

# Globe Valves

## Type 11C01 - Globe Valve FullX



**Top-Entry Cryogenic-Globe Valves, solid bar stock body, up to PN63  
A001 series**

Stainless steel body and topwork,  
"live loaded" gland packing  
"cleaned and degreased for oxygen service"

Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options:

- Bellow, top position
- Bellow, bottom position
- Bellow monitoring
- Check function
- Control function
- Throttle function
- Purge port

- on request only:
- Further connection types

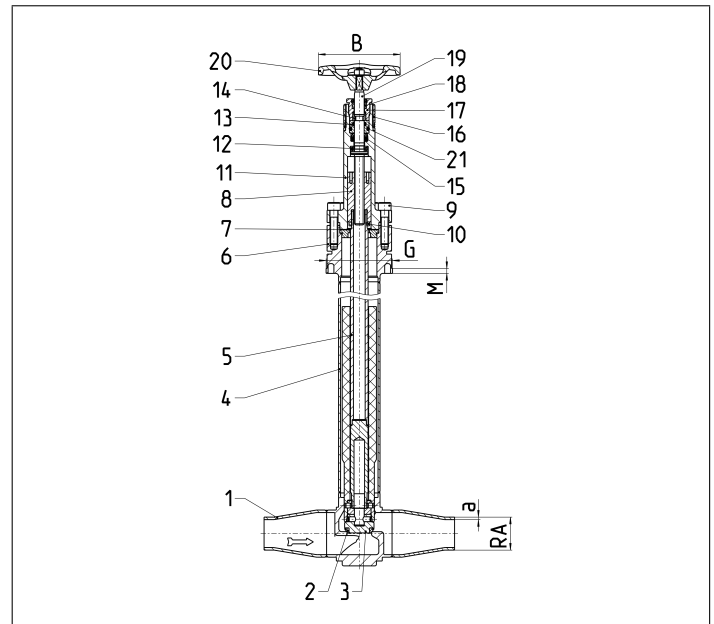
### Applications:

Approved for hydrogen, air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -269°C / -452°F (4K) up to +80°C / +176°F (353K)



Materials	DIN EN	ASTM
1 Body	1.4571	A 313 Grade 316TI
2 Valve seal	PCTFE	
3 Disc	1.4571	A 313 Grade 316TI
4 Tube	1.4571	A 313 Grade 316TI
5 Hollow stem	1.4571	A 313 Grade 316TI
6 Flange	1.4404	A 276 Grade 316L
7 Bonnet gasket	PTFE / Elektrocarbon (25%)	
8 Bushing	CW452K	B 159 UNS C51900
9 Bolt	A4-70	A 194 B8M
10 Nut	1.4404	A 276 Grade 316L
11 Head piece	1.4404	A 276 Grade 316L
12 Ball bearing	1.4125	440C
13 Sliding bushing	CW452K	B 159 UNS C51900
14 Stem ring	CW452K	B 159 UNS C51900
15 Gasket	PTFE / Elektrocarbon (25%)	
16 Cap	PVC	
17 Gland bold	1.4404	A 276 Grade 316L
18 Wiper	PEEK	
19 Stem	1.4404	A 276 Grade 316L
20 Handwheel	1.4409	A 351 CF3M
21 O-ring	FPM (VITON)	

