ENGINEERING TOMORROW



**Data Sheet** 

# Shut-off ball valve Type **GBC, GBCH** and **GBCT**

For CO<sub>2</sub> application







Danfoss shut-off ball valves, type GBC,GBCH,GBCT are manually operated shut-off valves for CO<sub>2</sub> refrigeration systems, in order to open and to shut off inner flow path by operating the valve spindle.

The valves are specifically designed for intrinsic standstill security, meaning that the valves can withstand pressures normally arising when the refrigeration system is shut off, i.e. during serving or during unexpected power failure.

The valve structure and materials are designed and tested specifically for use with CO<sub>2</sub> refrigerant.

GBC and GBCH valves are designed to use in subcritical  ${\rm CO_2}$  refrigeration systems. GBCT valves are approved for use in transcritical  ${\rm CO_2}$  systems.

## **Features:**

- Bleed hole design to prevent liquid entrapment when the valve is closed
- Sealing material especially for CO<sub>2</sub> to ensure long term product reliability
- Customized brass material ensures consistent performance under aggressive environment
- GBCH 28s~42s with stainless-steel butt welding connections, suitable for systems with stainless-steel piping
- GBCT with reinforced copper-iron tube extensions to allow easy torch-brazing installation
- UL/cUL Listed, complies with Pressure Equipment Directive 2014/68/EU



# **Applications**

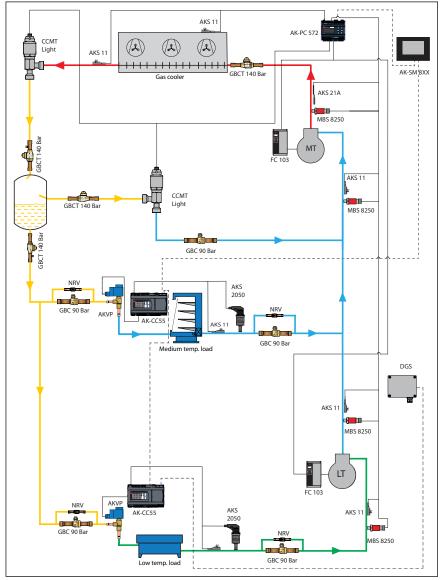
## Typical applications for CO<sub>2</sub> ball valves are:

- Display cases
- Supermarket stores
- · Food Retail
- Industrial refrigeration
- · Heat pump

## Danfoss CO<sub>2</sub> ball valves are designed for the following refrigerant cycles:

- GBC with PS = 45 bar, copper connections equipped, for subcritical systems
- GBCH with PS = 90/75 bar, copper/ stainless steel connections equipped, for subcritical systems
- GBCT with PS = 140 bar, reinforced copper connections (K65) equipped, for transcritical systems

Figure 1: Application



- HP High Pressure (120-140 bar)
  - HP Receiver Pressure (60-90 bar)
- LP Suction Pressure MT (35-55 bar)
- LP Suction Pressure LT (25-30 bar)



## Media

#### Table 1: Media

Refrigerants	R 744 (CO <sub>2</sub> )
Refrigerant oil	POE, PAG (PVE, PAO)

### NOTE:

## For the application use with R744 as part of a secondary loop or cascade:

- 1. The design pressure of the refrigerant containing component is not less than the design pressure of the associated components.
- 2. The component is not provided with any pressure relief or pressure regulating relief valve and that a sufficient number of valves having capacity deemed adequate shall be field installed on the refrigeration system.
- 3. When the refrigeration system is de-energized, venting of R744 may occur through the pressure regulating relief valves, and may need to be recharged, but the valve should not be defeated or bypassed.
- 4. A sufficient number of pressure relief and pressure regulating valves may need to be provided based upon system capacity and located such that no stop valve is provided between the relief valve and the parts or section of the system being protected.



## **Product specification**

## **Technical data**

Table 2: Technical data

Technical data	GBC	GBCH	GBCT						
Max. working pressure	45 bar / 650 psig	6s - 28s: 90 bar / 1305 psig 35s - 42s: 75 bar / 1085 psig	140 bar / 2031 psig						
Media temperature range	-40 °C – 100 °C / -40 °F – 212 °F	-40 °C – 100 °C / -40 °F – 212 °F	-40 °C – 149 °C / -40 °F – 300 °F						
Flow direction	Single flow	Bi flow	Bi flow						
Environmental transport/storage temperature and humidity	-40 – 65 °C /-40 – 150 °F. Air humidity: RH≤95%.								

