TOTAL INGENIEROS S.A.C

VENTAS, PROYECTOS, SERVICIOS EN INGENIERIA Y SISTEMAS DE REFRIGERACION

Danfoss

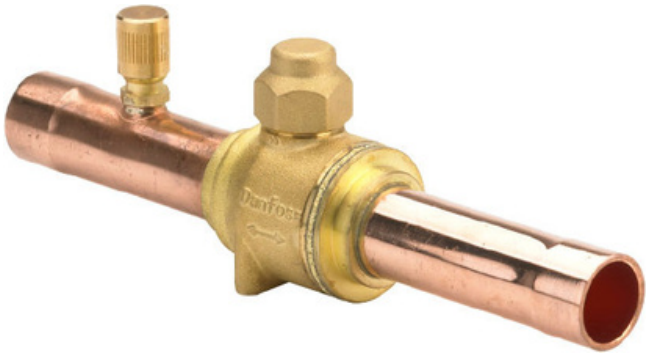


ENGINEERING TOMORROW

Data Sheet

Shut-off ball valve Type GBC and GBC E

Version 2



Danfoss shut-o ball valves, type GBC, are manually operated shut-o valves for refrigeration systems, in order to open and to shut o inner ow path by operating the valve spindle.

The GBC valves are used in liquid, suction and hot gas lines in refrigeration and air conditioning systems.

The GBC bi-directional ball valves can be delivered with or without external access port. The valves have one-piece wire seal cap to prevent unintentional cap removal or tampering between services.

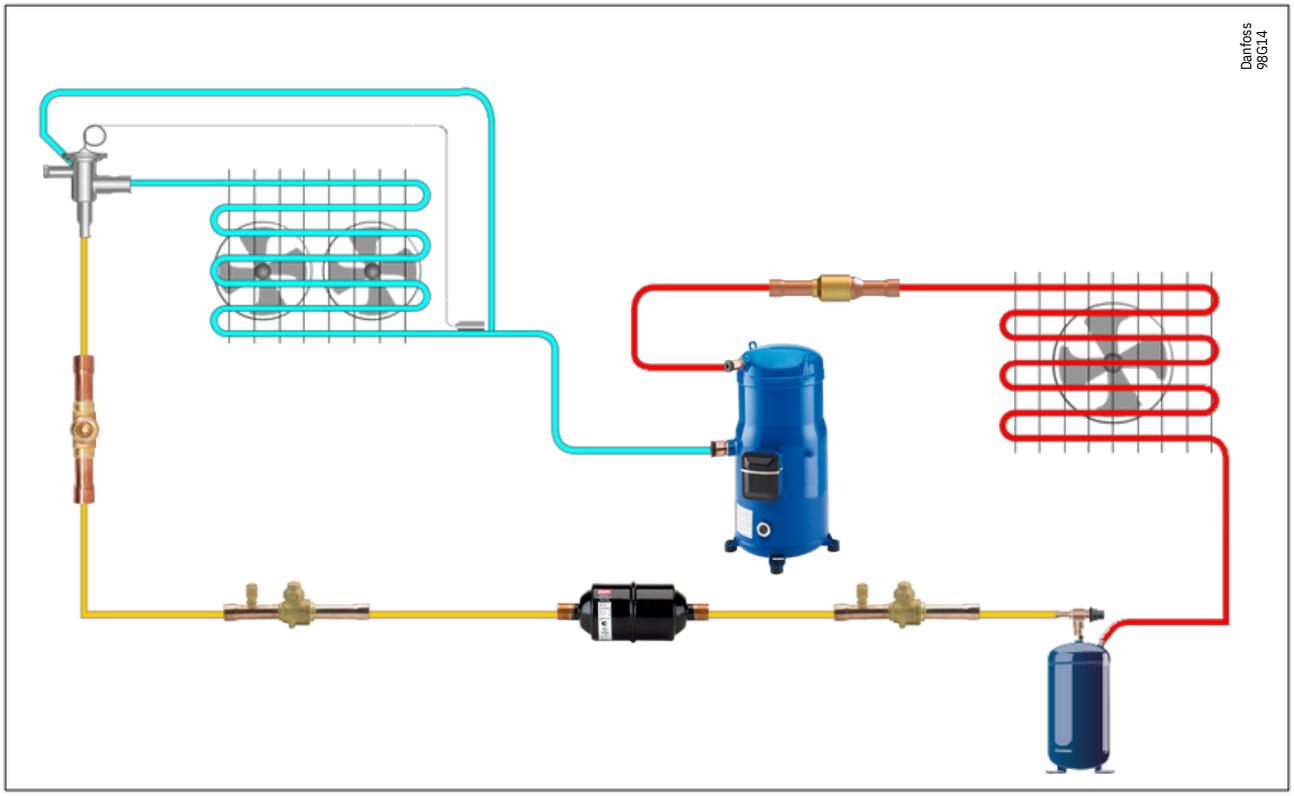
Features:

