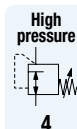
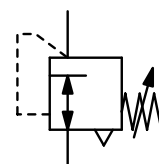


HIGH PRESSURE REGULATORS

	DESCRIPTION		SUPPLY PRESSURE	PRESSURE RANGE		CONNECTION	SERIES	PAGE
			max. bar	bar		thread		
PRESS. REGULATOR	also for liquidis and O ₂	Kv: 0.3 - 25,6	40	0.2 ...	3 / 35	G $\frac{1}{4}$ - G2	R280	4.02
	for many different gases	Kv: 0.2 - 70	50	0.1 ...	1.5 / 50	G $\frac{1}{8}$ - G4	R120	4.04
	also for liquids	Kv: 1.3 - 3,2	60	0.5 ...	12 / 50	G $\frac{1}{4}$ - G1	R286	4.08
	low cost	Kv: 0.02	207	0.1 ...	3.5 / 12	$\frac{1}{4}$ "NPT	RH83	4.09
	for many different gases	Kv: 0.05 - 3.5	200	0.1 ...	1.5 / 200	G $\frac{1}{4}$ - G1 $\frac{1}{4}$	RH10	4.10
	gas cylinder pressure regulator		200	0 ...	1.5 / 40	DIN 477	RH201/RH202	4.12
	gas cylinder pressure regulator		300	0 ...	1.5 / 40	DIN 477	RH300	4.13
	gas cylinder pressure regulator		100	0 ...	10 / 60	G $\frac{1}{4}$ - G $\frac{1}{2}$	RH-147	4.14
	gas cylinder pressure regulator		200	0 ...	10 / 60	G $\frac{1}{4}$ - G $\frac{1}{2}$	RH-247	4.14
	gas cylinder pressure regulator		300	0 ...	10 / 60	G $\frac{1}{4}$ - G $\frac{1}{2}$	RH-347	4.14
	miniature	Kv: 0.05	414	0.5 ...	5 / 124	$\frac{1}{4}$ "NPT	RH1	4.15
	different pressure ranges	Kv: 0.05	414	0.3 ...	35 / 414	$\frac{1}{4}$ "NPT	HP300	4.16
	made of brass	Kv: 0.05	414	0.7 ...	104 / 172	$\frac{1}{4}$ "NPT	HP400	4.16
	different pressure ranges	Kv: 0.05	300	0.1 ...	1.7 / 35	$\frac{1}{4}$ "NPT	HP500	4.17
	large nominal size	Kv: 1.7	260	0.7 ...	21 / 104	$\frac{1}{2}$ "NPT u. $\frac{3}{4}$ "NPT	RH3	4.18
	large nominal size	Kv: 1.7	345	0.7 ...	21 / 172	$\frac{1}{2}$ "NPT u. $\frac{3}{4}$ "NPT	RH3-U	4.18
	different pressure ranges	Kv: 0.05		0.3 ...	35 / 690	$\frac{1}{4}$ "NPT	HP306	4.19
MADE OF SST	for many different gases	Kv: 0.05 - 3.5	200	1 ...	8 / 200	G $\frac{1}{4}$ - G1 $\frac{1}{4}$	RH3000	15.16
	different pressure ranges		690	0.3 ...	35 / 414	$\frac{1}{4}$ "NPT	HP300-S	4.16
	large nominal size	Kv: 1.7	310	0.7 ...	21 / 104	$\frac{1}{2}$ "NPT u. $\frac{3}{4}$ "NPT	RH3-S1	4.18
	large nominal size	Kv: 1.7	410	0.7 ...	21 / 172	$\frac{1}{2}$ "NPT u. $\frac{3}{4}$ "NPT	RH3-S2	4.18
	for different gases, wide variety		60	0.1 ...	1.5 / 50	G $\frac{1}{8}$ - G2	R3000	15.04
VOLUM. BOOSTER	ratio 1:2 to 1:19	Kv: 1.7	260	3 ...	42 / 104	$\frac{1}{2}$ "NPT u. $\frac{3}{4}$ "NPT	RH3-J	6.15
	SST 1:2 to 1:19	Kv: 1.7	310	3 ...	42 / 104	$\frac{1}{2}$ "NPT u. $\frac{3}{4}$ "NPT	RH3-JS1	6.15
	made of brass		50	1 ...	15 / 50	G $\frac{1}{4}$ - G2	R120-J	6.16
	SST	Kv: 2.9	100	0.1 ...	24 / 99	G1	RLM/RLE	6.18
ELECTRICAL	control valves		75	0 ...	40 / 70	G $\frac{1}{8}$	PQH	10.21
	Proportional solenoid		90	0 ...	30 / 80	G $\frac{1}{4}$	PHP	10.22



Description	Diaphragm pressure regulator for supply pressure up to 40 bar, of solid design, completely made of brass.
Media	compressed air, non-corrosive gases or liquids. Regulator R280-16 is not suitable for liquids.
Supply pressure	max. 40 bar, for liquids $\Delta p_{\max.} = 25$ bar
Adjustment	by handwheel for G $\frac{1}{4}$ and G $\frac{1}{2}$, with locknut by T-handle for G $\frac{3}{4}$ up to G1 $\frac{1}{2}$ by knob for G2 by hexagonal spindle for range 0.5...16/25 bar, size G $\frac{1}{2}$ 14 mm A/F, otherwise 19 mm A/F
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	-10 °C to 90 °C / 14 °F to 194 °F
Material	Body: brass, aluminium die-cast at G2 regulator Elastomer: NBR/Buna-N Inner valve: brass



G $\frac{1}{4}$ up to G2, P $_1$: max. 40 bar
0.2...3/35 bar

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



Brass pressure regulator

supply pressure max. 40 bar, for compressed air relieving, without pressure gauge

R280

45	104	23	handwheel	0.3	26	430	G $\frac{1}{4}$	0.2... 3 0.2... 6 0.5... 10 0.5... 16 0.5... 25	R280-02A R280-02B R280-02C R280-02D R280-02E
72	145	30	handwheel	0.8	75	1250	G $\frac{1}{2}$	0.2... 3 0.2... 6 0.5... 10 0.5... 16 0.5... 25	R280-04A R280-04B R280-04C R280-04D R280-04E
			hexagonal spindle						
95	216	41	T-handle	4.8	450	7500	G $\frac{3}{4}$ *2	0.2... 3 0.2... 6 0.5... 10 0.5... 16 0.5... 25	R280-06A R280-06B R280-06C R280-06D R280-06E
			hexagonal spindle						
83	216	41	T-handle	5.0	468	7800	G1	0.2... 3 0.2... 6 0.5... 10 0.5... 16 0.5... 25	R280-08A R280-08B R280-08C R280-08D R280-08E
			hexagonal spindle						
128	240	50	T-handle	7.1	660	11000	G1 $\frac{1}{4}$ *2	0.2... 3 0.2... 6 0.5... 10 0.5... 16 0.5... 25	R280-10A R280-10B R280-10C R280-10D R280-10E
			hexagonal spindle						



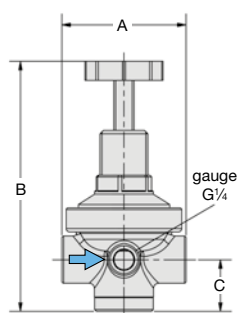
R280-02



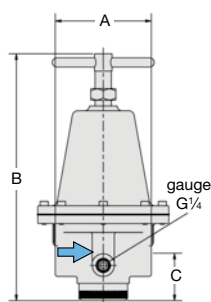
R280-04A / B / C



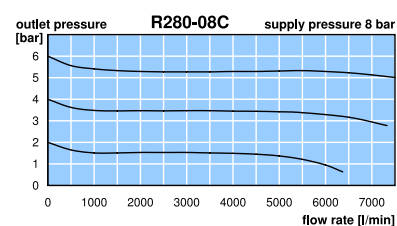
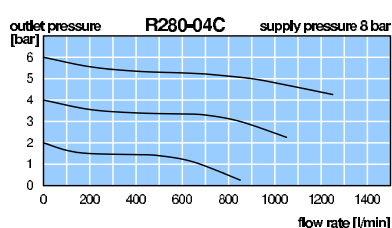
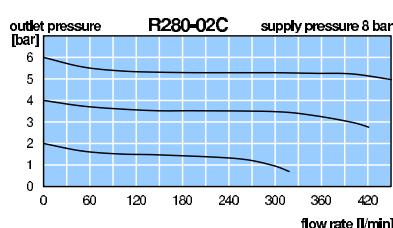
R280-10D / E



R280-02/-04



R280-06/-08/-10/-12



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

*2 reduced from next bigger thread

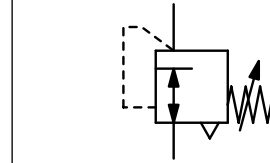
* Product group

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Order example:
R280-02A

Description	Diaphragm pressure regulator for supply pressure up to 40 bar, of solid design, completely made of brass.
Media	compressed air, non-corrosive gases or liquids. Regulator R280-16 is not suitable for liquids.
Supply pressure	max. 40 bar, for liquids $\Delta p_{max.} = 25$ bar
Adjustment	by handwheel for G $\frac{1}{4}$ and G $\frac{1}{2}$, with locknut by T-handle for G $\frac{3}{4}$ up to G1 $\frac{1}{2}$ by knob for G2
Relieving function	by hexagonal spindle for range 0.5 ... 16/25 bar, size G $\frac{1}{2}$ 14 mm A/F, otherwise 19 mm A/F
Gauge port	relieving, optionally non-relieving
Mounting position	G $\frac{1}{4}$ on both sides of the body, one screw plug supplied
Temperature range	any
Material	-10 °C to 90 °C / 14 °F to 194 °F Body: brass, aluminium die-cast at G2 regulator Elastomer: NBR/Buna-N Inner valve: brass



G $\frac{1}{4}$ up to G2, P $_1$: max. 40 bar
0.2 ... 3/35 bar

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

Brass pressure regulator					supply pressure max. 40 bar, for compressed air relieving, without pressure gauge				R280
114	240	50	T-handle	7.7	720	12 000	G1½	0.2 ... 3	R280-12A
								0.2 ... 6	R280-12B
								0.5 ... 10	R280-12C
			hexagonal spindle					0.5 ... 16	R280-12D
								0.5 ... 25	R280-12E
160	248	78	knob	25.6	2 400	40 000	G2	0.5 ... 6	R280-16B
								0.5 ... 10	R280-16C
								0.5 ... 16	R280-16D
								0.5 ... 25	R280-16E
								0.5 ... 35	R280-16F



