nXL110iD Dry Pump

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General description

Scope of this addendum

This addendum describes the specific technical information for the nXL110iD dry pump. Please read this document in conjunction with publication A77010880.

The section and table headings in this document refer to the section and table headings in publication A77010880.

Description	Model Number
nXL110iD 200-240 V NW40/NW25/NW25	A77032320
nXL110iD 200-240 V NW40/NW16/NW25	A77032321

Overview

The nXL110iD dry pump is a variant of the standard nXL110i air cooled dry pump. It provides a second inlet port to allow provision of two vacuum sources from a single backing pump.

Installation

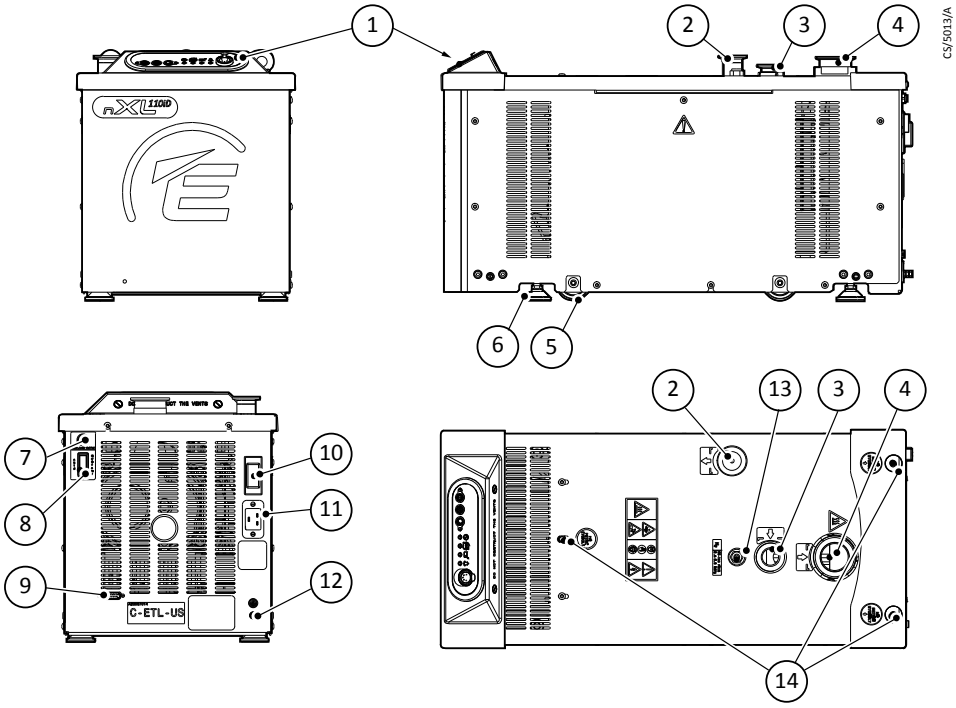
Unpack and inspect

Table 1 Checklist of items

Quantity	Description	Check
1	nXL110iD dry pump	❒
3	Eye bolts	❒
1	Instruction manual CD (P450-00-000)	❒

General description

Figure 1 nXL110iD



1. Dashboard or interface
2. Exhaust port
3. Secondary inlet port
4. Primary inlet port
5. Castors x 4
6. Levelling feet x 4
7. Auxiliary connector
8. Auto-run switch
9. 15-way D-type connector port
10. Mains circuit breaker
11. Mains connector port
12. Protective earth stud
13. N_2 purge port
14. Lifting eye positions

