive and require too much space.

When an air source heat pump cannot provide heat, the Inta Hydra allows the original combi boiler to operate, providing constant heating, even during the coolest temperatures.

When the heating demand becomes greater than the heat pump can meet, the Hydra's programmable control monitor will, after a series of timed-out delays, revert to using the combi boiler for heating the home.

It only does this when the heat pump is not delivering enough heat, and it doesn't go back to the combi boiler just because it's cold outside.

The electronic controller allows the installer to set the operation to match the operating COP (coefficient of performance) with 4 profiles:

- Profile 1**
 The factory default, to BS EN 14511 return temperature of 40°C
- Profile 2**
 For low COP ASHP operation
- Profile 3**
 For high COP ASHP operation
- Profile 4**
 Allows a full 24-hour day on gas boiler room heating when demand is high, more suitable for older less well insulated properties

Cost Effective

Add to an existing heating system, rather than replacing a functioning boiler.

Smart Hybrid Control

Switches from ASHP to boiler to maintain heating supply only when necessary.

Requires little space

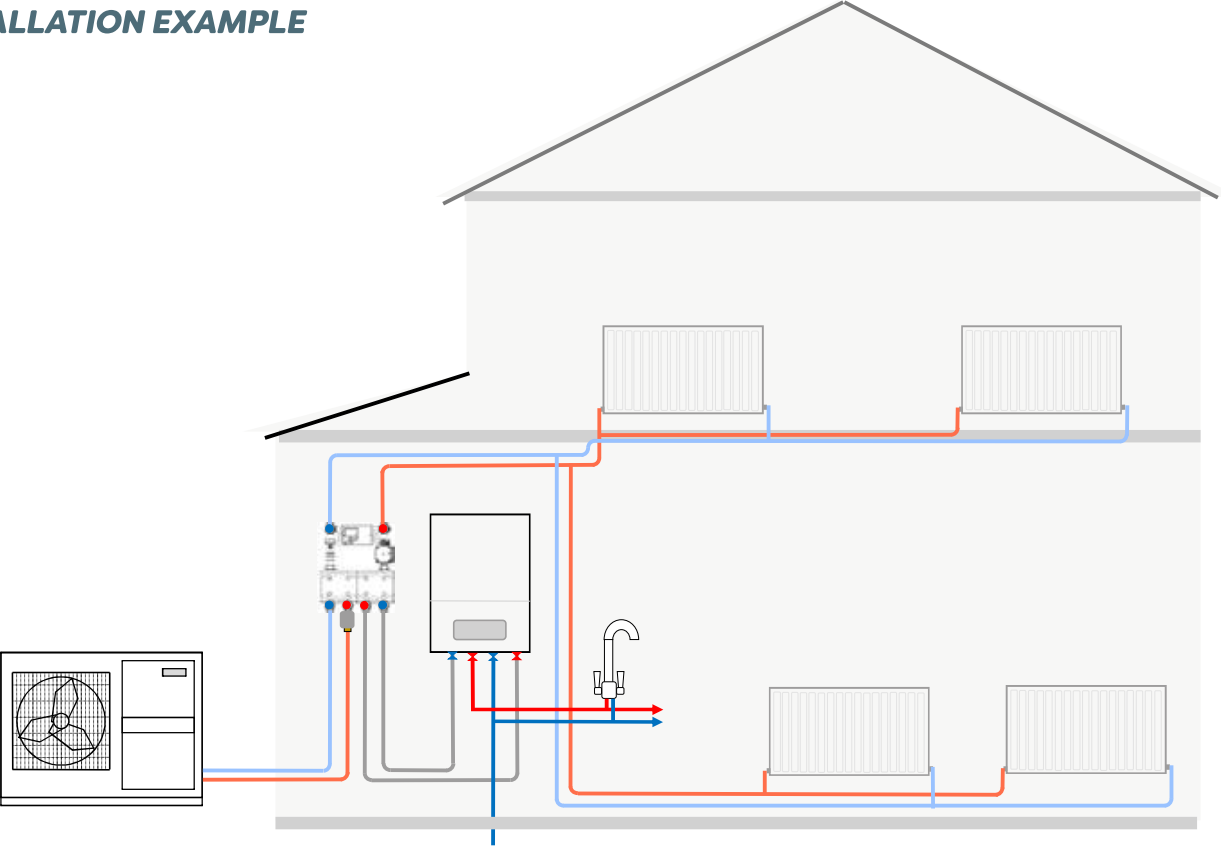
At just 50 x 50 centimetres, it can be easily concealed within a small kitchen unit.



Inta Hydra Hybrid Control Unit

CODE	DESCRIPTION
HCU0100-A	HYDRA control unit assembly. Electronic controller, pump, actuated ball valve assembled on upper and lower diverting manifolds with 1 x PT1000 sensor for T1 sensing only. Isolation valves on all connections
HCU0100-U	HYDRA control unit assembly. Electronic controller, pump, actuated ball valve assembled on upper and lower diverting manifolds with 1 x PT1000 sensor for T1 sensing only. Isolation valves on all connection. Heating connections flow and return downwards
HCUTF300	PT1000 temperature sensor
HY-AC2WH	Cover - white powder coat finish encasement to conceal the Hydra control unit assembly

INSTALLATION EXAMPLE





35mm Magnetic air source heat pump filter with 28mm reducing sets

The new IntaKlean HP XL features a more efficient direct filtration design with higher flow rates, built-in isolation and greater flexibility for the installer.

