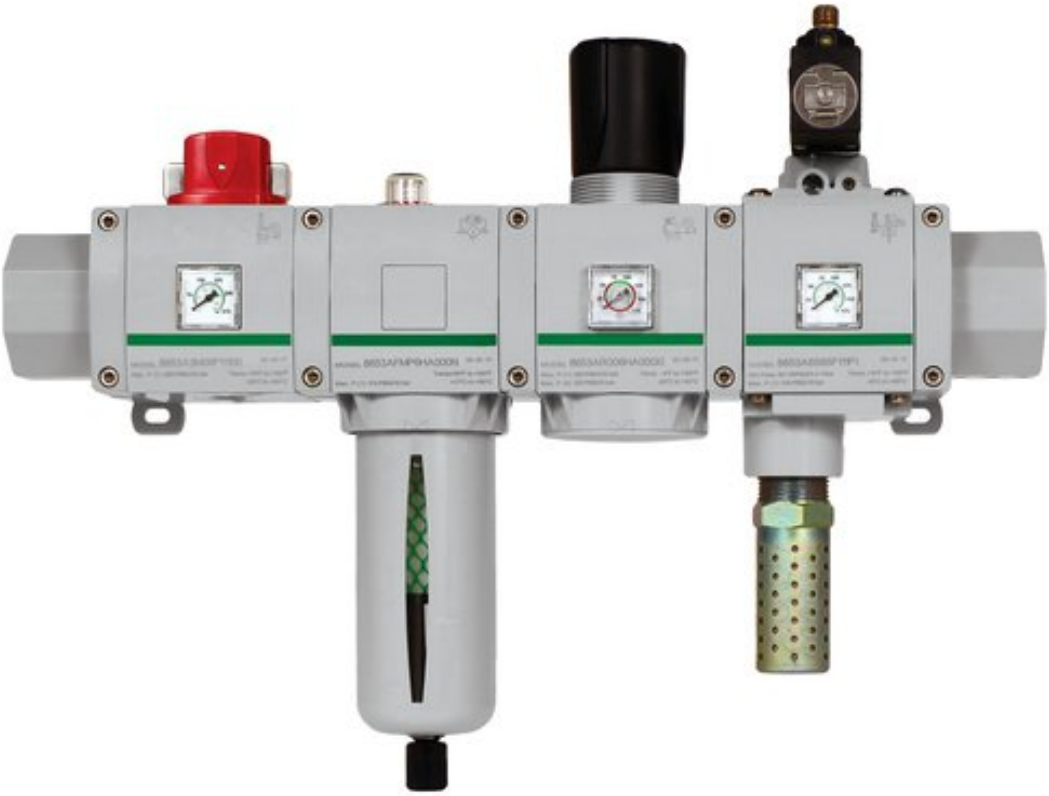
Series 653

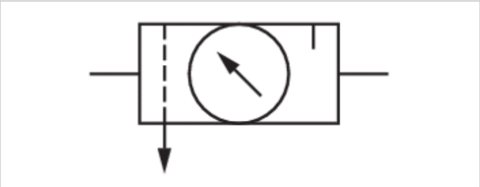


AVENTICS™ Series 653

EMERSON.

Air preparation unit, 2-part, Series 653

- G 3/4 G 1
- filter porosity 25 µm
- With integrated pressure gauge



Brand	ASCO Numatics
Version	2-part, Can be assembled into blocks
Parts	Filter pressure regulator, Lubricator
Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	5 ... 50 °C
Medium temperature min./max.	5 ... 50 °C
Adjustment range min./max.	0.5 ... 10 bar
Condensate drain	semi-automatic, open without pressure

The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Port	filter porosity	Condensate drain
A653A0000000600	G 3/4	25 µm	semi-automatic, open without pressure
A653A0000000601	G 1	25 µm	semi-automatic, open without pressure

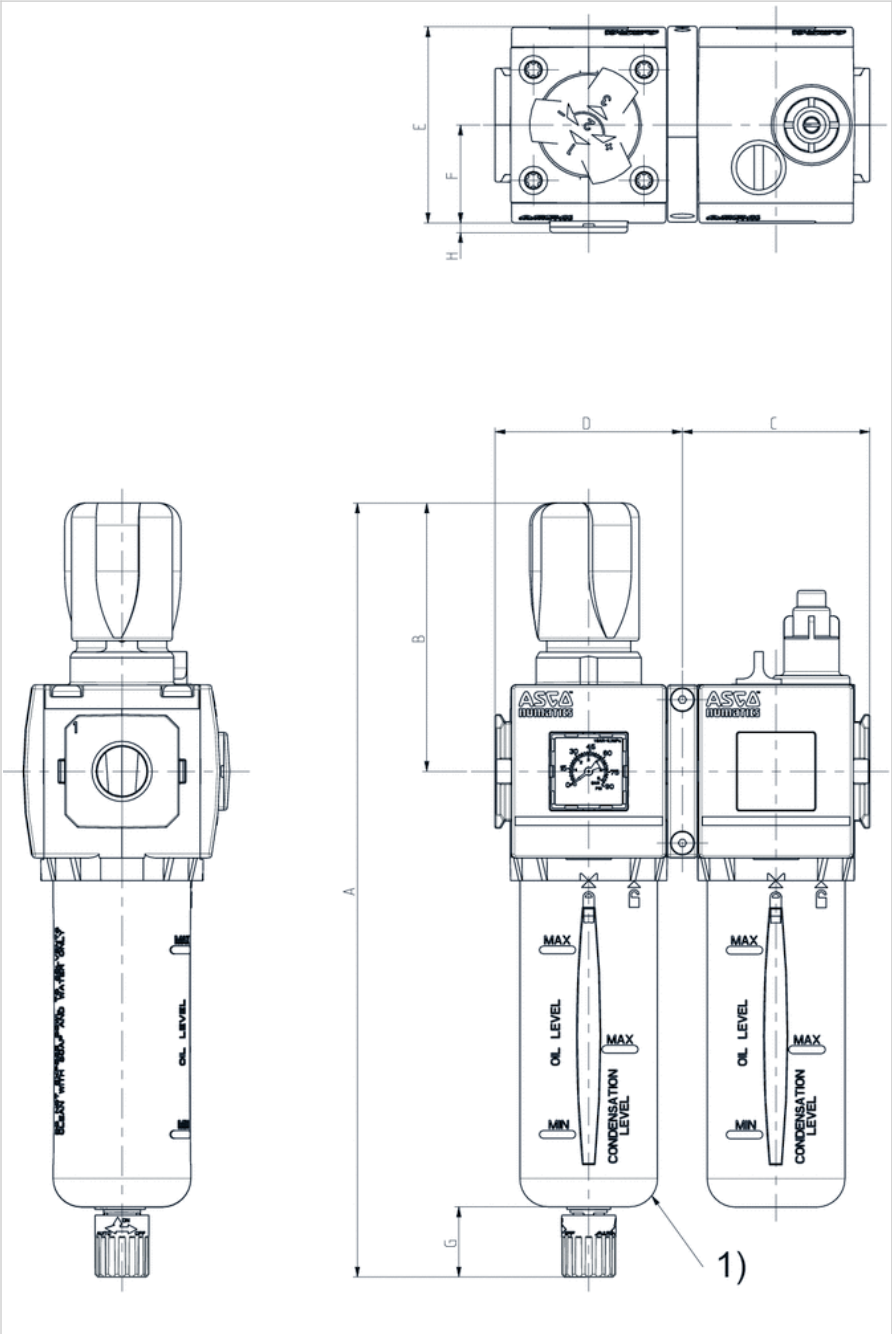
Part No.	Pressure gauge
A653A0000000600	With integrated pressure gauge
A653A0000000601	With integrated pressure gauge

Technical information

Material	
Housing	Aluminum
Seals	Nitrile butadiene rubber
Reservoir	Polycarbonate
Condensate drain	Plastic

Dimensions

Dimensions



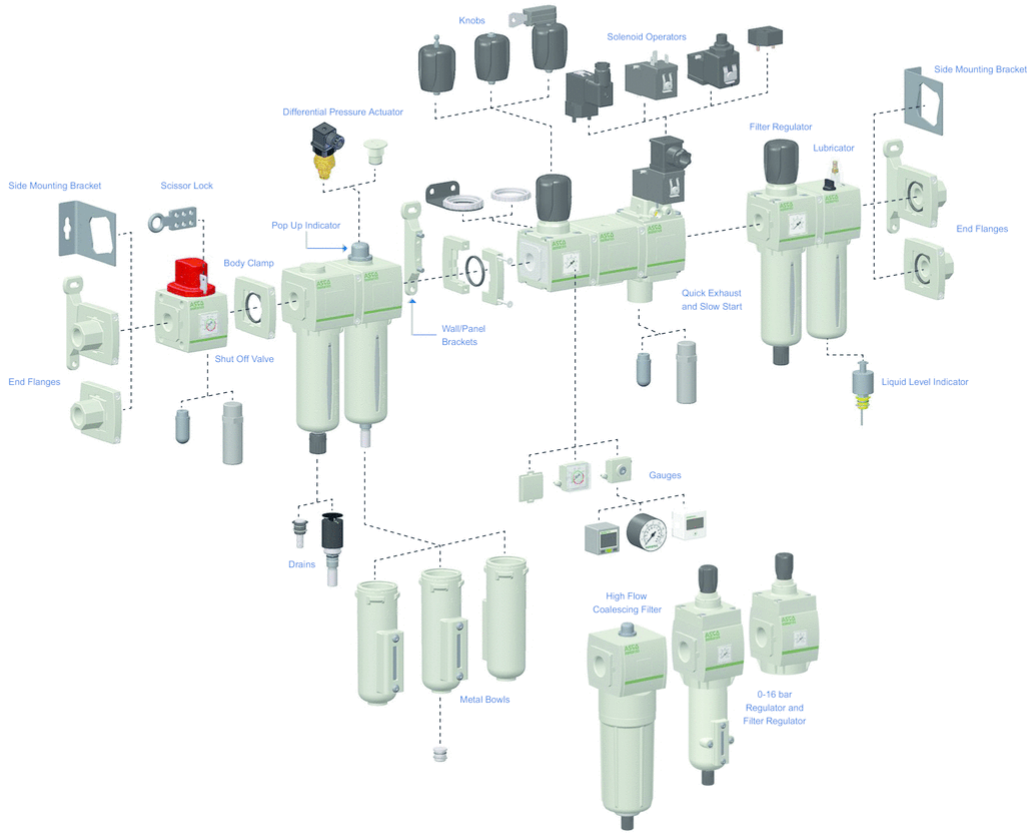
1) To remove the reservoir, allow a clearance of 105 mm from the bottom of the reservoir drain.

Dimensions

Series	A	B	C	D	E	F	G	H
653	340,2	117,5	90	90	93,6	46,8	25	2,7

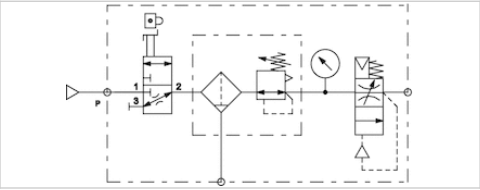
Accessories overview

Accessories overview



Air preparation unit, 3-part, Series 653

- G 3/4 G 1
- filter porosity 25 µm
- With integrated pressure gauge



Brand	ASCO Numatics
Version	3-part, Can be assembled into blocks
Parts	Shut-off valve, Filter pressure regulator, Filling valve
Working pressure min./max.	3.8 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Adjustment range min./max.	0.5 ... 10 bar
Condensate drain	semi-automatic, open without pressure

Technical data

Part No.	Port	filter porosity	Condensate drain
A653A0000000702	G 3/4	25 µm	semi-automatic, open without pressure
A653A0000000703	G 1	25 µm	semi-automatic, open without pressure

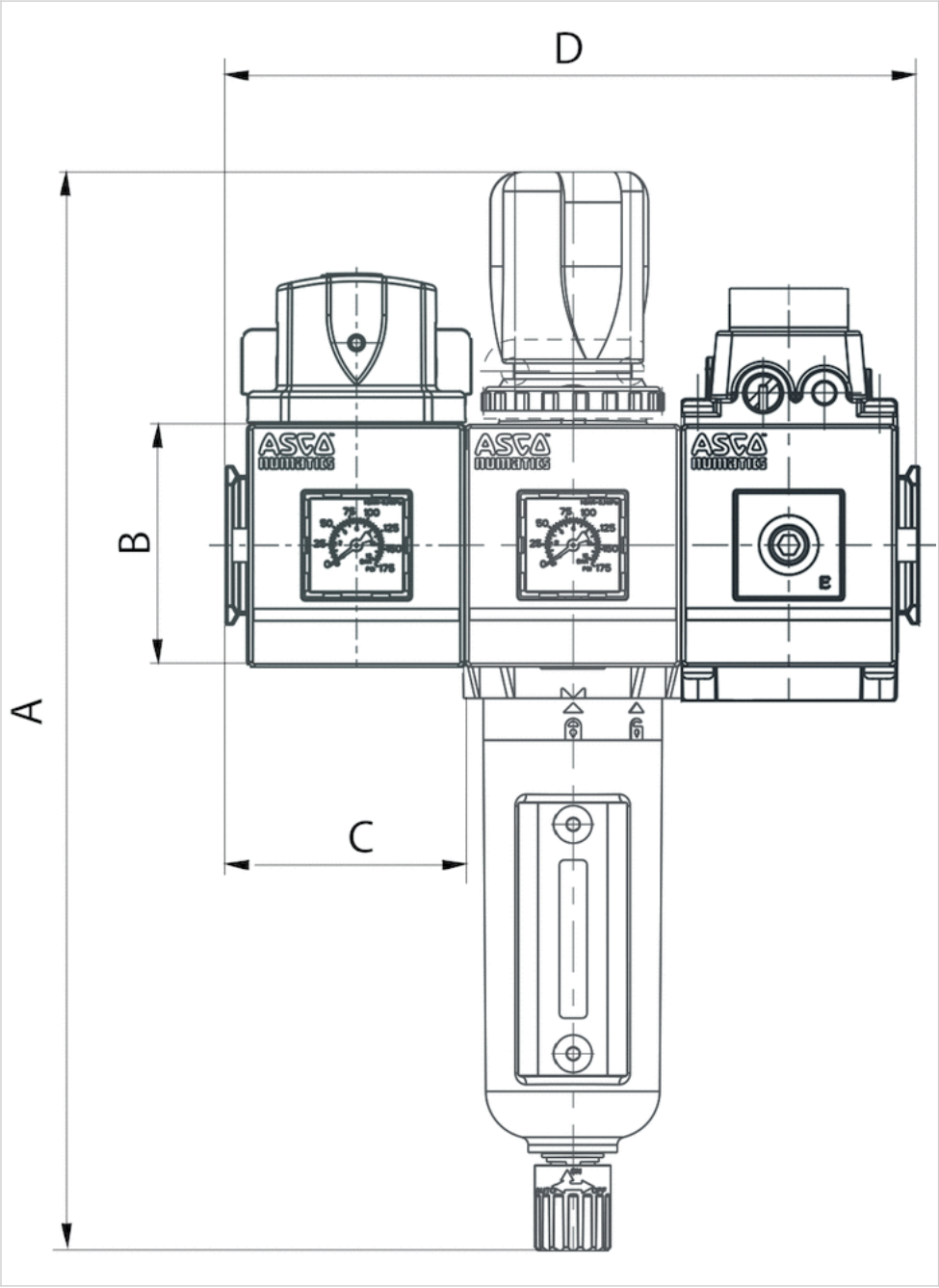
Part No.	Pressure gauge
A653A0000000702	With integrated pressure gauge
A653A0000000703	With integrated pressure gauge

Technical information

Material	
Seals	Nitrile butadiene rubber
Condensate drain	Plastic

Dimensions

Dimensions

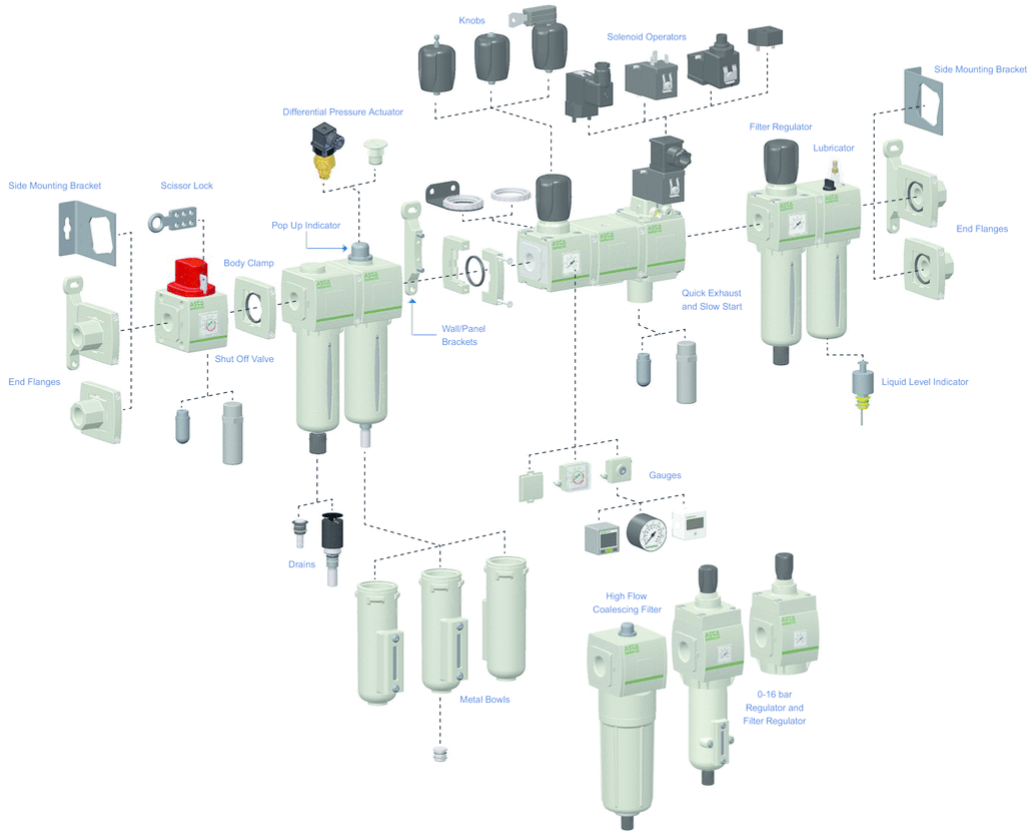


Dimensions

Series	A	B	C	D
653	340,2	93,6	90	270

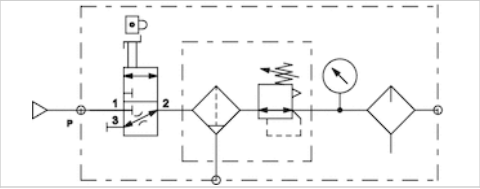
Accessories overview

Accessories overview



Air preparation unit, 3-part, Series 653

- G 3/4 G 1
- filter porosity 25 µm
- With integrated pressure gauge



Brand	ASCO Numatics
Version	3-part, Can be assembled into blocks
Parts	Shut-off valve, Filter pressure regulator, Lubricator
Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	5 ... 50 °C
Medium temperature min./max.	5 ... 50 °C
Medium	Compressed air Neutral gases
Adjustment range min./max.	0.5 ... 10 bar
Condensate drain	semi-automatic, open without pressure

Technical data

Part No.	Port	filter porosity	Condensate drain
A653A0000000698	G 3/4	25 µm	semi-automatic, open without pressure
A653A0000000699	G 1	25 µm	semi-automatic, open without pressure

