EYE OR EYE/FACEWASH
EMERGENCY MIXING SYSTEM

MIXING VALVE SYSTEM FOR EMERGENCY EYE/FACEWASH EQUIPMENT

FUNCTION AND FEATURES

- Utilises a 25mm Watermark approved high flow mixing valve.
- Provides tepid warm water up to 50 l/min at 50kPa pressure loss.
- Supplied pre-plumbed on a galvanised steel plate with 20mm copper tails.
- Valves will shut off supply upon failure of cold water supply.
- Cold water will bypass the mixing valves upon failure of hot water supply.
- Set temperature can be locked using the locking nut on the adjustment spindle.

PRODUCT DETAILS

The emergency mixing valve system incorporates a Caleffi mixing valve which is Watermark approved to AS4032.2.

This emergency mixing system has been specifically designed to meet the requirements of both AS 4775 - Emergency eyewash and shower equipment, as well as ANSI Z 358.1.

When installed with a certified eyewash or eye/face wash to AS4775, the minimum warm water flow rate shall be 11.4 l/pm. Most brands of eyewash and eye/face wash units are much higher than this and so the EMF50L has been designed to accomodate even the most demanding flow rates for eye/face wash units in the market.

The cold water bypass design allows for cold water only to flow through the assembly in the event of heated water supply failure to the mixing valves. This feature has been integrated to ensure the functionality and integrity of the emergency shower is maintained.

The valve is adjustable from 20 - 50ºC, however, it is the responsibility of the specifier to determine the correct water temperature to each safety fixture, especially in applications where a chemical reaction is increased by water temperature.

TECHNICAL SPECIFICATIONS

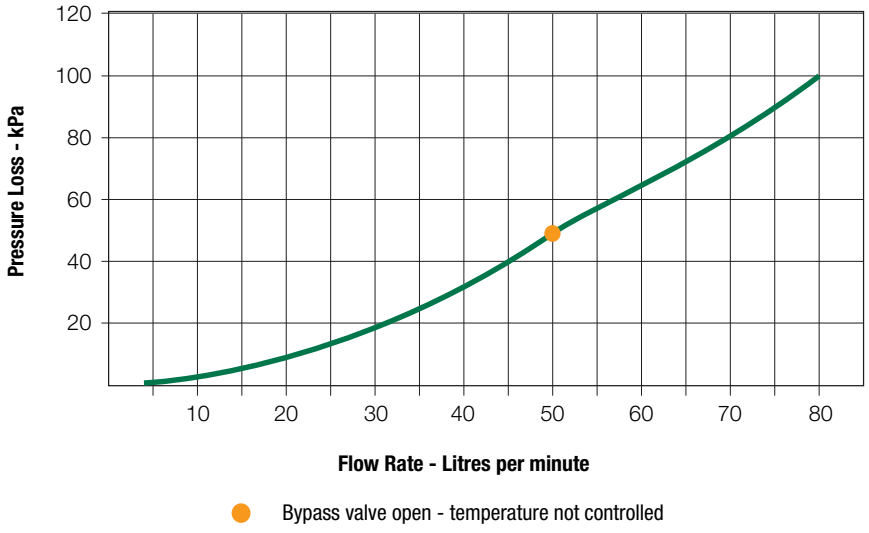
TEMP ADJUSTMENT RANGE	20-50ºC
COLD INLET TEMPERATURE RANGE	5-20ºC
HOT INLET TEMPERATURE RANGE	55-85ºC
MINIMUM TEMP DIFFERENTIAL BETWEEN MIXED OUTLET AND COLD INLET	5ºC
MAX STATIC PRESSURE (TESTING)	1400kPa
RECOMMENDED WORKING PRESSURE (DYNAMIC)	> 350kPa *
MAX UNBALANCED SUPPLY PRESSURE	2:1 Recommend +/-10%
MINIMUM FLOW RATE	6 l/min
COLD WATER BYPASS FLOW (HOT WATER FAILURE)	30 l/min (minimum)
DESIGN FLOW @ 50KPA DP	50 l/min

* Recommended dynamic inlet pressure of 350kPa (minimum) based on the cumulative pressure loss of;

- 50 kPa mixing valve
- 70 kPa for the cold water bypass PRV operation
- 210 kPa minimum required after the assembly to the emergency fixtures to comply with AS4775

Note: Pipe friction losses, other valves and fittings not included in minimum inlet pressure recommendation.

PRESSURE LOSS CHART



ASSEMBLY SIZE

PART NUMBER	EMF50L-FP
HEIGHT	400mm
WIDTH	350mm
DEPTH	80mm
HOT INLET	3/4”
COLD INLET	3/4”
TEPID OUTLET	3/4”

Also available in a 70mm deep recessed stainless steel cabinet with lockable hinged lid. Contact us for details.

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WE RESERVE THE RIGHT TO CHANGE OUR PRODUCTS AND THEIR RELEVANT TECHNICAL DATA, CONTAINED IN THIS PUBLICATION, AT ANY TIME AND WITHOUT PRIOR NOTICE.

All Valve Industries Pty Ltd. · Unit 2, 18-28 Sir Joseph Banks Drive
Kurnell NSW 2231 - Ph: +61 2 8543 9811 · Fax: +61 2 8543 9822
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