#### **A** CAUTION:

Danfoss recommends that GBCT valves are installed so that the HP side is oriented towards the highest pressure side of the system when the valve is in the closed position.

## **GBCT CAUTION - RISK OF HIGH PRESSURE**

Do not close with CO2 liquid temperature below ambient. This component shall be installed along with a pressure relief valve set to discharge at no higher than the rated pressure of this component. This component is intended for systems in which the critical pressure of the refrigerant will be exceeded. The relief valve shall comply with the requirements of ASME Section VIII, be marked "UV" and sized based on the refrigeration system capacity.

An orange Hanging tag is added on all valves as per requirement of UL certificate.

## Identification

Relevant product data is available on the product and box label. An example of a box label and product label are shown, including an explanation of the content.

Figure 2: Box label

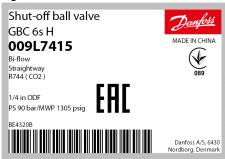


Figure 3: Product label



Table 3: Product and label text

Position	Inscription	Explanation
Box label; Product label	Shut-off ball valve	Product name
Box label	GBC 6s H	Product type
Box label	009L7415	Code number for ordering
Box label	Bi-flow	Flow type
Box label	Straightway	Direction
Box label	R744(CO <sub>2</sub> )	Refrigerant
Box label	1/4 in ODF	Connection size and type
Box label	PS 90 bar/MWP 1305 psig	Max. working pressure in bar and psig
Box label	BE4320B	Code for production place and time (BE = Wuqing, week 43, year 2020, weekday B = Tuesday)
Box label; Product label	MADE IN CHINA	Manufacturing site acc. to EN standards
Box label	EAN code	Barcode for individual code no. identification according to EAN standard
Product label	-40 °C – 100 °C	Media temperature range
Box label; Product label	Additional information: Relevant approval authority logos	-



Figure 4: Marking of GBCT



**Table 4: Marking of GBCT** 

Inscription	Explanation
"HP"	Indicates where the bleed hole of ball is located and Danfoss recommends the HP side is oriented towards the highest pressure side of system when valve is in closed position.
"LP"	Indicates the side without bleed hole and shall be oriented towards to the low pressure side of system when valve is in closed position.

## **Design and materials**

Direct flow gives maximum through-flow with minimum pressure drop across valve. The combination of laserwelded valve body (2) and valve tail (4), ball seat/seal (3), double O-ring seal in spindle (6), and cap seal (7) provides the best tightness.

Figure 5: Design and materials

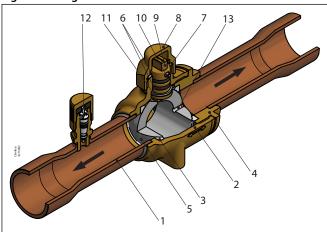


Table 5: Design and materials

Tubic 5. Design o	ma materials	
Position	Description	Material
1	Connection tube	Copper (Stainless steel for GBCH 28s~42s)
2	Valve body	Brass
3	Ball seat	PTFE
4	Valve tail	Brass
5	Ball	Stainless steel
6	Double O-ring seal in spindle	EPDM Rubber
7	Cap seal	PTFE
8	Seal cap	Brass
9	Spindle	Brass
10	Pin	Stainless steel
11	Guide ring	PTFE
12	Schrader valve	Stainless steel
13	Bleed hole	-

# **Dimensions**

We have chosen to show dimensions of the major versions.



You will find downloadable dimension drawings for individual code numbers on Danfoss store as part of the Visuals tab for individual code numbers.

Weights also differ depending on the design of the individual code numbers. Weights are available as part of the technical data for individual code numbers on Danfoss store.

