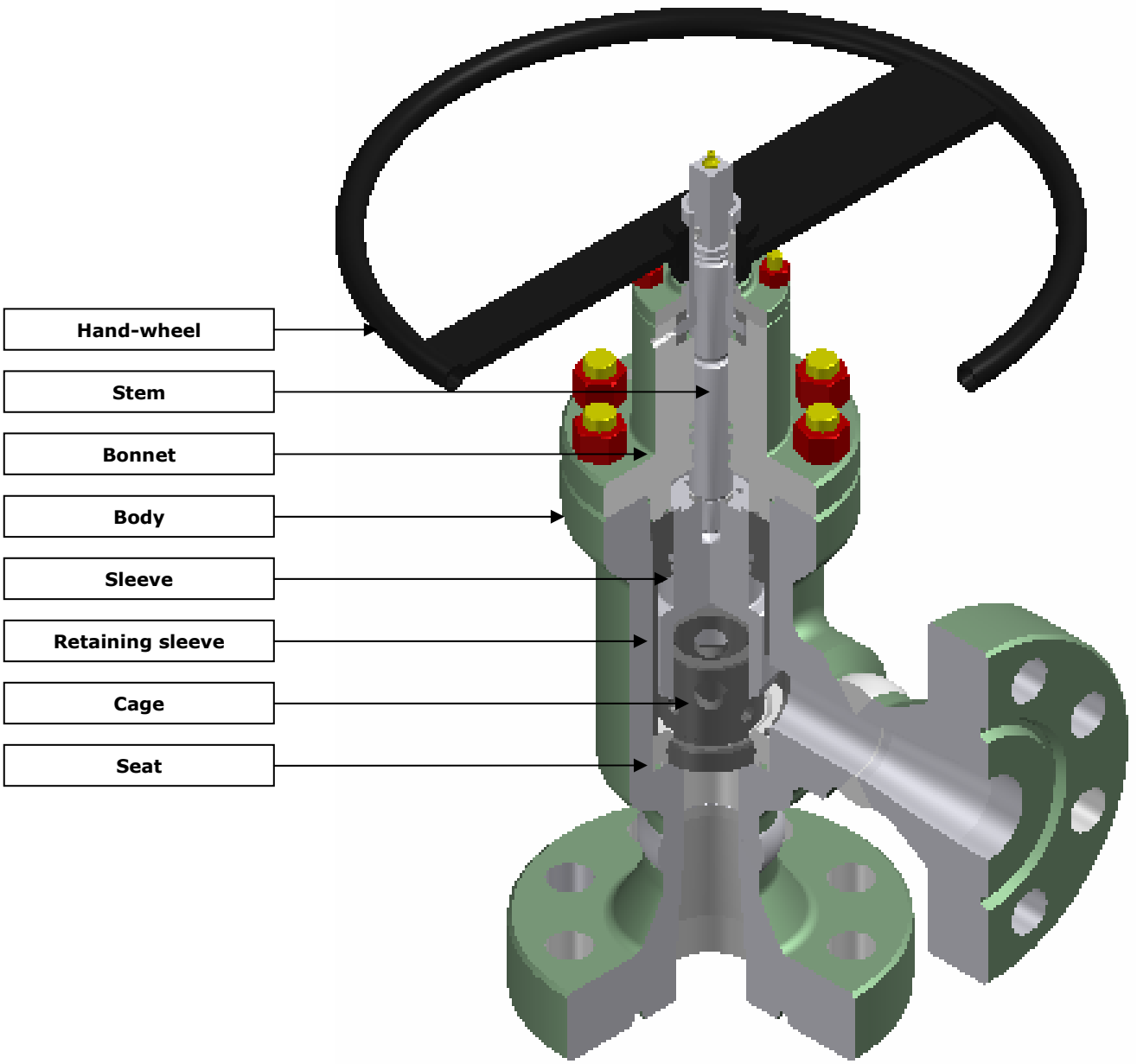
CHOKES

API 6A

Cage Control Choke
Type BCC



Cage Control Choke
Type BCC

TECHNICAL DESCRIPTION

Description:

The BREDA ENERGIA Cage Control Choke type BCC is designed to provide precise flow control throughout its entire operating range. This choke has a cage and an external sleeve trim and is suitable for single or multiphase liquid and gas service.
Typical applications include Christmas trees, manifold, water injection and gas lift. The standard flow characteristic is equal percentage, but upon request can be supplied also the linear characteristic. These valves can be easily converted from manual to actuated valves using an adapter flange and BREDA ENERGIA stepping actuator.

Design Code :

API 6A / ISO 10423

Standard features:

The Cage with external sleeve design configuration directs flow through various sized ports opposite one another, forcing the flow to impinge upon itself within the nozzle, thus dissipating the fluid energy onto itself. With this design the turbulence and jetting are dissipated before flow enters the outlet, thus eliminating the typical problem of wear in the choke outlet. The Cage is the hardest component of the valve and typically is made from various grades of tungsten carbide. However, for less severe applications, other materials are available.

