

# ASCO™ Filter, Regulator and Filter Regulator

## Stainless Steel 316L, Compact 1/4", High Flow 1/4", 1/2", 3/4", 1"

Series  
**342**

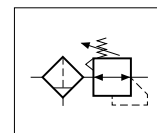
### Features

- Stainless Steel filter, regulator and filter regulator intended for corrosive environment and suitable for use in potentially explosive atmosphere caused by gases, vapours, mists and / or dust according to: (ATEX directive 2014/34/EU).  
SAFETY CODE:  
II 2G Ex h IIC T5 Gb  
II 2D Ex h IIIC T100°C Db  
(T5 - 90°C ambient temperature)
- Functional Safety: IEC 61508, SIL certified
- Comply with the European Essential Health and Safety Requirements (ISI/IEC 80079-36 & 37)
- All internal metal parts made of 316 / 316L stainless steel
- Built-in overpressure relieving function, non-relieving option available
- Quick relief available#, allowing downstream pressure in the actuator or other instrument to exhaust in the event if supply pressure is lost
- 316L Stainless Steel body, bonnet and bowl
- Internal springs made of INCONEL® to suit sour gas environment complying to NACE MR0175 / ISO 15156\*

\* Available for High Flow SSFR as an option

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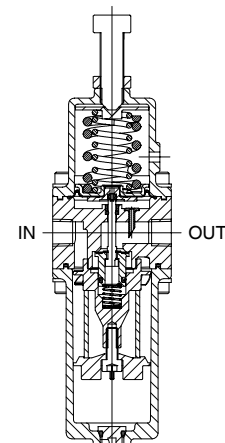
# Available for High Flow SSFR and standalone regulator as an option



### Benefits

- Precise tuning and regulation - using dual spring design\* ^
- Improved regulation accuracy - with pitot tube feedback\* ^
- Longer lifespan - using rolling diaphragm
- Effective moisture removal - using fin diverters to create centrifugal action\*
- Long lasting product labeling - laser etched marking on stainless steel bowl

\* Available for High Flow 1/4" - 1/2" SSFR    ^ Available for High Flow 3/4" - 1" SSFR

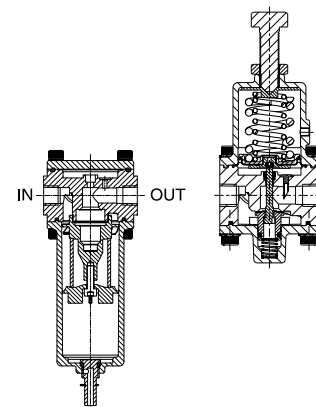


### Characteristics

	Compact	High Flow (1/4" - 1/2")	High Flow (3/4" - 1")
<b>Fluids</b>	<b>Compressed Air, Neutral Gas, Natural Gas</b>	<b>Compressed Air, Neutral Gas, Natural Gas &amp; Sour Natural Gas</b>	
Compliance to NACE for Sour Gas Environment	No	Yes (as an option)	
Quick Relief	Yes	Yes <sup>(2)</sup> (as an option)	
Ports	1/4"	1/4" & 1/2"	3/4" & 1"
Threads	NPT G as an option		
Pressure Range (Inlet)	0 - 20 bar (Manual Drain) 2.5 - 11 bar (Auto Drain)		
Regulating Pressure (Outlet)	0.5 - 10 bar		
Regulation	By hexagonal head screw with locking nut		
Hysteresis	< 0.32 bar	< 0.2 bar	< 0.25 bar
Filtering Capacity	25 µm & 5 µm		40 µm, 25 µm, 5 µm
Operating Temperature <sup>(1)</sup>	-40°C to +90°C		
Low Temperature Option	-50°C	-60°C	-
Condensate Drain	Manual & Automatic		

<sup>(1)</sup> Operating temperature for Automatic Drain: +0°C to +90°C

<sup>(2)</sup> Available for standard temperature of -40°C to +90°C only



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Series  
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### Construction

	Compact	High Flow (1/4" - 1/2")	High Flow (3/4" - 1")
Body, Bonnet & Bowl	AISI 316L SS		
Bowl Capacity	25 cm <sup>3</sup>	75 cm <sup>3</sup>	160 cm <sup>3</sup>
Filtering Element	AISI 316 SS		
Diaphragm	LT FPM	HNBR	FPM
Elastomers	FPM		

### How to Order

**342 A 8 0 0 1 AD**

**Product Series** \_\_\_\_\_  
342

**Revision** \_\_\_\_\_  
A = Initial Release

**F/R/FR Type** \_\_\_\_\_  
8 = SS Filter Regulator (FR)  
9 = SS Filter (F)<sup>(5)</sup>  
A = SS Regulator (R)<sup>(5)</sup>  
<sup>(5)</sup> Not available for Compact version.

**Pressure Relief/Vent Hole** \_\_\_\_\_  
0 = Non relief diaphragm type<sup>(6)(7)</sup>  
2 = ØM5 thread<sup>(1)</sup>  
4 = Ø1/8" NPT thread<sup>(1)</sup>  
Other connection on request  
<sup>(1)</sup> Not available for filter.  
<sup>(6)</sup> Automatically "0" for standalone filter option.  
<sup>(7)</sup> Bonnet with Ø 1/8" NPT thread.

**Certifications & Approvals** \_\_\_\_\_  
0 = ATEX 1/21 Only  
1 = ATEX 1/21 + CUTR  
2 = ATEX 1/21 + NACE<sup>(5)</sup>  
3 = ATEX 1/21 + NACE + CUTR<sup>(5)</sup>  
<sup>(5)</sup> Not available for compact version.

