

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:

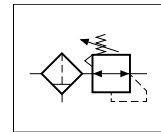
II 2G Ex h IIC T5 Gb

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

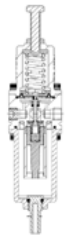

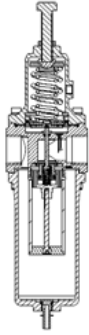
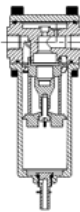
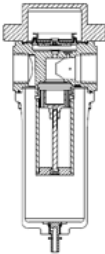
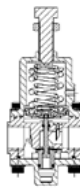
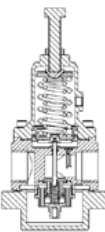
	Compact	High Flow (1/4" & 1/2")	High Flow (3/4" & 1")
Fluids	Compressed Air, Neutral Gas, Natural Gas	Compressed Air, Neutral Gas, Natural Gas & Sour Natural Gas	Compressed Air, Neutral Gas, Natural Gas
Compliance to NACE for Sour Gas Environment	No	Yes (as an option)	Yes (as on option)
Quick Relief	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		

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Characteristics

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

Construction

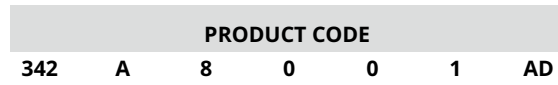
	Compact	High Flow (1/4" & 1/2")	High Flow (3/4" & 1")
Body, Bonnet & Bowl	AISI 316L SS		
Bowl Capacity	30 cm ³	75 cm ³	160 cm ³
Filtering Element	AISI 316 SS		
Diaphragm	LT FKM	HNBR	FKM
Elastomers	FKM		

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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

1 = ATEX 1/21 + CUTR

2 = ATEX 1/21 + NACE (5)

3 = ATEX 1/21 + NACE + CUTR (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 not applicable for Compact version, need minimum order of 20 units.

(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)

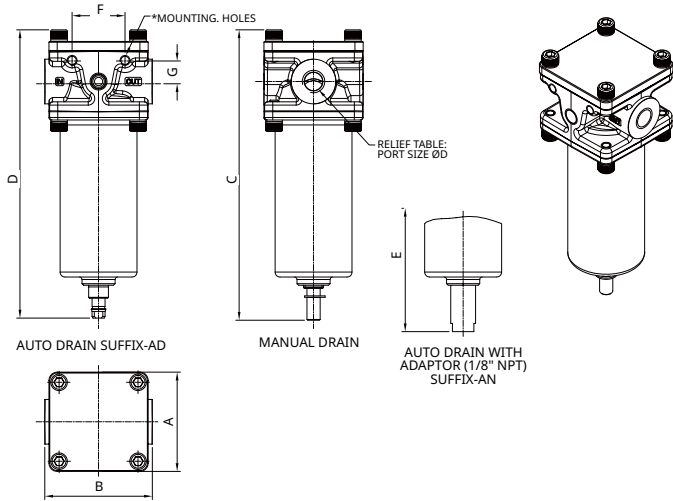
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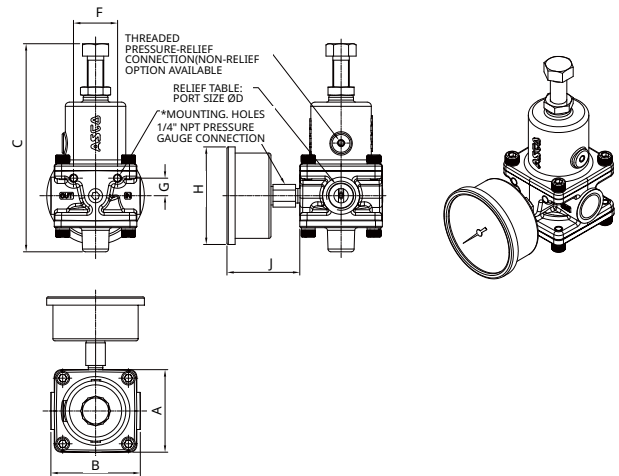
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Dimensions (mm), Weight (kg)

