
inta
EVERYTHING
HEAT PUMP
WE ARE INTA.
RENEWABLES. PLUMBING AND HEATING. COMMERCIAL. SHOWERING.
PROUD TO BE A LEADING BRITISH BRAND

inta

Made for the installer

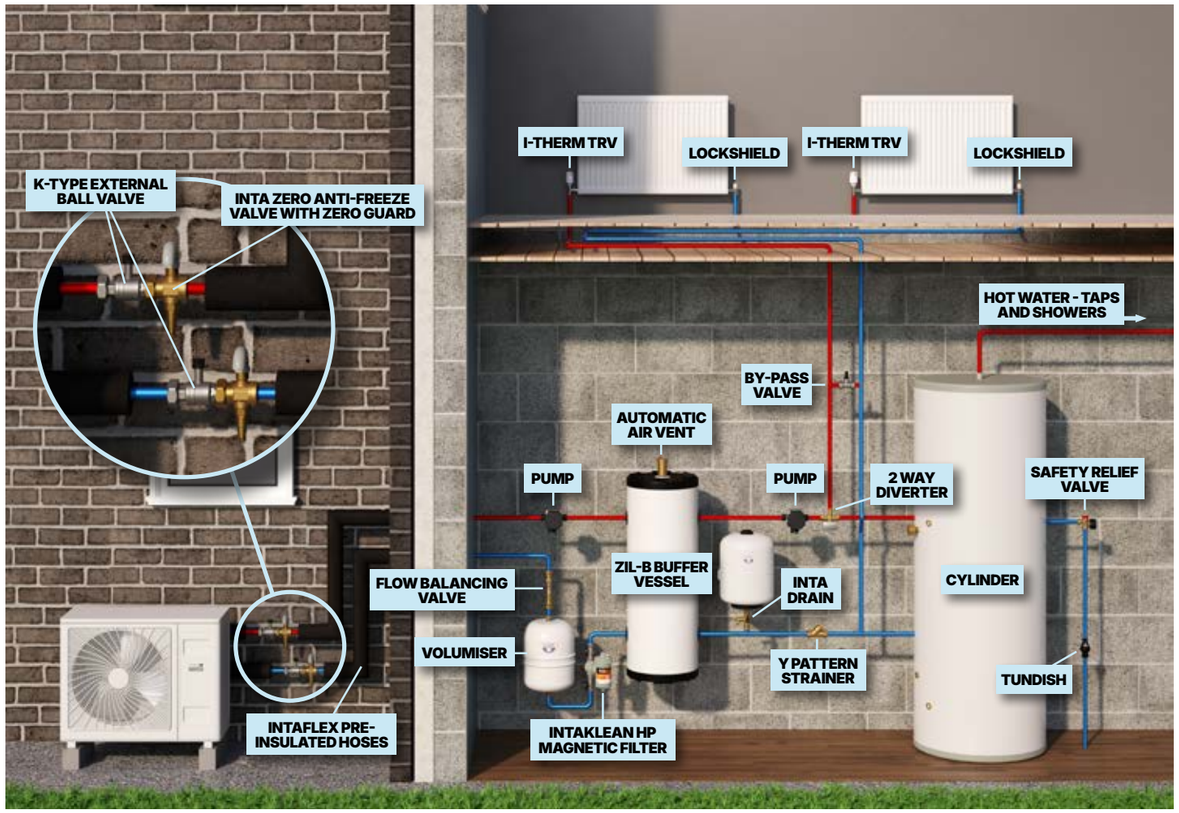
EVERYTHING HEAT PUMP

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.



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INTATEC.CO.UK

CONTENTS

	PAGE
K-TYPE EXTERNAL BALL VALVES	4 - 5
BALL VALVES WITH FILTER	6
K-TYPE INTERNAL BALL VALVES	7
INTA ZERO ANTI-FREEZE VALVES	8 - 9
ANTI-FREEZE VALVE INSTALLER PACKS	10 - 11
INTA FLEX PRE-INSULATED HOSES	12 - 13
INTA XCEED	14
INTAKLEAN HP	15
ZIL-B BUFFER VESSELS	16 - 17
VOLUMISER VESSELS	17
INTAFIL PLUS SEALED SYSTEM KITS	18 - 19
INTAFIL COMBI	20 - 21
INTAFIL SLIMLINE ALL-IN-ONE SEALED SYSTEM	22 - 23
CAL-PRO HEATING EXPANSION VESSELS	24 - 25
FILL AND FLUSH VALVES	26
BY-PASS VALVES	26
INTA-VENT DEAERATOR	27
FLOW BALANCING VALVES	27 - 28
Y-PATTERN STRAINERS	28
INTA HYDRA	30 - 31

PRIMARY PRO
PROFESSIONAL PROTECTION SOLUTIONS

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

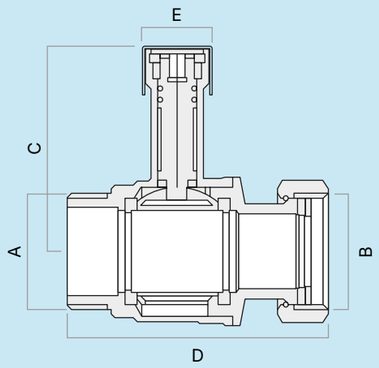
For more information on how to correctly install and seal your insulation, please scan the QR code for the Primary Pro YouTube channel:

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

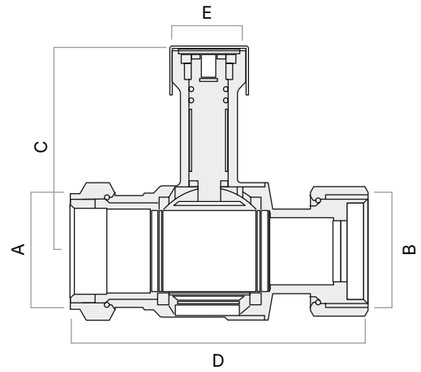
TECHNICAL SPECIFICATION

Maximum Inlet Pressure (Static):	25 Bar
Working Temperature:	-10 to 90°C
Temperature Range:	-20 to 120°C
Thread Standard:	ISO228
Kv-value:	HPBV11 (66m³/h) HPBV114 (66m³/h) HPBV114X2 (80m³/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
HPBV11FS	1″ Female swivel x 1″ female swivel extender ball valve
HPBV114FS	1 1/4″ Female swivel x 1 1/4″ female swivel extended 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) HPBV11FS (66m³/h) HPBV114FS (80m³/h)

HB Ball Valves are supplied with an adjustment key.

