ASCO™ Filter, Regulator and Filter Regulator

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

Series 342

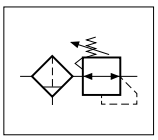
Features



- 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 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 ¼" & ½" as an option. INCONEL is trademark of the Special Metals Corporation group of companies



Benefits

- Precise tuning and regulation - using dual spring design[(1)(2)]
- Improved regulation accuracy - with pitot tube feedback[(1)(2)]
- Longer lifespan - using rolling diaphragm
- Effective moisture removal - using fin diverters to create centrifugal action[(1)]
- Long lasting product labeling - laser etched marking on stainless steel bowl

(1) Available for High Flow 1/4" - 1/2" SSFR

(2) 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 [(3)]	-
Condensate Drain	Manual & Automatic		

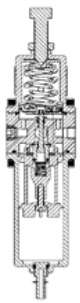
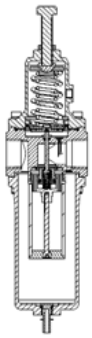
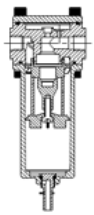
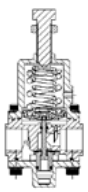
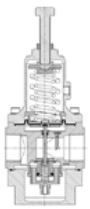
(3) Low temperature option is limited to -50°C when used with a gauge

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

Series 342

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		

How to Order

PRODUCT CODE

342	A	8	0	0	1	AD

Product Series

342

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]
RL = Right to Left flow direction
TH = T-Handle

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.
- Dummy plug can be provide not assembled, please consult sales Office.
- 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.
- G + LT limits the low temperature to -50°C.

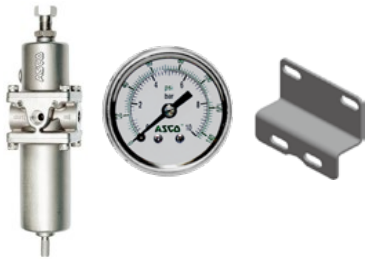
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Stainless Steel 316L, Compact 1/4", High Flow 1/4", 1/2", 3/4", 1"

Series 342

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			

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

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	

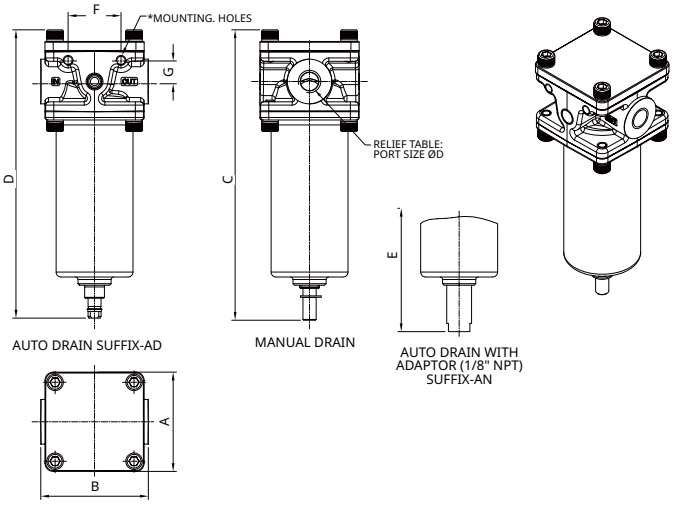
Option	Weight (kg)
Auto Drain	0.015
Adapter for Auto Drain	0.020
Pressure Gauge	0.164
Mounting Bracket	0.079

Installation

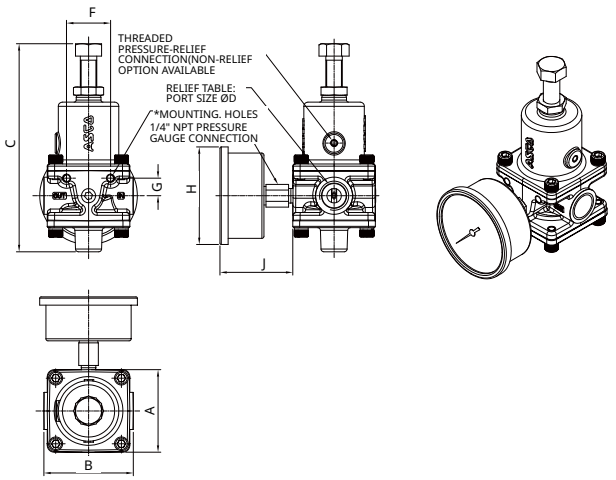
- Installation / Maintenance instructions are included with each filter/regulator
- Air flow direction indicated by IN/OUT as well as inlet & outlet indicators
- Pipe connection has standard thread according to NPT (ANSI 1.20.3)

Dimensions (mm), Weight (kg)

