

## Pegler Terrier





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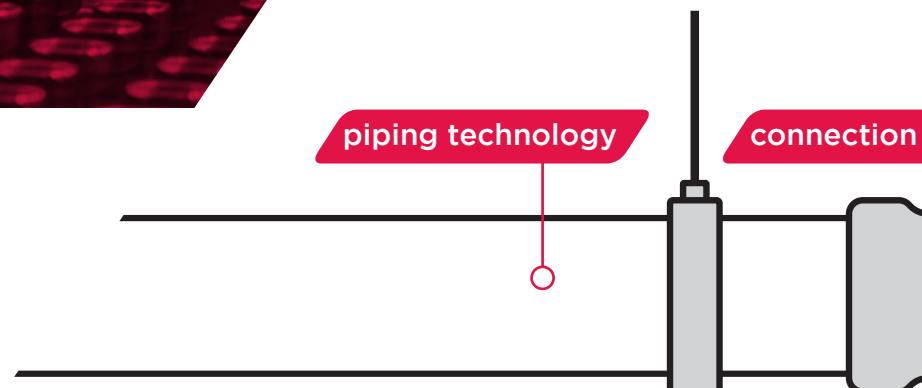
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A large, industrial-scale photograph of a man working on a complex piping system. He is wearing a dark shirt and is focused on a task involving a valve or fitting. The background shows a large, cylindrical storage tank and various industrial structures.

# don't just buy products, buy solutions.

Aalberts Integrated Piping Systems



Aalberts Integrated Piping Systems develops and produces connectors, metal and plastic pipes, valves, and fastening technology for the distribution and control of liquids and gases. Our technologies enable customers to work quickly and reliably in a simple and efficient way.

### integrated piping systems

These bespoke systems are applicable for key vertical markets such as residential, commercial, industrial and utility. Our complete range of integrated piping systems and fittings is always available through a wide range of various distribution channels. Furthermore, our own engineers are always developing our existing systems and services to the next level, as well as the design of completely new and innovative solutions.

**This is how Aalberts Integrated Piping Systems enables its customers to make every project a success.**

### global footprint with a local presence

We are part of Aalberts, a globally operating technology group and currently active at 30 locations in 14 countries, offering the broadest and most advanced portfolio. At Aalberts Integrated Piping Systems, we combine an overall technical expertise, global knowledge exchange, and the continuous drive to innovate within our group, with our knowledge of local markets and involvement in our customers' business. We offer them

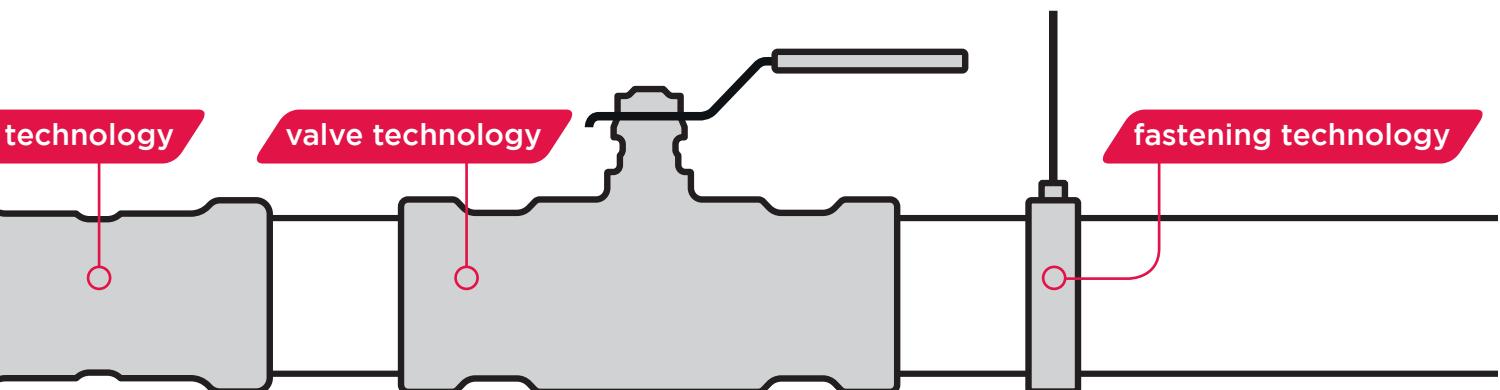
advice, Design Service and complete customised solutions from the design phase right through to delivery and aftercare, via our Aalberts Integrated Piping Systems Design Service®.

**We take away all our customers worries and concerns and offer them a complete integrated piping solution, each and every time.**

### exceeding expectations

At Aalberts Integrated Piping Systems we not only invest in our customers, but also in our own employees. Because we realise that they are the heart of our company. With passion, teamwork, ownership and diversity, we have the ability to think 'out-of-the-box'. This means that we define answers on challenging market demands and invent a range of appropriate solutions. Our people are also constantly focused on achieving optimum performances and continuous innovation.

**It is this dedication that enables us to exceed both ourselves and our customers' expectations.**



### our internationally strong brands and technologies

Aalberts Integrated Piping Systems does not simply focus on only one technology within the system, but applies different technologies for different applications. All these technologies employ strong brands and together they constitute what we call our integrated piping systems. Our systems are easy to specify, install and maintain.

- **valve technology.** Thanks to the internationally renowned brands Apollo and Pegler, Aalberts Integrated Piping Systems can offer the best valves for a wide range of market segments. Naturally these valves are high quality and distributed worldwide.

- **connection technology.** With the high-quality solutions from VSH, Aalberts Integrated Piping Systems is a market leader in connection technology. The wide range of solutions is suitable for numerous applications in residential, commercial and industrial buildings, general industrial usage, fire protection and shipbuilding.

- **piping technology.** Piping technology includes a complete range of carbon steel, stainless steel and plastic tubes in sizes ranging from 12 mm to 108 mm.

- **fastening technology.** Smart hangers for the optimal arrangement of the integrated piping system

# Pegler

Pegler provides the best solutions for integrated piping systems. This term encompasses a range of product lines for connection technology and valve technology which, together with our design service, offer the ultimate solution for top-quality integrated piping systems.

## VSH PowerPress®



material	carbon steel
suitable for	thick walled steel
connection	press / DW-profile
dimensions	1/2" - 2" (DN15 - DN50)

## VSH Shurjoint



material	ductile iron / stainless steel
suitable for	thick walled steel / stainless steel / HDPE
connection	groove
dimensions	1/2" - 10" (DN15 - DN2600)

## the strength of Pegler

- the perfect solution for every project
- smart, fast and efficient installation
- Aalberts Integrated Piping Systems Design Service
- valuable advice from the drawing board to delivery
- a very wide product range
- warranty Plus
- all products are BIM now

The integrated piping systems stand out due to their high and consistent quality, and quick and simple installation and maintenance. Pegler offers the widest, most comprehensive range of reliable press, compression, groove and push systems – including fittings for thick-walled and thin-walled metal and plastic tubes.

## Aalberts Integrated Piping Systems Design Service®

Pegler is a fully customer-focused sales and service organisation with experts who are committed to product development, service and customer support every single day. This means that from day one at the digital drawing board, you will receive professional advice on customised total solutions while being able to rely on optimum availability and reliable support both during and after delivery. Our engineers have access to all Aalberts Integrated Piping Systems products and can therefore always find the best solution which is fully customised to your needs.

### VSH XPress

material	carbon steel / stainless steel / copper
suitable for	thin walled / carbon steel / stainless steel / copper
connection	press / M-profile
dimensions	12 – 108 mm (DN10 – DN100)

### VSH MultiPress

material	PPSU / brass
suitable for	Multilayer tube
connection	press / U & TH profile

### VSH Tectite

material	brass / stainless steel / copper
suitable for	thin walled stainless steel / copper / carbon steel / PEX, PB and Multilayer tube
connection	push
dimensions	10 – 54 mm (DN8 – DN50)

### Pegler Valve Technology

Pegler is well known and respected as one of the leading manufacturers of advanced plumbing, heating and engineering products in the world. It's a reputation earned through a total dedication to quality, innovation and customer service that's been the hallmark of the company since it was established in the 1890's (originally trading as Pegler Ltd and Yorkshire Fittings Ltd).

Our success has been derived from a commitment to a philosophy based on quality, service, investment, competitiveness and innovation. Energy and water conservation is very much at the forefront of our product development. Pegler's unique Integrated Piping System brings together valves, fitting and pipes in one complete pipe-work system, with an emphasis on delivering heat free jointing.

Integrated Piping System combines the best elements of modern connection and valve technology, with international quality approvals and cost effective solutions for every project.

As a business partner to some of the world's best known plumbing and heating suppliers, our unrivalled list of market leading product brands include Yorkshire integral solder ring fittings, Pegler Terrier radiator valves, VSH Tectite push fit fittings, VSH PowerPress® products, VSH Shurjoint solutions, the VSH XPress press fit system, Pegler valves, Prestex general brassware, Endex end feed and Kuterlite compression fittings.

don't just buy products,  
buy solutions.

# Introduction

Pegler's reputation is second to none in UK engineering and manufacturing, resulting from a century of experience, expertise, and investment - in excess of £20m over the past 10 years.

Manufactured in state of the art facilities in the UK, to the highest engineering and quality assurance standards, Pegler Terrier Radiator Valves are a flagship brand where reliability, confidence and trust are second to none.

## strength of reputation

Over 20 million Pegler Terrier radiator valves have already been fitted - a market leader for good reason. Based on our fit and forget approach, ease of operation, and exceptional British engineering throughout, the Pegler Terrier reputation keeps on growing.

## a wealth of experience

Working closely with our customers, the all new Pegler Terrier capitalises on the success of its predecessors, with performance that surpasses all its competitors, ensuring complete customer satisfaction at all times.

## innovation, performance and design

Performance excellence provides rapid temperature control and user response, and the natural eco settings ensure maximum efficiency, saving money on heating bills with comfort throughout the home at all times.



# Operation by design

Renowned for quality, precision and efficiency, Pegler Terrier is the most specified radiator valve range in the UK.

## ease of control



Ergonomical design provides a positive grip whilst the low friction mechanism makes operation effortless for those with limited dexterity.

## detailed information



Once installed the user information tag is placed around the collar beneath the TRV to help the user.

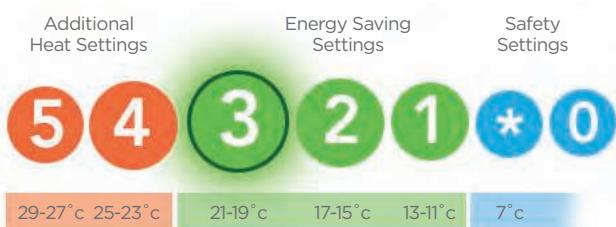


Touch indicator assists users with visual difficulties



## simplifying the choice

Large setting window with high contrast icons and intuitive colour coded settings.



## Pegler service

With an unparalleled level of experience in the heating control market, Pegler shares knowledge with customers through our highly efficient products, solutions and services. Pegler's no-compromise standards of quality, reliability and value for money naturally go hand in hand with our principle of delivering the best in product development and customer service. Our outstanding customer support service also includes a dedicated helpline direct to our technical team.

## guarantee

Where Pegler Terrier TRV products are installed and used in accordance with the installation instructions a guarantee of 5 years will apply.

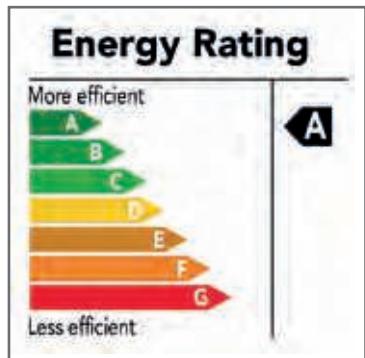
# Performance

Pegler Terrier performance is guaranteed as a result of Pegler's policy of providing products which exceed requirements and expectations at all times.

