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Standard control valve RC200

USA Type 807,752



Features

- Control valve in sizes 1", 3/4", 1/2" and 1/4"
- Globe cast body
- Maximum allowable pressure 340 bar
- Suitable for control of medium and low flow
- Many variations not listed here

Applications

Suitable for control of liquids, gases or steam, in industrial applications, research, and process pilot plants. Its compact size makes it an ideal choice for additive injection, sampling, low flow hydraulic systems or wherever precise control is an important factor or physical constraints limit valve weight or size.

Connections

Standard is NPT-internal thread.
For other types, see **Data Sheet CON**.

Guiding

Standard as pictured on page 2 or optional medium and heavy duty guiding, see **Data Sheet GDG**.

Bonnet

Standard as pictured on page 2. Other types available are for example:
Cooling fin bonnet, see **Data Sheet CFG**.
Bellows sealed bonnet, see **Data Sheet BLW**.

Packing

Standard are PTFE chevron rings.
For other type, see **Data Sheet PCK**.

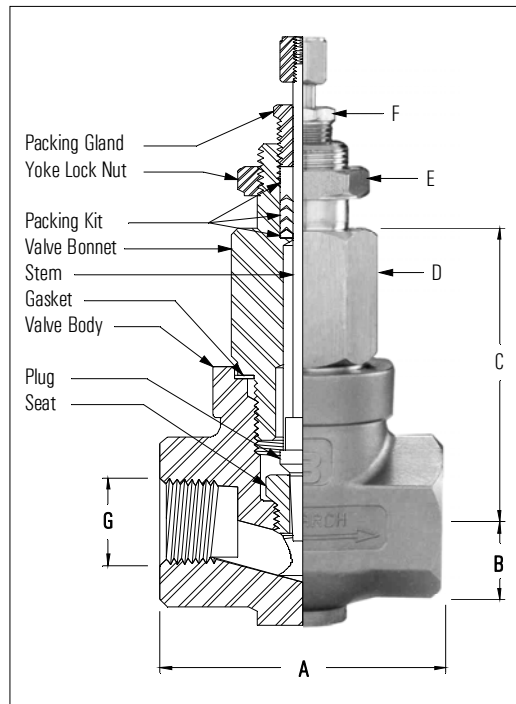
Pneumatic actuator

Die cast Aluminium with Epoxy paint, optional 316L S/S (Stainless Steel) but only for 1/2" valves.
Standard actuator "Spring to close" **Data Sheet AC-OS**
Standard actuator "Spring to open" **Data Sheet AC-CS**
With integrated pneumatic positioner:
Standard actuator "Spring to close" **Data Sheet AC-OP**
Standard actuator "Spring to open" **Data Sheet AC-CP**
Various accessories on request.

Electric actuator

Various special types available: explosion proof, safety position "Spring to open" or "Spring to close".
Electric **Data Sheet AC-HH500 AC-M60WE**
Electronic **Data Sheet AC-EVA1 AC-MC60**

Dimensions



| G | A | B | C | D | E | F | Lift |
|-----------|-----|----|-----|--------|--------|-------|------|
| 1" NPT* | 102 | 38 | 100 | 1-3/4" | 1-1/8" | 1/2" | 14,3 |
| 3/4" NPT* | 86 | 30 | 99 | 1-1/2" | 1-1/8" | 1/2" | 14,3 |
| 1/2" NPT* | 70 | 25 | 72 | 1-1/4" | 1-1/8" | 1/2" | 14,3 |
| 1/4" NPT* | 54 | 17 | 48 | 7/8" | 7/8" | 7/16" | 11.1 |

Innervalue materials

| Size | Plug | Seat |
|---------|-------------------------------------|--------------------------------|
| V - 0 | 316 SS | 316 SS |
| V - P18 | Stellite ⁽¹⁾ | 416 SS |
| V - P18 | Stellite ⁽¹⁾ | 316 SS stellite ⁽¹⁾ |
| V - P5 | Monel | Monel |
| V - P9 | Alloy-20 | Alloy-20 |
| V - P9 | Alloy-B | Alloy-B |
| V - P13 | Alloy-C276 | Alloy-C276 |
| A - 0 | Tantalum | Tantalum |
| V - P13 | Additional Titanium nitride coating | |

Other materials available on request. Up to now over 140 materials and materials combinations have been used. (316 SS ~ 1.4571).

⁽¹⁾ Stellite[®] is a registered trademark of Deloro Stellite Holdings Corporation.

