

STP301 Turbomolecular Vacuum Pump

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Edwards STP301 is for use in electron microscopes and semiconductor applications. Edwards rotor technology gives class-leading performance for maximum process flexibility. The STP301 has been approved for use by major equipment manufacturers in the scientific instrument, semiconductor and magnetic media industries.

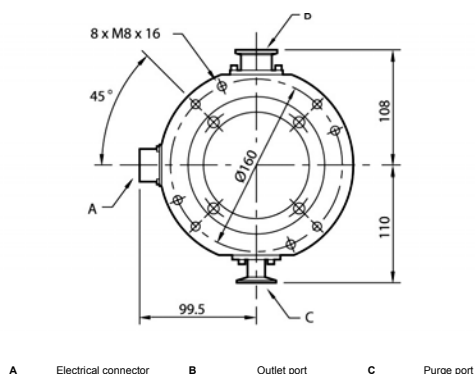
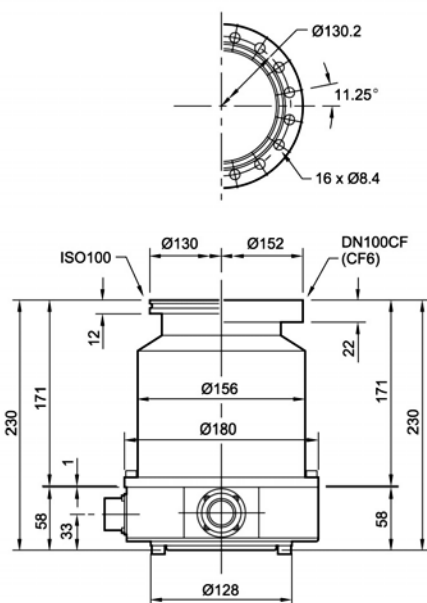
This STP pump is supplied with an inlet screen.

For a complete installation order an STP pump, a controller, a connection cable and power cable.

Features & Benefits

- Advanced rotor technology
- Maximized process flexibility
- Oil free
- Low vibration
- High reliability

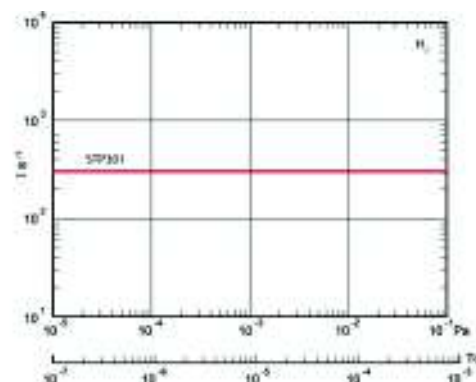
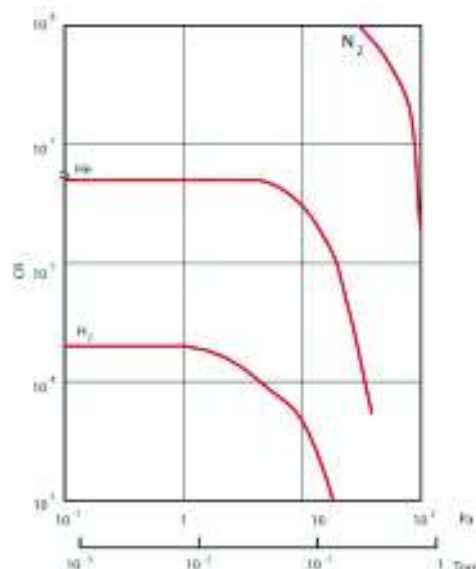
Dimensions



Applications

- Plasma etch (chlorine, fluorine and bromine chemistries) for metal (aluminum), tungsten and dielectric (oxide) and polysilicon
- Electron cyclotron resonance (ECR) etch
- Film deposition CVD, PECVD, ECRCVD, MOCVD
- Sputtering
- Ion implantation source, beam line pumping end station

Performance Curves



Technical Data

Inlet flange	ISO100, CF100
Outlet port	KF25
Pumping Speed	
N ₂	300 ls ⁻¹
H ₂	300 ls ⁻¹
Compression ratio	
N ₂	>10 ⁸
H ₂	>2 x 10 ⁴
Ultimate pressure with bake out heating (VG/ISO flange)	6.5 x 10 ⁻⁶ Pa (5 x 10 ⁻⁸ Torr)
Ultimate pressure with bake out heating (ICF flange)	10 ⁻⁸ Pa (10 ⁻¹⁰ Torr)
Maximum allowable inlet pressure (ambient cooled)	0.066 Pa (5 x 10 ⁻⁴ Torr)
Max continuous outlet pressure (ambient cooled)	13 Pa (0.1 Torr)
Rated speed	48000 rpm
Starting time	3 min
Maximum inlet flange temperature	120 °C
Input voltage	100 to 120 (± 10%) V a.c. or 200 to 240 (± 10%) V a.c.
Power consumption at start up	0.55 kVA
Pump weight	11 kg
Controller weight	7 kg

