

# XDS35i DRY SCROLL PUMPS

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#### XDS35i and XDS35i Enhanced Family

The XDS35i family of scroll pumps offer proven dry, clean vacuum solutions for a wide range of applications, with smart drive technology to look after the pump and provide world wide performance.

Now, a combination of the double start scroll form technology and by-pass valves have enabled Edwards to offer the XDS35i Enhanced range of pumps to complement our original family.

Take another step.

With reduced peak power requirements at roughing pressures and continuous higher roughing speeds these enhanced pumps enable the user to take another step in terms of the performance envelope to address those special applications where roughing performance or the ability to evacuate a large volume is important.

XDS35i and XDS35i Enhanced pumps are available as standard pumps with gas ballast, versions of the pump with no Gas Ballast (well suited for rare gas recirculation and gas recovery applications) and the C versions of the pumps featuring Chemraz® internal valves and stainless steel fittings for extra protection from the pumped media.



#### **FEATURES AND BENEFITS**

#### **Bearing shield**

ensures separation between process gases and bearing lubrication to ensure clean vacuum and no possibility of contamination to lubrication from process gases, which prolongs bearing life.

#### Smart motor drive

means consistent performance globally, pump overload protection and remote start/stop capability.

# High flow gas ballast feature

allows pumping of vapours including water vapour at up to  $240~{\rm gh^{\text{-}1}}$ .

#### Simple single sided scroll design

allows maintenance to be done in minutes for low cost of ownership and maximum up-time.

#### Take another step

the Enhanced versions offer up to 20% lower peak power requirements during initial pump down which means it has the ability to pump down large volume chambers with no loss of performance and has up to 25% more pumping speed at these roughing pressures which helps on higher frequency cycling applications as well.

**PRODUCT DATA SHEET** 

## **TECHNICAL DATA**

	Units	XDS35i	XDS35i Enhanced			
Peak pumping speed	m³h-¹ (cfm)	35 (21)				
Ultimate vacuum (1)	mbar (Torr)	0.01 (0.008) 0.03 (0.02)				
Ultimate vacuum with gas ballast 1	mbar (Torr)	0.02 (0.015)	0.04 (0.03)			
Ultimate vacuum with gas ballast 2	mbar (Torr)	< 10 (7.5)				
Max inlet pressure for water vapour	mbar (Torr)	35 (23)				
Water vapour handling capacity GBII	gh <sup>-1</sup>	24	0			
Maximum continuous inlet pressure	mbar a (Torr a)	40 (30)(2)	1000 (760) *			
Maximum gas ballast/purge pressure	bar gauge (psig)	0.5 (7)				
Motor data						
Supply voltage	V	100-120/200-240 (+/- 10%)				
Supply frequency	Hz	50/60				
Nominal rotation speed	rpm	1750				
Power at ultimate	W	440				
Motor power	W	520				
Power connector		IEC EN60320 C19				
Recommended fuse, 230 V (115 V)	А	16 <sup>(3)</sup> (15)				
Physical data						
Weight	kg (lb)	48 (105)				
Inlet connection		NW40				
Exhaust connection		NW25				
Noise level at ultimate	dB(A)	57				
Vibration at inlet flange	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)	5 to 40 (41 to 104)				

<sup>\*</sup> Use at higher inlet pressure speeds up tip seal wear

(1) measured as total pressure
(2) These pumps are designed to pump down from atmospheric pressure, but prolonged operation at inlet pressures higher than specified may reduce bearing life.
(3) for UK 240 V use 13 A fuse







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## ORDERING INFORMATION

## **Pumps:**

	Order number
XDS35i 100-120/200-230V 1PH 50/60Hz	A73001983
XDS35i NGB 100-120/200-230V 50/60Hz	A73005983
XDS35iC 100-120/200-230V 1PH 50/60Hz	A73006983
XDS35iE 100-120/200-230V 1PH 50/60Hz Enhanced	A73003983
XDS35iE NGB 100-120/200-230V 50/60Hz Enhanced	A73007983
XDS35iCE 100-120/200-230V 1PH 50/60Hz Enhanced	A73008983

## **Extended warranty:**

Product	2 year	3 year		
XDS35i & E	EW2AA5005	EW3AA5005		

# Accessories and spares:

Product desc	cription	Order number	
Accessories	Exhaust silencer XDS35i	A50597001	
	Gas ballast adapter with 0.25 mm restrictor	A50626801	
	Gas ballast adaptor with no restrictor	A50502000	
	Vibration isolator (pack of 4)	A24801408	
	Inlet/exhaust filter NW25	A50597805	
	Inlet/exhaust filter NW40	A50597806	
	XDS acoustic enclosure 110-120 V	NRY5C0000	
	XDS acoustic enclosure 200-240 V	NRD797000	
Spares	Silencer spares kit	A50597801	
	XDS filter 5 micron element kit	A50597802	
	XDS filter 1 micron element kit	A50597803	
Cord sets	UK, three pin plug	A50505003	
	North European plug	A50506003	
	North America/Japan plug	A50507003	
	No plug	A50508003	

# XDS35i Family Pump spares kits:

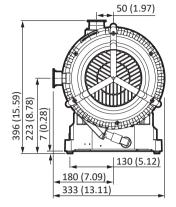
Product	Part number	XDS 35i	XDS 35iC	XDS 35i NGB	XDS 35iE	XDS 35iCE	XDS 35iE NGB
Tip seal & exhaust service kit XDS35i	A73001801	Х	Х	Χ	Χ	Х	X
Exhaust valve kit (Chemraz®)	A73001814	-	Х	-	-	Х	-
Gas ballast kit XDS35i	A73001803	Х	-	-	Х	-	-
Gas ballast kit (Chemraz®)	A73001815	-	Х	-	-	Х	-
By-pass valve Kit 35iE	A73003804	-	-	-	Х	-	Х
By-pass valve Kit 35iEC (Chemraz®)	A73008804	-	-	-	-	Х	-

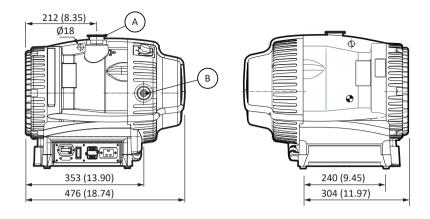
Please remember to order appropriate valve and gas ballast kits as required



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#### **DIMENSIONS**



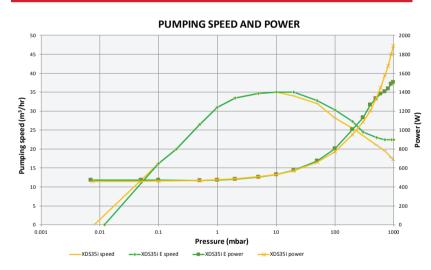


# B. NW25

A. NW40

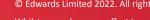
## **PERFORMANCE**

# XDS35i



The graph shows typical pump performance

Note that peak power for XDS35i is supplied for a short period of time before the intelligent drive reduces the power and speed XDS35i Enhanced, with its bypass valves, is not limited and will pump down continuously at full speed



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