

# SPECIAL GASES AND MIXTURES

## CYLINDER REGULATOR FM52

### KEY FEATURES AND BENEFITS

- Compact chrome brass cylinder regulator with two stage performance
- All wetted parts cleaned in CFC free ultrasonic bath and baked out
- Metal to metal seal to atmosphere
- 100% function and helium leak test for all components
- Suitable for non-corrosive gas mixtures and gases up to purity level 6.0
- Tested for oxygen service
- 6 port design for configuration flexibility
- Suitable for inlet pressures up to 300bar
- Outlet pressure ranges from 4 to 200bar
- Easy to install
- Simple handwheel adjustment of outlet pressure



Gas mixtures and pure gases supplied in cylinders require suitable quality pressure regulators to ensure the integrity of the delivered gas. The FM52 regulator is a high quality chrome brass regulator which uses 'Exact' technology to give two stage performance from a compact single stage design and is suitable for use with high purity gases and non-corrosive gas mixtures. Its design includes three inlet and three outlet ports giving considerable configuration flexibility. The regulator is supplied as standard with a 0-300bar inlet pressure range, and is pre-configured with appropriate inlet cylinder connection, outlet fitting, inlet and outlet pressure gauges, an inlet protective filter plus a safety relief valve. The ergonomic design is easy to install and operate.

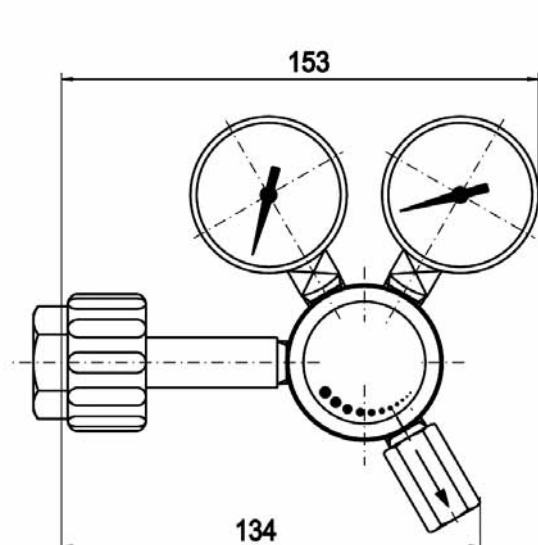
### Technical Data

|                          |  |
|--------------------------|--|
| Type                     | Compact single stage with 'Exact' technology giving dual stage performance |
| Maximum Inlet Pressure   | 300bar   |
| Outlet Pressure Ranges   | 4/10/20/50/100/200 bar   |
| Materials: Body          | Chrome plated brass  |
| Relief Valve             | Chrome plated brass  |
| Valve Seat               | PA 6.6   |
| Diaphragm                | Hastelloy C276   |
| Seals                    | Viton  |
| Filter                   | Sintered 316 SS  |
| Ports                    | 1/4" NPT Female  |
| Pressure Gauges          | Safety Pressure Gauges EN562/K11/NG50                                      |
| Temperature Range        | -30°C to +60°C   |
| Dimensions               | See diagram overleaf   |
| Weight                   | 1.2kg  |
| Leak Rate: To Atmosphere | $1 \times 10^{-8}$ mbar l/s He   |
| Via Seat                 | $1 \times 10^{-6}$ mbar l/s He   |
| Flow Capacity            | $C_v = 0.15$   |

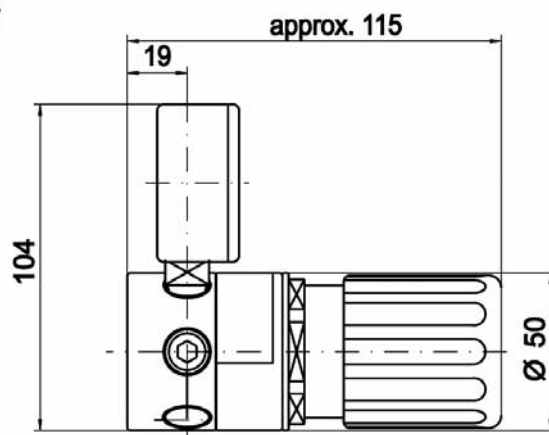
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### Dimensions (mm)



Side view

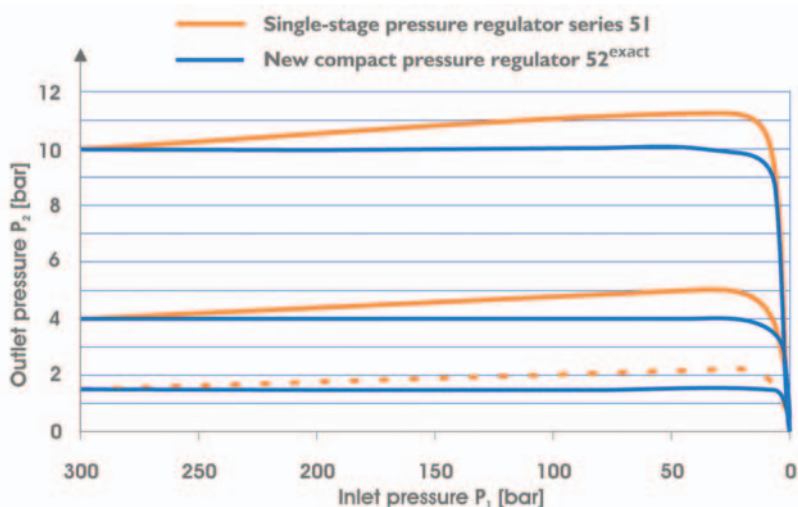


### Ordering Information

#### FM-52-300-X-Y-Z

- X defines outlet pressure range, select 1.5, 4 or 10
- Y defines the inlet connection, select BS3 or BS4
- Z defines the outlet connection, select from:
  - HT = barbed connector
  - 1/4COM = 1/4inch compression
  - 6MMCOM = 6mm compression

**Note** other configurations, outlet ranges and connection types are available – consult CryoService.



#### Product range available:

- |      |  |
|------|--|
| FM51 | Single Stage Chrome Brass Regulator    |
| FM52 | 'Exact' Chrome Brass Regulator         |
| FE51 | Single Stage Stainless Steel Regulator |
| FE52 | 'Exact' Stainless Steel Regulator      |