## energy saving

With ever growing concerns over rising energy costs, the installation of Pegler Terrier TRVs to all domestic properties, must become the norm.

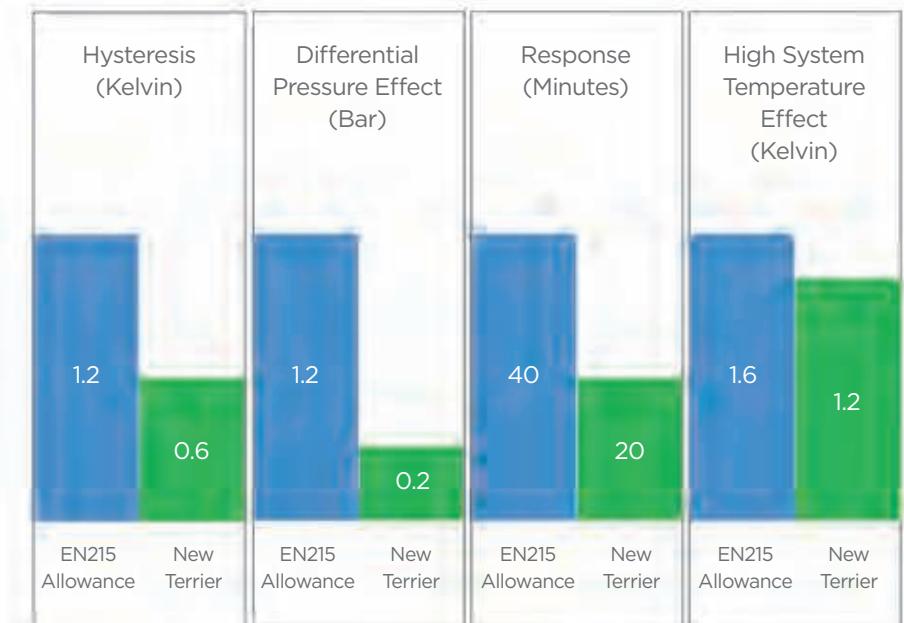
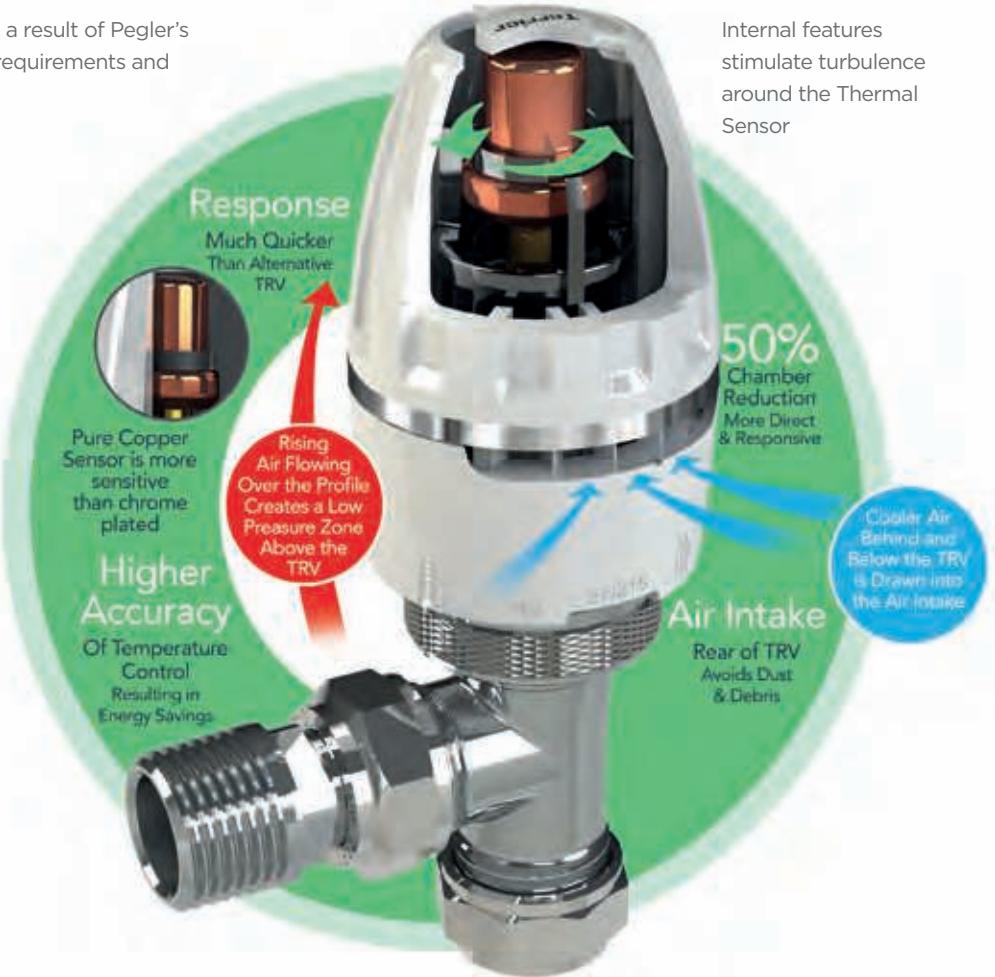
- Pegler Terrier provides even better accuracy for temperature setting especially against competitor TRVs
- Pegler Terrier reaches comfort levels quickly which enables the best comfort for customer
- The Pegler Terrier TRV has an A energy rating



## Pegler Terrier quality

The Pegler Terrier heating range has long been the most trusted and respected in the industry for quality, design and especially reliability. Every product is designed with efficiency and reliability at the forefront, for both installation and functionality.

- Robust construction under stringent quality control conditions assures a long working life
- Full compliance with British Kitemark and/or European BS 2767-10, EN215 standards are assured at all times, with full independent testing and certification



# Flexibility, reliability, trust

House builders and developers throughout the UK rely on their reputation for building quality homes and developments to meet and exceed clients' and user expectations. Reputation is key, and the correct choice of product is critical in maintaining this, and with an extensive choice, knowledgeable clients are now the norm, seeking quality, style and reliability.

The Pegler Terrier TRV from Pegler helps maintain a long term quality reputation, and provides unique design functions that radiate style and quality, specifically designed for all residential styles. This is why the Pegler Terrier radiator valve solution ensures the key aspiration of reputation is the only choice, and why Pegler Terrier is the best-selling TRV throughout the UK. It's design, engineering and overall quality make it perfect for all new build developments.

Every newly installed Pegler Terrier TRV comes with a Guidance hanger, to ensure all users get the best from their heating at all times, and address any questions, saving time and resource.

## key features and benefits of all new Pegler Terrier

- Ergonomic design
- Chrome accent ring for décor style appeal
- Enclosed and efficient design
- Ensures long term value and reputation
- Built to last - support costs reduced
- Pegler Terrier performance compliance to Building Regulations and proven energy saving
- Supporting UK economy with UK manufacturing Dynamic colour visual settings
- Smooth operation - intuitive settings
- 33% Hysteresis reduction



# Pegler Terrier

The only choice

# The Pegler Terrier range from Pegler is where you will find unrivalled radiator control

Renowned for quality manufacturing, precision control and optimum efficiency Pegler Terrier is the most specified radiator valve range in the UK.

Pegler Terrier has been delivering on quality and cost-efficiency for over 50 years. Evolution of Pegler Terrier technology is very much part of our manufacturing scene, where breakthroughs like reverse flow technology and programmable radiator controls were first introduced. And, through our team of highly skilled experts the brand is continually evolving and setting new standards.

## reliability

A reliable TRV is key to ensuring a system is enhanced and savings made, so by choosing one that carries industry standards such as Kitemark and EN215 you are guaranteed a quality product. The Pegler Terrier TRV range not only carries these exacting standards but also benefits from an A rating in the European TELL classification giving both the installer and customer peace of mind in terms of performance, reliability and cost savings.

**'a' rating** - High accuracy within temperature settings leading to high efficiency allowing savings to be made in fuel consumption and reduction in associated costs. Ideal for consumers and housing stock where ineffective controls are in use.

**quality** - UK heating is within the Pegler Terrier fabric, our development and manufacturing strives to deliver quality that will last and lead technology, such as Programmable, Bi-directional flow and maintenance solutions.

**certification** - The Pegler Terrier range of Radiator controls exceeds all European approvals and performance standards, meeting Part L of Building Regulations and provide opportunity within Product Character database enabling SAP.

**confidence** - Quality UK manufacture eradicates maintenance concerns. A full comprehensive range of configurations for radiators in any location which are easy to install and offer silent operation.

**clear markings** - Pegler Terrier TRV includes clear control markings with a user friendly colour coded strip which easily identifies high, low and economical settings. Plus an mechanism to aid visually impaired further enhancing the interaction.



## Evolution of the radiator control



# 20 million Pegler Terrier valves have been installed throughout the UK and here's why

## Pegler Terrier quality

The Pegler Terrier heating range has long been the most trusted and respected in the industry for quality, design and most of all reliability. Each product has been designed with efficiency in mind in both its installation and functionality.

- robust construction under the most stringent quality control conditions assures a long working life
- Pegler investment in advanced manufacturing techniques to complement the traditional skills of the workforce
- where appropriate this is compliance with Kitemark British Standards or the European nor (BS 2767-10, EN215) with independent testing and certification
- every Pegler Terrier product is made to perform better and to last longer – by any standards, the one true measure of value for money



## Pegler Terrier service

With an unparalleled level of experience in the heating control market, we share our knowledge with customers via our highly efficient products, solutions and services. Pegler's no-compromise standards of quality, reliability and value for money naturally go hand in hand with our principle of delivering the best in product development and customer service.



## refurbishment

- high value products for long life installations
- reliability, less risk of down time saving on maintenance costs
- innovations to save energy and money for the household

Pegler Terrier Trust

## specification

- UK system understanding
- performances to surpass Building regulations
- innovations to gain higher SAP results
- approved to EU specification standards
- design and Aesthetics suiting modern decor



## plumbing opportunities

- over 11 million homes don't have suitable heating controls
- servicing and system drain down support the simple step to upgrade from manual to TRV
- retrofitting controls provides the end user with comfort and financial benefits
- benefit for end user and additional business for installers

# Product overview

## Pegler Terrier thermostatic radiator valves

Pegler Terrier thermostatic radiator valves are manufactured to exacting standards by Pegler to ensure reliability.

Pegler Terrier TRVs are an immediate step towards making heating systems more energy efficient. With its accuracy in temperature setting and response Pegler Terrier TRV will close when heat is not required.

\*Independent test carried out at the University of Salford Energy House facility. Results of TRVs and a room thermostat. Test results @ [www.beama.org.uk](http://www.beama.org.uk)



### features

- 'A' rated TELL approved, the first choice for thermostatic energy efficiency
- proven to deliver annual cost savings of up to 40% through improved temperature control and without compromising on comfort\*
- bi-directional flow for installation flexibility
- double 'O' ring seal for enhanced reliability
- clear temperature settings for the visually impaired
- approved to EN 215
- temperature flexibility from 0°C - 28°C settings
- low hysteresis, ensuring rapid response to temperatures
- economy settings for maximum energy efficiency

## Pegler Terrier push-fit thermostatic radiator valves

Speed of installation has been a key consideration and push-fit technology means many fitting complications are removed, greatly saving installation time on site and resulting in significant cost savings.