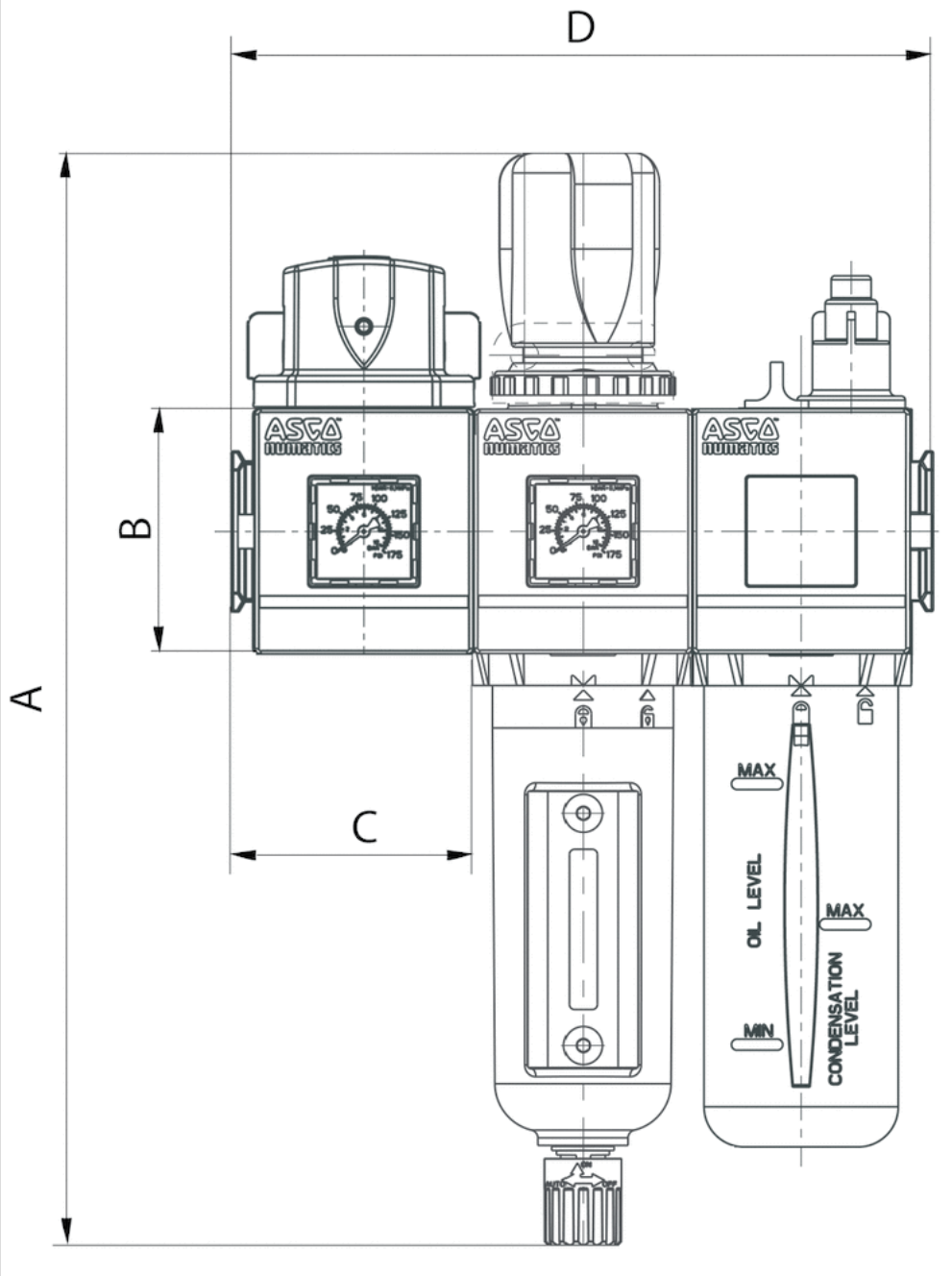
Part No.	Pressure gauge
A653A0000000698	With integrated pressure gauge
A653A0000000699	With integrated pressure gauge

Technical information

Material	
Housing	Aluminum
Seals	Nitrile butadiene rubber
Reservoir	Polycarbonate
Condensate drain	Plastic

Dimensions

Dimensions

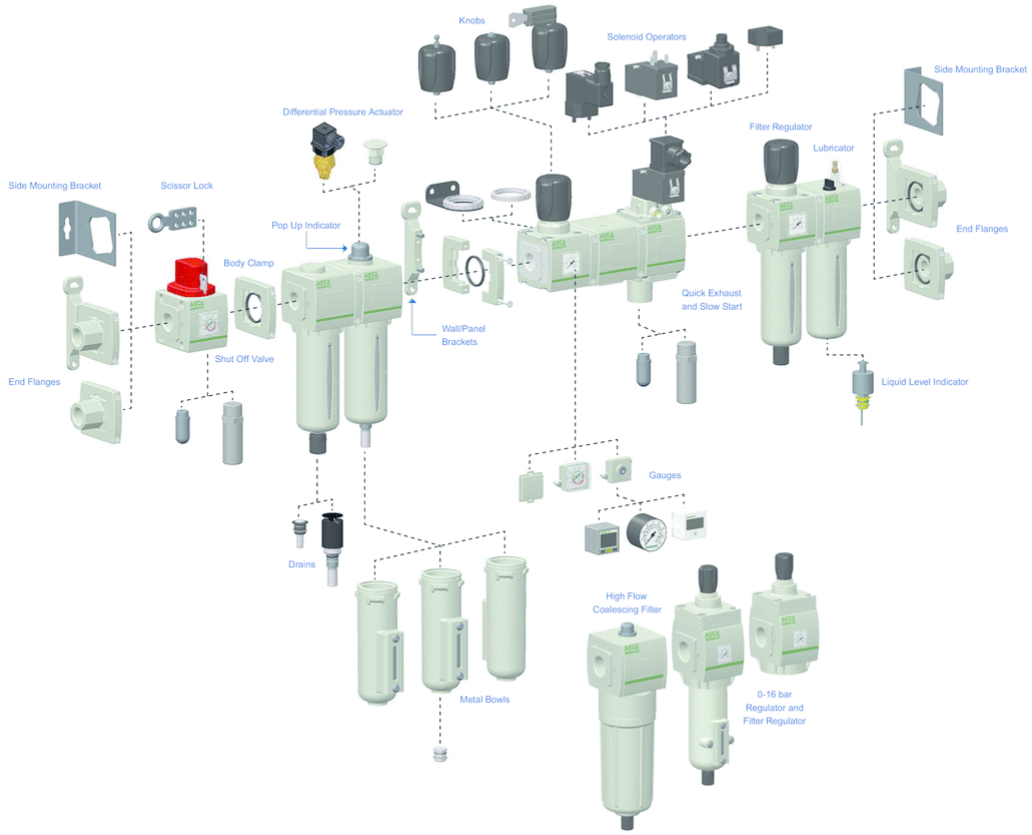


Dimensions

Series	A	B	C	D
653	340,2	93,6	90	270

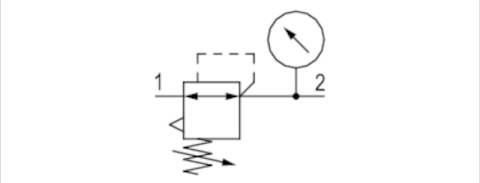
Accessories overview

Accessories overview



Pressure regulator, Series 653

- G 3/4 G 1
- Qn = 10000-11500 l/min



Brand	ASCO Numatics
Parts	Pressure regulator
Working pressure min./max.	0 ... 20 bar
Ambient temperature min./max.	-20 ... 50 °C
Medium temperature min./max.	-20 ... 50 °C Extended temperature range min./max. (optional) -40 °C ... 80 °C
Medium	Compressed air Neutral gases
Regulator type	Can be assembled into blocks
Adjustment range min./max.	See table below
Hysteresis	0.4 bar
Weight	1.1 kg
	The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Port	Flow	Adjustment range min./max.
		Qn	
G653AR005GA00H0	G 3/4	10000 l/min	0.5 ... 10 bar
G653AR005PA00H0	G 3/4	10000 l/min	0.5 ... 10 bar
G653AR005QA00H0	G 3/4	10000 l/min	0.5 ... 10 bar
G653AR005GA00N0	G 3/4	10000 l/min	0.5 ... 16 bar
G653AR006GA00H0	G 1	11500 l/min	0.5 ... 10 bar
G653AR005PA00N0	G 3/4	10000 l/min	0.5 ... 16 bar
G653AR006PA00H0	G 1	11500 l/min	0.5 ... 10 bar
G653AR006GA00N0	G 1	11500 l/min	0.5 ... 16 bar
G653AR006QA00H0	G 1	11500 l/min	0.5 ... 10 bar
G653AR006PA00N0	G 1	11500 l/min	0.5 ... 16 bar

Part No.	Pressure gauge
G653AR005GA00H0	With integrated pressure gauge
G653AR005PA00H0	Transition plate for assembling a pressure gauge with connection thread G 1/8
G653AR005QA00H0	with pressure gauge
G653AR005GA00N0	With integrated pressure gauge
G653AR006GA00H0	With integrated pressure gauge
G653AR005PA00N0	Transition plate for assembling a pressure gauge with connection thread G 1/8
G653AR006PA00H0	Transition plate for assembling a pressure gauge with connection thread G 1/8
G653AR006GA00N0	With integrated pressure gauge
G653AR006QA00H0	with pressure gauge
G653AR006PA00N0	Transition plate for assembling a pressure gauge with connection thread G 1/8

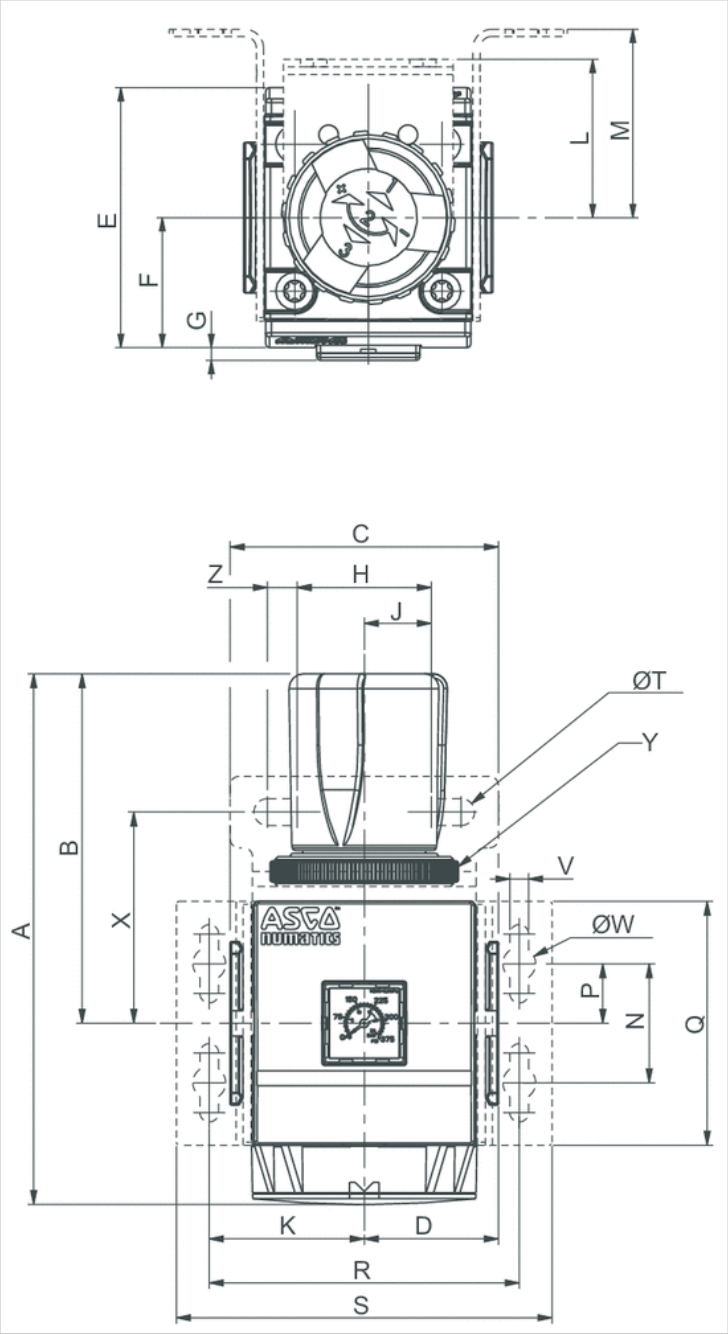
Nominal flow Qn at p1= 10 bar , p2= 6.3 bar and Δp = 1 bar

Technical information

Material	
Housing	Aluminum
Front plate	Polyamide
Seals	Nitrile butadiene rubber

Dimensions

Dimensions

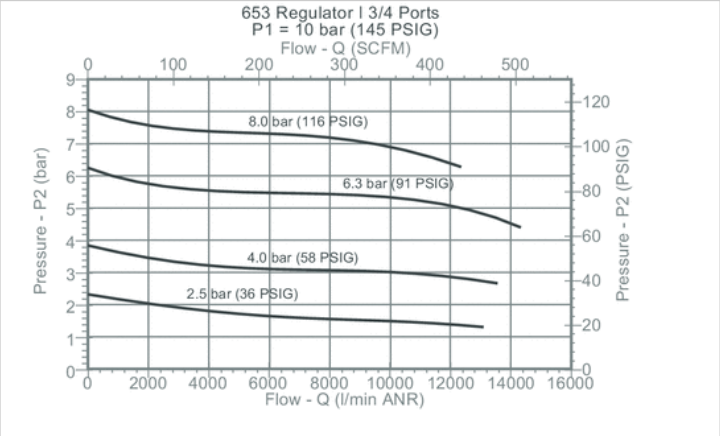


Dimensions

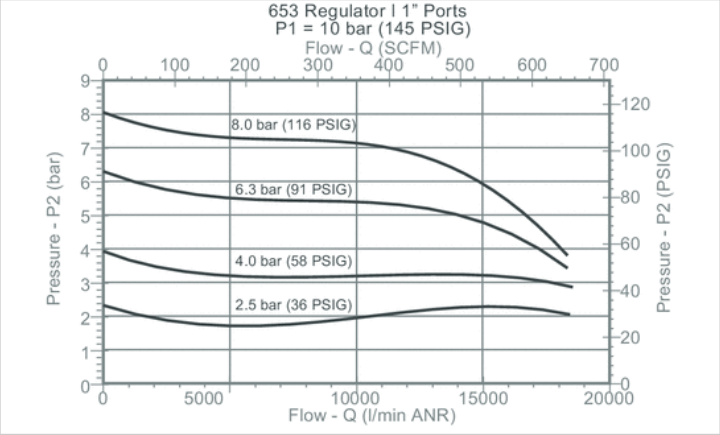
Series	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	V	W	X	Y	Z
653	178,4	117,5	90	45	93	46,5	3	45	22,5	52	60	62	40	20	82	104	126	9	6,3	11	71	M51x2	10

Diagrams

Flow diagram, G 3/4

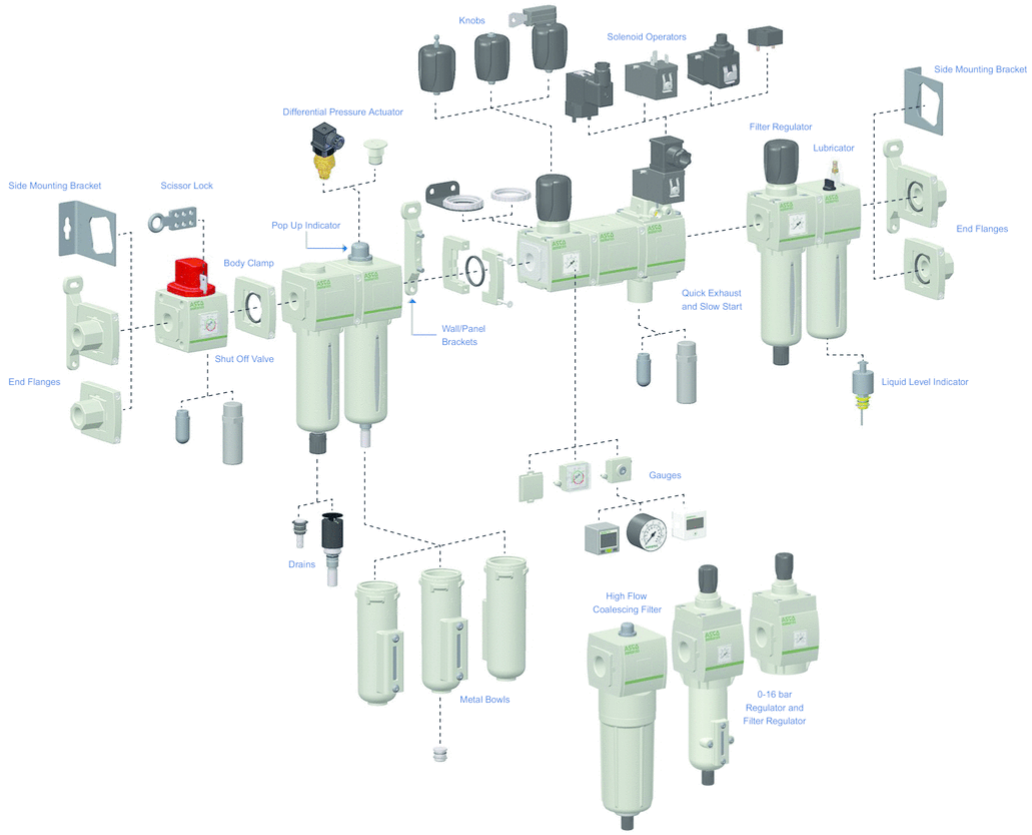


Flow diagram, G 1



Accessories overview

Accessories overview



Ordering information

G 651 A R 0 0 2 G A00 H 0

Thread connection
G = ISO 228/1-G (1)
8 = NPTF

Product series
651
652
653

Revision letter
A

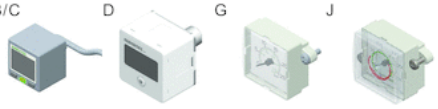
Product type
K = Regulator "Quick Relief Option" (652 only)
R = Regulator (2)
W = Pilot Operated Regulator (652 only)

K/R W

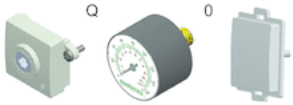
Port size
1 = 1/8 (651 Series)
2 = 1/4 (651 or 652 Series)
3 = 3/8 (652 Series)
4 = 1/2 (652 Series)
5 = 3/4 (653 Series)
6 = 1 (653 Series)

Gauge type
B = Digital pressure switch - PNP
C = Digital pressure switch - NPN
D = Digital gauge
G = Low profile integrated gauge bar/PSI
J = Low profile integrated gauge bar/PSI with pressure range indicators
Q = Round gauge bar/PSI
0 = No gauge port
P = Port Plate Rc 1/8

B/C D G J



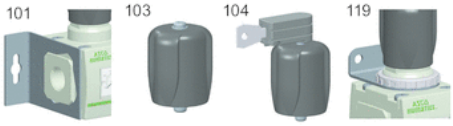
P Q 0



Pressure range
D = 0,2..3 bar
H = 0,5..10 bar
N = 0,5..16 bar (653 only)

Options (3)
A00 = Without option
101 = Side Mounting Brackets
102 = Panel Nut (651 or 652)
103 = Tamper resistant
104 = Key lockable
105 = High temperature (+80°C)
106 = Low temperature (-40°C) (4)
109 = FPM seals
113 = Stainless steel fasteners
114 = Provision for key lock
117 = ATEX zones 1-21
119 = Panel Bracket with Panel Nut (651 or 652)
121 = Non-relieving
122 = Bottom oriented pressure adjustment
123 = Gauge type mounted for right-to-left flow
124 = CUTR Certification (EAC)
125 = CUTR Ex
202 = 105 + 109
2A9 = 105 + 106

101 103 104 119

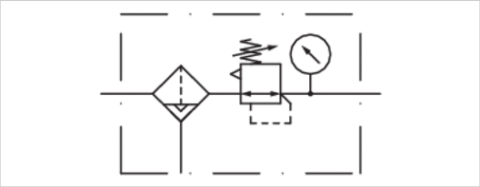


122 123

(1) Conforms to ISO standards 1179-1.
(2) Relieving standard; use option 121 for non-relieving
(3) If multiple options are required, please use the on-line CAD configurator on the website to generate the part number (www.asco.com).
(4) Compressed air must be dry enough so no ice formation is present on the product.