**Options**  
AD = Automatic Drain<sup>(2)</sup>  
AN = Automatic Drain with 1/8" NPT Adapter<sup>(2)</sup>  
G = 316 SS pressure gauge<sup>(1)(8)(9)(10)</sup>  
K = Quick Relief<sup>(11)</sup>  
LT = Low Temperature<sup>(3)(4)</sup>  
MB = 316L SS Mounting Bracket<sup>(10)</sup>  
AD + AN is not a possible combination  
LT + AD/AN is not a possible combination  
<sup>(1)</sup> Not available for Filter.  
<sup>(2)</sup> Not available for Regulator.  
<sup>(3)</sup> For High-Flow 1/4" - 1/2" SSFR or Compact SSFR with pressure gauge, a special low temperature 316 SS pressure gauge will be delivered.  
<sup>(4)</sup> Not available for High-Flow 3/4" - 1" SSFR, standalone filter and regulator  
<sup>(8)</sup> For High Flow SSFR or Standalone Regulator, a 316 SS pressure gauge with Ø63mm dial and 1/4" NPT gauge port will be delivered.  
<sup>(9)</sup> For Compact SSFR, a 316 SS pressure gauge with Ø50mm dial and 1/8" NPT gauge port will be delivered.  
<sup>(10)</sup> Not mounted onto the product. Separate packaging.  
<sup>(11)</sup> Available for High-Flow SSFR and standalone regulator only.

**Filtration/Port Size**  
1 = High Flow 1/4" NPT 25 µm or Regulator only  
2 = High Flow 1/4" G 25 µm or Regulator only  
3 = High Flow 1/2" NPT 25 µm or Regulator only  
4 = High Flow 1/2" G 25 µm or Regulator only  
5 = High Flow 1/4" NPT 5 µm  
6 = High Flow 1/4" G 5 µm  
7 = High Flow 1/2" NPT 5 µm  
8 = High Flow 1/2" G 5 µm  
9 = Compact Basic Flow 1/4" NPT 25 µm (4)  
A = Compact Basic Flow 1/4" G 25 µm (4)  
B = Compact Basic Flow 1/4" NPT 5 µm (4)  
C = Compact Basic Flow 1/4" G 5 µm (4)  
D = High Flow 3/4" NPT 25 µm or Regulator only  
E = High Flow 3/4" G 25 µm or Regulator only  
F = High Flow 1" NPT 25 µm or Regulator only  
G = High Flow 1" G 25 µm or Regulator only  
H = High Flow 3/4" NPT 40 µm  
J = High Flow 3/4" G 40 µm  
K = High Flow 1" NPT 40 µm  
L = High Flow 1" G 40 µm  
M = High Flow 3/4" NPT 5 µm  
N = High Flow 3/4" G 5 µm  
P = High Flow 1" NPT 5 µm  
Q = High Flow 1" G 5 µm  
<sup>(4)</sup> Only available in Filter regulator.  
No standalone filter or regulator.

**Notes:**  
• 40 µm, 25 µm & 5 µm filtration are not applicable for standalone regulator.  
• 1/8" port size for compact SSFR is also available upon request.  
• Standard regulating pressure is 0.5-10 bar. 0.5-2.5 bar is also available upon request.

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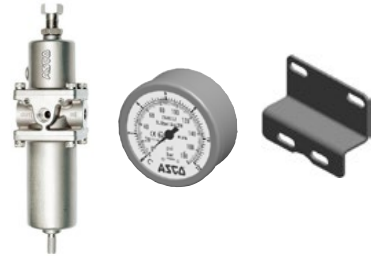
# ASCO™ Filter, Regulator and Filter Regulator

## Stainless Steel 316L, Compact 1/4", High Flow 1/4", 1/2", 3/4", 1"

Series  
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### Ordering Example


1. Compact low temperature stainless steel filter regulator (1/4" NPT, 25 µm filtration) with low temperature pressure gauge & mounting bracket
  - Product Code: 342A8209GLTMB
2. High-Flow stainless steel filter regulator (1/4" NPT, 25 µm filtration) with auto drain, pressure gauge & mounting bracket
  - Product Code: 342A8201ADGMB
3. High-Flow stainless steel filter regulator (3/4" NPT, 25 µm filtration) with auto drain, pressure gauge & mounting bracket
  - Product Code: 342A820DADGMB




### Maximum Flow Values

Construction Type	Maximum Flow Values Following ISO Standards 5782, 6358 and 6953	Compact		High Flow (1/4" - 1/2")				High Flow (3/4" - 1")					
		Litres Per Minute (ANR)											
		1/4" NPT		1/4" NPT		1/2" NPT		3/4" NPT			1" NPT		
		5 µm	25 µm	5 µm	25 µm	5 µm	25 µm	5 µm	25 µm	40 µm	5 µm	25 µm	40 µm
Filter	Inlet pressure = 6.3 bar & ΔP = 1 bar	-	-	1780	2600	1800	3300	2200	3900	5100	2350	4200	5500
Regulator	Inlet pressure = 10 bar, setpoint = 6.3 bar & ΔP = 1 bar	-	-	3120		7800		9150			10200		
Filter Regulator	Inlet pressure = 10 bar, setpoint = 6.3 bar & ΔP = 1 bar	1280	1400	2380	2450	3920	4430	4550	7500	8500	5000	7750	9500

Auto Drain			
	COMPACT SSFR	HIGH FLOW SSFR (1/4" - 1/2")	HIGH FLOW SSFR (3/4" - 1")
			
Max. Inlet Pressure	11 bar		
Operating Pressure	2.5 - 11 bar		
Operating Temp.	0°C to +90°C		
Metal Parts	316L SS		
Elastomers	FPM		
Float	Rigid Polyurethane	PP material	Rigid Polyurethane
Adaptor (316 SS) for 1/8 NPT conversion "AN" as option			

Pressure Gauge			
	COMPACT SSFR	HIGH FLOW SSFR (1/4" - 1/2")	HIGH FLOW SSFR (3/4" - 1")
			
Pressure	0 - 10 bar	0 - 12 bar	
Diameter	Ø 50 mm	Ø 63 mm	
Gauge Port Size	1/8" NPT	1/4" NPT	
Material	316 Stainless Steel		
Protection	IP65; Safety glass; Fixed crimped case to avoid accidental dismounting		
Kit Number	C325937	C325316	
Kit Number (For Low temp)	C325938	C325667	-

Mounting Bracket			
	COMPACT SSFR	HIGH FLOW SSFR (1/4" - 1/2")	HIGH FLOW SSFR (3/4" - 1")
			
Material	316L Stainless Steel		
Kit Number	C117877	C117813	

Option	Weight (kg)
Auto Drain	0.015
Adaptor for Auto Drain	0.020
Pressure Gauge	0.164
Mounting Bracket	0.079

### Installation

- Installation / Maintenance instructions are included with each filter/regulator
- Air flow direction indicated by IN/OUT as well as inlet & outlet indicators
- Pipe connection has standard thread according to NPT (ANSI 1.20.3)

