Low Pressure

RECTUS Measuring-Systems

RectuTest



Detect power losses. Cut costs. Assign the true consumption to the right cost centre. Keep your compressed air system under control with RectuTest.

Determining the exact consumption of compressed air used to be a costly venture and was often rejected for investment reasons. It was also difficult to assess the effectiveness and level of efficiency of the compressed air tools used.

The RectuTest RT02 unit measures the flow of compressed air through pipelines. It determines the current volume flow with an accuracy level of approx. 2,5% of the measured value.

A specially developed nozzle is used to create a small pressure drop in the through-flow. This so-called effective pressure is a measure of the current flow volume. The exact standard volume flow is determined through simultaneous measurement of the medium temperature and the system pressures in the pressure line.

With its integrated display, the microprocessor-controlled RectuTest RT02 shows either the current volume flow in standard I/min or standard m3/h. Further display options are: compressed air consumption in m³/h, system pressure in bar and system temperature in °C.

The network function is specially integrated for several permanently installed devices. This permits the simple remote control and remote scanning of an almost unlimited number of RectuTest RT02 units through a linked-up PC.

Technical data

Housing: ABS grey (IP 65), W 80 x L 240 x H 60 mm

Power supply: 220 V/5 watts

Operating temperature: 0°C up to 60°C

Pressure drop: 0,1 bar (in the nozzle)

Measuring accuracy: ± 2,5% of measured value (flow rate and consumption measurement in the specified operating temperature and measuring ranges, according to table)

Permissible operating pressure: max. 10 bar

Resistance to pressure: max. 16 bar (without measurement)

Network: Any number of measuring units can be linked up using network socket

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| | Description | Part Number |
|-------------------------------------|--|-------------|
| Standard Design: | RectuTest with following equipment: | RT 02 Set |
| | - 1/2" measuring nozzle | |
| | - 2 pcs. 2 m plastic hose | |
| | - temperature sensor with cable | |
| | - software for PC port | |
| | - PC connecting cable | |
| | - connection coupling | |
| | - operating instructions | |
| | - equipment case | |
| | | |
| Optional equipment: | Measuring diaphragm Ø 2 with 1/4" pipe thread* | RD 13/02 |
| | | |
| | Measuring diaphragm Ø 4 with 1/4" pipe thread* | RD 13/04 |
| | | |
| | 1" measuring nozzle with 1" pipe thread* | RD 33 |
| | | |
| | 2" measuring nozzle with 2" pipe thread* | RD 60 |
| | | |
| | Network cable for connecting several meters | RTZ_01 |
| * made of nickel-plated brass incl. | (standard 5 m, other lengths on request) | |
| CD-ROM with calibration data. | | |

Scope of delivery

The RectuTest RT02 is supplied in a sturdy case with plastic inserts. The standard equipment includes the following:

- RectuTest RT02 measuring unit with power cable
- 1/2" nozzle (calibrated)
- measuring hoses made of PA, each 2 m long
- temperature sensor with 2 m connecting cable
- one set of quick connect couplings complete with connectors
- PC connecting cable 5 m for parallel port software on 3,5" disk for remote control of the RectuTest RT02
- operating instructions

The following are available as optional extras:

- 16-bit software (Win 3,1x)
- PC cable for serial port

- other measuring nozzles on request
- network cable, length at customer's request
- analog interface, 4-20 mA, 0-1 V
- ** with calibration data on CD-ROM

Software for Windows 95 + Win 98 + Win NT 4.0 allowing remote control of all functions of an individual unit or of all networked units through a PC is supplied with the RectuTest RT02. The measured results can be continuously stored, with time stamp. The stored data can be printed out or further processed using other software programs, such as Word or Excel. Hardware requirements: PC with Windows 95 or higher, with CD-ROM-drive. In this way, the compressed air consumption can be assigned to the individual cost centres in the company.

Further applications are, for example, checking volume flows for values that are too high or too low.

| Measuring ranges for compressed air | | | | | | |
|-------------------------------------|-------------------------------------|-------------|-------------|--------------|---------------|--|
| Output | Volume flow, standardised in I/min. | | | | | |
| pressure | 2 mm nozzle | 4 mm nozzle | 1/2" nozzle | 1" nozzle | 2" nozzle | |
| 1 bar | 3,2 to 48 | 14 to 210 | 102 to 1530 | 287 to 4300 | 1136 to 17000 | |
| 6 bar | 6,3 to 95 | 27 to 410 | 200 to 3000 | 567 to 8500 | 2200 to 33000 | |
| 10 bar | 8,0 to 120 | 34 to 510 | 250 to 3750 | 700 to 10500 | 2760 to 41500 | |
| | | | | | | |

