

ASCO™ Filter, Regulator and Filter Regulator

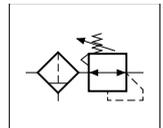
Stainless Steel 316L, Compact 1/4", High Flow 1/4", 1/2", 3/4", 1"

Series
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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 based on selection, 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 only in High Flow SSFR 1/4" & 1/2" as an option. INCONEL is trademark of the Special Metals Corporation group of companies



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

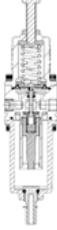
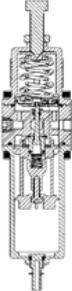
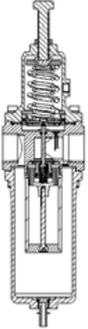
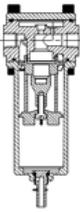
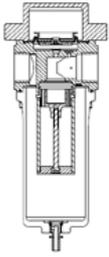
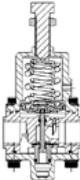
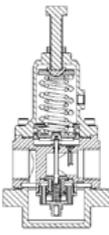
	Compact	High Flow (1/4" & 1/2")	High Flow (3/4" & 1")
Fluids	Compressed Air, Neutral Gas, Natural Gas	Compressed Air, Neutral Gas, Natural Gas & Sour Natural Gas	Compressed Air, Neutral Gas, Natural Gas
Compliance to NACE for Sour Gas Environment	No	Yes (as an option)	No
Quick Relief	Yes (as an option)		
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		
Filtering Capacity	25 µm & 5 µm	40 µm, 25 µm, 5 µm	
Manual Drain Ambient Temperature Range	-40°C to +90°C		
Auto Drain Ambient Temperature Range	0°C to +90°C		
Low Temperature Option	-50°C	-60°C	-
Condensate Drain	Manual & Automatic		

ASCO™ Filter, Regulator and Filter Regulator

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

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Characteristics

	Compact (1/4")	High Flow (1/4" & 1/2")	High Flow (3/4" & 1")
Filter Regulator			
Filter			
Regulator			

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

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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	30 cm ³	75 cm ³	160 cm ³
Filtering Element	AISI 316 SS		
Diaphragm	LT FKM	HNBR	FKM
Elastomers	FKM		

How to Order



Product Series
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Revision

- A** = High Flow 1/4" & 1/2"
(Filtration/ Port Size Ref Selection: 1 to 8)
& Compact 1/4"
(Filtration/ Port size Ref Selection: 9, A, B, C)
- B** = High Flow 3/4" & 1"
(Filtration/ Port Size Ref Selection: D to Q)

F/R/FR Type

- 8** = SS Filter Regulator (FR)
- 9** = SS Filter (F)⁽⁵⁾
- A** = SS Regulator (R)⁽⁵⁾

Pressure Relief/Vent Hole

- 0** = Non relief diaphragm type⁽⁶⁾⁽⁷⁾
 - 2** = ØM5 thread⁽¹⁾
 - 4** = Ø1/8" NPT thread⁽¹⁾
- Other connection on request

Certifications & Approvals

- 0** = ATEX 1/21 Only
- 2** = ATEX 1/21 + NACE⁽⁵⁾

Options

- AD** = Automatic Drain⁽²⁾
 - AN** = Automatic Drain with 1/8" NPT Adapter⁽²⁾
 - G** = 316 SS pressure gauge⁽¹⁾⁽⁸⁾
 - K** = Quick Relief
 - LT** = Low Temperature⁽³⁾⁽⁴⁾
 - MB** = 316L SS Mounting Bracket⁽⁸⁾
- AD + AN is not a possible combination
LT + AD/AN is not a possible combination
K+LT is not a possible combination.

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
- A** = Compact Basic Flow 1/4" G 25 µm
- B** = Compact Basic Flow 1/4" NPT 5 µm
- C** = Compact Basic Flow 1/4" G 5 µm
- 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

Notes:

- ⁽¹⁾Not available for Filter.
- ⁽²⁾Not available for Regulator.
- ⁽³⁾For Low temp with gauge option, a special low temperature 316 SS pressure gauge will be delivered.
- ⁽⁴⁾Applicable only for Compact & High flow 1/4", 1/2"
- ⁽⁵⁾NACE version available only in high flow 1/4" & 1/2" with minimum order of 20 units. For other specific NACE requirements, please consult sales office.
- ⁽⁶⁾Automatically "0" for standalone filter option.
- ⁽⁷⁾Bonnet with Ø 1/8" NPT thread.
- ⁽⁸⁾Gauge & Bracket not mounted onto the product. Separate packaging.

General note:

- 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.
- For specific documentation requirement, please consult sales office.

