

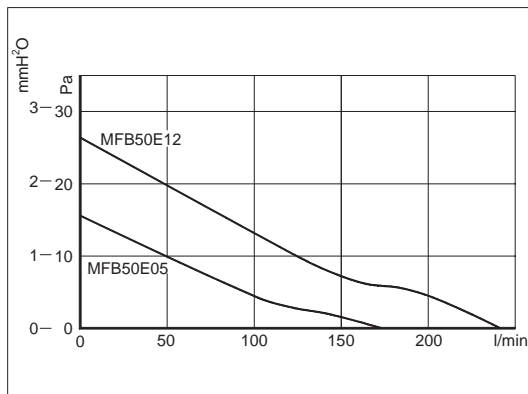
## MFB50E05(A), MFB50E12(A)

### BRUSHLESS, HIGH RELIABILITY FAN

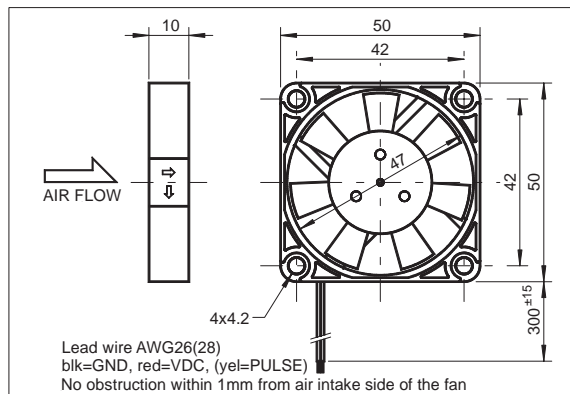
AUTOMOTIVE FAN



#### AIR PERFORMANCE



#### SHAPE AND DIMENSION



## PERFORMANCE

CE	MFB50E05(A)	MFB50E12(A)
Operating Voltage [V]	4,5...5,0...5,5	10,2...12,0...13,8
Operating Current [mA]	50	40
Max. Start Current [mA]	120	100
Max. Air Flow [l/min - m <sup>3</sup> /h]	169 - 10,1	238 - 14,3
Max. Air Pressure [mmH <sub>2</sub> O - Pa]	1,6 - 15,6	2,7 - 26,9
Typ. Noise @ 1m [dB(A)]	16	25
Operating Temperature [°C]	-40...+80 (+85 for 2h max.)	
Rotor Speed [RPM]	3500	4800
Life Expectancy L <sub>10</sub> /MTBF @20°C [h]	95000/280000	
Bearing System	ball bearings ZZ	
Weight [g]	19	
Pulse Output (MFB50ExxA only)	2 Pulses / Rev.	2 Pulses / Rev.
Packing Quantity [PCs]	50 - 100 - 500	

These **SEPA**<sup>®</sup> high-tech miniature fans are suitable for industrial or automotive use with very low power consumption and have a remarkable air flow performance despite its small dimensions and very low power consumption. Due to a nearly linear air performance characteristic, the fans are applicable for different uses. They are permanently protected electrically against reverse polarity, blocking and thermal overloading. Due to the low rotor weight and precision balancing, they are virtually vibration-free. They are also insensitive to shock.

Further features of these fans are there extremely robust and torsionally rigid plastic housing of PBT (UL E54695), ball bearings with narrow tolerances of special steel, polyester-based PCB (UL E44247) and absolute reliability due to 100% burn-in.

Technical changes without notice • 05/07

#### • ALARM SIGNAL (Optional)

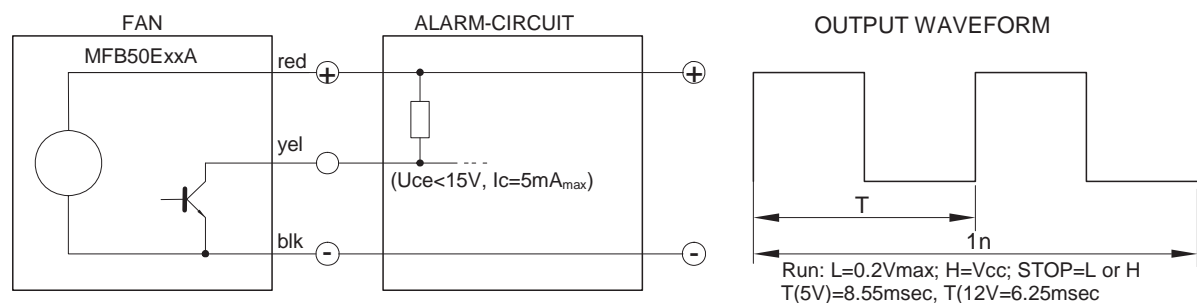
The **SEPA**® MFB50ExxA include a pulse output, which allows monitoring the correct function of the fan. An alarm-board is available on request.

MFB50ExxA: The pulse is like a rectangular wave, the frequency correlates to 2 x rotor speed. At blocked rotor the output signal could be L ( $\leq 0.2V$ ) or H ( $V_{cc}$ ). A pull-up-resistor is needed.

**IMPORTANT:** The pulse output is *not* protected against short circuit and must not connect to GND or  $V_{cc}$  without pre-resistor.

Do not connect not used pulse output (insulate).  
Do not touch the rotor!

The MFB50Exx(A) have tinned lead wire ends (without connector).



#### • ACCESSORIES:

CONNECTOR on request

#### • ORDER INFORMATION:

MFB50E05	<b>SEPA</b> fan 50x50x10mm, 5VDC, ball bearing, <b>CE</b>	515061000
MFB50E05A	<b>SEPA</b> fan 50x50x10mm, 5VDC, pulse, ball bearing, <b>CE</b>	515061010
MFB50E12	<b>SEPA</b> fan 50x50x10mm, 12VDC, ball bearing, <b>CE</b>	515062000
MFB50E12A	<b>SEPA</b> fan 50x50x10mm, 12VDC, pulse, ball bearing, <b>CE</b>	515062010