



T-STATIONS WITH mXDS3s

Customer presentation

September 2023

Petr Lastovicka



Confidentiality Statement

This presentation has been prepared exclusively for the benefit and use of Edwards and is confidential in all respects. This presentation does not carry any right of publication or disclosure, in whole or in part, to any other party. This presentation is the property of Edwards. Neither this presentation nor any of its contents may be used for any purpose without the prior written consent of Edwards. This presentation includes certain statements, estimates, targets and projections as to anticipated future business performance. Such statements may reflect significant assumptions and subjective judgements by Edwards which may or may not prove to be correct. Edwards makes no representations as to the accuracy, completeness or fairness of this presentation and so far as is permitted by law, no responsibility or liability whatsoever is accepted by Edwards for the accuracy or sufficiency thereof or for any errors, omissions, or misstatements relating thereto. The contents of this presentation is confidential and should not be distributed.

Agenda

- Portfolio
- Introduction - NEW VARIANTS
- Features and benefits
- Ordering information
- Marketing materials



Turbocarts

Portfolio overview

→ **Entry Level Carts**

T – station 85 and 300

mXDS3s, E2M, XDD1



TIC carts

Premium Catalogue Carts

nXDS, E2M, RV, XDD1



TIC carts XL

nXRi

Design & Built to order carts



mXDS3 variants T-stations

Filling the Performance Gap

- mXDS3s
- Fan cowl and fan same as Standard Variant
- Low noise same as Standard version 54dB(A) +/- 2.5
- 4 separate mains driven to cover 100 +/-6%; 200, 115 (covers 110 and 120), 230 +/-10% V 50/60Hz
- End users, OEMs, (Great for turbo carts with inlet valve fitted)
- Inlet valve fitted together with delay opening relay (10 sec delay)
- Manual gas ballast included
- Exhaust silencer included
- Weight 8.0 kg

CONFIGURED



mXDS3 variants T-stations

Features and benefits

- Solenoid open, spring close
- Extra protection in the event of power failure!
- Inlet valve fitted to the mXDS3s
 - isolates pump from backing line as soon as power is removed, or pump switched off
- When power restored a built-in relay delays opening the valve by 10 sec
 - allows pump to get up to speed & under vacuum before the valve opens and connects the pump to the backing line
- Extra protection for the system from pressure rise if gas ballast open (pump will effectively vent via open gas ballast) and limits pressure rise in backing line



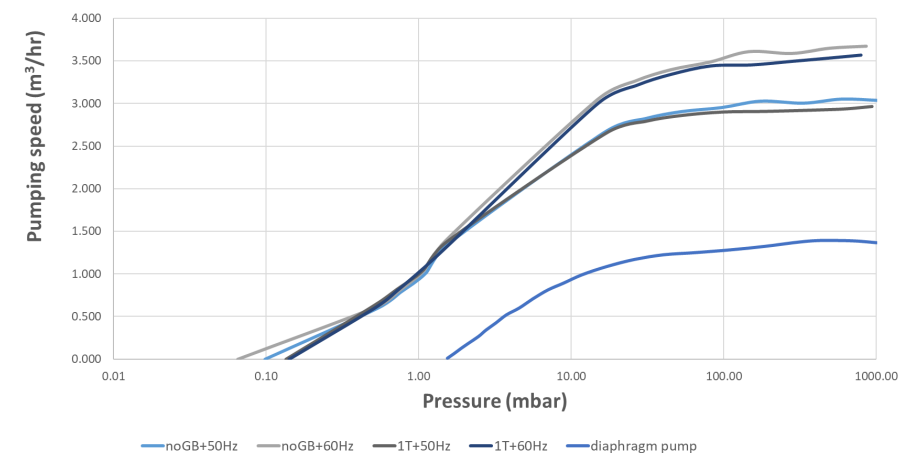
Quick Comparison

Diaphragm Pumps



- We offer a $3\text{m}^3\text{h}^{-1}$ Scroll pump. It has higher pumping speeds compared to the diaphragm pumps typically used to back turbos (e.g. XDD1, MD1) and a much better ultimate performance
- 0.1 mbar ultimate and more pumping speed at lower pressure
- Good ultimate performance with gas ballast
- Vapour handling capability without compromising performance whilst backing a turbo pump
- Compact when compared to similar capacity diaphragm pumps
- Service requirements:
 - Tip Seals wear out slowly. Eventual a drop in performance indicates need to change (nice video to show how to do this)
 - Diaphragm can die suddenly (ruptured diaphragm), can be difficult to service and it can take long time to replace all the diaphragms and valves

