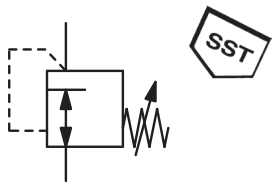
Pressure Regulator Made of Stainless Steel, Suitable for Pharmacy R70

Description	Piston-operated pressure regulator made of stainless steel up to pressure range of 52 bar, independent to inlet pressure.
Note	It is recommended to select an outlet diameter at least one time larger than the main valve's diameter.
Media	compressed air, gases, liquids or steam (R70-02 not suitable for steam)
Supply pressure	max. 16 bar at R70-02, max. 40 bar at R70-16/-20, max. 63 bar at R70-03/-06 to -12, max. 100 bar at R70-04
Adjustment	by wing screw at R70-02, with locknut by T-handle at R70-03 to -20, with locknut
Relieving function	non-relieving
Gauge port	G¼ on both sides of the body **Mounting position** any
Temperature range	0 °C to 140 °C / 32 °F to 284 °F, EPDM, steamable, 0 °C to 150 °C / 32 °F to 302 °F, PTFE/EPDM for steam 0 °C to 200 °C / 32 °F to 302 °F, PTFE/AF100/EPDM, for steam
Material	Body: stainless steel 1.4301 or 1.4571 (R70-02), optionally 1.4435 Spring cage: stainless steel 1.4301 Diaphragm: EPDM Seals: EPDM, optionally PTFE O-rings: EPDM



0.25 … 0.4 / 52 bar
up to G2½, also for food

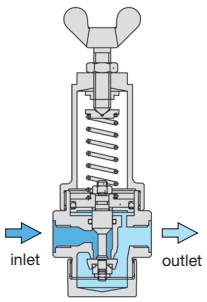
SST pressure regulator

supply max. 16 / 63 / 100 bar, non-relieving for compressed air, gas, water and steam*3

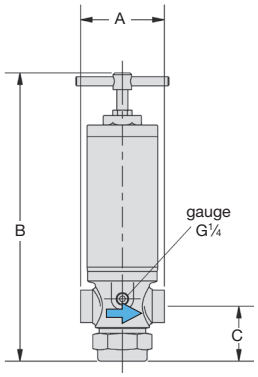
Dimensions A mm	B mm	C mm	Nominal size DN	K_v value (m³/h)	Flow rate Air l/min*1	Water l/min*2	Connection thread G	Supply max. bar	Pressure range bar	Order number R70
58	185	36	8	0.63	24	3	G¼	16	1.0 … 1.7	R70-02A
									1.7 … 3.3	R70-02B
									2.8 … 5.6	R70-02C
									3.5 … 6.2	R70-02D
70	253	48	10	2.0	55	6	G⅜	*4	0.4 … 0.9	R70-03A
									0.8 … 1.7	R70-03B
									1.5 … 3.1	R70-03C
									3.0 … 6.1	R70-03D
									5.0 … 9.8	R70-03E
									7.0 … 14.4	R70-03F
90	333	58	15	3.0	120	15	G½	*4	0.5 … 0.94	R70-04A
									1.0 … 2.4	R70-04B
									2.6 … 5.3	R70-04C
									4.7 … 9.5	R70-04D
									7.5 … 15.0	R70-04E
									13.0 … 26.0	R70-04F
									26.0 … 52.0	R70-04G
90	333	58	20	3.2	200	25	G¾	*4	0.5 … 0.94	R70-06A
									1.0 … 2.4	R70-06B
									2.6 … 5.3	R70-06C
									4.7 … 9.5	R70-06D
									7.5 … 15.0	R70-06E
									13.0 … 26.0	R70-06F
									26.0 … 52.0	R70-06G
105	368	68	25	6.3	350	45	G1	*4	0.4 … 0.8	R70-08A
									1.0 … 2.0	R70-08B
									1.7 … 3.5	R70-08C
									3.0 … 6.1	R70-08D
									5.5 … 11.0	R70-08E
									12.0 … 23.0	R70-08F

R70-02.