Filter pressure regulator, Series 653

- G 3/4 G 1
- filter porosity 5 25 µm
- With integrated pressure gauge



Brand	ASCO Numatics
Version	1-part, Can be assembled into blocks
Parts	Filter pressure regulator
Working pressure min./max.	See table below
Ambient temperature min./max.	-20 ... 50 °C
Medium temperature min./max.	-20 ... 50 °C Extended temperature range min./max. (optional) -40 °C ... 80 °C
Medium	Compressed air Neutral gases
Adjustment range min./max.	See table below
Hysteresis	0.4 bar
Weight	See table below
	The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Port	filter porosity	Flow	Working pressure min./max.	Adjustment range min./max.
			Qn		
G653APBK5GA00HN	G 3/4	5 µm	8900 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APBK6GA00HN	G 1	5 µm	9000 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APBP6GA00HA	G 1	5 µm	9000 l/min	0 ... 12 bar	0.5 ... 10 bar
G653APJK5GA00HN	G 3/4	25 µm	9000 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APBK5GA00HA	G 3/4	5 µm	8900 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APBP5GA00HA	G 3/4	5 µm	8900 l/min	0 ... 12 bar	0.5 ... 10 bar
G653APJK5GA00HA	G 3/4	25 µm	9000 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APJL6GA00NN	G 1	25 µm	10000 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APBL5GA00HN	G 3/4	5 µm	8900 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APBP5GA00HN	G 3/4	5 µm	8900 l/min	0 ... 12 bar	0.5 ... 10 bar
G653APJK6GA00HN	G 1	25 µm	10000 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APJL5GA00NN	G 3/4	25 µm	9000 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APBL5GA00HA	G 3/4	5 µm	8900 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APBL5GA00NN	G 3/4	5 µm	8900 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APBP6GA00HN	G 1	5 µm	9000 l/min	0 ... 12 bar	0.5 ... 10 bar
G653APJK6GA00HA	G 1	25 µm	10000 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APBK6GA00HA	G 1	5 µm	9000 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APBL6GA00NN	G 1	5 µm	9000 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APJL5GA00HA	G 3/4	25 µm	9000 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APBL6GA00HN	G 1	5 µm	9000 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APJL5GA00HN	G 3/4	25 µm	9000 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APBL6GA00HA	G 1	5 µm	9000 l/min	0 ... 17 bar	0.5 ... 10 bar

Part No.	Port	filter porosity	Flow	Working pressure min./max.	Adjustment range min./max.
			Qn		
G653APJL6GA00HA	G 1	25 µm	10000 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APBK5GA00NN	G 3/4	5 µm	8900 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APJL6GA00HN	G 1	25 µm	10000 l/min	0 ... 20 bar	0.5 ... 10 bar
G653APBK6GA00NN	G 1	5 µm	9000 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APJP5GA00HA	G 3/4	25 µm	9000 l/min	0 ... 17 bar	0.5 ... 10 bar
G653APJK5GA00NN	G 3/4	25 µm	9000 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APJP5GA00HN	G 3/4	25 µm	9000 l/min	0 ... 12 bar	0.5 ... 10 bar
G653APJK6GA00NN	G 1	25 µm	10000 l/min	0 ... 20 bar	0.5 ... 16 bar
G653APJP6GA00HA	G 1	25 µm	10000 l/min	0 ... 12 bar	0.5 ... 10 bar
G653APJP6GA00HN	G 1	25 µm	10000 l/min	0 ... 12 bar	0.5 ... 10 bar

Part No.	Condensate drain
G653APBK5GA00HN	semi-automatic, open without pressure
G653APBK6GA00HN	semi-automatic, open without pressure
G653APBP6GA00HA	fully automatic, open without pressure
G653APJK5GA00HN	semi-automatic, open without pressure
G653APBK5GA00HA	fully automatic, open without pressure
G653APBP5GA00HA	fully automatic, open without pressure
G653APJK5GA00HA	fully automatic, open without pressure
G653APJL6GA00NN	semi-automatic, open without pressure
G653APBL5GA00HN	semi-automatic, open without pressure
G653APBP5GA00HN	semi-automatic, open without pressure
G653APJK6GA00HN	semi-automatic, open without pressure
G653APJL5GA00NN	semi-automatic, open without pressure
G653APBL5GA00HA	fully automatic, open without pressure
G653APBL5GA00NN	semi-automatic, open without pressure
G653APBP6GA00HN	semi-automatic, open without pressure
G653APJK6GA00HA	fully automatic, open without pressure
G653APBK6GA00HA	fully automatic, open without pressure
G653APBL6GA00NN	semi-automatic, open without pressure
G653APJL5GA00HA	fully automatic, open without pressure
G653APBL6GA00HN	semi-automatic, open without pressure
G653APJL5GA00HN	semi-automatic, open without pressure
G653APBL6GA00HA	fully automatic, open without pressure
G653APJL6GA00HA	fully automatic, open without pressure
G653APBK5GA00NN	semi-automatic, open without pressure
G653APJL6GA00HN	semi-automatic, open without pressure
G653APBK6GA00NN	semi-automatic, open without pressure
G653APJP5GA00HA	fully automatic, open without pressure
G653APJK5GA00NN	semi-automatic, open without pressure
G653APJP5GA00HN	semi-automatic, open without pressure
G653APJK6GA00NN	semi-automatic, open without pressure
G653APJP6GA00HA	fully automatic, open without pressure
G653APJP6GA00HN	semi-automatic, open without pressure

Part No.	Pressure gauge	Reservoir
G653APBK5GA00HN	With integrated pressure gauge	Aluminum

Part No.	Pressure gauge	Reservoir
G653APBK6GA00HN	With integrated pressure gauge	Aluminum
G653APBP6GA00HA	With integrated pressure gauge	-
G653APJK5GA00HN	With integrated pressure gauge	Aluminum
G653APBK5GA00HA	With integrated pressure gauge	Aluminum
G653APBP5GA00HA	With integrated pressure gauge	-
G653APJK5GA00HA	With integrated pressure gauge	Aluminum
G653APJL6GA00NN	With integrated pressure gauge	-
G653APBL5GA00HN	With integrated pressure gauge	-
G653APBP5GA00HN	With integrated pressure gauge	-
G653APJK6GA00HN	With integrated pressure gauge	Aluminum
G653APJL5GA00NN	With integrated pressure gauge	-
G653APBL5GA00HA	With integrated pressure gauge	-
G653APBL5GA00NN	With integrated pressure gauge	-
G653APBP6GA00HN	With integrated pressure gauge	-
G653APJK6GA00HA	With integrated pressure gauge	Aluminum
G653APBK6GA00HA	With integrated pressure gauge	Aluminum
G653APBL6GA00NN	With integrated pressure gauge	-
G653APJL5GA00HA	With integrated pressure gauge	-
G653APBL6GA00HN	With integrated pressure gauge	-
G653APJL5GA00HN	With integrated pressure gauge	-
G653APBL6GA00HA	With integrated pressure gauge	-
G653APJL6GA00HA	With integrated pressure gauge	-
G653APBK5GA00NN	With integrated pressure gauge	Aluminum
G653APJL6GA00HN	With integrated pressure gauge	-
G653APBK6GA00NN	With integrated pressure gauge	Aluminum
G653APJP5GA00HA	With integrated pressure gauge	-
G653APJK5GA00NN	With integrated pressure gauge	Aluminum
G653APJP5GA00HN	With integrated pressure gauge	-
G653APJK6GA00NN	With integrated pressure gauge	Aluminum
G653APJP6GA00HA	With integrated pressure gauge	-
G653APJP6GA00HN	With integrated pressure gauge	-

Part No.	Material Reservoir	Material Condensate drain	Weight
G653APBK5GA00HN	Metal reservoir without window	Plastic	1.56 kg
G653APBK6GA00HN	Metal reservoir without window	Plastic	1.56 kg
G653APBP6GA00HA	Reservoir polycarbonate	Brass	1.31 kg
G653APJK5GA00HN	Metal reservoir without window	Plastic	1.56 kg
G653APBK5GA00HA	Metal reservoir without window	Brass	1.56 kg
G653APBP5GA00HA	Reservoir polycarbonate	Brass	1.31 kg
G653APJK5GA00HA	Metal reservoir without window	Brass	1.56 kg
G653APJL6GA00NN	reservoir, metal, with inspection glass	Plastic	1.56 kg
G653APBL5GA00HN	reservoir, metal, with inspection glass	Plastic	1.56 kg
G653APBP5GA00HN	Reservoir polycarbonate	Plastic	1.31 kg
G653APJK6GA00HN	Metal reservoir without window	Plastic	1.56 kg
G653APJL5GA00NN	reservoir, metal, with inspection glass	Plastic	1.56 kg
G653APBL5GA00HA	reservoir, metal, with inspection glass	Brass	1.56 kg
G653APBL5GA00NN	reservoir, metal, with inspection glass	Plastic	1.56 kg

Part No.	Material Reservoir	Material Condensate drain	Weight
G653APBP6GA00HN	Reservoir polycarbonate	Plastic	1.31 kg
G653APJK6GA00HA	Metal reservoir without window	Brass	1.56 kg
G653APBK6GA00HA	Metal reservoir without window	Brass	1.56 kg
G653APBL6GA00NN	reservoir, metal, with inspection glass	Plastic	1.56 kg
G653APJL5GA00HA	reservoir, metal, with inspection glass	Brass	1.56 kg
G653APBL6GA00HN	reservoir, metal, with inspection glass	Plastic	1.56 kg
G653APJL5GA00HN	reservoir, metal, with inspection glass	Plastic	1.56 kg
G653APBL6GA00HA	reservoir, metal, with inspection glass	Brass	1.56 kg
G653APJL6GA00HA	reservoir, metal, with inspection glass	Brass	1.56 kg
G653APBK5GA00NN	Metal reservoir without window	Plastic	1.56 kg
G653APJL6GA00HN	reservoir, metal, with inspection glass	Plastic	1.56 kg
G653APBK6GA00NN	Metal reservoir without window	Plastic	1.56 kg
G653APJP5GA00HA	Reservoir polycarbonate	Brass	1.31 kg
G653APJK5GA00NN	Metal reservoir without window	Plastic	1.56 kg
G653APJP5GA00HN	Reservoir polycarbonate	Plastic	1.31 kg
G653APJK6GA00NN	Metal reservoir without window	Plastic	1.56 kg
G653APJP6GA00HA	Reservoir polycarbonate	Brass	1.31 kg
G653APJP6GA00HN	Reservoir polycarbonate	Plastic	1.31 kg

Nominal flow Qn at p1= 10 bar , p2= 6.3 bar and Δp = 1 bar

Technical information

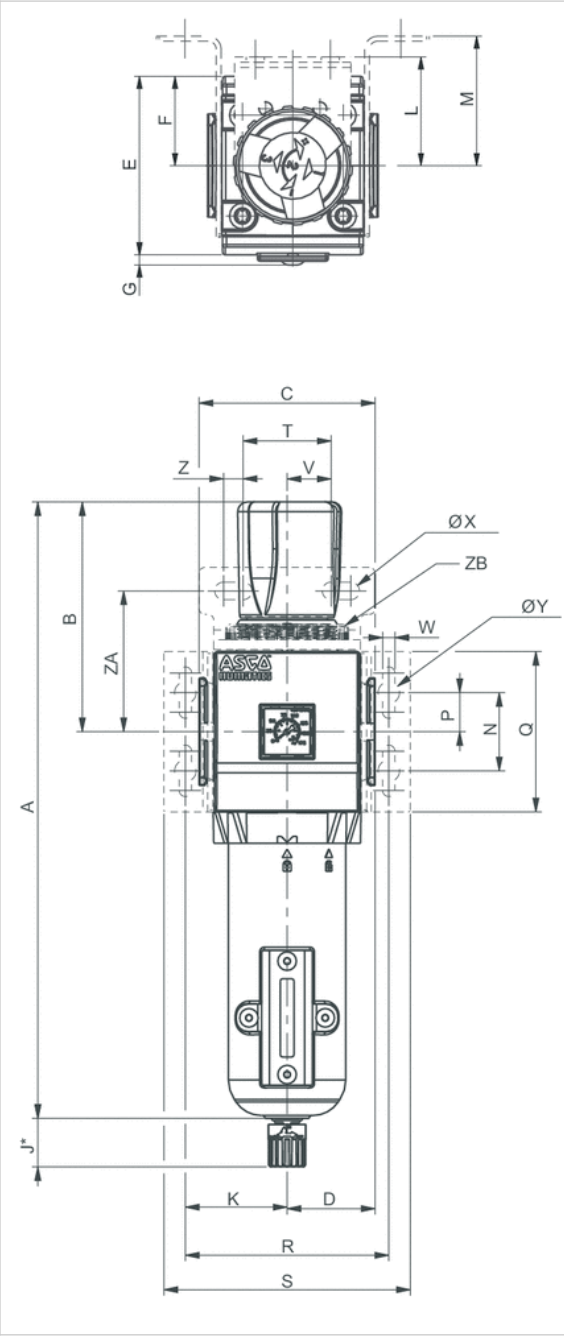
Max. achievable compressed air class acc. to ISO 8573-1:2010 5 : 8 : 4 (5 µm filter porosity) und 6 : 8 : 4 (25µm filter porosity)
Other filter porosities on request.

Technical information

Material	
Housing	Aluminum
Front plate	Polyamide
Seals	Nitrile butadiene rubber
Reservoir	Aluminum
Filter insert	Sintered bronze
Condensate drain	Plastic Brass

Dimensions

Dimensions



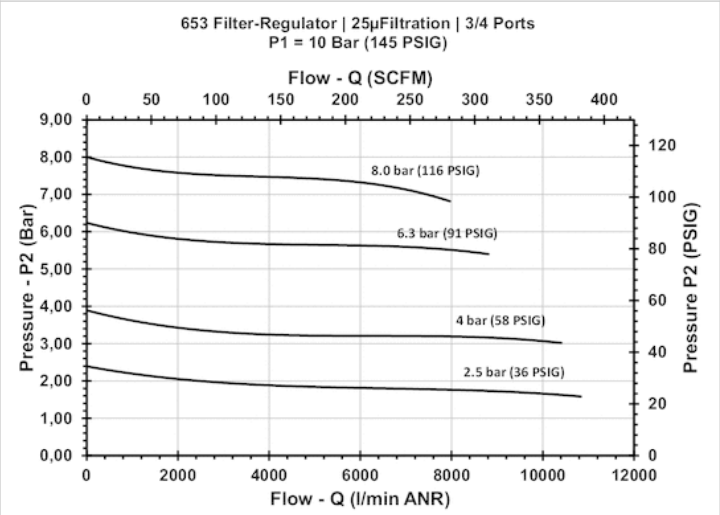
To remove the reservoir, allow a clearance of 105 mm from the bottom of the reservoir drain.
*Variable dimension based on the type of drain specified, if an automatic drain is specified, add another 5 mm to the “J” dimension.

Dimensions

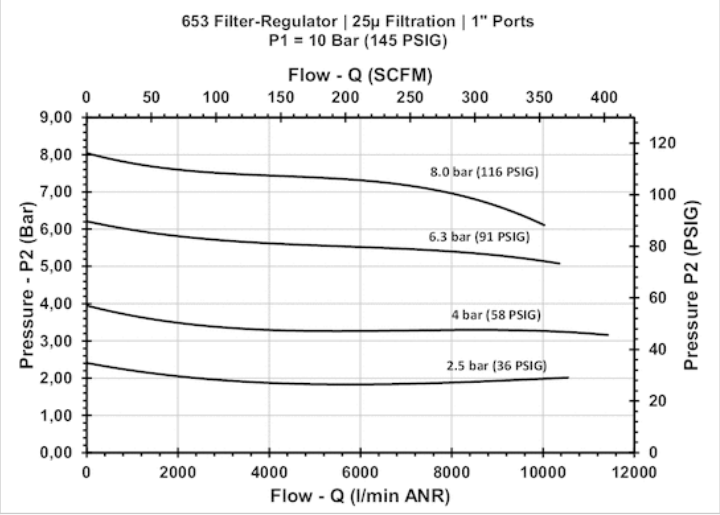
Series	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	V	W	X	Y
653	329,5	132	90	45	93,6	46,2	2,7	158,9	25	41,75	42	50	20	10	61,5	84	105,5	29	14,5	6,3	7	11

Diagrams

Flow diagram, G 3/4

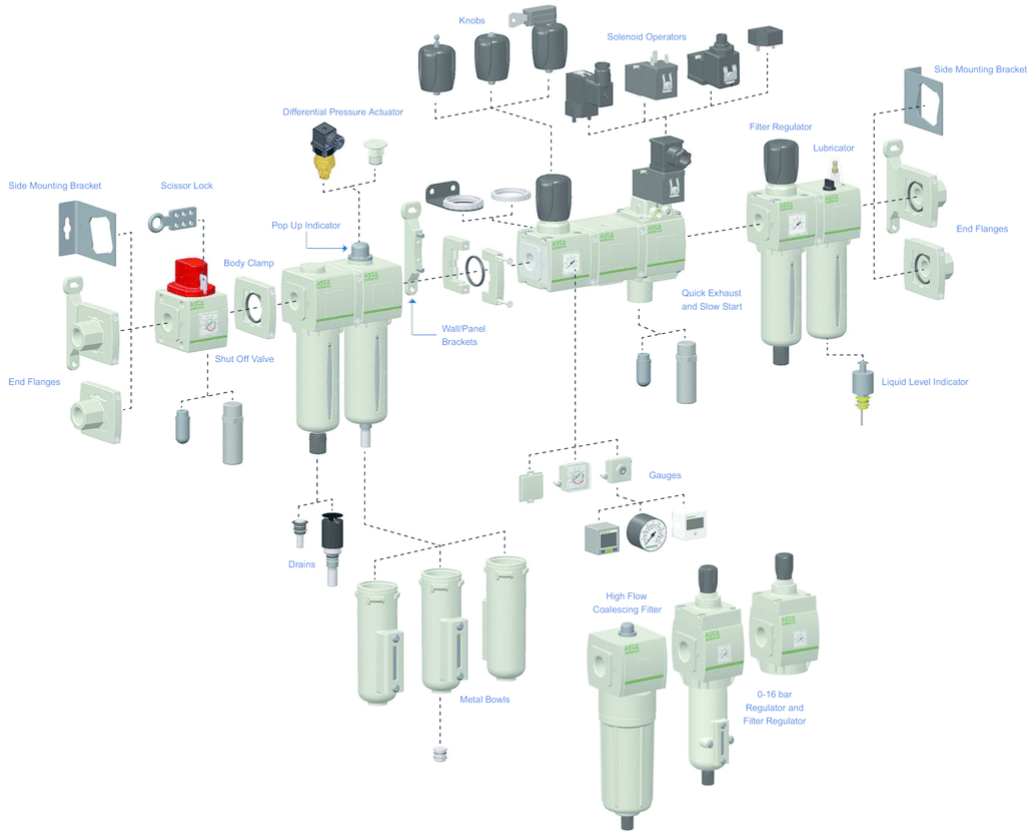


Flow diagram, G 1



Accessories overview

Accessories overview



Ordering information

G 651 A P B P 2 G A00 H N

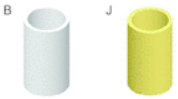
Thread connection
G = ISO 228/1-G [1]
8 = NPTF

Product series
651
652
653

Revision letter
A

Product type
P = Filter/Regulator - Particulate

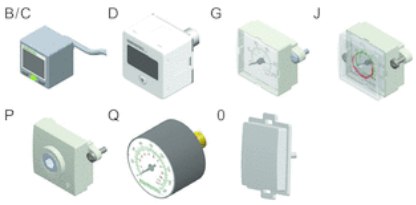
Elements
B = 5 µm (White)
J = 25 µm (Yellow)



Bowl type
K = Metal bowl without sight gauge
L = Metal bowl with sight gauge (glass)
P = Polycarbonate bowl with bowl guard

Port size
1 = 1/8 (651 Series)
2 = 1/4 (651 or 652 Series)
3 = 3/8 (652 Series)
4 = 1/2 (652 Series)
5 = 3/4 (653 Series)
6 = 1 (653 Series)

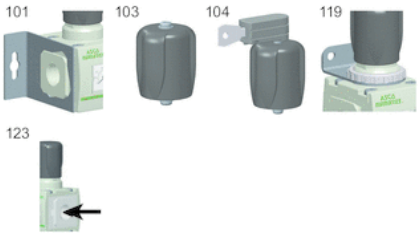
Gauge type
B = Digital pressure switch - PNP
C = Digital pressure switch - NPN
D = Digital gauge
G = Low profile integrated gauge bar/PSI
J = Low profile integrated gauge bar/PSI with pressure range indicators
Q = Round gauge bar/PSI
0 = No gauge port
P = Port Plate Rc 1/8



Drain type
0 = Without
A = Auto drain normally open
N = Manual/Semi-automatic drain
Q = Manual drain - Stainless steel

Pressure range
D = 0,2..3 bar
H = 0,5..10 bar
N = 0,5..16 bar (653 only) [2]

Options [3]
A00 = Without option
101 = Side Mounting Brackets
102 = Panel Nut (651 or 652)
103 = Tamper resistant
104 = Key lockable
105 = High temperature (+80°C)
106 = Low temperature (-40°C) [4]
109 = FPM seals
113 = Stainless steel fasteners
114 = Provision for key lock
117 = ATEX zones 1-21
119 = Panel Bracket with Panel Nut (651 or 652)
121 = Non-relieving
123 = Gauge type mounted for right-to-left flow
124 = CUTR Certification (EAC)
125 = CUTR Ex
202 = 105 + 109
2A9 = 105 + 106



[1] Conforms to ISO standards 1179-1.
[2] Metal Bowl Types K or L only.
[3] If multiple options are required, please use the on-line CAD configurator on the website to generate the part number (www.asco.com).
[4] Compressed air must be dry enough so no ice formation is present on the product. All bowls should be emptied prior to ambient temperatures dropping below 0°C.

