

Low Pressure Regulators

	Description	Supply pressure max. bar	Pressure range mbar	Connection thread	Device	Page
standard	also for propane and other gases	16	factory-set 50	G $\frac{1}{4}$ - G $\frac{1}{2}$	R01	3.02
	miniature, manually adjustable	16	25 ... 50 / 1400	G $\frac{1}{4}$ and G $\frac{3}{8}$	R01-5/-6	3.03
	miniature	10	20 ... 1500 / 500	G $\frac{1}{2}$ and G $\frac{3}{4}$	R01-2/-4	3.03
	for oil	10	preset 100 / 2500	G $\frac{1}{4}$ and G $\frac{3}{8}$	RL13	3.03
	for many different gases	0.4	2 ... 16 / 160	G $\frac{1}{2}$ - G2	RGDJ	3.04
	for many different gases	4	5 ... 12 / 350	G $\frac{1}{2}$ - G1 $\frac{1}{2}$	RGB4	3.05
	for many different gases	7	5 ... 45 / 3000	G $\frac{1}{2}$ - G2	R160	3.06
	for many different gases	20	10 ... 18 / 4400	G1 - flange DN50	RZ	3.08
precise	with relieving function	10	2 ... 45 / 350	G $\frac{3}{8}$ - G $\frac{3}{4}$	R4100	3.09
	for pure gases 5.0	20	5 ... 50 / 1500	G $\frac{1}{2}$	RR	3.10
	Nullmatic	35	2 ... 120 / 31000	$\frac{1}{4}$ "NPT	R40	5.12
	relatively small	10	2 ... 35 / 800	G $\frac{1}{4}$ - G $\frac{1}{2}$	R110	5.15
made of stainless steel	for many different gases	7	5 ... 45 / 3000	G $\frac{1}{2}$ - G2	R3100	15.12
volume booster	for many different gases	20	10 ... 350 / 1000	G1 - G2	RZ	6.10
	for many different gases	0.4	2 ... 55 / 100	G $\frac{1}{2}$ - G2	RGDJ-J	6.13
	for many different gases	4	5 ... 350	G $\frac{1}{2}$ - G1 $\frac{1}{2}$	RGB4-J	6.13
back pressure regul.	precise	10	2 ... 35 / 800	G $\frac{1}{4}$ - G $\frac{1}{2}$	DB110	8.08
	precise	6	5 ... 45 / 3000	G $\frac{1}{2}$ - G2	DBC	8.11



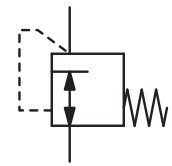
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Low Pressure Regulators

Low Pressure Regulator with Factory-Set Outlet Pressure of 50 mbar

R01

Description	Low pressure regulator with factory-set outlet pressure of 50 mbar and an integrated safety valve, (except for regulator R01-415), thus not for gas pressure regulation in closed rooms.	
Media	compressed air, propane, butane or other non-corrosive gases	
Supply pressure	max. 16 bar at R01-415, R01-310/-405/-406,	max. 2.5 bar bei R01-319/-407/-604/-641
Accuracy	at max. supply pressure and flow: < 15 % FS pressure deviation	< 25 % FS pressure deviation
	at max. supply pressure without flow: < 25 % FS pressure deviation	< 5 % FS pressure deviation
	at min. supply pressure and flow:	
Air consumption	without constant bleed	
Relieving function	non-relieving	
Gauge port	G $\frac{1}{4}$ on one side of the body, except on R01-319/-415	
Mounting position	any	
Temperature range	-20 °C to 60 °C / -4 °F to 140 °F	
Material	Body: zinc die-cast, chrome-plated	Inner valve: brass
	Elastomer: NBR/Buna-N	



G $\frac{1}{4}$ and G $\frac{1}{2}$
50 mbar

Dimensions			Flow rate		Supply pressure	Connection	Outlet pressure	Order number
A	B	ØT	m ³ /h	l/min	max. bar	G	mbar	

Low pressure regulator								
supply pressure max. 2.5 / 16 bar, non-relieving, 50 mbar factory-set								R01
100	44	86	1.2	20	16	G $\frac{1}{4}$	50	R01-415
138	92	118	3.0	50	2.5	G $\frac{1}{2}$	50	R01-604
138	92	118	4.8	80	2.5	G $\frac{1}{2}$	50	R01-407
138	117	118	9.6	160	2.5	G $\frac{1}{2}$	50	R01-641
160	133	145	19.8	330	2.5	G $\frac{1}{2}$	50	R01-319
138	92	118	3.0	50	16	G $\frac{1}{2}$	50	R01-405
138	92	118	4.8	80	16	G $\frac{1}{2}$	50	R01-406



R01-415



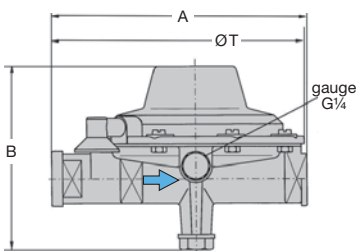
R01-319



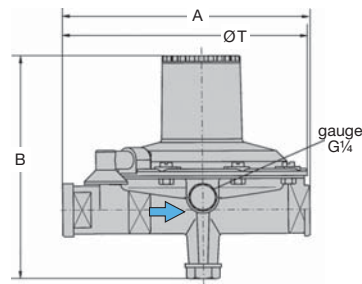
R01-406

Accessory

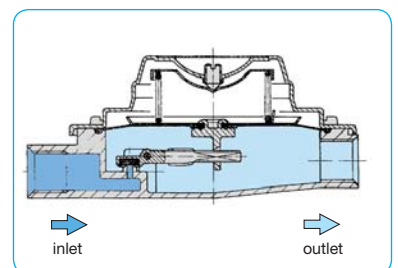
pressure gauge Ø 63 mm, 0...60 mbar, G $\frac{1}{4}$ not for R01-319/-415 MA6302-B6



