

PRESSURE REDUCING VALVE EQA 1301

The 1301 series pressure regulators are specified to reduce from a high inlet pressure (up to 420 barg or 6000 psig) and provide a constant pressure flow to pilot-operated valves, control panels, instrumentation, control valves, etc.

Due to their robust design, proven reliability, and precise pressure regulation, they are ideal for numerous applications where large pressure drops are required. The 1301F model can supply outlet pressures from 1 to 16 barg (14 to 230 psig), while the 1301G model can supply regulated pressures from 5 to 40 barg (70 to 580 psig).

Easy to maintain, they allow for the replacement of all their parts with the equipment mounted in situ. Their stainless steel diaphragm and polyamide plug ensure a prolonged service life and minimal maintenance.

TECHNICAL DATA

CONEXIONES: Threaded 1/4" NPT

TEMPERATURA DE OPERACION: -20°C a 60°C

MODEL	F	G
Weight	1.8 Kg	2 Kg
Inlet Pressure	420 bar MAX	420 bar MAX
Max. Outlet Pressure	16 bar	40 bar
Min. Outlet Pressure	1 bar	5 bar

MATERIALS

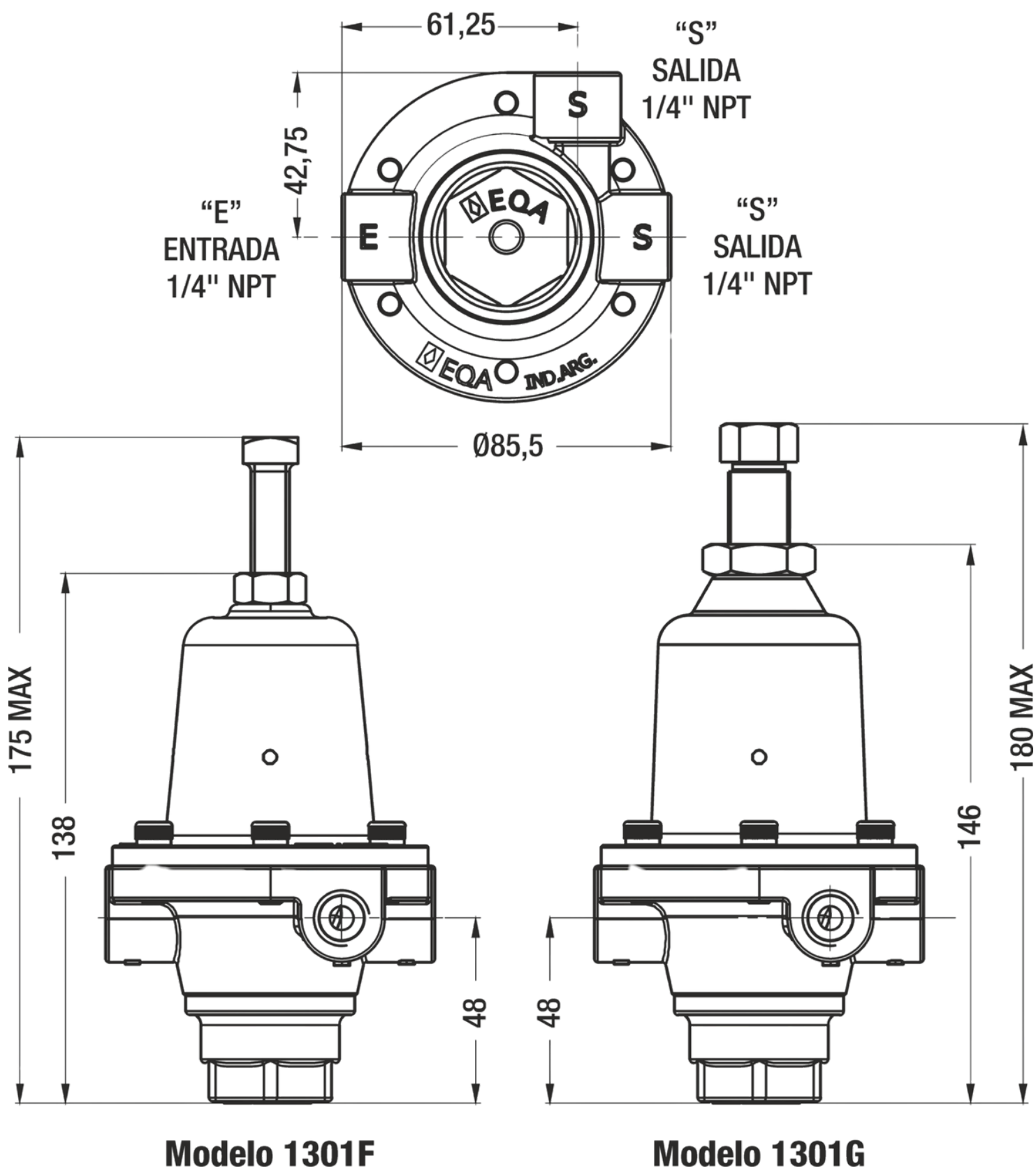
Main Body	Brass	Brass
Bonnet	Brass	AISI 304 (INOX)
Diaphragm	AISI 302 (INOX)	AISI 302 (INOX)
Joints	NBR	NBR
Shutters	PA 6	PA 6





DIMENSIONS in mm.