Filter, Series 653

- G 3/4 G 1
- filter porosity 5 25 µm

Brand	ASCO Numatics
Version	Can be assembled into blocks
Parts	Filter
Working pressure min./max.	See table below
Ambient temperature min./max.	-20 ... 50 °C
Medium temperature min./max.	-20 ... 50 °C Extended temperature range min./max. (optional) -40 °C ... 80 °C
Medium	Compressed air Neutral gases
Condensate drain	See table below
Weight	See table below
	The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Port	filter porosity	Flow Qn	Working pressure min./max.
G653ABBK5JA000A	G 3/4	5 µm	4000 l/min	0 ... 20 bar
G653ABBP5JA000N	G 3/4	5 µm	4700 l/min	0 ... 12 bar
G653ABJK5JA000N	G 3/4	25 µm	4700 l/min	0 ... 20 bar
G653ABBK5JA000N	G 3/4	5 µm	4000 l/min	0 ... 20 bar
G653ABBL5JA000A	G 3/4	5 µm	4000 l/min	0 ... 20 bar
G653ABJK5JA000A	G 3/4	25 µm	4700 l/min	0 ... 20 bar
G653ABBK6JA000A	G 1	5 µm	4250 l/min	0 ... 20 bar
G653ABBP6JA000N	G 1	5 µm	4250 l/min	0 ... 12 bar
G653ABJL5JA000A	G 3/4	25 µm	4700 l/min	0 ... 20 bar
G653ABBK6JA000N	G 1	5 µm	4250 l/min	0 ... 20 bar
G653ABBL5JA000N	G 3/4	5 µm	4000 l/min	0 ... 20 bar
G653ABJK6JA000N	G 1	25 µm	5000 l/min	0 ... 20 bar
G653ABBL6JA000N	G 1	5 µm	4250 l/min	0 ... 20 bar
G653ABBP5JA000A	G 3/4	5 µm	4000 l/min	0 ... 12 bar
G653ABJL6JA000A	G 1	25 µm	5000 l/min	0 ... 20 bar
G653ABBL6JA000A	G 1	5 µm	4250 l/min	0 ... 20 bar
G653ABBP6JA000A	G 1	5 µm	4250 l/min	0 ... 12 bar
G653ABJK6JA000A	G 1	25 µm	5000 l/min	0 ... 20 bar
G653ABJL5JA000N	G 3/4	25 µm	4700 l/min	0 ... 20 bar
G653ABJL6JA000N	G 1	25 µm	5000 l/min	0 ... 20 bar
G653ABJP5JA000A	G 3/4	25 µm	4700 l/min	0 ... 12 bar
G653ABJP5JA000N	G 3/4	25 µm	4700 l/min	0 ... 12 bar
G653ABJP6JA000A	G 1	25 µm	5000 l/min	0 ... 12 bar

Part No.	Port	filter porosity	Flow Qn	Working pressure min./max.
G653ABJP6JA000N	G 1	25 µm	5000 l/min	0 ... 12 bar

Part No.	Condensate drain	Material Condensate drain
G653ABBK5JA000A	fully automatic, open without pressure	Brass
G653ABBP5JA000N	semi-automatic, open without pressure	Plastic
G653ABJK5JA000N	semi-automatic, open without pressure	Plastic
G653ABBK5JA000N	semi-automatic, open without pressure	Plastic
G653ABBL5JA000A	fully automatic, open without pressure	Brass
G653ABJK5JA000A	fully automatic, open without pressure	Brass
G653ABBK6JA000A	fully automatic, open without pressure	Brass
G653ABBP6JA000N	semi-automatic, open without pressure	Plastic
G653ABJL5JA000A	fully automatic, open without pressure	Brass
G653ABBK6JA000N	semi-automatic, open without pressure	Plastic
G653ABBL5JA000N	semi-automatic, open without pressure	Plastic
G653ABJK6JA000N	semi-automatic, open without pressure	Plastic
G653ABBL6JA000N	semi-automatic, open without pressure	Plastic
G653ABBP5JA000A	fully automatic, open without pressure	Brass
G653ABJL6JA000A	fully automatic, open without pressure	Brass
G653ABBL6JA000A	fully automatic, open without pressure	Brass
G653ABBP6JA000A	fully automatic, open without pressure	Brass
G653ABJK6JA000A	fully automatic, open without pressure	Brass
G653ABJL5JA000N	semi-automatic, open without pressure	Plastic
G653ABJL6JA000N	semi-automatic, open without pressure	Plastic
G653ABJP5JA000A	fully automatic, open without pressure	Brass
G653ABJP5JA000N	semi-automatic, open without pressure	Plastic
G653ABJP6JA000A	fully automatic, open without pressure	Brass
G653ABJP6JA000N	semi-automatic, open without pressure	Plastic

Part No.	Version	Weight
G653ABBK5JA000A	Metal reservoir without window	1.14 kg
G653ABBP5JA000N	reservoir, PA, with PA protective guard	0.93 kg
G653ABJK5JA000N	Metal reservoir without window	1.14 kg
G653ABBK5JA000N	Metal reservoir without window	1.14 kg
G653ABBL5JA000A	reservoir, metal, with inspection glass	1.14 kg
G653ABJK5JA000A	Metal reservoir without window	1.14 kg
G653ABBK6JA000A	Metal reservoir without window	1.14 kg
G653ABBP6JA000N	reservoir, PA, with PA protective guard	0.93 kg
G653ABJL5JA000A	reservoir, metal, with inspection glass	1.14 kg
G653ABBK6JA000N	Metal reservoir without window	1.14 kg
G653ABBL5JA000N	reservoir, metal, with inspection glass	1.14 kg
G653ABJK6JA000N	Metal reservoir without window	1.14 kg
G653ABBL6JA000N	reservoir, metal, with inspection glass	1.14 kg
G653ABBP5JA000A	reservoir, PA, with PA protective guard	0.93 kg
G653ABJL6JA000A	reservoir, metal, with inspection glass	1.14 kg
G653ABBL6JA000A	reservoir, metal, with inspection glass	1.14 kg
G653ABBP6JA000A	reservoir, PA, with PA protective guard	0.93 kg
G653ABJK6JA000A	Metal reservoir without window	1.14 kg

Part No.	Version	Weight
G653ABJL5JA000N	reservoir, metal, with inspection glass	1.14 kg
G653ABJL6JA000N	reservoir, metal, with inspection glass	1.14 kg
G653ABJP5JA000A	reservoir, PA, with PA protective guard	0.93 kg
G653ABJP5JA000N	reservoir, PA, with PA protective guard	0.93 kg
G653ABJP6JA000A	reservoir, PA, with PA protective guard	0.93 kg
G653ABJP6JA000N	reservoir, PA, with PA protective guard	0.93 kg

Nominal flow Qn at p1= 10 bar , p2= 6.3 bar and Δp = 0.35 bar

Technical information

Other filter porosities on request.

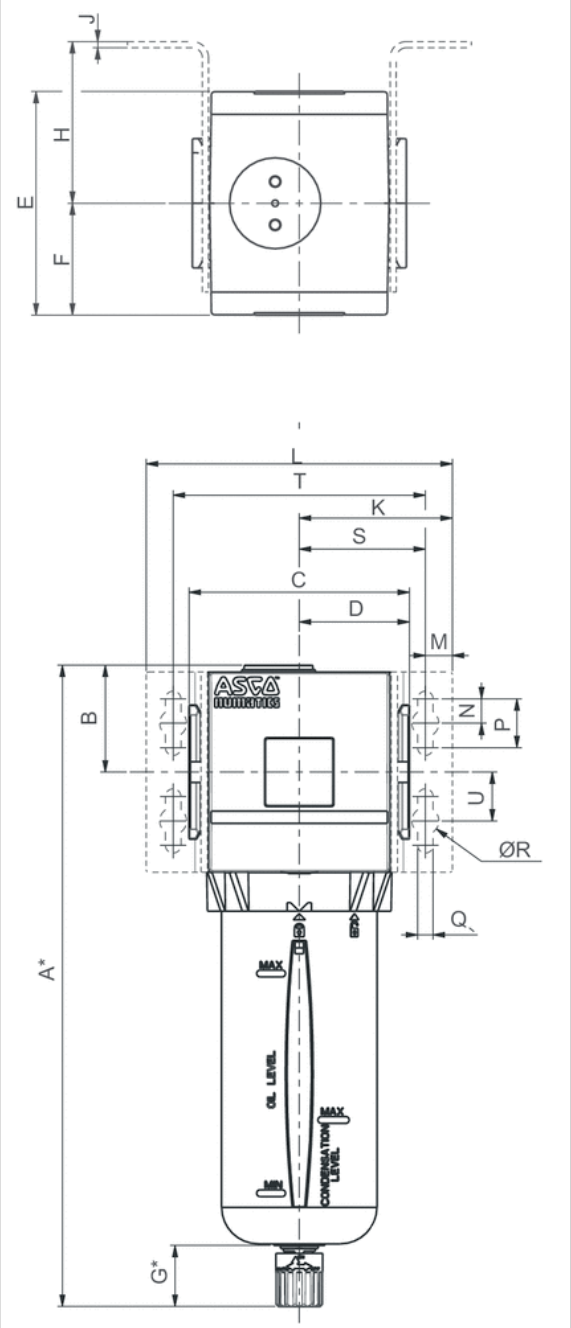
Max. achievable compressed air class acc. to ISO 8573-1:2010 1 : - : 2

Technical information

Material	
Housing	Aluminum
Seals	Nitrile butadiene rubber
Filter insert	Sintered polyethylene
Condensate drain	Brass Plastic

Dimensions

Dimensions



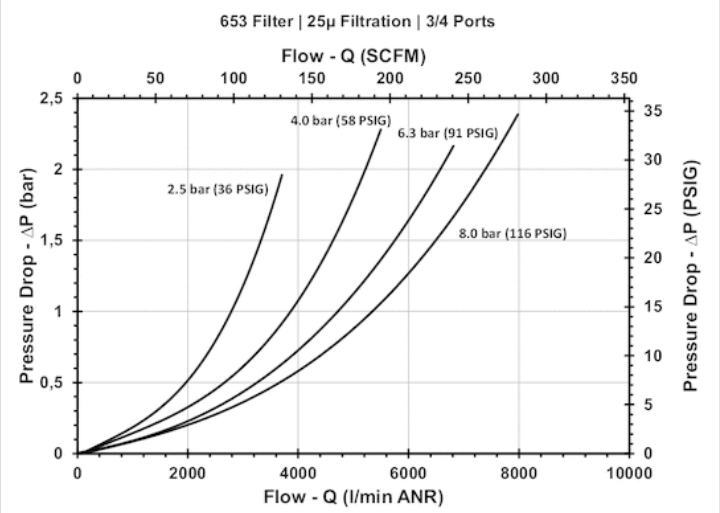
*Variable dimension based on the type of drain specified, if an automatic drain is specified, add another 5 mm to the “G” dimension, which also adds 5 mm to the “A” dimension.

Dimensions

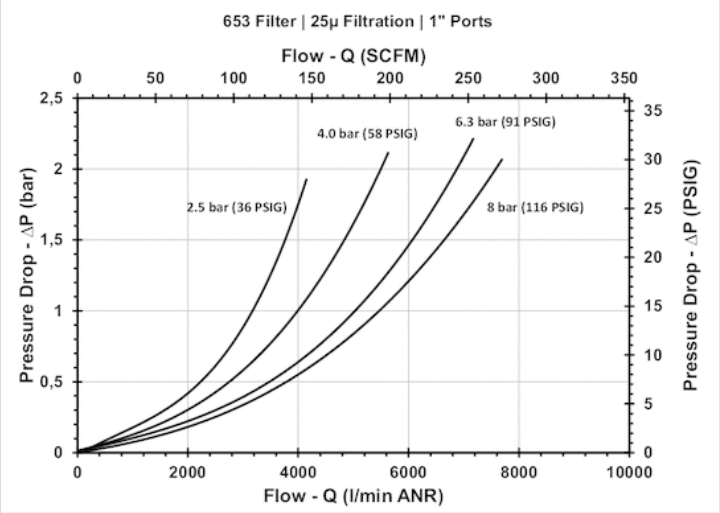
Series	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
653	260,7	43,8	90	45	93,2	46,6	25	62	3	62,5	125	11	10	20	6,3	11	51,5	103	20

Diagrams

Flow diagram, G 3/4

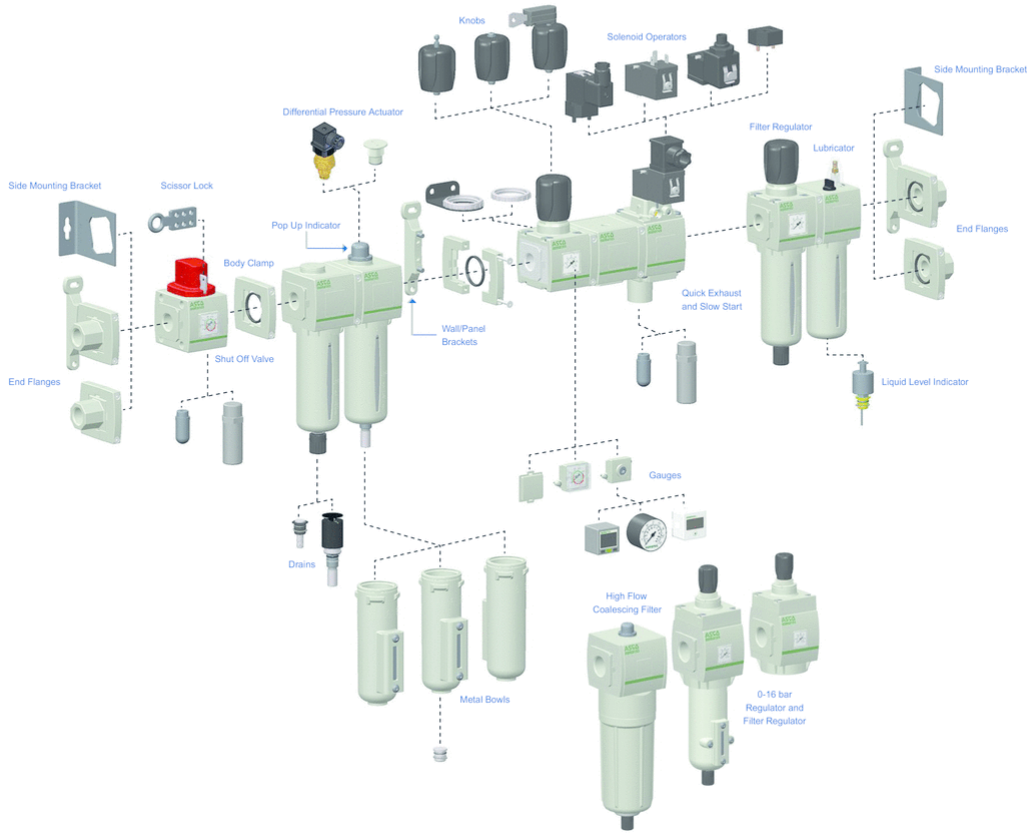


Flow diagram, G 1



Accessories overview

Accessories overview



Ordering information

G 651 A B B P 2 J A00 0 N

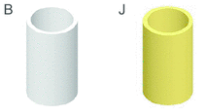
Thread connection
G = ISO 228/1-G (1)
8 = NPTF

Product series
651
652
653

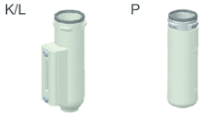
Revision letter
A

Product type
B = Filter - Particulate

Elements
B = 5 µm (White)
J = 25 µm (Yellow)



Bowl type
K = Metal bowl without sight gauge
L = Metal bowl with sight gauge (glass)
P = Polycarbonate bowl with bowl guard



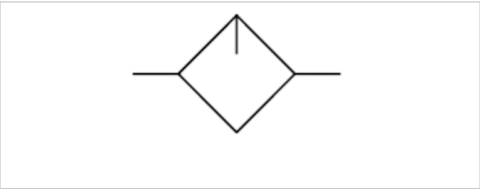
Drain type
0 = Without
A = Auto drain normally open
N = Manual/Semi-automatic drain
Q = Manual drain - Stainless steel

Options (2)
A00 = Without option
101 = Side Mounting Brackets
105 = High temperature (+80°C)
106 = Low temperature (-40°C) (3)
109 = FPM seals
117 = ATEX zones 1-21
124 = CUTR Certification (EAC)
125 = CUTR Ex
202 = 105 + 109
2A9 = 105 + 106

Port size
1 = 1/8 (651 Series)
2 = 1/4 (651 or 652 Series)
3 = 3/8 (652 Series)
4 = 1/2 (652 Series)
5 = 3/4 (653 Series)
6 = 1 (653 Series)

Standard oil-mist lubricator, Series 653

- G 3/4 G 1



Brand	ASCO Numatics
Version	Can be assembled into blocks
Parts	Standard oil-mist lubricator
Working pressure min./max.	See table below
Ambient temperature min./max.	5 ... 50 °C
Medium temperature min./max.	5 ... 50 °C
Medium	Compressed air Neutral gases
Lubricator reservoir volume	200 cm³
Weight	See table below

The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Port	Nominal flow Qn	Working pressure min./max.	Material Reservoir
G653AL0K50A0000	G 3/4	13000 l/min	0 ... 16 bar	Aluminum
G653AL0K60A0000	G 1	13000 l/min	0 ... 16 bar	Aluminum
G653AL0L50A0000	G 3/4	13000 l/min	0 ... 16 bar	Aluminum
G653AL0L60A0000	G 1	13000 l/min	0 ... 16 bar	Aluminum
G653AL0P50A0000	G 3/4	13000 l/min	0 ... 10 bar	Polycarbonate
G653AL0P60A0000	G 1	13000 l/min	0 ... 10 bar	Polycarbonate

Part No.	Reservoir	Weight
G653AL0K50A0000	Metal reservoir without window	1.16 kg
G653AL0K60A0000	Metal reservoir without window	1.16 kg
G653AL0L50A0000	reservoir, metal, with inspection glass	1.16 kg
G653AL0L60A0000	reservoir, metal, with inspection glass	1.16 kg
G653AL0P50A0000	Reservoir polycarbonate	0.93 kg
G653AL0P60A0000	Reservoir polycarbonate	0.93 kg

