



Super-Air

排水器的領航者

SUPER TRAP

球閥型
無耗氣自動排水器



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排水器的領航者

高價能源時代來臨，工廠內不可或缺且耗電量極大的生財設備「空壓系統」，其運轉效率攸關企業的生產成本與競爭力。

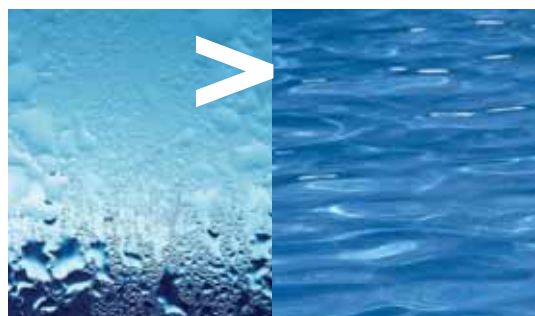
能揚公司自1988年即以技術服務創業，針對客戶空壓機各種不同問題，提供客製化之解決方案，並不斷精益求精。除提供各種螺旋式空壓機、變頻式空壓機、無油式空壓機、高低壓空壓機之外，更領先業界投入空壓節能技術之研發及製造，以期促進產業永續發展與綠色清潔生產概念之落實。

*Super Trap*球閥型無耗氣自動排水器及空壓機節能控制盤，乃此理念孕育下之優良產品。除可降低空壓系統運轉成本外，並可減少產業因經濟活動對地球環境的汙染，善盡地球公民的義務。

經營理念 | 專業熱誠 · 節能環保 · 領導創新 · 永續發展

企業使命 | 為產業顧客提供最佳空壓系統節能解決方案

企業願景 | 成為產業空壓機系統節能的最佳夥伴



冷凝水的由來

環境空氣中含有許多水蒸汽，經空壓機壓縮之後，空氣體積變小、密度增加。經過冷卻之後，空氣溫度降低，水蒸汽呈過飽和狀態，若干水汽凝結成液態水。

不只是冷凝水

環境空氣中含有許多不明、甚或有毒物質。工業區附近的環境空氣中，這些雜質的濃度更高。經過空壓機壓縮之後，其密度也隨之增高。由於壓縮過程中溫度升高，有害物質部份會溶解於冷凝水中，使得冷凝水PH質偏低，成為具有腐蝕性的液體。

*Super Trap*自動排水器使用不鏽鋼材質，提供全方位的保護功能，降低腐蝕物影響，有效延長使用壽命。

產品、設備不良的主因 - 冷凝水

冷凝水使塗料或被覆無法緊密配合，造成表面凸起，或黏著不佳，或使粉體結塊無法輸送。空氣中水份含量過高，將使過濾器濾蕊壓差升高，導致濾蕊破裂失去功能。壓縮空氣中濕度若超過40%，使氣動工具生鏽，加速磨耗、影響作業，減低企業競爭力。





自動排水器的限制

環境空氣無所不在的塵埃，設備、管路的鏽蝕物，油泥、鐵屑等雜質，參雜於冷凝水中，致使排水通道過小的傳統自動排水器，時常堵塞、漏氣，故障連連。影響壓縮空氣品質，甚或設備損壞、產線停擺。

自動排水器時常故障的原因

- * 容易阻塞
- * 排水孔徑太小
- * 單次排水量太少
- * 排水通道彎彎曲曲
- * 零件太多，動作繁複
- * 作動零件泡於冷凝水中

*Super Trap*球閥型無耗氣自動排水器，突破傳統排水器的限制，克服環境影響變數，提供全時穩定的操控性能。



壓縮空氣不是免費的

環境空氣無所不在，取用不盡，完全免費。空氣經空壓機壓縮之後，再經淨化處理、儲存、輸送，方能成為可用的壓縮空氣。此過程必須投資空壓設備，消耗昂貴能源。由於能源轉換效率極低，壓縮空氣並非免費，乃工廠內最昂貴的能源。



- | | | |
|--------------------|---------------|----------------|
| ■ 空壓系統節能改善評估、規劃、施工 | ■ 球閥型無耗氣自動排水器 | ■ 螺旋式氣水分離器 |
| ■ 售前專案整體規劃 | ■ 油潤滑螺旋式空壓機 | ■ 順風耳超音波測漏儀 |
| ■ 提供各種空壓機設備 | ■ 變頻螺旋式空壓機 | ■ 高壓往復式空壓機 |
| ■ 客戶技術保養代訓 | ■ 變速節能控制盤 | ■ 醫療 / 實驗室用空壓機 |
| ■ 各種空壓機修理維護 | ■ 無油式空壓機 | |



