

# Product Guide

2020 Edition



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**altecnic**  
CALEFFI group

# Authentic Accredited Altecnic



For thirty years Altecnic has led the market as the UK's premier manufacturer and supplier of superior plumbing and heating products. We invest significantly in new technology to bring innovative products and services to market. Our commitment to Building Information Modelling (BIM) is a perfect example, making our cutting edge products available to designers and specifiers nationwide in the most accessible formats.

As part of the global Caleffi organisation, Altecnic offers a comprehensive range of over 5,000 products and with our national sales team local to you, if you don't see an item in the Product Guide, please ask, it's likely that it is in our range.



Altecnic supplies trade merchants, original equipment manufacturers, engineers and specifiers who rely on the highest quality service backed up by our ISO 9001, 14001 and OHSAS 18001 certification. This ensures that only authentic, accredited Altecnic products are supplied which meet all current UK and European standards, supported by our outstanding technical and quality departments.

### Please note

#### WRAS Approved Products

Details of the range of products approved can be found in the Water Fittings and Materials online directory:

[www.wras.co.uk](http://www.wras.co.uk)



#### NSF Certified Products

Details of NSF certified products to TMV2, TMV3 and DTC can be found online at:

[www.nsf.org](http://www.nsf.org)



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For thirty years, Altecnic has supported the UK plumbing and heating industry with the best advice and market leading products from our parent company Caleffi S.p.A.

Caleffi was founded in 1961 to provide high quality heating and plumbing components.

Based near Milan in Northern Italy, Caleffi has maintained its principles and grown rapidly to include global sales based out of three core factories within ten miles of Milan.

Caleffi is the largest manufacturer of hydronic components in Italy and from these factories produces stamped brass and thermo plastics, core materials for its ranges, ensuring the very highest quality control.

**Recent milestones include:**

- 2000** - Caleffi has 600 employees and turnover of 200bn Lira.
- 2002** - Altecnic becomes part of the Caleffi family.
- 2003** - Caleffi introduces market leading separators and deaerators.
- 2007** - Offices open in USA.
- 2008** - The iconic CUBOROSSO research and testing facility is completed. Caleffi has always had a comprehensive quality control process but the CUBOROSSO is it's heart.
- 2010** - An innovative vertical warehouse is built to provide global stock support enabling fast delivery wherever you are.
- 2010** - Japanese offices open.
- 2016** - Caleffi has more than 1,000 employees in 12 companies and over 70 active markets.
- 2018** - Caleffi group consolidated turnover exceeds 350 million euros.
- 2019** - Altecnic strengthens links with Caleffi group



Today's plumbing and heating components have to do much more than simply transport hot water, and Altecnic's range meets every requirement for every application, from UK & EU legislation to global environmental standards.

With a comprehensive range of products for use within the hot and cold services and both domestic and commercial heating circuits, Altecnic's market-leading approach has brought a number of UK firsts to market.

Committed to delivering accredited and compliant products, Altecnic's range of approved radiator valves and accessories is the most comprehensive on the market. From the TELL efficiency rated "I" Ecolal™ thermostatic radiator valve, to the contemporary design of the Eclipse range of manual radiator valves, there's a product to fit the requirements of any installation.

Offering the latest in expansion vessel technology, Altecnic is the first UK company to replace traditional air filled vessels with superior, longer lasting nitrogen filled

tanks. Altecnic has incorporated this new advancement in technology into its industry favourite Robokit and Robokit Extra sealed system kits.

The easy to install and maintain Dirtmag Mini™ is the latest innovation in Altecnic's range of magnetic, non-magnetic debris, air removal and venting products. Altecnic also supplies Robocal and Minical brands, the industry's most widely used automatic air vents.

Meeting the latest European safety legislation, Altecnic's accredited range of safety relief valves are manufactured to the highest international standards.

Altecnic also offers a full range of products for water supply protection from non return valves, single and double check valve to back flow preventors (RPZ).

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# Mixing Valves

## Mixing Valves

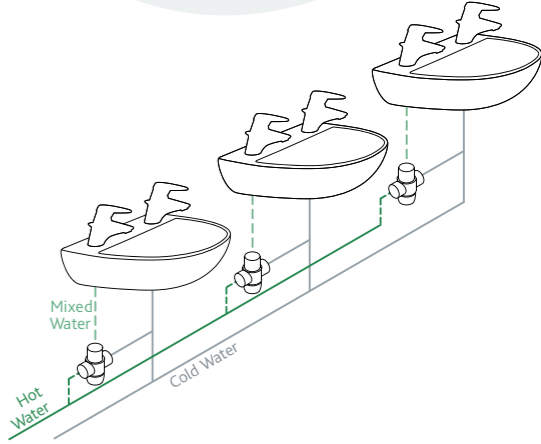


### Thermostatic mixing valves

A complete range of thermostatic mixing valves is available for domestic appliances, healthcare, school, hotel and leisure facilities. This includes a valve which meets the TMV3, DO8 engineering specifications required for healthcare and nursing home facilities and BS EN1111 & 1287 (TMV2). It allows installations from point of use of baths and basins to centralised mixing in commercial properties such as sports facilities, where stable temperatures with high volume flow rates are required.

The range covers use with hot and cold water, with inlet pressures of up to 14 bar, maximum inlet temperatures of 85°C and temperature controls of +/-2°C.

Hot bath water is responsible on average for 20 fatalities a year and 570 scaldings are causing disfigurement. Uncontrolled hot water can lead to second and third degree burns and is especially dangerous for the young and elderly members of society. It is a duty of care for all plumbers and installation engineers to correctly protect these groups within society and is the very reason why regulations have been put in place. TMV2, TMV3 and NHS DO8 regulations are applicable to various situations and installations. Other regulations and standards also affect the hot water control within the home such as BS EN 15092, all of which can be catered for with an Altecnic valve.



### Which mixing valve is suitable for my application?

Using the table below, it is possible to see which application and set of regulations apply to your installation, and remember if in doubt always err on the side of caution.

	ART	WRAS APPROVED PRODUCT	NSF 2 Certified to NSF TMV2	NSF 3 Certified to NSF TMV3	NSF Certified to BS EN 15092
Merchant Mixing Valves	5213	✓	✓	✓	
45-65° Tempering Valve	5218	✓			✓
Mixcal III Thermostatic Failsafe Mixing Valve	5211	✓	✓		
Mixcal III Group Thermostatic Mixing Valve	5219	✓	✓		✓
Careflo Thermostatic Failsafe Mixing Valve	5212	✓		✓	
L-Pattern Thermostatic Mixing Valve	5200	✓	✓		
Mixcal Mixpro®	5231	✓			
Adjustable Thermostatic Mixing Valve	5214	✓	✓		
OEM Thermostatic Mixing Valve	5219	✓	✓		

## MIXING VALVES - MERCHANT MIXING VALVE & TEMPERING VALVE

CA-100822



### MERCHANT MIXING VALVES - ART 5213



Ref no	Size	Connections	Temperature
CA-100822	15mm	Compression	Setting range 30 - 50°C
CA-100824	22mm	Compression	Setting range 30 - 50°C
CA-100827	15mm	Compression+ MX valve	Setting range 30 - 50°C
CA-100828	22mm	Compression + MX valve	Setting range 30 - 50°C

The failsafe Merchant thermostatic mixing valve has been specifically designed and manufactured to meet the requirements of the latest National Health Service model engineering specification - D08 and BS 7942 for use in vulnerable person applications.



#### SPECIFICATION

- Temperature stability :  $\pm 2^{\circ}\text{C}$
- Max. working pressure (static) : 10 bar
- Max. working pressure (dynamic) : 5 bar
- Max. inlet temperature :  $85^{\circ}\text{C}$
- Max. inlet pressure ratio (H/C or C/H) : 6:1
- Minimum temperature differential requirement for failsafe :  $10^{\circ}\text{C}$
- Minimum flow rate for stable operation : 4 l/min

CA-100827



521814



### 45-65° TEMPERING VALVE - ART 5218



Ref no	Size	Connections	Temperature
521814 *	1/2"	M BSP	Setting range 45 - 65°C
521815 *	3/4"	M BSP	Setting range 45 - 65°C
521816 *	1"	M BSP	Setting range 45 - 65°C
521817	15mm	Compression	Setting range 45 - 65°C
521818	22mm	Compression	Setting range 45 - 65°C
521819	28mm	Compression	Setting range 45 - 65°C

#### SPECIFICATION

- Maximum inlet pressure : 10 bar static, 5 bar dynamic
- Maximum inlet temperature :  $90^{\circ}\text{C}$
- Certified to BS EN 15092
- Maximum pressure ratio (H/C or C/H) : 2:1
- Minimum temperature differential requirement for failsafe :  $10^{\circ}\text{C}$
- Temperature stability :  $\pm 2^{\circ}\text{C}$
- Minimum flow rate for stable operation : 4 l/m - 1/2" and 3/4" sizes, 6 l/m - 1" size



521817



## MIXING VALVES - MIXCAL III

### MIXCAL III THERMOSTATIC FAILSAFE MIXING VALVE - ART 5211



521122

Ref no	Size	Connections	Temperature
521115	15mm	Compression	Setting range 30 - 65°C
521122	22mm	Compression	Setting range 30 - 65°C
CA-MX5115	15mm	Compression	Setting range 30 - 65°C
CA-MX5122	22mm	Compression	Setting range 30 - 65°C

Failsafe thermostatic mixing valve, complies with the requirements of EN 1287.



#### SPECIFICATION

- Temperature stability :  $\pm 2^{\circ}\text{C}$
- Maximum hot inlet temperature :  $85^{\circ}\text{C}$
- Minimum temperature differential requirement for failsafe :  $10^{\circ}\text{C}$

### MIXCAL III GROUP THERMOSTATIC MIXING VALVE - ART 5219



ALT-521928

Ref no	Size	Connections	Check Valves	Temperature
ALT-521928	28mm	Compression	Yes	Setting range 35 - 65°C

#### SPECIFICATION

- Maximum working pressure : 14 bar (static), 5 bar (dynamic)
- Maximum hot inlet temperature :  $90^{\circ}\text{C}$
- Temperature stability :  $\pm 2^{\circ}\text{C}$



## THERMOSTATIC MIXING VALVES - CAREFLO & MX VALVES

521222



### CAREFLO THERMOSTATIC FAILSAFE MIXING VALVE - ART 5212



Ref no	Size	Connections	Temperature
521215	15mm	Compression	Setting range 30 - 50°C
521222	22mm	Compression	Setting range 30 - 50°C
CA-MX5215	15mm	Compression	Setting range 30 - 50°C
CA-MX5222	22mm	Compression	Setting range 30 - 50°C
CA-100065	15mm - conversion kit only		
CA-100066	22mm - conversion kit only		
CA-100147	Service kit		

Ideal for care homes and medical applications, the Mixcal Careflo is a failsafe thermostatic mixing valve that has been specifically designed and manufactured to meet the requirements of the latest National Health Service model engineering specification - D08 and BS 7942 for use in vulnerable person applications.



#### SPECIFICATION

- Temperature stability :  $\pm 2^\circ\text{C}$
- Maximum hot inlet temperature :  $85^\circ\text{C}$
- Minimum temperature differential requirement for failsafe :  $10^\circ\text{C}$

AI-495015



### MX VALVES (PAIR) - FOR USE WITH ART 5211 & 5212



Ref no	Size	Connections
AI-495015	15mm x 1"	Compression x F BSP
AI-495022	22mm	Compression x F BSP



AI-496A05BAG



### MX VALVES (PAIR) - FOR USE WITH ART 5213



Ref no	Size	Connections
AI-496A05BAG	15mm	Compression x F BSP
AI-490A06BAG	22mm x 1"	Compression x F BSP

The MX range of valves c/w isolation valve, check valve and test port strainers. The MX valves have been designed specifically for use with our range of thermostatic mixing valves.



## THERMOSTATIC MIXING VALVES - L-PATTERN & MIXCAL VALVES

### L-PATTERN THERMOSTATIC MIXING VALVES - ART 5200



101-2001

Ref no	Size	Connections	Temperature
101-2001	15mm	Compression	Setting range 35-65°C
101-2002	22mm	Compression	Setting range 35-65°C
520040	1/2"	M BSP	Setting range 35-65°C
520050	3/4"	M BSP	Setting range 35-65°C
520060	1"	M BSP	Setting range 35-65°C

Adjustable thermostatic mixing valve with knob, complete with check valves and strainers at the inlets.



#### SPECIFICATION

- Dezincification resistant brass body.
- Male union connections.
- Temperature stability:  $\pm 2^\circ\text{C}$
- Max. working pressure (static): 10 bar
- Max. working pressure (dynamic): 5 bar
- Max. inlet temperature:  $90^\circ\text{C}$
- Max. inlet pressure ratio (H/C or C/H): 2:1
- Minimum temperature differential requirement for failsafe:  $15^\circ\text{C}$
- Min. flow rate for stable operation: 4 l/min (DN 15 - DN 20) 6 l/min (DN 25)C.
- Certified to EN 1111 and EN 1287.



### MIXCAL MIXPRO® - ART 5231



523170

Ref no	Size	Connections	Check Valves	Temperature
523140	1/2"	M BSP	No	Setting range 35 - 65°C
523150	3/4"	M BSP	No	Setting range 35 - 65°C
523160	1"	M BSP	No	Setting range 35 - 65°C
523170	1 1/4"	M BSP	No	Setting range 35 - 65°C
523180	1 1/2"	M BSP	No	Setting range 35 - 65°C
523190	2"	M BSP	No	Setting range 35 - 65°C
523162	28mm	Compression	No	Setting range 35 - 65°C

#### SPECIFICATION

- Maximum working pressure : 14 bar (static), 5 bar (dynamic)
- Maximum hot inlet temperature :  $90^\circ\text{C}$
- Temperature stability :  $\pm 2^\circ\text{C}$



## THERMOSTATIC MIXING VALVES - ADJUSTABLE & OEM TMV

521411



NEW

### ADJUSTABLE THERMOSTATIC MIXING VALVE - ART 5214



Ref no	Size	Connections	Temperature
521411	15mm	Compression	Setting range 30 - 50°C
521412	22mm	Compression	Setting range 30 - 50°C

#### SPECIFICATION

- Maximum working pressure : 10 bar (static), 5 bar (dynamic)
- Maximum hot inlet temperature : 90°C
- Temperature stability : ±2°C



521931 CST



### OEM THERMOSTATIC MIXING VALVE - ART 5213 & 5219



Ref no	Size	Connections	Temperature
521331 CST	G½"/15mm	Compression	Preset 61°C
521332 CST	G½"/15mm	Compression	Preset 51°C
521931 CST	G½"/15mm	Compression	Setting range 35 - 65°C

#### SPECIFICATION

- Maximum inlet temperature : 85°C
- Maximum working pressure : 10 bar (static)
- Temperature stability : ±2°C



## THERMOSTATIC MIXING VALVES

### THERMOSTATIC BLENDING VALVE - NON-FAILSAFE VALVE FOR GENERAL USE



520430



Ref no	Size	Connections	Temperature
520430	½"	F BSP	Setting range 30 - 48°C
520440	½"	F BSP	Setting range 40 - 60°C
520530	¾"	F BSP	Setting range 30 - 48°C
520540	¾"	F BSP	Setting range 40 - 60°C
520630	1"	F BSP	Setting range 30 - 48°C
520640	1"	F BSP	Setting range 40 - 60°C

#### SPECIFICATION

- Adjustable outlet temperature
- Non-failsafe
- Female connections
- Ideal for underfloor heating

### THERMOSTATIC DIVERTING VALVE FOR SOLAR SYSTEMS - ART 2620



262040



Ref no	Size	Connections	Temperature
262040	½"	Screwed iron	Adjustment range 35 - 55°C
262050	¾"	Screwed iron	Adjustment range 35 - 55°C
262055	¾"	Screwed iron	Adjustment range 38 - 52°C

#### SPECIFICATION

- Maximum working pressure : 10 bar (static), 5 bar (dynamic)
- Maximum hot inlet temperature : 100°C
- Temperature stability : ±2°C

## THERMOSTATIC MIXING VALVES - THERMAL BALANCING

116240

### THERMOSTATIC REGULATOR FOR HOT WATER RECIRCULATION LOOPS



Ref no	Size	Description
116140	½"	Regulator with probe pocket for temperature gauge
116150	¾"	Regulator with probe pocket for temperature gauge
116240	½"	Regulator with temperature gauge
116250	¾"	Regulator with temperature gauge

The Altecnic thermostatic regulator for domestic hot water re-circulation loops automatically maintains the specified water temperature.



#### SPECIFICATION

- Kv maximum: 1.8 m<sup>3</sup>/h / Kv minimum: 0.2 m<sup>3</sup>/h
- Max. working pressure: 10 bar
- Max. differential pressure: 1 bar
- Temperature adjustment range: 35 to 65°C

116420

NEW

### 116 THERMOSTATIC REGULATOR FOR HOT WATER RECIRCULATION



Ref no	Size	Connections	Description
116420	22mm	RP ¾" w/ 22mm compression fitting	Thermostatic regulator

#### SPECIFICATION

- Maximum working pressure: 16 bar
- Maximum working temperature: 60°C
- Temperature gauge available (code: 116010)



## THERMOSTATIC MIXING VALVES - ACCESSORIES

### ANTI SCALD DEVICE



600140

Ref no	Size	Connections
600140	½"	M x F BSP



#### SPECIFICATION

- For use on outlets of showers/taps
- Isolates water when temperature exceeds 48°C

### ACCESSORIES FOR THERMOSTATIC MIXING VALVES



CA-100977

Ref no	Description
CA-100147	Careflow service kit 15 & 22 filters, check valves, gaskets, thermostats, O-rings & instructions
CA-100065	15mm tail-piece set for Mixcal III
CA-100066	22mm tail-piece set for Mixcal III
CA-100977	¼" temperature measuring point
CA-100224	Service kit for Mixcal III
CA-5215INT	15mm Merchant Mixing Valve service kit
CA-5222INT	22mm Merchant Mixing Valve service kit



# Pressure Reducing Valves

## Pressure Reducing Valves

### Pressure Reducing Valves

The Caleffi range of valves are designed to cover domestic, semi-commercial and commercial applications ranging from DN 15 to DN 300.

Meeting the latest European standard and UK water regulations, the range of pressure reducing valves provides pressure control under both dynamic and static flow condition (dependent on model).




Pressure reducing valves are installed in water systems to reduce and stabilise inlet pressures from mains water supplies or boosted water systems, which generally are too high and variable for domestic appliances to function correctly.

The 533 range is designed for domestic use while the 535 is intended for semi-commercial or public buildings to equalise the supply, preventing excessive pressures at outlets.

Both 533 and 535 series include the H-range designed for higher temperature applications.

Reduction Ratio 3:1



		Domestic use 	Commercial use 	Pressure Control
Prescal - Series 533LB	✓	✓		Dynamic
Prescal - Series 533H	✓	✓		Dynamic
Prescal - Series 535	✓	✓	✓	Static
Prescal - Series 535H	✓		✓	Static
Prescal - Series 536	✓		✓	Static
Prescal - Series 300	✓		✓	Dynamic

## PRESSURE REDUCING VALVES - SERIES 533

533641H



### PRESCAL - SERIES 533 HIGH PERFORMANCE PRESSURE REDUCING VALVE WITH COMPRESSION ENDS



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
533641H	15mm	12 bar	1.0 - 5.5 bar	Compression	No Port	Max 80°C
533651H	22mm	12 bar	1.0 - 5.5 bar	Compression	No Port	Max 80°C
533741H	15mm	12 bar	1.0 - 5.5 bar	Compression	Port Only	Max 80°C
533751H	22mm	12 bar	1.0 - 5.5 bar	Compression	Port Only	Max 80°C
533761H	28mm	12 bar	1.0 - 5.5 bar	Compression	Port Only	Max 80°C
533841H	15mm	12 bar	1.0 - 5.5 bar	Compression	With Gauge	Max 80°C
533851H	22mm	12 bar	1.0 - 5.5 bar	Compression	With Gauge	Max 80°C
533861H	28mm	12 bar	1.0 - 5.5 bar	Compression	With Gauge	Max 80°C

The series 533 high performance range of pressure reducing valves is designed for domestic and semi-commercial applications.



#### SPECIFICATION

- Maximum pressure at inlet : 12 bar
- Outlet adjustment range : 1.0 - 5.5 bar (dynamic control only)
- EN 1567 approved
- Maximum temperature : 80°C
- High flow rate
- Low operational noise

533741



533841H



533441H LTC



### PRESCAL - SERIES 533 HIGH PERFORMANCE PRESSURE REDUCING VALVES



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
533441H LTC	1/2"	12 bar	1.0 - 5.5 bar	F x F BSP	Port Only	Max 80°C
533451H LTC	3/4"	12 bar	1.0 - 5.5 bar	F x F BSP	Port Only	Max 80°C
533241H LTC	1/2"	12 bar	1.0 - 5.5 bar	F x F BSP	With Gauge	Max 80°C
533251H LTC	3/4"	12 bar	1.0 - 5.5 bar	F x F BSP	With Gauge	Max 80°C

The series 533 high performance range of pressure reducing valves is designed for domestic and semi-commercial applications.



#### SPECIFICATION

- Maximum pressure at inlet : 12 bar
- Outlet adjustment range : 1.0 - 5.5 bar (dynamic control only)
- EN 1567 approved
- Maximum temperature : 80°C
- High flow rate
- Low operational noise

533241H LTC



## PRESSURE REDUCING VALVES - SERIES 533

### SERIES 533 COLD PRESSURE REDUCING VALVE



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
533041	1/2"	16 bar	1 - 6 bar	Screwed Iron		Max 40°C
533051	3/4"	16 bar	1 - 6 bar	Screwed Iron		Max 40°C
533241	1/2"	16 bar	1 - 6 bar	Screwed Iron	With Gauge	Max 40°C
533251	3/4"	16 bar	1 - 6 bar	Screwed Iron	With Gauge	Max 40°C
533441	1/2"	16 bar	1 - 6 bar	Screwed Iron	Port Only	Max 40°C
533451	3/4"	16 bar	1 - 6 bar	Screwed Iron	Port Only	Max 40°C
533641	15mm	16 bar	1 - 6 bar	Compression		Max 40°C
533651	22mm	16 bar	1 - 6 bar	Compression		Max 40°C
533741	15mm	16 bar	1 - 6 bar	Compression	Port Only	Max 40°C
533751	22mm	16 bar	1 - 6 bar	Compression	Port Only	Max 40°C
533841	15mm	16 bar	1 - 6 bar	Compression	With Gauge	Max 40°C
533851	22mm	16 bar	1 - 6 bar	Compression	With Gauge	Max 40°C



533041

#### SPECIFICATION

- Maximum pressure at inlet : 16 bar
- Outlet adjustment range : 1 - 6 bar
- Maximum temperature : 40°C
- Pressure gauge connection : G1/4"



Want to learn more about Pressure Reducing Valves?

Request a FREE copy of our latest Technical Bulletin at [technical@altecnic.co.uk](mailto:technical@altecnic.co.uk)



## PRESSURE REDUCING VALVES - SERIES 533

533442 CST



### PRESCAL - SERIES 533LB PRESSURE REDUCING VALVE - 4MS POSITIVE LIST COMPLIANT



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
533442 CST	½"	12 bar	1.0 - 6.0 bar	F x F BSP	Port Only	Max 40°C

The series 533LB range of pressure reducing valves is designed for domestic and semi-commercial applications.



#### SPECIFICATION

- Maximum pressure at inlet : 12 bar
- Outlet adjustment range : 1 - 6 bar (dynamic control only)
- Manufactured with materials from 4MS positive list material - low lead alloy
- Maximum temperature : 40°C
- Dynamic control

533430H

NEW



### SERIES 533H INCLINED MICRO PRESSURE REDUCING VALVE



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
533430H	¾"	16 bar	0.8 - 4.0 bar	F x F BSP	Port Only	Max 80°C
533230H	¾"	16 bar	0.8 - 4.0 bar	F x F BSP	With Gauge	Max 80°C

The series 533H range of pressure reducing valves is designed for domestic and semi-commercial applications.



#### SPECIFICATION

- Maximum pressure at inlet : 16 bar
- Outlet adjustment range : 0.8 - 4 bar (dynamic control only)
- Maximum temperature : 80°C
- Dynamic control

## PRESSURE REDUCING VALVES - SERIES 535

### PRESCAL - SERIES 535 DIAL UP PRESSURE REDUCING VALVE



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
535022	22mm	25 bar	1.0 - 6.0 bar	Compression	Port Only	Max 40°C
535041	½"	25 bar	1.0 - 6.0 bar	M x M BSP	With Gauge	Max 40°C
535051	¾"	25 bar	1.0 - 6.0 bar	M x M BSP	With Gauge	Max 40°C
535061	1"	25 bar	1.0 - 6.0 bar	M x M BSP	With Gauge	Max 40°C
535071	1¼"	25 bar	1.0 - 6.0 bar	M x M BSP	With Gauge	Max 40°C
535081	1½"	25 bar	1.0 - 6.0 bar	M x M BSP	With Gauge	Max 40°C
535091	2"	25 bar	1.0 - 6.0 bar	M x M BSP	With Gauge	Max 40°C
535040	½"	25 bar	1.0 - 6.0 bar	M x M BSP	Port Only	Max 40°C
535050	¾"	25 bar	1.0 - 6.0 bar	M x M BSP	Port Only	Max 40°C
535060	1"	25 bar	1.0 - 6.0 bar	M x M BSP	Port Only	Max 40°C
535070	1¼"	25 bar	1.0 - 6.0 bar	M x M BSP	Port Only	Max 40°C
535080	1½"	25 bar	1.0 - 6.0 bar	M x M BSP	Port Only	Max 40°C
535090	2"	25 bar	1.0 - 6.0 bar	M x M BSP	Port Only	Max 40°C

The series 535 range of dial up pressure reducing valves is designed for semi-commercial and industrial applications.