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

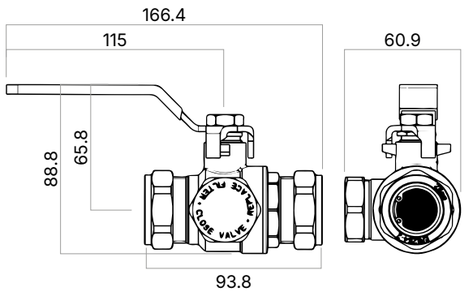
SUPPLIED WITH A DUST COVER TO PROTECT THE ADJUSTER

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
BVF01	1″ Ball valve male 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
Kv-value:	BVF28 (66m³/h) BVF35 (80m³/h) BVF01 (66³/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

KTYPE EXTENDED BALL VALVES

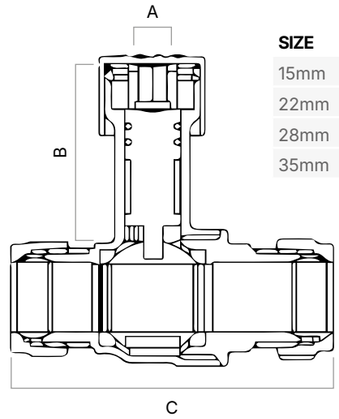
CODE	DESCRIPTION	BOX QTY
TR15KBV	15mm Extended ball valve K type	8
TR22KBV	22mm Extended ball valve K type	5
TR28KBV	28mm Extended ball valve K type	5
TR35KBV	35mm Extended ball valve K type	3
TRBVKEY	Key for extended ball valves	1

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

TECHNICAL SPECIFICATION

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

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

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.

INTELLECTUAL PROPERTY PATENT PENDING

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

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

INTA ZERO ANTI-FREEZE VALVES

CODE	DESCRIPTION
ZERO28	Inta Zero - Anti-freeze valve 28mm
ZERO28ZG	Inta Zero - Anti-freeze valve 28mm with Zero guard
ZERO35	Inta Zero - Anti-freeze valve 35mm
ZERO35ZG	Inta Zero - Anti-freeze valve 35mm with Zero guard
ZERO001	Inta Zero - Anti-freeze valve 1˝ M
ZERO001ZG	Inta Zero - Anti-freeze valve 1˝ M with Zero guard
ZERO114	Inta Zero - Anti-freeze valve 1 1/4˝ M
ZERO114ZG	Inta Zero - Anti-freeze valve 1 1/4˝ M with Zero guard
ZERO112	Inta Zero - Anti-freeze valve 1 1/2˝ M
ZERO1SW	Inta Zero - Anti-freeze valve 1˝ M x 1˝ F swivel
ZERO1SWZG	Inta Zero - Anti-freeze valve 1˝ M x 1˝ F swivel with Zero guard
ZERO14SW	Inta Zero - Anti-freeze valve 1 1/4˝ M x 1 1/4˝ F swivel
ZERO14SWZG	Inta Zero - Anti-freeze valve 1 1/4˝ M x 1 1/4˝ F swivel with Zero guard
ZERO128SW	Inta Zero - Anti-freeze valve 1˝ x 28mm swivel
ZERO128SWZG	Inta Zero - Anti-freeze valve 1˝ x 28mm swivel with Zero guard
ZERO11435SW	Inta Zero - Anti-freeze valve 1 1/4˝ x 35mm swivel
ZERO11435SWZG	Inta Zero - Anti-freeze valve 1 1/4˝ x 35mm swivel with Zero guard
ZERO002	Inta Zero - Anti-freeze valve 2˝ M
ZERO212	Inta Zero - Anti-freeze valve 2 1/2 ˝ M
ZEROGUARD	Anti-freeze valve guard

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-value:	ZERO001 (55m³/h), ZERO28 (64m³/h), ZERO1SW (33m³/h), ZERO128SW (33m³/h), ZERO112 (112 m3/h), ZERO212 (421m3/h)	ZERO114 (70m³/h), ZERO35(70m³/h), ZERO14SW (52m³/h), ZERO11435SW (52m³/h) ZERO002 (198m3/h)

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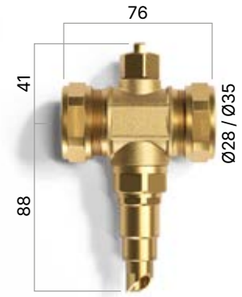
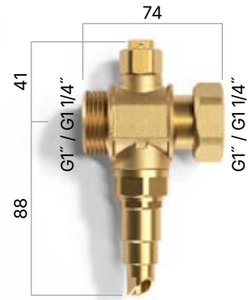


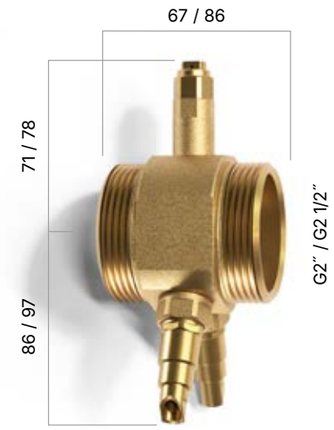
ZERO28 - ZERO35

ZERO001 - ZERO114

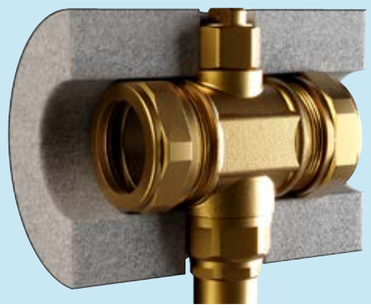


ZERO1SW - ZERO14SW

ZERO128SW - ZERO11435SW



ZERO002 - ZERO212



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. Inta 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 Inta 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 Inta Zero can be fully insulated to help maintain the COP and SCOP of your system without affecting the operation.

ANTI-FREEZE VALVE INSTALLER PACKS

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. 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.

