

HP *CYLINDER REGULATORS FOR INDUSTRIAL GASES*



ROBUST REGULATOR WITH STAINLESS STEEL MEMBRANE (HP-25)
SENSING ELEMENT OR PISTON (HP-50, 100, 200) (IN BRASS OR SS)
DESIGNED TO ASSOCIATE HIGH FLOW RATES WITH HIGH PRESSURES IN
HEAVY SERVICES, WITH BUILT-IN RELIEF VALVE.



GASCAT

models

HP-25: membrane regulator (in stainless steel), broadly used in chemical industries, for tanks feeding or blanketing, or in systems where the requested pressures are between 2 and 24 bar.

HP-50/100/200: piston regulators, for applications where are high pressures, between 20 and 200 bar, are demanded downstream, associated to high flows.

- Application Examples:**
- piping cleaning;
 - creation of neutral gas atmospheres;
 - tire filling;
 - gas propulsion;
 - pneumatic commands;
 - estatic high pressure testing.

TECHNICAL SPECIFICATIONS

Seat diameter 3,2 mm for HP-25 and 2,9 mm for HP-50/100/200

Weight 4,7 Kg

Fittings tapped to the body: 1/4" NPT

Can be supplied clean and degreased for use with oxygen

CONNECTIONS	Inlet	Outlet
for cylinder mounting	depending on the gas type ABNT PB 588 Standard	compression fitting 1/4" NPT x 1/4" pipe
for line mounting	compression fitting 1/4" NPT x 1/4" pipe	compression fitting 1/4" NPT x 1/4" pipe

Pressure gauges

Upstream manometer 63mm: 0 to 315 bar/mPa



OPERATION RANGES

MODELS	Upstream pressure max. bar	Downstream pressure bar	Average flow in Nm ³ /h of N ₂
HP-25	240	2 to 20	50 to 140
HP-50	240	4 to 40	
HP-100	240	10 to 90	
HP-200	240	20 to 200	

Building materials

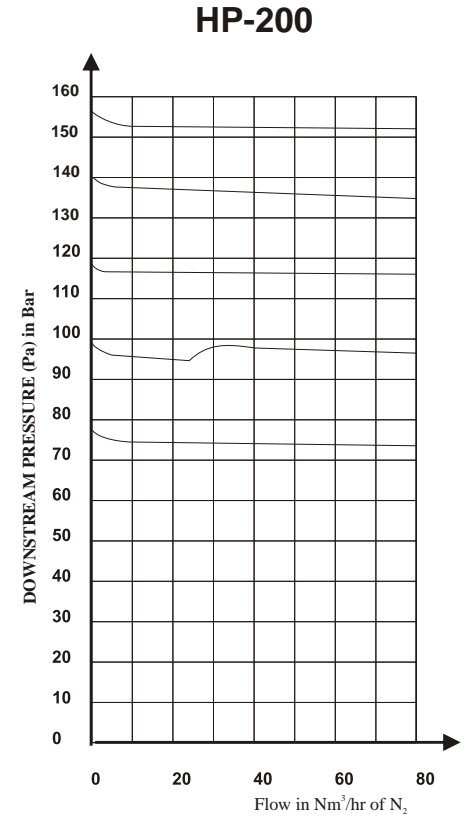
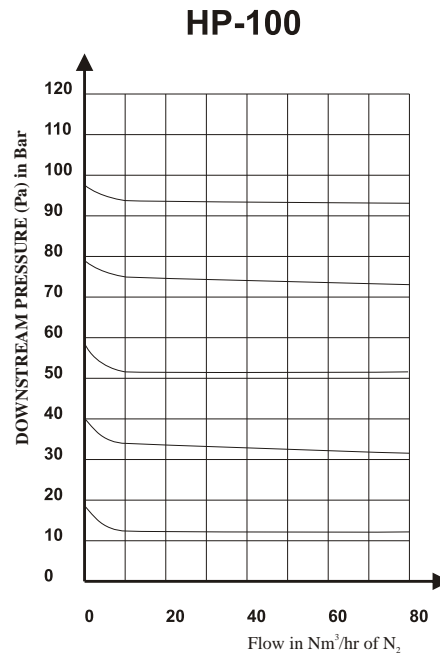
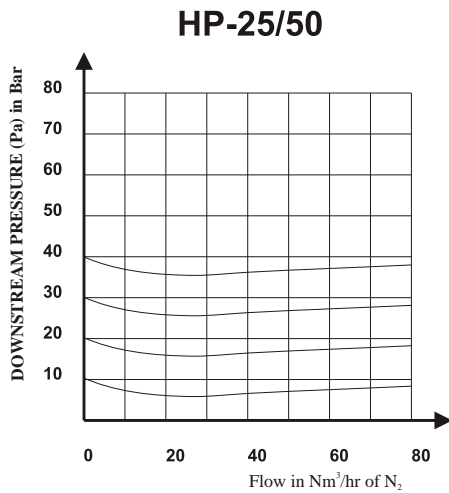
Materials	Standard Version	SS Version
Body	Chromed TM 360 brass	AISI-316
Cover	Chromed ASTM-A-536	AISI-316
Seat	TM 360 Brass	AISI-316
Shutter	TM 360 Brass	AISI-316
Membrane	AISI-316	AISI-316
Piston	TM 360 Brass	AISI-316
Packing	Nylon	Nylon/Teflon
* Filter	Sintered Brass	SS Mesh
Fittings	Polished Chromed Brass	AISI-316