自動排水器 必要的設計元素

節能

只排水，不排氣。節省寶貴能源。



超級功能，性能比一比

- * 防塵防水設計
- * 不鏽鋼儲水槽
- * 手動功能測試鈕
- * 手動強制排污設計
- * 無耗氣 - 節省能源
- * 免保養 - 污染物隨水排出
- * 巡檢容易 - 可以目視檢查
- * 安全可靠 - 可遠端警示監控
- * 保養費最省 - 無膜片耗材費用
- * 排水通道較大 - 污染物隨水排出
- * 排水路徑成一直線 - 污染物不會累積
- * 斷電時可手動操作 - 彈性、可靠、安全
- * 無壓力時仍可排水 - 空壓機安全運轉

效率

單次排水量最大，動作頻率低，使用壽命最長。



排水通道10Φ，市場唯一

針對一般排水器易堵塞缺點，*Super Trap*球閥內部排水道直徑高達10Φ，即使鐵屑也可以排出，不需另加Y型過濾器，是目前市場上最不易堵塞的無耗氣自動排水器！



可靠

儲水槽內無任何活動零件，組件最少，故障率最低，可靠度最高。



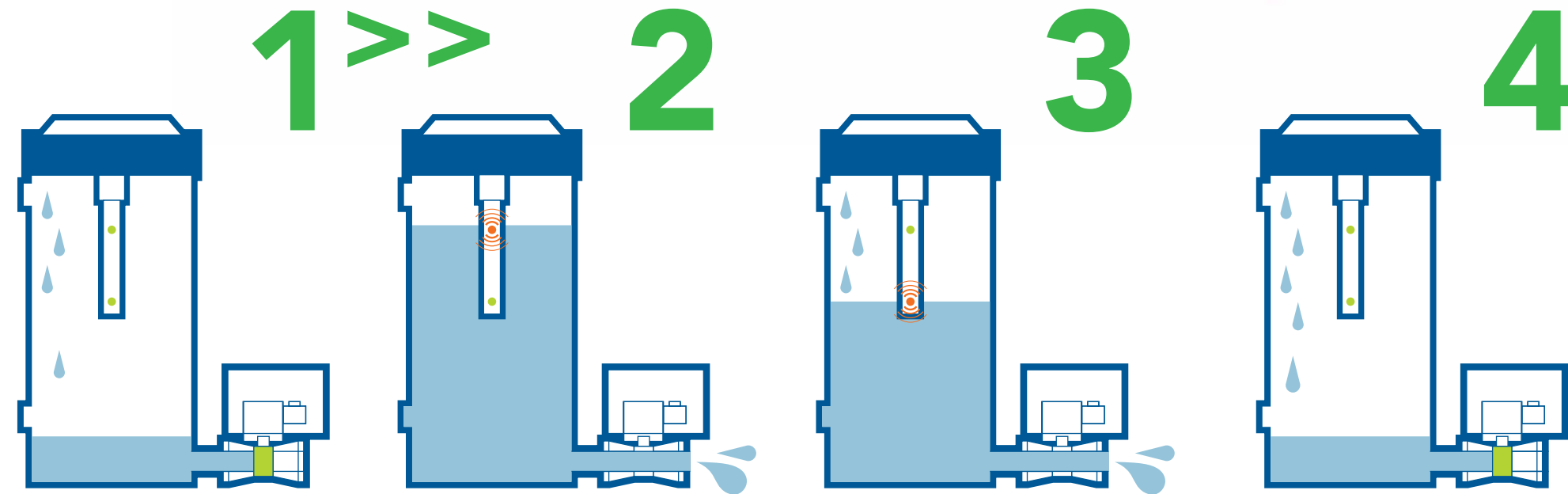
安全

堵塞、過載時，自動警示並可外接遠端監控，保障安全運轉。



SUPER TRAP

球閥型無耗氣自動排水器
排水示意圖



* 冷凝水流入儲水槽
* 儲水槽水位慢慢升高

* 冷凝水達高水位
* 液位感測器發出訊號
* 啟動排水球閥，開始排水

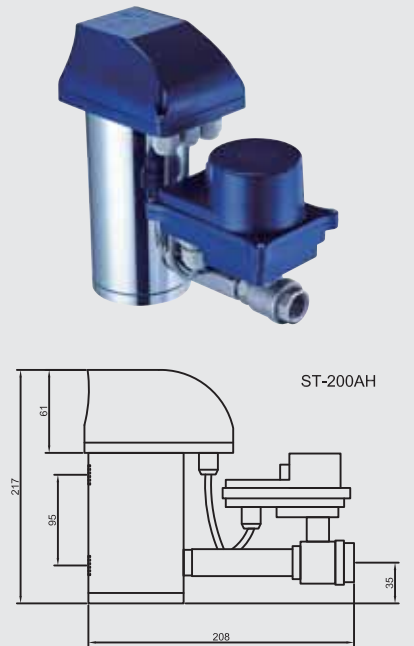
* 冷凝水排放至低水位