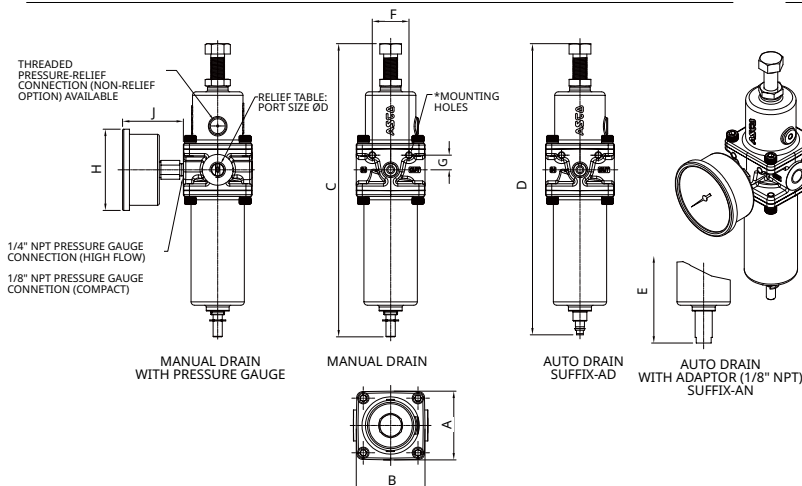
Filter



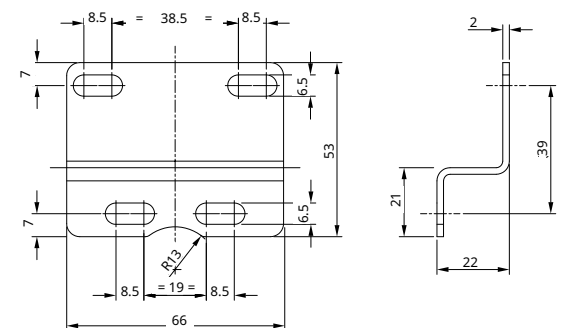
Regulator



Filter Regulator



Mounting Bracket



Spare Parts Kits

Type	Filtering Capacity	Spare Parts Kit Number-Standard	Spare Parts Kit Number-Low Temp	
COMPACT				
1/4"	Filter Regulator	25 µm	C325921	
		5 µm	C325922	
HIGH FLOW				
1/4" & 1/2"	Filter Regulator	25 µm	C325309	
		5 µm	C325310	
	Filter Regulator	-	C325311	C325993
		25 µm	C325305	C325994
3/4" & 1"	Filter	40 µm	574700-001-SP	
		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	

	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
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	-	-
		3/4"	1.2	60	65	151.3	-	-	32	12.75	71	51
	Regulator	1/2"	4.1	85	90	230	-	-	32 & 46	21	71	52
		1"	2	60	65	256	254	261	32	12.8	71	51
	Filter Regulator	1/4"	2	60	65	256	254	261	32	12.8	71	51
	Filter Regulator	1/2"	4.3	85	90	362	360	371	32 & 46	20	71	52
	Filter Regulator	3/4"	4.3	85	90	362	360	371	32 & 46	20	71	52
	Filter Regulator	1"	4.3	85	90	362	360	371	32 & 46	20	71	52

* 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

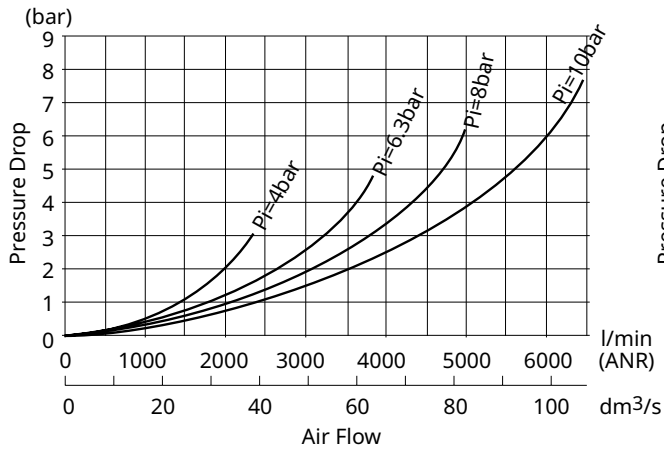
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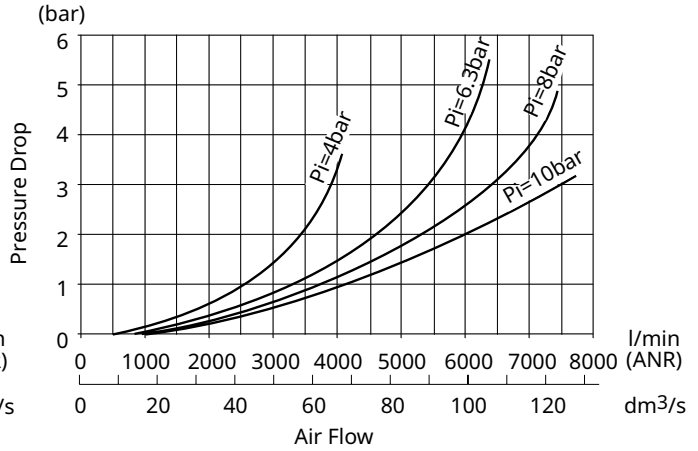
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Pressure Drop Vs. Air Flow Curves

