EMCARA

EMCARA GAS DEVELOPMENT INC.

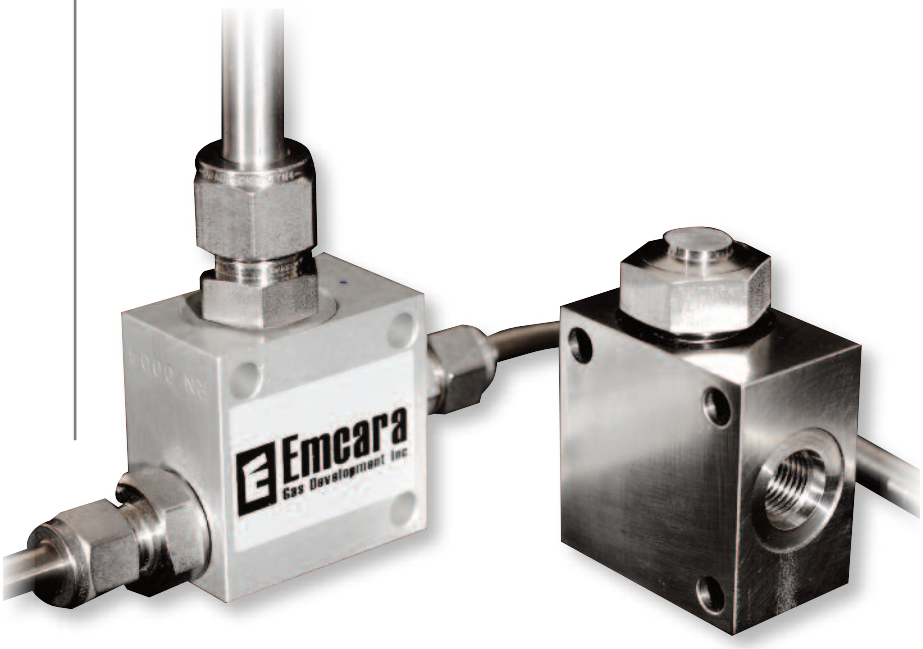
Safety Technology for Alternative Fuel Systems

STAINLESS VIPER – 2ND GENERATION LONG TRIGGER PRD - CNG

LT168 Series (Stainless Steel)

FEATURES

The Stainless Viper is part of Emcara's 2nd generation family of thermally activated, Long Trigger Pressure Relief Device with lengths from 4' to 45', and beyond. Complete with stainless steel body, the Stainless Viper is designed for systems with working pressures to 5,000psi. When fire is concerned, it is important to vent gas as quickly as possible to avoid the risk of a tank rupture. The Stainless Viper benefits from an advanced trigger mechanism and provides high flow rates when venting, superior corrosion resistance, and increased longevity in the harshest of environmental conditions. The internal mechanism utilized is robust, and possesses enhanced corrosion resistance, performing in the most challenging conditions. With a substantial length range; superior fire detection (when compared to single or multiple point PRD's) can be achieved while providing cost savings and design flexibility.



PERFORMANCE & GEOMETRY

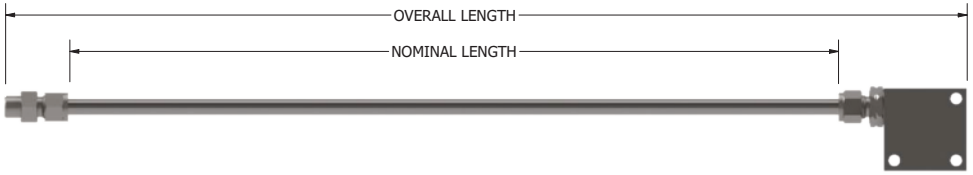
Gas Type: CNG
Certified to ANSI/CSA PRD1-2013
Pressure: 5000 psi nominal
Activation Temperature: ~130 ºC
Activation Time: ~25 seconds
Flow Rate: 90 SCFM (per PRD1/ISO15500)
Minimum Exposure Length: 5" - 18"
Length: 48" - 540"
Body Size: 2" x 2" x 1.25"
Tank Thread (End-Boss Version): 1 1/8"
Inlet Connection: SAE J1926-6 Port
Outlet Connection: SAE J1926-8 Port
Body Construction: Stainless Steel

