2 2

300 ±15



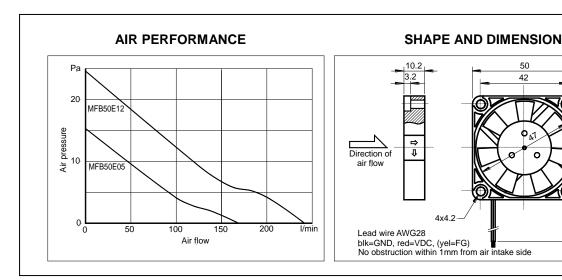
MFB50E05, MFB50E12 **HIGH PERFORMANCE FAN**











PERFORMANCE

CE		MFB50E05 MFB50E05A	MFB50E12 FN MFB50E12A
Operating voltage	[VDC]	4.5 5 5.5	10.2 12 13.8
Typ. operating current	[mA]	50	60
Max. start current	[mA]	120	140
Max. air flow	[l/min-m ³ /h]	169 – 10.1	238 – 14.3
Max. air pressure	[Pa-mmH ² O]	16 – 1.6	27 – 2.7
Typ. Noise (1m from air intake side)	[dB(A)]	24	30
Typ. rotor speed	[RPM]	3500	4800
FG (A)	[PPR]	2	
Operating temperature	[°C]	-40 +85	-10 +70
Life expectancy L10/MTBF@ 40°C	[h]	70000/350000	
Bearing system		2 ball bearings ZZ	
Weight	[g]	19	
Standard packing quantity	[Pcs.]	40-100-500	

This SEPA® high-tech miniature fan is suitable for industrial or automotive use and has a remarkable air flow performance despite its small dimensions. Thanks to the extremely low power input, this fan is highly suitable for battery-operated devices. 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 stiff plastic housing of PBT, ball bearings with narrow tolerances, of special steel, polyester-based PCB and absolute reliability due to a 100% burn-in.

Technical changes without notice ● 04/16



MFB50E05, MFB50E12 **HIGH PERFORMANCE FAN**









• ALARM SIGNAL (Optional)

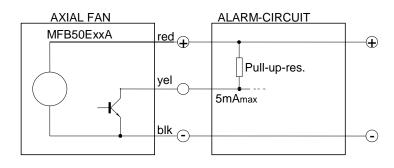
The SEPA® fans MFB50E05A and MFB50E12A include a pulse output, which allows monitoring the correct function of the fan.

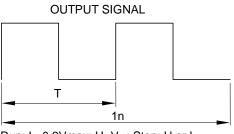
The pulse is like a rectangular wave, the frequency correlates to 2x rotor speed. The amplitude appears periodically. At blocked rotor the output signal could be L (≤0,2V) or H (Vcc).

IMPORTANT: The pulse output is not protected against short circuit and must not connect to GND or Vcc without preresistor. A pull-up-resistor is needed. Do not connect not used pulse output (insolate).

The fans MFB50Exxx have tinned lead wire ends (without connector).

Do not touch the rotor! Please note the handling specification!





Run: L=0.2Vmax; H= V_{cc} ; Stop: H or L T=8.6msec (5V), T=6.3msec (12V)

• ACCESSORIES:

Connector: on request

• ORDER INFORMATION (Delivery time on request)

MFB50E05	SEPA® Axial fan, 50x50x10mm, 5VDC, Ball bearings, CE,	515061100
MFB50E05A	SEPA® Axial fan, 50x50x10mm, 5VDC, Ball bearings, FG, CE,	515061110
MFB50E12	SEPA® Axial fan, 50x50x10mm, 12VDC, Ball bearings, CE,	515062000
MFB50E12A	SEPA® Axial fan, 50x50x10mm, 12VDC, Ball bearings, FG, CE,	515062010

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

Technical changes without notice ● 04/16