

T-STATION 85 TURBOMOLECULAR PUMPING STATION

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T-Station 85 is a low cost, compact turbomolecular pumping station that seamlessly combines the nEXT85H turbomolecular pump with either an oil-free scroll, dry diaphragm or oil sealed backing pump, and a simple controller, providing pumping speeds of 47 to 84 ls⁻¹.

The T-Station 85 comes with an integrated Turbo and Active Gauge controller which enables single button start/stop of the system. This is combined with the ability to control one of our active gauges, vent valve control and delayed start of the turbomolecular pump to either time or pressure if a gauge is fitted, making the T-Station 85 ideal for general laboratory needs.

Primary vacuum is achieved with either:

- **mXDS3s** oil-free dry scroll pump with pumping speeds of 3 m³ h⁻¹ and ultimate vacuum of 0.1 mbar. This option also comes with a fitted inlet valve to protect against power failure and exhaust ballast
- **E2M1.5** oil sealed pump with pumping speeds of 1.6 m³ h⁻¹
- **XDD1** dry diaphragm pump with pumping speeds of 1.2 m³ h⁻¹

As well as reducing pump down time, improving efficiency and energy consumption, the mXDS3s option also comes with fitted inlet valve designed to protect the vacuum in the event of a power failure as well as integrated exhaust filter.

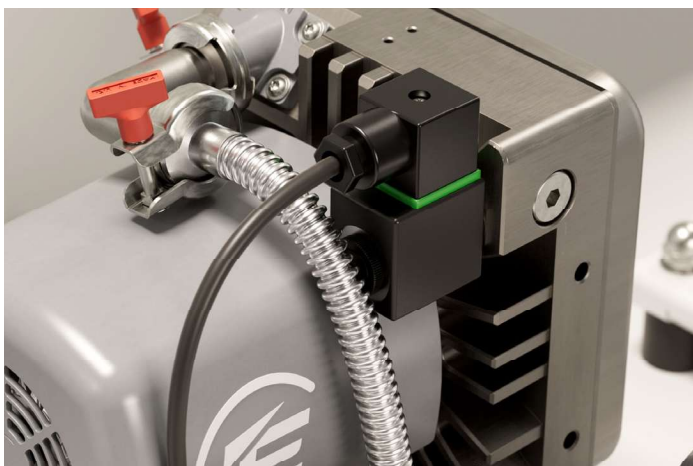


**'Plug and Pump'
No systemisation
required**

**Robust construction
Low cost of
ownership**

Features and benefits

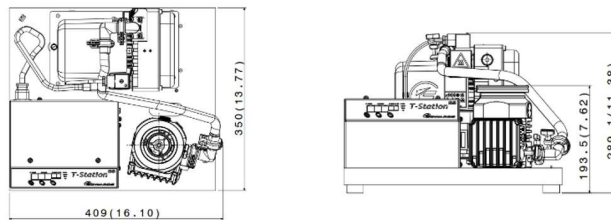
- Base plate includes rubber feet and cut-outs in the sides for manual handling, giving a compact low profile but stable design that can't be knocked over
- All metal frame means rugged design that can take abuse without cracking or breaking
- A choice of the latest mXDS3s oil-free dry scroll pump, the E2M1.5 oil sealed pump, or the XDD1 dry diaphragm pump for the fore vacuum
- E2M1.5 or XDD1 high capacity backing pumps giving the choice between an oil sealed pump or a totally dry diaphragm pump
- Integrated air cooler acts to cool internal power supply and pump/controller for quiet operation avoiding multiple fans
- Customer integrated control features:
 - » Single dedicated button to start/stop
 - » Easy to read accuracy display
 - » Ability to select vent mode where a TAV5 vent valve is fitted for automated venting with no user intervention
- Available with either an NW40, ISO63 or CF63 inlet flange to suit your application.
- User serviceable nEXT85H turbomolecular pump



