

## Agilent TPS-mobile



Roll-around cart, high capacity systems, with higher compression ratio and wide pumping speed range.

The possible configurations are 440, combining the TwisTorr 74 FS, 304 FS and Turbo-V 551 Navigator turbo pumps, backed by Agilent Dry Scroll Pumps (IDP or TriScroll series) or DS Rotary Vane Pumps.

Large selection of gauges and accessories available for customized solutions.

A-PLUS Software, integrated backing pump Isolation Valve.

Voltage 110/230V. CE, UL/CUL, CSA certified.

Applications include UHV system pump-down, ion pump roughing, lamp and tube processing, cryopump regeneration, High Vacuum systems operation, High and Ultra High Vacuum systems bake-out

## Turbomolecular Pumps - Pumping Speed\*

	TwisTorr 74 FS KF 40, ISO 63, CFF 2¾", CFF 4½"	TwisTorr 304 FS ISO 100, CFF 6", ISO 160, CFF 8"	Turbo-V 551 Navigator CFF 6", ISO 160, CFF 8"
Pumping Speed	N <sub>2</sub> : 48 L/s (with inlet screen)*	N <sub>2</sub> : 180 L/s (with inlet screen)*	N <sub>2</sub> : 550 L/s (with inlet screen)

\* Pump nominal speed: TwisTorr 74 FS N<sub>2</sub>: 60 L/s; TwisTorr 304 FS N<sub>2</sub>: 250 L/s.

## Base Pressure \*

	TwisTorr 74 FS	TwisTorr 304 FS	Turbo-V 551 Navigator
With IDP-7 dry scroll pump or DS102 rotary vane pump	< 5 x 10 <sup>-10</sup> mbar (< 3.75 x 10 <sup>-10</sup> Torr)	< 1.0 x 10 <sup>-10</sup> mbar (< 7.5 x 10 <sup>-11</sup> Torr)	< 1.0 x 10 <sup>-10</sup> mbar (< 7.5 x 10 <sup>-11</sup> Torr)

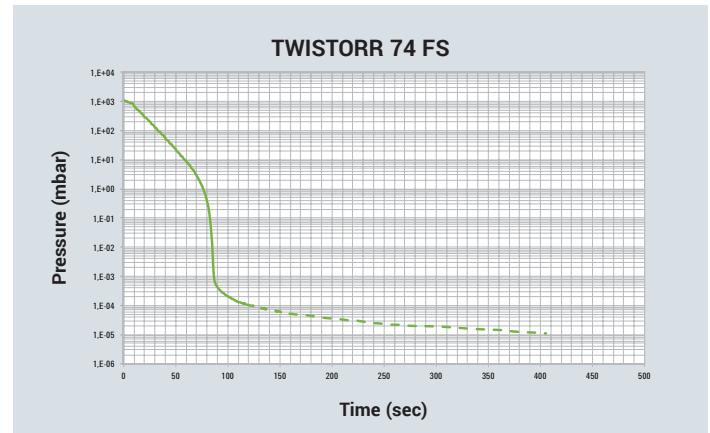
\* According to standard DIN 28 428

## Pumpdown time

TPS-mobile with TwisTorr 74 FS ISO 63 and IDP-7		
Pumpdown Time (15 liter volume)	34 sec	(100 mbar)
	76 sec	(1 mbar)
	120 sec	(1 x 10 <sup>-4</sup> mbar)
	160 sec	(5 x 10 <sup>-5</sup> mbar)
	400 sec	(1 x 10 <sup>-5</sup> mbar)

TPS-mobile with TwisTorr 304 FS ISO 100 and IDP-7		
Pumpdown Time (15 liter volume)	40 sec	(50 mbar)
	60 sec	(8 mbar)
	80 sec	(7 x 10 <sup>-1</sup> mbar)
	100 sec	(1 x 10 <sup>-4</sup> mbar)
	130 sec	(1 x 10 <sup>-5</sup> mbar)

## Pressure vs Time (with a pump down vol. of 15 L.)



## TPS-mobile standard configurations

TPS-mobile	TwisTorr 74 FS KF 40	TwisTorr 74 FS ISO 63	TwisTorr 74 FS CFF 2¾"	TwisTorr 74 FS CFF 4½"	TwisTorr 304 FS ISO 100	TwisTorr 304 FS CFF 6"	TwisTorr 304 FS ISO 160	TwisTorr 304 FS CFF 8"	TV551 CFF 6"	TV551 ISO 160	TV551 CFF 8"
DS 102 - 120 V	•	•	•	•	•	•	•	•			
DS 102 - 220 V	•	•	•	•	•	•	•	•			
DS 202 - 120 V	•	•	•	•	•	•	•	•			
DS 202 - 220 V	•	•	•	•	•	•	•	•			
DS 302 - 120 V					•	•	•	•	•	•	•
DS 302 - 220 V					•	•	•	•	•	•	•
DS 402 - 120 V					•	•	•	•	•	•	•
DS 402 - 220 V					•	•	•	•	•	•	•
DS 602 - 120 V					•	•	•	•	•	•	•
DS 602 - 220 V					•	•	•	•	•	•	•
IDP-3 - 120 V	•	•	•	•	•	•	•	•			
IDP-3 - 220 V	•	•	•	•	•	•	•	•			
IDP-7 - 120 V	•	•	•	•	•	•	•	•			
IDP-7 - 220 V	•	•	•	•	•	•	•	•			
DP-15 - 120 V					•	•	•	•	•	•	•
IDP-15 - 220 V					•	•	•	•	•	•	•
TS 300 VPI - 120 V					•	•	•	•	•	•	•
TS 300 VPI - 220 V					•	•	•	•	•	•	•
TS 600 VPI - 120 V					•	•	•	•	•	•	•
TS 600 VPI - 220 V					•	•	•	•	•	•	•