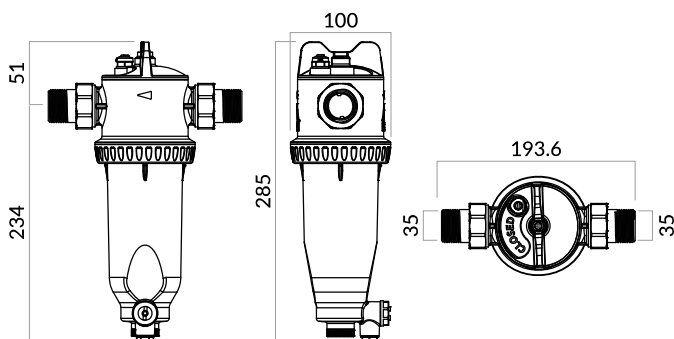
The direct filter forces the fluid across the mesh of the filter before entering the filter chamber. In this chamber, the mesh cartridge and strong neodymium magnet help to capture and breakdown the magnetite and non-ferrous debris from the system.

The gravitational force pulls the non-ferrous debris to the base of the pot, allowing it to be easily drained while any air passing through the filter floats to the top, where the manual air vent can purge it from the system.

- Actively filters magnetite and non-ferrous system debris
- Direct filter forces fluid through the mesh cartridge before entering the filter chamber to catch as much system debris as possible
- Supplied with 28mm reducing set
- Fully removable magnet
- Low profile drain valve
- Manual air-vent
- 800 Micron mesh filter
- Excellent hydraulic properties
- Extends the lifespan of heat pumps
- Fights corrosion
- Ensures system efficiency
- Complete with integrated shut-off device and discharge ball cock



DIMENSIONS



IntaKlean HP magnetic heat pump filter with 28mm reducing sets

CODE	DESCRIPTION
IK35MP1	IntaKlean 35mm heat pump filter with 28mm reducing sets
IK35INSU	Intaklean 35mm insulation jacket for IK35MP1 filter

TECHNICAL SPECIFICATION

Maximum Temperature (One Hour Max):	90°C
Operating Temperature:	0 ÷ +70°C
Maximum Operating Pressure:	6 Bar
Maximum Pressure During Maintenance:	3 Bar
Degree of Filtration:	800 µm
Compatible Fluid:	Water, Water + Glycol
Kv (35mm Only):	17.3 m³/h



28mm Magnetic air source heat pump filter

The IntaKlean HP Magnetic air source heat pump filter, featuring Inta's unique direct multi-layered non-ferrous fine filter.

This is the ideal solution to prevent costly and unnecessary system breakdowns caused by both magnetic and non-ferrous particulates in air source heat pump systems.

As well as separating magnetic debris and trapped air in circulating system fluid, IntaKlean HP also includes a completely unique direct filter which contains a multi-layered stainless steel 300-micron fine gauze.

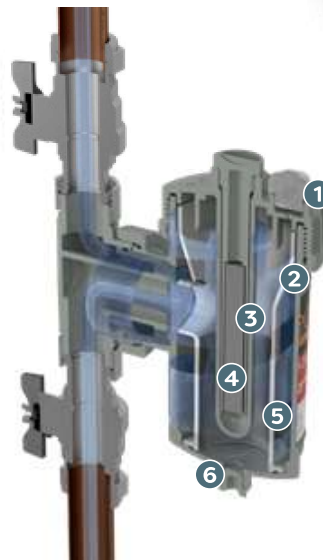
The system debris is forced directly into the filter, breaking down the debris, which then precipitates to the base of the pot.

The remaining magnetic debris is drawn to the centre of the filter and captured by 11,000-gauss rare earth neodymium magnet.

- Actively filters magnetite and non-ferrous system debris
- Unique direct non-ferrous system filter forces system debris directly into the filter core to capture as much system debris as possible
- Multi-layered filter incorporating a 300-micron fine particle filter and a 800-micron mesh filter
- Low-profile drain valve
- Fully removable 11,000 gauss magnet - service the system live
- 360° rotation for ease of servicing
- Manual air vent

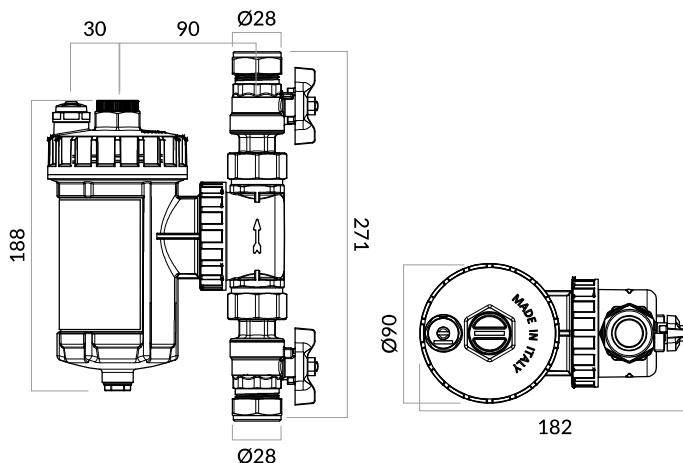


DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE



- 1 Manual air vent
- 2 Filtering cartridge
- 3 Protection conduit for magnet cleaning
- 4 Neodymium magnet
- 5 Filtration chamber
- 6 Drain plug

DIMENSIONS



IntaKlean HP magnetic heat pump filter

CODE	DESCRIPTION
IKHPMF28	IntaKlean HP 28mm magnetic heat pump filter

TECHNICAL SPECIFICATION

Max Operating Pressure:	4 Bar
Max Operating Temperature:	90°C
Magnet Strength:	11,000 Gauss
Compatible fluid:	Water, water + glycol 50%
Kv:	8.27 m³/h

ZIL-B

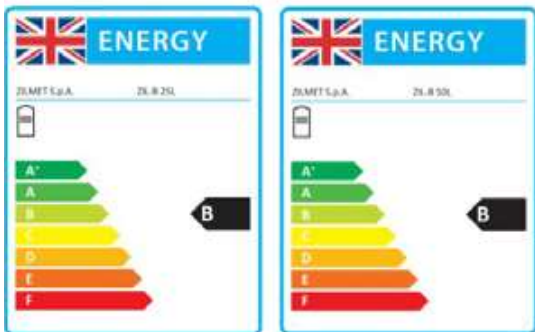


The new range of Zilmet buffer vessels, where efficiency meets reliability

Inta Zil-B buffer vessels are designed to store thermal energy generated by a heat pump system for later use when required.

