

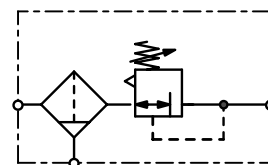
FILTER PRESSURE REGULATORS

DESCRIPTION	PRESSURE RANGE bar	CONNECTION thread	SERIES	PAGE
„Miniatur“-Serie	0.2 ... 1.8 / 9	G $\frac{1}{8}$ and G $\frac{1}{4}$	B548	17.02
brass	0.2 ... 3 / 15	G $\frac{1}{4}$ and G $\frac{1}{2}$	BM	17.03
Stainless steel	0.2 ... 3 / 50	G $\frac{1}{8}$ - G2	B3000	15.28
made of plastic	0 ... 4 / 12	G $\frac{1}{4}$ - G1	B042 ... B095	17.04
„Maxi“-Series, robust, modular	0.2 ... 4 / 17	G $\frac{1}{2}$ - G1	B20, B21	17.05
Series „D“, made of aluminium	0.3 ... 3 / 15	G $\frac{1}{8}$ - G2	BD	17.06
down to -40 °C / -40 °F	0 ... 0.7 / 8	$\frac{1}{4}$ " NPT	B300	17.08



17

Description	Regulator of small and compact design, ideal for limited space conditions.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 11 bar for plastic bowl, max. 21 bar for metal bowl		
Adjustment	by plastic knob with snap-lock		
Relieving function	relieving		
Gauge port	G $\frac{1}{8}$ on both sides of the body, screw plugs supplied		
Filter element	20 μ m, optionally 5 μ m, made of polypropylene		
Bowl	plastic or metal version		
Drainage	manual drain as standard, for max. 21 bar semiautomatic drain as option, for max. 12 bar		
Temperature range	0 °C to 50 °C / 32 °F to 122 °F for plastic bowl and semiautomatic drain version 0 °C to 80 °C / 32 °F to 176 °F for metal bowl		
Material	Body: aluminium Spring cage: glass fibre-reinforced plastic Bowl: polyurethane or zinc die-cast	Elastomer: NBR/Buna-N Inner valve: brass	



G $\frac{1}{8}$ and G $\frac{1}{4}$

Dimensions			Bowl		Flow rate		P ₁ max.	Connection thread	Pressure range	Order number	
A	B	C	design	capacity	m ³ /h*1	l/min*1	bar	G	bar		
mm	mm	mm	made of	l							B*

Miniature filter regulator										with manual drain, relieving, without gauge, filter element 20 μ m	B548
40	152	86	plastic	0.04	27	450	11	G $\frac{1}{8}$	0.2 ... 1.8		B548-01AHA
									0.2 ... 4.0		B548-01AHB
									0.3 ... 9.0		B548-01AHC
			metal				21		0.2 ... 1.8		B548-01DHA
									0.2 ... 4.0		B548-01DHB
									0.3 ... 9.0		B548-01DHC
40	152	86	plastic	0.04	27	450	11	G $\frac{1}{4}$	0.2 ... 1.8		B548-02AHA
									0.2 ... 4.0		B548-02AHB
									0.3 ... 9.0		B548-02AHC
			metal				21		0.2 ... 1.8		B548-02DHA
									0.2 ... 4.0		B548-02DHB
									0.3 ... 9.0		B548-02DHC

Special options, add the appropriate letter

5 μ m filter element		B548-0..G.
non-relieving	without relieving function	B548-0.... K
semiautomatic drain	RK500SY, max. 12 bar	B548-0....M



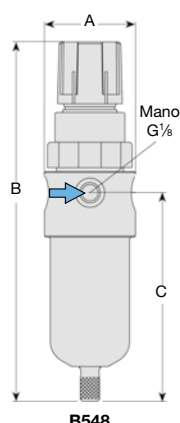
B548-02AHC



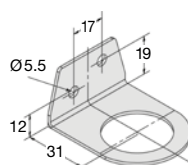
B548-02DHC

Accessories, enclosed

pressure gauge	Ø 40 mm, 0 ... *2 bar, G $\frac{1}{8}$	MA4001-... *2
mounting bracket	made of steel	BW30-02
mounting nut	made of plastic	M30x1,5K
	made of aluminium	M30x1,5A