- ¼ turn from fully open to fully closed
- Rotation stops at fully open and fully closed positions
- Ball status indicator on spindle top indicating open or closed position
- Double O-ring stem seal design
- Customized brass material ensures consistent performance under aggressive environment
- Rupture proof, internally-loaded spindle design ensures safe operation under extreme pressures
- Bi-directional ow, valve orientation is unimpor tant
- Full port construction to match line size
- Drilled and tapped for panel mounting
- Versions with access port helps in reducing cost if service of the system is necessary
- One-piece seal cap for safety purpose complies with European Safety Directive EN 378 (Safety and environmental requirements)

Applications

Application

Typical applications for GBC valves are:
•Cold room
• Chiller
•Heat pump
•Transport refrigeration
Figure 1: Application Diagram



Media

Table 1: Refrigerants

Valve type	Refrigerants	Approval	Max. working pressure (PS/ MWP)	Media temperature range
GBC 6s-28s	R134a, R22/R407C, R404A/R507, R407A, R407F, R407H, R410A, R448A, R449A, R449B, R450A, R452A, R452B, R454A, R454B, R454C, R455A, R463A, R513A, R515B, R516A, R1234ze(E), R1234yf	PED, UL 207, EAC, UA, CRN	45 bar / 650 psig	-40 – 100 °C /-40 – 212 °F
GBC 35s-	R134a, R22/R407C, R404A/R507, R407A, R407F, R407H, R410A, R448A, R449A, R449B, R450A, R452A,R463A, R513A, R515B, R1234ze(E)			
79s GBC	R290, R32, R452B, R454A, R454B, R454C, R455A, R516A, R1234yf	UL 207, EAC, UA, CRN (Not PED approved)		
35s-42s	R32, R452B, R454A, R454B, R454C, R455A, R516A, R1234yf			
GBC 54s- GBC 6s E-42s E 79s	R134a, R22/R407C, R32, R404A/R507, R407A, R407F, R407H, R410A, R448A, R449A, R449B, R450A, R452A, R452B, R454A, R454B, R454C, R455A, R463A, R513A, R515B, R516A, R1234ze(E), R1234yf	PED, UL 207, EAC, UA	49 bar / 710 psig	-40 – 150 °C / -40 – 300 °F
GBC 54s E-79s E	R134a, R22/R407C, R32, R404A/R507, R407A, R407F, R407H, R410A, R448A, R449A, R449B, R450A, R452A, R452B, R454A, R454B, R454C, R455A, R463A, R513A, R515B, R516A, R1234ze(E), R1234yf			

NOTE:

-For GBC 42s/GBC 42s E, only the version of without access port can be used for R290.

-GBC 35s to 79s for ammable refrigerants are not PED approved.

Table 2: Refrigerant oil

Valve type	Refrigerant oil
GBC	POE,PVE,PAG,PAO;Mineral oils
GBC E	POE,PVE,PAG(Not compatible for Mineral oil and PAO)

NOTE:

1.For a complete list of approved refrigerants, visit http://store.danfoss.com/ and search for individual code numbers, where refrigerants are listed as part of product details.

2.This product is approved for R290, R32, R452B, R454A, R454B, R454C, R455A, R516A, R1234ze(E), R1234yf by ignition source assessment in accordance to standard EN ISO 80079-36.

3.GBC is only can be used in the temperature below 80 °C/176 °F for oil free application. For higher temperature for oil free application, please use GBC E.