Zil-B buffer vessels are manufactured to the highest quality and standard, to ensure they maintain optimum system performance, helping to enhance the heat pumps overall efficiency.

- Available in 25, 50, 80 & 100 litre capacity
- Acts as a buffer storing additional volume and also as a hydraulic separator, separating the primary and secondary circuits
- Eliminates compressor pump short cycling
- Heat efficient for the heat pump defrost cycle
- Adjustable wall bracket to assist in the event of an uneven install surface
- Premium polyurethane foam insulation with minimal heat loss
- 5 years manufacturer's warranty
- Improves the operating efficiency of heat pumps
- Additional connections for venting and drainage
- Additional leg accessory available



(B Rated efficiency applies to 25 & 50L only)

Buffer vessels

CODE	DESCRIPTION
BUFF25	25 Litre wall / floor buffer vessel
BUFF50	50 Litre wall / floor mounted buffer vessel
BUFF80	80 Litre floor mounted buffer vessel
BUFF100	100 Litre floor mounted buffer vessel
BUFFLEG	Buffer tank legs

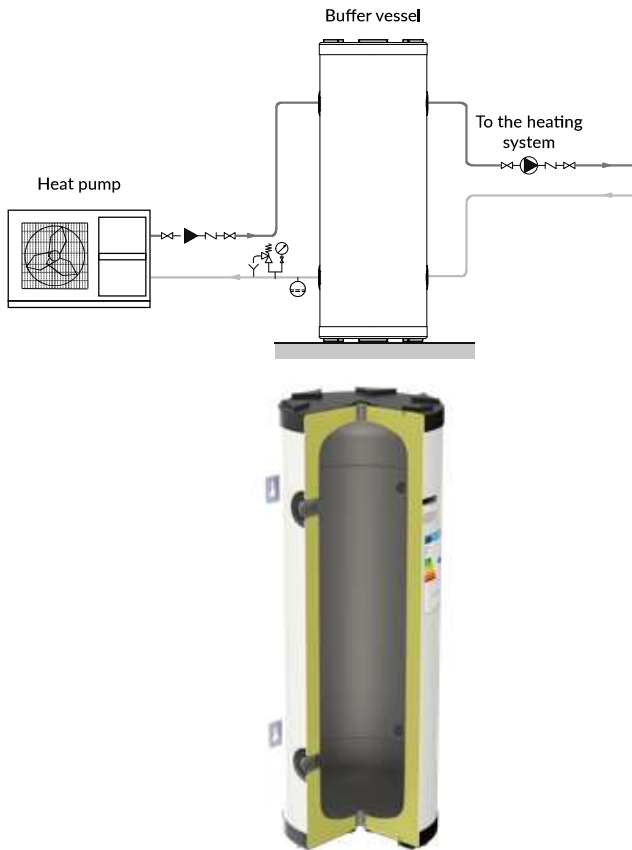
TECHNICAL SPECIFICATION

Maximum inlet pressure (static):	4 Bar
Maximum inlet temperature:	95°C
Fluid type:	Water
Glycol mix:	up to 50%
Material:	Mild steel
Insulation thickness:	41mm
Note: Buffer vessels are supplied with wall support brackets	

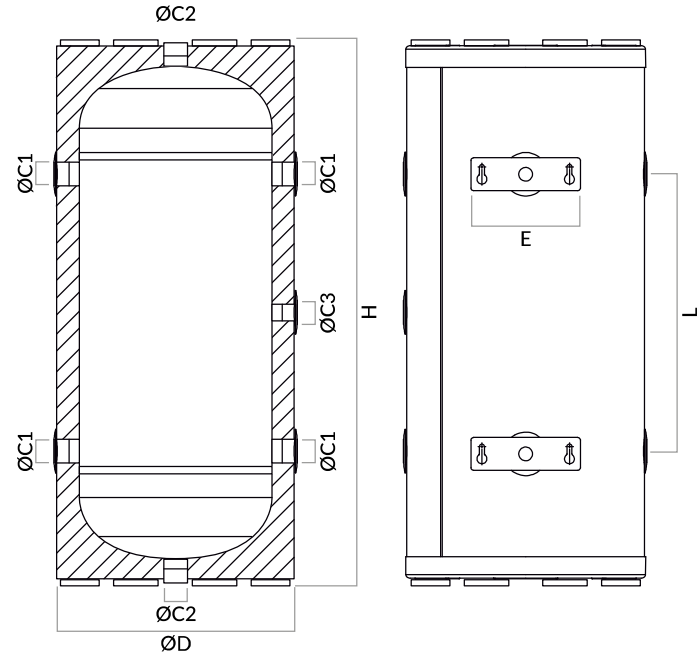


DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

INSTALLATION EXAMPLE



DIMENSIONS



Volume	C1	C2	C3	H	L	D	E
25 L	1"	3/4"	-	925	480	Ø290	160
50 L	1"	3/4"	-	1008	580	Ø360	160
80 L	1 1/4"	1 1/4"	1/2"	891	365	Ø469	160
100 L	1 1/4"	1 1/4"	1/2"	1071	545	Ø469	160

Note: 80 & 100L buffers include an additional 1/2" connection.

