



Seiko Seiki STP-A803, STP-A1303

Technical Specifications

Pump Type		STP-A803C	STP-A1303C	STP-A803CV	STP-A1303CV		
TMS unit		Without TMS		With TMS			
Flange size	Inlet port flange	ICF203/VG150 ISO160F	ICF253VG200 ISO200F	ICF203/VG150 ISO160F	ICF253VG200 ISO200F		
	Outlet port flange	KF40					
	Purge port flange	KF10					
Pumping speed (L/s) (see chapter 7.1)	N ₂	800	1300	800	1300		
	H ₂	520	800	520	800		
Compression ratio * ¹	N ₂	> 10 ⁸					
	H ₂	10 ³					
Allowable maximum continuous flow rate * ^{1,*2} (sccm)	N ₂	1500		1000			
Ultimate pressure * ^{1,*3}	Pa	10 ⁻⁷ (10 ⁻⁹ Torr) order					
Allowable maximum backing pressure * ¹	Pa	270 (2 Torr)					
Enable exhaust gas		Chlorine and Fluorine gas can be used. When you want to use the following gas, please contact Edwards. - The gas including alkali metal, but except "Li". - The gas including "Ga", "Hg", "In" and "Sn". - HBr					
Purge gas flow rate	sccm	20 (see chapter 2.2.2)					
Back pump size	L/min	> 1300					
Rated speed	rpm	32,500 (Allowable speed range: between 16,000 and 32,500)					
Starting time	min	7					
Stopping time	min	8					
Baking temperature	°C	< 120		No baking possible with TMS			
Lubricating oil		Not necessary					
Installation position		Free					
Cooling method		Water cooling	Water cooling controlled by TMS				
TMS temperature setting	°C	-	60				
Water	Flow rate	L/min	2				
Cooling	Temperature	°C	5 to 25				
	Pressure	Mpa	< 0.3				
Water cooling fitting	Size		Rc 1/4 (ISO standard)				
	Material		Brass				
Mass	kg		39				
Dimension	mm		See chapter 7.3 Pump Overview Chart				
Ambient air temp. range	°C		0 to 40				
Storage temp. range	°C		-25 to 55				
Connection cable length	m		30 (maximum)				

The data inside above table are the typical measured value. It's not guaranteed performance.

*¹ : Pumping speed, compression ratio, allowable maximum continuous flow rate, ultimate pressure and allowable maximum backing pressure are measured by Edwards method

*² : Allowable maximum continuous flow rate varies depend on the cooling methods. The pumping speed of 1,300 (L/min) dry pump was used for the measurements.

*³ : Ultimate pressure is a value after baking.