#### SPECIFICATION

- Maximum pressure at inlet : 25 bar
- Outlet adjustment range : 1 - 6 bar (static control only)
- BS EN 1567 approved
- Maximum temperature : 40°C



535022



535051

### PRESCAL - SERIES 535 HIGH PERFORMANCE DIAL UP PRESSURE REDUCING VALVE



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
535015H	15mm	16 bar	1.0-6.0 bar	Compression	Port Only	Max 80°C
535022H	22mm	16 bar	1.0-6.0 bar	Compression	Port Only	Max 80°C
535028H	28mm	16 bar	1.0-6.0 bar	Compression	Port Only	Max 80°C
535041H	½"	16 bar	1.0-6.0 bar	M x M BSP	With Gauge	Max 80°C
535051H	¾"	16 bar	1.0-6.0 bar	M x M BSP	With Gauge	Max 80°C
535061H	1"	16 bar	1.0-6.0 bar	M x M BSP	With Gauge	Max 80°C
535071H	1¼"	16 bar	1.0-6.0 bar	M x M BSP	With Gauge	Max 80°C
535081H	1½"	16 bar	1.0-6.0 bar	M x M BSP	With Gauge	Max 80°C
535091H	2"	16 bar	1.0-6.0 bar	M x M BSP	With Gauge	Max 80°C
535040H	½"	16 bar	1.0-6.0 bar	M x M BSP	Port Only	Max 80°C
535050H	¾"	16 bar	1.0-6.0 bar	M x M BSP	Port Only	Max 80°C
535060H	1"	16 bar	1.0-6.0 bar	M x M BSP	Port Only	Max 80°C
535070H	1¼"	16 bar	1.0-6.0 bar	M x M BSP	Port Only	Max 80°C
535080H	1½"	16 bar	1.0-6.0 bar	M x M BSP	Port Only	Max 80°C
535090H	2"	16 bar	1.0-6.0 bar	M x M BSP	Port Only	Max 80°C

The series 535 range of dial up pressure reducing valves is designed for semi-commercial and industrial applications.



#### SPECIFICATION

- Max inlet pressure: 16 bar
- Outlet pressure setting range: 1 to 6 bar
- Factory setting: 3 bar
- Pressure gauge scale: 0 to 10 bar
- Pressure gauge connection: G¼
- Maximum temperature 80°C
- Certification: BS EN 1567
- Static control



535015H



535015H

## PRESSURE REDUCING VALVES - SERIES 536

536040



### PRESCAL - SERIES 536 PRESSURE REDUCING VALVE



Ref no	Size	Max Pressure at Inlet	Outlet Adj Range	Connections	Gauge	Temperature
536040	½"	25 bar	0.5 - 6.0 bar	M x M BSP	Port Only	Max 80°C
536050	¾"	25 bar	0.5 - 6.0 bar	M x M BSP	Port Only	Max 80°C
536060	1"	25 bar	0.5 - 6.0 bar	M x M BSP	Port Only	Max 80°C
536070	1¼"	25 bar	0.5 - 6.0 bar	M x M BSP	Port Only	Max 80°C
536080	1½"	25 bar	0.5 - 6.0 bar	M x M BSP	Port Only	Max 80°C
536041	½"	25 bar	0.5 - 6.0 bar	M x M BSP	With Gauge	Max 80°C
536051	¾"	25 bar	0.5 - 6.0 bar	M x M BSP	With Gauge	Max 80°C
536061	1"	25 bar	0.5 - 6.0 bar	M x M BSP	With Gauge	Max 80°C
536071	1¼"	25 bar	0.5 - 6.0 bar	M x M BSP	With Gauge	Max 80°C
536081	1½"	25 bar	0.5 - 6.0 bar	M x M BSP	With Gauge	Max 80°C
536240	½"	25 bar	0.5 - 6.0 bar	F x F BSP	Port Only	Max 80°C
536250	¾"	25 bar	0.5 - 6.0 bar	F x F BSP	Port Only	Max 80°C
536260	1"	25 bar	0.5 - 6.0 bar	F x F BSP	Port Only	Max 80°C
536241	½"	25 bar	0.5 - 6.0 bar	F x F BSP	With Gauge	Max 80°C
536261	1"	25 bar	0.5 - 6.0 bar	F x F BSP	With Gauge	Max 80°C
CA-536251	¾"	25 bar	0.5 - 6.0 bar	F x F BSP	With Gauge	Max 80°C
536660	DN65	25 bar	0.5 - 6.0 bar	Flanged PN16	2 Gauges	Max 80°C

The series 536 range of pressure reducing valves is designed for semi-commercial and industrial applications.



#### SPECIFICATION

- Maximum pressure at inlet : 25 bar
- Outlet adjustment range : 0.5 - 6 bar (static control only)
- Maximum temperature 80°C
- Static control

536051



536250



536061



536660



## PRESSURE REDUCING VALVES - SERIES 300

### PRESCAL - SERIES 300 PRESSURE REDUCING VALVE WITH FLANGED CONNECTIONS



Ref no	Size	Max Pressure at Inlet	Connections	Gauge	Temperature
FL-30050	DN50	16 bar	Flanged PN16	With Gauge	Max 85°C
FL-30065	DN65	16 bar	Flanged PN16	With Gauge	Max 85°C
FL-30080	DN80	16 bar	Flanged PN16	With Gauge	Max 85°C
FL-300100	DN100	16 bar	Flanged PN16	With Gauge	Max 85°C
FL-300150	DN150	16 bar	Flanged PN16	With Gauge	Max 85°C
FL-300200	DN200	16 bar	Flanged PN16	With Gauge	Max 85°C
FL-300250	DN250	16 bar	Flanged PN16	With Gauge	Max 85°C
FL-300300	DN300	16 bar	Flanged PN16	With Gauge	Max 85°C



FL-300100

The series 300 range is designed for commercial and industrial applications.

#### SPECIFICATION

- Flanged PN 16 (PN25 on request)
- Pilot operated offering total control
- Maximum temperature 85°C



### SERIES 576 - DIRECT ACTING PRESSURE REDUCING VALVE



Ref no	Size	Connections	Temperature
576062	DN65	Flanged PN16	Max 60°C
576082	DN80	Flanged PN16	Max 60°C
576102	DN100	Flanged PN16	Max 60°C
576122	DN125	Flanged PN16	Max 60°C
576152	DN150	Flanged PN16	Max 60°C



576082

The model 576 reduces a higher inlet pressure to a lower downstream pressure, regardless of upstream pressure and flow variations. The simple and robust design allows stable operation, minimal maintenance as well as an assembly in various positions.

#### SPECIFICATION

- Flanged PN16 (PN25 & PN40 on request)
- Max upstream pressure: 40 bar
- Downstream pressure : 2 - 14 bar

# Radiator Valves

## Radiator Valves

### Radiator Valves

The Altecnic range of radiator valves is designed to cover domestic and commercial applications. Covering 8mm - 15mm, 1/2" - 3/4" female BSP.

Ecocal™ thermostatic head meets the latest European standards including TELL 'I' rating.

The commercial range offering is comprehensive to include angled, straight lockshield, including fully pre-settable valves for ease of commissioning and TRV body along with a full range of accessories.

Thermostatic radiator valves are typically used for regulating the flow to radiators of central heating systems. They can also be used with a remote sensor to control the flow to heated ceilings and fancoils.

The thermostatic controller contains a liquid-filled element which automatically controls the opening of the valve to keep the ambient temperature of the room at the set temperature. This prevents temperature fluctuations in the room and achieves considerable energy savings.

The thermostatic controller has '0' setting which prevents flow but when positive isolation is required the manual cap must be used.

The frost setting prevents the radiator and pipework from freezing and causing damage to floor coverings and structural items from flooding.



Model Series	Body Pattern	Domestic use	Commercial use	TELL Rating 'I'
Ecocal™ Thermostatic Radiator Valves	Angled / Straight	8, 10, 15mm		✓
Commercial Thermostatic Radiator Valves	Angled / Straight	15, 22mm	1/2" & 3/4"	✓
Commercial Pre-settable Thermostatic Radiator Valves	Angled / Straight		1/2"	✓
Eclipse Manual Radiator Valves	Angled / Straight	8, 10, 15mm		
Decorative Manual Radiator Valves	Angled / Straight	15mm		
Dynamical Presettable Thermostatic Radiator Valve	Angled / Straight	15mm	1/2" & 3/4"	✓

# RADIATOR VALVES - ECOCAL™

CA-200425 LTC



CA-201011

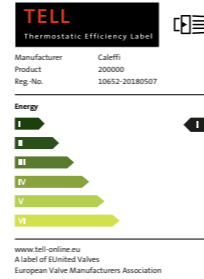


## ECOICAL™ THERMOSTATIC RADIATOR VALVES

Ref no	Size	Connections	Body	Finish	Box Qty
CA-200428MS	8mm x 1/2"	Compression x M BSP	Angled	White head	50
200420 LTC	10mm x 1/2"	Compression x M BSP	Angled	White head	50
200425 LTC	15mm x 1/2"	Compression x M BSP	Angled	White head	50
CA-200455	15mm x 1/2"	Compression x M BSP	Angled	Chrome head	50
CA-201010	10mm x 1/2"	Compression x M BSP	Straight	White head	20
200465 LTC	15mm x 1/2"	Compression x M BSP	Straight	White head	20
CA-201013	10mm x 1/2"	Compression x M BSP	Straight	Chrome head	50
CA-201011	15mm x 1/2"	Compression x M BSP	Straight	Chrome head	50

### SPECIFICATION

- Temperature setting range : 0°C - 28°C
- Max. working pressure (static): 10 bar
- Max differential pressure : 1 bar
- Frost setting : 7°C



200445 LTC - TWIN PACK



200475 LTC - TWIN PACK



200485 LTC

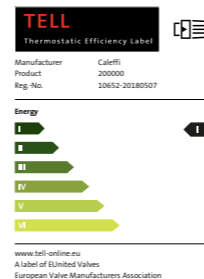


## ECOICAL™ TWIN PACKS

Ref no	Size	Connections	Body	Finish	Box Qty
200440 LTC	10mm x 1/2"	Compression x M BSP	Angled	White head	20
200445 LTC	15mm x 1/2"	Compression x M BSP	Angled	White head	20
CA-200456	10mm x 1/2"	Compression x M BSP	Angled	Chrome head	20
200455 LTC	15mm x 1/2"	Compression x M BSP	Angled	Chrome head	20
CA-200478	10mm x 1/2"	Compression x M BSP	Straight	White head	20
200475 LTC	15mm x 1/2"	Compression x M BSP	Straight	White head	20
CA-200477	10mm x 1/2"	Compression x M BSP	Straight	Chrome head	20
200485 LTC	15mm x 1/2"	Compression x M BSP	Straight	Chrome head	20

### SPECIFICATION

- Temperature setting range : 0°C - 28°C
- Max differential pressure : 1 bar
- Frost setting : 7°C
- 10 bar, BS 2767:10, serviceable packing gland
- Designed to match all the demands of modern sealed systems as well as traditional open vented systems
- Lockshield cap purpose designed to match Ecocal™
- Max. operating pressure: 10 bar
- Polished chrome finish (where appropriate)



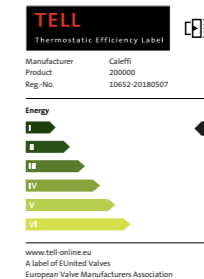
# RADIATOR VALVES - ECOCAL™ OPTIONS

## ECOICAL™ THERMOSTATIC HEAD

Ref no	Description	Box Qty
200014 CST	Ecocal™ chrome head and collar	50
CA-200000	Ecocal™ TRV head and collar	10
CA-100793	Tamperproof guard and allen key for tamperproof guard	1

### SPECIFICATION

- Temperature setting range : 0°C - 28°C
- Max. working pressure (static): 10 bar
- Max differential pressure : 1 bar
- Frost setting : 7°C



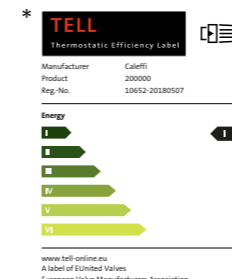
CA-200000



CA-100793

## ECOICAL™ OPTIONS

Ref no	Size	Description	Box Qty
200001	N/A	Ecocal™ head only*	10
201000	N/A	Ecocal™ Remote Sensor Head 2m	10
472000	N/A	Remote adjusting and sensing for TRV 2m capillary	1
BI-100001	15mm x 8mm	Reducing bullet	20
BI-100002	15mm x 10mm	Reducing bullet	20
CA-100793	N/A	Tamperproof guard and allen key for tamperproof guard	1
CA-200510	10mm	Ecocal™ with elbows	20



201000



472000

## RADIATOR VALVES - DYNAMICAL®

230402



NEW

### DYNAMICAL PRESETTABLE THERMOSTATIC RADIATOR VALVE - NON-REVERSABLE



Ref no	Size	Connections	Body	Description
230402	1/2"	Threaded BSP (G)	Angled	With rubber seal
230500	3/4"	Threaded BSP (G)	Angled	With rubber seal
231402	1/2"	Threaded BSP (G)	Straight	With rubber seal
231500	3/4"	Threaded BSP (G)	Straight	Without rubber seal

#### SPECIFICATION

- Working temperature range : 5°C - 95°C
- Maximum operating pressure: 10 bar
- Maximum percentage of glycol: 30%
- Order with CA-200000 Ecocal™ standard head and collar

231402



431503



### 431 & 432 SERIES LOCKSHIELD VALVES



Ref no	Size	Connections	Body	Description
431503	3/4"	Threaded BSP (G)	Angled	Lockshield
431603	1"	Threaded BSP (G)	Angled	Lockshield
432503	3/4"	Threaded BSP (G)	Straight	Lockshield
432603	1"	Threaded BSP (G)	Straight	Lockshield

432503



105-1513



NEW

### DYNAMICAL® TWIN PACK



Ref no	Size	Connections	Body	Description
105-1513	1/2"	Threaded BSP (G)	Angled	With rubber seal
105-2205	3/4"	Threaded BSP (G)	Angled	With rubber seal
105-1514	1/2"	Threaded BSP (G)	Straight	With rubber seal
105-2206	3/4"	Threaded BSP (G)	Straight	Without rubber seal

#### SPECIFICATION

- Working temperature range : 5°C - 95°C
- Maximum operating pressure: 10 bar
- Maximum percentage of glycol: 30%
- Lockshield Temperature range: 5°C - 100°C
- Scale of adjustment ΔP (reg. 1-4) 10 - 150 kPa  
(reg. 5-6) 15 - 150 kPa

105-1514



## RADIATOR VALVES - COMMERCIAL THERMOSTATIC VALVES

### COMMERCIAL PRE-SETTABLE THERMOSTATIC RADIATOR VALVES



421402

Ref no	Size	Connections	Body	Box Qty
421402	1/2" x 1/2"	F x M BSP	Angled	20
422402	1/2" x 1/2"	F x M BSP	Straight	20

#### SPECIFICATION

- Temperature setting range : 0°C - 28°C
- Max differential pressure : 1 bar
- Frost setting : 7°C
- Order with CA-200000 Ecocal™ standard head and collar



### COMMERCIAL THERMOSTATIC RADIATOR VALVES (NON-REVERSIBLE)



220402

Ref no	Size	Connections	Body	Box Qty
220402	1/2" x 1/2"	F x M BSP	Angled	20
220500	3/4" x 3/4"	F x M BSP	Angled	20
221402	1/2" x 1/2"	F x M BSP	Straight	20
221500	3/4" x 3/4"	F x M BSP	Straight	20
224402*	1/2" x 1/2"	F x M BSP	Angled	20
CA-200000	Ecocal™ head and collar			10

#### SPECIFICATION

- Temperature setting range : 0°C - 28°C
- Max differential pressure : 1 bar
- Frost setting : 7°C
- Order with CA-200000 Ecocal™ standard head and collar
- \* Horizontal sensor



224402



CA-200000



## RADIATOR VALVES - SERIES 400 & ECLIPSE MANUAL VALVES

431503



### RADIATOR VALVE - SERIES 400 (NON-REVERSIBLE)



Ref no	Size	Connections	Body	Description	Box Qty
431402	1/2" x 1/2"	F x M BSP	Angled	Lockshield	20
431503	3/4" x 3/4"	F x M BSP	Angled	Lockshield	20
401500*	3/4" x 3/4"	F x M BSP	Angled	Wheelhead	20
411402	1/2" x 1/2"	F x M BSP	Angled	Wheelhead	20
432402	1/2" x 1/2"	F x M BSP	Straight	Lockshield	20
432503	3/4" x 3/4"	F x M BSP	Straight	Lockshield	20
402500	3/4" x 3/4"	F x M BSP	Straight	Wheelhead	20
412402	1/2" x 1/2"	F x M BSP	Straight	Wheelhead	20

\* Convert to TRV with CA-200000

#### SPECIFICATION

- Temperature range: 5°C - 100°C
- Max. working pressure (static): 10 bar

410410 LTC



### ECLIPSE MANUAL RADIATOR VALVES



Ref no	Size	Connections	Body	Description	Box Qty
CA-410408	8mm x 1/2"	Compression x M BSP	Angled	White head	10
410410 LTC	10mm x 1/2"	Compression x M BSP	Angled	White head	10
410415 LTC	15mm x 1/2"	Compression x M BSP	Angled	White head	10
CA-410425	15mm x 1/2"	Compression x M BSP	Angled	Chrome head pair	10
CA-406408	8mm x 1/2"	Compression x M BSP	Straight	White head	10
CA-406410	10mm x 1/2"	Compression x M BSP	Straight	White head	10
406415 LTC	15mm x 1/2"	Compression x M BSP	Straight	White head	10
CA-406425	15mm x 1/2"	Compression x M BSP	Straight	Chrome head pair	10

#### SPECIFICATION

- 10 bar, BS 2767:10, serviceable packing gland
- Designed to match all the demands of modern sealed systems as well as traditional open vented systems
- Lockshield cap purpose designed to match Ecocal™
- Maximum operating pressure: 10 bar
- Polished chrome finish (where appropriate)

CA-410425



## RADIATOR VALVES

### SCREWED IRON THERMOSTATIC RADIATOR VALVE



Ref no	Size	Body	Connections	Description
105-1501	1/2"	Angled	Threaded BSP (G)	Wheel head
105-2201	3/4"	Angled	Threaded BSP (G)	Wheel head
105-1502	1/2"	Straight	Threaded BSP (G)	Wheel head
105-2203	3/4"	Straight	Threaded BSP (G)	Wheel head
105-1503	1/2"	Angled	Male thread BSP (R)	Lockshield
105-2203	3/4"	Angled	Male thread BSP (R)	Lockshield
105-1504	1/2"	Straight	Male thread BSP (R)	Lockshield
105-2204	3/4"	Straight	Male thread BSP (R)	Lockshield

#### SPECIFICATION

- Max working pressure: 10 bar
- Max working temperature: 100°C



105-1501



105-1502

### SCREWED IRON THERMOSTATIC RADIATOR VALVE TWIN PACK



Ref no	Size	Body	Description
105-1505	1/2"	Angled	Thermostatic radiator valve + LS
105-1506	1/2"	Straight	Thermostatic radiator valve + LS
105-2205	3/4"	Angled	Thermostatic radiator valve + LS
105-2206	3/4"	Straight	Thermostatic radiator valve + LS

#### SPECIFICATION

- Temperature setting range : 0°C - 28°C
- Max. working pressure (static): 10 bar
- Max differential pressure : 1 bar
- Frost setting : 7°C



### DUAL FUEL POLISHED RADIATOR VALVES



Ref no	Size	Connections	Description
103-3201	15 mm x 1/2"	15mm compression x 1/2" M BSP	Dual Fuel Corner Radiator Valve

#### SPECIFICATION

- The wheelhead valve has the facility to allow an electric heater to pass through the valve into the vertical leg of a towel rail
- When this is connected to an electricity supply it allows the towel rail to be heated when the central heating boiler is switched off, for example in summer
- Supplied as pair of wheelhead and lockshield valve



## RADIATOR VALVES - DECORATIVE RADIATOR VALVES

YU-JQAL022LC



YU-JQAL024LC



YU-JQAL026LC



YU-JQAL029LC



### DECORATIVE POLISHED RADIATOR VALVES

Ref no	Size	Connections	Body	Description	Box Qty
YU-JQAL022LC	15mm x 1/2"	Compression x M BSP	Straight	Minimalistic single peg x2	24
YU-JQAL023LC	15mm x 1/2"	Compression x M BSP	Angled	Minimalistic single peg x2	24
YU-JQAL024LC	15mm x 1/2"	Compression x M BSP	Straight	Modern pair	38
YU-JQAL025LC	15mm x 1/2"	Compression x M BSP	Angled	Modern pair	38
YU-JQAL026LC	15mm x 1/2"	Compression x M BSP	Straight	Minimalistic cross head x2	18
YU-JQAL028LC	15mm x 1/2"	Compression x M BSP	Angled	Traditional cross head x2	18
YU-JQAL029LC	15mm x 1/2"	Compression x M BSP	90° corner	Modern pair	20

#### SPECIFICATION

- Max working pressure : 10 bar
- Max working temperature : 85°C

### T-PIECE FOR DUAL FUEL INSTALLATIONS

NEW



Ref no	Size	Connections
106-3002	1/2" x 1/2" x 1/2"	M x F x F BSP

## EXTENSION PIECES & FLOW DIFFERENTIAL BYPASS VALVE

### RADIATOR EXTENSION PIECES

Ref no	Size	Connections	Description
106-1010	1/2"	F x M	10mm
106-1015	1/2"	F x M	15mm
106-1020	1/2"	F x M	20mm
106-1025	1/2"	F x M	25mm
106-1030	1/2"	F x M	30mm
106-1040	1/2"	F x M	40mm
106-1060	1/2"	F x M	60mm
106-1080	1/2"	F x M	80mm
106-1100	1/2"	F x M	100mm
106-1009	1/2"	DN15 x 15mm	100 mm Self cutting
106-1012	1/2"	DN15 x 15mm	60 mm Self cutting
106-1013	1/2"	DN15 x 15mm	60mm Telescopic
106-1014	1/2"	DN15 x 15mm	80mm Telescopic
YU-JQAL213HC	1/2"	DN15 x 15mm	Ecocal™ and Eclipse radiator drain off tail piece



106-1010



106-1012



YU-JQAL213HC

### PUSH FIT ELBOW

Ref no	Size	Description
459004	15mm x 10mm	15mm plain tail x 10mm pushfit elbow (pair)
106-2001	15mm x 15mm	15mm plain tail x 15mm pushfit elbow (pair)

#### SPECIFICATION

- Supplied in pairs
- Solder-free connection
- Demountable push fit



459004

### ECOPAS FULL FLOW DIFFERENTIAL BYPASS VALVE

Ref no	Size	Connections	Delta P Range	Temp	Box Qty
519500	3/4" x 3/4"	F x M BSP	Adjustment range 10 - 60 kPa	Max 110°C	10
519700	1 1/4" x 1 1/4"	F x M BSP	Adjustment range 10 - 60 kPa	Max 110°C	10
519504	3/4" x 3/4"	F x M BSP	Adjustment range 100 - 400 kPa	Max 110°C	10
519002 GLW	22mm x 22mm	Compression x compression	Adjustment range 10 - 60 kPa	Max 110°C	10

#### SPECIFICATION

- Valves for use on heating systems where control is by zone or thermostatic radiator valves
- Fitted between flow and return permitting circulation through boiler and helps prevent unnecessary cycling of boiler



519002 GLW

# Mechanical Thermostats

## Mechanical Thermostats

**altecnic**  
CALEFFI group

### Mechanical Thermostats

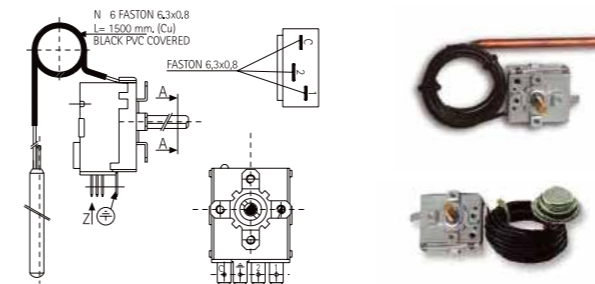
The Altecnic range of thermostats has been developed over a number of years. The range covers:

- Thermometers
- Thermostats (TR2, TRZ, LS1, LS3 Ranges)
- Thermo-manometers
- Encased dual thermostat
- Room thermostats
- Cylinder thermostat



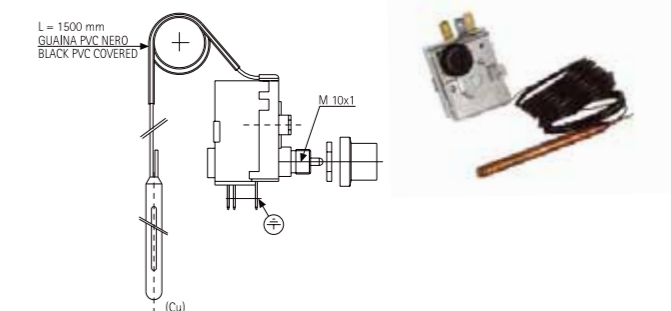
### TR2

Adjustable control thermostat, measuring temperature through a liquid filled sensing element with single pole double throw contacts. SPDT contacts, usually used to adjust the temperature of boilers, electric radiators, oven, washing machines and other various applications. The sensing bulb may be supplied with pocket or fitting for liquid sealing.