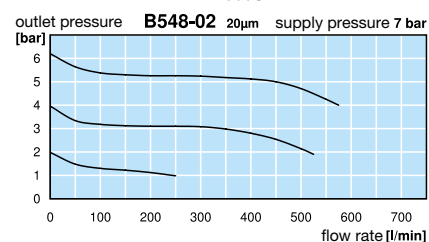
B548



BW30-02



RK500SY



*1 at 7 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop
*2 02 = 0...2.5 bar, 04 = 0...4 bar, 10 = 0...10 bar

Extensions: see chapter for FRL service units
Gauges: see chapter for measuring devices

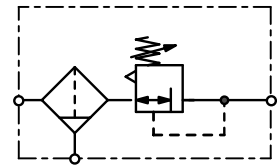
PDF CAD
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* Product group



Order example:
B548-01AHA

Description	Filter pressure regulator made of solid brass, with bowl without sight glass. The control system is a membrane. compressed air, non-corrosive gases or liquids max. 50 bar (without drain)			Relieving function	relieving, optionally non-relieving by T-handle with locknut at G½
Media					
Supply pressure					
Adjustment	by black plastic knob at size G¼,				
Gauge port	G¼ on both sides of the body, one screw plug supplied				
Filter element	50 µm, optionally 5 µm, made of stainless steel				
Bowl	stainless steel version without sight glass				
Drainage	screw plug as standard, optionally manual drain (max. 30 bar) or automatic drain (max. 16 bar)				
Temperature range	0 °C to 80 °C / 32 °F to 176 °F for FKM 0 °C to 130 °C / 32 °F to 266 °F for high temperature version for appropriately conditioned compressed air down to -20 °C / -4 °F or low temperature version down to -40 °C / -40 °F				
Material	Body:	brass	Bowl:	stainless steel 316L / material no. 1.4404	
	Diaphragm:	NBR/Buna-N with PTFE coating	O-rings:	FKM	
	Knob:	plastic at sizes G¼, brass at G½	Inner valve:	brass and plastic (not at option X54)	



**G¼ up to G½, max. 50 bar
-40 to 130 °C / -40 to 266 °F**

Dimensions			Bowl-		Flow		Connection	Order
A	B	C	Design	Capacity	rate	rate	thread	number
mm	mm	mm	made of	l	m³/h*1	l/min*1	G	

Brass filter regulator with screw plug, relieving, without gauge, 50 µm filter element
supply pressure max. 50 bar, pressure range 0.5...8 bar

BM

64	220	123	stainless steel	0,17	84	1 400	G¼	BM-02
79	247	127	stainless steel	0,28	228	3 800	G½	BM-04



BM-02

Special options, add the appropriate letter

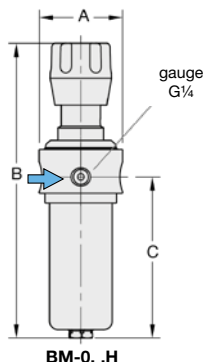
5 µm filter element								BM- . . G
0.2... 3 bar range								BM- . . B
1 ...15 bar range								BM- . . D
manual drain			max. 30 bar					BM- . . H
automatic drain			made of stainless steel, max. 16 bar			for G¼ (02) to G2		BM- . . R
non-relieving			without relieving function					BM- . . K
down to -40 °C / -40 °F			low temperature version					BM- . . X51
up to 130 °C / 266 °F			high temperature version					BM- . . X54
T-handle			instead of adjusting knob				for G¼	BM- . . T
nitrogen	N₂: 07		carbon dioxide	CO₂: 03		argon	Ar:	BM- . . 05
helium	He: 09		hydrogen	H₂: 11		methane	CH₄:	BM- . . 13
oxygen	O₂: 15		propane	C₃H₈: 16		nitrous oxide	N₂O:	BM- . . 17
flange connection			see chapter for stainless steel devices / flanges					BM- . . F.



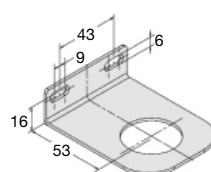
BM-04

Accessories, enclosed

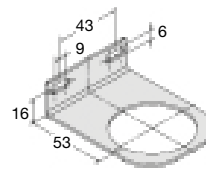
pressure gauge	Ø 50 mm, 0...*2 bar, G¼	MA5002-... *2
gauge -40 °C/-40 °F to 130 °C/266 °F	Ø . . mm, 0...*2 bar, G¼	MS6302-... *2
mounting bracket	made of stainless steel for G¼	BW35-01S
mounting nut		M35x1,5S
mounting bracket	made of stainless steel for G½	BW50-01S
mounting nut		M50x1,5S