The "VSH Tectite push" element of jointing new Pegler Terrier push-fit is instantaneous and the simple, tool-free jointing action requires no secondary operations in awkward areas, which means there is much less chance of damaging chrome pipe as a result.



### features

- bi-directional flow capability
- frost protection 7°C
- setting range 7°C - 28°C
- approved to EN 215
- suitable for 2 pipe systems
- polished chrome plate finish
- double 'O' ring seal
- low hysteresis wax sensor
- 'O' setting for positive shut off
- improved nominal flow rate for both forward and reverse applications

# Product overview

## Pegler Terrier manual radiator valves

Manual radiator valves for small bore and micro bore heating systems, including combis. Available in wheel handle for manual flow adjustment, lockshield for system balancing purposes and drain off version for convenience when draining down your radiator. Connection flexibility is available with compression, compression push-fit adaptors and integral push-fit options.



### features

- long life gland packing with rising spindle for extended reliability
- available in compression, push-fit adaptor and integral push-fit, suiting a variety of pipe
- screw down handles for anti-tamper and safety
- approved to BS 2767-10, ensuring water working pressure up to 10bar (non shock)
- push-fit straight and elbow connectors available

## Pegler Terrier push-fit manual radiator valves

The new Pegler Terrier push-fit range has been developed using the wealth of knowledge of push-fit fittings and heating controls technology Pegler has built up over many years to deliver an integrated push-fit radiator product that truly offers the best of both worlds. Designed to meet the requirements of the new build sector, Pegler Terrier push-fit successfully combines product quality and speed of installation, whilst being competitively priced.



### features

- suitable for sealed systems
- water working pressure up to 10bar (non-shock)
- approved to BS 2767-10
- white handles as standard
- screw down lockshield
- superior grip characteristics on wheel handle
- comprehensive range of WH, LS and DLS
- long life gland packing with rising spindle
- gland removal without draining down

## Product overview

### Pegler Terrier decor thermostatic radiator valves

With a smoothness of operation and a high quality feel, the Decor range is compatible with both 10mm and 15mm pipe sizes. A durable easy fit sculptured thermal ring connection.

The range of 3 complimentary finishes mixed chrome, anthracite and white/chrome ideally suited to all applications. For added assurance, all come with Pegler's five year guarantee of quality.



### features

- 'A' rated TELL approved, the first choice for thermostatic energy efficiency
- quick and easy to install, enabling cost effective upgrades
- high quality contemporary design aesthetics in line with current trends for feature radiators and towel rails
- a stylish and versatile finishing touch that combines heating efficiency and a quality that is tried and trusted
- approved to EN215

### Pegler Terrier decor thermostatic radiator valves

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The range of 3 complimentary finishes mixed chrome, anthracite and white/chrome ideally suited to all applications. For added assurance, all come with Pegler's five year guarantee of quality.



### features

- styles include ultra modern, minimalist, cross top modern and traditional
- approved to BS 2767-10, ensuring durability and endurance
- angle and straight pattern bodies available for alignment options
- identical WH and operating LS
- comprehensive range of WH and LS
- approved to BS 2767-10, ensuring durability and endurance
- push-fit straight and elbow connectors available
- double 'O' ring seal for long life
- designed to complement decorative TRVs

# Standards, approvals and guarantees

It is Pegler's policy to provide a range of products and services which meet, or exceed, the requirements of our customers, in respect of quality, cost and delivery

## standards and approvals

Pegler Terrier products are manufactured under quality systems in accordance with EN 29002/ISO 9002 and meet the following British and European standards.

### BS 2767-10

Specification for manually operated copper alloy valves for radiators.

### BS EN 215:2004

Thermostatic radiator valves. Requirements and test methods.

### BS EN 1254-2:1998

Copper and copper alloys. Plumbing fittings.

Fittings with compression ends for use with copper tube.

### BS EN 1254-3:1998

Copper and copper alloys. Plumbing fittings.

Fittings with compression ends for use with plastic pipes.

### EN 1254-6 - 2012

Copper and copper alloys. Plumbing fittings -

Part 6: Fittings with push-fit ends.



ISO is achieved through the continuous improvement of our Quality Management System in line with the requirements of BS EN ISO 9001: 2000.

## guarantees

Where Pegler Terrier products are installed and used in accordance with the installation instructions the following guarantees will apply:

## Guarantees

Guarantee period (years)	5
Manual radiator valves	✓
Thermostatic radiator valves	✓

## Standards and Approvals

Product	Standard	Approvals	Compliant
All manual radiator valves	BS 2767-10 • cover pressure testing • size, strength • pressure rating • ISO 228 ISO7 thread standards • up to 10bar pressure	• official BSI (British Standard Institute) • product marked	
All thermostatic radiator valves	BS EN215: 2004 - Thermostatic • performance (hysteresis) • dimensions, strength • pressure rating • ISO 288 ISO7 thread standards • up to 10bar pressure	• BSI, audited by independent testing body • CEN mark fully approved, marking on product	• Building regulations Part L
All compression ends	BS 1254 compression ends • strength • pressure rating	• kitemark product	
All push-fit ends	EN 1254-6 - 2012 • strength • pressure rating		

Product	Domestic	Office*	Hotels*	Hotel* public areas	Energy saving	Temper proof	Social housing	New build	DIY	Time adjustment	Flow adjustment
Pegler Terrier TRV	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Pegler Terrier TRV & push-fit	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Pegler Terrier TRV with integral push-fit	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Pegler Terrier manual radiator valves	✓	✓	✓	✓			✓	✓	✓		
Pegler Terrier manual radiator valves & push-fit	✓	✓	✓	✓			✓	✓	✓		
Pegler Terrier manual radiator valves with integral push-fit	✓	✓	✓	✓			✓	✓	✓		
Pegler Terrier chrome plated DECOR TRV	✓	✓	✓	✓	✓			✓	✓		✓
Pegler Terrier chrome plated DECOR TRV & push-fit	✓	✓	✓	✓	✓			✓	✓		✓
Pegler Terrier chrome plated manual radiator valves	✓	✓	✓	✓	✓			✓	✓		✓
Pegler Terrier chrome plated decorative manual radiator valves	✓	✓	✓	✓				✓	✓		

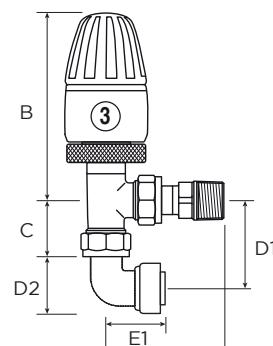
\* Suitable for systems up to 0.6bar differential pressure. For larger systems please refer to our Pegler Belmont range.

# Compression, adapted push-fit, radiator valves

## Thermostatic radiator valve

Angle pattern compression for copper, vertical or horizontal mounting

Push-fit adaptor

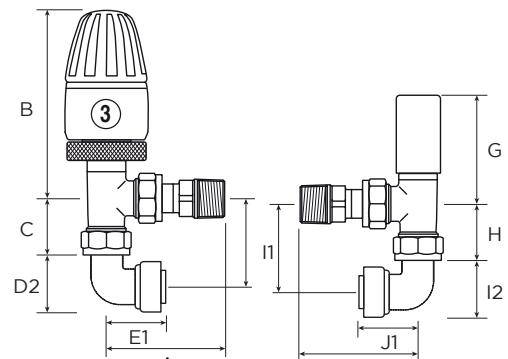


Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1
8/10mm x 1/2"	631800	No	Chrome plate	61	104	26	-	-	-
15mm x 1/2"	631801	No	Chrome plate	61	104	26	-	-	-
10mm x 1/2"	631865	Elbow	Chrome plate	61	104	26	50	-	28
15mm x 1/2"	631868	Elbow	Chrome plate	61	104	26	52	-	30

## 367 CP Thermostatic radiator valve and lockshield

Angle pattern compression for copper, vertical or horizontal mounting

Push-fit adaptor

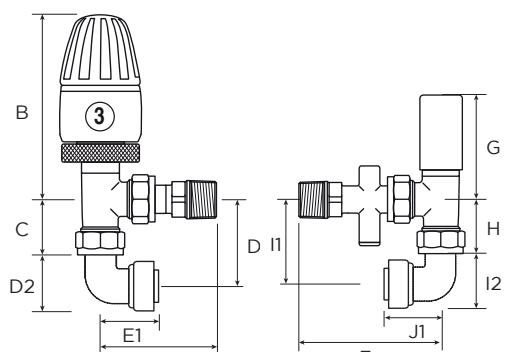


Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1	F	G	H	I1	I2	J1
8/10mm x 1/2"	631802	No	Chrome plate	61	104	26	-	-	-	61	52	29	-	-	-
15mm x 1/2"	631803	No	Chrome plate	61	104	26	-	-	-	61	52	29	-	-	-
10mm x 1/2"	631866	Elbow	Chrome plate	61	104	26	50	-	28	61	52	29	50	-	28
15mm x 1/2"	631869	Elbow	Chrome plate	61	104	26	52	-	30	61	52	29	52	-	30

## 367 CP Thermostatic radiator valve and drain off lockshield

Angle pattern compression for copper, vertical or horizontal mounting

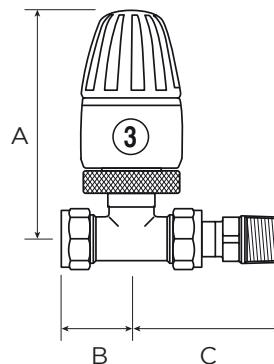
Push-fit adaptor



Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1	F	G	H	I1	I2	J1
8/10mm x 1/2"	631804	No	Chrome plate	61	104	26	-	-	-	77	52	29	-	-	-
15mm x 1/2"	631805	No	Chrome plate	61	104	26	-	-	-	77	52	29	-	-	-
10mm x 1/2"	631867	Elbow	Chrome plate	61	104	26	50	-	28	77	52	29	50	-	28
15mm x 1/2"	631870	Elbow	Chrome plate	61	104	26	52	-	30	77	52	29	52	-	30

### Thermostatic radiator valve

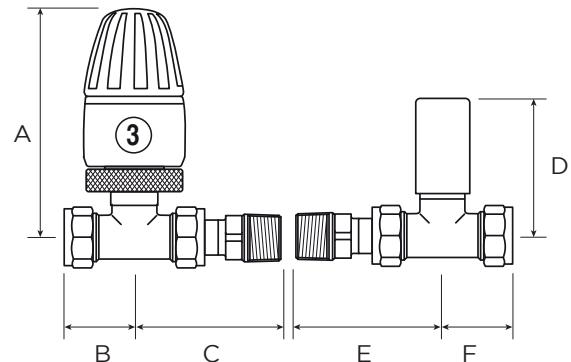
Straight pattern compression for copper, vertical or horizontal mounting



Size	Code	Finish	A	B	C
8/10/15mm x 1/2"	631806	Chrome plate	109	34	69

### 368T CP Thermostatic radiator valve and lockshield

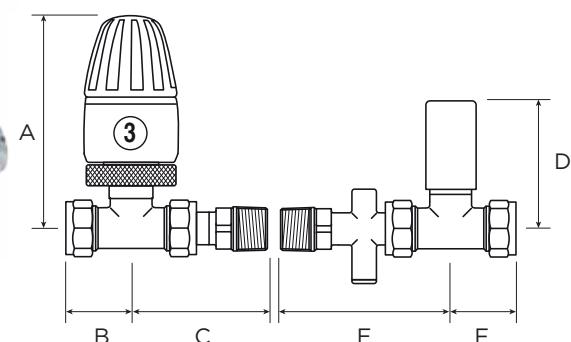
Straight pattern compression for copper, vertical or horizontal mounting



