# belmont

Heating Controls

Thermostatic and Manual Radiator Valve range



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# New thermostatic and manual radiator valves with built-in energy saving solutions

With increasing demands on specifiers and installers to lead the way in saving energy at every possible opportunity, the innovative new Terrier Belmont range of radiator valves has arrived with perfect timing.

And because it's been developed and manufactured by Pegler Yorkshire in close consultation with the commercial and social housing sectors, it's a range that incorporates as standard many features which others charge as extra-cost options.

It's also a product which has grown out of the highly successful and industry-leading Terrier brand – for many years the UK's biggest name in domestic manual and thermostatic radiator valves.

Terrier Belmont offers the complete and cost-effective solution for both new and replacement installations. Comprehensive testing ensures every Terrier Belmont product meets stringent British and European standards for guaranteed performance, with TRVs approved to EN215 and Manual Valves approved to BS2767.







#### **Key features**

- Easy maintenance and servicing to minimise downtime: vital in commercial and social housing applications and satisfying the Tenants Charter.
- Enables compliance with revised Building Regulations to increase energy efficiency.
- Patented locking facilities on new tamperproof Terrier Belmont thermostatic radiator valves are highly effective at achieving greater energy efficiency in commercial applications such as schools, hospitals and colleges.
- Ideal and reliable cost-effective solutions for new and replacement installations.
- Onsite time savings thanks to innovative new no-drain feature: change working components glands without draining the system.
- New pre-setting TRV body prevents disruption of system balancing.
- British made: designed, engineered and manufactured in the UK.
- Exhaustive internal and external testing plus full compliance with all relevant UK and EU standards.



#### Guarantee

Belmont valves are guaranteed for 5 years against manufacturing defects. To qualify for these guarantees, products must be installed in accordance with our instructions on specified applications.









Pages 8 and 9

**Flow Charts** Pages 10 and 11



B4452/4



# Key operated tamper resistant feature (patented)

When in a locked down operation a further tamper resistant feature is available by adjusting the internal ring.





3

Align removal tool into the head grooves and engage.

Engage the locking<br/>ring by twisting.Remove the ring by pulling downwards.Reposition ring to lock (see A).

#### **TRV operation (patented)**



#### Specification clause

#### Belmont Complete TRV specification

Thermostatic radiator valves shall be approved to EN215, the thermal head will have a lift and lock mechanism and an anti adjustment lock down mechanism. The valve body will be of a chrome plate finish and with bi-directional reverse flow technology. The TRV will be suitable for central heating two pipe systems and suitable for use with up to 10 bar system pressure. The Complete TRV will be suitable for use with copper compression and screwed iron connections. The TRV will have a guarantee of 5 years against manufacturing defect and must be drawn from the Belmont range from Pegler Yorkshire.

# Thermostatic Radiator Valves

Belmont thermostatic radiator valves have been designed for use on commercial through to residential properties including combi boiler installations.

The Belmont TRV benefits from a frost setting where the valve is opened automatically at 7°C to prevent the system freezing and has a built-in patented tamper resistant feature that is key operated. The TRV also employs a patented 'lift and lock' operation which prevents accidental adjustment.

#### **Key features**

- Control range of 11°C to 29°C
- Frost setting at 7°C
- Positive shut off for maintenance purposes
- Range limiting locking customised temperature setting
- Approved to EN215
- Suits copper and iron pipework\*
- Matching manual radiator valves
- 10 bar rating suitable for combi boilers
- Horizontal and vertical mounting
- Patented unique lift and lock tamper resistant mechanism



B

The head is now locked. To restore temperature adjustment to the head remove locking ring and refit as shown.

Reposition locking ring off-setting the lugs as shown and push firmly home.

#### **TRV** specifications



For flow chart information see pages 10 and 11

\*Pegler Yorkshire have a range of push and press connectors in the Tectite range for use with plastic, carbon steel or copper piping.