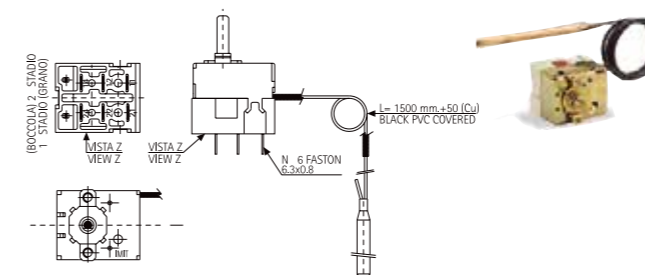
### LS1/LS3

Safety limit thermostat, measuring temperature through a liquid filled sensing element with single pole double throw contact. SPDT contacts, manual or automatic reset, usually used to limit the temperature in boilers, electric radiators, oven, washing machines and other various applications when a maximum safety temperature is not to be exceeded. The sensing bulb may be supplied with pocket or fitting for liquid sealing.



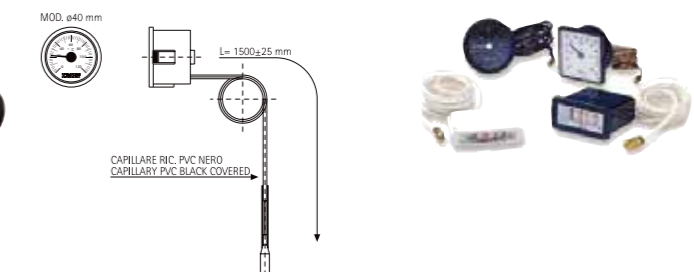
### TRZ

Two stage, adjustable control thermostat, measuring temperature through a liquid filled sensing element with single pole double throw contacts. SPDT contacts, usually used to adjust the temperature of boilers, electric radiators, oven, washing machines and other various applications. The sensing bulb may be supplied with pocket or fitting for liquid sealing. It can be equipped with a mechanical device for contacts opening.



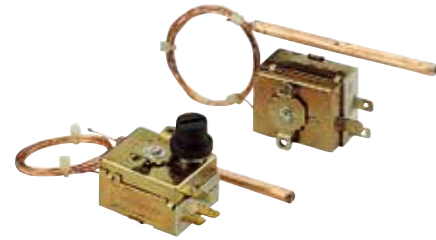
### Thermometers

Thermometer with liquid filled sensing bulb. Particularly suitable for boilers, refrigerators, catering equipment and household appliances. Available in different bodies and options: capillary length, bulb dimension, custom made dial.





## MECHANICAL THERMOSTATS



### SAFETY LIMIT THERMOSTATS



Ref no	Temp	Capillary
IM-LS1/541510	90/110°C	1,000mm

#### SPECIFICATION

- Max bulb temperature 125°C
- Bulb diameter 95mm max, 65mm min
- Capillary length 1,000mm
- Single pole double thread



### FLOW SWITCH FOR HEATING AND AIR CONDITIONING SYSTEMS



Ref no	Description
626600	Flow switch for heating and air conditioning systems

#### SPECIFICATION

- Maximum working pressure : 10 bar
- Working temperature range : -30 to 120°C



### CONTROL THERMOSTATS



Ref no	Temp	Capillary
IM-TR2/540010	0/90°C	1,000mm
IM-TR2/540020	0/300°C	1,000mm
IM-TR2/540030	0/40°C	1,000mm
IM-TR2/540043	-30/+34.5°C	1,000mm
IM-TR2/540140	64/210°C	1,000mm
IM-TR2/540160	0/120°C	1,000mm

Adjustable thermostat ideal for fitting inside casings to prevent live connections being touched as they are exposed.

#### SPECIFICATION

- Panel mounting, liquid-filled capillary and sensing element (not including knobs and bezels)
- Capillary length 1,000mm
- Single pole double throw

## MECHANICAL THERMOSTATS

### IMMERSION CONTROL THERMOSTAT



Ref no	Size	Capillary	Description
IM-TC2/542450	1/2"	97mm	0°/90°C adjustable - grey

Single control thermostat with case and temperature range from 0-90°C.

#### SPECIFICATION

- IP rating: 40
- Compact design
- Complete with 1/2" pocket
- Max bulb temperature 125°C



### LIMIT THERMOSTAT



Ref no	Size	Capillary	Description
IM-LSC1/543039	1/2"	95mm	80°C limit - No pocket

Thermostat with case and cap for external fitting on boilers.



### DUAL IMMERSION THERMOSTAT



Ref no	Size	Description
IM-TLSC/542902	1/2"	25/65°C adjustable & 80°C limit - white

Thermostat with case for fitting on unvented cylinders or boilers.

#### SPECIFICATION

- IP rating: 40
- Max bulb temperature 150°C
- No pocket



# Underfloor Heating

## Underfloor Heating

### Underfloor Heating

Underfloor heating is not only highly efficient but it also has great design and aesthetic appeal. Altecnic offers a number of solutions for modern underfloor heating.

The range of underfloor heating pump packages are designed for use with 210mm centre manifolds available with high-efficiency pumps in line with European legislation.

UFH Compact Unit



UFH Control Unit



### Application Guide

Model Series	Application	High Efficiency Pump
UFH Control Unit	15kW Output	✓
UFH Compact Unit	3kW Output	✓

### UFH CONTROL UNIT



The UFH Control Unit is designed to supply temperature controlled hot water to the underfloor heating system or in radiant panel heating systems.

It is designed to be easily connected to any 210mm flow and return manifold (not supplied) to evenly distribute the hot water.

The UFH Control Unit is supplied as a collection of components for easy assembly at site.

The flow elbow has 2 liquid crystal thermometers to indicate temperature and a test port which are be used to install an air vent or pressure gauge.

The UFH Control Unit is normally supplied with the Wilo Para 25-130/7-50/SC-12 pump but can also be supplied without a pump.

#### SPECIFICATION

- Medium: water or glycol solution
- Maximum glycol percentage: 30%
- Temperature range: 5 to 90°C
- Temperature adjustment range: 35 to 60°C
- Factory setting: 35°C
- Accuracy: ±2°C
- Maximum working pressure: 10 bar
- Male thread connections: BS EN ISO 228-1
- Primary side connection centre distance: 75mm
- Manifold connection centre distance: 210 mm

### UFH COMPACT CONTROL UNIT



The Altecnic UFH single zone control unit is designed for use on smaller heating circuits such as conservatories and extensions. It provides temperature controlled pre-mixed water to underfloor heating zones with a heat output of up to 3kW, satisfying underfloor areas up to 40 square metres.

The Altecnic UFH is pre-assembled and wired for installer convenience and is supplied complete with a mounting bracket for installation on a wall. A pre-wired flow thermostat is connected via a wiring centre to the pump, which in turn has a mains cable supplied for connection to the power supply.

#### SPECIFICATION

- Provides mixed temperature water control to underfloor heating systems 3kW maximum

### ACTUATORS

Ref no	Description
656102	230v ON/OFF thermoelectric actuator
656104	24v ON/OFF thermoelectric actuator



656102

Did you know?

Altecnic provides training on all of our products.

For more information contact us on  
+44 (0)1785 218 206

# Sealed Systems

## Sealed Systems

### Sealed Systems

**Sealed primary central heating systems are the most commonly used form of heating system throughout Europe and the rest of the developed world.**

Sealed central heating systems should not be confused with unvented mains pressure hot water systems, which apply only to the secondary hot water supply side of a combined heating and hot water system.

From an installer's viewpoint therefore, there is no requirement to be registered or to notify any authority when fitting a sealed primary heating system.

The ease of installation of a sealed system makes it particularly attractive to the installer, eliminating the feed and expansion tank and associated pipework, and thus reducing the risk of corrosion and noise in the system.

**Advantages can be summarised as follows:**

- System flexibility due to component siting alternatives.
- Cost savings due to considerably reduced installation time.
- No feed and expansion tank hence avoiding over pumping problems, risk of freezing up etc.
- Longer life due to virtual elimination of corrosion problems.
- Noise reduction due to higher system pressure, boiler noise (localised boiling) is significantly reduced or eliminated.
- Low maintenance costs as equipment is virtually maintenance free, other than for periodic operational checks.

### Essential Components and Location

Note: Domestic sealed heating systems should take due account of the following British Standards:

**BS 7074: Part 1: 1998** – "Application, selection and installation of expansion vessels and ancillary equipment for sealed water systems – Part 1. Code of practice for domestic heating and water supply".

**BS EN 12828:2012+A1:2014** – "Heating systems in buildings – Design for water based heating systems".

**The essential components for a sealed system are:**

- Diaphragm Expansion Vessel (complying with BE EN 13831: 2007 – "Closed expansion vessels with built in diaphragms for installation in water")
- Safety Valve (pressure relief valve)
- Pressure Gauge
- Filling Point (means for system filling, make-up and venting).



### HEATING VESSEL SIZING GUIDE

Boiler output		Vessel size per system static head		
kw	btu/hr	5 m (Litre)	10 m (Litre)	10 m (Litre)
10	34120	8	12	18
15	51180	12	18	24
20	68240	12	18	35
25	85300	18	25	35
35	119421	25	35	50
40	136480	35	35	80
		0.5 bar	1.0 bar	1.5 bar
Vessel pre-charge (set by installer)				



Also refer to the Altecnic expansion vessel sizing calculator **FREE** on request.

## SEALED SYSTEMS - ROBOKITS

CA-900012



CE marked

### ROBOKIT EXTRA SEALED SYSTEM - NITROGEN FILLED



Ref no	Vessel (Litre)	Expansion Vessel	Filling Loop	Mounting Bracket	Safety Relief Valve w/gauge	Manifold Fitting
CA-900008	8	Y	Y	Y	Y	Y
CA-900012	12	Y	Y	Y	Y	Y
CA-900018	18	Y	Y	Y	Y	Y
CA-900024	25	Y	Y	Y	Y	Y
CA-900035	35	Y	Y	N	Y	Y
CA-900050CP	50	Y	Y	N	Y	Y
CA-900080	80	Y	Y	N	Y	Y

#### SPECIFICATION

- Reflex vessel includes Altecnic 5-year warranty
- Nitrogen filled
- Not suitable for potable water



109-5005



SPACE SAVING

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### ROBOKIT COMPACT SEALED SYSTEM



Ref no	Vessel (Litre)	Expansion Vessel	Filling Loop	Mounting Bracket	Safety Relief Valve w/gauge	Manifold Fitting
109-5005	8	Y	Y	Y	Y	Y
109-5006	12	Y	Y	Y	Y	Y
109-5007	18	Y	Y	Y	Y	Y

#### SPECIFICATION

- Sealed system kit comprising: expansion vessel up to 18 litre capacity, filling loop, safety relief valve, pressure gauge, integral mounting bracket and assembly connector allowing left or right installation on the system

109-5008



SPACE SAVING

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### ROBOKIT COMPACT PLUS SEALED SYSTEM



Ref no	Vessel (Litre)	Expansion Vessel	Filling Loop	Mounting Bracket	Safety Relief Valve w/gauge	Manifold Fitting
109-5008	8	Y	Y	Y	Y	Y
109-5009	10	Y	Y	Y	Y	Y
109-5010	12	Y	Y	Y	Y	Y

#### SPECIFICATION

- Sealed system kit comprising: expansion vessel up to 12 litre capacity, WRAS Approved filling loop, safety relief valve, pressure gauge, integral mounting bracket and assembly connector allowing left or right installation on the system

## SEALED SYSTEMS - KITS & FILLING LOOPS

### ROBOKIT SEALED SYSTEM KITS



Ref no	Size	Description
CA-900000	1/2"	1/2" sealed system kit (for 8 litre to 80 litre) with tapered vessel connection.
CA-900001	3/4"	Filling loop, safety relief valve w/gauge, mounting bracket, manifold fitting.
CA-100000	1/2"	Filling loop, safety relief valve w/gauge, manifold fitting.
CA-100085	1/2"	Filling loop, safety relief valve (remote from Robokit), pressure gauge, mounting bracket, manifold fitting.



CA-900000

#### SPECIFICATION

- Sealed system filling kit comprising: filling loop, safety relief valve complete with gauge, mounting bracket to suit up to 25 litre capacity and manifold fitting
- Water regulations G24.1 and 24.2 compliant filling loop

### FILLING LOOPS



Ref no	Size	Description
CA-300001	15mm	Robofil auto filling loop
CA-300606	15mm	Ecofil filling loop (G24 approved) *
CA-300611	15mm	Ecofil+ filling loop, cap and collar (G24 approved) *
JI-300608	15mm	Robofil filling loop (as used in Robokit) *
ALT-ST0035	15mm	Filling loop with built-in gauge



CA-300611



CA-300001

Used to fill sealed systems from the mains cold water.



#### SPECIFICATION

- Approved flexible hoses complete with check valves
- Comply with water regulations and use WRAS approved components \* Water regulation G24.1 and 24.2 compliant where indicated



ALT-ST0035

### ACCESSORIES FOR FILLING LOOPS



Ref no	Size	Description
YU-JQAL304	15mm	Cap, collar & washer



YU-JQAL304

## SEALED SYSTEMS - MATRIX DIGITAL PRESSURISATION UNIT



### MATRIX MINI

Ref no	Description	Filled Weight	Empty Weight
121-1001	Matrix Mini 130D	3.6	6.6
121-1002	Matrix Mini 230D	4.2	7.2

Suitable for maintaining pressure in large domestic and commercial sealed heating systems, chilled water systems, refrigeration units and industrial cooling systems. Matrix Mini units are exceptionally easy to install and commission and are housed in a compact and robust enclosure suitable for wall mounting.



### MATRIX MIDI

Ref no	Description	Filled Weight	Empty Weight
121-1011	Matrix Midi 135D	13.4	23.4
121-1012	Matrix Midi 150D	13.4	23.4
121-1013	Matrix Midi 235D	19.4	29.4
121-1014	Matrix Midi 250D	19.4	29.4

Suitable for maintaining pressure in large domestic and commercial sealed heating systems, chilled water systems, refrigeration units and industrial cooling systems. Matrix Midi units feature continuously rated brass peripheral pumps, are exceptionally easy to install and commission and are suitable for either floor or wall mounting.



### MATRIX MAXI

Ref no	Description	Filled Weight	Empty Weight
121-1021	Matrix Maxi 180D	34.0	52.0
121-1022	Matrix Maxi 280D	45.0	63.0

Suitable for maintaining pressure in large domestic and commercial sealed heating systems, chilled water systems, refrigeration units and industrial cooling systems. Matrix Maxi 8.0 bar units are exceptionally easy to install and commission and are housed in a compact and robust enclosure for floor mounting.

## SEALED SYSTEMS - MATRIX DIGITAL PRESSURISATION UNIT

The Altecnic range of digital pressurisation units represent the next generation of automatic filling and pressure maintenance solutions for sealed heating and chiller systems.

#### Unique Monocoque Design

Offers a compact unit that can be wall or floor mounted. Along with flexible hose connections easily configured to be left or right handed.

#### Advanced Digital Controls

Featuring intuitive, easy to use menu system and backlit LCD matrix display.

#### Premium Quality Pumps

Available in single (duty) or twin pump (duty-standby) options, offering balanced usage based on run time and extended life.

#### Precise Pressure Transducer

Closed loop control featuring precise system pressure monitoring and top up. System pressure control operates in 0.1 bar increments.

#### Robust Break Tank

Up to 18 litres capacity and with a WRAS approved fill valve offering high flow rates of 12 litres/minute. Features include type AB air gap and weir overflow.

#### External Alarm

Multiple Volt-free contacts and BMS connectivity to external alarms and systems.

- ✓ Simple & convenient to install
- ✓ Easy & quick commissioning
- ✓ High reliability
- ✓ Monitoring and control
- ✓ Category 5 compatible
- ✓ System connectivity

#### PERFORMANCE

- Up to 300,000 litre systems
- Duty or Duty Standby options
- Up to 8.0 bar pressure options
- 3 - 18 litre tank capacity options
- High flow fill valve
- Quiet operation

#### QUALITY

- Built-in safety – low voltage controls
- WRAS Approved fill valve
- ISO 9001:2015
- BS EN 60335 compliant
- CE compliant

#### RELIABILITY

- 2 year guarantee
- Robust construction
- Continuously rated pumps
- Dry run protection

# Expansion Vessels

## Expansion Vessels

**altecnic**  
CALEFFI group

### The benefits of Nitrogen filled vessels

Nitrogen, a dry inert gas used in the Reflex range of expansion vessels, improves the vessel's life span by reducing corrosion inside the vessel, and prevents loss of pre-charge pressure. Nitrogen permeates through rubber slower than oxygen, is far less reactive to both steel and aluminium and does not degrade rubber prolonging the membrane life.

Oxygen in compressed air permeates through the membrane, thus reducing the pre-charge pressure over time. During normal operation, oxygen oxidises the membrane in the vessel, causing under-inflation, but dry nitrogen will maintain proper inflation pressure and will not corrode the inside of the vessel.

It's recognised in the industry that oxidative aging is one of the primary causes of decreased vessel life. Tests have shown that if vessels are inflated with nitrogen, there is a significant reduction in failure and increased vessel life.

### HEATING VESSEL SIZING GUIDE

Boiler output		Vessel size per system static head		
kw	btu/hr	5 m (Litre)	10 m (Litre)	10 m (Litre)
10	34120	8	12	18
15	51180	12	18	24
20	68240	12	18	35
25	85300	18	25	35
35	119421	25	35	50
40	136480	35	35	80
		0.5 bar	1.0 bar	1.5 bar
Vessel pre-charge (set by installer)				



Also refer to the Altecnic expansion vessel sizing calculator **FREE** on request.



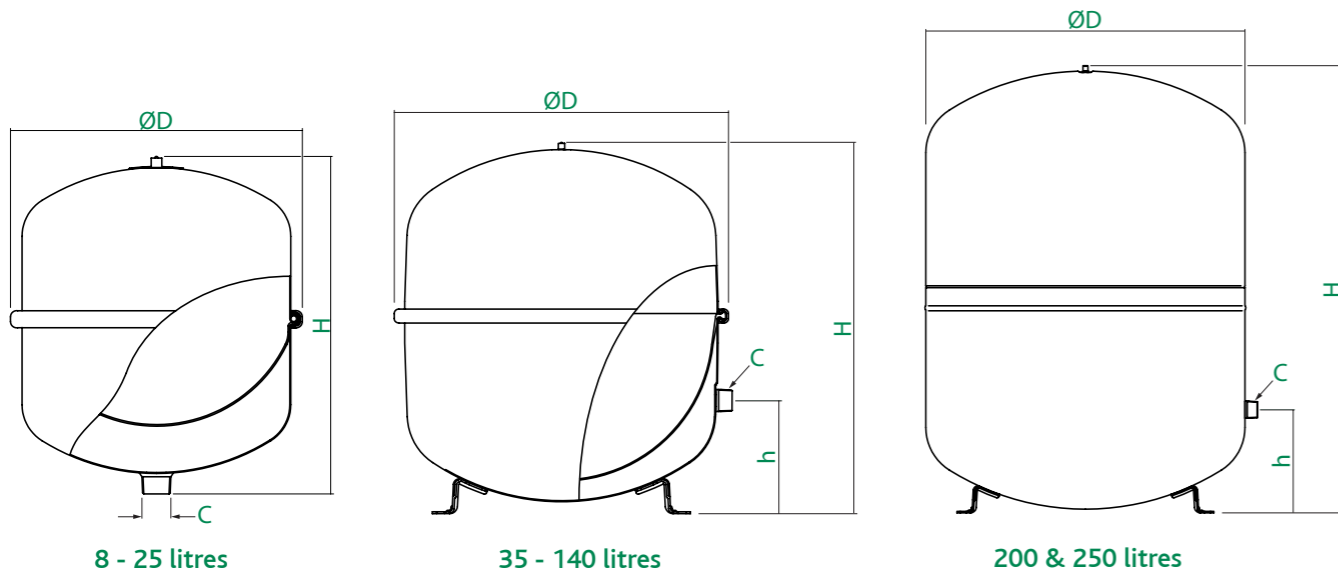
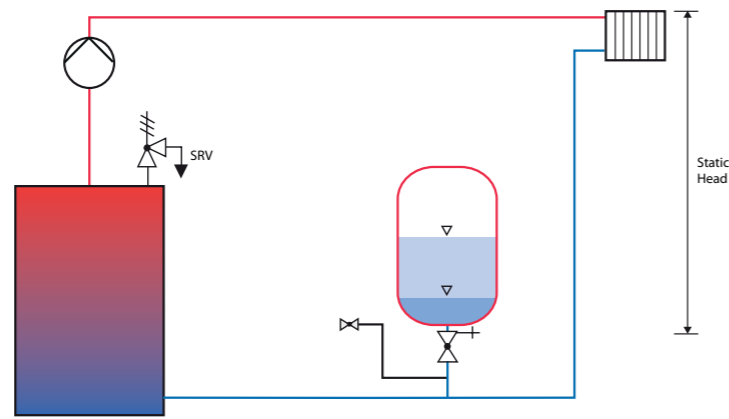
# VESSELS - HEATING VESSELS

## Heating expansion vessels sizing

### Heating Vessel Calculation

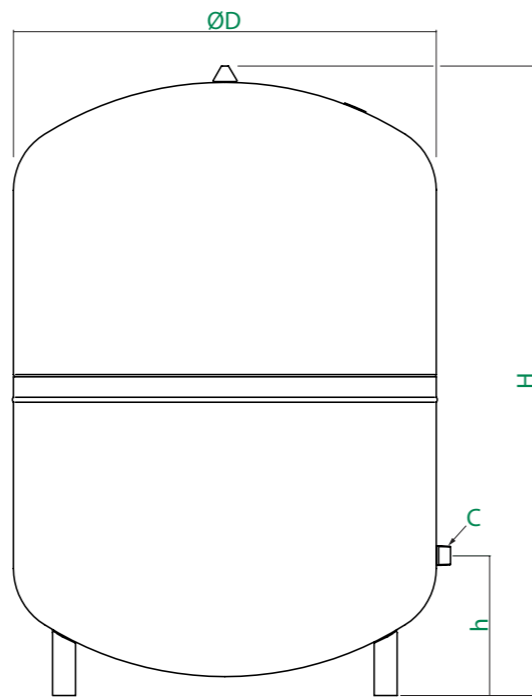
$$V = \frac{e \times C}{[1 - (P_{prec} + 0.3 + 1) \div (P_{max} + 1)]}$$

V = Vessel size  
 e = Coefficient of water expansion  
 C = System volume in litres  
 P<sub>max</sub> = System pressure in Bar  
 P<sub>prec</sub> = Precharge pressure in Bar



Materials	
Component	Material
Shell	Carbon steel
Connections	Carbon steel
Diaphragm	Synthetic rubber compound
Coating	Powder epoxy

Technical Specification	
Test pressure	1.5 x max working pressure
Max. flow operating temperature	120°C
Max. vessel operating temperature	70°C
Factory pre-charge	1.5 bar - nitrogen



300 - 800 litres

# VESSELS - HEATING VESSELS

## HEATING EXPANSION VESSELS 8 - 25 LITRES



Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
HV8C	8	272	235	R 3/4	1.7	3 bar
HV12C	12	272	315	R 3/4	2.3	3 bar
HV18C	18	308	365	R 3/4	2.8	3 bar
HV25C	25	308	485	R 3/4	3.5	3 bar

- Membrane: Synthetic Rubber



## HEATING EXPANSION VESSELS 35 - 140 LITRES



Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
HV35C	35	376	465	R 3/4	5.7	3 bar
HV50C	50	441	495	R 3/4	7.5	6 bar
HV80C	80	512	570	R 1	9.9	6 bar
HV100C	100	512	680	R 1	11.2	6 bar
HV140C	140	512	895	R 1	14.5	6 bar

- With feet
- Membrane: Synthetic Rubber



CE marked



## HEATING EXPANSION VESSELS 200 - 800 LITRES



Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
HV200W	200	634	760	R 1	37	6 bar
HV250W	250	634	890	R 1	45	6 bar
HV300W	300	634	1090	R 1	52	6 bar
HV400W	400	740	1090	R 1	65	6 bar
HV500W	500	740	1290	R 1	79	6 bar
HV600W	600	740	1530	R 1	85	6 bar
HV800W	800	740	1995	R 1	103	6 bar

- With feet
- 300l - 800l vessels palletised
- Membrane: Synthetic Rubber



CE marked



## VESSELS - HEATING VESSELS

HV8F



### OEM HEATING VESSELS



Ref no	Cap (L)	Connections	Dia (Ø D mm)	Ht (Ø H mm)	Pressure
HV8F	8	G 3/4"	324	129	3 bar
HV10F	10	G 3/4"	324	139	3 bar
HV12F	12	G 3/4"	324	169	3 bar

- Flat vessel for expansion on heating systems and boilers
- Max working pressure: 3 bar
- Max vessel operating temperature: 70°C