BM-02 .H



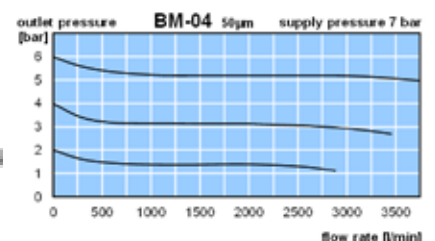
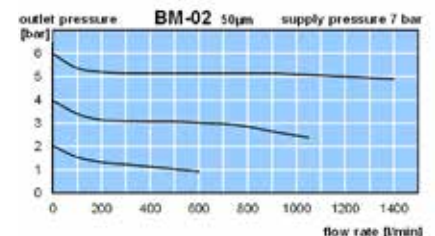
BW35-01S



BW50-01S

*1 at 7 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop

*2 04 = 0...4 bar, 10 = 0...10 bar, 16 = 0...16 bar



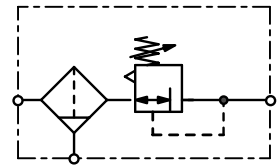
Extensions: see chapter for FRL service units
Gauges: see chapter for measuring devices
Spare parts: see separate spare parts list

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Order example:
BM-02

Description	Modular pressure filter regulator which can be interlocked with all other instruments of the same series.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 12,5 bar, max. 16 bar for Series 042		
Adjustment	by knob with snap-lock		
Relieving function	relieving		
Gauge port	G $\frac{1}{8}$ or G $\frac{1}{4}$ at series 095, on both sides of the body, screw plugs supplied		
Filter element	20 μ m, optionally 5 μ m, made of sintered polyethylene		
Bowl	plastic version with bayonet catch, threaded connection at series 042		
Drainage	manual drain with semiautomatic drain, optionally automatic drain		
Temperature range	0 °C to 50 °C / 32 °F to 122 °F		
Material	Body: nylon,	POM at series 042	Inner valve: brass
	Bowl: polyamide		Thread insert: brass
	Elastomer: NBR/Buna-N		



G $\frac{1}{4}$ up to G1

Dimensions			Bowl		Flow rate		Supply max.	Connection thread	Order number	
A	B	C	Design	Capacity	m ³ /h*1	l/min*1	bar	G		B*
mm	mm	mm	made of/with	l						

Plastic filter regulator									
manual drain with semiautomatic drain, relieving, max. 12,5/16 bar w/o gauge, pressure range 0...8 bar, 20 μ m filter element									
42	207	126	plastic/	0.02	72	1200	16	G $\frac{1}{4}$	B042-02HC
52	239	148	bowl guard	0.04	120	2000	12.5	G $\frac{3}{8}$	B050-03HC
52	239	148		0.04	126	2100	12.5	G $\frac{1}{2}$	B052-04HC
63	276	173		0.10	168	2800	12.5	G $\frac{1}{2}$	B075-04HC
137	276	173		0.10	174	2900	12.5	G $\frac{3}{4}$	B080-06HC
195	411	237		0.20	828	13800	12.5	G1	B095-08HC

Special options, add the appropriate letter

5 μ m filter element		B0...0.G.
non-relieving	without relieving function	B0...0...K
0...4 bar regulating range		B095-0...B
0...12 bar regulating range		B095-0...D
automatic drain		B0...0...R

Accessories, enclosed

pressure gauge	Ø 40 mm, 0... ^{*2} bar, G $\frac{1}{8}$	for B042	MA4001-... ^{*2}
	Ø 50 mm, 0... ^{*2} bar, G $\frac{1}{8}$	for B050 to B080	MA5001-... ^{*2}
	Ø 63 mm, 0... ^{*2} bar, G $\frac{1}{4}$	for B095	MA6302-... ^{*2}
mounting bracket	made of steel, mounting nut at the device	for B042	BW30-01
		for B050 to B080	BW42-01
		for B095	BW00-02



