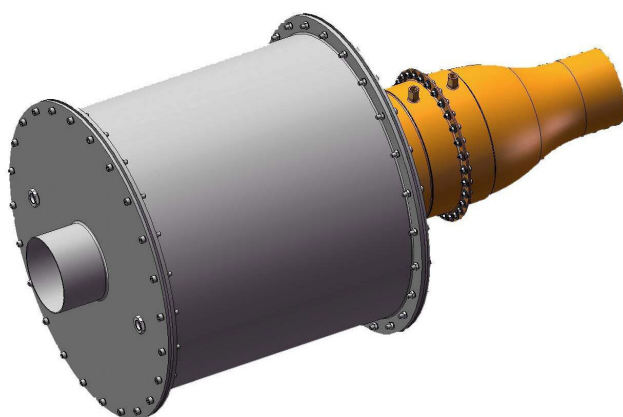


# LFE Inline version with exchangeable filter 50MC02-...-FET

(Update: 14.12.2016)

**TetraTec**<sup>®</sup>  
Instruments



The Laminar Flow Element model 50MC02-...-FET can be used for large flows in 4 sizes from 2800 l/min to 63700 l/min. Often a LFE is used as a calibration unit inline and a space consuming setup cannot be used. To avoid pollution of the LFE an inlet filter is integrated in the inlet tube.

- LFE for flows of 2800 l/min to 63700 l/min
- Calibration accuracy on request better  $\pm 0,65\%$  o.R
- 20 mbar differential pressure at nominal flow
- Version for inline measurement
- Changing of filter without changing of calibration

## TECHNICAL DESCRIPTION

Almost the whole series MC can be delivered with appropriated 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, which allows working with conditioned air intake.

## SPECIFICATION

### Measuring Range and Differential Pressure

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

Model	Range [L/min]	$\Delta p$ [mbar]
50MC02-02-FET-250-0700	0-2800	0-20
50MC02-04-FET-400-1100	0-11300	0-20
50MC02-06-FET-560-1250	0-28300	0-20
50MC02-08-FET-630-1700	0-63700	0-20

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

### Total Pressure Drop

Around 1.6 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% rH

### Material

Body out of aluminium with internal stainless steel matrix, Induction pipe out of stainless steel.

### Nominal Width and Dimensions

Model	NW [inch]	L [mm]	D [mm]
50MC02-02-FET-250-0700	2	690	253
50MC02-04-FET-400-1100	4	1080	464
50MC02-06-FET-560-1250	6	1230	634
50MC02-08-FET-630-1700	8	1690	704

### Differential Pressure Connection

1/4" female parallel thread

### Mounting Position

Arbitrary

## ORDERING INFORMATION

### LFE in Inline version with inlet filter

Ordering No.	Measure range [L/min]
50MC02-02-FET-250-0700	0-2800
50MC02-04-FET-400-1100	0-11300
50MC02-06-FET-560-1250	0-28300
50MC02-08-FET-630-1700	0-63700

### Options

#### DIN- flange Aluminium at outlet

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

aa	Nominal width	For LFE-Type
02	DN 50 to DIN	50MC02-02-...
04	DN 100 to DIN	50MC02-04-...
06	DN 150 to DIN	50MC02-06-...
08	DN 200 to DIN	50MC02-08-...

#### bbb Pressure stage

006	PN 6 to DIN
016	PN 16 to DIN

Other flange versions on request

### 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)