SPACE SAVING



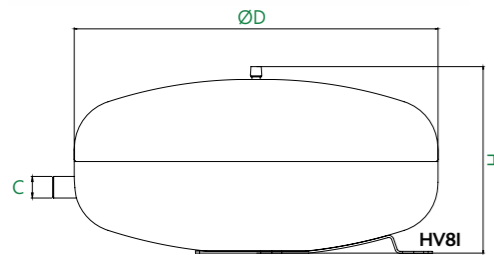
NITROGEN FILLED VESSELS

### HEATING VESSELS C/W INTEGRATED BRACKETS



Ref no	Cap (L)	Dia (Ø D mm)	Ht (Ø H mm)	Connections	Pressure
HV8I	8	287	163	G 1/2"	3 bar
HV12I	12	362	168	G 1/2"	3 bar
HV18I	18	362	222	G 3/4"	3 bar
HV25I	25	409	239	G 1/2"	3 bar
HV35I	35	480	240	G 3/4"	3 bar
HV50I	50	480	318	G 3/4"	3 bar
HV80I	80	634	325	G 3/4"	3 bar

- Flat vessel for expansion on heating systems and boilers
- Max working pressure: 3 bar
- Max vessel operating temperature: 70°C



8 - 80 litres

PVA34L



### LOCKABLE ISOLATION VALVE



Ref no	Description
PVA34L	3/4" lockable isolation valve

- Tamper-proof
- Max. working pressure: 10 bar
- Min. working temperature: 120°C

## VESSELS - ACCESSORIES

### ACCESSORIES FOR EXPANSION VESSELS



Ref no	Description
RS-MB2	Potable vessel mounting bracket 8 litre - 12 litre
RS-MB24	Potable vessel mounting bracket 18 litre - 25 litre (2 straps)
PVADG	Digital hand-held pressure gauge



RS-MB2



PVADG

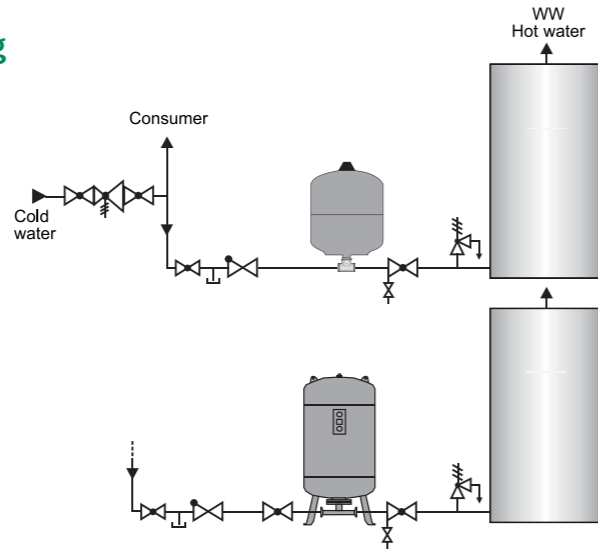
# VESSELS - POTABLE VESSELS

## Potable water expansion vessels sizing

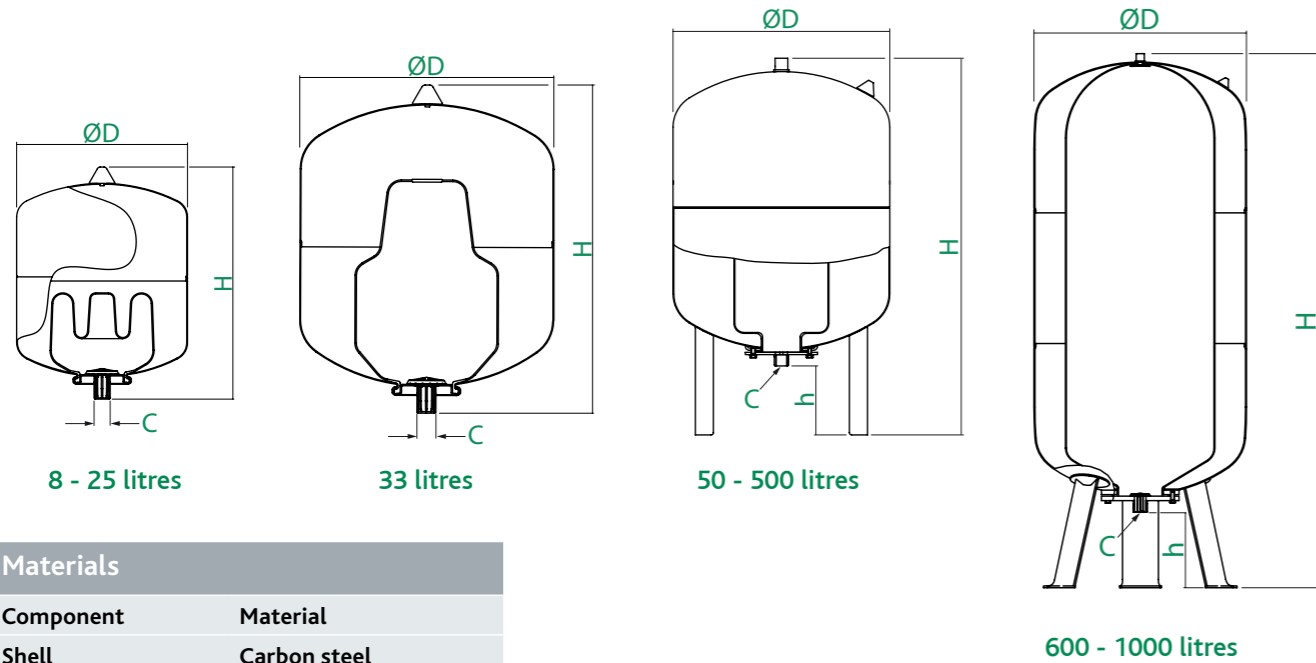
### Potable Water Vessel Calculation

$$V = \frac{e \times C}{[1 - (P_{prec} + 1) \div (P_{max} + 1)]}$$

- V = Vessel size
- e = Coefficient of water expansion
- C = System volume in litres
- P<sub>max</sub> = System pressure in Bar
- P<sub>prec</sub> = Precharge pressure in Bar
- P<sub>max</sub> = The set pressure of the system safety relief valve typically 6 Bar
- P<sub>prec</sub> = The set pressure of the system pressure reducing valve (typically 3 Bar)

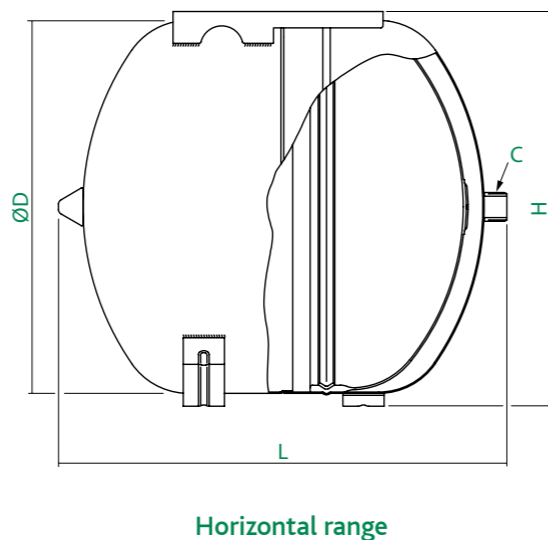


\* Note system layouts are indicative only. Refer to relevant standards.



Materials	
Component	Material
Shell	Carbon steel
Connections	Carbon steel with plastic insert
Diaphragm	Butyl
Coating	Powder epoxy

Technical Specification	
Max. working pressure	10 bar
Max. vessel operating temperature	70°C
Factory pre-charge	
- Vertical range	4.0 bar - nitrogen
- Horizontal range	2.0 bar - nitrogen
System water connection thread	BE EN ISO 228 - male
- 140 litre size	BE EN 10226 - male
- Horizontal range	BE EN ISO 228 - male



Horizontal range

# VESSELS - POTABLE VESSELS

## VERTICAL POTABLE WATER EXPANSION VESSELS 8 - 33 LITRES

Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
PV8W	8	206	335	G 3/4	1.8	10 bar
PV12W	12	280	310	G 3/4	2.4	10 bar
PV18W	18	280	410	G 3/4	2.8	10 bar
PV25W	25	280	520	G 3/4	4.7	10 bar
PV33W	33	354	455	G 3/4	6.6	10 bar

- Membrane: Fixed Butyl



## VERTICAL POTABLE WATER EXPANSION VESSELS 50 - 1000 LITRES

Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
PV50W	50	409	605	G 1	9.5	10 bar
PV60W	60	409	740	G 1	14	10 bar
PV80W	80	480	745	G 1	16	10 bar
PV100W	100	480	850	G 1	19	10 bar
PV140W	140	480	1015	R 1	29	10 bar
PV200W	200	634	970	G 1 1/4	40	10 bar
PV300W	300	634	1270	G 1 1/4	54	10 bar
PV400W	400	740	1245	G 1 1/4	70	10 bar
PV500W	500	740	1475	G 1 1/4	79	10 bar
PV600W	600	740	1860	G 1 1/2	103	10 bar
PV800W	800	740	2325	G 1 1/2	195	10 bar
PV1000W	1000	740	2804	G 1 1/2	228	10 bar

- Top connection 80 litre +
- 300l - 1000l vessels palletised
- Membrane: Replaceable Butyl (PV140W: Fixed Butyl)



## HORIZONTAL POTABLE WATER EXPANSION VESSELS 25 - 100 LITRES

Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
PVH25W	25	280	520	G 3/4	5.5	10 bar
PVH50W	50	409	503	G 1	15	10 bar
PVH80W	80	480	595	G 1	18	10 bar
PVH100W	100	480	705	G 1	21	10 bar

- Membrane: Fixed Butyl



## VESSELS - POTABLE VESSELS

VF8D



NEW

SPACE SAVING

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### VFD POTABLE VESSELS WITH INTEGRATED BRACKET



Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
VF8D	8	280	300	G ½"	3.8	10 bar
VF12D	12	354	375	G ½"	5.2	10 bar
VF18D	18	354	375	G ¾"	5.6	10 bar
VF25D	25	409	430	G ¾"	8.2	10 bar
VF35D	35	480	500	G ¾"	13	10 bar
VF50D	50	480	500	G ¾"	15.4	10 bar
VF80D	80	634	654	G ¾"	22.4	10 bar

- Max working temperature: 70°C
- Membrane: Fixed Butyl
- Threaded stainless steel connection
- Integrated bracket

PV18F



NITROGEN FILLED VESSELS

### POTABLE WATER EXPANSION VESSELS C/W INTEGRATED BRACKETS



Ref no	Cap (L)	Dia (Ø D mm)	Ht (Ø H mm)	Connections	Bracket	Pressure
PV12D	12	280	309+/-5	22mm Compression	N	10 bar
PV18D	18	280	407+/-5	22mm Compression	N	10 bar
PV25D	25	280	518+/-5	22mm Compression	N	10 bar
PV12F	12	280	309+/-5	G ¾"	Y	10 bar
PV18F	18	280	407+/-5	G ¾"	Y	10 bar
PV25F	25	280	518+/-5	G ¾"	Y	10 bar
PV12G	12	280	309+/-5	G ¾"	N	10 bar
PV18G	18	280	407+/-5	G ¾"	N	10 bar
PV25G	25	280	518+/-5	G ¾"	N	10 bar

- Max working pressure: 10 bar
- Max vessel operating temperature: 70°C
- Membrane: Fixed Butyl
- Integrated bracket



RS-MB2



### ACCESSORIES FOR EXPANSION VESSELS



Ref no	Description
RS-MB2	Potable vessel mounting bracket 8 litre - 12 litre (with strap)
RS-MB24	Potable vessel mounting bracket 18 litre - 25 litre (with 2 straps)
PVADG	Digital hand-held pressure gauge

PVADG



## VESSELS - FLOW THROUGH VESSELS

### FLOW THROUGH SERIES POTABLE VESSELS

Reflex Flow Through vessels from Altecnic prevent build-up of potentially harmful bacteria in potable water expansion vessels by reducing stagnation within the vessel. The innovative design encourages flushing through the expansion vessel, greatly reducing the opportunity for potentially harmful cysts to form.

\* Using the optional Flowjet valve is recommended.

#### Materials

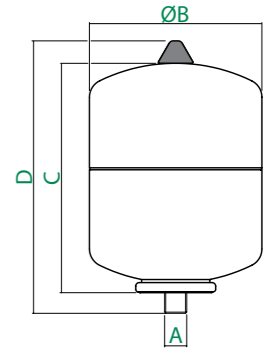
Component	Material
Shell	Carbon steel
Connections	Stainless steel
Diaphragm	Synthetic rubber compound
Coating	Powder epoxy

#### Technical Specification

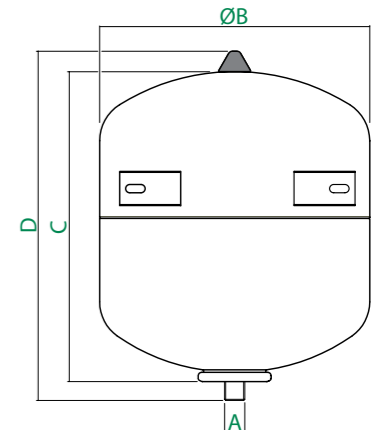
Max. working pressure	10 bar
Max. vessel operating temperature	70°C
Factory pre-charge - Vertical range	4.0 bar - nitrogen
System water connection thread	BE EN ISO 228 - male



\* Flow Through vessel with Flowjet valve



8 - 25 litres



33 litres

PVA8G



NITROGEN FILLED VESSELS

### FLOW THROUGH POTABLE WATER EXPANSION VESSELS 8 - 600 LITRES - MEMBRANE: FIXED BUTYL

Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Max pressure
PVA8G	8	206	345	G ¾"	2.7	10 bar
PVA12G	12	280	325	G ¾"	3.7	10 bar
PVA18G	18	280	420	G ¾"	4.7	10 bar
PVA25G	25	280	530	G ¾"	5.7	10 bar
PVA33G	33	354	465	G ¾"	6.5	10 bar
PVA60G	60	409	755	1 ¼"	15.0	10 bar
PVA80G	80	480	750	1 ¼"	16.5	10 bar
PVA100G	100	480	856	1 ¼"	18.6	10 bar
PVA200G	200	634	975	1 ¼"	37.0	10 bar
PVA300G	300	634	1275	1 ¼"	43.5	10 bar
PVA400G	400	740	1245	1 ¼"	73.0	10 bar
PVA500G	500	740	1475	1 ¼"	69.0	10 bar
PVA600G	600	740	1860	DN 60/PN 16	164.0	16 bar



CE marked

#### SPECIFICATION

- Anti-legionella vessel when used with Flowjet attachment
- 300L - 600L vessels palletised

PVACC1



### FLOWJET VALVE FOR POTABLE WATER SYSTEMS



Ref no	Connections	Pressure
PVACC1	G ¾"	10 bar
PVACC2	G 1 ¼"	10 bar

## VESSELS - STAINLESS STEEL

SSV2A



### STAINLESS STEEL EXPANSION VESSEL 2 - 500 LITRES

Ref. no	Cap (L)	Dia (Ø D mm)	Ht (H mm)	Connection (inches)	Wt (kg)	Pressure
SSV2A	2	114	200	G¾B	0.8	14 bar
SSV5C	5	250	240	G1B	2.2	14 bar
SSV8C	8	250	264	G1B	2.4	14 bar
SSV12C	12	250	370	G1B	3.1	14 bar
SSV20C	20	250	490	G1B	4.4	13 bar
SSV35C	35	350	480	G1B	7.2	14 bar
SSV50C	50	350	770	G1B	24	11 bar
SSV100C	100	450	910	G1B	27	9 bar
SSV150C	150	500	994	G1B	54	8 bar
SSV200C	200	550	1203	G1½B	63	8 bar
SSV300C	300	650	1202	G1½B	111	8 bar
SSV500C	500	750	1449	G1½B	123	6 bar



CE marked

#### SPECIFICATION

- Max. operating temperature: 85°C
- Factory pre-charge: 2.0 bar - air
- Membrane: Replaceable
- System water connection thread: BE EN 228

## VESSELS - MINI VESSELS

### MINI EXPANSION VESSELS 0.5-2 LITRE

Ref no	Cap (L)	Connection (inches)	Pressure	Max Temp
PV05C	0.5	G ½"	10 bar	70°C
PV1C	1	G ½"	10 bar	70°C
PV2W	2	G ¾"	10 bar	70°C
PV2Z	2	G ½"	10 bar	70°C



PV2W

#### SPECIFICATION

- Steel body and inlet connection noryl polymer
- Membrane: Butyl
- Max system temperature: 70°C

### SHOCK ARRESTER /MINI EXPANSION VESSEL

Ref no	Size	Connections	Pressure	Description
525040	½"	M BSP	10 bar	Mechanical
PV016D	0.16 L	R ¼"	15 bar	Mini-expansion
PV016C	0.16 L	R ½"	15 bar	Mini-expansion
PV016RS	0.16 L	15mm Compression	15 bar	Mini-expansion
PV016D	0.16 L	¼" BSP	15 bar	Mini-expansion



525040

PV016RS



## DISTRIBUTION MANIFOLDS

354054



### DISTRIBUTION MANIFOLD

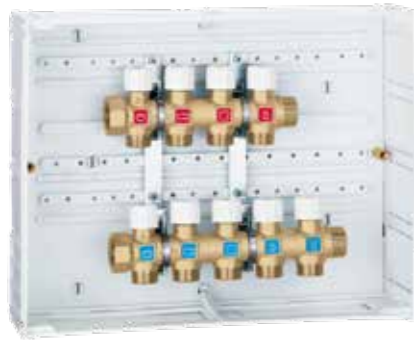


Ref no	Size	Connections
354052	3/4"	Ø 23mm x 2 outlets
354053	3/4"	Ø 23mm x 3 outlets
354054	3/4"	Ø 23mm x 4 outlets
354055	3/4"	Ø 23mm x 5 outlets

#### SPECIFICATION

- Modular single distribution manifold with shut-off valves.
- Dezincification resistant alloy body
- Max. working pressure : 10 bar
- Temperature range : 5 - 100°C
- Outlet centre distance : 35mm
- Adapters required for pipe

360043



### DISTRIBUTION MANIFOLD IN CASE



Ref no	Size	Connections
360043	3/4"	Ø 23mm x 3 - 4 outlets
360054	3/4"	Ø 23mm x 4 - 5 outlets

#### SPECIFICATION

- Modular single distribution manifold with shut-off valves.
- Dezincification resistant alloy body
- Max. working pressure : 10 bar
- Temperature range : 5 - 100°C
- Outlet centre distance : 35mm
- Inspection box 320 x 250 x 90mm with cover

347010



### COMPRESSION FITTING FOR COPPER TUBE



Ref no	Size	Connections
347010	Ø 10mm	Ø 23mm x 10mm compression
347015	Ø 15mm	Ø 23mm x 15mm compression

#### SPECIFICATION

- Compression fitting for annealed copper, hard copper, brass, mild steel and stainless steel pipes
- Complete with O ring seal
- Max. working pressure : 10 bar
- Temperature range : -25 to 120°C

## INSTANT WATER HEATER PACKS

### WATER HEATER ACCESSORY PACKS



CA-100148

Ref no	Pack	Description
CA-100148	Water heater accessory pack 1	1 x 1/2" PRV at 3.5 bar. 1 x expansion vessel 2 litre. 1 x 1/2" SRV at 6 bar 312460. 1 x 15mm single check valve
CA-100149	Water heater accessory pack 2	1 x expansion vessel 2 litre. 1 x 1/2" safety valve. 1 x 15mm single check valve
CA-100150	Water heater accessory pack 4	1 x 1/2" PRV at 3.5 bar. 1 x expansion vessel 2 litre. 1 x 15mm single check valve
CA-100151	Water heater accessory pack 5	1 x expansion vessel 2 litre. 1 x 15mm single check valve



#### SPECIFICATION

- Suitable for installation with all single/multi-point water heaters.
- 5 year warranty on expansion vessel.

## TUNDISHES & WATER HEATER ISOLATION VALVES

105-1200 CST



NEW

### WATER HEATER ISOLATION VALVES



Ref no	Size	Connections
105-1200 CST	15mm x 1/2"	Compression x F BSP
105-0002 CST	15mm x 1/2"	Compression x F BSP
105-0001	15mm x 1/2"	Compression x F BSP

AL-400010



### TUNDISHES



Ref no	Size	Connections	Body	Description
AP-400001	1/2" x 3/4"	M x F BSP	Angled	Plastic
AP-400002	3/4" x 1"	M x F BSP	Angled	Plastic
AP-400003	3/4" x 1/2"	M x F BSP	Straight	Plastic
AL-400010	15mm x 22mm	Compression x compression	Straight	Plastic with plastic nuts
AP-400011	22mm x 28mm	Compression x compression	Straight	Plastic with plastic nuts
552140	1/2" x 3/4"	M x F BSP	Angled	Aluminium
552150	3/4" x 1"	M x F BSP	Angled	Aluminium
552160	1" x 1 1/4"	M x F BSP	Angled	Aluminium
552050	3/4" x 3/4"	F x F BSP	Straight	Aluminium
552070	1 1/4" x 1 1/4"	F x F BSP	Straight	Aluminium
128-2001 CST	1" x 1 1/4"	F x F BSP	Straight	Mild steel
128-2003 CST	1 1/2" x 2"	F x F BSP	Straight	Mild steel
128-2004 CST	2" x 2 1/2"	F x F BSP	Straight	Mild steel
128-2005 CST	2 1/2" x 3"	F x F BSP	Straight	Mild steel

#### SPECIFICATION

- Suitable for use where air gap or air break is required in sealed or unvented systems.

552140



128-2001 CST



## DOSING POTS

### DOSING POTS



Ref no	Capacity (Litres)	Description
141-1001	3.5	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples
141-1002	6	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples
141-1003	11	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples
141-1004	18	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples
141-1005	25	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples
141-1006	35	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples
141-1007	40	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples
141-1008	50	1x fabricated vessels with welded construction, 1x tundish, 2x integral wall brackets, 4 x 1" BSP isolating valves, 2 x 1" tee pieces, 4 x 1" BSP pipe nipples

NEW

141-1007



#### SPECIFICATION

- All pipe connections 1" BSP
- 3/8" BSP air vent connection
- Maximum working pressure: 10 bar
- Maximum operating temperature: 90°C
- Complies with the Pressure Equipment Directive (PED) 2014/68/EU

# Safety Relief Valves

## Safety Relief Valves

### Safety Relief Valves

Safety relief valves are typically used for controlling pressure on boilers in heating systems, on stored hot water cylinders in domestic hot water systems, and in water systems generally.

When the calibrated pressure is reached, the valve opens and, by means of the discharge to atmosphere, prevents the pressure of the system from reaching levels which would be dangerous for the boiler and the components in the system itself.

The Altecnic series 311 through 314, 513 and 514 safety (pressure relief) valves are made by Caleffi S.p.A. in compliance with the essential safety requirements laid down by Directive 97/23/CE of the European Parliament and the Council of the European Union for harmonisation of member states with regard to pressurised equipment.