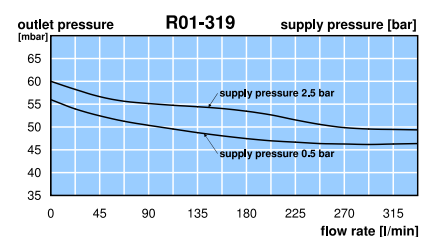
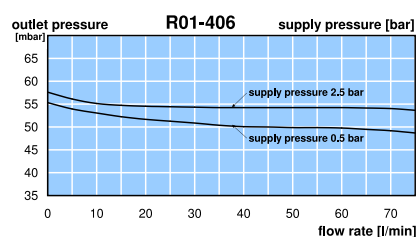
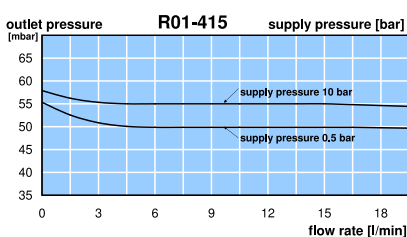
R01-405 / -406 / -604



R01-641



cross-section



Gauges: see chapter for measuring devices

PDF CAD
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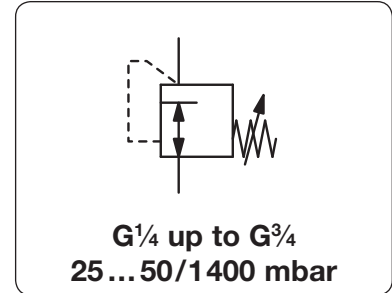


Order example:
R01-415

Low Pressure Regulator from 20 mbar, also for Oil

R01 / RL13

Description	The low pressure regulator is manually adjustable. Version R01-2/-3/-4 has an integrated safety valve which opens at a pressure of 1.5 times of the max. outlet pressure, thus not suitable for gas pressure regulation in closed rooms.		
Media	compressed air, propane, butane or other non-corrosive gases as well as oil		
Supply pressure	max. 16 bar at R01-5/-6,	max. 10 bar at R01-2/-3/-4 and RL13-5,	max. 6 bar at RL13-0
Accuracy	at min. supply pressure and flow: < 5% FS pressure deviation at max. supply pressure and flow: < 15% FS pressure deviation at max. supply pressure without flow: < 25% FS pressure deviation without constant bleed		
Air consumption	without constant bleed		
Adjustment	RL13-0: no individual settings	Mounting position any	
Relieving function	R01-5/-6: by adjusting knob a. dial enabling eleven settings for different outlet pressures R01-2/-3/-4 and RL13-5: by T-handle with locknut		
Gauge port	non-relieving		
Temperature range	G $\frac{1}{4}$ on one side of the body, except on R01-5/-6 and RL13-0 -20 °C to 60 °C / -4 °F to 140 °F		
Material	Body: zinc die-cast	Elastomer: NBR/Buna-N	Inner valve: brass



Dimensions			Flow rate l/min	Supply pressure empfohlen	Connection thread G	Pressure range mbar	Order number
A	B	ØT					

Low pressure regulator				supply pressure max. 16 bar, non-relieving, without gauge port	R01-5/-6	
100	68	68	13	2.5	G $\frac{1}{4}$ 25... 50	R01-524-00
100	68	68	7	6.0	G $\frac{1}{4}$ 20... 200	R01-524-05
100	68	68	26	6.0	G $\frac{1}{4}$ 70... 200	R01-522-01
100	68	68	50	2.5	G $\frac{1}{4}$ 30... 200	R01-524-06
100	68	68	7	2.5	G $\frac{1}{4}$ 20... 1400	R01-524-08
103	50	83	40	6.0	G $\frac{3}{8}$ *1 350... 1400	R01-626
103	50	83	140	6.0	G $\frac{3}{8}$ *1 350... 1400	R01-627



Low pressure regulator				supply pressure max. 10 bar, non-relieving	R01-2/-3/-4	
138	127	117	140	2.5	G $\frac{1}{2}$ 20... 150	R01-411-01
138	127	117	140	2.5	G $\frac{1}{2}$ 20... 500	R01-211
160	136	145	280	2.5	G $\frac{3}{4}$ *2 50... 500	R01-321

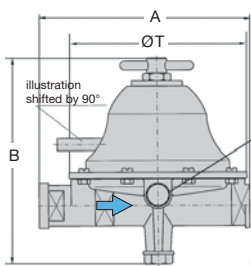


Oil pressure regulator				supply pressure max. 6/10 bar, non-relieving	RL13	
65	32	59	0.3	max. 6	G $\frac{1}{4}$ fest 100	RL13-001
65	70	68	3.0	max. 10	G $\frac{3}{8}$ *1 0... 2500	RL13-504

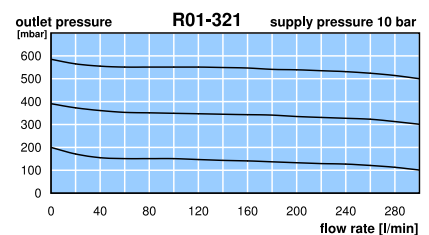
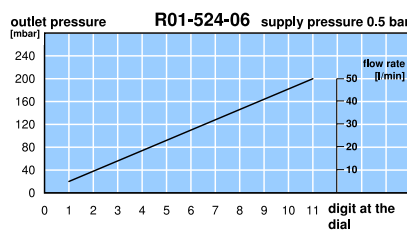
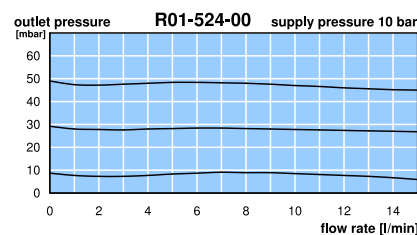
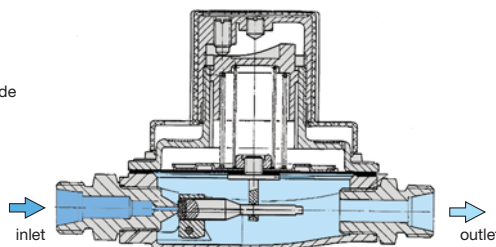