Nominal flow Qn at 6.3 bar and Δp = 0.8 bar

Technical information

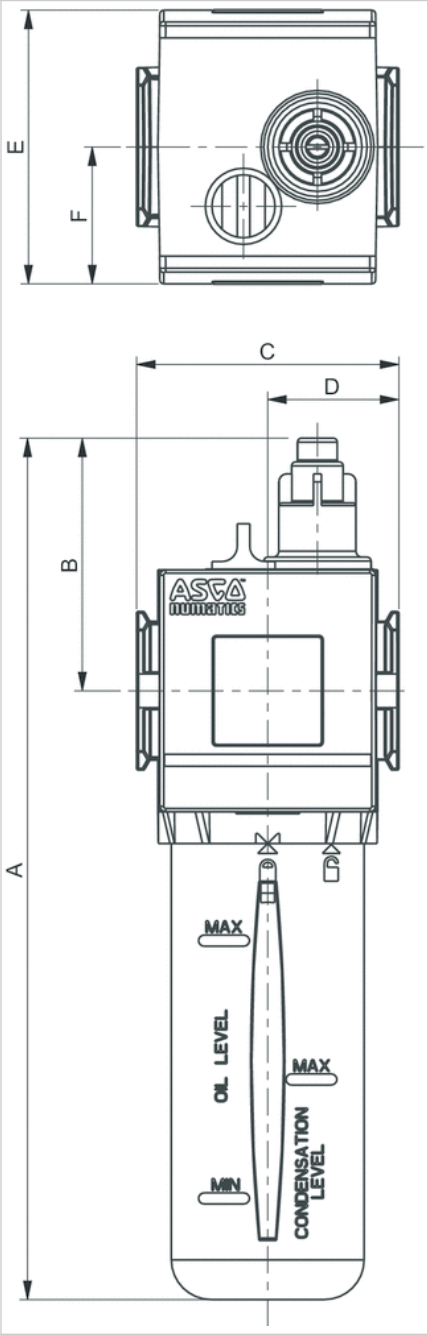
Recommended oil type
Non-detergent type and without aggressive additives (VG32-ISO3448)

Technical information

Material	
Housing	Aluminum
Front plate	Polycarbonate
Seals	Nitrile butadiene rubber
Reservoir	Aluminum Polycarbonate

Dimensions

Dimensions



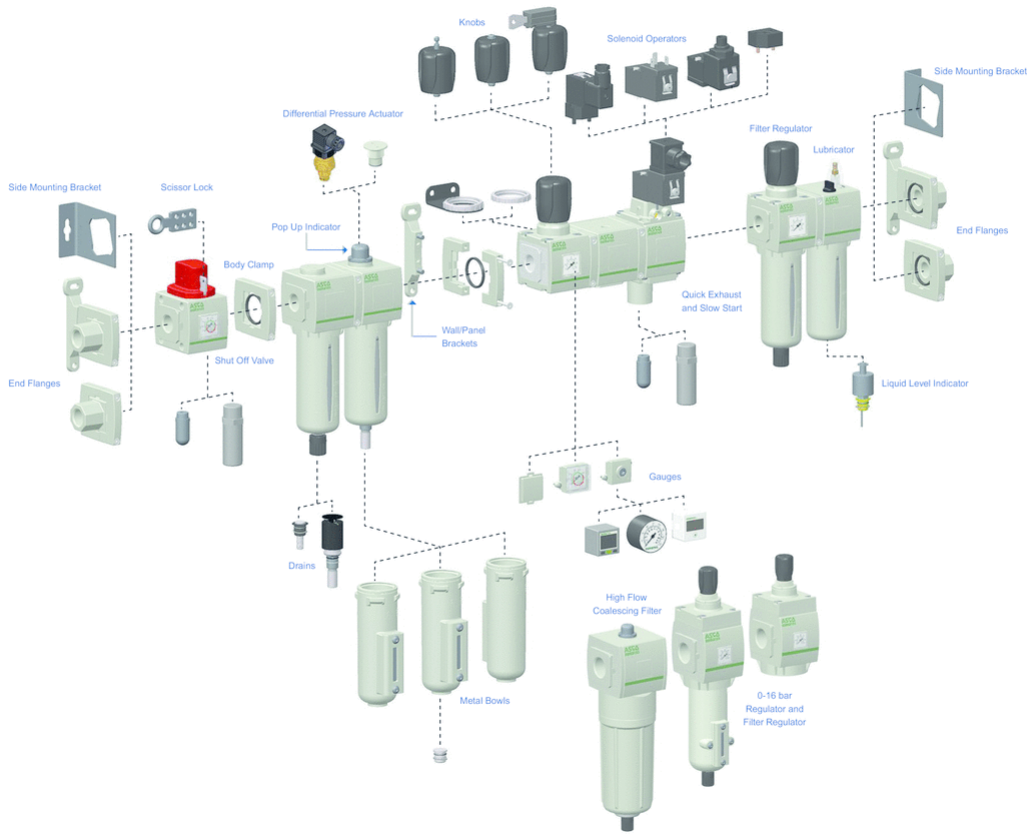
To remove the reservoir, allow a clearance of 25 mm from the bottom of the reservoir drain.

Dimensions

Series	A	B	C	D	E	F	G
653	266	75	90	45	93	46,5	155

Accessories overview

Accessories overview



Ordering information

G 651 A L 0 P 2 0 A00 0 0

Thread connection
G = ISO 228/1-G [1]
8 = NPTF

Product series
651
652
653

Revision letter
A

Product type
L = Lubricator

Bowl Type
K = Metal Bowl without Sight Gauge
L = Metal bowl with sight gauge (glass)
P = Polycarbonate bowl with bowl guard

K/L

P

Options [2]
A00 = Without option
101 = Side Mounting Brackets
108 = Liquid Level Indicator - Electronic
109 = FPM seals
117 = ATEX zones 1-21
124 = CUTR Certification (EAC)
125 = CUTR Ex

101

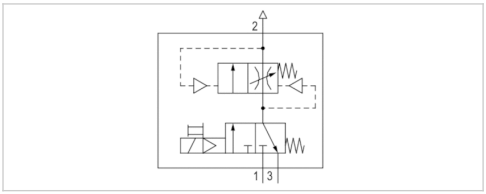
108

Port size
1 = 1/8 (651 Series)
2 = 1/4 (651 or 652 Series)
3 = 3/8 (652 Series)
4 = 1/2 (652 Series)
5 = 3/4 (653 Series)
6 = 1 (653 Series)

[1] Conforms to ISO standards 1179-1.
[2] If multiple options are required, please use the on-line CAD configurator on the website to generate the part number (www.asco.com).

Filling unit, electrically operated, Series 653

- Compressed air connection G 3/4 G 1
- Pipe connection



Brand	ASCO Numatics
Version	Poppet valve
Nominal flow 1 ▸ 2	See table below
Nominal flow 2 ▸ 3	See table below
Working pressure min./max.	3.8 ... 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 ... 50 °C
Ambient temperature min./max.	-10 ... 50 °C
Weight	1.59 kg

The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Compressed air connection input	Compressed air connection output	Port
G653A6S650A00F1	G 3/4	G 3/4	G 3/4
G653A6S660A00F1	G 1	G 1	G 1
G653A6S650A00F8	G 3/4	G 3/4	G 3/4
G653A6S660A00F8	G 1	G 1	G 1

Part No.	Operational voltage	Flow	Flow
		Qn 1▸2	Qn 2▸3
G653A6S650A00F1	24 V DC	7280 l/min	8890 l/min
G653A6S660A00F1	24 V DC	8230 l/min	8960 l/min
G653A6S650A00F8	230 V AC	7280 l/min	8890 l/min
G653A6S660A00F8	230 V AC	8230 l/min	8960 l/min

Nominal flow Qn at 6.3 bar and Δp = 1 bar

Technical information

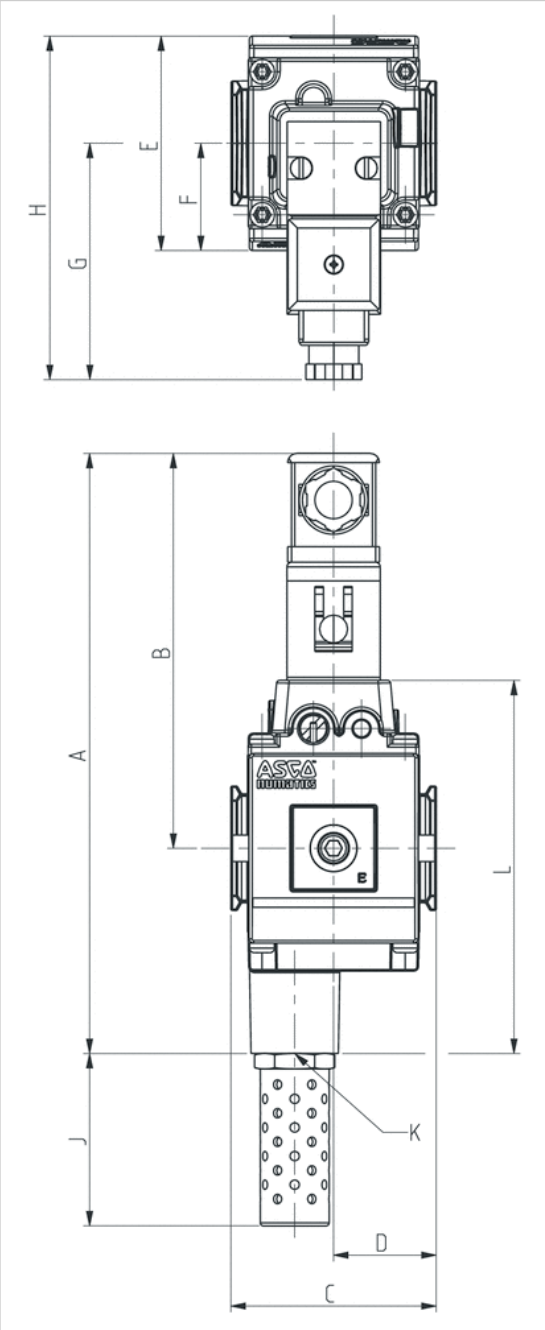
If P1 supply flow is restricted on valves with internal pilot supply, temporary leakage can occur.

Technical information

Material	
Housing	Aluminum
Seals	Nitrile butadiene rubber

Dimensions

Dimensions

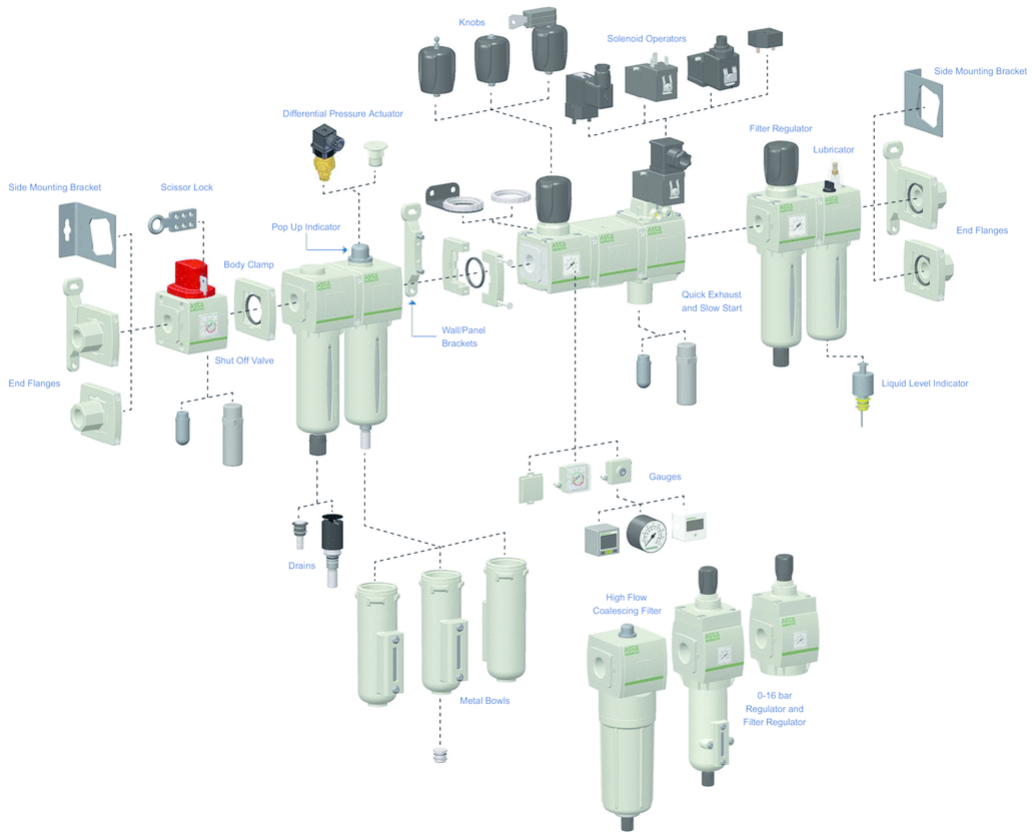


Dimensions

Series	A	B	C	D	E	F	G	H	J	K	L
653	214	137	90	45	93,1	46,5	94	140,5	81,2	G 1	142

Accessories overview

Accessories overview



Ordering information

G 651 A 6 S 6 2 G A00 F1

Thread connection
G = ISO 228/1-G [1]
8 = NPTF

Product series
651
652
653

Revision letter
A

Product type
4 = 2/2 - Slow start
5 = 3/2 - Quick exhaust
6 = 3/2 - Slow start/Quick exhaust

Valve type
E = External air pilot
P = Internal air pilot (Available on 2/2 Slow Start only)
S = Solenoid air pilot

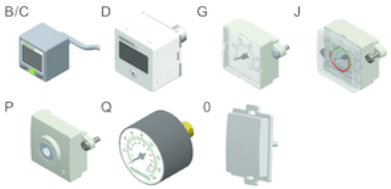
Pilot valve /Electrical connection
0 = No Electrical Connection
1 = Vertical Solenoid Pilot, without DIN Connector (must order with option 110)
2 = Vertical Solenoid Pilot, DIN Connector with LED (must order with option 110)
3 = Vertical Solenoid Pilot, DIN Connector w/o LED (must order with option 110)
4 = Vertical Solenoid Pilot, 3 Pin M12 Connection [2] (must order with option 110)
5 = Horizontal Solenoid Pilot, without DIN Connector
6 = Horizontal Solenoid Pilot, DIN Connector with LED
7 = Horizontal Solenoid Pilot, DIN Connector without LED
8 = Horizontal Solenoid Pilot with 3 Pin M12 Connection [2]
9 = Without pilot operator

Port size
1 = 1/8 (651 Series)
2 = 1/4 (651 or 652 Series)
3 = 3/8 (652 Series)
4 = 1/2 (652 Series)
5 = 3/4 (653 Series)
6 = 1 (653 Series)

Voltage
EW = 115 50/60 VAC
F1 = 24 VDC
FQ = 24 50/60 VAC
FH = 230 50/60 VAC (651 or 652)
F8 = 230/50 VAC (653 only)
DE = 230/60 VAC (653 only)
00 = No voltage

Options [3]
A00 = Without option
101 = Side Mounting Brackets
109 = FPM seals
110 = Without manual operator
111 = Metal Muffler
112 = Polyethylene Muffler
113 = Stainless steel fasteners
117 = ATEX zones 1/21 [4]
122 = Inverter Mounting
123 = Gauge type mounted for right-to-left flow
124 = CUTR Certification (EAC)
125 = CUTR Ex
201 = 110 + 111

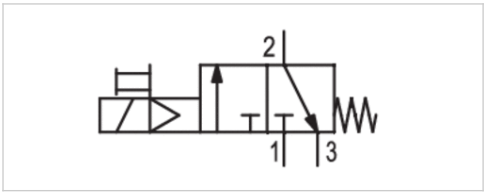
Gauge type
B = Digital pressure switch - PNP
C = Digital pressure switch - NPN
D = Digital gauge
G = Low profile integrated gauge bar/PSI
J = Low profile integrated gauge bar/PSI with pressure range indicators
Q = Round gauge bar/PSI
0 = No gauge port
P = Port Plate Rc 1/8



[1] Conforms to ISO standards 1179-1.
[2] Available for DC voltage only.
[3] If multiple options are required, please use the on-line CAD configurator on the website to generate the part number (www.asco.com).
[4] Option 117 (ATEX 1-21) is available with Valve Type "E" or "P". For Valve Type "S" (Solenoid Pilot), please select "9" under the "Pilot Valve/Electrical Connection. Contact us for further information.

3/2-directional valve, electrically operated, Series 653

- Compressed air connection G 3/4 G 1
- Pipe connection



Brand	ASCO Numatics
Version	Poppet valve
Nominal flow 1 ▸ 2	See table below
Nominal flow 2 ▸ 3	See table below
Working pressure min./max.	3.8 ... 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 ... 50 °C
Ambient temperature min./max.	-10 ... 50 °C
Weight	0.94 kg

The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Compressed air connection input	Compressed air connection output	Port
G653A5S650A00F1	G 3/4	G 3/4	G 3/4
G653A5S650A00F8	G 3/4	G 3/4	G 3/4
G653A5S660A00F1	G 1	G 1	G 1
G653A5S660A00F8	G 1	G 1	G 1

Part No.	Operational voltage	Flow	Flow
		Qn 1▸2	Qn 2▸3
G653A5S650A00F1	24 V DC	7280 l/min	8890 l/min
G653A5S650A00F8	230 V AC	7280 l/min	8890 l/min
G653A5S660A00F1	24 V DC	8230 l/min	8960 l/min
G653A5S660A00F8	230 V AC	8230 l/min	8960 l/min

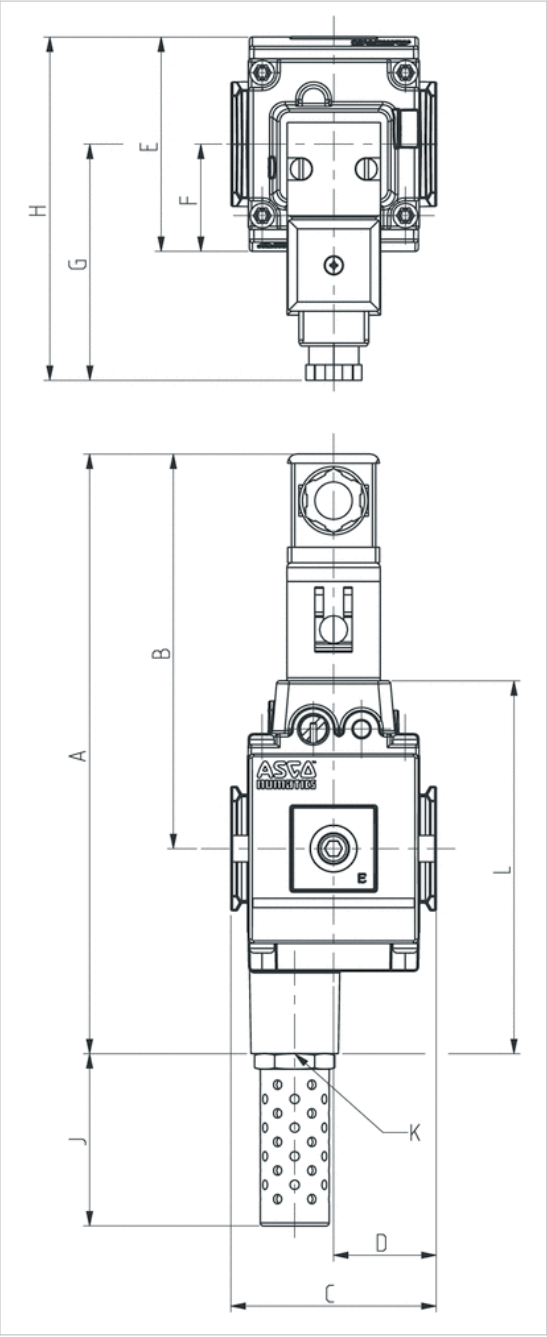
Nominal flow Qn at 6.3 bar and Δp = 1 bar