WITHOUT INSULATION

Water Discharge Temperature = 2.49°C
Time taken to begin discharge = 1 hour 4 mins

WITH INSULATION

Water Discharge Temperature = 2.03°C
Time taken to begin discharge = 4 hours 3 mins

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).

PATENT PENDING

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

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

INTA ZERO PROFESSIONAL INSTALLER PACKS

CODE	DESCRIPTION
AFCOMPACK	Inta Zero - Anti-freeze 28mm professional installer pack
AFCOMPACK35	Inta Zero - Anti-freeze 35mm professional installer pack
AFCOMPACK1	Inta Zero - Anti-freeze 1″ professional installer pack
AFCOMPACK114	Inta Zero - Anti-freeze 1 1/4″ professional installer pack
AFCOMPACKSW	Inta Zero - Anti-freeze 1″ swivel professional installer pack
AFCOMPACKSW35	Inta Zero - Anti-freeze 1 1/4″ swivel professional installer pack

Professional installer packs contain:

2 x Anti-freeze valves
2 x Insulation
2 x ZEROGUARD
1 x Tube of Bond & Seal

HEAT PUMP INSTALLER PACKS

CODE	DESCRIPTION
INHPKIT1	28mm Heat pump installer pack
INHPKIT2	1″ Swivel heat pump installer pack
INHPKIT3	1 1/4″ Swivel heat pump installer pack
INHPKIT114	35mm Heat pump installer pack

Heat Pump installer packs contain:

2 x Heat pump ball valve
2 x Ball valve insulation
2 x Inta Zero anti-freeze valve
2 x Anti-freeze insulation
2 x ZEROGUARD
2 x Heat pump hose with elbow 500mm (Pack of 2),
2 x Adaptor
1 x Tube of Bond & Seal

INSULATION FOR ANTI-FREEZE VALVE

CODE	DESCRIPTION
INSULZERO28SW	Insulation for 1″ Inta Zero - Anti-freeze valve
INSULZERO35SW	Insulation for 1 1/4″ Inta Zero - Anti-freeze valve
INSULBOND	290ml Bond & Seal

intaflex

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
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

TECHNICAL SPECIFICATION

HOSE

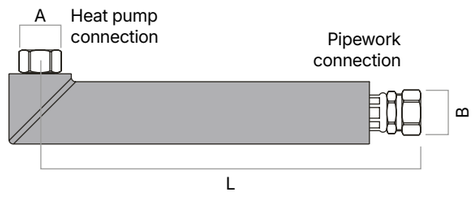
Maximum Inlet Pressure (Static):	10 Bar
Maximum Inlet Temperature:	90°C
Medium:	Water, Water+Glycol up to 50%

HOSE

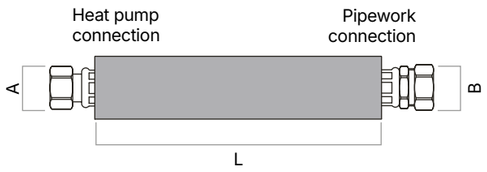
Wall Thickness:	21mm +1 / -0mm
Material:	Treated Closed Cell Polyethylene
Temperature Range:	-45°C to 105°C
Thermal Conductivity:	λ = 0.034 W/mk at 0°C
Water Vapour Diffusion Resistance:	μ ≥ 39,300

THE INSULATION IS STRICTLY FOR EXTERNAL USE ONLY!

DIMENSIONS



CODE	A	B	L
HPHOSE300B	1″	28mm	300mm
HPHOSE500B	1″	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″	28mm	750mm
HPHOSE75035	1 1/4″	35mm	750mm

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.

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

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

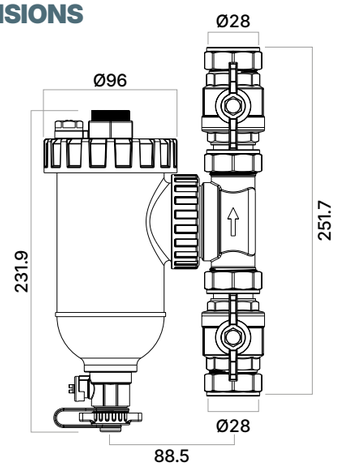
SUPPLIED PRE-INSULATED WITH PRIMARY PRO'S WATER AND UV RESISTANT INSULATION

UNIVERSAL MAGNETIC FILTER

High flow performance suitable for boilers and heat pumps.

- High 12Kv + 18Kv flow performance
- Fine particle filtration through a 500 micron mesh cartridge
- Integral drain valve to aid with servicing and commissioning
- Cap key and filter pot connector spanner included as standard
- Dry pocket, 12,000 gauss magnet
- Full bore flow channels for maximum flow capability
- Closed cell insulation jacket accessory available (XCFINSUL28/35)
- Universal compatibility for all types of heating systems
- 1-piece cap for ease and usability

DIMENSIONS



1. Enhanced flow channels for optimum performance.
2. Fine particle filter captures debris to maintain system efficiency.
3. High strength magnet captures magnetite from the system helping to maintain efficiency.
4. Built-in drain port allows easy cleaning of the filter.

XCEED UNIVERSAL MAGNETIC FILTER

CODE	DESCRIPTION
XCF28	XCEED 28mm universal magnetic filter
XCFINSUL28	XCEED 28mm insulation jacket
XCF35	XCEED 35mm universal magnetic filter
XCFINSUL35	XCEED 35mm insulation jacket

TECHNICAL SPECIFICATION

Maximum Inlet Pressure	6 Bar
Maximum Temperature:	90°C
Inlet Connection:	28mm / 35mm
Magnet Strength:	12,000 gauss
Degree of Filtration:	500 micron
Kv-value:	XCF28 (12 m³/h) XCF35 (18 m³/h)
Medium:	Water / Glycol up to 50%

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

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.

