

**Air service units series 1700 Steel line**



**General**

The stainless steel SS1700 air treatment series has been engineered and developed to approach specifically the OIL & GAS industry and more widely for all the severe service applications that require excellent corrosion resistance due to chemical and/or harsh environmental condition. **All external and internal parts (except for the automatic drain version) are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156/1.** The product range includes FILTER, with filtration elements up to 3 filtration degree (5µm-20 µm-50 µm), available in AISI316 stainless steel or HDPE (high density polyethylene), and manual or automatic condensed exhaust; The PRESSURE REGULATOR is supplied with low hysteresis rolling diaphragm and an over-pressure exhaust valve (RELIEVING), available in 4 different adjustment ranges from 0 to 12 bar. As a last the FILTER REGULATOR range, which combines the features of a filter and pressure regulator into a one single device. "CLEAN PROFILE" version is available for all the sizes, featuring a glossy finish on the external surface. The over-pressure exhaust hole (RELIEVING) has a 1/8" NPT threading, and it is protected by an AISI 316 sintered filter series. Note: for CLEAN PROFILE series this is a simple unthread hole.

**Construction and operational characteristics**

Body, bowl and adjustment mechanism	AISI 316L stainless steel
Caseback regulator	AISI 316L stainless steel
Adjustment screw, locking nut and fastening screws	AISI 316L stainless steel (stainless steel A4-70)
Internal components	AISI 316L stainless steel
Filtering elements	AISI 316 stainless steel or HDPE (High density polyethylene)
Spring	AISI 316 stainless steel
Seals	

NBR (standard versions and automatic drain)	NBR for low temperatures (L versions)	Silicone - PU (Z version)
FPM - HNBR (H versions)	EPDM-FDA (EF versions)	

Automatic drain Brass, stainless steel AISI 304 and AISI 302, sintered bronze  
Acetal resin , NBR, FPM

**Operating Range**

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert gases. Natural gases
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Temperature		
-30°C ... +80°C (standard version)	-5°C ... +150°C (high temperature H version)	-40°C ... +100°C (EPDM-FDA version)
-50°C ... +80°C (low temperature L version)	-5°C ... +70°C (automatic drain S version)	
-60°C ... +80°C (low temperature version -60 °C Z)	-5°C ... +70°C (reduced orifice automatic drain SR version)	

Maximum working pressure		
20 bar (standard, low and high temperature versions)	16 bar (automatic drain version)	10 bar (reduced orifice automatic drain version)

**Instructions for installation and use**

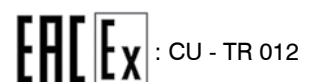
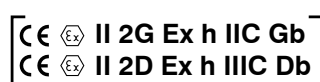
Product shall be installed reducing the distance from inlet point. Check and install the device following the flow direction (clearly marked with an arrow stamped on the body). Vertical position installation with condensed exhaust tap pointing downward is recommended. Devices must be used in compliance with pressure and temperature operating range. To set the pressure there is an adjustable knob, located on the top of the device. Pneumax recommend selection of pressure regulator adjusting range option in line with client required performance. The condensed exhaust action for the manual drain version shall be performed only in the absence of pressure. To discharge liquid, turn the tap clockwise until the discharge of liquid is triggered, then tighten it all the way.

**Maintenance**



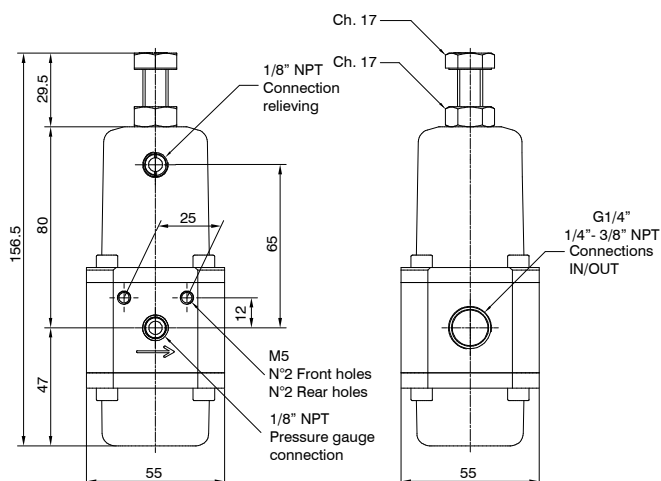
Filtration elements and filter regulator are reusable through blowing and/or washing and is made of stainless steel or HDPE (high density polyethylene). To replace, remove the cup, loosen the set screw of the support and replace the filter element with a new one or refurbished one. Replace the regulator diaphragm whenever the performance is compromised or if there is a continuous discharge from the relieving hole (over-pressure exhaust). Fully discharge the adjustment spring before removing the adjustment mechanism. For other maintenance activities, due to complexity of assembly and requirement for dedicated PNEUMAX testing activities, it is strongly recommended to contact the manufacturer.