Size	Code	Finish	A	B	C	D	E	F
8/10/15mm x 1/2"	631807	Chrome plate	109	36	69	61	69	36

### 368 CP Thermostatic radiator valve and drain off lockshield

Straight pattern compression for copper, vertical or horizontal mounting

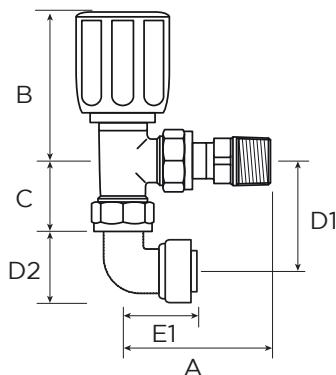


Size	Code	Finish	A	B	C	D	E	F
15mm x 1/2"	631808	Chrome plate	-	36	69	61	84	36

## 367 WH manual radiator valve wheel head

Angle pattern compression for copper

Push-fit adaptor

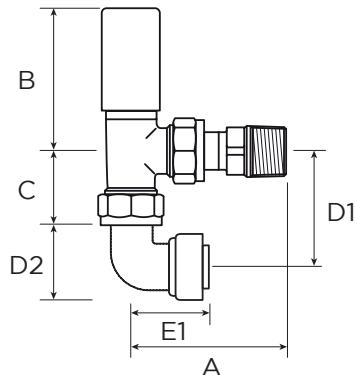


Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1
10mm x 1/2"	601006	No	Plain	61	52	29	-	-	-
15mm x 1/2"	601008	No	Plain	61	52	29	-	-	-
8mm x 1/2"	601022	No	Chrome Plate	61	52	26	-	-	-
10mm x 1/2"	601026	No	Chrome Plate	61	52	29	-	-	-
15mm x 1/2"	601028	No	Chrome Plate	61	52	29	-	-	-
15mm x 1/2" (Irish Cone)	601118	No	Chrome Plate	61	52	29	-	-	-
10mm x 1/2" (15mm fitting)	661001	Elbow	Chrome Plate	61	52	29	52	-	28
15mm x 1/2"	661002	Elbow	Chrome Plate	61	52	29	52	-	30

## 367 LS manual radiator valve lockshield

Angle pattern compression for copper

Push-fit adaptor

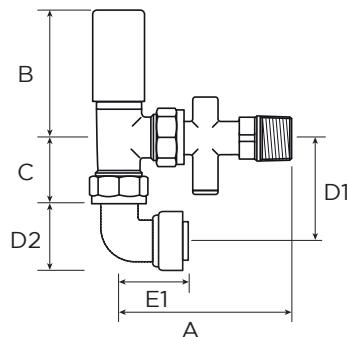


Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1
10mm x 1/2"	601016	No	Plain	61	52	29	-	-	-
15mm x 1/2"	601018	No	Plain	61	52	29	-	-	-
8mm x 1/2"	601032	No	Chrome Plate	61	52	26	-	-	-
10mm x 1/2"	601036	No	Chrome Plate	61	52	29	-	-	-
15mm x 1/2"	601038	No	Chrome Plate	61	52	29	-	-	-
15mm x 1/2" (Irish Cone)	601128	No	Chrome Plate	61	52	29	-	-	-
10mm x 1/2" (15mm fitting)	661007	Straight	Chrome Plate	61	52	29	-	37	-
10mm x 1/2" (15mm fitting)	661005	Elbow	Chrome Plate	61	52	29	52	-	28
15mm x 1/2"	661006	Elbow	Chrome Plate	61	52	29	52	-	30

## 367 DLS manual radiator valve drain off lockshield

Angle pattern compression for copper

Push-fit adaptor

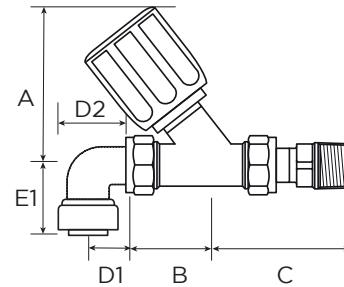


Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1
8mm x 1/2"	601042	No	Plain	77	52	29	-	-	-
10mm x 1/2"	601046	No	Plain	77	52	29	-	-	-
15mm x 1/2"	601048	No	Plain	77	52	29	-	-	-
8mm x 1/2"	601052	No	Chrome Plate	77	52	26	-	-	-
10mm x 1/2"	601056	No	Chrome Plate	77	52	29	-	-	-
15mm x 1/2"	601058	No	Chrome Plate	77	52	29	-	-	-
10mm x 1/2" (15mm fitting)	661009	Elbow	Chrome Plate	77	52	29	52	-	28
15mm x 1/2"	661010	Elbow	Chrome Plate	77	52	29	52	-	30

## 368 WH manual radiator valve wheel head

Straight pattern compression for copper

Push-fit adaptor

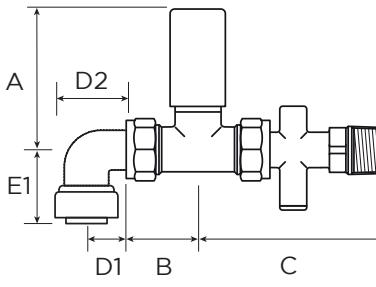


Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1
15mm x 1/2"	602028	No	Chrome Plate	64	32	66	-	-	-
10mm x 1/2" (15mm fitting)	661013	Elbow	Chrome Plate	64	32	66	20	-	28
15mm x 1/2"	661014	Elbow	Chrome Plate	64	32	66	29	-	30

## 368 DLS manual radiator valve drain off lockshield

Straight pattern compression for copper

Push-fit adaptor

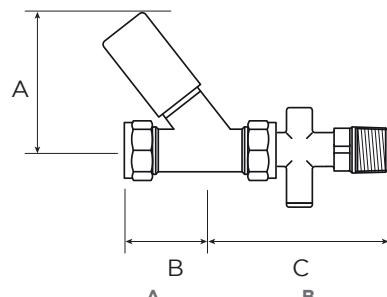


Size	Code	Push-fit adaptor	Finish	A	B	C	D1	D2	E1
15mm x 1/2"	602038	No	Plain	60	32	66	-	-	-
10mm x 1/2" (15mm fitting)	661017	Elbow	Chrome Plate	60	32	66	20	-	28
15mm x 1/2"	661018	Elbow	Chrome Plate	60	32	66	29	-	30

## Compression & iron end radiator valves

### 368 DLS manual radiator valve drain off lockshield

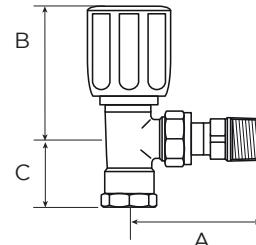
Straight pattern compression for copper



Size	Code	Push-fit adaptor	Finish	A	B	C
15mm x 1/2"	602048	No	Chrome plate	60	32	81

### 369 manual radiator valve wheel head

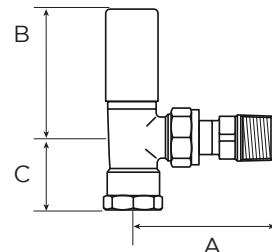
Angle pattern screwed connection for iron



Size	Code	Push-fit adaptor	Finish	A	B	C
1/2" x 1/2"	603028	No	Chrome plate	65	54	25

### 369 LS manual radiator valve lockshield

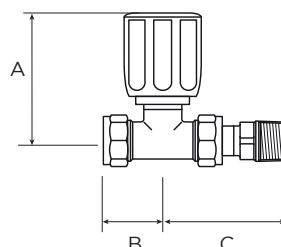
Angle pattern screwed connection for iron



Size	Code	Push-fit adaptor	Finish	A	B	C
1/2" x 1/2"	603038	No	Chrome plate	65	52	25

### 368T WH manual radiator valve wheel head

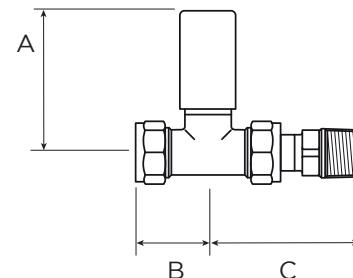
Straight pattern compression for copper



Size	Code	Push-fit adaptor	Finish	A	B	C
8/10mm x 1/2"	602127	No	Chrome plate	61	34	69
15mm x 1/2"	602128	No	Chrome plate	61	36	69

### 368T LS manual radiator valve lockshield

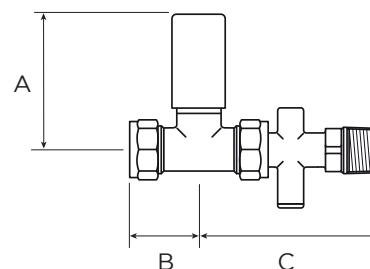
Straight pattern compression for copper



Size	Code	Push-fit adaptor	Finish	A	B	C
8/10mm x 1/2"	602137	No	Chrome plate	61	34	69
15mm x 1/2"	602138	No	Chrome plate	61	36	69

### 368T DLS manual radiator valve drain off lockshield

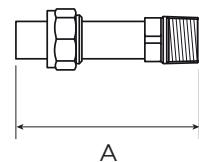
Straight pattern compression for copper



Size	Code	Push-fit adaptor	Finish	A	B	C
8/10mm x 1/2"	602147	No	Chrome plate	61	34	84
15mm x 1/2"	602148	No	Chrome plate	61	36	84

### Extension tail piece

Complete with nut and olive

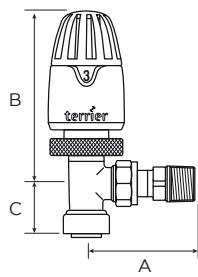


Size	Code	Push-fit adaptor	Finish	A
15mm x 1/2"	634005	Plain	Chrome plate	40
15mm x 1/2"	634006	Chrome plate	Chrome plate	40

## Integral push-fit radiator valves

### Thermostatic radiator valve

Angle pattern push-fit for copper, PEX, MLCP vertical or horizontal mounting



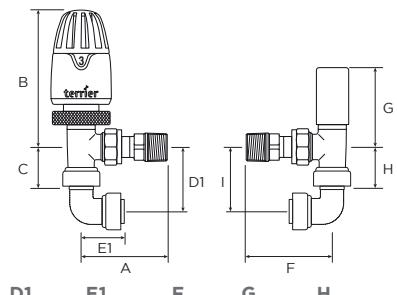
Size	Code	Push-fit adaptor	Finish	A	B	C
10mm x 1/2"	631820	No	Chrome plate	60	98	35
10mm x 1/2"	631821	No	Chrome plate	60	98	35
10mm x 1/2"	631822	Elbow	Chrome plate	60	98	35

### 367PF Thermostatic radiator valve

Angle pattern push-fit for copper, PEX, MLCP vertical or horizontal mounting

Push-fit adaptor

Elbow



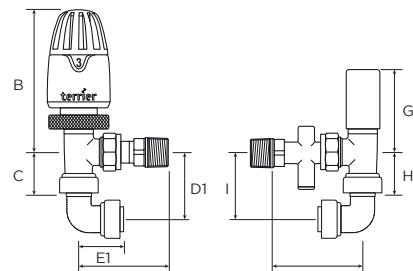
Size	Code	Push-fit adaptor	Finish	A	B	C	D1	E1	F	G	H	I
10mm x 1/2" (15mm fitting)	631823	Elbow	Chrome plate	60	98	35	50	28	27	52	35	50

