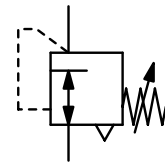


PRECISION PRESSURE REGULATOR

	DESCRIPTION	PRESSURE RANGE	CONNECTION	SERIES	PAGE
		bar	thread		
WITH CONSTANT BLEED	miniature	0.05 ... 2 / 8	G½ a. ½"NPT	R90	5.02
	proven	0.02 ... 0.5 / 10	G¼	11-818	5.03
	proven	0.14 ... 1.7 / 8	G¼ a. ¼"NPT	53.10	5.04
	many variations	0.01 ... 0.14 / 10	G¼ - G½	R230	5.06
	very precise	0.01 ... 0.14 / 28	G¼ - G½	10	5.07
	small design	0.001 ... 0.14 / 7	G¼ a. G¾	R300	5.08
	high exhaust	0.01 ... 3 / 10	G¼ - G½	R03	5.10
	low pressure	0.002 ... 0.5 / 0.8	G¼ - G½	R110	5.11
	2-stage	0.14 ... 2.7 / 8.2	G¼ - G¾	R700	5.13
	many pressure areas	0.03 ... 0.15 / 14	G¼ - G¾	R410	5.14
	high volume flow	0.001 ... 0.7 / 10	G1 a. G1½	R102	5.16
	miniature	0.01 ... 0.35 / 7	M5 a. flange	RT	1.20
	stainless steel	0.02 ... 1.5 / 10	G¼ a. G½	R3150	15.12
WITHOUT CONSTANT BLEED	robust, low cost	0.01 ... 0.6 / 3.5	G¼ a. G¾	R216	5.05
	non-relieving	0.01 ... 0.14 / 10	G¼ a. G½	R230-K	5.06
	non-relieving	0.01 ... 0.14 / 28	G¼ - G½	10-N	5.07
	small design	0.001 ... 0.14 / 7	G¼	R300-K	5.08
	high volume flow	0.03 ... 0.7 / 10	G¼ u. G¾	R100	5.09
	non-relieving	0.002 ... 0.35 / 0.8	G¼ - G½	R110-K	5.11
	robust	0.01 ... 0.5 / 16	G¼	R217	5.12
	non-relieving	0.03 ... 0.15 / 14	G¼ - G¾	R410-K	5.14
	high-precision	0.03 ... 0.7 / 17	G¾ - G¾	R400	5.15
	non-relieving	0.001 ... 0.7 / 10	G1 a. G1½	R102-K	5.16
	differential pressure regulator	0.01 ... 1 / 10	G¼ a. G¾	R650	6.03
	miniature	0.2 ... 2.5 / 8	G½	R307	1.16
	miniature	0.2 ... 0.25 / 8	Flange	R308	1.17
MINIATUR	very lightweight	0.03 ... 0.24 / 6	½"NPT, 16 - 32" flange	R800/R900	1.09
	interlockable	0.01 ... 0.7 / 7	M5, G½, G¼, SS	R7	1.10
ELECTRICAL	control valves	0 ... 0.005/35	G½	PQ	10.03
	piezo-operated	-1 ... 1 / 10	G½ u. G¼	PRE	10.14



Description	Diaphragm precision pressure regulator of very small design and low air consumption
Media	compressed air or non-corrosive gases
Supply pressure	max. 10 bar
Accuracy	response sensitivity: $\pm 0.2\%$ FS repeatability: $\pm 0.3\%$ FS supply sensitivity: 35 mbar for a 7 bar supply pressure change
Air consumption	max. 3 l/min at 10 bar supply pressure. Consumption depends on supply pressure.
Adjustment	by handwheel with locknut
Relieving function	relieving
Gauge port	G $\frac{1}{8}$ on both sides of the body, screw plug supplied
Mounting position	any
Temperature range	-18 °C to 71 °C / -0.4 °F to 159.8 °F
Material	Body: zinc die-cast Elastomer: NBR/Buna-N Inner valve: stainless steel and brass



G $\frac{1}{8}$
0.05 ... 2 / 4 / 8 bar

Dimensions			Flow rate	Supply pressure	Connection thread	Pressure range	Order number
A	B	C	l/min*1	max. bar	G / flange	bar	
mm	mm	mm					

Precision pressure regulator

supply pressure max. 10 bar, relieving, with constant bleed

R90

35	94	10	200	10	G $\frac{1}{8}$	0.05 ... 2	R90-01A
						0.08 ... 4	R90-01B
						0.10 ... 8	R90-01C



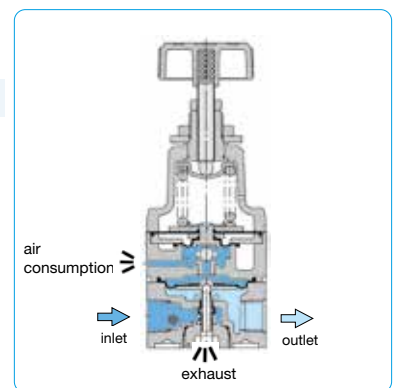
R90

Special options, add the appropriate letter

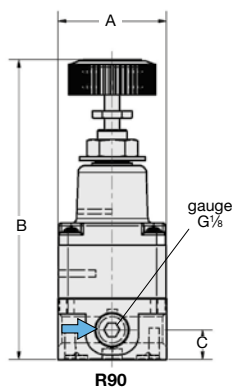
NPT	connection thread	R90-01.N
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Accessories, enclosed

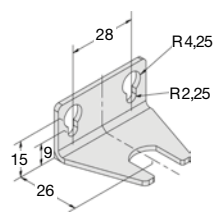
pressure gauge	$\varnothing$ 23 mm, 0...*2 bar, G $\frac{1}{8}$	MA2301-...*2
mounting bracket	made of steel, mounting nut at the device	BW10-02



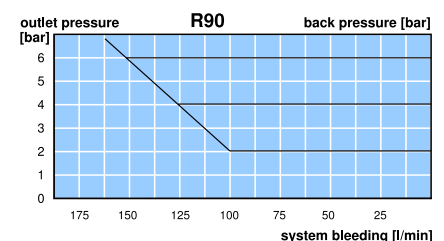
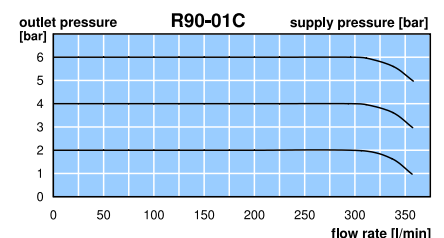
cross-section



R90



BW10-02



*1 for compressed air : 7 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop
*2 04 = 0...4 bar, 10 = 0...10 bar

Gauges: see chapter for measuring devices

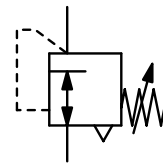
PDF CAD
www.aircom.net

* Product group



Order example:
R90-01A

Description	Precision pressure regulator designed for precise pressure control in the event of changes in flow and supply pressure. Due to constant bleed slight blow-off sounds existing.				
Media	dry, oil-free and 25 µm filtered compressed air				
Supply pressure	max. 8 bar for 0.02...0.5 bar, max. 10 bar for 0.07...4 bar, max. 14 bar for 0.4...10 bar				
Accuracy	at varying supply pressures: < 20 mbar pressure deviation at varying volume flows: < 30 mbar pressure deviation at 5 °C / K temperature variation: < 3 mbar pressure deviation				
Air consumption	max. 2 l/min, subject to outlet pressure				
Adjustment	by handwheel for panel mounting, optionally by spindle				
Relieving function	relieving, 3 mm exhaust diameter				
Gauge port	G¼ on both sides of the body, optionally without gauge port				
Temperature range	0 °C to 70 °C / 32 °F to 158 °F, for appropriately conditioned compressed air down to -30 °C / -22 °F				
Material	Body: zinc die-cast Elastomer: NBR/Buna-N				
	Inner valve: brass, plastic				
	Mounting position any				



G¼, 280 l/min

Dimensions			Description	P ₁ max.	Flow rate	Connection thread	Pressure range	Order number
A	B	C		bar	l/min*1	G	bar	
mm	mm	mm						

Precision pressure regulator								
				P1: max. 8 / 10 / 14 bar, relieving, with constant bleed, accuracy < 30 mbar, K _v = 0.16 m³/h				11-818
55	137	13	handwheel	8	280	G¼	0.02 ... 0.5	11-818-999
			w/o gauge port	10			0.07 ... 4.0	11-818-100
				14			0.40 ... 10	11-818-110
55	137	13	handwheel	8	280	G¼	0.02 ... 0.5	11-818-987
			with gauge port	10			0.07 ... 4.0	11-818-993
				14			0.40 ... 10	11-818-991
55	137	13	spindle	8	280	G¼	0.02 ... 0.5	11-818-998
			w/o gauge port	10			0.07 ... 4.0	11-818-101
				14			0.40 ... 10	11-818-112

