
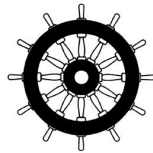


EXPLORER RTE and RTS SERIES

Sensors / Transmitters for toxic gas and oxygen



- Electrochemical cell technology
- Ex Aluminum Container for 3/4" NPT cable gland
- For ATEX 94/9/EC security systems ATEX 94/9/EC
- For ABS – RINA - MED  marine applications
- INOX Steel Sensor
- Complete series of accessories
- Very good price-quality relationship
- Very fast response



Toxic gas detection and oxygen is based on one electrochemical cell use.

RTE Series Sensors permit the monitoring in continuous of these gas in Exd-classified Areas, and are supplied with a die-cast aluminium tin container according to the ATEX indications.

RTS series sensors, on the contrary, can be used just in the safe areas.

Some sensors are available just in this version; while regarding other different gas detections, you can use both solutions. The toxic gas detection is been in ppm (parts for million), while the oxygen concentration is shown in % volume. Regarding the oxygen, 2 different sensors are available: the classic sensor with range 0-30% vol. and the KE-25 type sensor, for the oxygen measurements till 100% vol. in environments that are rich of carbon dioxide (CO₂).

The inner display, mounted on the transmitter PCB card, makes easy the check recurring procedures, the tests and the calibration, just through the 3 buttons use.

The sensors for inflammable gas, for Oxygen, for CO and for H₂S are approved for applications in the marine applications: RI.NA, MED and ABS Type Approval.

The transmitters are supplied with a specific circuit balancing automatically the zero point drifts out.

RTE series				
Name	Gas	Formula	Range	Code
RTE 1001	Oxygen	O ₂	0 ÷ 30 % vol	1001760
RTE 1002	Oxygen (KE-25 type)	O ₂	0 ÷ 100 % vol	1001780
RTE 1003	Carbon Monoxide	CO	0 ÷ 200 ppm	1001780
RTE 1004	Hydrogen Sulfide	H ₂ S	0 ÷ 100 ppm	1001800
RTE 1005	Nitrogen Dioxide	NO ₂	0 ÷ 50 ppm	1001810
RTE 1006	Nitrogen oxide	NO	0 ÷ 100 ppm	1001820
RTE 1007	Hydrogen cyanide	HCN	0 ÷ 30 ppm	1001830
RTE 1008	Tetrahydrothiophene	THT	0 ÷ 50 mg/m ³	1001840
RTE 1009	Tert-butyl mercaptan	TBM	0 ÷ 50 mg/m ³	1001850
RTS series				
Name	Gas	Formula	Range	Code
RTS 1001	Nitrogen	NH ₃	0 ÷ 100 ppm	1003020
RTS 1002	Sulfur Dioxide	SO ₂	0 ÷ 20 ppm	1003030
RTS 1003	Ethylene Oxide	ETO	0 ÷ 20 ppm	1001860
RTS 1004	Chlorine Dioxide	ClO ₂	0 ÷ 1 ppm	1003040
RTS 1006	Carbon monoxide	CO	0 ÷ 200 ppm	1003060
RTS 1007	Oxygen	O ₂	0 ÷ 30 % vol	1003070
RTS 1008	Chlorine	Cl ₂	0 ÷ 50 ppm	1003080
RTS 1009	Phosphine	PH ₃	0 ÷ 5 ppm	1003090
RTS 1010	Hydrogen chloride	HCl	0 ÷ 50 ppm	1003095

Technical Specifications for all the electrochemicals sensors	
Mechanical	
Enclosure	Die-cast aluminum
Dimensions	71 (H) x 40 (P) x 53 (L)
Weight	620 gr.
Enclosure rating	IP-6X
Electrical	
Display	Internal 7-segments, 4-digit LCD
Power supply	12- 24 Vcc
Absorption	5 – 25 W
Connection	4-20mA, 3 conductors
Working conditions	
Temperature	-20°C / + 55°C
Humidity	0% - 95% relative humidity (non-condensing)
Pression	Athmosferic +/- 10%

RTE 1001	OXYGEN
Range	0 ÷ 30 % vol
Max full range	30 % vol.
Sensor life	24 months in air
Calibration	100% N ₂ cod. 5301025
Signal drift	< 5% signal / year
Resolution	0,1 %
Response time	T ₉₀ < 15 sec.
Approval	ATEX II G Ex D IIC T6 Gb RINA ELE 272113CS MED 272113CS ABS 13-GE975317-PDA
RTE 1002	OXYGEN (KE-25 type) not influenced by CO₂
Range	0 ÷ 100 % vol
Max full range	100 % vol.
Sensor life	> 2,5 years in air
Calibration	100% N ₂ cod. 5301025
Signal drift	< 5% signal / year
Resolution	0,1 %
Response time	T ₉₀ < 15 sec.
Approval	ATEX II G Ex D IIC T6 Gb
RTE 1003	CARBON MONOXIDE CO
Range	0 ÷ 200 ppm
Max full range	2.000 ppm
Sensor life	24 months in air
Calibration	50 ppm CO, cod. 5301216
Signal drift	< 5% signal / month
Resolution	1 ppm
Response time	T ₉₀ < 60 sec.
Approval	ATEX II G Ex D IIC T6 Gb RINA ELE 272113CS MED 272113CS ABS 13-GE975317-PDA

