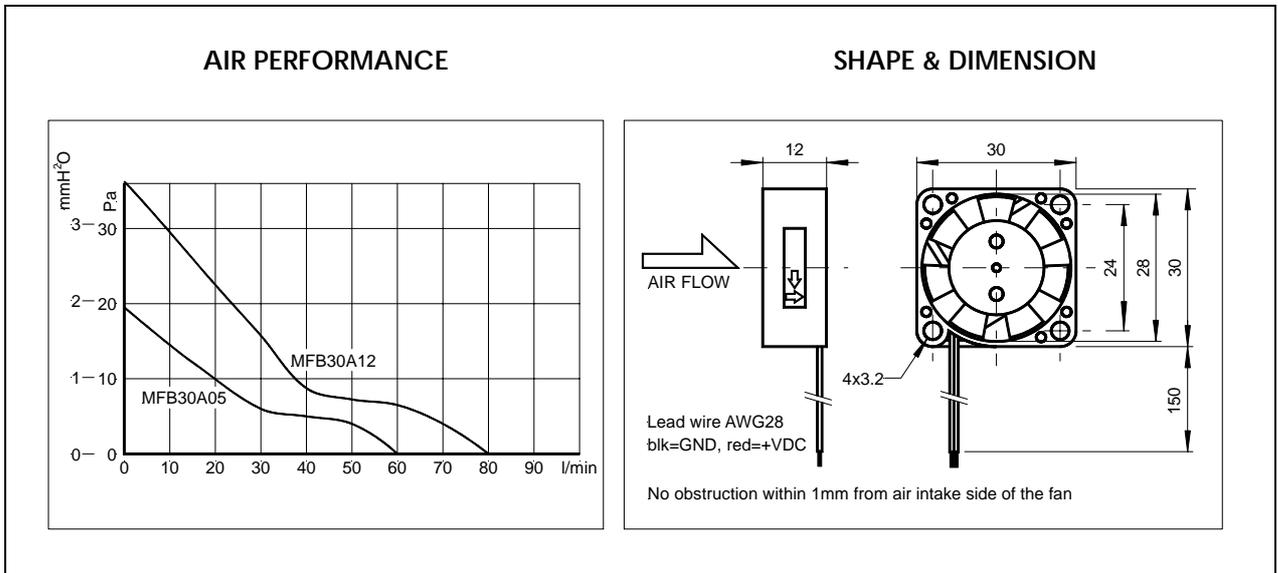


SEPA[®] BRUSHLESS FAN

MFB30A05(A) MFB30A12(A)



HIGH RELIABILITY FAN



PERFORMANCE

	MFB30A05(A)	MFB30A12(A)
Operating Voltage [V]	4.5 ... 5.0 ... 5.5	10.2 ... 12.0 ... 13.8
Operating Current [mA]	70	60
Max. Start Current [mA]	200	200
Max. Air Flow [l/min - m ³ /h]	60 - 3.6	80 - 4.8
Max. Air Pressure [mmH ₂ O - Pa]	2.0 - 19.6	3.7 - 36.3
Typ. Noise @ 1m [dB(A)]	18	23
Operating Temperature [°C]	-10/+70	
Rotor Speed [RPM]	6500	9000
Pulse Output (optional for ...A)	(2 Pulses / Rev.)	
Life Expectancy L ₁₀ /MTBF [h]	95000/280000@20°C	
Bearing System	ball bearings ZZ	
Weight [g]	10	
Packing Quantity [PCs]	50 - 100 - 500	

This **SEPA**[®] 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.

• **ALARM SIGNAL (Optional)**

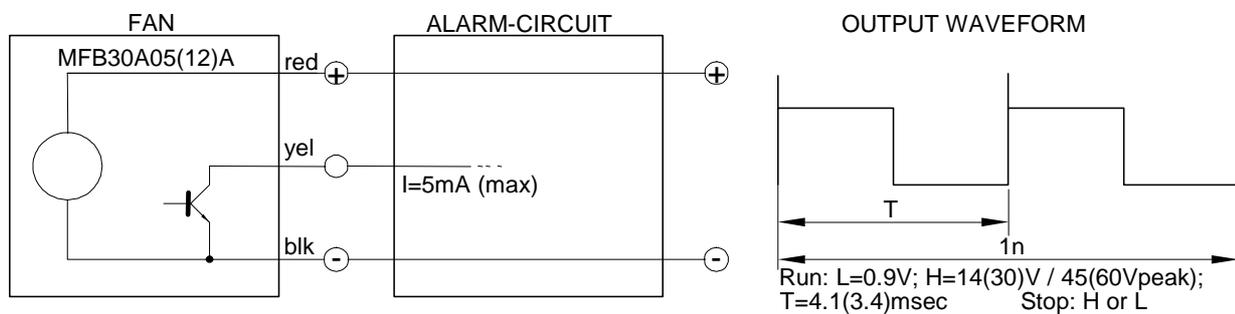
The **SEPA**® MFB30AxxA includes a pulse output, which allows monitoring the correct function of the fan. An alarm-board is available on request.

The pulse is like a rectangular wave, the frequency correlates to 2 x rotor speed. The amplitude is 2-3 x operating voltage and peaks up to 9 x operating voltage appear periodically. Please use a series resistor and a Z-diode to block up the high voltage. At blocked rotor the output signal could be L ($\leq 0.8V$) or H ($V_{cc} - 1V$).

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

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

The MFB30Axx(A) has tinned lead wire ends (without connector).



• **Accessories:**

ALG01: **SEPA** ALARM, monitor-circuit, generates an acoustic signal in case of missing pulses.
Connector: on request

• **ORDER INFORMATION:**

MFB30A05	SEPA ® Miniature fan 30x40x12mm, ball bearings, CE	513011000
MFB30A05A	SEPA ® Miniature fan 30x40x12mm, ball bearings, pulse, CE	513011010
MFB30A12	SEPA ® Miniature fan 30x40x12mm, ball bearings, CE	513012000
MFB30A12A	SEPA ® Miniature fan 30x40x12mm, ball bearings, pulse, CE	513012010

SEPA® is the brand name for fans and CPU-Cooler, made by Nippon Keiki Works LTD., Tokyo