



M I S U R A &
AUTOMAZIONE

Pharma



Trasmittitore di pressione differenziale Altra Precisione Singolo Canale

- Campi di pressione unidirezionali e bidirezionali
- Range da 25 Pa a 7000 Pa
- Accuracy $\pm 0.07\%$ FS , 0.25%, 0.4%, 0.5%, 1% FS
- Segnali 0 to 5 VDC, 0 to 10 VDC (4-wire), 4-20mA (2-wire)
- Optional LCD Display
- High Overpressure Capability >100X Range
- Stability <0.15% FS/YR
- Response time to pressure input
 - <10 ms for Voltage Output
 - <50 ms for Current Output
- Fluidi Clean, dry gases compatibili con stainless steel and 17-4 pH stainless steel



1. Sterilized
product

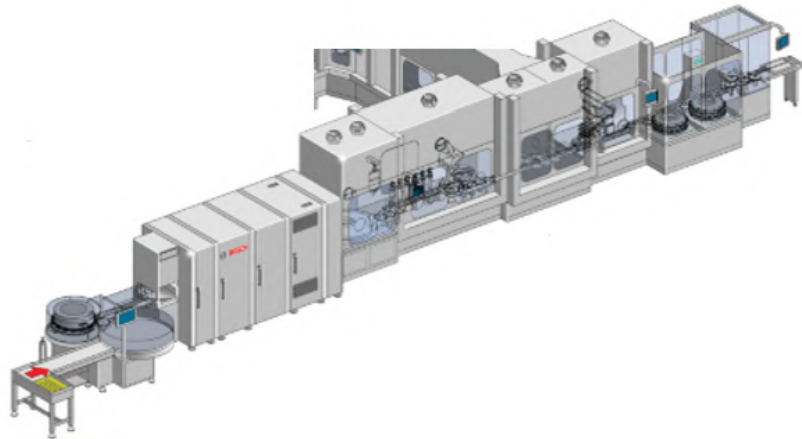
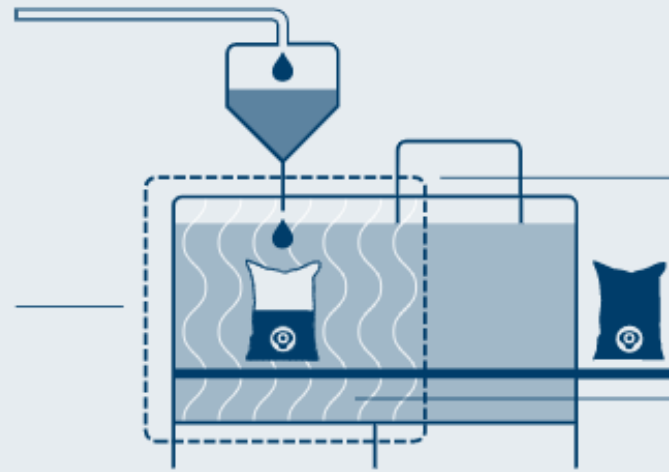


2. Sterilized
packaging



3. Vapor
Sterilization

4. Sterile
Filling Chamber



Clean Room and Aseptic Filling

DE90 - Trasmettitore di pressione differenziale Flow Dynamic Filter Monitor

Doppio Canale + Canale Virtuale



- 2 Canali ingresso di pressione + 1 Virtual Channel
- Range di pressione Simmetrici e Asimmetrici da 25 Pa a 250mbar
- Campo scala scalabile 4:1
- Fluido Gas (materiali a contatto Silicon, PVC, FKM, aluminium, brass, stainless steel)
- Unità' bar, mbar, Pa, kPa,MPa, psi, InWc,mmH2O, mmHg ,Free Unit programmabile
- Portata : m3/h , cfm , l/s , cmh - K Factor - Air Density
- Punto decimale / Start point- End Point programmabile nel range di pressione
- Accuratezza 0,5% FS
- Compensation range 0..60°C
- 2 Uscite elettriche configurabili e assegnabili ai 3 canali
0/4 ... 20 mA 0/2 ... 10 V 1...5V RS485
- Modbus RTU
- Micro USB type B (per *programmazione con Software InTouch*)
- 4 Contatti allarmi (NO/NC)
- LCD Display (Cambio Colore / Grafico)
- Curve uscita : lineare , radice quadrata , portata volume, tabella con 30 punti, funzione lineare
Virtual Channel : differenza fra ingressi | Dynamic Filter Monitoring
- Multilingua
- Silicon Free