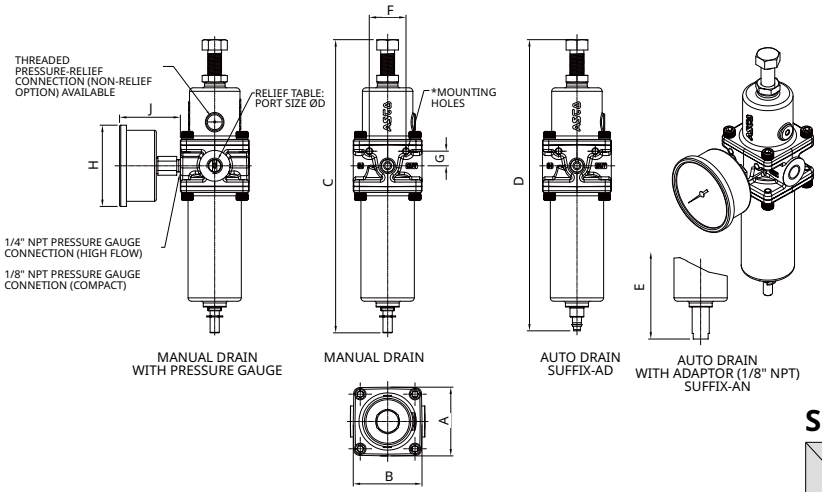
Filter



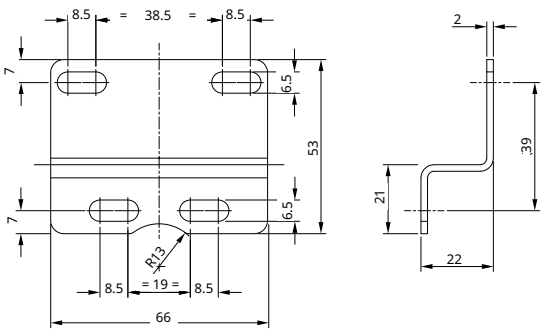
Regulator



Filter Regulator



Mounting Bracket



	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"										
		3/4"	4.4	85	90	268	266	277	32 & 46	20	-	-
		1"										
	Regulator	1/4"	1.2	60	65	151.3	-	-	32	12.75	71	51
		1/2"										
		3/4"	4.1	85	90	230	-	-	32 & 46	21	71	52
		1"										
	Filter Regulator	1/4"	2	60	65	256	254	261	32	12.8	71	51
		1/2"										
	Filter Regulator	3/4"	4.3	85	90	362	360	371	32 & 46	20	71	52
		1"										

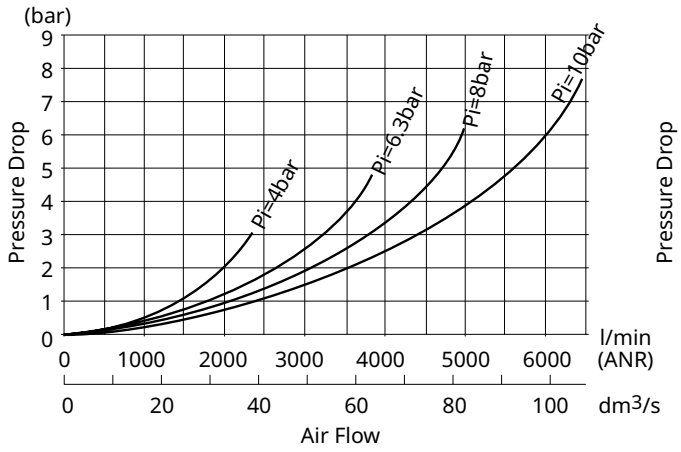
* Note: Mounting hole for Compact 1/4" (M5) - Mounting hole for High flow 1/4", 1/2", 3/4, 1" (M6) - High Flow 3/4", 1", Use 32mm pitch (Dim F) for Mounting purpose

Spare Parts Kits

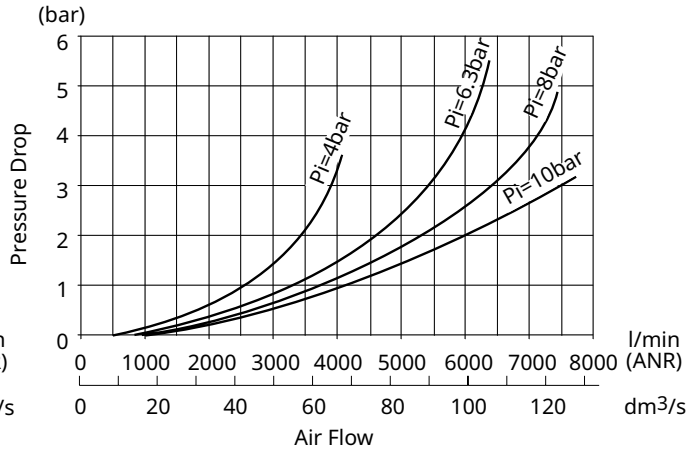
	Type	Filtering Capacity	Spare Parts Kit Number-Standard	Spare Parts Kit Number-Low Temp
COMPACT				
1/4"	Filter Regulator	25 µm	C325921	C325996
		5 µm	C325922	C325997
HIGH FLOW				
1/4" & 1/2"	Filter	25 µm	C325309	
		5 µm	C325310	
	Regulator	-	C325311	C325993
	Filter Regulator	25 µm	C325305	C325994
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