Pressure on pumping speed mXDS3 vs XDD1



Quick comparison

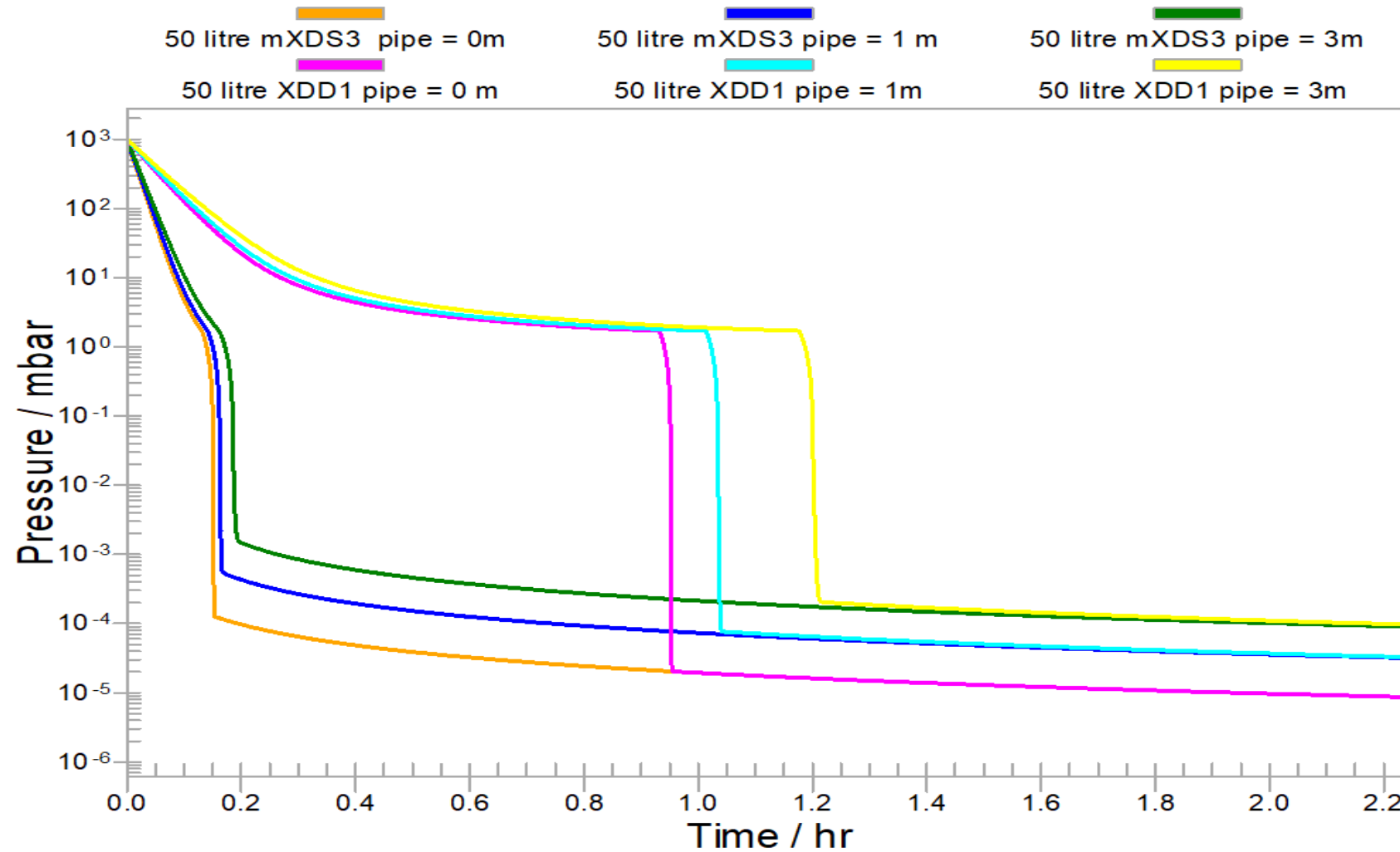
mXDS3 vs Typical Alternative Pumps

- Compact
- Light
- Comparable speed
- Better ultimate
- Reduced maintenance

	Small diaphragm mains driven	Small OSRVP	Small OSRVP higher pumping speed	Small scroll	mXDS3
Dimensions (l x w x h) mm	334 x 144 x 162 (215 with handle)	323 x 150 x 178	332 x 130 x 177	358 x 140 x 181	224 x 158 x 231 (with handle)
Weight kg	7.3	10	11.3	9.5	7.8 (standard)
Peak speed 50Hz m^3h^{-1}	1.2	1.6	2.5	3	3.0
Ultimate mbar	<2	3.0×10^{-3}	3.0×10^{-3}	<0.33	<0.1