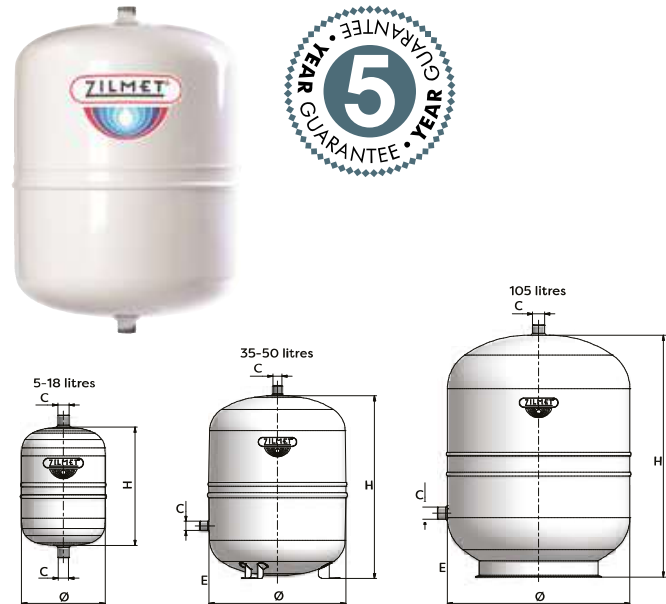


Volumiser Vessels

Provides a bypass route to maintain the minimum flow rate through the heat pump.

- Promotes energy efficiency
- Prevents short cycling
- Equipped with entry and exit connections
- Complies with PED 2014/68/EU

CODE	CAPACITY	ØD	H	E	ØC
10000512	5 Litres	160	270	-	3/4"G
10001216	12 Litres	270	264	-	3/4"G
10001836	18 Litres	270	349	-	3/4"G
10003510	35 Litres	380	367	125	3/4"G
10005022	50 Litres	380	505	146	3/4"G
10010518	105 Litres	500	665	165	1"G



TECHNICAL SPECIFICATION

Maximum Pressure:	10 Bar
Colour:	White
Operating Temperature:	-10°C to 110°C
Shell:	Carbon Steel

intafil

Intafil Plus sealed system kits

The Intafil sealed system filling kit includes a filling loop, double check valve and isolating ball assembly, ball valve and safety relief valve with gauge. Complies with both water regulations G24.1 and G24.2.

Intafil Plus sealed system kits expansion vessels are designed for unvented heating systems only. They are not suitable for use on potable applications or systems augmented with an uncontrolled heat source such as solar thermal or wood burner.

- Manual set point indicator
- Supplied with either 3, 8, 12, 18, 24, 35 or 50 litre vessels
- Suitable for retrofit and new build projects
- Provides complete flexibility for installation orientation
- Complies with G24.1 and G24.2 of the water regulations
- Supplied with wall mounting bracket (where applicable)
- 360° rotatable connection
- Fully CPR compliant



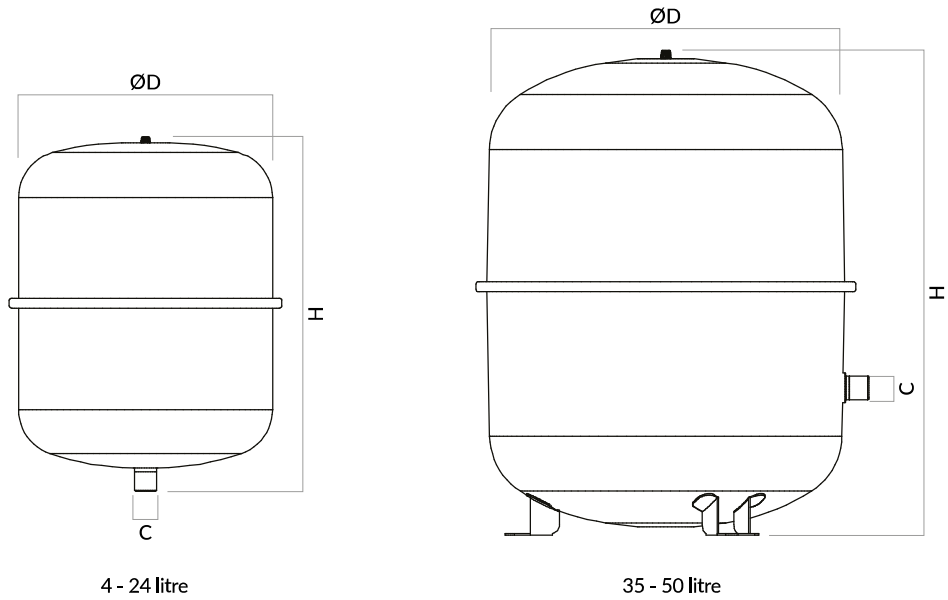
TECHNICAL SPECIFICATION

Maximum Working Temperature:	70°C
Maximum Peak Temperature:	90°C
Minimum Temperature:	4°C
Safety Relief Valve Discharge Pressure:	3 Bar
Max Glycol Concentration:	50%
Vessel Shell & Connections:	Carbon Steel
Vessel Membrane:	Synthetic Butyl Rubber (SBR) Diaphragm According to DIN4807-3
Vessel Colour:	Red
Coating:	Epoxy-Polyester Powder Finish



DATA SHEETS, INSTALLATION
INSTRUCTIONS & MAINTENANCE

DIMENSIONS



Intafil Plus sealed system kit and wall-mounted heating vessels

CODE	ØD	H	C
IFP4	225	195	3/4"
IFP8	220	295	3/4"
IFP12	294	287	3/4"
IFP18	290	400	3/4"
IFP24	324	415	3/4"