* 液位感測器發出訊號
* 通知排水閥關閉

* 冷凝水排完前，排水閥已關閉
* 殘留些許冷凝水，形成水封
* 不會排放壓縮空氣

* 冷凝水的多寡會受各地的氣候、空壓系統設備效率、安裝環境等等影響。若要精確選擇適合您的型號，歡迎聯絡原廠或當地、鄰近經銷商。

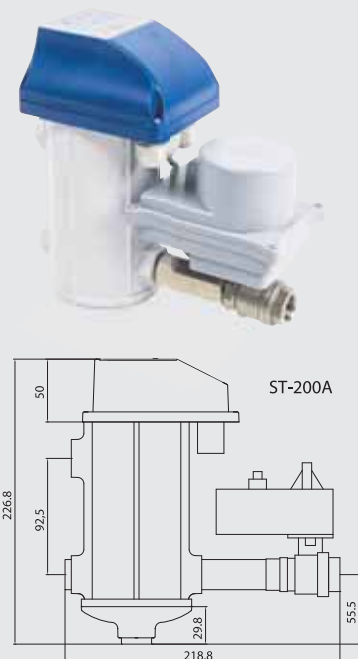
ST-200AH(45 Bar)

壓力(Bar)	0~45
入口(英寸)	1/2
出口(英寸)	1/2
電壓 AC (V)	110或220
重量(kg)	1.5
空壓機 M^3/Min (最大)	30
乾燥機 M^3/Min (最大)	60
過濾器 M^3/Min (最大)	300



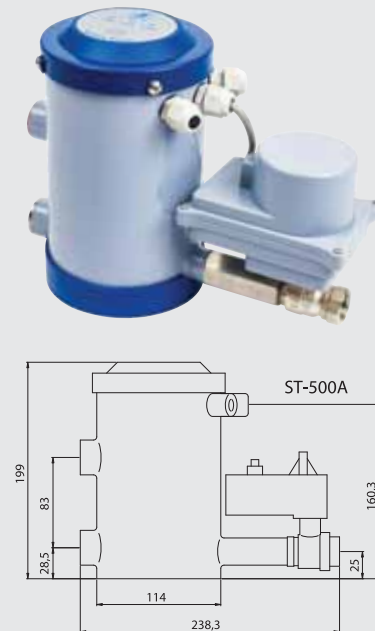
ST-200A

壓力(Bar)	0-16
入口(英寸)	1/2
出口(英寸)	1/2
電壓 AC (V)	110或220
重量(kg)	1.5
空壓機 M^3/Min (最大)	30
乾燥機 M^3/Min (最大)	60
過濾器 M^3/Min (最大)	300



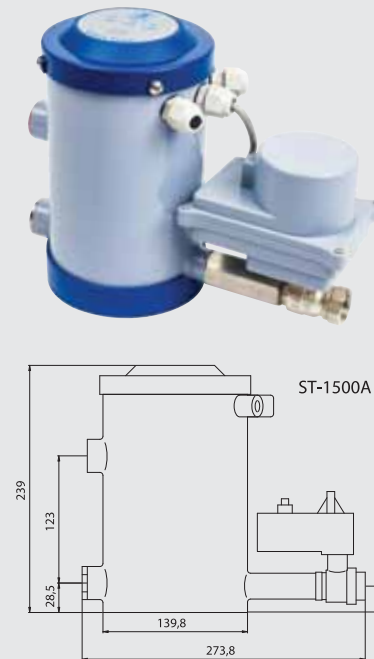
ST-500A

壓力(Bar)	0-16
入口(英寸)	3/4
出口(英寸)	1/2
電壓 AC (V)	110或220
重量(kg)	3.5
空壓機 M^3/Min (最大)	95
乾燥機 M^3/Min (最大)	190
過濾器 M^3/Min (最大)	1000