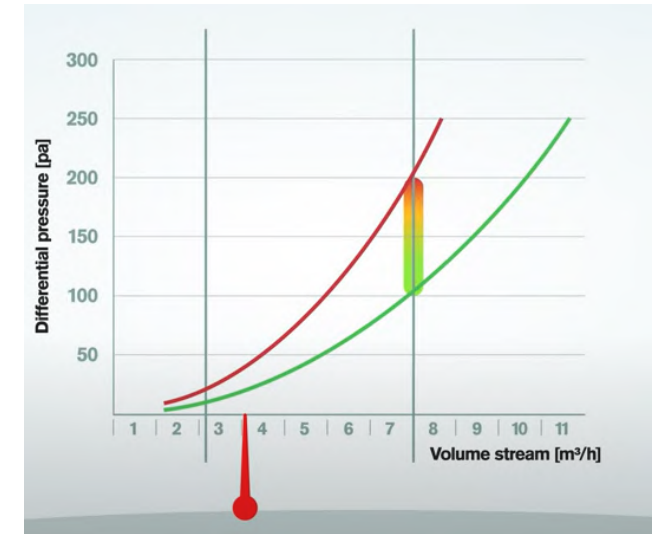
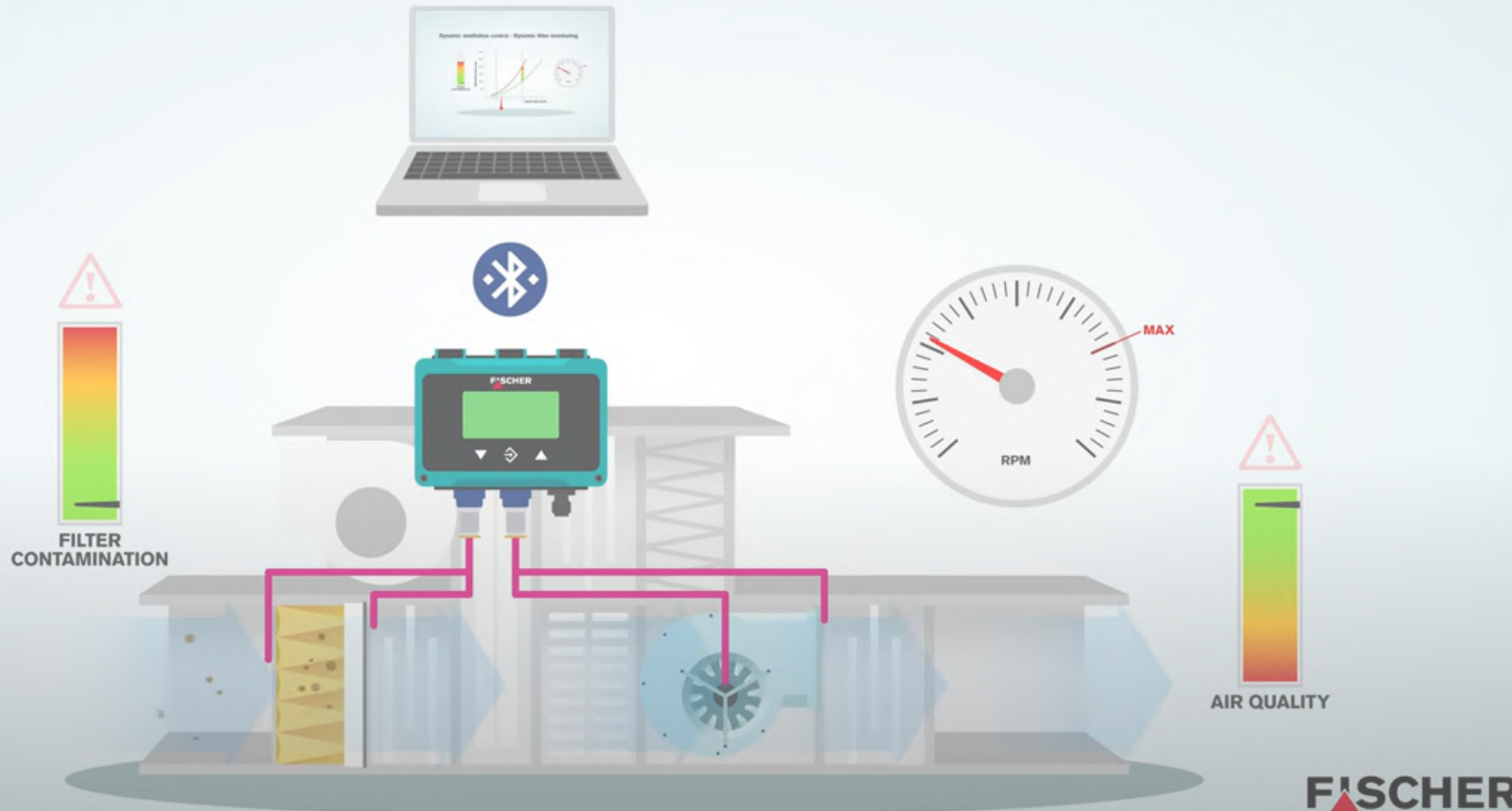