Technical information

Material	
Housing	Aluminum
Seals	Nitrile butadiene rubber

Dimensions

Dimensions

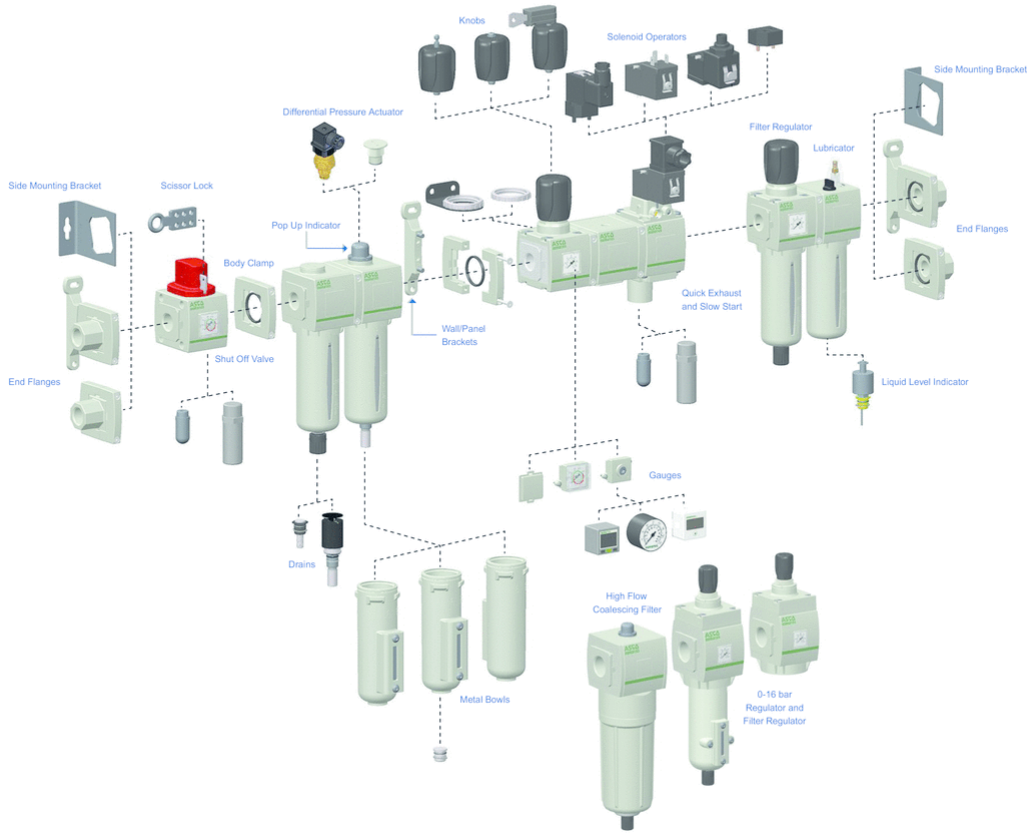


Dimensions

Series	A	B	C	D	E	F	G	H	J	K	L
653	214	137	90	45	93,1	46,5	94	140,5	81,2	G 1	142

Accessories overview

Accessories overview



Ordering information

G 651 A 6 S 6 2 G A00 F1

Thread connection
G = ISO 228/1-G [1]
8 = NPTF

Product series
651
652
653

Revision letter
A

Product type
4 = 2/2 - Slow start
5 = 3/2 - Quick exhaust
6 = 3/2 - Slow start/Quick exhaust

Valve type
E = External air pilot
P = Internal air pilot
(Available on 2/2 Slow Start only)
S = Solenoid air pilot

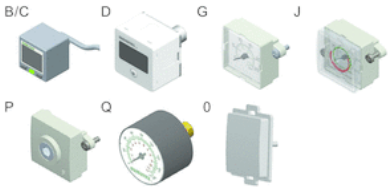
Pilot valve /Electrical connection
0 = No Electrical Connection
1 = Vertical Solenoid Pilot, without DIN Connector (must order with option 110)
2 = Vertical Solenoid Pilot, DIN Connector with LED (must order with option 110)
3 = Vertical Solenoid Pilot, DIN Connector w/o LED (must order with option 110)
4 = Vertical Solenoid Pilot, 3 Pin M12 Connection [2] (must order with option 110)
5 = Horizontal Solenoid Pilot, without DIN Connector
6 = Horizontal Solenoid Pilot, DIN Connector with LED
7 = Horizontal Solenoid Pilot, DIN Connector without LED
8 = Horizontal Solenoid Pilot with 3 Pin M12 Connection [2]
9 = Without pilot operator

Port size
1 = 1/8 (651 Series)
2 = 1/4 (651 or 652 Series)
3 = 3/8 (652 Series)
4 = 1/2 (652 Series)
5 = 3/4 (653 Series)
6 = 1 (653 Series)

Voltage
EW = 115 50/60 VAC
F1 = 24 VDC
FQ = 24 50/60 VAC
FH = 230 50/60 VAC (651 or 652)
F8 = 230/50 VAC (653 only)
DE = 230/60 VAC (653 only)
00 = No voltage

Options [3]
A00 = Without option
101 = Side Mounting Brackets
109 = FPM seals
110 = Without manual operator
111 = Metal Muffler
112 = Polyethylene Muffler
113 = Stainless steel fasteners
117 = ATEX zones 1/21 [4]
122 = Inverter Mounting
123 = Gauge type mounted for right-to-left flow
124 = CUTR Certification (EAC)
125 = CUTR Ex
201 = 110 + 111

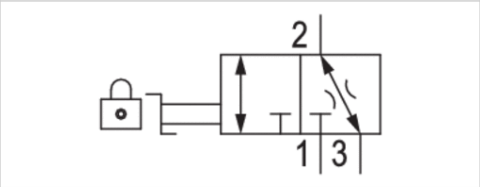
Gauge type
B = Digital pressure switch - PNP
C = Digital pressure switch - NPN
D = Digital gauge
G = Low profile integrated gauge bar/PSI
J = Low profile integrated gauge bar/PSI with pressure range indicators
Q = Round gauge bar/PSI
0 = No gauge port
P = Port Plate Rc 1/8



[1] Conforms to ISO standards 1179-1.
[2] Available for DC voltage only.
[3] If multiple options are required, please use the on-line CAD configurator on the website to generate the part number (www.asco.com).
[4] Option 117 (ATEX 1-21) is available with Valve Type "E" or "P". For Valve Type "S" (Solenoid Pilot), please select "9" under the "Pilot Valve/Electrical Connection. Contact us for further information.

3/2-shut-off valve, mechanically operated, Series 653

- Qn 1▸2 = 33000-51900 l/min
- Qn 2▸3 = 300 l/min



Brand	ASCO Numatics
Activation	Mechanical
Control pressure min./max.	0 ... 20 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Weight	0.94 kg

The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	Port	Flow	Flow	Material Silencer
		Qn 1 ▸ 2	Qn 2▸3	
G653A3M05011100	G 3/4	33000 l/min	300 l/min	metal
G653A3M050A0000	G 3/4	33000 l/min	300 l/min	-
G653A3M06011100	G 1	51900 l/min	300 l/min	metal
G653A3M060A0000	G 1	51900 l/min	300 l/min	-

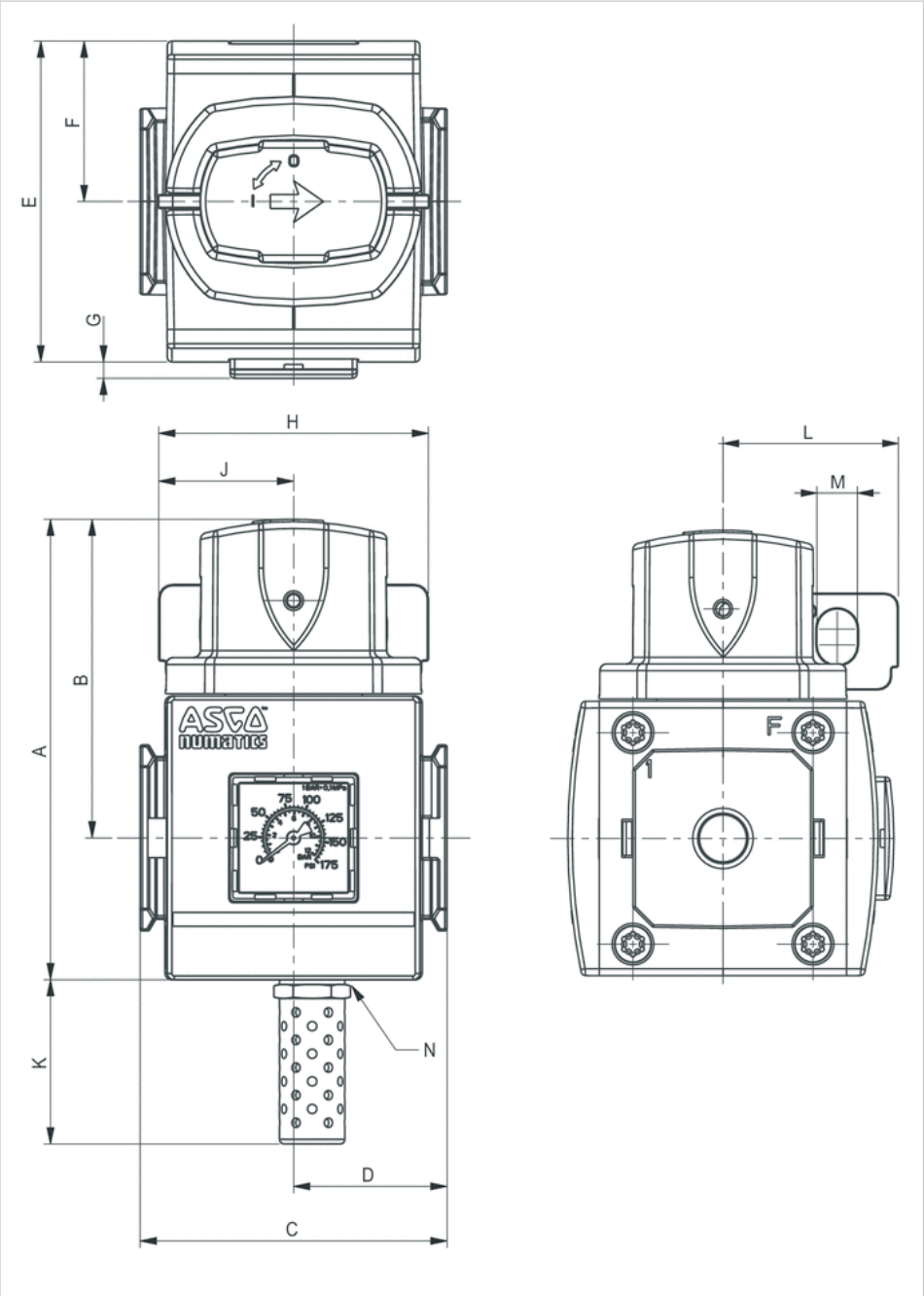
Nominal flow Qn at 6.3 bar and Δp = 1 bar

Technical information

Material	
Housing	Aluminum
Seals	Nitrile butadiene rubber

Dimensions

Dimensions

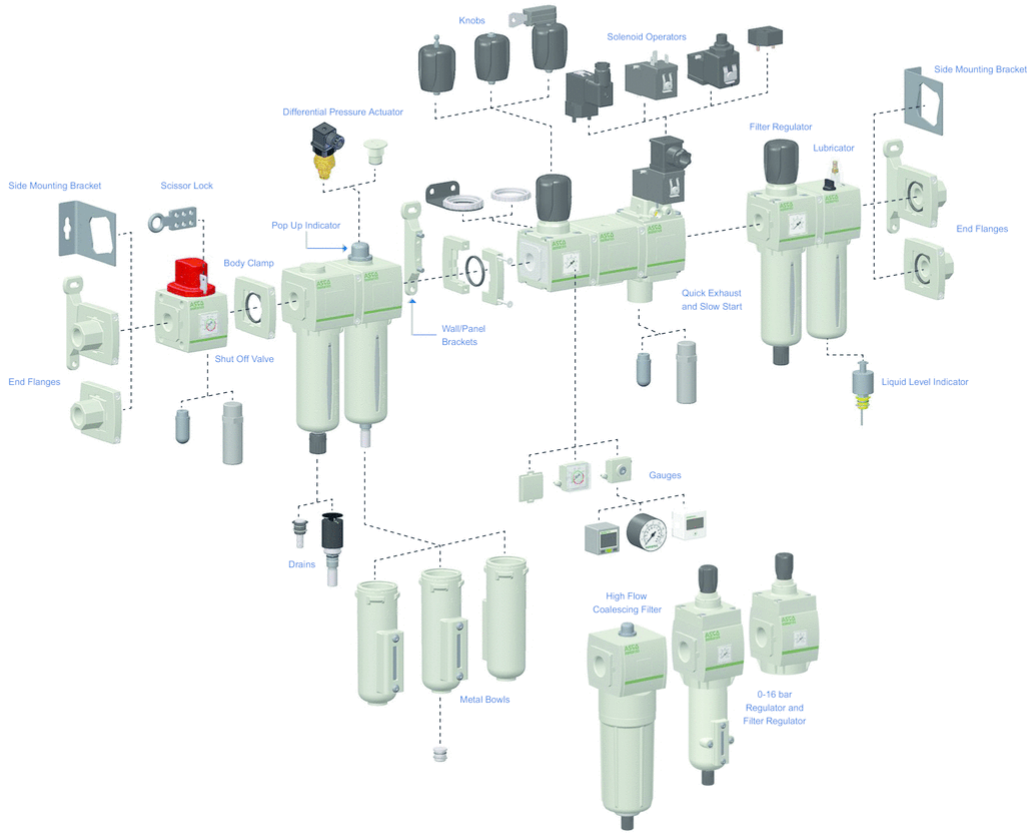


Dimensions

Series	A	B	C	D	E	F	G	H	J	K	L	M	N
653	120	79	90	45	93	46,5	1,9	58	29	46,7	38	9	G 3/8

Accessories overview

Accessories overview



Ordering information

G 651 A 3 M 0 2 G A00 00

Thread connection
G = ISO 228/1-G (1)
8 = NPTF

Product series
651
652
653

Revision letter
A

Product type
2 = 2/2 - Shut Off Valve
3 = 3/2 - Shut Off Valve

Valve Type
M = Manually Operated Ball Valve with Lockout

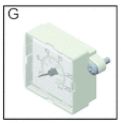
Pilot valve /Electrical connection
0 = No Electrical Connection

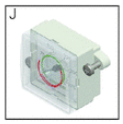
Port size
1 = 1/8 (651 Series)
2 = 1/4 (651 or 652 Series)
3 = 3/8 (652 Series)
4 = 1/2 (652 Series)
5 = 3/4 (653 Series)
6 = 1 (653 Series)

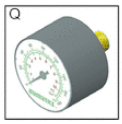
(1) Conforms to ISO standards 1179-1.
(2) If multiple options are required, please use the on-line CAD configurator on the website to generate the part number (www.asco.com).

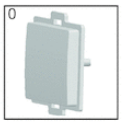
Options (2)
A00 = Without option
101 = Side Mounting Brackets
109 = FPM seals
111 = Metal Muffler
112 = Polyethylene Muffler
113 = Stainless steel fasteners
115 = Scissor Lock
117 = ATEX zones 1-21
122 = Bottom oriented pressure adjustment
123 = Gauge type mounted for right-to-left flow
124 = CUTR Certification (EAC)
125 = CUTR Ex
2B9 = 111 + 115

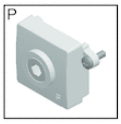
Gauge type
G = Low profile integrated gauge bar/PSI
J = Low profile integrated gauge bar/PSI with pressure range indicators
Q = Round gauge bar/PSI
0 = No gauge port
P = Port Plate Rc 1/8





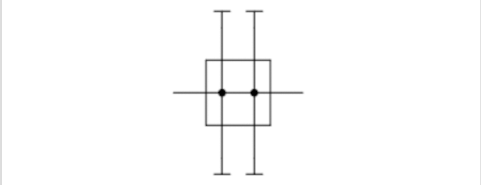






Distributor, Series 653

- G 1



Brand	ASCO Numatics
Parts	Distributor
Working pressure min./max.	0 ... 20 bar
Ambient temperature min./max.	-40 ... 80 °C
Medium temperature min./max.	-40 ... 80 °C
Medium	Compressed air Neutral gases
Weight	0.75 kg

The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

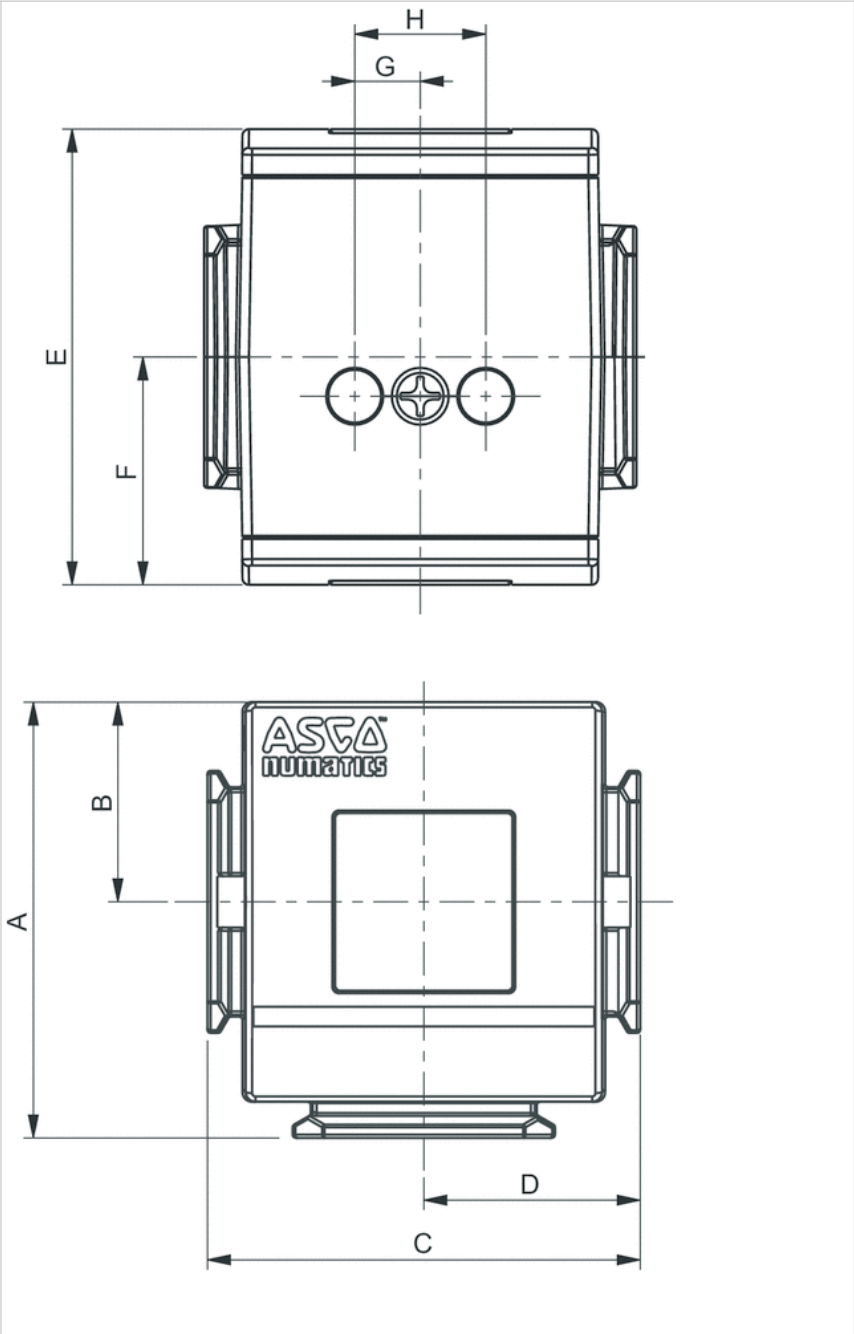
Part No.	Port
G653AD006CA0000	G 1

Technical information

Material	
Housing	Aluminum
Seals	Nitrile butadiene rubber

Dimensions

Dimensions

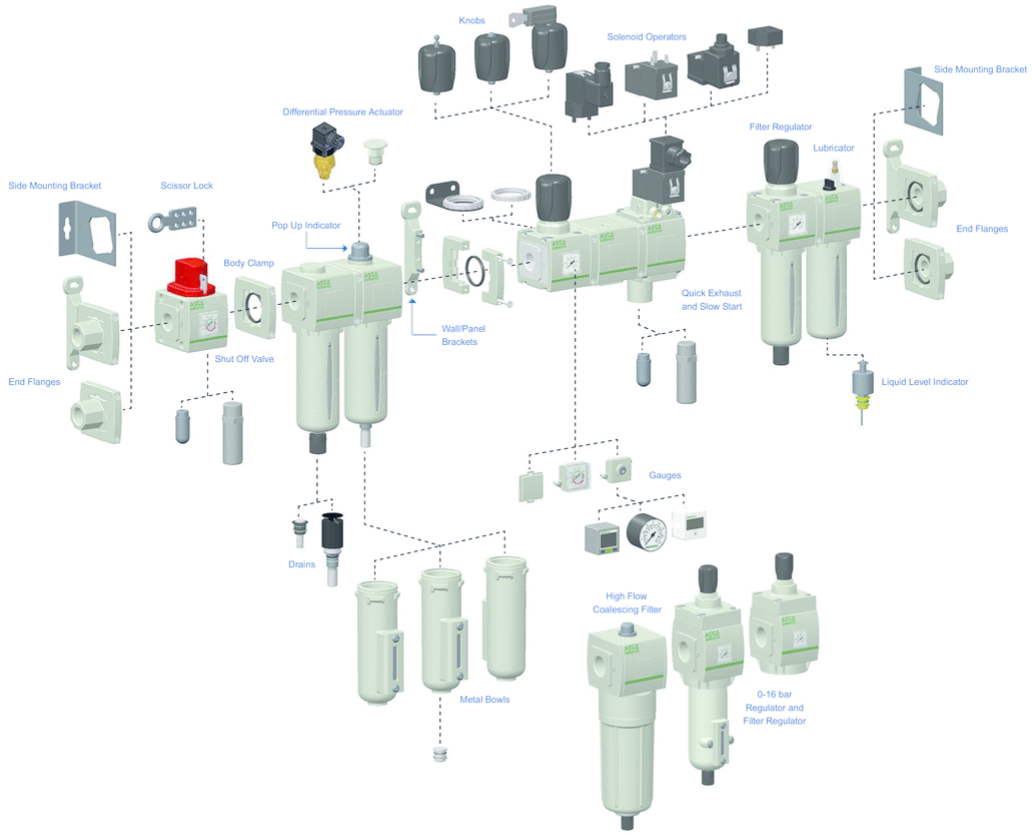


Dimensions

Series	A	B	C	D	E	F	G	H
653	86,5	41	90	45	93	46,5	10	20

Accessories overview

Accessories overview



Ordering information

G 651 A D 0 0 2 C A00 0 0

Thread connection
G = ISO 228/1-G (1)
8 = NPTF

Product series
651
652
653

Revision letter
A

Product type
D = Diverter Block

Pressure switch type
0 = No pressure switch
1 = Pad mount without Visual indicator 10 bar max.
2 = Pad mount with Visual indicator 10 bar max.

