

BRUSHLESS DC FANS

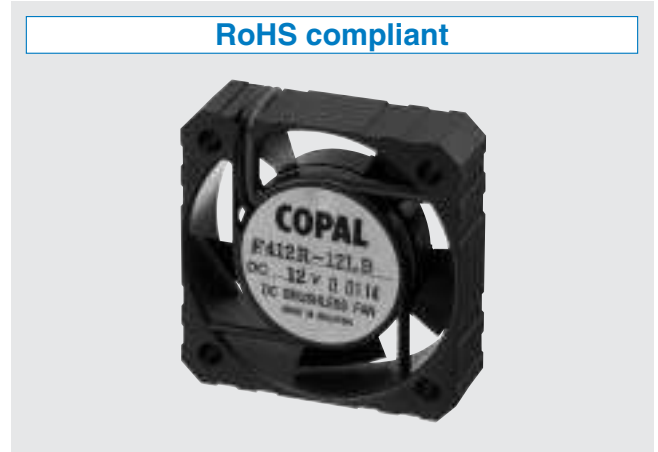
F412R

FEATURES

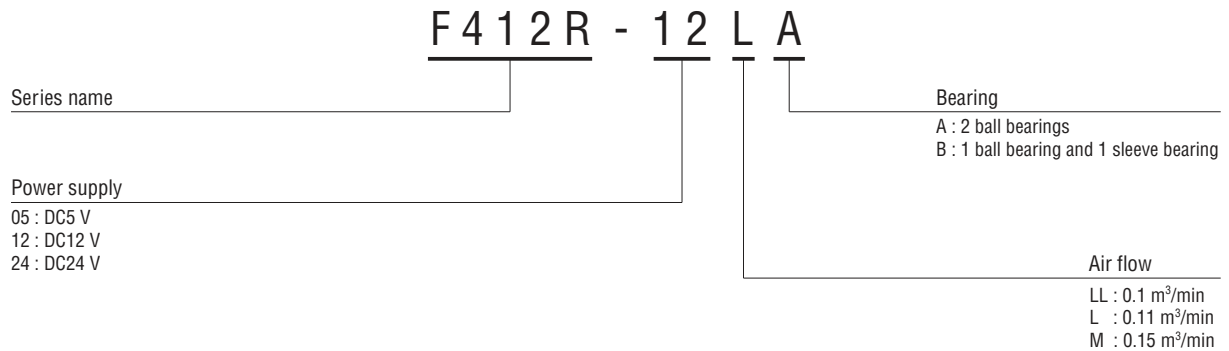
- Low noise 14 dB (A)
- Light weight (approx. 20 g)

STRUCTURE

- Frame and impeller
ABS/PBT alloy
- Bearing
A type : 2 ball bearings
B type : 1 ball bearing and 1 sleeve bearing



PART NUMBER DESIGNATION



LIST OF PART NUMBERS

| Static pressure [Pa] | Noise [dB (A)] | Bearing | Power supply | Part number |
|----------------------|----------------|---------|--------------|-------------|
| 11.8 | 14 | B | DC12 V | F412R-12LLB |
| 14.7 | 16 | | DC5 V | F412R-05LB |
| | | | DC12 V | F412R-12LB |
| | | | DC24 V | F412R-24LB |
| 25.5 | 23 | DC5 V | F412R-05MB | |
| | | DC12 V | F412R-12MB | |
| | | DC24 V | F412R-24MB | |
| 14.7 | 16 | A | DC12 V | F412R-12LA |
| | | | DC24 V | F412R-24LA |
| 25.5 | 23 | | DC12 V | F412R-12MA |
| | | | DC24 V | F412R-24MA |

* : Verify the above part numbers when placing orders.