R280-12A/B/C



R280-16 with gauges

Special options, add the appropriate letter

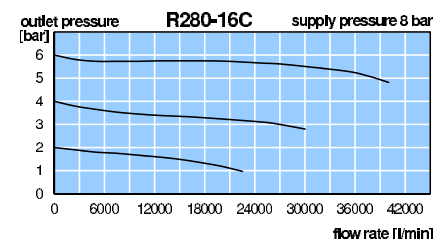
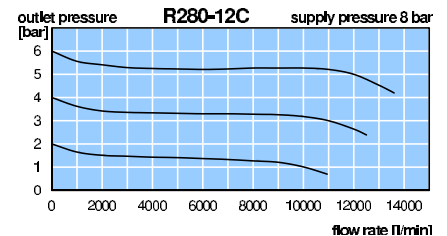
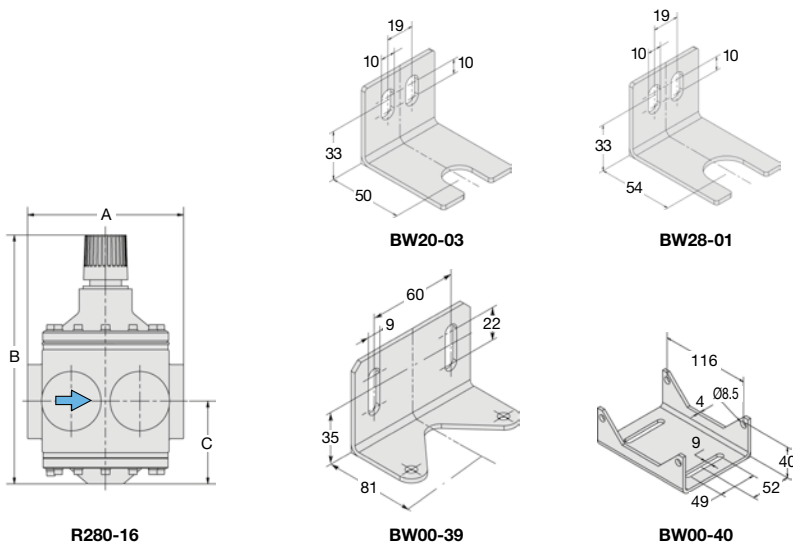
non-relieving	without relieving function	not for G2	R280-... K
for oxygen	specially cleaned, with oxygen grease, max. 60 °C/140 °F up to G1 $\frac{1}{2}$		R280-... K15

Accessories, enclosed

pressure gauge	Ø 50 mm, 0... ^{*2} bar, G $\frac{1}{4}$ Ø 50 mm, 0...25 bar, G $\frac{1}{4}$ Ø 63 mm, 0... ^{*2} bar, G $\frac{1}{4}$ Ø 63 mm, 0...25 bar, G $\frac{1}{4}$	for G $\frac{1}{4}$ and G $\frac{1}{2}$ for G $\frac{1}{4}$ and G $\frac{1}{2}$ from G $\frac{3}{4}$ from G $\frac{3}{4}$ for G $\frac{1}{4}$ for G $\frac{1}{4}$ for G $\frac{1}{2}$ for G $\frac{1}{2}$ for G $\frac{3}{4}$ to G1 $\frac{1}{2}$ for G2	MA5002-... ^{*2} MA5002-25 MA6302-... ^{*2} MA6302-25 BW20-03 M20x1,5M BW28-01 M28x1,5M BW00-39 BW00-40
mounting bracket	made of steel		
mounting nut	made of brass		
mounting bracket	made of steel		
mounting nut	made of brass		
mounting bracket	made of steel		
mounting bracket	made of steel		



4



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

Gauges: see chapter for measuring devices

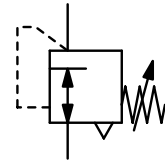
PDF CAD
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* Product group



Order example:
R280-12A

Description	Pressure regulator of solid design. Made of brass or bronze. Series R120-0..A to -0..E and R120-16 and -32 are equipped with diaphragms, all other are piston-operated.
Media	compressed air, non-corrosive gases or liquids
Adjustment	Supply pressure see chart, max. 50 bar, for liquids $\Delta p_{\text{max}} = 25$ bar at R120-02 with black knob R120-01/-A2: with adjusting screw, R120-04 to -B6: with T-handle R120-16: with hexagonal spindle (spanner size 24 mm) R120-16/-24/-32: by pilot pressure regulator
Relieving function	R120-16/-24/-32: non-relieving
Gauge port	R120-B6: relieving R120-01/-A2: G $\frac{1}{8}$ on both sides of the body, all others G $\frac{1}{4}$ on both sides of the body, one screw plug supplied
Temperature range	Mounting position any 0 °C bis 80 °C / 32 °F to 176 °F, for appropriately conditioned compressed air down to -20 °C / -4 °F or low temperature version down to -40 °C / -40 °F, optionally high temperature version up to 130 °C / 266 °F
Material	Body: brass O-ring: FKM, optionally EPDM Spring cage: brass at R120-01 to -04, aluminum at R120-06 to -32 Inner valve: brass Diaphragm: NBR/Buna-N with PTFE coating



G $\frac{1}{8}$ up to G4
0.1 ... 1.5/50 bar

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



Brass pressure regulator				for compressed air, supply pressure max. 30 / 50 bar, relieving, without pressure gauge				R120			
40	98	18	D	0.35	8	130	G $\frac{1}{8}$	30	0.1 ... 1.5	R120-01A	
			D		10	160		30	0.2 ... 3.0	R120-01B	
			D		15	250		30	0.5 ... 8.0	R120-01C	
			D		20	330		30	1 ... 15	R120-01E	
40	98	18	D	0.35	8	130	G $\frac{1}{4}$	30	0.1 ... 1.5	R120-A2A	
			D		10	160		30	0.2 ... 3.0	R120-A2B	
			D		15	250		30	0.5 ... 8.0	R120-A2C	
			D		20	330		30	1 ... 15	R120-A2E	
69	146	35	D	1.4	16	260	G $\frac{1}{4}$	30	0.1 ... 1.5	R120-02A	
			D		20	320		30	0.2 ... 3.0	R120-02B	
			D		30	500		30	0.5 ... 8.0	R120-02C	
			D		40	660		50	1 ... 15	R120-02E	
69	161	35	P		50	840		50	2 ... 30	R120-02F	
			P		60	1000		50	3 ... 50	R120-02G	
69	146	35	D	0.35	16	260	G $\frac{3}{8}$	30	0.1 ... 1.5	R120-03A	
			D		20	320		30	0.2 ... 3.0	R120-03B	
			D		30	500		30	0.5 ... 8.0	R120-03C	
			D		40	660		50	1 ... 15	R120-03E	
69	161	35	P		50	840		50	2 ... 30	R120-03F	
			P		60	1000		50	3 ... 50	R120-03G	

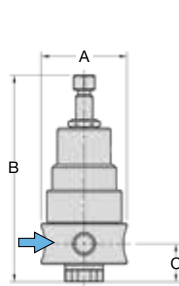


R120-01/-A2

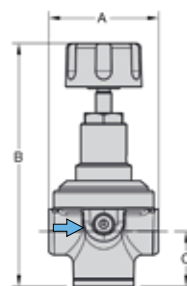


R120-02/-03

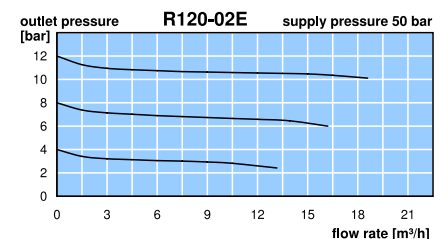
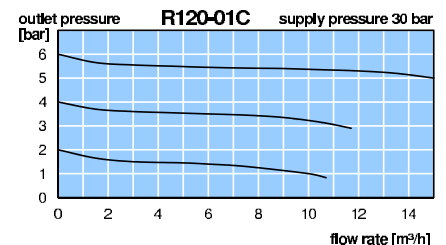
Special options and Accessories, see separate page



R120-01/-A2



R120-02/-03



*1 at max. supply pressure and max. outlet pressure

* Product group

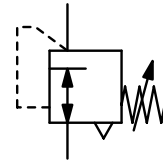
Gauges: see chapter for measuring devices

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Order example:
R120-01A

Description	Pressure regulator of solid design. Made of brass or bronze. Series R120-0..A to -0..E and R120-16 and -32 are equipped with diaphragms, all other are piston-operated.
Media	compressed air, non-corrosive gases or liquids
Adjustment	R120-01/-A2: with adjusting screw, Supply pressure see chart, max. 50 bar, for liquids $\Delta p_{max} = 25$ bar R120-04 to -B6: with T-handle, at R120-02 with black knob R120-16/-24/-32: by pilot pressure regulator, R120-16: with hexagonal spindle (spanner size 24 mm)
Relieving function	R120-B6: relieving
Gauge port	R120-01/-A2: G $\frac{1}{8}$ on both sides of the body, all others G $\frac{1}{4}$ on both sides of the body, one screw plug supplied
Temperature range	0 °C bis 80 °C / 32 °F to 176 °F, for appropriately conditioned compressed air down to -20 °C / -4 °F or low temperature version down to -40 °C / -40 °F, optionally high temperature version up to 130 °C / 266 °F
Material	Body: brass O-ring: FKM, optionally EPDM Spring cage: brass at R120-01 to -04, aluminum at R120-06 to -32 Inner valve: brass Diaphragm: NBR/Buna-N with PTFE coating



G $\frac{1}{8}$ up to G4
0.1 ... 1.5/50 bar

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

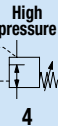
Brass pressure regulator					for compressed air, supply pressure max. 30 / 50 bar, relieving, without pressure gauge					R120
78	171	37	D	3.0	27	450	G½	30	0.1 ... 1.5	R120-04A
			D		30	600		30	0.2 ... 3.0	R120-04B
			D		40	830		30	0.5 ... 8.0	R120-04C
			D		60	1250		50	1 ... 15	R120-04E
78	171	37	P		100	2080		50	2 ... 30	R120-04F
			P		120	2500		50	3 ... 50	R120-04G
114	290	66	D	9.8	75	1250	G¾*2	30	0.1 ... 1.5	R120-06A
			D		98	1600		30	0.2 ... 3.0	R120-06B
			D		170	2800		30	0.5 ... 8.0	R120-06C
			D		280	4600		50	1 ... 15	R120-06E
114	315	66	P		400	6600		50	2 ... 30	R120-06F
			P		500	8300		50	3 ... 50	R120-06G
114	290	66	D	9.8	75	1250	G1	30	0.1 ... 1.5	R120-08A
			D		98	1600		30	0.2 ... 3.0	R120-08B
			D		170	2800		30	0.5 ... 8.0	R120-08C
			D		280	4600		50	1 ... 15	R120-08E
114	315	66	P		400	6600		50	2 ... 30	R120-08F
			P		500	8300		50	3 ... 50	R120-08G



