

EMS-CF-FP-K

Filter performance monitoring installation kit, static pressure tip, connector and valve

Installation accessory for differential-pressure monitoring across a filter element

An installation kit containing a static pressure tip, a connector and a valve, published for differential-pressure monitoring across a filter element. It serves the 35 psid (2.4 bar) change-out point and has to let the transmitter read the whole element window, from 0.17 bar (2 psid) on a clean 2 µm element to the 60 psid (4.1 bar) maximum published at 20 °C (68 °F). It carries no measuring element of its own, so its pressure and connection rows stay open and are confirmed at order.

ORDERING INFORMATION

Part number	EMS-CF-FP-K
Instrument	Filter performance monitoring installation kit
Contents	Static pressure tip, connector, valve
Serves	Differential-pressure monitoring across a filter element
Change-out point served	35 psid (2.4 bar)
Compatible transmitter span	0 to at least 2.4 bar (35 psid)
Pressure rating	Open — confirmed at order
Wetted materials	Open — confirmed at order

WHAT THE KIT DOES

Parameter	Value	Notes
Contents	Static pressure tip, connector, valve	Published kit contents
Duty	Differential-pressure monitoring across a filter element	The published use case for this kit
Change-out point it serves	35 psid (2.4 bar)	The recommended element change-out differential pressure
Clean reference the pair must read	0.17 bar (2 psid)	Published on a clean 2 µm element; the bottom of the operating window
Maximum the pair must read	60 psid (4.1 bar)	At 20 °C (68 °F); past this the element is outside its published differential limit
Span the paired transmitter must cover	0 to at least 2.4 bar (35 psid)	The published selection rule for liquid element monitoring
Temperature condition	ΔP is comparable only at a stated temperature	The published maximum is specified at 20 °C (68 °F)

INSTALLATION

Parameter	Value	Notes
Installation position	Across the filter element	On a side-stream branch or a full-flow housing
Compatible transmitters	A liquid-service differential-pressure transmitter spanning 0 to at least 2.4 bar (35 psid)	The low-range ±125 Pa and ±500 Pa units in this family do not reach this window: their full scales are 0.018 psi and 0.0725 psi (derived)

Parameter	Value	Notes
Line-pressure context	Side-stream vessel published to 150 psi (10.3 bar)	Proof-tested at 1.5× rated maximum working pressure under IEC 62368-1, about 15.5 bar (derived)
Process connection	Open — not published	Thread and port size confirmed against the supplier document at order
Static and line pressure limit	Open — not published	Confirmed against the supplier document at order
Wetted materials	Open — not published	Confirmed against the supplier document at order
Supply voltage	Not applicable	The kit is a mechanical accessory and carries no measuring element or electronics
Calibration interval	Not applicable to the kit	The transmitter the kit serves carries the calibration row; it is not published in the source research and is confirmed at order

READINGS THE KIT EXISTS TO PRODUCE

Parameter	Value	Notes
Change-out trigger	35 psid (2.4 bar)	Differential pressure is the primary element-change trigger; a flow reading alone shows the symptom
Diagnostic pairing	Steady flow with rising ΔP means the element is loading normally	Falling flow with rising ΔP points to prefiltration upstream; falling flow with steady ΔP points to a partial blockage elsewhere
Headroom, clean to change-out	About 17×	Derived from the two published figures
Headroom, clean to maximum	About 30×	Derived from the two published figures
Consequence past change-out	Falling flow, falling local heat rejection, rising core temperature	A blocked microchannel removes local heat rejection entirely; cold-plate channels run about 100–300 μm
Bands read beside this kit, by loop type	Glycol-premix or facility-water loop: 50–300 $\mu\text{S}/\text{cm}$ and pH 7.0–9.0. De-ionised technology cooling loop: 0.2–20 $\mu\text{S}/\text{cm}$ and pH 8.0–9.5	Both columns are published because the loop type decides which band applies

APPLICATIONS

- Differential-pressure tapping across a side-stream filter element
- Differential-pressure tapping across a full-flow filter housing
- Retrofit of a ΔP measurement to an existing housing
- Heat-exchanger differential-pressure tapping on the same loop

COMPATIBLE PRODUCTS

- EMS-CF-FP-DP liquid-service element differential-pressure monitor
- EMS-CF-FP-FC or EMS-CF-FP-FL for the flow side of the same trend
- EMS-CF-S10 and the wider side-stream unit ladder
- EMS-CF-F5-20, EMS-CF-F1-20 and the wider cartridge ladder

FLOW AND DIFFERENTIAL-PRESSURE LADDER

Parameter	Value	Notes
EMS-CF-FP-FL	Full-bore magnetic flow meter	1–24 in (DN25–DN600); $\pm 0.75\%$ of rate

Parameter	Value	Notes
EMS-CF-FP-FC	Compact magnetic flow meter	DN 4, 8, 15, 25; 0.14–1.66 L/s
EMS-CF-FP-D1	Low-range ΔP transmitter	±125 Pa; does not span a liquid element window
EMS-CF-FP-D5	Low-range ΔP transmitter	±500 Pa; does not span a liquid element window
EMS-CF-FP-DP	Liquid-service element ΔP monitor	2 psid clean to 60 psid maximum
EMS-CF-FP-K	Filter performance monitoring installation kit	Static pressure tip, connector, valve

NOTES

- The kit carries no measuring element. Its pressure rating, wetted materials and process connection are not published in the source research and stay open until a supplier document is held.
- The kit serves the 35 psid (2.4 bar) change-out point, which the ±125 Pa and ±500 Pa low-range units in this family cannot display: their full scales are 0.018 psi and 0.0725 psi (derived).
- Conductivity and pH bands are published with their loop type, both columns together: 50–300 μS/cm and pH 7.0–9.0 on a glycol-premix or facility-water loop; 0.2–20 μS/cm and pH 8.0–9.5 on a de-ionised technology cooling loop.
- Differential-pressure figures are comparable only at a stated temperature; the published element maximum is specified at 20 °C (68 °F).

Full specification sheet and current pricing EMS-Trade Cooling · ems-cool.com Typical lead time confirmed on order acknowledgement.	EMS-CF-FP-K Rev. A 2026-09-19
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