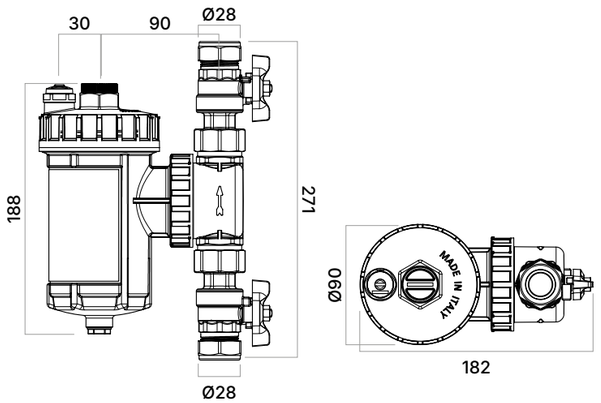
As well as separating magnetic debris and trapped air in circulating system fluid, IntaKlean HP also includes a completely unique direct filter which contains a multi-layered stainless steel 300-micron fine gauze.

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

DIMENSIONS



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

INTAKLEAN HP MAGNETIC HEAT PUMP FILTER

CODE	DESCRIPTION
IKHPMF28	IntaKlean HP 28mm magnetic heat pump filter
IK28INSU	Insulation for the IntaKlean HP

TECHNICAL SPECIFICATION

Maximum Operating Pressure:	4 Bar
Maximum Operating Temperature:	90°C
Magnet Strength:	11,000 Gauss
Compatible fluid:	Water, water + glycol 50%
Degree of Filtration:	300 micron
Kv-value:	8.27 m³/h

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

ZIL-B

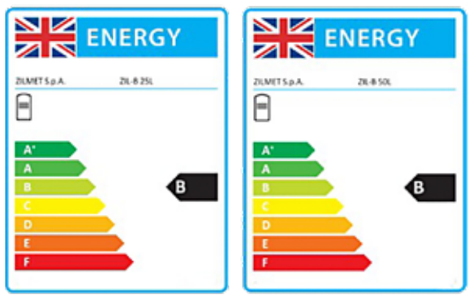
5 YEAR GUARANTEE

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 12, 18, 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
BUFF12	12 Litre wall / floor mounted buffer vessel
BUFF18	18 Litre wall / floor mounted buffer vessel
BUFF25	25 Litre wall / floor mounted 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

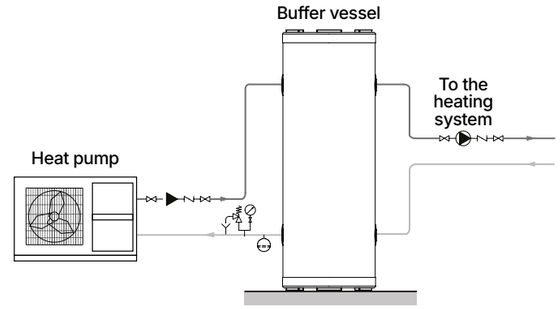
TECHNICAL SPECIFICATION

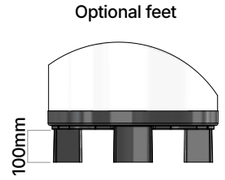
Maximum Inlet Pressure (Static):	4 Bar
Maximum Inlet Temperature:	95°C
Fluid Type:	Water
Glycol Mix:	Up to 50%
Material:	Mild steel
Insulation Thickness:	41mm

Note: Buffer vessels are supplied with wall support brackets

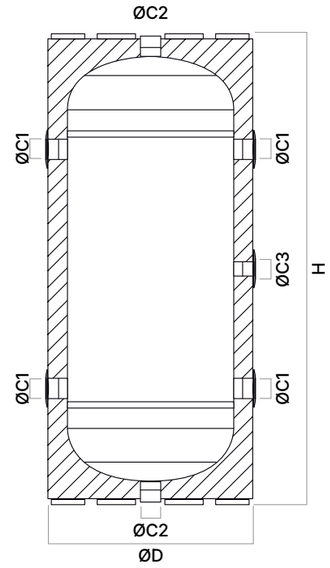
DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

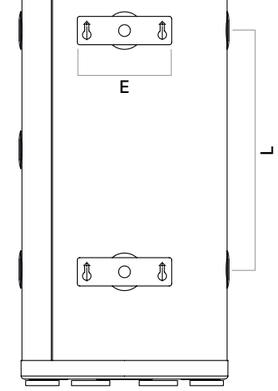
INSTALLATION EXAMPLE





DIMENSIONS





VOLUME	C1	C2	C3	H	L	D	E
12 L	1″	3/4″	-	356	104	Ø360	160
18 L	1″	3/4″	-	441	189	Ø360	160
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.

ZILMET

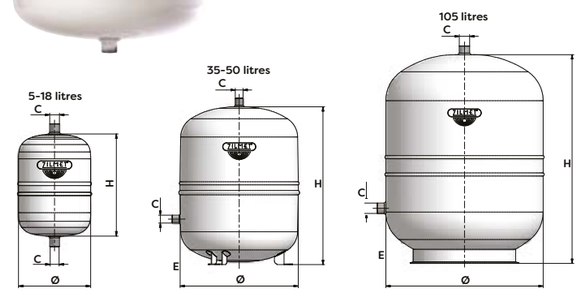
VOLUMISER VESSELS

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	H	ØD	E	ØC
10000512	5 litres	270	160	-	3/4″ G
Z1-11A0001255	12 litres	264	270	-	1″ G
Z1-11A0001867	18 litres	349	270	-	1″ G
Z1-11A0002467	24 litres	392	300	-	1″ G
Z1-11A0003527	35 litres	367	380	135	1″ G
Z1-11A0005047	50 litres	505	380	153	1″ G

5 YEAR GUARANTEE



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.

