



Badger Meter Europa

# Cryogenic control valve RC260 USA-Type 884

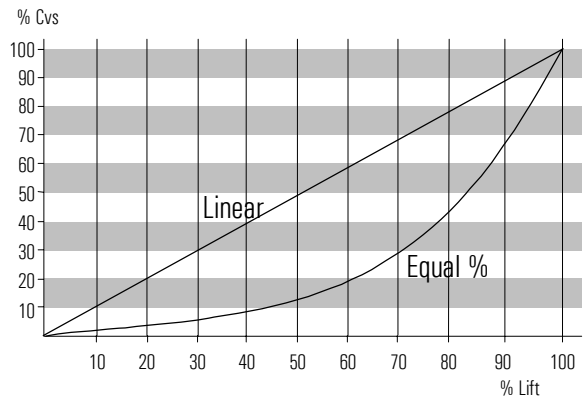
## DESCRIPTION

- Control valve in sizes 1", 3/4", 1/2" and 1/4".
- Globe cast body.
- Maximum allowable pressure 172 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. Specifically for control of media at  $T \leq -50$  °C.

## INNERVALVE CHARACTERISTIC



## INNERVALVE 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"

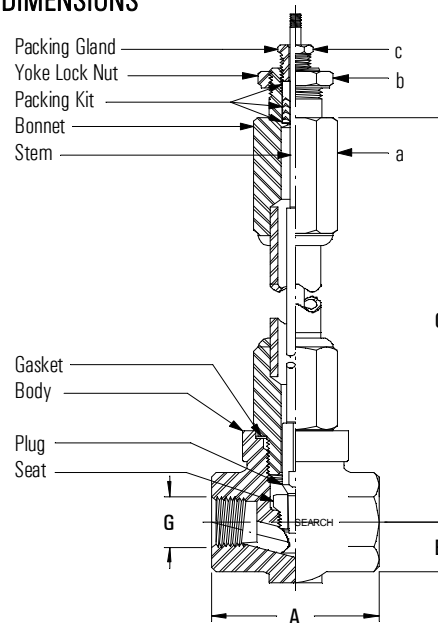
For detailed information, see [Data Sheet TRM](#)

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, resp. AC.

## 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).

## DIMENSIONS



| G       | A   | B  | C   | a      | b      | c     | Lift |
|---------|-----|----|-----|--------|--------|-------|------|
| 1"NPT   | 102 | 38 | 356 | 1-3/4" | 1-1/8" | 1/2"  | 14,3 |
| 3/4"NPT | 86  | 30 | 356 | 1-1/2" | 1-1/8" | 1/2"  | 14,3 |
| 1/2"NPT | 70  | 25 | 356 | 1-1/4" | 1-1/8" | 1/2"  | 14,3 |
| 1/4"NPT | 54  | 17 | 356 | 7/8"   | 7/8"   | 7/16" | 11.1 |

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## GUIDING

Standard as in picture 1.

## BONNET

Standard as in picture 1. Other types available are for example:

Bellows sealed bonnet [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](#)

## 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 .

## INNERVALVE MATERIALS

| Size    | Valve Plug                          | Valve Seat      |
|---------|-------------------------------------|-----------------|
| V - 0   | 316 SS                              | 316 SS          |
| V - P18 | Stellite                            | 416 SS          |
| V - P18 | Stellite                            | 316 SS stellite |
| A - 0   | Tantalum                            | Tantalum        |
| V - P5  | Monel                               | Monel           |
| V - P9  | Alloy-20                            | Alloy-20        |
| V - P9  | Alloy-B                             | Alloy-B         |
| V - P13 | Alloy-C276                          | Alloy-C276      |
| 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).

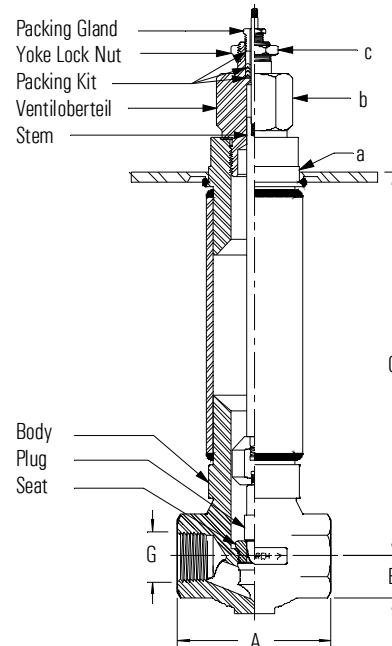
## PRESSURE-TEMPERATURE RATING BODY

|                    | °C   | 316 SS |                    | °C   | 316 SS |
|--------------------|------|--------|--------------------|------|--------|
| 1" CONTROL VALVE   | -268 | 103    | 1/2" CONTROL VALVE | -268 | 172    |
|                    | 20   | 103    |                    | 20   | 172    |
|                    | 100  | 103    |                    | 100  | 163    |
|                    | 200  | 81     |                    | 200  | 13     |
|                    | 300  | 46     |                    | 300  | 119    |
|                    | 400  | -      |                    | 400  | 112    |
| 3/4" CONTROL VALVE | 500  | -      | 500                | 80   |        |
|                    | -268 | 103    | 1/4" CONTROL VALVE | -268 | 172    |
|                    | 20   | 103    |                    | 20   | 172    |
|                    | 100  | 103    |                    | 100  | 172    |
|                    | 200  | 81     |                    | 200  | 144    |
|                    | 300  | 72     |                    | 300  | 131    |
| 400                | 40   | 400    |                    | 123  |        |
| 500                | -    | 500    | 60                 |      |        |

max. pressure in bar

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

## COLD BOX VALVE



| G       | A   | B  | C   | a      | b      | c    | Hub  |
|---------|-----|----|-----|--------|--------|------|------|
| 1"NPT   | 102 | 38 | 356 | 2-1/4" | 1-1/8" | 1/2" | 14,3 |
| 1/2"NPT | 70  | 25 | 356 | 1-1/2" | 1-1/8" | 1/2" | 14,3 |

The innervalve is replaceable after installation of the valve in the cold box.