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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	3100	4300	5300	3300	4700	6100
Regulator	Inlet pressure = 10 bar, setpoint = 6.3 bar & ΔP = 1 bar	-	-	3120		7800		9400			10400		
Filter Regulator	Inlet pressure = 10 bar, setpoint = 6.3 bar & ΔP = 1 bar	1280	1400	2380	2450	3920	4430	6600	8700	9050	7200	9000	10200

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			

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	

Pressure Gauge				
	COMPACT (1/4")	HIGH FLOW (1/4" & 1/2")	HIGH FLOW (3/4" & 1")	
				
Pressure	0 - 10 bar	0 - 12 bar	0-10 bar	0-12 bar
Diameter	50 mm	63 mm	50 mm	63 mm
Gauge Port size	1/8" NPT	1/4" NPT	1/8" NPT*	1/4" NPT
Material	SS316			
Protection	IP65			
Kit Number (Standard temp)	C325937	C325316	C325937	C325316
Kit Number (For Low temp)	C325938	C325667	N/A	

* Available on request, Default Gauge 1/4" NPT

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)

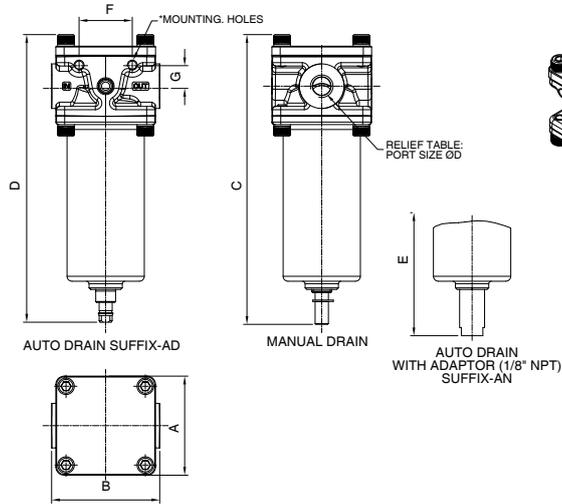
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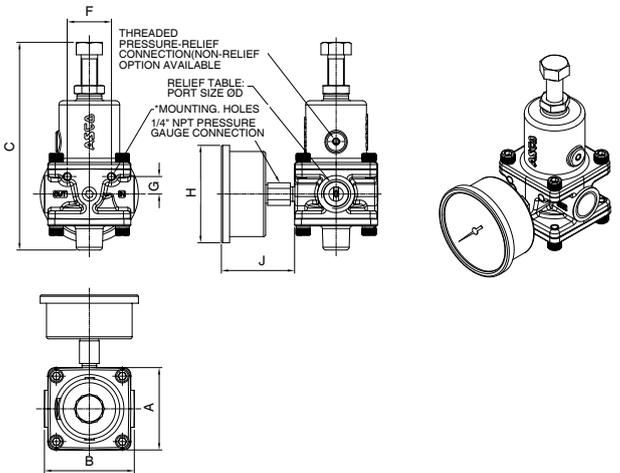
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Dimensions (mm), Weight (kg)

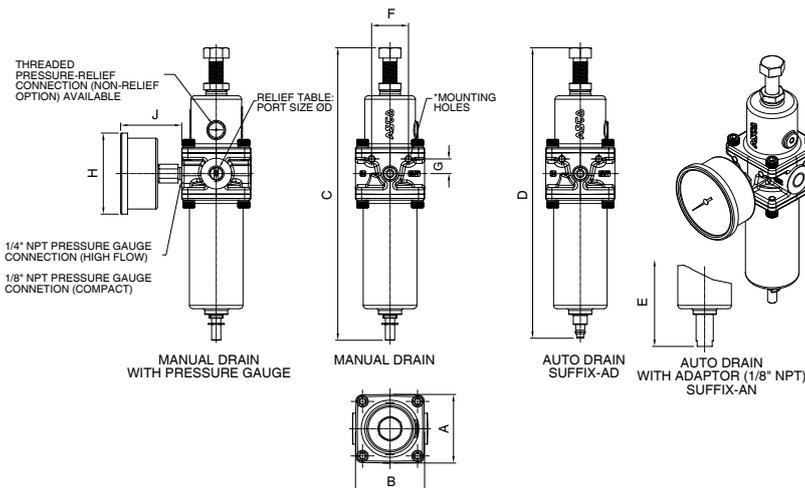
Filter



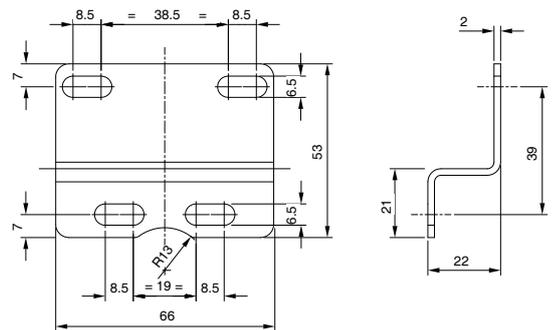
Regulator



Filter Regulator



Mounting Bracket



Dimensions (mm), Weight (kg)

Type	Type	ØD NPT	Weight (kg)	A	B	C	D	E	F	G	H	J
COMPACT	Filter Regulator	1/4"	1.0	45	45	185	223	233	20	10	58	53
HIGH FLOW	Filter	1/4"	1.4	60	65	177	175	183	32	12.8	-	-
		1/2"	4.4	85	90	268	266	277	32 & 46	20	-	-
		1"	1.2	60	65	151.3	-	-	32	12.75	71	51
	Regulator	1/4"	4.1	85	90	230	-	-	32 & 46	21	71	52
		1/2"	2	60	65	256	254	261	32	12.8	71	51
	Filter Regulator	3/4"	4.3	85	90	362	360	371	32 & 46	20	71	52
	Filter Regulator	1"										

* Note: Mounting hole for Compact 1/4" (M5) - Mounting hole for High flow 1/4", 1/2", 3/4", 1" (M6) - High Flow 3/4", 1", Use 32mm pitch (Dim F) for Mounting purpose