Ordering Information

Product Description	Order No.
STP301 ISO100 Inlet KF25 Outlet	B74830020
STP301 DN100CF Inlet	B74831010
STP301C ISO100 inlet KF25 outlet	B74871000
STP301C ISO100 Inlet	B74871010
STP301C ISO100 inlet KF40 outlet	B74872000
STP301C DN100CF Inlet	B74881010
Accessories & Spares	Order No.
SCU-21 Control unit	PT21Z0Z04
STP301/451 Water Cooling Coil	YT21CA001
STP301/451/603/1003 Air Cooler 100-120 VAC	YT011A003
STP301/451/603/1003 Air Cooler 200-240 VAC	YT011A005
STP straight connection cable, 3m	B70700010
STP straight connection cable, 5m	B70700000
Connection cable, 12m	PT21Y0B08
Type B P/Cab 3M UK Plug	A50505010
Type B P/Cab 3M Europe Plug	A50506010
Type B P/Cab 3M Ring Terminals	B70700090
Type B P/Cab 5M Ring Terminals	B70700040

STP-L301 Turbomolecular Vacuum Pump

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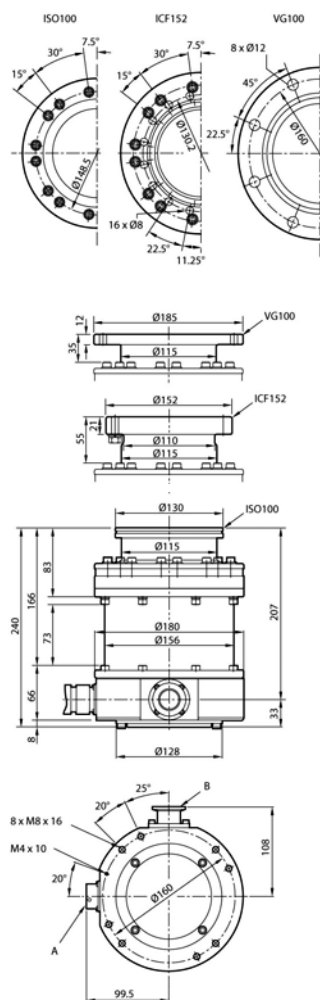
Edwards corrosion resistant STP-L301(C) is for use in electron microscopes and semiconductor applications. Edwards rotor technology gives class-leading performance for maximum process flexibility.

The STP-L301(C) has been approved for use by major equipment manufacturers in the scientific instrument, semiconductor and magnetic media industries.

Features & Benefits

- Advanced rotor technology
- Maximized process flexibility
- Oil free
- Low vibration
- High reliability

Dimensions



A

Connector

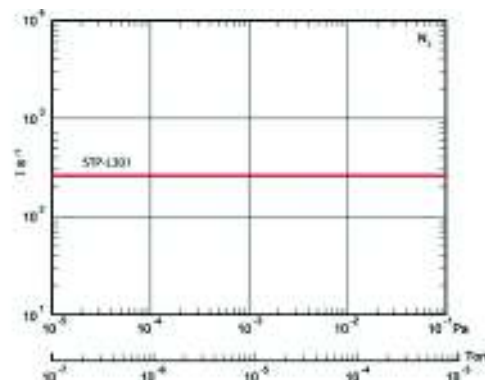
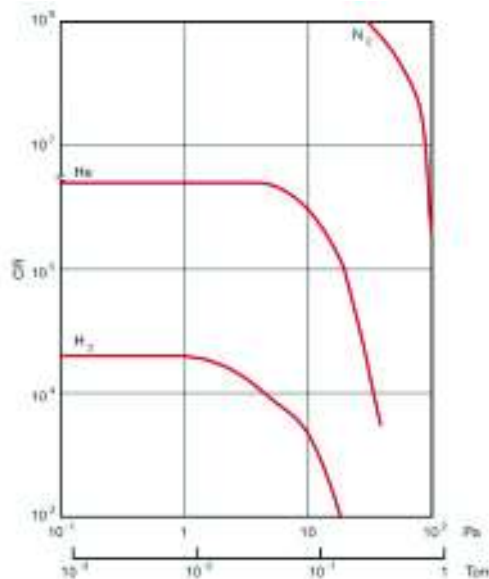
B

