HP 405

Liquid Cylinder Regulator

Model HP 405-350-580A shown

A chrome plated brass single stage regulator for gaseous withdrawal from liquid cylinders. The HP 405 can also be used on high pressure cylinders and for general pipeline applications. The Model HP 405 is suitable for:

- Laser assist gas
- Purging
- Pressure testing
- Blanketing
- Gas withdrawal from liquid cylinders

MATERIALS

Body	Chrome Plated Brass
Bonnet	Chrome Plated Brass
Diaphragm	302 Stainless Steel
Nozzle	Brass
Seat	PTFE Teflon
Seals	PTFE Teflon
Filter	Nickel-Plated Sintered Bronze - 10 Micron
Seat Return Spring	PH 17-7 Stainless Steel
Adjusting Screw	Brass

FEATURES

- ⊡ 0-125, 0-350 and 0-500 PSIG delivery pressure
- ⊡ One-piece encapsulated seat design to protect seat from particulate contamination
- ⊡ Chrome plated bonnet, body and fittings
- ⊡ 2" chrome plated dual scale gauge (psi/bar)
- ⊡ Conforms to CGA E-4 standard for gas pressure regulators
- ⊡ Maximum inlet 3000 PSIG
- ⊡ Tamper-proof, self reseating internal relief valve

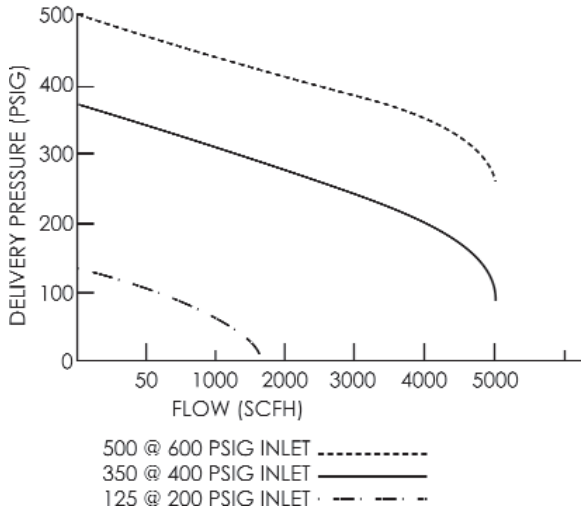
HP 405 ORDERING INFORMATION

HP 405 - xxx - xxx - x

MODEL NO.	DELIVERY PRESSURE DELIVERY	(OUTLET GAUGE)	CGA/INLET FITTING	ACCESSORIES
HP 405	0-125 PSIG	(0-200 psi/14 bar)	320	A) 1/4" Tube Fitting (Stainless Steel)
	0-350 PSIG	(0-400 psi/28 bar)	540	B) 1/4" FNPT Port
	0-500 PSIG	(0-1000 psi/70 bar)	580	
			000 (1/4" FNPT)	
			001 (1/4" MNPT)	

HP 405 TECHNICAL SPECIFICATIONS

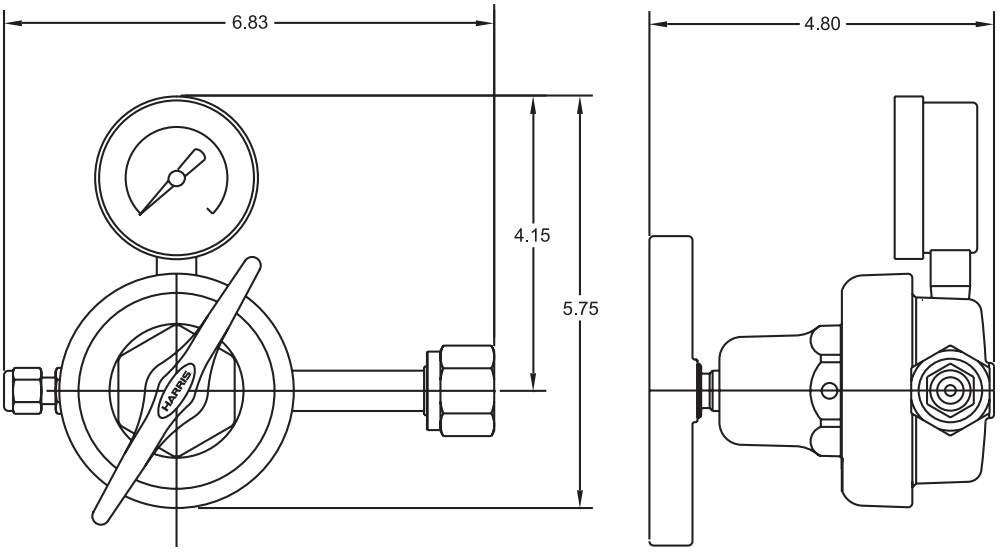
FLOW DATA



SPECIFICATIONS

- C_V: .37
- Pressure Regulation: .9 PSIG/100 PSIG
- Weight: 3.1 Lbs.

