

# ***XDS DRY SCROLL PUMPS***



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INNOVATIVE PRODUCTS

GLOBAL STRENGTH

LOCAL SUPPORT

VACUUM EXPERTISE

# Unique design that sets the industry standard

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 is a unique award-winning dry pumping technology. It is designed to provide a robust and clean dry 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.

## Typical Applications

	XDS5	XDS10	XDS35i
Analytical instruments - GCMS	•		
Analytical instruments - LCMS		•	•
Automotive	•	•	•
Beam lines and high energy physics	•	•	•
Centrifuges, ultra-high speed	•	•	•
Coating	•	•	•
Cryogenics	•	•	•
Degassing/curing - oil, epoxy resin	•	•	•
Distillation/extraction/filtration	•	•	•
Freeze drying	•	•	•
Furnaces	•	•	•
Gas bottle filling/emptying		•	•
Gel drying	•	•	•
Glove boxes, ovens		•	•
Laboratory bench top vacuum	•	•	•
<b>GENERAL</b>			
Lasers, gas recovery and recirculation	•	•	•
Leak detectors, Helium	•	•	•
Load locks and transfer chambers	•	•	•
Rare gas recirculation	•	•	•
Rare gas recovery	•	•	•
Refrigeration manufacture	•	•	•
Research and development	•	•	•
Rotary, centrifugal evaporators	•	•	•
Scanning electron microscopes - SEM	•	•	•
SEM/FIB (ion beam repair)	•	•	•
Solvent recovery	•	•	•
Surface science instruments	•	•	•
Turbomolecular backing pumps	•	•	•

### Patented 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

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

Simple voltage selection, less world-wide service

### Selectable gas ballast position

No permanent gas ballast leak  
Large water vapor handling capacity



### Award winning

Millennium R&D Magazine  
100 Award Winner

### ***Inverter driven motor (XDS35i)***

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

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

Ease of incorporating pump into approved systems, safe product

### ***Axial air gap motor***

Unique design, low power  
Compact product, low noise levels

***Manufactured under ISO 9001 standard***

High quality product

***Manufactured under ISO 14001 standard***

Environmentally friendly processes



# Specifications

	Hz	Units	XDS5	XDS10	XDS35i
<b>VACUUM DATA</b>					
Peak pumping speed <sup>1,2</sup>	60	cfm	3.5	6.5	21
	50	m <sup>3</sup> /h	4.8	9.3	35
Ultimate pressure (Total)	60	Torr	0.05	0.05	0.0075
	50	mbar	0.07	0.07	0.01
Ultimate pressure GB I (Total)	50/60	Torr	0.09	0.09	0.015
		mbar	0.15	0.15	0.02
Ultimate pressure GB II (Total)	50/60	Torr	-	-	0.022
		mbar	-	-	0.03
High throughput mode	50/60	Torr	-	-	-
		mbar	-	-	-
Water vapor tolerance		Torr	38	23	
		mbar	50	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
	50	W	300	300	520
Motor rating 3 phase		W	300	300	-
Nominal rotation speed	60	rpm	1800	1800	1800
	50	rpm	1500	1500	1800
<b>PHYSICAL DATA</b>					
Weight		lb	51	54	106
		kg	23	24.5	48
Inlet flange			NW25	NW25	NW40
Exhaust flange			NW25	NW25	NW40
Noise level	50/60 <sup>3</sup>	dB(A)	55	55	57
Leak tightness		mbar l/s	<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
		°F	50 to 104	50 to 104	50 to 104

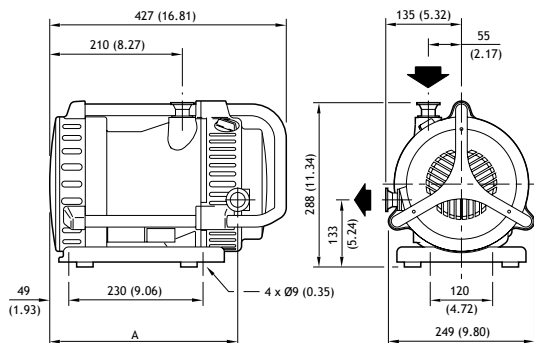
Notes: 1. XDS5i is inverter controlled, preset to 60Hz  
2. Pumping speed measured to PNEUROP 6602