IEC 61508
SIL2
ISO 13849
PLd



Ex II 3G Ex nA IIC T4 Gc
Ex II 3D Ex tc IIIB T125°C Dc

Dynamic ventilation control - Dynamic filter monitoring

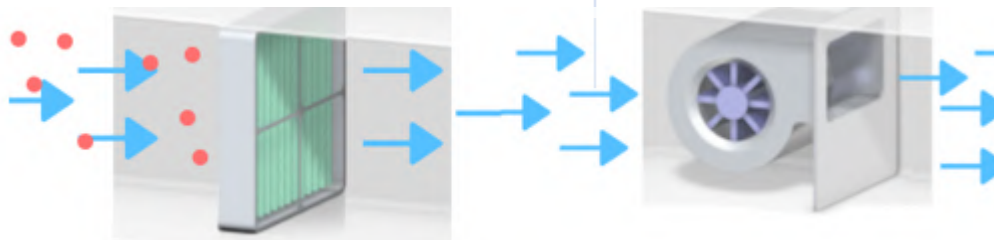
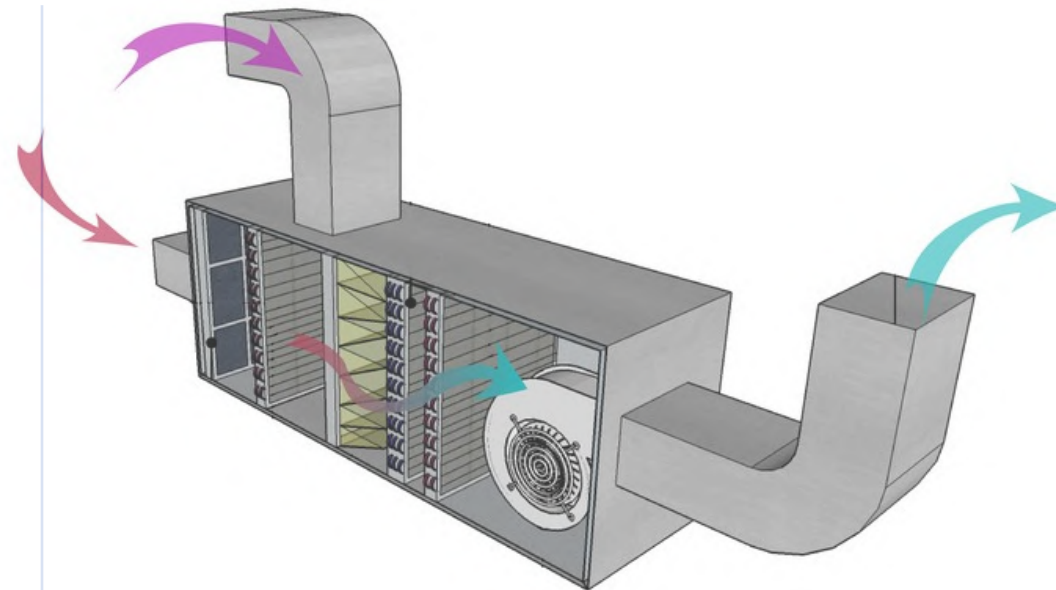
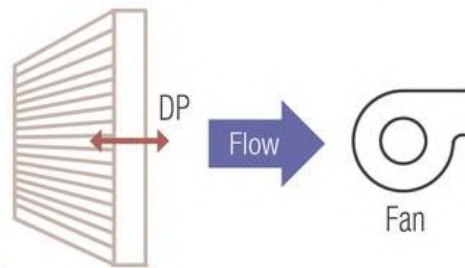
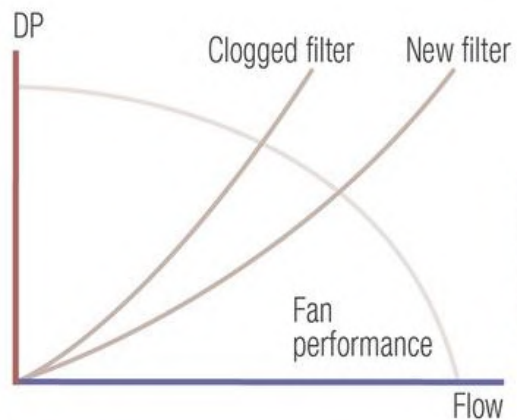


