

# nXDS6i Scroll Pump

The nXDS6i is the next generation in completely oil free, dry scroll pumps and replaces the XDS5. nXDS improves on legacy XDS pumps by offering increased pumping speeds, combined with lower ultimate pressures, lower power consumption and lower noise. Gas ballast allows for pumping of condensable vapours including, water, solvents, dilute acids and bases. nXDS pumps also feature the latest in tip seal technology giving significantly longer life between tip seal changes. Integrated inverter drive with auto sensing voltage input delivers optimized pumping performance globally. nXDS pumps are designed to be completely field serviceable.



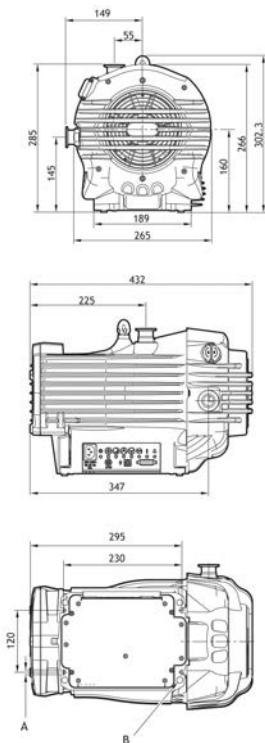
## Features & Benefits

- Lubricant-free within the vacuum envelope and hermetically sealed means totally clean and dry vacuum to prevent cross contamination
- No atmosphere to vacuum shaft seals means bearings are completely isolated, which prevents process attack and means the bearings run cooler and last longer
- Simple single sided scroll arrangement combined with an innovative motor and bearing design allows for easy field service with a minimum of special tooling for low cost of ownership and maximum up-time
- Improved motor and drive efficiencies for reduced power and cost of ownership
- Advanced interface provides a variety of traditional, analogue and digital control methods enabling remote control/monitoring via USB, RS232 or RS485

## Applications

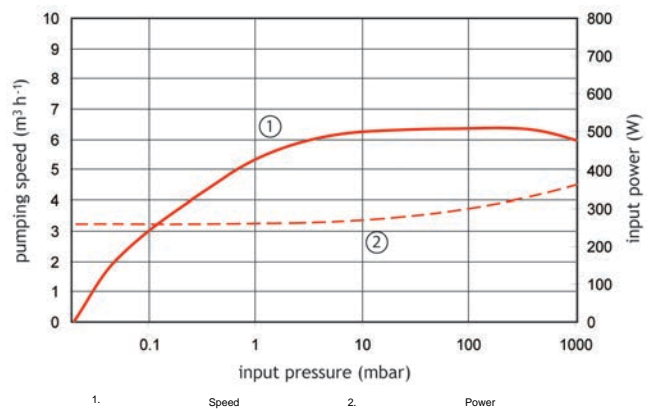
- General clean pumping applications
- Scanning Electron Microscopes - SEM
- Beam lines and high energy physics
- Backing turbo pumps
- Centrifuges, ultra-high speed

## Dimensions



A. 9 wide slots (x 4)      B. Rubber feet (x 4)

## Performance Curves



## Technical Data

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Nominal rotational speed	1800 rpm
Displacement	6.8 m <sup>3</sup> h <sup>-1</sup> / 4.0 ft <sup>3</sup> min <sup>-1</sup>
Peak pumping speed	6.2 m <sup>3</sup> h <sup>-1</sup> / 3.6 ft <sup>3</sup> min <sup>-1</sup>
Ultimate vacuum (total pressure)	0.020 mbar / 0.015 Torr
Minimum standby rotational speed	1200 rpm
Speed control resolution (percentage of full rotation speed)	1%
Pumping speed at minimum rotational speed	4.1
Maximum continuous inlet pressure	200 mbar
Motor power 1-ph	260 W
Power connector 1-ph	IEC EN60320 C13
Recommended fuse	10A, 250Vac rms
Weight	26.2 kg / 58 lb
Inlet flange	NW25
Exhaust flange	NW25
Noise level	52 dB(A)
Vibration at inlet flange	< 4.5 mms <sup>-1</sup> (rms)
Leak tightness (static)	< 1x10 <sup>-6</sup> mbar ls <sup>-1</sup>
Operating temperature range	10 to 40 °C / 41 to 104 °F