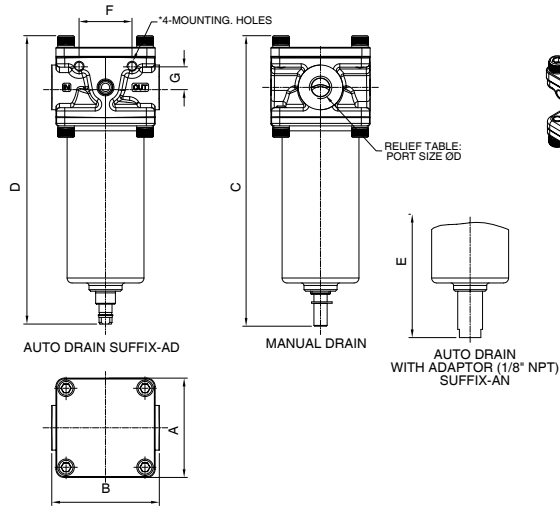
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Stainless Steel 316L, Compact 1/4", High Flow 1/4", 1/2", 3/4", 1"

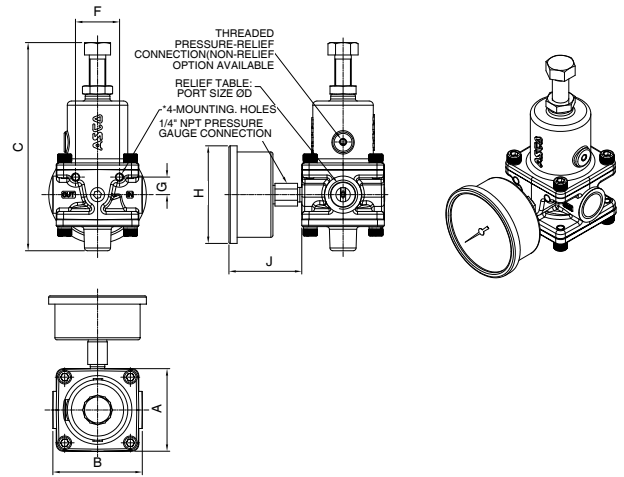
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## Dimensions (mm), Weight (kg)

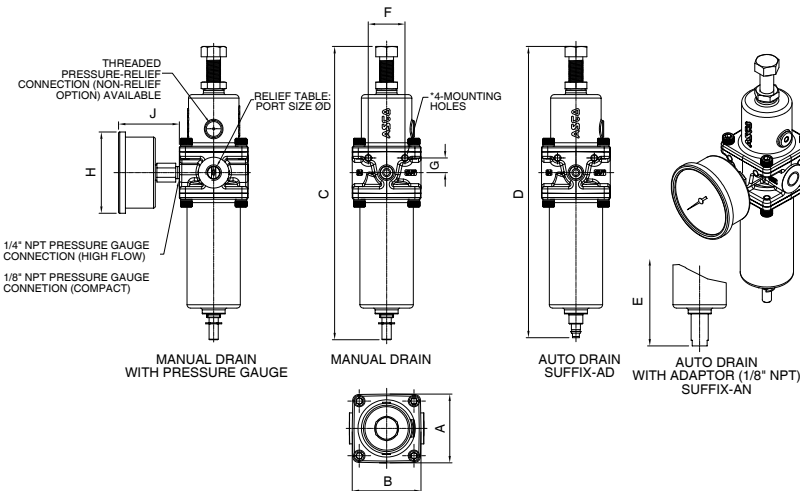
### Filter



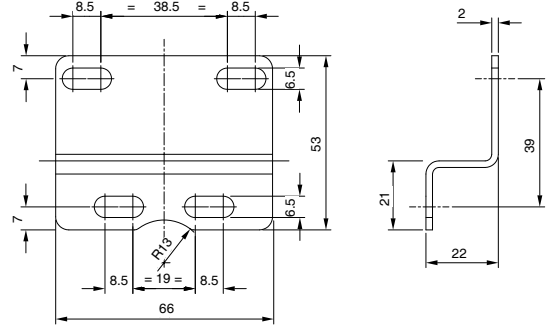
### Regulator



### Filter Regulator



### Mounting Bracket



## Dimensions (mm), Weight (kg)

	Type	ØD	Weight (kg)	A	B	C	D	E	F	G	H	J
		NPT										
COMPACT	Filter Regulator	1/4"	1.0	45	45	185	223	233	20	10	Ø58	53
HIGH FLOW	Filter	1/4"	1.4	60	65	177	175	183	32	12.75	-	-
		1/2"	5.0	85	90	242	240	250	32	21	-	-
		3/4"	5.0	85	90	242	240	250	32	21	-	-
	Regulator	1/4"	1.2	60	65	151.3	-	-	32	12.75	Ø71	51
		1/2"	4.5	85	90	230	-	-	32	21	Ø71	52
		3/4"	4.5	85	90	230	-	-	32	21	Ø71	52
		1"	6.0	85	90	329	327	337	32	21	Ø71	52
	Filter Regulator	1/4"	2.0	60	65	256	254	261	32	12.75	Ø71	51
	Filter Regulator	3/4"	6.0	85	90	329	327	337	32	21	Ø71	52

\* Note: Mounting hole for Hi-Flow 1/4", 1/2", 3/4" & 1" SSFR are M6 in size.  
Mounting hole for Compact SSFR is M5 in size.