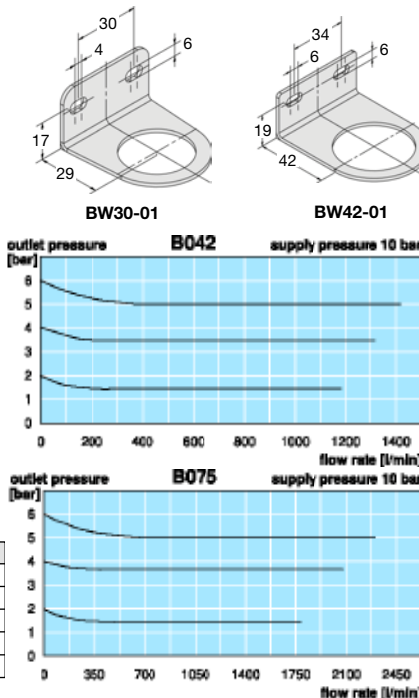
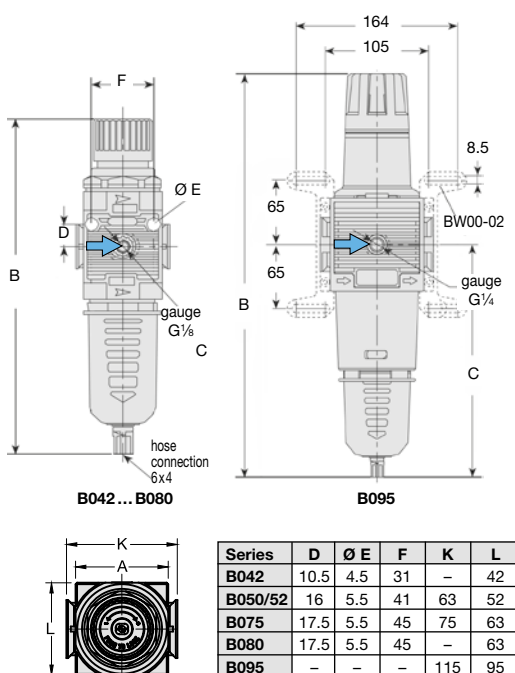
B042



B050



B095



*1 at 10 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop

*2 04 = 0...4 bar, 10 = 0...10 bar, 16 = 0...16 bar

* Product group

Extensions: see chapter for FRL service units
Gauges: see chapter for measuring devices

PDF CAD
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Order example:
B042-02HC

Description

High-capacity filter regulator of modular design with exchangeable inserts. Can be interlocked with lubricator without needs for double nipples. Each "maxi" device may be taken from a fixed line in seconds by simply removing the mounting bolts.

Media

compressed air or non-corrosive gases

Supply pressure

max. 17 bar

Adjustment

by plastic knob with snap-lock at B20, by T-handle with locknut at B21

Relieving function

relieving

Gauge port

G $\frac{1}{4}$ on both sides of the body, screw plugs supplied

Bowl

metal version with sight glass

Filter element

40 μ m, optionally 5 μ m, made of polypropylene

Drainage

manual drain as standard, optionally semiautomatic or automatic drain for max. 12 bar

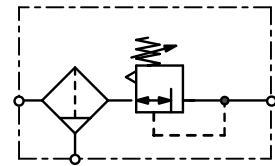
Temperature range

0 °C to 70 °C / 32 °F to 158 °F
up to 50 °C / 122 °F for semiautomatic or automatic drain version

Material

Body: zinc die-cast
Knob (B20): glass fibre-reinforced plastic
Bowl: zinc die-cast
Elastomer: NBR/Buna-N

Spring cage: zinc die-cast
T-handle (B21): steel
Sight glass: polyurethane
Inner valve: brass and plastic



G $\frac{1}{2}$ up to G1

Dimensions			Bowl		Flow rate		Connection	Pressure	Order	A*
A	B	C	Design	Capacity	m ³ /h*1	l/min*1	thread	range	number	
mm	mm	mm	made of / with	l			G	bar		

"Maxi" filter regulator					with manual drain, relieving, without gauge, 40 μ m filter element, max. 17 bar			B20	
89	289	175	metal/sight glass	0.3	288	4800	G $\frac{1}{2}$	0.2 ... 4.0 0.3 ... 9.0 0.5 ... 17	B20-04WJB B20-04WJC B20-04WJD
111	289	175	metal/sight glass	0.3	408	6800	G $\frac{3}{4}$	0.2 ... 4.0 0.3 ... 9.0 0.5 ... 17	B20-06WJB B20-06WJC B20-06WJD
					420	7000	G1	0.2 ... 4.0 0.3 ... 9.0 0.5 ... 17	B20-08WJB B20-08WJC B20-08WJD



B20
with adjusting knob



B21
with T-handle

Special options, add the appropriate letter

T-handle

including locknut, total height 329 mm

B21-0 . W . .

filter element 5 μ m

B20-0 . WG .