# **Thermostatic Heads** B1701/4 Choice of different thermal heads is available: standard, remote sensing with 2m/8m capillary and remote adjusting in 2m, 5m and 8m capillary lengths. This makes the Belmont solution the first choice for those looking B1301/4 O TT entites for the benefits of the latest B1401/4 products and service in a cost-effective package.

The remote adjusting unit is especially suited to low surface temperature radiators and can also be positioned away from the radiator when using the sensing head behind a permanent fixture.

#### Thermostatic head specifications and temperature settings

All dimensions are in mm. C dimension for body type – refer to page 3. Maximum diameter of head 63mm.

PATTERN NO.			DESCRIPTION			BOX QTY	CODE		PATTERN NO.
B1301/4	4	Liquid TRV	head with	zero positi	on	1	686005		B1701/4
B1401/4	4	Liqu	id TRV hea	d with		1	686006		(2m)
(2m)		2n	n remote se	ensor					B1701/4
B1401/4	4	Liquid TRV head with 1 686009							(5m)
(8m)		8n		B1701/4					
									(8m)
B1301/4 82 UNLOCKED 84 LOCKED	B1301/4 B1301/4 GUIDENCE B1401/4 100.0 B1401/4 100.0 B1401/4 100.0 B1401/4 100.0 B1401/4 100.0 B1401/4								B1701/-
Temperature settings									
0	*	1	2	3	4	4	5		033
Shut off	7°C	11-13°C	15-17°C	19-21°C	22-3	25°C	27-29°C		
									- 64

PATTERN NO.	DESCRIPTION	BOX QTY	CODE
B1701/4 (2m)	Liquid TRV head with 2m remote adjuster	1	686011
B1701/4 (5m)	Liquid TRV head with 5m remote adjuster	1	686012
B1701/4 (8m)	Liquid TRV head with 8m remote adjuster	1	686013



For flow chart information see pages 10 and 11

# Thermostatic **Radiator Valve Bodies**

Belmont thermostatic radiator valves comprise of three different body patterns: angle, horizontal and straight. They have a choice of pre-setting and non pre-setting options.

#### **Key features**

- Approved to EN215
- Suits copper and iron pipework direct\*
- 10 bar rating suitable for combi boilers
- Horizontal and vertical mounting
- Insert removal and replacement without draining down when using special tool
- All valves are suitable for 2 pipe systems

#### **Specification clauses**

#### **Belmont Bodies specification**

Thermostatic radiator bodies shall be approved to EN215. The valve body will be of a chrome plate finish and with bi-directional reverse flow technology. The TRV will be suitable for central heating two pipe systems and suitable for use with up to 10 bar system pressure. The TRV will be suitable for use with copper compression and screwed iron connections. The TRV will have a guarantee of 5 years against manufacturing defect and must be drawn from the Belmont range from Pegler Yorkshire.

#### **Belmont Preset Bodies specification**

Thermostatic radiator bodies shall be approved to EN215. The valve body will be of a Chrome plate finish and with bi-directional reverse flow technology. The TRV will be suitable for system balance with built-in preset mechanism. The TRV will be suitable for central heating two pipe systems and suitable for use with up to 10 bar system pressure. The TRV will be suitable for use with copper compression and screwed iron connections. The TRV will have a guarantee of 5 years against manufacturing defect and must be drawn from the Belmont range from Pegler Yorkshire.

\*Pegler Yorkshire has a range of push and press connectors in the Tectite range for use with plastic, carbon steel or copper piping.

