

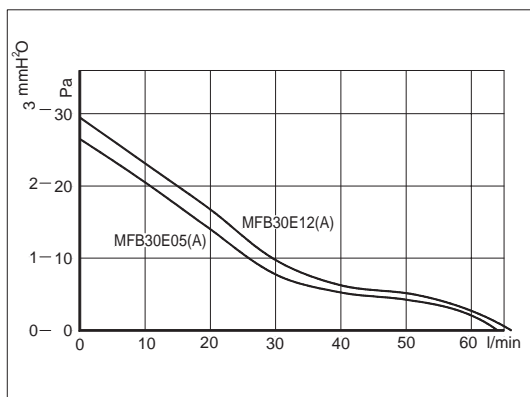
## MFB30E05(A), MFB30E12(A)

BRUSHLESS, HIGH RELIABILITY FAN

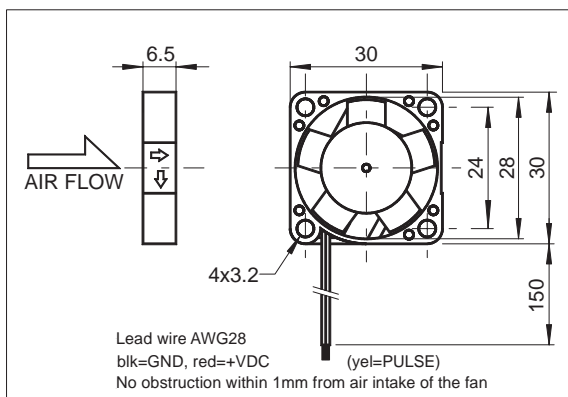
AUTOMOTIVE FAN



AIR PERFORMANCE DIAGRAM



SHAPE AND DIMENSION



## PERFORMANCE

	MFB30E05	MFB30E12
Operating Voltage [V]	3.5 ... 5.0 ... 5.5	10.0 ... 12 ... 14.0
Operating Current [mA]	80	30
Max. Current [mA]	160	70
Max. Air Flow [l/min - m <sup>3</sup> /h]	64 - 3.8	67 - 4.0
Max. Air Pressure [mmH <sub>2</sub> O - Pa]	2.7 - 26.5	3.0 - 29.4
Typ. Noise @ 1m [dB(A)]	18	19
Operating Temperature (non blocking rotor) [°C]	-40...+80 (85)	
Rotor Speed [RPM]	8600	9000
Pulse Output (MFB30ExxA only) [Pulse/Rev]	3	3
Life Expectancy L <sub>10</sub> /MTBF [h]	95000/280000@20°C, 20000/55000@70°C	
Bearing System	ball bearing ZZ	
Weight [g]	8	
Standard Packing [PCs]	50 - 250 - 1000	

This **SEPA**<sup>®</sup> high-tech miniature fan is suitable for industrial or automotive use and has a remarkable air flow performance despite its small dimensions. Due to a nearly linear air performance characteristic, the fan is applicable for different uses. It is permanently protected electrically against reverse polarity, blocking and thermal overloading. Due to the low rotor weight and precision balancing, it is virtually vibration-free. It is also insensitive to shock.

Further features of this fan are its 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 OUTPUT

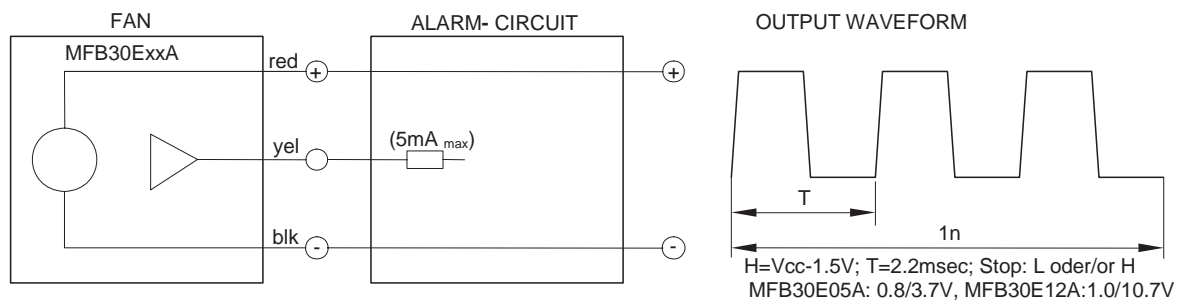
The **SEPA**® MFB30EXXA includes a pulse output, which allows monitoring the correct function of the fan. An alarm-board is available on request.

The pulse is like a rectangular wave, the frequency correlates to 3 x rotor speed. At blocked rotor the output signal could be L or H (MFB30E05A: 0.5/3.7V, MFB30E12: 1.0/10.7V).

**IMPORTANT:** The pulse output is *not* protected against short circuit and must not connect to GND or Vcc without series-resistor. A pull-up-resistor is not needed.

Do not connect not used pulse output to GND or Vcc (insulate).

The MFB30EXX(A) has tinned lead wire ends (without connector).



### • ACCESSORIES:

CONNECTOR: on request

### • ORDER INFORMATION:

MFB30E05	<b>SEPA</b> ® Miniature fan 30x30x6.5mm, ball bearings, <b>CE</b>	513051000
MFB30E05A	<b>SEPA</b> ® Miniature fan 30x30x6.5mm, ball bearings, pulse, <b>CE</b>	513051010
MFB30E12	<b>SEPA</b> ® Miniature fan 30x30x6.5mm, ball bearings, <b>CE</b>	513052000
MFB30E12A	<b>SEPA</b> ® Miniature fan 30x30x6.5mm, ball bearings, pulse, <b>CE</b>	513052010