Special options, add the appropriate letter

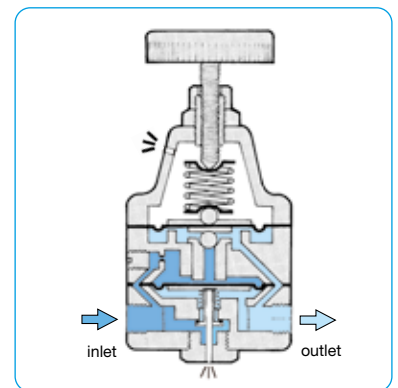
tamper-proof cap	made of brass, adjustment by screwdriver, total height 108 mm	11-818-...T
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Accessories, enclosed

pressure gauge	Ø 50 mm, 0...*2 bar, G¼	MA5002-...*2
mounting bracket	made of steel, mounting nut at the device	BW12-01
mounting nut	for metal sheet thickness from 2.5 up to 6 mm	3081-01

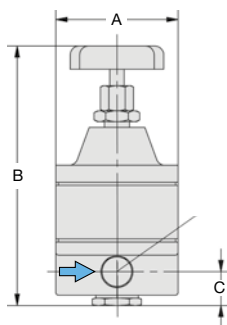


11-818-100

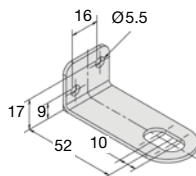


cross-section

Präzis.
5



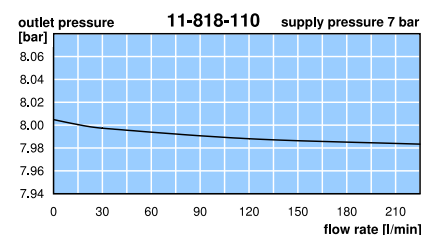
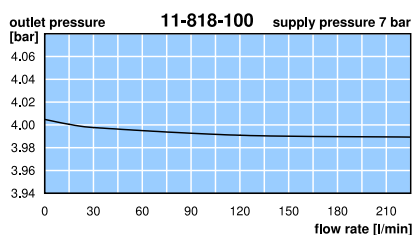
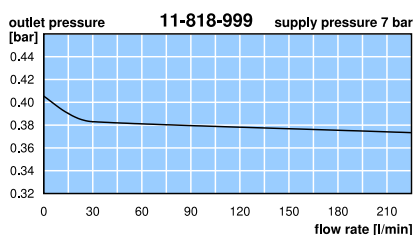
11-818



BW12-01



tamper-proof cap



*1 at 7 bar supply pressure and 1.4 bar outlet pressure

*2 01 = 0...1 bar, 04 = 0...4 bar, 10 = 0...10 bar

* Product group

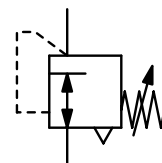
Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net



Order example:
11-818-999

Description	Regulator of proven reliability and durability designed for precise pressure regulation in the event of changes in flow, supply pressure and temperature. Slight exhaust sounds are normal.	
Note	To avoid leaks the mounting nut must be screwed tight.	
Media	dry, oil-free and 25 µm filtered compressed air	
Supply pressure	max. 10 bar	
Accuracy	at varying supply pressures: < 1 mbar pressure deviation at varying volume flows: < 5 mbar pressure deviation	
Air consumption	max. 2 l/min, subject to outlet pressure	
Adjustment	by handwheel with locknut, for panel mounting	
Relieving function	relieving, the exhaust valve's diameter is six times greater than the regulating valve's diameter	
Gauge port	G¼ or ¼" NPT on both sides of the body, identical with the connection thread	
Temperature range	0 °C to 70 °C / 32 °F to 158 °F, for appropriately conditioned compressed air down to -30 °C / -22 °F	
Material	Body: zinc die-cast Elastomer: NBR/Buna-N	Measuring capsule: beryllium copper



G¼ and ¼" NPT
280 l/min

Dimensions			Description	K _v -value	Flow rate		Connection thread	Pressure range	Order number	D*
A	B	C			m³/h*1	l/min*1				
mm	mm	mm		(m³/h)			G/NPT	bar		

Precision pressure regulator

supply pressure max. 10 bar, relieving, with constant bleed, accuracy 5 mbar

Manostat

54	70	14	standard	0.16	17	280	G¼	0.14 ... 1.7	53.1002.4X
								0.14 ... 4.0	53.1002.5X
								0.14 ... 8.0	53.1002.6X
54	70	14	standard	0.16	17	280	¼" NPT	0.14 ... 1.7	53.1002.00
								0.14 ... 4.0	53.1003.00
								0.14 ... 8.0	53.1004.00



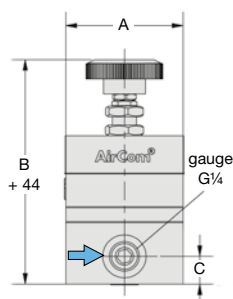
53.1002.6X

Special options, add the appropriate letter

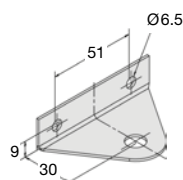
tamper-proof cap aluminium, adjustment by screwdriver, total height 109 mm **53.1. T**

Accessories, enclosed

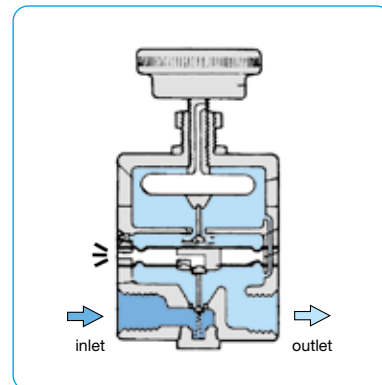
pressure gauge	Ø 50 mm, 0 ... *2 bar, G¼	MA5002-... *2
gauge connection	adapter ¼" NPT - G¼ female, made of brass, for NPT ports	AM-06
mounting bracket	made of steel, mounting nut at the device	BW11-01



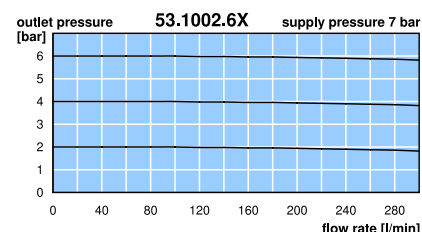
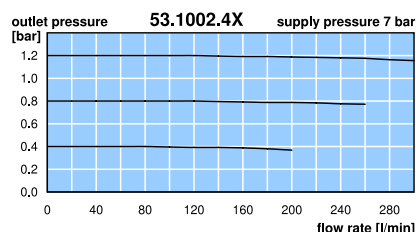
53.10...



BW11-01



cross-section



*1 at 7 bar supply pressure and 1.4 bar outlet pressure
*2 02 = 0...2.5 bar, 04 = 0...4 bar, 10 = 0...10 bar

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net

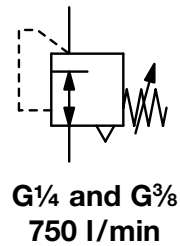
* Product group



Order example:
53.1002.4X

PRECISION REGULATOR WITHOUT CONSTANT BLEED, UP TO 3.5 BAR OUTLET PRESSURE R216

Description	Diaphragm pressure regulator with good regulation accuracy at varying volume flow, especially at low pressure.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 21 bar		
Accuracy	response sensitivity: < 100 mbar		
Air consumption	without constant bleed		
Adjustment	by T-handle with locknut, mounting bracket not possible by handwheel, suitable for panel mounting		
Relieving function	relieving, optionally non-relieving		
Gauge port	G $\frac{1}{8}$ on the bottom side of the body, one screw plug supplied		
Mounting position	any		
Temperature range	0 °C to 50 °C / 32 °F to 122 °F for handwheel version 0 °C to 80 °C / 32 °F to 176 °F for T-handle version for appropriately conditioned compressed air down to -30 °C / -22 °F		
Material	Body: zinc die-cast	Elastomer: NBR/Buna-N	Bottom screw: brass
	Spring cage: aluminium		



Dimensions			Adjustment	Kv-value	Flow rate		Connection thread	Pressure range	Order number	
A	B	C	by	(m ³ /h)	m ³ /h*1	l/min*1	G	bar		D*
mm	mm	mm	by							