Pressure-temperature rating body

| | °C | 1.4581 | Alloy-B | Alloy-C | Monel | Alloy20 | length bonnet |
|----------------------|-----|--------|----------------|----------------|----------------|----------------|---------------|
| 1" CONTROL VALVE | 20 | 100 | see type RC250 | see type RC250 | see type RC250 | see type RC250 | STD |
| | 100 | 93 | | | | | CF |
| | 200 | 82 | | | | | EF |
| | 300 | 55 | | | | | |
| | 400 | 17 | | | | | |
| | 500 | - | | | | | |
| 3/4" CONTROL VALVE | 20 | 100 | see type RC250 | see type RC250 | see type RC250 | see type RC250 | STD |
| | 100 | 99 | | | | | CF |
| | 200 | 82 | | | | | EF |
| | 300 | 73 | | | | | |
| | 400 | 48 | | | | | |
| | 500 | - | | | | | |
| 1/2" CONTROL VALVE | 20 | 340 | 320 | 320 | 276 | 320 | STD |
| | 100 | 320 | 320 | 320 | 258 | 320 | |
| | 200 | 269 | 320 | 320 | 236 | 320 | CF |
| | 300 | 242 | 320 | 320 | 234 | 302 | |
| | 400 | 226 | 310 | 310 | 184 | 382 | EF |
| | 500 | 190 | - | 285 | 115 | 175 | |
| 1/4" CONTROL VALVE | 20 | 340 | 320 | 320 | 276 | 320 | STD |
| | 100 | 320 | 320 | 320 | 275 | 320 | |
| | 200 | 292 | 320 | 320 | 260 | 320 | CF |
| | 300 | 267 | 320 | 320 | 258 | 295 | |
| | 400 | 249 | 320 | 320 | 249 | 262 | EF |
| | 500 | 159 | - | 299 | 128 | 174 | |
| 600 | - | - | 237 | - | - | | |
| max. pressure in bar | | | | | | | |

STD = standard bonnet. Details about bonnet length CF and EF, see **Data Sheet CFG**

The above pressure ratings alone are not sufficient to determine if a valve is suitable for an application.

You can find help for selection of innervalue, material combinations, guiding, bonnet and actuator in the "instruction for valve selection" and the **Data Sheets TRM, GDG, CFL resp. AC**.

Valve materials

| Body | Bonnet |
|------------------------|------------------|
| 1.4581 steel casting | 1.4571 barstock |
| 1.4571 forged | 1.4571 barstock |
| 316 SS steel casting | 316 SS barstock |
| Monel casting | Monel barstock |
| Alloy-20 steel casting | Alloy20 barstock |
| Alloy-B casting | Alloy-B barstock |
| Alloy-C casting | Alloy-C barstock |

For other materials see type RC250.



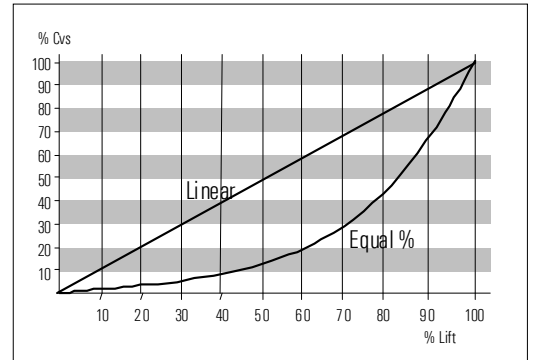
Innervale chart

| NW | Size | Cvs | NW | Size | Cvs |
|----|------|-------|----|------|----------|
| | V | 6,0 | | O | 0,003 |
| | U | 5,0 | | P1 | 2,0 E-03 |
| | T | 4,5 | | P2 | 1,3 E-03 |
| | S | 4,0 | | P3 | 1,0 E-03 |
| | R | 3,5 | | P4 | 6,0 E-04 |
| | A | 2,5 | | P5 | 4,0 E-04 |
| | B | 2,0 | | P6 | 2,7 E-04 |
| | C | 1,25 | | P7 | 1,8 E-04 |
| | D | 0,80 | | P8 | 1,2 E-04 |
| | E | 0,50 | | P9 | 8,0 E-05 |
| | F | 0,32 | | P10 | 5,0 E-05 |
| | G | 0,20 | | P11 | 3,6 E-05 |
| | H | 0,13 | | P12 | 2,4 E-05 |
| | I | 0,08 | | P13 | 1,6 E-05 |
| | J | 0,05 | | P14 | 1,0 E-05 |
| | K | 0,03 | | P15 | 6,0 E-06 |
| | L | 0,02 | | P16 | 4,0 E-06 |
| | M | 0,01 | | P17 | 2,7 E-06 |
| | N | 0,006 | | P18 | 1,8 E-06 |

| Size | 1" | 3/4" | 1/2" | 1/4" |
|------|----|------|------|------|
| | | | | |

For detailed information, see Data Sheet TRM

Innervale characteristic



Seat leakage

0.01% of Cvs for "O" and larger ANSI Class IV
 0.1% of Cvs for "P1" and smaller ANSI Class III
 Optional: Metallic or soft seated (PTFE or Kel-F).