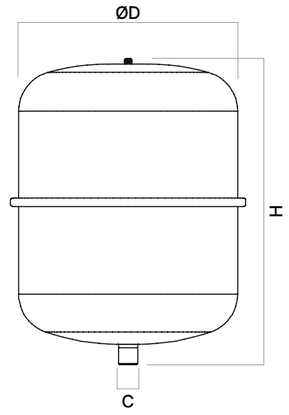
- Manual set point indicator
- Supplied with either 4, 8, 12, 18, 24, 35 or 50 litre vessels
- Suitable for retrofit and new build projects
- Provides complete flexibility for installation orientation
- Complies with G24.1 and G24.2 of the water regulations
- Supplied with wall mounting bracket (where applicable)
- 360° rotatable connection
- Fully CPR compliant

TECHNICAL SPECIFICATION

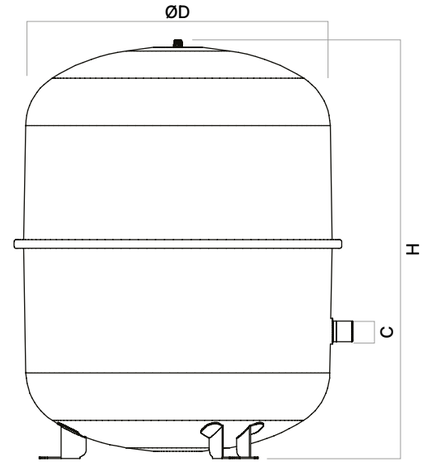
Maximum Working Temperature:	70°C
Maximum Peak Temperature:	90°C
Minimum Temperature:	4°C
Safety Relief Valve Discharge Pressure:	3 Bar
Max Glycol Concentration:	50%
Vessel Shell & Connections:	Carbon Steel
Vessel Membrane:	Synthetic Butyl Rubber (SBR) Diaphragm According to DIN4807-3
Vessel Colour: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

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

DIMENSIONS



4 - 24 litre



35 - 50 litre

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″

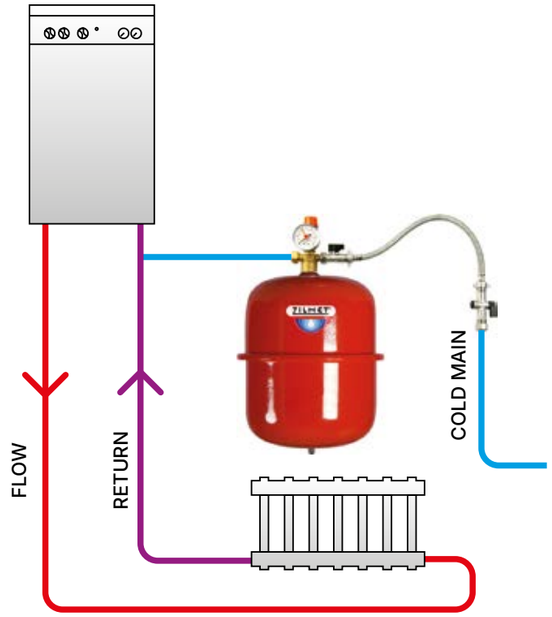
INTAFIL PLUS SEALED SYSTEM KIT AND FLOOR-STANDING HEATING VESSELS

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

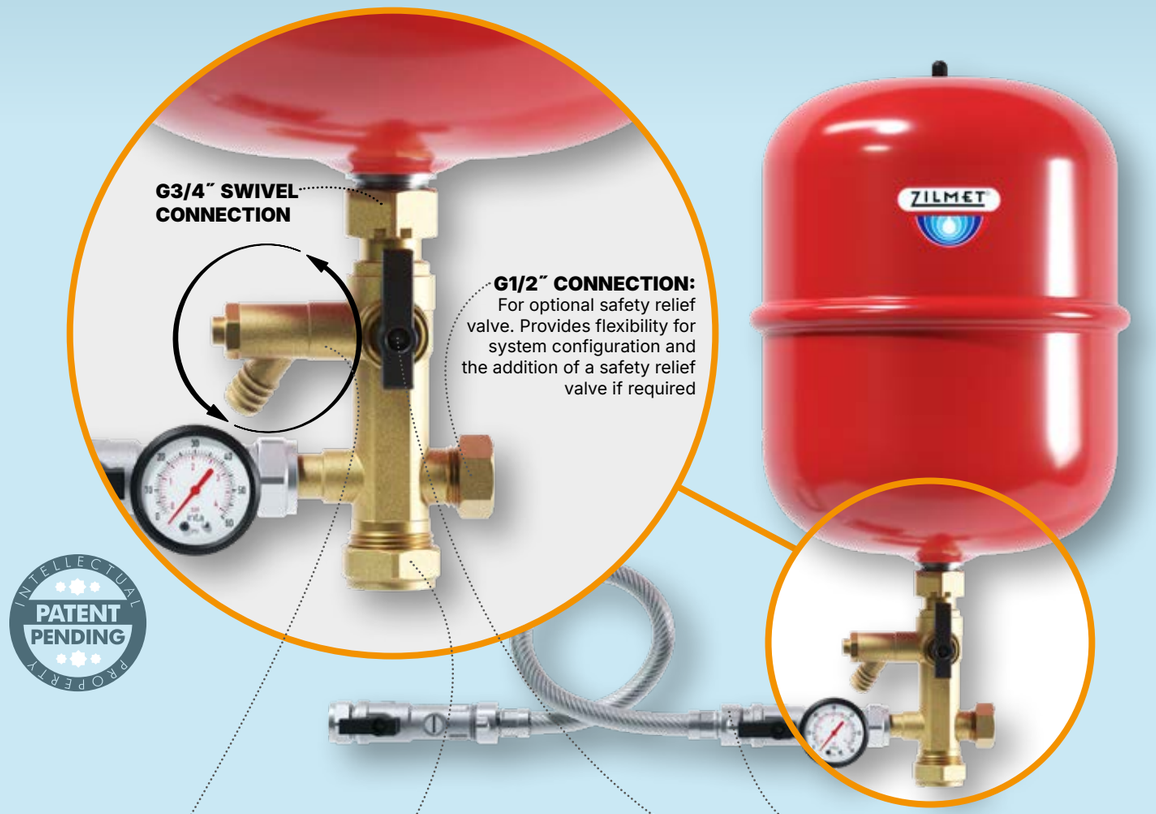


intafil COMBI

THE ALL-IN-ONE SOLUTION. COMBINING MULTIPLE ESSENTIAL COMPONENTS INTO A SINGLE, COMPACT AND TIME-SAVING ASSEMBLY.

Intafil Combi allows you to fill a central heating system and drain the expansion vessel in one easy to fit monoblock.

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.



