



ROTAREX
FIRETEC



DIMES
DIGITAL MEASURING SYSTEM

OPTIMIZED PRODUCTIVITY AND COST SAVINGS

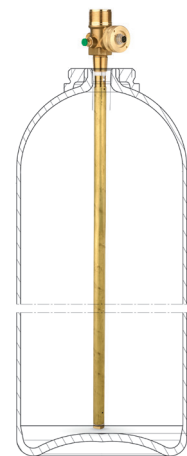


DIMES by ROTAREX stands for **D**igital **M**easurement **S**ystem. This innovative and patented technology electronically measures the cylinder CO₂ level in real-time – so you have full confidence that the system is armed and ready – and it simplifies annual maintenance.



DIGITALLY MEASURES CO₂ CYLINDER CONTENTS 24/7

- ★ DIMES sensor unit integrated into valve
- ★ Sensors monitor cylinder pressure and temperature (temperature compensation)
- ★ Integrated electronic control unit calculates exact CO₂ cylinder contents



PROACTIVELY WARNS IN THE EVENT OF A LEAK OR PROBLEM

HOW IT WORKS

The DIMES sensor unit is integrated into a special valve with a linear electrode. This replaces the standard system valve.

The built-in sensors monitor ambient temperature and the capacitance differential of the gas density between two electrodes in the dip tube.

An integrated microchip calculates the exact cylinder contents based on the known densities of CO₂ gas at different ambient temperatures. You input the cylinder volume and 100% fill level during a simple one-time configuration when the cylinder is filled.

If the contents would ever fall below a pre-set level, such as in the event of a leak, a warning signal will sound via the control box. A warning signal is also sent when the system discharges.



EASY AND EFFICIENT CONTROLLING OF CO₂ CONTENTS



- ★ Sole and unique technology preventing leaks and ensuring the system to be always ready to suppress a fire 24/7
- ★ Ideal for long-distance remote monitoring
- ★ Interventions only required if warning signal is sent in case the content is below alarm level
- ★ Easy adjustment of alarm level
- ★ In case of changing temperatures or vibrations, DIMES is the only reliable and accurate measurement technology

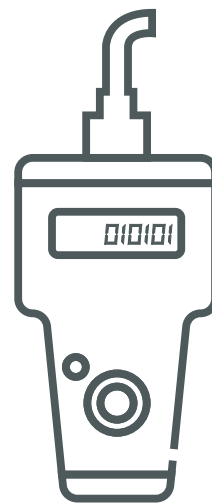
NO NEED TO DISMOUNT AND WEIGH CYLINDERS PERIODICALLY

- ★ Higher efficiency compared to traditional weighing systems, working time is significantly reduced
- ★ One single technician is enough
- ★ Easy and fast maintenance

NO MORE DISMANTLING AND WEIGHING



EASY MONITORING AND CALIBRATION



REAL-TIME DIGITAL MEASUREMENT FOR FIXED INSTALLATIONS

Single Cylinder



DIMES valve + control box connection cable



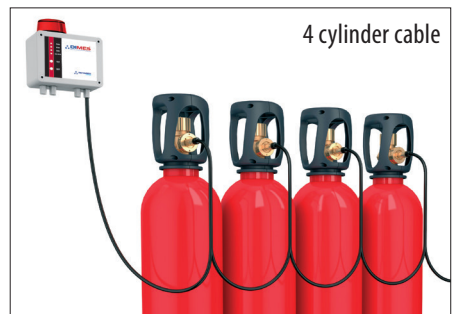
Multiple Cylinders



2 cylinder cable



3 cylinder cable



4 cylinder cable

DIMES valve + multiple cylinder connector cable + control box connection cable + end connector

DIMES ACCESSORIES



Control alarm box
Indicates that system is properly armed and sounds audio alarm when the system actuates. Compatible with any control box.



Calibration unit
Calibrates the valve to the cylinder using a built-in computer chip



Monitoring switch recommended to:
- monitor system status
- transmit alarm signals
- send an electronic shut-down signal

Technical characteristics of DIMES - electronic

Supply voltage	6 to 30 VDC	
Temperature range	- 20°C to + 60°C	
Alarm level	80 % (configurable)	
Max. switching power	20 W	
Max. contact rating	0,4 A	
Max. switching voltage	50 V	
Sealed housing	IP 67	
Max. dissipation rating	6 mA	
Max. dissipation power	12 VDC	24 VDC
	72 mW	144 mW

REAL-TIME DIGITAL MEASUREMENT FOR OBJECT PROTECTION



- ★ Improves certainty of system readiness
- ★ Possible to install on many different objects, such as electrical cabinets, CNC machines, fume hoods, etc.
- ★ DIMES cylinder valve assemblies for indirect high pressure systems (IHP)
- ★ Available with a wide choice of cylinder sizes (from 2 to 30kg)
- ★ Pneumatic detection (B0702 DIMES cylinder valve assemblies) or electronic detection (B0439 DIMES cylinder valve assemblies)
- ★ Maximum flexibility by configuring the system yourself
- ★ CE or DOT cylinders



A CHOICE OF DETECTION SYSTEMS

PNEUMATIC SENSOR TUBING



1. Quick & Easy installation directly inside the enclosures:

The flexible sensor tubing is easily installed directly inside the enclosure closer to where a fire could start.

2. Early fire detection:

If a fire occurs, the heat of the fire causes the pressurized sensor tube to burst at the hottest spot (approx. 110°C).

3. Instant suppression:

The sudden tube depressurization actuates the special pressure differential valve and instantly floods the entire enclosure with extinguishing agent. The fire is quickly suppressed just moments after it began... minimizing damage and downtime

SMOKE DETECTOR



2. Instant suppression:

The smoke detection system detects a fire and sends a signal to the solenoid valve which actuates the special pressure differential valve and instantly floods the entire enclosure with extinguishing agent. The fire is quickly suppressed just moments after it began... minimizing damage and downtime.

WORLDWIDE HEADQUARTERS

24, rue de Diekirch,
L-7440 Lintgen, Luxembourg
Tel.: +352 32 78 32-1
Fax: +352 32 78 32-854
E-mail: firetec@rotarex.com

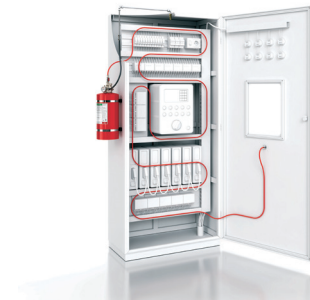
A COMPLETE RANGE OF SOLUTIONS FOR YOUR NEEDS



INERT GAS FIXED SYSTEMS



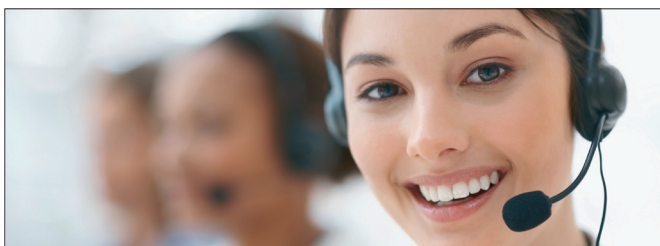
CO₂ FIXED SYSTEMS



OBJECT-PROTECTION SYSTEMS

HOW TO CONTACT US?

★ **CALL OUR CUSTOMER SERVICE TEAM**



+352 32 78 32-1

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firetec@rotarex.com