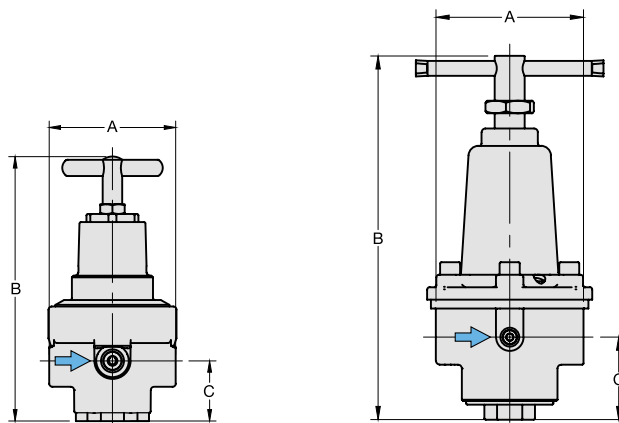
R120-04



R120-06/-08



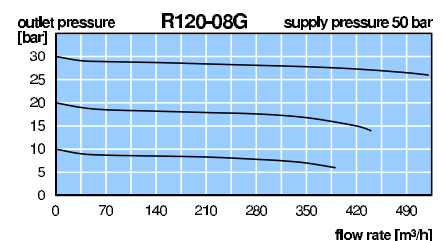
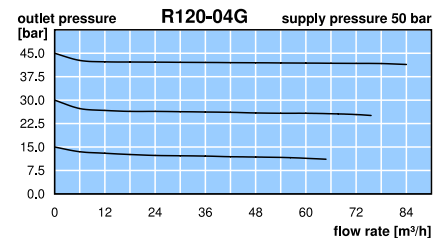
Special options and Accessories, see separate page



R120-04

R120-06/-08

*1 at max. supply pressure and max. outlet pressure
*2 reduced from next bigger thread



* Product group

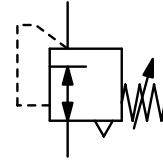
Gauges: see chapter for measuring devices

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Order example:
R120-04A

Description	Pressure regulator of solid design. Made of brass or bronze. Series R120-0..A to -0..E and R120-16 and -32 are equipped with diaphragms, all other are piston-operated.
Media	compressed air, non-corrosive gases or liquids
Adjustment	Supply pressure see chart, max. 50 bar, for liquids $\Delta p_{max} = 25$ bar R120-01/-A2: with adjusting screw, at R120-02 with black knob R120-04 to -B6: with T-handle R120-16: with hexagonal spindle (spanner size 24 mm) R120-16/-24/-32: by pilot pressure regulator
Relieving function	R120-B6: relieving
Gauge port	R120-16/-24/-32: non-relieving R120-01/-A2: G $\frac{1}{8}$ on both sides of the body, all others G $\frac{1}{4}$ on both sides of the body, one screw plug supplied
Temperature range	Mounting position any 0 °C bis 80 °C / 32 °F to 176 °F, for appropriately conditioned compressed air down to -20 °C / -4 °F or low temperature version down to -40 °C / -40 °F, optionally high temperature version up to 130 °C / 266 °F
Material	Body: brass O-ring: FKM, optionally EPDM Spring cage: brass at R120-01 to -04, aluminum at R120-06 to -32 Inner valve: brass Diaphragm: NBR/Buna-N with PTFE coating



G $\frac{1}{8}$ up to G4
0.1 ... 1.5/50 bar

Dimensions	Regul. system	K _v -	Flow	Connection	P ₁	Pressure	Order
A B C	D: diaphragm	value	rate	thread	max.	range	number
mm mm mm	P: piston	(m³/h)	m³/h*1 l/min*1	G	bar	bar	

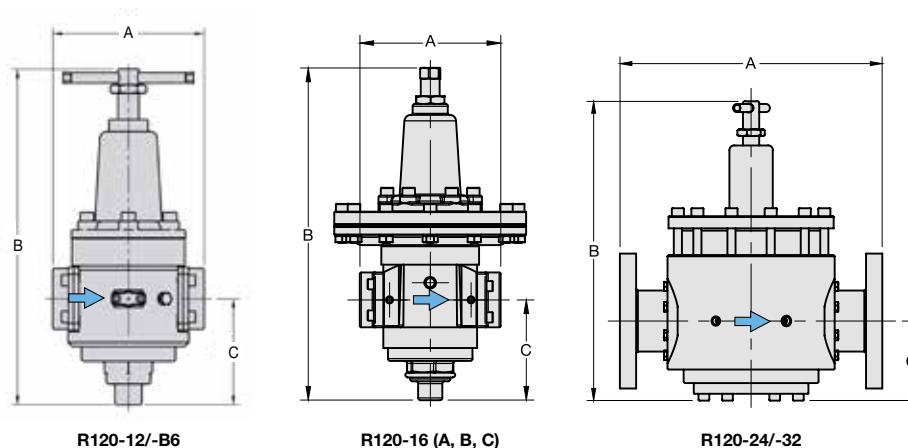
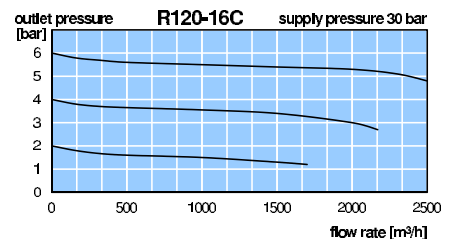
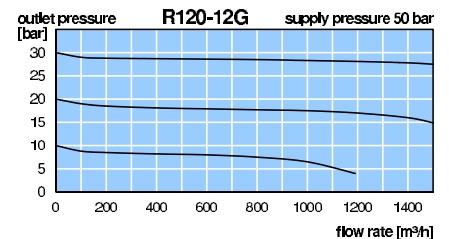
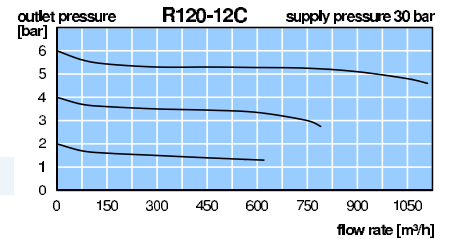
Brass pressure regulator								for compressed air, supply pressure max. 30 / 50 bar, relieving, without pressure gauge		R120
174	386	122	P	25	400	6600	G1½	30	0.1 ... 1.5	R120-12A
			P		670	11000		30	0.2 ... 3.0	R120-12B
			P		1000	16600		30	0.5 ... 8.0	R120-12C
			P		1500	25000		50	1 ... 15	R120-12E
			P		1600	27000		50	2 ... 30	R120-12F
			P		2000	33000		50	3 ... 50	R120-12G
174	386	122	P	25	400	6600	G2	30	0.1 ... 1.5	R120-B6A
			P		670	11000		30	0.2 ... 3.0	R120-B6B
			P		1000	16600		30	0.5 ... 8.0	R120-B6C
			P		1500	25000		50	1 ... 15	R120-B6E
			P		1600	27000		50	2 ... 30	R120-B6F
			P		2000	33000		50	3 ... 50	R120-B6G
180	421	128	D	25	1800	30000	G2	30	0.1 ... 1.5	R120-16AK
			D		2100	35000		30	0.2 ... 3.0	R120-16BK
			D		2500	40000		30	0.3 ... 6.0	R120-16CK
180	403	128	D		3500	50000		30	1 ... 15	R120-16DK
389	434	118	D	65	2400	40000	flange	30	0.1 ... 1.5	R120-24AKF
			D		5000	83000		30	0.2 ... 3.0	R120-24BKF
			D		5000	83000	DN80	30	0.3 ... 6.0	R120-24CKF
			D		6000	99000		30	1 ... 15	R120-24DKF
389	434	118	D	65	2400	40000	flange	30	0.1 ... 1.5	R120-32AKF
			D		3700	61000		30	0.2 ... 3.0	R120-32BKF
			D		5000	83000	DN100	30	0.3 ... 6.0	R120-32CKF
			D		6000	99000		30	1 ... 15	R120-32DKF



R120-12/-B6



R120-16DK



R120-12/-B6

R120-16 (A, B, C)

R120-24/-32

*1 at max. supply pressure and max. outlet pressure

* Product group

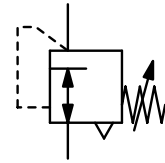
Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net



Order example:
R120-12A

Description	Pressure regulator of solid design. Made of brass or bronze. Series R120-0..A to -0..E and R120-16 and -32 are equipped with diaphragms, all other are piston-operated.
Media	compressed air, non-corrosive gases or liquids
Adjustment	Supply pressure see chart, max. 50 bar, for liquids $\Delta p_{\text{max}} = 25$ bar R120-01/-A2: with adjusting screw, at R120-02 with black knob R120-04 to -B6: with T-handle R120-16: with hexagonal spindle (spanner size 24 mm) R120-16/-24/-32: by pilot pressure regulator
Relieving function	R120-B6: relieving
Gauge port	R120-01/-A2: G $\frac{1}{8}$ on both sides of the body, all others G $\frac{1}{4}$ on both sides of the body, one screw plug supplied
Temperature range	0 °C bis 80 °C / 32 °F to 176 °F, for appropriately conditioned compressed air down to -20 °C / -4 °F or low temperature version down to -40 °C / -40 °F, optionally high temperature version up to 130 °C / 266 °F
Material	Body: brass O-ring: FKM, optionally EPDM Spring cage: brass at R120-01 to -04, aluminum at R120-06 to -32 Inner valve: brass Diaphragm: NBR/Buna-N with PTFE coating



G $\frac{1}{8}$ up to G4
0.1 ... 1.5/50 bar

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



Special options, add the appropriate letter

NPT	connection thread	R120-...N
non-relieving	without relieving function	up to R120-B6 R120-...K
down to -40 °C	low temperature version	R120-...X51
up to 130 °C	high temperature version	R120-...X54
Spring cage made of POM	for G $\frac{1}{8}$ and G $\frac{1}{4}$ (A2)	R120-...X57
EPDM O-ring	PTFE diaphragm	R120-...E
T-handle	instead of plastic knob	for R120-02 R120-02..T
PWIS-free	for painting plants	R120-...LA
carbon dioxide	CO ₂	R120-...K03
argon	Ar	R120-...K05
nitrogen	N ₂	R120-...K07
helium	He	R120-...K09
hydrogen	H ₂	R120-...K11
methane	CH ₄	R120-...K13
natural gas *3		R120-...K14
oxygen	O ₂	R120-...K15
propane	C ₃ H ₈	R120-...K16
nitrous oxide	N ₂ O	R120-...K17
water	H ₂ O	R120-...KW
flange connection	according to EN-1092-1 or ASME B16.5 on request, standard for R120-32 R120-...F.	