Pressure Drop Vs. Air Flow Curves

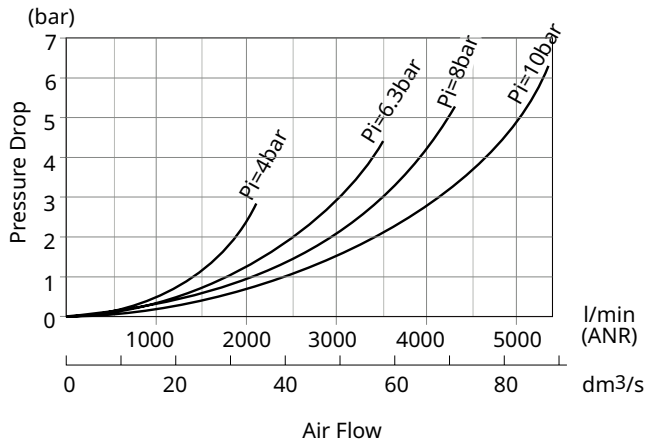
High Flow St. steel filter 1/2" NPT Ref. : 342A9007
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



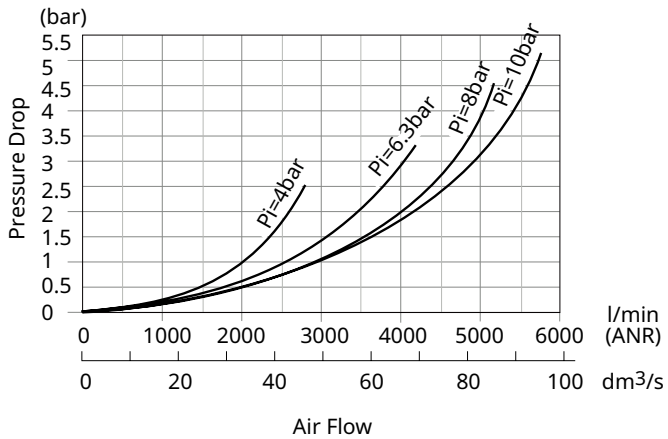
High Flow St. steel filter 1/2" NPT Ref. : 342A9003
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



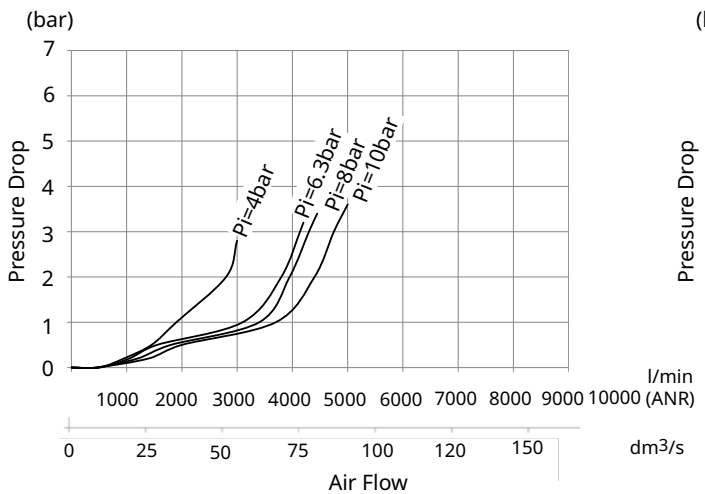
High Flow St. steel filter 1/4" NPT Ref. : 342A9005
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



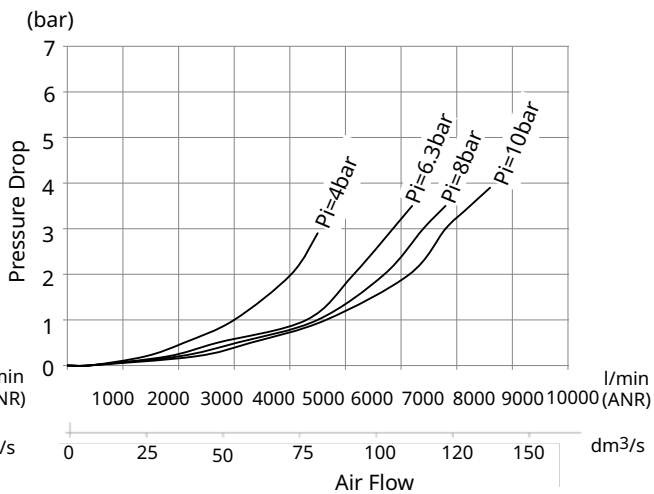
High Flow St. steel filter 1/4" NPT Ref. : 342A9001
Filtration 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



