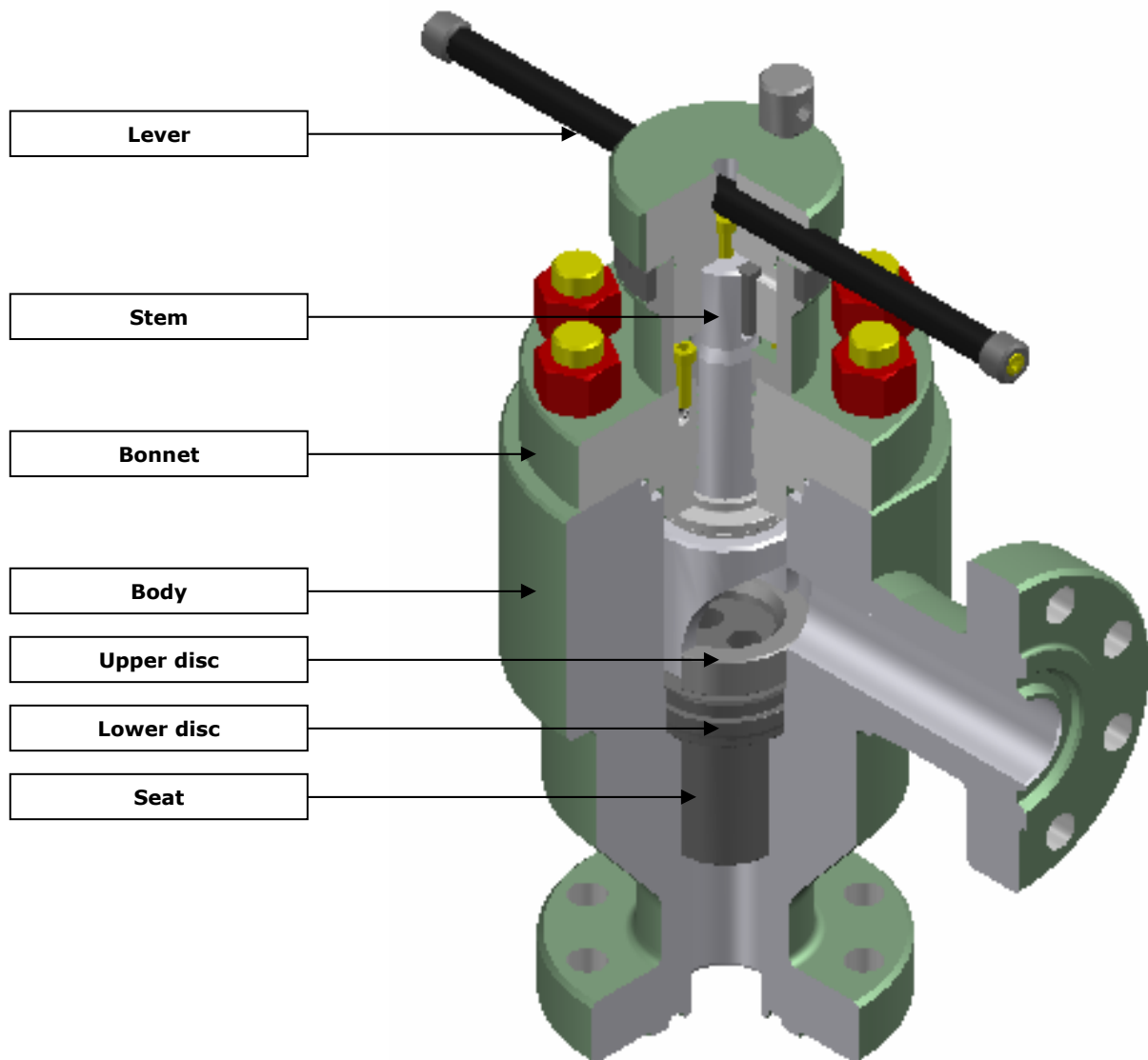




# **CHOKES**

## **API 6A**

**Rotary Control Choke  
Type BCR**



**Rotary Control Choke  
Type BCR**



## TECHNICAL DESCRIPTION

### Description:

The BREDA ENERGIA Rotary Control Choke type BCR, is designed to provide precise flow control throughout its entire operating range. The throttling mechanism made up by two circular discs of hardened material is deceiving in its simplicity. Each disc has a pair of precise orifices placed in such a manner that when one disc is fixed in the valve body, the other may be rotated through 90° to expose all or part of the orifice's flow area. This system also insures a tight shut-off when the orifices of one disc are covered by the blank portions of the other.

