

450

MODEL



STAINLESS STEEL DIAPHRAGM

MODEL SHOWN:
450-125-540

DESCRIPTION

The Model 450 is an economically priced industrial duty regulator, but with premium features found only in high priced regulators. The 450 has a stainless steel diaphragm and a Harris exclusive tamper-proof self-seating safety relief device.

DETAILS

Capacity: Heavy duty**C_v:** 0.17**Gauges:** 2.5" brass**Pressure Regulation:**
0.3 PSIG/100 PSIG**Seat:** One-piece encapsulated seat design with internal filter and PTFE Teflon® seat**Certifications:** UL® listed/CGA E-4**Weight:** 4.6 lbs./2.09 kg.

Additional Technical Information: PG. 166

| PART # | MODEL # | GAS | MAX. INLET PSIG | DELIVERY PRESSURE RANGE PSIG | DELIVERY PRESSURE GAUGE PSIG | SUPPLY PRESSURE GAUGE PSIG | INLET CONNECTION | OUTLET CONNECTION |
|---------|-------------|------------------------|-----------------|------------------------------|------------------------------|----------------------------|------------------|-------------------|
| 3002493 | 450-15-300 | ACETYLENE | 500 | 0 - 15 | 30RZ | 400 | CGA 300 | 1/16" - 18 LH |
| 3002494 | 450-15-510 | ACETYLENE | 500 | 0 - 15 | 30RZ | 400 | CGA 510 | 1/16" - 18 LH |
| 3002495 | 450-50-510P | LPG* | 500 | 0 - 50 | 100 | 400 | CGA 510P | 1/16" - 18 LH |
| 3002496 | 450-50-540 | OXYGEN | 3000 | 0 - 50 | 100 | 4000 | CGA 540 | 1/16" - 18 RH |
| 3002497 | 450-125-540 | OXYGEN | 3000 | 0 - 125 | 200 | 4000 | CGA 540 | 1/16" - 18 RH |
| 3002499 | 450-200-540 | OXYGEN | 3000 | 0 - 200 | 400 | 4000 | CGA 540 | 1/16" - 18 RH |
| 3002498 | 450-125-580 | AR, HE, N ₂ | 3000 | 0 - 125 | 200 | 4000 | CGA 580 | 5/16" - 18 RH |

*Regulator designed specifically for propane service can be used with any of the other welding grade liquid petroleum gases. NOT FOR USE WITH ACETYLENE.

THE TRUE MEASURE OF A REGULATOR

Performance = Pressure Regulation

There is a reason they are called "pressure" regulators. Regulators take unusable high pressure, for example, from a cylinder and break it down into a lower usable pressure. This is the true function of a regulator. How well a regulator maintains the lower pressure, despite the changes in pressure upstream, is the true measure of a regulator. The more constant the set pressure is held, the better the regulator. The Harris Model 450 offers superior pressure regulation over competitive models.

Pressure Comparison

Both of the competitive models, delivery pressure rises twice as fast as the Harris Model 450. This is important because the Harris Model 450 user will get a better, more constant delivery pressure, as the cylinder empties. Additionally, the user won't have to adjust the regulator as much, meaning more time spent working.

| Model Number | Pressure Rise PSI / 100PSI | Change In Delivery Pressure | Final Outlet Pressure | Percent Change |
|----------------------|----------------------------|-----------------------------|-----------------------|----------------|
| Harris Model 450 | 0.30 | + 7.65 | 37.65 | 25% |
| Competitive Model 1a | 0.56 | + 14.28 | 44.28 | 47% |
| Competitive Model 1b | 0.70 | + 17.85 | 47.85 | 60% |

Calculations were performed per the Compressed Gas Association (CGA) E-4 standard. It is the most up-to-date and comprehensive regulator standard in the world today for the welding industry. It defines product safety and production test requirements and it defines performance characteristics required to meet field applications.