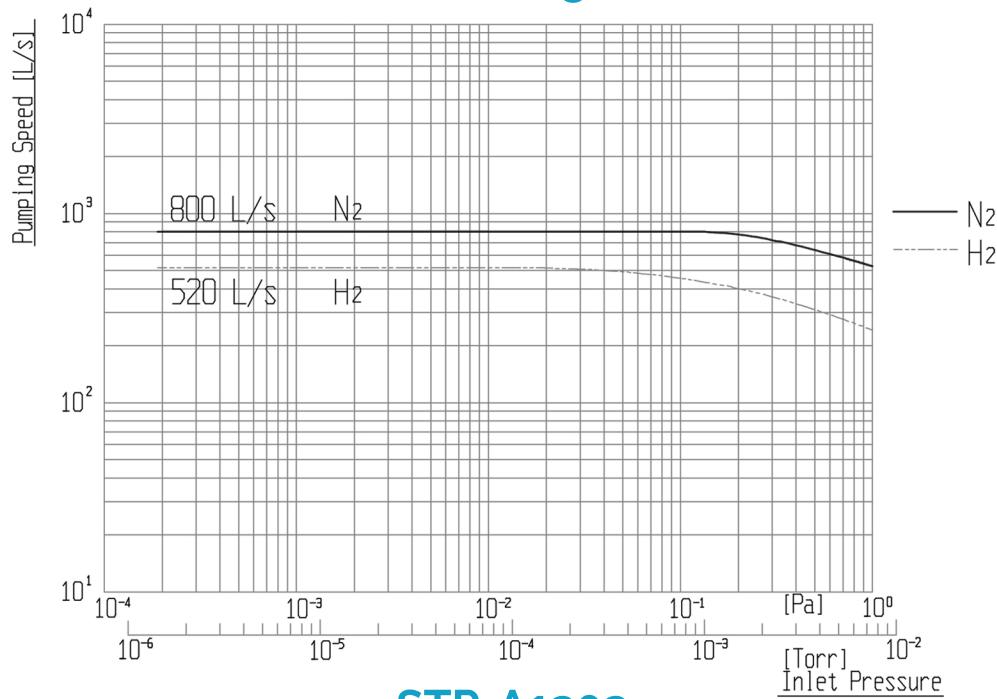


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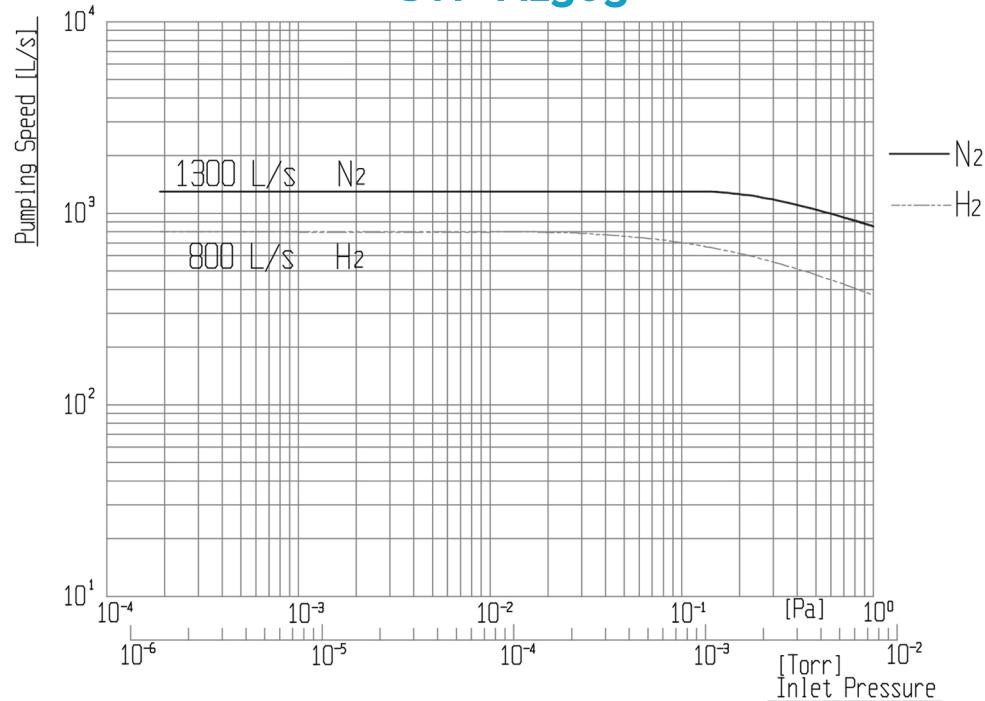
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Seiko Seiki STP-A803, STP-A1303 Pumping Curves