* Built-in filter in the inlet connector for particles retention up to 50µ

Flow rate table

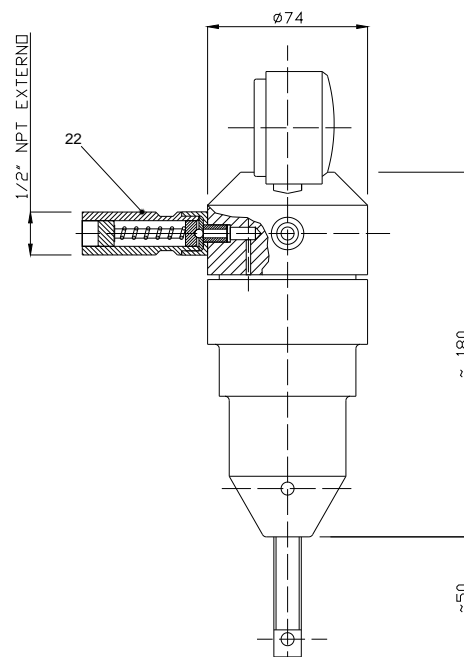
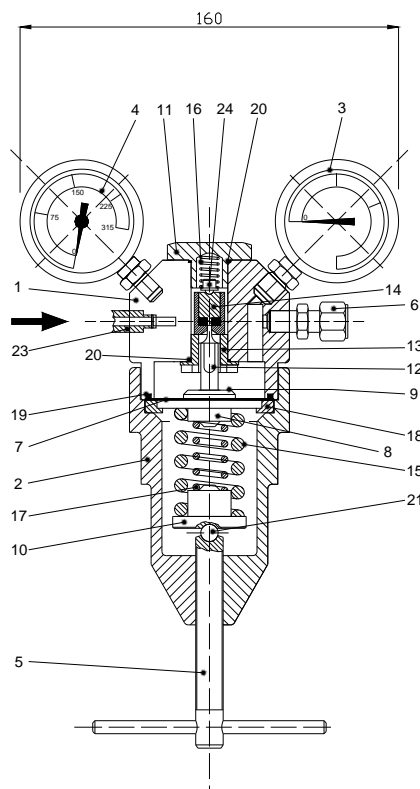
Pressure in bar	HP-200										
	HP-100										
	HP-50										
	HP-25										
Upstream downstream	5	10	20	40	60	80	100	120	150	180	
30	35	40	42								
60	48	55	57	60							
90	86	95	97	100	110	95					
120	97	110	111	150	155	159	150				
150	115	130	131	200	210	220	195	180			
180	122	147	149	210	220	230	220	215	210		
200	146	155	170	240	250	260	280	270	243	240	

Flow rate curves



Note: Upstream pressure 2 Pa + 1 bar (valid for HP-25/50/100)

HP-25



POS.	MAINTENANCE
1	BODY
2	COVER
3	MANOMETER
4	MANOMETER
5	REGULATING SCREW
6	CONNECTOR
7	MEMBRANE
8	MEMBRANE DISK
9	STEM DISK
10	SPRING PLATE
11	PLUG
12	STEM
13	SEAT
14	SHUTTER SUB-SET
15	REGULATING SPRING
16	SHUTTER SPRING
17	REGULATING SPRING
18	MEMBRANE RING
19	O' RING
20	SEALING RING
21	BALL
22	RELIEF VALVE
23	CONNECTOR
23.1	O' RING
24	SPRING SEAT

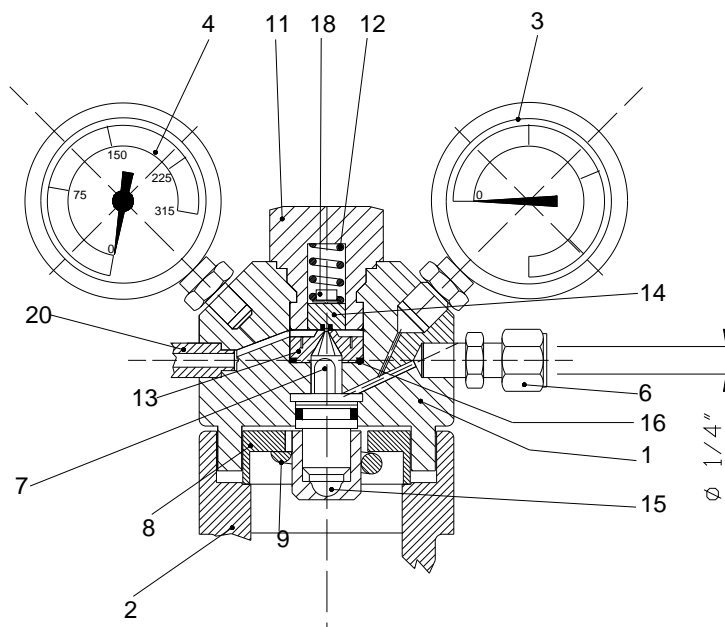
POS (positions) denoted with "*" form the repair kit n° 19.13.D0.A0.00 - HP 25.

