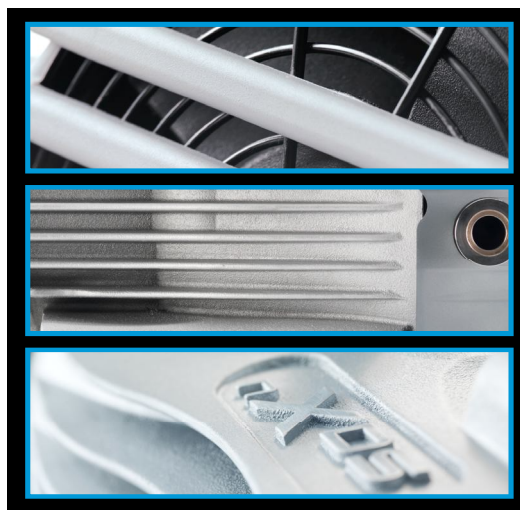


nXDS DRY SCROLL PUMP

THE ULTIMATE DRY CHOICE



With exceptional pumping capability, ultimate vacuum performance and state-of-the-art design features, the nXDS dry scroll pump is the best performing pump in its class. nXDS improves on the original XDS pump technology by offering increased pumping speeds, combined with lower ultimate pressures, low power consumption and reduced noise. The gas ballast allows for pumping of condensable vapours, including water, solvents, dilute acids and bases. nXDS pumps feature the very latest in tip seal technology, giving a significantly longer life between tip seal changes. nXDS-C has been modified so that it is more suitable for use on vapour handling processes and may be used in some applications involving corrosive substances. This chemically resistant version is fitted with Chemraz® internal valve pads and stainless steel fittings. nXDS-R has the gas ballast blanked off so it cannot be accidentally opened. This is useful for applications such as rare gas recirculation or gas recovery.



Features and Benefits

- **Lubricant-free** within the vacuum envelope and hermetically sealed means a totally clean and dry vacuum to prevent cross contamination.
- **Advanced scroll-form and tip-seal technologies** deliver best-in-class vacuum performance and unrivalled ultimate vacuum levels.
- **Unique tip seal design** significantly reduces wear to minimise maintenance and extend service life.
- **Quiet operation** with typical noise during operation < 52 dB(A) for minimal environmental impact.
- **Advanced interface** providing a variety of traditional and analogue and digital control methods enabling remote control/monitoring via RS232 or RS485.
- **Integrated inverter drive** with auto sensing input delivers optimised pumping performance globally.
- **Pump range** includes 6, 10, 15 and 20 m³h⁻¹.

Applications

- Backing turbomolecular pumps.
- Chamber evacuation.
- Chemical applications including gel dryers and solvent recovery.
- Electron microscopy.
- High energy physics.
- Mass spectrometry.

Pump Range

nXDS6i	nXDS15i
- nXDS6i	- nXDS15i
- nXDS6iC	- nXDS15iC
- nXDS6iR	- nXDS15iR
nXDS10i	nXDS20i
- nXDS10i	- nXDS20i
- nXDS10iC	- nXDS20iC
- nXDS10iR	- nXDS20iR

Chemraz® is a registered trademark of Greene Tweed

Performance Curves

nXDS6i Dry Scroll pump

nXDS6i



Peak pumping speed

6.2 m³h⁻¹
(3.6 ft³min⁻¹)

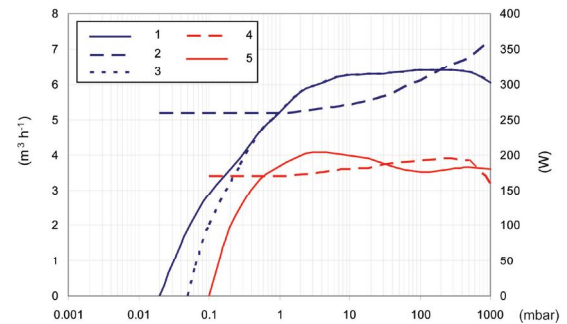
Ultimate Pressure

0.020 mbar
(0.015 Torr)

Ordering information

Product description	Order no:
nXDS6i 100-127 V, 200-240 V, 1ph 50-60 Hz	A73501983
nXDS6iC 100-127 V, 200-240 V, 1ph 50-60 Hz	A73502983
nXDS6iR 100-127 V, 200-240 V, 1ph 50-60 Hz	A73503983

nXDS6i Performance Curve



1 Normal Pumping Speed	4 min Standby Power
2 Normal Full Power	5 min Standby Speed
3 Normal GB speed	

nXDS10i Dry Scroll pump

nXDS10i



Peak pumping speed

11.4 m³h⁻¹
(6.7 ft³min⁻¹)