### PRODUCT RANGE

**Series 311 Standard safety relief valve.**  
F-F connections. Sizes 1/2" & 3/4"

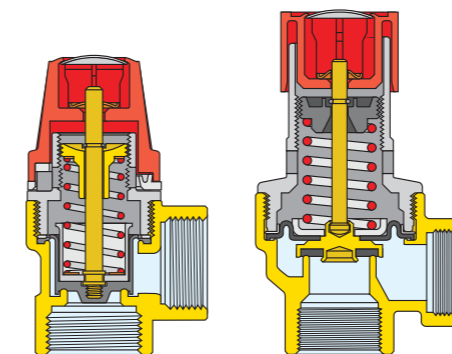
**Series 312 Standard safety relief valve.**  
M-F connections. Size 1/2"

**Series 313 Standard safety relief valve with pressure gauge or pressure gauge connection.**  
F-F connections. Sizes 1/2" & 3/4"

**Series 314 Standard safety relief valve with pressure gauge or pressure gauge connection.**  
M-F connections. Size 1/2"

**Series 513 Standard safety relief valve.**  
F-F connections. Sizes 1/2" x 3/4", 1" x 1 1/4" & 1 1/4" x 1 1/2"

**Series 514 Standard safety relief valve.**  
M-F connections. Size 1/2"



Safety Relief Valves  
Series 311

Safety Relief Valves  
Series 513



A314437CST



311 Series



312 Series



313 Series



314 Series



513 Series



514 Series

### TECHNICAL SPECIFICATION

#### Materials:

Body:	1/2" - 3/4"; brass EN 12165 CW617N 1" - 1 1/4"; brass EN 1982 CB753S
Cover:	brass EN 12165 CW617N 513-514 (1/2"); PA 6 G 30
Control spindle:	brass EN 12164 CW614N
Obturator seal:	EPDM
Diaphragm:	EPDM
Spring:	steel UNI 3823
Control knob:	311-312-313-314-513 (1/2")-514; ABS 513 (1" and 1 1/4"); PA 6 G 20
Nominal pressure:	PN 10
Temperature range:	5÷110°C

#### Performance:

Max opening pressure:	311-312-313-513-514; Pset +20%·Pset
Min closing differential:	Pset - 20%·Pset
Medium:	water, air
PED Category:	IV

## SAFETY RELIEF VALVES

311430



### SAFETY RELIEF VALVES SERIES 311



Ref no	Size	Connections	Pressure	Gauge	Box Qty
311415	1/2" x 1/2"	F x F BSP	1.5 bar	No	50
311425	1/2" x 1/2"	F x F BSP	2.5 bar	No	50
311430	1/2" x 1/2"	F x F BSP	3 bar	No	50
311435	1/2" x 1/2"	F x F BSP	3.5 bar	No	50
311460	1/2" x 1/2"	F x F BSP	6 bar	No	50
311470	1/2" x 1/2"	F x F BSP	7 bar	No	50
311480	1/2" x 1/2"	F x F BSP	8 bar	No	50
311525	3/4" x 3/4"	F x F BSP	2.5 bar	No	50
311530	3/4" x 3/4"	F x F BSP	3 bar	No	50
311450	1/2" x 1/2"	F x F BSP	5.0 bar	No	50
311560	3/4" x 3/4"	F x F BSP	6 bar	No	50
311570	3/4" x 3/4"	F x F BSP	7 bar	No	50
311580	3/4" x 3/4"	F x F BSP	8 bar	No	50

312430



### SAFETY RELIEF VALVES SERIES 312



Ref no	Size	Connections	Pressure	Gauge	Box Qty
312405 CST	1/2" x 1/2"	M x F BSP	4 bar	No	50
312020 CST	1/2" x 1/2"	F x F BSP	10 bar	No	50
312425	1/2" x 1/2"	M x F BSP	2.5 bar	No	50
312430	1/2" x 1/2"	M x F BSP	3 bar	No	50
312460	1/2" x 1/2"	M x F BSP	6 bar	No	50
312470	1/2" x 1/2"	M x F BSP	7 bar	No	50
312480	1/2" x 1/2"	M x F BSP	8 bar	No	50
A312401 CST	1/2" x 1/2"	Pushfit x F BSP	3 bar	No	65
A312438 CST	1/2" x 1/2"	Pushfit x M BSP	3 bar	No	65

313430



### SAFETY RELIEF VALVES SERIES 313



Ref no	Size	Connections	Pressure	Gauge	Box Qty
313425	1/2" x 1/2"	F x F BSP	2.5 bar	Yes	50
313430	1/2" x 1/2"	F x F BSP	3 bar	Yes	50
313460	1/2" x 1/2"	F x F BSP	6 bar	Yes	50
313470	1/2" x 1/2"	F x F BSP	7 bar	Yes	50
313480	1/2" x 1/2"	F x F BSP	8 bar	Yes	50
313525	3/4" x 3/4"	F x F BSP	2.5 bar	Yes	50
313530	3/4" x 3/4"	F x F BSP	3 bar	Yes	50
313560	3/4" x 3/4"	F x F BSP	6 bar	Yes	50
313570	3/4" x 3/4"	F x F BSP	7 bar	Yes	50
313580	3/4" x 3/4"	F x F BSP	8 bar	Yes	50

## SAFETY RELIEF VALVES

### SAFETY RELIEF VALVES SERIES 314



Ref no	Size	Connections	Pressure	Gauge	Box Qty
314425	1/2" x 1/2"	M x F BSP	2.5 bar	Yes	50
314430	1/2" x 1/2"	M x F BSP	3 bar	Yes	50
314460	1/2" x 1/2"	M x F BSP	6 bar	Yes	50
314480	1/2" x 1/2"	M x F BSP	8 bar	Yes	50
A314437 CST	1/2" x 1/2"	M x F BSP	3 bar	Port only	50



A314437 CST



### SAFETY RELIEF VALVES SERIES 513



Ref no	Size	Connections	Pressure	Box Qty
513420	1/2" x 1/2"	F x F BSP	2.0 bar	50
513425	1/2" x 1/2"	F x F BSP	2.5 bar	50
513430	1/2" x 1/2"	F x F BSP	3 bar	50
513460	1/2" x 1/2"	F x F BSP	6 bar	50
513470	1/2" x 1/2"	F x F BSP	7 bar	50
513480	1/2" x 1/2"	F x F BSP	8 bar	50
513620	1" x 1 1/4"	F x F BSP	2.0 bar	50
513625	1" x 1 1/4"	F x F BSP	2.5 bar	50
513630	1" x 1 1/4"	F x F BSP	3 bar	50
513660	1" x 1 1/4"	F x F BSP	6 bar	50
513670	1" x 1 1/4"	F x F BSP	7 bar	50
513680	1" x 1 1/4"	F x F BSP	8 bar	50
513725	1 1/4" x 1 1/2"	F x F BSP	2.5 bar	50
513730	1 1/4" x 1 1/2"	F x F BSP	3 bar	50
513635	1" x 1 1/4"	F x F BSP	3.5 bar	50
513760	1 1/4" x 1 1/2"	F x F BSP	6 bar	50
513770	1 1/4" x 1 1/2"	F x F BSP	7 bar	50
513780	1 1/4" x 1 1/2"	F x F BSP	8 bar	50



513425

### SAFETY RELIEF VALVES SERIES 514



Ref no	Size	Connections	Pressure	Box Qty
514425	1/2" x 1/2"	M x F BSP	2.5 bar	50
514460	1/2" x 1/2"	M x F BSP	6 bar	50
514420	1/2" x 1/2"	M x F BSP	2.0 bar	50
514430 CST	1/2" x 1/2"	M x F BSP	3 bar	50



514425

# Dirt and Air Separation

## Dirt and Air Separation

### Smart dirt & air solutions

The smart choice for efficient magnetic, non-magnetic and air separation.

Altecnic offers an industry leading range of Domestic and Commercial Dirtmag magnetic filters and separators offering unrivalled system protection using Caleffi patented technology. Covering a comprehensive pipe size range Dirtmag magnetic filtration is ideal for domestic and commercial applications ensuring maximum system protection and performance whilst enabling fast, simple and efficient servicing due to the external magnetic belt, full bore isolation valves and dosing point.



Model Series	Size	Domestic use		Commercial use		Separation			Orientation
				Air	Dirt	Magnetic			
Dirtmag Mini™	22mm	✓	✓	✓	✓	✓	✓	Vertical /Horizontal	
Dirtmag iQ™ Prime	22mm, 28mm, ¾" - 1¼"	✓	✓	✓	✓	✓	✓	Vertical /Horizontal	
Dirtmag iQ™	22mm, 28mm	✓	✓	✓	✓	✓	✓	Vertical /Horizontal	
Dirtmag	22mm, 28mm, 1" - 2"	✓	✓	✓	✓	✓	✓	Vertical /Horizontal	
Dirtmag XL	DN50 - DN300		✓		✓	✓	✓	Horizontal	
Discal	22mm, ¾" - 1", DN50 - DN150		✓	✓ Auto Air Venting	✓	✓		Horizontal	
Dirtcal	22mm, ¾" - 2", DN50 - DN150		✓	✓	✓	✓		Horizontal	
Hydraulic Separator	1¼" - 2", DN50 - DN300		✓	✓	✓			Vertical /Horizontal	
Magnetic Hydraulic Separator	1" - 2"		✓	✓	✓	✓		Vertical /Horizontal	
Automatic Air Vent	15mm, ¼" - 1"	✓	✓	✓				n/a	
Discal - Auto Air	22mm, 28mm, ¾" - 2", DN50 - DN150		✓	✓ Auto Air Venting				Vertical /Horizontal	

# DIRTMAG MINI™



**NEW**

**DIRTMAG MINI™**



Ref no	Size	Insulation	Connections	Body
114-1020	22mm	No	Compression ends	Polyamide 66

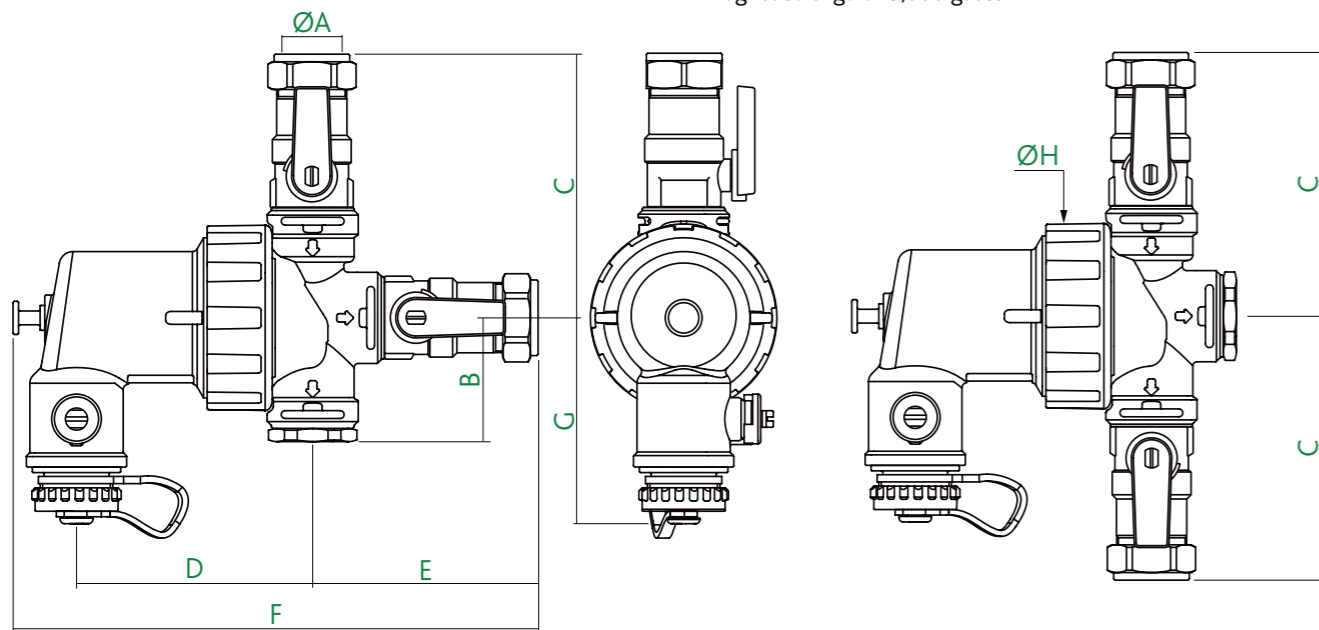
The DIRTmag Mini™ magnetic dirt separator and strainer filters, separates and captures impurities in the system thanks to the combined action of the strainer and dirt separator. Ferrous impurities are also captured inside the body, thanks to the action of a removable, internal magnet.

Opening the dedicated drain point drains the captured impurities. The fluid from the system is slowed down, so that the smaller particles that are not stopped by the filter separate and deposit, and are thereby removed from circulation. The special profile of the bottom allows the impurities to be captured and drained effectively.

The compression connections on the The DIRTmag Mini™ body are interchangeable and reversible as they have a quick-fit system with fixing clip, making it easy to install the dirt separator by turning it to the horizontal or vertical position. Thanks to the compactness of the body, the filter can be easily installed in narrow spaces under wall-mounted boilers without the need for additional accessories.

**SPECIFICATION**

- Medium: water glycol solution
- Maximum percentage of glycol: 30%
- Maximum working pressure: 3 bar
- Temperature range: 0-90°C
- Strainer mesh size: 800µm
- Magnet strength: 13,000 gauss



Ref no	A	B	C	D	E	F	G	H	kg
114-1020	Ø22	45	95.5	85.5	82.5	190.5	74.5	67.5	0.7

**DIRTMAG MINI™ COMPLIANCE PACK**

Ref no	Size	Connections	Body
114-1050	22mm	Compression ends	Polyamide 66



**SPECIFICATION**

- Pack contains DIRTmag Mini™ magnetic filter, C3 and C1 Fast Cleaner and Inhibitor

**DIRTMAG MINI™ & DISCAL SLIM COMBI PACK**

Ref no	Size	Connections	Body
114-1100	22mm	Compression ends	Polyamide 66



**SPECIFICATION**

- Pack contains DIRTmag Mini™ magnetic filter and Discal Slim® deaerator

Want to know more?  
Scan the QR code with your camera phone to view the  
DIRTMAG MINI™ Demonstration Video



SCAN ME

# DIRTMAG IQ™

THE SMART MAGNETIC SEPARATOR **PRIME**



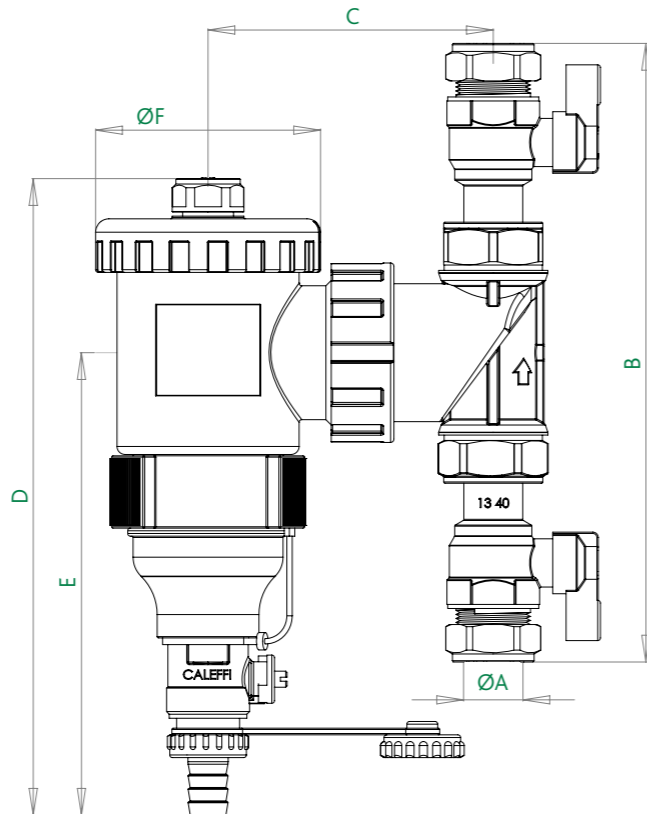
### DIRTMAG IQ™ PRIME

Ref no	Size	Insulation	Connections	Body
545342 LTC	22mm	No	Vertical/Horizontal	Polyamide 66
545343 LTC	28mm	No	Vertical/Horizontal	Polyamide 66
545345	¾"	No	Vertical/Horizontal	Polyamide 66
545346	1"	No	Vertical/Horizontal	Polyamide 66
545347	1 ¼"	No	Vertical/Horizontal	Polyamide 66

Dirtmag IQ™ Prime - offers triple separation of magnetic, non-magnetic debris and system air releases, whilst the powerful external magnetic belt, full bore isolation valves and drain off valve enables ease of installation and fast and effective system servicing. Suitable for horizontal or vertical applications each filter is supplied with a unique metal spanner ensuring correct and incident free installation.

#### SPECIFICATION

- Medium: water glycol solution
- Maximum percentage of glycol: 30%
- Maximum working pressure: 3 bar
- Temperature range: 0-90°C
- Minimum particle size: 5µm



Ref no	A	B	C	D	E	F
545342 LTC	Ø22	224	106.5	238	172.5	84
545343 LTC	Ø28	232	106.5	238	172.5	84

### DIRTMAG IQ™ PRIME COMPLIANCE PACK A

Ref no	Size	Connections	Body
114-1001	22mm	Compression	Polyamide 66
114-1011	28mm	Compression	Polyamide 66

#### SPECIFICATION

- Pack A - Dirmag IQ™ Prime magnetic filter, IQ3 500ml Benchmark approved system cleaner, IQ1 500ml Benchmark and Buildcert approved system inhibitor for treating systems up to 100 litre (approx. 10 radiators).
- Dirmag IQ™ Prime full bore isolation valves, full bore bottom entry discharge valve and dosing facility via a ½" air vent enables unrivalled ease of system commissioning.



### DIRTMAG IQ™ PRIME COMPLIANCE PACK B

Ref no	Size	Connections	Body
114-1002	22mm	Compression	Polyamide 66
114-1012	28mm	Compression	Polyamide 66

#### SPECIFICATION

- Pack B - Content as Pack A including Dirmag IQ™ Prime, Cleaner and Inhibitor plus:
- Fully WRAS approved and Part L Building Regulations compliant filling loop with metal handles and two blanking caps.



### DIRTMAG IQ™ PRIME COMPLIANCE PACK C

Ref no	Size	Connections	Body
114-1003	22mm	Compression	Polyamide 66
114-1013	28mm	Compression	Polyamide 66

#### SPECIFICATION

- Pack C - Content as Pack A including Dirmag IQ™ Prime, Cleaner and Inhibitor plus:
- Fully WRAS approved 15mm electrolytic scale reducer for Part L compliance where water hardness exceeds 200ppm.



### DIRTMAG IQ™ PRIME COMPLIANCE PACK D

Ref no	Size	Connections	Body
114-1004	22mm	Compression	Polyamide 66
114-1014	28mm	Compression	Polyamide 66

#### SPECIFICATION

- Pack D - Content as Pack A including Dirmag IQ™ Prime, Cleaner and Inhibitor plus:
- Fully WRAS approved system filling loop with metal handles and two blanking caps
- 15mm WRAS approved electrolytic scale reducer ensures ultimate protection and compliance to Part L where water hardness exceeds 200ppm.



## DIRTMAG iQ™

# DIRTMAG iQ™

THE SMART MAGNETIC SEPARATOR

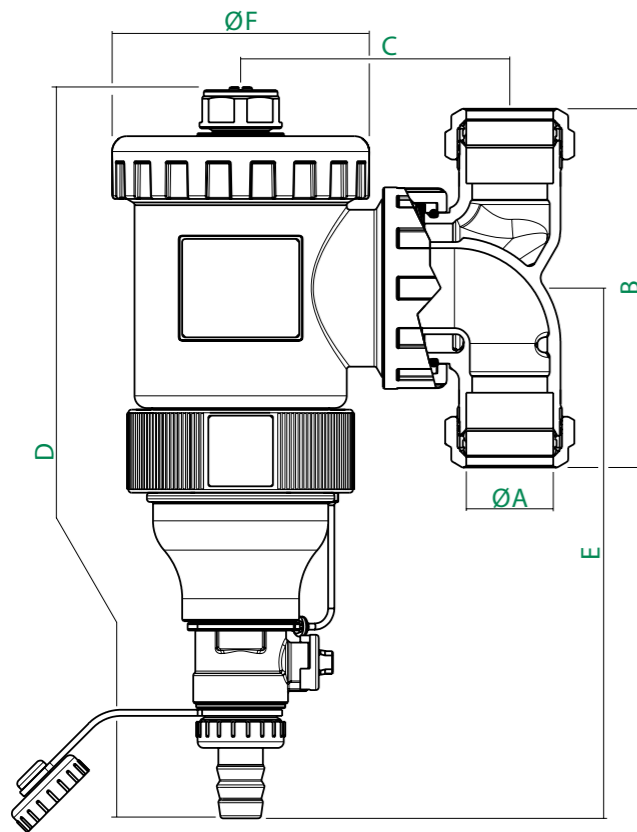
### DIRTMAG iQ™



Ref no	Size	Insulation	Connections	Body
545302	22mm	No	Vertical/Horizontal	Polyamide 66
545303	28mm	No	Vertical/Horizontal	Polyamide 66

### SPECIFICATION

- Medium: water glycol solution
- Maximum percentage of glycol: 30%
- Maximum working pressure: 3 bar
- Temperature range: 0-90°C
- Minimum particle size: 5µm



### DIMENSIONS

Ref no	A	B	C	D	E	F	kg
545302	22	115	87.5	238	173	84	2.15
545303	28	117	87.5	238	173	84	2.15

## DIRTMAG

### DIRTMAG® (VERTICAL)



Ref no	Size	Insulation	Connections	Body
546802	22mm	No	Compression	Brass
546803	28mm	No	Compression	Brass

### SPECIFICATION

- Medium: water glycol solution
- Maximum percentage of glycol: 50%
- Maximum working pressure: 10 bar
- Temperature range: 0-110°C
- Minimum particle size: 5µm



546802

### DIRTMAG® (HORIZONTAL)



Ref no	Size	Insulation	Connections	Body
546306	1"	No	F x F BSP	Brass
546307	1¼"	No	F x F BSP	Brass
546308	1½"	No	F x F BSP	Brass
546309	2"	No	F x F BSP	Brass

### SPECIFICATION

- Medium: water glycol solution
- Maximum percentage of glycol: 50%
- Maximum working pressure: 10 bar
- Temperature range: 0-110°C
- Minimum particle size: 5µm



546307

### DIRTMAG CLEAN®



Ref no	Description
579000	Self-cleaning dirt separator, adjustable height
579001	Self-cleaning dirt separator, adjustable height

The 5790 Series DIRTMAG CLEAN® is a self-cleaning dirt separator filter with magnet. The device is used in heating systems controllers to remove dirt and impurities from the circuit progressively and completely.

### SPECIFICATION

- Body material: stainless steel AISI 304
- Maximum working pressure : 10 bar
- Working temperature range : 5 - 85°C
- Recommended flow rate Kv: 5 - 20 m³/h
- Particle separation capacity: down to 2 µm



579000

NEW

## DIRT AND AIR SEPARATION - DIRT AND AIR

546650



### DIRTMAG XL



Ref no	Size	Insulation	Connections	Body
546650	DN 50	Yes	Flanged PN16	Epoxy resin coated steel
546660	DN 65	Yes	Flanged PN16	Epoxy resin coated steel
546680	DN 80	Yes	Flanged PN16	Epoxy resin coated steel
546610	DN 100	Yes	Flanged PN16	Epoxy resin coated steel
546612	DN 125	Yes	Flanged PN16	Epoxy resin coated steel
546615	DN 150	Yes	Flanged PN16	Epoxy resin coated steel
546620	DN 200	No	Flanged PN16	Epoxy resin coated steel
546625	DN 250	No	Flanged PN16	Epoxy resin coated steel
546630	DN 300	No	Flanged PN16	Epoxy resin coated steel

546620



### SPECIFICATION

- Dirt separator with magnet to be coupled with flat counterflanges EN 1092-1
- Max. percentage of glycol: 50%
- Max. working pressure: 10 bar
- Temperature range: 0–100°C
- Temperature probe connection: ½" F
- Minimum particle size: 5µm

546002



### DISCAL DIRT AND AIR SEPARATORS



Ref no	Size	Insulation	Connections	Body
546002	22mm	No	Compression	Brass
546005	¾"	No	F x F BSP	Brass
546006	1"	No	F x F BSP	Brass

### SPECIFICATION

- Medium: water glycol solution
- Max. percentage of glycol: 50%
- Max. working pressure: 10 bar
- Temperature range: 0 to 110°C
- Minimum particle size: 5µm

## DIRT AND AIR SEPARATION - DIRT AND AIR

### DISCAL DIRT AND AIR SEPARATORS



Ref no	Size	Insulation	Connections	Body
546050	DN50	No	Flanged PN16	Epoxy resin coated steel
546060	DN65	No	Flanged PN16	Epoxy resin coated steel
546080	DN80	No	Flanged PN16	Epoxy resin coated steel
546100	DN100	No	Flanged PN16	Epoxy resin coated steel
546120	DN125	No	Flanged PN16	Epoxy resin coated steel
546150	DN150	No	Flanged PN16	Epoxy resin coated steel
546051	DN50	No	Welded socket PN16	Epoxy resin coated steel
546061	DN65	No	Welded socket PN16	Epoxy resin coated steel
546081	DN80	No	Welded socket PN16	Epoxy resin coated steel
546101	DN100	No	Welded socket PN16	Epoxy resin coated steel
546121	DN120	No	Welded socket PN16	Epoxy resin coated steel
546151	DN150	No	Welded socket PN16	Epoxy resin coated steel

546061



### DISCAL DIRTMAG DE-AERATOR - DIRT SEPARATORS



Ref no	Size	Insulation	Connections	Body
546118	G 1½	Yes	F x F BSP	Epoxy resin coated steel
546119	G 2	Yes	F x F BSP	Epoxy resin coated steel

546118



### SPECIFICATION

- Medium: water glycol solution
- Max. percentage of glycol: 50%
- Max. working pressure: 10 bar
- Temperature range: 0 to 110°C
- Particle separation rating: up to 5µm

## DIRT AND AIR SEPARATION - DIRT

546062



### DISCAL DIRT AND AIR SEPARATORS (WITH INSULATION)



Ref no	Size	Insulation	Connections	Body
546052	DN50	Yes	Flanged PN16	Epoxy resin coated steel
546062	DN65	Yes	Flanged PN16	Epoxy resin coated steel
546082	DN80	Yes	Flanged PN16	Epoxy resin coated steel
546102	DN100	Yes	Flanged PN16	Epoxy resin coated steel
546122	DN125	Yes	Flanged PN16	Epoxy resin coated steel
546152	DN150	Yes	Flanged PN16	Epoxy resin coated steel
546053	DN50	Yes	Welded socket PN10	Epoxy resin coated steel
546063	DN65	Yes	Welded socket PN10	Epoxy resin coated steel
546083	DN80	Yes	Welded socket PN10	Epoxy resin coated steel
546103	DN100	Yes	Welded socket PN10	Epoxy resin coated steel
546123	DN125	Yes	Welded socket PN10	Epoxy resin coated steel
546153	DN150	Yes	Welded socket PN10	Epoxy resin coated steel

The Discal range of dirt and air separators are designed for use on heating and air conditioning systems to provide an efficient method of dirt and air removal.