## Spare Parts Kits

	Type	Filtering Capacity	Spare Parts Kit Number-Standard	Spare Parts Kit Number-Low Temp
<b>COMPACT</b>				
1/4"	Filter Regulator	25 µm	C325921	C325996
		5 µm	C325922	C325997
<b>HIGH FLOW</b>				
1/4" - 1/2"	Filter	25 µm	C325309	
		5 µm	C325310	
	Regulator	-	C325311	C325993
		Filter Regulator	25 µm	C325305
	Filter Regulator	5 µm	C325307	C325995
		Filter	40 µm	C326171
25 µm	C326172		-	
5 µm	C326173		-	
3/4" - 1"	Regulator	-	C326174	-
		Filter Regulator	40 µm	C326176
	Filter Regulator	25 µm	C326177	-
		5 µm	C326178	-

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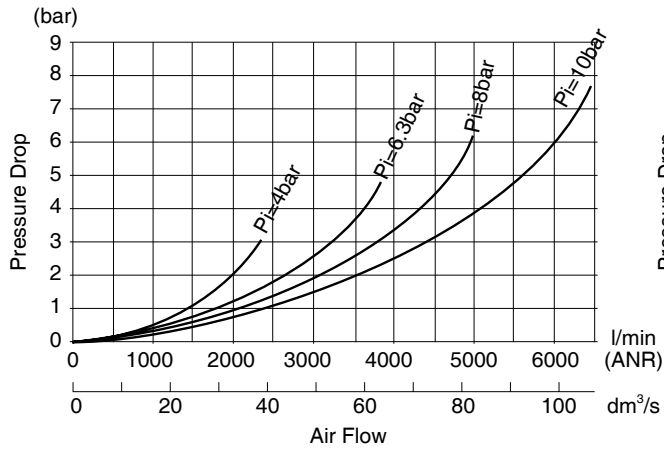
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Stainless Steel 316L, Compact 1/4", High Flow 1/4", 1/2", 3/4", 1"

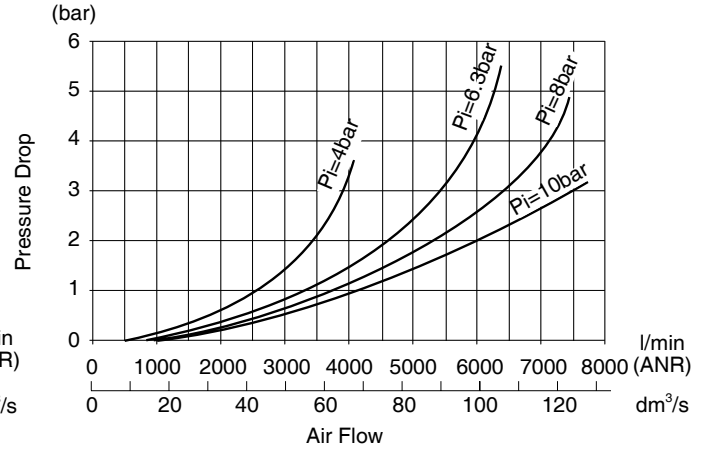
Series  
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## Pressure Drop Vs. Air Flow Curves

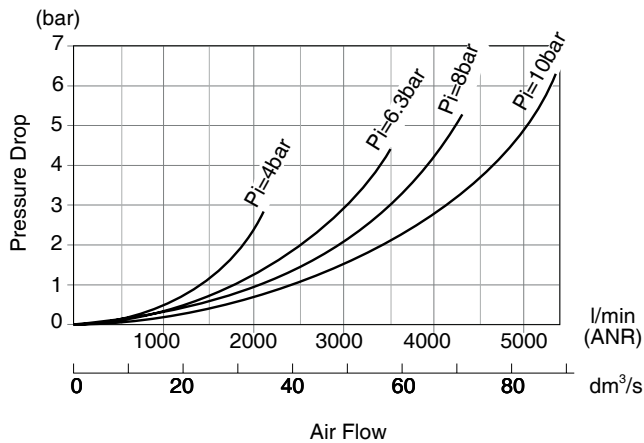
**High Flow St. steel filter 1/2" NPT Ref. : 342A9007**  
Filtration 5 μm with P inlet 4 - 6.3 - 8 - 10 bar



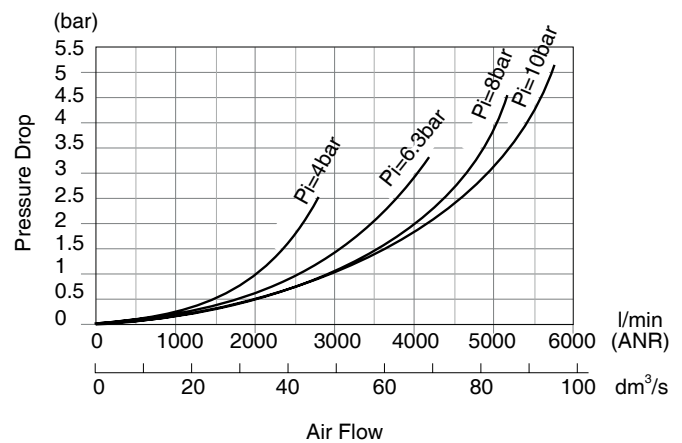
**High Flow St. steel filter 1/2" NPT Ref. : 342A9003**  
Filtration 25 μm with P inlet 4 - 6.3 - 8 - 10 bar



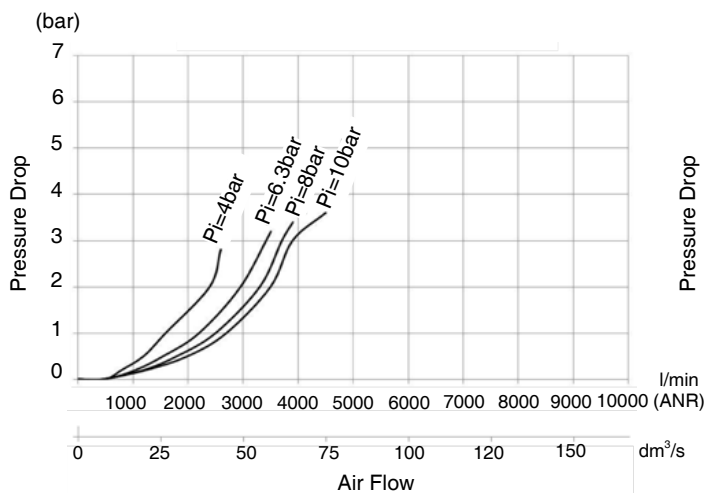
**High Flow St. steel filter 1/4" NPT Ref. : 342A9005**  
Filtration 5 μm with P inlet 4 - 6.3 - 8 - 10 bar



