

## FEATURES

- ⊕ IMPROVED RELIABILITY WITH THE TwisTorr FS TURBO PUMPS
- ⊕ WIDE RANGE OF CONFIGURATIONS
- ⊕ DRY OR WET ROUGHING VERSIONS
- ⊕ COMPACT & PORTABLE, SMALL FOOTPRINT, LIGHTWEIGHT
- ⊕ VERSATILE BROAD RANGE OF GAUGES, VALVES & ACCESSORIES
- ⊕ ENHANCED RELIABLE VACUUM PERFORMANCES
- ⊕ EASY TO USE, SIMPLY PLUG & PUMP DOWN
- ⊕ COST EFFECTIVE SOLUTION

### TURBOMOLECULAR PUMPS PUMPING SPEED

#### V301

	ISO 100, CFF 6", ISO 160, CFF 8"
Pumping Speed	N <sub>2</sub> : 180 l/s (with inlet screen)*

### BASE PRESSURE

#### V301

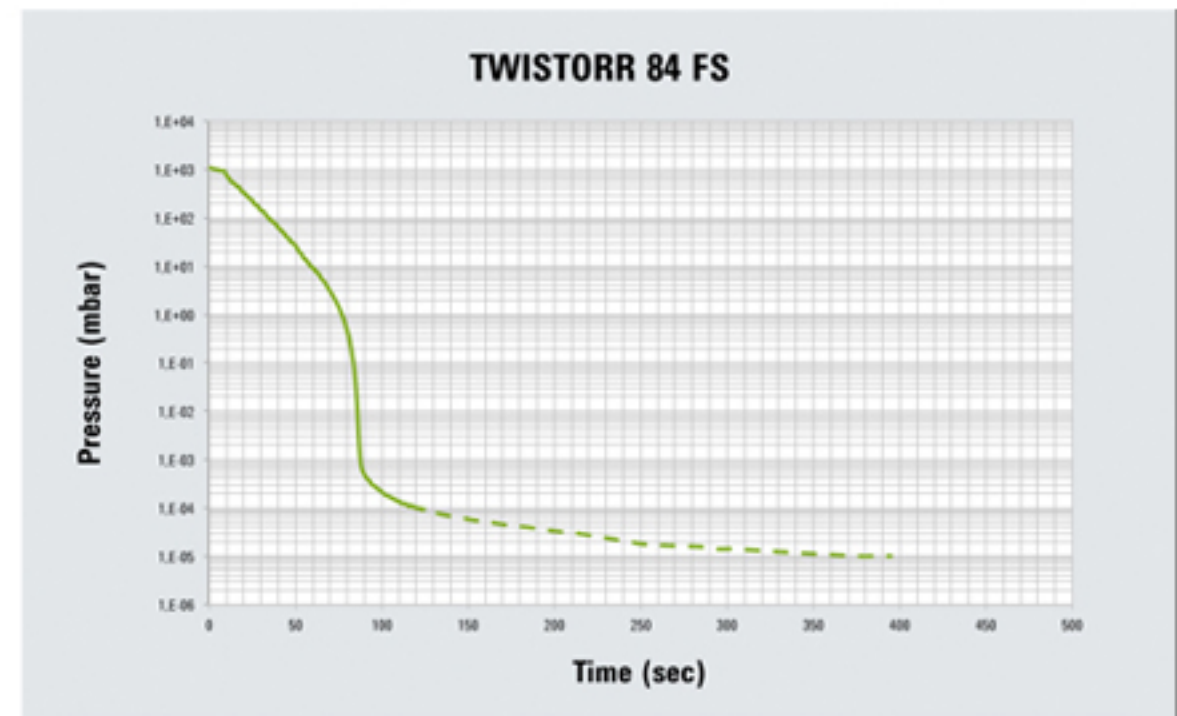
Primary Pumps Dry	$< 1.0 \times 10^{-10}$ mbar ( $< 7.5 \times 10^{-11}$ Torr)
Primary Pumps Mechanical	$< 1.0 \times 10^{-10}$ mbar ( $< 7.5 \times 10^{-11}$ Torr)

### PUMPDOWN TIME

#### TPS-bench with V301 ISO 100 and SH 110 Scroll Pump

Pumpdown Time (15 liter volume)	40 sec	(45 mbar)
	60 sec	(7 mbar)
	80 sec	( $5 \times 10^{-1}$ mbar)
	100 sec	( $8 \times 10^{-5}$ mbar)
	115 sec	( $1 \times 10^{-5}$ mbar)

### PRESSURE vs TIME (with a pump down vol. of 15 lt.)



### GAUGES

GAUGE KIT	Inlet Flange	DIY FRG-700 Full Range Gauge Kit (atmosphere to $3.8 \times 10^{-9}$ Torr)
<b>V301</b>	ISO 100	9699194
	CFF 6"	9699201
	ISO 160	9699195
	CFF 8"	9699202

### ROUGHING PUMPS

Dry Scroll Pumps	Peak Pumping Speed 50 Hz
SH 110, single phase	90 l/min - 5.4 m <sup>3</sup> /h - 3.3 cfm
IDP-3, single phase	50 l/min - 3.0 m <sup>3</sup> /h - 1.8 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

### TURBOMOLECULAR PUMPS

Turbo Pump Model	Inlet Flange
<b>V301</b>	ISO 100, CFF 6", ISO 160, CFF 8"