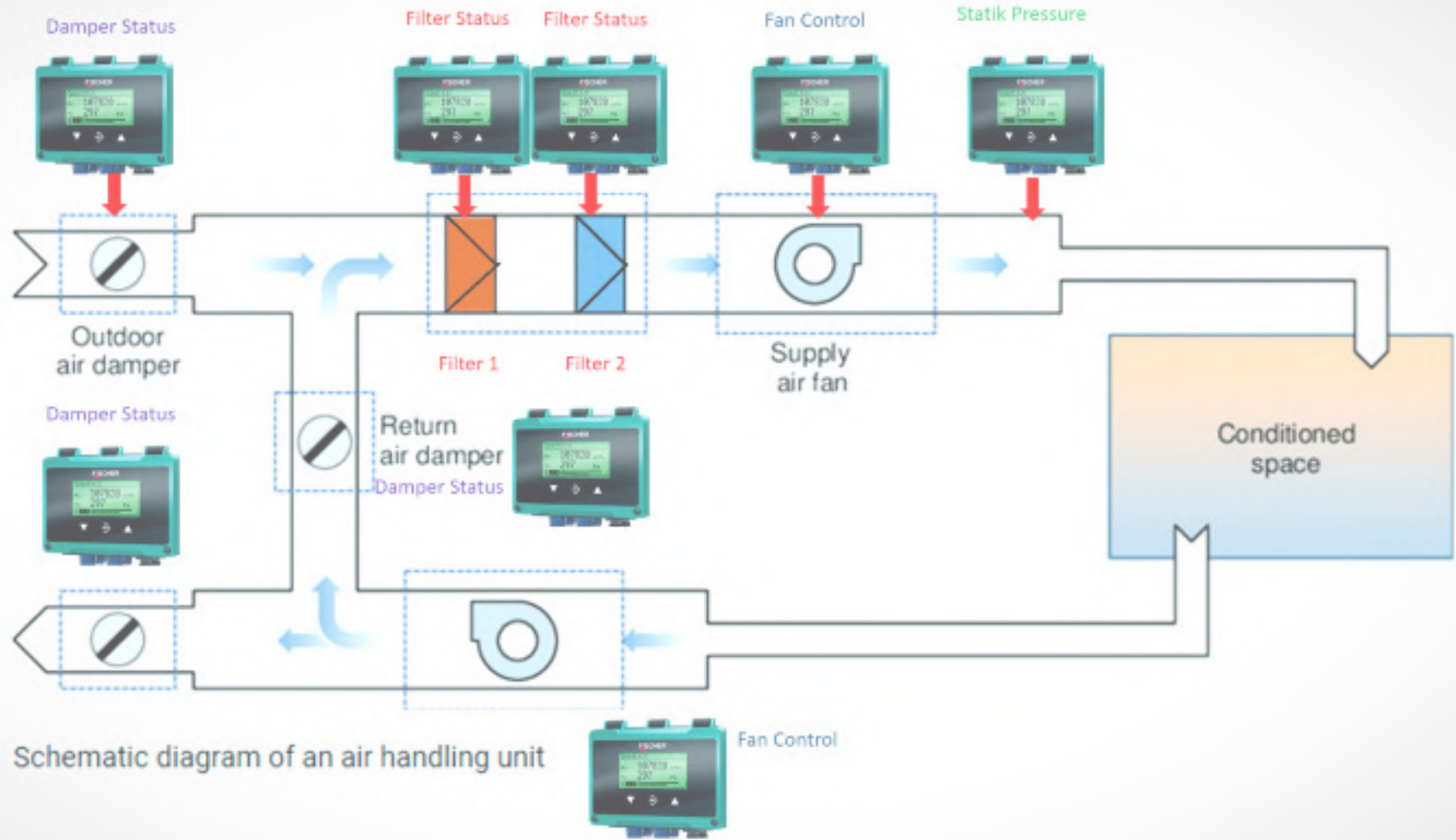
Applicazioni

- Space and clean room monitoring
- Supply and exhaust air systems
- Filter monitoring
- Flow rate measurement
- Surface coating systems
- Process monitoring
- TNV system

Applicazioni - Monitoraggio intasamento filtri

Unita' Trattamento Aria





Schematic diagram of an air handling unit

FT90 - Trasmettitore pressione differenziale, Umidita' relativa, Temperatura in un unico strumento



- 1 Canale ingresso di pressione differenziale + 1 Canale di umidita'/temperatura
- Range di Umidita' 0 to 100 %rH - accuratezza 3 %rH
- Sensore di umidita'/temperature con o senza cavo in Stainless Steel
- Range di temperature -40 to +100 °C accuratezza 0.4°C
- Range di pressione Simmetrici e Asimmetrici da 25 Pa a 250mbar
- Accuratezza sulla misura di pressione 0.5%
- Campo scala scalabile 4:1
- Fluido Gas
- Pressione (materiali a contatto Silicon, PVC, FKM, aluminium, brass, stainless steel)
- Umidita' (materiali FR4, stainless steel, solder resist, silicon, tin, copper, nickel, silver, ceramic)
- Unità bar, mbar, Pa, kPa,MPa, psi, InWc,mmH2O, mmHg ,Free Unit programmabile
- Curve caratteristiche impostabili
Curve uscita : lineare , radice quadrata , portata volume, tabella con 30 punti, funzione lineare
- Fino a 3 segnali uscita - 0/4 to 20 mA, 0/2 to 10 V, or 1 to 5 V
- Fino a 4 allarmi assegnabili
- USB OTG
- RS485 Modbus RTU (opzionale)
- Display LCD con Cambio Colore allarme
- Multilingua