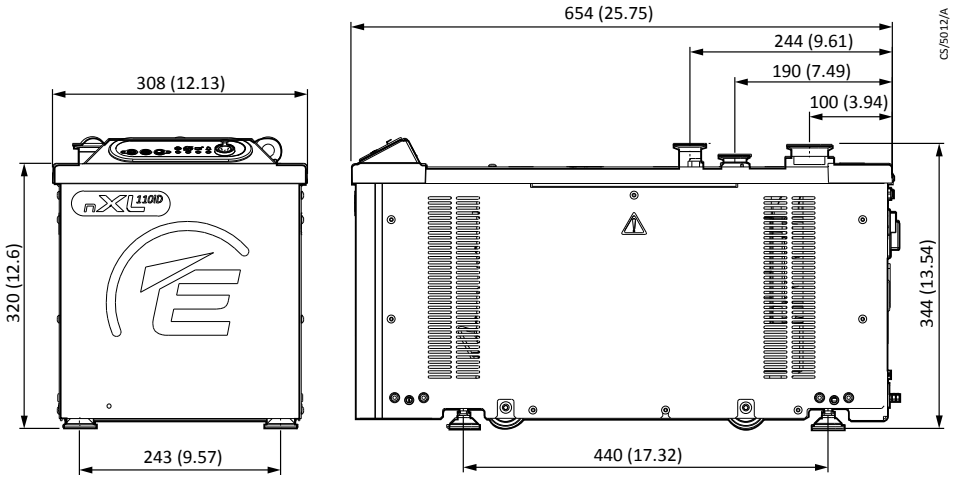
Technical reference

General technical data

Table 2 Mechanical data

	nXL110iD
Overall dimensions (L x W x H)	654 x 308 x 344 mm
Maximum tilt angle	25 °
Nominal rotational speed	9000 rpm
Mass	78 kg
Inlet connection	NW40/NW25 or NW16
Outlet connection	NW25

Figure 2 Dimensions - nXL110iD



Pump performance data

Table 3 Performance data

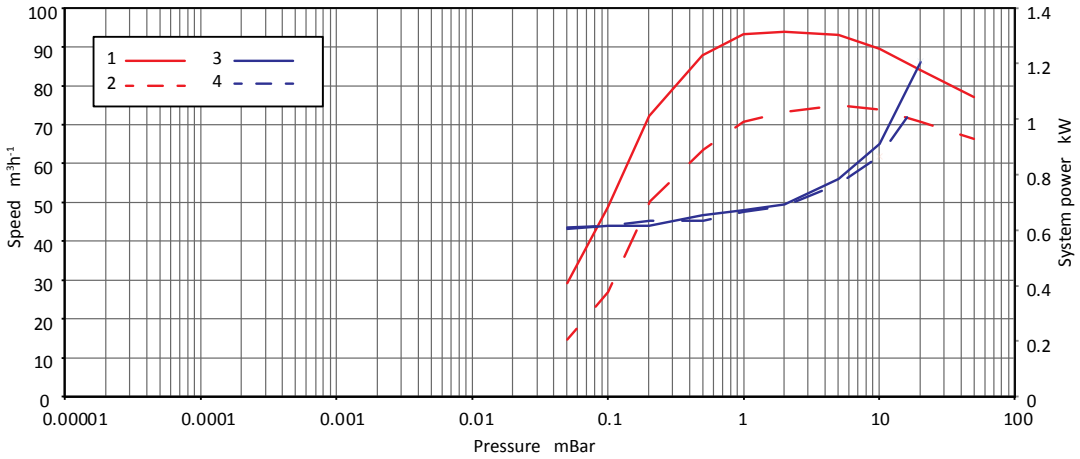
	nXL110iD	
	Primary Inlet	**Secondary Inlet**
Maximum pumping speed (m^3/hr)*	98	75
Maximum continuous inlet pressure at 40° ambient (mbar)	8	
Maximum continuous inlet pressure at 30° ambient (mbar)	15	
Maximum continuous exhaust pressure (bar gauge)	0.4	
Suck-back protection	By exhaust valve	
Leak tightness (static) (mbar l s^{-1})	<1 x 10^{-5}	

** Values for maximum pumping speed are obtained at sea level. Above this level pump performance may be compromised and the rotational speed may drop below nominal. The maximum pumping speeds are measured with only one open inlet. With simultaneous gas flow at both inlets, the pumping speed will be less. Contact us for more details.*

Table 4 Sound data

Declared dual-number noise emission values in accordance with ISO 4871	
	nXL110iD
Measured A-weighted emission sound pressure level, LpA at ultimate vacuum 1 m from the pump in free space dB(A)	56.7
Uncertainty, KpA dB(A)	2.5
Values determined in accordance with ISO 3744: 2010	

Figure 3 nXL110iD Performance Graph (maximum performance with a single open inlet)



1. nXL110iD Dual Inlet 1 Smoothed
2. nXL110iD Dual Inlet 2 Smoothed
3. Power Inlet 1
4. Power Inlet 2