4. If the application covered by UL 60335-2-89/40, please contact Danfoss for UL approval.

Product speci cation

Technical data

Table 3: Technical data

Technical data	GBC	GBC E
Max. working pressure	45 bar / 650 psig	49 bar / 710 psig
Media temperature range	-40 °C ~ +100°C / -40 °F ~ +212°F	-40 °C ~ +150°C / -40 °F ~ +300°F
Environmental transport/storage temperature and humidity	-40 – 65 °C /-40 – 150 °F Air humidity: RH≤95%	
Flow direction	Bi ow	

Identi cation

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

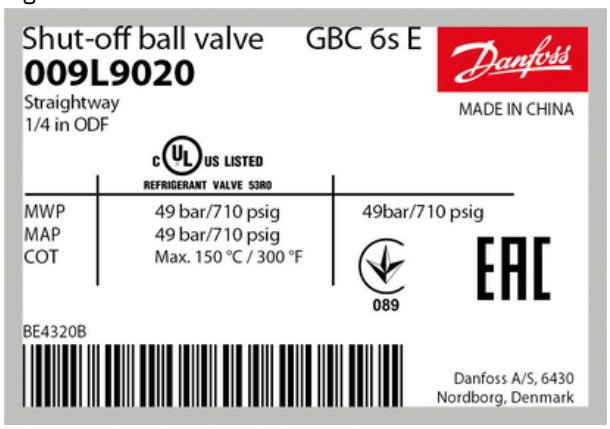


Figure 3: Product label

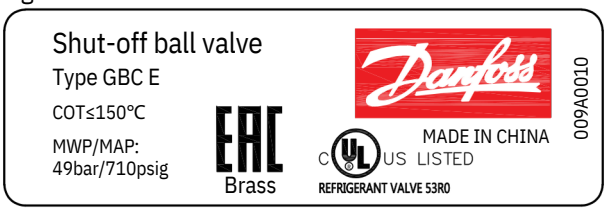


Table 4: Product and label text

Position	Inscription	Explanation
Box label; Product label	Shut-o ball valve	Product name
Box label Box label Box	GBC 6s E	Product type
label Box label Box	009L9020	Code number for ordering
label; Product label	Straightway	Direction
Box label	1/4 in ODF	Connection size and type
Box label; Product label	MWP/MAP: 49 bar/710 psig	Max. working pressure in bar and psig
Box label; Product label	BE4320B	Code for production place and time (BE = Wuqing, week 43, year 2020, weekday B = Tuesday)
Box label Box label;	COT Max.150 °C/300 °F	Max. temperature
Product label	MADE IN CHINA	Manufacturing site acc. to EN standards
	EAN code	Barcode for individual code no. identi cation according to EAN standard
	Additional information: Relevant appro-val authority logos	

Design and materials

The shut o valves with ball are bi ow manual valves capable of ensuring a minimum internal loss when closed and a low pressure drop when open. The GBC valves can be installed in liquid, suction and hot gas lines in refrigeration and air conditioning systems. The design of the ball valves guarantees the pressure balance with the valve closed, it allows two directions uid ow and prevents the danger of explosion and rejection of the operating spindle.

Direct ow gives maximum through- ow with minimum pressure drop across valve. The combination of laser-welded 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 4: Design and materials

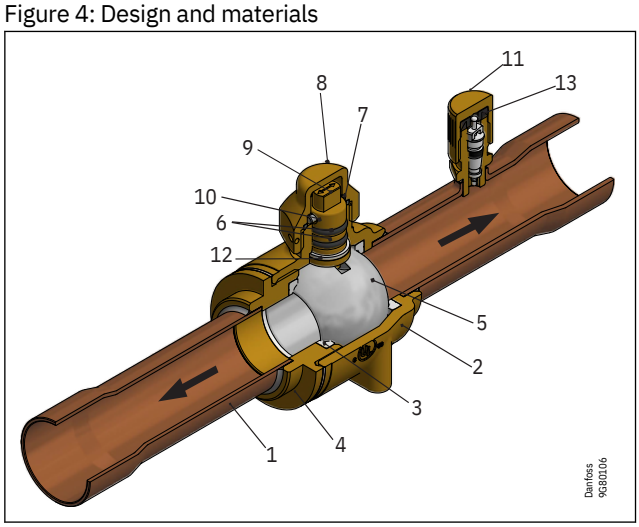


Table 5: Design and materials

Position	Description	Material
1	Connection tube Valve body	Copper Brass
2	Ball seat Valve tail Ball Double	PTFE Brass
3	O-ring seal in spindle Cap seal	Stainless steel CR
4	Seal cap Spindle Pin Access	rubber/EPDM
5	port cap Guide ring Schrader	PTFE Brass Brass
6	valve	Stainless steel
7		Brass PTFE
8		Stainless steel
9		
10		
11		
12		
13		

Dimensions

We have chosen to show dimensions of the major versions.