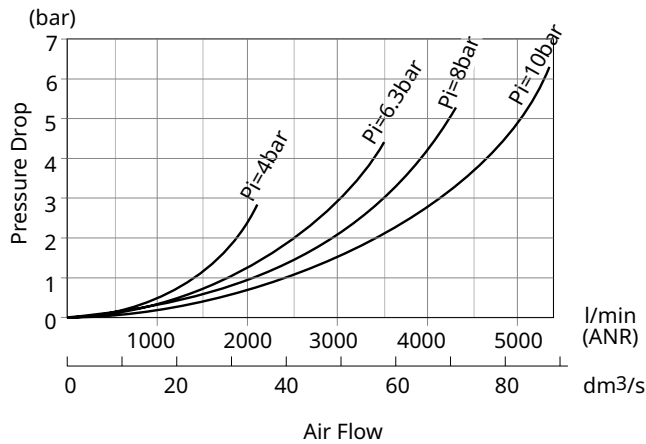
High Flow St. steel filter 1/2" NPT Ref. : 342A9007
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



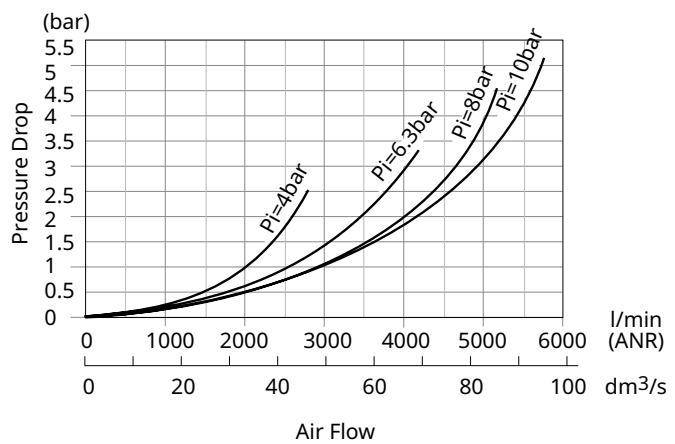
High Flow St. steel filter 1/2" NPT Ref. : 342A9003
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



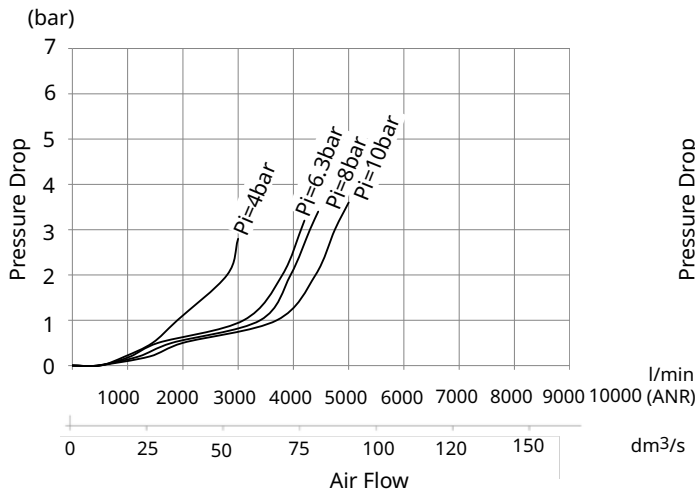
High Flow St. steel filter 1/4" NPT Ref. : 342A9005
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



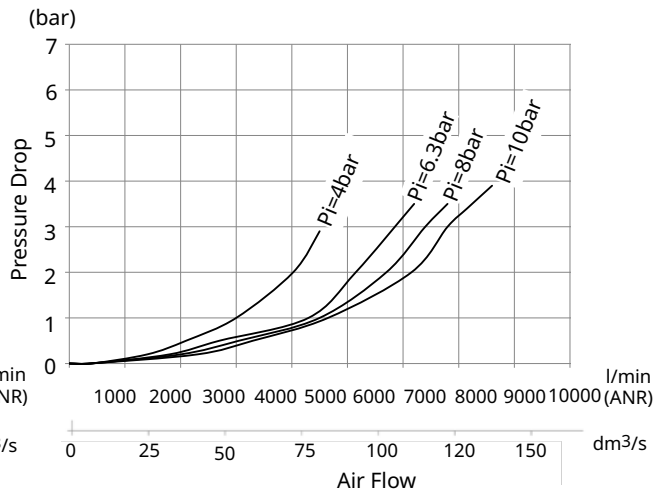
High Flow St. steel filter 1/4" NPT Ref. : 342A9001
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



High Flow St. steel filter 3/4" NPT Ref. : 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