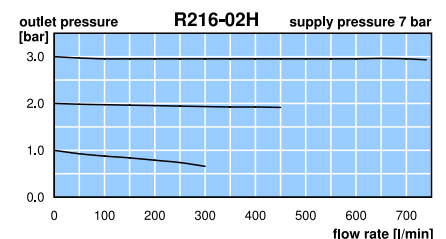
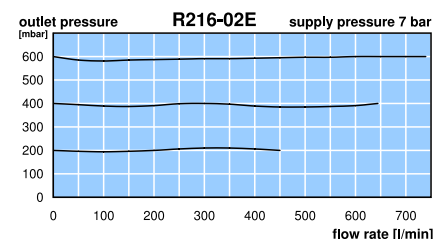
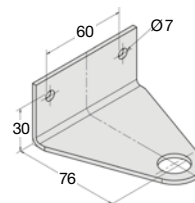
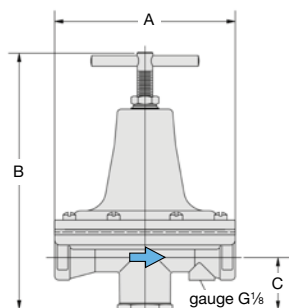
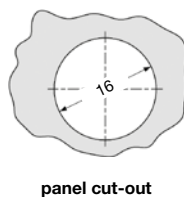
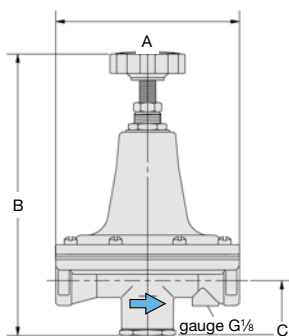
Precision pressure regulator									supply pressure max. 21 bar, relieving, without constant bleed	R216
108	162	32	T-handle	0.39	42	700	G $\frac{1}{4}$	0.01 ... 0.6		R216-02E
									0.01 ... 1.6	R216-02F
									0.01 ... 3.5	R216-02H
				0.42	45	750	G $\frac{3}{8}$	0.01 ... 0.6		R216-03E
									0.01 ... 1.6	R216-03F
									0.01 ... 3.5	R216-03H
108	162	32	handwheel for panel mounting	0.39	42	700	G $\frac{1}{4}$	0.01 ... 0.6		R216-02EP
									0.01 ... 1.6	R216-02FP
									0.01 ... 3.5	R216-02HP
				0.42	45	750	G $\frac{3}{8}$	0.01 ... 0.6		R216-03EP
									0.01 ... 1.6	R216-03FP
									0.01 ... 3.5	R216-03HP

Special options, add the appropriate letter

non-relieving	without relieving function	R216-0...K
NPT	connection thread (not for G $\frac{3}{8}$ with T-handle)	R216-0...N
free of oil and grease	specially cleaned	R216-0...L

Accessories, enclosed

pressure gauge	Ø 63 mm, 0... ² bar, G $\frac{1}{4}$, connection parts required	MA6302-... ²
gauge connection	pressure gauge made of brass, adapter G $\frac{1}{8}$ a-G $\frac{1}{4}$ i	AM-02
mounting bracket	made of steel, mounting nut at the device for R216-0...P	BW20-02



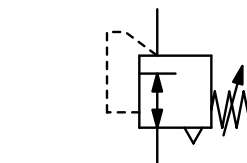
*1 at 7 bar supply pressure and 3 bar outlet pressure

*2 01 = 0...1 bar, 02 = 0...2.5 bar, 04 = 0...4 bar

* Product group



Description	The diaphragm pressure regulator provides precision regulation in high flow applications. A balanced inner valve, sensitive rolling diaphragm and carefully positioned aspirator tube ensure constant outlet pressure even with changing supply pressure and flow fluctuations.	
Media	compressed air or non-corrosive gases	
Supply pressure	max. 17 bar	
Accuracy	response sensitivity: < 4 mbar	
Air consumption	max. 6 l/min, subject to outlet pressure	
Adjustment	by handwheel with locknut	
Relieving function	relieving, optionally non-relieving	
Relief capacity	110 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint	
Gauge port	G $\frac{1}{4}$ on both sides of the body, optionally $\frac{1}{4}$ " NPT	
Temperature range	0 °C to 80 °C / 32 °F to 176 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F	
Material	Body: aluminium die-cast Elastomer: NBR/Buna-N	Mounting position any Inner valve: brass, galvanized steel



**G $\frac{1}{4}$ up to G $\frac{1}{2}$, 900 l/min
10 ... 140 mbar / 10 bar**

Dimensions			K _v -value	Flow rate		Connection thread	Pressure range	Order number	D*
A	B	C		m ³ /h	l/min				
mm	mm	mm	(m ³ /h)	m ³ /h*	l/min*	G	bar		

Precision pressure regulator							supply pressure max. 17 bar, relieving, with constant bleed	R230
67	154	16	0.5	54	900	G $\frac{1}{4}$	0.01 ... 0.14	R230-020
							0.01 ... 1.0	R230-02A
							0.01 ... 2.0	R230-02B
							0.07 ... 4.0	R230-02C
							0.14 ... 10	R230-02D



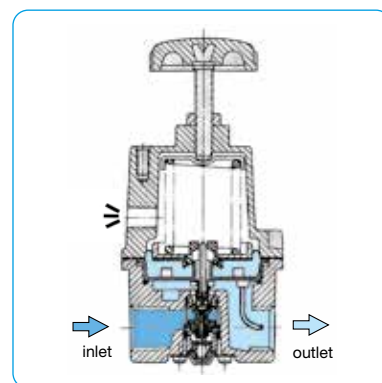
R230

Special options, add the appropriate letter

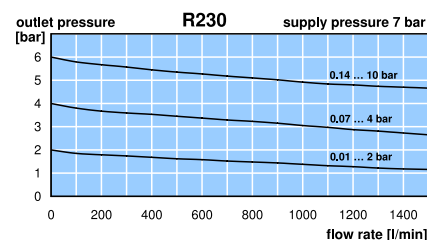
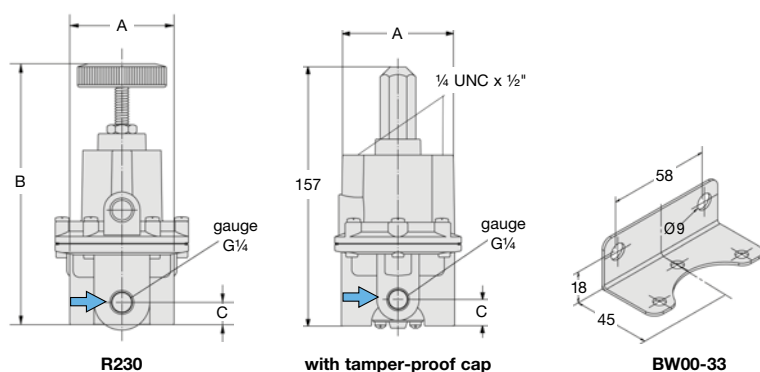
G $\frac{3}{8}$	connection thread	R230-03 .
G $\frac{1}{2}$	connection thread, recommended for mbar range	R230-04 .
NPT	connection thread	R230-0 . . N
non-relieving	and without constant bleed	R230-0 . . K
reduced bleeding		R230-0 . . X19
tapped exhaust	connection thread G $\frac{1}{4}$	R230-0 . . X12
tamper-proof cap	aluminium, adjustment by screwdriver, total height 157 mm	R230-0 . . T
check valve	quick exhaust at supply pressure removal	R230-0 . . X80

Accessories, enclosed

pressure gauge	Ø 63 mm, 0 ... 160 mbar, G $\frac{1}{4}$, capsule type	MA6302-C2
pressure gauge	Ø 50 mm, 0 ... *2 bar, G $\frac{1}{4}$, Bourdon tube	MA5002-...*2
gauge connection	NPT connection thread, made of brass, adapter $\frac{1}{4}$ " NPT to G $\frac{1}{4}$ female	VP-0202N
mounting bracket	made of steel	BW00-33



cross-section



*1 at 7 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop
*2 01 = 0 ... 1 bar, 02 = 0 ... 2.5 bar, 06 = 0 ... 6 bar, 10 = 0 ... 10 bar

Gauges: see chapter for measuring devices

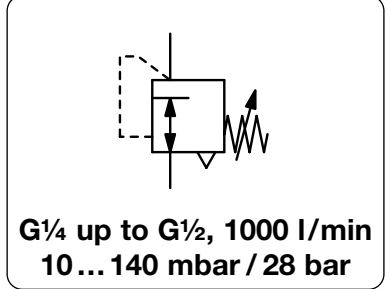
PDF CAD
www.aircom.net

* Product group



Order example:
R230-020

Description	The diaphragm pressure regulator provides precision regulation in high flow applications. A balanced inner valve, sensitive rolling diaphragm and carefully positioned aspirator tube ensure constant outlet pressure even with changing supply pressure and flow fluctuations.	
Media	compressed air or non-corrosive gases	
Supply pressure	max. 35 bar	
Accuracy	response sensitivity: < 2 mbar	
Air consumption	max. 6 l/min, subject to outlet pressure	
Adjustment	by handwheel with locknut	
Relieving function	relieving, optionally non-relieving	
Relief capacity	150 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint	
Gauge port	1/4" NPT, on both sides of the body	
Temperature range	0 °C to 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F	
Material	Body: aluminium die-cast	Inner valve: brass, galvanized steel
	Elastomer: NBR/Buna-N, optionally FKM	



Dimensions			K _v -value	Flow rate	Connection thread	Pressure range	Order number
A	B	C					
mm	mm	mm	(m³/h)	m³/h*1 l/min*1	G	bar	