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

Weights also di er 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 5: GBC solder ODF/ODF

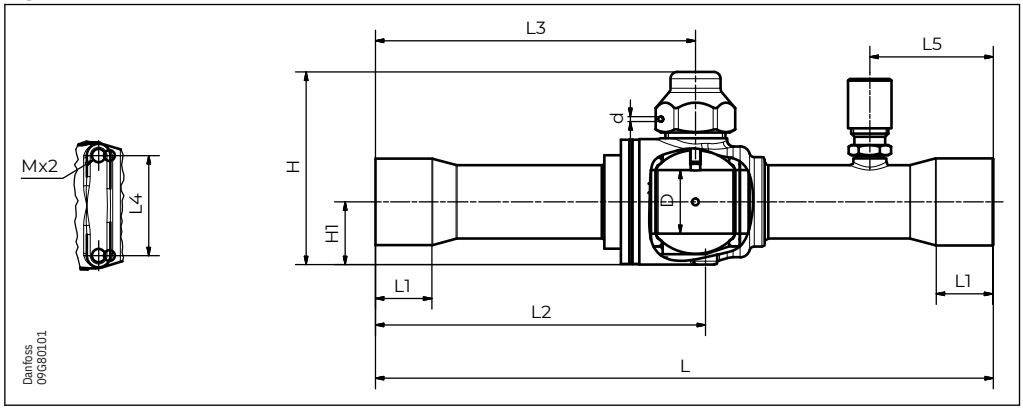


Table 6: GBC solder ODF/ODF, copper connections

Type	Size	Con-nec-tion	Connection tolerance	H	H1	L	L1	L2	L3	L4	L5	M	D	d	Weight	Code no.	
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	without access port	with ac-cess port
GBC 6s	1/4 in.	6.35	+0.065/+0.155	43	12	139	7	73	73	17	31	M3 × 0.5	11.1	1.5	0.1	009L7020	009L7050
												M4 × 0.7				009L9020	009L9050
	6 mm	6.00										M3 × 0.5				009L7030	009L7060
												M4 × 0.7				009L9030	009L9060
GBC 10s	3/8 in.	9.52		43	12	139	9	73	73	17	31	M3 × 0.5	11.1	1.5	0.1	009L7021	009L7051
												M4 × 0.7				009L9021	009L9051
	10 mm	10.00										M3 × 0.5				009L7031	009L7061
												M4 × 0.7				009L9031	009L9061
GBC 12s	1/2 in.	12.70		43	12	161	10	84	84	17	31	M3 × 0.5	11.1	1.5	0.1	009L7022	009L7052
												M4 × 0.7				009L9022	009L9052
	12 mm	12.00										M3 × 0.5				009L7032	009L7062
												M4 × 0.7				009L9032	009L9062
GBC 16s	5/8 in.			50	15	161	12	86	84	22	31	M4 × 0.7	14.0	1.5	0.2	009L7023	009L7053
	16 mm	16.00														009L9023	009L9053
GBC 18s	3/4 in.	19.05		58	19	185	14	99	96	30	37	M4 × 0.7	19.0	1.5	0.4	009L7024 009L9024	009L7054 009L9054
	18 mm	18.00														009L7035 009L9035	009L7065 009L9065
GBC 22s	7/8 in.	22.22	+0.075/+0.185	58	19	185	17	99	96	30	37	M4 × 0.7	19.0	1.5	0.4	009L7025	009L7055
	22 mm															009L9025	009L9055
GBC 28s	1 1/8 in.	28.58		80	25	208	20	112	108	38	44	M4 × 0.7	25.5	1.5	0.9	009L7026 009L9026	009L7056 009L9056
	28 mm	28.00														009L7033 009L9033	009L7063 009L9063
GBC 35s	1 3/8 in.	35.00	+0.09/+0.23	89	30	251	25	136	130	48	44	M6 × 1.0	32.0	1.5	1.4	009L7027	009L7057
	35 mm															009L9027	009L9057
GBC 42s	1 5/8 in.	41.28		110	35	281	29	151	145	55	56	M6 × 1.0	38.0	1.5	2.2	009L7028 009L9028	009L7058 009L9058
	42 mm	42.00														009L7034 009L9034	009L7064 009L9064
GBC 54s	2 1/8 in.	54.00		131	46	305	34	167	157	74	56	M6 × 1.0	50.0	1.5	4.2	009L7029	009L7059
	54 mm	54.00														009L9029	009L9059
GBC 67s	2 5/8 in.	66.70	+0.1/+0.33	149	55	343	38	188	172	84	72	M6 × 1.0	60.5	1.5	5.8	009L7959 009L9959	009L7960 009L9960
GBC 79s	3 1/8 in.	79.38		169	65	416	38	230	214	86	80	M6 × 1.0	73.5	1.5	9.1	009L7980 009L9980	009L7981 009L9981
GBC 67s RP	2 5/8 in.	66.68	+0.09/+0.29	131	46	305	37	167	157	74	56	M6 × 1.0	50.0	1.5	4.4	009L7036	009L7066
GBC 79s RP	3 1/8 in.	79.38		131	46	305	42	167	157	74	56	M6 × 1.0	50.0	1.5	4.5	009L7037	009L7067