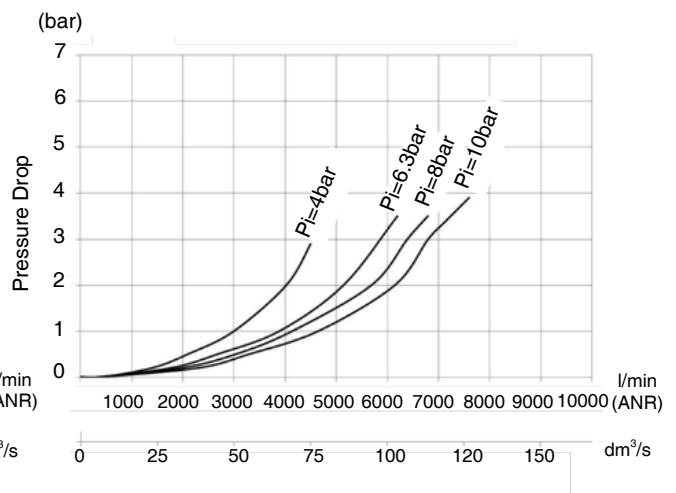
**High Flow St. steel filter 1/4" NPT Ref. : 342A9001**  
Filtration 25 μm with P inlet 4 - 6.3 - 8 - 10 bar



**High Flow St. steel filter 3/4" NPT Ref. : 342A920M**  
Filtration 5 μm with P inlet 4 - 6.3 - 8 - 10 bar



**High Flow St. steel filter 3/4" NPT Ref. : 342A920D**  
Filtration 25 μm with P inlet 4 - 6.3 - 8 - 10 bar



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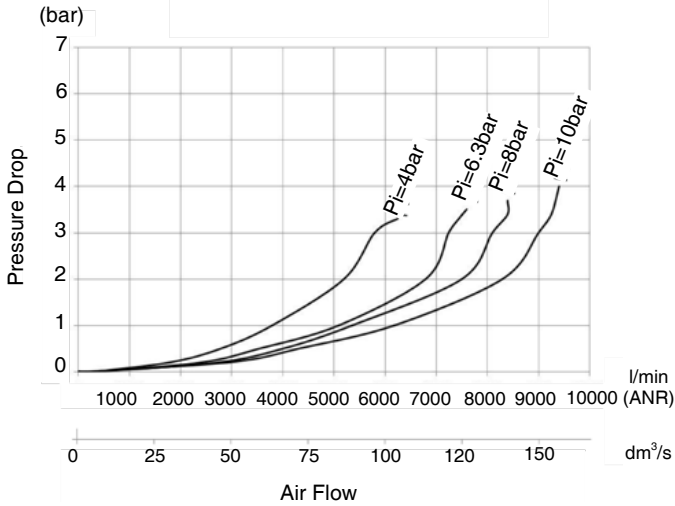
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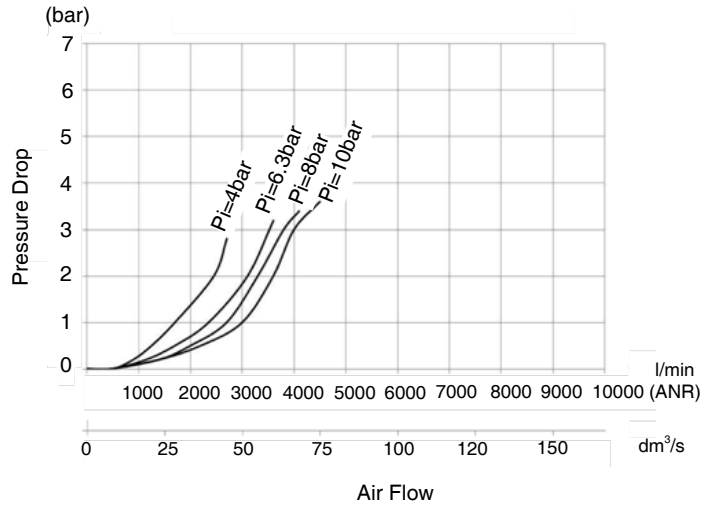
Series  
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## Pressure Drop Vs. Air Flow Curves

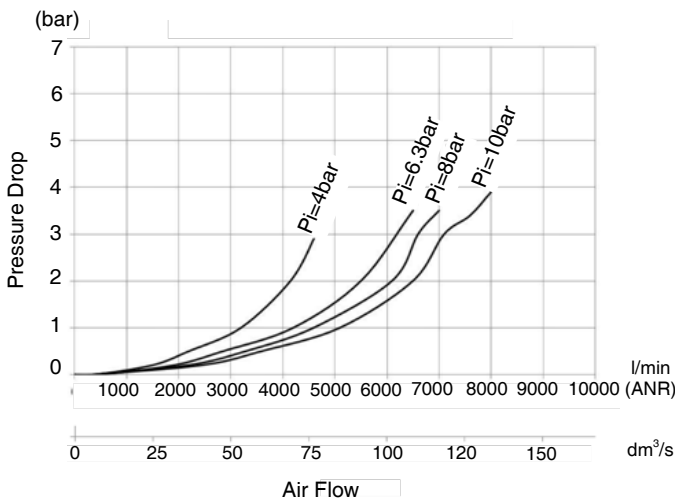
**High Flow St. steel filter 3/4" NPT Ref. : 342A920H**  
Filtration 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



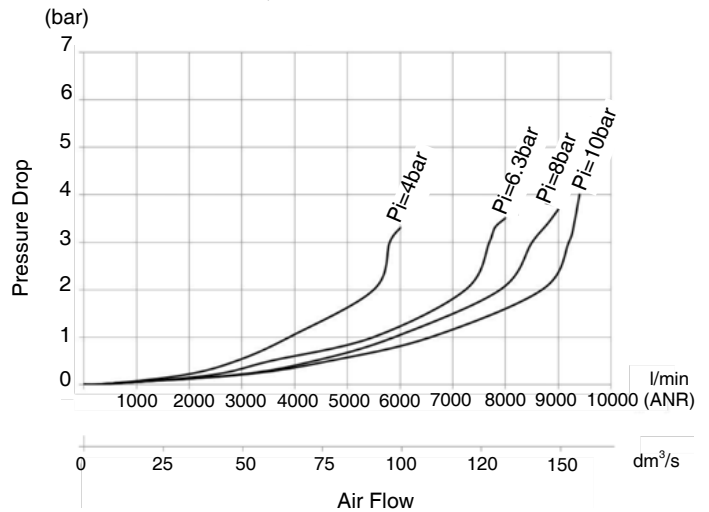
**High Flow St. steel filter 1" NPT Ref. : 342A920P**  
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