Accessories, enclosed

pressure gauge	Ø 40 mm, 0...*2 bar, G $\frac{1}{8}$	for G $\frac{1}{8}$ and G $\frac{1}{4}$ (A2)	MA4001-...*2
	Ø 50 mm, 0...*2 bar, G $\frac{1}{4}$	for G $\frac{1}{4}$ (02) up to G $\frac{1}{2}$	MA5002-...*2
	Ø 50 mm, 0...60 bar, G $\frac{1}{4}$	for G $\frac{1}{4}$ up to G $\frac{1}{2}$	MA5002-60
	Ø 63 mm, 0...*2 bar, G $\frac{1}{4}$	for G $\frac{3}{4}$ up to G4	MA6302-...*2
	Ø 63 mm, 0...60 bar, G $\frac{1}{4}$	for G $\frac{3}{4}$ up to G4	MA6302-60
gauge up to 130 °C	Ø 63 mm, 0...*2 bar, G $\frac{1}{4}$, stainless steel		MS6302-...*2
mounting bracket	made of stainless steel	for G $\frac{1}{8}$ u. G $\frac{1}{4}$ (A2)	BW30-03S
mounting nut	made of stainless steel	for G $\frac{1}{8}$ and G $\frac{1}{4}$ (A2)	M30x1,5SS
mounting bracket	made of stainless steel	for G $\frac{1}{4}$ (02) and G $\frac{3}{8}$	BW35-01S
mounting nut	made of stainless steel	for G $\frac{1}{4}$ (02) and G $\frac{3}{8}$	M35x1,5S
mounting bracket	made of stainless steel	for G $\frac{1}{2}$	BW50-01S
mounting nut	made of stainless steel	for G $\frac{1}{2}$	M50x1,5S
mounting bracket	made of steel	for G $\frac{3}{4}$ and G1	BW00-42
mounting bracket	made of stainless steel	for G1 $\frac{1}{2}$ and G2 (B6)	BW00-68S

*1 at max. supply pressure and max. outlet pressure

*2 02 = 0...2.5 bar, 04 = 0...4 bar, 06 = 0...6 bar, 10 = 0...10 bar, 16 = 0...16 bar

*3 without DVGW approval

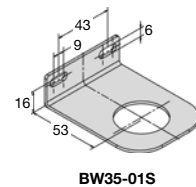
* Product group

Gauges: see chapter for measuring devices

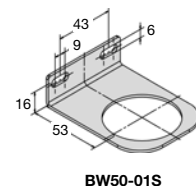
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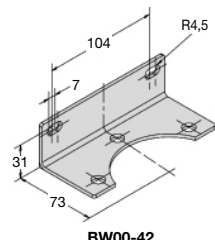
Order example:
MA4001-02



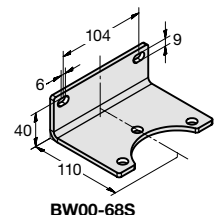
BW35-01S



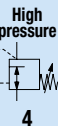
BW50-01S



BW00-42

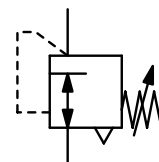


BW00-68S



4

Description	Piston-operated pressure regulator of solid design, completely made of brass. For inlet pressure up to 60 bar.		
Media	compressed air, non-corrosive gases or liquids		
Supply pressure	max. 60 bar, for liquids $\Delta p_{\max} = 25$ bar		
Adjustment	by handwheel, T-handle or hexagonal spindle, with locknut		
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	Inlet filter	stainless steel, 500 μm
Temperature range	-10 °C to 90 °C / 14 °F to 194 °F		
Material	Body: brass Elastomer: NBR/Buna-N	Intermediate ring: brass at G $\frac{1}{4}$, anodized aluminium at G1 Inner valve: brass	



G $\frac{1}{4}$ up to G1, P $_1$: max. 60 bar
0.5 ... 12/50 bar

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



Brass pressure regulator R286

supply pressure max. 60 bar, for compressed air relieving, without pressure gauge

72	164	31	gag	1.3	120	2000	G $\frac{1}{4}$	0.5 ... 12	R286-02C
								1.0 ... 20	R286-02E
								2.0 ... 35	R286-02F
								3.0 ... 50	R286-02G
			hexagonal spindle						
72	164	31	gag	1.6	150	2500	G $\frac{3}{8}$	0.5 ... 12	R286-03C
								1.0 ... 20	R286-03E
								2.0 ... 35	R286-03F
								3.0 ... 50	R286-03G
			hexagonal spindle						
72	156	35	gag	2.3	216	3500	G $\frac{1}{2}$	0.5 ... 12	R286-04C
								1.0 ... 20	R286-04E
								2.0 ... 35	R286-04F
								3.0 ... 50	R286-04G
			hexagonal spindle						
118	257	51	gag	3.2	300	5000	G1	0.5 ... 12	R286-08C
								1.0 ... 20	R286-08E
								2.0 ... 35	R286-08F
								3.0 ... 50	R286-08G
			hexagonal spindle						



R286-02C / E



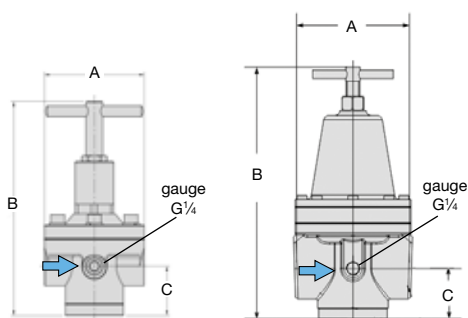
R286-08F / G

Special options, add the appropriate letter

non-relieving	without relieving function, for liquids	R286-0 . . K
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Accessories, enclosed

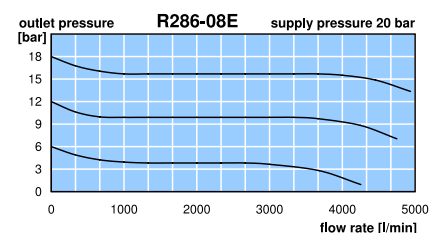
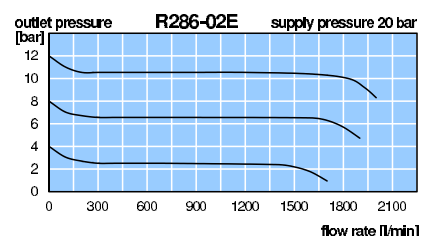
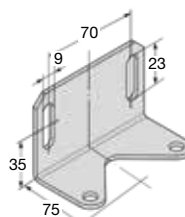
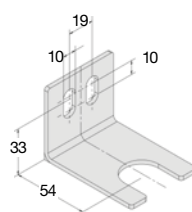
pressure gauge	Ø 50 mm, 0...10 bar, G $\frac{1}{4}$	for G $\frac{1}{4}$ to G $\frac{1}{2}$	MA5002-10
	0...25 bar, G $\frac{1}{4}$	for G $\frac{1}{4}$ to G $\frac{1}{2}$	MA5002-25
	0...60 bar, G $\frac{1}{4}$	for G $\frac{1}{4}$ to G $\frac{1}{2}$	MA5002-60
	Ø 63 mm, 0...16 bar, G $\frac{1}{4}$	for G1	MA6302-16
	0...25 bar, G $\frac{1}{4}$	for G1	MA6302-25
	0...60 bar, G $\frac{1}{4}$	for G1	MA6302-60
mounting bracket	made of steel, mounting nut required	for G $\frac{1}{4}$ to G $\frac{1}{2}$	BW28-01
mounting nut	made of brass	for G $\frac{1}{4}$ to G $\frac{1}{2}$	M28x1,5M
mounting bracket	made of steel, assembly at spring cage	for G1	BW00-45



R286-02/-03/-04

R286-08

BW28-01



*1 at 20 bar supply pressure, 10 bar outlet pressure and 4 bar pressure drop

* Product group

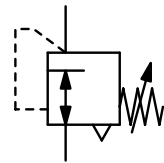
Gauges: see chapter for measuring devices

PDF CAD
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Order example:
R286-02C

Description	Diaphragm-operated high pressure regulator made of brass .		
Media	compressed air, nitrogen, helium, krypton, carbon dioxide, neon, xenon		
Supply pressure	max. 207 bar		
Adjustment	by slotted screw with locknut		
Relieving function	standard, optionally non-relieving		
Connection thread	¼" NPT, two high pressure inlet ports and two regulated pressure outlet ports.		
Mounting position	any		
Temperature range	-34 °C to 60 °C / -29.2 °F to 140 °F		
Material	Body: brass	Diaphragm: NBR/Buna-N and acetal	Seals: NBR/Buna-N
	Spring cage: zinc die-cast	Valve seat: teflon, brass and stainless steel	



P₁: max. 207 bar
0.1 ... 3.5/12 bar

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	NPT	bar	

High pressure regulator 207 bar

for compressed air, relieving made of brass, NBR/Buna-N

RH83

48	110	10	0.02	19.2	320	¼" NPT	0.1 ... 3.5	RH83-02A
							0.3 ... 8.5	RH83-02B
							0.7 ... 12	RH83-02C



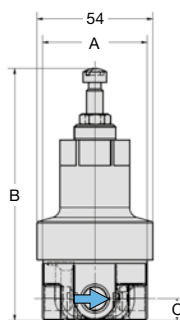
RH83

Special options, add the appropriate letter

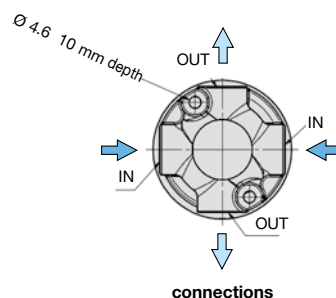
non-relieving	without relieving function	RH83-02. K
carbon dioxide	CO ₂	RH83-02. K03
argon	Ar	RH83-02. K05
nitrogen	N ₂	RH83-02. K07
helium	He	RH83-02. K09
inert gas	krypton, neon, xenon	RH83-02. K31

Accessories, enclosed

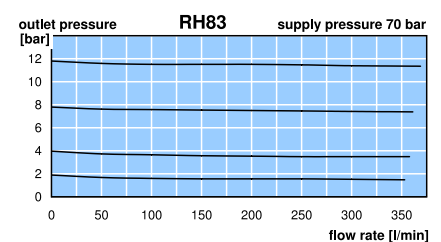
pressure gauge	Ø 50 mm, ¼" NPT	MA5002- ..*2N
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RH83



connections



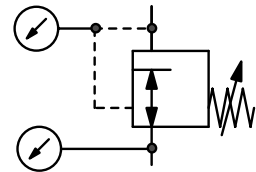
*1 bei P₁ = 70 bar, P₂ = 4 bar und Δp = 0.35 bar

*2 04 = 0...4 bar, 11 = 0...11 bar, 16 = 0...16 bar

* Product group



Description	For outlet pressures up to 15 bar the regulator has a diaphragm, for higher outlets a piston. A sintered bronze filter at the inlet port protects against contamination.	
Media	compressed air or non-corrosive gases	
Supply pressure	max. 220 bar	
Adjustment	RH10-02: by black plastic knob	all others: by T-handle with locknut
Gauge port	All regulators are equipped with both one supply pressure gauge and one outlet pressure gauge.	
Safety relief valve	prevents from overpressure, see chart	
Compensation	All regulators are equipped with supply pressure variation compensation, so that a change in supply pressure has no effect on the outlet pressure's stability.	
Temperature range	-20 °C to 60 °C / -4 °F to 140 °F	
Material	Body: brass, nickel-plated at RH10-02 Piston: brass at RH10-02 Valve seat: nylon Diaphragm: stainless steel at RH10-02, NBR/Buna-N at all others	Mounting position any Inlet filter: sintered bronze O-rings: EPDM or FKM, dependent on media