Precision pressure regulator

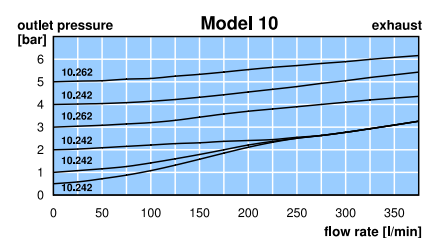
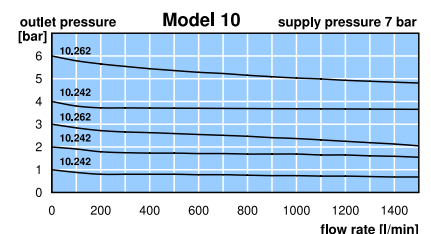
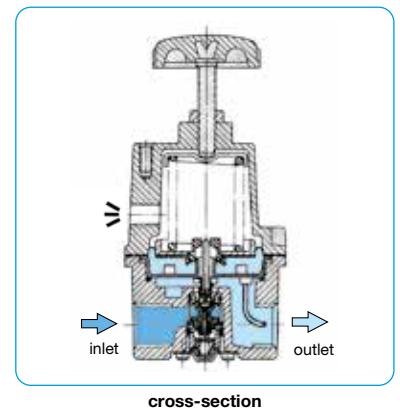
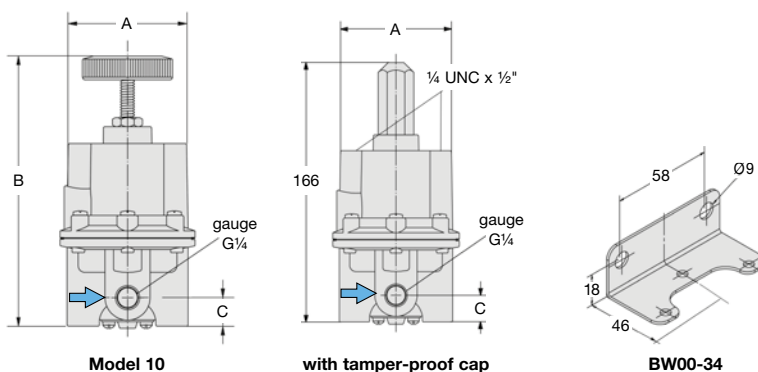
			supply pressure max. 35 bar, relieving, with constant bleed		Model 10		
67	169	26	0.64	60 1000	G1/4	0.01 ... 0.14	10212H
						0.01 ... 0.7	10222H
						0.01 ... 1.4	10202H
						0.01 ... 2.1	10232H
						0.07 ... 4.1	10242H
						0.14 ... 10	10262H
						0.20 ... 14	10272H
67	178	26	0.64	60 1000	G1/4	0.30 ... 21	10282H
						0.30 ... 28	10292H

Special options, add the appropriate letter

G3/8	connection thread	102.3H
G1/2	connection thread, recommended for mbar range	102.4H
NPT	connection thread	102.2
non-relieving	and without constant bleed	102.2.N
reduced bleeding	approx. 2 l/min	102.2.B
for small flow rate	high constant bleed for more sensitivity	102.2.L
tapped exhaust	G1/4 connection thread	102.2.E
FKM elastomer		102.2.J
for oxygen	specially cleaned	102.2.SC
no yellow metals	FKM elastomer	102.2.X63
tamper-proof cap	aluminium, adjustment by screwdriver, total height 166 mm	102.2.T

Accessories, enclosed

pressure gauge	Ø 63 mm, 0...160 mbar, G1/4, capsule type	MA6302-C2
pressure gauge	Ø 50 mm, 0...*2 bar, G1/4, Bourdon tube	MA5002-...*2
gauge connection	made of brass, adapter 1/4" NPT - G1/4 female	AM-06
mounting bracket	made of steel	BW00-34



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

*2 01 = 0...1 bar, 02 = 0...2.5 bar, 06 = 0...6 bar, 10 = 0...10 bar, 16 = 0...16 bar, 25 = 0...25 bar, 60 = 0...60 bar

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net

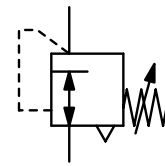
* Product group



Order example:
10212H

Description	Diaphragm pressure regulator of small and lightweight design with high flow capacity. It provides sensitive adjustment accurate to 2 mbar.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 18 bar		
Accuracy	setting accuracy: < 2 mbar response sensitivity: < 2 mbar		
Air consumption	max. 3 l/min, subject to outlet pressure		
Adjustment	by handwheel with locknut		
Relieving function	relieving		
Relief capacity	55 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint		
Gauge port	G $\frac{1}{8}$ on both sides of the body, screw plugs supplied		
Temperature range	0 °C to 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F		
Material	Body: aluminium die-cast Inner valve: brass, galvanized steel Elastomer: NBR/Buna-N, optionally FKM		

Mounting position any



G $\frac{1}{4}$ and G $\frac{3}{8}$
900 l/min

Dimensions			K _v -value	Flow rate		Connection thread	Pressure range	Order number
A	B	C		m ³ /h	l/min*1			
mm	mm	mm	(m ³ /h)			G	bar	



Precision pressure regulator

supply pressure max. 18 bar, relieving with constant bleed

R300

57	133	25	0.5	54	900	G $\frac{1}{4}$	0.001 ... 0.14	R300-020
							0.01 ... 0.7	R300-021
							0.03 ... 2.0	R300-02A
							0.07 ... 4.0	R300-02B
							0.14 ... 7.0	R300-02C
57	133	25	0.5	54	900	G $\frac{3}{8}$	0.001 ... 0.14	R300-030
							0.01 ... 0.7	R300-031
							0.03 ... 2.0	R300-03A
							0.07 ... 4.0	R300-03B
							0.14 ... 7.0	R300-03C



R300

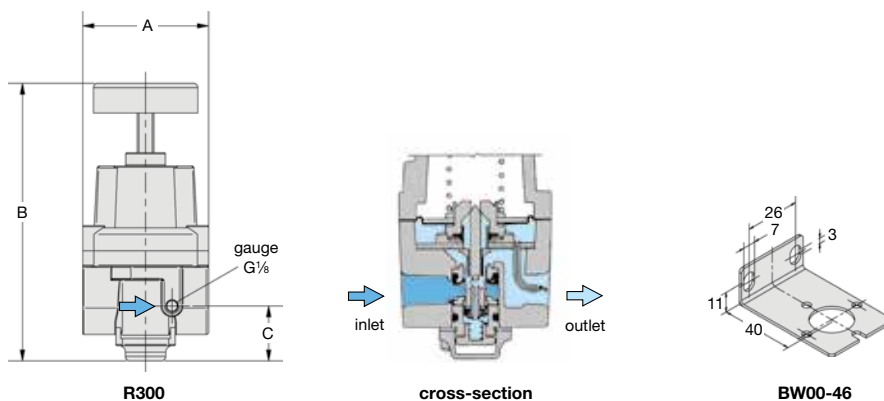
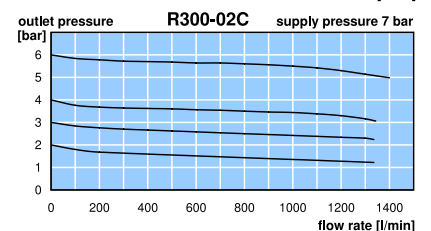
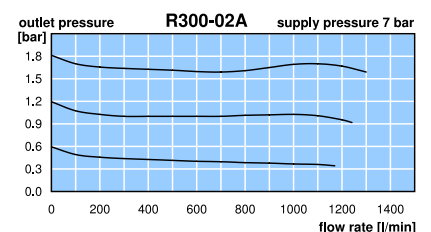
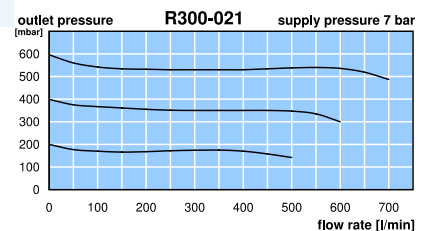
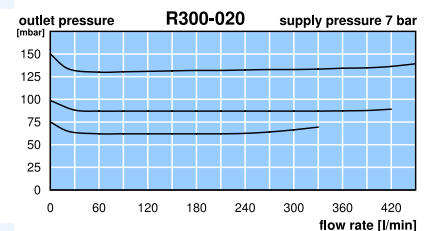
Special options, add the appropriate letter

without constant bleed	non-relieving, for small flow rate	R300-0...K
NPT	connection thread	R300-0...N
tamper-proof cap	aluminium, adjustment by screwdriver, total height 141 mm	R300-0...T
FKM elastomer		R300-0...V
for oxygen	specialty cleaned, with oxygen grease	R300-0...K15

Accessories, enclosed



pressure gauge	Ø 63 mm, 0 ... 160 mbar, G $\frac{1}{4}$ - connection parts required	MA6302-C2
pressure gauge	Ø 50 mm, 0 ... *2 bar, G $\frac{1}{8}$	MA5001-...*2
gauge connection	made of brass, adapter G $\frac{1}{8}$ m-G $\frac{1}{4}$ f for MA6302-C2	AM-04
mounting bracket	made of steel	BW00-46



*1 at 7 bar supply pressure and 1.4 bar outlet pressure

*2 01 = 0...1 bar, 02 = 0...2.5 bar, 04 = 0...4 bar, 10 = 0...10 bar, 16 = 0...16 bar, C2 = 160 mbar