INTAFIL COMBI SEALED SYSTEM KIT

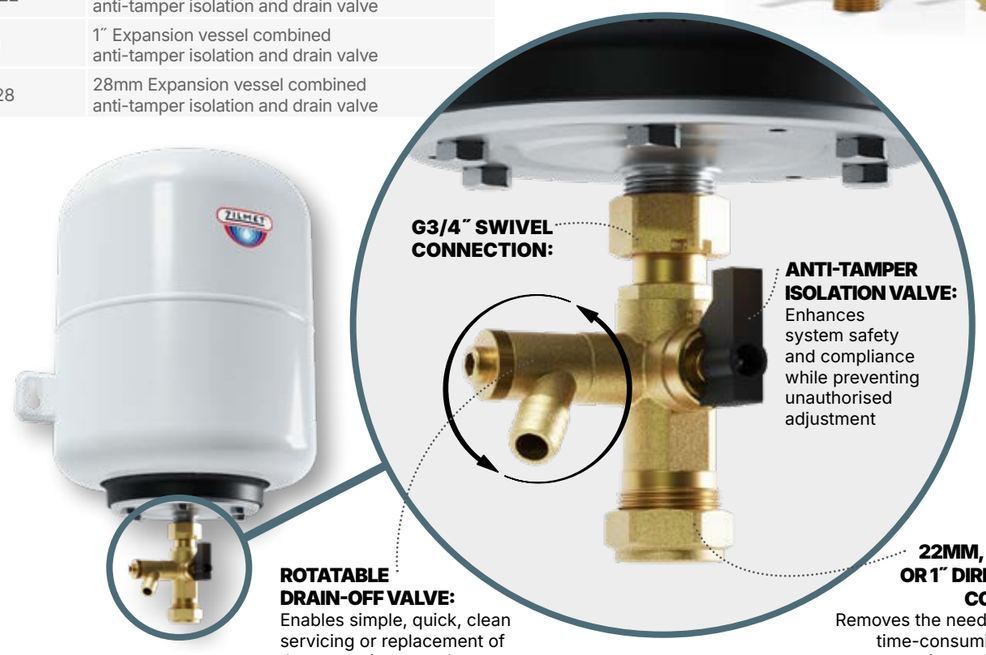
CODE	DESCRIPTION
KTSSK34NB	3/4″ Intafil Combi sealed system kit with drain (without bracket)
KTSSK34	3/4″ Intafil Combi sealed system kit with drain and bracket
KTSSK34SRV	3/4″ Intafil Combi sealed system kit with drain SRV and bracket
KTSSK34SRVNB	3/4″ Intafil Combi sealed system kit with drain SRV (without bracket)

SAFETY RELIEF VALVE F X F WITHOUT GAUGE

CODE	SIZE	PRESSURE SETTING
SRV012153	1/2″	3 bar

COMBINED ANTI-TAMPER ISOLATION AND DRAIN VALVE

CODE	DESCRIPTION
KTPEVI34	3/4″ Expansion vessel combined anti-tamper isolation and drain valve
KTPEVI22	22mm Expansion vessel combined anti-tamper isolation and drain valve
KTPEV1	1″ Expansion vessel combined anti-tamper isolation and drain valve
KTPEV28	28mm Expansion vessel combined anti-tamper isolation and drain valve



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

INTAFIL SLIMLINE SEALED SYSTEM KIT AND WALL-MOUNTED HEATING VESSEL

CODE	DESCRIPTION
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%
Safety Relief Valve Discharge Pressure:	3 Bar

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

intafil

SLIMLINE SQUARE EXPANSION VESSEL

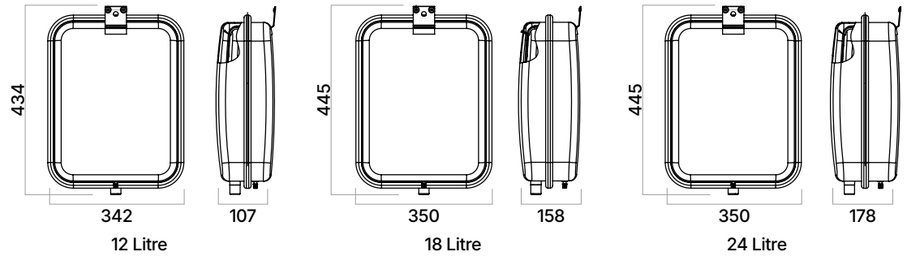
INTAFIL SLIMLINE SQUARE EXPANSION VESSEL

CODE	DESCRIPTION
Z1-13Q6001204	12 Litre square expansion vessel 3/4"
Z1-13Q2001817	18 Litre square expansion vessel 3/4"
Z1-13Q2002417	24 Litre square expansion vessel 3/4"

TECHNICAL SPECIFICATION

Maximum Operating Pressure:	3.5 Bar
Maximum Operating Temperature:	90°C
Factory Pre-charge:	1 Bar ± 20%
Colour:	Silver

DIMENSIONS



DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

inta

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.

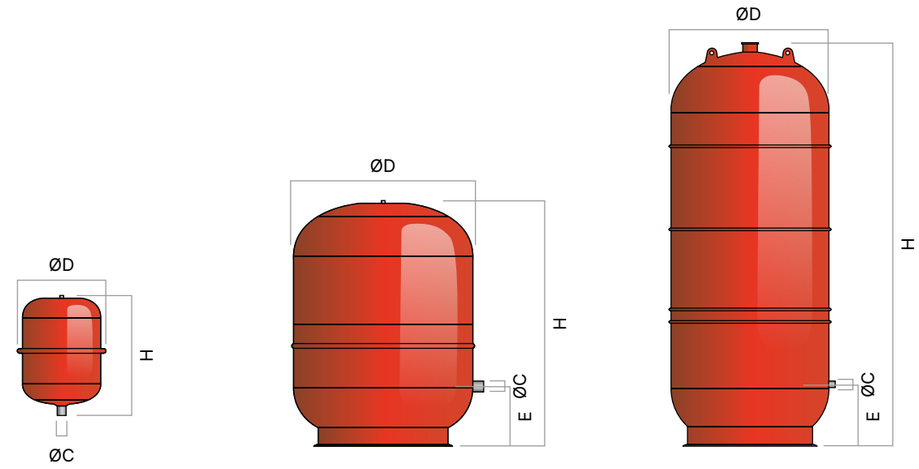
This allows the system to maintain the pressure, helping to reduce energy consumption of the heating system.