Some comparison

50-liter chamber pump down



T-station with mXDS3S

Benefits | selling arguments

- Great ultimate and double primary pumping speed
- Extending the product range
- Extra performance, same footprint
- Inlet valve fitted – extra security
- Exhaust silencer / filter supplied



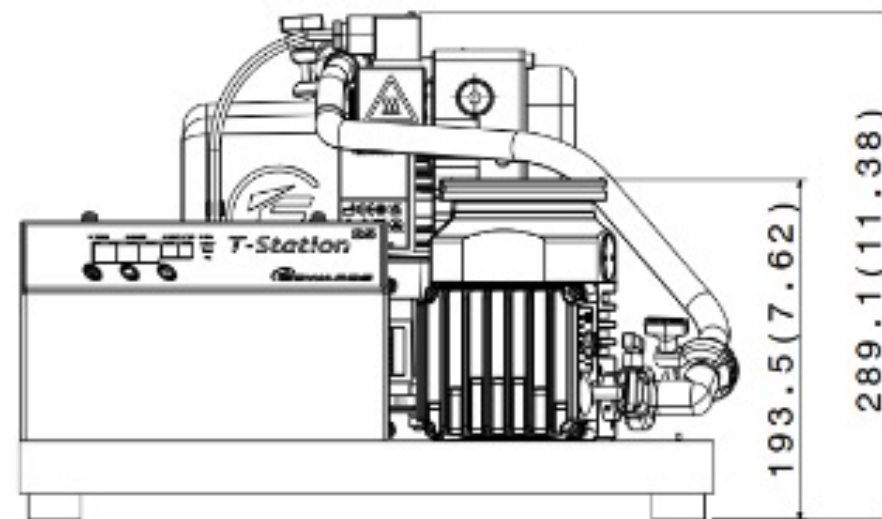
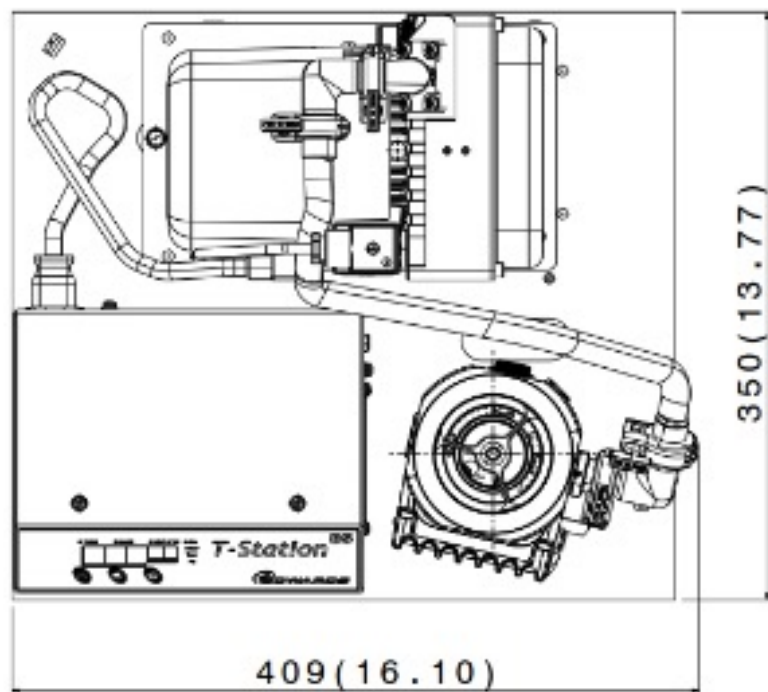
T-station with mXDS3S