**Certifications available**



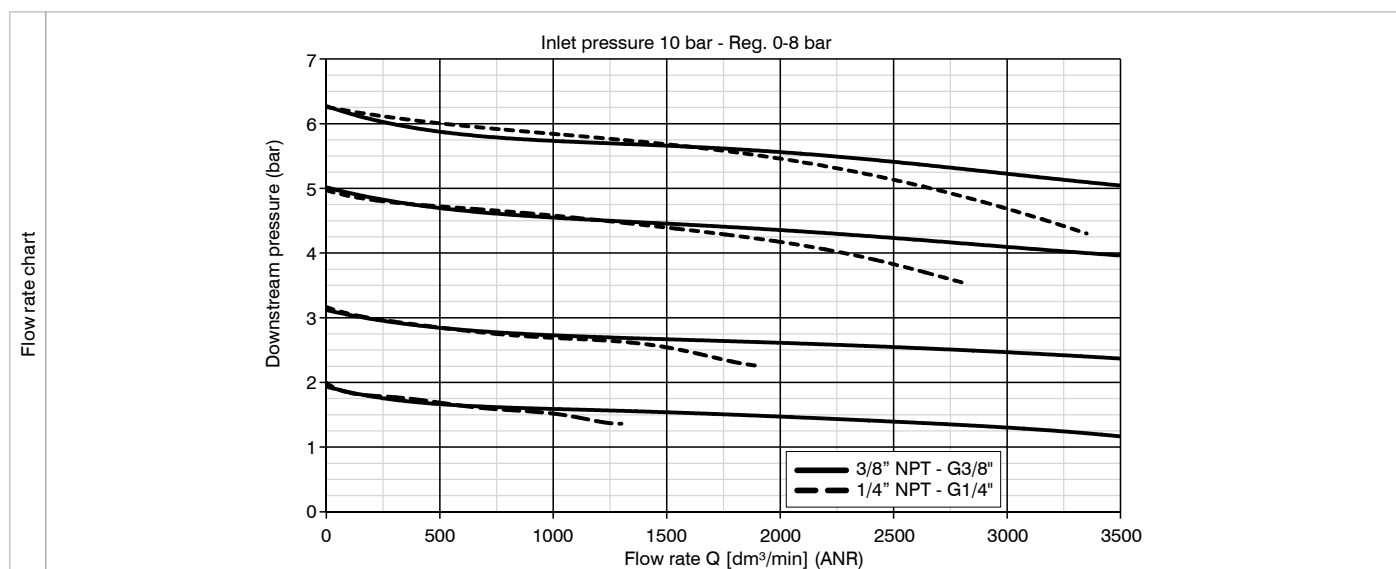


Regulators

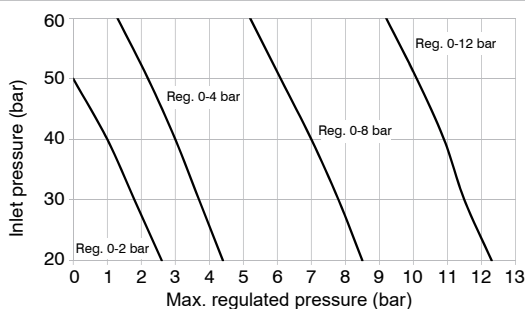


Ordering code	
<b>SV172CRGT0</b>	
VERSION	
V	S = Standard surface finishing
	F = Clean profile
CONNECTIONS	
C	A = 1/4" NPT
	B = 3/8" NPT
	C = G1/4"
PRESSURE RANGE	
G	A = 0-2 bar
	B = 0-4 bar
	C = 0-8 bar
	D = 0-12 bar
TYPE	
T	= Standard*
	N = Without relieving
OPTIONS	
	= Standard*
D	L = Low temperature
	Z = Low temperature (-60 °C)
	H = High temperature
	EF = EPDM-FDA
* no additional letter required	

Construction characteristics	Technical characteristics	
<ul style="list-style-type: none"> <li>- Body, adjustment mechanism, AISI 316L stainless steel and caseback inter. components</li> <li>- AISI 316 stainless steel adjustment springs.</li> <li>- Fixing screws, adjustment screws and locknut in A4 (AISI 316) stainless steel.</li> <li>- Pressure regulator diaphragm with over-pressure drain (Relieving).</li> <li>- Low hysteresis rolling diaphragm.</li> <li>- Balanced system.</li> </ul>	Maximum inlet pressure (standard version)	20 bar
	Temperature (standard version)	-30°C ... +80°C
	Temperature (low temperature version)	-50°C ... +80°C
	Temperature (low temperature version -60 °C)	-60°C ... +80°C
	Temperature (high temperature version)	-5°C ... +150°C
	Temperature (EPDM-FDA version)	-40°C ... +100°C
	Pressure gauge connection	1/8" NPT
Weight	1270 (gr.)	
Assembly positions	Indifferent	