### Design Code :

API 6A / ISO 10423

### Option features:

Metal to Metal Bonnet Seal  
Stem Locking Assembly

### Remarks:

On request, Breda Energia will issue various technical solutions not listed in this catalogue. Years of experience in products for distribution of oil & gas allows Breda Energia to supply products on special client specifications.



## - API 6A -

### Product Range

| Service                        | Pressure Range API 6A ( Psi )                 |                      |                     |
|--------------------------------|---|----------------------|---------------------|
| <b>Standard Range ( Inch )</b> | <b>API 2000 - 3000 - 5000</b>                 | <b>API 10000</b>     | <b>API 15000</b>    |
|                                | 1.13/16 up to 7.1/16                          | 1.13/16 up to 7.1/16 | 1.13/16 up to 5.1/8 |
|                                | <b>Disc Orifice Size</b>                      |                      |                     |
|                                | <b>1/4", 3/8", 1/2", 3/4", 1", 1.1/2", 2"</b> |                      |                     |

### Material requirements

| Service Conditions        | Trim      | Minimum material requirements           |   |
|---------------------------|-----------|---|---|
| API 6A Classification     |           | Body, bonnet end and outlet connections | Pressure-controlling parts, stems and mandrel hangers |
| General Service           | <b>AA</b> | Carbon or low-alloy steel               | Carbon or low-alloy steel                             |
| General Service           | <b>BB</b> | Carbon or low-alloy steel               | Stainless Steel                                       |
| General Service           | <b>CC</b> | Stainless Steel                         | Stainless Steel                                       |
| Sour Service <sup>a</sup> | <b>DD</b> | Carbon or low-alloy steel <sup>b</sup>  | Carbon or low-alloy steel <sup>b</sup>                |
| Sour Service <sup>a</sup> | <b>EE</b> | Carbon or low-alloy steel <sup>b</sup>  | Stainless Steel <sup>b</sup>                          |
| Sour Service <sup>a</sup> | <b>FF</b> | Stainless Steel <sup>b</sup>            | Stainless Steel <sup>b</sup>                          |
| Sour Service <sup>a</sup> | <b>HH</b> | CRAs <sup>b</sup>                       | CRAs <sup>b</sup>                                     |