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

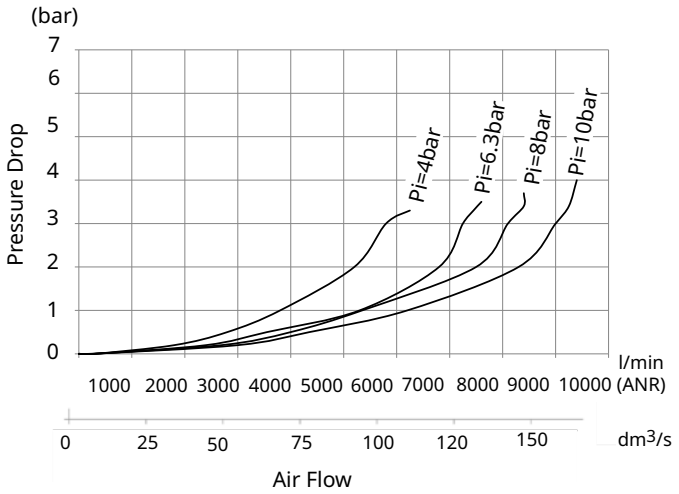


High Flow St.Steel Filter 3/4 NPT Ref: 342B920D
Filtration with 25 µm with P inlet 4 - 6.3 - 8 - 10 bar

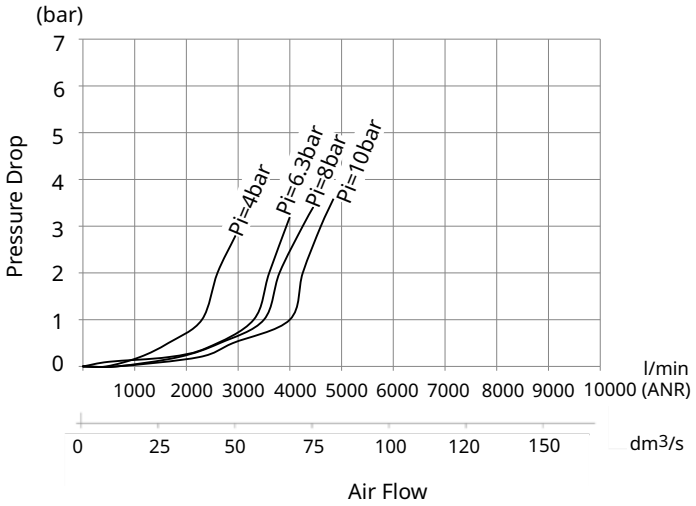


Pressure Drop Vs. Air Flow Curves

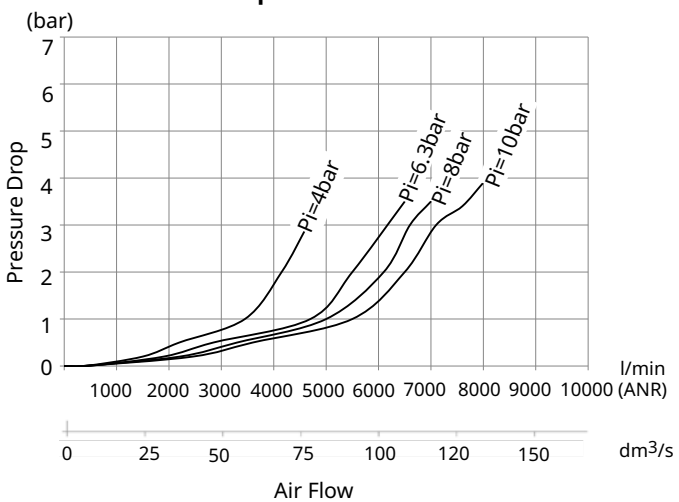
High Flow St.Steel Filter 3/4 NPT Ref: 342B920H
Filtration with 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



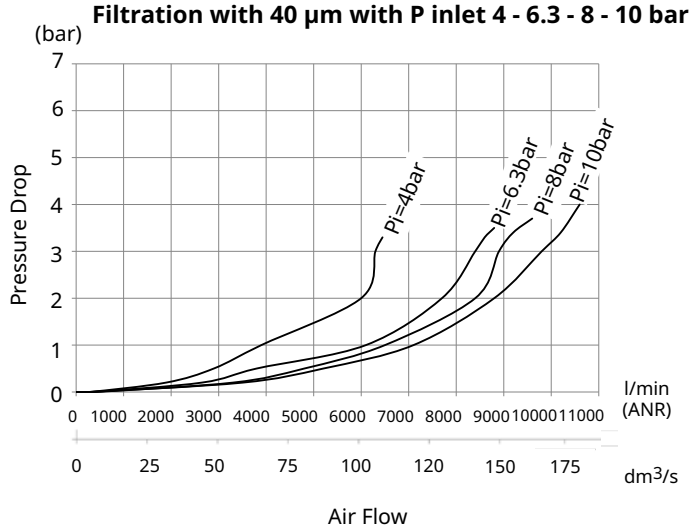
High Flow St. steel filter 1" NPT Ref. : 342B920P
Filtration 5 µm with P inlet 4 - 6.3 - 8 - 10 bar