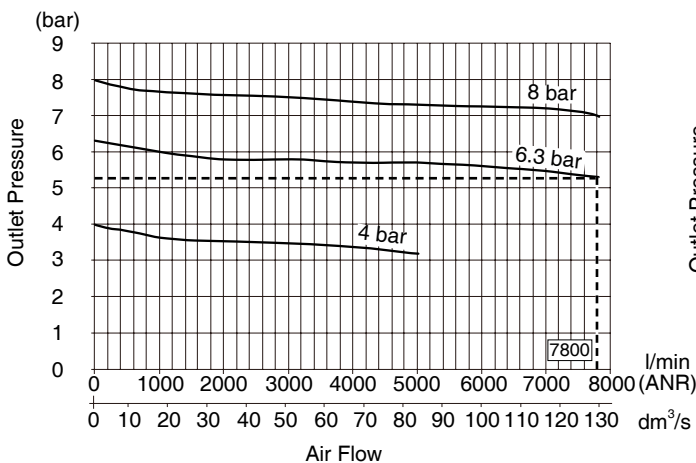
**High Flow St. steel filter 1" NPT Ref. : 342A920F**  
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



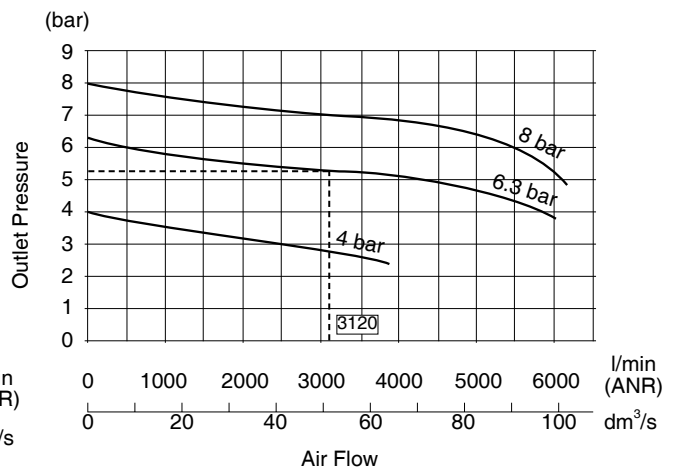
**High Flow St. steel filter 1" NPT Ref. : 342A920K**  
Filtration 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



**High Flow St. steel regulator 1/2" NPT Ref. : 342AA403**  
P inlet 10 b - setpoint 4 - 6.3 - 8 bar



**High Flow St. steel regulator 1/4" NPT Ref. : 342AA401**  
P inlet 10 b - setpoint 4 - 6.3 - 8 bar



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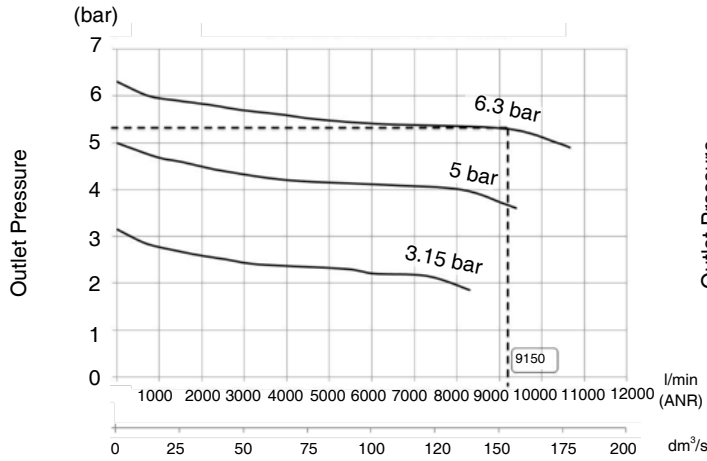
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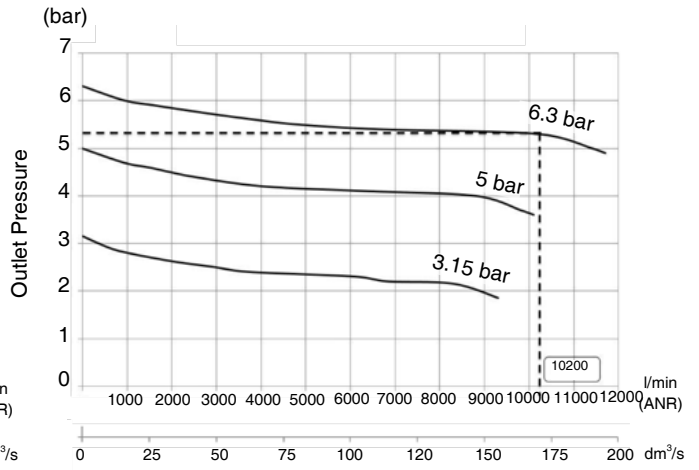
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## Pressure Drop Vs. Air Flow Curves

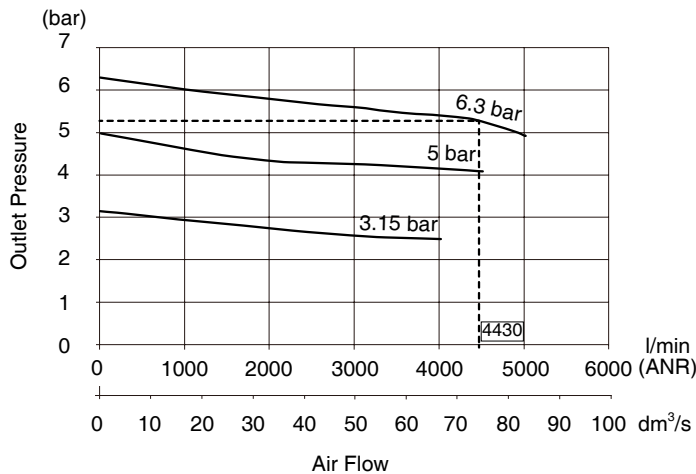
**High Flow St. steel regulator 3/4" NPT Ref. : 342AA20D**  
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