## GBC solder ODF/ODF, copper connections

Figure 6: GBC solder ODF/ODF

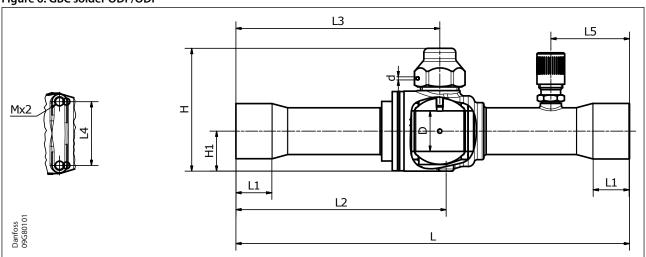


Table 6: GBC solder ODF/ODF, copper connections

and of a contract of the contr																															
Turno	Size	Con- nec- tion	Connection tolerance	н	H1	L	L1	L2	L3	L4	L5	М	D	d	Weigh	Cod	e no.														
Type	Size	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	without access port	with access port														
GBC 6s	1/4 in.	6.35		50	15	139	7	75	73	22	31	M4×	14	1.5	0.2	009L7520	009L7553														
GDC 05	6 mm	6.00		30	15	139	,	/3	/3	22	31	0.7	14	1.5	0.2	009L7570	009L7554														
	3/8 in.	9.52		50	15	139	8	75	73	22	31	M4 × 0.7	14	1.5	0.2	-	009L7555														
GBC 10s	3/8 in.	9.52	+0.065/+0.155	50	15	120	9	75	73	22	31	M4×	14	1.5	0.2	009L7521	-														
	10 mm	10.00		30	15	139	9	/5	/3	22	31	0.7	14	1.5	0.2	009L7571	009L7556														
GBC 12s	1/2 in.	12.70		+0.065/+0.155	+0.065/+0.155	+0.065/+0.155	50	15	161	10	86	84	22	31	M4×	14	1.5	0.2	009L7522	009L7557											
GBC 123	12 mm	12.00		30	13	101	10	80	04	22	31	0.7	14	1.5	0.2	009L7572	009L7558														
GBC 16s	5/8 in.	16.00			50	15	161	12	86	84	22	31	M4×	14	1.5	0.2	0001 7523	009L7534													
GDC 103	16 mm	10.00		30	13	101	12	80	04	22	31	0.7	14	1.5	0.2	00917323	00927334														
GBC 18s	3/4 in.	19.05			58	19	185	14	99	96	30	37	M4×	19	1.5	0.4	009L7524	009L7563													
GDC 103	18 mm	18.00		50	19	103	14	99	90	30	37	0.7	13	1.5	0.4	009L7574	009L7564														
GBC 22s	7/8 in.	22.22		58	19	185	17	99	96	30	37	M4×	19	1.5	0.4	0091 7525	009L7536														
GDC 223	22 mm		+0.075/+0.185	30	1,5	103	.,	,,,	50	30	3,	0.7	17	1.5	0.1	00727323	00727330														
GBC 28s	1 1/8 in.	28.58	+0.075/+0.185	+0.0/5/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	80	25	208	20	112	108	38	44	M4×	26	1.5	0.9	009L7526	009L7565
GDC 203	28 mm	28.00		00	23	200	20		100	30		0.7	20	1.5	0.5	009L7576	009L7566														
GBC 35s	1 3/8 in.	35.00	+0.09/+0.23	89	30	251	25	136	130	48	44	M6×	32	1.5	1.4	009L7528	009L7567														
250 555	35 mm	35.00		+0.09/+0.23	+0.09/+0.23	+0.09/+0.23	+0.09/+0.23	0,	30	251		136	130	.0	44	1.0				2372,320	2372.337										
GBC 42s	1 5/8 in.	41.28									8	110	35	281	29	151	145	55	56	M6×	38	1.5	2.2	009L7529	009L7568						
222 123	42 mm	42.00									)			0	2.00	42.00	. 10	55			.51	. 13	- 55	50	1.0	50	5	,_	009L7579	009L7569	



