

# 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 a dry diaphragm or oil sealed backing pump, and a simple controller, providing pumping speeds of 47 to 84  $l s^{-1}$ .**

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.



**'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
- 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

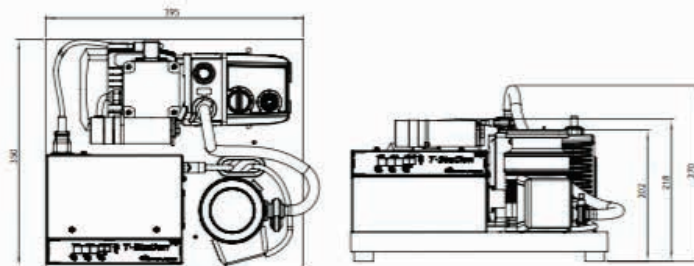
**Technical data**

|  |   |
|--|---|
| <b>Pumping speed for N<sub>2</sub></b>     |   |
| NW40                                       | 47 ls <sup>-1</sup>                         |
| ISO/CF63                                   | 84 ls <sup>-1</sup>                         |
| <b>Compression ratio for N<sub>2</sub></b> |   |
|  | >1 x 10 <sup>11</sup>                       |
| <b>Backing pump speed @50 Hz</b>           |   |
| E2M1.5 (TS85H Wet)                         | 1.6 m <sup>3</sup> h <sup>-1</sup>          |
| XDD1 (TS85H Dry)                           | 1.2 m <sup>3</sup> h <sup>-1</sup>          |
| <b>Ultimate vacuum</b>                     |   |
|  | <5 x 10 <sup>-8</sup> mbar                  |
| <b>Inlet flange</b>                        |   |
|  | NW40, ISO63 or CF63                         |
| <b>Exhaust flange</b>                      |   |
| E2M1.5 (TS85H Wet)                         | 11 mm OD nozzle or 3/8" BSP                 |
| XDD1 (TS85H Dry)                           | Fitted silencer or 1/8" BSP                 |
| <b>Mass</b>                                |   |
| E2M1.5 system (TS85H Wet)                  | 21 kg max                                   |
| XDD1 system (TS85H Dry)                    | 17 kg max                                   |
| <b>Noise level</b>                         |   |
|  | ≤56 dB(A)                                   |
| <b>Leak tightness</b>                      |   |
|  | <1 x 10 <sup>-6</sup> mbar ls <sup>-1</sup> |
| <b>Operating temperature range</b>         |   |
|  | 12 to 40 °C                                 |

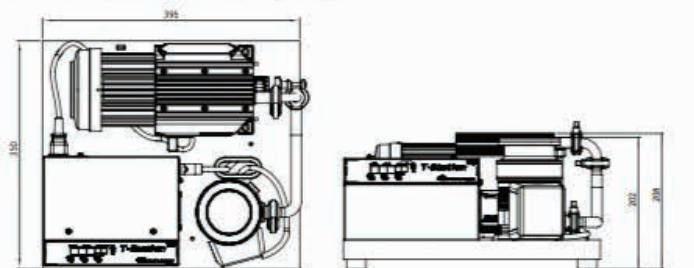
**Ordering information**

| Product description              | Order number |
|----------------------------------|--------------|
| T-Station 85H Wet NW40 200-240V  | TS85W1001    |
| T-Station 85H Wet ISO63 200-240V | TS85W2001    |
| T-Station 85H Wet CF63 200-240V  | TS85W3001    |
| T-Station 85H Dry NW40 200-240V  | TS85D1001    |
| T-Station 85H Dry ISO63 200-240V | TS85D2001    |
| T-Station 85H Dry CF63 200-240V  | TS85D3001    |
| T-Station 85H Wet NW40 100-120V  | TS85W1002    |
| T-Station 85H Wet ISO63 100-120V | TS85W2002    |
| T-Station 85H Wet CF63 100-120V  | TS85W3002    |
| T-Station 85H Dry NW40 100-120V  | TS85D1002    |
| T-Station 85H Dry ISO63 100-120V | TS85D2002    |
| T-Station 85H Dry CF63 100-120V  | TS85D3002    |

**Dimensions**



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



T-Station 85H Dry with XDD1 backing pump

| Product description                            | Order number |
|--|--------------|
| Model EMF3 mist filter for E2M1.5 pump         | A46220000    |
| TAV5 solenoid operated vent valve              | B58066010    |
| 2m electrical supply cable UK plug 10A         | A50505000    |
| 2m electrical supply cable North European plug | A50506000    |
| 2m electrical supply cable USA/Japan plug      | A50507000    |
| 2m electrical supply cable no plug             | A50508000    |
| APG100-XLC Active Pirani Gauge NW16            | D02603000    |
| APGX-H Active Linear Convection Gauge NW16     | D02391000    |
| AIM-X Active Inverted Magnetron Gauge NW25     | D14642000    |
| WRG-S Active Wide Range Gauge NW25             | D14701000    |
| 0.5m Active Gauge Cable                        | D40001005    |
| 1m Active Gauge Cable                          | D40001010    |

**GLOBAL CONTACTS**

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