Accessory

pressure gauge	Ø 50 mm, 0... 4 bar, G $\frac{1}{4}$, Bourdon tube	for RL13-504	MA5002-04
	Ø 63 mm, 0... 250 mbar, G $\frac{1}{4}$, capsule type	for R01-411-01	MA6302-C3
	Ø 63 mm, 0... 0.6 bar, G $\frac{1}{4}$, Bourdon tube	for R01-2/-3	MA6302-C6



R01-211 / -321 / -411



*1 G $\frac{1}{4}$ eingangsseitig *2 G $\frac{1}{2}$ eingangsseitig

Gauges: see chapter for measuring devices

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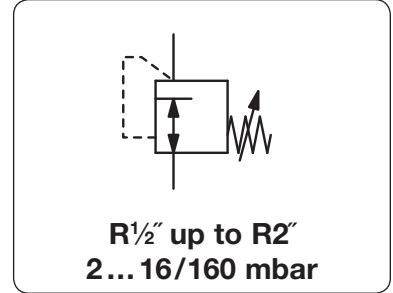


Order example:
R01-524-00

Low Pressure Regulator, Supply Pressure max. 400 mbar

RGDJ

Description	Highly sensitive low pressure regulator with inlet pressure compensation for high precision regulation. Zero shut-off prevents outlet pressure from increasing.	
Media	compressed air or non-corrosive gases, dryly biogas H ₂ S < 200 ppm	
Supply pressure	max. 400 mbar	
Air consumption	without constant bleed	
Adjustment	manual by turning the spindle under the cover of the spring cage	
Relieving function	non-relieving	
Accuracy	at maximum volume flow: < 20% FS pressure deviation	
Gauge port	none as standard, optionally gauge port G $\frac{1}{4}$ on one side from size R $\frac{3}{4}$ on	
Mounting position	any, preferably bonnet upwards	
Temperature range	-20 °C to 70 °C / -4 °F to 158 °F	
Material	Body: aluminium Elastomer: NBR/Buna-N	Inner valve: aluminium and plastic



Dimensions			Nominal size	K _v -value	Flow rate		Connection thread	Pressure range	Order number
A	B	C	DN	(m ³ /h)	m ³ /h*1	l/min*1	R	mbar	

Low pressure regulator									
supply pressure max. 400 mbar, non-relieving									
RGDJ									
100	120	30	15	0.66	12	200	1/2"	2... 16	RGDJ-04A
								10... 20	RGDJ-04B
								16... 28	RGDJ-04C
								22... 40	RGDJ-04D
								40... 55	RGDJ-04E
134	166	34	20	1.49	27	450	3/4"	5... 15	RGDJ-06A
								12... 25	RGDJ-06B
								22... 35	RGDJ-06C
								30... 50	RGDJ-06D
								45... 65	RGDJ-06E
								60... 80	RGDJ-06G
								75... 100	RGDJ-06I
								100... 160	RGDJ-06L
134	166	34	25	2.6	51	850	1"	pressure range see R3/4	RGDJ-08.
185	194	45	40	4.9	90	1500	1 1/2"	5... 15	RGDJ-12A
								12... 25	RGDJ-12B
								22... 35	RGDJ-12C
								30... 50	RGDJ-12D
								45... 65	RGDJ-12E
								60... 80	RGDJ-12G
								75... 100	RGDJ-12I
								100... 160	RGDJ-12L
234	219	52	50	6.6	120	2000	2"	5... 15	RGDJ-16A
								12... 25	RGDJ-16B
								22... 35	RGDJ-16C
								30... 50	RGDJ-16D
								45... 65	RGDJ-16E
								60... 80	RGDJ-16G
								75... 100	RGDJ-16I

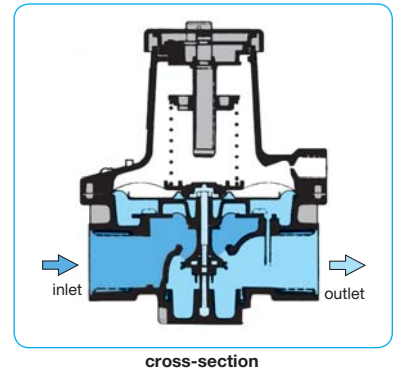
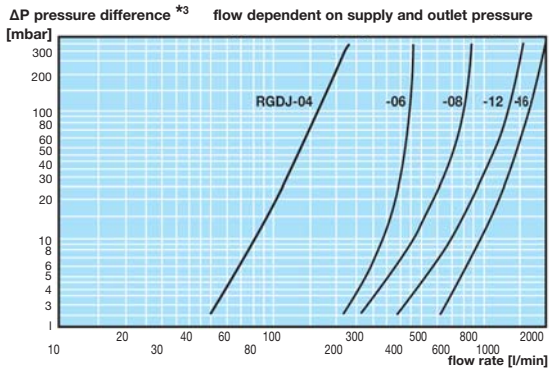
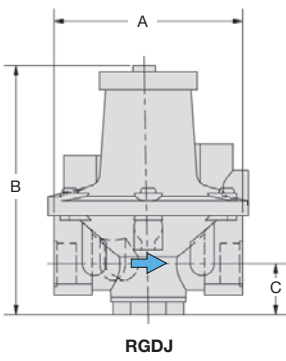