MAINTENANCE

(Change of the replacement kit)

- Release the regulating screw (5)
- Release the cover (2)
- Remove parts (12), (9), (7), (8), (18), (15), (17) and (10)
- Release the plug (11)
- Remove parts (24), (16), (20) and (14)
- Release the seat (13)
- Remove the sealing ring (20)
- Make the necessary replacement
- Reassemble in inverse order

HP-50/100



HP-200

POS.	DENOMINATION
1	BODY
2	COVER
3	MANOMETER
4	MANOMETER
5	REGULATING SPRING
6	CONNECTOR
7	PISTON
8	SPRING GUIDE
9	REGULATING SPRING
10	SPRING SEAT
11	PLUG
12	SHUTTER SPRING
13	SEAT
14	SHUTTER SUB-SET
15	BALL
16	O' RING
17	O' RING
18	SPRING SEAT
19	RELIEF VALVE
20	CONNECTOR
20.1	O' RING

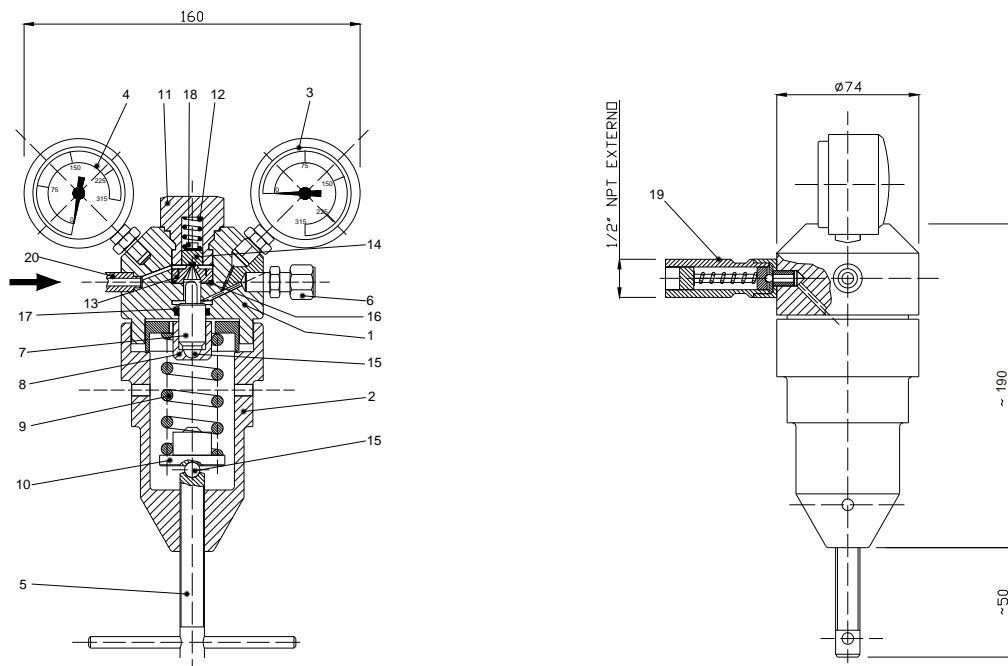
POS (positions) denoted with * form the repair kits below:

N° 19.23.D0.A0.00 - HP-50
 N° 19.33.D0.A0.00 - HP100
 N° 19.43.D0.A0.00 - HP-200

MAINTENANCE

(Change of the replacement kit)

- Release the regulating screw (5)
- Release the cover (2)
- Remove parts (7), (17), (8), (9) and (10)
- Release the plug (11)
- Remove parts (4), (18) and (12)
- Release the seat (13)
- Remove the O-ring (16)
- Make the necessary replacements
- Reassemble in inverse order



InstalLaTION

It is advisable to conveniently purge the line before the regulator installation, in order to prevent the equipment bad functioning.

Eventualities - generally speaking, some 95% of the problems occurred with these regulators are caused by metallic particles that lodge themselves between the seat (13) and the shutter (14) due to the improper conditioning of the installation. In such case, verify the components (13) and (14) and, if they are not damaged, clean the parts and proceed according to instructions to change the kit, or request **GASCAT's** technical support.



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