Spare Parts Kits

Type	Type	Filtering Capacity	Spare Parts Kit Number-Standard	Spare Parts Kit Number-Low Temp
COMPACT				
1/4"	Filter Regulator	25 µm	C325921	C325996
		5 µm	C325922	C325997
HIGH FLOW				
1/4" & 1/2"	Filter	25 µm	C325309	
		5 µm	C325310	
	Regulator	-	C325311	C325993
		25 µm	C325305	C325994
	Filter Regulator	5 µm	C325307	C325995
		40 µm	574700-001-SP	-
3/4" & 1"	Filter	25 µm	574700-002-SP	-
		5 µm	574700-003-SP	-
	Regulator	-	574700-004-SP	-
		40 µm	574700-005-SP	-
Filter Regulator	25 µm	574700-006-SP	-	
	5 µm	574700-007-SP	-	

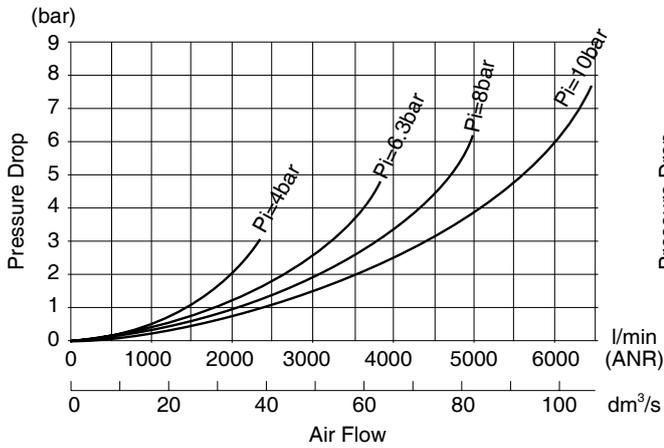
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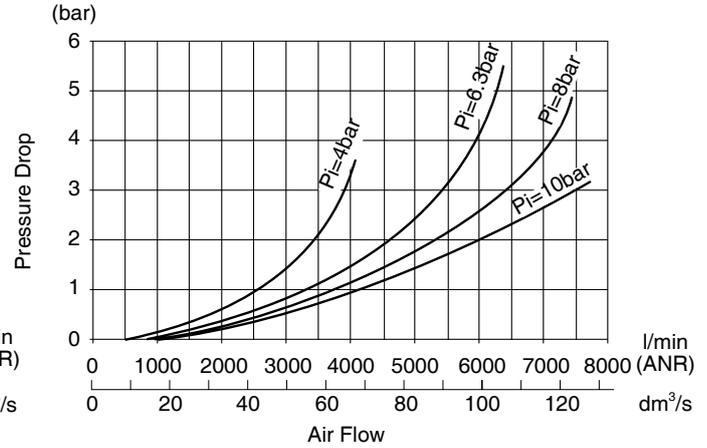
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Pressure Drop Vs. Air Flow Curves

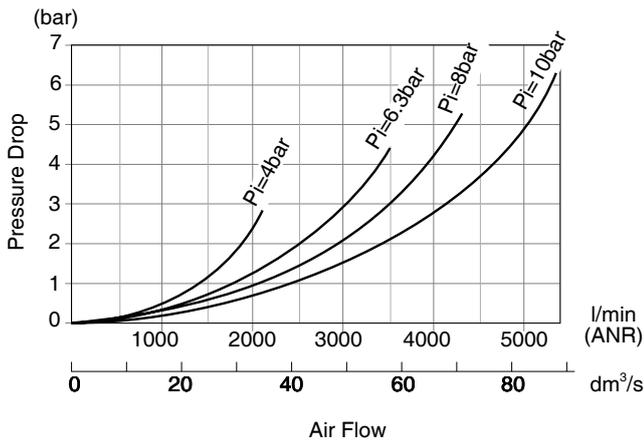
High Flow St. steel filter 1/2" NPT Ref. : 342A9007
Filtration 5 μm with P inlet 4 - 6.3 - 8 - 10 bar



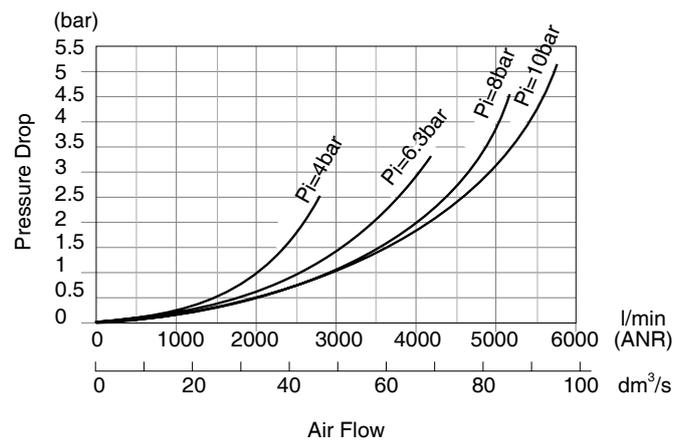
High Flow St. steel filter 1/2" NPT Ref. : 342A9003
Filtration 25 μm with P inlet 4 - 6.3 - 8 - 10 bar