Special options, add the appropriate letter

Connection thread G $\frac{1}{4}$	for pressure gauge	not for R $\frac{1}{2}$ "	RGDJ - . . . M
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Accessory

pressure gauge	Ø 63 mm, 0...*2 mbar, G $\frac{1}{4}$	from R $\frac{3}{4}$ "	MA6302-..*2
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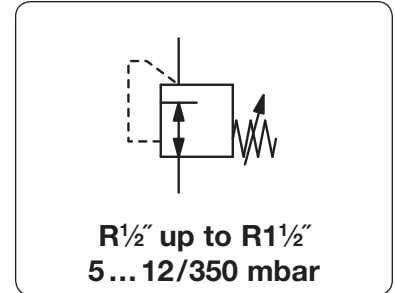


*1 at 350 mbar supply pressure and 100 mbar outlet pressure
*2 B6 = 0...60 mbar, C2 = 0...160 mbar
*3 Δp = P₁ - P₂, difference between supply and outlet pressure

Low Pressure Regulator, Supply Pressure max. 4 bar

RGB4

Description	Highly sensitive low pressure regulator with inlet pressure compensation for high precision regulation. Zero shut-off prevents outlet pressure from increasing.	
Media	compressed air or non-corrosive gases	
Supply pressure	max. 4 bar	
Air consumption	without constant bleed	
Adjustment	manual by turning the spindle under the cover of the spring cage	
Relieving function	non-relieving	
Accuracy	max. 20% pressure drop at full flow	
Gauge port	none as standard, optionally gauge port G $\frac{1}{4}$ on one side at R $\frac{1}{2}$ " and R1", standard G $\frac{1}{4}$ at R $\frac{1}{2}$ "	
Mounting position	any, preferably bonnet upwards	
Temperature range	-15 °C to 60 °C / 5 °F to 140 °F	
Material	Body: aluminium	Inner valve: aluminium and plastic
	Elastomer: NBR/Buna-N	



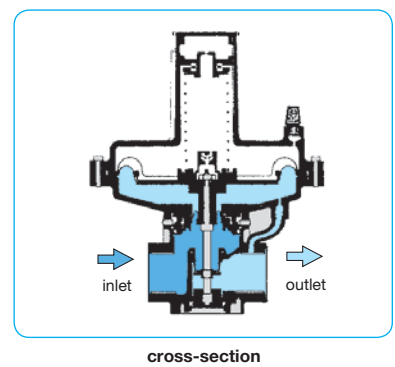
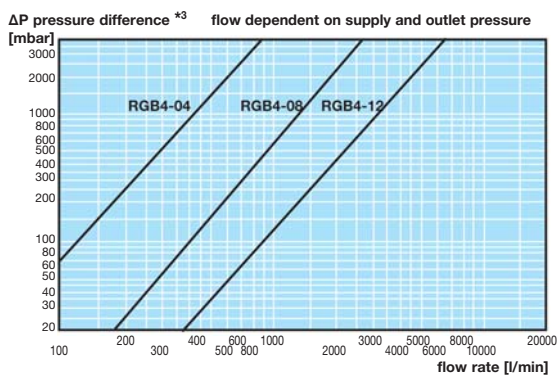
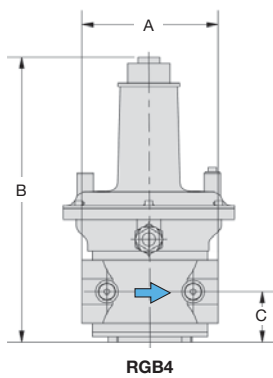
Dimensions			Nominal size	K _v -value	Flow rate	Connection thread	Pressure range	Order number
A	B	C	DN	(m ³ /h)	m ³ /h*1	R	mbar	

Low pressure regulator								supply pressure max. 4 bar, non-relieving	RGB4																		
132	174	24	15	0.62	42	700	1/2"	5 ... 12	10 ... 30	25 ... 45	40 ... 60	55 ... 75	70 ... 90	85 ... 105	100 ... 160	150 ... 230	220 ... 350	RGB4-04A	RGB4-04C	RGB4-04D	RGB4-04E	RGB4-04F	RGB4-04G	RGB4-04H	RGB4-04I	RGB4-04K	RGB4-04L
190	230	33	25	2.5	168	2800	1"	5 ... 12	10 ... 30	25 ... 45	40 ... 60	55 ... 75	70 ... 90	85 ... 105	100 ... 160	150 ... 230	220 ... 350	RGB4-08A	RGB4-08C	RGB4-08D	RGB4-08E	RGB4-08F	RGB4-08G	RGB4-08H	RGB4-08I	RGB4-08K	RGB4-08L
190	265	55	40	5	336	5600	1 1/2"	5 ... 12	10 ... 30	25 ... 45	40 ... 60	55 ... 75	70 ... 90	85 ... 105	100 ... 160	150 ... 230	220 ... 350	RGB4-12A	RGB4-12C	RGB4-12D	RGB4-12E	RGB4-12F	RGB4-12G	RGB4-12H	RGB4-12I	RGB4-12K	RGB4-12L



Special options, add the appropriate letter
connection thread G $\frac{1}{4}$ for pressure gauge for R $\frac{1}{2}$ " and R1" RGB4-...M

Accessory
pressure gauge \varnothing 63 mm, 0...*2 mbar, G $\frac{1}{4}$ MA6302-..*2



*1 at 4 bar supply pressure and 100 mbar outlet pressure
*2 B6 = 0...60 mbar, C2 = 0...160 mbar, C3 = 0...250 mbar, C4 = 0...400 mbar
*3 $\Delta P = P_1 - P_2$ difference between supply and outlet pressure

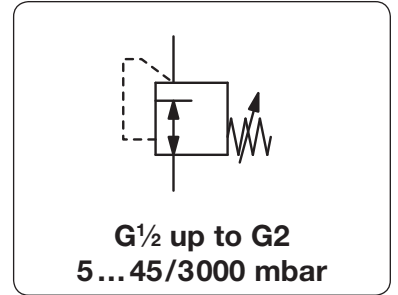
Gauges: see chapter for measuring devices PDF CAD www.aircom.net