Features and improvements

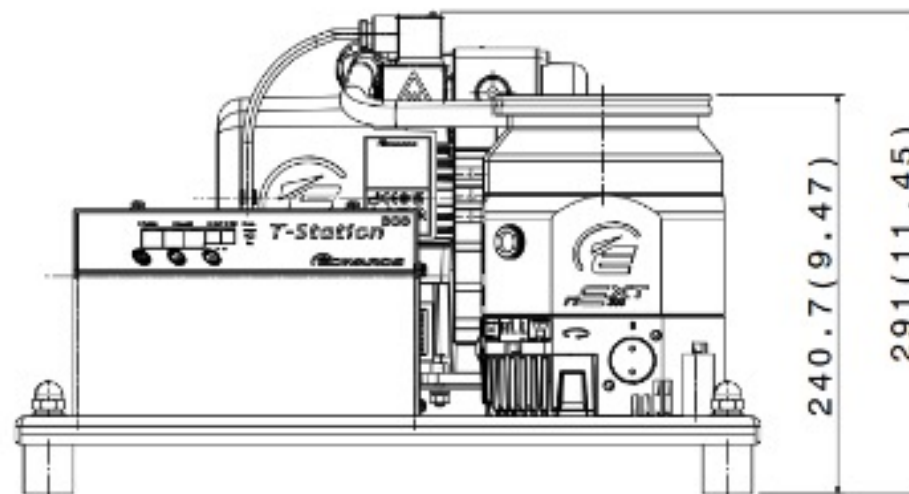
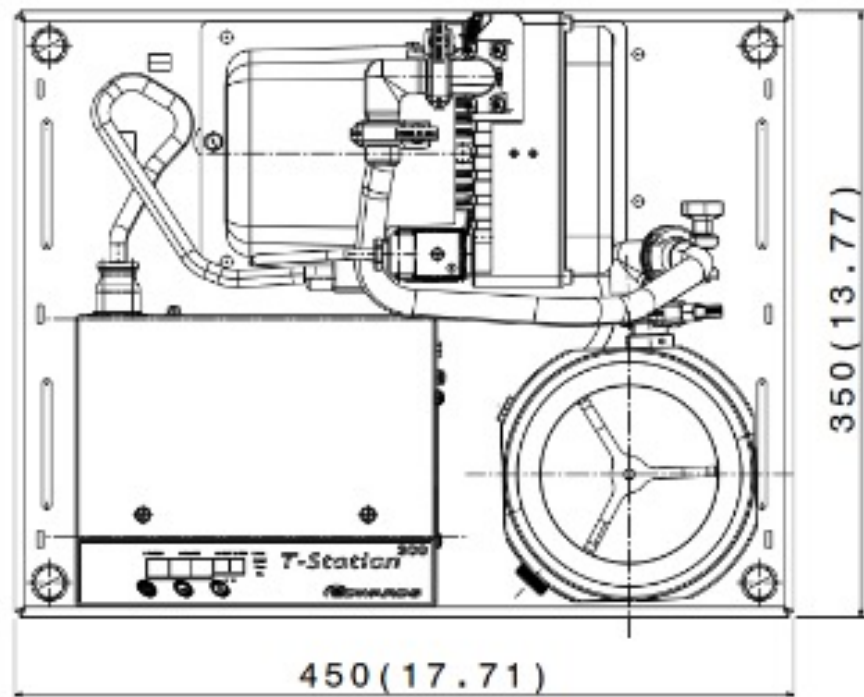
- Builds on our popular T-stations
- Increase market share
- Technical ownership
- Widening the portfolio
- 3 options for backing pump
- 2 options for TMP pump



T-station 85 view detail



T-station 300 view detail



Ordering information

T-station 85	Part Number
T-Station 85H Dry NW40 mXDS3s 230V	TS85M1003
T-Station 85H Dry NW40 mXDS3s 115V	TS85M1006
T-Station 85H Dry NW40 mXDS3s 200V	TS85M1004
T-Station 85H Dry ISO63 mXDS3s 230V	TS85M2003
T-Station 85H Dry ISO63 mXDS3s 115V	TS85M2006
T-Station 85H Dry ISO63 mXDS3s 200V	TS85M2004
T-Station 85H Dry CF63 mXDS3s 230V	TS85M3003
T-Station 85H Dry CF63 mXDS3s 115V	TS85M3006
T-Station 85H Dry CF63 mXDS3s 200V	TS85M3004

