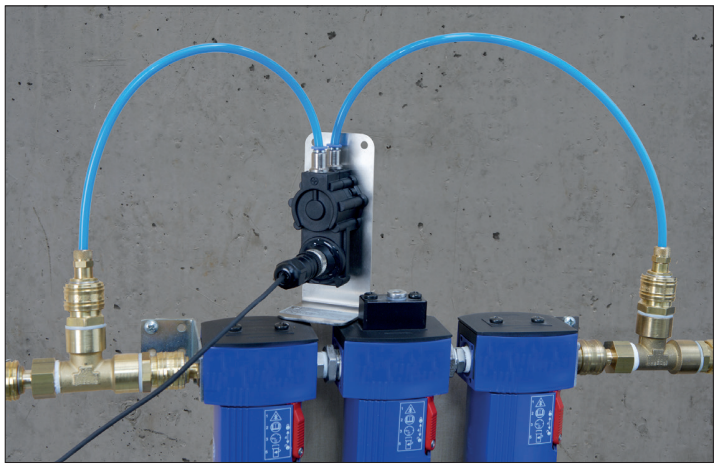
Differential pressure probe for testing on compressed air systems



Typical application of the differential pressure sensor: connection with two PE hoses before and after filter elements.

Requirements in practice:

- Timely replacement of the filter elements
- At a differential pressure of >350 mbar at the latest, the filter elements should be replaced (active carbon filters are excluded from this)

DESCRIPTION	ORDER NO.
Differential pressure probe 23 psi diff.	0694 3561
Connection cable for probes 16 ft., with open ends	0553 0108
Connection cable for probes 32 ft., with open ends	0553 0109
Connection cable for pressure, temperature or external sensors on mobile instruments, ODU / open ends, 16 ft.	0553 0501
Connection cable for pressure, temperature or external sensors on mobile instruments, 32 ft.	0553 0502

TECHNICAL DATA	
Measuring range:	0...23 psi difference
Max. system pressure:	145 psi
Max. overload capability two-sided:	217.5 psi
Max. one-sided overload capability:	
+ side	217.5 psi
- side	145 psi
Bursting pressure:	870 psi
Total error:	2.0% of the full scale
Output:	4 … 20 mA two-wire
Power supply:	10 … 30 V for output 4…20 mA
Ambient operating temperature:	-4...176 °F
Connections:	2× G 1/8" female thread incl. plug-in coupling for 6 mm hose
Electrical connection:	Round plug M12 × 1

The longer a filter element is in use, the quicker the differential pressure is rising, and consequently the costs – see diagram below.