Outlet port

Applications

- Plasma etch (chlorine, fluorine and bromine chemistries) for metal (aluminum), tungsten and dielectric (oxide) and polysilicon
- Electron cyclotron resonance (ECR) etch
- Film deposition CVD, PECVD, ECRCVD, MOCVD
- Sputtering
- Ion implantation source, beam line pumping end station

Performance Curves



Technical Data

Inlet flange	ISO100, CF100
Outlet port	KF25
Purge port	KF10
Pumping Speed	
N ₂	260 ls ⁻¹
H ₂	290 ls ⁻¹
Compression ratio	
N ₂	>10 ⁸
He	5 x 10 ⁵
H ₂	2 x 10 ⁴
Ultimate pressure with bake out heating (VG/ISO flange)	6.5 x 10 ⁻⁶ Pa (5 x 10 ⁻⁸ Torr)
Ultimate Pressure with bake out heating (ICF flange)	10 ⁻⁸ Pa (10 ⁻¹⁰ Torr)
Max allowable inlet pressure ambient cooled	6.7 x 10 ⁻² Pa (5 x 10 ⁻⁴ Torr)
Max continuous outlet pressure ambient cooled	13 Pa (0.1 Torr)
Rated speed	48000 rpm
Starting time	3 min
Maximum inlet flange temperature	120 °C
Input voltage	100 to 120 (± 10) V a.c. or 200 to 240 (± 10) V a.c.
Power consumption at start up	0.55 kVA
Pump weight	13 kg
Controller weight	7 kg

Ordering Information

Product Description	Order No.
STP-L301C ISO100 Inlet	B75800010
STP-L301 ISO100 Inlet	B75800090
STP-L301 DN100CF Inlet	PT470Z000
STP-L301C DN100CF Inlet	PT47AZ030
Accessories & Spares	Order No.
SCU-21 Control unit	PT21Z0Z04
STP301/451 Water Cooling Coil	YT21CA001
STP301/451/603/1003 Air Cooler 100-120 VAC	YT011A003
STP301/451/603/1003 Air Cooler 200-240 VAC	YT011A005
STP straight connection cable, 3m	B70700010
STP straight connection cable, 5m	B70700000
Connection cable, 12m	PT21Y0B08
Type B P/Cab 3M Europe Plug	A50506010
Type B P/Cab 3M Ring Terminals	B70700090
Type B P/Cab 3M UK Plug	A50505010
Type B P/Cab 5M Ring Terminals	B70700040

STP603 Turbomolecular Vacuum Pump

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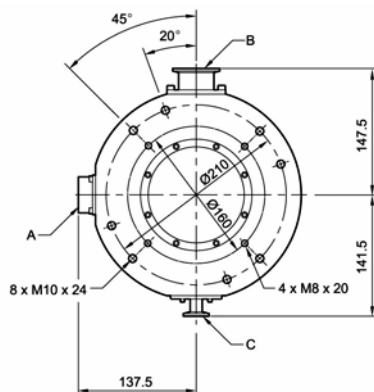
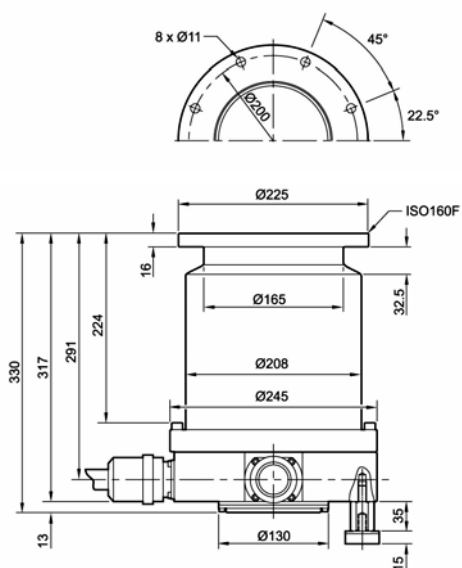


Edwards STP603 is a new turbomolecular pump for use in the most advanced semiconductor applications. Edwards rotor technology gives class-leading performance for maximum process flexibility. This pump has been approved for use by major equipment manufacturers in the semiconductor and magnetic media industries.