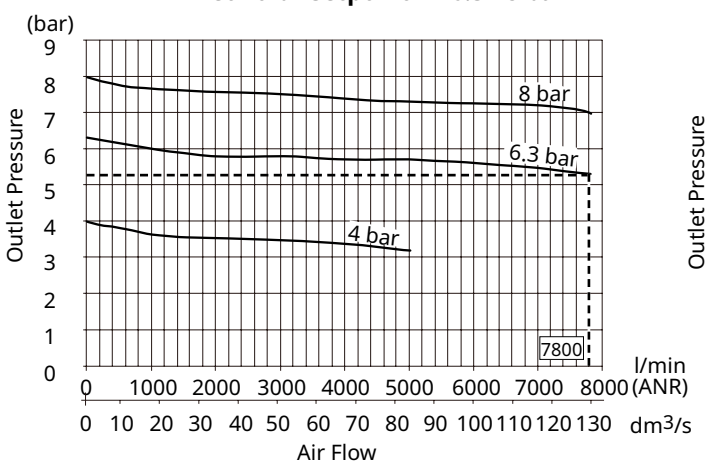
High Flow St.Steel Filter 1 NPT Ref: 342B920F
Filtration with 25 µm with P inlet 4 - 6.3 - 8 - 10 bar



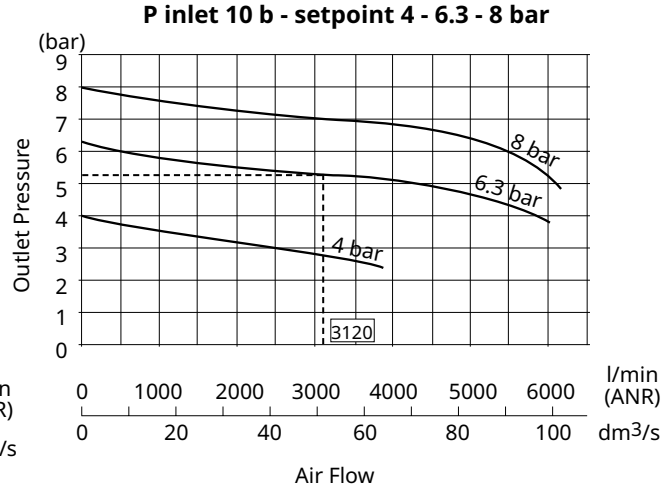
High Flow St.Steel Filter 1 NPT Ref: 342B920K
Filtration with 40 µm with P inlet 4 - 6.3 - 8 - 10 bar



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

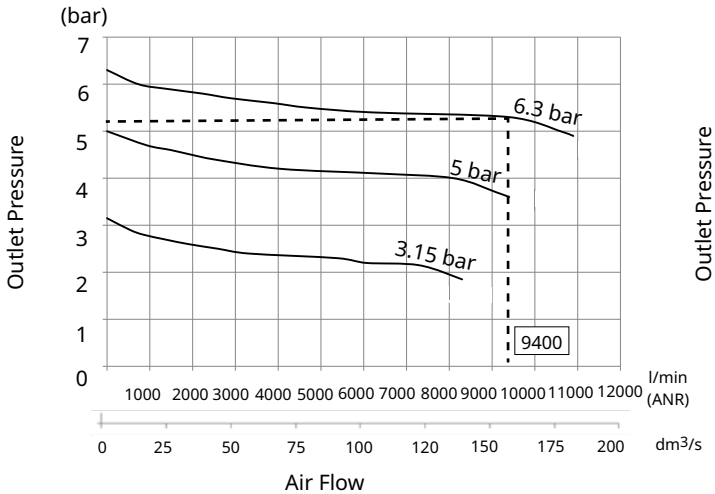


High Flow St. steel regulator 1/4" NPT Ref. : 342AA401
P inlet 10 b - setpoint 4 - 6.3 - 8 bar