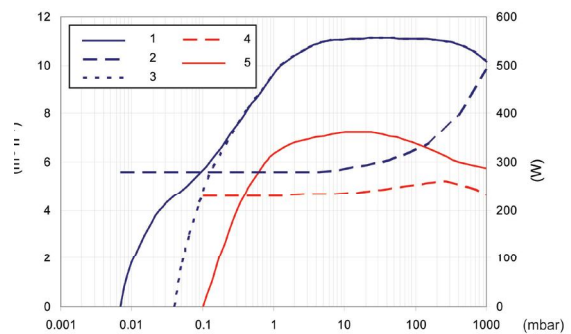
Ultimate Pressure

0.007 mbar
(0.005 Torr)

Ordering information

Product description	Order no:
nXDS10i 100-127 V, 200-240 V, 1ph 50-60 Hz	A73601983
nXDS10iC 100-127 V, 200-240 V, 1ph 50-60 Hz	A73602983
nXDS10iR 100-127 V, 200-240 V, 1ph 50-60 Hz	A73603983

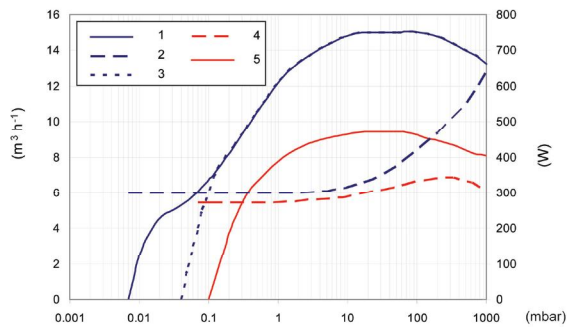
nXDS10i Performance Curve



1 Normal Pumping Speed	4 min Standby Power
2 Normal Full Power	5 min Standby Speed
3 Normal GB speed	

nXDS15i Dry Scroll pump

nXDS15i Performance Curve



1	Normal Pumping Speed	4	min Standby Power
2	Normal Full Power	5	min Standby Speed
3	Normal GB speed		

nXDS15i

Peak pumping speed

15.1 $\text{m}^3 \text{h}^{-1}$

(8.9 $\text{ft}^3 \text{min}^{-1}$)

Ultimate Pressure

0.007 mbar

(0.005 Torr)



Product description

nXDS15i 100-127 V, 200-240 V, 1ph 50-60 Hz

nXDS15iC 100-127 V, 200-240 V, 1ph 50-60 Hz

nXDS15iR 100-127 V, 200-240 V, 1ph 50-60 Hz

Order no:

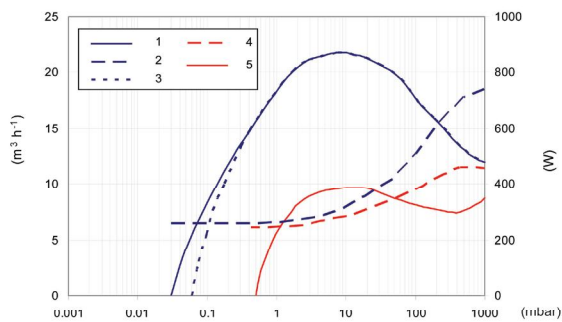
A73701983

A73702983

A73703983

nXDS20i Dry Scroll pump

nXDS20i Performance Curve



1	Normal Pumping Speed	4	min Standby Power
2	Normal Full Power	5	min Standby Speed
3	Normal GB speed		

nXDS20i

Peak pumping speed

22.0 $\text{m}^3 \text{h}^{-1}$

(13.0 $\text{ft}^3 \text{min}^{-1}$)

Ultimate Pressure

0.030 mbar

(0.022 Torr)



Product description

nXDS20i 100-127 V, 200-240 V, 1ph 50-60 Hz

nXDS20iC 100-127 V, 200-240 V, 1ph 50-60 Hz

nXDS20iR 100-127 V, 200-240 V, 1ph 50-60 Hz

Order no:

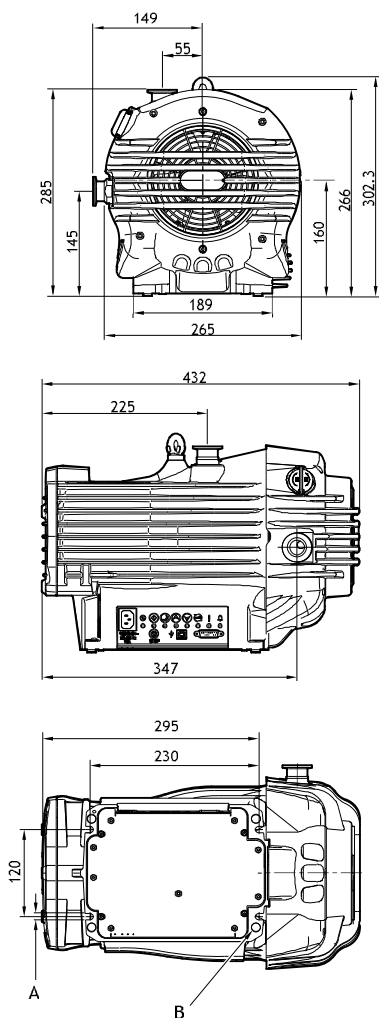
A73801983

A73802983

A73803983

Dimensions

nXDS dimensions



A 9 mm wide slots 4 off

B Rubber feet 4 off

All nXDS variants are of the same dimensions.
Dimensions in mm (inch).

Pump views



Technical Data



	Units	nXDS6i	nXDS10i	nXDS15i	nXDS20i
Nominal rotational speed	rpm			1800	
Displacement	m ³ h ⁻¹ / ft ³ min ⁻¹	6.8 / 4.0	12.7 / 7.5	17.1 / 10.1	28.0 / 16.5
Peak pumping speed	m ³ h ⁻¹ / ft ³ min ⁻¹	6.2 / 3.6	11.4 / 6.7	15.1 / 8.9	22.0 / 13.0
Ultimate vacuum (total pressure)	mbar / Torr	0.020 / 0.015		0.007 / 0.005	0.030 / 0.022
Minimum standby rotational speed	rpm			1200	
Speed control resolution (percentage of full rotation speed)				1%	
Max water vapour pumping rate	gh ⁻¹	110	145	145	220
Maximum continuous inlet pressure	mbar		200		50
Voltage input	V		100-127, 200-240 (+/-10%)		
Voltage frequency	Hz		50/60		
Motor power 1-ph*	W	260	280	300	260
Power connector 1-ph			IEC EN60320 C13		
Weight	kg / lb	26.2 / 58	25.8 / 57	25.2 / 56	25.6 / 56
Inlet flange			NW25		
Exhaust flange			NW25		
Noise level**	dB(A)		52		
Vibration at inlet flange	mms ⁻¹ (rms)		< 4.5		
Leak tightness (static)	mbar ls ⁻¹		< 1 x 10 ⁻⁶		
Operating temperature range	°C / F		10 to 40 / 41 to 104		

* Typical.

** For low fan speed, typical at ultimate end when load/ambient conditions allow.

Service, Spares and Accessories

The control cable is used to connect the nXDS pump directly to the RS485 or RS232 serial input on your control equipment or a PC, or alternatively, to an Edwards controller such as a TIC (Turbo Instrument Controller) or TAG (Turbo & Active Gauge controller).

Pump to TIC/TAG Controller Cable

Product description	Order no:	Product description	Order no:
Interface cable 1.0 m	D39700835	2 m electrical supply cable for 1-ph pumps, UK, three-pin plug	A50505000
Interface cable 2.0 m	D39700836	2 m electrical supply cable for 1-ph pumps, North European plug	A50506000
Interface cable 5.0 m	D39700837	2 m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
		2 m electrical supply cable for 1-ph pumps, no plug	A50508000

Gas Ballast Adaptor

Product description	Order no:
Gas Ballast adaptor blank	A73501806
Gas Ballast Adaptor 0.25mm restrictor	A73501809
Gas Ballast Adaptor no restrictor	A73501811

Exhaust

Product description	Order no:
Exhaust silencer	A50597000
Silencer spares kit	A50597800
Exhaust nozzle kit 3/4" to 15 mm	A50509000
NW25 inlet/outlet filter 5 micron	A50597805
XDS Filter 5 micron element kit	A50597802
XDS Filter 1 micron element kit	A50597803

Vibration Isolator

Product description	Order no:
nXDS Vibration isolator (0.45 kg)	A24701441

Chemical Resistance Conversion Unit

Product description	Order no:
nXDS6i, 10i & 15i Chemical resistance conversion unit	A73501807
nXDS20i Chemical resistance conversion unit	A73501808

nXDS Service kits

Product description	Order no:
nXDS Exhaust and gas ballast kit	A73501803
nXDS Tip seal service kit	A73501801
nXDS Bearing replacement kit	A73501802

Service

Edwards products, spares and accessories are available from Edwards companies in Belgium, Brazil, China, France, Germany, Israel, Italy, Japan, Korea, Singapore, United Kingdom, U.S.A. and a worldwide network of distributors. The majority of these centres employ Service Engineers who have undergone comprehensive Edwards training courses. Order spare parts and accessories from your nearest Edwards company or distributor.

When you order, please state for each part required:

- Model and item number of your equipment.
- Serial number (if any).
- Item number and description of the part.