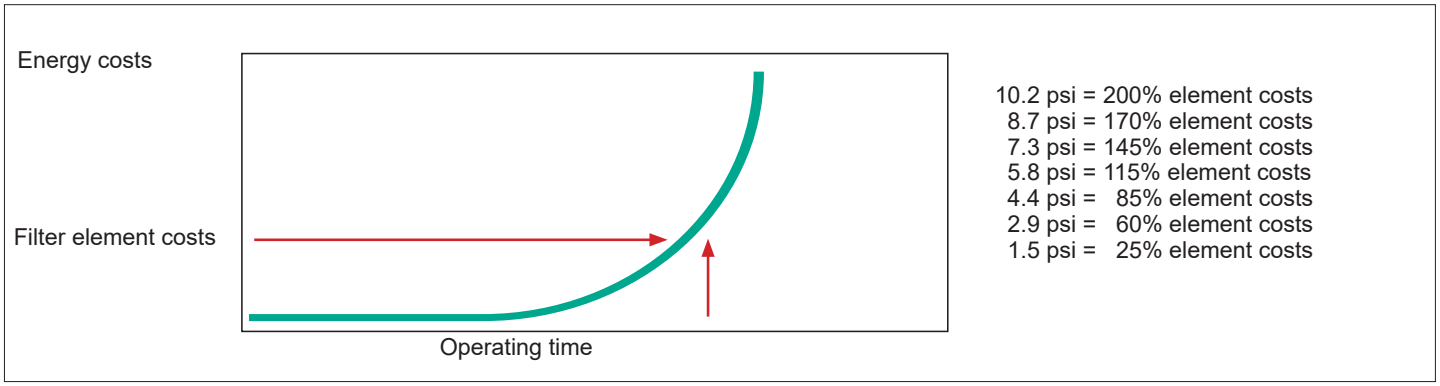
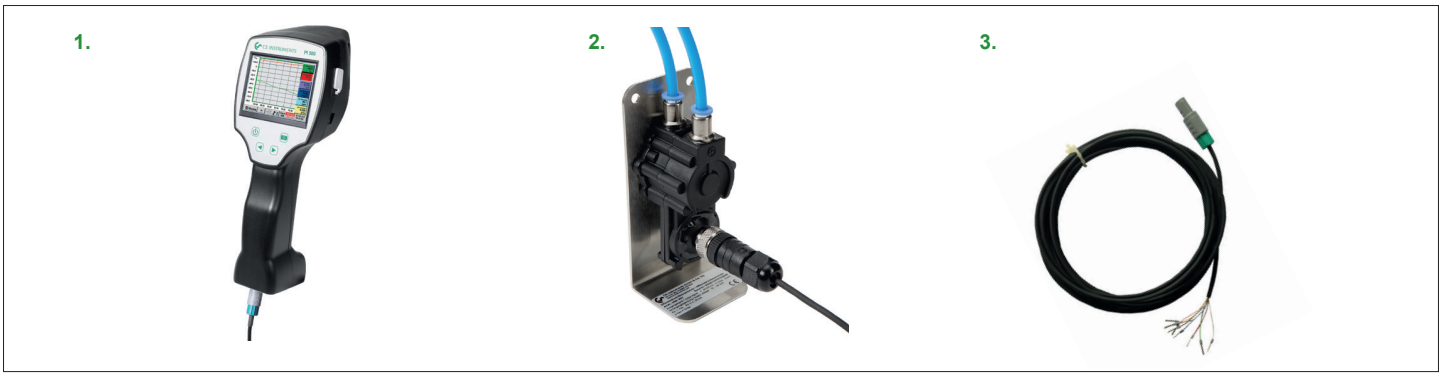


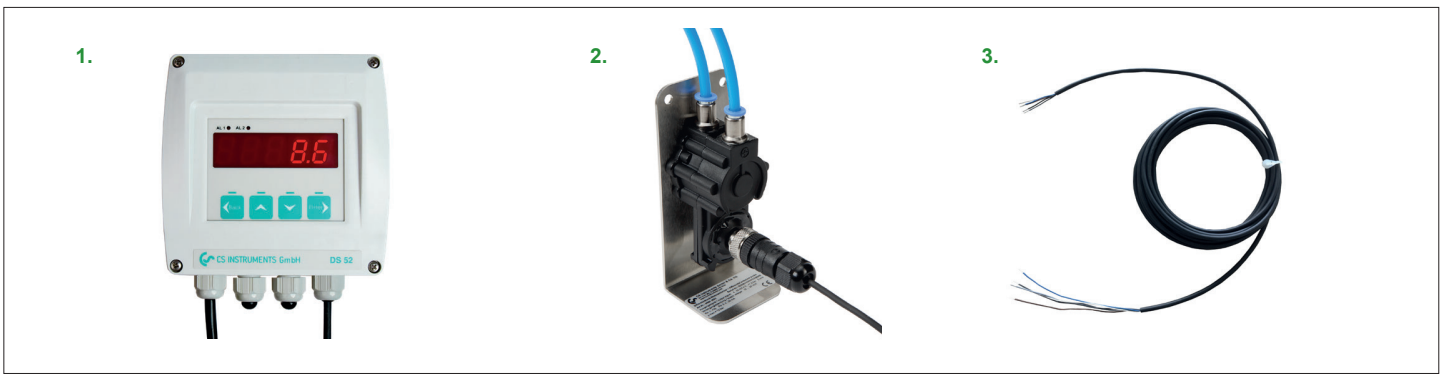
Fig.: Typical differential pressure process, energy costs in relation to filter element costs

PI 500 set for mobile measurement



1. PI 500 portable handheld device with integrated data logger	0560 0511
2. Differential pressure probe 23 psi diff.	0694 3561
3. Connection cable for pressure, temperature or external sensors to mobile devices, ODU / open ends, 16 ft	0553 0501

DS 52 set for stationary measurement



1. DS 52 LED process display in the wall housing	0500 0009
2. Differential pressure probe 23 psi diff.	0694 3561
3. Connection cable for probes 16 ft, with open ends	0553 0108