

NF-A12x25r PWM

Noctua NF-A12x25r PWM Premium Fan



LOGISTIC DATA

Product name
Noctua NF-A12x25r PWM

EAN
9010018100563

UPC
841501110566

Packaging dimensions (HxWxD)
178x152x36 mm

Weight incl. packaging
330 g

Warranty
6 years

Packaging unit
36 pcs

Packaging dimensions / unit (HxWxD)
391x386x384 mm

Weight incl. packaging / unit
13.64 kg

SCOPE OF DELIVERY

NF-A12x25r PWM premium fan

Low-Noise-Adaptor (L.N.A.)

4-pin y-cable

30cm extension cable

4x anti-vibration mounts

4x fan screws



The NF-A12x25r is a round-frame version of Noctua's award-winning flagship model 120mm NF-A12x25 fan. Its round shape makes it ideal for use on low-height dual-tower CPU coolers like the NH-D12L as well as other space-restricted applications that cannot accommodate square-frame 120mm fans. Just like the square NF-A12x25, the round NF-A12x25r uses a record-tight tip clearance of only 0.5mm, which is made possible by using the novel Sterrox liquid-crystal polymer (LCP) compound as well as a metal-reinforced motor hub and axis for ultimate precision. Sharing the same state-of-the-art impeller design with Flow Acceleration Channels, the NF-A12x25r achieves the same class-leading quiet cooling performance as its square-frame sibling. It also supports fully automatic speed control via PWM fan headers and comes with a Low-Noise Adaptor to reduce the maximum speed from 2000 to 1700rpm. Topped off with exceptional running smoothness, Noctua's reference-class SS02 bearing, a rich bundle of accessories and 6-year manufacturer's warranty, the NF-A12x25r is a premium-quality product through and through. Its superior efficiency, cutting-edge construction and pioneering materials make it an elite choice for all 120mm applications that require a round frame.

Award-winning NF-A12x25 impeller

Noctua's NF-A12x25 has captured the hearts of quiet cooling enthusiasts around the world and reshaped the common perception of what 120mm fans can do. With more than 100 awards and recommendations from the international press, it is widely considered to be the best 120mm fan on the market. The NF-A12x25r combines the same impeller with a round frame.

Round frame design

The NF-A12x25r is identical to the NF-A12x25 except for its round frame that allows it to be used in applications where a square-frame 120mm fan would not fit. For example, the NF-A12x25r is ideal for being sunk in between the dual towers of the low-height NH-D12L cooler without causing compatibility problems with tall motherboard heatsinks or shrouds.

Highly optimised P/Q curve for all applications

The NF-A12x25's sophisticated aerodynamic design allows for a pressure to airflow (P/Q) curve that is extremely strong in the critical mid-section. This means that the NF-A12x25 is a true jack-of-all-trades with excellent performance in both static pressure demanding and airflow demanding applications.

Excellent on-application acoustics

While many fans produce unpleasant, high-pitched noises when installed in typical applications such as on heatsinks or radiators, the NF-A12x25 has been carefully fine-tuned for optimal on-application acoustics. It produces a smooth, pleasant frequency profile and surprisingly low sound pressure levels (SPL) when working against back pressure.

Ultra-tight tip clearance

The NF-A12x25 has a record tight tip clearance (distance between the blade tips and the inside of the frame) of only 0.5mm. This highly ambitious design sets a new benchmark for 120mm fans and helps the NF-A12x25 to work more efficiently against back pressure, such as on heatsinks or radiators, by reducing leak flows through the gap between impeller and frame.

Smooth Commutation Drive 2

The latest version of Noctua's advanced Smooth Commutation Drive system ensures superb running smoothness by eliminating torque variations and switching noises. This makes the fan remarkably quiet even at very close distances.

Low-Noise Adaptor

The NF-A12x25 PWM is supplied with a Low-Noise Adaptor (L.N.A.) that reduces the maximum fan speed from 2000 to 1700rpm. The L.N.A. can be used either to run the fan at a fixed speed of 1700rpm or to cap the maximum speed when using automatic PWM control.

6-year manufacturer's warranty

Noctua fans are renowned for their impeccable quality and outstanding longevity. Like all Noctua fans, the NF-A12x25 features an MTTF of more than 150,000 hours rating and comes with a full 6-year manufacturer's warranty.

SPECIFICATIONS

Dimensions	120x120x25 mm	
Bearing	SS02	
Connector	4-pin	
Blade geometry	A-Series with Flow Acceleration Channels	
Max. input power / voltage	1.68 W / 12 V	
MTTF	> 150,000 h	

NF-A12x25r PWM	w/o adaptor	with L.N.A.
Max. rotational speed (+/-10%)	2000 RPM	1700 RPM
Max. airflow	102.1 m³/h	84.5 m³/h
Max. acoustical noise	22.6 dB(A)	18.8 dB(A)
Max. static pressure	2.34 mmH₂O	1.65 mmH₂O