

Data Sheet O2S-FR-T2-18X Oxygen Sensors - Screw Fit Probe

FEATURES

- Oxygen pressure range 2 mbar 3bar
- Zirconium dioxide (ZrO₂) sensing elements
- Non-consumption technology
- Integral heating element
- No need for temperature stabilisation
- No reference gas required
- High accuracy
- Linear output signal
- Operates with external interface boards
- M18x1.5 screw mount



SPECIFICATIONS

Heater Voltage* $4.35V_{DC} \pm 0.1V_{DC}$ (1.85A) Stand by $2V_{DC}$ (0.85A) Pump resistance @ $700^{\circ}C^{**}$ < $6k\Omega$

Permissible gas temperature -100 to 250°C

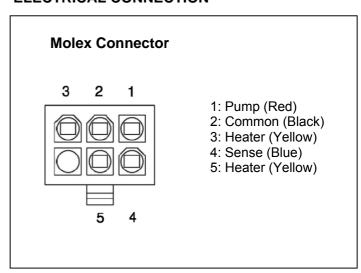
Gas flow rate 0 to 10 m/s

Repetitive permissible acceleration 5 g

Incidental permissible acceleration 30 g

* It is important to measure the heater voltage as close to the sensor as possible due to voltage drops in the supply cable. Heater can also be operated with an equivalent a.c. or PWM signals.

ELECTRICAL CONNECTION



For detailed information on the sensor operation please refer to the following application note: AN0043 Operation Principle and Construction of Zirconium Dioxide Oxygen Sensor.

深圳市新世联科技有限公司

地址: 深圳市深南中路2066号华能大厦712室

电话: 0755-83680810 83680820 83680830 83680860

网址: www.apollounion.com

邮编: 518031 传真: 0755-83680866

邮箱: sales@apollounion.com

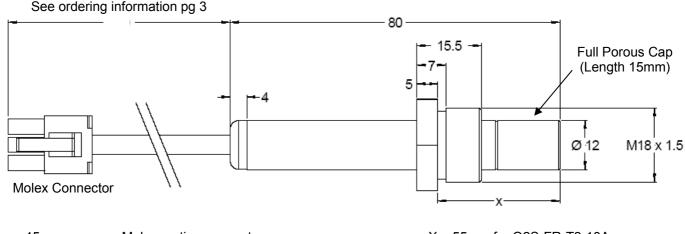
 $^{^{\}star\star}$ The constant current source used in the pump circuit should be designed to drive a load of up to $6k\Omega$



Data Sheet

O2S-FR-T2-18X Oxygen Sensors - Screw Fit Probe

OUTLINE DRAWING



Mass: 45g

Molex mating connector 39-01-2061 (plastic plug) 39-00-0041 (pins) X = 55mm for O2S-FR-T2-18A X = 45mm for O2S-FR-T2-18B X = 28mm for O2S-FR-T2-18C

All dimensions in mm.

Sensor lengths are approximate.

深圳市新世联科技有限公司

邮编: 518031

地址: 深圳市深南中路2066号华能大厦712室

电话: 0755-83680810 83680820 83680830 83680860 传真

网址: www.apollounion.com 邮箱: sales@a

传真: 0755-83680866 邮箱: sales@apollounion.com



Data Sheet

O2S-FR-T2-18X Oxygen Sensors - Screw Fit Probe

PERFORMANCE CHARACTERISTIC

Characteristics	Min.	Тур.	Max.	Unit	
Oxygen pressure range	2		3000	mhar	
Accuracy			5	mbar	
Internal operational temperature		700 (4.35V _{DC})		°C	
Response time (10-90% step)			4		
Warm up time (prior to sensor operation)			100	2	
Warm up time (from stand by)			20	S	
Output stabilisation time		~180			

ORDERING INFORMATION

Part number	Housing	Termination	
O2S-FR-T2-18A		0.15m Cable with Molex Connector	
O2S-FR-T2-18A-002	Probe with M18 x 1.5 nut X = 55mm	0.3m Cable with Molex Connector	
O2S-FR-T2-18A-003		1.1m Cable with Molex Connector	
O2S-FR-T2-18B		0.15m Cable with Molex Connector	
O2S-FR-T2-18B-002	Probe with M18 x 1.5 nut X = 45mm	0.3m Cable with Molex Connector	
O2S-FR-T2-18B-003		1.1m Cable with Molex Connector	
O2S-FR-T2-18C		0.15m Cable with Molex Connector	
O2S-FR-T2-18C-002	Probe with M18 x 1.5 nut X = 28mm	0.3m Cable with Molex Connector	
O2S-FR-T2-18C-003		1.1m Cable with Molex Connector	

WARNING

Personal Injury

DO NOT USE these products as safety or Emergengy Stop devices or in any other application Where failure of the product could result in Personal injury.

Failure to comply with these instructions could Result in death or serious injury.

CAUTION

Do not exceed maximum ratings and ensure sensor is operated in accordance with all requirements of AN0043 Failure to comply with these instructions may result in product damage.

深圳市新世联科技有限公司

地址:深圳市深南中路2066号华能大厦712室

邮编:518031 传真: 0755-83680866 电话: 0755-83680810 83680820 83680830 83680860

邮箱: sales@apollounion.com 网址: www.apollounion.com