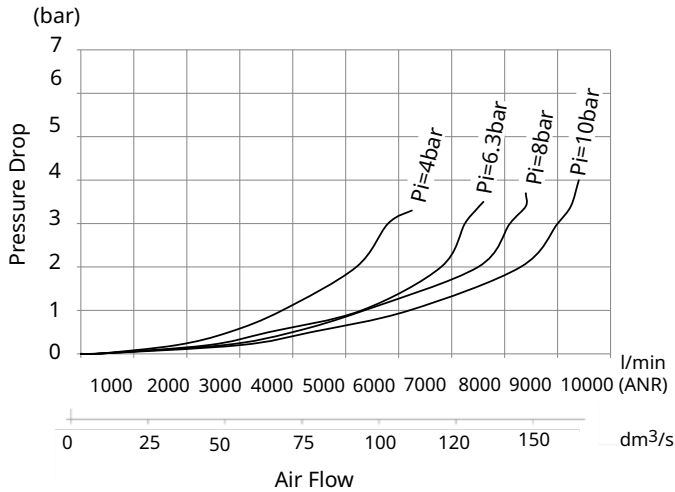
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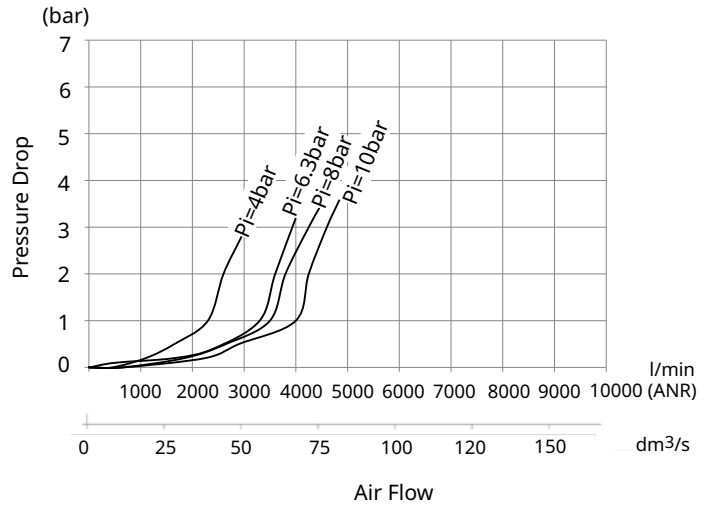
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Pressure Drop Vs. Air Flow Curves

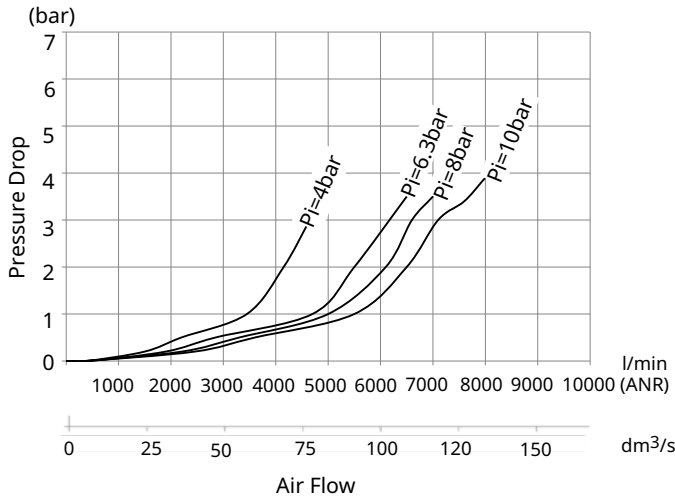
High Flow St. Steel Filter 3/4 NPT Ref: 342B920H
Filtration with 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



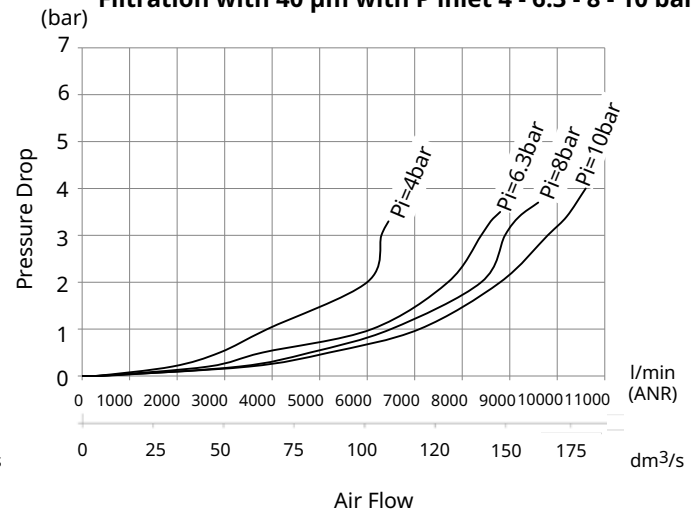
High Flow St. steel filter 1" NPT Ref. : 342B920P
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



