



Emerald GEM® Trap

QFA Connector Low Condensate Duty Venturi Orifice Steam Trap. Rev 3 Oct 2012

The GEM® Trap

The GEM Trap is a staged venturi orifice steam trap. It has no moving parts so will not wear and cannot fail. The unique venturi orifice technology utilises the expansion of the flash steam created by the pressure differential across the trap to control the flow of condensate.

Operating over variable loads, the GEM Trap will suit all industrial applications. The single piece bodies are manufactured from wear and corrosion resistant grades of stainless steel.

The GEM Trap is the most energy efficient steam trap on the market and is supplied with a 10 year performance guarantee*, and a full sizing and commissioning service.

The Emerald GEM® Trap

- Designed for use with the universal 2 bolt Quick Fit Adapter
- Quick and easy to install
- Fully maintainable in-line
- Easy access to both strainer basket and orifice chamber

Emerald Traps contain GEM's inverted cone technology and a robust reinforced mesh strainer basket with large surface area to further protect the orifice from debris.

Suitable Applications

- Low condensate duty applications
- Line drainage / trace heating

Operating Parameters

- PMA 50 Bar (730psi)
- TMA 400°C (750°F)

Ancillary Parts

- Insulation Jacket
- Optional drainage valve

Available Spares

- Quality SS reinforced graphite gasket
- Robust SS reinforced strainer basket



Sizes and Connection Types Available

Trap Body	Universal Quick Fit Adapter (QFA)
DN15 / ½ "	✓
DN20 / ¾ "	✓

QFA	Flanged	Threaded BSP / NPT	Socket Weld
DN15 / ½ "	On request	✓	✓
DN20 / ¾ "	On request	✓	✓

Key GEM® Trap Benefits

Quality, Efficiency, Reliability and Service

- > 10 Year performance guarantee*
- > No moving parts to wear or fail
- > No inserts - no leak path
- > No ongoing trap surveys
- > Minimal annual maintenance
- > Does not contribute to waterhammer
- > No pressurisation of condensate return system
- > Inherently more efficient than mechanical traps
- > Typical payback < 2 years
- > Permanent energy savings
- > Each traps supplied with full sizing and commissioning service

* Reduced guarantee offered for superheated steam



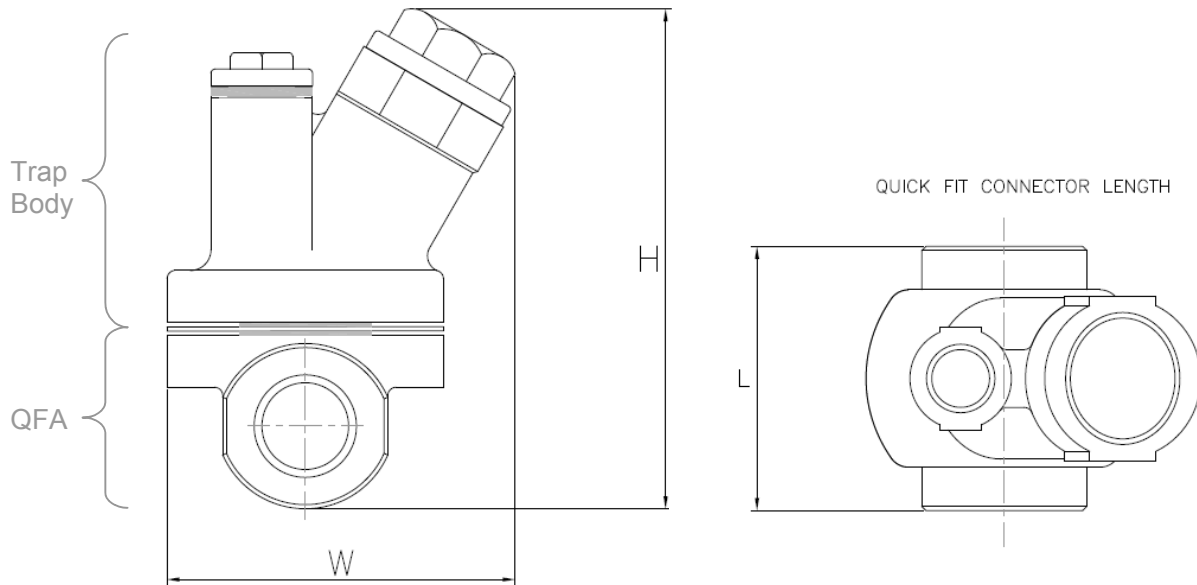
An Innovative Technology Company Providing
Energy and Emission Reduction Solutions

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Dimensions and Weights



	H (mm)	L (mm)	W (mm)	Weight (kg)
EMC15 (DN15 / 1/2")	79	43	85	0.7
EMC20 (DN20 / 3/4")	79	43	85	0.7
EMC15 with QFA (DN15 / 1/2")	117	62	85	1.5
EMC20 with QFA (DN20 / 3/4")	125	64	85	1.6

Materials

Part	Material
Trap Body	Cast Stainless Steel 316L BS 3146 PT2 (ANC4BFC)
Orifice Cap	304 Stainless Steel
Strainer Basket	Reinforced 316 Stainless Steel 40 Mesh
Gaskets	METACAM 316 Stainless Steel Core/Graphite faced
Strainer Cap	316L Stainless Steel
Orifice Cap	304 Stainless Steel
QFA Body	Cast Stainless Steel 316L BS 3146 PT2 (ANC4BFC)

- Full product traceability is part of our Quality Assurance procedure
 - Type 3.1 material certification to BS EN 10204:2004 (E)
- All certification/inspection requirements must be stated at time of order placement.*



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