www.emcara.com

20 YEARS OF ALTERNATIVE FUELS EXPERIENCE
INNOVATIVE THINKING AND PRODUCTS
BULK HAUL, FUEL SYSTEMS, GROUND STORAGE

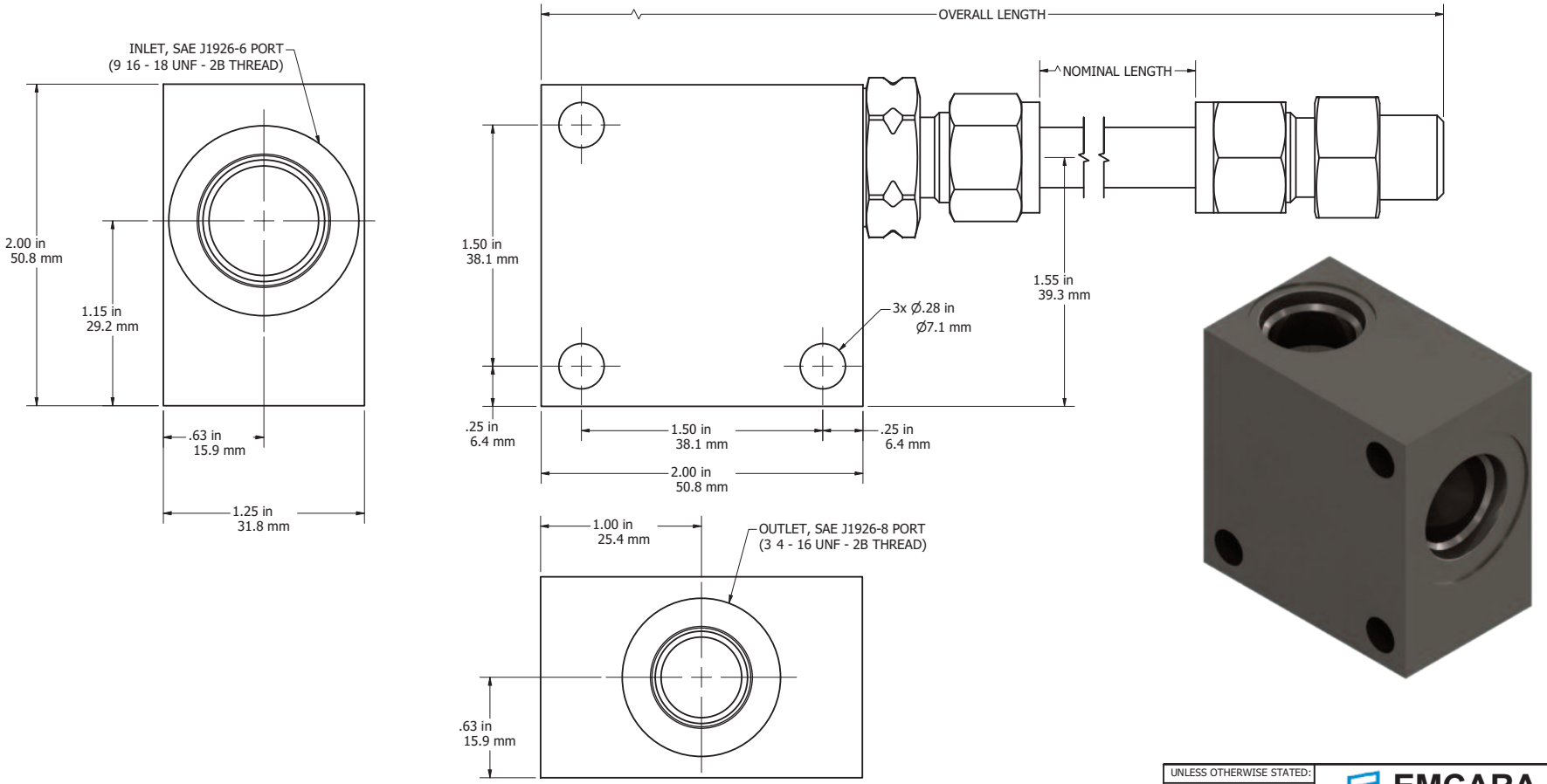
PERFORMANCE:

- ACTIVATION TIME: 20-30 SECONDS
- FLOW RATE: 90 SCFM (PER PRD1)
- MINIMUM ACTIVATION LENGTH: 18" 450 mm (DEPENDING ON CONFIGURATION)
- ACTIVATION TEMPERATURE: 130°C ± 10°C
- LEAK RATE: 1.0 * 10^{-5} SCCS
- SERVICE PRESSURE: 5076 PSI 350 BAR
- CERTIFIED TO ANSI PRD 1-2013 AT 3600 PSI



LT162

PART NUMBER	NOMINAL LENGTH	OVERALL LENGTH	TOLERANCE
LT168 - 036	36 in 914.4 mm	39.34 in 999.2 mm	± 0.25
LT168 - 048	48 in 1219.2 mm	51.34 in 1304.0 mm	± 0.25
LT168 - 060	60 in 1524.0 mm	63.34 in 1608.8 mm	± 0.25
LT168 - 072	72 in 1828.8 mm	75.34 in 1913.6 mm	± 0.25
LT168 - 084	84 in 2133.6 mm	87.34 in 2218.4 mm	± 0.25
LT168 - 096	96 in 2438.4 mm	99.34 in 2523.2 mm	± 0.25
LT168 - 108	108 in 2743.2 mm	111.34 in 2827.0 mm	± 0.25
LT168 - 120	120 in 3048.0 mm	123.34 in 3132.8 mm	± 0.25
LT168 - 132	132 in 3352.8 mm	135.34 in 3437.6 mm	± 0.25
LT168 - 144	144 in 3657.6 mm	147.34 in 3742.4 mm	± 0.25
LT168 - 156	156 in 3962.4 mm	159.34 in 4047.2 mm	± 0.25
LT168 - 168	168 in 4267.2 mm	171.34 in 4352.0 mm	± 0.25
LT168 - 180	180 in 4572.0 mm	183.34 in 4656.8 mm	± 0.25
LT168 - 192	192 in 4876.8 mm	195.34 in 4961.6 mm	± 0.25
LT168 - 204	204 in 5181.6 mm	207.34 in 5266.4 mm	± 0.25
LT168 - 216	216 in 5486.4 mm	219.34 in 5571.2 mm	± 0.25
LT168 - 228	228 in 5791.2 mm	231.34 in 5876.0 mm	± 0.25
LT168 - 240	240 in 6096.0 mm	243.34 in 6180.8 mm	+ 0.5 in - 0.25 in



WETTED MATERIALS, EXTERIOR:

- 304 AND 316 STAINLESS STEEL

WETTED MATERIALS, GAS:

- 416 STAINLESS STEEL
- 304 AND 316 STAINLESS STEEL
- FLUOROCARBON

UNLESS OTHERWISE STATED:	EMCARA GAS DEVELOPMENT INC.
All DIMENSIONS ARE IN IMPERIAL INCHES TOLERANCE: ONE PLACE DEC. = ±.05 TWO PLACE DEC. = ±.01 THREE PLACE DEC. = ± .005 ANGLE = ± 1˚	TITLE: STAINLESS STEEL PRESSURE RELIEF DEVICE
MATERIAL:	
FINISH:	SIZE C / DWG. NO. LT-168-XXX / REV NC
DO NOT SCALE DRAWING	SCALE: 2 / WEIGHT: N A / SHEET 1 OF 1