

# APR66 Series

## Single-Stage, High-Pressure Regulator

Pressure Reducing • Stainless Steel



### Value Proposition:

The Parker APR66 is a high pressure-reducing, single-stage regulator designed to operate at inlet pressures up to 6,000 psig. A full range of pressure sensing can be achieved without time-consuming spring and piston changeouts.

### Product Features:

- Piston Sensing
- Thrust bearing allows low actuating torque and precise setability
- Low friction adjusting screw sleeve provides smooth operation
- Optional self-relieving feature allows user to decrease outlet pressure in closed systems. Feature is actuated by turning the adjusting knob counterclockwise

### Specifications:

| Functional Performance        |                                                                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Design</b>                 |                                                                                                                                                                                                                 |
| Burst Pressure                | 18,000 psig (1,241 barg)                                                                                                                                                                                        |
| Proof Pressure                | 9,000 psig (620 barg)                                                                                                                                                                                           |
| <b>Flow Capacity</b>          |                                                                                                                                                                                                                 |
| C <sub>v</sub> Options        | C <sub>v</sub> 0.05                                                                                                                                                                                             |
| <b>Leak Rate: Internal</b>    | Bubble Tight                                                                                                                                                                                                    |
| <b>Leak Rate: External</b>    | Bubble Tight                                                                                                                                                                                                    |
| <b>Supply Pressure Effect</b> | 100-1000 psig (4 psig/100 psig (0.28 barg/7 barg)<br>100-2000 psig (4 psig/100 psig (0.28 barg/7 barg)<br>100-3000 psig (4 psig/100 psig (0.28 barg/7 barg)<br>100-6000 psig (6 psig/100 psig (0.4 barg/7 barg) |
| <b>Approximate Weight</b>     | 3.0 lbs. (1.4 kg)                                                                                                                                                                                               |

| Operating Conditions              |                                                                                                                     |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Maximum Inlet                     | 6,000 psig (414 barg)                                                                                               |
| Outlet Options                    | 100 - 1000 psig (69 barg)<br>100 - 2000 psig (138 barg)<br>100 - 3000 psig (207 barg)<br>100 - 6000 psig (414 barg) |
| Maximum Temperature of Flow Media | -40°F to 165°F (-40°C to 74°C)<br>Note: Metal Knob required for high temperature applications                       |

| Material of Construction |                             |
|--------------------------|-----------------------------|
| Wetted                   |                             |
| Body Options             | 316L Stainless Steel (std). |
| Poppet                   | 316L Stainless Steel        |
| Spring                   | Hastelloy® C-22             |
| Seat                     | PEEK™                       |
| Seat & Screw Clamp       | 316L Stainless Steel        |
| Plug & Screw             | 316L Stainless Steel        |
| Piston                   | Torlon®                     |
| Piston Housing           | 316L Stainless Steel        |
| Stem                     | 316L Stainless Steel        |
| Seals                    | Aflas®, PTFE and PCTFE      |
| Non-Wetted               |                             |
| Cap                      | Nickel Plated Brass         |
| Nut                      | 316L Stainless Steel        |
| Knob Options             | ABS (std) or Aluminum       |

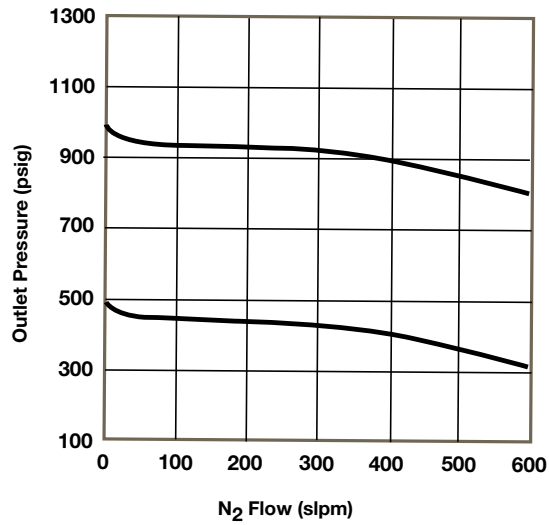
For additional information on materials of construction, functional performance and operating conditions, please contact factory.