Order example: RGB4-04A

Low Pressure Regulator, Supply Pressure max. 7 bar

R160

Description Low pressure regulator with large diaphragm for good accuracy and high sensitivity.
Media compressed air or non-corrosive gases
Supply pressure max. 7 bar, min. 1 bar
Air consumption without constant bleed
Adjustment for G $\frac{1}{2}$ and G $\frac{3}{4}$: by handwheel with locknut
 from G1: by hexagon head screw with locknut
Relieving function non-relieving
Gauge port G $\frac{1}{4}$ on both sides of the body, screw plug supplied
Mounting position any
Temperature range -20 °C to 80 °C / -4 °F to 176 °F
Material Body: aluminium coated
 O-rings: NBR/Buna-N, optionally FKM or EPDM
 Diaphragm: NBR/Buna-N with PTFE coating
 Inner valve: stainless steel / brass
 Spring cage: stainless steel



Dimensions			K _v -value	Flow rate		P ₁ max.	Connection thread	Pressure range	Order number
A	B	C		m ³ /h	l/min*1				

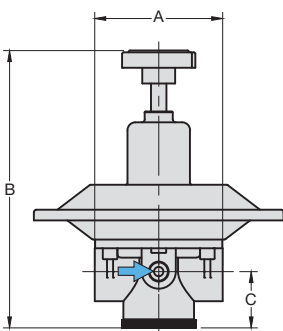
Low pressure regulator			supply pressure max. 6 / 7 bar, non-relieving, without constant bleed					R160		
82	188	38	0.4	60	1000	6	G $\frac{1}{2}$ *3	5 ... 45	R160-04A	
								20 ... 200	R160-04B	
								150 ... 700	R160-04C	
154	233	69	1.8	180	3000	7	G $\frac{3}{4}$	5 ... 45	R160-06A	
								10 ... 120	R160-06B	
								10 ... 400	R160-06C	
154	292	53						15 ... 700	R160-06D	
								200 ... 1200	R160-06E	
154	233	69	1.8	180	3000	7	G1	5 ... 45	R160-08A	
								10 ... 120	R160-08B	
								10 ... 400	R160-08C	
154	292	53						15 ... 700	R160-08D	
								200 ... 1200	R160-08E	
263	233	69	1.8	180	3000	7	G $\frac{1}{4}$	5 ... 45	R160-10A	
								10 ... 120	R160-10B	
								10 ... 400	R160-10C	
263	292	53						15 ... 700	R160-10D	
								200 ... 1200	R160-10E	
263	233	69	1.8	180	3000	7	G $\frac{1}{2}$	5 ... 45	R160-1AA	
								10 ... 120	R160-1AB	
								10 ... 400	R160-1AC	
263	292	53						15 ... 700	R160-1AD	
								200 ... 1200	R160-1AE	



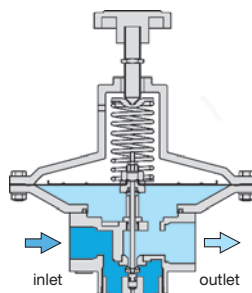
R160-04
Zubehör Manometer



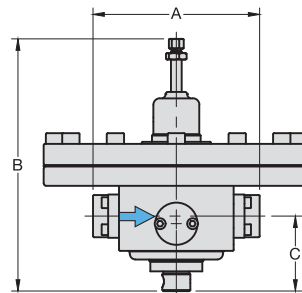
R160-06 /-08 /-10 /-1A



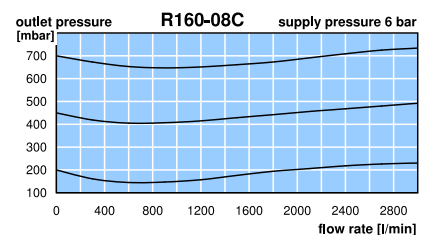
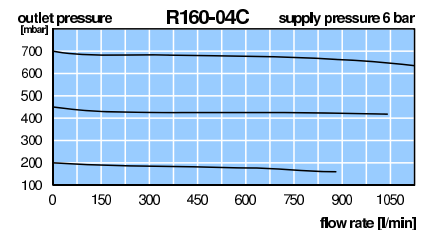
R160-04



cross-section



R160-06/-08/-10/-1A (A/B/C)



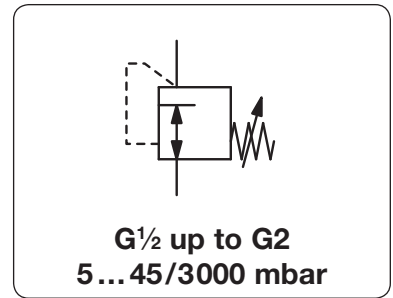
*1 at 6 bar supply pressure and max. outlet pressure *2 see description above *3 thread at outlet G $\frac{3}{4}$

PDF CAD
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Order example:
R160-04A

Description Low pressure regulator with large diaphragm for good accuracy and high sensitivity.
Media compressed air or non-corrosive gases
Supply pressure max. 7 bar, min. 1 bar
Air consumption without constant bleed
Adjustment for G $\frac{1}{2}$ and G $\frac{3}{4}$: by handwheel with locknut
 from G1: by hexagon head screw with locknut
Relieving function non-relieving
Gauge port G $\frac{1}{4}$ on both sides of the body, screw plug supplied
Mounting position any
Temperature range -20 °C to 80 °C / -4 °F to 176 °F
Material Body: aluminium coated
 O-rings: NBR/Buna-N, optionally FKM or EPDM
 Diaphragm: NBR/Buna-N with PTFE coating
 Inner valve: stainless steel / brass
 Spring cage: stainless steel



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

Low pressure regulator									supply pressure max. 6 / 7 bar, non-relieving, without constant bleed		R160
215	472	128	5.7	480	8000	6	G1 $\frac{1}{2}$	20 ... 50			R160-12A
								50 ... 150			R160-12B
								150 ... 300			R160-12C
								300 ... 3000			R160-12D
215	472	128	5.7	480	8000	6	G2	20 ... 50			R160-16A
								50 ... 150			R160-16B
								150 ... 300			R160-16C
								300 ... 3000			R160-16D