RTE 1004	HYDROGEN SULPHIDE H₂S
Range	0 ÷ 200 ppm
Max full range	1.000 ppm
Sensor life	24 months in air
Calibration	25 ppm H ₂ S / aria, cod. 5301215
Signal drift	< 2% signal / year
Resolution	1 ppm
Response time	T ₉₀ < 35 sec.
Approval	ATEX II G Ex D IIC T6 Gb RINA ELE 272113CS MED 272113CS ABS 13-GE975317-PDA
RTE 1005	NITROGEN DIOXIDE NO₂
Range	0 ÷ 50 ppm
Max full range	50 ppm
Sensor life	2 years in air
Calibration	10 ppm NO ₂ , cod. 5301219
Signal drift	< 5% signal / month
Resolution	1 ppm
Response time	T ₉₀ < 35 sec.
Approval	ATEX II G Ex D IIC T6 Gb
RTE 1006	NITROGEN OXIDE NO
Range	0 ÷ 100 ppm
Max full range	100 ppm
Sensor life	2 years in air
Calibration	10 ppm NO, cod. 5301200
Signal drift	< 5% signal / month
Resolution	1 ppm
Response time	T ₉₀ < 30 sec.
Approval	ATEX II G Ex D IIC T6 Gb
RTE 1007	HYDROGEN CYANIDE HCN
Range	0 ÷ 100 ppm
Max full range	200 ppm
Sensor life	2 years in air
Calibration	10 ppm HCN, cod. 5301218
Signal drift	< 2% signal / month
Resolution	1 ppm
Response time	T ₉₀ < 150 sec.
Approval	ATEX II G Ex D IIC T6 Gb
RTE 1008	TETRAHYDROTHYOPHENE THT
Range	0 ÷ 50 mg/m ³
Max full range	50 mg/m ³
Sensor life	18 months in air
Signal drift	< 10% signal / 6 months
Resolution	1 mg/m ³
Response time	T ₉₀ < 30 sec.
Approval	ATEX II G Ex D IIC T6 Gb
RTE 1009	TERTBUTYLMERCAPTAN TBM
Range	0 ÷ 50 mg/m ³
Max full range	50 mg/m ³
Sensor life	12 mesi in aria
Signal drift	< 10% signal / 10 months
Resolution	1 mg/m ³
Response time	T ₉₀ < 90 sec.
Approval	ATEX II G Ex D IIC T6 Gb

RTS 1001	AMMONIA NH₃
Range	0 ÷ 100 ppm
Max full range	100 ppm
Sensor life	24 months in air
Calibration	25 ppm NH ₃ , cod. 5301210
Signal drift	< 5% signal / 6 months
Resolution	1 ppm
Response time	T ₉₀ < 120 sec.
RTS 1002	SULPHUR DIOXIDE SO₂
Range	0 ÷ 20 ppm
Max full range	100 ppm
Sensor life	12 months in air
Calibration	10 ppm SO ₂ , cod. 5301217
Signal drift	< 2% signal / month
Resolution	1 ppm
Response time	T ₉₀ < 15 sec.
RTS 1003	ETHYLENE OXIDE ETO
Range	0 ÷ 20 ppm
Max full range	100 ppm
Sensor life	2 anni in aria
Signal drift	< 5% segnale / anno
Resolution	0,1 ppm
Response time	T ₉₀ < 140 sec.
RTS 1004	CHLORINE DIOXIDE ClO₂
Range	0 ÷ 1 ppm
Max full range	1 ppm
Sensor life	2 years in air
Signal drift	< 10% signal / 6 months
Resolution	0,01 ppm
Response time	T ₉₀ < 120 sec.
RTS 1005	CHLORINE Cl₂
Range	0 ÷ 20 ppm
Max full range	250 ppm
Sensor life	12 months in air
Calibration	10 ppm Cl ₂ , cod. 5301220
Signal drift	< 2% signal / month
Resolution	0,1 ppm
Response time	T ₉₀ < 60 sec.
RTS 1010	HYDROGEN CHLORIDE HCl
Range	0 ÷ 50 ppm
Max full range	100 ppm
Sensor life	24 months in air
Signal drift	< 2% signal / month
Resolution	0,5 ppm
Response time	T ₉₀ < 120 sec.

OTHER SENSORS AVAILABLE