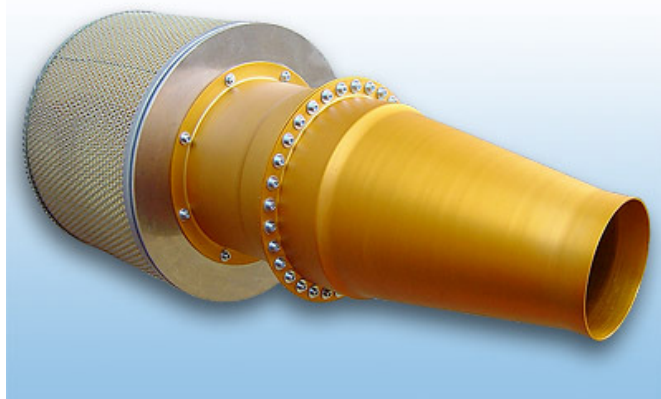


LFE with exchangeable inlet filter 50MC02-...-FE

(Update: 14.12.2016)

TetraTec[®]
Instruments



The Laminar Flow Element model 50MC02-...-FE can be used for large flows in 4 models from 2800 l/min to 63700 l/min. Often a LFE is used as a calibration unit sucking in air directly from the atmosphere. To avoid pollution of the LFE an inlet filter is integrated.

- LFE for flows of 2800 l/min to 63700 l/min
- Calibration acc. on request better than $\pm 0,65\%$ o.R.
- 20 mbar differential pressure at nominal flow
- Air intake measurement
- Changing of filter without changing of calibration
- Inline version with inlet tube

TECHNICAL DESCRIPTION

Almost all models of the MC series can be delivered with an appropriate filter mounted at the inlet. This has the advantage that the calibration of the LFE considers possible influences of the filter to the characteristic curve. To keep the validity of the calibration after changing the filter, this LFE is equipped with a special mechanism for exchanging the filter. This mechanism allows to change the filter without changing the calibration curve more than $\pm 0,3\%$. Another option for this series are a version with DIN-flange and an inline version combined with an inlet tube at the filter side.

SPECIFICATION

Measuring Range and Differential Pressure

Measuring range from 0 to nominal flow. The resolution is determined by the used pressure transmitter

Model	Measure range [L/min]	Δp [mbar]
50MC02-FE	0-2800	0-20
50MC04-FE	0-11300	0-20
50MC06-FE	0-28300	0-20
50MC08-FE	0-63700	0-20

Nominal flow and pressure drop ($\pm 10\%$ tolerance) at calibration conditions 1013,25 mbar abs., 21.1°C, 0.0 %r.H.

Total Pressure Drop

Around 1.2 x of the measured differential pressure

Accuracy

Calibration Accuracy Standard: $\leq \pm 0,65\%$ o.R.
or $\pm 0,4\%$ o.R. optionally

Application Area

Media: Air
Operation Pressure: 0.6 to 1,4 bar absolute
Operation Temperature: 0 to 50°C
Operation Humidity: 0 to 95% rel. Feuchte

Material

Body out of aluminium with internal stainless steel matrix

Nominal Width and Dimensions

Model	NW [inch]	L [mm]	D [mm]
50MC02-02-FE	2	491	165
50MC02-04-FE	4	800	286
50MC02-06-FE	6	890	420
50MC02-08-FE	8	1270	447

Differential Pressure Connection

G1/4 female parallel thread

Mounting Position

Arbitrary

ORDERING INFORMATION

LFE with interchangeable inlet filter

Ordering No. Measure Range [L/min]

50MC02-02-FE	0-2800
50MC02-04-FE	0-11300
50MC02-06-FE	0-28300
50MC02-08-FE	0-63700

Options

DIN- flange Aluminium at outlet

Part No. Structure: 50MCY-FD-aa-bbb

aa	Nominal Width	For LFE-Type
02	DN 50 (mm) to DIN	50MC02-02-...
04	DN 100 (mm) to DIN	50MC02-04-...
06	DN 150 (mm) to DIN	50MC02-06-...
08	DN 200 (mm) to DIN	50MC02-08-...

bbb Nominal Pressure

006	PN 6 to DIN
016	PN 16 to DIN

Other flange versions on request

Upgrade for FET-Version (Inline version)

Ordering No. For LFE-Type

50MC02-02-FEZ-250-0700	50MC02-02-FE
50MC02-02-FEZ-400-1100	50MC02-04-FE
50MC02-06-FEZ-560-1250	50MC02-06-FE
50MC02-08-FEZ-630-1700	50MC02-08-FE

It is possible to upgrade the FE-Version to an FET-Version (even subsequently) with an add-on kit.

Spare part: Air filter cartridge

Ordering No.	For LFE-Type
50MC02-02-C17160	50MC02-02-FE(T)
50MC02-04-C29577	50MC02-04-FE(T)
50MC02-06-C421729	50MC02-06-FE(T)
50MC02-08-C453265	50MC02-08-FE(T)