

## MFB40H12L, MFB40H12, **MFB40H12H**

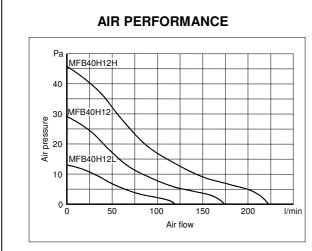
#### **HIGH PERFORMANCE FAN**

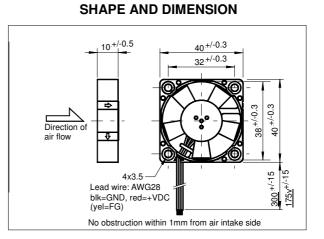












### **PERFORMANCE**

( (		MFB40H12L-	MFB40H12 <b>9</b>	MFB40H12H
		175v	MFB40H12A	MFB40H12HA
Operating voltage	[VDC]	10.8 12 13.2		
Typ. operating current	[mA]	40	60	90
Max. start current	[mA]	80	90	290
Max. air flow	[l/min-m <sup>3</sup> /h]	118 – 7.1	173 – 10.3	232 - 13.9
Max. air pressure	[Pa-mmH <sup>2</sup> O]	13 - 1.3	20 -3.0	50 – 5.1
Typ. noise (1m dist. from air intake side)	[dB(A)]	21	25	33
Typ. rotor speed	[RPM]	3800	5500	7300
FG (A)	[PPR]	2		
Operating temperature	[℃]	-40 +85		
Life expectancy L10/MTBF@ 40 ℃	[h]	70000/350000		
Bearing system		2 ball bearings ZZ		
Weight	[g]	13		
Standard 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. 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 ● 09/15



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#### **HIGH PERFORMANCE FAN**









### • ALARM SIGNAL (Optional)

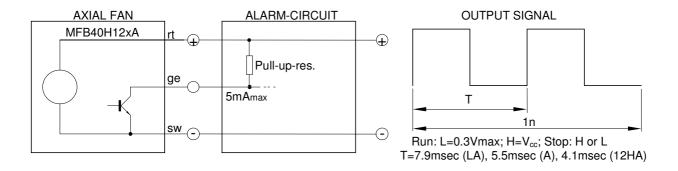
The SEPA® fans MFB40H12xA include a pulse output, which allows monitoring the correct function of the fan.

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 (≤0,3V) 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 MFB40H12xx have tinned lead wire ends (without connector).

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



#### • ACCESSORIES:

Connector: on request

#### • ORDER INFORMATION (Delivery time on request)

MFB40H12L-157v	SEPA® Miniature fan, 40x40x10mm, 12VDC, Ball bearings, CE	514082104
MFB40H12LA	SEPA® Miniature fan, 40x40x10mm, 12VDC, Ball bearings, FG, CE	514082110
MFB40H12	SEPA® Miniature fan, 40x40x10mm, 12VDC, Ball bearings, CE	514082000
MFB40H12A	SEPA® Miniature fan, 40x40x10mm, 12VDC, Ball bearings, FG, CE	514082010
MFB40H12H	SEPA® Miniature fan, 40x40x10mm, 12VDC, Ball bearings, CE	514082200
MFB40H12HA	SEPA® Miniature fan, 40x40x10mm, 12VDC, Ball bearings, FG, CE	514082210

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

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