

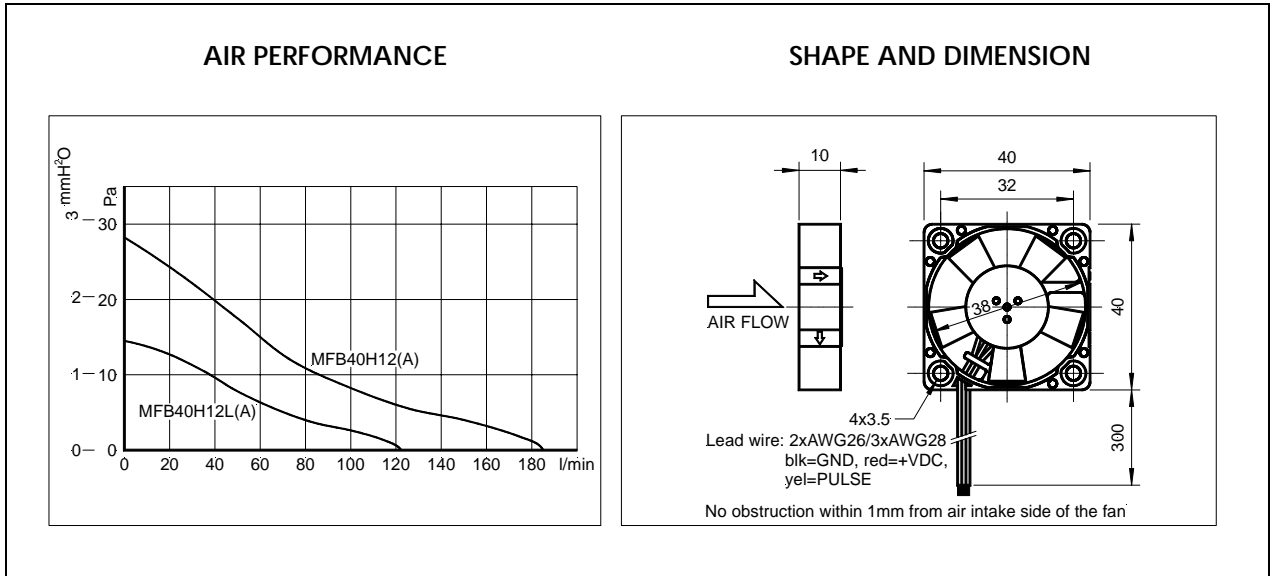
SEPA[®] BRUSHLESS FAN

MFB40H12L(A) , MFB40H12(A)



HIGH RELIABILITY FAN

AUTOMOTIVE FAN



PERFORMANCE

CE	MFB40H12L(A)	MFB40H12(A) (Standard model)
Operating Voltage [V]	10.2 ... 12 ... 13.8	
Operating Current [mA]	50	40
Rated Current blocked rotor (restart system) [mA]	(70)	(90)
Max. Air Flow [l/min - m ³ /h]	121 - 7.3	185 - 11.1
Max. Air Pressure [mmH ₂ O - Pa]	1.4 - 14	2.9 - 28
Noise @ 1m (typ.) [dB(A)]	18	24
Operating Temperature [°C]	-40 ... +80 (85)	
Rotor Speed [RPM]	3900	6100 ±20%
Life Expectancy L ₁₀ /MTBF [h]	95000/280000@20°C, 29000/80000@70°C	
Bearing System	ball bearings in metal flange	
Weight [g]	13	
Pulse Output (MFB40H12xA)	2 pulse / rev.	
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 (by IC). Due to the low rotor weight and precision balancing, it is virtually vibration-free. It is also insensitive to shock.

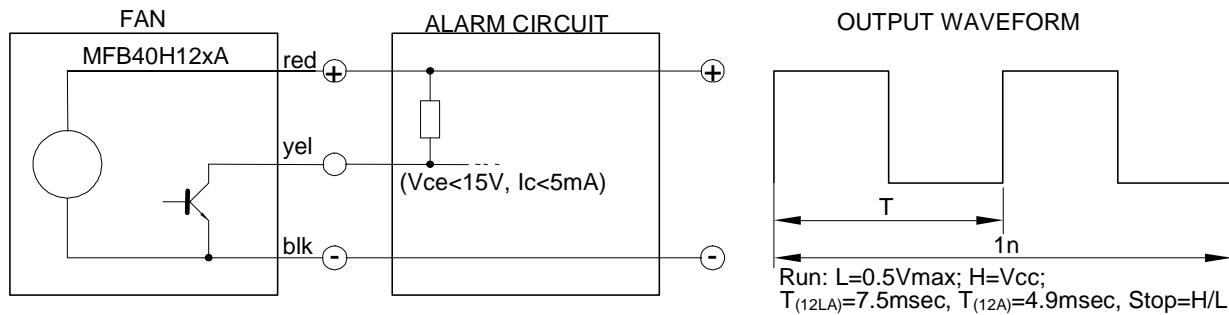
Further features of this fan are its extremely robust and torsionally rigid plastic housing of PBT (UL E54695), ball bearings with narrow tolerances, of special steel, polyester-based PCB (UL E44247) and absolute reliability due to 100% burn-in.

• **ALARM SIGNAL (Option ...A)**

The **SEPA**® MFB40H12xA includes a speed impulse output, which enables monitoring the correct function of the fan. An alarm-board is available on request.

The pulse is like a rectangular wave. The pulse frequency correlates to 2 x rotor speed, OC-output, a pull-up-resistor is needed. At blocked rotor the output signal could be L ($\leq 0.5V$) or H (V_{cc}).

IMPORTANT: The pulse output is *not* protected against short circuit and must not connect to GND or Vcc without series-resistor. Do not connect not used pulse output to GND or Vcc (insolate).



• **ACCESSORIES:**

ALG01 **SEPA** ALARM, monitor-circuit, generates an acoustic signal in case of missing pulses.
 VARP01 Speed control via temperature
 Connector On request

IMPORTANT: Do not touch the rotor!

• **ELECTRICAL PROTECTION:**

The MFB40H12xA is permanently protected against false pole of power supply and blocking rotor.

• **ORDER INFORMATION:**

MFB40H12L	SEPA fan, Ball Bearing, CE	(on request)	514082100
MFB40H12LA	SEPA fan, Ball Bearing, CE	(on request)	514082110
MFB40H12	SEPA fan, Ball Bearing, CE	(Standard model)	514082000
MFB40H12A	SEPA fan, Ball Bearing, CE	(Standard model)	514082010

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