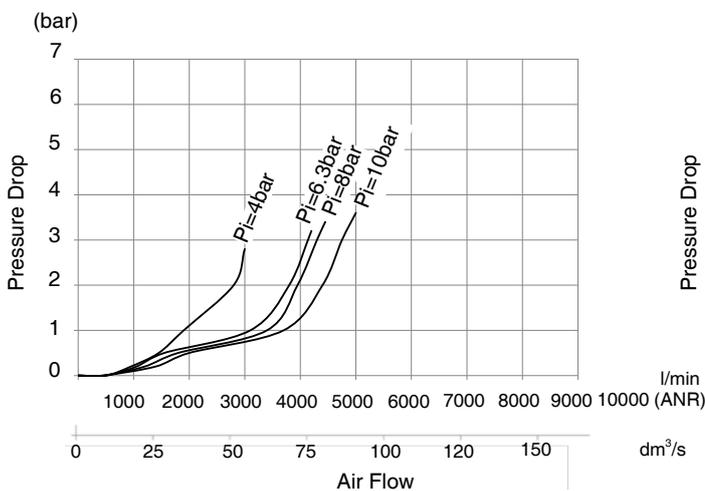
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Filtration 5 μm with P inlet 4 - 6.3 - 8 - 10 bar



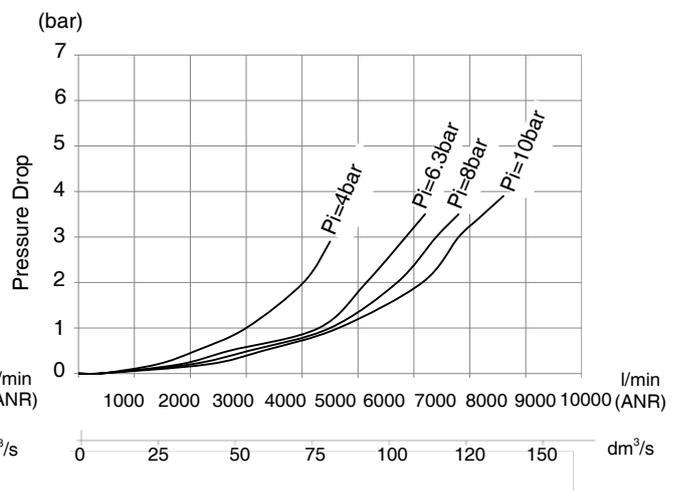
High Flow St. steel filter 1/4" NPT Ref. : 342A9001
Filtration 25 μm with P inlet 4 - 6.3 - 8 - 10 bar



High Flow St. steel filter 3/4" NPT Ref. : 342B920M
Filtration 5 μm with P inlet 4 - 6.3 - 8 - 10 bar



High Flow St. Steel Filter 3/4 NPT Ref: 342B920D
Filtration with 25 μm with P inlet 4 - 6.3 - 8 - 10 bar



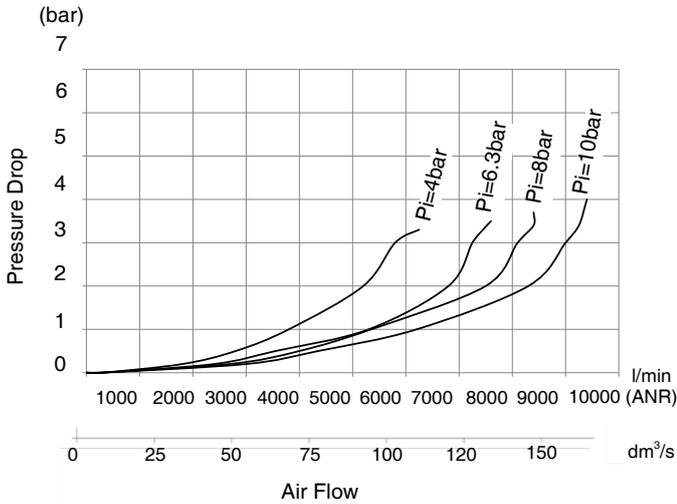
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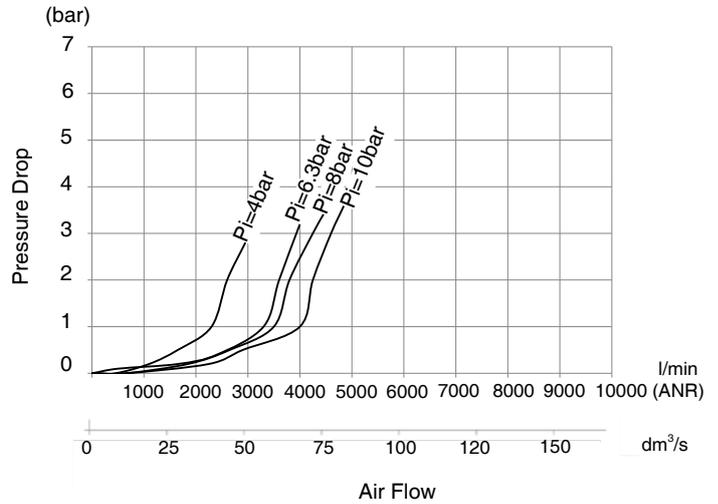
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Pressure Drop Vs. Air Flow Curves