#### SPECIFICATION

- Range of dirt and air separators for use in commercial applications
- Maximum working pressure : 10 bar
- Maximum working temperature : 110°C
- Maximum glycol concentration : 50%

546205



### DIRTCAL BRASS DIRT SEPARATORS



Ref no	Size	Insulation	Connections	Body
546205	¾"	No	F x F BSP	Brass
546206	1"	No	F x F BSP	Brass
546207	1¼"	No	F x F BSP	Brass
546208	1½"	No	F x F BSP	Brass
546209	2"	No	F x F BSP	Brass
546550	DN50	Yes	Flanged PN16	Epoxy resin coated steel
546560	DN65	Yes	Flanged PN16	Epoxy resin coated steel
546580	DN80	Yes	Flanged PN16	Epoxy resin coated steel
546510	DN100	Yes	Flanged PN16	Epoxy resin coated steel
546512	DN125	Yes	Flanged PN16	Epoxy resin coated steel
546515	DN150	Yes	Flanged PN16	Epoxy resin coated steel
546905	¾"	No	F x F BSP	Brass
546906	1"	No	F x F BSP	Brass
546902	22mm	No	Compression	Brass

#### SPECIFICATION

- The Dirtcal range of dirt separators are designed for use on heating and air conditioning systems to provide an efficient method of dirt removal
- Maximum working pressure : 10 bar
- Maximum working temperature : 110°C
- Maximum glycol concentration : 50%

546550



## DIRT AND AIR SEPARATION - HYDRAULIC SEPARATORS

### HYDRAULIC SEPARATOR



Ref no	Size	Insulation	Connections	Body
548006	1"	Yes	F x F BSP	Epoxy resin coated steel
548007	1¼"	Yes	F x F BSP	Epoxy resin coated steel
548008	1½"	Yes	F x F BSP	Epoxy resin coated steel
548009	2"	Yes	F x F BSP	Epoxy resin coated steel
548052	DN50	Yes	Flanged PN16	Epoxy resin coated steel
548062	DN65	Yes	Flanged PN16	Epoxy resin coated steel
548082	DN80	Yes	Flanged PN16	Epoxy resin coated steel
548102	DN100	Yes	Flanged PN16	Epoxy resin coated steel
548122	DN125	Yes	Flanged PN16	Epoxy resin coated steel
548152	DN150	Yes	Flanged PN16	Epoxy resin coated steel
548200	DN200	No	Flanged PN10	Epoxy resin coated steel
548250	DN250	No	Flanged PN10	Epoxy resin coated steel
548300	DN300	No	Flanged PN10	Epoxy resin coated steel

#### SPECIFICATION - 548 SERIES SCREWED IRON

- Hydraulic separator. Connections 1" F (from 1" to 2") with union
- Epoxy resin coated steel body
- Medium water and non-hazardous glycol solutions excluded from the guidelines of EC directive 67/548
- Maximum percentage of glycol : 30%
- Maximum working pressure : 10 bar
- Working temperature range : 0 - 110°C

#### SPECIFICATION - 548 SERIES FLANGE

- Hydraulic separator. Flanged connections DN 50 (from DN 50 to DN 150) PN 16, DN 200 (from DN 200 to DN 300) PN 10, for coupling with counter flanges EN 1092-1. Epoxy resin coated steel body.
- Medium water and non-hazardous glycol solutions excluded from the guidelines of EC directive 67/548.
- Maximum percentage of glycol : 30%
- Maximum working pressure : 10 bar
- Working temperature range : 0 - 110°C

548009



548102



548200



## DIRT AND AIR SEPARATION - HYDRAULIC SEPARATORS

549506



### MAGNETIC HYDRAULIC SEPARATOR



Ref no	Size	Insulation	Connections	Body
549506	1"	Yes	F x F BSP	Epoxy resin coated steel
549507	1¼"	Yes	F x F BSP	Epoxy resin coated steel
549508	1½"	Yes	F x F BSP	Epoxy resin coated steel
549509	2"	Yes	F x F BSP	Epoxy resin coated steel

#### SPECIFICATION

- Maximum working pressure : 10 bar
- Working temperature range : 0 - 100°C
- Maximum percentage of glycol : 50%

559022



### SEPCOLL HYDRAULIC SEPARATOR MANIFOLD



Ref no	Description
559021	2 + 1 built in version with preformed insulation
559121	2 + 1 in manifold cabinet with preformed insulation
559022	2 + 2 external use with preformed insulation and brackets
559031	3 + 1 external use with preformed insulation and brackets

#### SPECIFICATION

- Maximum working pressure : 6 bar
- Working temperature range : 0 - 100°C
- With a hot preformed insulation shell in closed cell expanded PEX
- Complete with fixing brackets

## DIRT AND AIR SEPARATION - AUTOMATIC AIR

### DISCAL AUTOMATIC AIR SEPARATORS



Ref no	Size	Insulation	Connections	Body
551002	22mm	No	Compression - no drain	Brass
551003	¾"	No	F x F BSP - no drain	Brass
551005	¾"	No	F x F BSP	Brass
551006	1"	No	F x F BSP	Brass
551007	1¼"	No	F x F BSP	Brass
551008	1½"	No	F x F BSP	Brass
551009	2"	No	F x F BSP	Brass
551050	DN50	No	Flanged PN16	Epoxy resin coated steel
551060	DN65	No	Flanged PN16	Epoxy resin coated steel
551080	DN80	No	Flanged PN16	Epoxy resin coated steel
551100	DN100	No	Flanged PN16	Epoxy resin coated steel
551905	¾"	No	F x F BSP	Brass
551906	1"	No	F x F BSP	Brass
551902	22mm	No	Compression	Brass
551052	DN50	Yes	Flanged PN16	Epoxy resin coated steel
551062	DN65	Yes	Flanged PN16	Epoxy resin coated steel
551082	DN80	Yes	Flanged PN16	Epoxy resin coated steel
551102	DN100	Yes	Flanged PN16	Epoxy resin coated steel
551122	DN125	Yes	Flanged PN16	Epoxy resin coated steel
551152	DN150	Yes	Flanged PN16	Epoxy resin coated steel
551053	DN50	Yes	Welded socket	Epoxy resin coated steel
551063	DN65	Yes	Welded socket	Epoxy resin coated steel
551083	DN80	Yes	Welded socket	Epoxy resin coated steel
551103	DN100	Yes	Welded socket	Epoxy resin coated steel
551123	DN125	Yes	Welded socket	Epoxy resin coated steel
551153	DN150	Yes	Welded socket	Epoxy resin coated steel
551702	22mm	No	Compression	Brass
551703	28mm	No	Compression	Brass
551705	¾"	No	F x F BSP	Brass
551706	1"	No	F x F BSP	Brass

#### SPECIFICATION

- The Discal range of air eliminators are designed for use with heating circuits to provide an efficient method of air removal
- Maximum working pressure : 10 bar
- Maximum working temperature : 110°C
- Maximum glycol concentration : 50%



551002



551006



551902



551053



551706

## DIRT AND AIR SEPARATION - AUTOMATIC AIR VENTS

502649



### AUTOMATIC AIR VENTS



Ref no	Size	Connections	Pressure	Max Temp	Description	Box Qty
502649	15mm	Compression	Discharge 6 bar	115°C	Robocal	100
502420	¼"	M BSP	Discharge 4 bar	115°C	Robocal	50
502430	⅜"	M BSP	Discharge 4 bar	115°C	Robocal	50
502530	⅜"	M BSP	Discharge 4 bar	115°C	Robocal w/checkvalve	100
502630	⅜"	M BSP	Discharge 6 bar	115°C	Robocal	100
502640	½"	M BSP	Discharge 6 bar	115°C	Robocal	100
502730	⅜"	M BSP	Discharge 6 bar	115°C	Robocal w/checkvalve	100
CA-100099	⅜"	M BSP	Discharge 6 bar	115°C	Robocal w/checkvalve	100
502030	⅜"	M BSP	Discharge 2.5 bar	120°C	Minical	100
502040	½"	M BSP	Discharge 2.5 bar	120°C	Minical	100
502050	¾"	M BSP	Discharge 2.5 bar	120°C	Minical w/hygroscopic cap	100
502060	1"	M BSP	Discharge 2.5 bar	120°C	Minical w/hygroscopic cap	100
502130	⅜"	M BSP	Discharge 2.5 bar	120°C	Minical w/checkvalve	100
501500	¾"	M BSP	Discharge 6 bar	120°C	Maxcal	5
504401	½"	M BSP	Discharge 2.5 bar	120°C	Aercal	25

#### SPECIFICATION

- The range of automatic air vents is operated via a float mechanism and is designed for the removal of air from systems



502420



502730



551004



### DISCAL AIR AUTOMATIC AIR VENTS



Ref no	Size	Connections	Pressure	Temperature
551004	½"	F BSP	Discharge 10 bar	Max 110°C

#### SPECIFICATION

- Maximum percentage of glycol : 50%
- Maximum working pressure : 10 bar
- Maximum discharge pressure : 10 bar
- Working temperature range : 0 - 110°C

## DIRT AND AIR SEPARATION - AUTOMATIC AIR VENTS

### DISCALSLIM® DE-AERATOR



NEW

551802

Ref no	Size	Connections	Pressure	Temperature
551802	22mm	Compression	Discharge 3 bar	Max 110°C
551805	¾"	F BSP	Discharge 3 bar	Max 110°C
551806	1"	F BSP	Discharge 3 bar	Max 110°C



#### SPECIFICATION

- Maximum percentage of glycol : 30%
- Maximum working pressure : 3 bar
- Maximum discharge pressure : 3 bar
- Working temperature range : 0 - 110°C

### CAVSA VALVE KINETIC AIR VENT



NEW

Ref no	Size	Connections	Temperature
118-2001	½"	M BSP	Max 60°C
118-2002	¾"	M BSP	Max 60°C
118-2003	1"	M BSP	Max 60°C
118-2004	2"	M BSP	Max 60°C



#### SPECIFICATION

- Operating pressure of 0.2 to 16 bars
- Internal parts: corrosion resistant plastic materials and synthetic rubber
- The valve allows the discharge of 700m<sup>3</sup>/h of air at pipe pressure of 0.5 bar, when fully-open

## DIRT AND AIR SEPARATION - AUTOMATIC AIR VENTS

561300



### CHECK VALVES FOR AUTOMATIC AIR VENTS



Ref no	Size	Connections	Pressure	Temperature	Box Qty
561230	1/4" x 3/8"	M x F BSP with PTFE seal	Discharge 10 bar	Max 115°C	100
561300	3/8" x 3/8"	M x F BSP with PTFE seal	Discharge 10 bar	Max 115°C	100
561340	3/8" x 1/2"	M x F BSP with PTFE seal	Discharge 10 bar	Max 115°C	100
561400	1/2" x 1/2"	M x F BSP with PTFE seal	Discharge 10 bar	Max 115°C	100

508041



### HYGROSCOPIC AIR VENTS



Ref no	Size	Connections	Pressure	Temperature	Box Qty
508011	1/8"	M BSP with PTFE seal	Discharge 10 bar	Max 90°C	100
508021	1/4"	M BSP with PTFE seal	Discharge 10 bar	Max 90°C	100
508031	3/8"	M BSP with PTFE seal	Discharge 10 bar	Max 90°C	100
508041	1/2"	M BSP with PTFE seal	Discharge 10 bar	Max 90°C	100

118-1001 CST



### CHROME AUTO AIR VENT



Ref no	Size	Description
118-1001 CST	1/2"	Chrome auto air vent
118-1002 RTL	1/2"	Chrome auto air vent blister pack

337131



### MANUAL AIR VENTS



Ref no	Size	Connections	Pressure	Temperature	Box Qty
337121	1/4"	M BSP with PTFE seal	Discharge 6 bar	Max 85°C	200
337131	3/8"	M BSP with PTFE seal	Discharge 6 bar	Max 85°C	200



## DIRT AND AIR SEPARATION - STRAINERS

### Y PATTERN STRAINERS



AI-595022

Ref no	Size	Connections
AI-595015	15mm	Compression
AI-595022	22mm	Compression
AI-595028	28mm	Compression
AI-500015	1/2"	F x F BSP
AI-500022	3/4"	F x F BSP
AI-500025	1"	F x F BSP
AI-500031	1 1/4"	F x F BSP
AI-500038	1 1/2"	F x F BSP
AI-500050	2"	F x F BSP
AI-500065	2 1/2"	F x F BSP
AI-500075	3"	F x F BSP
AI-500100	4"	F x F BSP



The Altecnic range of Y pattern strainers is designed for use within both domestic and commercial applications.

### SPECIFICATION

- Maximum working pressure : 10 bar
- Maximum working temperature : 120°C
- Filter rating : 400 microns for the following products : 15mm, 22mm, 28mm, 3/8" 1/2", 3/4" and 1"
- Filter rating : 470 microns for the following products : 1 1/4" and 1 1/2"
- Filter rating : 530 microns for the following products : 2", 2 1/2", 3" and 4"



### FOOT FILTERS



BA-030015000

Ref no	Size	Connections	Box Qty
BA-030015000	1/2"	M BSP	50
BA-030020000	3/4"	M BSP	25
BA-030025000	1"	M BSP	20
BA-030032000	1 1/4"	M BSP	10
BA-030040000	1 1/2"	M BSP	8
BA-030050000	2"	M BSP	5
BA-030065	2 1/2"	M BSP	5
BA-03008000	3"	M BSP	3
BA-030100	4"	M BSP	2



### SPECIFICATION

- For use with our non-return valves

## DIRT AND AIR SEPARATION - ACCESSORIES

ALT-DM37322



### DIRTMAG® ACCESSORIES



Ref no	Size	Description
ALT-DM37322	22mm	DirtMag isolation valves (pair)
ALT-DM37328	28mm	DirtMag isolation valves (pair)
ALT-DM1MHOSE	¾"	DirtMag discharge hose
380400 LTC	½"	Drain off tailpiece
130-1016 CST		Valve union seal
133-1041		Dirtmag washer

114-9004



### CHEMICAL TEST KIT



Ref no	Description
114-9004	Inhibitor test kit (tube)

114-9003



### ELECTROLYTIC SCALE REDUCER



Ref no	Size	Connections
114-9003	15mm	Compression
114-9005	22mm	Compression



## DIRT AND AIR SEPARATION - CHEMICALS

### LIQUID CLEANER AND INHIBITOR



Ref no	Size	Description
114-9001	500ml	Cleaner - iQ3
114-9002	500ml	Inhibitor - iQ1



114-9001

114-9002

### FAST AEROSOL CLEANER AND INHIBITOR



Ref no	Size	Description
570915	400ml	Cleaner - C3
570916	400ml	Inhibitor - C1

#### SPECIFICATION

- 400ml dose for 150L capacity system
- Easy, fast & clean system dosing



570915

570916

### C4 HEATING SYSTEM LEAK SEALER



Ref no	Size	Description
570914	500ml	Leak sealer - C4

#### SPECIFICATION

- 500ml dose per 150 litres of water



570914

### C7 BIOCIDES



Ref no	Size	Description
570913	500ml	Biocide - C7

#### SPECIFICATION

- 500ml dose per 150 litres of water



570913

# Gauges

## Gauges

### Gauges

Monitoring of any system is vital to system commissioning and maintenance.

The Altecnic range of pressure, temperature and combined gauges allows for multiple connection options and installation needs.



Code	Diameter (Ø mm)	Connections (size/position)	Pressure (bar)	Temperature (°C)
WI-111.12	40	1/8" back	✓ 0 - 4	n/a
WI-557104	50	1/4" back	✓ 0 - 4	n/a
WI-557106	50	1/4" back	✓ 0 - 6	n/a
WI-557204	50	1/4" offset back	✓ 0 - 4	n/a
WI-557304	50	1/4" bottom	✓ 0 - 4	n/a
WI-557306	50	1/4" bottom	✓ 0 - 6	n/a
WI-557310	50	1/4" bottom	✓ 0 - 10	n/a
WI-557410	63	1/4" back	✓ 0 - 10	n/a
503040	80	1/2" centre back	✓ 0 - 4	✓ 0 - 120
503060	80	1/2" centre back	✓ 0 - 6	✓ 0 - 120
503140	80	1/2" bottom	✓ 0 - 4	✓ 0 - 120
503160	80	1/2" bottom	✓ 0 - 6	✓ 0 - 120
688000	80	1/2" centre back	n/a	✓ 0 - 120
688010	80	1/2" centre back	n/a	✓ 0 - 120
688100	80	1/2" bottom	n/a	✓ 0 - 120

## GAUGES

WI-557104



### PRESSURE GAUGES 50MM Ø DIAL



Ref no	Size	Connections	Pressure
WI-557104	50mm Ø dial	¼" back connection	0 - 4 bar
WI-557106	50mm Ø dial	¼" back connection	0 - 6 bar
WI-557204	50mm Ø dial	¼" bottom connection	0 - 4 bar
WI-557304	50mm Ø dial	¼" bottom connection	0 - 4 bar
WI-557306	50mm Ø dial	¼" bottom connection	0 - 6 bar
WI-557310	50mm Ø dial	¼" bottom connection	0 - 10 bar

#### SPECIFICATION

- 50mm dial, ABS black case with red pointer
- ¼" BSP connection
- Working temperature -20°C / +80°C

WI-557410



### PRESSURE GAUGES 63MM Ø DIAL



Ref no	Size	Connections	Pressure
WI-557410	63mm Ø dial	¼" back connection	0 - 10 bar

#### SPECIFICATION

- 63mm dial, ABS black case with red pointer
- ¼" BSP connection
- Working temperature -20°C / +80°C

503040



### TEMPERATURE AND PRESSURE GAUGES



Ref no	Size	Connections	Pressure	Temperature
503040	80mm Ø dial	½" back connection	0 - 4 bar	0-120°C
503060	80mm Ø dial	½" back connection	0 - 6 bar	0-120°C
503140	80mm Ø dial	½" bottom connection	0 - 4 bar	0-120°C
503160	80mm Ø dial	½" bottom connection	0 - 6 bar	0-120°C

#### SPECIFICATION

- ½" central back connection
- With shut-off pocket
- Ø 80 mm
- Accuracy class: - temperature gauge UNI 2 - pressure gauge UNI 2,5

## GAUGES

### TEMPERATURE GAUGES



Ref no	Size	Connections	Probe	Temperature
688000	80mm Ø dial	½" back connection	45mm probe length	0-120°C
688010	80mm Ø dial	½" back connection	100mm probe length	0-120°C
688100	80mm Ø dial	½" bottom connection	45mm probe length	0-120°C



688000

### DIGITAL HAND HELD PRESSURE GAUGE



Ref no	Description
PVADG	Digital hand held pressure gauge



PVADG

# Backflow Prevention

## Backflow Prevention

### Backflow Prevention

There are legal requirements regulating water installations in domestic, commercial and health care premises.

These requirements make it a criminal offence for any person, whether the owner or occupier, to allow the wholesome water supply system within their premises to become:

- Contaminated
- Wasted
- Misused
- Unduly consumed

It is also a criminal offence to allow any contaminated water to backflow into the water undertakings distribution system.

Connections between wholesome and unwholesome water systems can create a serious risk to public health where backflow from cross connection results in contamination of the wholesome water supply system.

Persons with the responsibility for the water installation within their premises should make themselves familiar with the appropriate legislation and the risks that can occur from the backflow and back siphonage of a contaminate.

The legislation which governs water installations within private premises is set out in:

- The Water Industry Act 1991
- The Water Supply (Water Fittings) Regulations 1999
- The Water Byelaws 2000, Scotland
- European Standard / British Standard 1717

To prevent the contamination of the wholesome water supply system, the Water Regulations require backflow protection devices to be installed at or near to all points where water is to be drawn off for use.



## BACKFLOW PREVENTION - RPZ VALVES

574040



575010



### RPZ VALVES



Ref no	Size	Connections	Pressure
574040	1/2"	M x M BSP	16 bar
574050	3/4"	M x M BSP	16 bar
574600	1"	M x M BSP	16 bar
574700	1 1/4"	M x M BSP	16 bar
574800	1 1/2"	M x M BSP	16 bar
574900	2"	M x M BSP	16 bar
575006	DN65	Flanged PN16	16 bar
575008	DN80	Flanged PN16	16 bar
575010	DN100	Flanged PN16	16 bar

The Altecnic range of BA type back flow prevention devices designed for applications in water distribution systems to prevent back siphonage and back flow in fluid category 4 applications.

#### SPECIFICATION

- Maximum pressure at inlet : 16 bar
- Maximum working temperature : 65°C
- Complete list of spares available



570005



### RPZ VALVES - COMPLETE ASSEMBLIES



Ref no	Size	Connections	Pressure
570004	1/2"	F x F BSP	16 bar
570005	3/4"	F x F BSP	16 bar
570006	1"	F x F BSP	16 bar
570007	1 1/4"	F x F BSP	16 bar
570008	1 1/2"	F x F BSP	16 bar
570009	2"	F x F BSP	16 bar

The Altecnic range of BA type back flow prevention devices designed for applications in water distribution systems to prevent back siphonage and back flow in fluid category 4 applications.

#### SPECIFICATION

- Maximum pressure at inlet : 16 bar
- Maximum working temperature : 65°C
- Complete list of spares available
- Includes RPZ, isolation valve and strainer



NEW

### RPZ VALVES



Ref no	Size	Connections	Pressure
580040	DN 15	1/2" M	10 bar
580050	DN 20	3/4" M	10 bar
580060	DN 25	F x F BSP	10 bar
580070	DN 32	F x F BSP	10 bar

#### SPECIFICATION

- Backflow preventer with multifunction geometry
- BA type
- Chrome plated
- Dezincification resistant alloy body
- Threaded union connections
- For linear installation on horizontal or vertical pipes
- Complete with strainer at the inlet
- Maximum working temperature : 65°C
- Certified to BS EN 12729 standard

## BACKFLOW PREVENTION - DOUBLE CHECK VALVES

### DOUBLE CHECK VALVES - ECOFIL®



Ref no	Size	Connections	Pressure
AI-903015	1/2"	F x F BSP	10 bar
AI-903020	3/4"	F x F BSP	10 bar
AI-903025	1"	F x F BSP	10 bar
AI-903032	1 1/4"	F x F BSP	10 bar
AI-903040	1 1/2"	F x F BSP	10 bar
AI-903050	2"	F x F BSP	10 bar



AI-903020

#### SPECIFICATION

- Dezincification resistant brass alloy
- Plated finish to body
- Maximum working pressure : 10 bar
- Maximum working temperature : 60°C



### DOUBLE CHECK VALVES - ECOFIL®



Ref no	Size	Connections	Pressure
AI-903215	15mm	Compression	10 bar
AI-903222	22mm	Compression	10 bar
AI-903228	28mm	Compression	10 bar



AI-903215

#### SPECIFICATION

- Double check valve with compression ends
- Dezincification resistant brass alloy
- Nickel plated finish to body
- Maximum working pressure : 10 bar
- Maximum working temperature : 60°C



### DOUBLE CHECK VALVE COMPLETE WITH ISOLATOR



Ref no	Size	Connections	Pressure
303615	15mm	Compression	10 bar



303615

#### SPECIFICATION

- Double check valve with compression ends
- Dezincification resistant brass alloy
- Nickel plated finish to body
- Maximum working pressure : 10 bar
- Maximum working temperature : 60°C



## BACKFLOW PREVENTION - SINGLE CHECK VALVES

BI-100034



### SINGLE CHECK VALVES

Ref no	Size	Connections	Pressure
BI-100034	15mm	Compression	10 bar
BI-100522	22mm	Compression	10 bar
BI-100528	28mm	Compression	10 bar

#### SPECIFICATION

- Single check valve with compression ends
- Dezincification resistant brass alloy
- Nickel plated finish to body
- Maximum working pressure : 10 bar
- Maximum working temperature : 85°C



ALT-SCV015



### SINGLE CHECK VALVES

Ref no	Size	Connections	Pressure
ALT-SCV015	1/2"	F x F BSP	10 bar
ALT-SCV020	3/4"	F x F BSP	10 bar
ALT-SCV025	1"	F x F BSP	10 bar
ALT-SCV032	1 1/4"	F x F BSP	10 bar
ALT-SCV040	1 1/2"	F x F BSP	10 bar
ALT-SCV050	2"	F x F BSP	10 bar

#### SPECIFICATION

- Dezincification resistant brass alloy
- Yellow brass finish to body
- Maximum working pressure : 10 bar
- Maximum working temperature : 60°C



## BACKFLOW PREVENTION - NON RETURN VALVES

### NON RETURN VALVES

Ref no	Size	Connections
BA-032015000	15mm	Compression PN16
BA-032022000	22mm	Compression PN16
BA-032028000	28mm	Compression PN16

#### SPECIFICATION

- Maximum temperature : 110°C
- Pressure/temperature rating : BS EN 1254-2
- Maximum temperature at 16 bar : 30°C
- Maximum temperature at 10 bar : 65°C
- Maximum temperature at 6 bar : 110°C
- Minimum opening pressure : 0.02 bar
- End connections : BS EN 1252-2
- Sample port thread : M5 x 0.8



BA-032015000

### NON RETURN VALVES

Ref no	Size	Connections	Max Pressure
BA-300020	1/4"	F x F BSP	16 bar
BA-300030	3/8"	F x F BSP	16 bar
BA-300040	1/2"	F x F BSP	16 bar
BA-300050	3/4"	F x F BSP	16 bar
BA-300060	1"	F x F BSP	16 bar
BA-300070	1 1/4"	F x F BSP	10 bar
BA-300080	1 1/2"	F x F BSP	10 bar
BA-300090	2"	F x F BSP	10 bar
BA-300100	2 1/2"	F x F BSP	8 bar
BA-300110	3"	F x F BSP	8 bar
BA-300120	4"	F x F BSP	8 bar

#### SPECIFICATION

- Spring loaded universal check valve with soft seating and stainless steel spring
- Other models available on request
- Maximum working temperature : 110°C



BA-300020

### FOOT FILTERS

Ref no	Size	Connections	Box Qty
BA-030015000	1/2"	M BSP	50
BA-030020000	3/4"	M BSP	25
BA-030025000	1"	M BSP	20
BA-030032000	1 1/4"	M BSP	10
BA-030040000	1 1/2"	M BSP	8
BA-030050000	2"	M BSP	5
BA-030065	2 1/2"	M BSP	5
BA-03008000	3"	M BSP	3
BA-030100	4"	M BSP	2

#### SPECIFICATION

- For use with our non-return valves



BA-030015000

# Ball Valves

## Ball Valves

### Intaball® Ball Valves

The Altecnic Intaball® lever ball valve with compression ends is the ideal isolation valve for use in copper pipe systems.