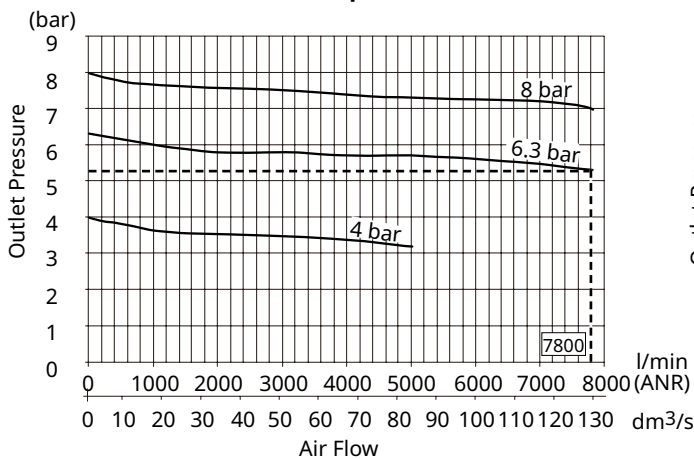
High Flow St. Steel Filter 1 NPT Ref: 342B920F
Filtration with 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



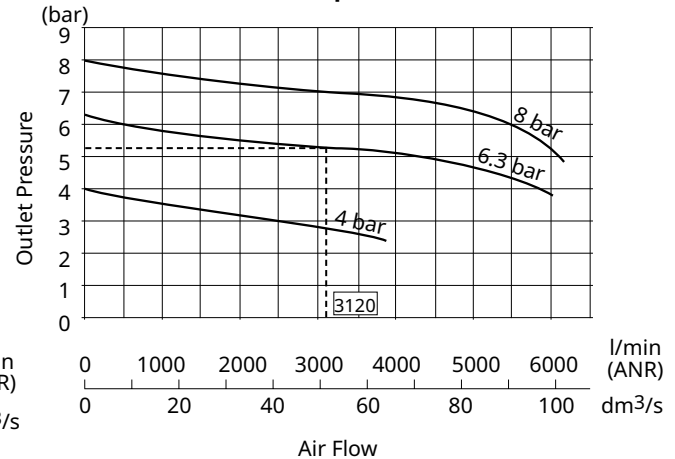
High Flow St. Steel Filter 1 NPT Ref: 342B920K
Filtration with 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



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



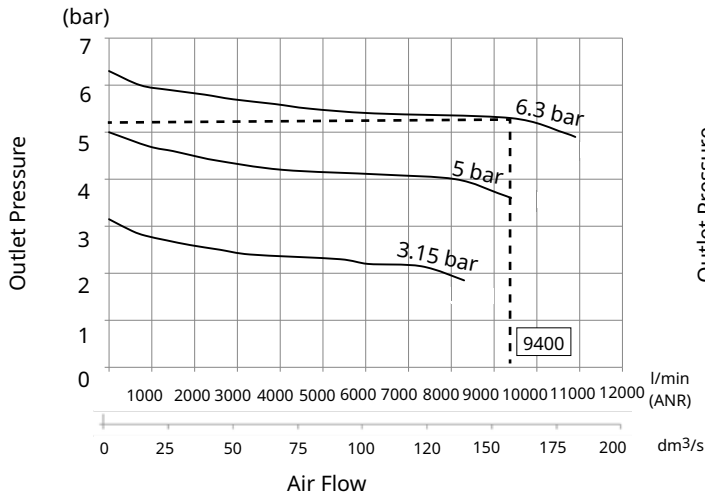
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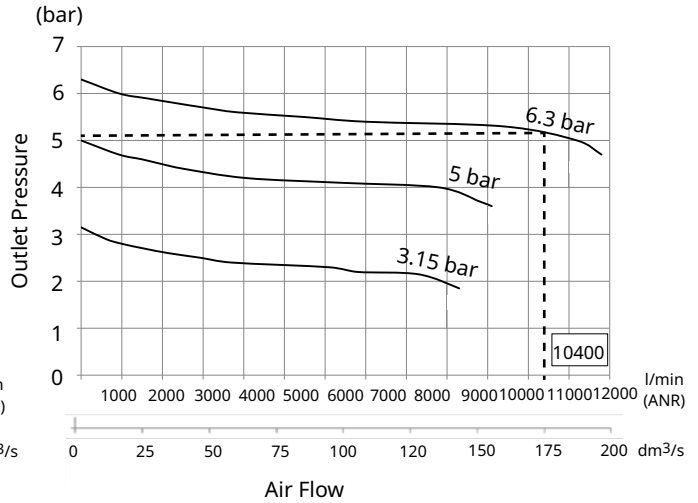
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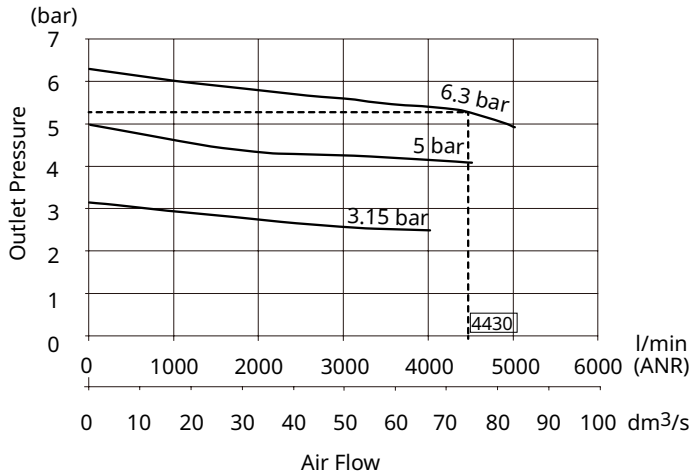
High Flow St. Steel Regulator 3/4 NPT Ref: 342BA20D
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