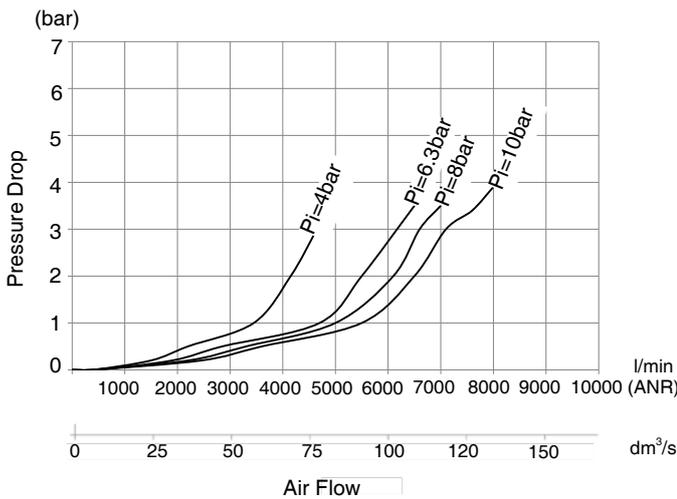
High Flow St. Steel Filter 3/4 NPT Ref: 342B920H
Filtration with 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



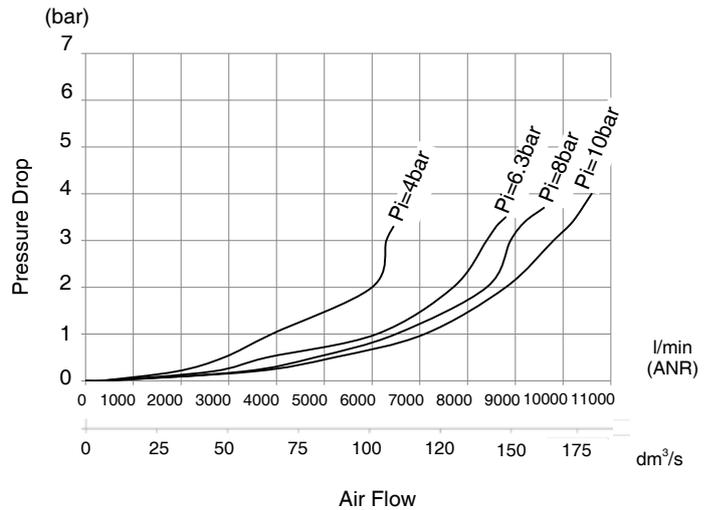
High Flow St. steel filter 1" NPT Ref. : 342B920P
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



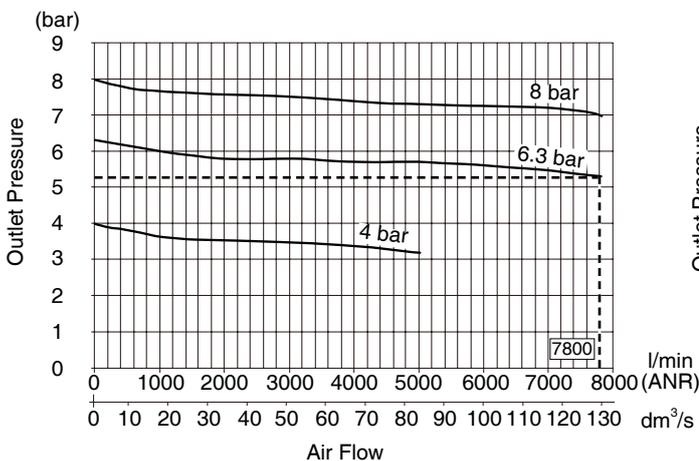
High Flow St. Steel Filter 1 NPT Ref: 342B920F
Filtration with 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



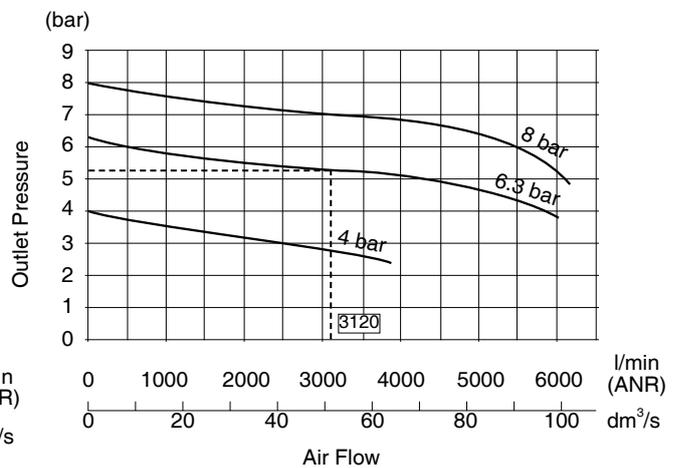
High Flow St. Steel Filter 1 NPT Ref: 342B920K
Filtration with 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