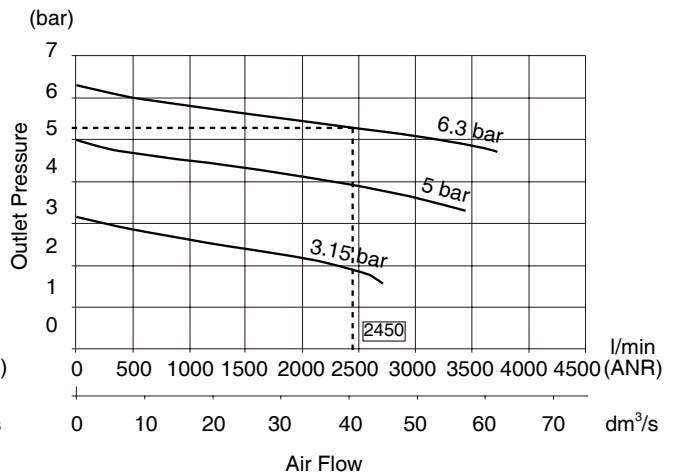
**High Flow St. steel regulator 1" NPT Ref. : 342AA20F**  
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



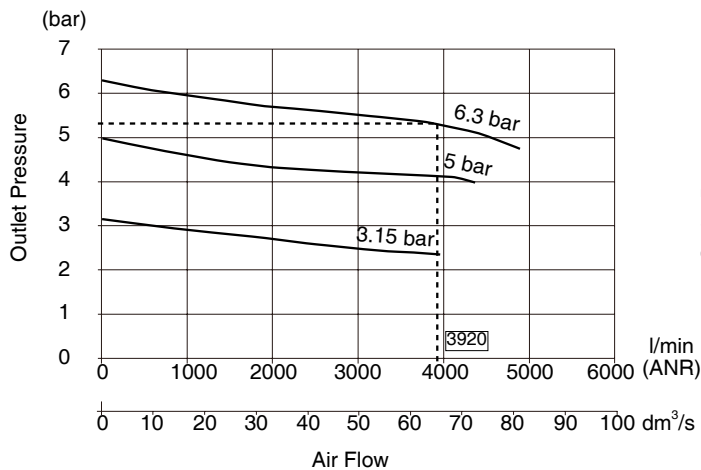
**High Flow St. steel filter regulator 1/2" NPT Ref : 342A8203**  
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



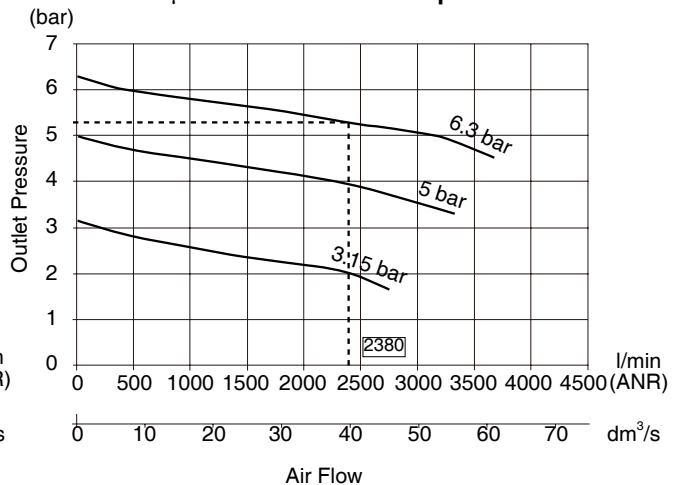
**High Flow St. steel filter regulator 1/4" NPT Ref. : 342A8201**  
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



**High Flow St. steel filter regulator 1/2" NPT Ref : 342A8207**  
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



**High Flow St. steel filter regulator 1/4" NPT Ref. : 342A8205**  
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar





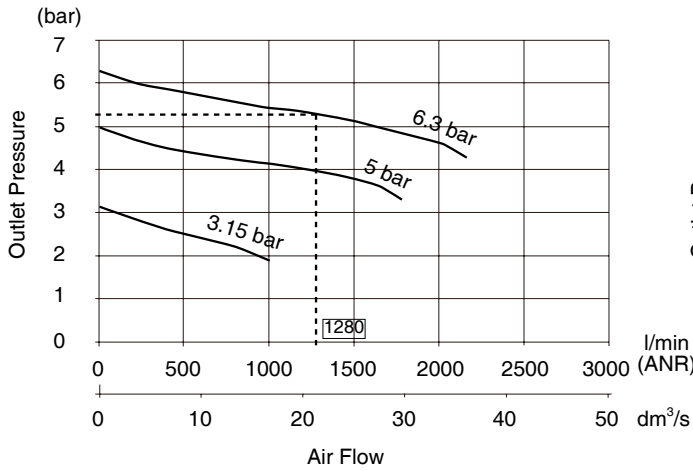
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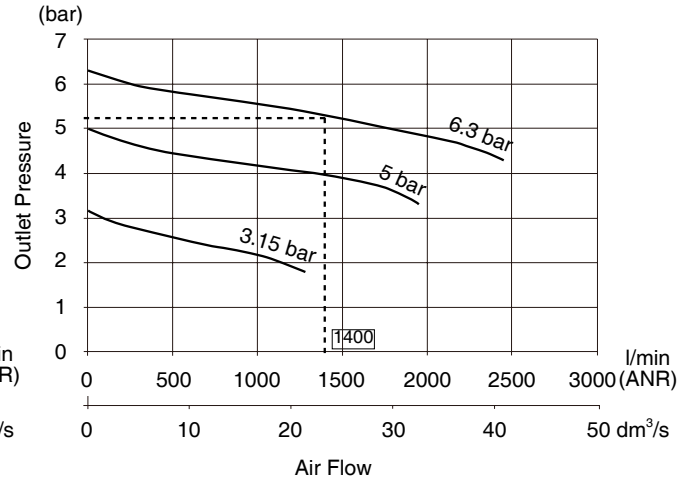
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## Pressure Drop Vs. Air Flow Curves

