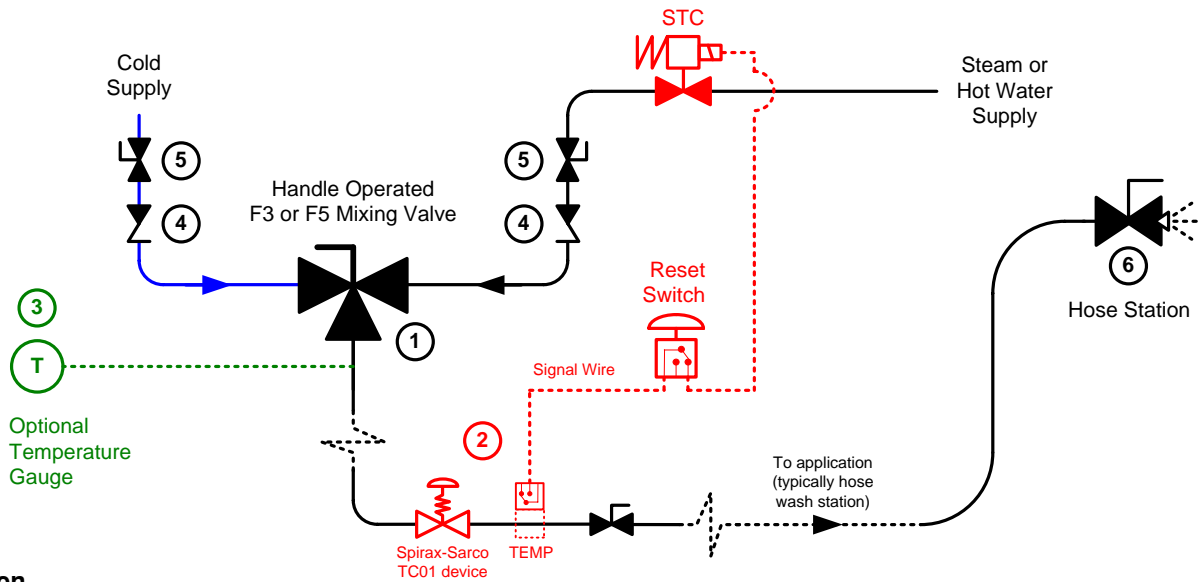


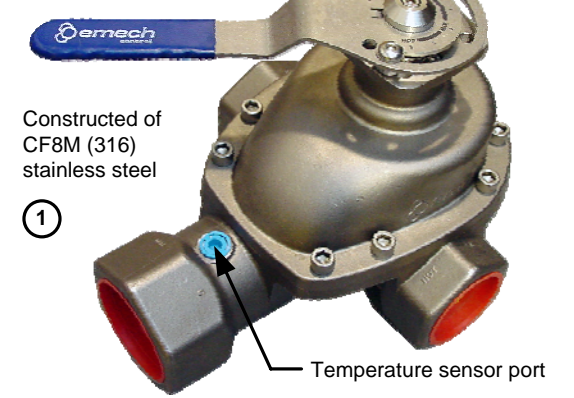
APPLICATION
PROVEN IN
INDUSTRY



Advantages of the Emech 3-Port Mixing Valve

OUT OF THE BOX solution Top entry allows inline access to internal valve parts

Adjustable stroke limiting stop Graduated scale on handle



Constructed of CF8M (316) stainless steel

F3 – Durable corrosion resistant ceramic discs F5 – Hard seal stainless steel discs

Figure 1: Emech's patented "hard seal" shear action disc design provides precise control mixing of steam and water (F5) or hot and cold water (F3). The models appear identical from the exterior.

Application

Emech's hand operated 3 port mixing valves offer fast and accurate mixing of water and/or steam for many water heating applications.

Operation

Emech 3 port valves utilize "hard-seal" shear action disc technology to provide tight shut-off, high pressure differential capability, and long life integrity. Unlike most 3 port valves the Emech valve can isolate BOTH INLETS at once (i.e. it has a fully closed position). In the case of the F3 water blending valve series the ceramic disc seat provide tight shut-off which may eliminate the need for separate isolation valving.

Advantages

- Simple installation and low-torque single lever operation.
- As the valve is opened (anti-clockwise handle movement) the cold port opens first. The hot port begins to open after 90° of handle stroke. The hot port only is full open at 230° of handle stroke.
- By setting the position of the "stroke limiting" stop, an approximate maximum temperature setting can be made. This is a safety feature to minimize the possibility of operator injury.

IMPORTANT NOTE: Users must consider safety implications when designing their installations using manually operated F5's. Emech recommend a spring to close isolation valve prior to the steam inlet of the F5 valve triggered by a failsafe temperature switch near the valve outlet (see items highlighted red above). Contact an Emech representative for more information.

Emech Accessories

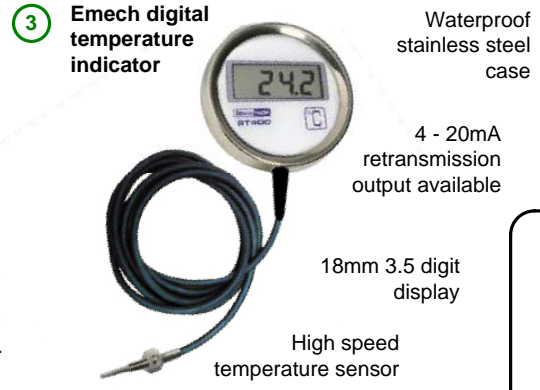


Figure 2: The digital temperature indicator can be fitted to the outlet of the mixing valve to give fast accurate feedback of temperature to the operator.

Key

- 1 Emech F3 or F5 Temperature Controller
- 2 Thermal Switch Over-Temperature Cut Out System (Recommended), includes - manual reset, fast acting spring to close isolation valve & thermal switch. OR Spirax TCO1 temperature cut out valve (size 1" only).
- 3 Emech Digital Temperature Indicator (optional)
- 4 Check Valve (non return valve)
- 5 Manual Isolation Valve
- 6 Hose wash station or similar

Disclaimer: This diagram is for general discussion purposes only. The information is solely intended to provide a general understanding of the subject matter and to assist Emech's customers and potential customers to assess whether they require further information.

Note: Proposal sketch for discussion purposes.

- Water pipe
- - Steam pipe
- - - 24Vdc power cable
- Signal cable

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