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



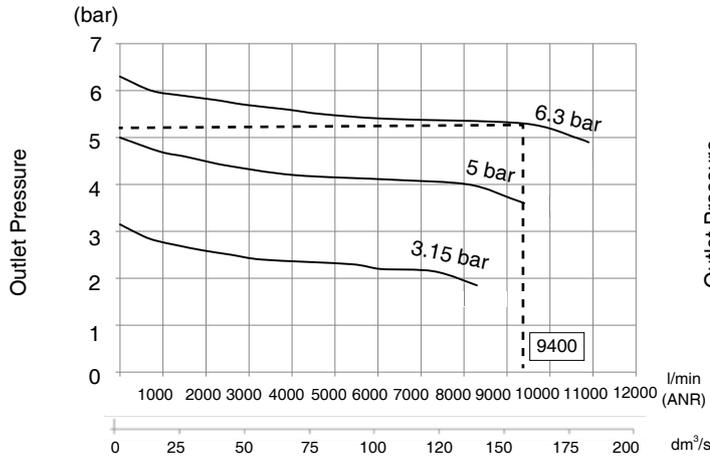
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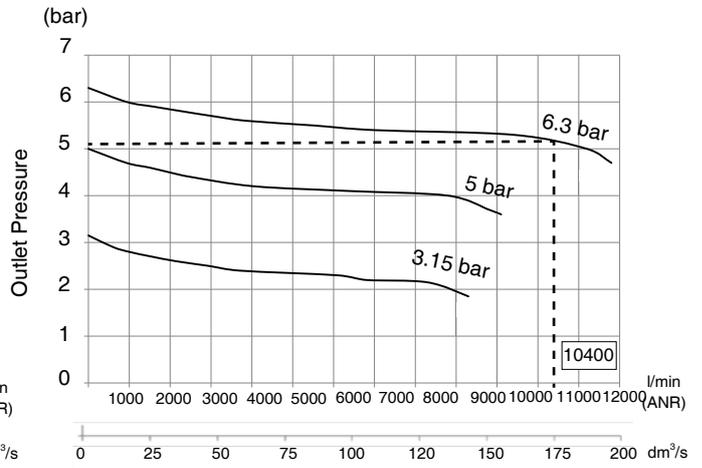
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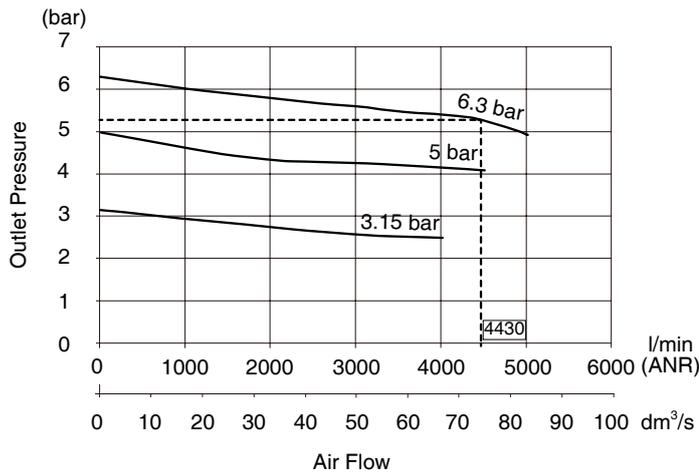
High Flow St. Steel Regulator 3/4" NPT Ref: 342BA20D
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



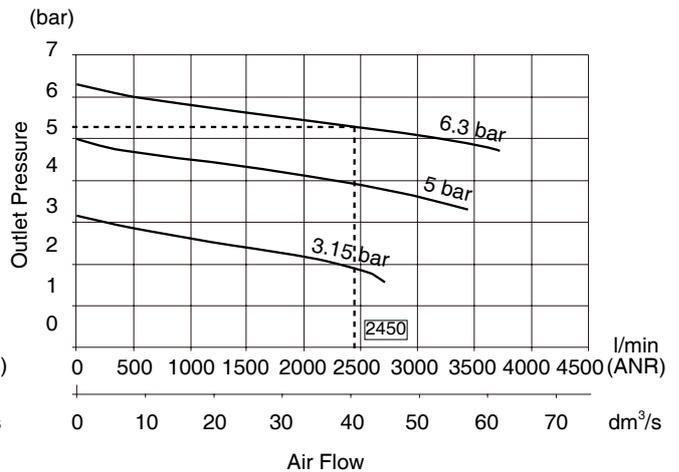
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P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



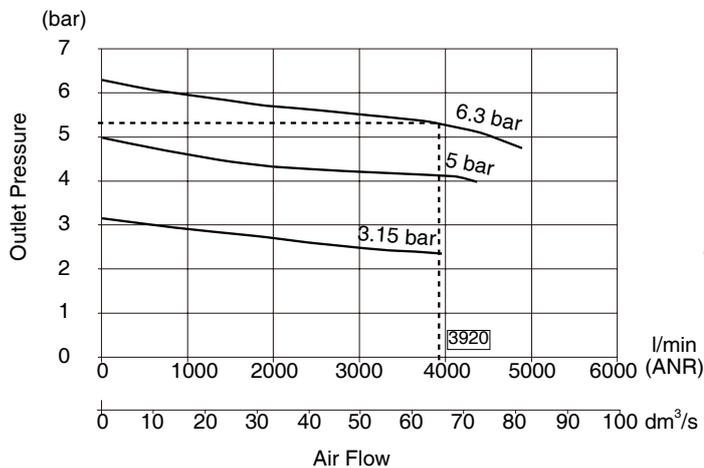
High Flow St. steel filter regulator 1/2" NPT Ref: 342A8203
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



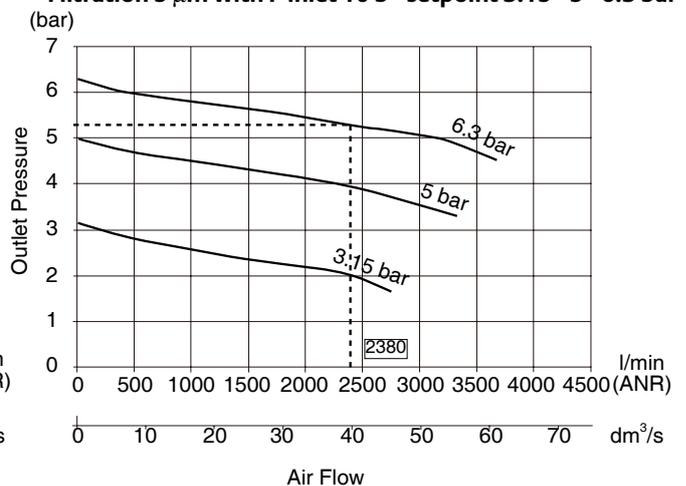
High Flow St. steel filter regulator 1/4" NPT Ref: 342A8201
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