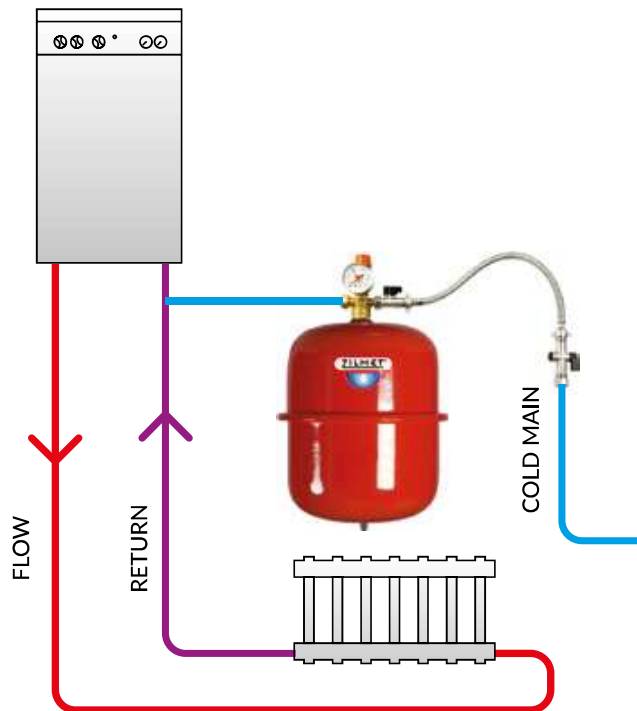
Intafil Plus sealed system kit and floor-standing heating vessels

CODE	ØD	H	C
IFP35	404	408	3/4"
IFP50	407	530	3/4"

Intafil sealed system kit

CODE	DESCRIPTION
SSKA075	3/4" Intafil sealed system kit without bracket
SSKA076	3/4" Intafil sealed system kit with bracket
SSKA077	3/4" Intafil sealed system kit with bracket and remote safety valve
RSMB	Wall mounting bracket for 4-24l heating vessels
RSMB2	Wall mounting bracket for 4-24l potable vessels

INSTALLATION EXAMPLE



intafil

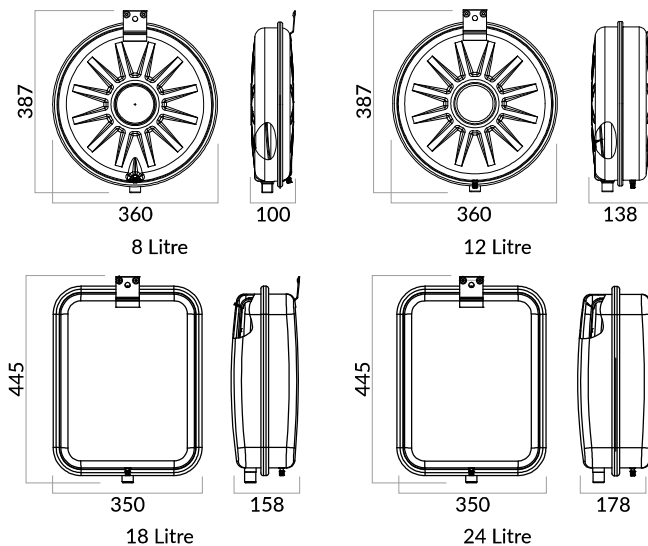
Slimline all-in-one sealed system

“Slimline” compact expansion vessel, with an all-in-one solution and unique five-way connector allows for easy and convenient installations, where space is limited.

- Slimline compact design allows for installation where space is limited
- Compact all-in-one solution for sealed heating systems
- Fixed wall bracket permits left or right installation
- A unique five-way connection provides a fully flexible installation
- 360° fully rotatable safety relief valve
- Complies fully with G24.1 & G24.2 of the water regulations
- Ideal for both new and retro-fit installations
- Compression joints allow direct connection to pipework



DIMENSIONS



Intafil Slimline sealed system kit and wall-mounted heating vessel

CODE	DESCRIPTION
IFS08	8 Litre Intafil “slimline” sealed system kit and wall-mounted heating vessel
IFS12	12 Litre Intafil “slimline” sealed system kit and wall-mounted heating vessel
IFS18	18 Litre Intafil “slimline” sealed system kit and wall-mounted heating vessel
IFS24	24 Litre Intafil “slimline” sealed system kit and wall-mounted heating vessel

TECHNICAL SPECIFICATION

Maximum Operating Pressure: 3 bar
 Maximum Operating Temperature: 90°C
 Factory Pre-charge: 1 Bar ± 20%



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

inta Safe Group

Ideal solution for installations where space is limited

The Inta-Safe Group wall fixing bracket comprising of a wall fixing bracket with an automatic air vent, 3 bar safety relief valve, and vessel connection.

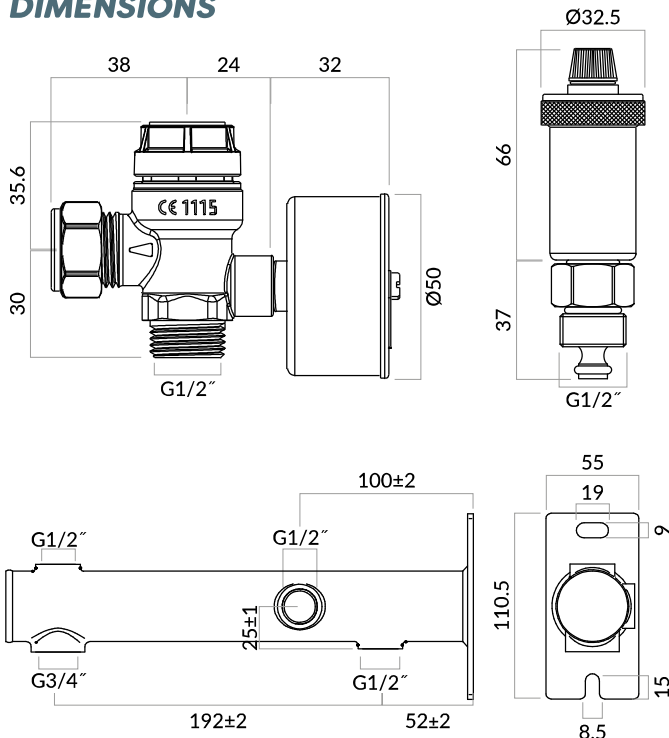
This unique assembly is the ideal product for heating systems where space is limited.