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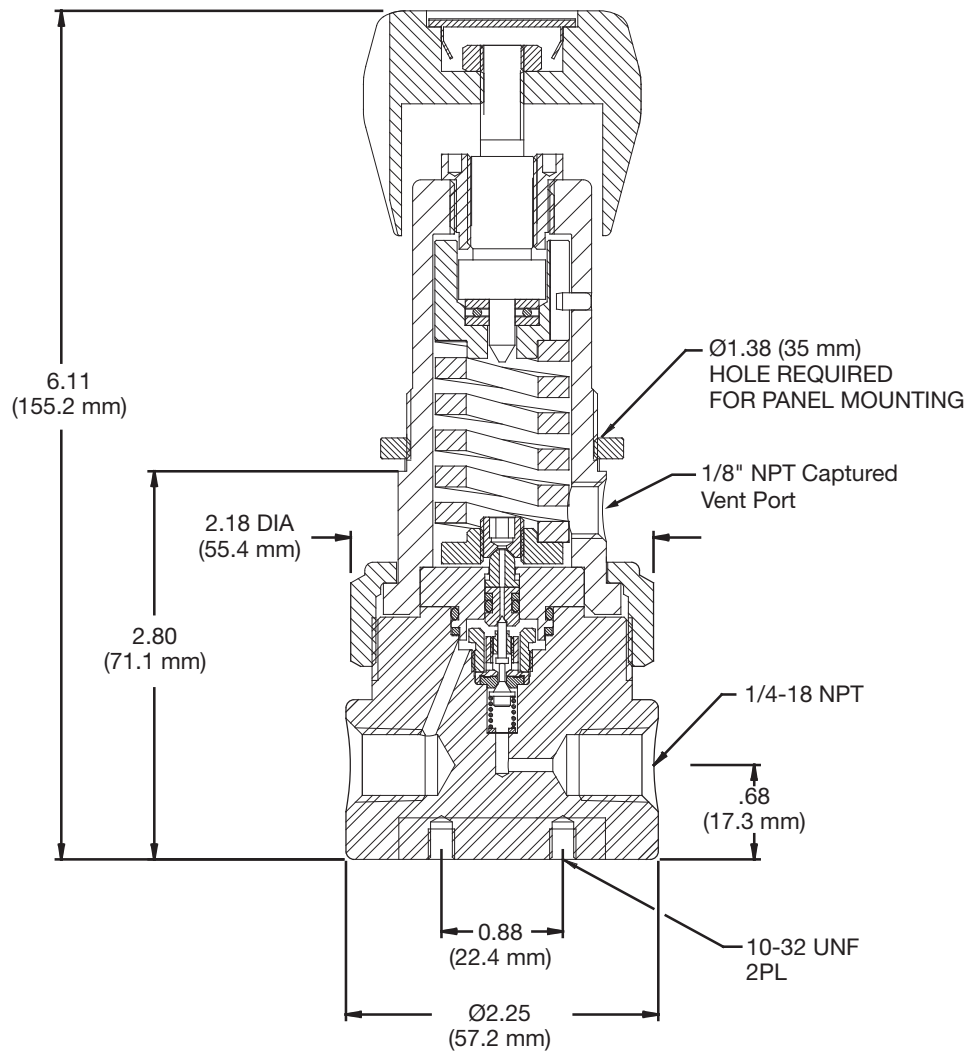


# APR66 Series

## Flow Curve:



## Dimensional Drawing:



# APR66 Series

## Ordering Information:

| Building a Part Number: <i>Example: APR66S4P1XX4M</i> |        |               |         |                |              |             |            |                   |
|-------------------------------------------------------|--------|---------------|---------|----------------|--------------|-------------|------------|-------------------|
| Example Part Number:                                  | APR66  | S             | 4P      | 1              | X            | X           | 4          | M                 |
| Ordering Parameters/Options:                          | Series | Body Material | Porting | Pressure Range | Outlet Gauge | Inlet Gauge | Port Style | Optional Features |
| Table Reference: (see below)                          | A      | B             | C       | D              | E            | F           | G          | H                 |

| A - Series |                        |
|------------|------------------------|
| APR66      | APR66 Series Regulator |

| B - Body Material |                      |
|-------------------|----------------------|
| S                 | 316L Stainless Steel |

| C - Porting |                                                               |
|-------------|---------------------------------------------------------------|
| 2P          | 2 Ports (No X required for gauges, inlet & outlet ports only) |
| 3P          | 3 Ports (One X for gauge port)                                |
| 4P          | 4 Ports (Two X's for gauge ports)                             |

| D - Pressure Range |               |
|--------------------|---------------|
| 1                  | 100-1000 psig |
| 2                  | 100-2000 psig |
| 3                  | 100-3000 psig |
| 4                  | 100-6000 psig |

| E - Outlet Gauge |                                                               |
|------------------|---------------------------------------------------------------|
| 20               | 0-2000 psig                                                   |
| 30               | 0-3000 psig                                                   |
| 40               | 0-4000 psig                                                   |
| 60               | 0-6000 psig                                                   |
| X                | No Gauge (Gauges may be provided by local Parker Distributor) |

| F - Inlet Gauge (Gauges may be provided by local Parker Distributor) |             |
|----------------------------------------------------------------------|-------------|
| 40                                                                   | 0-4000 psig |
| 60                                                                   | 0-6000 psig |
| X                                                                    | No Gauge    |

| G - Port Style |                                                  |
|----------------|--------------------------------------------------|
| 4              | 1/4" NPT Female (All Gauges are 1/4" NPT Female) |

| H - Optional Features |                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| M                     | Metal Knob (Black)                                                                                                                     |
| SR                    | Self-Relieving (For safety purposes, the optional self-relieving feature is not recommended for toxic or flammable gasses or liquids.) |
| C3                    | Cleaned for Oxygen Service<br>(Oxygen Cleaning Requirements in accordance with Parker Specification ES8003)                            |

**Note:**

Each unit is standard with a threaded cap and panel mount nut.

**Parker Instrumentation Products Division reserves the right to plug NPT ports**

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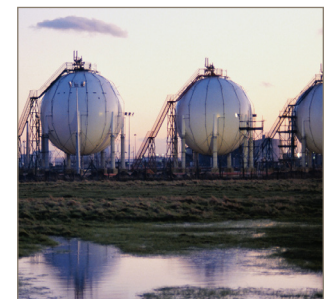
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**APR66 SERIES: Single Stage, High Pressure Regulator**



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