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



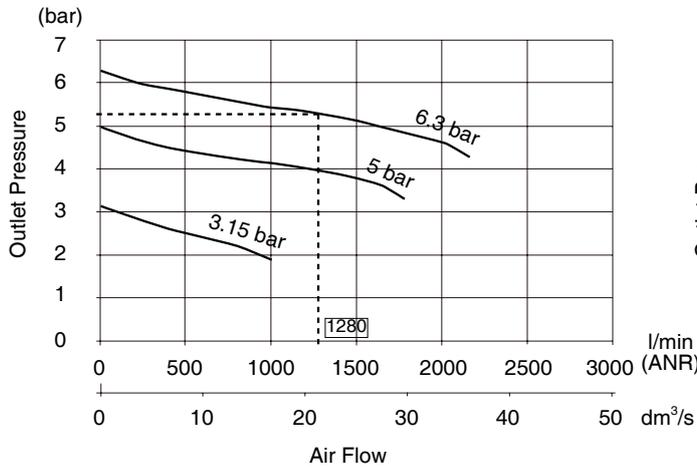
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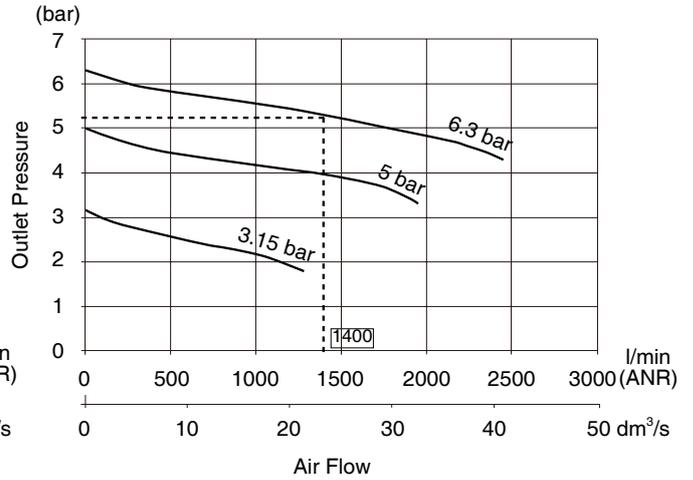
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Pressure Drop Vs. Air Flow Curves

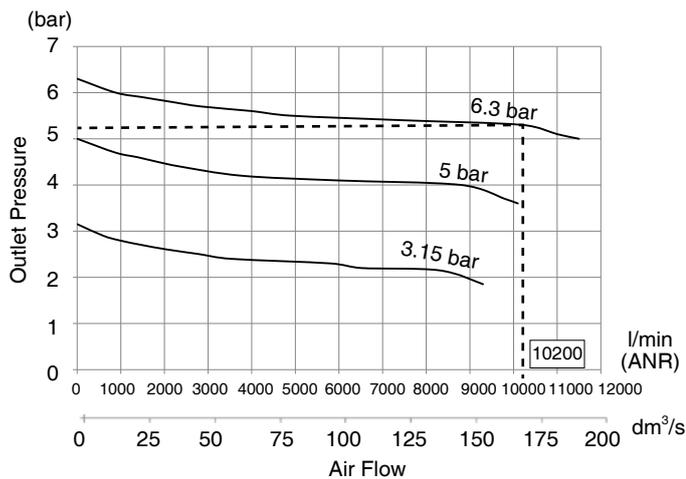
Compact St. steel filter regulator 1/4" NPT Ref : 342A820B
Filtration 5 μm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



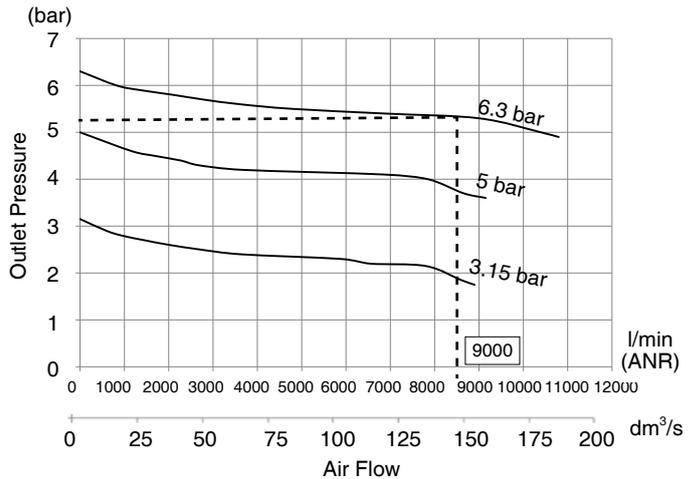
Compact St. steel filter regulator 1/4" NPT Ref : 342A8209
Filtration 25 μm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