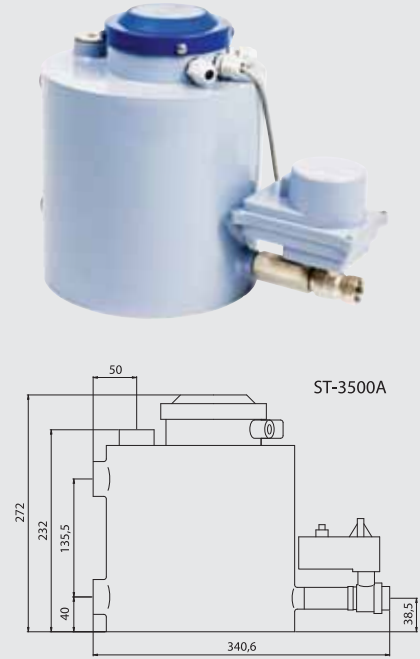
ST-1500A

壓力(Bar)	0-16
入口(英寸)	3/4
出口(英寸)	1/2
電壓 AC (V)	110或220
重量(kg)	4.5
空壓機 M^3/Min (最大)	300
乾燥機 M^3/Min (最大)	600
過濾器 M^3/Min (最大)	3000



ST-3500A

壓力(Bar)	0-16
入口(英寸)	1
出口(英寸)	1/2
電壓 AC (V)	110或220
重量(kg)	8
空壓機 M^3/Min (最大)	700
乾燥機 M^3/Min (最大)	1400
過濾器 M^3/Min (最大)	7000





SUPER TRAP™

Motorized Ball Valve type
Zero Air Loss Condensate Drain



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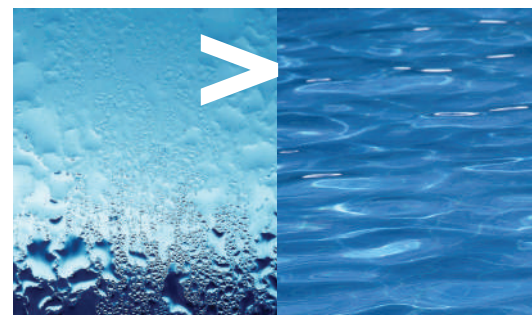
SUPER TRAP™

Motorized Ball Valve Type
Zero Air Loss
Condensate Drain

Super Air Compressor Technology Co., Ltd.

Located in Taiwan and started the business based on technical service support for compressed air systems in 1988. Super Air aim to provide customized solutions for our customers' various compressed air problems and to strive for excellence in our operations. In addition, we are committed the development and manufacturing of energy saving equipment related to compressed air systems.

With a view to promote industrial sustainable development and implement the concept of green production, we developed our Super Trap™ Condensate Drain with revolutionary automatic ball valve control, which is a landmark product of our efforts in the promotion of green production.



We use stainless steel as main part of condensate drain in order to provide comprehensive protection, reduce corrosion effect and extend the operating life.

Business philosophy |

- √ Professional Dedication
- √ Sustainable Development
- √ Energy Saving
- √ Leading Innovation

Mission | Provide the best energy -saving solutions of compressed air system

Vision | Become the best Industrial partner of energy-efficient compressed air system



An Important Factor Affecting Quality and Profitability - Condensate in Pneumatic System

Condensate in any pneumatic circuits causes rust and coated surface shedding of the equipment. Consequently, we will have rough surfaces and particles accumulation. The humidity in the system is over 40%, the equipment will have rust. The wear speed and breakdown frequency also increase. These will severely impact the profitability of the operation.



Problems of Other Drainage Devices:

- Clogging easily
- Complicated operation
- Winding water discharge channel
- Small water piping
- Many parts and complicated mechanical movement required
- Moving parts working in the condensate



Certificate & Patent



Our Strength and Advantages:

- Dustproof and Waterproof Design
- Stainless steel tank
- Buttons for manual test and water emission
- No loss of compressed air to save energy costs
- No diaphragm required: more costs saved
- Remote monitoring available: safe and reliable
- Big diameter discharge channel: no clogging
- Air pressure not needed for water drainage: workable during down time
- Straight discharge route provide efficient emission of particles with water

Compressed Air: Resources Should not be Wasted

Compressed air is not free. Air is everywhere, inexhaustible, and completely free in our daily lives. However, after being compressed by a compressor, the compressed air needs to go through purification, storage, and transportation processes to become usable compressed air. This process requires an investment in air compression equipment and consumes valuable energy. Due to the extremely low energy conversion efficiency, compressed air is by no means free. In fact, it is a very expensive resource of in today's factories.

