

# nEXT55 TURBOMOLECULAR PUMP

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**nEXT55 is one of the smaller members of the nEXT family and has been extended to include variants that can be mounted in any orientation. These variants deliver the same performance characteristics as our current pumps but with more flexibility.**

This 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

- Any orientation for flexibility of use
- 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

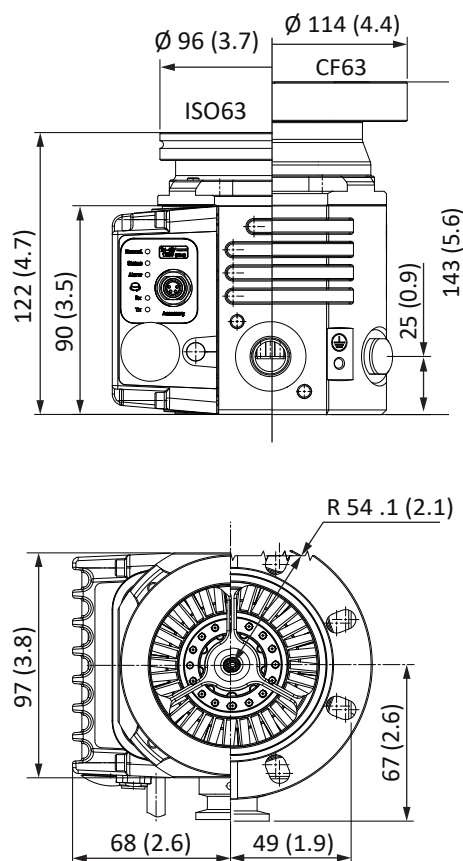
## TECHNICAL DATA

		nEXT55	
<b>Pump interface</b>			
Inlet flange		NW40	ISO63/CF63
Exhaust flange		NW16	NW16
Vent port		¼ 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>	35	55
	He	26	41
	H <sub>2</sub>	17	27
	Ar	35	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	

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

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

## DIMENSIONS



## ORDER INFORMATION

nEXT55 Product description	Order number
nEXT55D ISO63 NW16 80W	B8E210B01
nEXT55D CF63 NW16 80W	B8E210C01
nEXT55D ISO100 NW16 80W	B8E210I01
nEXT55D NW40 NW16 80W	B8E210A01
nEXT55D ISO63 NW16 80W AO	B8A210B01
nEXT55D CF63 NW16 80W AO	B8A210C01
nEXT55D ISO100 NW16 80W AO	B8A210I01
nEXT55D NW40 NW16 80W AO	B8A210A01



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