NPT

connection thread

B20-0 . W . . N

non-relieving

without relieving function

B20-0 K

semiautomatic drain

RK500SY, max. 12 bar

B20-0 . W . . M

automatic drain

SA605MD, max. 12 bar

B20-0 . W . . R

Accessories, enclosed

pressure gauge

Ø 63 mm, 0...2 bar, G $\frac{1}{4}$

MA6302-..*2 B*

mounting bracket

mounting at the spring cage

BW45-02 B*

mounting nut

made of plastic

M45x1,5K B*

made of aluminium

M45x1,5A B*

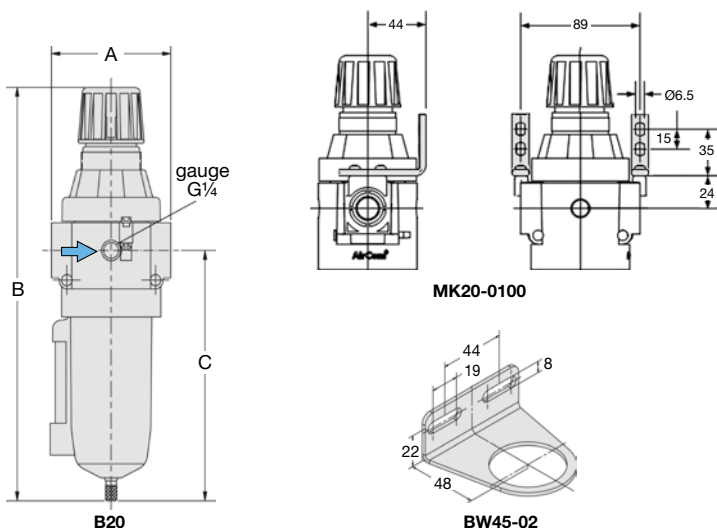
mounting bracket set

made of steel

MK20-0100

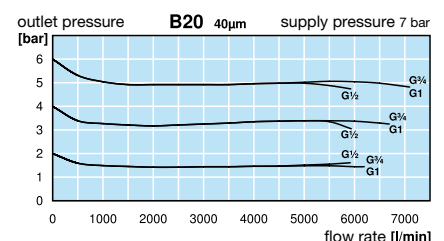
Filter
regulator

17



RK500SY

SA605MD



*1 at 7 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop

*2 04 = 0...4 bar, 10 = 0...10 bar, 25 = 0...25 bar

* Product group

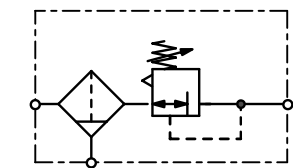
Extensions: see chapter for FRL service units
Gauges: see chapter for measuring devices

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Order example:
B20-04WJB

Description	Low-cost aluminium regulator of solid design and diaphragm operating system up to G $\frac{1}{2}$. From G $\frac{3}{4}$ on with piston operating system. Suitable for compressed air or non-corrosive gases.
Supply pressure	max. 16 bar for metal bowl with sight glass, max. 30 bar for metal bowl without sight glass
Adjustment	by knob with snap-lock up to G $\frac{1}{2}$, by hexagon head screw from G $\frac{3}{4}$ up to G1 $\frac{1}{2}$ (BD-1A.) by T-handle from G1 $\frac{1}{2}$ (BD-12.) up to G2
Gauge port	G $\frac{1}{4}$ on both sides of the body, G $\frac{1}{8}$ on both sides of the body at BD-01/02, one screw plug supplied
Filter element	50 μ m, optionally 5 μ m, made of propylene
Bowl	plastic version, standard or short, metal version with or without sight glass
Drainage	semiautomatic drain as standard for max. 16 bar, respectively manual drain max. 30 bar automatic drain max. 16 bar as option
Temperature range	-20 °C to 60 °C / -4 °F to 140 °F for metal bowl with sight glass -30 °C to 80 °C / -22 °F to 176 °F for metal bowl without sight glass
Material	Body: aluminium Elastomer: NBR/Buna-N Bowl: zinc die-cast, stainless steel by BD-12 and -16



G $\frac{1}{8}$ up to G2
5/50 μ m, up to 30 bar

Dimensions			Bowl		Flow rate		P ₁ max.	Filter element	Connection thread	Order number
A	B	C	Design	Capacity	m ³ /h*1	l/min*1	bar	μ m	G	
mm	mm	mm	made of/with	l						

