

*a clear edge*

*XDS dry scroll pumps*



Vacuum science... product solution.

# *a clear edge*

## *the ultimate dry choice*

### *Applications*

**You can be assured Edwards has the application expertise and vacuum solution to meet your needs**

#### Mass spectrometry

GCMS, LCMS, ICPMS, MALDI, RGA, surface science, leak detectors

#### Electron microscopy

TEM, SEM, sample coaters

#### Sample preparation

Gel dryers, glove boxes, rotary evaporators, centrifuges

#### Research and development

Chamber evacuation, coating systems, turbopump backing

#### High energy physics

Beam lines, accelerators, mobile pump carts, turbopump backing, laser evacuation

#### Industrial

Gas recovery and recirculation, glove boxes, brake line and air conditioning evacuation, coating systems, freeze drying, gas bottle filling/emptying, refrigeration system manufacture, degassing/curing (oil, epoxy resin)

#### Semiconductor

Load locks and transfer chambers, turbopump backing

#### Chemical

Gel dryers, glove boxes, rotary evaporators, centrifuges, solvent recovery, distillation/extraction/filtration

# *XDS dry scroll pump*

**Edwards 30 years of experience in scientific applications affords us a deep understanding of research practices and the critical role that vacuum plays within them. From this platform, and through collaboration with the major analytical instrument manufacturers, we develop and support innovative vacuum products that underpin our clients' entire research process.**

The XDS range incorporates a unique dry pumping scroll mechanism provides a robust and clean pumping solution for all applications.

All pumps in the range are approved to UL and CSA standards and backed by Edwards worldwide service and support.

*unique design that  
sets the industry  
standard*

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# Technology

## Bearing shield

- Totally clean and dry vacuum
- No bearings or grease in the vacuum space
- No shaft seals, no bearing purges
- Simple single sided scroll design
- Tip seal change in 20 minutes
- No special tools required

## Integral IEC 60320 connector

- No customer wiring

## Motor on/off switch

- Ease of control

## Inverter driven motor (XDS35i/46i/100B)

- Worldwide voltage, low power consumption
- Pump overload protection
- Remote on/off control capability
- Remote speed selection capability

## Axial air gap motor

- Unique design, low power
- Compact product, low noise levels

## Dual voltage/frequency motor with external change-over switch

- Simple voltage selection, less world-wide stock

## Selectable gas ballast position

- No permanent gas ballast leak
- Large water vapor handling capacity





Manufactured under ISO 14001 standard

- Environmentally friendly processes

Manufactured under ISO 9001 standard

- High quality product

All pumps externally approved to EN61010,  
CSA C22.2 1010, UL 61010 standards

Ease of incorporating pump into approved systems,  
safe product



## Technical data

	Hz	Units	XDS5	XDS10	XDS35i	XDS46i	XDS100B booster
<b>VACUUM DATA</b>							
Peak pumping speed <sup>1,2</sup>	60	cfm	3.5	6.5	21	23.5	56
	50	m <sup>3</sup> /h	4.8	9.3	35	40	95
Ultimate pressure (Total)	60	Torr	4.5 x 10 <sup>-2</sup>	4.5 x 10 <sup>-2</sup>	8 x 10 <sup>-3</sup>	4 x 10 <sup>-2</sup>	<8 x 10 <sup>-3</sup>
	50	mbar	7 x 10 <sup>-2</sup>	7 x 10 <sup>-2</sup>	1 x 10 <sup>-2</sup>	5 x 10 <sup>-2</sup>	<1 x 10 <sup>-2</sup>
Water vapor tolerance		Torr	38	23	23	-	-
		mbar	50	35	35	-	-
Water vapor capacity - GB I		g/h	70	70	70	-	-
Water vapor capacity - GB II		g/h	200	200	200	-	-
<b>MOTOR DATA</b>							
Motor rating 1 phase (nominal)	60	W	300	300	520	520	520
	50	W	300	300	520	520	520
Motor rating 3 phase		W	300	300	-	-	-
Nominal rotation speed	60	rpm	1800	1800	1800	1750	1750
	50	rpm	1500	1500	1800	1750	1750
<b>PHYSICAL DATA</b>							
Weight		lb	51	54	106	105	105
		kg	23	24.5	48	48	48
Inlet flange			NW25	NW25	NW40	NW40	NW40
Exhaust flange			NW25	NW25	NW25	NW25	NW40
Noise level	50/60 <sup>3</sup>	dB(A)	55	55	57	55.4	52.1
Leak tightness		mbar l/s	<1 x 10 <sup>-6</sup>	<1 x 10 <sup>-6</sup>	<1 x 10 <sup>-6</sup>	<1 x 10 <sup>-6</sup>	<1 x 10 <sup>-6</sup>
Operating temperature range		°C	10 to 40	10 to 40	10 to 40	10 to 40	10 to 40
		°F	50 to 104	50 to 104	50 to 104	50 to 104	50 to 104