## Ordering Information

Product Description	Order No.
nXDS6i Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73501983
Accessories & Spares	Order No.
2m electrical supply cable for 1-ph pumps, no plug	A50508000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
2m electrical supply cable for 1-ph pumps, UK, Three-pin plug	A50505000
Exhaust silencer	A50597000
Silencer spares kit	A50597800

# nXDS10i Scroll Pump

The nXDS10i is the next generation in completely oil free, dry scroll pumps and replaces the XDS10. nXDS improves on legacy XDS pumps by offering increased pumping speeds, combined with lower ultimate pressures, lower power consumption and lower noise. Gas ballast allows for pumping of condensable vapours including, water, solvents, dilute acids and bases. nXDS pumps also feature the latest in tip seal technology giving significantly longer life between tip seal changes. Integrated inverter drive with auto sensing voltage input delivers optimized pumping performance globally. nXDS pumps are designed to be completely field serviceable.



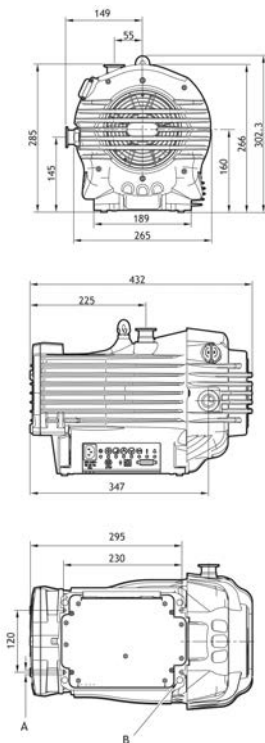
## Features & Benefits

- Lubricant-free within the vacuum envelope and hermetically sealed means totally clean and dry vacuum to prevent cross contamination
- No atmosphere to vacuum shaft seals means bearings are completely isolated, which prevents process attack and means the bearings run cooler and last longer
- Simple single sided scroll arrangement combined with an innovative motor and bearing design allows for easy field service with a minimum of special tooling for low cost of ownership and maximum up-time
- Improved motor and drive efficiencies for reduced power and cost of ownership
- Advanced interface provides a variety of traditional, analogue and digital control methods enabling remote control/monitoring via USB, RS232 or RS485

## Applications

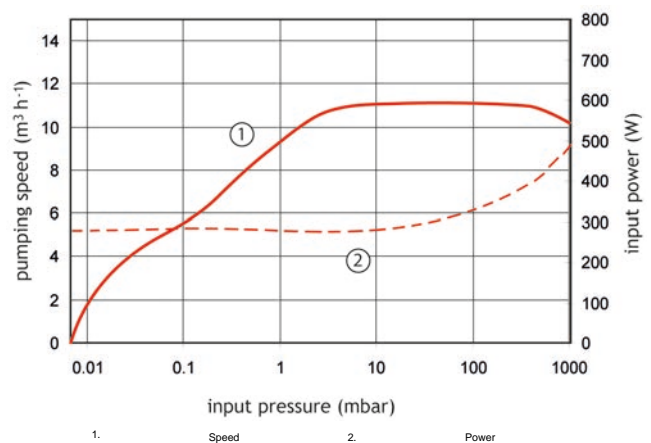
- General clean pumping applications
- Scanning Electron Microscopes - SEM
- Beam lines and high energy physics
- Backing turbo pumps
- Centrifuges, ultra-high speed

