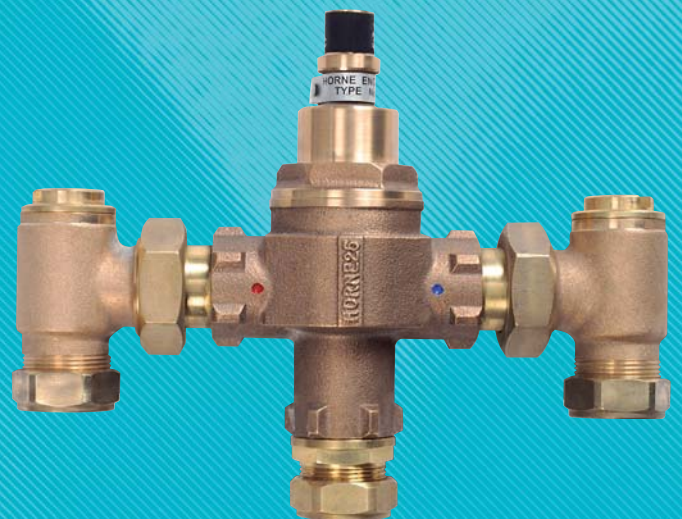


THERMOSTATIC CONTROL TECHNOLOGY



HORNE 25
THERMOSTATIC MIXING VALVE

INTRODUCTION

APPLICATIONS

Thermostatic mixing of hot and cold water to provide warm water to taps and showers at a controlled temperature over a wide range of flow rates.

FEATURES

Simplicity, reliability, ease of maintenance.

Hot supply is shut down if cold supply fails or is turned off.

Temperature adjustment by removable key to prevent alteration of setting by unauthorised personnel.

Check valve at inlets.

Inlet connections can be turned to any angle during installation to suit pipework.

Strainers at inlets to protect both check valves and mixing valve from dirt.

RANGE OF TEMPERATURE ADJUSTMENT

25-50°C

SIZES

25mm with inlet and outlet connections for 28mm copper pipe by compression.

ACCURACY OF TEMPERATURE CONTROL

The mixed water temperature is always controlled within safe limits.

TECHNICAL INFORMATION

THERMAL SHUT OFF

If the cold water supply fails or is accidentally turned off, the hot water supply will be automatically shut down to prevent the risk of scalding. Sudden failure will result in the HORNE TMV cutting off the hot water supply immediately. In a large building, a failure of the cold water supply will take place slowly. The HORNE TMV will control the mixed water temperature within safe limits as the cold water pressure gradually falls.

If the hot water supply fails, the cold water supply will be automatically cut off to prevent the risk of thermal shock.

To ensure that the thermal shut-off facility works, the HORNE TMV must be maintained according to our instructions and kept in proper working condition.

EASE OF INSTALLATION & COMMISSIONING

Installation can be quickly and easily carried out at minimal cost. HORNE TMVs are supplied complete with compression fittings for copper pipes on all three connections. Swivel inlet connections meet any configuration of pipework.

Commissioning can be easily carried out by following the detailed instructions supplied with each TMV.

EASE OF MAINTENANCE

Maintenance requirements have been carefully taken into consideration during the design stage. All internal parts which require cleaning are readily accessible without disturbing any pipework. No special skills or tools are required. Detailed maintenance instructions are supplied with each TMV.

STRAINERS AT HOT AND COLD WATER INLETS

Full capacity fine mesh strainer baskets are fitted at the hot and cold water inlets to protect the TMV and non-return valves from dirt.

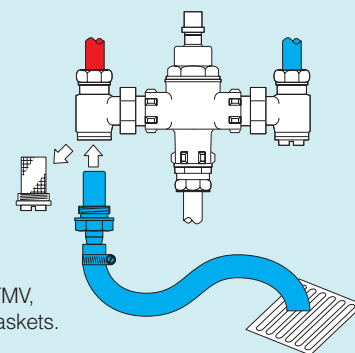
The baskets can be quickly and easily removed for cleaning without disturbing any pipework.

WATER FITTINGS REGULATIONS - FLUSHING KIT

To comply with Water Byelaws 2003 (Scotland) and Water Supply (Water Fittings) Regulations 1999 (England and Wales), all pipework should be flushed after installation, renewal or repair.

A HORNE Flushing Kit allows the pipework to be thoroughly flushed without any dirt or debris entering the TMV, Non-return Valves or Strainer Baskets.

The Flushing Kit consists of a screwed adaptor to fit into the strainer body and replace the strainer basket and a plastic pipe. Only one or two flushing kits are required on each site and these are available on request.

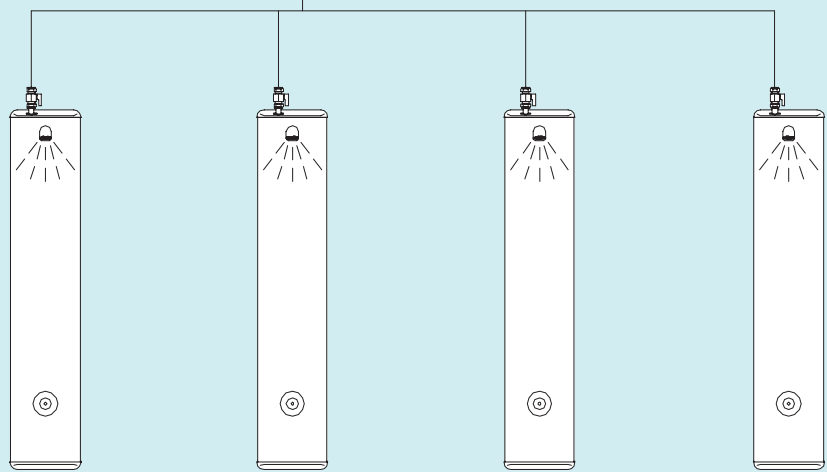
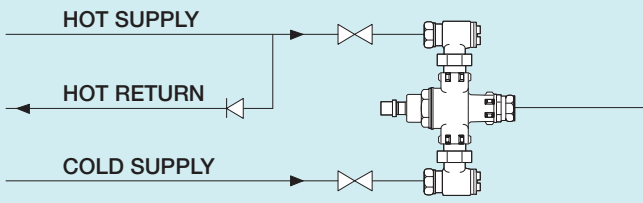