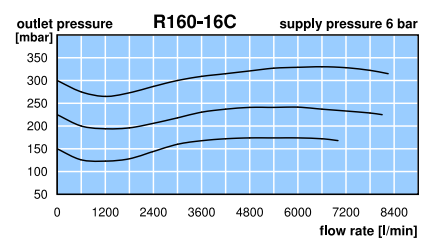
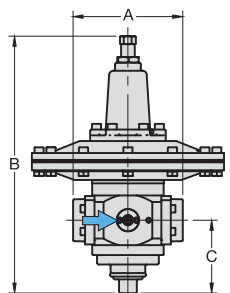
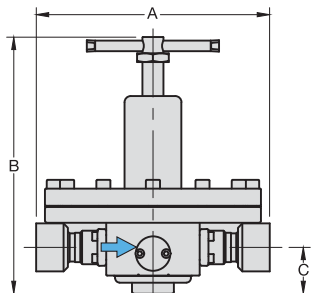
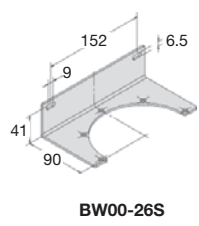


Special options, add the appropriate letter

NPT	connection thread	for G1	to G2	R160-... N
SST inner parts	for ammonia NH ₃	for G $\frac{1}{2}$	and G1 $\frac{1}{2}$ (-1A)	R160-... .02
		for G1 $\frac{1}{2}$ (-12)	and G2	R160-1. .02
FKM -o-ring	PTFE diaphragm			R160-... T
EPDM-o-ring				R160-... TE
EPDM-o-ring	FDA-approval			R160-... TD
carbon dioxide CO ₂				R160-... .03
argon	Ar			R160-... .05
nitrogen	N ₂			R160-... .07
helium	He			R160-... .09
hydrogen	H ₂			R160-... .11
methane	CH ₄			R160-... .13
natural gas *4				R160-... .14
oxygen	O ₂			R160-... .15
propane	C ₃ H ₆			R160-... .16
nitrous oxide	N ₂ O			R160-... .17
flange connection	see chapter for stainless steel devices			R160-... F.

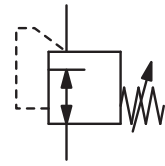
Accessory

pressure gauge	Ø 63 mm, 0...*2 mbar, G $\frac{1}{4}$, capsule type, connection parts required	MA6302-... *2
	Ø 63 mm, 0...*2 bar, G $\frac{1}{4}$, Bourdon tube, connection parts required	MA6302-... *2
connection parts	for pressure gauge, made of brass, not for NH ₃	for G $\frac{1}{2}$ AM-01
connection parts	for pressure gauge, made of stainless steel, for NH ₃	for G $\frac{1}{2}$ AM-03S
mounting bracket	made of stainless steel	for G $\frac{1}{2}$ BW00-26S



*1 at 6 bar supply pressure and max. outlet pressure
 *2 B6 = 0...60 mbar, C2 = 0...160 mbar, C3 = 0...250 mbar, C4 = 0...400 mbar, 01 = 0...1 bar, 04 = 0...4 bar, 06 = 0...6 bar
 *4 without DVGW approval

Description	Highly sensitive diaphragm pressure regulator.	
Media	compressed air or non-corrosive gases	
Supply pressure	max. 20 bar depending on the accuracy range	AR: the smaller P ₁ the higher the accuracy, min. 1 bar
Accuracy	max. 10 bar at pressure range < 120 mbar	< e.g. 10% FS pressure deviation
Air consumption	at maximum volume flow	without constant bleed
Adjustment	manual by turning the spindle under the cover of the spring cage	
Relieving function	non-relieving, optionally relieving	
Relief capacity	Can be adjusted independently of outlet pressure. On non-relieving designs: blocked exhaust valve.	
Gauge port	not available	Mounting position any
Temperature range	-20 °C to 60 °C / -4 °F to 140 °F	
Material	Body: SG cast iron GGG50, GGG40 at DN50 Spring cage: aluminium	Elastomer: NBR/Buna-N, optionally FKM Inner valve: brass and stainless steel



**G1 up to flange DN50
15...20/4400 mbar**

Dimensions			Accuracy	Nominal size	Flow rate	P ₁ max.	Connection thread	Pressure range	Order number
A	B	C	%	DN	l/min*1	bar*2	G	mbar	

Low press. regulator w. positioning spring P₁: max. 20 bar, non-relieving **RZ**

185	245	30	10	17	1800	10	G1	15 ... 20	RZ1-08A
								20 ... 30	RZ1-08B
								30 ... 40	RZ1-08C
								40 ... 70	RZ1-08D
								70 ... 110	RZ1-08E
								110 ... 180	RZ2-08F
								180 ... 300	RZ2-08G
								300 ... 700	RZ3-08H
185	245	30	10	17	2700	10	G1½*3	15 ... 20	RZ1-12A
								20 ... 30	RZ1-12B
								30 ... 40	RZ1-12C
								40 ... 70	RZ1-12D
								70 ... 110	RZ1-12E
								110 ... 180	RZ2-12F
								180 ... 300	RZ2-12G
								300 ... 700	RZ3-12H
254	460	80	5	22	15000	10	flange	10 ... 18	RZ1-16AF
								15 ... 30	RZ1-16BF
								25 ... 49	RZ1-16CF
								40 ... 75	RZ1-16DF
								62 ... 120	RZ1-16EF
								100 ... 170	RZ1-16FF
								145 ... 270	RZ1-16GF
								230 ... 350	RZ1-16HF
								280 ... 720	RZ2-16IF
								840 ... 1250	RZ2-16KF
			5	34	28000	20	DN50	280 ... 720	RZ2-16IF
								840 ... 1250	RZ2-16KF