RP: Reduced Port

The thread of access port : 7/16-20UNF

The thread of schrader valve: 5 V1 DIN7756/DIN7757

GBC solder ODF/ODM, copper connections

Figure 6: GBC solder ODF/ODM

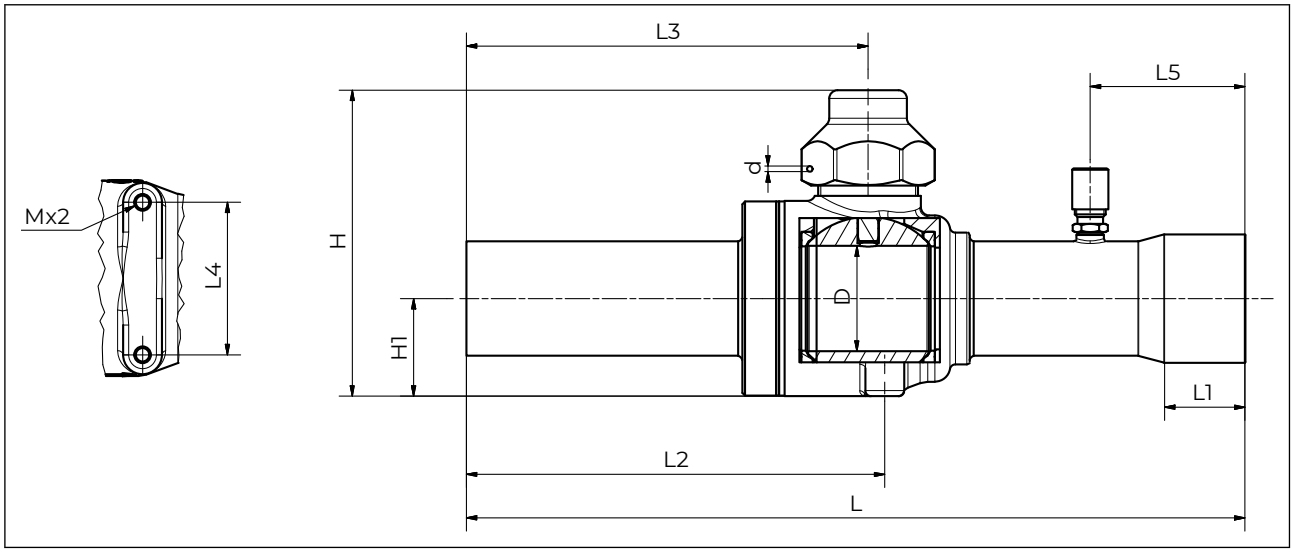


Table 7: GBC solder ODF/ODM, copper connections

Type	Size	Con-nec-tion	Connection tolerance	H	H1	L	L1	L2	L3	L4	L5	M	D	d	Weight	Code no.	
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[kg]	without access port	with access port
GBC 16s	5/8 in.	ODF: 16	ODF: +0.065/+0.155 ODM: -0.04/+0.04	50	15	161	12	86	84	22	31	M4 × 0.7	14.0	1.5	0	009L7043	009L7084
	16 mm ODM: 15.88																
GBC 22s	7/8 in. ODF: 22.22	22 ODM: 22	ODF: +0.075/+0.185 ODM: -0.08/+0.08	58	19	201	17	86	83	30	-	M4 × 0.7	19	2	0	009L7000	-
GBC 28s	1 1/8 in.	28.58	ODF: +0.075/+0.185 ODM: -0.12/+0.12	79	25	228	20	112	108	38	-	M4 × 0.7	25.5	1.5	0.9	009L7001	-
	1 1/8 in.			80	25	208	20	112	108	38	44	M4 × 0.7	25.5	1.5	0.9	-	009L7097
GBC 35s	1 3/8 in.	35.00	ODF: +0.09/+0.23 ODM: -0.15/+0.15	89	30	280	25	136	130	48	-	M6 × 1.0	32.0	1.5	1	009L7002	-
	35 mm																
	1 3/8 in.			89	30	251	25	136	130	48	44	M6 × 1.0	32.0	1.5	1	-	009L7098
	35 mm																
GBC 42s	1 5/8 in.	41.28		110	35	295	29	151	145	55	-	M6 × 1.0	38.0	1.5	2.2	009L7003	-
				110	35	281	29	151	145	55	56	M6 × 1.0	38.0	1.5	2.2	-	009L7099
GBC 54s	2 1/8 in.	54.00	ODF: +0.09/+0.23 ODM: -0.1/+0.1	131	46	305	34	167	157	74	56	M6 × 1.0	50.0	1.5	4	-	009L7069
	54 mm											M6 × 1.0					
GBC 67s	2 5/8 in.	66.70	ODF: +0.1/+0.33 ODM: -0.16/+0.07	149	55	346	38	191	175	84	72	M6 × 1.0	60.5	1.5	5.8	-	009L7958
GBC 79s	3 1/8 in.	79.38		168	65	406	38	220	204	86	80		73.5	1.5	9.1	009L7969	009L7970

The thread of access port ： 7/16-20UNF
The thread of schrader valve: 5 V1 DIN7756/DIN7757