Ex II 3G Ex ec IIC T4 Gc
Ex II 3D Ex tc IIIB T125°C Dc

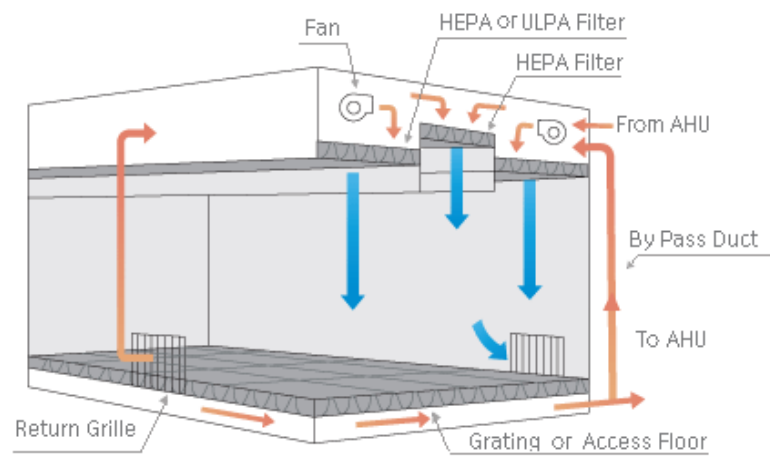
Applicazioni

- Space and clean room monitoring
- Isolators
- air systems Filter monitoring
- Flow rate measurement

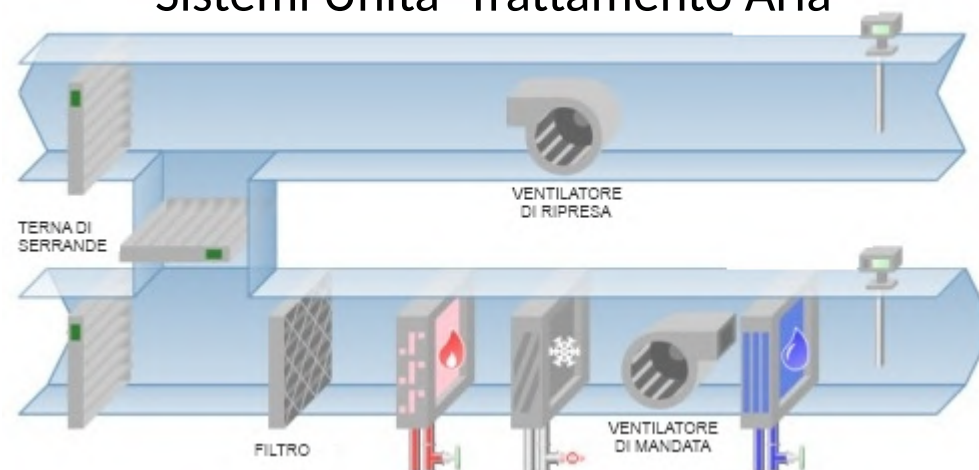
Sonde di Umidita' / Temperatura industriali ad alta precisione

- FDA 21 CFR Part 11 / GAMP compatibile
- IP66 / Conforme UL94-HB
- $\pm 0.8\%$ ur / ± 0.1 K
- Calcoli psicrometrici
- Segnali uscita 2 x 0...1 V, 0...5 V, 0...10 V, 0(4)...20 mA
- Modelli alta temperature -100...200 °C
- Sonde ATEX





Sistemi Unità' Trattamento Aria



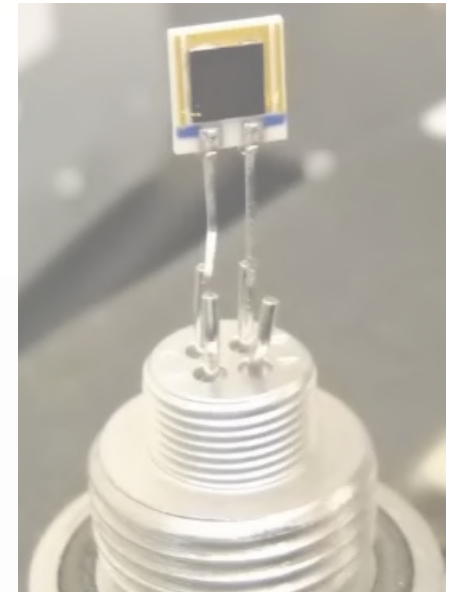
Thin-film aluminum oxide

- Dew point range -100°C a 20 °C
- Flow rate: Static to 10,000-cm/s linear velocity at 1 atm
- Calibrated Accuracy @ 25 °C
 - ±2°C da 65°C a 10°C dew/frost point
 - ±3°C da -80°C a -66°C dew/frost point