<sup>1</sup> XDS35i is inverter controlled, preset to 60Hz

<sup>2</sup> Pumping speed measured to PNEUROP 6602

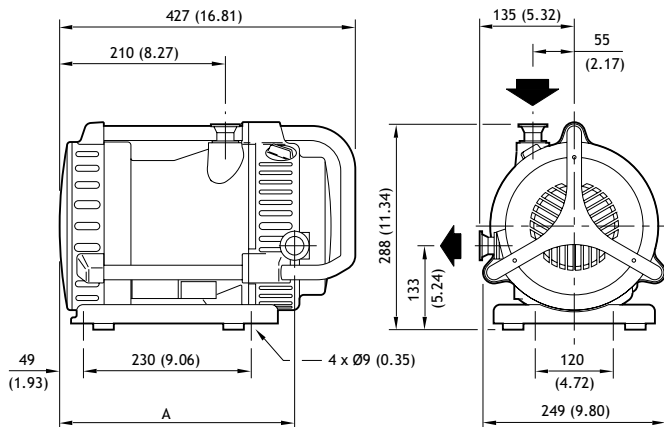
<sup>3</sup> XDS5/10 at 50Hz, XDS35i at 60Hz

## Accessories

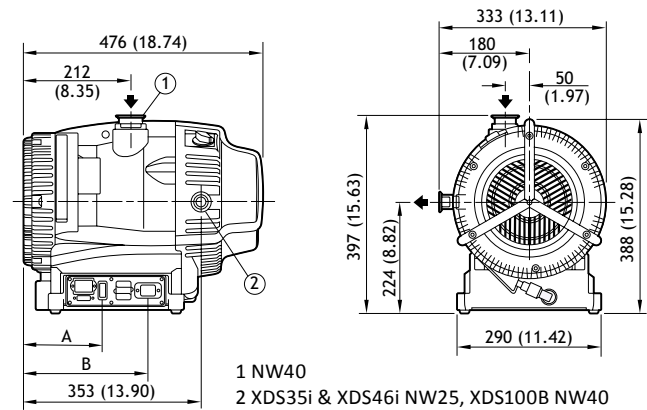


# Dimensions - mm (inch)

## XDS5/10



## XDS35i/46i/100B



# Ordering information

	Product description	Order No.
<b>PUMPS</b>		
XDS5	XDS5 1ph, 115V/230V 50/60Hz set to 230V	A72401903
	XDS5 1ph, 100/200V set to 200V	A72401904
	XDS5 3ph, 200-220/380-415V 50Hz 200-230/460V 60Hz	A72401905
	XDS5 1ph, 115V/230V 50/60Hz set to 115V	A72401906
XDS10	XDS10 1ph, 115V/230V 50/60Hz set to 230V	A72601903
	XDS10 1ph, 100/200V set to 200V	A72601904
	XDS10 3ph, 200-220/380-415V 50Hz, 200-230/460V 60Hz	A72601905
	XDS10 1ph, 115V/230V 50/60Hz set to 115V	A72601906
XDS35i	XDS35i 100-120/200-230V 50/60Hz set to 230V	A73001983
XDS46i	XDS46i 100-120/200-230V, 1ph, 50/60Hz with IEC60320 connector, factory set to 230V	A73101983
XDS100B	XDS100B 1-ph, 100-120/200-230V set to 230V	A73201983

	Product description	Order No.
<b>ACCESSORIES AND SPARES</b>		
Cord sets (XDS5/10)	UK, three pin plug	A50505000
	North European plug	A50506000
	North American plug	A50507000
Silencer	for XDS5 and XDS10	A50597000
Vibration Isolators	for XDS5 and XDS10	A24801404
Gas Ballast adaptor	Kit for XDS5 and XDS10	A50626801
Spare parts	Tip seal kit (XDS5/10)	A72601805
Cord sets (XDS35i/46i/100B)	UK, three pin plug	A50505003
	North European plug	A50506003
	North American plug	A50507003
Silencer	for XDS35i/46i	A50597001
Vibration Isolators	for XDS35i	A24801408
Gas Ballast adaptor	Kit for XDS35i/46i	A50626801
Spare parts	Tip seal kit for XDS35i/100B	A73001801
	Tip seal kit for XDS46i	A73101801
	Reducing piece NW40/25	C10516439
	Centering ring & O ring NW25	C10514395
	Clamp - NW25	C10514401

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