- Ease of installation
- Robust construction
- Brass automatic air vent
- Ideal solution for installations where space is limited
- ISG003 features auto closing, quick-release valves on the air-vent and vessel connections
- Safe wall mounting solution for expansion vessels



Note: Vessel not included

DIMENSIONS



ISG002

Inta Safe Group expansion vessel mounting bracket

CODE	DESCRIPTION
ISG003	Inta Safe Group expansion vessel mounting bracket and quick release
ISG002	Inta Safe Group expansion vessel mounting bracket
ISG00XXX	Inta Safe Group bar only

Suitable for expansion vessels with a 3/4" inlet up to 24 Litres



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

Cal-Pro heating expansion vessels

Heating expansion vessels absorb the water volume variations in closed heating systems maintaining constant pressure, which helps to reduce energy consumption and protect your system.

In a closed heating system, water cannot be compressed and any increase in water volume due to the increase of temperature is absorbed by the expansion vessel. When water is cold, the pre-charge pressure presses the diaphragm against the tank.

As temperature increases, the expanded water volume pushes against the membrane and water enters the tank, providing additional space within the system. With the temperature decrease, the air cushion forces water back into the system.

This allows the system to maintain the pressure, helping to reduce energy consumption of the heating system.



0036

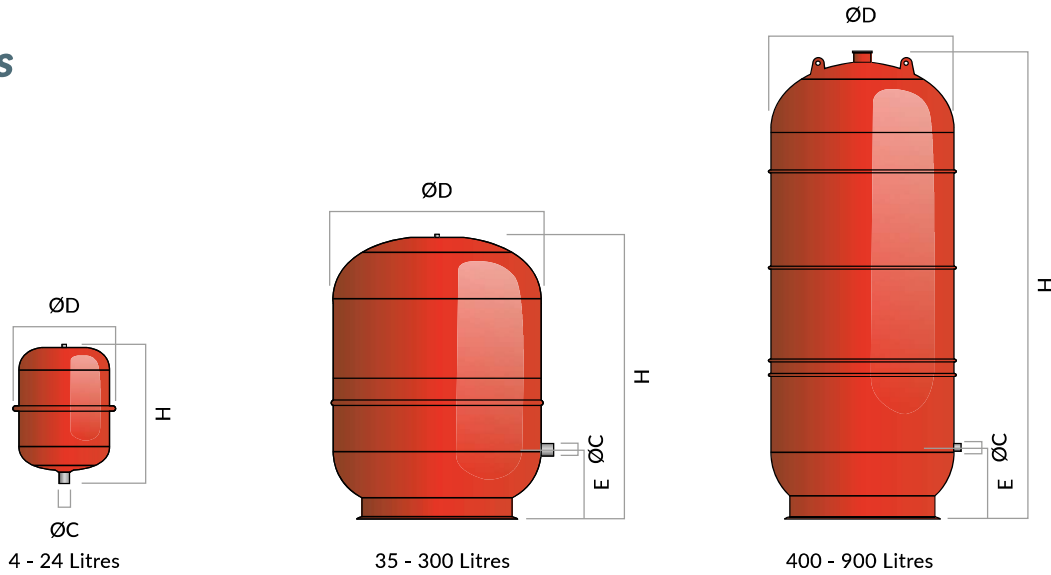
- Carbon steel construction
- SBR synthetic rubber diaphragm according to DIN 4807-3
- Hard-wearing epoxy polyester powder coated finish
- Maximum working temperature: 70°C
- Peak working temperature: 99°C
- 100% Factory tested
- Fully CPR compliant
- Sizing calculator available
- Suitable for Heating Systems Only
- 5 year guarantee
- Made in Italy



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE



DIMENSIONS



Cal-Pro heating expansion vessel and mounting bracket

CODE	CAPACITY	ØD	H	E	ØC	MAX. WORKING PRESSURE	PRE-CHARGE
Z1-301004	4 Litres	225	195	-	3/4"	5 bar	1.5 bar
Z1-301008	8 Litres	220	295	-	3/4"	5 bar	1.5 bar
Z1-301012	12 Litres	294	281	-	3/4"	4 bar	1.5 bar
Z1-301018	18 Litres	290	375	-	3/4"	4 bar	1.5 bar
Z1-301024	24 Litres	324	415	-	3/4"	4 bar	1.5 bar