Gauges: see chapter for measuring devices

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www.aircom.net

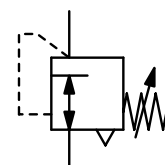
* Product group



Order example:
R300-020

Description	Regulator provides precision regulation in high flow and high relief applications.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 18 bar		
Accuracy	at supply pressure variation of 7 bar: < 7 mbar pressure deviation response sensitivity: < 2 mbar		
Air consumption	without constant bleed		
Adjustment	by handwheel with locknut		
Relieving function	relieving		
Relief capacity	200 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint		
Gauge port	on both sides of the body, 1/4"NPT screw plugs supplied		
Temperature range	0 °C to 80 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F		
Material	Body: zinc die-cast	Inner valve: aluminium, brass and neoprene	Elastomer: NBR/Buna-N

Mounting position any



**G1/4 and G3/8
1400 l/min**

Dimensions			K _v - value (m³/h)	Flow rate		Connection thread	Pressure range bar	Order number
A	B	C		m³/h*1	l/min*1			
mm	mm	mm				G		



Precision pressure regulator						supply pressure max. 18 bar, relieving, without constant bleed	R100
54	129	25	0.73	78	1300	G1/4	0.03 ... 0.7 0.03 ... 2.0 0.07 ... 4.0 0.14 ... 10 R100-021 R100-02A R100-02B R100-02C
54	129	25	0.78	84	1400	G3/8	0.03 ... 0.7 0.03 ... 2.0 0.07 ... 4.0 0.14 ... 10 R100-031 R100-03A R100-03B R100-03C



R100

Special options, add the appropriate letter

NPT	connection thread	R100-0...N
tamper-proof cap	aluminium, adjustment by screwdriver, total height 139 mm	R100-0...T

Accessories, enclosed

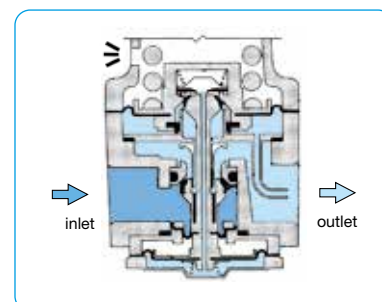


pressure gauge	Ø 50 mm, 0...*2 bar, G1/4	MA5002-...*2
gauge connection	made of brass, adapter 1/4" NPT - G1/4i	AM-06
mounting bracket	made of steel, including mounting screws	BW20-04

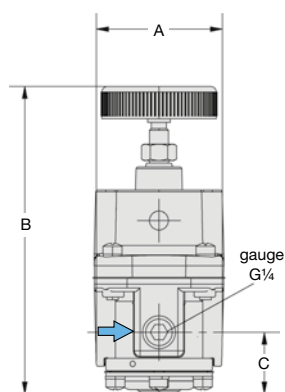
Präzis.



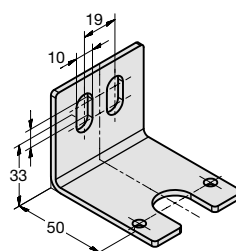
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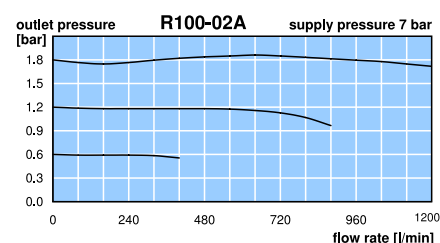
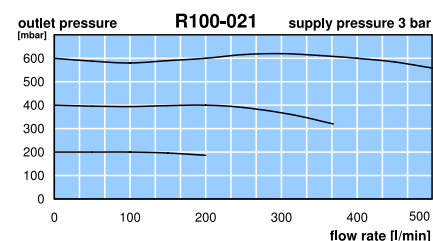
cross-section



R100



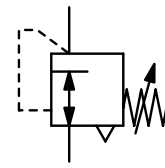
BW20-04



*1 at 7 bar supply pressure and 1.4 bar outlet pressure
*2 01 = 0...1 bar, 02 = 0...2.5 bar, 04 = 0...4 bar, 10 = 0...10 bar



Description	Regulator provides precision regulation in high flow and high relief applications. The regulator is silicone-free and suitable for panel mounting.		
Media	oil-free and 5 µm filtered compressed air or non-corrosive gases		
Supply pressure	max. 16 bar		
Accuracy	at supply pressure change from 2 bar to 7 bar: < 6 mbar pressure deviation at volume flow change from 0 l/min to 20 l/min: < 20 mbar pressure deviation response sensitivity: < 4 mbar		
Air consumption	< 1.5 l/min at P _i = 5 bar, < 2 l/min at P _i = 7 bar, < 4 l/min at P _i = 10 bar, < 1% of volume flow		
Adjustment	by handwheel with locknut, suitable for panel mounting		
Relieving function	relieving		
Relief capacity	700 l/min at 6 bar outlet and 0.35 bar overpressure above setpoint		
Gauge port	G¼ on both sides of the body, one screw plug supplied		
Temperature range	0 °C to 60 °C / 32 °F to 140 °F, for appropriately conditioned compressed air down to -35 °C / -31 °F		
Material	Body: zinc die-cast Elastomer: NBR/Buna-N		



**G¼ up to G½
4500 l/min**

Dimensions			K _v - value	Flow rate		Connection thread	Pressure range	Order number	D*
A	B	C		m³/h*1	l/min*1				
mm	mm	mm	(m³/h)			G	bar		

Precision pressure regulator							supply pressure max. 16 bar, relieving, with constant bleed	R03
82	200	41	2.1	198	3300	G¼	0.01 ... 3	R03-02A
							0.02 ... 5	R03-02B
							0.04 ... 7	R03-02C
							0.05 ... 10	R03-02D
82	200	41	2.4	228	3800	G¾*3	0.01 ... 3	R03-03A
							0.02 ... 5	R03-03B
							0.04 ... 7	R03-03C
							0.05 ... 10	R03-03D
82	200	41	2.9	270	4500	G½	0.01 ... 3	R03-04A
							0.02 ... 5	R03-04B
							0.04 ... 7	R03-04C
							0.05 ... 10	R03-04D



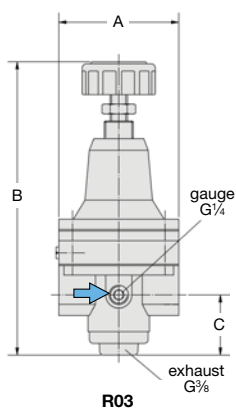
R03

Special options, add the appropriate letter

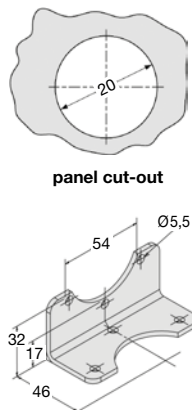
tamper-proof cap total height 204 mm R03-0...T

Accessories, enclosed

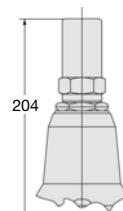
pressure gauge Ø 50 mm, 0...*2 bar, G¼ **MA5002-...*2**
mounting bracket made of steel **BW00-36**



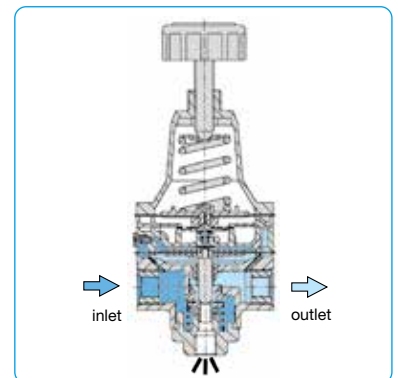
R03



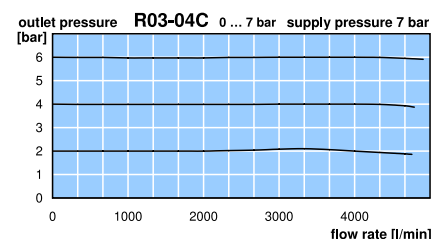
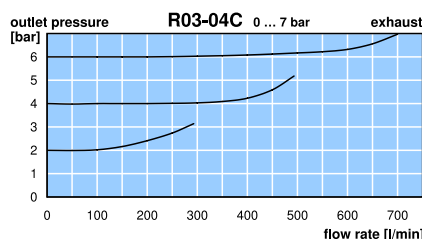
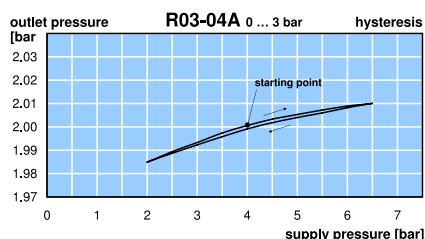
BW00-36



tamper-proof cap



cross-section



*1 at 7 bar supply pressure and 6 bar outlet pressure
 *2 04 = 0...4 bar, 06 = 0...6 bar, 10 = 0...10 bar

*3 standard unit G½ is reduced to smaller threads by fittings

* Product group

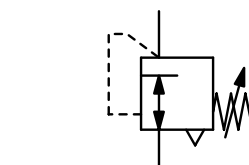
Gauges: see chapter for measuring devices