G $\frac{1}{4}$ up to G1 $\frac{1}{4}$
1 ... 8/220 bar

Dimensions			Safety relief valve	K _v -value	Flow rate	Connection thread	Pressure range	Order number
A	B	C						
mm	mm	mm	S: with valve	(m ³ /h)	m ³ /h*1	l/min*1	inlet / outlet	bar

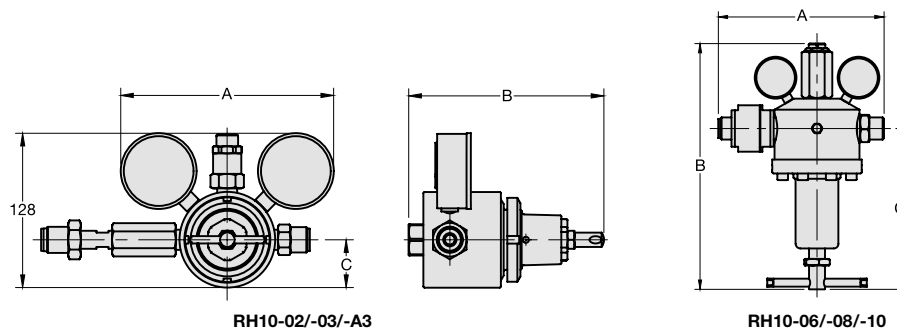
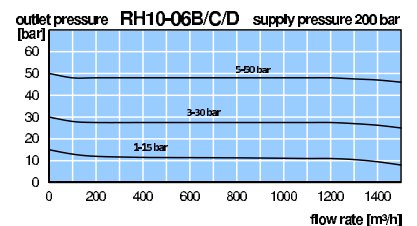
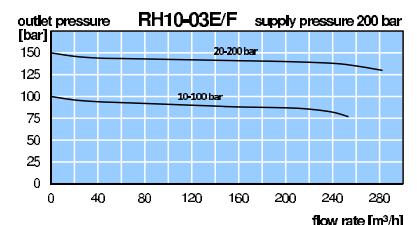
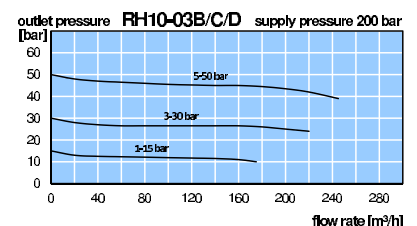
High pressure regulator 220 bar								non-relieving, for compressed air, pressure gauges supplied	RH10
176	145	35	S	0.05	80	1300	DIN 477 / G $\frac{1}{4}$ f	1 ... 8	RH10-02A
			S					1 ... 15	RH10-02B
176	163	35	S					3 ... 30	RH10-02C
			S					5 ... 50	RH10-02D
			S					10 ... 100	RH10-02E
			-					20 ... 200	RH10-02F
184	176	40	S	0.19	228	3800	DIN 477 / G $\frac{3}{8}$ f	0.1 ... 1.5	RH10-030
			S					1 ... 15	RH10-03B
			S					3 ... 30	RH10-03C
			S					5 ... 50	RH10-03D
184	186	40	-				RH10-04 for DIN 477 / G $\frac{1}{2}$ f	10 ... 100	RH10-03E
			-					20 ... 200	RH10-03F
182	245	102	S	0.5	422	7000	G $\frac{3}{4}$ f / G $\frac{3}{4}$ m	0.1 ... 1.5	RH10-A30
			S					1 ... 15	RH10-A3B
182	260	102	S				RH10-A4 for G $\frac{3}{4}$ f / G $\frac{1}{2}$ m	3 ... 30	RH10-A3C
			S					5 ... 50	RH10-A3D
182	195	35	-					10 ... 100	RH10-A3E
			-					20 ... 200	RH10-A3F
166	345	232	S	0.6	2000	33000	G $\frac{3}{4}$ a / G $\frac{3}{4}$ m	1 ... 8	RH10-06A
			S					1 ... 15	RH10-06B
166	358	245	S					3 ... 30	RH10-06C
			S					5 ... 50	RH10-06D
			-					10 ... 100	RH10-06E
253	370	242	S	1.8	3000	48000	G1m / G1m	1 ... 8	RH10-08A
			S					1 ... 15	RH10-08B
253	406	278	S					3 ... 30	RH10-08C
			S					5 ... 50	RH10-08D
253	406	278	-					20 ... 200	RH10-08F



RH10-02B



RH10-A3B07



*1 at 200 bar supply pressure and 15 bar outlet pressure

*2 max. 80 bar outlet pressure

Stainless steel version: see chapter for stainless steel devices

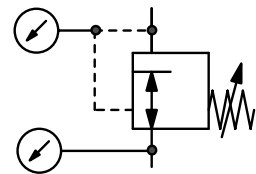
PDF CAD
www.aircom.net

* Product group



Order example:
RH10-02A

Description	For outlet pressures up to 15 bar the regulator has a diaphragm, for higher outlets a piston. A sintered bronze filter at the inlet port protects against contamination.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 220 bar		
Adjustment	RH10-02: by black plastic knob	all others: by T-handle with locknut	
Gauge port	All regulators are equipped with both one supply pressure gauge and one outlet pressure gauge.		
Safety relief valve	prevents from overpressure, see chart		
Compensation	All regulators are equipped with supply pressure variation compensation, so that a change in supply pressure has no effect on the outlet pressure's stability.		
Temperature range	-20 °C to 60 °C / -4 °F to 140 °F		Mounting position: any
Material	Body: brass, nickel-plated at RH10-02	Inlet filter: sintered bronze	
	Piston: brass at RH10-02	O-rings: EPDM or FKM, dependent on media	
	Valve seat: nylon		
	Diaphragm: stainless steel at RH10-02, NBR/Buna-N at all others		



**G $\frac{1}{4}$ up to G1 $\frac{1}{4}$
1 ... 8/220 bar**

Dimensions			Safety relief valve	K _v -value	Flow rate	Connection thread	Pressure range	Order number
A	B	C						
mm	mm	mm	S: with valve	(m ³ /h)	m ³ /h*1	l/min*1	inlet / outlet	bar

High pressure regulator 220 bar						non-relieving, for compressed air, pressure gauges supplied	RH10
248	385	270	S	3.1	5000	80000	G1m / G1 $\frac{1}{4}$ 1 ... 8 RH10-10A
			S				1 ... 15 RH10-10B
			S				3 ... 30 RH10-10C
248	420	305	S				5 ... 50 RH10-10D



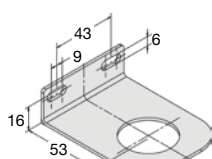
RH10-08B

Special options, add the appropriate letter

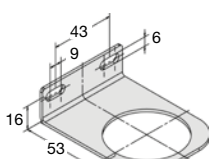
relieving	with relieving function, for compressed air	RH10-...R
FKM elastomer		RH10-...V
PTFE elastomer		RH10-...T
SST diaphragm	from RH10-03	RH10-...S
for panel mounting	for RH10-02 to -A3	RH10-...P
carbon dioxide *2	CO ₂	RH10-...03
argon	Ar	RH10-...05
nitrogen	N ₂	RH10-...07
helium	He	RH10-...09
hydrogen	H ₂	RH10-...11
methane	CH ₄	RH10-...13
oxygen	O ₂	RH10-...15
propane	C ₃ H ₈	RH10-...16
nitrous oxide	N ₂ O	RH10-...17
without cylinder connection		RH10-...X40

Accessories, enclosed

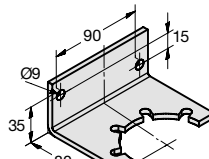
mounting bracket	made of stainless steel	for RH10-02	BW35-01S
mounting nut		for RH10-02	M35x1,5S
mounting bracket		for RH10-03 and -A3	BW50-01S
mounting nut		for RH10-03 and -A3	M50x1,5S
mounting bracket		for RH10-06	BW00-31S
		for RH10-08	BW00-35S



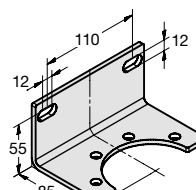
BW35-01S



BW50-01S



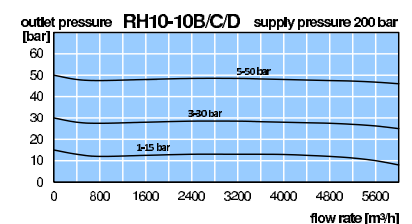
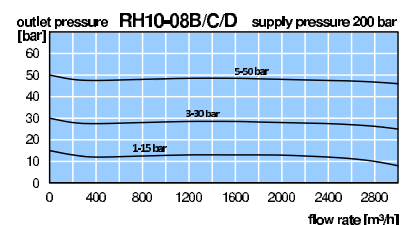
BW00-31S



BW00-35S

*1 at 200 bar supply pressure max. outlet pressure

*2 max. 80 bar outlet pressure



* Product group

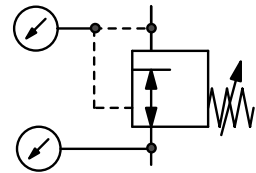
Stainless steel version: see chapter for stainless steel devices

PDF CAD
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**Order example:
RH10-10A**

Description	High pressure regulator for gas cylinders for reducing pressure of compressed air or liquid gases from a high level to the required pressure.		
Supply pressure	max. 200 bar		
Media	compressed air, oxygen or different gases		
Connections	according to DIN 477 (Part 1)		
Adjustment	by T-handle		
Gauge port	All regulators are equipped with both one supply pressure gauge and one outlet pressure gauge.		
Leakage rate	10 ⁻⁸ mbar l/s		
Compensation	All regulators are equipped with supply pressure variation compensation, so that a change in supply pressure has no effect on the outlet pressure's stability.		
Temperature range	-30 °C to 60 °C / -22 °F to 140 °F		
Material	Body: brass	O-rings: NBR/Buna-N and EPDM	Spring cage: brass
	Diaphragm: 65NBR4550, PTFE for outlet > 10 bar, stainless steel for pure gases up to 5.0		



P₁: max. 200 bar
0 ... 1.5/40 bar

Dimensions			Version	Flow rate		Supply pressure	Pressure range	Order number	D*
A	B	C		m ³ /h*2	l/min*2				
mm	mm	mm	1-step			max. bar	bar		
			2-step						

Cylinder pressure regulator 200 bar for compressed air, connections DIN 477, with inlet / outlet gauges RH201/RH202

210	190	100	1-step	48	800	200	0 ... 10	RH201-00C
210	210	120		75	1250		0 ... 20	RH201-00D
				120	2000		0 ... 40	RH201-00E
240	190	100	2-step	8	133	200	0 ... 1.5	RH202-00A
				48	800		0 ... 10	RH202-00C



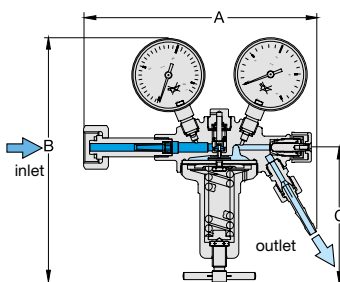
RH201, 1-step

Regulator for propane and acetylene connections DIN 477, with inlet / outlet gauges RH201