OPERATING CONDITIONS

Temperature setting at factory	41°C
Range of temperature adjustment	25-50°C
Range of hot water supply temperature	55-85°C
Maximum static pressure	10 bar
Minimum differential between hot water temperature and mixed water temperature	12°C
Range of maintained water supply pressures	0.2-5 bar

For optimum performance, inlet pressures should be nominally equal, i.e. hot and cold supplies should be from a common source. It is not recommended to mix mains cold water with low pressure hot.

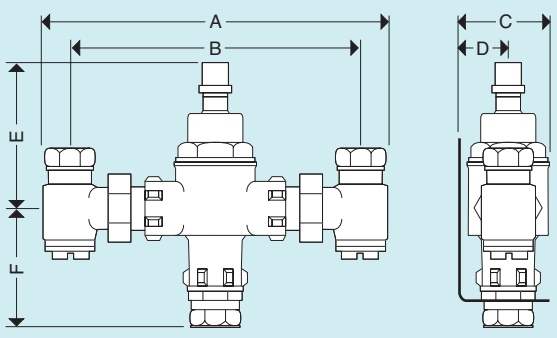
TYPICAL INSTALLATIONS



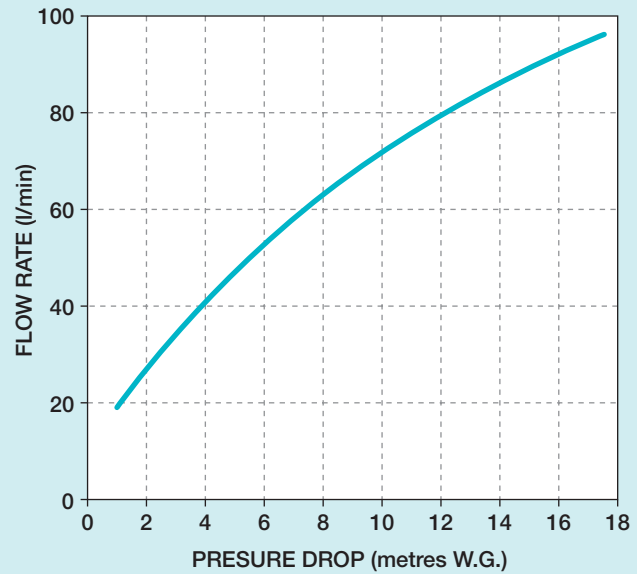
Horne 25 Thermostatic Mixing Valve supplying pre-mixed water to Home shower panels. (See separate brochure)

DIMENSIONS

	HORNE 25	HORNE 25 WITH MOUNTING BRACKET
A	260	276
B	218	218
C	62	66
D	-	35
E	102	102
F	90	100






SIZING CHART



This graph allows for a maximum water velocity of 3 m/s in accordance with BS6700.

SPECIFICATION OPTIONS - HORNE 25 THERMOSTATIC MIXING VALVE

OPTIONS	DESCRIPTION	FINISH	REF.
	<p>HORNE 25 THERMOSTATIC MIXING VALVE</p> <p>Including check valves, strainers and swivel inlet connections. Pipe connections by compression fittings for 28mm copper pipe.</p>	<p>BRONZE</p> <p>CHROMIUM PLATED</p>	<p>H25-11B</p> <p>H25-11C</p>
	<p>HORNE 25 THERMOSTATIC MIXING VALVE WITH WALL MOUNTING KIT</p> <p>Including check valves, strainers and swivel inlet connections, mild steel wall bracket, screws and wallplugs. Pipe connections by compression fittings for 28 mm copper pipe.</p>	<p>BRONZE</p> <p>CHROMIUM PLATED</p>	<p>H25-12B</p> <p>H25-12C</p>
	<p>HORNE 25 THERMOSTATIC MIXING VALVE WITH WALL MOUNTING KIT & WHITE PLASTIC COVER</p> <p>Including check valves, strainers and swivel inlet connections. White plastic cover, wall bracket, screws and wallplugs. Pipe connections by compression fittings for 28mm copper pipe.</p>	<p>H25 TMV IN BRONZE & HIPS COVER IN WHITE</p>	<p>H25-13B</p>

HORNE ENGINEERING also manufacture TMVs up to 50mm size and will be pleased to supply technical literature on request.

HOW TO SPECIFY

A sample specification for a HORNE 25 Thermostatic Mixing Valve with Wall Mounting Kit is as follows:

- HORNE 25 THERMOSTATIC MIXING VALVE including Wall Mounting Kit.
- Strainer baskets to be removable without breaking any pipe connections.
- Strainers to accommodate a HORNE Flushing Kit to enable the pipework to be flushed to Water Fittings Regulations 1999 without breaking any pipe connections.
- Pipe connections by compression fittings for 28mm copper pipe.
- Catalogue number H25-12B.



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