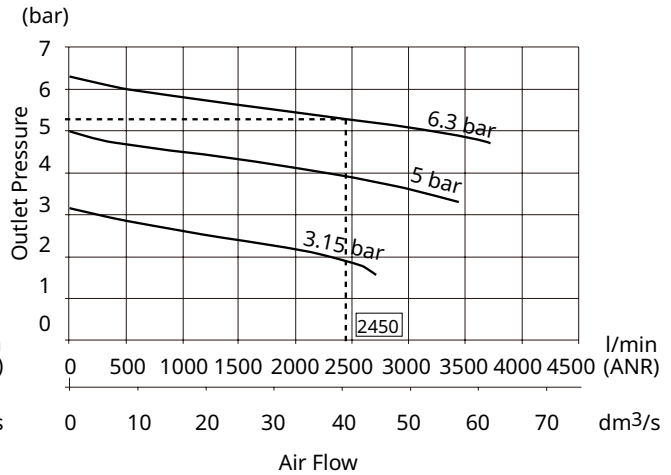
High Flow St. Steel Regulator 1 NPT Ref: 342BA20F
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



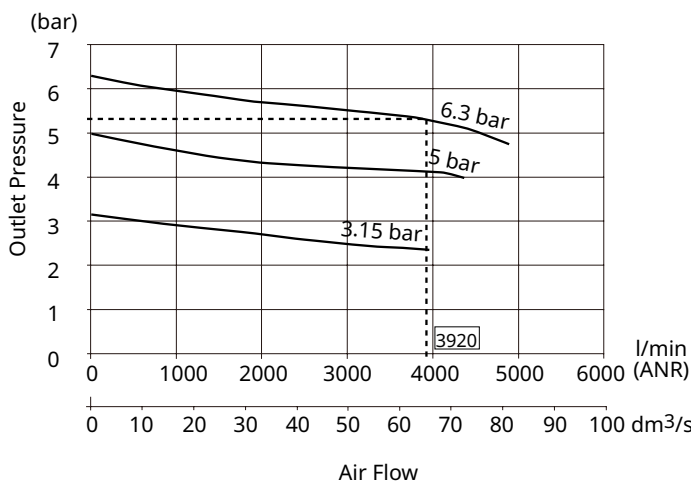
High Flow St. steel filter regulator 1/2" NPT Ref : 342A8203
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



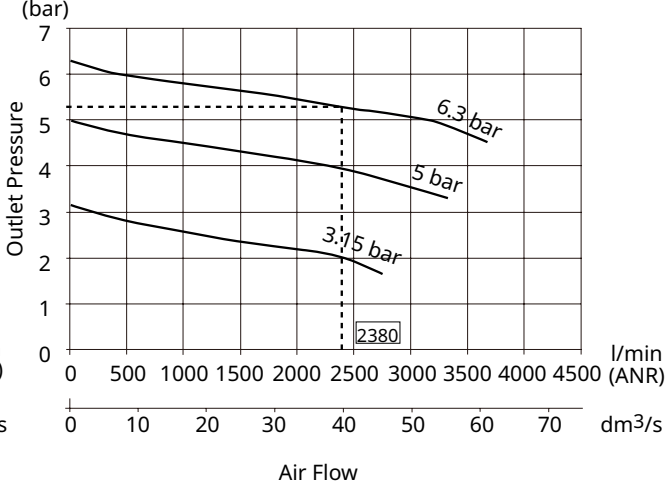
High Flow St. steel filter regulator 1/4" NPT Ref. : 342A8201
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