Option features:

Multistage Trim
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)		
Standard Range (Inch)	API 2000 -3000 - 5000	API 10000	API 15000
	1.13/16 up to 7.1/16	1.13/16 up to 7.1/16	1.13/16 up to 5.1/8

CAGE Size	1/2	3/4	1	1.1/2	2	2.1/2	3	4	6
Cv	5	10	18	33	60	100	160	293	620

Material requirements

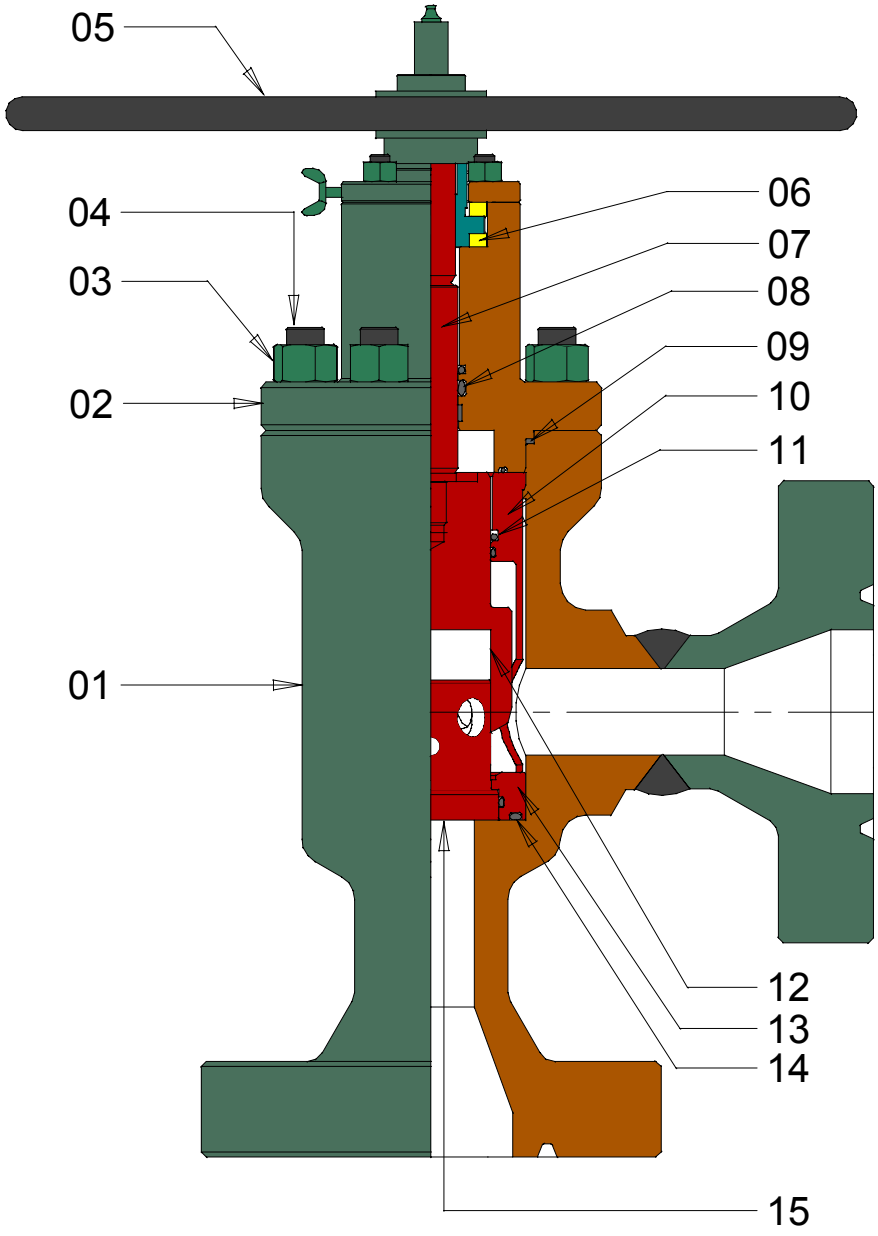
Service Conditions	*Trim*	*Minimum material requirements*	
API 6A Classification		Body, bonnet end and outlet connections	Pressure-controlling parts, stems and mandrel hangers
General Service	AA	Carbon or low-alloy steel	Carbon or low-alloy steel
General Service	BB	Carbon or low-alloy steel	Stainless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

[a] As defined be NACE MR 0175; [b] In compliance with NACE MR 0175.

Temperature ratings

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

Part List & Spare Parts



Part N°	Description	Recommended Spare Parts	Part N°	Description	Recommended Spare Parts
01	Body	n.a.	**09**	Body/bonnet gasket	**Yes**
02	Bonnet	n.a.	**10**	Retaining Sleeve	**Yes**
03	Body Stud Nuts	n.a.	**11**	Sleeve gasket	**Yes**
04	Body Studs	n.a.	**12**	Sleeve	**Yes**
05	Hand-wheel	n.a.	**13**	Seat	**Yes**
06	Thrust Bearing	n.a.	**14**	Seat gaskets	**Yes**
07	Stem	n.a.	**15**	Cage	**Yes**
08	Stem gasket	**Yes**			