GBC solder ODM/ODM, copper connections

Figure 7: GBC solder ODM/ODM, copper connections

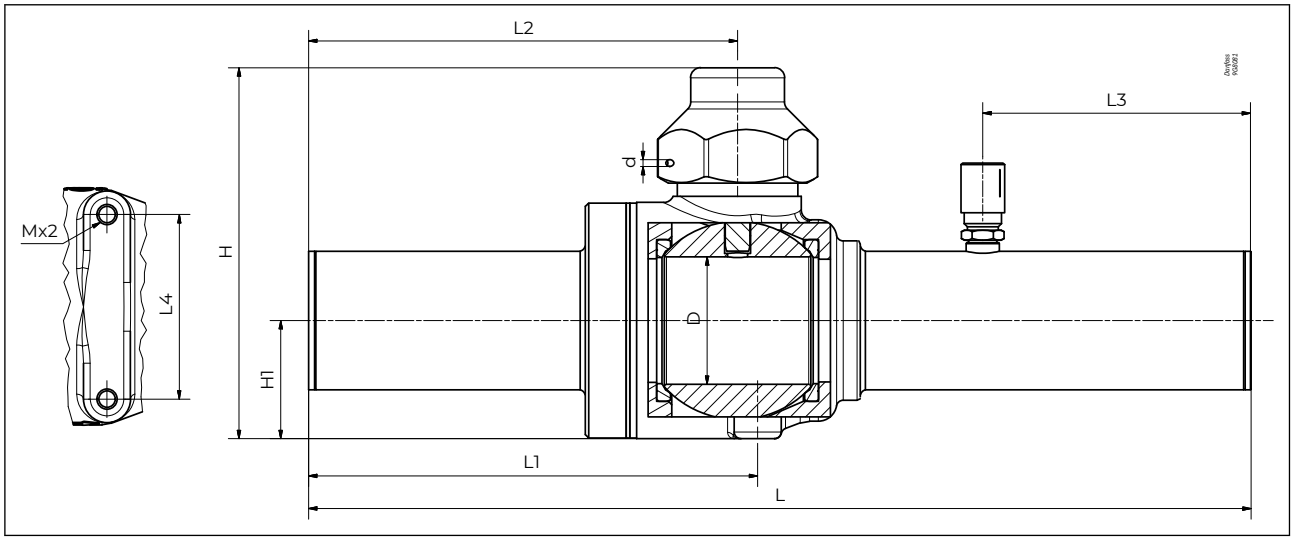


Table 8: GBC solder ODM/ODM, copper connections

Type	Size	Con-nec-tion	Connection tolerance	H	H1	L	L1	L2	L3	L4	M	D	d	Weight	Code no.	
		[mm	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[kg]	without access port	with access port
GBC	1		-0.12/+0.05	79	2	20	10	10	56	3	M4x0.7	25.	1.	0.9	-	009L7100
28s	1/8	28.58	-0.15/+0.06	110	5	8	4	0	80	8	M6x1.0	5	5	2.4	-	009L7101
GBC	1	41.28		131	3	28	13	12	81	5	M6x1.0	38.	1.	4.3	-	009L7102
42s	5/8	54.00	-0.16/+0.07	149	5	1	4	8	78	5	M6x1.0	0	5	5.6	-	009L7103
GBC	2	66.70		168	4	30	15	14	106	7	M6x1.0	50.	1.	9.0	-	009L7104
54s	1/8	79.38			6	5	1	1		4		0	5			
GBC	2				5	30	15	13		8		60.	1.			
67s	5/8				5	5	3	7		4		5	5			
GBC	3				6	41	22	20		8		73.	1.			
76s	1/8				5	0	0	4		6		5	5			

The thread of access port ： 7/16-20UNF

The thread of schrader valve: 5 V1 DIN7756/DIN7757

Connections

Standard GBC, GBC E versions can be provided with straightway, connection types solder ODF/ODF or ODF/ODM or ODM/ODM in a wide variety of connection sizes. Solder versions are with extended ends copper connections.