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



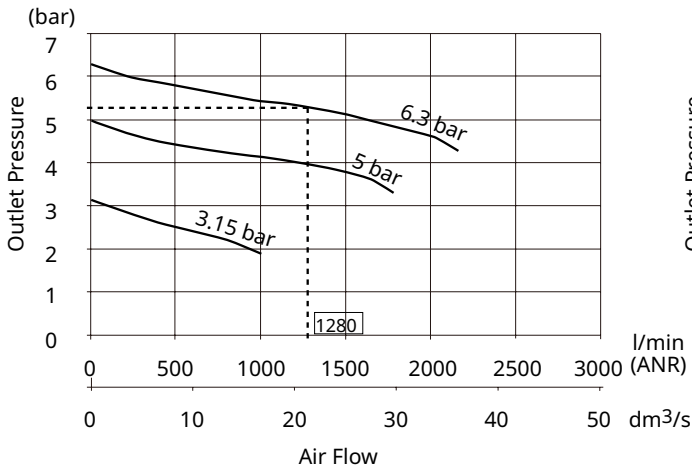
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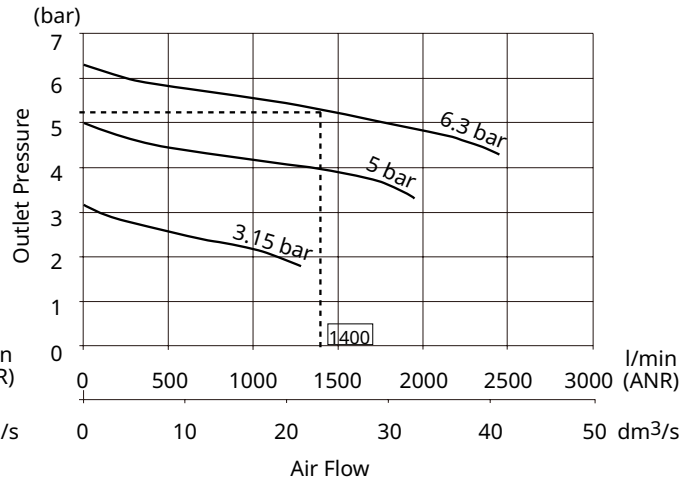
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Pressure Drop Vs. Air Flow Curves

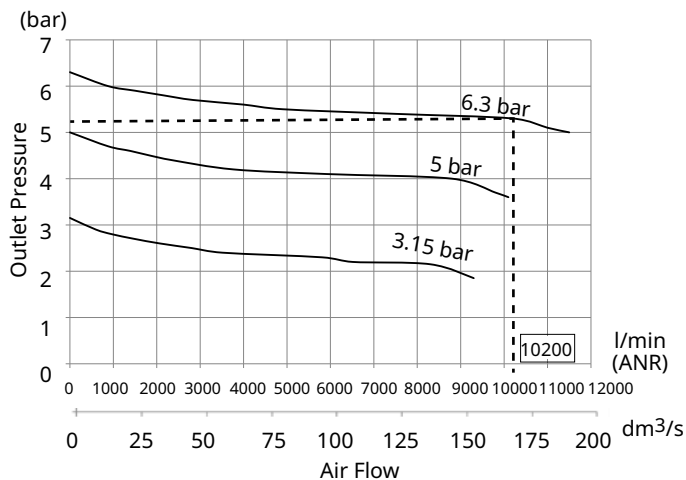
Compact St. steel filter regulator 1/4" NPT Ref : 342A820B
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



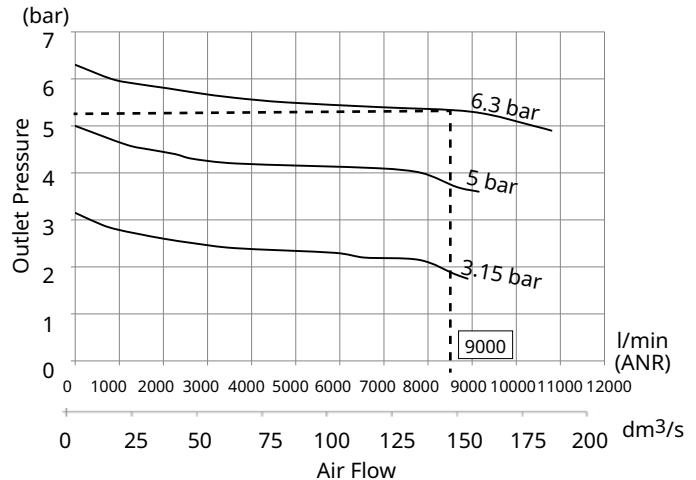
Compact St. steel filter regulator 1/4" NPT Ref. : 342A8209
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