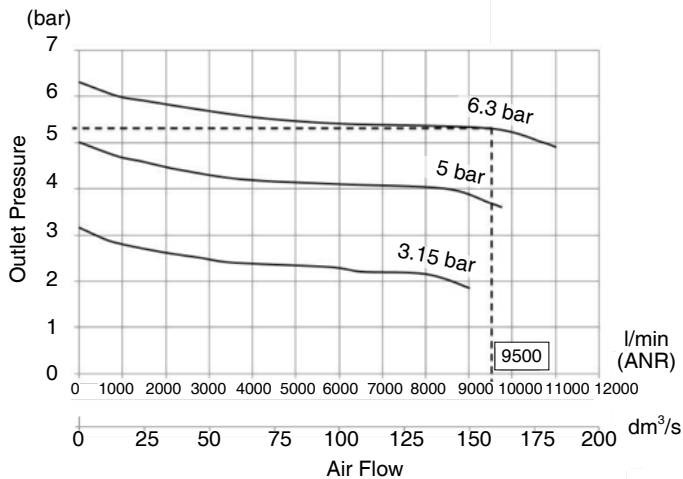
**Compact St. steel filter regulator 1/4" NPT Ref : 342A820B**  
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



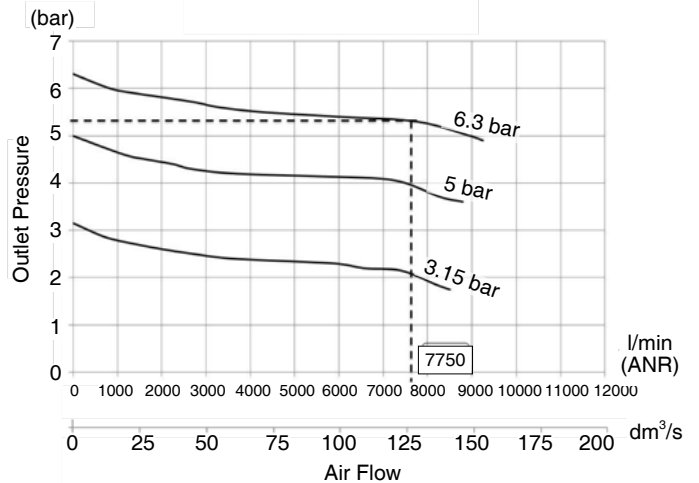
**Compact St. steel filter regulator 1/4" NPT Ref : 342A8209**  
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



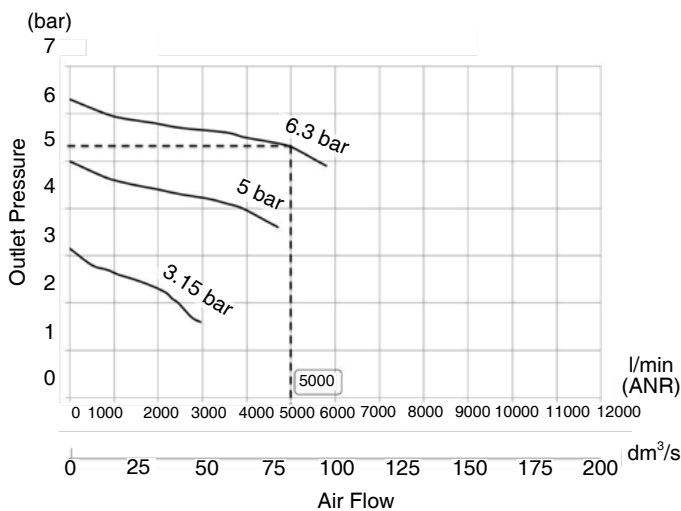
**High Flow St. steel filter regulator 1" NPT Ref : 342A820K**  
Filtration 40 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



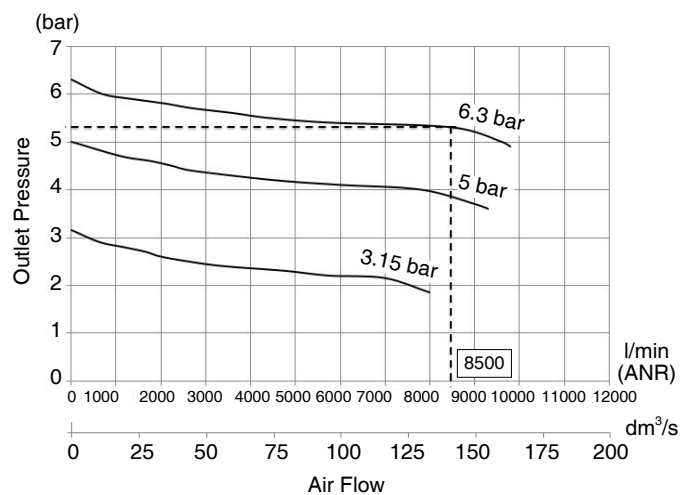
**High Flow St. steel filter regulator 1" NPT Ref : 342A820F**  
Filtration 25 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



**High Flow St. steel filter regulator 1" NPT Ref : 342A820P**  
Filtration 5 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



**High Flow St. steel filter regulator 3/4" NPT Ref : 342A820H**  
Filtration 40 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



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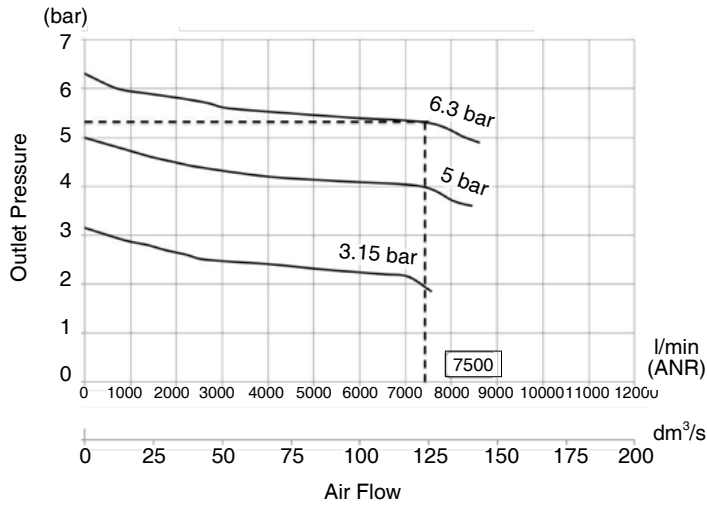
# ASCO™ Filter, Regulator and Filter Regulator

Stainless Steel 316L, Compact 1/4", High Flow 1/4", 1/2", 3/4", 1"

Series  
**342**

## Pressure Drop Vs. Air Flow Curves

**High Flow St. steel filter regulator 3/4" NPT Ref : 342A820D**  
Filtration 25 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



**High Flow St. steel filter regulator 3/4" NPT Ref : 342A820M**  
Filtration 5 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