# GBCH solder ODF/ODF, copper connections

Figure 7: GBC solder ODF/ODM

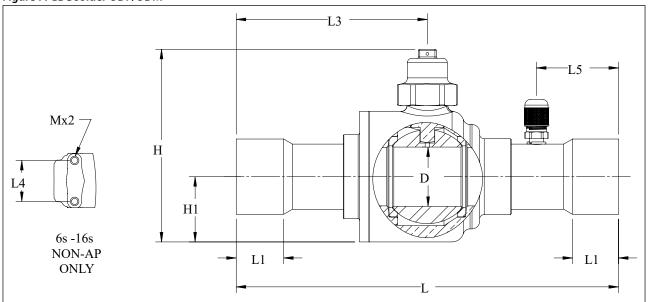


Table 7: GBCH solder ODF/ODF, copper connections

Type Si	Size	Con- nec- tion	Connection tolerance	н	Н1	L	L1	L2	L3	L4	L5	М	D	d	Weigh	Code	e no.																												
	Size	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	without access port	with ac- cess port																												
GBCH 6s	1/4 in.	6.35		50	15	139	5	75	73	22	31	M4×	14	1.5	0.2	009L7415	009L7581																												
GDCITOS	6 mm	6.00			50	13	137	3	75	75	22	31	0.7		1.5	0.2	009L7395	009L7580																											
GBCH 10s	3/8 in.	9.52						50	15	139	7	75	73	22	31	M4×	14	1.5	0.2	009L7416	009L7582																								
GDCI1103	10 mm	10.00		50	13	137	,	75	75	22	31	0.7		1.5	0.2	009L7396	009L7583																												
GBCH 12s	1/2 in.	12.70	+0.065/+0.155	+0.065/+0.155	50	15	161	8	86	84	22	31	M4×	14	1.5	0.2	009L7417	009L7585																											
GDCI1 123	12 mm	12.00		50	13	101	Ü	00	04	22	31	0.7		1.5	0.2	009L7397	009L7584																												
GBCH 16s	5/8 in.	16.00												50	15	161	10	86	84	22	31	M4×	14	1.5	0.2	009L7418	0001 7586																		
GDC11 103	16 mm	10.00																								30	13	101	10	00	04	22	31	0.7	17	1.5	0.2	00927418	009L7300						
GBCH 18s	3/4 in.	19.05														58	19	185	12	99	96	30	37	M4×	19	1.5	0.4	009L7419	009L7588																
GDC11 103	18 mm	18.00		50	13	103	12	99	96	30	37	0.7	13	1.5	0.4	009L7399	009L7587																												
GBCH 22s	7/8 in.	22.22	+0.075/+0.185	±0.075/±0.185	±0.075/±0.185	±0.075/±0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	+0.075/+0.185	±0.075/±0.185	±0.075/±0.185	±0.075/±0.185	±0.075/±0.185	+0.075/+0.185	±0.075/±0.185	±0.075/±0.185	±0.075/±0.185	±0.075/±0.185	+0.075/+0.185	+0.075/+0.185	+0 075/+0 185	+0 075/+0 185	58	19	0 105	5 15	99	96	30	37	M4×	19	1.5	0.4	009L7420	009L7589
GDCH 223	GBCH 22s 22 mm	22.22		58	19	185	13	22	90	30	5/	0.7	19	1.5	0.4	009L/420	009L/309																												

# GBCH butt weld, stainless steel connections

Figure 8: GBC solder ODM/ODM, copper connections

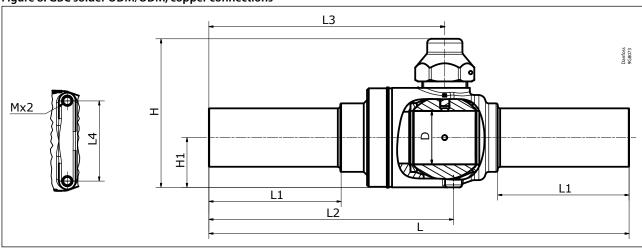




Table 8: GBCH butt weld, stainless steel connections

Tuno	Type Size	Con- nec- tion	Connection tolerance	н	Н1	L	L1	L2	L3	L4	М	D	d	Weight	Code no.
Туре		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	without access port
GBCH 28s	28 mm	28		80	25	208	65	115	116	38	M4 × 0.7	25.5	1.5	0.9	009L7406
GBCH 35s	35 mm	35	-0.1/+0.1	89	30	251	79	146	141	48	M6 × 1.0	32	1.5	1.5	009L7410
GBCH 42s	42 mm	42		110	35	281	88	162	156	55	M6 × 1.0	38	1.5	2.5	009L7411