### 367PF CP Thermostatic radiator valve drain off lockshield

Angle pattern push-fit for copper, PEX, MLCP vertical or horizontal mounting

Push-fit adaptor

Elbow



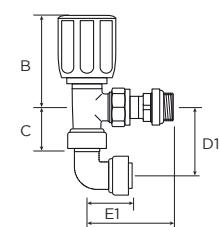
Size	Code	Push-fit adaptor	Finish	A	B	C	D1	E1	F	G	H	I
10mm x 1/2" (15mm fitting)	631824	Elbow	Chrome plate	77	87	35	50	27	27	52	35	50

### 367PF WH manual radiator valve wheel head

Angle pattern push-fit for copper, PEX, MLCP

Push-fit adaptor

Elbow



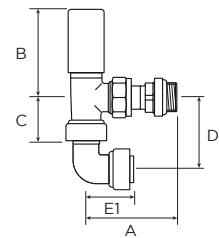
Size	Code	Push-fit adaptor	Finish	A	B	C	D1	E1
10mm x 1/2" (15mm fitting)	661203	No	Chrome plate	60	52	34	-	-
15mm x 1/2"	661204	No	Chrome plate	60	52	34	-	-
10mm x 1/2" (15mm fitting)	661201	Elbow	Chrome plate	60	52	34	50	28
15mm x 1/2"	661202	Elbow	Chrome plate	60	52	34	53	30

## 367PF LS manual radiator valve lockshield

Angle pattern push-fit for copper, PEX, MLCP

Push-fit adaptor

Elbow



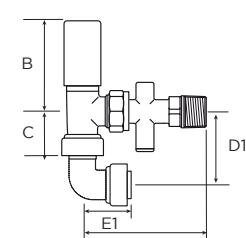
Size	Code	Push-fit adaptor	Finish	A	B	C	D1	E1
10mm x 1/2"	661207	No	Chrome plate	60	52	35	50	28
15mm x 1/2"	661208	No	Chrome plate	60	52	35	53	30
10mm x 1/2" (15mm fitting)	661205	Elbow	Chrome plate	60	52	35	50	27
15mm x 1/2"	661206	Elbow	Chrome plate	60	52	35	53	33

## 367PF DLS manual radiator valve drain off lockshield

Angle pattern push-fit for copper, PEX, MLCP

Push-fit adaptor

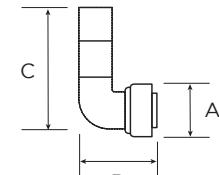
Elbow



Size	Code	Push-fit adaptor	Finish	A	B	C	D1	E1
15mm x 1/2"	661210	No	Chrome plate	77	52	35	-	-
10mm x 1/2" (15mm fitting)	661209	Elbow	Chrome plate	77	52	35	50	28

## Elbow connector push-fit

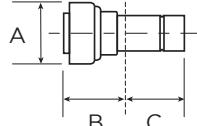
Push-fit for copper, PEX, MLCP



Size	Code	Finish	A	B	C
15mm x 10mm	7P1010	Chrome plate	23	25	40
15mm x 1/2"	7P1012	Chrome plate	28	26	42

## Straight connector push-fit

Push-fit for copper, PEX, MLCP



Size	Code	Finish	A	B	C
15mm x 10mm	7P1011	Chrome plate	22.5	23	23
15mm x 1/2"	7P1013	Chrome plate	27.5	50	23

## Release tool

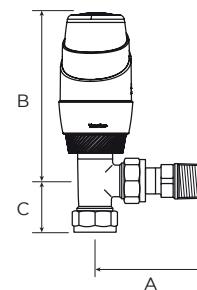


Size	Code
10mm	7P1014
15mm	7P1015

# Thermostatic decorative radiator valves

## Decor thermostatic radiator valve

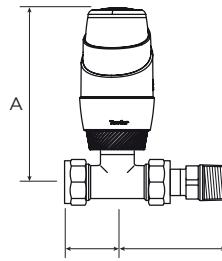
Angle pattern compression for copper, vertical or horizontal mounting



Size	Code	Push-fit adaptor	Finish	Packaging	A	B	C
15mm	632320	No	Anthracite/Chrome	-	61	96	26
15mm	632327	No	Mixed/Chrome	-	61	96	26
15mm	632340	No	Anthracite/Chrome	Clam	61	96	26
15mm	632343	No	Mixed/Chrome	Clam	61	96	26
15mm	632346	No	Mixed/Chrome	Clam	61	96	26

## Decor thermostatic radiator valve

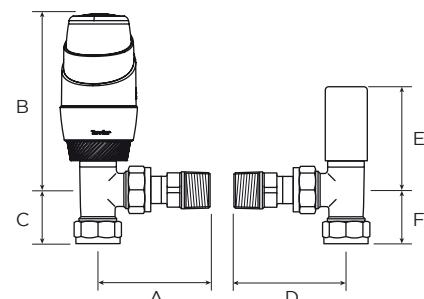
Straight pattern compression for copper, vertical or horizontal mounting



Size	Code	Finish	A	B	C
15mm	632321	Anthracite/Chrome	101	34	69
15mm	632328	Mixed/Chrome	101	36	69

## 367 CP decor thermostatic radiator valve lockshield

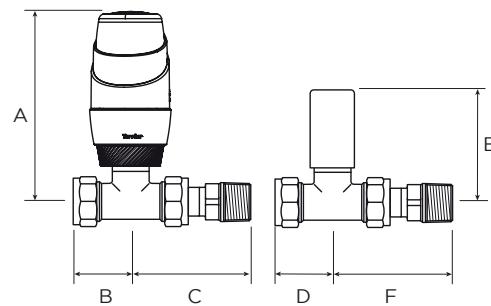
Straight pattern compression for copper, vertical or horizontal mounting



Size	Code	Push-fit adaptor	Finish	Packaging	A	B	C	D	E	F
15mm	632322	No	Anthracite/Chrome	-	61	101	26	61	52	26
15mm	632329	No	Mixed/Chrome	-	61	101	26	61	52	29
15mm	632334	No	White/Chrome	-	61	101	26	61	52	29
15mm	632341	No	Anthracite/Chrome	Clam	61	101	26	61	52	29
15mm	632344	No	Mixed/Chrome	Clam	61	101	26	61	52	29
15mm	632347	No	White/Chrome	Clam	61	101	26	61	52	29

## 368T CP decor thermostatic radiator valve lockshield

Straight pattern compression for copper, vertical or horizontal mounting



Size	Code	Push-fit adaptor	Finish	Packaging	A	B	C	D	E	F
15mm	632323	No	Anthracite/Chrome	-	103	36	69	61	56	36
10mm	632324	No	Anthracite/Chrome	-	103	34	69	61	56	34
15mm	632330	No	Mixed/Chrome	-	103	36	69	61	56	36
10mm	632331	No	Mixed/Chrome	-	103	34	69	61	56	34
15mm	632335	No	White/Chrome	-	103	36	69	61	56	36
15mm	632342	No	Anthracite/Chrome	Clam	103	36	69	61	56	36
15mm	632345	No	Mixed/Chrome	Clam	103	36	69	61	56	36
15mm	632348	No	White/Chrome	Clam	103	36	69	61	56	36

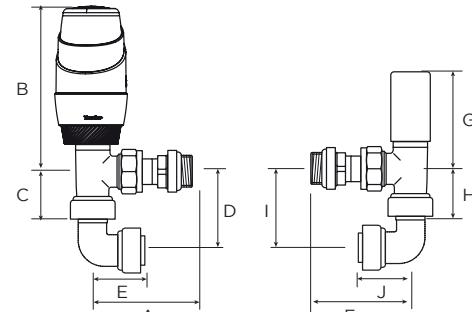
## 367PF CP decor thermostatic radiator valve lockshield

Angle pattern push-fit for copper, PEX, MLCP vertical or horizontal mounting

Push-fit adaptor



Elbow



Size	Code	Push-fit adaptor	Finish	Packaging	A	B	C	D	E	F	G	H	I	J
10mm	632325	No	Anthracite/Chrome	-	60	96	35	50	28	27	52	35	-	-
10mm	632332	No	Mixed/Chrome	-	60	96	35	-	-	60	52	35	-	-
10mm	632336	No	White/Chrome	-	60	96	35	-	-	60	52	35	-	-
10mm	632326	Elbow	Anthracite/Chrome	-	60	96	35	50	28	27	52	35	50	28
10mm	632333	Elbow	Mixed/Chrome	-	60	96	35	50	28	60	52	35	50	28
10mm	632337	Elbow	White/Chrome	-	60	96	35	50	28	60	52	35	50	28

## Packaging key



Clam packaging

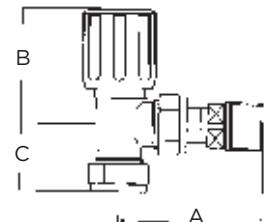


Standard packaging

# Thermostatic decorative radiator valves

## Decor manual radiator valve wheel handle

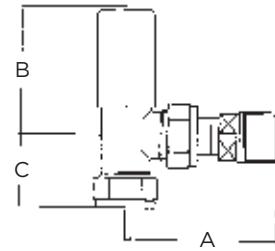
Angle compression for copper



Size	Code	Finish	A	B	C
15mm x 1/2"	632201	Chrome plate	61	52	29
10mm x 1/2"	632202	Chrome plate	61	52	29

## Decor manual radiator valve lockshield

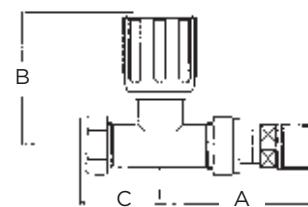
Angle compression for copper



Size	Code	Finish	A	B	C
15mm x 1/2"	632205	Chrome plate	61	52	29
10mm x 1/2"	632206	Chrome plate	61	52	29

## Decor manual radiator valve wheel head & lockshield

Angle compression for copper

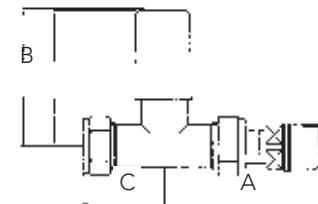


Size	Code	Finish	A	B	C
15mm x 1/2"	632210	Chrome plate	69	62	36
10mm x 1/2"	632211	Chrome plate	69	62	34

# Pegler Terrier manual decorative radiator valves

## Decor manual radiator valve wheel handle

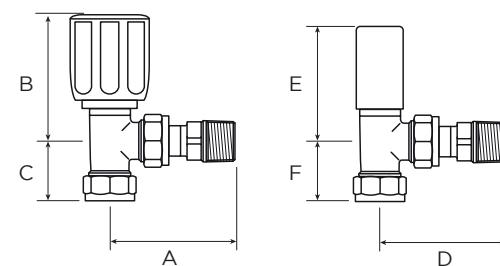
Straight pair, compression for copper



Size	Code	Finish	A	B	C
15mm x 1/2"	632215	Chrome plate	69	61	36
10mm x 1/2"	632216	Chrome plate	69	61	34

## Decor manual radiator valve wheel handle & lockshield

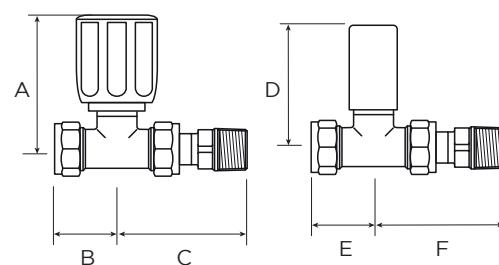
Angle pair, compression for copper



Size	Code	Finish	A	B	C	D	E	F
15mm x 1/2"	601200	Chrome plate	62	54	30	62	52	30
10mm x 1/2"	601201	Chrome plate	62	54	29	62	52	29