Cal-Pro floor-standing heating expansion vessel - supplied with feet

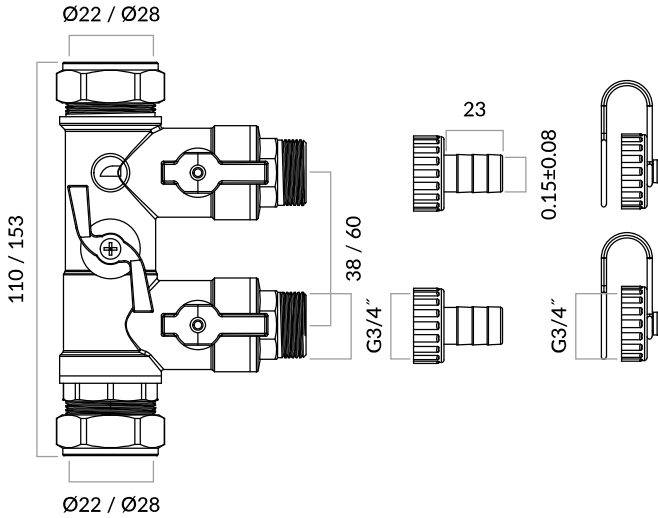
CODE	CAPACITY	ØD	H	E	ØC	MAX. WORKING PRESSURE	PRE-CHARGE
Z1-302035CP *	35 Litres	404	387	119	3/4"	4 bar	1.5 bar
Z1-302050CP *	50 Litres	407	507	157	3/4"	4 bar	1.5 bar
Z1-302080	80 Litres	450	608	150	3/4"	6 bar	2.0 bar
Z1-302105	105 Litres	500	665	165	3/4"	6 bar	2.0 bar
Z1-302150	150 Litres	500	897	216	3/4"	6 bar	2.0 bar
Z1-302200	200 Litres	600	812	225	3/4"	6 bar	2.5 bar
Z1-302250	250 Litres	630	957	245	3/4"	6 bar	2.5 bar
Z1-302300	300 Litres	630	1105	245	3/4"	6 bar	2.5 bar
Z1-302400	400 Litres	630	1450	245	3/4"	6 bar	2.5 bar
Z1-302500	500 Litres	750	1340	290	1"	6 bar	2.5 bar
Z1-302600	600 Litres	750	1555	290	1"	6 bar	2.5 bar
Z1-302750	700 Litres	750	1755	290	1"	6 bar	2.5 bar
Z1-302800	800 Litres	750	1855	290	1"	6 bar	2.5 bar
Z1-302900	900 Litres	750	2105	290	1"	6 bar	2.5 bar

**SIZING CALCULATOR AVAILABLE
GET THE RIGHT SIZE.
EVERY TIME.**

Fill and Flush Valve

CODE	DESCRIPTION
INFAF22	22mm Fill and Flush Valve
INFAF28	28mm Fill and Flush Valve

DIMENSIONS



TECHNICAL SPECIFICATION

Maximum Operating Temperature:	99°C
Minimum Operating Temperature:	-5°C
Maximum Pressure (Static):	16 Bar
Medium:	Water / Glycol up to 50%

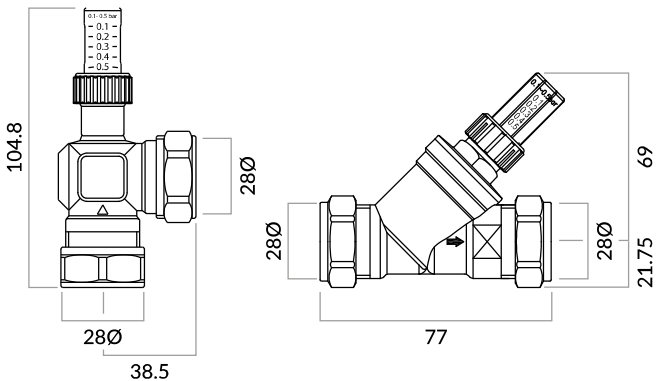


DATA SHEETS, INSTALLATION
INSTRUCTIONS & MAINTENANCE

By-pass Valves

CODE	SIZE	TYPE	SETTING RANGE
ABPA28CP	28mm	angled	0.1 - 0.5 bar
ABPS28CP	28mm	straight	0.1 - 0.5 bar

DIMENSIONS



TECHNICAL SPECIFICATION

Minimum Inlet Pressure (dynamic):	10 Bar
Maximum Inlet Temperature:	100°C
Flow Capacity:	1 to 5m ³ /hour
Differential Pressure Range:	0.1 to 0.5 Bar



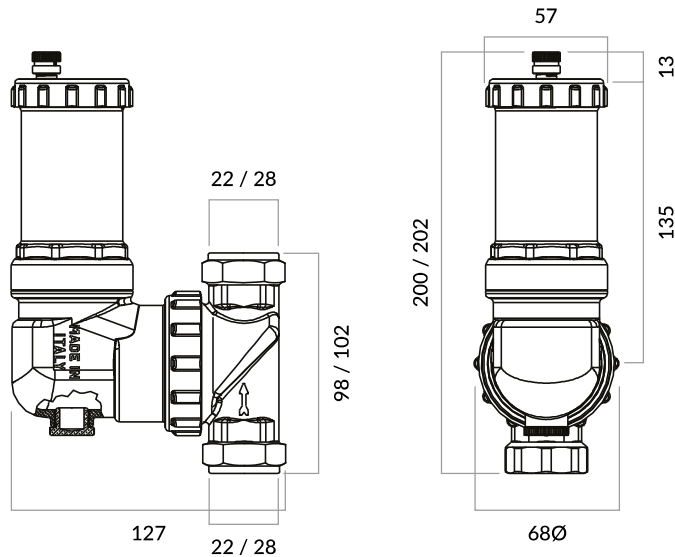
DATA SHEETS, INSTALLATION
INSTRUCTIONS & MAINTENANCE

Inta-Vent Deaerator

The Inta-Vent deaerator is the convenient in-line solution to the problems associated with trapped air in sealed systems.

Fluid enters the base of the Inta-Vent through a wound coil of stainless steel mesh. This generates a vortex within the filter body which encourages micro bubbles to form. These air bubbles combine and then rise to the top of the filter where they are then discharged by the air vent.