# GBCT solder ODF/ODF, copper connections

Figure 9: GBCT solder ODF/ODF, copper connections

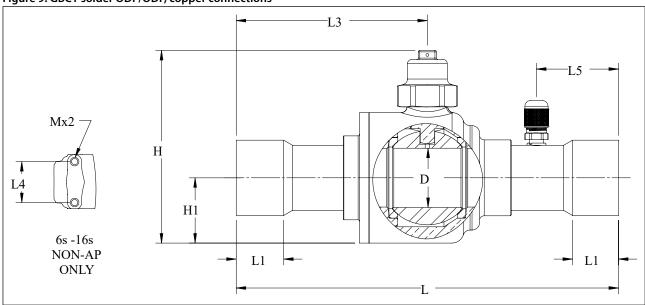


Table 9: GBCT solder ODF/ODF, copper connections

idale 3. eser solder ost / ost / copper connections																	
Туре	Size	Con- nec- tion	Connection tolerance	н	Н1	L	L1	L3	L4	L5	M	D	Weight	Code	e no.		
Туре	3126	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	without access port	with ac- cess port		
GBCT 6s	1/4 in.	6.35		57	14	127	7	69	22	N/A	M4 × 0.7	13	0.2	009L6415	-		
				57	14	127	7	55	N/A	44	N/A	13	0.3	-	009L6581		
GBCT 10s	3/8 in.	9.52		57	14	132	9	72	22	N/A	M4 × 0.7	13	0.2	009L6416	-		
				57	14	132	9	58	N/A	46	N/A	13	0.3	-	009L6582		
GBCT 12s	1/2 in.	12.70	+0.051/+0.155	57	14	139	10	75	22	N/A	M4 × 0.7	13	0.2	009L6417	-		
				57	14	139	10	61	N/A	50	N/A	13	0.3	-	009L6585		
GBCT 16s	5/8 in.	15.88		57	14	148	13	80	22	N/A	M4 × 0.7	13	0.2	009L6418	-		
						57	14	148	13	66	N/A	54	N/A	13	0.3	-	009L6586
GBCT 18s	3/4 in.	19.05		87	32	148	17	78	N/A	30	N/A	19	0.7	009L6419	009L6588		
GBCT 22s	7/8 in.	22.22		87	32	185	20	96	N/A	40	N/A	19	0.7	009L6420	009L6589		
GBCT 28s	1 1/8 in.	28.58	±0.075/±0.185	102	37	185	24	95	N/A	40	N/A	25	1.3	009L6406	009L6451		
GBCT 35s	1 3/8 in.	34.93	+0.075/+0.185	103	35	205	25	102	N/A	44	N/A	32	2.0	009L6410	009L6453		
GBCT 42s	1 5/8 in.	41.28	+0.075/+0.203	113	40	240	28	120	N/A	50	N/A	38	2.9	009L6411	009L6454		
GBCT 54s	2 1/8 in.	53.98		144	52	275	35	138	N/A	56	N/A	51	6.1	009L6412	009L6456		



# **Connections**

Standard GBC, GBCH, GBCT versions can be provided with straightway, connection types solder ODF or butt weld in a wide variety of connection sizes. Solder ODF versions are with extended ends copper connections, butt weld versions with stainless steel connections.

For details on availability, see Ordering

## **Connection table**

**Table 10: Connection table** 

Туре	Inlet	Outlet	mm connections	Inch connections
GBC	Solder ODF	Solder ODF	6 mm x 6 mm 10 mm x 10 mm 12 mm x 12 mm 16 mm x 16 mm 18 mm x 18 mm 22 mm x 22 mm 28 mm x 28 mm 35 mm x 35 mm 42 mm x 42 mm	¼ in x ¼ in ¾ in x ½ in ½ in x ½ in ½ in x ½ in ¾ in x ¾ in ¾ in x ¾ in ¼ in x ¾ in 1 ¼ in x ¼ in 1 ¼ in x 1 ½ in 1 ¾ in x 1 ½ in 1 ¾ in x 1 ½ in 1 % in x 1 ⅓ in
GBCH	Solder ODF	Solder ODF	6 mm x 6 mm 10 mm x 10 mm 12 mm x 12 mm 16 mm x 16 mm 18 mm x 18 mm 22 mm x 22 mm	¼ in x ¼ in ½ in x ½ in ½ in x ½ in ½ in x ½ in ¾ in x ¾ in ½ in x ¾ in
	Butt weld	Butt weld	28 mm x 28 mm 35 mm x 35 mm 42 mm x 42 mm	-
GBCT	Solder ODF	Solder ODF	-	¼ in x ¼ in       % in x ½ in       ½ in x ½ in       % in x ¾ in       ¾ in x ¾ in       % in x ¾ in       1 ½ in x 1 ½ in       1 ½ in x 1 ½ in       1 ½ in x 1 ½ in       2 ½ in x 2 ½ in



## **Ordering**

GBC,GBCH,GBCT code numbers described in this data sheet are standard code numbers, i.e. made to stock.