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Order example:
R03-02A

Description	Diaphragm regulator with small dimensions. Suitable for low pressure and high accuracy applications. Its special diaphragm ensure constant outlet pressure even with changing supply pressure and flow fluctuations.	
Media	compressed air or non-corrosive gases	
Recommendation	connection thread G½ for pressure range 0...35 / 140 / 280 mbar	
Supply pressure	max. 10 bar	
Accuracy	response sensitivity: < 0,2 mbar	Air consumption max. 2 l/min depending on outlet pressure
Adjustment	by handwheel with locknut	Relief capacity 14 l/min at 7 mbar above setpoint 70 mbar
Relieving function	relieving, optionally non-relieving	
Gauge port	¼NPT on both sides of the body	
Mounting position	any	
Temperature range	0 °C to 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F	
Material	Body: aluminium die-cast Inner valve: stainless steel and galvanised steel Elastomer: NBR/Buna-N, optionally FKM	



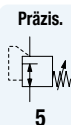
**G¼ up to G½, 700 l/min
2...35 / 800 mbar**

Dimensions			K _v - value	Flow rate		Connection thread	Pressure range	Order number	D*
A	B	C		m³/h*	l/min*				
mm	mm	mm	(m³/h)			G	mbar		

Precision regulator for low pressure								supply pressure max. 10 bar, relieving, with constant bleed	R110
67	180	25	0.4	42	700	G¼	2 ... 35		R110-020
							2 ... 140		R110-02A
							2 ... 280		R110-02B
							2 ... 400		R110-02C
							2 ... 800		R110-02D
67	180	25	0.4	42	700	G½	2 ... 35		R110-040
							2 ... 140		R110-04A
							2 ... 280		R110-04B
							2 ... 400		R110-04C
							2 ... 800		R110-04D



R110

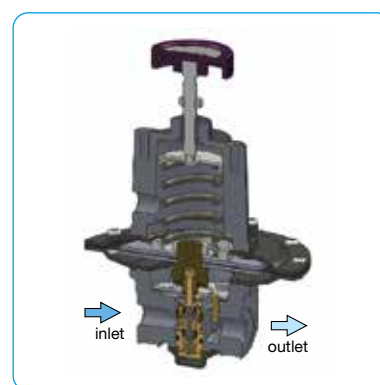


Special options, add the appropriate letter

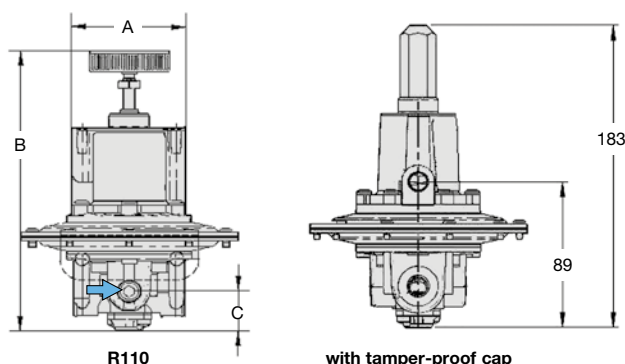
G¾	connection thread	R110-03 .
NPT	connection thread	R110-0 . . N
non-relieving	without constant bleed	R110-0 . . K
reduced bleeding	ca. 1 l/min	R110-0 . . X19
tapped exhaust	connection thread G¼	R110-0 . . X12
FKM elastomer		R110-0 . . V
tamper-proof cap	aluminium, adjustment by screwdriver, total height 183 mm	R110-0 . . T

Accessories, enclosed

pressure gauge	Ø 63 mm, 0 ... *2 mbar, G¼, capsule type	MA6302-... *2
	Ø 63 mm, 0 ... 600 mbar, G¼, Bourdon tube	MA6302-C6
	Ø 63 mm, 0 ... 1 bar, G¼, Bourdon tube	MA6302-01
gauge connection	made of brass, adapter ¼" NPT to G¼ female	VP-0202N
mounting bracket	made of steel	BW00-58

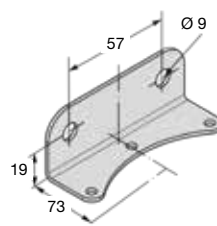


cross-section

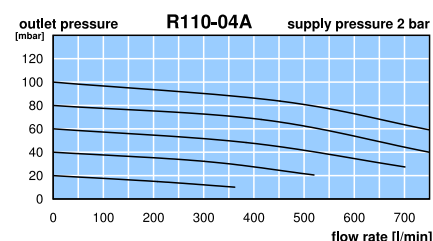


R110

with tamper-proof cap



BW00-58



*1 at 7 bar supply pressure, 800 mbar outlet pressure and 40 mbar pressure drop
*2 B6 = 0...60 mbar, C2 = 0...160 mbar, C3 = 0...250 mbar, C4 = 0...400 mbar

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net

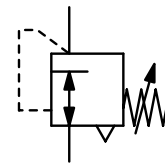
* Product group



Order example:
R110-020

PRECISION REGULATOR WITHOUT CONSTANT BLEED, UP TO 16 BAR OUTLET PRESSURE R217

Description	Diaphragm pressure regulator with good regulation accuracy at varying volume flow.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 16 bar		
Accuracy	response sensitivity: < 350 mbar		
Air consumption	without constant bleed		
Adjustment	by handwheel with locknut, suitable for panel mounting		
Relieving function	relieving, optionally non-relieving		
Gauge port	G $\frac{1}{4}$ on both sides of the body, one screw plug supplied		
Mounting position	any		
Temperature range	0 °C to 80 °C / 32 °F to 176 °F		
Material	Body:	zinc die-cast	O-ring: NBR/Buna-N
	Spring cage:	zinc die-cast	Bottom screw: POM
	Diaphragm:	FKM	



**G $\frac{1}{4}$, up to 16 bar
600 l/min**

Dimensions			K _v -value	Flow rate	Connection thread	Pressure range	Order number
A	B	C					
mm	mm	mm	(m ³ /h)	m ³ /h*1 l/min*1	G	bar	

Precision pressure regulator

supply pressure max. 16 bar, relieving, without constant bleed

R217

82	148	20	0.3	36	600	G $\frac{1}{4}$	0.01 ... 0.5	R217-020
							0.01 ... 1	R217-02A
							0.20 ... 3	R217-02B
							0.40 ... 6	R217-02C
							0.50 ... 10	R217-02D
							0.70 ... 16	R217-02E



R217

Präzis.



5

Special options,

add the appropriate letter

non-relieving	without relieving function	R217-0..K
free of grease and oil	specially cleaned	R217-0..L

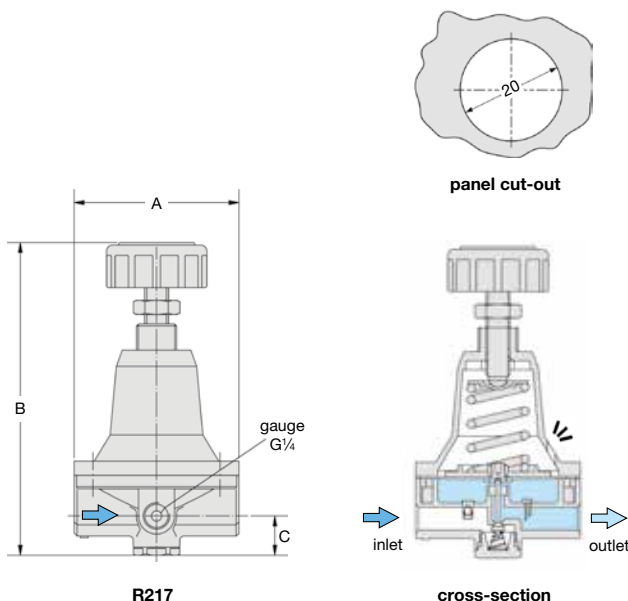
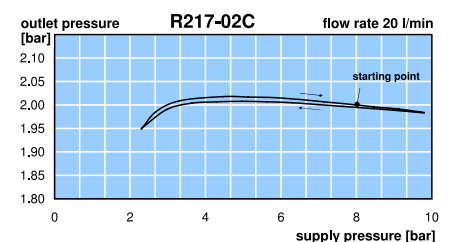
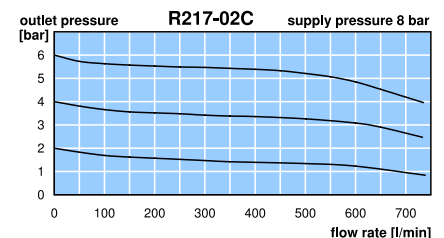
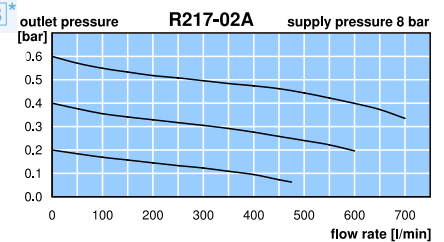
Accessories,

enclosed

pressure gauge	Ø 63 mm, 0...*2 bar, G $\frac{1}{4}$
mounting bracket	made of steel

MA6302-...*2
BW00-36

B*



*1 at 8 bar supply pressure, 6 bar outlet pressure und 1 bar pressure drop
*2 01 = 0...1 bar, 04 = 0...4 bar, 06 = 0...6 bar, 10 = 0...10 bar, 16 = 0...16 bar

* Product group

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net

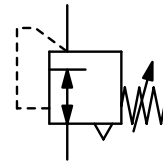


Order example:
R217-020

Description

Media
Supply pressure
Accuracy
Air consumption
Relieving function
Relief capacity
Gauge port
Mounting position
Temperature range
Material