DIMENSIONS



LIQUID CYLINDER PERFORMANCE DATA

Specifications

	Size Pressure	160 MP	160 HP	180 MP	180 HP	200 MP	200 HP	230 MP	230 HP	265 MP	265 HP
Capacity											
Liquid(Gross)	(liters)	176	176	196	196	209	209	240	240	276	276
Liquid(Net)	(liters)	165	165	185	185	196	196	230	230	265	265
Gas(N)*	ft3/Nm3	3685/97	3464/91	4099/108	3864/102	4375/115	4072/108	5024/132	4734/124	5769/152	5438/143
Gas(O_2)*	ft3/Nm3	4577/120	4348/114	5096/134	4843/127	5435/143	5048/133	6244/164	5930/156	7186/189	6811/179
Gas(Ar)*	ft3/Nm3	4448/117	4226/111	4961/130	4709/124	5290/139	4932/130	6073/160	5763/151	6982/183	6634/174
Gas(CO_2)*	ft3/Nm3	--	3382/89	--	3766/99	--	4011/105	--	4614/121	--	5305/132
Gas(N_2O)*	ft3/Nm3	--	3207/84	--	3574/94	--	3810/100	--	4378/115	--	5034/132
Performance											
NER(N_2)	% per day	2	2	1.9	1.9	1.85	1.85	1.8	1.8	2	2
NER(O_2-Ar)	% per day	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.2	1.4	1.4
NER(CO_2-N_2O)	% per day	--	0.5	--	0.5	--	0.5	--	0.5	--	0.5
Gas Flow (N_2, CO_2, Ar)	ft3/hr	350/9.2	350/9.2	350/9.2	350/9.2	400/10.5	400/10.5	400/10.5	400/10.5	400/10.5	400/10.5
Gas Flow (CO_2, N_2O)	ft3/hr	--	110/2.9	--	110/2.9	--	110/2.9	--	110/2.9	--	110/2.9
Dimensions & Pressure Ratings											
Relief Valve Setting	psig/bar	230/16	350/24	230/16	350/24	230/16	350/24	230/16	350/24	230/16	350/24
DOT/CTC Rating		4L200	4L292	4L200	4L292	4L200	4L292	4L200	4L292	4L200	4L292
Diameter	in/cm	20/50.8	20/50.8	20/50.8	20/50.8	20/50.8	20/50.8	26/66.0	26/66.0	26/66.0	26/66.0
Height	in/cm	59.6/151.3	59.6/151.3	63.5/161.3	63.5/161.3	65.8/167.1	65.8/167.1	52.9/131.9	52.9/131.9	57.8/146.8	57.8/149.8
Empty Weight	lb/kg	250/113.4	280/126.9	260/117.9	300/136.1	280/126.9	320/145.1	300/136.1	340/154.2	340/154.2	360/163.6
Full Weight (N_2)	lb/kg	517/234	531/241	557/253	580/263	597/271	618/280	664/301	683/310	758/344	754/343
(O_2)	lb/kg	629/285	640/290	682/309	701/318	730/331	747/339	817/370	831/377	935/424	924/420
(Ar)	lb/kg	710/322	717/325	773/351	787/357	827/375	839/380	928/421	936/424	1062/481	1046/475
(CO_2)	lb/kg	--	667/303	--	731/331	--	779/353	--	868/393	--	967/439
(N_2O)	lb/kg	--	647/293	--	709/321	--	756/343	--	841/381	--	936/425

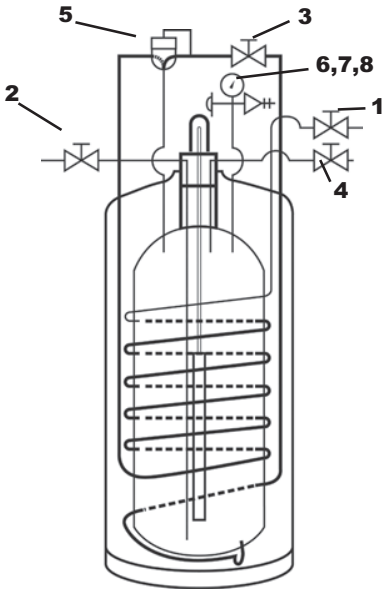
*AT RELIEF VALVE SETTINGS

NOMENCLATURE

1. Gas Use Valves- For gas withdrawal
2. Fill/Liquid Valves- For filling or fluid withdrawal operations
3. Pressure Control Valves- To isolate (on/off) the pressure control regulator
4. Vent Valves- to vent valve
5. Combination Pressure Control Regulator- To automatically control operating pressure
6. Pressure Gauges- Indicates cylinder pressure

7/8. Relief Valves, Rupture Disk

9. Liquid Level Gauge- To approximate the liquid contents of the liquid cylinder



Data provided by CHART® Industries