Besides code numbers made to stock GBC,GBCH,GBCT is also made to order. Make to order options include:

- Mechanical connection type
- Mechanical connection size
- Access port size

Multipack contains several items, individually packed, so that customers can purchase 1 item and receive all relevant documentation.

# **GBC solder ODF/ODF, copper connections**

Figure 10: GBC without access port, solder ODF/ODF



Figure 11: GBC with access port, solder ODF/ODF



Table 11: GBC solder ODF/ODF, copper connections

	Solder ODF / O	DF Connection	Kv <sup>(1)</sup>	Cv (1)	Max. working	Media tem-	Code	e no.	Multi pack
Туре	[in.]	[mm]	[m³/h]	[gal/min]	pressure: PS/MWP	perature range	without access port	with access port	Qty/ pack
GBC 6s	1/4	-	1.74	2.01			009L7520	009L7553	25
GBC 05	-	6	1.74	2.01			009L7570	009L7554	25
GBC 10s	3/8	-	7.52	8.69			009L7521	009L7555	25
GDC 103	-	10	7.52	8.69			009L7571	009L7556	25
GBC 12s	1/2	-	12.92	14.94			009L7522	009L7557	25
GBC 125	-	12	12.92	14.94		-40 °C − 100 °C	009L7572	009L7558	25
GBC 16s	5/8	16	15.66	18.10			009L7523	009L7534	25
GBC 18s	3/4	-	21.93	25.35	45 bar / 650 psig	/	009L7524	009L7563	25
GDC 165	-	18	21.93	25.35	030 ps.g	-40 °F – 212 °F	009L7574	009L7564	25
GBC 22s	7/8	22	33.34	38.54			009L7525	009L7536	25
GBC 28s	1 1/8	-	62.25	71.96			009L7526	009L7565	5
GDC 203	-	28	62.25	71.96			009L7576	009L7566	5
GBC 35s	1 3/8	35	92.76	107.23			009L7528	009L7567	5
GBC 42s	1 5/8	-	134.76	155.78			009L7529	009L7568	4
GDC 423	-	42	134.76	155.78			009L7579	009L7569	4

<sup>(1)</sup> Calculated based on fluid dynamic equations



# **GBCH solder ODF/ODF, copper connections**

Figure 12: GBCH without access port, solder ODF



Figure 13: GBCH with access port, solder ODF



Table 12: GBCH solder ODF/ODF, copper connections

		Solder ODF/ODF connection		Cv (1)	Max. working	Media tempera-		Multi pack	
Туре	[in.]	[mm]	[m³/h]	[gal/min]	pressure: PS/MWP	ture range	without access port	with access port	Qty/ pack
GBC 6s H	1/4	-	1.78	2.06			009L7415	009L7581	25
GBC 05 H	-	6	1.78	2.06			009L7395	009L7580	25
GBC 10s H	3/8	-	6.31	7.29		-40 °C − 100 °C	009L7416	009L7582	25
GBC 10811	-	10	6.31	7.29			009L7396	009L7583	25
GBC 12s H	1/2	-	12.87	14.88	90 bar /		009L7417	009L7585	25
GDC 125 FI	-	12	12.87	14.88	1305 psig	-40 °F – 212 °F	009L7397	009L7584	25
GBC 16s H	5/8	16	11.77	13.61			009L7418	009L7586	25
GBC 18s H	3/4	-	31.07	35.92			009L7419	009L7588	25
GDC 188 H	-	18	31.07	35.92			009L7399	009L7587	25
GBC 22s H	7/8	22	24.47	28.29			009L7420	009L7589	25

<sup>(1)</sup> Calculated based on fluid dynamic equations

# **GBCH butt weld, stainless steel connections**

Figure 14: GBCH without access port,butt weld



Table 13: GBCH butt weld, stainless steel connections

Туре	Solder ODF/ODF		<b>Kv</b> <sup>(1)</sup>	<b>Cv</b> <sup>(1)</sup>	Max. work- ing pres- sure:	Media tempera- ture range	Code no.		Multi pack
	[in.]	[mm]	[m³/h]	[gal/min]	PS/MWP		without ac- cess port	with access port	Qty/ pack
GBC 28s H	-	28	96.72	111.81	90 bar / 1305 psig	-40 °C – 100 °C	009L7406	-	5
GBC 35s H	-	35	106.95	123.63	75 bar / -40 °F – 212 1088 psig	/ -40 °F – 212 °F	009L7410	-	5
GBC 42s H	-	42	150.98	174.53		.0 . 2.2 .	009L7411	-	4