- 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

5 YEAR GUARANTEE

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

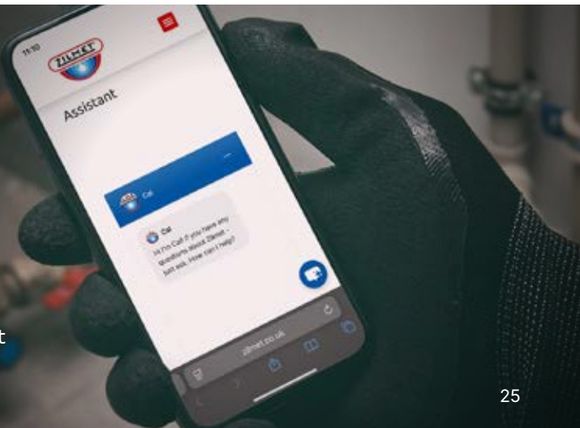
CAL-PRO FLOOR-STANDING HEATING EXPANSION VESSEL - SUPPLIED WITH FEET

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

Say hello to our new AI assistant

CAL

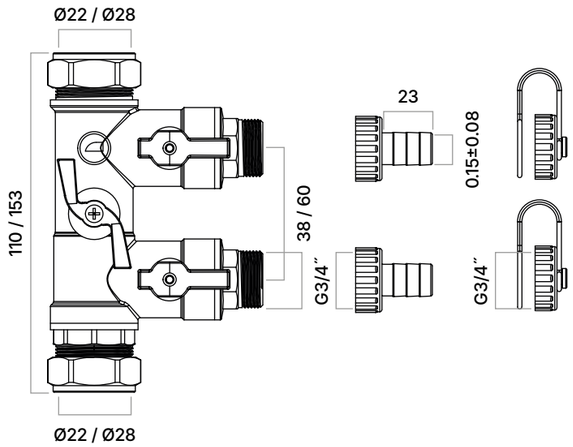
Scan the code and say hello to Cal. Our new AI assistant can help you with technical queries, product information, technical support and much more.



FILL AND FLUSH VALVE

CODE	DESCRIPTION
INFAF22	22mm Fill and flush valve
INFAF28	28mm Fill and flush valve

DIMENSIONS



TECHNICAL SPECIFICATION

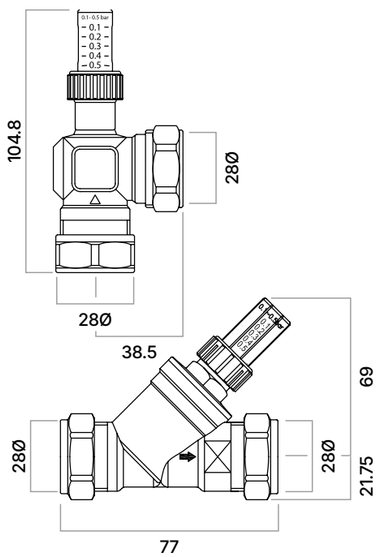
Maximum Operating Temperature:	99°C
Minimum Operating Temperature:	-5°C
Maximum Pressure (Static):	16 Bar
Medium:	Water / Glycol up to 50%

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 5m³/hour
Differential Pressure Range:	0.1 to 0.5 Bar

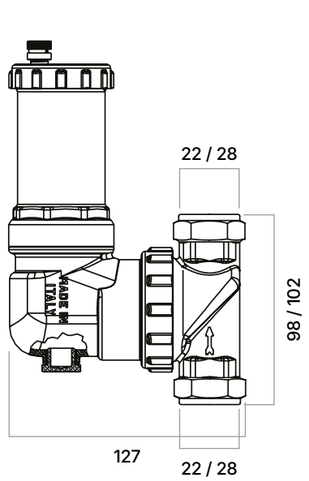
DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

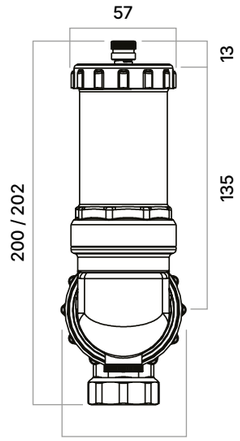
INTA-VENT DEAERATOR

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

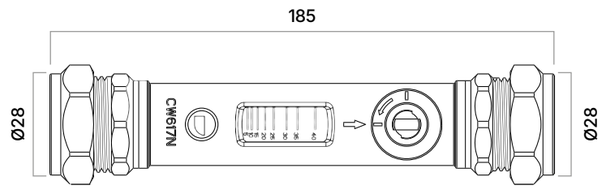
Maximum Operating Temperature:	100°C
Minimum Inlet Temperature:	-10°C
Maximum Pressure (Static):	10 Bar
Medium:	Water / Glycol up to 30%

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

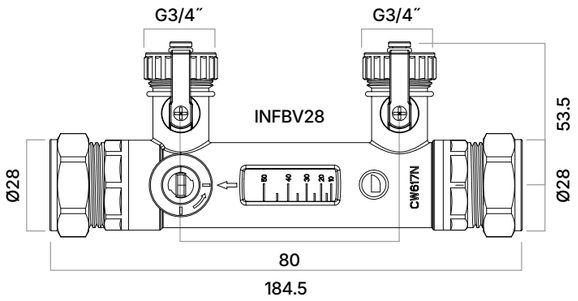
Maximum Operating Temperature:	110°C
Minimum Operating Temperature:	-20°C
Maximum Pressure (Static):	10 Bar
Medium:	Water / Glycol up to 50%
Inlet Connections:	28mm Compression

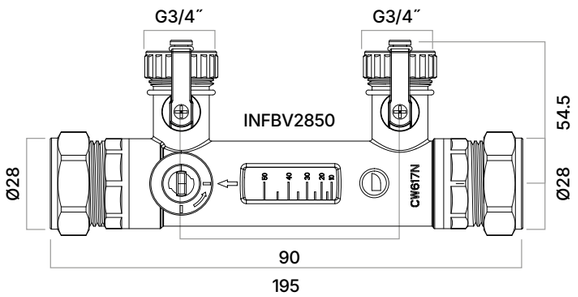
DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

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

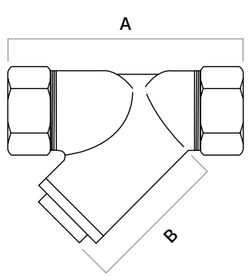
CODE	DESCRIPTION
YPS085828800	28mm Y-pattern strainer (800 Micron)
YPS0858125800	1 1/4″ F x F Y-pattern strainer (800 Micron)

TECHNICAL SPECIFICATION

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

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

DIMENSIONS



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

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:

1 ENERGY SAVING EFFICIENCY

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

2 REDUCED ENVIRONMENTAL IMPACT

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

3 EXTREMELY SAFE & FAMILY FRIENDLY

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

4 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.