DIMENSIONS



CODE	DESCRIPTION
IV22	22mm Inta-Vent auto air eliminator
IV28	28mm Inta-Vent auto air eliminator

TECHNICAL SPECIFICATION

Maximum Operating Temperature:	100°C
Min Inlet Temperature:	-10°C
Maximum Pressure (Static):	10 Bar
Medium:	Water / Glycol up to 30%



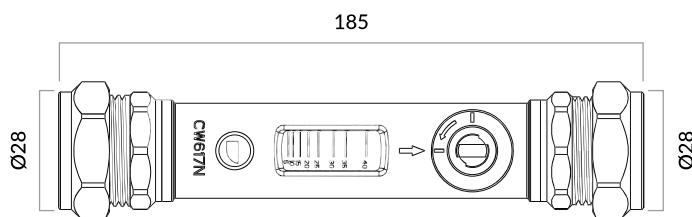
DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

Flow Balancing Valves

CODE	DESCRIPTION
INFSV2840	28mm Flow Balancing Valve 5 - 40 L/min
INFSV2850	28mm Flow Balancing Valve 10 - 50 L/min



DIMENSIONS



TECHNICAL SPECIFICATION

Maximum Operating Temperature:	110°C
Minimum Operating Temperature:	-20°C
Maximum Pressure (Static):	10 Bar
Medium:	Water / Glycol up to 50%
Inlet Connections:	28mm Compression

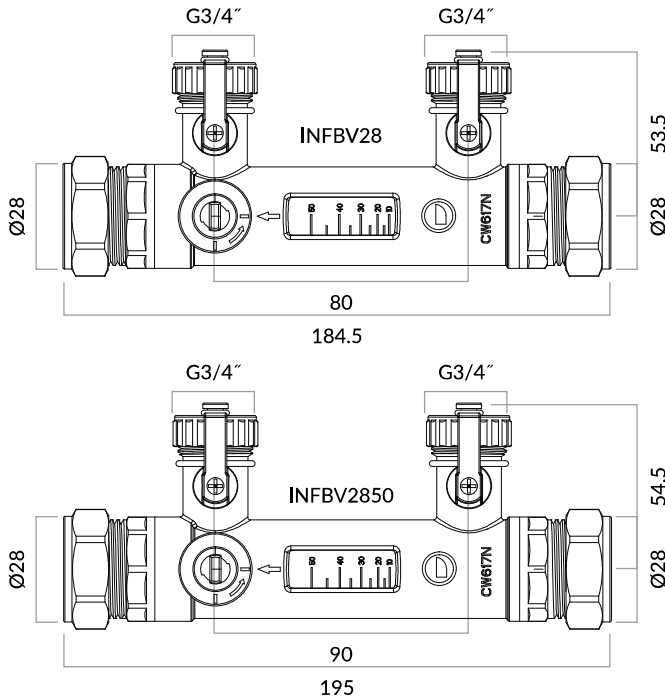


DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

Flow Balancing Valves with Fill and Flush

CODE	DESCRIPTION
INFBV28	28mm Flow Balancing Valve with Fill and Flush 5 - 40 L/min
INFBV2850	28mm Flow Balancing Valve with Fill and Flush 10 - 50 L/min

DIMENSIONS



TECHNICAL SPECIFICATION

Maximum Operating Temperature	110°C
Minimum Operating Temperature:	-20°C
Maximum Pressure (Static):	10 Bar
Medium:	Water / Glycol up to 50%
Inlet Connections:	28mm Compression
Fill & Flush Connections:	G3/4" BSP



DATA SHEETS, INSTALLATION
INSTRUCTIONS & MAINTENANCE

Y-Pattern Strainers

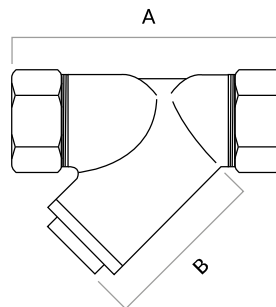
CODE	DESCRIPTION
YPS085828800	28mm Y-pattern strainer (800 Micron)
YPS0858125800	1 1/4" F x F Y-pattern strainer (800 Micron)



TECHNICAL SPECIFICATION

Maximum Inlet Temperature	100°C
Maximum Pressure (Static):	16 Bar
Medium:	Water

DIMENSIONS



SIZE	A	B
28mm	93	70
1 1/4" F x F	70	97



DATA SHEETS, INSTALLATION
INSTRUCTIONS & MAINTENANCE

Make your home smarter, greener, & more energy efficient

Heat pumps are three times more energy efficient than traditional gas boilers.

They substantially reduce the carbon footprint of your home. Because they run on electricity, there's also potential to make significant bill savings by using smart tariffs with cheaper off-peak rates.



The government offers a £7,500 grant towards installing a heat pump across England and Wales through the Boiler Upgrade Scheme. Scan here to find out more.



What is a heat pump?

A heat pump heats your home using electricity. It works like a fridge in reverse, taking heat from the air or ground (even in sub-zero weather), increasing it to a higher temperature and transferring it to your home to provide heating and hot water.

The heat pump unit is fixed on the outside of a home or property. When properly installed and maintained, they operate quietly with sound levels similar to a boiler.

For more information and advice on heat pumps, visit Energy Saving Trust and Nesta and The MCS Foundation.



**energy
saving
trust**



**THE MCS
FOUNDATION
nesta**

Heat pump benefits

- Carbon savings of up to 70% compared to a gas boiler
- Bill savings of around £100 per year compared to a gas boiler if used effectively with a smart tariff
- Three times more energy efficient than traditional gas boilers
- Heat pumps remove the need for any imported gas in your home, contributing to UK energy security
- They'll become greener every year as the UK electricity grid continues to decarbonise

It is now cheaper than ever to install cleaner, more energy efficient heating solutions thanks to the government's new £450 million Boiler Upgrade Scheme.

4 reasons to swapping your gas boiler for a heat pump:

Energy saving efficiency

Ultra-efficient -1KW energy in, 4KW energy out. Coverts air outside to heat inside at up to 4x efficiency.

Reduced environmental Impact

You can expect an average of 66% to 75% reduction in CO2 emissions compared to other systems.

Extremely safe & family friendly

There are no fumes or dangerous chemicals from the units and no risk of fire or explosions.

Add resale value to your property

Add value to your property with 21st century heating. Home buyers will be impressed by the low energy bills.

inta

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