<sup>(1)</sup> Calculated based on fluid dynamic equations



# **GBCT solder ODF/ODF, copper connections**

Figure 15: GBCT without access port, solder ODF



Figure 16: GBCT with access port, solder ODF



Table 14: GBCT solder ODF/ODF, copper connections

Туре -	Connec- tion	Kv	Cv	Max. working pressure: PS/MWP	Media tempera- ture range	Code no.		Multi pack		
	[in.]	[m³/h]	[gal/min]			without access port	with access port	Qty/ pack		
GBCT 6s	1/4	0.9	1.0	140 bar / 2031 psig		009L6415 009L6581	009L6581	30		
GBCT 10s	3/8	3.7	4.3			009L6416	009L6582	30		
GBCT 12s	1/2	5.4	6.2			009L6417	009L6585	30		
GBCT 16s	5/8	10.4	12.1			009L6418	009L6586	30		
GBCT 18s	3/4	16.4	19.0		-40 °C – 149 °C /	009L6419	009L6588	18		
GBCT 22s	7/8	23.7	27.5		-40 °F – 300 °F	009L6420	009L6589	18		
GBCT 28s	1 1/8	42.3	48.9				009L6406	009L6451	4	
GBCT 35s	1 3/8	67.1	77.6						009L6410	009L6453
GBCT 42s	1 5/8	83.1	96.1		009L6411 009L6	009L6454	4			
GBCT 54s	2 1/8	171.3	198.0			009L6412	009L6456	2		

# **Spare parts**

Figure 17: Seal cap kit



Table 15: Seal cap kit

Туре	Valve conn	ection size	Industrial pack [pcs]	Code no.
	[inch]	[mm]	iliuustiiai pack [pcs]	
GBC/GBCH 6s - 22s	1/4 – 7/8	6 – 22	6	009L7210
GBC/GBCH 28s - 35s	1 1/8 – 1 3/8	28 – 35	3	009L7211
GBC/GBCH 42s	1 5⁄8	42	3	009L7212

Figure 18: Bracket kit





# Shut-off ball valve, type GBC, GBCH and GBCT

Туре	Valve conr	nection size	Industrial week (was 1	Code no.
	[inch]	[mm]	Industrial pack [pcs.]	Code no.
GBC/GBCH 6s -16s	1/4 – 5/8	6 – 16	12	009G7084
GBC/GBCH 18s - 22s	3/4- 7/8	18 – 22	12	009G7085
GBC/GBCH 28s	1 1/8	28	10	009G7086
GBC/GBCH 35s	1 3/8	35	5	009G7087
GBC/GBCH 42s	1 5⁄8	42	4	009G7088

## NOTE:

The spare parts are only for GBC and GBCH. For GBCT spare parts, please consult Danfoss



# Certificates, declarations, and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

Some approvals may change over time. You can check the most current status at danfoss.com or contact your local Danfoss representative if you have any questions.



Туре	File name	Document type	Document topic	Approval authority
GBC, GBCH, GBCT	Д-DK.PA01.B.02567_19	EAC Declaration	Machinery & Equipment	EAC RU
GBC, GBCH, GBCT	Д-DК.БЛ08.В.02139_19	EAC Declaration	PED	EAC RU
GBC, GBCH	033F4001.AE	Manufacturers Declaration	PED	Danfoss
GBC, GBCH	033F4002.AE	EU Declaration	PED	Danfoss
GBCT	033F4003.AA	Manufacturers Declaration	PED	Danfoss
GBC, GBCH, GBCT	033F4006	Manufacturers Declaration	China RoHS	Danfoss
GBC, GBCH, GBCT	033F4010	Manufacturers Declaration	RoHS	Danfoss
GBCT	033F4013.AA	EU Declaration	PED	Danfoss
GBC, GBCH	UA.089. D. 00189-17	UA Declaration	PED	LLC CDC EURO TYSK
GBC, GBCH	UA.TR-089.0995-17	Pressure - Safety Certificate	PED	LLC CDC EURO TYSK
GBC, GBCH, GBCT	UL SA7200	Mechanical - Safety Certificate	UL	UL



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