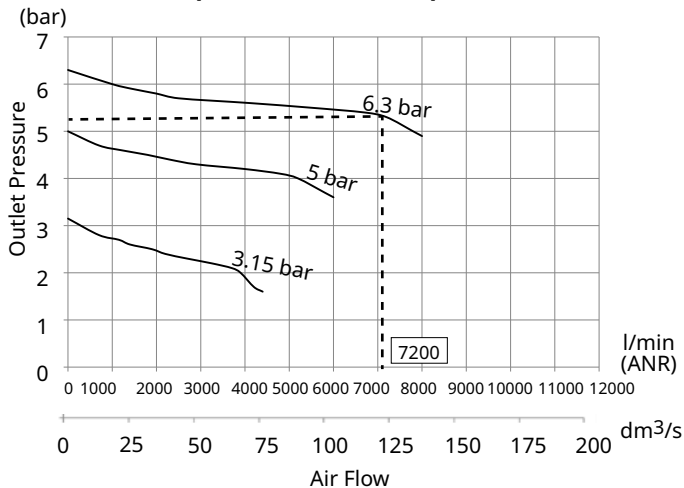
St. steel filter regulator 1 NPT Ref: 342B820K
Filtration with 40 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



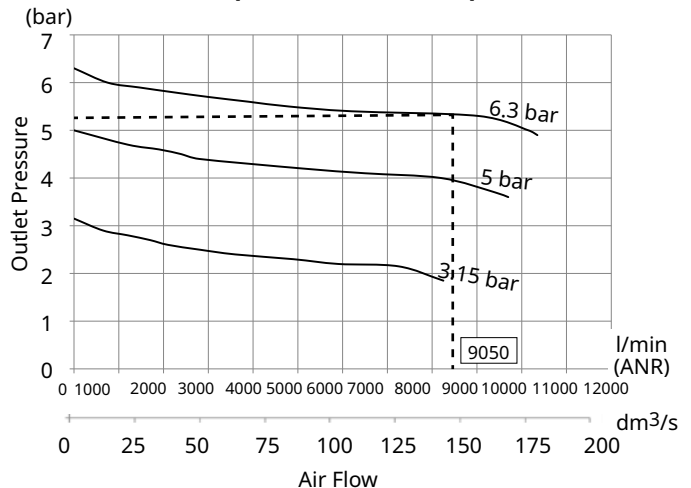
St. steel filter regulator 1 NPT Ref: 342B820F
Filtration with 25 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



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



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



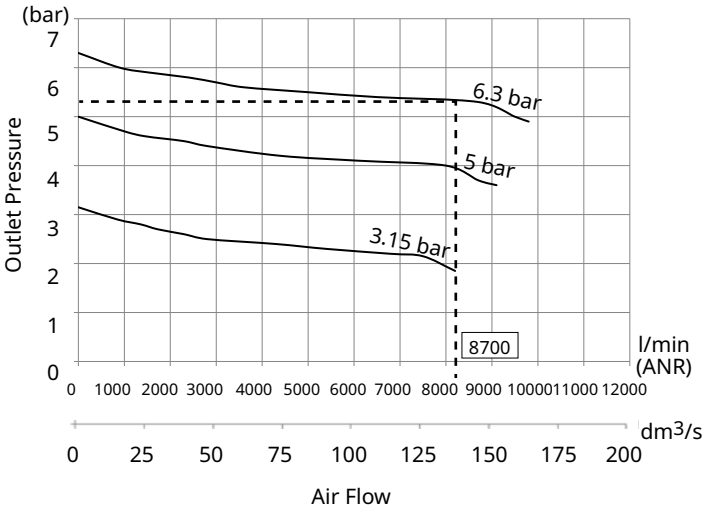
ASCO™ Filter, Regulator and Filter Regulator

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

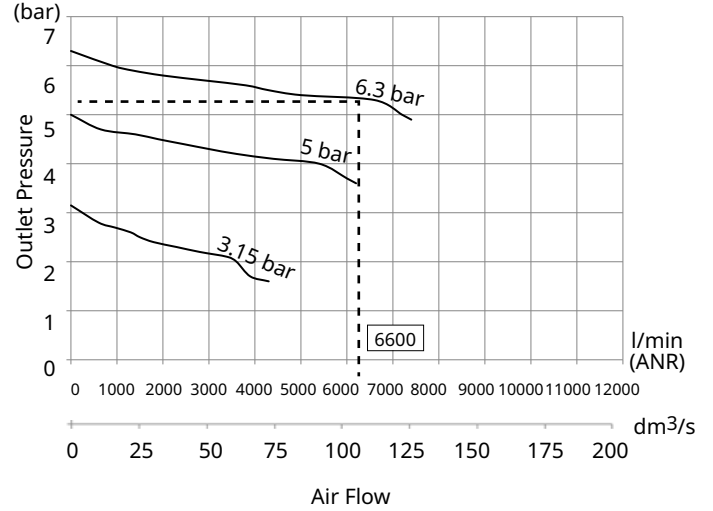
Series
342

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



2025.12.16 - Availability, design and specifications are subject to change without notice.
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