Modelo 1301F / Modelo 1301G





In order to calculate capacities with other gases, multiply the values of the chart by K factor.

CAPACITY

The tables shown below detail the flow rates for outlet pressure drops of 10% and 20% for the 1301F model, and 3.5%, 10%, 15%, and 20% for the 1301G model.

The flow rates in the tables correspond to Natural Gas (relative density 0.6) according to the following parameters:

Flow rate in Nm³/h:
Temperature = 0 °C (32 °F)
Pressure = 1.01325 bar

Flow rate in SCFH:
Temperature = 15 °C (60 °F)
Pressure = 1.01325 bar (14.7 psia)

GAS	DENSITY	K FACTOR
Butane	2	0.55
Propane (LPG)	1.5	0.63
Carbon Dioxide	1.5	0.63
Oxygen	1.1	0.74
Air	1	0.77
Nitrogen	0.97	0.79
Acetylene	0.9	0.82
Ammonia	0.59	1.02
Hydrogen	0.07	3
Biogas*	máx 1.2	0.7
	mín 0.8	0.75
*The proper operation is guaranteed only for treated Biogas (Low content of sulfur)		

1301F - CAPACITY CHART IN SCFH AND Nm³/h OF NATURAL GAS

Inlet Pressure in psig/bar																		
Outlet Pressure Range (psig/bar)	Inlet Pressure		100/6.9				250/17.2				500/34.5				750/51.7			
			Ac10		Ac20		Ac10		Ac20		Ac10		Ac20		Ac10		Ac20	
	psig	bar	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h
10 a 75/ 0.69 a 5.2	25	1.7	248	7	379	10	388	10	626	17	519	14	845	23	651	17	976	26
	50	3.4	364	10	519	14	626	17	1039	28	937	25	1301	35	1092	29	1563	42
	75	5.2	325	9	519	14	782	21	1170	31	1170	31	1820	49	1301	35	2083	56
50 a 150/ 3.4 a 10.3	75	5.2	262	7	456	12	651	17	1039	28	1039	28	1689	45	1238	33	1952	52
	150	10.3	---	---	---	---	976	26	1301	35	1432	38	2340	63	1888	51	2990	80
100 a 225/ 6.9 a 15.5	150	10.3	---	---	---	---	845	23	1170	31	1301	35	2214	59	1757	47	2864	77
	225	15.5	---	---	---	---	651	17	1039	28	1820	49	2733	73	2471	66	3772	101



1301F - CAPACITY CHART IN SCFH AND Nm³/h OF NATURAL GAS

Inlet Pressure in psig/bar														
Outlet Pressure Range (psig/bar)	Inlet Pressure		1000/69				1500/103				2000/138			
			Ac10		Ac20		Ac10		Ac20		Ac10		Ac20	
	psig	bar	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h
10 a 75/ 0.69 a 5.2	25	1.7	675	18	1000	27	704	19	1039	28	728	19	1068	29
	50	3.4	1170	31	1689	45	1238	33	1820	49	1301	35	1952	52
	75	5.2	1286	34	2214	59	1563	42	2340	63	1689	45	2471	66
50 a 150/ 3.4 a 10.3	75	5.2	1301	35	2083	56	1432	38	2214	59	1563	42	2340	63
	150	10.3	2083	56	3384	91	2214	59	3641	97	2340	63	3903	104
100 a 225/ 6.9 a 15.5	150	10.3	1952	52	2927	78	2049	55	3578	96	2340	63	3903	104
	225	15.5	3121	84	4554	122	3515	94	5194	139	3903	104	5874	157

1301G - CAPACITY CHART IN SCFH AND Nm³/h OF NATURAL GAS

Inlet Pressure in psig/bar																	
Outlet Pressure Range (psig/bar)	Inlet Pressure		Ac	300/20.7		580/40		750/51.7		1000/69		1500/103		2000/138		2250/155	
	psig	bar		SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h	SCFH	Nm 3/h
200 a 580/ 13.8 a 40	200	13.8	5	456	12	714	19	976	26	1238	33	1432	38	1626	44	1820	49
			10	845	23	1170	31	1563	42	1952	52	2340	63	2602	70	2733	73
			15	1170	31	1757	47	2214	59	2602	70	2990	80	3515	94	3903	104
			20	1432	38	2146	57	2733	73	3253	87	3903	104	4554	122	4816	129
	580	40	3	---	---	---	---	1039	28	1301	35	1689	45	1951	52	2083	56
			5	---	---	---	---	1820	49	2083	56	2602	70	3384	91	3641	97
			10	---	---	---	---	2864	77	3641	97	4291	115	5194	139	5874	157

The detailed values in this brochure are subject to change without notice.



At EQA, we strive to minimize our environmental impact through sustainable and responsible practices. Therefore, we encourage you to join our commitment and, at the end of the product's lifecycle, adhere to the current Municipal, Provincial, and National regulations regarding the classification, recycling, destruction, or disposal of the product, spare parts, non-reusable parts, and packaging. By doing so, we prevent environmental damage and promote reuse and recycling whenever possible. Thank you for your commitment and efforts in joining these actions.