

# 205 SERIES REGULATORS



The 205 Series regulators are intended for secondary pressure control of non-corrosive, high purity or liquefied gases (up to grade 4.5) or as point of use pressure control in high purity gas distribution systems.

## Typical Applications

- Gas Supply Purging
- Point-of Use Laboratory Systems
- Bulk Gas Distribution Systems
- Control of Cryogenic Gases
- Liquefied Hydrocarbon Gas Control



205 3021-01-TF4 shown

## Features

**Standard Relief Valve** protects diaphragm and gauge

**316L Stainless Steel Diaphragm** prevents inboard diffusion

**CAPSULE® Seat Technology** increases product serviceability and life

**3000 PSIG (210 BAR) Inlet Pressure Rating** permits safe use with high pressure cylinders

## Materials and Specifications

**Maximum Inlet Pressure (bare body):** 3000 PSIG (210 BAR)

**Body:** Chrome-plated forged brass

**Bonnet:** Chrome-plated die cast zinc

**Gauges:** 2 1/2 in (63 mm) diameter plated case

**Seat:** PTFE

**Filter:** 10-micron sintered bronze

**Temperature Range:** -40°F to 140°F (-40°C to 60°C)

**Diaphragm:** 316L Stainless steel

**Cv:** 0.28

**Helium Leak Integrity** 1 x 10<sup>-8</sup> scc/sec

**Internal Seals:** PTFE

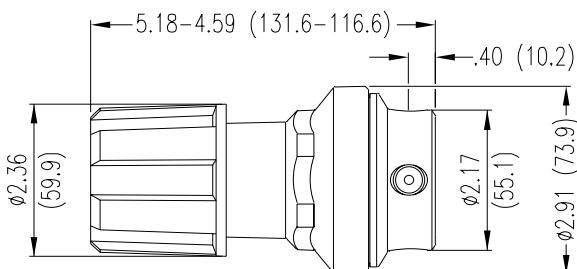
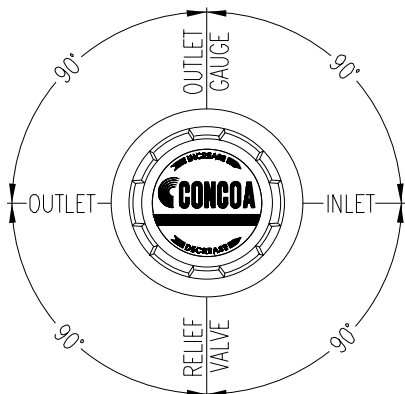
**Ports (bare body):** 1/4 in FNPT

**Conformances:** Cleanliness meets or exceeds CGA G-4.1; PED 2014/68/EU; ANSI/ASME B40.1; CRN OH5216

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## Installation Dimensions



## Ordering Information

| 205        | A                               | B                    | C                                         | D                                      | -CON                                       | Options           |                           |
|------------|---------------------------------|----------------------|-------------------------------------------|----------------------------------------|--------------------------------------------|-------------------|---------------------------|
| Series 205 | Outlet Pressure                 | Outlet Gauge         | Inlet Gauge                               | Outlet Assemblies                      | Assembly Gauges                            | Inlet Connections | Installed Options         |
|            | 1: 0-15 PSIG (0-1 BAR)          | 0-30 PSIG/ 0-2 BAR   | 0: None                                   | 0: 1/4" FNPT port                      | 0: Bare body                               | 000: 1/4" FNPT    | M: Protocol station       |
|            | 2: 0-40 PSIG (0-3 BAR)          | 0-60 PSIG/ 0-4 BAR   |                                           | 1: 1/4" MNPT                           | 1: Standard assembly (PSIG/kPa gauges)     | TF2: 1/8" tube    | Q: Protocol purge station |
|            | 3: 0-120 PSIG (0-8 BAR)         | 0-200 PSIG/ 0-14 BAR |                                           | 2: 1/4" tube fitting                   | 2: Standard assembly (BAR/PSIG gauges)     | TF4: 1/4" tube    |                           |
|            | 4: 0-200 PSIG (0-14 BAR)        | 0-400 PSIG/ 0-28 BAR |                                           | 3: Diaphragm valve 1/4" tube fitting   | 6: Mirror image assembly (PSIG/kPa gauges) | TF6: 3/8" tube    |                           |
|            | 5: 0-15 PSIG (0-1 BAR)*         | 0-30 PSIG/ 0-2 BAR   |                                           | 4: Diaphragm valve 1/4" MNPT           | 7: Mirror image assembly (BAR/PSIG gauges) | M06: 6mm tube     |                           |
|            | *With redline for acetylene use |                      |                                           | 5: Needle valve 1/4" MNPT              |                                            |                   |                           |
|            |                                 |                      |                                           | 6: 1/8" tube fitting                   |                                            |                   |                           |
|            |                                 |                      |                                           | 7: 3/8" tube fitting                   |                                            |                   |                           |
|            |                                 |                      |                                           | 8: Diaphragm valve 1/8" tube fitting   |                                            |                   |                           |
|            |                                 |                      |                                           | 9: Diaphragm valve 1/4" FNPT           |                                            |                   |                           |
|            |                                 |                      |                                           | A: 3/8" BSP RH fitting                 |                                            |                   |                           |
|            |                                 |                      |                                           | B: Diaphragm valve 3/8" tube fitting   |                                            |                   |                           |
|            |                                 |                      |                                           | C: 3/8" BSP LH fitting                 |                                            |                   |                           |
|            |                                 |                      |                                           | D: 6mm hose barb, chrome               |                                            |                   |                           |
|            |                                 |                      |                                           | G: 1/8" stainless steel tube fitting   |                                            |                   |                           |
|            |                                 |                      |                                           | H: 1/4" stainless steel tube fitting   |                                            |                   |                           |
|            |                                 |                      |                                           | J: 9/16"-18 "B" RH fitting, bare brass |                                            |                   |                           |
|            |                                 |                      | K: 9/16"-18 "B" LH fitting, bare brass    |                                        |                                            |                   |                           |
|            |                                 |                      | L: 5/8"-18 "Inert" RH fitting, bare brass |                                        |                                            |                   |                           |
|            |                                 |                      | M: 6mm tube fitting                       |                                        |                                            |                   |                           |
|            |                                 |                      | S: Diaphragm valve 6mm tube fitting       |                                        |                                            |                   |                           |

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## Flow Curves for 205 Series