- Loop-powered 4 to 20 mA output
- Operating Pressure 345 bar
- Type 4X/IP67 enclosure
- Operating temperature Range [-40°C to 60°C]
- Repeatability
 - ±0.5°C da -65°C a 10°C
 - ±1.0°C da -80°C to -66°C

Hazardous Area Certification

- C-US Class I, Division 1, Groups A,B,C&D, Type 4X
- II 1 G EEx ia IIC T4 (ATEX)
- Ex ia IIC T4 (IEC Ex)
- Built-in temperature and pressure sensors



Trasmettitore di Ossigeno Oxy . IQ

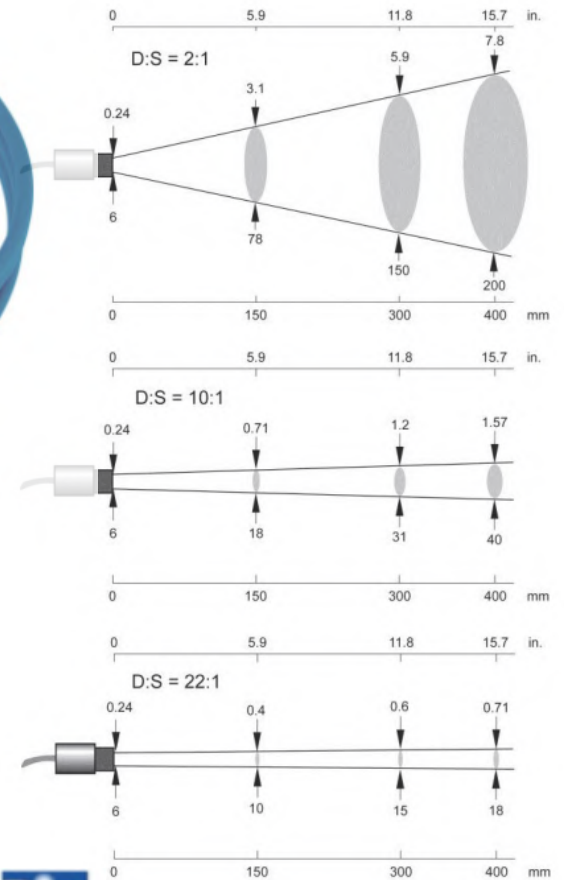
- Two-wire, loop-powered 4 to 20 mA transmitter
- Display with keypad
- Intrinsically safe option for Class 1 Div 1 and Div 2 locations
- ATEX and IECEx : Ex ia IIC Ga T4 Tamb -20 to 60°C
- Ex flameproof option
- Galvanic fuel cell O₂ sensor technology
- User selectable ranges for ppm
(from 10 ppm to 10,000 ppm) and percent oxygen (1% to 50%)
- Accuracy
 - ±1% of range at calibration point
 - ±2% of range at the calibration point for the 0 to 10 ppmv range
- Sample Flow rate 500 cc/min





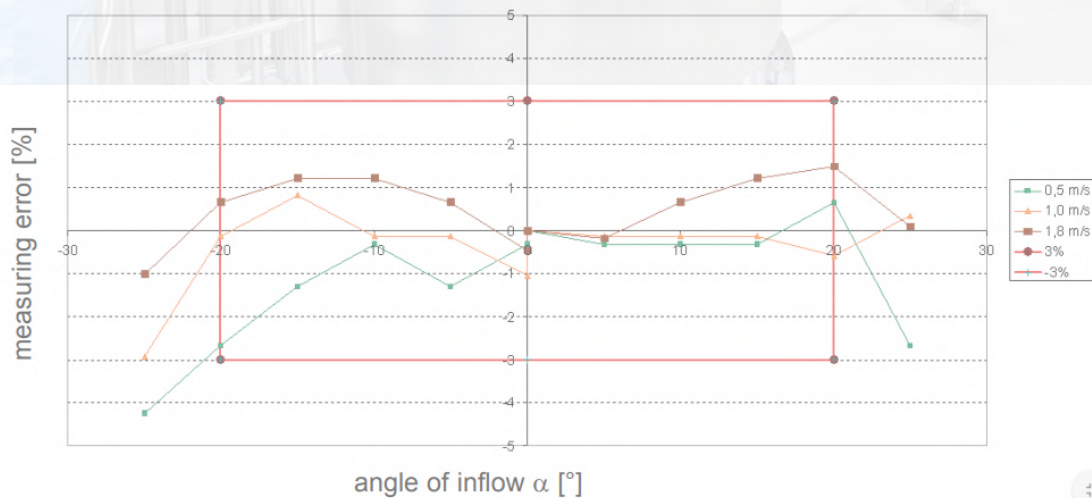
Pirometri ottici per misura della temperatura