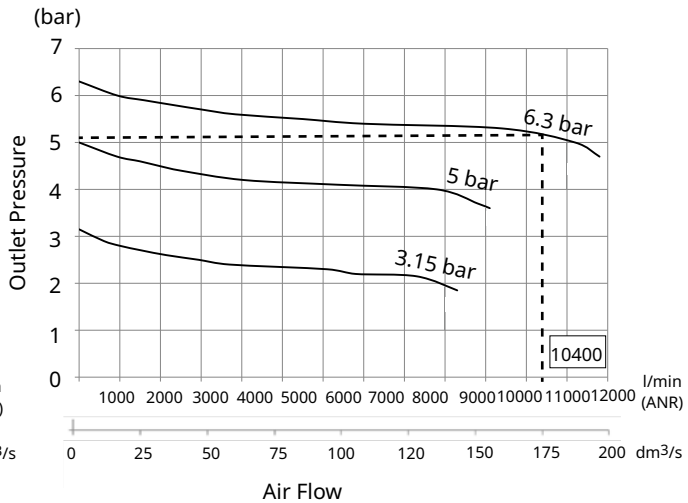


Pressure Drop Vs. Air Flow Curves

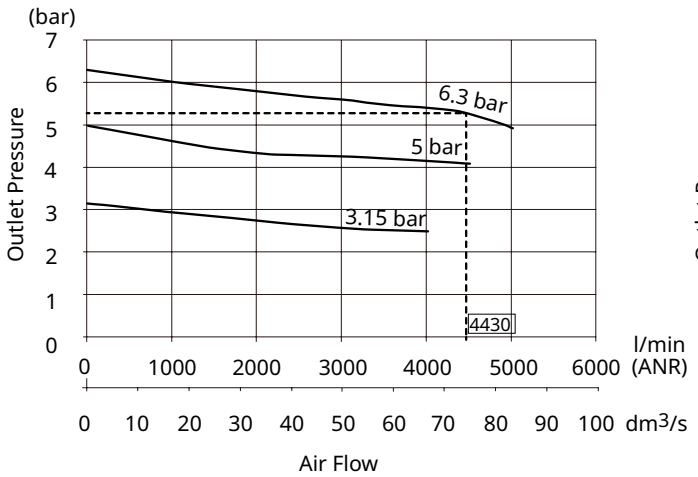
High Flow St.Steel Regulator 3/4 NPT Ref: 342BA20D
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



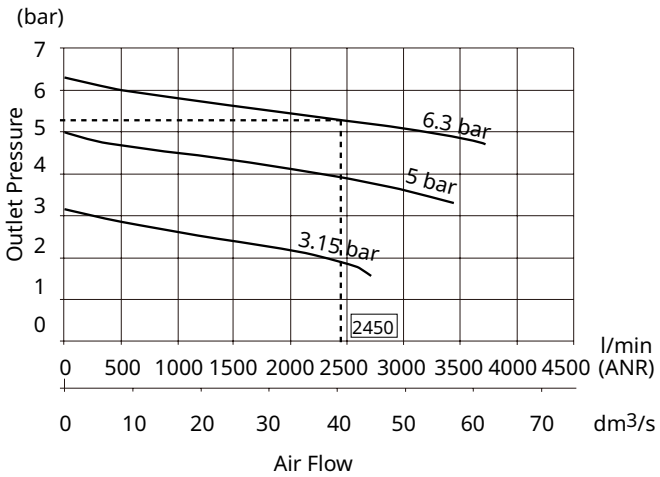
High Flow St.Steel Regulator 1 NPT Ref: 342BA20F
P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



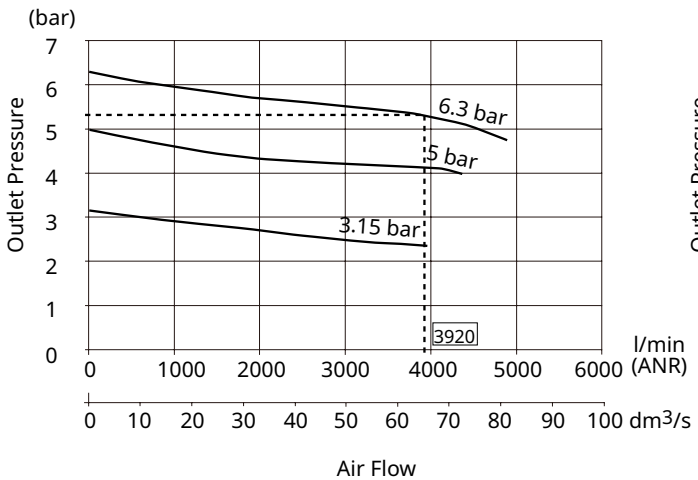
High Flow St. steel filter regulator 1/2" NPT Ref : 342A8203
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



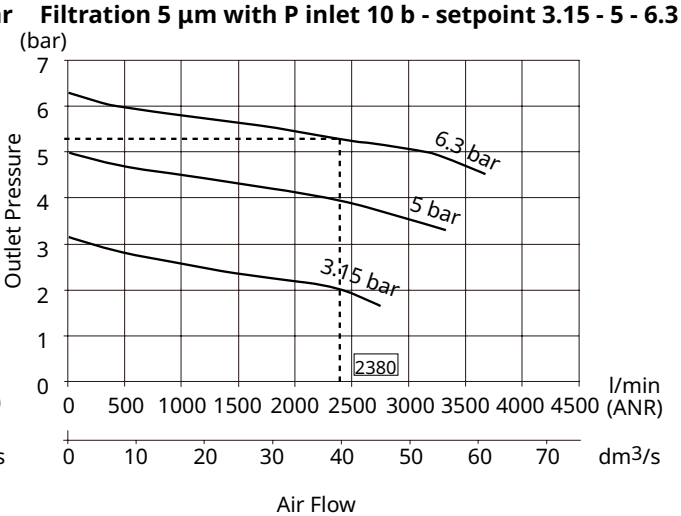
High Flow St. steel filter regulator 1/4" NPT Ref. : 342A8201
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