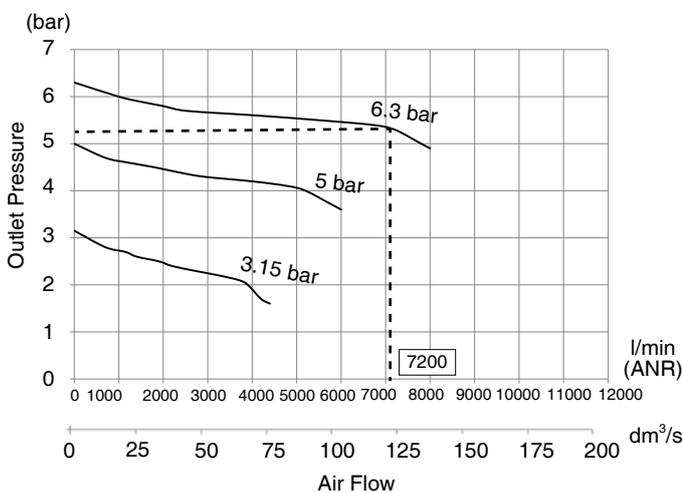
St. steel filter regulator 1 NPT Ref: 342B820K
Filtration with 40 μm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



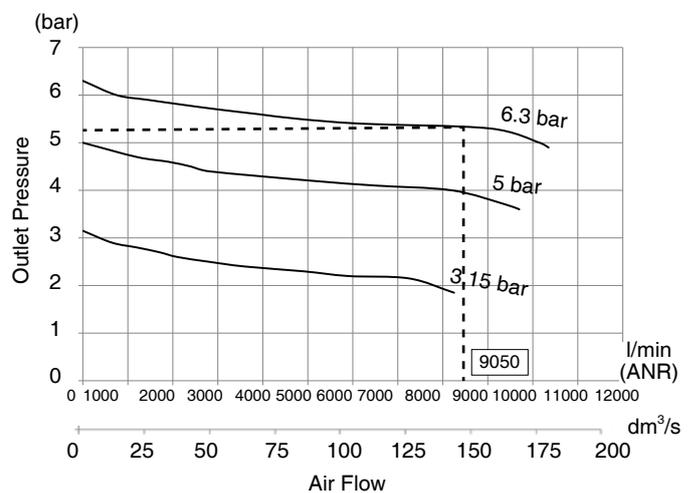
St. steel filter regulator 1 NPT Ref: 342B820F
Filtration with 25 μm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



St. steel filter regulator 1 NPT Ref: 342B820P
Filtration with 5 μm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



HighSt. steel filter regulator 3/4" NPT Ref: 342B820H
Filtration with 40 μm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



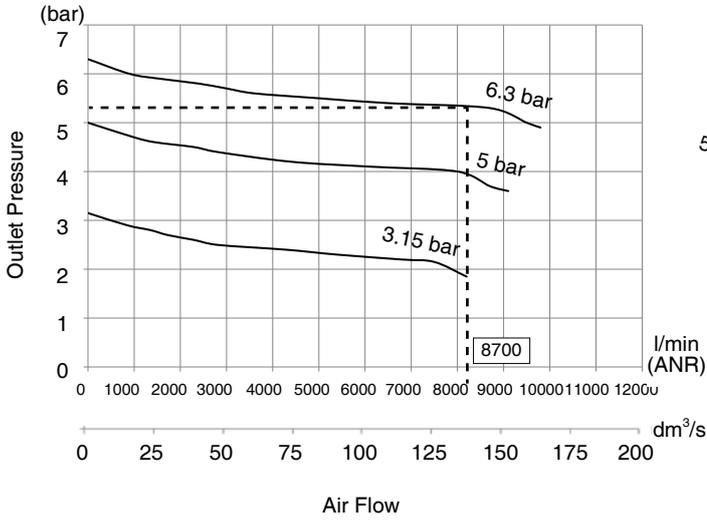
ASCO™ Filter, Regulator and Filter Regulator

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

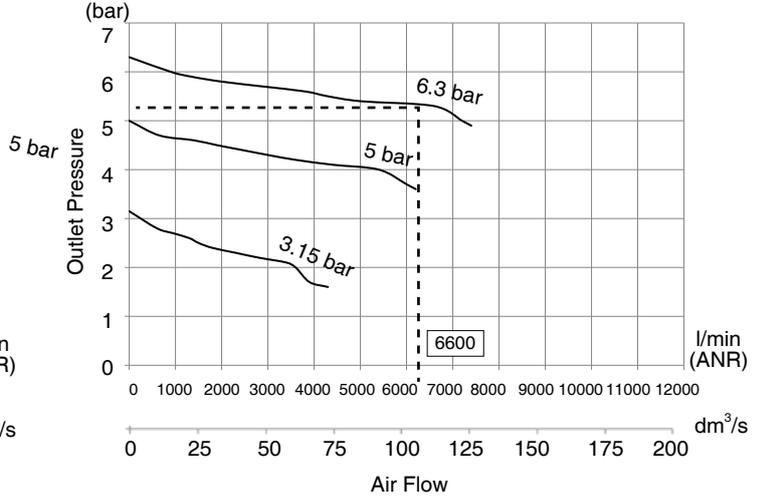
Series
342

Pressure Drop Vs. Air Flow Curves

St. steel filter regulator 3/4 NPT Ref: 342B820D
Filtration with 25 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



St. steel filter regulator 3/4 NPT Ref: 342B820M
Filtration with 5 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



Availability, design and specifications are subject to change without notice.
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