- Temperature Range -40 to 1000°C
- Spectral Response 8 - 14 μm
- Optical Resolution1 LTS (standard) 2:1, 10:1, 22:1
- Accuracy $\pm$ (1% of reading or 1°C)
- Output 4 - 20 mA, 0 - 20 mA, 0 - 5 V, or 0 - 10 V , J, K, R, or S thermocouple, 0 - 5 V head ambient signal
- Response Time LTS (standard) 130 ms / Fast 20ms
- Emissivity ϵ 0.100 to 1.100
- Transmission 0.100 to 1.000
- Signal Processing Peak hold, valley hold, adjustable up to 998 s variable averaging filter
- Digital electronics with an LCD, push-button interface for sensor configuration, and connection terminals housed in an IP65
- Digital interface RS485 / Profibus /Profinet / Modbus



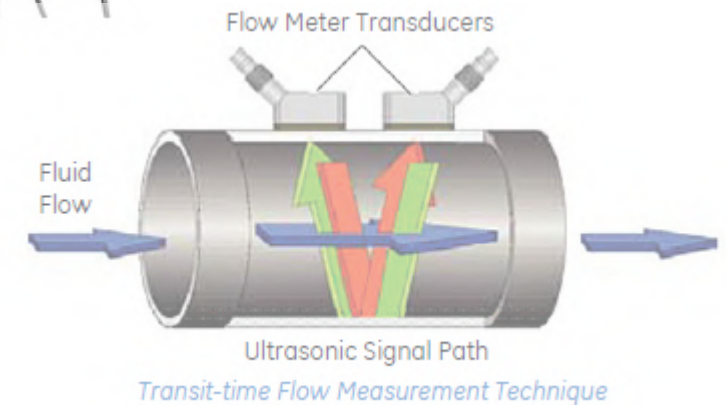
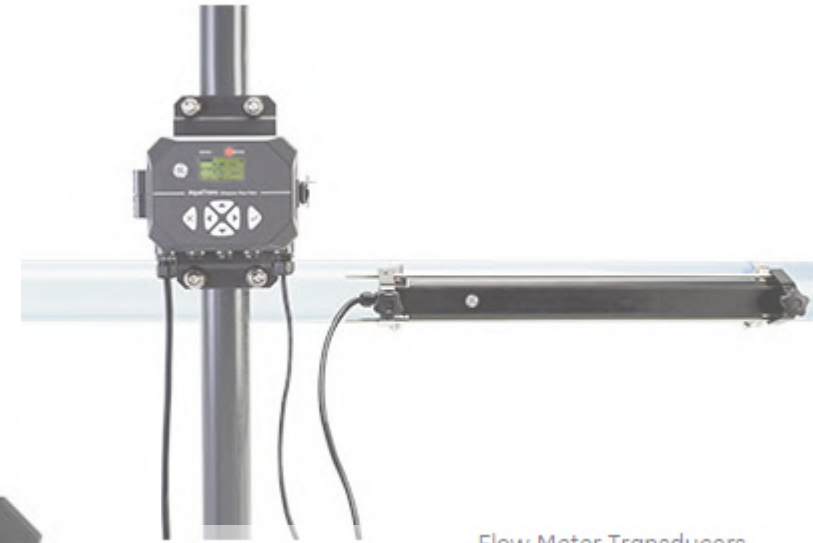
Anemometro misura della velocita' aria

- Air Velocity range 0... 2 m/s / 0... 10 m/s / 0...40m/s
- Accuracy ± 0.03 m/s / ± 0.1 m/s / $\pm 0,2$ m/s
- Temperature: -40 to 248°F (-40 to 120°C)
- Output voltage 0-10 V (e.g: 0-5 V, 1-5 V etc.)
current (3-wire) 0-20 mA (e.g: 4-20 mA etc.)
- Calculation of volumetric flow rate
- Low dependence on the angle of inflow
- Diameter: 8mm
- Remote probe up to 10m
- Pressure, humidity, & media low flow cut-off correction
- Pressure rating up to 10bar