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

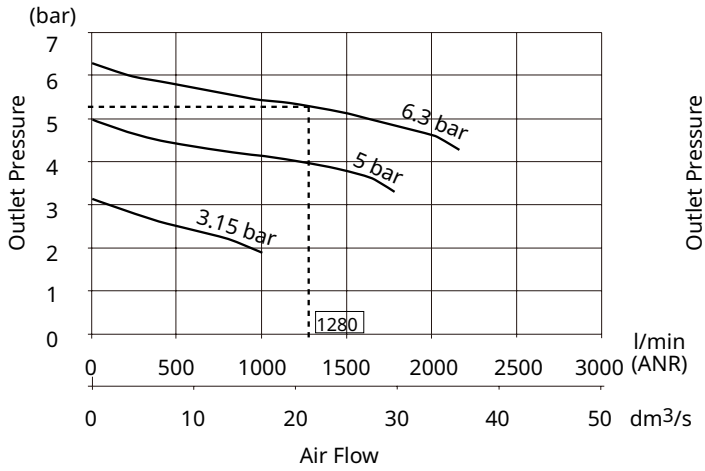


High Flow St. steel filter regulator 1/4" NPT Ref. : 342A8205
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

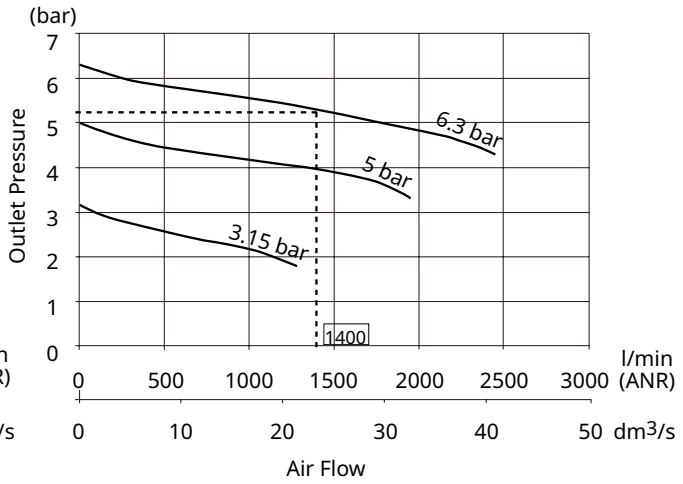


Pressure Drop Vs. Air Flow Curves

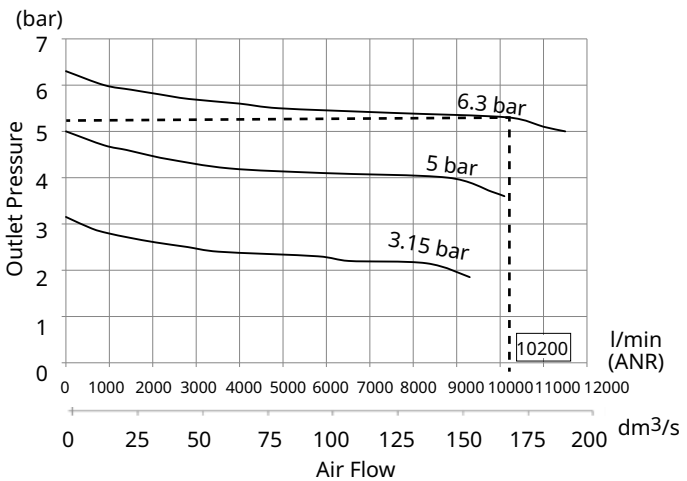
Compact St. steel filter regulator 1/4" NPT Ref : 342A820B
Filtration 5 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



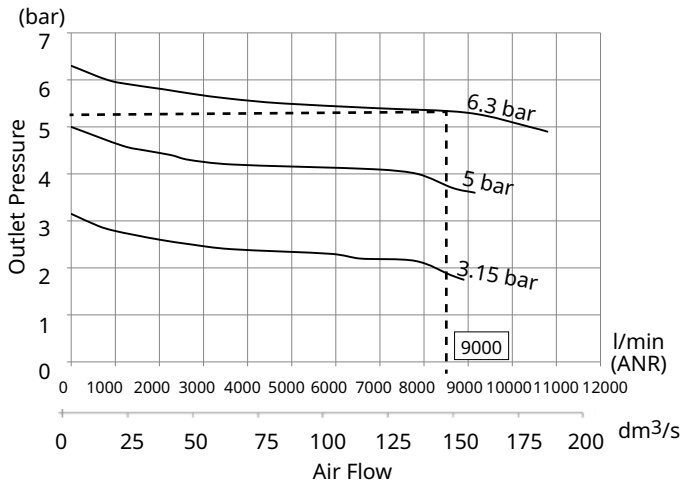
Compact St. steel filter regulator 1/4" NPT Ref. : 342A8209
Filtration 25 µm with P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