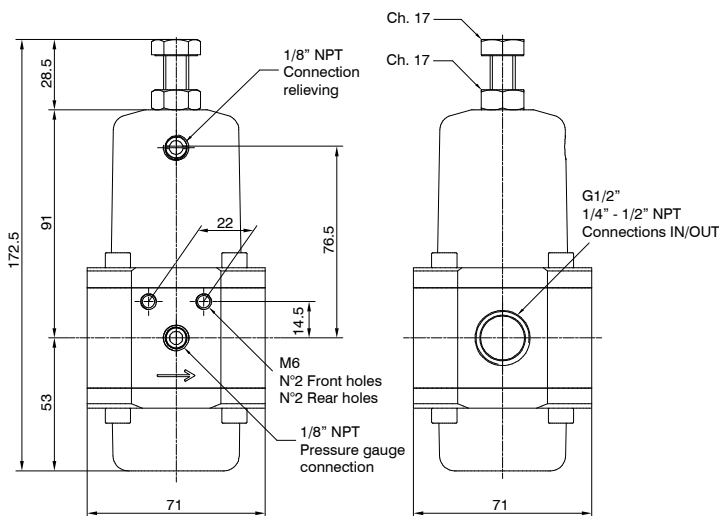


Pressure regulator Stainless steel line have been designed to withstand a **60 bar** maximum inlet pressure.  
**Maximum regulated outlet pressure is 20 bar.**  
For performance details please refer to diagram alongside.



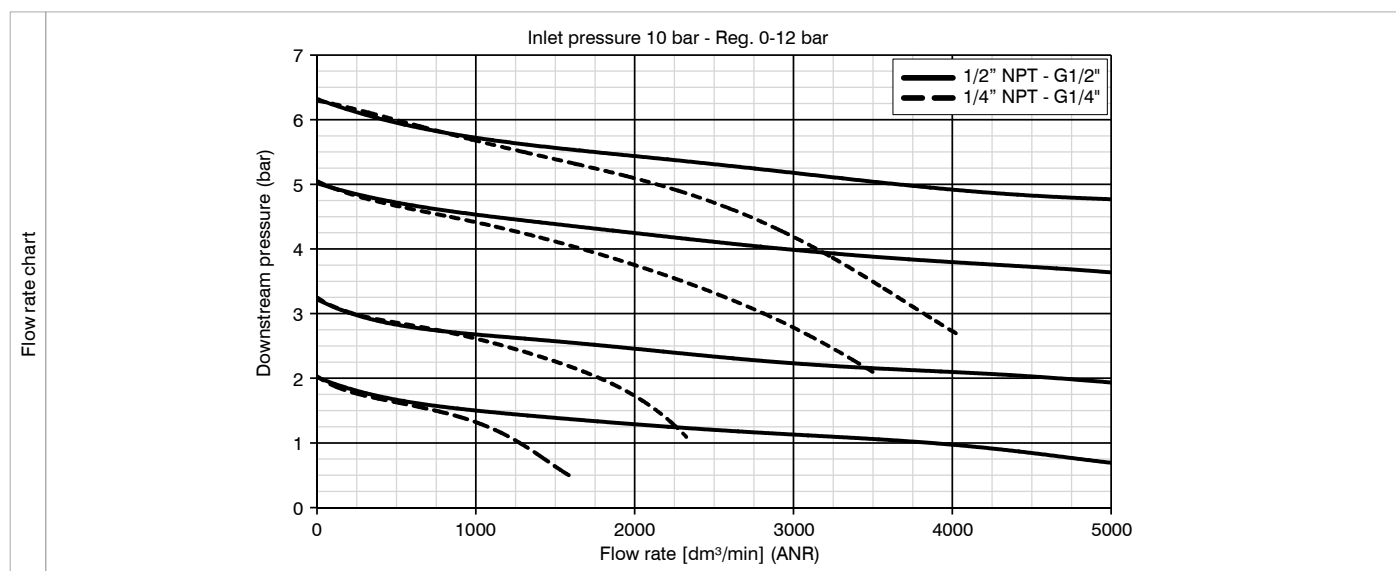


Regulators

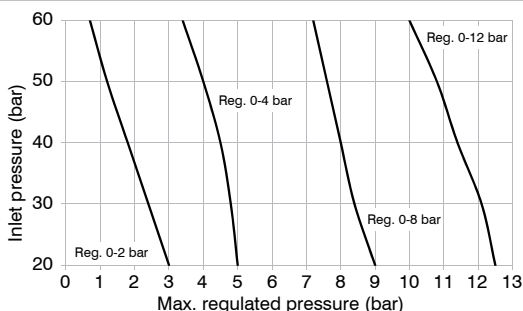


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	Temperature (EPDM-FDA version)	-40°C ... +100°C
<p><b>Note</b></p> <p>The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.</p>	Pressure gauge connection	1/8" NPT
	Weight	1830 (gr.)
	Assembly positions	Indifferent

