

FEATURES

- Oxygen pressure range 2 mbar...3 bar
- Zirconium dioxide (ZrO₂) sensing elements
- Non-consumptive technology
- Integral heating element
- No need for temperature stabilisation
- No reference gas required
- Function testing and calibration in ambient air
- High accuracy
- Linear output signal
- Operates with external interface boards



SPECIFICATIONS

Maximum ratings

Heater supply voltage 4.35 ±0.1 V_{DC} (1.85 A)
Stand by 2.0 V_{DC}

Pump resistance @ 700 °C
DC typ. 1 kΩ
AC typ. 1 kHz, 120 Ω

Permissible gas temperature
XYA1 -100...400 °C
all others -100...250 °C

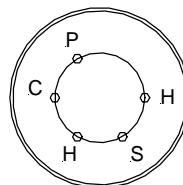
Gas flow rate 0...20 m/s

Repetitive permissible acceleration 5 g

Incidental permissible acceleration 30 g

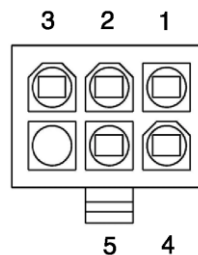
ELECTRICAL CONNECTION

Stainless steel wires (XYA1S)



P: Pump
C: Common
S: Sense
H: Heater

Molex connector (XYA...M)



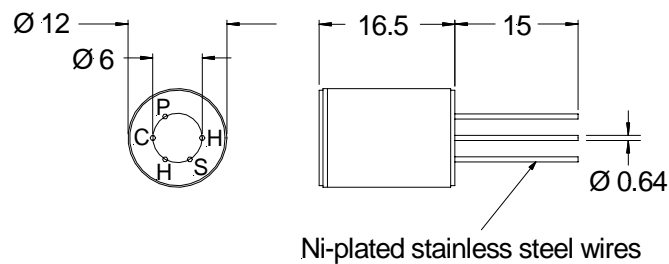
1: Pump (Red)
2: Common (Black)
3: Heater (Yellow)
4: Sense (Blue)
5: Heater (Yellow)

PERFORMANCE CHARACTERISTICS

Characteristics	Min.	Typ.	Max.	Unit
Oxygen pressure range	2		3000	mbar
Accuracy			5	
Operational temperature		700		°C
Stand by temperature		500		
Response time			4	s
Warm up time			100	
Warm up time (from stand by)			20	

OUTLINE DRAWING

Housing type XYA1S

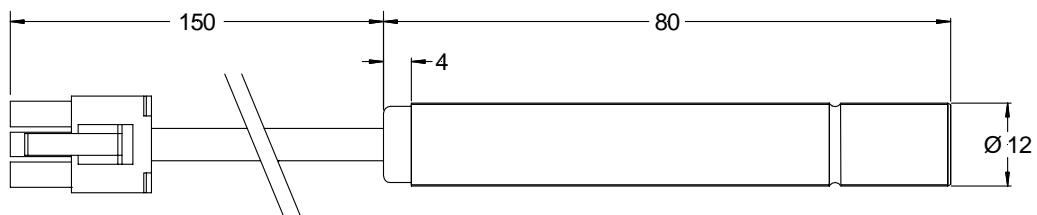


mass: 4 g

dimensions in mm

OUTLINE DRAWING (cont.)

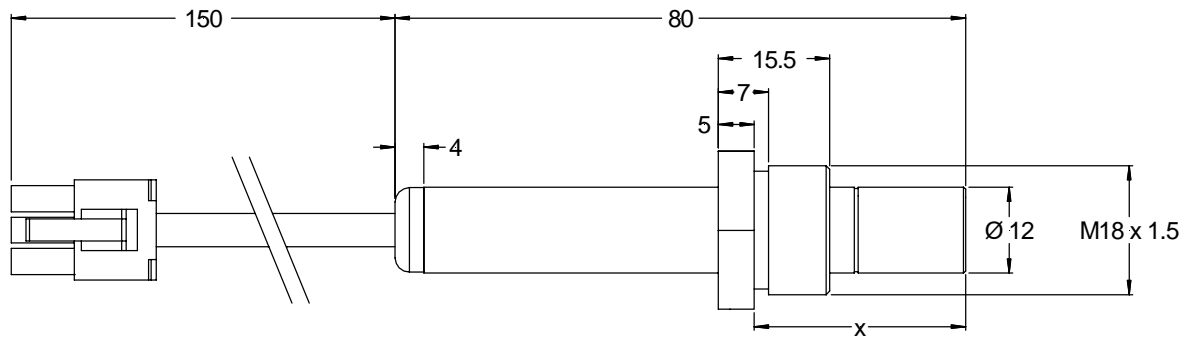
Housing type XYA2M



mass: 24 g

dimensions in mm

Housing types XYA5M, XYA6M, XYA7M



x = 28 mm for XYA5...
x = 45 mm for XYA6...
x = 55 mm for XYA7...

mass: 48 g

dimensions in mm

ORDERING INFORMATION

Options	Series		Housing type	Termination
	XYA	1S:	cylinder	stainless steel wires
2M:		probe	Molex connector*	
5M:		screw fit probe, M18 x 1.5 (28 mm sensor header)	Molex connector*	
6M:		screw fit probe, M18 x 1.5 (45 mm sensor header)	Molex connector*	
7M:		screw fit probe, M18 x 1.5 (55 mm sensor header)	Molex connector*	
			* Molex mating connector: 39-01-2061 (plastic plug) 39-00-0041 (pins)	
Example:	XYA	2M		

Note: Custom specific options are widely available!
Please contact your nearest Sensortechincs sales office for further information.