The diaphragm regulator provides high-precision two-stage regulation in high flow and high relief applications. A special diaphragm and balanced inner valve ensure constant outlet pressure even with changing supply pressure and flow fluctuations.
 compressed air or non-corrosive gases
 max. 17 bar
 response sensitivity: < 2 mbar
 max. 3 l/min in depending on outlet pressure
 relieving
 1000 l/min at 5 bar outlet and 0.35 bar overpressure above setpoint
 1/4"NPT on both sides of the body
 any
 0 °C to 71 °C / 32 °F to 160 °F, for appropriately conditioned compressed air down to -29 °C / -29 °F
 Body: aluminium die-cast
 Elastomer: NBR/Buna-N
 Inner valve: stainless steel, brass and aluminium



1/4"NPT to 3/4"NPT
 4150 l/min

Dimensions			K _v -value	Flow rate		Connection thread	Pressure range	Order Number	D*
A	B	C		m³/h*	l/min*				
mm	mm	mm	(m³/h)			NPT	bar		

Precision pressure regulator

supply pressure max. 17 bar, relieving, with constant bleed

R700

92	176	25	2.0	100	1600	1/4"NPT	0.14...2.7	R700-02A
							0.14...4.1	R700-02B
							0.14...8.2	R700-02C
92	176	25	4.3	220	3600	1/2"NPT	0.14...2.7	R700-04A
							0.14...4.1	R700-04B
							0.14...8.2	R700-04C
92	176	25	5.0	250	4150	3/4"NPT	0.14...2.7	R700-06A
							0.14...4.1	R700-06B
							0.14...8.2	R700-06C



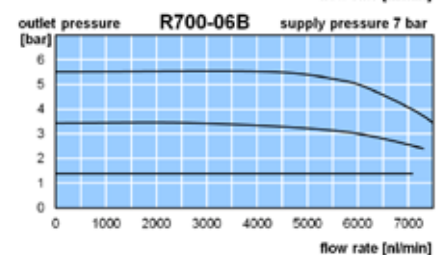
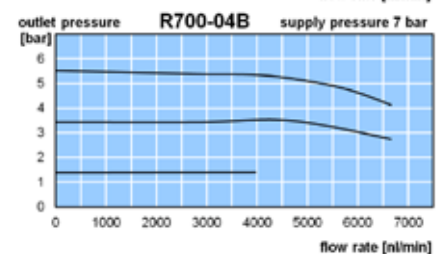
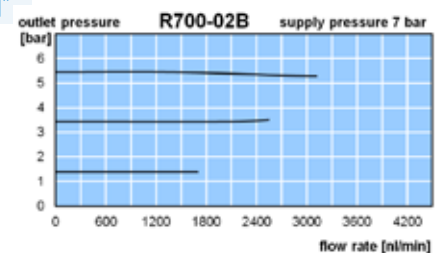
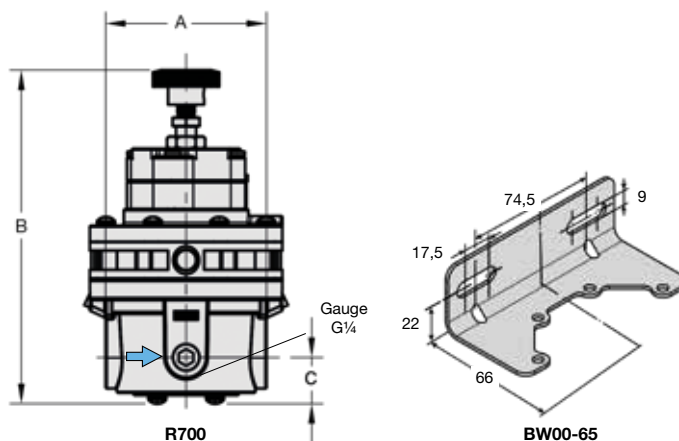
R700

Special options, add the appropriate letter

tapped exhaust	connection thread 1/4"NPT	R700-0..X12
tamper-proof cap	aluminium, adjustment by screwdriver, total height 173 mm	R700-0..T

Accessories, enclosed

pressure gauge	Ø 63 mm, 0...*2 bar, G1/4	MA6302-...*2
gauge connection	made of brass, adapter 1/4"NPT to G1/4 female	AM-06
Mounting bracket	made of steel	BW00-65



*2 bei 04 = 0...4 bar, 06 = 0...6 bar, 10 = 0...10 bar

Gauges: see chapter for measuring devices

PDF CAD
 www.aircom.net

* Product group



Order example:
 R700-02A

Präzis.



5

Description

The diaphragm regulator provides high-precision regulation in high flow and high relief applications. A special diaphragm and balanced inner valve ensure constant outlet pressure even with changing supply pressure and flow fluctuations.

Media

compressed air or non-corrosive gases

Supply pressure

max. 17 bar

Accuracy

response sensitivity: < 2 mbar

Air consumption

max. 3 l/min depending on outlet pressure

Relieving function

relieving, optionally non-relieving

Relief capacity

850 l/min at 5 bar outlet and 0.35 bar overpressure above setpoint

Gauge port

1/4" NPT on both sides of the body

Mounting position

any

Temperature range

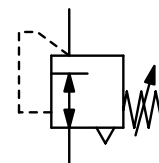
0 °C to 93 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F

Material

Body: Aluminium die-cast

Elastomer: NBR

Inner valve: stainless steel, brass and aluminium



1/4" NPT to 3/4" NPT
4150 l/min

Dimensions			K _v - Value	Flow rate		Connection thread	Pressure range	Order number
A	B	C		m³/h*	l/min*			
mm	mm	mm	(m³/h)			NPT	bar	



Precision pressure regulator

supply pressure max. 17 bar,
relieving, with constant bleed

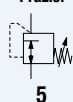
R410

92	194	25	1.7	100	1600	1/4" NPT	0.03 ... 0.15	R410-02A
							0.03 ... 0.7	R410-02B
							0.03 ... 2.0	R410-02C
							0.07 ... 4.0	R410-02D
							0.07 ... 7.0	R410-02E
							0.15 ... 10	R410-02F
							0.15 ... 14	R410-02G
92	194	25	3.7	200	3300	1/2" NPT	0.03 ... 0.15	R410-04A
							0.03 ... 0.7	R410-04B
							0.03 ... 2.0	R410-04C
							0.07 ... 4.0	R410-04D
							0.07 ... 7.0	R410-04E
							0.15 ... 10	R410-04F
							0.15 ... 14	R410-04G
92	194	25	4.3	250	4150	3/4" NPT	0.03 ... 0.15	R410-06A
							0.03 ... 0.7	R410-06B
							0.03 ... 2.0	R410-06C
							0.07 ... 4.0	R410-06D
							0.07 ... 7.0	R410-06E
							0.15 ... 10	R410-06F
							0.15 ... 14	R410-06G



R410

Präzis.



5

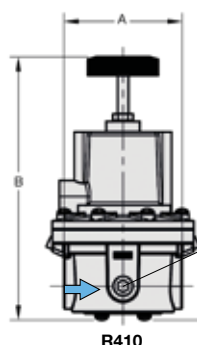
Special options, add the appropriate letter

non-relieving	without constant bleed	R410-0...K
tapped exhaust	connection thread 1/4" NPT	R410-0...X12
tamper-proof-cap	of aluminium, adjustment by screwdriver, total height 295 mm	R410-0...T

Accessories, enclosed

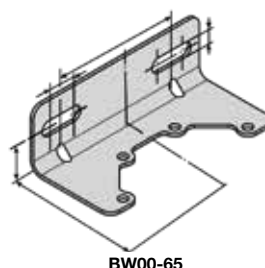


pressure gauge	Ø 63 mm, 0...*1 bar, G1/4	MA6302-...*1
gauge connection	made of brass, adapter 1/4" NPT to G1/4 female	AM-06
mounting bracket	made of steel	BW00-65

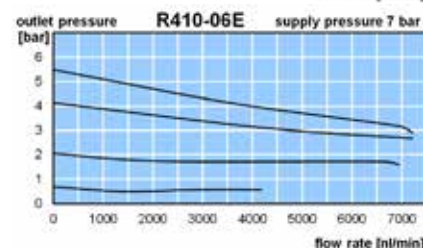
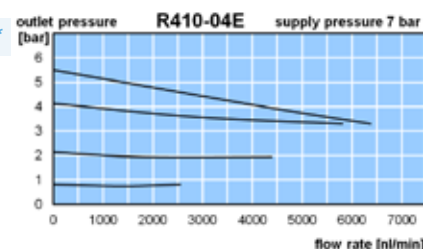
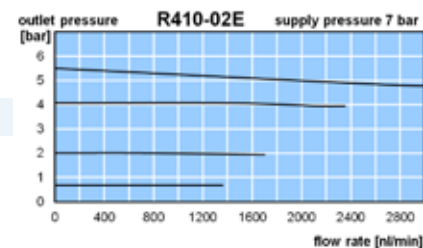


R410

Gauge
G1/4



BW00-65



*1 bei 01 = 0...1 bar, 02 = 0...2,5 bar, 06 = 0...6 bar, 10 = 0...10 bar, 16 = 0...16 bar