Options (2)
A00 = Without option
101 = Side Mounting Brackets
117 = ATEX zones 1-21 ⟨Ex⟩
124 = CUTR Certification (EAC)
125 = CUTR Ex

Pressure switch interface
C = Provisioned for 349 pressure switch pad mount

Port size
2 = 1/4 (651 Series)
4 = 1/2 (652 Series)
6 = 1 (653 Series)

(1) Conforms to ISO standards 1179-1.
(2) If multiple options are required, please use the on-line CAD configurator on the website to generate the part number (www.asco.com).

Series AF2 flow sensor, 653 pipe version with pipe, IO-Link

8653AV006JA0000

Series 653

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C. The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions. Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result. Precision: Standard measurement range: ±3% of measured value, + 0.3% of final value. Extended measurement range: ±8% of measured value, + 1% of final value.

Technical data

Industry
Industrial

Note
Output signal: 1 analog output 4 mA ... 20 mA + 1 digital/ analog output (PNP, NPN, push-pull, 4 mA ... 20 mA / switchable)+1 digital output (PNP, NPN, push-pull, switchable), IO-Link V1.1 (COM3 / 230K4 baud)

Switching principle
Flow measuring principle: calorimetric

Protocol
IO-Link

Nominal flow Qn min., standard
14.7 l/min

Nominal flow Qn max., standard
2945 l/min

Nominal flow Qn min., extended
2945 l/min

Nominal flow Qn max., extended
4417 l/min

Compressed air connection
1″ NPT

Certificates
CE declaration of conformity
RoHS

Working pressure min.
0 bar

Working pressure max
16 bar

Min. ambient temperature
-20 °C

Max. ambient temperature
60 °C

Min. medium temperature
-20 °C

Max. medium temperature
60 °C

Medium
Compressed air
Argon

Nitrogen
Helium
Carbon dioxide

Display
OLED

Flow display unit
l/sec
l/min
m³/min
m³/h
ft³/s
m³/min

Pressure display unit
bar
psi

Temperature display unit
°C
°F

Electrical connection
Plug

Electrical connection
M12x1

Electrical connection
5-pin

Electrical connection
A-coded

Output signal digital
PNP, NPN, push-pull, 1x IO-Link

Output signal analog
4 ... 20 mA

Power consumption max.
5 W

Operating voltage DC, min.
17 V DC

Operating voltage DC, max.
30 V DC

Response time
< 0.3 s

Short circuit resistance
short circuit resistant

Shock resistance max.
30 g, 11 ms

Vibration resistance
1 g (10 - 2000 Hz) IEC 60068 - 2-6

Reproducibility
± 1.5% of the measured value

Protection class
IP65
IP67 according to IEC 60529

Weight
0.685 kg

Material

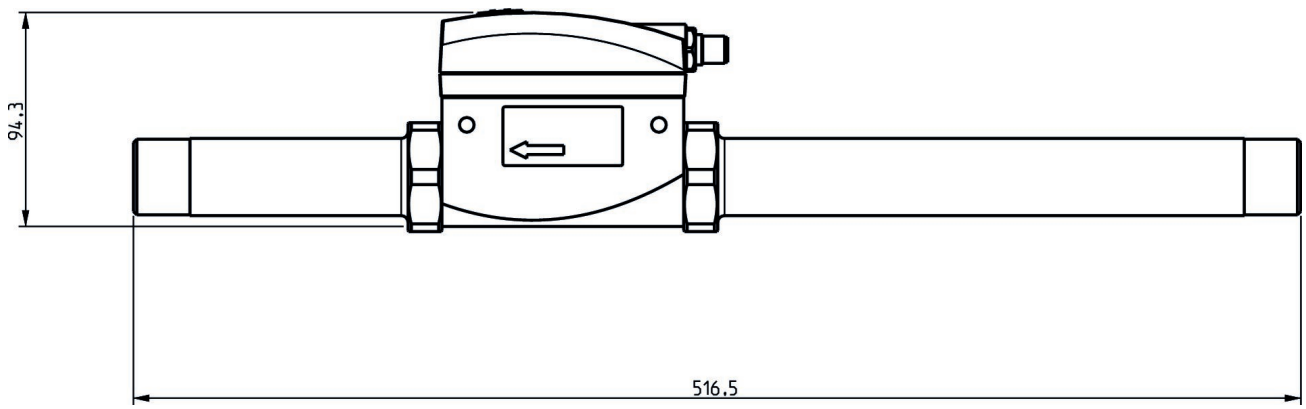
Housing material
Polyamide
Polycarbonate
Aluminum

Pipe material
Stainless Steel

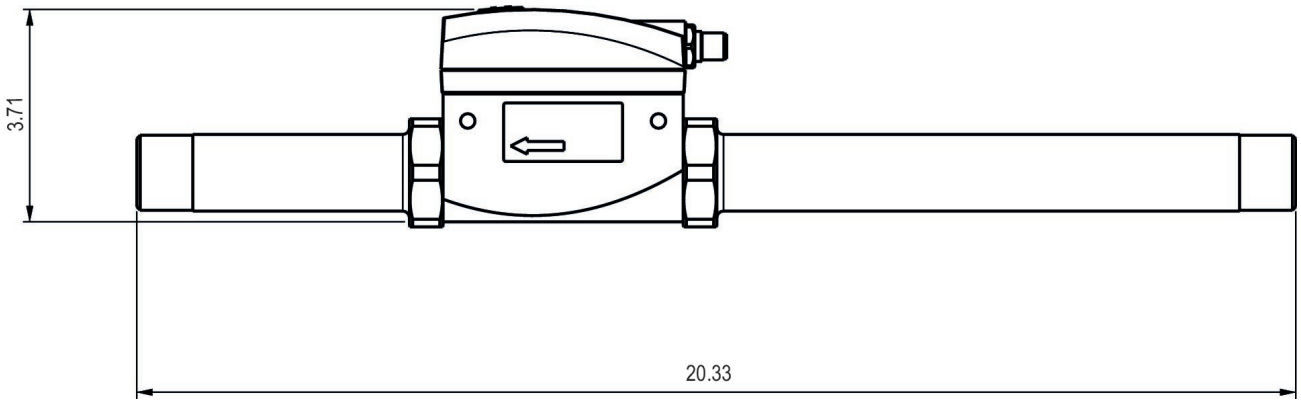
Seal material sensor
Fluorocarbon caoutchouc

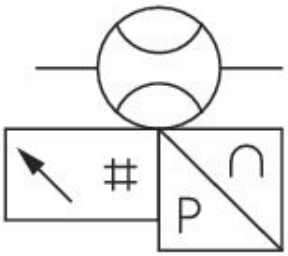
Part No.
8653AV006JA0000

Dimensions in mm

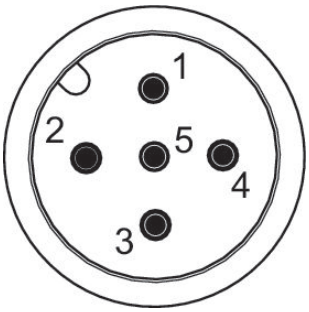


Dimensions in inches





Pin assignments



Pin	Allocation	Wire color	
1	L+	brown	Supply Voltage
2	QA (output 4 ... 20 mA)	white	
3	m = mass	blue	
4	C/Q1 (IO-Link/switch output)	black	
5	Analog output 4 ... 20 mA	yellow	

Series AF2 flow sensor, 653 pipe version with pipe, IO-Link

G653AV006JA0000

Series 653

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C. The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions. Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result. Precision: Standard measurement range: ±3% of measured value, + 0.3% of final value. Extended measurement range: ±8% of measured value, + 1% of final value.

Technical data

Industry
Industrial

Note
Output signal: 1 analog output 4 mA ... 20 mA + 1 digital/ analog output (PNP, NPN, push-pull, 4 mA ... 20 mA / switchable)+1 digital output (PNP, NPN, push-pull, switchable), IO-Link V1.1 (COM3 / 230K4 baud)

Switching principle
Flow measuring principle: calorimetric

Protocol
IO-Link

Nominal flow Qn min., standard
14.7 l/min

Nominal flow Qn max., standard
2945 l/min

Nominal flow Qn min., extended
2945 l/min

Nominal flow Qn max., extended
4417 l/min

Compressed air connection
G 1″

Certificates
CE declaration of conformity
RoHS

Working pressure min.
0 bar

Working pressure max
16 bar

Min. ambient temperature
-20 °C

Max. ambient temperature
60 °C

Min. medium temperature
-20 °C

Max. medium temperature
60 °C

Medium
Compressed air
Argon

Nitrogen
Helium
Carbon dioxide

Display
OLED

Flow display unit
l/sec
l/min
m³/min
m³/h
ft³/s
m³/min

Pressure display unit
bar
psi

Temperature display unit
°C
°F

Electrical connection
Plug

Electrical connection
M12x1

Electrical connection
5-pin

Electrical connection
A-coded

Output signal digital
PNP, NPN, push-pull, 1x IO-Link

Output signal analog
4 ... 20 mA

Power consumption max.
5 W

Operating voltage DC, min.
17 V DC

Operating voltage DC, max.
30 V DC

Response time
< 0.3 s

Short circuit resistance
short circuit resistant

Shock resistance max.
30 g, 11 ms

Vibration resistance
1 g (10 - 2000 Hz) IEC 60068 - 2-6

Reproducibility
± 1.5% of the measured value

Protection class
IP65
IP67 according to IEC 60529

Weight
0.685 kg

Material

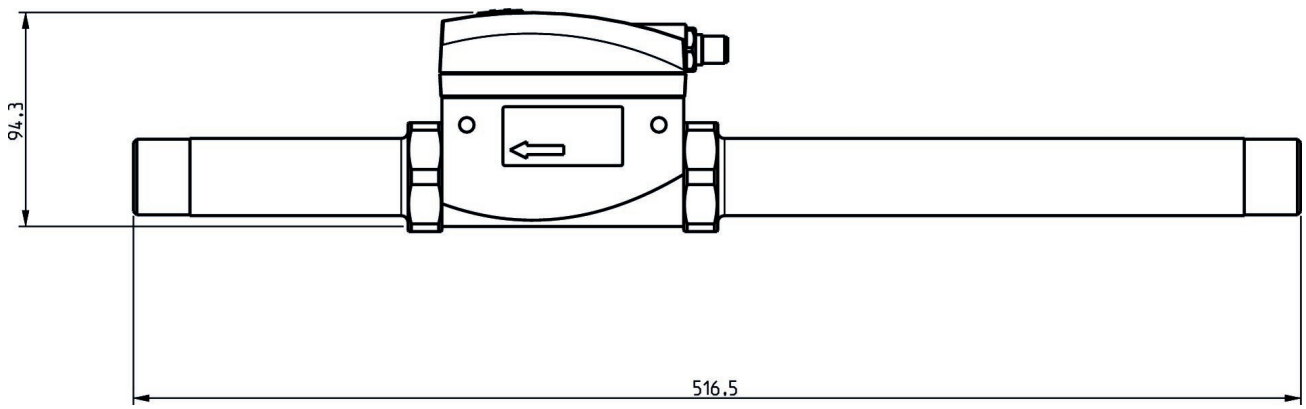
Housing material
Polyamide
Polycarbonate
Aluminum

Pipe material
Stainless Steel

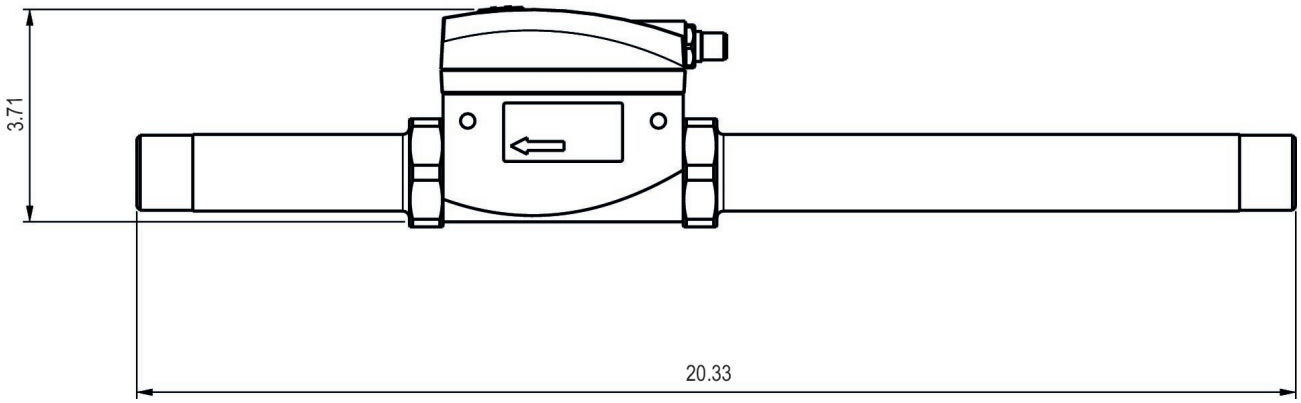
Seal material sensor
Fluorocarbon caoutchouc

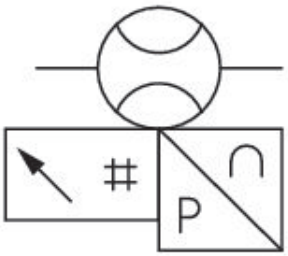
Part No.
G653AV006JA0000

Dimensions in mm

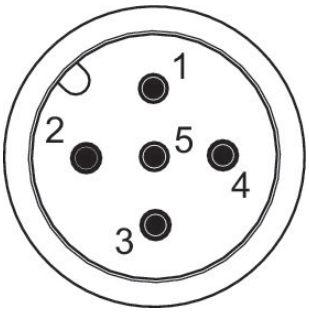


Dimensions in inches





Pin assignments



Pin	Allocation	Wire color	
1	L+	brown	Supply Voltage
2	QA (output 4 ... 20 mA)	white	
3	m = mass	blue	
4	C/Q1 (IO-Link/switch output)	black	
5	Analog output 4 ... 20 mA	yellow	

Series AF2 flow sensor, 653 pipe version with pipe, Ethernet

8653AV006JA0010

Series 653

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C. The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions. Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result. Precision: Standard measurement range: ±3% of measured value, + 0.3% of final value. Extended measurement range: ±8% of measured value, + 1% of final value.

Technical data

Industry
Industrial

Note
Integrated web server, 48 VDC connection via Power over Ethernet

Switching principle
Flow measuring principle: calorimetric

Protocol
TCP/IP
OPC UA
MQTT

Nominal flow Qn min., extended
2945 l/min

Nominal flow Qn max., extended
4417 l/min

Compressed air connection
1″ NPT

Certificates
CE declaration of conformity
RoHS

Working pressure min.
0 bar

Working pressure max
16 bar

Min. ambient temperature
-20 °C

Max. ambient temperature
60 °C

Min. medium temperature
-20 °C

Max. medium temperature
60 °C

Medium
Compressed air
Argon
Nitrogen
Helium
Carbon dioxide

Display
OLED

Flow display unit
l/sec
l/min
m³/min
m³/h
ft³/s
m³/min

Pressure display unit
bar
psi

Temperature display unit
°C
°F

Electrical connection
Plug

Electrical connection
M12x1

Electrical connection
8-pin

Electrical connection
X-coded

Power consumption max.
5 W

Operating voltage DC, min.
36 V DC

Operating voltage DC, max.
57 V DC

Response time
< 0.3 s

Short circuit resistance
short circuit resistant

Shock resistance max.
30 g, 11 ms

Vibration resistance
1 g (10 - 2000 Hz) IEC 60068 - 2-6

Reproducibility
± 1.5% of the measured value

Protection class
IP65
IP67 according to IEC 60529

Weight
0.685 kg

Material

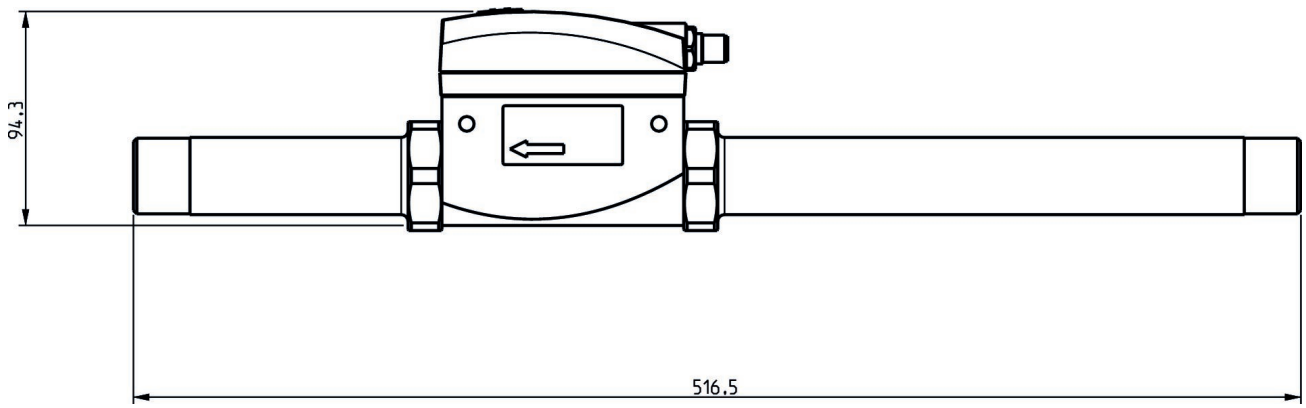
Housing material
Polyamide
Polycarbonate
Aluminum

