

# XDS SCROLL VACUUM PUMP

## THE ULTIMATE DRY CHOICE



XDS scroll pumps have become industry standard when dry pumping is essential, proving to be a robust and clean vacuum pump solution in a range of applications and processes.

The XDS35i pump has an innovative bearing shield that isolates the vacuum environment from all forms of lubricant, making it not only lubricant-free but hermetically sealed. XDS35iNGB variant has had the gas ballast feature removed for applications such as rare gas recirculation and gas recovery.

The XDS46i shares many of the same features of the XDS35i but with a peak speed of  $40 \text{ m}^3\text{h}^{-1}$ . The pump has been optimised for maximum pumping speed at inlet pressures between 1 mbar and 10 mbar, making it ideally suited for LCMS and ICPMS applications requiring higher pumping speeds.

The C variant has been modified so that it is more suitable for use on vapour handling processes and may be used in some applications using corrosive substances. The C version is fitted with Chemraz<sup>®</sup> internal valve pads and stainless steel exhaust port.

Chemraz<sup>®</sup> is a registered trademark of Greene Tweed



### Features and Benefits

- **Lubricant-free** within the vacuum envelope and hermetically sealed means a totally clean and dry vacuum to prevent cross contamination.
- **No atmosphere to vacuum shaft seals** means bearings are completely isolated, this prevents process attack and enable the bearings to run cooler and last longer.
- **No oil to change eliminating cost** of contaminated oil disposal.
- **Simple single sided scroll design** allows maintenance to be done in minutes for low cost of ownership and maximum up-time.
- **Inverter drive** for consistent pumping speeds worldwide.
- **Pump range** includes 35 and  $40 \text{ m}^3\text{h}^{-1}$ .

### Applications

- Automotive; brake line and air conditioning evacuation.
- Backing turbomolecular pumps.
- Chemical applications including gel dryers and solvent recovery.
- Coating systems.
- High energy physics.
- Mass spectrometry.

### Pump Range

#### XDS

- XDS35i
- XDS35iNGB
- XDS35iC
- XDS46i
- XDS46iC

# Performance Curves

## XDS35i Scroll vacuum pump

### XDS35i



#### Peak pumping speed

35 m<sup>3</sup>h<sup>-1</sup>

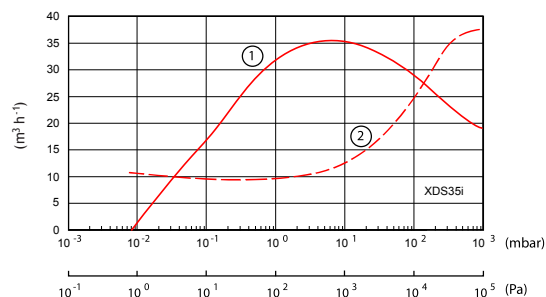
(21 ft<sup>3</sup>min<sup>-1</sup>)

#### Ultimate Pressure

1 x 10<sup>-2</sup> mbar

(8 x 10<sup>-3</sup> Torr)

### XDS35i Performance Curve



### Ordering information

Product description	Order no:
XDS35i 100-120/200-230V 1 ph 50/60 Hz set to 230V	A73001983
XDS35i NGB 100-120/200-230V 1 ph 50/60 Hz set to 230V	A73005983
XDS35iC 100-120/200-230V 1 ph 50/60 Hz set to 230V	A73006983

1	Speed
2	Power

Note: Mains leads must be ordered separately, please see accessories and spares at the end of this section for the relevant standard XDS pump for the correct mains lead.

## XDS46i Scroll vacuum pump

### XDS46i



#### Peak pumping speed

40 m<sup>3</sup>h<sup>-1</sup>

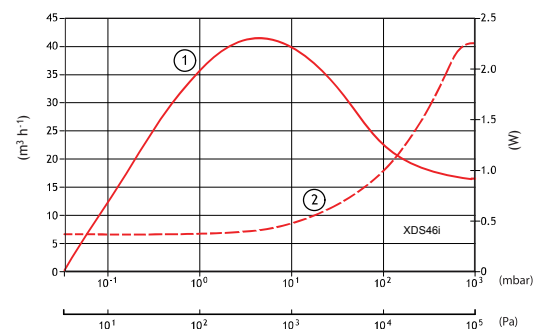
(23.5 ft<sup>3</sup>min<sup>-1</sup>)

#### Ultimate Pressure

5 x 10<sup>-2</sup> mbar

(4 x 10<sup>-2</sup> Torr)