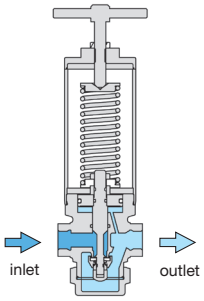
R70-03.CF1, accessory: gauge



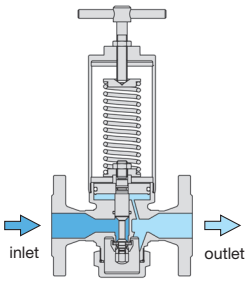
R70-02, cross section



R70-03



R70-04, cross section



R70-…F. cross section

*1 at flow velocity 10 m/s
*2 at 2.5 m/s

*3 not for R70-02
*4 P_1 max. = P_2 max. + 25 bar

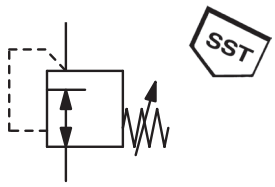
PDF CAD
www.aircom.net

Order example:
R70-02A

Pressure Regulator Made of Stainless Steel, Suitable for Pharmacy R70

Pharmacy and food-safe version

Description	The pharmacy version (option **P**) standard design is completely made of stainless steel, independent of inlet pressure, sealed at zero consumption, with EPDM and steamable up to 140 °C / 284 °F. Media contact parts have roughness of R_a < 2.6 µm.						
Special options	Add the appropriate letter to the order number:						
Outer surface	Valve body:	electropolished	**FA**	glass bead shot-peened	**FC**		
	Complete valve:	electropolished	**FB**	glass bead shot-peened	**FD**	ground/polished R_a 1.2 µm	**FE**
Inner surface	Valve body:	R_a < 2.0 µm		glass bead shot-peened	**GA**		
	Media contact parts:	R_a < 1.6 µm	**GB**	R_a < 0.8 µm	**GC**	R_a < 0.5 µm	**GD**
Connection	Aseptic flange as per DIN 11864-2		**F(AS)**	as per APV	**F(APV)**		
	Flange as per DIN 2633 (PN16)		**F**	as per ANSI B16.5 150 lbs	**F150lbs**		
	Threaded connection as per DIN 11851		**GA**				
	Clamp fittings as per DIN 32676		**CL**				



0.25…0.4/52 bar
up to G2½, also for food

Dimensions A	B	C	Nominal size	K_v value	Flow rate Air	Water	Connection thread	Supply max.	Pressure range	Order number
mm	mm	mm	DN	(m^3/h)	l/min*1	l/min*2	G	bar	bar	
SST pressure regulator					supply pressure max. 40 / 63 bar, non-relieving, without constant bleed					**R70**
145	410	85	40	12.5	900	120	G1½	*4	1.0…2.0	**R70-12A**
									1.6…3.2	**R70-12B**
									2.4…4.8	**R70-12C**
									4.8…9.6	**R70-12D**
									9.5…19	**R70-12E**
145	410	85	50	13.0	1300	160	G2	*4	1.0…2.0	**R70-16A**
									1.6…3.2	**R70-16B**
									2.4…4.8	**R70-16C**
									4.8…9.6	**R70-16D**
									9.5…19	**R70-16E**
220	685	145	65	28.0	3200	420	G2½	*4	0.25…0.4	**R70-20A**
									0.5…1.1	**R70-20B**
									1.3…2.6	**R70-20C**
									2.8…5.6	**R70-20D**
									6.0…12	**R70-20E**

R70-08BF.

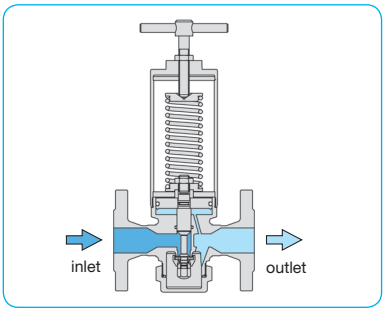
R70-16.

Special options, add the appropriate letter

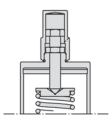
NPT	connection thread		R70-. . .**N**
stainless steel 1.4435	housing 1.4435, spring cage 1.4301	for G⅜ up to G1	R70-. . .**S**
up to 150 °C / 302 °F	PTFE seals		R70-. . .**X55**
up to 200 °C / 392 °F	PTFE / AF100 seals		R70-. . .**X56**
tamper-proof cap	adjustment by spanner, height 35 mm lower		R70-. . .**T**
drainage	through bottom screw		R70-. . .**U**
volume booster	pneumatic pressure setting		R70-. . .**J**
other connections	DIN or ANSI flange, threaded connection or clamp fittings		R70-. . .**F.**
for pharmacy	forged stainless steel, R_a < 2.6 µm, steamable, EPDM		R70-. . .**P**
CIP cleaning	pressure regulator sterilisable and minimal dead spots		R70-. . .
for food industry	EPDM elastomer with FDA approval		R70-. . .

Accessories, enclosed

pressure gauge	Ø 63 mm, 0…*3 bar, G¼ for other requirements on request	**MS6302-..***3

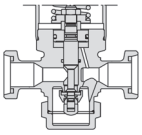


R70-…F. cross section

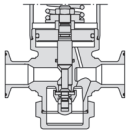


tamper-proof cap for pressure adjustment

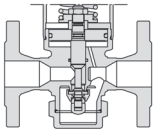
drainage through bottom screw



threaded connection e.g. DIN 11851/11864-1



clamp fittings e.g. DIN 32676



flange e.g. DIN 11864-2

*1 at flow velocity 10 m/s
*2 at 2.5 m/s
*3 **02** = 0…2.5 bar, **04** = 0…4 bar, **06** = 0…6 bar, **10** = 0…10 bar, **16** = 0…16 bar, **25** = 0…25 bar, **60** = 0…60 bar
*4 P_1 max. = P_2 max. + 25 bar

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net

Order example: R70-12A