Ordering Information available on request: call Agilent for details

## Turbomolecular Pumps

Turbo Pump Model	Inlet Flange
TwisTorr 74 FS	ISO 63, KF 40*, CFF 2 3/4", CFF 4 1/2"*
TwisTorr 304 FS	ISO 100, CFF 6", ISO 160, CFF 8"*
Turbo-V 551 Navigator	CFF 6", ISO 160, CFF 8"*

\*Configuration available on request

## Primary Pumps

Dry Scroll Pumps	Peak Pumping Speed 50 Hz
IDP-3, single phase	50 L/min - 3.0 m <sup>3</sup> /h - 1.8 cfm
IDP-7, single phase	90 L/min - 5.4 m <sup>3</sup> /h - 3.3 cfm
IDP-15, single phase	214 L/min - 12.8 m <sup>3</sup> /h - 7.5 cfm
TriScroll 300, single phase, with Vacuum Pump Isolation Valve (VPI)	10 L/min - 12.6 m <sup>3</sup> /h - 7.4 cfm
TriScroll 600, single phase, with Vacuum Pump Isolation Valve (VPI)	420 L/min - 25.2 m <sup>3</sup> /h - 14.8 cfm
Rotary Vane Dual Stage Pumps	Pumping Speed 50 Hz
DS 102 - 1 phase worldwide motor	5.0 m <sup>3</sup> /h
DS 202 - 1 phase worldwide motor	8.3 m <sup>3</sup> /h
DS 302 - 1 phase worldwide motor	11.6 m <sup>3</sup> /h
DS 402 - 1 phase worldwide motor	17.4 m <sup>3</sup> /h
DS 602 - 1 phase worldwide motor	25.0 m <sup>3</sup> /h

## Managing Gauges

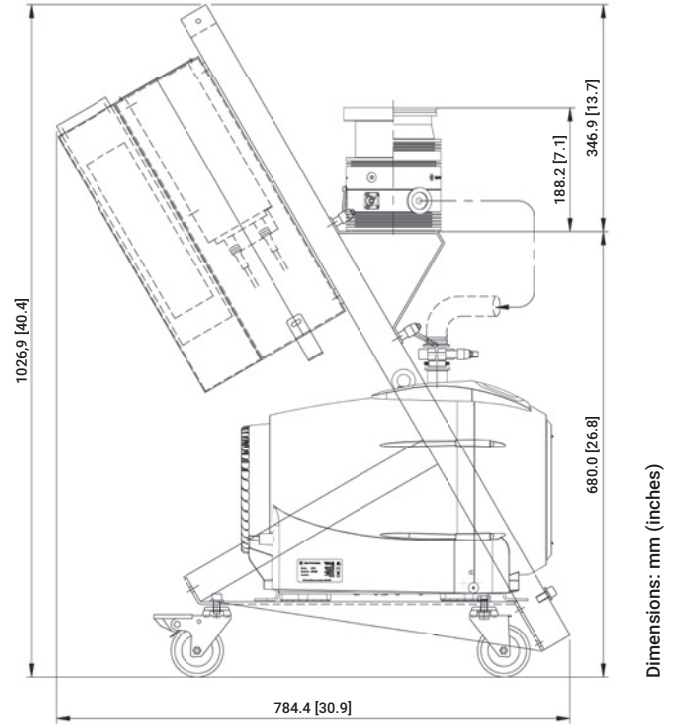
Turbo Pump	Gauge Configuration	Measurement range
TwisTorr 74 FS TwisTorr 304 FS	Turbo pump controller driving: - FRG-700 Full Range Gauge	Atmosphere to 3.8 x 10 <sup>-9</sup> Torr (mbar)
TwisTorr 74 FS TwisTorr 304 FS Turbo-V 551 Navigator	XGS-600 Gauge Controller driving:	
	- ConvecTorr Rough Vacuum gauge	- 1 x 10 <sup>-4</sup> Torr (mbar) to atmosphere
	- IMG-100 High Vacuum gauge	1 x 10 <sup>-3</sup> Torr (mbar) to 5 x 10 <sup>-9</sup> Torr (mbar)

For other gauge configurations, please contact your local Agilent representative

## Cables

Power cords are included free of charge in all TPS-mobile models, with US, EU or UK plug.

## TPS-mobile with TwisTorr 304 FS and IDP-15



Width: 422 (16.61)

[www.agilent.com/chem/vacuum](http://www.agilent.com/chem/vacuum)

**United States**

Agilent Technologies  
Toll free: +1 800 882 7426  
vpl-customer@agilent.com

**Europe and other countries**

Agilent Technologies Italia SpA  
Toll free: 00 800 234 234 00  
vpt-customer@agilent.com

This information is subject to change without notice.

© Agilent Technologies, Inc. 2018  
Published in the USA, November 15, 2018  
5994-0539EN