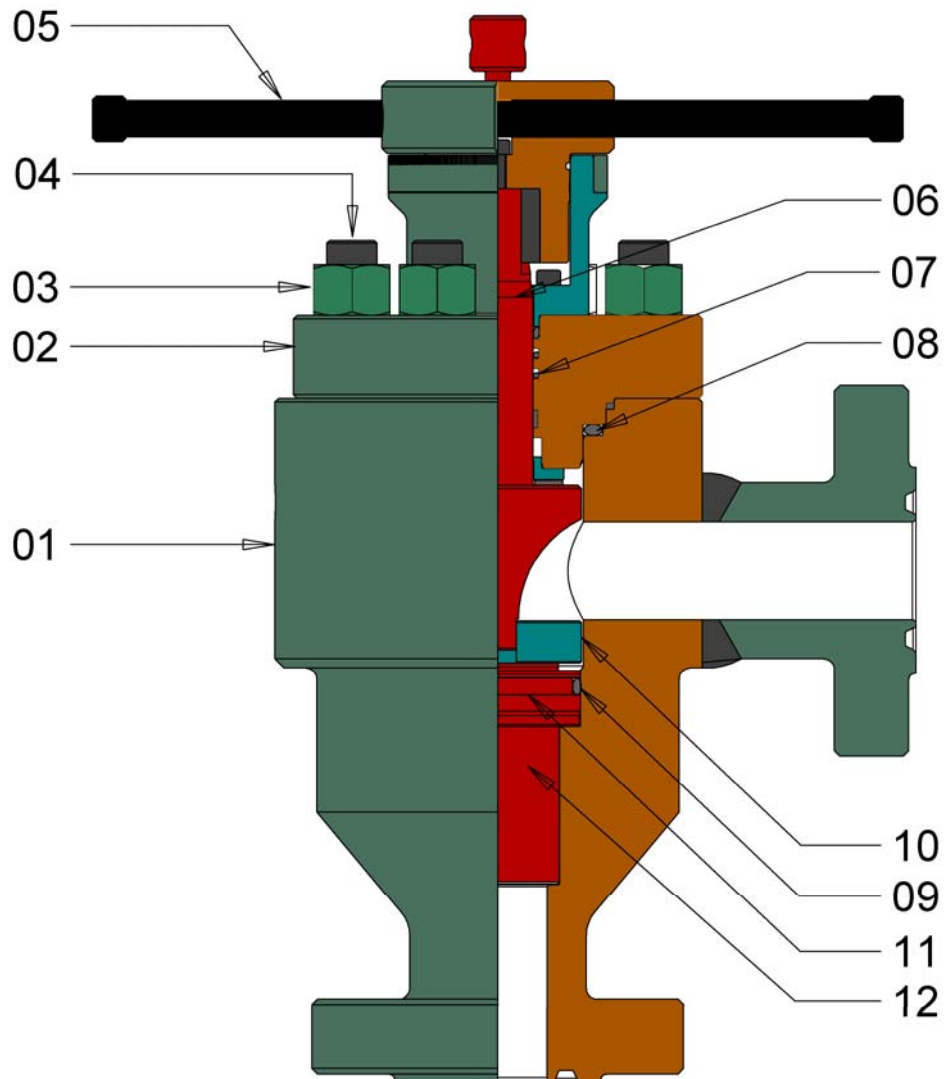
<sup>a</sup> As defined by NACE MR 0175; <sup>b</sup> In compliance with NACE MR 0175.

### Temperature ratings

| Temperature Classification | Operating Range            |      |                            |      |
|----------------------------|----------------------------|------|----------------------------|------|
|                            | °F<br>from min. up to Max. |      | °C<br>from min. up to Max. |      |
|                            | min.                       | Max. | min.                       | Max. |
| <b>K</b>                   | -75                        | 180  | -60                        | 82   |
| <b>L</b>                   | -50                        | 180  | -46                        | 82   |
| <b>P</b>                   | -20                        | 180  | -29                        | 82   |
| <b>R</b>                   | Room temperature           |      | Room temperature           |      |
| <b>S</b>                   | 0                          | 150  | -18                        | 66   |
| <b>T</b>                   | 0                          | 180  | -18                        | 82   |
| <b>U</b>                   | 0                          | 250  | -18                        | 121  |
| <b>V</b>                   | 35                         | 250  | 2                          | 121  |



## Part List & Spare Parts



| Part N°   | Description    | Recommended Spare Parts | Part N°   | Description         | Recommended Spare Parts |
|-----------|----------------|-------------------------|-----------|---------------------|-------------------------|
| <b>01</b> | Body           | n.a.                    | <b>07</b> | Stem packing        | <b>Yes</b>              |
| <b>02</b> | Bonnet         | n.a.                    | <b>08</b> | Body/bonnet gaskets | <b>Yes</b>              |
| <b>03</b> | Body Stud Nuts | n.a.                    | <b>09</b> | Seat gasket         | <b>Yes</b>              |
| <b>04</b> | Body Studs     | n.a.                    | <b>10</b> | Upper disc          | <b>Yes</b>              |
| <b>05</b> | Lever          | n.a.                    | <b>11</b> | Lower disc          | <b>Yes</b>              |
| <b>06</b> | Stem           | n.a.                    | <b>12</b> | Seat                | <b>Yes</b>              |