#### Design

The Intaball® brass ball valves are lever operated through 90°, with bi-directional flow.

- Hard chrome plated ball for increased wear resistance.
- Compact design, with PTFE body seats for reliable isolation.
- Anti blow out stem for added security.
- The valves are designed for high flow rates with minimum pressure drops.
- Supplied with compression ends complying with BS EN 1252-2 for use with R250 (half hard) copper tube.
- Valves are available with either a red or blue lever for visual indication of hot or cold service.
- Full bore flow improves system efficiency and reduces wear and tear.



## BALL VALVES - WATER

AI-373B22

FULL BORE



### INTABALL® LEVER BALL VALVES - BLUE HANDLE



Ref no	Size	Connections	Body	Box Qty	Pressure
AI-373B15	15mm	Compression	Brass	20	25 bar
AI-373B22	22mm	Compression	Brass	10	25 bar
AI-373B28	28mm	Compression	Brass	8	25 bar
AI-373B35	35mm	Compression	Brass	4	16 bar
AI-373B42	42mm	Compression	Brass	2	16 bar
AI-373B54	54mm	Compression	Brass	4	16 bar

#### SPECIFICATION

- Temperature range -20°C - 99°C
- Complies with full bore BS EN 13828:2003



## BALL VALVES - WATER

AI-373R15

FULL BORE



### INTABALL® LEVER BALL VALVES - RED HANDLE



Ref no	Size	Connections	Body	Box Qty	Pressure
AI-373R15	15mm	Compression	Brass	20	25 bar
AI-373R22	22mm	Compression	Brass	10	25 bar
AI-373R28	28mm	Compression	Brass	8	25 bar
AI-373R35	35mm	Compression	Brass	4	16 bar
AI-373R42	42mm	Compression	Brass	2	16 bar
AI-373R54	54mm	Compression	Brass	4	16 bar

#### SPECIFICATION

- Temperature range -20°C - 99°C
- Complies with full bore BS EN 13828:2003



AI-171B07

FULL BORE



### INTABALL® LEVER BALL VALVES - BLUE HANDLE



Ref no	Size	Connections	Body	Box Qty	Pressure
AI-171B02	¼"	F x F BSP	Brass	30	50 bar
AI-171B03	⅜"	F x F BSP	Brass	30	50 bar
AI-171B04	½"	F x F BSP	Brass	25	50 bar
AI-171B05	¾"	F x F BSP	Brass	15	50 bar
AI-171B06	1"	F x F BSP	Brass	10	40 bar
AI-171B07	1¼"	F x F BSP	Brass	6	25 bar
AI-171B08	1½"	F x F BSP	Brass	3	16 bar
AI-171B09	2"	F x F BSP	Brass	2	16 bar
AI-171B10	2½"	F x F BSP	Brass	6	16 bar
AI-171B11	3"	F x F BSP	Brass	4	16 bar
AI-171B12	4"	F x F BSP	Brass	2	16 bar

#### SPECIFICATION

- Temperature range -20°C - 99°C
- Complies with full bore BS EN 13828:2003



### INTABALL® LEVER BALL VALVES - RED HANDLE



AI-171R02

FULL BORE



Ref no	Size	Connections	Body	Body	Pressure
AI-171R02	¼"	F x F BSP	Brass	30	50 bar
AI-171R03	⅜"	F x F BSP	Brass	30	50 bar
AI-171R04	½"	F x F BSP	Brass	25	50 bar
AI-171R05	¾"	F x F BSP	Brass	15	50 bar
AI-171R06	1"	F x F BSP	Brass	10	40 bar
AI-171R07	1¼"	F x F BSP	Brass	6	25 bar
AI-171R08	1½"	F x F BSP	Brass	3	16 bar
AI-171R09	2"	F x F BSP	Brass	2	16 bar
AI-171R10	2½"	F x F BSP	Brass	6	16 bar
AI-171R11	3"	F x F BSP	Brass	4	16 bar
AI-171R12	4"	F x F BSP	Brass	2	16 bar

#### SPECIFICATION

- Temperature range -20°C - 99°C
- Complies with full bore BS EN 13828:2003



AI-373115

FULL BORE



### INTABALL® BALL VALVES - BLUE BUTTERFLY HANDLE



Ref no	Size	Connections	Body	Box Qty	Pressure
AI-373115	15mm	Compression	Brass	20	25 bar
AI-373222	22mm	Compression	Brass	15	25 bar
AI-373228	28mm	Compression	Brass	8	25 bar
AI-171BB4	½"	F x F BSP	Brass	30	50 bar
AI-171BB5	¾"	F x F BSP	Brass	20	50 bar

#### SPECIFICATION

- Temperature range -20°C - 99°C
- Complies with full bore BS EN 13828:2003



### INTABALL® BALL VALVES - RED BUTTERFLY HANDLE



AI-373RB2

FULL BORE



Ref no	Size	Connections	Body	Box Qty	Pressure
AI-373RB5	15mm	Compression	Brass	15	25 bar
AI-373RB2	22mm	Compression	Brass	20	25 bar
AI-373RB8	28mm	Compression	Brass	8	25 bar
AI-171RB4	½"	F x F BSP	Brass	30	50 bar
AI-171RB5	¾"	F x F BSP	Brass	20	50 bar

#### SPECIFICATION

- Temperature range -20°C - 99°C
- Complies with full bore BS EN 13828:2003



## BALL VALVES - WATER

AI-397004



### INTABALL® COMBI BALL VALVES



Ref no	Size	Connections	Drainport	Box Qty
AI-397004	1/2"	F x F BSP	No	20
AI-397104	3/4"	F x F BSP	No	20
AI-397115	15mm	Compression	No	20
AI-397122	22mm	Compression	No	20
AI-397204	1"	F x F BSP	No	20
AI-401005	1/2" x 3/4"	F BSP x swivel	No	20
AI-395004	1/2"	F x F BSP	Yes	20
AI-395104	3/4"	F x F BSP	Yes	20
AI-395115	15mm	Compression	Yes	20

#### SPECIFICATION

- Maximum working pressure - threaded : 25 bar Maximum working pressure - Cu x Cu : 25 bar
- Maximum working temperature : 120°C
- Strainer mesh size: 400µ - 0.4mm
- Compression ends: BS EN 1254 - 2
- Threaded ends: BS EN ISO 228 - 1
- Drain port thread: G1/4"



323040



### BALLSTOPS



Ref no	Size	Connections	Body	Handle type
323040	1/2"	F x F BSP	Brass	Butterfly
323050	3/4"	F x F BSP	Brass	Butterfly
323060	1"	F x F BSP	Brass	Butterfly
323070	1 1/4"	F x F BSP	Brass	Lever
323080	1 1/2"	F x F BSP	Brass	Lever
323090	2"	F x F BSP	Brass	Lever
332400	1/2"	M x F BSP	Brass	Butterfly
333500	3/4" x 3/4"	F x Swivel BSP	Brass	Butterfly
334500	3/4" x 3/4"	M x Swivel BSP	Brass	Butterfly

#### SPECIFICATION

- The ballstop range of in-line lever ball valves with an integrated check valve situated within the ball of the valve
- Maximum working pressure : 16 bar
- Maximum working temperature : 90°C



## BALL VALVES - WATER

### STAINLESS STEEL BALL VALVES



W-124-1001



Ref no	Size	Connections	Body	Pressure
W-124-1001	1/2"	F x F miniball handle ball valve	Brass	63 bar
W-124-1002	1/2"	M x F miniball handle ball valve	Brass	63 bar
W-124-1003	1 1/4"	F x F lever handle ball valve	Brass	50 bar
W-124-1004	1 1/4"	M x F lever handle ball valve	Brass	50 bar
W-124-1005	1 1/2"	F x F lever handle ball valve	Brass	40 bar
W-124-1006	1 1/2"	M x F lever handle ball valve	Brass	40 bar

#### SPECIFICATION

- Maximum working temperature : 120°C

### FILTER BALL VALVES



124-6003 CST



Ref no	Size	Connections	Body	Pressure
124-6003 CST*	1/2"	F x F BSP	Brass	30 bar
124-6004 CST	3/4"	F x F BSP	Brass	30 bar
124-6005 CST	1"	F x F BSP	Brass	30 bar
124-6006 CST	1 1/4"	F x F BSP	Brass	20 bar
124-6007 CST	1 1/2"	F x F BSP	Brass	20 bar
124-6008 CST	2"	F x F BSP	Brass	20 bar

\* 1/2" complies with the full bore and the other sizes exceeds the reduced bore diameter circle specified in BS EN 13547.



### 3 - WAY BALL VALVES



124-5001 CST



Ref no	Size	Description
124-5001 CST	1/4"	L-pattern 3-way ball valve
124-5002 CST	3/8"	L-pattern 3-way ball valve
124-5003 CST	1/2"	L-pattern 3-way ball valve
124-5004 CST	3/4"	L-pattern 3-way ball valve
124-5005 CST	1"	L-pattern 3-way ball valve
124-5006 CST	1 1/4"	L-pattern 3-way ball valve
124-5007 CST	1 1/2"	L-pattern 3-way ball valve
124-5008 CST	2"	L-pattern 3-way ball valve
125-5009 CST	2 1/2"	L-pattern 3-way ball valve
124-5010 CST	1/4"	T-pattern 3-way ball valve
124-5011 CST	3/8"	T-pattern 3-way ball valve
124-5012 CST	1/2"	T-pattern 3-way ball valve
124-5013 CST	3/4"	T-pattern 3-way ball valve
124-5014 CST	1"	T-pattern 3-way ball valve
124-5015 CST	1 1/4"	T-pattern 3-way ball valve
124-5016 CST	1 1/2"	T-pattern 3-way ball valve
124-5017 CST	2"	T-pattern 3-way ball valve
125-5018 CST	2 1/2"	T-pattern 3-way ball valve

#### SPECIFICATION

- Min. working temperature: -10°C
- Max. pressure: 40 bar
- Max. working temperature: +100°C
- Threaded ends: ISO 228/1

## BALL VALVES - WATER

124-8008



FULL BORE

NEW

### INTABALL® PRESS FIT LEVER BALL VALVES



Ref no	Size	Connections	Body	Pressure
124-8001	15mm x 15mm	Copper press fit	Brass	40 bar
124-8003	22mm x 22mm	Copper press fit	Brass	40 bar
124-8004	28mm x 28mm	Copper press fit	Brass	40 bar
124-8005	35mm x 35mm	Copper press fit	Brass	25 bar
124-8006	42mm x 42mm	Copper press fit	Brass	10 bar
124-8007	54mm x 54mm	Copper press fit	Brass	10 bar
124-8008	15mm x 1/2"	Copper press fit x F BSP	Brass	40 bar
124-8010	22mm x 3/4"	Copper press fit x F BSP	Brass	40 bar
124-8011	28mm x 1"	Copper press fit x F BSP	Brass	40 bar
124-8012	35mm x 1 1/4"	Copper press fit x F BSP	Brass	25 bar

#### SPECIFICATION

- Anti blow out stem
- Lever operated through 90° with bi-directional resistance
- PTFE body seats for reliable isolation
- M&V press up to 35mm



124-8001



FULL BORE

NEW

### INTABALL® PRESS FIT BUTTERFLY LEVER BALL VALVES



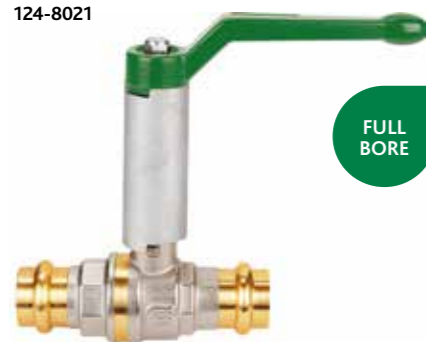
Ref no	Size	Connections	Body	Pressure
124-8013	15mm x 15mm	Copper press fit	Brass	40 bar
124-8015	22mm x 22mm	Copper press fit	Brass	40 bar
124-8016	28mm x 28mm	Copper press fit	Brass	40 bar
124-8017	15mm x 1/2"	Copper press fit x F BSP	Brass	40 bar
124-8019	22mm x 3/4"	Copper press fit x F BSP	Brass	40 bar
124-8020	28mm x 1"	Copper press fit x F BSP	Brass	40 bar

#### SPECIFICATION

- Anti blow out stem
- Compact design with butterfly lever
- PTFE body seats for reliable isolation
- M&V press up to 35mm



124-8021



FULL BORE

NEW

### INTABALL® PRESS FIT LEVER BALL VALVES WITH STEM EXTENTION



Ref no	Size	Connections	Body	Pressure
124-8021	15mm x 15mm	Copper press fit	Brass	40 bar
124-8023	22mm x 22mm	Copper press fit	Brass	40 bar
124-8024	28mm x 28mm	Copper press fit	Brass	40 bar
124-8025	35mm x 35mm	Copper press fit	Brass	25 bar

#### SPECIFICATION

- Anti blow out stem
- Lever operated through 90° with bi-directional resistance
- PTFE body seats for reliable isolation
- M&V press up to 35mm

## BALL VALVES - WATER

### INTABALL® PRESS FIT LEVER BALL VALVES WITH NYLON STEM EXTENTION



124-8026

Ref no	Size	Connections	Body	Pressure
124-8026	15mm x 15mm	Copper press fit	Brass	40 bar
124-8028	22mm x 22mm	Copper press fit	Brass	40 bar
124-8029	28mm x 28mm	Copper press fit	Brass	40 bar
124-8030	35mm x 35mm	Copper press fit	Brass	25 bar
124-8031	42mm x 42mm	Copper press fit	Brass	10 bar
124-8032	54mm x 54mm	Copper press fit	Brass	10 bar



FULL BORE

NEW

#### SPECIFICATION

- Anti blow out stem
- The extension with integral Tee handle is condensation proof with high thermal insulation
- PTFE body seats for reliable isolation
- M&V press up to 35mm
- Colour coded caps for the extension

### INTABALL® PRESS FIT LEVER BALL VALVES - RED LEVER



124-8101

Ref no	Size	Connections	Body	Pressure
124-8101	15mm x 15mm	Copper press fit	Brass	40 bar
124-8103	22mm x 22mm	Copper press fit	Brass	40 bar
124-8104	28mm x 28mm	Copper press fit	Brass	40 bar
124-8105	35mm x 35mm	Copper press fit	Brass	25 bar
124-8106	42mm x 42mm	Copper press fit	Brass	10 bar
124-8107	54mm x 54mm	Copper press fit	Brass	10 bar
124-8108	15mm x 1/2"	Copper press fit x F BSP	Brass	40 bar
124-8110	22mm x 3/4"	Copper press fit x F BSP	Brass	40 bar
124-8111	28mm x 1"	Copper press fit x F BSP	Brass	40 bar
124-8112	35mm x 1 1/4"	Copper press fit x F BSP	Brass	25 bar



FULL BORE

NEW

#### SPECIFICATION

- Anti blow out stem
- Lever operated through 90° with bi-directional resistance
- PTFE body seats for reliable isolation
- M&V press up to 35mm



### INTABALL® PRESS FIT LEVER BALL VALVES - BLUE LEVER



124-8201

Ref no	Size	Connections	Body	Pressure
124-8201	15mm x 15mm	Copper press fit	Brass	40 bar
124-8203	22mm x 22mm	Copper press fit	Brass	40 bar
124-8204	28mm x 28mm	Copper press fit	Brass	40 bar
124-8205	35mm x 35mm	Copper press fit	Brass	25 bar
124-8206	42mm x 42mm	Copper press fit	Brass	10 bar
124-8207	54mm x 54mm	Copper press fit	Brass	10 bar
124-8208	15mm x 1/2"	Copper press fit x F BSP	Brass	40 bar
124-8210	22mm x 3/4"	Copper press fit x F BSP	Brass	40 bar
124-8211	28mm x 1"	Copper press fit x F BSP	Brass	40 bar
124-8212	35mm x 1 1/4"	Copper press fit x F BSP	Brass	25 bar



FULL BORE

NEW

#### SPECIFICATION

- Anti blow out stem
- Lever operated through 90° with bi-directional resistance
- PTFE body seats for reliable isolation
- M&V press up to 35mm



## BALL VALVES - WATER

EU-002630108



### DZR SERVICE VALVE COMPLETE WITH BLACK LEVER HANDLE



Ref no	Size	Connections	Body
EU-002630108	15mm	Compression	Brass
EU-002630111	22mm	Compression	Brass

#### SPECIFICATION

- Maximum working pressure 10 bar
- Temperature range -20°C - 99°C



AI-SF9086XX



### PUSH FIT SERVICE VALVE



Ref no	Size	Connections	Body
AI-SF9086XX	15mm x 1/2"	Pushfit x Swivel	Brass

#### SPECIFICATION

- Maximum working pressure 10 bar
- Temperature range -20°C - 99°C



## BALL VALVES - GAS

### EN 331 APPROVED LEVER OPERATED BALL VALVES - FOR GAS



Ref no	Size	Connections	Body	Box Qty
AI-331115	15mm	Compression	Brass	20
AI-331122	22mm	Compression	Brass	10
AI-331128	28mm	Compression	Brass	8
AI-331135	35mm	Compression	Brass	4
AI-331142	42mm	Compression	Brass	2
AI-331154	54mm	Compression	Brass	4
AI-033103	3/8"	F x F BSP	Brass	20
AI-033104	1/2"	F x F BSP	Brass	20
AI-033105	3/4"	F x F BSP	Brass	10
AI-033106	1"	F x F BSP	Brass	6
AI-033107	1 1/4"	F x F BSP	Brass	5
AI-033108	1 1/2"	F x F BSP	Brass	3
AI-033109	2"	F x F BSP	Brass	2
AI-331A05	3/4"	M x F BSP	Brass	10
AI-331A06	1"	M x F BSP	Brass	6



AI-331115



AI-033103

The Intaball gas range of full bore valves has been designed and built to meet the requirements of BS EN 331: 2015



#### SPECIFICATION

- Maximum working pressure 10 bar
- Temperature range -20°C - 60°C
- Gas families 1st, 2nd & 3rd



# Flow Regulation

## Flow Regulation

### Conserving natural resources, saving money

Altecnic has developed a number of products which are aimed to help conserve our water resources.

Altecnic is dedicated to the efficient use of water, ensuring that we reduce our environmental impact and minimise any waste of water.

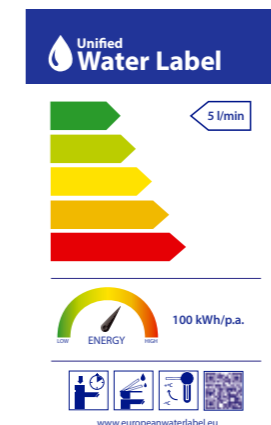
Delivering water efficiency in both domestic and commercial applications has never been easier using our innovative water saving products. Our product designers have produced a range of products where fit function and easy of install along with serving is paramount, and this range includes:

- Calflow plus® - combined isolation, filter and flow regulation valve
- Flow Regulators - proprietary flow regulators mounted in brass or plastic housing for easy of install

Our products have been design and manufactured to meet the industry standards of best practice and the requirements of BREEAM, the Water Technology List and the Water Efficient Product Labelling scheme.



BREEAM®



## BREEAM

The Building Research Establishment set up BREEAM (Building Research Establishment Environmental Assessment Method) as a way to determine the environmental performance of buildings.

BREEAM highlights the use of water in buildings. Points, which count towards the assessment rank, are awarded depending on the level of environmental efficiency achieved. Most building types can be specified and assessed using one of BREEAM's defined categories which include healthcare, industrial, prisons, retail, education, offices as well as domestic housing.

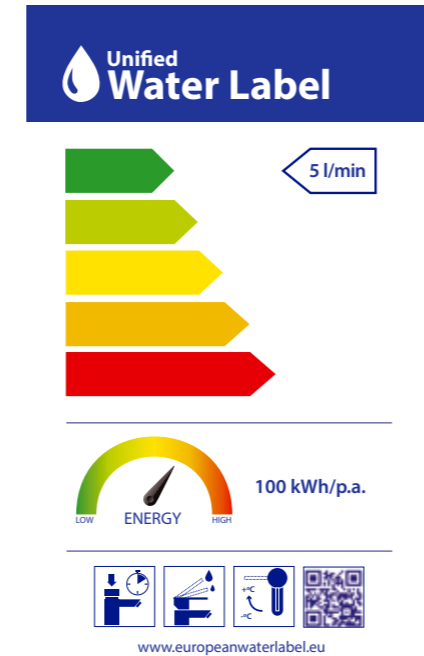
BREEAM's scope does not only cover water saving but energy usage, materials, comfort and the environmental impacts. The advantages of a BREEAM building extend to both designer and end user; the end user receives a building that is economic to run and the designer can clearly demonstrate compliance with environmental requirements. - (www.breeam.org)

## The Water Efficient Product Labelling Scheme

The Unified Water Label Scheme is an independently supported by the Department for Environment, Food and Rural Affairs (DEFRA). It is a method of reviewing water efficient products driven by a regularly maintained database.

Each product in the central database is tested and colour coded. A simple scale ranging from low to high water use provides an at a glance indication of its water saving performance. (www.water-efficiencylabel.org.uk)

# BREEAM®



## CALFLOW PLUS® 15MM

AI-811215

Ref no	Size	Flow rate scale	Connections	Body
AI-811215	-	-	Compression	Brass
AI-81121504	15mm	4 L/min	Compression	Brass
AI-81121506	15mm	6 L/min	Compression	Brass
AI-81121508	15mm	8 L/min	Compression	Brass
AI-81121510	15mm	10 L/min	Compression	Brass
AI-81121512	15mm	12 L/min	Compression	Brass
AI-81121515	15mm	15 L/min	Compression	Brass
AI-81121518	15mm	18 L/min	Compression	Brass
AI-LE01205APB	Blue handle only, for use with Calflow Plus			
AI-LE01205APR	Red handle only, for use with Calflow Plus			



### SPECIFICATION

- Multi-function flow 15mm & 22mm isolation with interchangeable flow cartridges and strainer
- Optional use as flow regulator, isolation, strainer or combination of 2 or more
- Red and blue handles available on request
- Maximum working pressure 2 bar
- Maximum working temperature 90°C



## FLOW REGULATOR CARTRIDGES FOR USE WITH CALFLOW PLUS®

Ref no	Size	Flow rate scale	Colour
AI-REG04	Calflow plus® only	4 L/min	Grey
AI-REG06	Calflow plus® only	6 L/min	Black
AI-REG08	Calflow plus® only	8 L/min	White
AI-REG10	Calflow plus® only	10 L/min	Blue
AI-REG12	Calflow plus® only	12 L/min	Red
AI-REG15	Calflow plus® only	15 L/min	Green
AI-REG18	Calflow plus® only	18 L/min	Grey



### SPECIFICATION

- Colour coded to denote literage per minute, allows constant flow without overflow occurring

132402



BALANCING VALVE WITH FLOW METER



Ref no	Size	Flow rate scale	Connections
132402	½"	2 - 7 L/min	DN15
132512	¾"	5 - 13 L/min	DN20
132522	¾"	7 - 28 L/min	DN20
132602	1"	10 - 40 L/min	DN25
132702	1¼"	20 - 70 L/min	DN32
132802	1½"	30 - 120 L/min	DN40
132902	2"	50 - 200 L/min	DN50

SPECIFICATION

- For adjusting and control of flows in heating, air conditioning and cooling systems. Visual flow indicator and flow adjustment.

534202



534 FLOW LIMITER M X F



Ref no	Size	Flow rate scale	Connections	Colour
534102	½"	2 L/min	M x F BSP	Green
534104	½"	4 L/min	M x F BSP	Grey
534105	½"	5 L/min	M x F BSP	Yellow
534106	½"	6 L/min	M x F BSP	Black
534108	½"	8 L/min	M x F BSP	White
534110	½"	10 L/min	M x F BSP	Light blue
534112	½"	12 L/min	M x F BSP	Red
534116	½"	16 L/min	M x F BSP	Blue
534118	½"	18 L/min	M x F BSP	Purple
534202	½"	2 L/min	F x M BSP	Green
534204	½"	4 L/min	F x M BSP	Grey
534205	½"	5 L/min	F x M BSP	Yellow
534206	½"	6 L/min	F x M BSP	Black
534208	½"	8 L/min	F x M BSP	White
534210	½"	10 L/min	F x M BSP	Light blue
534212	½"	12 L/min	F x M BSP	Red
534216	½"	16 L/min	F x M BSP	Blue
534218	½"	18 L/min	F x M BSP	Purple

SPECIFICATION

- Flow limiter, brass body, chrome plated.
- Maximum working pressure 10 bar
- Maximum working temperature 80°C
- Accuracy ±10%

FLOW LIMITER



SY-RO6LF



Ref no	Size	Flow rate scale	Connections	Colour
SY-RO10LF	½"	10 L/min	M x F BSP - Brass	Blue
SY-RO6LF	½"	6 L/min	M x F BSP - Brass	Green
SY-RO8LF	½"	8 L/min	M x F BSP - Brass	White
SY-RP10LF	½"	10 L/min	M x F BSP - ABS Plastic	Blue
SY-RP3410LF	½" x ¾"	10 L/min	M x F BSP - ABS Plastic	Blue
SY-RP346LF	½" x ¾"	6 L/min	M x F BSP - ABS Plastic	Green
SY-RP348LF	½" x ¾"	8 L/min	M x F BSP - ABS Plastic	White
SY-RP6LF	½"	6 L/min	M x F BSP - ABS Plastic	Green
SY-RP8LF	½"	8 L/min	M x F BSP - ABS Plastic	White

SPECIFICATION

- Maximum working pressure 5 bar
- Maximum working temperature 80°C
- Accuracy ±10%

# Metering

## Metering

### Metering

**Altecnic provides unique solutions to heat network design and our metering solutions are of the very highest quality.**

Altecnic offer a complete range water meters, single and multi-jet type with wet and dry dial or liquid filled sealed counter, as well as full bore helix Woltmann-type meters with interchangeable or fixed mechanism, to suit the needs of practically any end user.