Features & Benefits

- Advanced rotor technology
- Maximized process flexibility
- Oil free
- Low vibration
- High reliability

Dimensions

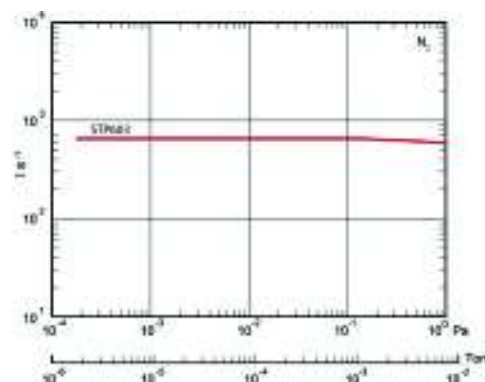
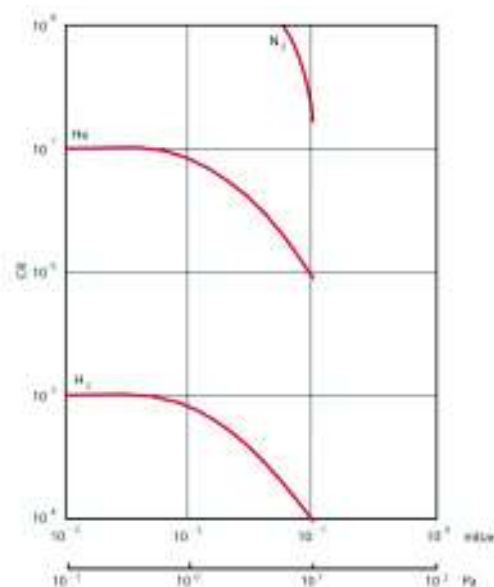


A Electrical connector B Outlet port C Purge port

Applications

- Plasma etch (chlorine, fluorine and bromine chemistries) for metal (aluminum), tungsten and dielectric (oxide) and polysilicon
- Electron cyclotron resonance (ECR) etch
- Film deposition CVD, PECVD, ECRCVD, MOCVD
- Sputtering
- Ion implantation source, beam line pumping end station

Performance Curves



Technical Data

Inlet flange	ISO160F
Outlet port	KF40
Pumping Speed	
N ₂	650 ls ⁻¹
H ₂	550 ls ⁻¹
Compression ratio	
N ₂	>10 ⁸
H ₂	>10 ⁵
Ultimate pressure with bake out heating (VG/ISO flange)	6.5 x 10 ⁻⁶ Pa (5 x 10 ⁻⁸ Torr)
Ultimate Pressure with bake out heating (ICF flange)	10 ⁻⁷ Pa (10 ⁻⁹ Torr)
Max continuous outlet pressure	13 Pa (0.1 Torr)
Rated speed	35000 rpm
Starting time	6 min
Max inlet flange temp	120 °C
Input voltage	100 to 120 (± 10) V a.c. or 200 to 240 (± 10) V a.c.
Power consumption at start up	0.8 kVA
Pump weight	31 kg
Controller weight	9 kg

Ordering Information

Product Description	Order No.
STP603 ISO160F Inlet	YT39B0030
STP603C ISO160F Inlet	YT39B0110
STP603 DN160CF Inlet	YT390Z005
STP603C DN160CF Inlet	YT39AZ002
Accessories & Spares	Order No.
SCU-800 Control unit	YT49Z2Z00
Water cooling coil	YT170A001
STP301/451/603/1003 Air Cooler 100-120 VAC	YT011A003
STP301/451/603/1003 Air Cooler 200-240 VAC	YT011A005
Vibration Isolator ISO200-K	B58061000
Power Cable 5m	PT49Y0A00
Power Cable 10m	PT49Y0A01
Connection Cable 3m	B75130050
STP straight connection Cable, 5m	B75130020
STP straight connection cable ,10m	B75130060

STP1003 Turbomolecular Vacuum Pump

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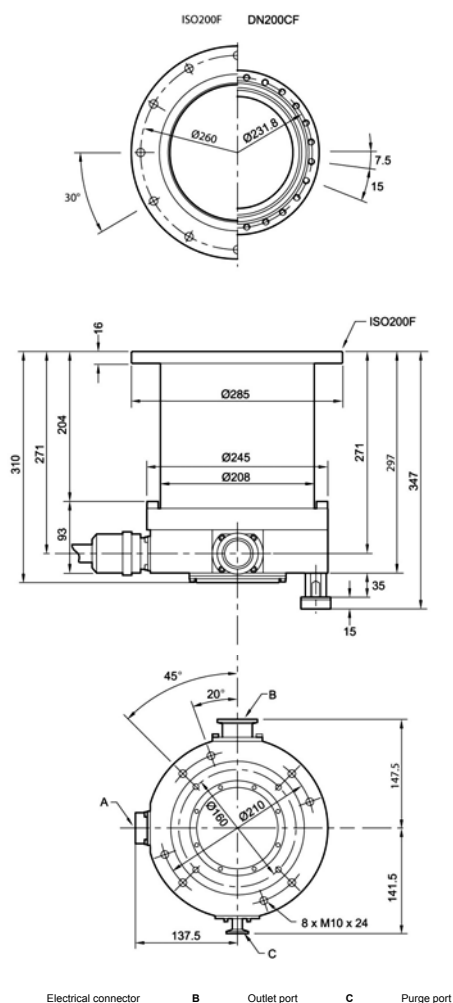