#### Angle vertical body specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	D A	imensior B	ns C	BOX QTY	CODE	A	
VB1290/4	Angle vertical	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	53	36	34	1	686032		
VB1290/4P	Angle vertical preset	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	53	36	34	1	686082		A Frank
VB1290/4	Angle vertical	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	63	37	38	1	686033		• 3. L
VB1290/4P	Angle vertical preset	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	63	37	38	1	686083		the start

#### Angle horizontal body specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	D A	imensior B	is C	BOX QTY	CODE
VB1390/4	Angle horizontal	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	34	36	53	1	686030
VB1390/4P	Angle horizontal preset	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	34	36	53	1	686080
VB1390/4	Angle horizontal	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	38	37	63	1	686031
VB1390/4P	Angle horizontal preset	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	38	37	63	1	686081



#### Straight valve body specifications and dimensions (mm)

			D	imensior	IS	BOX	
PATTERN NO.	DESCRIPTION	SIZE	Α	В	С	QTY	CODE
VB1490/4	Straight valve body	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	43	41	51	1	686034
VB1490/4P	Straight valve body preset	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	43	41	51	1	686084
VB1490/4	Straight valve body	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	45	47	62	1	686035
VB1490/4P	Straight valve body preset	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	45	47	62	1	686085



For flow chart information see pages 10 and 11.



Angle horizontal VB1390/4

Straight

Valve VB1490/4

#### Pre-setting mechanism



#### Valve system using TRV



#### Valve system using pre-setting TRV



Lockshields become Isolating Valves

# Accessories

Rely on Pegler Yorkshire to supply dedicated accessories and tools for installation and maintenance of the Terrier Belmont range.

pattern no. N/A	DESCRIPTION Belmont TRV Security Clip	<sup>SIZE</sup> One size	box qty 20	CODE 686102
PATTERN NO.	DESCRIPTION	SIZE	BOX QTY	CODE
N/A	Security Clip Release Tool	One size	1	686103
DATTEDN NO	DESCRIPTION	CITE	DOX OTV	CODE
N/A	Retaining Clips for Capillary Tube	One size	10 sets	686104
	25002277011	6775	504 074	0005
PATTERN NO. N/A	Iron Pipe Connection	1/2"	10	686105
	without Nut	3/4"	10	686106



Balancing your system can be laborious and time consuming. Using a lockshield to balance the system is common, but with accidental or intentional adjustment, the system can become unbalanced, reducing the efficiency of your heat output. The closing of a lockshield, the removal of radiator for replacement or decorating purposes can affect the system.

Using a presetting valve provides a unique solution without installing any additional products other than a TRV. The presetting valve should be applied on all radiators ideally on the flow end. On each valve the gland can be adjusted to control flow allowing pressure to be redirected to the next radiator in line. This is repeated on all radiators in the application allowing the system to be balanced.

This benefit allows the lockshield to become an isolating valve and ensures that any accidental adjustment can be easily corrected, additionally when radiators are removed or replaced the setting on the valves will remain, saving precious time and avoiding commissioning.



pattern no. N/A	DESCRIPTION Copper Compression Fitting (Black cap only)	SIZE 22mm for <sup>3</sup> /4" valve bodies	box qty 10	CODE 686107
pattern no.	DESCRIPTION	<sub>SIZE</sub>	box qty	CODE
N/A	Remote Sensor Housing	One size	1	686117
pattern no.	DESCRIPTION	<sub>SIZE</sub>	BOX QTY	CODE
RG1205/3	Gland/head Removal Tool (III)	One size	1	686100
RG1205/4	Gland/head Removal Tool (IV)	One size	1	686200
pattern no. B1301-0/4 B1401-0/4	DESCRIPTION Locking/Limiting Pins	size One size	box qty 20	<sup>CODE</sup> 686101





LS351/3

### **Manual Radiator Valves**

The new manual radiator valve range offers both traditional handwheel and lockshield styles, along with a new concealed lockshield style in both angled and straight patterns.

A 'no drain solution' on manual valves allows the spindle O ring's seal to be changed with the system still full of water. The whole headwork may be changed without draining by using a gland removal tool. These features minimise down time, saving both cost and time on site.

Innovations introduced for the first time include a concealed lockshield cap on the manual radiator valve, which requires an allen key to adjust the flow. The lockshield provides tamper resistance, this prevents accidental or vandal adjustment in public areas and ensures protection for system balance.