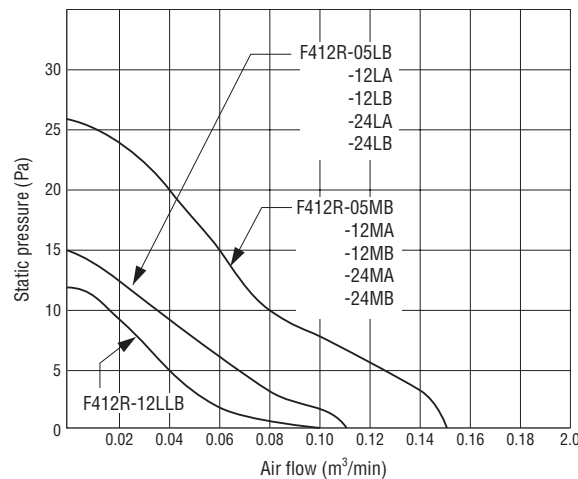
F412R BRUSHLESS DC FANS

STANDARD SPECIFICATIONS

| Item | F412R-12LLB | F412R-05LB | F412R-05MB | F412R-12LA -12LB | F412R-12MA -12MB | F412R-24LA -24LB | F412R-24MA -24MB |
|-----------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Rated voltage | DC12 V | DC5 V | | DC12 V | | DC24 V | |
| Voltage range | 10.2 ~ 13.8 V | 4.5 ~ 5.7 V | 4.2 ~ 5.7 V | 10.2 ~ 13.8 V | 10.2 ~ 13.8 V | 20.4 ~ 27.6 V | 20.4 ~ 26.4 V |
| Rated current | 0.04 A | 0.08 A | 0.10 A | 0.04 A | 0.06 A | 0.03 A | 0.04 A |
| Rotating speed | 3750 min ⁻¹ | 4200 min ⁻¹ | 5400 min ⁻¹ | 4200 min ⁻¹ | 5400 min ⁻¹ | 4200 min ⁻¹ | 5400 min ⁻¹ |
| Air flow | 0.1 m ³ /min | 0.11 m ³ /min | 0.15 m ³ /min | 0.11 m ³ /min | 0.15 m ³ /min | 0.11 m ³ /min | 0.15 m ³ /min |
| Static pressure | 12 Pa | 15 Pa | 26 Pa | 15 Pa | 26 Pa | 15 Pa | 26 Pa |
| Noise | 14 dB (A) | 16 dB (A) | 23 dB (A) | 16 dB (A) | 23 dB (A) | 16 dB (A) | 23 dB (A) |
| Net weight | Approx. 20 g | | | | | | |

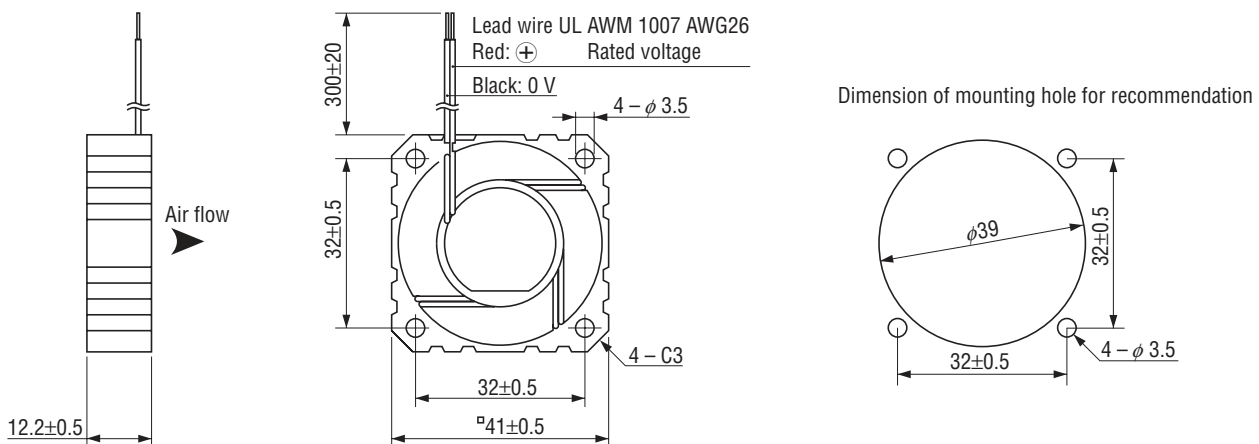
* : Figures in the table are typical values under rated operating condition.

AIR FLOW PERFORMANCE CURVES



OUTLINE DIMENSIONS

(Unit: mm)



Specifications are subject to change without notice. Specifications in this catalog are for reference. The formal specification sheets will be submitted upon request.