Filter pressure regulator										BD
										with semiautomatic drain, relieving, without pressure gauge, pressure range 0.5...8 bar
40	201	128	metal/sight glass	0.05	27	450	16	50	G $\frac{1}{8}$	BD-01M
			metal	0.05			30			BD-01NH
40	201	128	metal/sight glass	0.05	30	500	16	50	G $\frac{1}{4}$	BD-02M
			metal	0.05			30			BD-02NH
64	251	149	metal/sight glass	0.18	108	1800	16	50	G $\frac{3}{8}$	BD-03M
			metal	0.18			30			BD-03NH
64	251	149	metal/sight glass	0.18			16		G $\frac{1}{2}$	BD-04M
			metal	0.18			30			BD-04NH
129	310	174	metal/sight glass	0.50	300	5000	16	50	G $\frac{3}{4}$	BD-06M
			metal	0.50			30			BD-06NH
129	310	174	metal/sight glass	0.50			16		G1	BD-08M
			metal	0.50			30			BD-08NH
240	310	174	metal/sight glass	0.50	390	6500	16	50	G1 $\frac{1}{4}$	BD-10M
			metal	0.50			30			BD-10NH
240	310	174	metal/sight glass	0.50			16		G1 $\frac{1}{2}$	BD-1AM
			metal	0.50			30			BD-1ANH



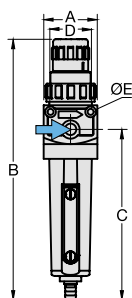
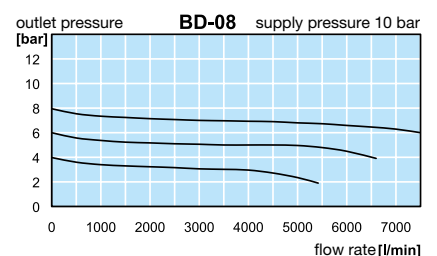
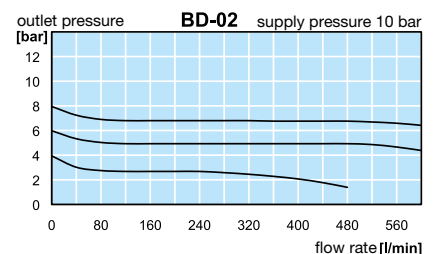
BD-01/-02M



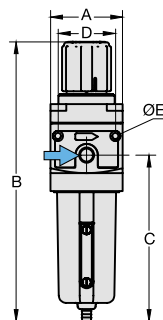
BD-03/-04M



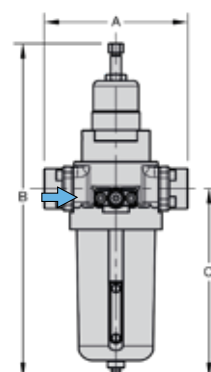
BD-10/-1ANH



BD-01/-02



BD-03/-04



BD-06/-08

Filter
regulator



17

Type	M	D	Ø E
BD-01/02	M30x1,5	30	4.5
BD-03/04	M50x1,5	51	5.5

*1 at 8 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop

*2 04 = 0...4 bar, 10 = 0...10 bar, 16 = 0...16 bar

* Product group

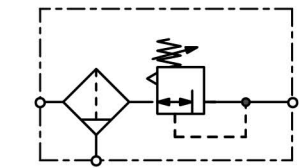
Extensions: see chapter for FRL service units
Gauges: see chapter for measuring devices

PDF CAD
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Order example:
BD-01M

Description	Low-cost aluminium regulator of solid design and diaphragm operating system up to G $\frac{1}{2}$. From G $\frac{3}{4}$ on with piston operating system. Suitable for compressed air or non-corrosive gases.
Supply pressure	max. 16 bar for metal bowl with sight glass, max. 30 bar for metal bowl without sight glass
Adjustment	by knob with snap-lock up to G $\frac{1}{2}$, by hexagon head screw from G $\frac{3}{4}$ up to G1 $\frac{1}{2}$ (BD-1A), by T-handle from G1 $\frac{1}{2}$ (BD-12.) up to G2
Gauge port	G $\frac{1}{4}$ on both sides of the body, G $\frac{1}{2}$ on both sides of the body at BD-01/02, one screw plug supplied
Filter element	50 μ m, optionally 5 μ m, made of propylene
Bowl	plastic version, standard or short, metal version with or without sight glass
Drainage	semiautomatic drain as standard for max. 16 bar, respectively manual drain max. 30 bar automatic drain max. 16 bar as option
Temperature range	-20 °C to 60 °C / -4 °F to 140 °F for metal bowl with sight glass -30 °C to 80 °C / -22 °F to 176 °F for metal bowl without sight glass
Material	Body: aluminium Elastomer: NBR/Buna-N Bowl: zinc die-cast, stainless steel by BD-12 and -16