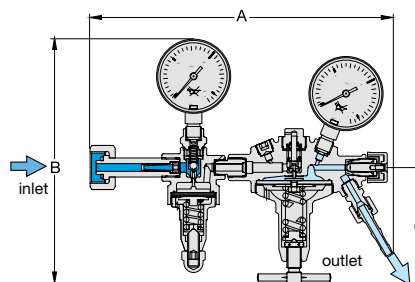
210	190	100	1-step	propane	C ₃ H ₈	max. 8	0 ... 4.0	RH201-00B16
210	190	100	1-step	azetylene	C ₂ H ₂	max. 26	0 ... 1.5	RH201-00A19

Special options, change the appropriate letter

carbon dioxide	CO ₂	RH20 .-. .03
inert gas		RH20 .-. .04
argon	Ar	RH20 .-. .05
fuel gas		RH20 .-. .06
nitrogen	N ₂	RH20 .-. .07
forming gas		RH20 .-. .08
helium	He	RH20 .-. .09
hydrogen	H ₂	RH20 .-. .11
testing gas		RH20 .-. .12
oxygen	O ₂	RH20 .-. .15
chrome-plated body	inside and outside	RH20 .-C...
metal diaphragm	5.0 purity	RH20 .- .M...



cross-section, 1-step



cross-section, 2-step

connection thread up to 200 bar		
gas type	inlet *1	outlet
compressed air	G ³ / ₈ m	G ¹ / ₄
oxygen	G ³ / ₈ f	G ¹ / ₄
inert gas	W21, 8x ¹ / ₄	G ¹ / ₄
CO ₂ / argon	W21, 8x ¹ / ₄	G ¹ / ₄
helium	W21, 8x ¹ / ₄	G ¹ / ₄
fuel gas	W21, 8x ¹ / ₄ LH	G ³ / ₈ LH
hydrogen	W21, 8x ¹ / ₄ LH	G ³ / ₈ LH
forming gas	W21, 8x ¹ / ₄ LH	G ³ / ₈ LH

connection thread up to 200 bar		
gas type	inlet *1	outlet
nitrogen	W24,32x ¹ / ₄	G ¹ / ₄
testing gas	M19x1,5 LH	G ³ / ₈ LH
nitrous oxide	G ³ / ₈	G ¹ / ₄
azetylene	clamp (cylinder)	G ³ / ₈ LH

flow rate - correction factor		
gas type		factor
compr. air		1.00
oxygen	O ₂	0.95
carbon dioxide	CO ₂	0.81
hydrogen	H ₂	3.80
argon	Ar	0.85
helium	He	2.70
propane	C ₃ H ₈	0.80
nitrous oxide	N ₂ O	0.80

*1 Thread according to DIN 477, Part 1

*2 at supply pressure of 2x outlet pressure + 1 bar

only left hand thread is marked LH, right hand RH is not marked.

* Product group

PDF CAD
www.aircom.net



Order example:
RH201-00C

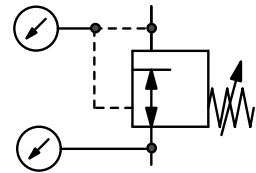


RH201-C..., chrome-plated



RH202, 2-step

Description	High pressure regulator for gas cylinders for reducing pressure of compressed air or liquid gases from a high level to the required pressure.		
Supply pressure	max. 300 bar		
Media	compressed air, oxygen or different gases		
Connections	according to DIN 477 (Part 5)		
Adjustment	by T-handle		
Gauge port	All regulators are equipped with both one supply pressure gauge and one outlet pressure gauge.		
Leakage rate	10 ⁻⁸ mbar l/s		
Compensation	All regulators are equipped with supply pressure variation compensation, so that a change in supply pressure has no effect on the outlet pressure's stability.		
Temperature range	-30 °C to 60 °C / -22 °F to 140 °F		
Material	Body: brass	O-rings: NBR/Buna-N and EPDM	Spring cage: brass
	Diaphragm: 65NBR4550, PTFE for outlet > 10 bar, stainless steel for pure gases up to 5.0		



P₁: max. 300 bar
0 ... 1.5/40 bar

Dimensions			Version	Flow rate		Supply pressure	Pressure range	Order number	D*
A	B	C		m ³ /h*2	l/min*2				
mm	mm	mm	1-step			max. bar	bar		
			2-step						

Cylinder pressure regulator 300 bar for compressed air, connections DIN 477, with inlet / outlet gauges RH301 / RH302

210	190	100	1-step	48	800	300	0 ... 10	RH301-00C
210	210	120		75	1250		0 ... 20	RH301-00D
				120	2000		0 ... 40	RH301-00E
240	190	100	2-step	8	133	300	0 ... 1,5	RH302-00A
				48	800		0 ... 10	RH302-00C



RH301, 1-step



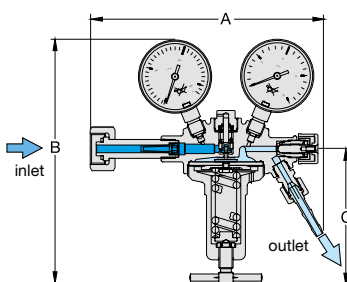
RH302, 2-step



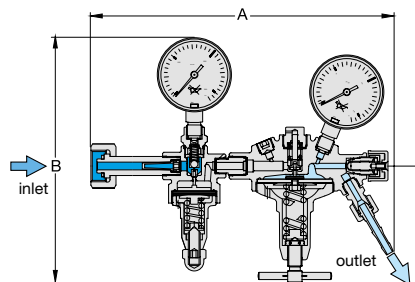
RH301-C..., chrome-plated

Special options, change the appropriate letter

compressed air	connection gauge G ⁵ / ₈	RH35 -... .
carbon dioxide	CO ₂	RH30 -... .03
inert gas		RH30 -... .04
argon	Ar	RH30 -... .05
fuel gas		RH30 -... .06
nitrogen	N ₂	RH30 -... .07
forming gas		RH30 -... .08
helium	He	RH30 -... .09
hydrogen	H ₂	RH30 -... .11
testing gas		RH30 -... .12
oxygen	O ₂	RH30 -... .15
chrome-plated body	inside and outside	RH30 -... .C...
metal diaphragm	5.0 purity	RH30 -... .M...



cross-section, 1-step



cross-section, 2-step

connection thread up to 300 bar		
gas type	inlet *1	outlet
fuel gas	W30x2 LH	G ⁵ / ₈ LH
all others	W30x2	G ¹ / ₄

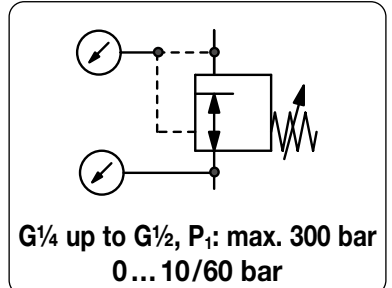
flow rate - correction factor	
gas type	factor
compressed air	1.00
oxygen O ₂	0.95
carbon dioxide CO ₂	0.81
hydrogen H ₂	3.80
argon Ar	0.85
helium He	2.70
propane C ₃ H ₈	0.80
nitrous oxide N ₂ O	0.80

*1 Thread according to DIN 477, Only left hand thread is marked LH. Right hand RH is not marked.
*2 at supply pressure of 2x outlet pressure + 1 bar

* Product group



Description	Main pressure regulator according to ISO 7291 up to 300 bar with G½ connection thread. A filter at the inlet port protects against contamination.
Media	compressed air, oxygen or different gases on request
Supply pressure	see chart, max. 300 bar
Connections	G¼ to G½
Adjustment	by T-handle for RH-...7.510 / 520 / 525 by hexagonal spindle (spanner size 20 mm) for RH-...7.545 / 565
Gauge port	All regulators are equipped with both one supply pressure gauge and one outlet pressure gauge.
Leakage rate	10 ⁻⁶ mbar l/s
Compensation	without supply pressure variation compensation
Temperature range	-30 °C to 60 °C / -22 °F to 140 °F
Material	Body: brass O-rings: NBR/Buna-N Spring cage: brass Diaphragm: 65NBR4550, stainless steel for oxygen > 20 bar



Dimensions			Flow rate		Supply pressure	Connection thread	Pressure range	Order number
A	B	C	m³/h*1	l/min*1	max. bar	G	bar	
mm	mm	mm						

Main pressure regulator					for compressed air, supply and outlet pressure gauge supplied			RH
150	205	115	50	830	100	G½	0...10	RH-147.510
			75	1250			0...20	RH-147.520
200	310	215	170	2830			0...20	RH-147.525
			290	4830			15...40	RH-147.545
			450	7500			15...60	RH-147.565
150	205	115	50	830	200	G½	0...10	RH-247.510
			75	1250			0...20	RH-247.520
200	310	215	170	2830			0...20	RH-247.525
			290	4830			15...40	RH-247.545
			450	7500			15...60	RH-247.565
150	205	115	50	830	300	G½	0...10	RH-347.510
			75	1250			0...20	RH-347.520
200	310	215	170	2830			0...20	RH-347.525
			290	4830			15...40	RH-347.545
			450	7500			15...60	RH-347.565



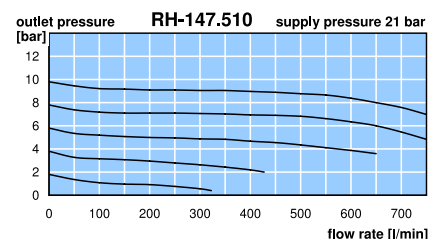
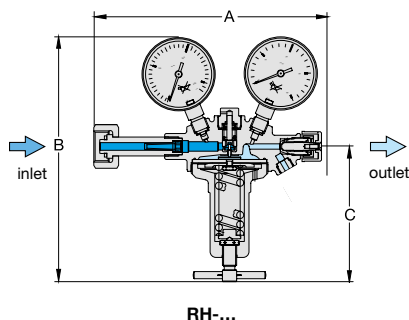
RH-147.510 / 520



RH-247.525 / 545 / 565

Special options, add the appropriate letter

G¼	connection thread, max. 100 bar	RH-...27...
G½	connection thread	RH-...37...
metal diaphragm	5.0 purity	RH-...7...M
carbon dioxide	CO ₂	RH-...7...03
inert gas		RH-...7...04
argon	Ar	RH-...7...05
fuel gas		RH-...7...06
nitrogen	N ₂	RH-...7...07
forming gas		RH-...7...08
helium	He	RH-...7...09
hydrogen	H ₂	RH-...7...11
testing gas		RH-...7...12
methane	CH ₄	RH-...7...13M
natural gas *2		RH-...7...14
oxygen	O ₂	RH-...7...15
chrome plated body	inside and outside	RH-...7...C



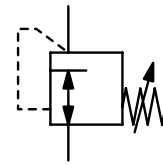
*1 at supply pressure of 2 x outlet pressure + 1 bar