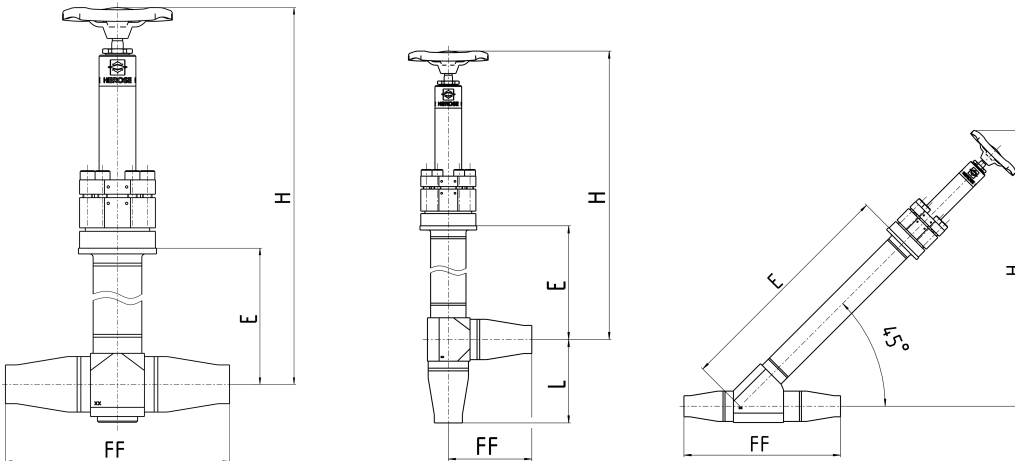


Nominal size	DN	10	15	20	25	32	40	50
Collar-Ø	G	68.0	68.0	68.0	68.0	84.4	84.4	100
Length	M	5	5	5	5	5	5	5
Handwheel-Ø	B	100	100	100	100	125	125	125
Outside pipe-Ø ISO	Ra	17.2	21.3	26.9	33.7	42.4	48.3	60.3
Wall thickness pipe ISO	a	1.8	2.0	2.3	2.6	2.6	2.6	2.9
Pipe-Ø ASTM A312		S10						

Dimensions in mm.



### Body types



### Straight body

Nominal size	DN	10	15	20	25	32	40	50
Face-to-face dim.	FF	150	150	195	195	235	235	280
Height	H	535	535	535	535	690	690	775
Length	E	325	325	325	325	445	445	525
Kvs-value	m <sup>3</sup> /h	3.4	4.4	9.8	12.3	25.8	28.3	44.0
Kvs-value*	m <sup>3</sup> /h	3.4	4.4	9.5	12.0	25.8	28.3	44.0
Cv-value	gal/min	4.0	5.1	11.4	14.3	30.0	32.9	51.2
Cv-value*	gal/min	4.0	5.1	11.0	14.0	30.0	32.9	51.2
Weight	ca. kg	3.71	3.73	4.49	4.53	9.30	9.33	13.13

\* with bellow

### Body angle type

Nominal size	DN	10	15	20	25	32	40	50
Face-to-face dim.	FF	80	80	100	100	120	120	140
Height	H	535	535	535	535	690	690	775
Length	E	325	325	325	325	445	445	525
Length	L	80	80	100	100	120	120	140
Kvs-value	m <sup>3</sup> /h	4.7	5.7	19.8	22.3	41.1	43.6	80.0
Kvs-value*	m <sup>3</sup> /h	4.7	5.7	16.5	19.0	33.3	35.8	63.0
Cv-value	gal/min	5.5	6.6	23.0	25.9	47.8	50.7	93.0
Cv-value*	gal/min	5.5	6.6	19.2	22.1	38.7	41.6	73.3
Weight	ca. kg	3.69	3.70	4.41	4.45	8.91	8.94	12.73

\* with bellow

### Body Y type

Nominal size	DN	10	15	20	25	32	40	50
Face-to-face dim.	FF	185	185	250	250	285	285	340
Height	H	430	430	440	440	570	570	640
Length	E	365	365	370	370	505	505	600
Kvs-value	m <sup>3</sup> /h	4.2	5.2	11.9	14.4	34.4	36.9	69.8
Kvs-value*	m <sup>3</sup> /h	4.2	5.2	7.7	10.2	28.6	31.1	35.0
Cv-value	gal/min	4.9	6.0	13.8	16.7	40.0	42.9	81.2
Cv-value*	gal/min	4.9	6.0	9.0	11.9	33.3	36.2	40.7
Weight	ca. kg	3.70	3.71	4.39	4.42	9.22	9.18	12.62

\* with bellow

# Globe Valves

## Type 11C01 - Globe Valve FullX



### Top-Entry Cryogenic-Globe Valves, casted body, up to PN50 A002 series

Stainless steel body and topwork,  
"live loaded" gland packing  
"cleaned and degreased for oxygen service"

Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

#### Available options:

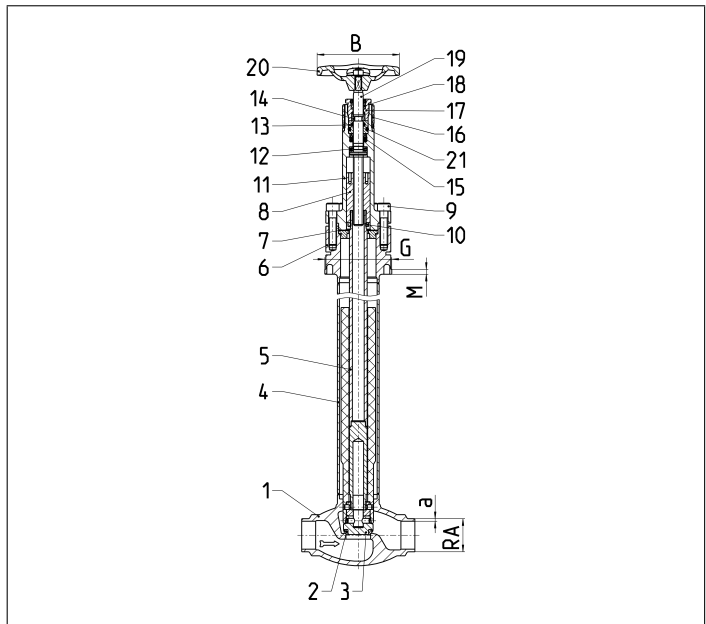
- Bellow, top position
  - Bellow, bottom position
  - Bellow monitoring
  - Check function
  - Control function
  - Throttle function
  - Purge port
- on request only:
- Further connection types

#### Applications:

Approved for hydrogen, air gases, vapours and cryogenic liquefied gases incl. LNG.  
Working temperature: -255°C / -427°F (18K) up to +80°C / +176°F (353K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve Seal	PCTFE	
3 Disc	1.4571	A 313 Grade 316TI
4 Tube	1.4571	A 313 Grade 316TI
5 Hollow stem	1.4571	A 313 Grade 316TI
6 Flange	1.4404	A 276 Grade 316L
7 Bonnet gasket	PTFE / Elektrocarbon (25%)	
8 Bushing	CW452K	B 159 UNS C51900
9 Bolt	A4-70	A 194 B8M
10 Nut	1.4404	A 276 Grade 316L
11 Head piece	1.4404	A 276 Grade 316L
12 Ball bearing	1.4125	440C
13 Sliding bushing	CW452K	B 159 UNS C51900
14 Stem ring	CW452K	B 159 UNS C51900
15 Gasket	PTFE / Elektrocarbon (25%)	
16 Cap	PVC	
17 Gland bolt	1.4404	A 276 Grade 316L
18 Wiper	PEEK	
19 Stem	1.4404	A 276 Grade 316L
20 Handwheel	1.4409	A 351 CF3M
21 O-ring	FPM (VITON)	



Nominal size	DN	10	15	20	25	32	40	50
Collar-Ø	G	68.0	68.0	68.0	68.0	84.4	84.4	100
Length	M	5	5	5	5	5	5	5
Handwheel-Ø	B	100	100	100	100	125	125	125
Outside pipe-Ø ISO	Ra	13.5	21.3	26.9	33.7	42.4	48.3	60.3
Wall thickness pipe ISO	a	1.6	2.0	2.0	2.6	2.6	2.6	2.6
Pipe-Ø ASTM A312		S10						

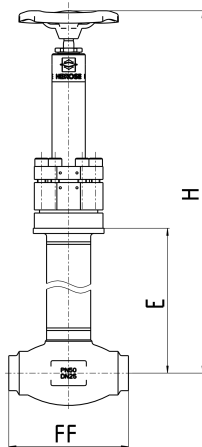
Dimensions in mm.