G $\frac{1}{8}$ up to G2
5/50 μ m, up to 30 bar

Dimensions			Bowl		Flow		P ₁	Filter	Connection	Order
A	B	C	Design	Capacity	rate	max.	max.	element	thread	number
mm	mm	mm	made of/ with	l	m ³ /h*1	l/min*1	bar	μ m	G	

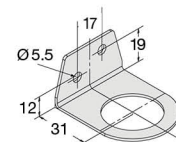
Filter pressure regulator										BD
174	483	213	Metall	1.w0	1380	23 000	30	50	G1 $\frac{1}{2}$	BD-12NH
174	483	213	Metall	1.0	1380	23 000	30	50	G2	BD-16NH



BD-12/-16NH

Special options, add the appropriate letter

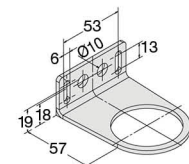
5 μ m filter element	BD-... G
0.3 ... 3 bar regulating range	BD-... B
1 ... 15 bar regulating range	BD-... E
manual drain	max. 16 bar for metal bowls with sight glass BD-... H
automatic drain	max. 16 bar, drainage through float valve for G $\frac{3}{4}$ to G2 BD-... R
flange connection	see chapter for stainless steel devices / flanges BD-... F.



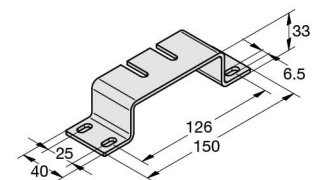
BW30-02

Accessories, enclosed

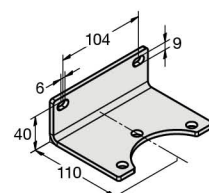
pressure gauge	Ø 40 mm, 0...*2 bar, G $\frac{1}{8}$ Ø 50 mm, 0...*2 bar, G $\frac{1}{4}$ Ø 63 mm, 0...*2 bar, G $\frac{1}{4}$	for G $\frac{1}{8}$ and G $\frac{1}{4}$ for G $\frac{3}{4}$ and G $\frac{1}{2}$ for G $\frac{3}{4}$ up to G2	MA4001-...*2 MA5002-...*2 MA6302-...*2
mounting bracket	made of steel	for G $\frac{1}{8}$ and G $\frac{1}{4}$	BW30-02
mounting nut	made of plastic	for G $\frac{1}{8}$ and G $\frac{1}{4}$	M30x1,5K
mounting bracket	made of steel	for G $\frac{3}{4}$ and G $\frac{1}{2}$	BW50-03
mounting nut	made of plastic	for G $\frac{3}{4}$ and G $\frac{1}{2}$	M50x1,5K
mounting bracket	made of stainless steel	for G $\frac{3}{4}$ up to G1 $\frac{1}{2}$ (1A)	BW00-59S
set of brackets	made of stainless steel	for G1 $\frac{1}{2}$ (12) and G2	BW00-62S



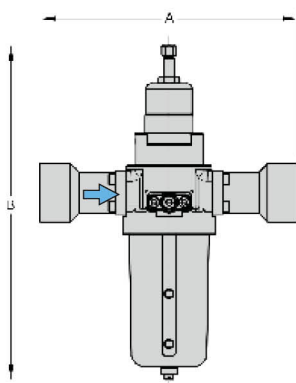
BW50-03



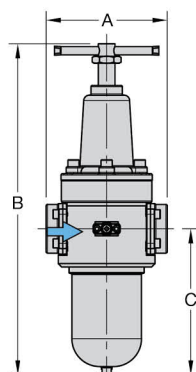
BW00-59S



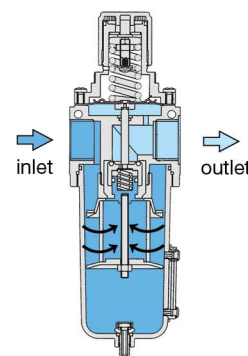
BW00-62S



BD-0/-1A



BD-12/-16



cross-section

*1 at 8 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop

*2 04 = 0...4 bar, 10 = 0...10 bar, 16 = 0...16 bar

* Product group

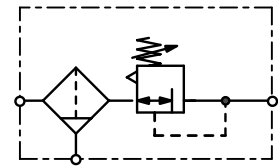
Extensions: see chapter for FRL service units
Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net