P20010250A

CE Declaration of Conformity

Edwards Ltd
Innovation Drive
Burgess Hill
West Sussex
RH15 9TW
UK

The following product

nXL110iD 200 – 240 V 1 PH 50-60 HZ NW40/NW25/NW25	A77032320
nXL110iD 200 – 240 V 1 PH 50-60 HZ NW50/NW16/NW25	A77032321

Is in conformity with the relevant requirements of European CE legislation:

2006/42/EC	Machinery directive
2014/35/EU	Low voltage directive (LVD) as applicable to electrical sub-assemblies
2014/30/EU	Electromagnetic compatibility (EMC) directive
2011/65/EU	Restriction of certain hazardous substances (RoHS) directive as amended by Delegated Directive (EU) 2015/863

Based on the relevant requirements of harmonised standards:

EN 1012-2:1996 +A1:2009	Compressors and vacuum pumps. Safety requirements. Vacuum pumps
EN 61010-1:2010	Safety requirements for electrical equipment for measurement, control and laboratory use. General requirements
EN 61326-1:2013	Electrical equipment for measurement, control and laboratory use. EMC requirements. General requirements Class A Emissions, Industrial Immunity

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This declaration, based on the requirements of the listed Directives and EN ISO/IEC 17050-1, covers all product serial numbers from this date on: *9th January 2020.*

Petr Smerek, Engineering Manager
Scientific Vacuum Division
Lutin

Nina Buta – General Manger
Lutin

Additional Legislation and Compliance Information

EU EMC Directive: Class A Industrial equipment

Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

EU RoHS Directive: Material Exemption Information

This product is compliant with the following Annex III Exemptions:

- 6(c) Copper alloy containing up to 4% **lead** by weight
- 7(a) **Lead** in in high melting temperature type solder (i.e. lead based alloys containing 85% by weight or more lead)
- 7(c) I Electrical and electronic components containing **lead** in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezo electronic devices, or in a glass or ceramic matrix compound
- 7(c) II **Lead** in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher
- 8(b) **Cadmium** and its compounds in electrical contacts
- 15 **Lead** in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages
- 34 **Lead** in cermet-based trimmer potentiometer elements

EU REACH Regulation Compliance

This product is a complex article which is not designed for intentional substance release. To the best of our knowledge the materials used comply with the requirements of REACH. The product manual provides information and instruction to ensure the safe storage, use, maintenance and disposal of the product including any substance based requirements.

Article 33.1 Declaration

This product does contain Candidate List Substances of Very High Concern above 0.1%ww by article as clarified under the 2015 European Court of Justice ruling in case C-106/14.

- Cadmium (Cd) added to the Candidate List June 2013

As indicated by the applied RoHS exemption above, this substance is present in electronic componentry.

- Lead (Pb) added to the Candidate List June 2018

As indicated by the applied RoHS exemption(s) above this substance is present in certain aluminium/brass/steel/electrical or electronic components.

ADDITIONAL INFORMATION

The products listed are also in scope for and comply with the requirements of the following:

Product is certified to CSA-C22.2 No.61010-1-12	Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements
Product conforms to UL61010-1 3rd Edition	Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements

材料成分声明
China Material Content Declaration

	有害物质 Hazardous Substances					
部件名称 Part name 	铅 Lead (Pb)	汞 Mercury (Hg)	镉 Cadmium (Cd)	六价铬 Hexavalent Chromium (Cr VI)	多溴联苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
机壳 Enclosure	O	O	O	O	O	O
电机（泵和机械增压泵） Motors (pump and mechanical booster)	O	O	O	O	O	O
泵和增压泵 Pump and booster	O	O	O	O	O	O
电子元件和控件 Electronics and Controls	X	O	X	O	O	O
冷却系统 Cooling system	O	O	O	O	O	O
吹扫系统 Purge system	O	O	O	O	O	O
机台接口 Tool Interface	O	O	O	O	O	O

O: 表示该有害物质在该部件的所有均质材料中的含量低于 GB/T 26572 标准规定的限量要求。
O: Indicates that the hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in GB/T 26572.

X: 表示该有害物质在该部件的至少一种均质材料中的含量超出 GB/T26572 标准规定的限量要求。
X: Indicates that the hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T26572.