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net

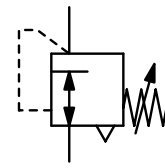
* Product group



Order example:
R410-02A

Description	The diaphragm regulator provides high-precision regulation in high flow and high relief applications. A special diaphragm and balanced inner valve ensure constant outlet pressure even with changing supply pressure and flow fluctuations.	
Media	compressed air or non-corrosive gases	
Supply pressure	max. 18 bar	
Accuracy	response sensitivity: < 2 mbar	
Air consumption	without constant bleed	
Adjustment	by handwheel with locknut	
Relieving function	relieving	
Relief capacity	1000 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint	
Gauge port	1/4"NPT on both sides of the body, screw plugs supplied	
Temperature range	0 °C to 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F	
Material	Body: aluminium die-cast	Elastomer: NBR/Buna-N, optionally FKM
	Inner valve: stainless steel, brass, aluminium and steel	

Mounting position any



**G^{3/8} up to G^{3/4}
4200 l/min**

Dimensions			K _v - value	Flow rate	Connection thread	Pressure range	Order number
A	B	C					
mm	mm	mm	(m ³ /h)	m ³ /h*1 l/min*1	G	bar	



Precision pressure regulator

supply pressure max. 18 bar, relieving,
without constant bleed

R400

89	206	39	2.12	228	3800	G ^{3/8}	0.03 ... 0.7	R400-031
							0.03 ... 2.0	R400-03A
							0.07 ... 4.0	R400-03B
							0.15 ... 10	R400-03C
							0.35 ... 17	R400-03D
89	206	39	2.23	240	4000	G ^{1/2}	0.03 ... 0.7	R400-041
							0.03 ... 2.0	R400-04A
							0.07 ... 4.0	R400-04B
							0.15 ... 10	R400-04C
							0.35 ... 17	R400-04D
89	206	39	2.34	252	4200	G ^{3/4}	0.03 ... 0.7	R400-061
							0.03 ... 2.0	R400-06A
							0.07 ... 4.0	R400-06B
							0.15 ... 10	R400-06C
							0.35 ... 17	R400-06D



R400

Präzis.



5

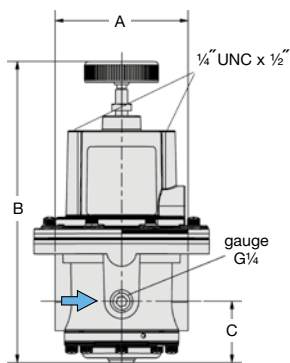
Special options, add the appropriate letter

tapped exhaust	connection thread G ^{1/4}	R400-0...X12
NPT	connection thread	R400-0...N
tamper-proof cap	of aluminium, adjustment by screwdriver, total height 295 mm	R400-0...T
FKM elastomer	up to 10 bar	R400-0...V

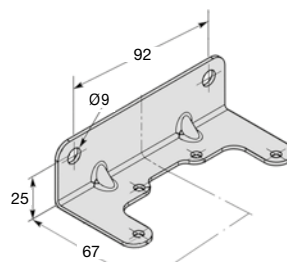
Accessories, enclosed



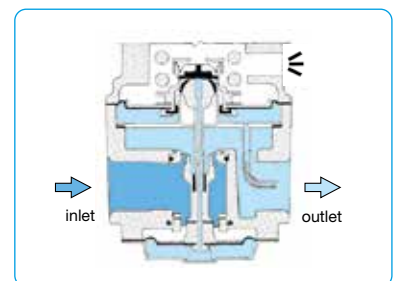
pressure gauge	Ø 63 mm, 0...*2 bar, G ^{1/4}	MA6302-...*2
gauge connection	made of brass, adapter 1/4"NPT to G ^{1/4} female	AM-06
mounting bracket	made of steel	BW00-47



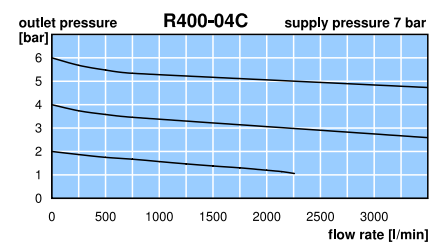
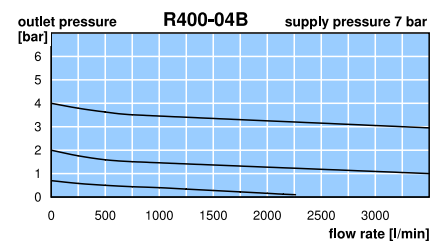
R400



BW00-47



cross-section



* Product group

Gauges: see chapter for measuring devices

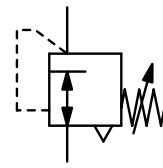
PDF CAD
www.aircom.net



Order example:
R400-031

Description	Provides precision regulation in high flow and high relief applications. A sensitive rolling diaphragm and balanced inner valve assure constant outlet pressure even with supply pressure and flow fluctuations.	
Media	compressed air or non-corrosive gases	
Supply pressure	max. 18 bar, optionally max. 35 bar	
Accuracy	response sensitivity: < 2 mbar	
Air consumption	0.5% of volume flow, max. 15 l/min	
Adjustment	by T-handle with locknut	
Relieving function	relieving, optionally non-relieving	
Relief capacity	1200 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint	
Gauge port	1/4" NPT for outlet pressure	
Temperature range	0 °C to 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F	
Material	Body: aluminium die-cast Elastomer: NBR/Buna-N, optionally FKM at 35 bar version Inner valve: stainless steel, brass, aluminium and steel	

Mounting position any



**G1 and G1½
30000 l/min**

Dimensions			K _v -value	Flow rate	Connection thread	Pressure range	Order number
A	B	C					
mm	mm	mm	(m³/h)	m³/h*1 l/min*1	G	bar	



Precision pressure regulator

supply pressure max. 18 bar, relieving, with constant bleed

R102

141	287	56	11.4	1680	28000	G1	0.001 ... 0.7	R102-081
							0.03 ... 2.0	R102-08A
							0.07 ... 4.0	R102-08B
							0.14 ... 7.0	R102-08C
							0.14 ... 10	R102-08D
141	287	56	12.2	1800	30000	G1½	0.001 ... 0.7	R102-121
							0.03 ... 2.0	R102-12A
							0.07 ... 4.0	R102-12B
							0.14 ... 7.0	R102-12C
							0.14 ... 10	R102-12D



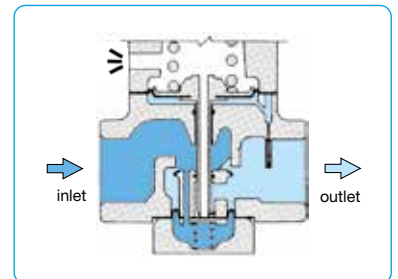
R102

Special options, add the appropriate letter

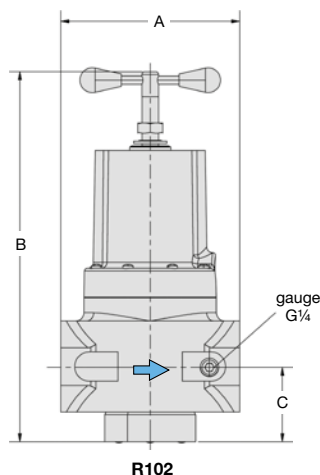
NPT	connection thread	R102-... N
non-relieving	and without constant bleed	R102-... K
tapped exhaust	G3/8 connection thread	R102-... X12
supply pressure 35 bar	free of non-ferrous metal, FKM elastomer	R102-... X62
tamper-proof cap	aluminium, adjustment by screwdriver, total height 295 mm	R102-... T

Accessories, enclosed

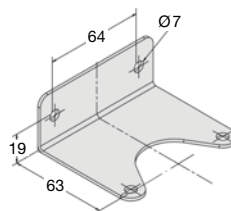
pressure gauge	Ø 63 mm, 0...*2 bar, G1/4	MA6302-... *2
gauge connection	made of brass, adapter 1 1/4" NPT to G1/4 female	AM-06
mounting bracket	made of steel	BW00-30



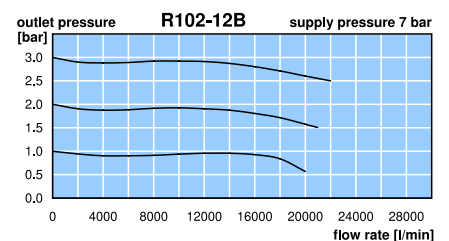
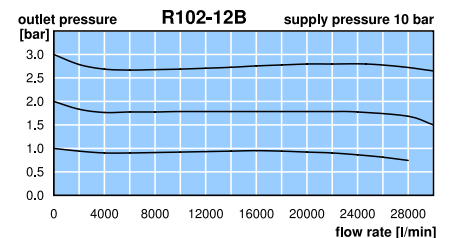
cross-section



R102



BW00-30



*1 at 10 bar supply pressure and 2.8 bar outlet pressure
*2 01 = 0...1 bar, 02 = 0...2.5 bar, 04 = 0...4 bar, 10 = 0...10 bar

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net

* Product group



Order example:
R102-081