Order example:
BD-12NH

Description	Filter pressure regulator especially for low temperatures as well as supply of instruments.
Media	compressed air or non-corrosive gases
Supply pressure	max. 17 bar
Supply sensitivity	10 mbar outlet pressure deviation at supply pressure variation of 1 bar
Air consumption	max 2 l/min subject to outlet pressure
Adjustment	by square-headed spindle (spanner size 8 mm) with locknut
Relieving function	relieving, optionally non-relieving
Gauge port	1/4" NPT on one side of the body, one screw plug supplied
Filter element	40 µm, optionally 5 µm, made of impregnated cellulose
Drainage	manual drain
Temperature range	0 °C to 50 °C / 32 °F to 122 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F
Material	Body: aluminium die-cast Spring cage: aluminium die-cast Elastomer: nylon-reinforced NBR/Buna-N, optionally FKM Inner valve: brass, acetal, galvanised steel



1/4" NPT

Dimensions			Bowl		Flow		P ₁	Connection	Pressure	Order	
A	B	C	Design	Capacity	rate	rate	max.	thread	range	number	
mm	mm	mm	made of	l	m³/h*1	l/min*1	bar	NPT	bar		B*

Filter pressure regulator										with manual drain, relieving, with air consumption without gauge, 40 µm filter element	B300
197	80	83	metal	0.1	33	550	17	1/4" NPT	0...0.7		B300-020
									0...2.0		B300-02A
									0...4.0		B300-02B
									0...8.0		B300-02C

Special options, add the appropriate letter

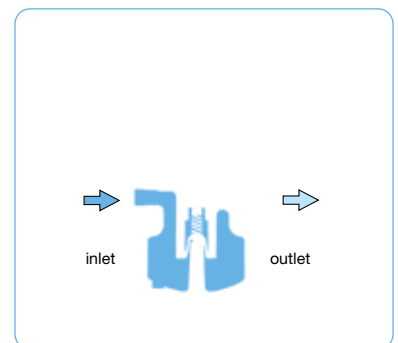
5 µm filter element		B300-02 . G
non-relieving	without relieving function and without air consumption	B300-02 . K
tapped exhaust	1/4" NPT	B300-02 . X12
tamper-proof cap		B300-02 . T
FKM-elastomer		B300-02 . V



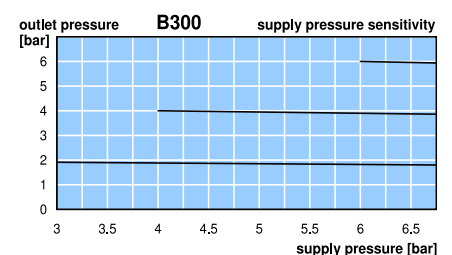
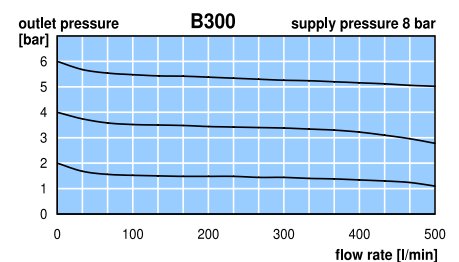
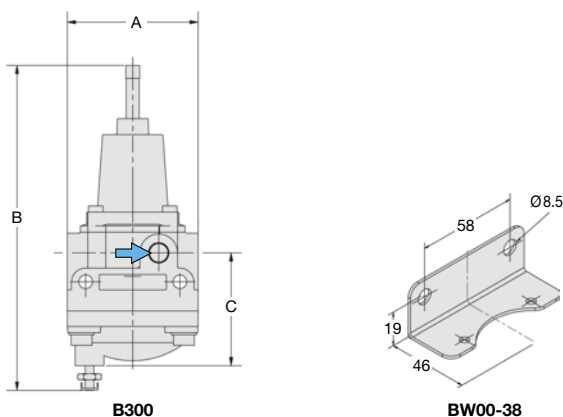
B300

Accessories, enclosed

mounting bracket	mounting at spring cage, made of steel	BW00-38
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cross-section



*1 at 8 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop

* Product group