*2 without DVGW-approval

* Product group



Description	Diaphragm-operated high pressure regulator of small and light design.
Media	compressed air, non-corrosive gases or liquids
Supply pressure	max. 414 bar
Adjustment	by black plastic knob
Relieving function	non-relieving
Leakage rate	$< 1 \times 10^{-4}$ mbar l/s He
Gauge port	1/4" NPT for inlet and outlet pressure
Weight	200 g
Mounting position	any
Temperature range	-25 °C to 75 °C / -13 °F to 167 °F
Materials	Body: nickel-plated aluminium Regulating system: piston with EPDM o-ring, as option NBR/Buna-N or FKM Valve seat: CTFE or Vespel as option Inner valve: stainless steel and aluminium



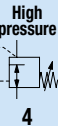
P₁: max. 414 bar
0.5 ... 5/124 bar

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

High pressure regulator 414 bar							for gases and liquids, non-relieving aluminium, piston with EPDM	RH1
41	76	13	0.05	84*1	1400*1	1/4" NPT	0.5 ... 5	RH1-02A
							0.5 ... 10	RH1-02B
							1.5 ... 15	RH1-02C
41	76	13	0.05	192*2	3200*2	1/4" NPT	4.0 ... 48	RH1-02D
							8.0 ... 83	RH1-02E
							10 ... 124	RH1-02F

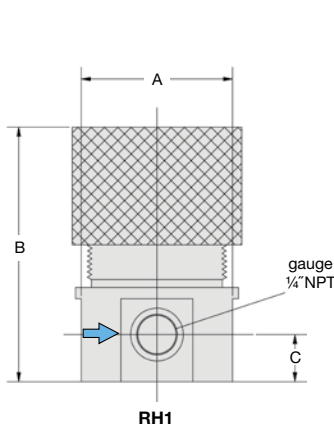


RH1

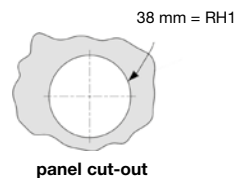


Special options, add the appropriate letter

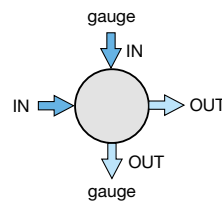
Vespel seat	für RH1	RH1-02.X45
NBR o-ring	für RH1	RH1-02.N
FKM o-ring	für RH1	RH1-02.V
brass pressure gauge	inlet side	HM
SST pressure gauge	inlet side	H
	outlet side	RH1-02.GM
	outlet side	RH1-02.G



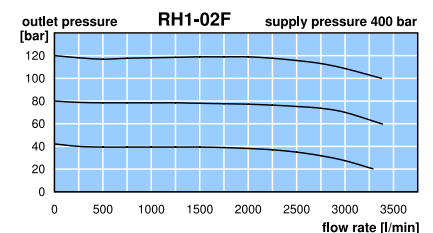
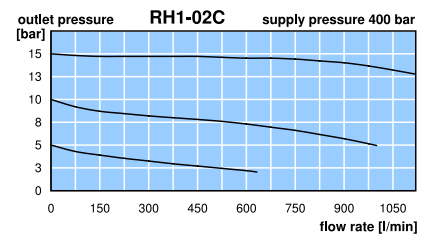
RH1



panel cut-out



connection diagram

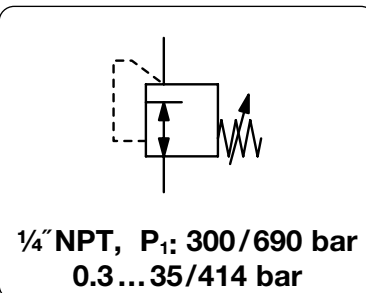


*1 at 400 bar supply pressure and 15 bar outlet pressure
*2 at 400 bar supply pressure and 120 bar outlet pressure

* Product group



Description	Piston-operated high pressure regulator HP300 / HP400 are marked by high flow and great reliability.	
Media	compressed air, non-corrosive gases or liquids	
Supply pressure	max. 690 bar at HP300, max. 414 bar at HP400	
Accuracy	at supply pressure variation of 7 bar: < 5 mbar pressure deviation at HP300, < 250 mbar pressure deviation at HP400	
Adjustment	by black plastic knob	
Relieving function	non-relieving, optionally relieving	
Mounting position	any	
Temperature range	-5 °C to 75 °C / 23 °F to 167 °F for HP300 -25 °C to 75 °C / -13 °F to 167 °F for HP400	
Material	Body: brass, optionally stainless steel (spring cage brass), stainless steel completely on request	
	Seals: NBR at HP300 (relieving), FKM at HP300 (non-relieving) / HP400	
	Spring cage: brass at HP300, nickel-plated at HP400	
	Valve seat: Vespel at HP300 / HP400 (relieving), Teflon PFA at HP400 (non-relieving)	
	Inner valve: stainless steel	
	Leakage rate	< 10 ⁻⁴ mbar l/s He
	Gauge port	1/4" NPT for inlet / outlet pressure, shifted by 70°



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

High pressure regulator 414 bar							non-relieving, brass		HP300
55	175	19	0.05	90	1500	1/4" NPT	0.3 ... 35		HP300-035
							0.6 ... 55		HP300-055
							0.7 ... 104		HP300-105
							1.0 ... 172		HP300-175
							1.7 ... 276		HP300-280
							3.4 ... 414		HP300-415



HP300

High pressure regulator 414 bar							non-relieving, brass		HP400
50	137	13	0.05	90	1500	1/4" NPT	0.7 ... 104		HP400-104
							1.0 ... 172		HP400-170



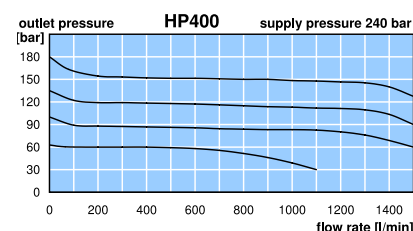
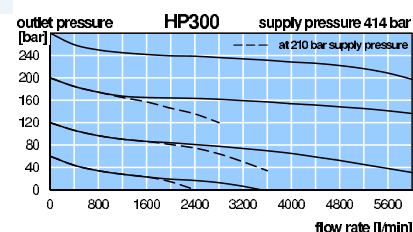
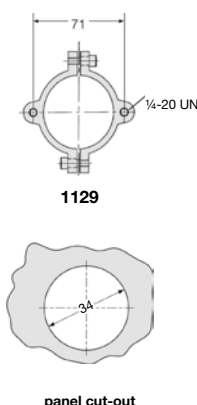
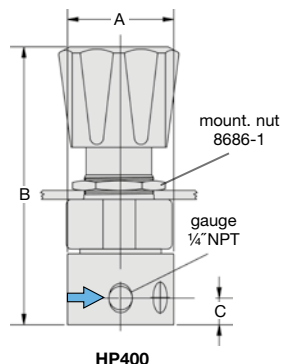
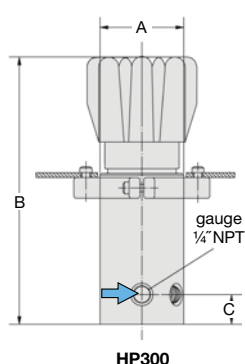
HP400

Special options, add the appropriate letter

relieving								HP300-...R
								HP400-...R
body made of SST				(690 bar)				HP300-...S
				(414 bar)				HP400-...S
for oxygen	specialy cleaned,	P ₁ < 300 bar		for HP300/400				HP.00-...15
for liquids	w/o filter at inlet, valve seat of Nylatron			for HP300				HP300-...W
	w/o filter at inlet, valve seat of Vespel			for HP400				HP400-...W
brass pressure gauge	for brass body, inlet side							HP.00-...HM
	for brass body, outlet side							HP.00-...GM
SST pressure gauge	for stainless steel body, inlet side							HP.00-...H
	for stainless steel body, outlet side							HP.00-...G

Accessories, enclosed

set of mounting brackets	aluminium	for HP300	1129
mounting nut	for panel mounting, made of stainless steel	for HP400	8686-1



*1 at 240 bar supply pressure and 30 bar outlet pressure

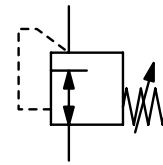
* Product group

PDF CAD
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Order example:
HP300-035

Description	Piston-operated high pressure regulator HP500R and diaphragm-operated HP500 are marked by high flow and great reliability.	
Media	compressed air, non-corrosive gases or liquids	
Supply pressure	max. 300 bar	
Accuracy	at supply pressure variation of 7 bar: < 120 mbar pressure deviation	
Adjustment	by black plastic knob	Leakage rate < 2x 10 ⁻⁸ mbar l/s He
Relieving function	non-relieving, optionally relieving	Gauge port 1/4" NPT for inlet / outlet pressure, shifted by 70°
Mounting position	any	
Temperature range	-40 °C to 75 °C / -40 °F to 167 °F	
Material	Body: brass, optionally stainless steel (spring cage brass), stainless steel completely on request	
	Seals: FKM	
	Spring cage: nickel-plated	Valve seat: Teflon PFA
	Inner valve: stainless steel	Diaphragm: stainless steel



1/4" NPT, P₁: 300 bar
0.1 ... 1.7/35 bar

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

High pressure regulator 300 bar							non-relieving, brass	HP500
50	137	19	0.05	90	1500	1/4" NPT	0.1 ... 1.7	HP500-002
							0.1 ... 3.5	HP500-004
							0.1 ... 7.0	HP500-007
							0.2 ... 17	HP500-017
							0.3 ... 35	HP500-035



HP500

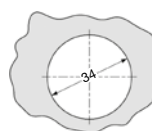
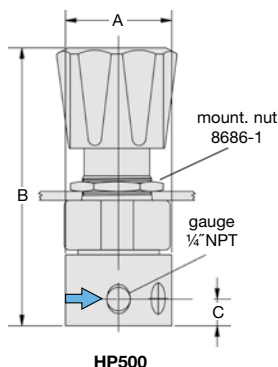


Special options, add the appropriate letter

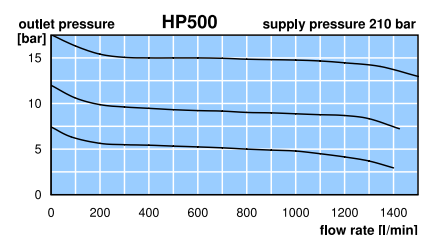
relieving		HP500-...R
body made of SST		HP500-...S
free of grease and oil	suitable for oxygen, P ₁ < 200 bar	HP500-...L
for liquids	w/o filter at inlet, valve seat of Vespel	HP500-...W
brass pressure gauge	for brass body, inlet side	HP500-...HM
	for brass body, outlet side	HP500-...GM
SST pressure gauge	for stainless steel body, inlet side	HP500-...H
	for stainless steel body, outlet side	HP500-...G

Accessories, enclosed

mounting nut	for panel mounting, made of stainless steel	8686-1
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panel cut-out