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.

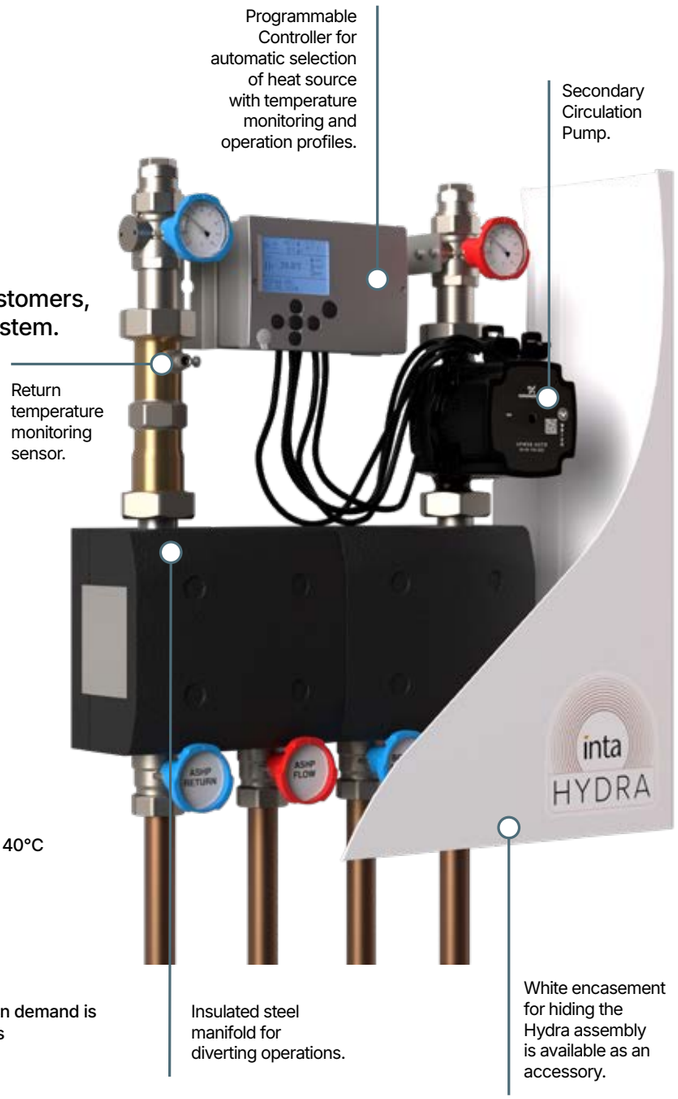
When an air source heat pump cannot provide heat, the Inta Hydra allows the original combi boiler to operate, providing constant heating, even during the coolest temperatures.

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

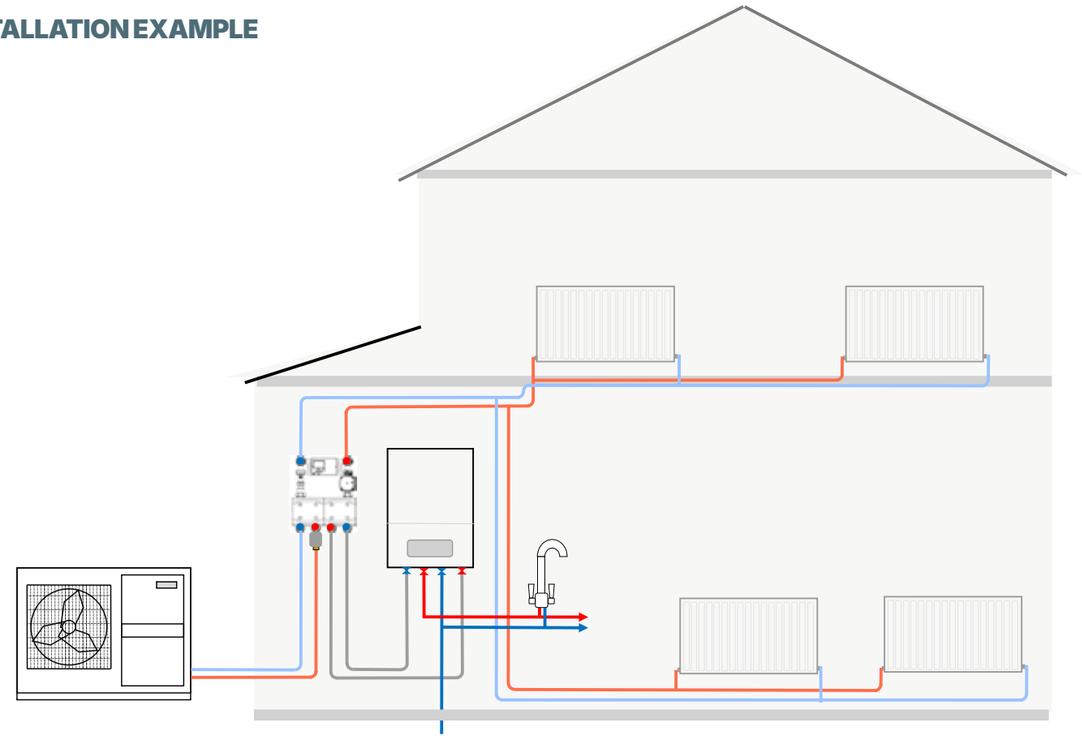
At just 50 × 50cm, it can be easily concealed within a small kitchen unit

DATA SHEETS, INSTALLATION INSTRUCTIONS & MAINTENANCE

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



inta

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