### XDS46i Performance Curve



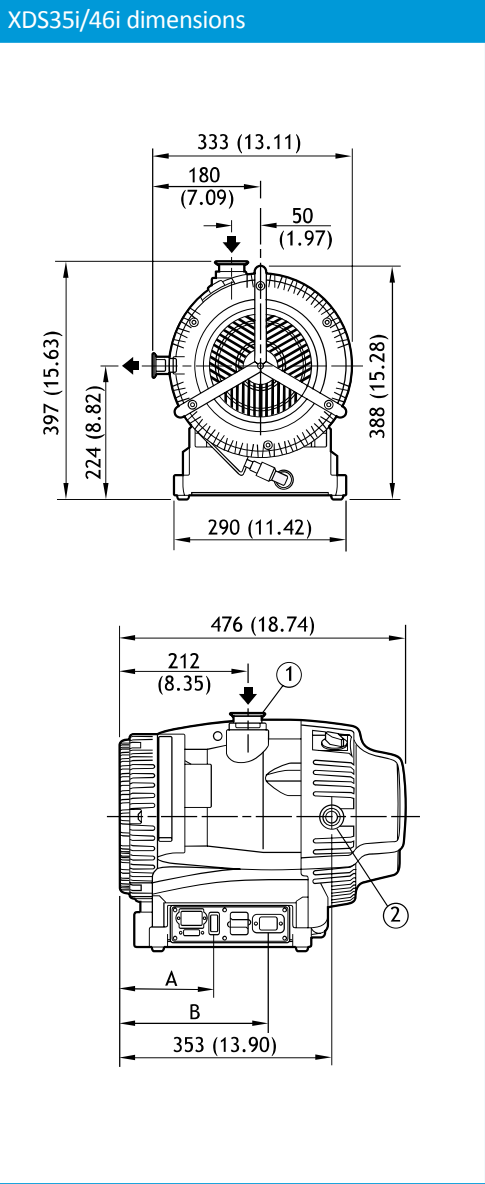
### Ordering information

Product description	Order no:
XDS46i 100-120/200-230V 1 ph 50/60 Hz set to 230V	A73101983
XDS46iC 100-120/200-230V 1 ph 50/60 Hz set to 230V	A73106983

1	Speed
2	Power

Note: Mains leads must be ordered separately, please see accessories and spares at the end of this section for the relevant standard XDS pump for the correct mains lead.

# Dimensions



XDS35i / 46i	
A	150 (5.91)
B	247.5 (9.74)
1	NW40
2	NW25

Dimensions in mm (inch).

## Technical Data



	Units	XDS35i	XDS46i
Displacement 50 or 60 Hz	m <sup>3</sup> h <sup>-1</sup> / ft <sup>3</sup> min <sup>-1</sup>	43 / 25	60 / 35
Peak pumping speed 50 or 60 Hz	m <sup>3</sup> h <sup>-1</sup> / ft <sup>3</sup> min <sup>-1</sup>	35 / 21	40 / 23.5
Ultimate vacuum (Total pressure)	mbar / Torr	1 x 10 <sup>-2</sup> / 8 x 10 <sup>-3</sup>	5 x 10 <sup>-2</sup> / 4 x 10 <sup>-2</sup>
Max inlet pressure for water vapour	mbar / Torr	35 / 23	40 / 30
Max water vapour pumping rate – GB I	gh <sup>-1</sup>	70	-
Max water vapour pumping rate – GB II	gh <sup>-1</sup>	240	-
Max allowed outlet pressure	bar gauge / psig*	0.2 / 2.9	
Max allowed inlet and GB pressure	bar gauge / psig*	0.5 / 7	
Motor power	kW	0.52	
Power connector		IEC EN60320 C19	
Nominal rotation speed	rpm	1750	
Weight	kg / lb	48 / 105	
Inlet flange		NW40	
Exhaust flange		NW25	
Noise level	dB(A)	57	55.4
Vibration	mms <sup>-1</sup> (rms)	< 4.5	
Leak tightness (static)	mbar ls <sup>-1</sup>	< 1 x 10 <sup>-6</sup>	
Operating temperature range	°C / F	10 to 40 / 50 to 104	

\*1 bar gauge / 14 psig for short period of time only

## Service, Spares and Accessories

### XDS Accessories

Product description	Order no:
Exhaust silencer XDS35i	A50597001
Gas Ballast Adapter with 0.25 mm hole	A50626801
XDS NW25 Inlet Outlet filter	A50597805
XDS NW40 Inlet Outlet Filter	A50597806
XDS Filter 5 micron Element kit	A50597802
XDS Filter 1 micron Element kit	A50597803
Vibration Isolator	A24801408

### XDS kits

Product description	Order no:
Tip seal kit XDS35i	A73001801
Tip seal kit XDS46i	A73101801
Silencer spares kit	A50597801

### Electrical Supply Cable

Product description	Order no:
2 m Electrical supply cable, no plug	A50508003
2 m Electrical supply cable, North America/ Japan plug	A50507003
2 m Electrical supply cable, North European plug	A50506003
2 m Electrical supply cable, UK, three-pin plug	A50505003

## 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.