*1 at 240 bar supply pressure and 30 bar outlet pressure

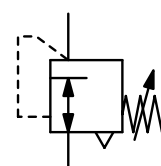
* Product group

PDF CAD
www.aircom.net



Order example:
HP500-002

Description	High pressure regulator with high flow and high reliability. Large piston sensor for high sensitivity and balanced stem design for constant downstream pressure.		
Media	compressed air, non-corrosive gases or liquids		
Supply pressure	max. 260 bar, optionally up to 310 bar or 410 bar		
Leakage rate	< 1 x 10 ⁻⁴ mbar l/s He		
Adjustment	by black plastic knob		
Relieving function	relieving, optionally non-relieving		
Gauge port	none, optionally 1/4" NPT for inlet and outlet		
Mounting position	any		
Temperature range	-25 °C to 100 °C / -13 °F to 212 °F		
Material	Body: brass,	optionally stainless steel	
	O-rings: NBR/Buna-N and FKM		
	Main valve seat: CTFE,	PTFE at RH3-04B	
	Relieving valve: CTFE,	PTFE at RH3-04B/-04C	
	Inner valve: PTFE and brass,	optionally stainless steel	



P₁: max. 260/410 bar
0.7 ... 21/104 bar

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



High pressure regulator 260 bar, 1/2" NPT							relieving, brass	RH3
76	203	45	1.7	420	7000	1/2" NPT	0.7 ... 21	RH3-04B
							1.0 ... 42	RH3-04C
							1.4 ... 70	RH3-04D
							3.4 ... 104	RH3-04E



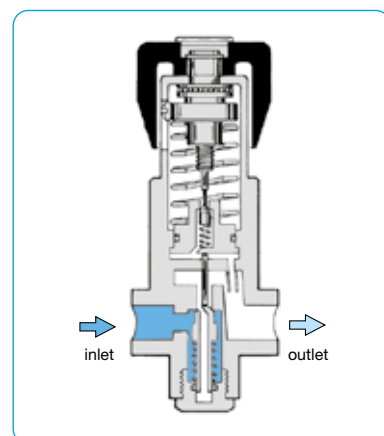
RH3

Special options, add the appropriate letter

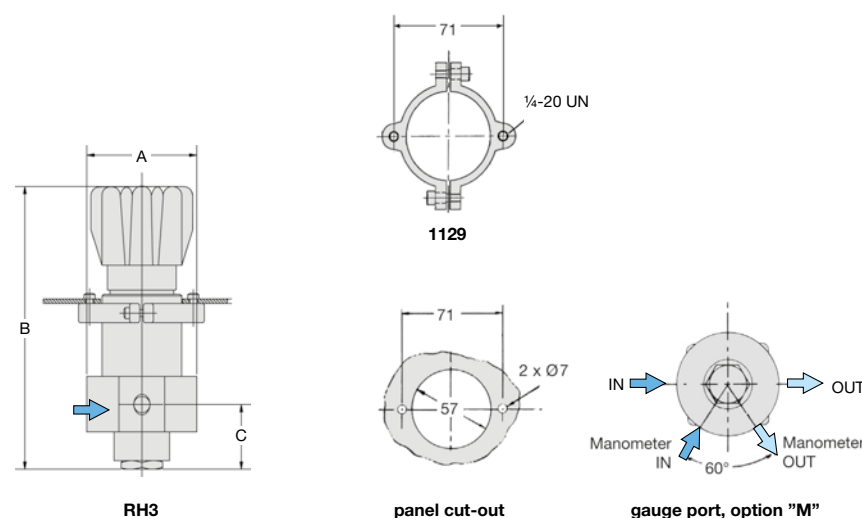
3/4" NPT	connection thread	RH3-0 6 .
non-relieving	without relieving function	RH3-0 . .K
stainless steel, 310 bar	body: stainless steel 316	RH3-0 . .S1
stainless steel, 410 bar	body: stainless steel 316, add. pre. range 3.4 ... 172 bar (F)	RH3-0 .S2
brass, 345 bar	body: brass, add. pre. range 3.4 ... 172 bar (F)	RH3-0 .U
gauge port	1/4" NPT for inlet and outlet	RH3-0 .M
brass pressure gauge	inlet side MHM	outlet side RH3-0 . .MGM
SST pressure gauge	inlet side MH	outlet side RH3-0 . .MG

Accessories, enclosed

set of mounting brackets	for panel mounting	1129
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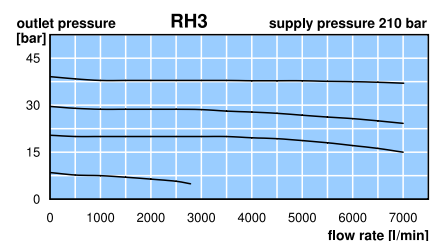
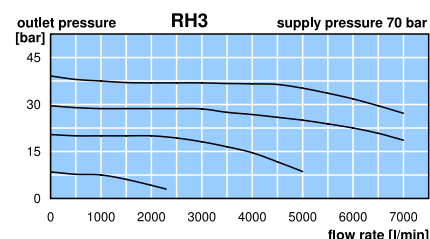
cross-section



RH3

panel cut-out

gauge port, option "M"



*1 at 210 bar supply pressure and 40 bar outlet pressure

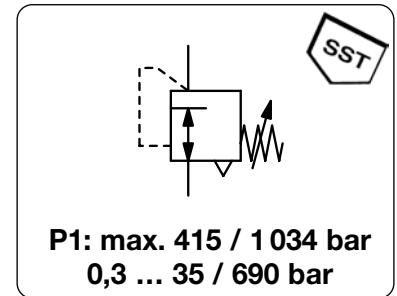
* Product group

PDF CAD
www.aircom.net



Order example:
RH3-04B

Description	High pressure regulator, piston operated, made of stainless steel, with high sensitivity, excellent accuracy and reliability.				
Media	compressed air and non-corrosive gases or liquids (non-relieving version)				
Supply Pressure	max. 690 bar optionally 415 bar or 1034 bar				
Accuracy	at supply pressure variation of 7 bar: < 100 mbar				
Adjustment	by black plastic adjustment dial				
Relieving Function	standard relieving, optional non-relieving				
Gauge Ports	no ports, optional 1/4"NPT for inlet and outlet pressure, shifted by 60°				
Temperature Range	-40° to 75°C / -40°F to 167°F				
Material	Body:	stainless steel 316	Mounting position:	any	
	Seal:	NBR optional FKM	Spring Cage:	stainless steel 300	
	Valve Seat:	Vespel	Filter:	40 µm, stainless steel 300, brass by option U	
	Inner Valve:	stainless steel 300	Relieving Valve:	CTFE	



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

High Pressure Regulator 690 bar					relieving, compressed air, stainless steel, NBR	HP306
55	175	19	0,05	210	3600	1/4" NPT 0.3 ... 35 HP306-035
				230	3900	1/4" NPT 0.3 ... 55 HP306-055
				280	4800	1/4" NPT 0.7 ... 105 HP306-105
				320	5400	1/4" NPT 1.0 ... 175 HP306-175
				390	6500	1/4" NPT 1.7 ... 275 HP306-280
				420	7000	1/4" NPT 3.4 ... 415 HP306-415
				450	7500	1/4" NPT 14 ... 690 HP306-690



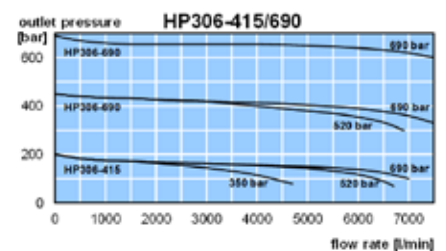
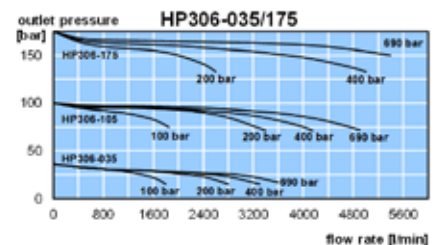
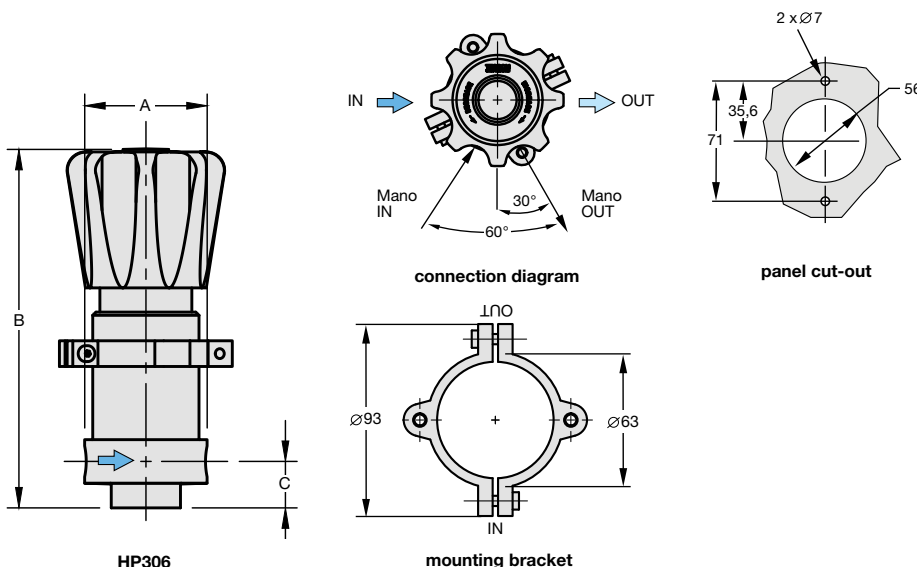
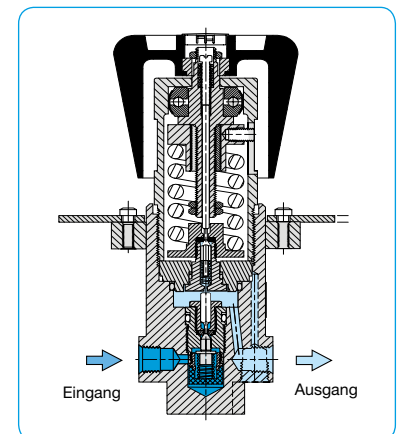
HP306
accessory: mounting bracket

Special options, add the appropriate letter

3/8"NPT	connection thread	HP306-...03
1/2"NPT	connection thread not possible by option S	HP306-...04
FKM elastomer		HP306-...V
non-relieving	with FKM elastomer	HP306-...VK
for oxygen	special cleaned, P1 < 200 bar	HP306-...15
inlet pressure 415 bar	brass up to pressure range 3.4 ... 415	HP306-...U
inlet pressure 1034 bar	stainless steel	HP306-...S
tapped exhaust	with FKM elastomer, 1/4"NPT	HP306-...VX12
gauge port	1/4"NPT for inlet and outlet	HP306-...M
gauge brass	inlet side MHM outlet side	HP306-...MGM
gauge stainless steel	inlet side MH outlet side	HP306-...MG

Accessories, enclosed

monting bracket	made of aluminium	1129
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*1 at 690 bar inlet pressure, see diaphragm

* Product group

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Order example:
HP306-035