THE HARRIS PRODUCTS GROUP
www.harrisproductsgroup.com

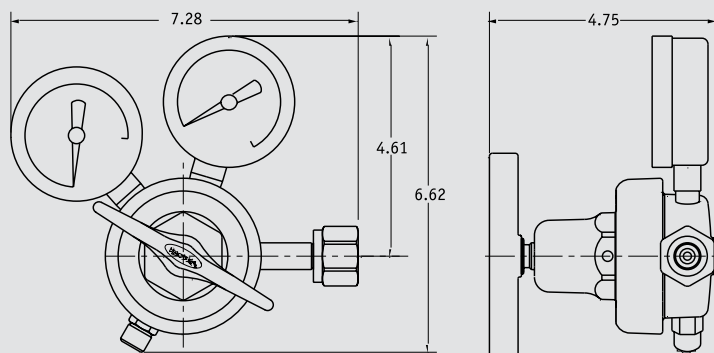
Orders: 1.800.241.0804

REGULATORS

15

MODEL 2500 & 450

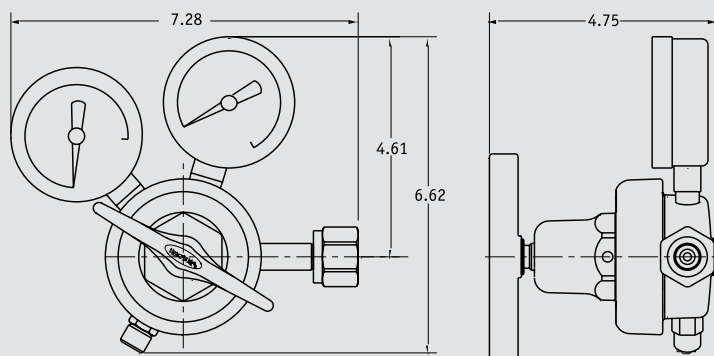
MODEL 2500



DETAILS

Regulator Weight: 4.6 lb / 2.09 kg
Pressure Rise: 0.3 PSIG per 100 PSIG
C_v: 0.17

MODEL 450

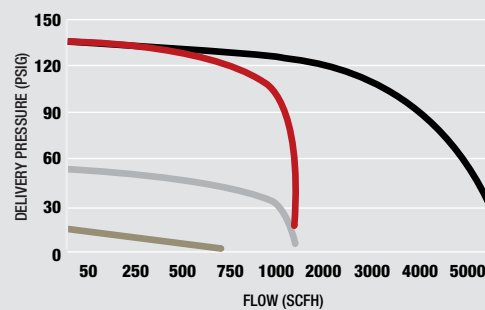


DETAILS

Regulator Weight: 4.6 lb / 2.09 kg
Pressure Rise: 0.3 PSIG per 100 PSIG
C_v: 0.17

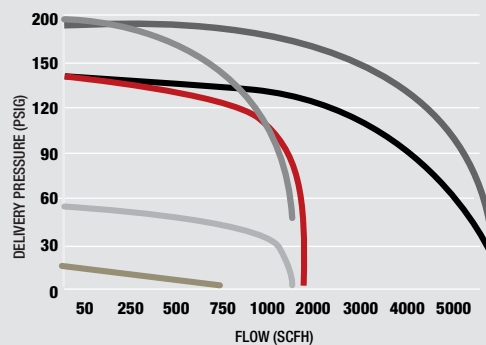
PERFORMANCE CHART

ALL FLOWS BASED ON AIR @ 70°F



MODEL 2500 SINGLE-STAGE REGULATOR

- 2500-125 @ 2000 PSIG inlet
- 2500-125 @ 200 PSIG inlet
- 2500-50 @ 200 PSIG inlet
- 2500-15 @ 200 PSIG inlet



MODEL 450 SINGLE-STAGE REGULATOR

- 450-200 @ 200 PSIG inlet
- 450-200 @ 2000 PSIG inlet
- 450-125 @ 2000 PSIG inlet
- 450-125 @ 200 PSIG inlet
- 450-50 @ 200 PSIG inlet
- 450-15 @ 200 PSIG inlet