## Decor manual radiator valve wheel handle & lockshield

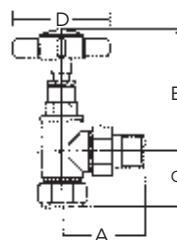
Straight pair, compression for copper



Size	Code	Finish	A	B	C	D	E	F
15mm x 1/2"	602200	Chrome plate	62	36	69	61	36	69
10mm x 1/2"	602201	Chrome plate	62	34	69	61	34	69

### Decor X top traditional manual radiator valve

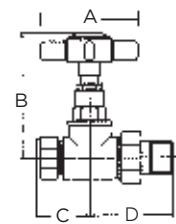
Angle pair, compression for copper



Size	Code	Finish	A	B	C	D
15mm x 1/2"	632300	Chrome plate	53	78	36	62

### Decor X top traditional manual radiator valve

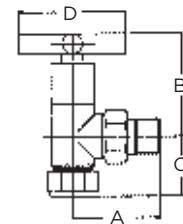
Straight pair, compression for copper



Size	Code	Finish	A	B	C	D
15mm x 1/2"	632301	Chrome plate	62	78	35	50

### Decor X modern manual radiator valve

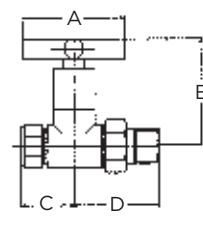
Angle pair, compression for copper



Size	Code	Finish	A	B	C	D
15mm x 1/2"	632302	Chrome plate	53	62	36	64

### Decor X top modern manual radiator valve

Straight pair, compression for copper

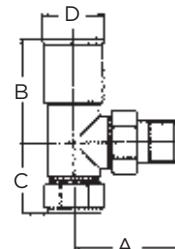


Size	Code	Finish	A	B	C	D
15mm x 1/2"	632303	Chrome plate	65	65	35	50

## Manual decorative radiator valves

### Decor minimalist manual radiator valve

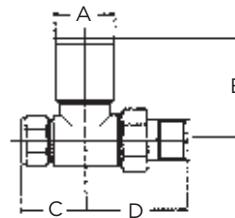
Angle pair, compression for copper



Size	Code	Finish	A	B	C	D
15mm x 1/2"	632304	Chrome	53	57	36	31
15mm x 1/2"	632305	Satin Nickel	53	57	36	31

### Decor minimalist manual radiator valve

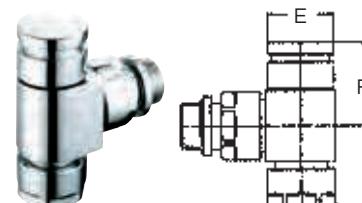
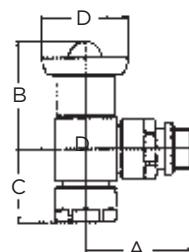
Straight pair, compression for copper



Size	Code	Finish	A	B	C	D
15mm x 1/2"	632306	Chrome	31	60	35	50
15mm x 1/2"	632307	Satin Nickel	31	60	35	50

### Decor ultra modern manual radiator valve

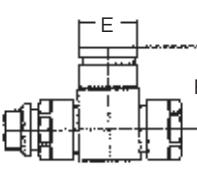
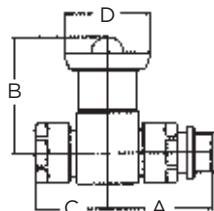
Angle pair, compression for copper



Size	Code	Finish	A	B	C	D	E	F
15mm x 1/2"	632308	Chrome plate	53	55	38	44	30	38

### Decor ultra modern manual radiator valve

Straight pair, compression for copper

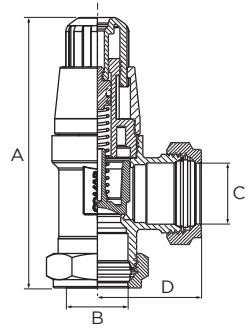


Size	Code	Finish	A	B	C	D	E	F
15mm x 1/2"	632309	Chrome plate	53	60	38	44	30	43

## Other products

### USV22 Differential pressure valve

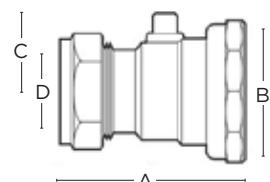
Copper x copper



Size	Code	A	B	C	D
22mm x 1/2"	678021	101	22	22	37.5

### PB300P Bulldog pump isolating valve

Copper x BSP union nut



Size	Code	A	B	C	D
22mm	553002	63	1 1/2" BSP	30	22
28mm	553003	65	1 1/2" BSP	30	28
28mm PAIR	553008	63	1 1/2" BSP	30	22
28mm PAIR	553009	65	1 1/2" BSP	30	28



Pegler Terrier

design  
& technical  
information

## System design considerations

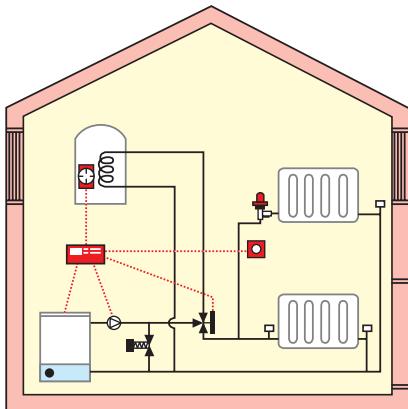
## introduction

In line with the Government's Good Practice Guide GPG302, Pegler explains the importance of system design and best practice.

Installation of effective controls has a major impact on the energy consumption of heating and hot water systems and can lead to improved energy efficiency, reduced running cost and lower carbon dioxide (CO<sub>2</sub>) emissions.

- using controls increases operating efficiency when updating older systems, and provides the user to minimise energy consumption by reducing comfort temperatures
- heating and hot water accounts for over 80% of the energy consumption in a home
- the installation of a minimum standard of controls in a wet system (which previously had no controls) can reduce fuel consumption and CO<sub>2</sub> emissions by 17%
- reducing the heating “on” time by two hours a day can reduce consumption by 6%





#### System controls

- Room thermostat
- Time switch/programmer
- Cylinder thermostat
- Motorised valve
- Thermostatic radiator valve (TRV)
- Automatic bypass valve

#### System considerations

Product	System design considerations
Thermostatic radiator valves	<ul style="list-style-type: none"> <li>• thermostatic radiator valves should be installed in association with a room thermostat to provide boiler interlock. If more than 50% of the location is fitted with TRVs then an automatic bypass valve will be required. (Pegler Terrier TRV, ABV).</li> </ul>
Manual radiator valves	<ul style="list-style-type: none"> <li>• radiators in rooms with a controlling room thermostat should be fitted with manual valves on connections. (Pegler Terrier manual radiator valves).</li> </ul>
Controls	<ul style="list-style-type: none"> <li>• systems with regular boilers must have separately controlled circuits to hot water cylinder and radiators, and both circuits must have pumped circulation.</li> <li>• room thermostats, programmable room thermostats, cylinder thermostats, programmers and time switches must be wired so they are interlocked with the boiler and pump i.e. they prevent the boiler from firing when there is no demand for heat..</li> </ul>
Frost Protection	<ul style="list-style-type: none"> <li>• frost protection must be provided where necessary to protect the appliance, system and dwelling, (Pegler Terrier TRV)</li> <li>• a bypass circuit must be installed if the boiler manufacturer specifies that a minimum flow rate has to be maintained while the boiler is firing. The installed bypass circuit must then include an automatic bypass valve. (Pegler Terrier ABV).</li> </ul>

#### new systems and upgrading systems

In order to adhere to the Building Regulations there are two levels of compliance: a minimum set level and a best practice. As a respected manufacturers, Pegler is responsible to promote a best practice approach.

#### Minimum set level and Pegler best practice

Product	Minimum set	Best Practice
Combi Boilers	<ul style="list-style-type: none"> <li>• time switch</li> <li>• room thermostat</li> <li>• TRV's on all radiators except rooms with a room thermostat</li> <li>• automatic bypass valve</li> </ul>	<ul style="list-style-type: none"> <li>• programmable room thermostats</li> <li>• TRV's on all radiators except rooms with a room thermostat</li> <li>• automatic bypass valve</li> </ul>
Regular Boilers	<ul style="list-style-type: none"> <li>• room thermostat</li> <li>• fully programmer</li> <li>• cylinder thermostat</li> <li>• TRV's on all radiators except rooms with a room thermostat</li> <li>• automatic bypass valve</li> </ul>	<ul style="list-style-type: none"> <li>• programmable room thermostats with additional hot water timing capability</li> <li>• cylinder thermostat</li> <li>• TRV's on all radiators except rooms with a room thermostat</li> <li>• automatic bypass valve</li> </ul>

# Beama using control to make a difference

Home heating accounts for 23% of UK energy demand and has increased by nearly a quarter since 1970, with over 95% of UK homes heated by a gas or oil boiler. If we are to meet our carbon targets it is essential that we do everything possible in the short to medium term to reduce wasted energy from these boilers, which we must remember are the biggest single energy consuming appliance within the home.

## The issues

Heating systems are not being controlled to deliver both comfort and efficiency. Without proper control they waste energy.

### householders want a warm, comfortable home

Recent research<sup>2</sup> shows very clearly that everyone wants to be comfortable in their home, and warmth delivered by their heating system is central to this. Money savings are welcomed only if comfort is not compromised.

### around 11 million UK homes don't have suitable heating controls

Research from 2008 showed that 70% of UK homes don't have the minimum level of controls defined within the Building Regulations for new systems<sup>3</sup>. Even allowing for heating improvements since the research took place it is likely that there remain 11 million homes with the potential for improved controls.

### people tinker and play with their heating system to achieve comfort

Heating systems without suitable controls cannot achieve desirable comfort levels. Most people appear to be using their systems in ways that achieve 'acceptable' comfort, but their system will not be operating in the most efficient manner. Where money is tight this inefficiency leads to comfort being compromised.



### current policies fail to promote opportunities to improve controls in UK homes

The role of heating controls needs to be far more prominent within current policies to reduce energy use in UK homes, particularly to ensure that they are installed as a part of every retrofit.

## The solutions

### the installation of a room thermostat and TRVs can reduce energy bills by over 40%

Tests carried out at the University of Salford in their Energy House facility showed that the costs of running a heating system with a full set of temperature controls was 40% less than the same system operated with a timer only. The tests also showed that individual room temperature controls (TRVs) were necessary for the system to maintain balanced temperatures around the house.

### room thermostats & TRVs are readily available, familiar to installers and simple to install

Increasing the rate at which these controls are installed could be accelerated with changes to policy. Both room thermostats and TRVs are a cost effective upgrade to existing homes with a payback of 18 months or less<sup>4</sup>. They can be supplied by UK manufacturers and existing local installers.



### better control systems will deliver comfort with lower fuel bills

This message will be received more positively by householders, who research has shown can negatively interpret messages on reducing heating costs as a request to sacrifice comfort<sup>5</sup>. Also the savings will be permanent, unlike the short term saving from switching supplier.



### industry can promote the benefits of controls

Heating controls have spent too long 'under the radar' of consumers. Industry must communicate the benefits of controls to generate demand from consumers, and we need to ensure that heating installers also act as advocates and deliverers of better controlled systems.

1 DECC (2013). The Future of Heating: Meeting the challenge

2 Fell D., King G. (2012). Domestic energy use study: to understand why comparable households use different amounts of energy A report to DECC.

3 Research carried out by BEAMA with the Energy Saving Trust in 2008

4 Payback estimates shown in appendix 1.

5 Deco heating research

## Appendix - test results from the University of Salford

The BEAMA heating controls group represents UK manufacturers of and suppliers of heating systems and general purpose applications. BEAMA is dedicated to advancing heating controls for domestic installations to ensure a comfortable environment at the least cost.

