

Agilent TPS-mobile



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

160 possible configurations, with the new TwisTorr 84 FS and 304 FS, and the Turbo-V 551 Navigator Turbo Pumps, backed by Agilent Dry Scroll Pumps (including the new IDP-15) or DS Mechanical Pumps. Large selection of gauges and accessories available for customized solutions.

T-Plus Software, Isolation valve integrated/included.

Voltage 110/230V. CE, UL/CUL, CSA and Semi S2-0200 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 84 FS	TwisTorr 304 FS	Turbo-V 551 Navigator
	KF 40, ISO 63, CFF 2¾", CFF 4½"	ISO 100, CFF 6", ISO 160, CFF 8"	ISO 100, CFF 6", ISO 160, CFF 8"
Pumping Speed	N ₂ : 57 l/s (with inlet screen)*	N ₂ : 180 l/s (with inlet screen)*	N ₂ : 550 l/s (with inlet screen)

* Pump nominal speed: TwisTorr 84FS N₂: 67 l/s; TwisTorr 304FS N₂: 250 l/s.

Base Pressure

	TwisTorr 84 FS	TwisTorr 304 FS	Turbo-V 551 Navigator
With SH110 Dry Scroll Pump	5.0 x 10 ⁻⁹ mbar (3.75 x 10 ⁻⁹ Torr)	< 1.0 x 10 ⁻¹⁰ mbar (< 7.5 x 10 ⁻¹¹ Torr)	< 1.0 x 10 ⁻¹⁰ mbar (< 7.5 x 10 ⁻¹¹ Torr)
With DS-102 Rotary Vane Pump	5.0 x 10 ⁻¹⁰ mbar (3.75 x 10 ⁻¹⁰ Torr)	< 1.0 x 10 ⁻¹⁰ mbar (< 7.5 x 10 ⁻¹¹ Torr)	< 1.0 x 10 ⁻¹⁰ mbar (< 7.5 x 10 ⁻¹¹ Torr)

* According to standard DIN 28 428

Pumpdown time

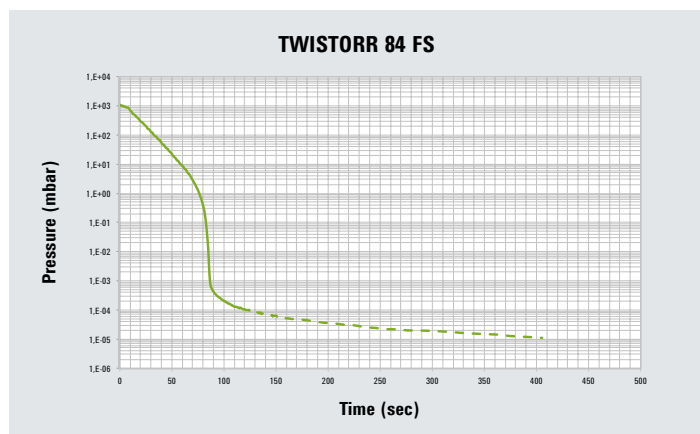
TPS-mobile with TwisTorr 84 FS ISO 63 and SH 110 Scroll Pump

Pumpdown Time (15 liter volume)	34 sec	(100 mbar)
	76 sec	(1 mbar)
	120 sec	(1 x 10 ⁻⁴ mbar)
	160 sec	(5 x 10 ⁻⁵ mbar)
	400 sec	(1 x 10 ⁻⁵ mbar)

TPS-mobile with TwisTorr 304 FS ISO 100 and SH 110 Scroll Pump

Pumpdown Time (15 liter volume)	40 sec	(50 mbar)
	60 sec	(8 mbar)
	80 sec	(7 x 10 ⁻¹ mbar)
	100 sec	(1 x 10 ⁻⁴ mbar)
	130 sec	(1 x 10 ⁻⁵ mbar)

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



TPS-mobile standard configurations

TPS-mobile	TwisTorr 84 FS KF 40	TwisTorr 84 FS ISO 63	TwisTorr 84 FS CFF 2 3/4"	TwisTorr 84 FS CFF 4 1/2"	TwisTorr 304 FS ISO 100	TwisTorr 304 FS CFF 6"	TwisTorr 304 FS ISO 160	TwisTorr 304 FS CFF 8"	TV551 ISO 100	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	●	●	●	●	●	●	●	●				
SH 110 - 120 V	●	●	●	●	●	●	●	●				
SH 110 - 220 V	●	●	●	●	●	●	●	●				
IDP-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 84 FS Pump	ISO 63, KF 40*, CFF 2 3/4", CFF 4 1/2"**
TwisTorr 304 FS Pump	ISO 100, CFF 6", ISO 160, CFF 8"**
Turbo-V 551 Navigator	ISO 100, 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 ³ /h - 1.8 cfm
SH 110, single phase	90 l/min - 5.4 m ³ /h - 3.3 cfm
TriScroll 300, single phase, with Vacuum Pump Isolation Valve (VPI)	210 l/min - 12.6 m ³ /h - 7.4 cfm
TriScroll 600, single phase, with Vacuum Pump Isolation Valve (VPI)	420 l/min - 25.2 m ³ /h - 14.8 cfm
IDP-15, single phase	214 l/min - 12.8 m ³ /h - 7.5 cfm
Rotary Vane Dual Stage Pumps	Pumping Speed 50 Hz
DS 102 - 1 phase worldwide motor	5.0 m ³ /h
DS 202 - 1 phase worldwide motor	8.3 m ³ /h
DS 302 - 1 phase worldwide motor	11.6 m ³ /h
DS 402 - 1 phase worldwide motor	17.4 m ³ /h
DS 602 - 1 phase worldwide motor	25.0 m ³ /h

Managing Gauges

GAUGE KIT	Inlet Flange	DIY FRG-700 Full Range Gauge Kit (atmosphere to 3.8 x 10 ⁻⁹ Torr)
TwisTorr 84 FS	KF 40	9699190
	ISO 63	9699192
	CFF 4 1/2"	9699193
TwisTorr 304 FS and Turbo-V 551 Navigator	ISO 100	9699194
	CFF 6"	9699201
Turbo-V 551 Navigator	ISO 160 K	9699195
	CFF 8"	9699202

For other gauge configurations, please contact your local Agilent representative

Cables

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

Outline Drawing