Energy Saving



Zero air loss = saving energy

High Efficiency



Large drainage volume means low frequency of mechanical movements, resulting in longer product life span.

Reliable



No moving parts inside the water tank. Fewer parts mean fewer repair issues.

Safe

Clogging and overload alarms may be connected to remote monitoring system to ensure operation safety.

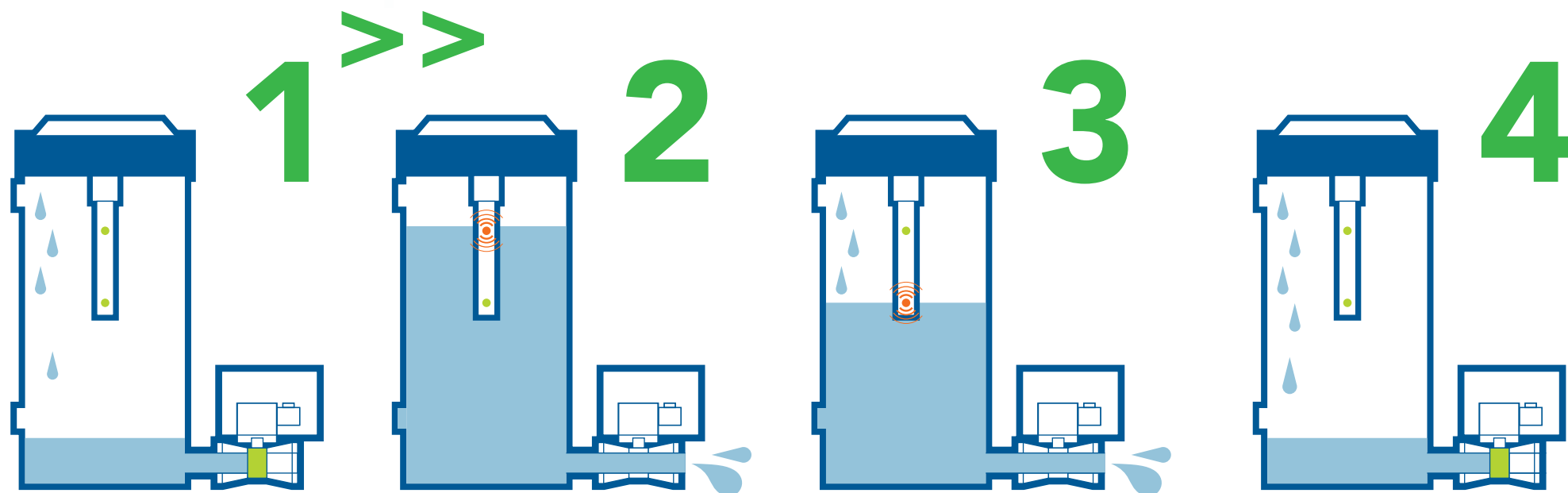
Big Water Discharge Channel

Ball valve water discharge channel is 10mm in diameter. This is the biggest in the industry. Even the chips in the pneumatic system can be ejected easily without the use of Y shaped filters. Super Trap™ is your best condensate solution !



SUPER TRAP™

Motorized Ball Valve Type
Zero Air Loss Condensate Drain
Drainage schematic



1
Condensate flows into the Super Trap and the water level rises.

2
Sensor detects high water level and discharges condensate by opening the ball valve automatically.

3
Sensor signals the valve to close when condensate discharged down to low water level.

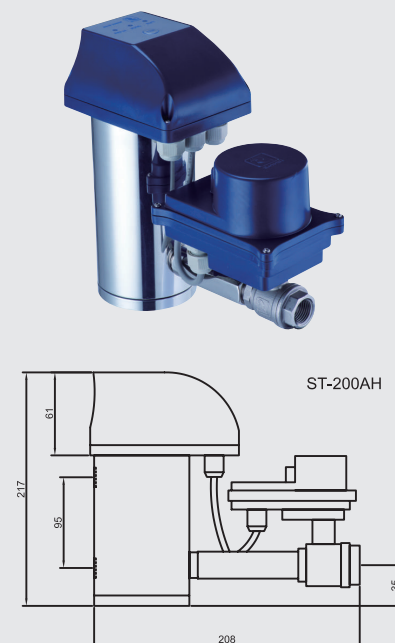
4
Water Seal prevents air leakage when the valve closed.