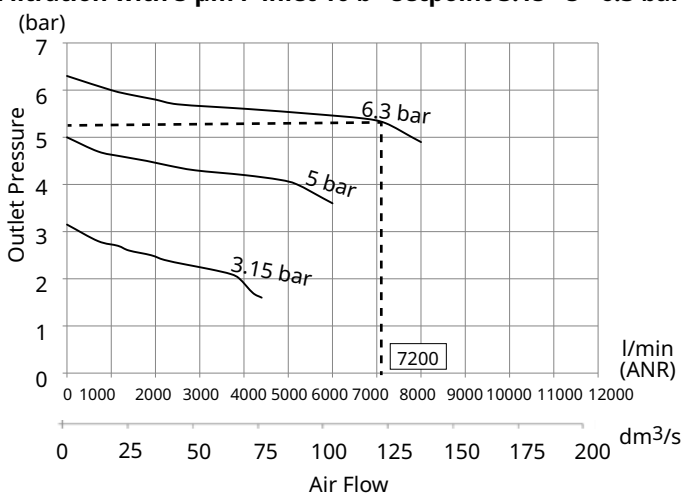
St.steel filter regulator 1 NPT Ref: 342B820K
Filtration with 40 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



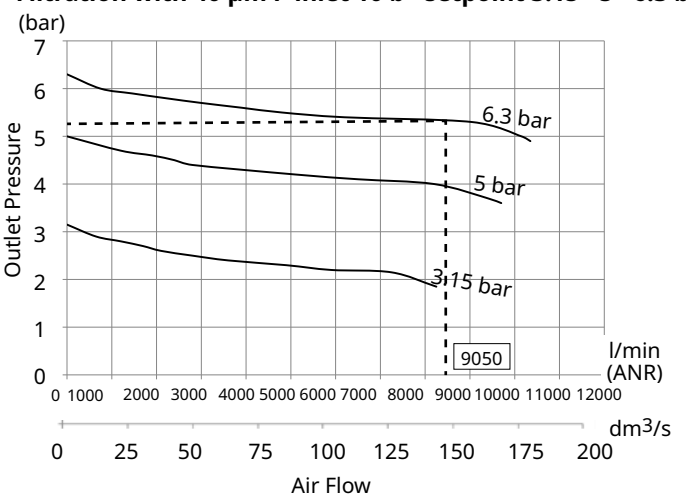
St.steel filter regulator 1 NPT Ref: 342B820F
Filtration with 25 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar



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

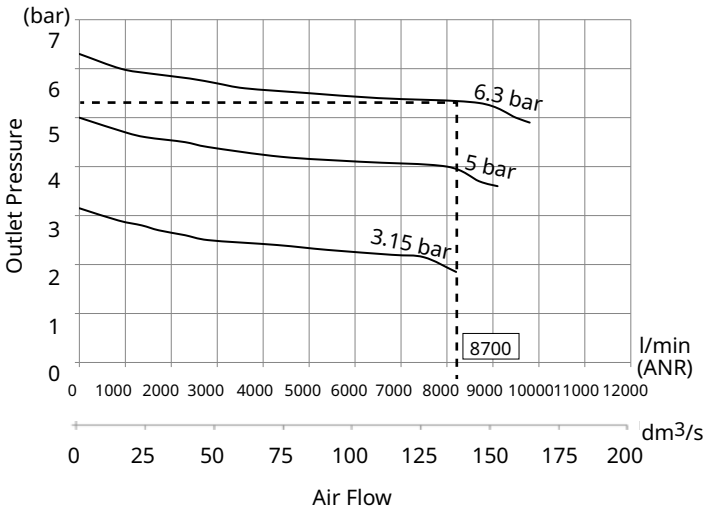


HighSt.steel filter regulator 3/4 NPT Ref: 342B820H
Filtration with 40 µm P inlet 10 b - setpoint 3.15 - 5 - 6.3 bar

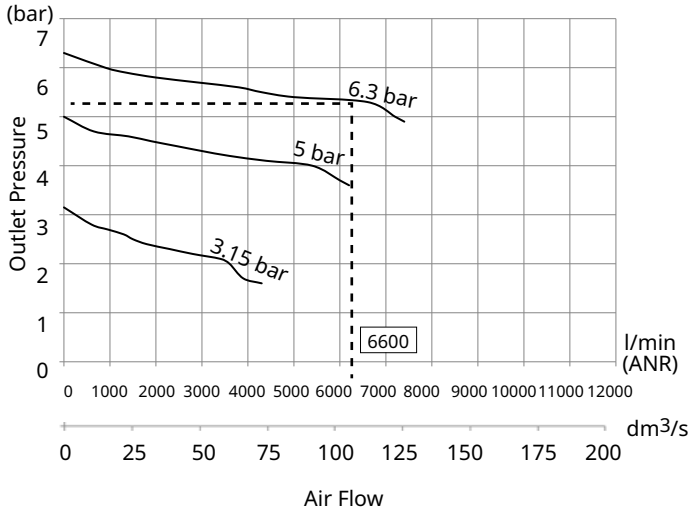


Pressure Drop Vs. Air Flow Curves

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



2026-06-04 - Availability, design and specifications are subject to change without notice.
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