The association commissioned the University of Salford to carry out some independent tests. This facility consists of a full size house built within an environmental chamber, designed to assess the effectiveness of new and existing technologies in reducing energy use and waste.

The top line results from the tests are shown in the table below. We have also used these to estimate the potential annual savings, and therefore the cost effectiveness of installing heating controls where they are not currently present:

## Changing policy

BEAMA are working towards challenging the current policy to ensure the best opportunity to reduce carbon and provide better comfort and control.

### Test Results

The Benefits of heating controls: improved comfort: increased efficiency

Over 50% of household energy is used for heating so significant benefits are possible:

- householders can reduce their energy bills without compromising comfort.
- those in fuel poverty or with fixed heating budgets can have more comfortable homes.
- bringing all homes up to standards could save 5 MtCO<sub>2</sub> by 2020 – 12% of the total target in the DECC Energy Efficiency Strategy.
- supporting UK manufacturing and supply chains will help deliver economic growth.

### Test Results

Test carried out	24hr heating cost <sup>2</sup>	Reduced cost from controls
1 - No temperature control	£5.31	0%
2 - Control by room thermostat only	£4.68	12.0%
3 - Control by room thermostat only	£4.68	12.0%

### Estimated cost effectiveness of controls<sup>8</sup>

Type of upgrade	Potential annual saving <sup>9</sup>	Estimated payback
Install a room thermostat	£120.49	18 months
Install a room thermostat and TRV's	£409.86	15 months
Install TRV's to a system with an existing room thermostat	£289.37	14 months
Install TRV's to a system with an existing room thermostat	£289.37	9 months

[www.controlyourhome.org.uk](http://www.controlyourhome.org.uk)

<sup>7</sup> Based on British Gas Clear & Simple cash / card payment (4.274p per kWh gas, 12.797p per kWh electric) not including standing charge (24.439p per day gas, 15.979p per day electric) – Prices taken on 07/05/2013 from: <http://www.britishgas.co.uk/products-and-services/gas-and-electricity/our-energy-tariffs/clear-and-simple/clear-and-simple-rates.html>

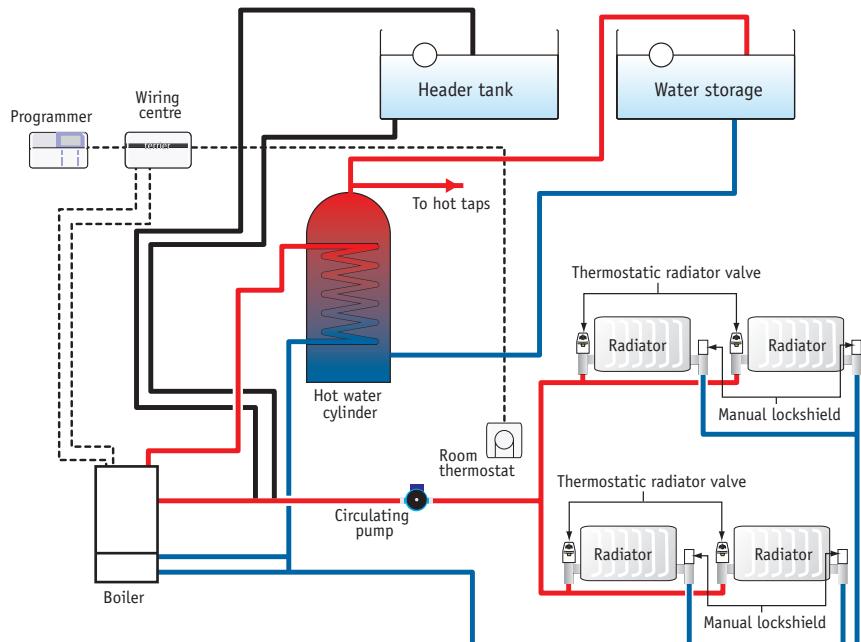
<sup>8</sup> Based on savings in the test house and cost of measures if installed into a similar house.

<sup>9</sup> Figures are based on a heating season of 243 days, with 75% of the savings in March, April, November and 50% in October and September. Paybacks are calculated using installation costs calculated by BEAMA for the Green deal call for evidence in March 2011. The measure 'TRVs at time of boiler replacement' assumes that the system is already drained down.

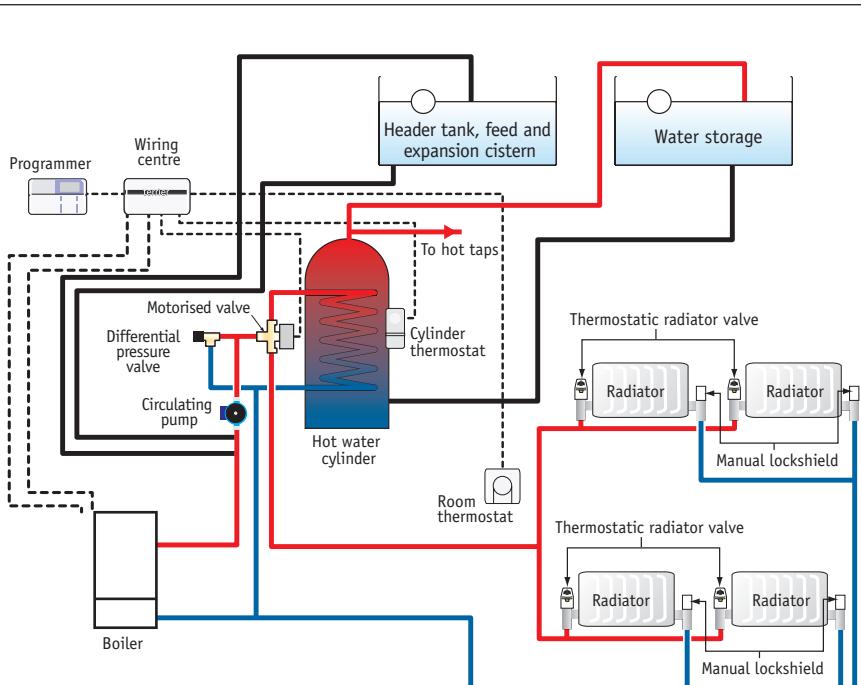
# Technical data applications

## Types of System

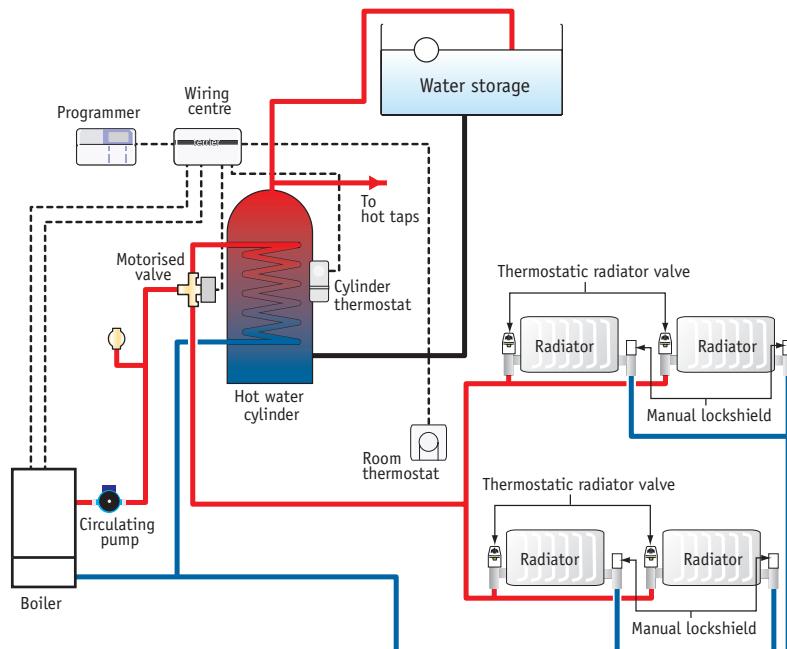
All system drawings are representative of various systems.



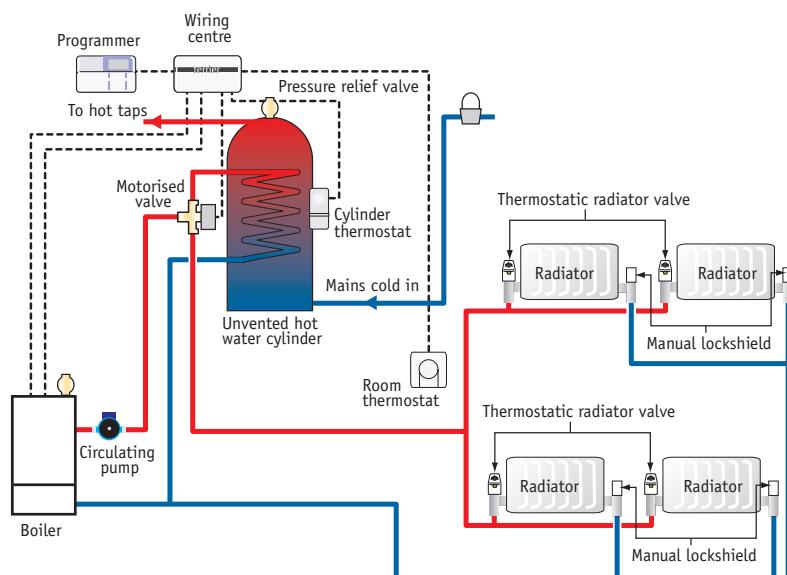
Gravity hot water system (open vented)



Fully pumped system (open vented)