## Dimensions



A. 9 wide slots (x 4)      B. Rubber feet (x 4)

## Performance Curves



## Technical Data

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Nominal rotational speed	1800 rpm
Displacement	12.7 m <sup>3</sup> h <sup>-1</sup> / 7.5 ft <sup>3</sup> min <sup>-1</sup>
Peak pumping speed	11.4 m <sup>3</sup> h <sup>-1</sup> / 6.7 ft <sup>3</sup> min <sup>-1</sup>
Ultimate vacuum (total pressure)	0.007 mbar / 0.005 Torr
Minimum standby rotational speed	1200 rpm
Speed control resolution (percentage of full rotation speed)	1%
Pumping speed at minimum rotational speed	7.5
Maximum continuous inlet pressure	200 mbar
Motor power 1-ph	280 W
Power connector 1-ph	IEC EN60320 C13
Recommended fuse	10A, 250Vac rms
Weight	25.8 kg / 57 lb
Inlet flange	NW25
Exhaust flange	NW25
Noise level	52 dB(A)
Vibration at inlet flange	< 4.5 mms <sup>-1</sup> (rms)
Leak tightness (static)	< 1x10 <sup>-6</sup> mbar ls <sup>-1</sup>
Operating temperature range	10 to 40 °C / 41 to 104 °F

## Ordering Information

Product Description	Order No.
nXDS10i Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73601983
Accessories & Spares	Order No.
2m electrical supply cable for 1-ph pumps, no plug	A50508000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
2m electrical supply cable for 1-ph pumps, UK, Three-pin plug	A50505000
Exhaust silencer	A50597000
Silencer spares kit	A50597800

# nXDS15i Scroll Pump

The nXDS15i is the next generation in completely oil free, dry scroll pumps and can be used to replace similar sized dry pumps and medium sized oil sealed pumps in a variety of applications. nXDS improves on legacy XDS pumps by offering increased pumping speeds, combined with lower ultimate pressures, lower power consumption and lower noise. Gas ballast allows for pumping of condensable vapours including, water, solvents, dilute acids and bases. nXDS pumps also feature the latest in tip seal technology giving significantly longer life between tip seal changes. Integrated inverter drive with auto sensing voltage input delivers optimized pumping performance globally. nXDS pumps are designed to be completely field serviceable.



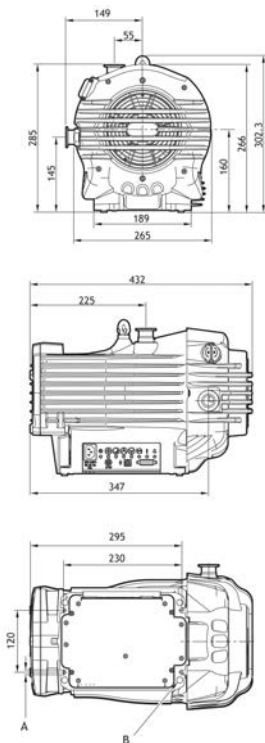
## Features & Benefits

- Lubricant-free within the vacuum envelope and hermetically sealed means totally clean and dry vacuum to prevent cross contamination
- No atmosphere to vacuum shaft seals means bearings are completely isolated, which prevents process attack and means the bearings run cooler and last longer
- Simple single sided scroll arrangement combined with an innovative motor and bearing design allows for easy field service with a minimum of special tooling for low cost of ownership and maximum up-time
- Improved motor and drive efficiencies for reduced power and cost of ownership
- Advanced interface provides a variety of traditional, analogue and digital control methods enabling remote control/monitoring via USB, RS232 or RS485