Misuratore di portata liquidi ad ultrasuoni Clamp-On

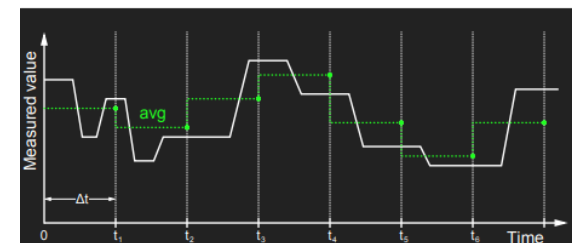
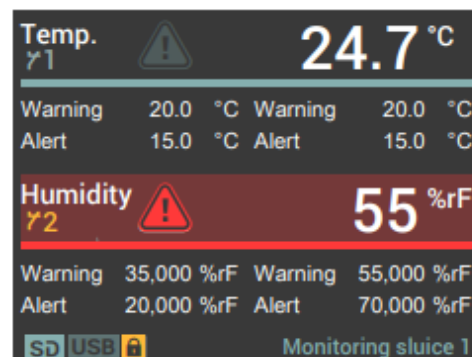
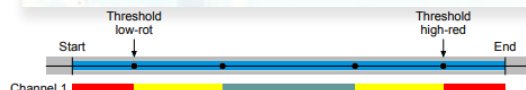
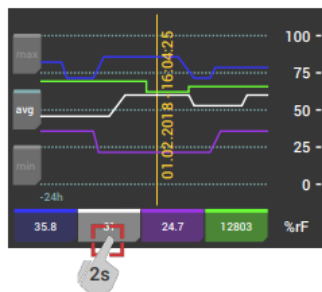
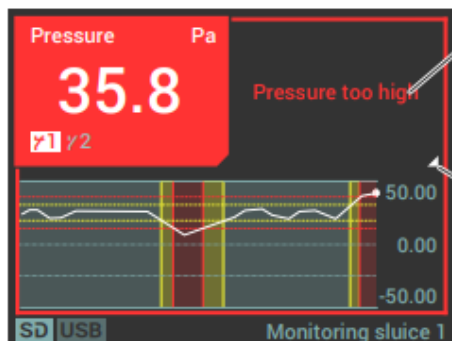
- Accuracy
- $\pm 1\%$ della lettura nell'applicazione
- $\pm 0,5\%$ nella calibrazione sul campo
- Ripetibilita' 0,2% lettura
- Uscite 4-20 mA , Frequenza , impulso, allarme
- Modbus/RS485
- Range di temperatura dei trasduttori -40 to 230°C
- Diametri da 15mm a 7600mm
- Velocita' -12,19/+12,19 bidirezionale
- Elettronica IP67
- Display
- Rangeability 400:1
- Fluidi monofase / acqua glicole



EA15 - Indicatore e Datalogger Touch Screen



- 2,8" LCD Touch Screen Display
- 2 o 4 canali analogici configurabili in ingresso (4/20 mA .. 0/10 V)
ingressi scalabili , offset , curve caratteristiche
- 2 o 4 uscite analogiche
- Sampling frequency fino a 8Hz
- Fino a 8 allarmi (relay /Mosfet) configurabili
- Allarme acustico con riconoscimento o a tempo
- Funzioni Differenza / Radice / Dynamic Filter Monitoring
- Curve uscita: lineare , radice quadrata , portata volume, tabella con 30 punti
- Isteresi / funzione window / funzione traffic-light
- Modbus RTU (opzionale)
- Datalogger on MicroSD
- 4 livelli di accesso utente
- USB / Log download / interfaccia per configurazione con software *inTouch*



Eurotherm

Schneider
Electric

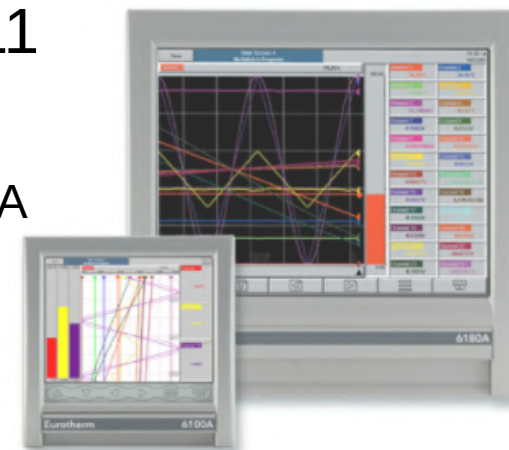
Registrazione Certificata FDA CFR21 Part 11

- Registrazione FDA CFR21 Part 11
- Display con schermo touchscreen a colori
- Velocita' Registrazione / Trend Speed 8Hz
- Fino a 48 canali di ingresso universali
- Funzionalità batch, totalizzatori, pacchetti matematici
- Reports
- Gruppi
- EtherNet/IP Server, Modbus TCP/RTU Master & Slave
- Visualizzazione e configurazione remote
- Schede I/O modulari
- Audit trail completo
- USB plug & play
- IP66

- Regolazione Doppio Loop indipendente o cascata
- Programmatore : 100 programmi /25 Spezzate
- Algoritmi User wired



Modello 6100 A /6180A
Registratori



VERSADAC
Registratore cieco
retroquadro



NANODAC
Registratore / Regolatore



Indicatore di Pressione, Temperatura - Leak Tester DPI705E

- Indicatore di pressione portatile
- Campi di misura da 25mBar a 700 Bar
- Accuratezza misura pressione 0,1% FS
- Opzione High Precision 0,05%FS
- Risoluzione display
- 5 Digit

- Leggero - 500 g
- Piccolo , utilizzabile con una mano sola

- Funzionalità' aggiuntive
- Leak Test
- Tara
- Filtri
- Multirange
- ATEX
- Allarmi

- Sensori Remoti opzionali
- Pressione
- Temperatura RTD