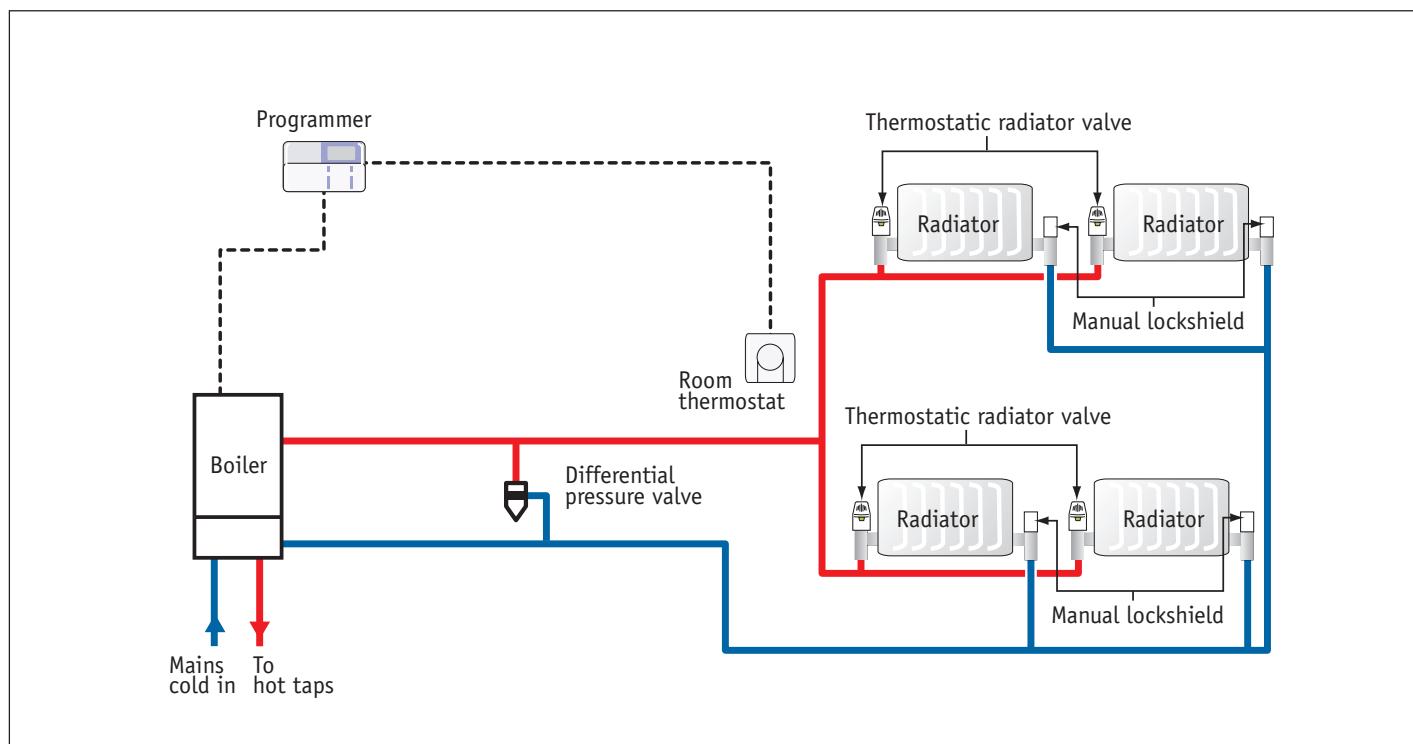


Sealed system vented DHW



Sealed system unvented DHW

# Product and tube compatibility and applications



Combination boiler

## Recommended Applications

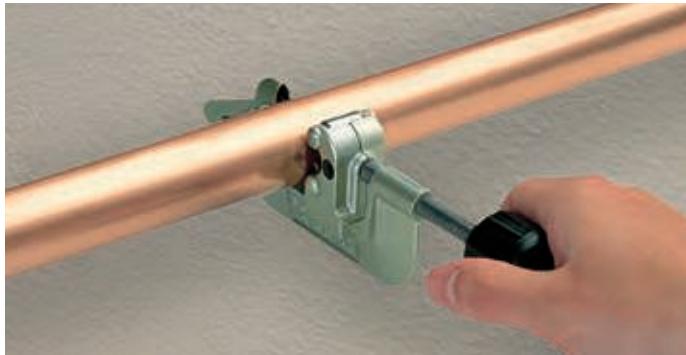
Product recommended	Gravity hot water system (1)	Fully pumped system (2)	Sealed system vented DHW (3)	Sealed system unvented DHW (4)	Combination boiler (5)	Commercial System example (6)
Thermostatic radiator valves	✓	✓	✓	✓	✓	✓
Manual radiator valves	✓	✓	✓	✓	✓	✓
Programmable radiator control	✓	✓	✓	✓	✓	✓

## Tube Compatibility

	Copper	Chrome	PEX/PB	Iron	Carbon
Pegler Terrier compression	✓	✓	✗	✗	✗
Pegler Terrier push-fit	✓	✓	✓	✗	✗

# Installation Instructions

## Push-fit and compression pipe work preparation



1. Select the right size of tube or pipe to be connected to the valve. Ensure ends are clean and free from damage, scores and imperfections. Do not use any additional lubricant or sealing compounds. For copper tube, cut the tube square using a rotary tube cutter wherever possible, and for plastic pipe or VSH Tectite flexible metal pipe use pipe shears. Ensure the tube end is round and cut square.



- 2a. Remove any burrs or sharp edges from the external tube end using a T111 Multipurpose tool from the VSH Tectite accessories range. Also ensure the internal bore is deburred and the tube is wiped clean and free of debris.

- 2b. For VSH Tectite flexible metal tube use the calibration tool T153 to chamfer and reround the pipe.



**3a.** Where using VSH Tectite-PEX barrier pipe that has been used on a previous installation, cut the tube marks, ensuring there are no score marks on the pipe. Insert the correctly sized T66 pipe support liner\* from the VSH Tectite accessories range fully into the pipe.

**3b.** If 10mm annealed copper tube (R220) is being used, ensure a T67 support liner is fully inserted into the tube.

**3c.** If using VSH Tectite flexible metal tube, insert a TectSEAL™ 3PS liner.



### push-fit only

4. Mark the tube/pipe with the correct socket depth using a marker/ pencil and the T111 Multipurpose tool or with a ruler to 23mm for both 10mm and 15mm valves.



### push-fit only

5. When using chrome plated copper tube you must scribe the tube using the T111 tool. Fully insert tube into the T111 and rotate twice whilst firmly pressing the button; check that the tube has been scribed.

## Installing the thermostatic radiator valve



1. Drain down existing system, connecting a hosepipe to the lowest drain off point available.



2. Apply a suitable PTFE based compound or PTFE tape to the threaded end of the tail. Screw  $\frac{1}{2}$ " BSP tail into radiator and tighten using a high quality open ended or adjustable spanner.



3. Connect the valve body to the tail, ensuring that the compression ring is seated centrally and that the tube makes firm contact with the tube stop in the valve body. Tighten nut, first using your fingers and then finish it by giving it a  $\frac{3}{4}$  to 1 turn with a high quality open ended or adjustable spanner.



### compression and push-fit

4. Remove manual shut off cap and store safely. With the sensor head set to the maximum setting (number 5) position the head so that the setting window can be viewed. Hand tighten the securing ring to fix the head in position.



### compression

5. Insert the pipe into the fitting without removing the capnut and cone, ensuring that the cone is in the correct position and that the pipe makes firm contact with the stop in the body of the fitting. In both cases, tighten the capnut onto the fitting until the pipe cannot be rotated by hand. A drop of light machine oil on the threads will facilitate (particularly on larger sizes). Tighten the capnut with a good, well-fitting spanner, using the table below as a guideline taking into consideration conditions.



### push-fit

6. Push the tube/pipe firmly with a slight twisting action until it reaches the tube stop with a positive "click". Ensure the depth insertion mark corresponds with the mouth of the inlet, then pull firmly on the tube/pipe to ensure the valve is secure.

\* Use the support liner specified by the pipe manufacturer for all 3rd party PEX and PB pipes to BS 7291 Parts 2 and 3

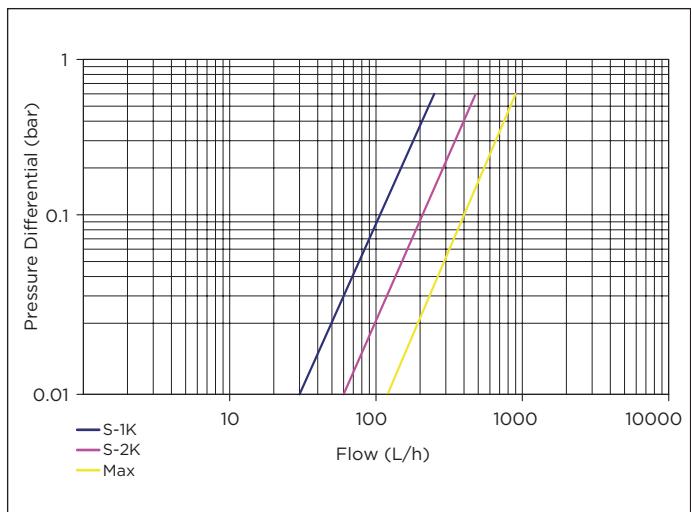
# Flow rates

## Performance - pressure temperature ratings and flow rates

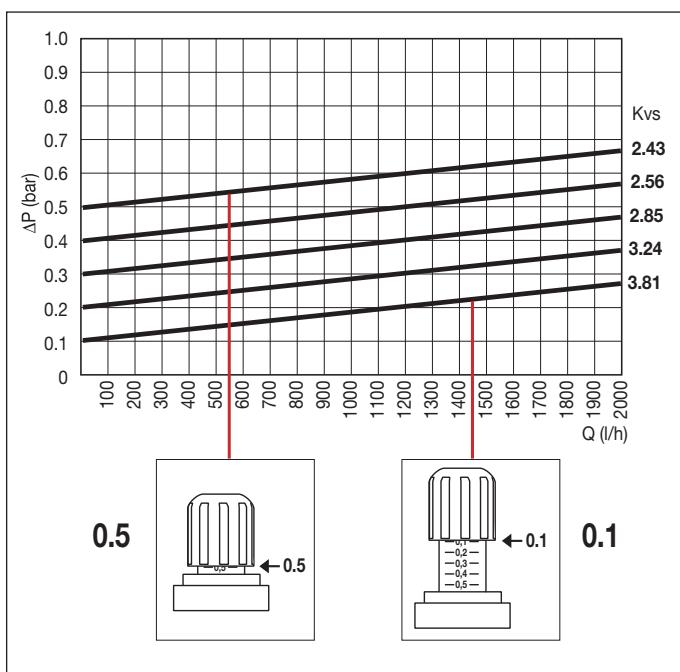
### Terrier thermostatic radiator valves

Nominal flow rates	
½" x 15mm angle forward and reverse flow	190kg/h
½" x 15mm straight forward and reverse flow	190kg/h
Maximum static pressure	10 bar at 120°C
Maximum differential pressure	0.6 bar
Hysteresis	
All thermal heads	0.8k
Differential pressure influence	
All thermal heads	0.15k
Water temperature influence	
All thermal heads	0.9k
Water temperature influence	
All thermal heads	20 minutes

### Settings and flows for automatic bypass valve 22mm



### Settings and flows for automatic bypass valve 22mm



Nominal Flow	Seat Authority a
190kh/h	0.72
<hr/>	
Position	kv
S-1K	0.32
S-2K	0.60
Max	1.08

Our fully integrated piping system incorporates a unique offering bringing together valves, fittings and pipes into one complete pipe-work system.

It combines the best world-class elements of modern connection and valve technology, incorporating press, push, groove, compression, capillary and threaded solutions for copper, steel, multi-layer and plastic pipes, with an emphasis on delivering heat free jointing.

### head office

#### **Aalberts Integrated Piping Systems Ltd**

St. Catherine's avenue / Doncaster

South Yorkshire / DN4 8DF / England

**tel:** +44 (0) 1302 560 560

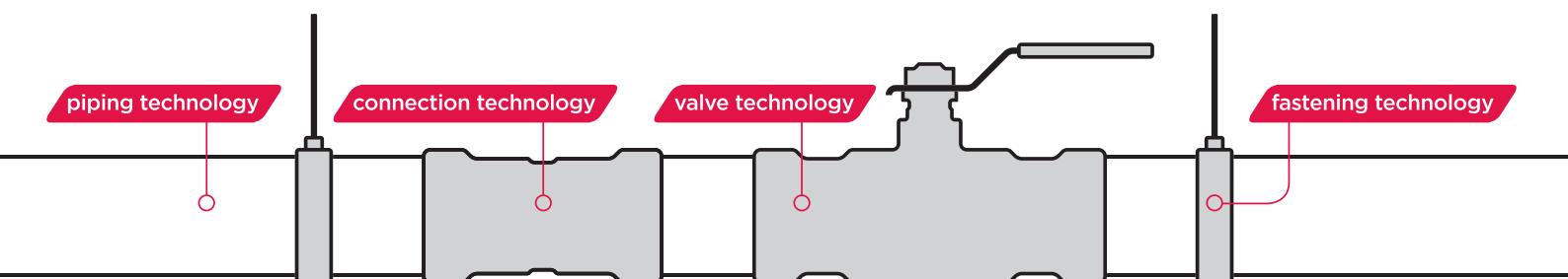
**fax:** +44 (0) 1302 560 203

**email:** info@pegler.co.uk

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**Aalberts Integrated Piping Systems Ltd**  
St. Catherine's avenue / Doncaster  
South Yorkshire / DN4 8DF / England  
[www.pegler.co.uk](http://www.pegler.co.uk)