

# nEXT55 TURBOMOLECULAR PUMP

[edwardsvacuum.com](http://edwardsvacuum.com)

**nEXT55 is the latest addition to the Edwards nEXT family. This new turbomolecular pump is an evolution of Edwards extremely popular nEXT85 platform, with a significantly reduced height while still offering pumping speeds of 55 l/s for nitrogen. nEXT55 offers the highest pumping density of other pumps in its class, with almost double the pumping speed of similar sized turbo pumps.**

As it is built on the proven nEXT85 platform, nEXT55 offers high reliability and low risk to adoptors. Also, like nEXT85, field maintenance is only required every 4 years of operation, and this - including replacement of the bearing - can be performed by the end user. nEXT55 brings with it all the benefits in flexibility associated with nEXT85, with the same comprehensive communication and control options available, as well as a full set of accessories.

nEXT55 is the ideal choice in deployable instruments or portable applications where a compact footprint or lower weight are key factors.



## FEATURES AND BENEFITS

- Class leading pumping speeds
- Outstanding compression ratios
- Ease of integration and installation
- Assured reliability
- End user service capability
- Full nEXT established communication interface



# PRODUCT DATA SHEET

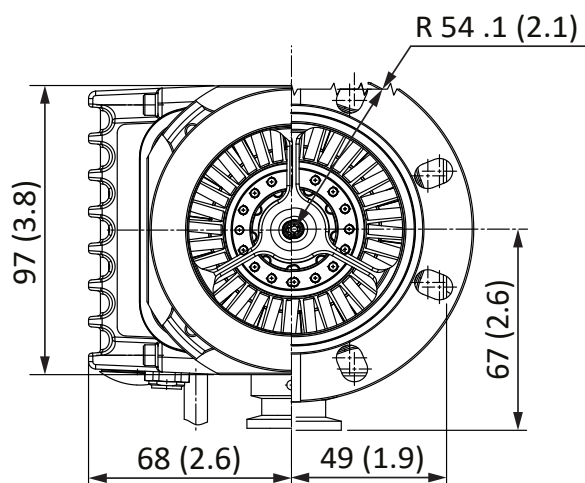
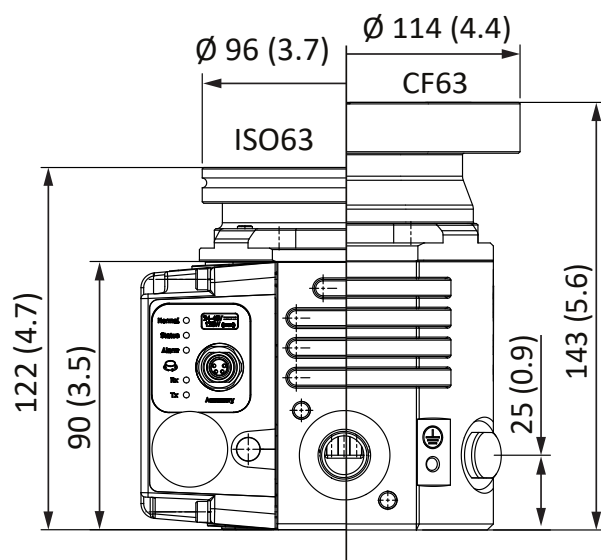
## TECHNICAL DATA

nEXT55		
<b>Pump interface</b>		
Inlet flange		ISO63
Exhaust flange		NW16
Vent port		½ inch BSP
<b>Key technical specifications</b>		
Rotational speed	Rpm	90,000
Start time to 90% speed (sec) D		90
Main inlet pumping speed (l/s)	N <sub>2</sub>	55
	He	41
	H <sub>2</sub>	27
	Ar	55
Peak compression ratio backing port to main inlet port (D)	N <sub>2</sub>	>1x10 <sup>11</sup>
	He	6.9x10 <sup>5</sup>
	H <sub>2</sub>	2.9x10 <sup>4</sup>
	Ar	1x10 <sup>11</sup>
Ultimate pressure	mbar	<1x10 <sup>-7</sup>
Sound pressure level	dB(A)	34 +/- 2.5*
Mass (kg) D		ISO 2.47 - CF 3.5
<b>Pumped media</b>		
Designed gas compatibility*	Air, CO, Ne, N <sub>2</sub> , Kr, Ar, CO <sub>2</sub> , He and H <sub>2</sub> O <sub>2</sub> concentration must be less than 25% by volume Water vapour must not condense inside the pump	
Ambient operating temperature range	°C	5 to 40
Storage temperature range	°C	-30 to +70
Cooling method, optional		air/water
Cooling method, standard		Free convection
Maximum external magnetic field	mT	5 radial
Enclosure protection		IP64
<b>Electrical rating</b>		
Power supply	v	24-48 Vd.c +5% - 10%
Max power consumption	W	120W
Factory default setting	W	Refer to pump label
Connector		15-way D-Type male
Logic control		Refer to nEXT85 manual

\*declared dual number noise emission values in accordance with ISO4871

\*\* To pump an unlisted gas species, contact the supplier for advice

## DIMENSIONS



Publication Number: 3601 0631 01

© Edwards Limited 2021. All rights reserved  
Edwards and the Edwards logo are trademarks of Edwards Limited.

Whilst we make every effort to ensure that we accurately describe our products and services, we give no guarantee as to the accuracy or completeness of any information provided in this datasheet.

Edwards Ltd, registered in England and Wales  
No. 6124750, registered office: Innovation Drive,  
Burgess Hill, West Sussex, RH15 9TW, UK.



## GLOBAL CONTACTS

### EMEA

UK	+44 (0) 1444 253 000 (local rate) 0845 921 2223
Belgium	+44 1293 60 3350
France	+33 1 4121 1256
Germany	0800 000 1456
Italy	+39 02 48 4471
Israel	+972 8 681 0633
Russia	+7 495 933 55 50 Ext. 1800/1803 +8 800 775 80 99

### ASIA PACIFIC

China	+86 400 111 9618
India	+91 20 4075 2222
Japan	+81 47 458 8836
Korea	+82 31 716 7070
Singapore	+65 6546 8408
Taiwan	+886 3758 1000

### AMERICAS

USA	+1 800 848 9800
Brazil	+55 11 3952 5000