Pipe material
Stainless Steel

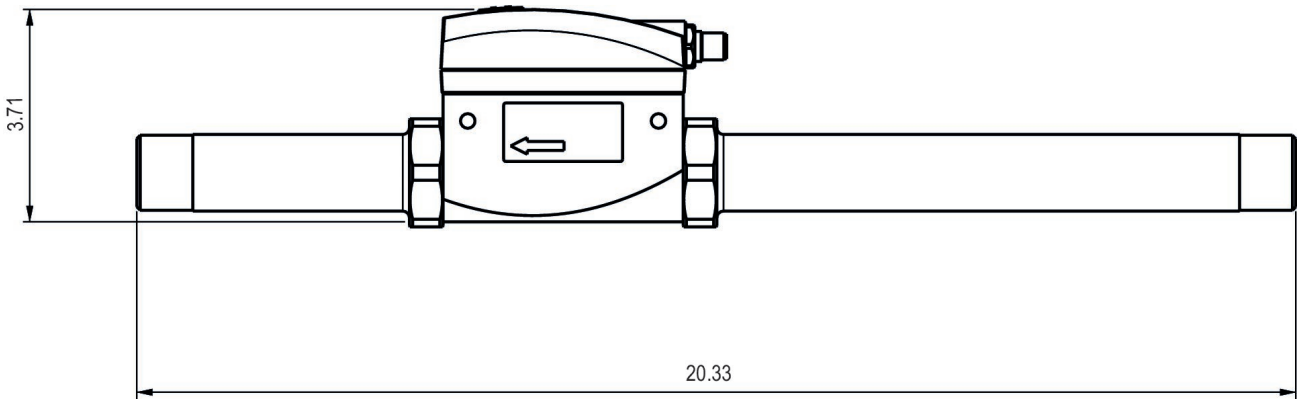
Seal material sensor
Fluorocarbon caoutchouc

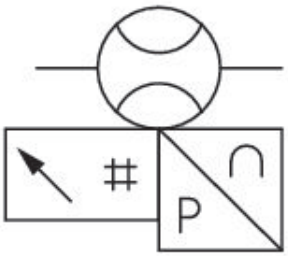
Part No.
8653AV006JA0010

Dimensions in mm

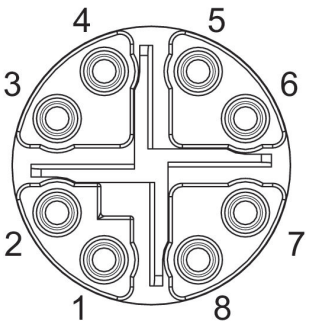


Dimensions in inches





Pin assignments



Pin	RJ45	Wire color	Identification	10/100 Mbit
1	1	WH / OG	TX(+) + POE	TxData+
2	2	OG	TX(-) + POE	TxData+
3	3	WH / GN	RX(+) - POE	TxData-
4	6	GN	RX(-) - POE	TxData-
7	5	WH / BU	POE+	
8	4	BU	POE+	
5	7	WH / BN	POE-	
6	8	BN	POE-	

Series AF2 flow sensor, 653 pipe version with pipe, Ethernet

G653AV006JA0010

Series 653

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Technical data

Industry
Industrial

Note
Integrated web server, 48 VDC connection via Power over Ethernet

Switching principle
Flow measuring principle: calorimetric

Protocol
TCP/IP
OPC UA
MQTT

Nominal flow Qn min., extended
2945 l/min

Nominal flow Qn max., extended
4417 l/min

Compressed air connection
G 1″

Certificates
CE declaration of conformity
RoHS

Working pressure min.
0 bar

Working pressure max
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Min. ambient temperature
-20 °C

Max. ambient temperature
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Medium
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Argon
Nitrogen
Helium
Carbon dioxide

Display
OLED

Flow display unit
l/sec
l/min
m³/min
m³/h
ft³/s
m³/min

Pressure display unit
bar
psi

Temperature display unit
°C
°F

Electrical connection
Plug

Electrical connection
M12x1

Electrical connection
8-pin

Electrical connection
X-coded

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5 W

Operating voltage DC, min.
36 V DC

Operating voltage DC, max.
57 V DC

Response time
< 0.3 s

Short circuit resistance
short circuit resistant

Shock resistance max.
30 g, 11 ms

Vibration resistance
1 g (10 - 2000 Hz) IEC 60068 - 2-6

Reproducibility
± 1.5% of the measured value

Protection class
IP65
IP67 according to IEC 60529

Weight
0.685 kg

Material

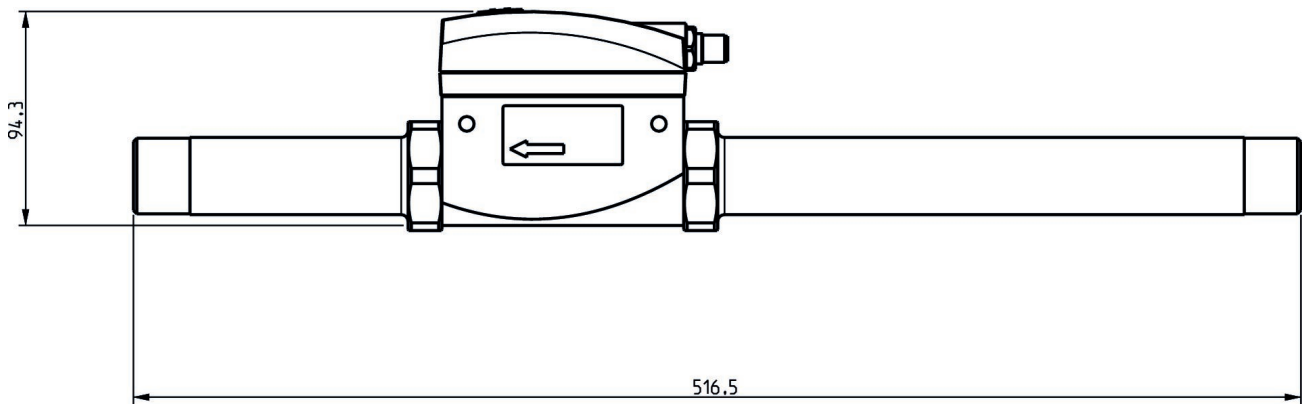
Housing material
Polyamide
Polycarbonate
Aluminum

Pipe material
Stainless Steel

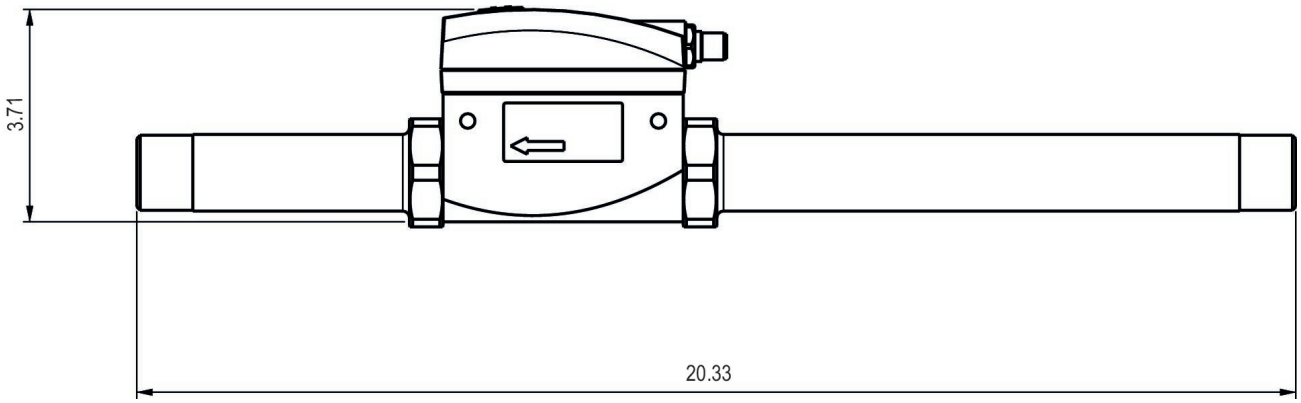
Seal material sensor
Fluorocarbon caoutchouc

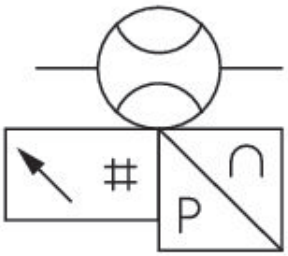
Part No.
G653AV006JA0010

Dimensions in mm

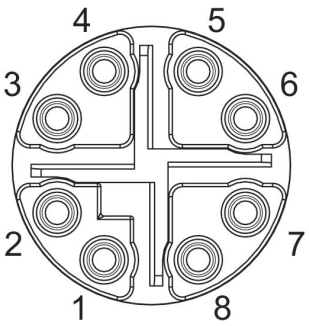


Dimensions in inches





Pin assignments



Pin	RJ45	Wire color	Identification	10/100 Mbit
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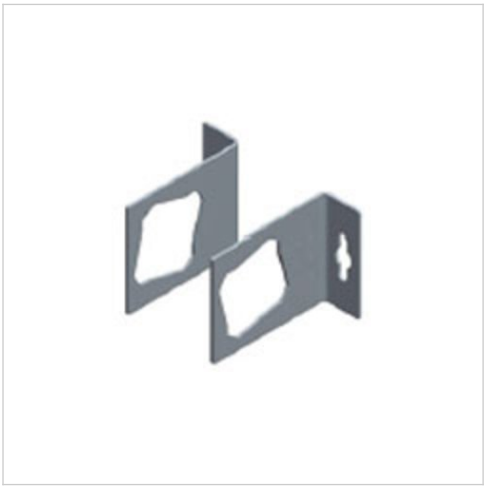
7	5	WH / BU	POE+	
8	4	BU	POE+	
5	7	WH / BN	POE-	
6	8	BN	POE-	

Mounting bracket

- Side mounting brackets



Brand ASCO Numatics

Technical data

Part No.
P653AT503860003

Includes two brackets.

Technical information

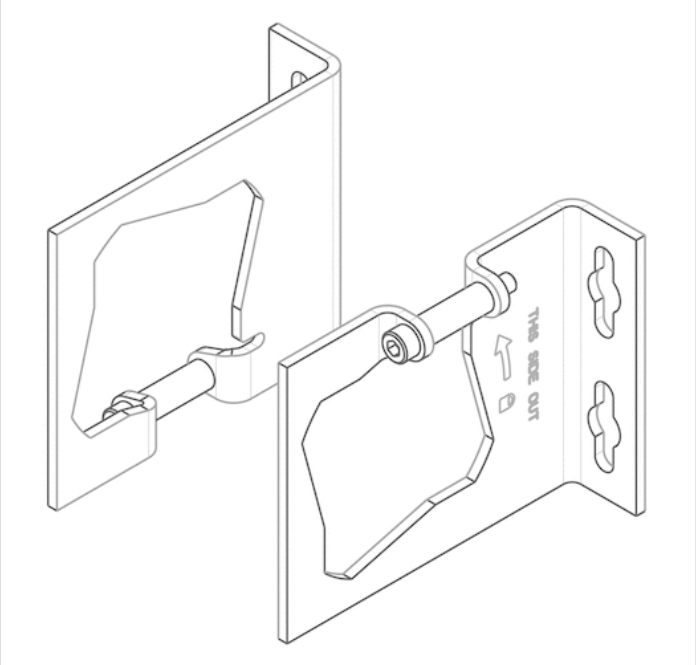
Recommended only for static applications (without vibration)

Technical information

Material	
Housing	Aluminum
Seal	Nitrile butadiene rubber

Dimensions

Dimensions



Block assembly kit

- End plate kit
- Body-to-body assembly clamps

Brand ASCO Numatics

Technical data

Part No.
P653AT507291001

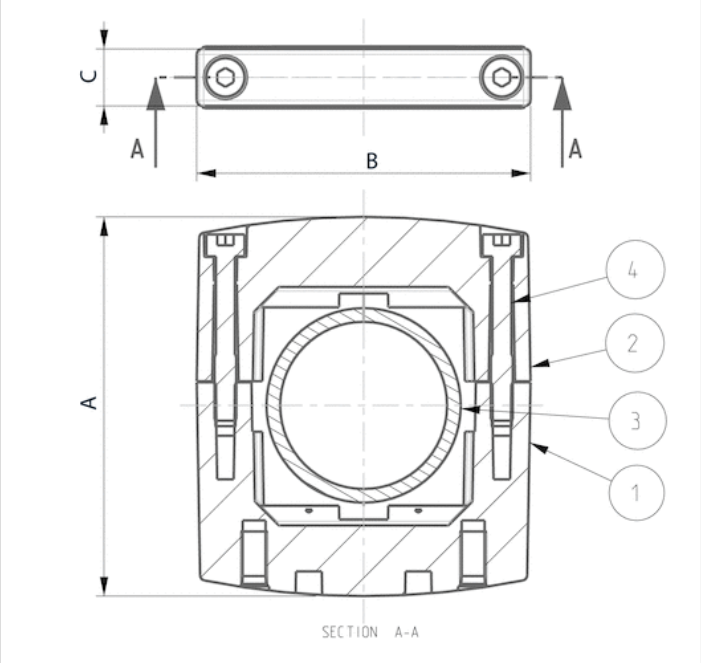
Includes NBR O-ring

Technical information

Material	
Housing	Aluminum
Seal	Nitrile butadiene rubber

Dimensions

Dimensions



1) Block assembly kit
2) Block assembly kit
3) O-ring
4) Screw

Dimensions

Series	A	B	C
653	93	82	16

End plate kit

Brand ASCO Numatics

Technical data

Part No.	Port
T653AT507292002	G 1

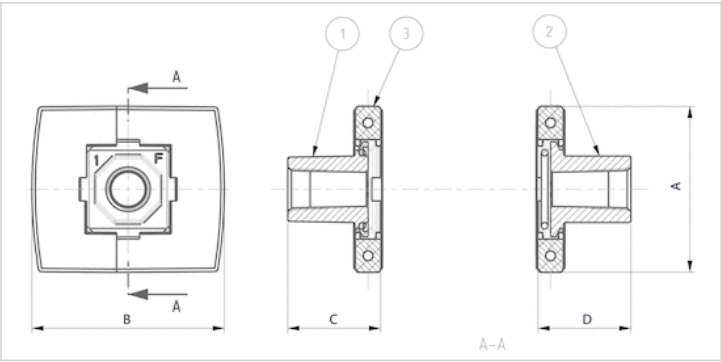
Includes two end plates, body-to-body assembly clamps, and O-ring

Technical information

Material	
Housing	Aluminum
Seal	Nitrile butadiene rubber

Dimensions

Dimensions



1) Right end plate
2) Left end plate
3) Kit

Dimensions

Series	A	B	C	D
653	82	93	57	57

Mounting clip

- Wall/panel bracket kit

Brand ASCO Numatics

Technical data

Part No.
P699AT502467001

Includes one bracket and two screws for attaching the bracket to the body clamps.

Technical information

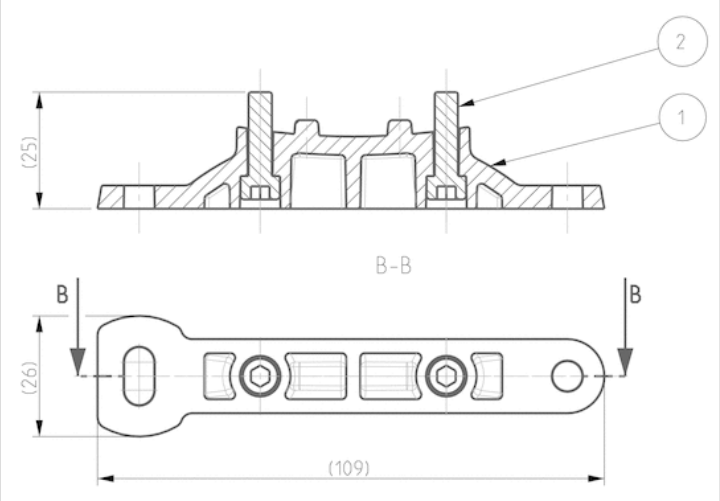
One bracket is suitable for mounting two products.
Two brackets are required for mounting three or more products.

Technical information

Material	
Housing	Aluminum
Seal	Nitrile butadiene rubber

Dimensions

Dimensions



1) Holder
2) Screw

Panel nut and bracket

- For panel installation

Brand	ASCO Numatics

Technical data

Part No.
P652AT503861003

Technical information

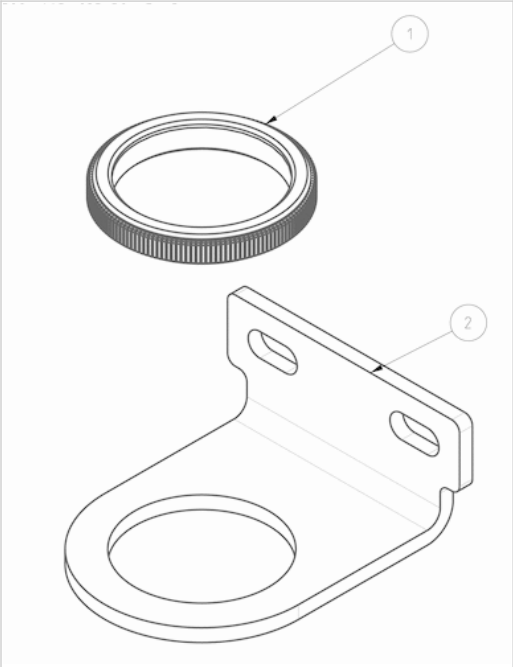
The panel nut and bracket are used to mount a regulator or filter-regulator to a wall or panel.

Technical information

Material	
Housing	Stainless steel

Dimensions

Dimensions



1) Panel nut
2) Mounting bracket

Filter element

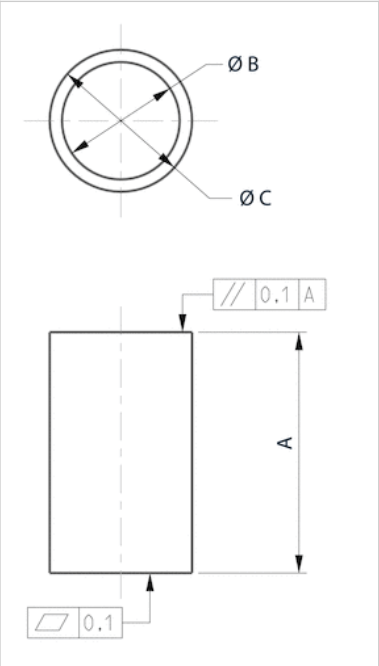
- 653

Technical data

Part No.	filter porosity	Color
M653AE439490001	5 µm	White
M653AE439490002	25 µm	Yellow

Dimensions

Dimensions



Dimensions

Series	A	B	C
653	80	32,4	38,4

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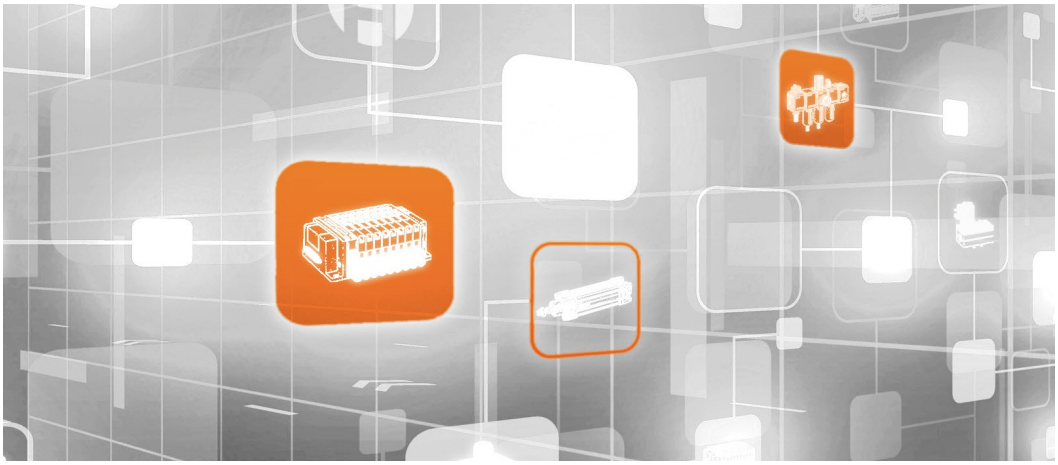

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