

# PROMETHEUS 2000/2500

## DATA SHEET

### Description

PROMETHEUS is an igniter power system for gas turbines. In conjunction with standard surface effect spark plugs it produces an intense spark every half of a second while energised from a nominal 24 VDC battery power supply.

Energy conversion and utilisation in the spark plug is very high and compared with alternative high energy systems the spark projects out from the tip of the plug therefore providing more margin for successful ignition with regard to air: fuel ratio and pressure.

This is especially the case on liquid fuelled turbines with pressure atomised burner nozzles. PROMETHEUS provides 4 high energy outputs with 2 sparks per second pulsing rate. It is possible per spark by linking output channels together, but it does reduce the number of available channels.

PROMETHEUS is certified flameproof for installation in Zone 1 hazardous areas (all gas groups)

### Applications

- All types of gas turbines
- PROMETHEUS 2000/2500 spark performance

### Features

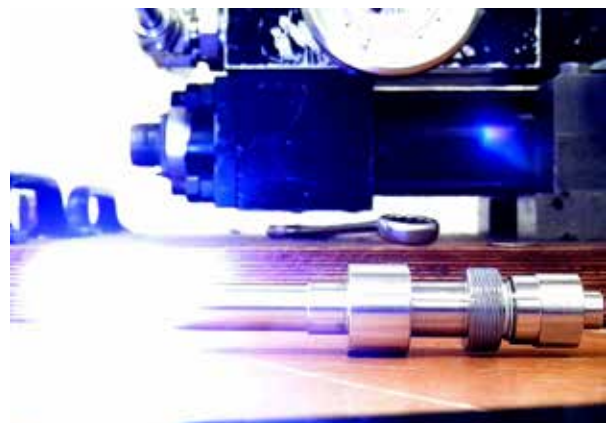
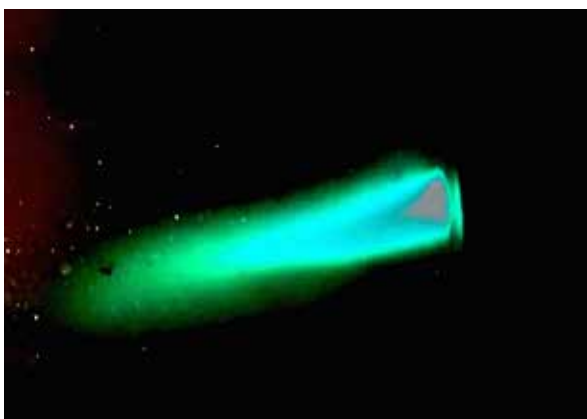
Highly efficient conversion intense spark