*Climate, equipment efficiency, installation and the rest of conditions will be the key affect that how much the condensate emerged. Please contact us or distributor nearby to find out suitable one for you.

Super-Trap Series

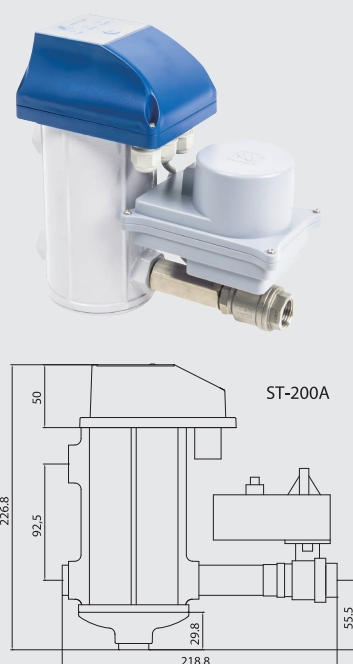
ST-200AH(45 Bar)

Working Bar	0-45
Inlet (inch)	1/2
Outlet (inch)	1/2
Voltage AC (V)	110/220
Weight (Kg)	1.5
Compressor (M ³ /Min)(Max)	30
Dryer (M ³ /Min)(Max)	60
Filter (M ³ /Min)(Max)	300



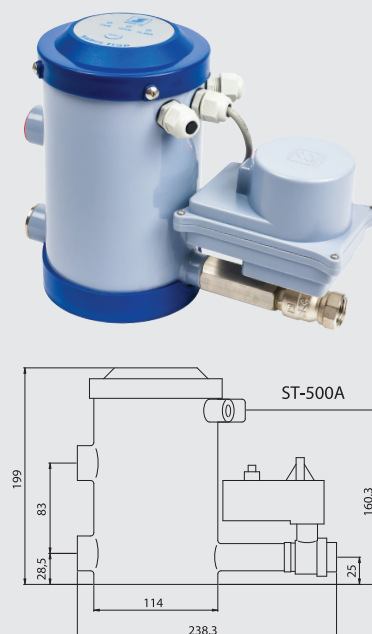
ST-200A

Working Bar	0-16
Inlet (inch)	1/2
Outlet (inch)	1/2
Voltage AC (V)	110/220
Weight (Kg)	1.5
Compressor (M ³ /Min)(Max)	30
Dryer (M ³ /Min)(Max)	60
Filter (M ³ /Min)(Max)	300



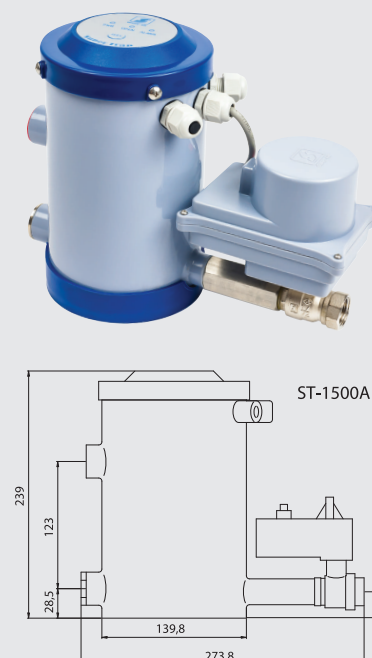
ST-500A

Working Bar	0-16
Inlet (inch)	3/4
Outlet (inch)	1/2
Voltage AC (V)	110/220
Weight (Kg)	3.5
Compressor (M ³ /Min)(Max)	95
Dryer (M ³ /Min)(Max)	190
Filter (M ³ /Min)(Max)	1000



ST-1500A

Working Bar	0-16
Inlet (inch)	3/4
Outlet (inch)	1/2
Voltage AC (V)	110/220
Weight (Kg)	4.5
Compressor (M ³ /Min)(Max)	300
Dryer (M ³ /Min)(Max)	600
Filter (M ³ /Min)(Max)	3000



ST-3500A

Working Bar	0-16
Inlet (inch)	1
Outlet (inch)	1/2
Voltage AC (V)	110/220
Weight (Kg)	8
Compressor (M ³ /Min)(Max)	700
Dryer (M ³ /Min)(Max)	1400
Filter (M ³ /Min)(Max)	7000