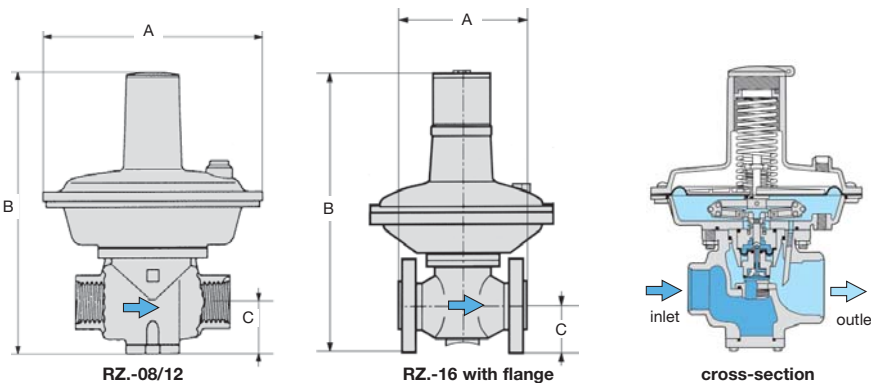
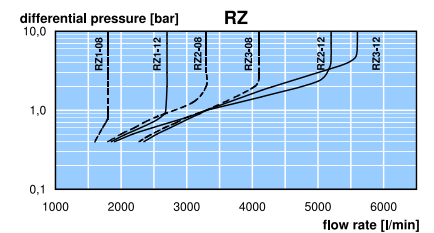
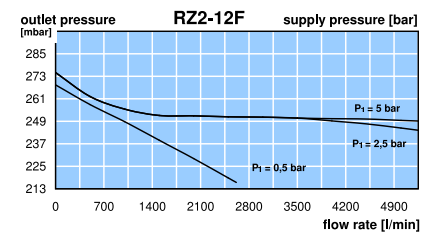
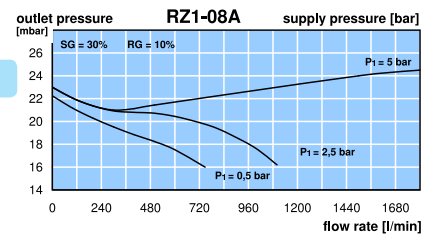
RZ2-08F



RZ1-16AF

Special options, add the appropriate letter

further ranges	RZ3-08 / -12	700 ... 1100	I	1100 ... 2000	J	2000 ... 3000	RZ3-... K	
further ranges	RZ2-16	1050 ... 2300	L			2000 ... 4400	RZ3-16M	
relieving		with relieving function, adjustable					RZ-... R	
FKM elastomer							RZ-... V	
flange connection	see chapter for stainless steel devices / flanges							RZ-... F.
nitrogen	N ₂ : 07	carbon dioxide	CO ₂ : 03	argon	Ar:		RZ-... 05	
helium	He: 09	hydrogen	H ₂ : 11	methane	CH ₄ :		RZ-... 13	
oxygen	O ₂ : 15	propane	C ₃ H ₈ : 16	nitrous oxide	N ₂ O:		RZ-... 17	



*1 at 4 bar supply pressure and max. outlet pressure *2 see description above *3 G1 thread at inlet

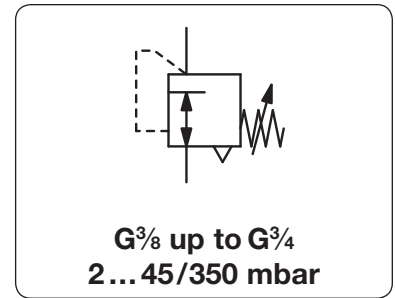
PDF CAD
www.aircom.net

Order example:
RZ1-08A

Precision Low Pressure Regulator, with relieving function

R4100

Description	High precision diaphragm pressure regulator with high flow, without zero shut-off (counterpressure is required).
Media	compressed air or non-corrosive gases
Supply pressure	max. 10 bar
Accuracy	sensitivity < 2 mbar
Air consumption	without constant bleed
Adjustment	by handwheel with locknut
Relieving function	relieving
Gauge port	G $\frac{1}{4}$ on both sides of the body, screw plug supplied
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 Elastomer: NBR/Buna-N Inner valve: stainless steel, brass, aluminium and steel



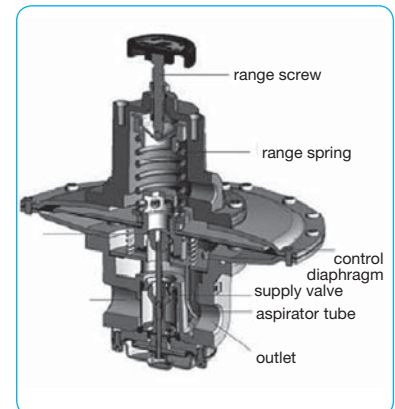
Dimensions			K _v -value (m ³ /h)	Flow rate		Connection thread G	Pressure range mbar	Order number
A	B	C		m ³ /h*1	l/min*1			

Precision low pressure regulator								P1: max. 10 bar, relieving, without constant bleed	R4100
87	219	40	0.24	30	500	G $\frac{3}{8}$	2... 45	R4100-03A	
							2... 95	R4100-03B	
							5... 210	R4100-03C	
							5... 350	R4100-03D	
87	219	40	0.27	36	600	G $\frac{1}{2}$	2... 45	R4100-04A	
							2... 95	R4100-04B	
							5... 210	R4100-04C	
							5... 350	R4100-04D	
87	219	40	0.30	42	700	G $\frac{3}{4}$	2... 45	R4100-06A	
							2... 95	R4100-06B	
							5... 210	R4100-06C	
							5... 350	R4100-06D	