Edwards corrosion resistant STP1003C is a new turbomolecular pump for use in the most advanced of semiconductor applications. Edwards rotor technology gives class-leading performance for maximum process flexibility. This pump has been approved for use by major equipment manufacturers in the semiconductor and magnetic media industries.

Features & Benefits

- Advanced rotor technology
- Maximized process flexibility
- Oil free
- Low vibration
- High reliability

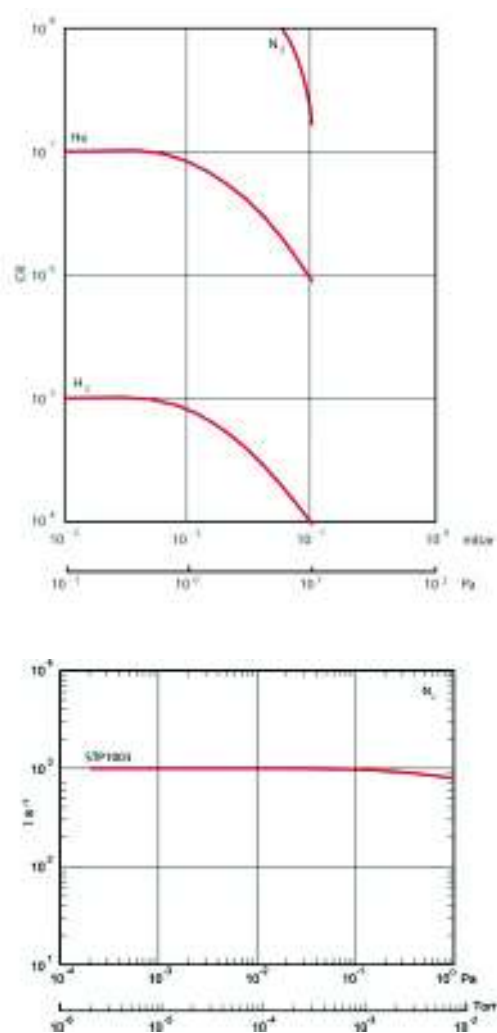
Dimensions



Applications

- Plasma etch (chlorine, fluorine and bromine chemistries) for metal (aluminum), tungsten and dielectric (oxide) and polysilicon
- Electron cyclotron resonance (ECR) etch
- Film deposition CVD, PECVD, ECRCVD, MOCVD
- Sputtering
- Ion implantation source, beam line pumping end station

Performance Curves



Technical Data

Inlet flange	ISO200F
Outlet port	KF40
Purge port	KF10
Pumping Speed	
N ₂	1000 ls ⁻¹
H ₂	800 ls ⁻¹
Compression ratio	
N ₂	>10 ⁸
H ₂	>10 ⁵
Ultimate pressure with bake out heating (VG/ISO flange)	10 ⁻⁷ Pa (10 ⁻⁹ Torr)
Ultimate pressure with bake out heating (ICF flange)	10 ⁻⁸ Pa (10 ⁻¹⁰ Torr)
Max continuous outlet pressure	13 Pa (0.1 Torr)
Rated speed	35000 rpm
Starting time	6 min
Max inlet flange temp	120 °C
Input voltage	100 to 120 (± 10) V a.c. or to 240 (± 10) V a.c.
Power consumption at Start up	0.8 kVA
Pump weight	31 kg
Controller weight	9 kg

Ordering Information

Product Description	Order No.
STP1003C ISO200F Inlet	YT39B0130
STP1003 ISO200F Inlet	YT390Z001
STP1003C DN200CF Inlet	PT39AZ003
STP1003 DN200CF Inlet	YT39B0010
Accessories & Spares	Order No.
SCU-800 Control unit	YT49Z2Z00
Water cooling coil	YT170A001
STP301/451/603/1003 Air Cooler 100-120 VAC	YT011A003
STP301/451/603/1003 Air Cooler 200-240 VAC	YT011A005
Vibration Isolator ISO200-K	B58061000
Power Cable 5m	PT49Y0A00
Power Cable 10m	PT49Y0A01
Connection Cable 3m	B75130050
STP straight connection Cable, 5m	B75130020
STP straight connection cable ,10m	B75130060