## Applications

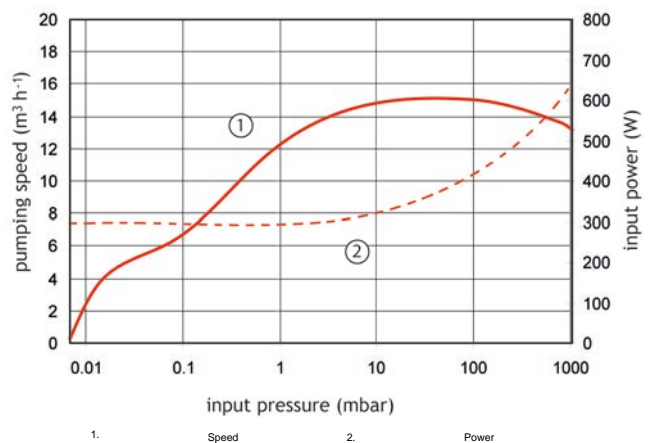
- General clean pumping applications
- Scanning Electron Microscopes - SEM
- Beam lines and high energy physics
- Backing turbo pumps
- Centrifuges, ultra-high speed

## Dimensions



A. 9 wide slots (x 4)      B. Rubber feet (x 4)

## Performance Curves



## Technical Data

Nominal rotational speed	1800 rpm
Displacement	$17.1 \text{ m}^3 \text{ h}^{-1} / 10.1 \text{ ft}^3 \text{ min}^{-1}$
Peak pumping speed	$15.1 \text{ m}^3 \text{ h}^{-1} / 8.9 \text{ ft}^3 \text{ min}^{-1}$
Ultimate vacuum (total pressure)	0.007 mbar / 0.005 Torr
Minimum standby rotational speed	1200 rpm
Speed control resolution (percentage of full rotation speed)	1%
Pumping speed at minimum rotational speed	9.9
Maximum continuous inlet pressure	200 mbar
Motor power 1-ph	300 W
Power connector 1-ph	IEC EN60320 C13
Recommended fuse	10A, 250Vac rms
Weight	25.2 kg / 56 lb
Inlet flange	NW25
Exhaust flange	NW25
Noise level	52 dB(A)
Vibration at inlet flange	$< 4.5 \text{ mms}^{-1}$ (rms)
Leak tightness (static)	$< 1 \times 10^{-6} \text{ mbar ls}^{-1}$
Operating temperature range	10 to 40 °C / 41 to 104 °F

## Ordering Information

Product Description	Order No.
nXDS15i Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73701983
Accessories & Spares	Order No.
2m electrical supply cable for 1-ph pumps, no plug	A50508000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
2m electrical supply cable for 1-ph pumps, UK, Three-pin plug	A50505000
Exhaust silencer	A50597000
Silencer spares kit	A50597800



# nXDS20i Scroll Pump

The nXDS20i is the next generation in completely oil free, dry scroll pumps and can be used to replace similar sized dry pumps and medium sized oil sealed pumps in a variety of applications. nXDS improves on legacy XDS pumps by offering increased pumping speeds, combined with lower ultimate pressures, lower power consumption and lower noise. Gas ballast allows for pumping of condensable vapours including, water, solvents, dilute acids and bases. nXDS pumps also feature the latest in tip seal technology giving significantly longer life between tip seal changes. Integrated inverter drive with auto sensing voltage input delivers optimized pumping performance globally. nXDS pumps are designed to be completely field serviceable.



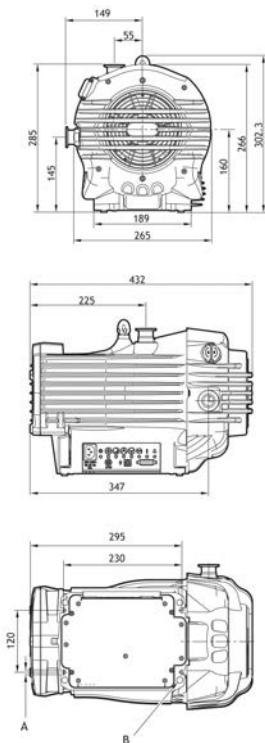
## Features & Benefits

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- Improved motor and drive efficiencies for reduced power and cost of ownership
- Advanced interface provides a variety of traditional, analogue and digital control methods enabling remote control/monitoring via USB, RS232 or RS485