STP-A803



STP-A1303





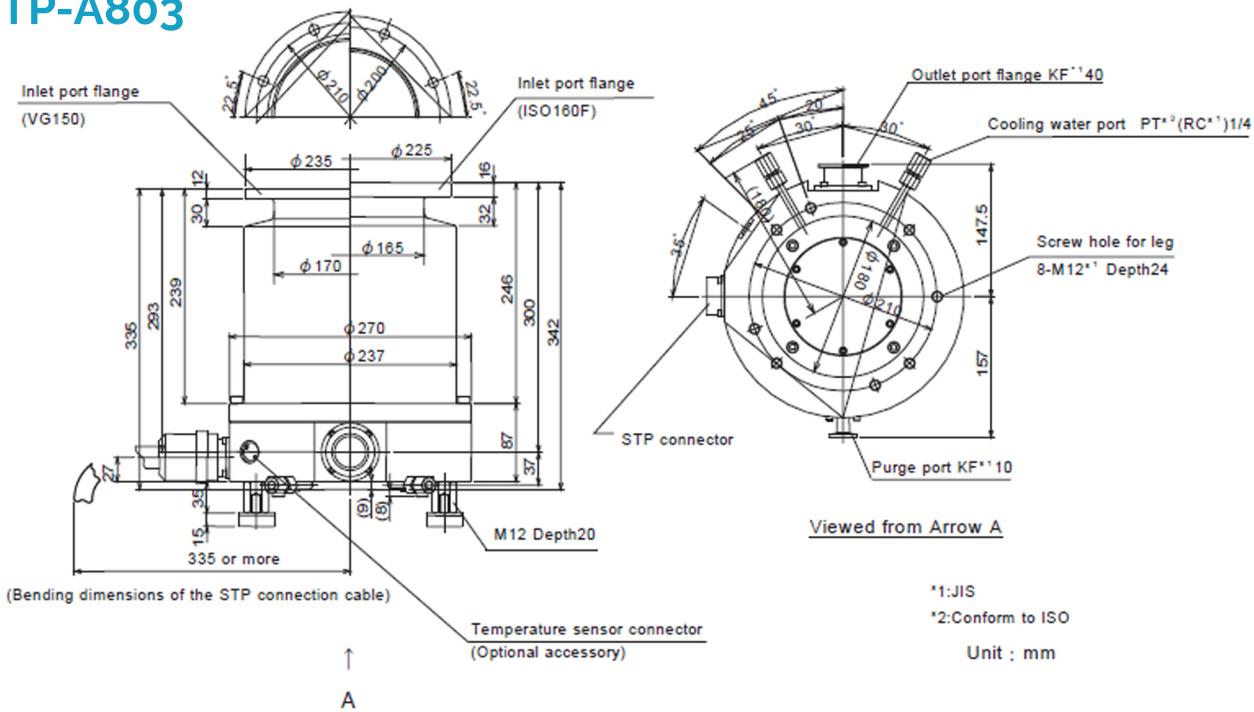
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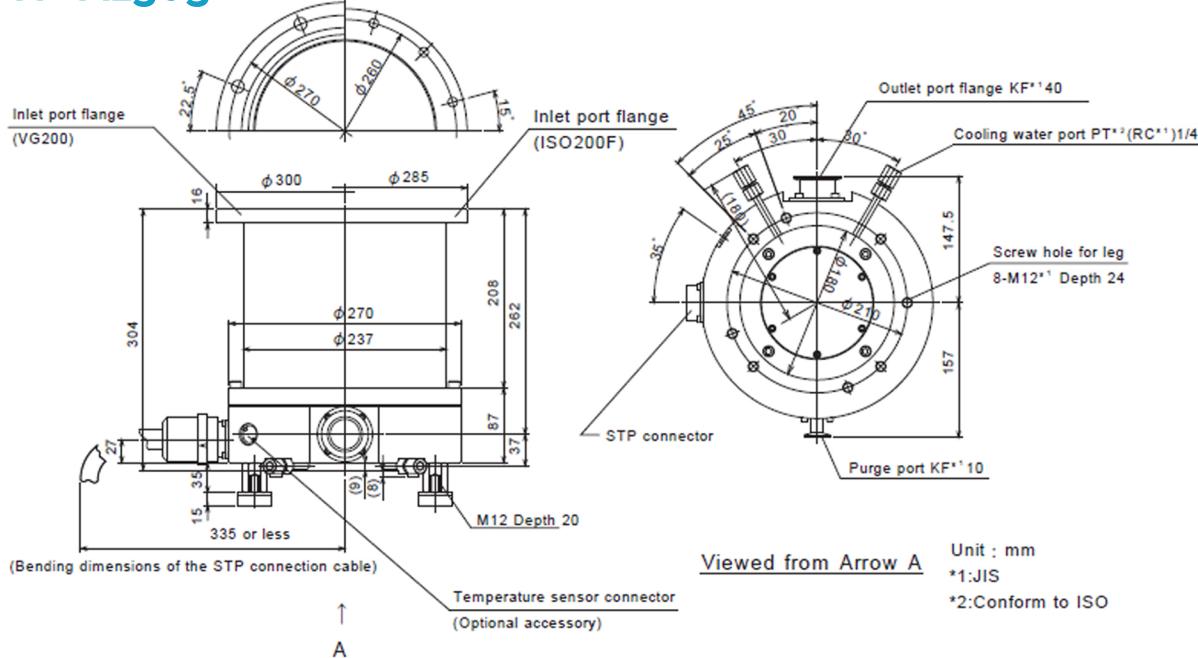
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Seiko Seiki STP-A803, STP-A1303 Dimensions

STP-A803



STP-A1303





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Features & Benefits

- oil free
- low vibration
- high reliability
- maintenance free
- increased life
- advanced controller design
- compact design
- small footprint
- advanced rotor technology
- maximised process flexibility

Applications

- semiconductor • coating • scientific research & development • LED
- metallurgy • solar • flat panel display • plasma etch for metal • ion implantation source • film deposition • diffusion • load lock chambers
- surface analysis • mass spectrometry • high energy physics

Recommended controller

- controller: SCU-800