

HE Pilot Ignition And Flame Detection System



The IVN pilot ignition and flame detection system provides high energy ignition and flame rod type flame detection in a single compact solution. The patented integration of the High Energy ignitor with a flame rod delivers reliable performance and simplifies installation and maintenance. The patented igniter improves ignition even in poor conditions and extends the life of the igniter. In addition, our exclusive indicator light ring communicates status easily at a distance, so you get the info you need quickly, clearly and without question.

AT A GLANCE.

- Gas pilot ignition and flame detection system
- Patented integrated high energy igniter and flame rod output provides simultaneous ignition and flame detection
- Ring of light indicator quickly relays status at a glance
- Electronic self-checking ensures fail-safe operation and compliance
- · 4-20mA flame signal strength output
- Pre-set over/under-temperature protection levels
- · Rated for division 2 and zone 2 hazardous areas

Features

- Simultaneous ignition and flame detection
- Single point of entry: one probe sparks and senses flame
- Exclusive, at-a-glance indicator light ring for quick, clear status communication
- Compact design for easy installation
- Quick disconnect for easier field wiring

IVN



Chentronics is an ISO 9001:2015 Certified, global leader with 40 years of innovative ignition and flame assurance solutions for natural gas, light oil, diesel and residual fuel.



SYSTEM ELECTRICAL AND PHYSICAL SPECIFICATIONS.

Application	Gas pilot ignition and flame detection system
Power	24VDC nominal, 2A MAX
Electrical Connection	IP66 quick connect, marine grade
Mounting	Via output rod
Dimensions / Weight	3x3x8 in., 3.7lb
Indicator Light Ring	Indicates status for flame, ignition and faults
Exciter Type	Low Tension High Energy
Exciter Duty Cycle	30 sec on / 2 min off ¹
Exciter Spark Command	INPUT – close wire A to C with relay contact to start exciter
Predictive Igniter Wear Detection	OUTPUT – dry relay contact set, 50VDC, 0.25A
Exciter Power	2J per spark at 5 sparks per second nominal
Flame Detector Type	For rectifying flame rod type installations
Flame Detector Duty	Continuous
Flame Detector Relay	OUTPUT - dry relay contact set, 240VAC, 0.25A
Flame Detector FDRT	0.7 seconds MAX
Operating Temperature Limits	-45°C to 85°C (-49°F to 185°F) ²
Storage Temperature Limits	-55°C to 100°C (-67°F to 212°F) ²
Humidity	0 to 100% condensing
Enclosure	316SS, IP64, NEMA 4X
Approvals	CE, IECEx Zone 2, ATEX Zone 2, cETLus, NEC Class 1 DIV 2

¹ Exceeding the exciter duty cycle limit can cause the exciter to fail.



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² The equipment contains an onboard heater. The heater becomes active when the internal temperature of the electronics is less than -15°C. When the electronics are cold started at an ambient temperature less than -25°C, allow 15 minutes of power-on operation before use so the heater may increase the internal temperature of the electronics. When the temperature of the internal electronics is below -25°C, the unit will be in Over/Under Temperature Warning mode and the flame detector will not operate. See Section 6.6 for indicator operating in various equipment modes.