Ordering information

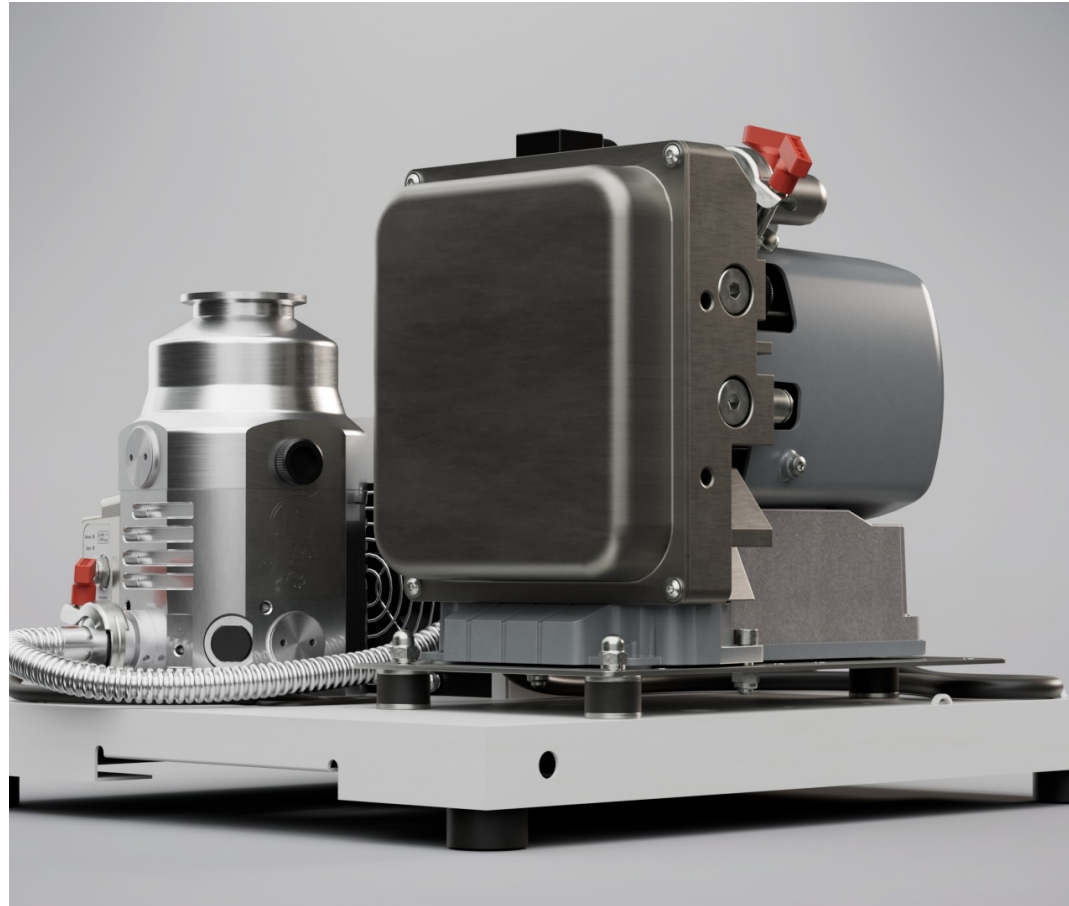
T-station 300	Part Number
T-Station 300 Dry ISO100 mXDS3s 230V	TS300M2003
T-Station 300 Dry ISO100 mXDS3s 115V	TS300M2006
T-Station 300 Dry ISO100 mXDS3s 200V	TS300M2004
T-Station 300 Dry CF100 mXDS3s 230V	TS300M3003
T-Station 300 Dry CF100 mXDS3s 115V	TS300M3006
T-Station 300 Dry CF100 mXDS3s 200V	TS300M3004

Technical data

T-station	85	85	85	300	300
High vacuum connection DN	KF 40	ISO 63	CF 63	ISO 100	CF 100
Fore vacuum connection	16 KF				
Pumping speed N ₂	47-84			300	
Ultimate pressure mbar	5 x 10 ⁻⁸	5 x 10 ⁻⁸	5 x 10 ⁻⁹	6 x 10 ⁻⁸	5 x 10 ⁻¹⁰
Mains supply V	100 / 230				
Power consumption W	520			560	
Weight Kg	19/21			23	26
Gauges	1				

Marketing materials

- Digital brochure
- Webpage updates
- Social media
- HUB spot mailers
- External announcements





edwardsvacuum.com

Edwards © 2020. All rights reserved