## Applications

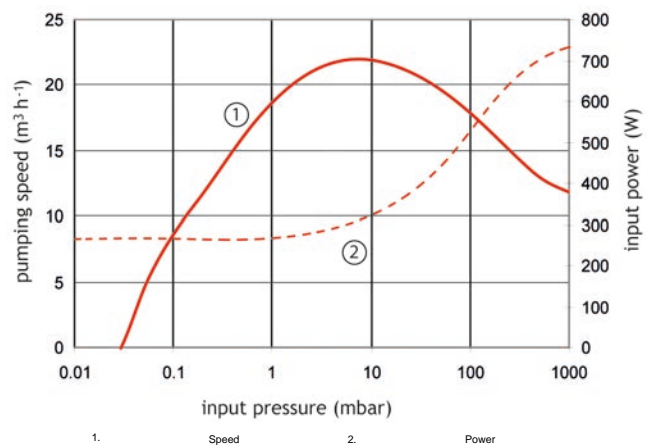
- General clean pumping applications
- Scanning Electron Microscopes - SEM
- Beam lines and high energy physics
- Backing turbo pumps
- Centrifuges, ultra-high speed

## Dimensions



A. 9 wide slots (x 4)      B. Rubber feet (x 4)

## Performance Curves



## Technical Data

Nominal rotational speed	1800 rpm
Displacement	28.0 m <sup>3</sup> h <sup>-1</sup> / 16.5 ft <sup>3</sup> min <sup>-1</sup>
Peak pumping speed	22.0 m <sup>3</sup> h <sup>-1</sup> / 13.0 ft <sup>3</sup> min <sup>-1</sup>
Ultimate vacuum (total pressure)	0.030 mbar / 0.022 Torr
Minimum standby rotational speed	1200 rpm
Speed control resolution (percentage of full rotation speed)	1%
Pumping speed at minimum rotational speed	10
Maximum continuous inlet pressure	50 mbar
Motor power 1-ph	260 W
Power connector 1-ph	IEC EN60320 C13
Recommended fuse	10A, 250Vac rms
Weight	26.6 kg / 56 lb
Inlet flange	NW25
Exhaust flange	NW25
Noise level	52 dB(A)
Vibration at inlet flange	< 4.5 mms <sup>-1</sup> (rms)
Leak tightness (static)	< 1x10 <sup>-6</sup> mbar ls <sup>-1</sup>
Operating temperature range	10 to 40 °C / 41 to 104 °F

## Ordering Information

Product Description	Order No.
nXDS20i Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73801983
Accessories & Spares	Order No.
2m electrical supply cable for 1-ph pumps, no plug	A50508000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
2m electrical supply cable for 1-ph pumps, UK, Three-pin plug	A50505000
Exhaust silencer	A50597000
Silencer spares kit	A50597800



The nXDS-C pump is a modified version of the nXDS that is suitable for use on vapour handling processes, and may be used for some pumping applications involving corrosive substances and particulates.



## Features & Benefits

- Lubricant-free within the vacuum envelope and hermetically sealed means totally clean and dry vacuum to prevent cross contamination
- No atmosphere to vacuum shaft seals means bearings are completely isolated, which prevents process attack and means the bearings run cooler and last longer
- No oil changes required eliminating costs of contaminated oil disposal
- Simple single sided scroll design means routine maintenance is done in minutes for low cost of ownership and maximum up-time
- Gas ballast feature to enable pumping of vapours

## Technical Data

Technical Data, Performance curves and Dimensions are as per the standard nXDS/XDS pumps.

## Ordering Information

Product Description	Order No.
nXDS6iC Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73502983
nXDS10iC Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73602983
nXDS15iC Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73702983
nXDS20iC Scroll Pump 100 - 240 V, 50 - 60 Hz, Single Phase	A73802983
Accessories & Spares	Order No.
2m electrical supply cable for 1-ph pumps, no plug	A50508000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
2m electrical supply cable for 1-ph pumps, UK, Three-pin plug	A50505000