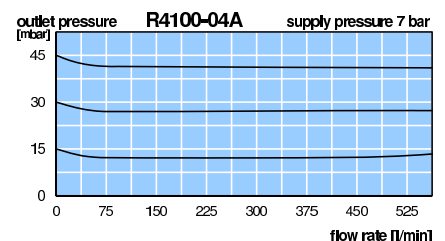
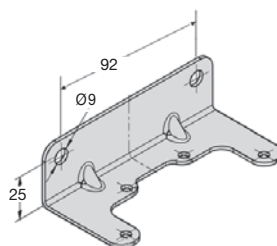
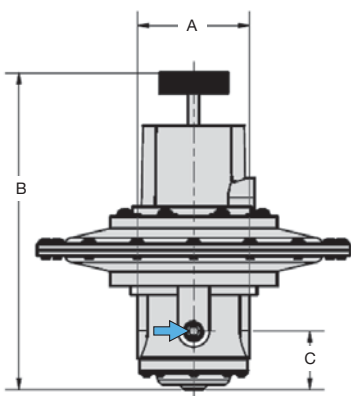
Special options, add the appropriate letter

NPT	connection thread	R4100-...N
tapped exhaust	connection thread G $\frac{1}{4}$	R4100-...X12
tamper-proof cap	made of aluminium, adjustment by screwdriver, height 295 mm	R4100-...T
FKM elastomer		R4100-...V
flange connection	see chapter for stainless steel devices / flanges	R4100-...F.



Accessory

pressure gauge	Ø 63 mm, 0...*2 mbar, G $\frac{1}{4}$	MA6302-...*2
mounting bracket	made of steel	BW00-47



*1 at 10 bar supply pressure and max. outlet pressure *2 B6 = 0...60 mbar, C2 = 0...160 mbar, C3 = 0...250 mbar, C4 = 0...400 mbar

Gauges: see chapter for measuring devices

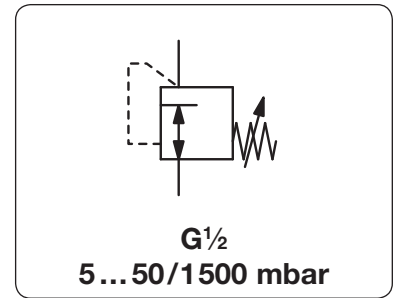
PDF CAD
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Order example:
R4100-03A

Precision Low Pressure Regulator for Pure Gases up to 5.0 purity

RR

Description	Precision regulator in mbar range without auxiliary power. Accurate and reliable regulation with large diaphragm for high sensitivity compressed air or non-corrosive gases up to 5.0 purity (99.999% vol.)
Media	compressed air or non-corrosive gases up to 5.0 purity (99.999% vol.)
Supply pressure	max. 20 bar
Air consumption	without constant bleed
Adjustment	by handwheel with locknut
Relieving function	non-relieving
Gauge port	G $\frac{1}{2}$ on the bottom side of the body, screw plug supplied
Mounting position	any
Temperature range	-20 °C to 70 °C / -4 °F to 158 °F, for CO $_2$ up to 40 °C / 104 °F
Material	Body: grey-coated brass Diaphragm: EPDM with PTFE coating O-rings: NBR/Buna-N Inner valve: brass



Dimensions			Flow rate		Connection thread	Pressure range	Order number
A	B	C	m 3 /h*1	l/min*1	G	mbar/bar	

Low pressure regulator				supply pressure max. 20 bar, non-relieving, without constant bleed		RR	
164	156	41	5	75	G $\frac{1}{2}$	5 ... 50 mbar	RR-04A
			12	200		10 ... 100 mbar	RR-04B
			30	500		50 ... 500 mbar	RR-04C
			45	750		0.1... 1 bar	RR-04D
			51	850		0.2... 1.5 bar	RR-04E



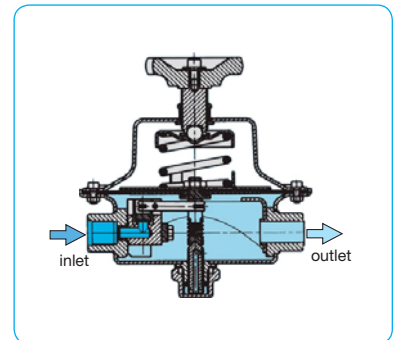
RR

Special options, add the appropriate letter

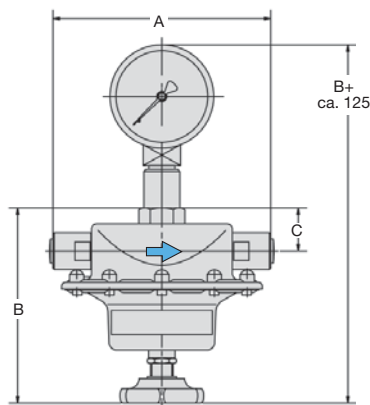
free of grease and oil	suitable for oxygen and flammable gases	RR-...L
pressure gauge	Ø 100 mm, 0... bar, handwheel at the bottom	RR-...G

Accessory

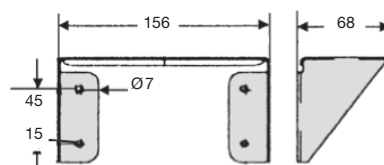
mounting bracket	made of steel	for RR-04	BW00-64
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cross-section

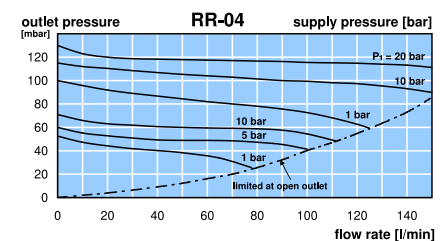
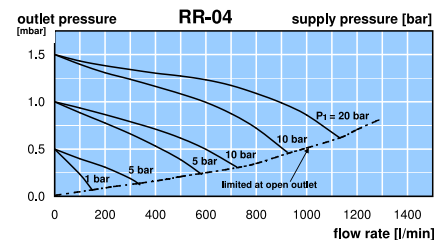


RR-04 with gauge



BW00-64

*1 at 6 bar supply pressure and open outlet



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Order example:
RR-04A