No lifetime limited parts used

24 VDC nominal battery supply

Certified and explosion-proof high-energy ignition cables

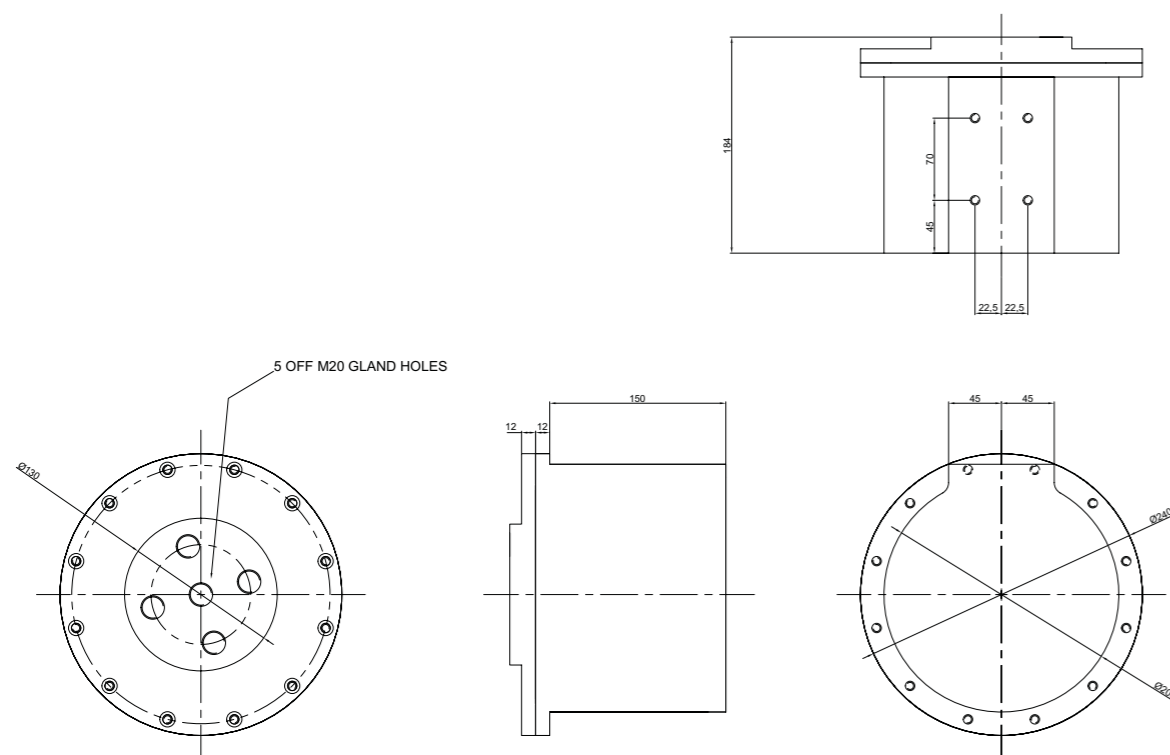
High-energy explosion-proof spark plugs



## Technical data

Designation	PROMETHEUS 2000/2500
Energy per spark	PROMETHEUS 2000 4.7 J per channel PROMETHEUS 2500 7.5 J per channel
Spark output voltage	2000 V / 2500 V
Spark frequency	2 sparks per second
Power supply voltage	Nominal 24 VDC +/- 20 %
Current consumption	2,5 A average (peak 11.5 A) – 20 A rated power supply is recommended
HT cable entry	4x M20 holes
Power supply cable entry	1x M20 holes in the centre of entry lid
Method of cable termination	Screw terminals for power supply max 2.5 mm <sup>2</sup> Spark plugs – 3x M8 studs (PL 1, PL 2, PL 3, PL 4 (+) PL 5 (COM))
Certification	Flame proof Z one 1, all gas groups
Weight	11.5 kg
Operating temperature	-20 ... +85 °C

## Dimensions



## Ignition Spark Plugs

Part No.: IGN001

The system comes with high-energy explosion-proof ignition spark plugs developed and produced by Heinzmann Regulateurs Europa Ltd.