Our range of water meters are EEC approved in classes Class A, B C dependant on model – in accordance with EEC directive No. 75/33.

The best quality of all our products is achieved thanks to the direct control over all the production stages. The production cycle starts with the control of incoming supplies, proceeds with the storage, identification and proper handling of all materials, both at the warehouse and during production, and continues with the machining of the brass parts on the automatic transfer machines and the automated assembly of the components.

The quality of the moulded pieces, along with the precision of the robotised machines in assembling them, ensures that all the parts fit together perfectly.

This means minimal friction between the gearwheels that make up the meter's measuring element and consequently a high degree of precision and sensitivity even at the lowest flow rates. Lastly, all our water meters undergo hydraulic tests for pressure and precision on electronic measurement.



### Classes of Water Meters

- A** This class of Meters is for secondary applications where the meter is used for guidance only and not billing purposes - this meter is mounted in the vertical position.
- B** This class of Meters is for secondary applications where the meter is used for guidance only and not billing purposes - this meter is mounted in the horizontal position.
- C** This class of Meters is for secondary applications where the meter is used for guidance only and not billing purposes - this meter is mounted in the vertical or horizontal position
- D** This class of Meters is for primary applications where the meter is used for billing purposes - this meter is mounted in the vertical or horizontal position

**For pulsed meter options, please contact a member of our technical department.**

Model Type	Single Jet	Multi Jet	Dry Dial	Wet Dial	Hot Water Use	Cold Water Use	Size Range
USF	✓		✓			✓	1/2" & 3/4"
Tagus	✓		✓			✓	1/2", 3/4", 1", 1 1/4" & 1 1/2"
DBRF	✓			✓		✓	1/2", 3/4", 1", 1 1/4" & 1 1/2"
IARF		✓	✓			✓	1/2", 3/4", 1", 1 1/4" & 1 1/2"
OARF		✓	✓			✓	2"
USC	✓		✓		✓		1/2" & 3/4"
USLF	✓		✓			✓	1/2" & 3/4"

## METERING - WATER METERS

GG-3003F13



### COLD WATER METERS - NON PULSED



Ref no	Size	Connections	Accuracy Class	Dial Type	Jet Type
GG-3003F13	½"	M x M BSP	Class B	Dry dial	Single jet
GG-3005F20	¾"	M x M BSP	Class B	Dry dial	Single jet
PS-100001	½"	M x M BSP	Class D / MID R 315	Dry dial	Multi jet
PS-100002	¾"	M x M BSP	Class D / MID R 160	Dry dial	Multi jet
PS-100004	1"	M x M BSP	Class D / MID R 100	Dry dial	Multi jet
GG-2003013	½"	M x M BSP	Class B	Wet dial	Single jet
GG-2005020	¾"	M x M BSP	Class B	Wet dial	Single jet
GG-2007025	1"	M x M BSP	Class B	Wet dial	Single jet
GG-2007030	1¼"	M x M BSP	Class B	Wet dial	Single jet
GG-2007040	1½"	M x M BSP	Class B	Wet dial	Single jet
GG-IARF15	½"	M x M BSP	Class B	Dry dial	Multi jet
GG-IARF20	¾"	M x M BSP	Class B	Dry dial	Multi jet
GG-IARF25	1"	M x M BSP	Class B	Dry dial	Multi jet
GG-IARF30	1¼"	M x M BSP	Class B	Dry dial	Multi jet
GG-IARF40	1½"	M x M BSP	Class B	Dry dial	Multi jet
GG-OARF50	2"	M x M BSP	Class B	Dry dial	Multi jet
GG-OARF50.1	2"	M x M BSP	Class B	Dry dial	Multi jet

PS-100001



GG-2003013



GG-IARF15



GG-OARF50



PS-100001



### COLD WATER METERS - PULSED



Ref no	Size	Connections	Accuracy Class	Dial Type	Litres Pulse	Jet Type
GG-USLF15P1	½"	M x M BSP	Class B	Dry dial	1	Single jet
GG-USLF20P1	¾"	M x M BSP	Class B	Dry dial	1	Single jet
PS-P00001	½"	M x M BSP	Class D / MID R 315	Dry dial	1	Multi jet
PS-P00002	¾"	M x M BSP	Class D / MID R 100	Dry dial	1	Multi jet
PS-P00003	1"	M x M BSP	Class D / MID R 100	Dry dial	1	Multi jet

## METERING - WATER METERS

### HOT WATER METERS - NON PULSED



Ref no	Size	Connections	Accuracy Class	Dial Type	Litres Pulse	Jet Type
GG-3003C13	½"	M x M BSP	Class B	Dry dial	1	Single jet
GG-3005C20	¾"	M x M BSP	Class B	Dry dial	1	Single jet

GG-3003C13



### HOT WATER METERS - PULSED



Ref no	Size	Connections	Accuracy Class	Dial Type	Litres Pulse	Jet Type
GG-L12ASC02B051	½"	M x M BSP	Class B	Dry dial	1	Single jet
GG-L31ASC02B051	¾"	M x M BSP	Class B	Dry dial	1	Single jet

GG-L12ASC02B051



### WATER METERS - ISOLATION VALVES



Ref no	Size	Connections
AI-195004	½"	F x F Swivel

AI-195004



**DATA CONCENTRATOR**



Ref no	Meters
205-1002	64
205-1003	128
205-1004	256

**SPECIFICATION**

- 64, 128 and 256 meters
- Extendible network up to 1000 meters
- Local data reading via USB/RS232
- Can be easily upgraded with an infra-red GPRS modem for remote meter reading

**GPRS MODEM**



Ref no	Power Supply
204-7010	230v mains power

**SPECIFICATION**

- Automatically sends meter usage data via email or text message
- Requires SIM card
- Optional mounting box available on request

**SMARTPAY PREPAYMENT SYSTEM WITH A DEDICATED CONTROL UNIT, INDEPENDENT TENANT DISPLAY FOR EASY INSTALLATION**



Ref no	Description
205-1001	Secure credit system management for landlords

**SPECIFICATION**

- Smarter budgeting and payment options for tenants
- Graphical and easy to read tenant screen, is connected wirelessly to the prepayment unit. This screen can be located conveniently within the apartment for the tenant to better manage their balance and account.
- Secure online payment portal for the tenant to top-up with credit or debit cards and local top-up facilities with PayPoint 26,700 retail points across the country
- Wireless Smart metering of heat and hot water, avoiding the need for cabling and building MBUS systems for data collection. The screen can provide a messaging capability to each tenant; events, key dates, marketing opportunities.
- The system is remote changeable between a prepayment and traditional credit system.
- The system is compliant with ENE3 Code for Sustainable Homes

**REMOTE METER STATION**



Ref no	Description
Ask for details	Wall mounted metering station for energy
Ask for details	Wall mounted metering station for energy and cold water metering
Ask for details	Wall mounted metering station for energy, cold and hot water metering
Ask for details	Wall mounted metering station for energy, cold, hot and grey water metering

**ITRON C F ECHO II ENERGY METER**

Ref no	Size	Power	Output
204-1...	15 - 50mm	- Mains - Battery	- M-Bus - Pulsed - Radio - GPRS - RS232



**ITRON COMPACT ENERGY METER - ULTRAMAX**

Ref no	Size	Power	Output
204-2...	15 - 20mm	- Mains - Battery	- M-Bus - Pulsed - Radio



**HYDROMETER ENERGY METER**

Ref no	Size	Power	Output
204-6...	15 - 20mm	- Mains - Battery	- M-Bus - Pulsed - Radio - GPRS - RS232



**KAMSTRUPP ENERGY METER**

Ref no	Size	Power	Output
204-4...	15 - 20mm	- Mains - Battery	- M-Bus - Pulsed - Radio - GPRS - RS232



# Accessories

## Accessories

### Accessories

Altecnic is the UK and Ireland's leading provider of high-quality hydronic solutions. Our extensive range includes market leading specialist components and associated supporting products.



### Did you know?

Altecnic provides training on all of our products.

For more information contact us on  
**+44 (0)1785 218 206**

## FLEXIBLE HOSES & GENERAL PLUMBING

PA-2522368520300



### FLEXIBLE TAP CONNECTORS



Ref no	Connections	Pressure	Length
PA-251B42B130450	15mm x 1/2" F x F BSP	10 bar	450mm
PA-2522368520300	22mm x 3/4" F x F BSP	10 bar	300mm
PA-252B42B130300	15mm x 1/2" F x F BSP	10 bar	300mm

#### SPECIFICATION

- Stainless steel braid
- Working pressure : 10 bar
- Working temperature range : 0°C - 80°C

PA-2522362151001



### FLEXIBLE HOSE



Ref no	Size	Connections	Length
PA-2522362151001	3/4" M x F	M x F BSP	1000mm

BI-WM0005



### DRAIN VALVES



Ref no	Size	Connections
BI-WM0004	15mm	Long tail
BI-WM0005	15mm	Short tail
BI-WM0006	1/2"	M BSP
BI-WM0007	3/4"	M BSP

#### SPECIFICATION

- Maximum working pressure: 10 bar



## OIL LINES

### OIL FILTERS



Ref no	Description
GA-V7045201ALS	1/4" Filter aluminium bowl with bleed screw
GA-V7045101ALS	3/8" Filter aluminium bowl with bleed screw
GA-V7030201A	1/2" Oil filter with aluminium bowl
GA-V7010401A	3/4" Oil filter with aluminium bowl
GA-V7010101	1" Oil filter with aluminium bowl



GA-V7045101ALS

### OIL NIPPLES



Ref no	Description
PA-300101	1/4" x 1/4" Nipple
PA-300202	1/4" x 3/8" Nipple

# Commercial Washrooms

## Commercial Washrooms

**altecnic**  
CALEFFI group

### Commercial Washrooms Product Range

The Altecnic range of commercial washroom products includes non concussive taps, timed flow controls, vandal resistant shower valves and shower panels.

The Altecnic range of commercial washroom products leverages over 40 years of experience in the field of design and production of washroom products of our sister company, SILFRA.

We understand the fundamentals of commercial washroom design and supply the innovative, high quality products the market demands. Altecnic commercial washroom products are made from the best materials to ensure maximum reliability and durability.



Q425251



### KEY BENEFIT

- 5 year warranty with SILFRA products



QL23051



PD15251



QK16551



QK15051

To find out more about Altecnic's range of Commercial Washroom Products visit [www.altecnic.co.uk/washrooms](http://www.altecnic.co.uk/washrooms)

QK23051



NEW

**SILFRA NON CONCUSSIVE TAPS**



Ref no	Description
QK23051	Single Basin Tap
QK23551	Single Wall Tap

**SPECIFICATION**

- Timed flow: 15 sec (adj +/- 5 sec)
- Flow rate: adj min 3 l/m, max 15 l/m at 3 bar

QK23551



QK16551



NEW

**SILFRA TIMED FLOW CONTROLS**



Ref no	Description
QK16551	Exposed timed flow control (single)
QK15051	Concealed timed flow control (single)

**SPECIFICATION**

- Max pressure: 5 bar
- Min pressure: 1 bar
- Max temperature: 80°C
- Timed flow: 30 sec (adj +/- 5 sec)
- Flow rate: Adj min 3 l/m, 15 l/m at 3 bar

QK15051



QL23051



NEW

**SILFRA TOGGLE TAP**



Ref no	Description
QL23051	Basin (single)

**SPECIFICATION**

- Wash basin tap with elbow lever
- Max pressure: 5 bar
- Min pressure: 1 bar
- Max temperature: 80°C
- Timed flow: 15 sec (adj +/- 5 sec)
- Flow rate: Adj min 3 l/m, 15 l/m at 3 bar

Q425251



NEW

**SILFRA NON CONCUSSIVE MIXER TAP**



Ref no	Description
Q425251	Non concussive mixer tap (single)

**SPECIFICATION**

- Max pressure: 5 bar
- Min pressure: 1 bar
- Max temperature: 80°C
- Timed flow: 15 sec (adj +/- 5 sec)
- Flow rate: Adj min 3 l/m, 15 l/m at 3 bar

**SILFRA VANDAL RESISTANT HEAD**



NEW

PD15251

Ref no	Description
PD15251	Small
AT89051	Large



**SPECIFICATION**

- Recommended operational pressure: 1-5 bar
- Max. test pressure: 16 bar
- Max. water temperature: 80°C
- Recommended water temperature: 50-60°C
- Pressure difference between hot & cold water: 1.5 bar

**GROUP THERMOSTATIC MIXING VALVE –ART 5219**



ALT-521928

Ref no	Size	Connections	Check Valves	Temperature
ALT-521928	28mm	Compression	Yes	Setting range 35 -65°C

**SPECIFICATION**

- Maximum working pressure : 14 bar (static), 5 bar (dynamic)
- Maximum hot inlet temperature : 90°C
- Temperature stability : ±2°C



**1164 SERIES –THERMOSTATIC REGULATOR FOR HOT WATER RECIRCULATION**



116420

Ref no	Size	Connections	Max working pressure
116420	22mm	Compression	S10 bar

**SPECIFICATION**

- Maximum working temperature 60°C



ALT-521928



116420



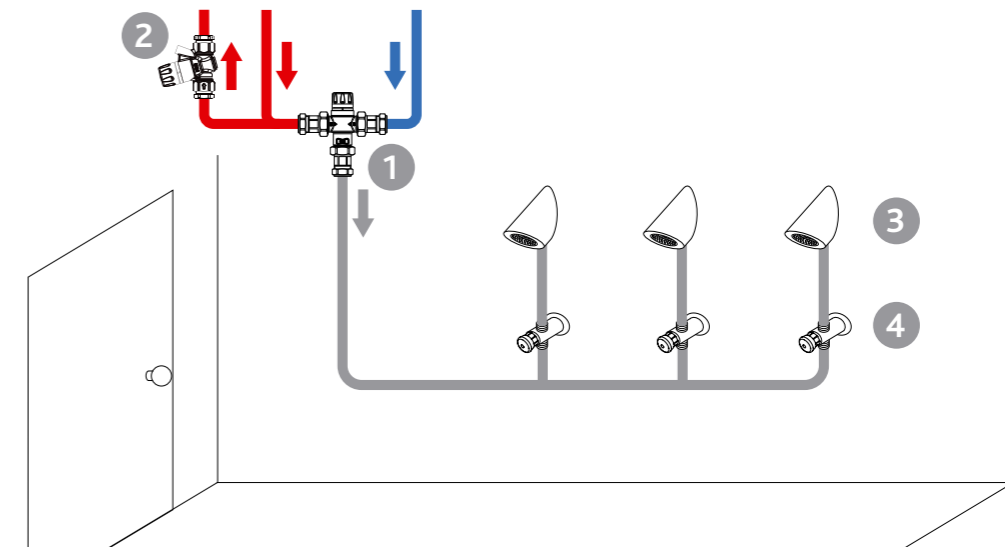
**GROUP SHOWERS WITH EXPOSED CONTROLLER AND SHOWER HEAD**

Ref no	Description	Diagram ref
ALT-521928	28MM Thermostatic mixing valve	1
116420	Thermal recirculation valve	2
PD15251	Vandal resistant shower valve	3
QK16551	Exposed timed flow control	4

PD15251



QK16551



ALT-521928



116420



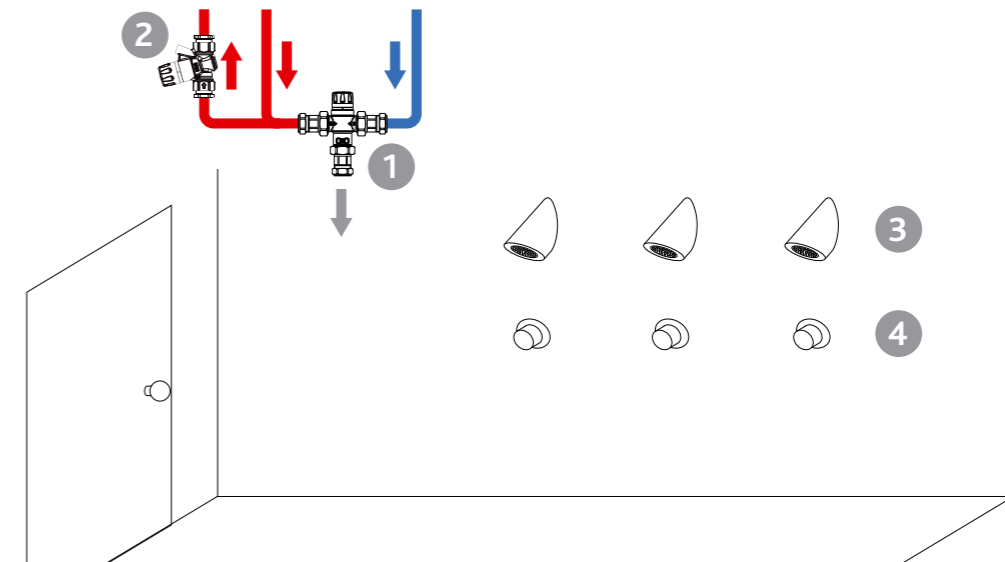
**GROUP SHOWERS WITH CONCEALED CONTROLLER AND SHOWER HEAD**

Ref no	Description	Diagram ref
ALT-521928	28MM Thermostatic mixing valve	1
116420	Thermal recirculation valve	2
PD15251	Vandal resistant shower valve	3
QK15051	Concealed timed flow control	4

PD15251



QK15051



ALT-521928



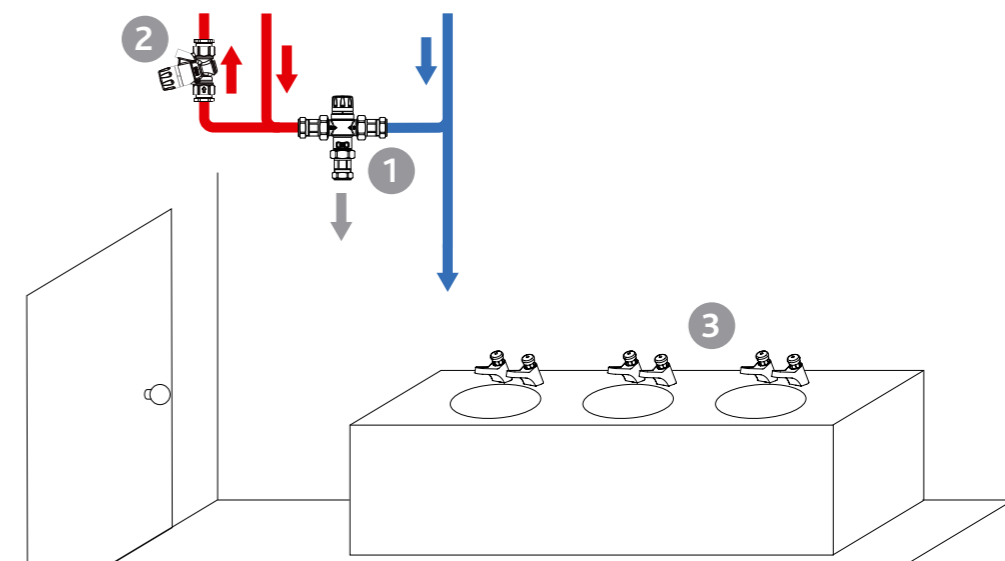
116420



**GROUP BASINS**

Ref no	Description	Diagram ref
ALT-521928	28MM Thermostatic mixing valve	1
116420	Thermal recirculation valve	2
QK23051	Non-concussive basin tap	3

QK23051



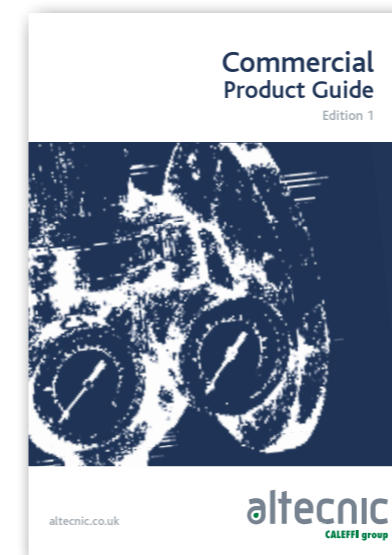
# Commercial Products

## Commercial Products

### Commercial Product Range

Altecnic offers a complete range of plumbing and heating products for commercial applications. Built upon 30 years of industry experience our commercial product range includes:

- Balancing Valves
- Thermostatic Mixing Valves
- Pressure Reducing Valves
- Dirt & Air Separation
- Pressure Independent Control Valves
- Backflow Prevention Devices
- Safety Relief Valves
- Thermal Stores
- Metering
- Differential Pressure Control Valves



To find out more about Altecnic's range of Commercial Products visit [www.altecnic.co.uk/commercial](http://www.altecnic.co.uk/commercial)

Altecnic provides CIBSE approved Continued Professional Development (CPD) seminars on systems balancing, district heating, backflow prevention and other topics. Contact us for further information.

# Heat Interface Units

## Heat Interface Units

### Heat Networks

**Efficient, reliable and compact, the next generation of SmartSat® intelligent heat interface units for central plant systems.**

The drive to conserve finite fossil energy stores and reduce the carbon footprint of buildings to meet latest regulations, has pushed the modern building services engineer to create specific central plant designs.

This allows for the easy and efficient integration of renewable energy sources, such as CHP, solar, heat pumps etc. A central plant system needs to offer a reliable and efficient way of producing hot water, controlling the heating and metering of each individual flat, apartment or house. Altecnic's range of SmartSat® Heat Interface Units (HIUs), consumer modules and metering products, do just that.

The extensive range, includes products for systems with centralised domestic water storage, instantaneous apartment based domestic water generation and apartment based combined cylinders and exchange units.

The latest SmartSat® intelligent heat interface units, the SATK range, take apartment heat interface units to the next level. Utilising electronic control, it enables many significant features not found on other units, for example, modulating primary heating circuit flow temperatures on both direct and indirect heating versions, return temperature limitation, primary flow rate limitation, remote Modbus control, configurable preheat, remote unit isolation, via the internet and a safety pump bypass. Their compact size and insulated enclosure mean that they're easy to locate and extremely efficient.

Each SmartSat® HIU can be installed with a variety of energy meters, all MID approved and capable of communicating by MBus or radio for remote data collection and billing. Altecnic also offers a PLURIMOD consumer unit or apartment control module and remote metering module, intended for installation outside of the apartment and containing all the necessary meters, strainers and isolation equipment required to monitor and control individual apartments.

**To find out more about Altecnic's range of Heat Networks visit**  
[www.altecnic.co.uk/heat-networks](http://www.altecnic.co.uk/heat-networks)



# Renewables

## Renewables

### Renewable Energy Range

#### SOLAR

The CALEFFI SOLAR® product range has been specially developed for use in solar thermal systems, where high temperatures can normally be reached and where, depending on the kind of system, there can be glycol. Materials and performance of the components must necessarily take into account these particular operating conditions.

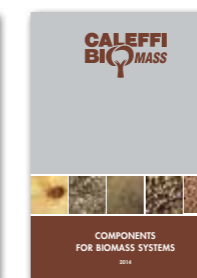
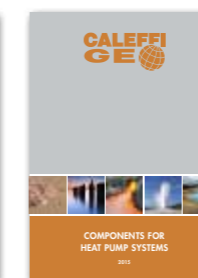
#### GEOHERMAL

The products in the CALEFFIGEO® series have been conceived specifically for use in heat pump systems. The thermal medium in circuits with air source heat pump can reach very low temperatures; for this reason the components are made with high-performance materials and special solutions to prevent freezing are offered.

#### BIOMASS

The CALEFFI BIOMASS® product series has been created specifically to be used in circuits of systems with wood solid fuel generators, operating at high temperature with water or glycol solutions as thermal medium. The materials of the components and their performance take account of the specific system needs in terms of efficiency and safety of the generators and systems.

To find out more about Altecnic's range of Renewable Products visit  
[www.altecnic.co.uk/solar](http://www.altecnic.co.uk/solar)  
[www.altecnic.co.uk/geothermal](http://www.altecnic.co.uk/geothermal)  
[www.altecnic.co.uk/biomass](http://www.altecnic.co.uk/biomass)





## General information

### Office hours:

Monday to Friday 8.30am - 5.00pm.

### Prices:

Prices are exclusive of VAT, and are subject to change without notice.

All prices displayed are recognised as list.

### Terms:

A copy of Altecnic's terms and conditions is available on request.

### Property of goods:

Until full payment has been received, all goods supplied remain the property of Altecnic Ltd.

### Delivery:

Carriage paid 3 day service, UK mainland only. (Minimum order value of £100 applies or £7.50 small order charge applies.)

## Customer Care Notice

Full details of Altecnic's Returns Policy are available at [www.altecnic.co.uk](http://www.altecnic.co.uk).



**Altecnic Ltd** - Caleffi group

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