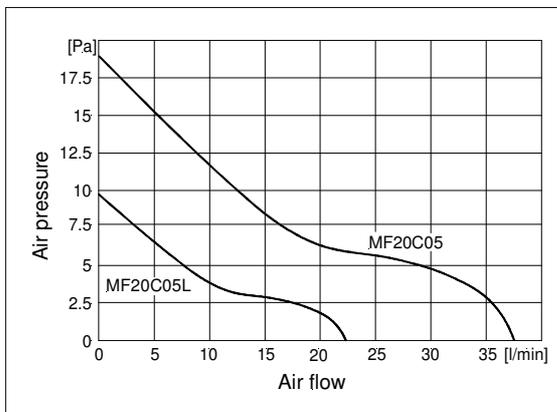


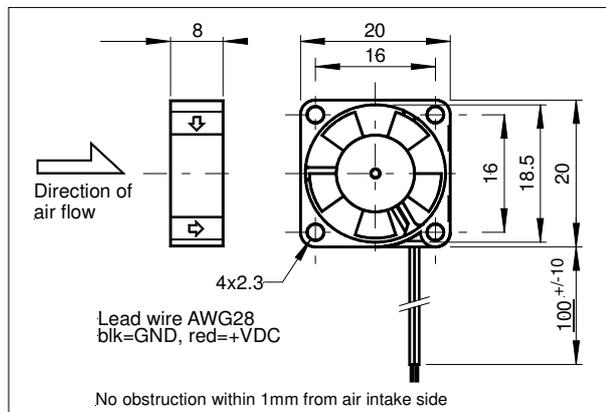
**MF20C05 Series**  
**HIGH PERFORMANCE FAN**



**AIR PERFORMANCE**



**SHAPE AND DIMENSIONS**



**PERFORMANCE**

CE		MF20C05L-011	MF20C05-006
		MF20C05LA-001	MF20C05A-002
Operating voltage	[VDC]	4.5 ... 5 ... 5.5	
Typ. operating current	[mA]	80	100
Max. start current	[mA]	120	200
Max. air flow	[l/min-m <sup>3</sup> /h]	22 - 1.3	37 - 2.2
Max. air pressure	[Pa-mmH <sup>2</sup> O]	9.6 - 1.0	18 - 1.9
Typ. noise (1m dist. from air intake side)	[dB(A)]	13	20
Typ. rotor speed	[RPM]	7700	10500
FG output (...A)	[PPR]	3	3
Operating temperature (non blocking rotor)	[°C]	-20 ... +80	
Life expectancy L10/MTBF@ 40°C	[h]	40000/210000	
Bearing system		Magfix sleeve bearing	
Weight	[g]	3	
Standard packing quantity	[Pc.]	50-100-500-1000	

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. 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, polyester-based PCB, the Magfix bearing system and absolute reliability due to a 100% burn-in.

Technical changes without notice • 12/16

## MF20C05 Series HIGH PERFORMANCE FAN



### • ALARM SIGNAL (Optional)

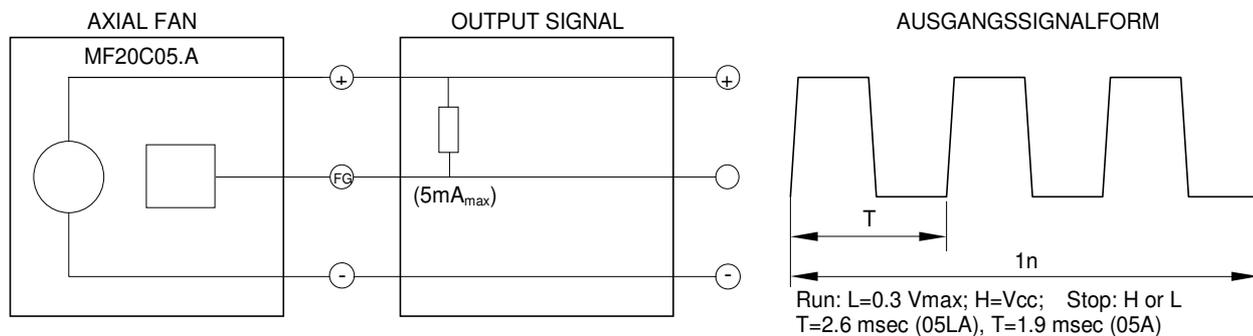
The **SEPA**® fans MF20C05A and MF20C05LA include a pulse output, which allows monitoring the correct function of the fan.

The pulse is like a rectangular wave, the frequency correlates to 3x rotor speed. The amplitude is about 5V<sub>ss</sub> and appears periodically. At blocked rotor the output signal could be L ( $\leq 0,3V$ ) or H (5 V).

**IMPORTANT:** The pulse output is not protected against short circuit and must not connect to GND or V<sub>cc</sub> without pre-resistor. A pull-up-resistor is not needed. Do not connect not used pulse output (insolate).

The fans MF20C05... 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)

MF20C05L-011	<b>SEPA</b> ® Miniature fan, 20x20x8mm, 5VDC, Sleeve bearing, <b>CE</b>	502031100
MF20C05LA-001	<b>SEPA</b> ® Miniature fan, 20x20x8mm, 5VDC, Sleeve bearing, FG, <b>CE</b>	502031110
MF20C05-006	<b>SEPA</b> ® Miniature fan, 20x20x8mm, 5VDC, Sleeve bearing, <b>CE</b>	111111190
MF20C05A-002	<b>SEPA</b> ® Miniature fan, 20x20x8mm, 5VDC, Sleeve bearing, FG, <b>CE</b>	T.B.D.

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