TMI-Orion

PicoVACQ 2PT Pressure and Temperature 4 Hz Type 3

Simultaneous measurement of the internal pressure of the container and of the environment inside the equipment during the thermal process.

The PicoVACQ 2PT 4 Hz Type 3 is an autonomous data logger equipped with two pressure sensors and two internal temperature sensors.

It is used with a gland system securing watertightness when mounted on the package.

The PicoVACQ 2PT 4 Hz allows to make a quick calculation of the differential pressure with Qlever software.

METROLOGY

	Operating range	Temperature resolution	Pressure resolution	Calibration uncertanties*
PicoVACQ 2PT 4 Hz Type 3 (15 bar absolute)	From -30°C to +140°C**	0.01°C	0.4 mbar	**Pressure:** ±10 mbar from 30 mbar to 15 bar **Temperature:** ± 0.09°C from 0°C to +140°C

Each logger can be calibrated and adjusted at the temperature points corresponding to the user's needs.

(*) The specified uncertainties correspond to two standard deviations. The uncertainties are calculated taking into account the various significant error sources, including the calibration probes, the equipment, the environmental conditions, the influence of the logger, repeatability, etc…
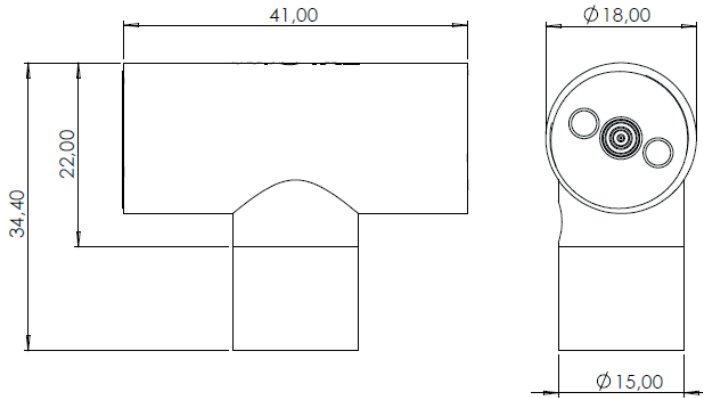*(**) The operating range varies depending on the battery pack used.*

FUNCTIONS

- Start set up: immediate or delayed.
- Time stamped measurement data.

- Battery level alert with Qlever software.

TECHNICAL SPECIFICATIONS

Model	Number of channels	Pressure sensor type	Internal temperature sensor	Watrertightness
PicoVACQ 2PT 4 Hz Type 3 15 bar	4	Piezoresistive	Internal platinum sensor for pressure sensor compensation	Up to 15 bar

Dimensions of the PicoVACQ 2PT 4 Hz Type 3 with 015P battery pack

Material	INOX 316L		
Dimensions of the logger, depending on operating range and battery pack	**Operating range**	**Battery pack**	**Dimensions (H x L x l)**
	From 0°C to +140°C	015P	34.4 mm x 41 mm x 18 mm
		015PV*	
	From -30°C to +85°C	015PW	59 mm x 41mm x 18 mm
		015PWV*	
	From -30°C to +100°C	015M	51 mm x 41 mm x 18 mm
	From -30°C to +140°C	016T	57 mm x 41 mm x 18 mm
		016PTA	82 mm x 41 mm x 18 mm
Memory capacity	32 675 acquisitions		
Acquisition rate	Programmable: from 4 acquisitions per second to 1 acquisition per 59 minutes and 59 seconds		
Program duration	Programmable: day, hour, minute		
Recording	Programmable start: by date, hour, minute or on temperature threshold		
Time drift	At 25°C and 1 Hz	± 1.5 second / 24 hours	
	Between -30°C and +140°C, at 1 Hz	± 4 seconds / 24 hours	
Power	User replaceable battery pack		
Connectivity	USB wired interface to the PC		

(*) The letter V indicates battery packs with a thread for a positioning kit.

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AUTONOMY

The PicoVACQ 2PT 4 Hz Type 3 is powered by a battery pack; its autonomy depends on environment and operational conditions of the application (temperatures at both ends of the mentioned operating range, data acquisition rate).

Please contact our sales department to optimize the choice of the battery pack according to the temperature of your application.

As a result of the variety of environments and operational conditions, TMI-Orion does not guarantee the battery lifetime and recommends that the user determine the battery lifetime according to his own process conditions and experience.

SOFTWARE AND RELATED PRODUCTS

The PicoVACQ 2PT 4 Hz Type 3 is used with Qlever software version 2.7.0.0 and higher.

Qlever software platform: data acquisition, management and visualization of data from TMI-Orion data loggers.

Qlever is installed on a PC and operates under Windows® 7/8/10/11. Data transmission and visualization are done after the industrial process

DELIVERABLES

The PicoVACQ 2PT 4 Hz Type 3 solution usually includes the following items :

- The PicoVACQ 2PT 4 Type 3 data logger with a battery pack,
- The PicoVACQ 2PT Type 3 calibration certificate,
- The PicoVACQ 2PT Type 3 configuration and calibration file,

- A gland system (to be ordered separately),
- Qlever software (to be ordered separately),
- A USB wired interface to the PC (to be ordered separately),
- A transport case (optional – to be ordered separately).

SERVICES

Maintenance : TMI-Orion recommends annual preventative maintenance and calibration service for the replacement of o-rings, functional checking, calibration and adjustment.

Accessories: The battery packs, engineered by TMI-Orion, are replaceable by the user and are referenced in the documents available on our web site.

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