3. XDS5/10 at 50Hz, XDS35i at 60Hz



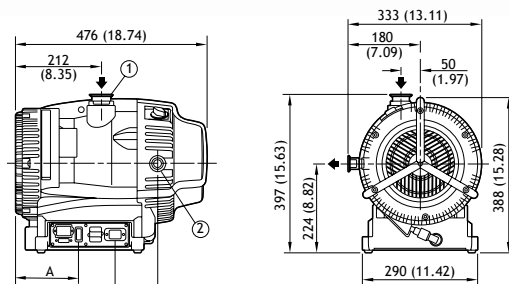
# Dimensions

**XDS5/10**



Dimensions reference A: XDS10 = 315mm, XDS5 = 297mm

**XDS35i**



A Center line of on/off switch, 150 (5.91)

B Center line of phase socket, 247.5 (9.74)

1 Inlet flange NW40

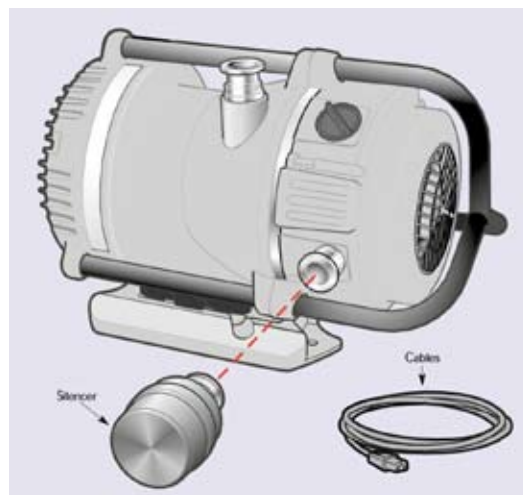
2 Outlet port NW25

# Ordering information

	Product description	Order No.
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
Cord sets	UK, three pin plug	A50505000
	North European plug	A50506000
	North American plug	A50507000
Silencer	Silencer for XDS5 and XDS10	A50597000
Vibration Isolators	XDS5 and XDS10	A24801404
Gas Ballast adaptor	Kit for XDS5 and XDS10	A50626801
Spare parts	Tip seal kit	A72601805

	Product description	Order No.
XDS35i	XDS35i 100-120/200-230V 50/60Hz set to 230V	A73001983
Cord sets	UK, three pin plug	A50505003
	North European plug	A50506003
	North American plug	A50507003
Silencer	Silencer for XDS35i	A50597001
Vibration Isolators	Vibration isolators for XDS35i	A24801408
Gas Ballast adaptor	Kit for XDS35i	A50626801
Spare parts	Tip seal kit	A73001801
	Reducing piece NW40/25	C10516439
	Centering ring & O ring NW25	C10514395
	Clamp - NW25	C10514401

# Accessories



Edwards – the company you have known and trusted for nearly 100 years - continues to deliver innovative vacuum pumps and related systems. We strive to lower your cost of ownership, increase your productivity and enhance your final product quality. Edwards products are based on a solid foundation of manufacturing excellence, field-proven technologies and are supported by a renowned global services network.

Edwards stands behind each product with exceptional integrity and strength, supporting our customers beyond standard expectations. Edwards is essential to your process.

### **PRODUCTS:**

- Dry Vacuum Pumps
- Oil-sealed Vacuum Pumps
- Turbomolecular Pumps
- Exhaust Management
- Integrated Vacuum and Abatement
- Liquid Abatement
- Chemical Management
- Chillers
- Coating Systems
- Vacuum System Components

### **SERVICES:**

- Equipment Service and Repair
- Product Exchange
- Refurbished Equipment
- Field and On-site Services
- Remote e-Diagnostics
- Product Training

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