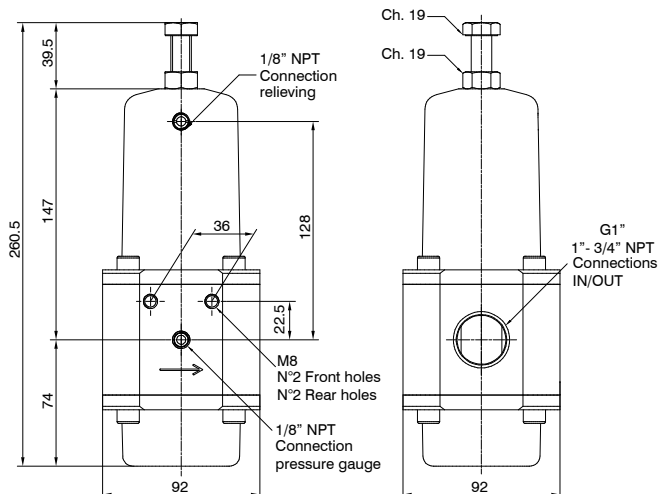


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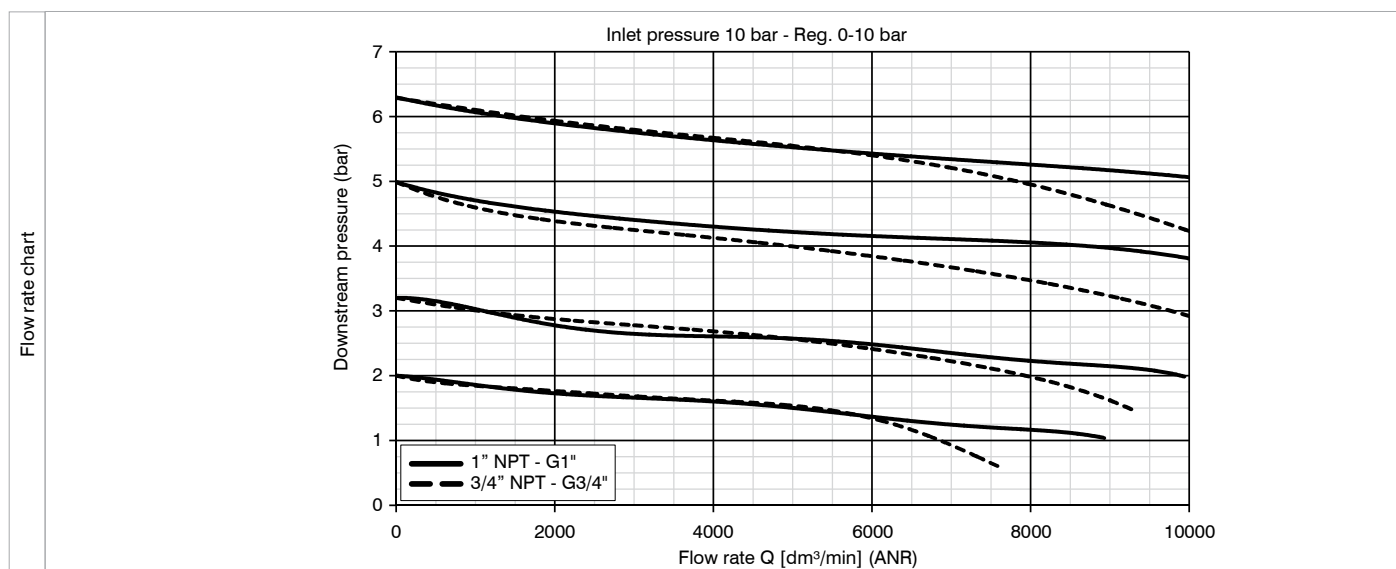


Regulators



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V	S = Standard surface finishing
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CONNECTIONS	
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	B = 1" NPT
	D = G1"
PRESSURE RANGE	
	A = 0-2 bar
G	B = 0-4 bar
	C = 0-7 bar
	D = 0-10 bar
TYPE	
T	= Standard*
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OPTIONS	
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<p><b>Note</b></p> <p>The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.</p>	Pressure gauge connection	1/8" NPT
	Weight 3/4" NPT - G 3/4"	5500 (gr.)
	Weight 1" NPT - G 1"	5400 (gr.)
	Assembly positions	Indifferent



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