

# T-Station 75

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The T-Station 75 is Edwards's new entry level Turbopumping system. It combines our proven EXT75DX with a choice of either an oil sealed E2M1.5 backing pump or an XDD1 diaphragm pump where a totally dry solution is desired.

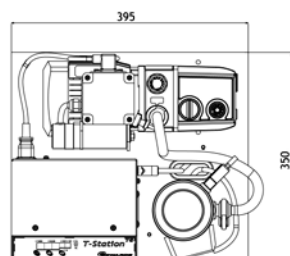
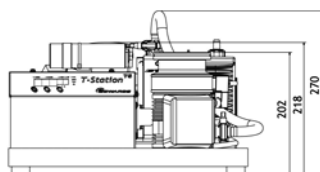
The T-Station comes with our new TAG (Turbo and Active Gauge) controller fitted as standard which enables single button start/stop of the system, the ability to control one of our Active Gauges\*, vent valve control\*, and delayed start to either time or pressure if a gauge is fitted making the T-Station ideal for general laboratory needs.

\* Gauges and TAV5 vent valve must be purchased separately.

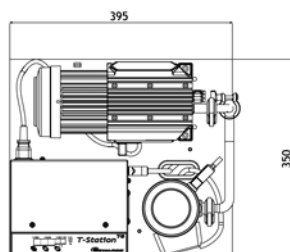
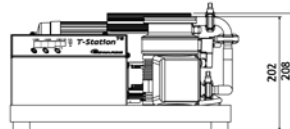
## Features & Benefits

- Fully assembled and ready to use
- Control of turbopump, backing pump and optional gauge from integrated controller
- NW40, ISO63 or CF63 inlet flanges
- Choice of backing pumps, E2M1.5 oil sealed pump T-Station 75W or XDD1 diaphragm pump T-Station 75D
- Delayed turbo start option for pumping larger volumes

## Dimensions



T-Station 75D



T-Station 75D

## Applications

- General laboratory applications
- Spectroscopy
- Surface analysis
- Small coating systems
- Vacuum tube manufacturing

## Ordering Information

Product Description	Order No.
T-Station 75W NW40 200-230V 50/60Hz	TS75W1001
T-Station 75W NW40 100-120V 50/60Hz	TS75W1002
T-Station 75W ISO63 200-230V 50/60Hz	TS75W2001
T-Station 75W ISO63 100-120V 50/60Hz	TS75W2002
T-Station 75W CF63 100-120V 50/60Hz	TS75W3002
T-Station 75W CF63 200-230V 50/60Hz	TS75W3001
T-Station 75D NW40 200-230V 50/60Hz	TS75D1001
T-Station 75D NW40 100-120V 50/60Hz	TS75D1002
T-Station 75D ISO63 200-230V 50/60Hz	TS75D2001
T-Station 75D ISO63 100-120V 50/60Hz	TS75D2002
T-Station 75D CF63 200-230V 50/60Hz	TS75D3001
T-Station 75D CF63 100-120V 50/60Hz	TS75D3002
Accessories & Spares	Order No.
0.5M Active Gauge Cable	D40001005
1M Active Gauge Cable	D40001010
2m electrical supply cable for 1-ph pumps, no plug	A50508000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
2m electrical supply cable for 1-ph pumps, UK, Three-pin plug	A50505000
3M Active Gauge Cable	D40001030
5M Active Gauge Cable	D40001050
AIM-X Active Inverted Magnetron Gauge	D14642000
APG100 Active Pirani Vacuum Gauge	D02603000
APGX-H Active Linear Convection Gauge	D02391000
Model EMF3 mist filter	A46220000
TAV5 Vent Valve 24V DC 1/8 Bsp	B58066010
WRG-S Active Wide Range Gauge	D14701000

## Technical Data

### Pumping Speed for N<sub>2</sub>

NW40	42 ls <sup>-1</sup>
ISO63/CF63	61 ls <sup>-1</sup>
Compression ratio for N <sub>2</sub>	>1 x 10 <sup>11</sup>
Backing pump speed @ 50Hz	
E2M1.5	1.6 m <sup>3</sup> /hr
XDD1	1.2 m <sup>3</sup> /hr
Ultimate pressure	<5 x 10 <sup>-8</sup> mbar
Inlet flange	NW40, ISO63 or CF63
Exhaust flange	
E2M1.5	11mm OD Nozzle or 3/8 inch BSP
XDD1	Fitted silencer or 1/8 inch BSP
Weight	
E2M1.5	22 kg / 48 lb
XDD1	18 kg / 40 lb
Noise level	55.4 dB(A)
Leak tightness	<1 x 10 <sup>-6</sup> mbar ls <sup>-1</sup>
Operating temperature range	10 to 40°C / 50 to 104°F

# nEXT Turbopumping Stations

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Our new range of nEXT turbopumping stations build on our previous generation, but with a simplified ordering matrix and expanded range to include turbopumps with speeds from  $42 \text{ l s}^{-1}$  to  $400 \text{ l s}^{-1}$ .

For pumping speeds from  $42 \text{ l s}^{-1}$  to  $66 \text{ l/s}$  we offer our trusted EXT75DX pump with a choice of various wet and dry backing pumps and a Turbo and Instrument TIC100.

For pumping speeds of  $240 \text{ l s}^{-1}$  to  $400 \text{ l s}^{-1}$  the new turbopumping stations are based on our nEXT pumps offering the additional flexibility of end-user serviceability plus a choice of backing pumps and a Turbo and Instrument TIC200.

Turbopumping stations fitted with E2M1.5 or RV pumps come with an EMF mist filter fitted, and those fitted with our class leading XDS scroll pumps have an isolation valve fitted between the turbopump and backing pump as standard.

All turbopumping stations include 4 locking castor wheels, a bench-top mounting kit, built in air cooling and come configured to suit a wide variety of applications such as:

- UHV systems
- Beam lines
- Load locks
- Surface science
- High energy physics

## Features & Benefits

- Fully assembled and ready to use
- Where nEXT is fitted the turbopump is fully end user-serviceable
- Control of the turbopump, backing pump and gauges from the integrated TIC
- Serial communication control available with RS232 and RS485 (Windows software included)
- Dry pumping options with XDD1, XDS5 and XDS10



## Ordering Information

**Turbopump \***  
**M** EXT75DX  
**B** nEXT240D  
**C** nEXT300D  
**D** nEXT400D

**Inlet Flange \***  
**1** DN40NW (EXT75DX)  
**2** DN63ISO-K (EXT75DX)  
**3** DN63CF (EXT75DX)  
**4** DN100ISO-K (nEXT240/300)  
**5** DN100CF (nEXT240/300)  
**6** DN160ISO-K (nEXT400)  
**7** DN160CF (nEXT400)

**Backing Pump**  
**1** E2M1.5 ‡  
**2** RV5  
**3** RV12  
**A** XDD1  
**B** XDS5  
**C** XDS10

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**Vent Option**  
 Manual vent **0**  
 TAV5 vent valve W **1**

**Electrical Supply**  
 220-240 V 50/60 Hz (Europe) **1**  
 110-120 V 50/60 Hz (USA) **2**  
 200 V 50/60 Hz (Japan) **3**  
 220-240 V 50/60 Hz (UK) **4**

\* Turbopump and inlet flange must match as shown

‡ For Japan low volts on E2M1.5 please order the USA voltage variant, for all other pumps please order Japan version and specify low volts on your order