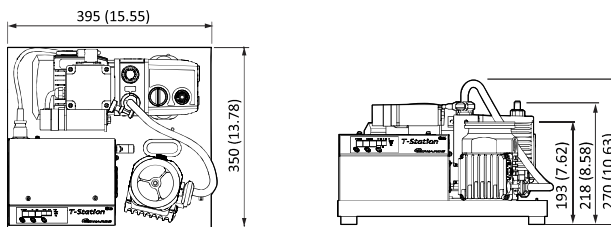
Technical data

| | |
|--|------------------------------------|
| Pumping speed for N₂ | |
| NW40 | 47 ls |
| ISO/CF63 | 84 ls |
| Compression ratio for N₂ | |
| | >1 x 10 ¹¹ |
| Backing pump speed @50 Hz | |
| mXDS3s | 3 m ³ h ⁻¹ |
| E2M1.5 | 1.6 m ³ h ⁻¹ |
| XDD1 | 1.2 m ³ h ⁻¹ |
| Ultimate vacuum | |
| Dry ISO63 | <5 x 10 ⁻⁸ mbar |
| Dry CF63 | <5 x 10 ⁻⁹ mbar |
| Wet ISO63 | <5 x 10 ⁻⁹ mbar |
| Wet CF63 | <5 x 10 ⁻¹⁰ mbar |
| Exhaust flange | |
| mXDS3s | 1/8 BSP for 6x8mm |
| E2M1.5 (TS85H wet) | 11 mm OD nozzle or 3/8" BSP |
| XDD1 (TS85H dry) | Fitted silencer or 1/8" BSP |
| Mass | |
| mXDS3s | 19 kg max |
| E2M1.5 | 21 kg max |
| XDD1 | 18 kg max |
| Noise level | |
| | 54.0 +/- 2.5 dB(A) |
| Operating temperature range | |
| Dry Vacuum pumps | +5 to +40°C |
| Wet Vacuum pumps | +12 to +40°C |

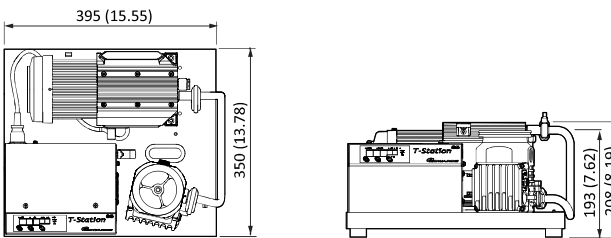
Dimensions



T-Station 85 Dry with mXDSs backing pump



T-Station 85H Wet with E2M1.5 backing pump



T-Station 85H Dry with XDD1 backing pump

Ordering information

| Product description | Order number |
|-------------------------------------|--------------|
| T-Station 85H Dry NW40 mXDS3s 230V | TS85M1003 |
| T-Station 85H Dry NW40 mXDS3s 115V | TS85M1006 |
| T-Station 85H Dry ISO63 mXDS3s 230V | TS85M2003 |
| T-Station 85H Dry ISO63 mXDS3s 115V | TS85M2006 |
| T-Station 85H Dry CF63 mXDS3s 230V | TS85M3003 |
| T-Station 85H Dry CF63 mXDS3s 115V | TS85M3006 |
| T-Station 85H Dry NW40 200-230V | TS85D1001 |
| T-Station 85H Dry NW40 100-120V | TS85D1002 |
| T-Station 85H Dry ISO63 200-230V | TS85D2001 |
| T-Station 85H Dry ISO63 100-120V | TS85D2002 |
| T-Station 85H Dry CF63 200-230V | TS85D3001 |
| T-Station 85H Dry CF63 100-120V | TS85D3002 |
| T-Station 85H Wet NW40 200-230V | TS85W1001 |
| T-Station 85H Wet NW40 100-120V | TS85W1002 |
| T-Station 85H Wet ISO63 200-230V | TS85W2001 |
| T-Station 85H Wet ISO63 100-120V | TS85W2002 |

| Product description | Order number |
|---|--------------|
| T-Station 85H Wet CF63 200-230V | TS85W3001 |
| T-Station 85H Wet CF63 100-120V | TS85W3002 |
| EMF3 mist filter for E2M1.5 pump | A46220000 |
| N/C TAV5 vent valve connector fitted | B8G200835 |
| N/O TAV5 vent valve connector fitted | B8G200834 |
| APG200 - XLC active Pirani gauge NW16 | D1G2011100 |
| AIM200 - X - active inverted magnetron gauge NW25 | D2G0021100 |
| WRG200 - X - active wide range gauge NW25 | D3G0021100 |
| APGX-H active linear convection gauge NW16 | D02391000 |
| 2m electrical supply cable UK plug | A50505000 |
| 2m electrical supply cable EU plug | A50506000 |
| 2m electrical supply cable USA/Japan plug | A50507000 |
| 2m electrical supply cable no plug | A50508000 |
| 0.5m active gauge cable | D40001005 |
| 1m active gauge cable | D40001010 |

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