#### **Key features**

- Suits a wide range of commercial applications
- Valves can be serviced without draining the system
- Approved to BS2767-10
- Concealed lockshield with allen key adjustment
- Compression or iron end connection direct\*



Tamper resistant lockshield adjustment by allen key

#### Wheel head angle pattern specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	D	imensio B	ns C	BOX QTY	CODE	A	
97WH	Matt brass	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	53	63	35	1	680001		
97WH	Matt brass	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	63	56	56	1	680004		
97WHCP	Chrome plate	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	53	63	35	1	680007		
97WHCP	Chrome plate	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	63	56	56	1	680010		

For flow chart information see pages 10 and 11. \*Pegler Yorkshire have a range of push and press connectors in the Tectite range for use with plastic, carbon steel or copper piping.

#### Wheel head straight pattern specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	Dimen A	isions B	BOX QTY	CODE	
98WH	Matt brass	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	105	78	1	681001	В
98WH	Matt brass	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	130	83	1	681004	
98WHCP	Chrome plate	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	105	78	1	681007	$\perp$
98WHCP	Chrome plate	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	130	83	1	681010	-



#### Lockshield drainoff angle valve specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	Dimensions A B C	BOX QTY	CODE	Т
97DLSCP	Chrome plate	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	81 63 35	1	680009	В
						С





#### Lockshield angle valve specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	Dimensions A B C	BOX QTY	CODE
97LS	Matt brass	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	53 63 35	1	680002
97LS	Matt brass	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	61 64 41	1	680005
97LSCP	Chrome plate	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	53 63 35	1	680008
97LSCP	Chrome plate	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	61 64 41	1	680011





#### Lockshield straight valve specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	Dimen A	sions B	BOX QTY	CODE
98LS	Matt brass	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	105	78	1	681002
98LS	Matt brass	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	130	83	1	681005
98LSCP	Chrome plate	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	105	78	1	681008
9866CP	Chrome plate	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	130	83	1	681011



#### Lockshield tamperproof angle valve specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	Dimensions A B C	BOX QTY	CODE	A	
LS351/4	Chrome plate	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	53 39 35	1	686050		
LS351/4	Chrome plate	<sup>3</sup> /4"/22mm x <sup>3</sup> /4"	61 40 41	1	686051		

#### Lockshield tamperproof straight valve specifications and dimensions (mm)

PATTERN NO.	DESCRIPTION	SIZE	Dimen: A	sions B	BOX QTY	CODE	
LS352/4	Chrome plate	<sup>1</sup> /2"/15mm x <sup>1</sup> /2"	105	54	1	686052	
LS352/4	Chrome plate	3/4"/22mm x 3/4"	130	59	1	686053	

# **Technical specifications**

TRV



#### **TRV** - preset







For product details see pages 6 and 7







For product details see pages 6 and 7

#### **Technical overview**

Nominal flow rates	
<sup>1</sup> /2" angle and reverse angle forward flow	206kg/h
<sup>1</sup> /2" angle and reverse angle reverse flow	220kg/h
<sup>1</sup> /2" straight pattern forward and reverse flow	195kg/h
<sup>3</sup> /4" patterns	265kg/h
Maximum static pressures	10bar at 120°C
Maximum differential pressures	0.6bar
Hysteresis	0.5k
<b>Differential pressure influence</b> All variants forwards	0.15k
All variants reverse	-0.25k
<b>Water temperature influence</b> Fixed thermal head Remote sensing and remote adjusting heads	0.9k 0.5k
<b>Response time</b> All TRV head variants - vertical All TRV head variants - horizontal	24 minutes 20 minutes

#### Manual radiator valves



For product details see pages 8 and 9



For product details see pages 8 and 9



#### The perfect commercial partnership



Pegler is an expert in the production of Taps, Mixers and Valve products. It boasts an unrivalled track record for integrity, quality, reliability and innovation.



terrier

HEATING CONTROLS

PRESTEX valves and fittings





Yorkshire is a specialist in the production of metal plumbing and heating fittings. It has an established reputation for manufacturing quality products.





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COMMERCIAL VALVES



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