## Key Features

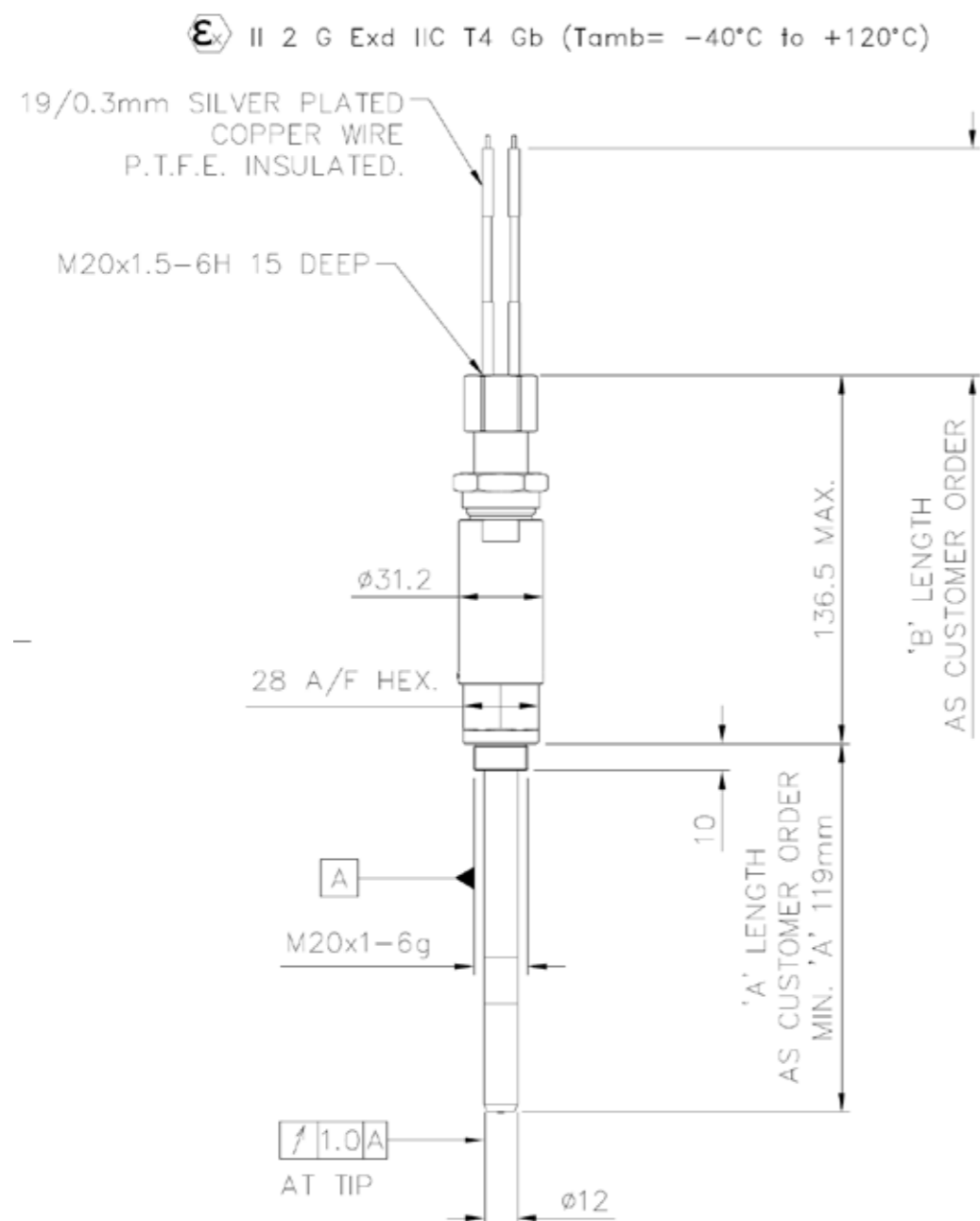
- Certified explosion-proof design (ATEX & IECEx) for Zone 1 gas atmospheres.
- Compact Ø12 mm stainless-steel lance, 119 mm overall length for easy retrofit.
- Robust high-temperature materials: AISI 316 connector.
- M22D quick-disconnect electrical interface—fully compatible with Smitsvonk HEI/QR & Prometheus 2000/2500 high-energy ignition systems.
- Can be supplied with matching high-temperature cable assemblies for plug-and-play installation.

## Technical data

Parameter	Value
Lance diameter	12 mm
Overall length	119 mm (including process thread)
Process connection	ISO Metric M20 x 1.0-6g male
Electrical connection	M22D plug
Materials	Lance: AISI 310 SS   Connector: AISI 316 SS
Ambient temp. range*	-40 °C ... +115 °C
Max. surface temp.*	600 °C (with HT-IGN cable)
Protection rating	II 2 G Ex db IIC T4 Gb
Certifications	ATEX DEK 17 ATEX0019X   IECEx KIWA 16.0013X



## Dimensions



## Ignition Cables

Part No.: IGN002

Heinzmann Regulateurs Europa Ltd delivers high-energy explosion-proof ignition cables according to customer specifications.

### Key Features

- Certified explosion-proof design (ATEX & IECEx) for Zone 1 gas atmospheres.
- Compact Ø12 mm stainless-steel lance, 119 mm overall length for easy retrofit.
- Robust high-temperature materials.
- M22D quick-disconnect electrical interface
- Can be supplied with dual plugs or single plug with flying leads.

### Technical data

Parameter	Value
Cable Specification	High temp explosion proof
Overall length	7 mtr or to specification.
Process connection	ISO Metric M20 × 1.0-6g male
Electrical connection	M22D plug
Materials	AISI316
Protection	SST flexible protection hose
Ambient temp. range*	-40 °C ... +115 °C
Max. surface temp.*	600 °C (with HT-IGN cable)
Protection rating	II 2 G Ex d IIC T4 Gb/- Ta: -40C to 115V
Certifications	KIWA 17 ATEX0019X   IECEx KIWA 16.0013X