# Globe Valves

## Type 11C01 - Globe Valve FullX



### Body types



### Straight body

Nominal size	DN	10	15	20	25	32	40	50
Face-to-face dim.	FF	85	85	115	115	130	130	155
Height	H	535	535	535	535	690	690	775
Length	E	325	325	325	325	445	445	525
Kvs-value	m <sup>3</sup> /h	2.4	3.8	10.0	13.3	16.0	25.0	46.0
Kvs-value*	m <sup>3</sup> /h	3.4	4.4	9.5	12.0	25.8	28.3	44.0
Cv-value	gal/min	2.8	4.4	11.6	15.4	18.5	28.9	53.2
Cv-value*	gal/min	4.0	5.1	11.0	14.0	30.0	32.9	51.2
Weight	ca. kg	3.70	3.71	4.39	4.42	9.22	9.18	12.62

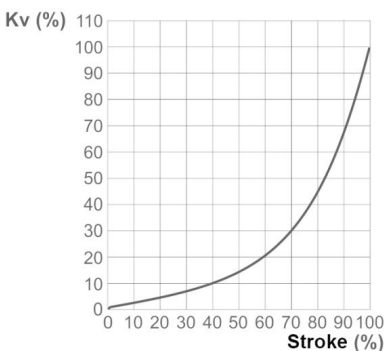
\* with bellows

**Flow coefficient for Control Valves - Control characteristic equal percentage Kvs-Value in m<sup>3</sup>/h, Cv-Value in gal/min. These figures refer to measurements for the flow direction.**

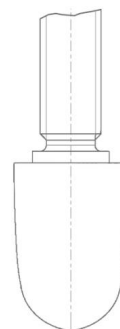
### Type 11C01 control function - A001 and A002 series

DN	Kvs [m <sup>3</sup> /h]	Cv [gal/min]	Stroke [mm]
10	1.0	1.2	10
15	3.5	4.1	10
20	4.0	4.7	10
25	6.3	7.3	10
32	10.0	11.6	20
40	19.0	22.1	20
50	30.0	34.9	20

Ideal inherent equal percentage characteristic curve acc. to DIN IEC 60534 Part 2-4



Sample drawing cone, control characteristic equal percentage





### Configurable options

For configurable types, the HEROSE part number consists as follows:

Type	Series	Dimension code	Option codes
11C01.	A001.	0250.	CBQ-KCZ-YWF-CBG-DDP
1	2	3	4 up to 8

Selection of the type			Type
1	Type	Product group	11C01
		Globe Valve FullX	

Selection of the series				Series	
2	Series	forged steel body	PN63	manual (handwheel)	A001
		casted body	PN50	manual (handwheel)	A002
		forged steel body	PN63	actuated (diaphragm / piston)	A009
		casted body	PN50	actuated (diaphragm / piston)	A010

Selection of the nominal size			Dimension code
3	Nominal sizes	DN10	0100
		DN15	0150
		DN20	0200
		DN25	0250
		DN32	0320
		DN40	0400
		DN50	0500

4	Body types	Body angle type	CBQ
		Straight body	HJC
		Body Y type	PYU

5	Disc function	lockable function	KCZ
		lockable check function	JDA
		lockable control function	SWX
		lockable throttle function	WVV

6	Bellow options	Bellow	Bellow position	Bellow monitoring	Dimension bellow monitoring		
		not selected	not selected	not selected	not selected		LYV
		selected	top	not selected	not selected		MUR
		selected	bottom	not selected	not selected		FYX
		selected	top	selected	DIN EN ISO 8434-1-WDS-S6		GXD
		selected	bottom	selected	DIN EN ISO 8434-1-WDS-S6		XHA

7	Purge port	w/o purge port	CBG
		with NPT 1/8" (female)	EPH
		with VCR 1/4" (male)	ANK

8	Vacuum Jacketing	w/o Vacuum Jacketing	DDP
		Vacuum Jacketing with MLI (Multi Layer Insulation)	RVA
		Vacuum Jacketing w/o MLI	MMA