For details on availability, see Ordering.

Connection diagrams

Type	Inlet	Outlet	connec tions	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 54 mmx 54 mm	¼ x ¼ in ⅜ x ⅜ in ½ x ½ in ⅝ x ⅝ in ¾ x ¾ in ⅞ x ⅞ in 1 ⅛ x 1 ⅛ in 1 ⅜ x 1 ⅜ in 1 ⅝ x 1 ⅝ in 2 ⅛ x 2 ⅛ in 2 ⅝ x 2 ⅝ in 3 ⅛ x 3 ⅛ in
GBC	Solder ODF	Solder ODM	16 mm x 16 mm 22 mm x 22 mm 35 mm x 35 mm 54 mm x 54 mm	⅝ in x ⅝ in ⅞ x ⅞ in 1 ⅛ x 1 ⅛ in 1 ⅜ x 1 ⅜ in 1 ⅝ x 1 ⅝ in 2 ⅛ x 2 ⅛ in 2 ⅝ x 2 ⅝ in 3 ⅛ x 3 ⅛ in 1 ⅛ x 1 ⅛ in
GBC	Solder ODM	Solder ODM	54 mm x 54 mm	1 ⅝ x 1 ⅝ in 2 ⅛ x 2 ⅛ in 2 ⅝ x 2 ⅝ in 3 ⅛ x 3 ⅛ in ¼ x ¼ in
GBC E	Solder ODF	Solder ODF	6 x 6 mm 10 x 10 mm 12 x 12 mm 16 x 16 mm 18 x 18 mm 22 x 22 mm 28 x 28 mm 35 x 35 mm 42 x 42 mm 54 x 54 mm	⅜ x ⅜ in ½ x ½ in ⅝ x ⅝ in ¾ x ¾ in ⅞ x ⅞ in 1 ⅛ x 1 ⅛ in 1 ⅜ x 1 ⅜ in 1 ⅝ x 1 ⅝ in 2 ⅛ x 2 ⅛ in 2 ⅝ x 2 ⅝ in 3 ⅛ x 3 ⅛ in

Ordering

GBC/GBC E code numbers described in this data sheet are standard code numbers, i.e. made to stock.
Besides code numbers made to stock GBC/GBC E 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 8: GBC without access port, solder ODF/ODF

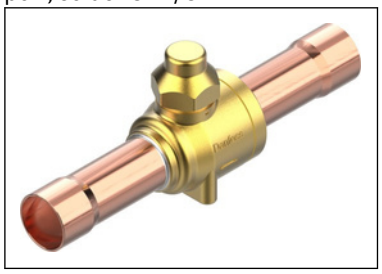


Figure 9: GBC with access port, solder ODF/ODF

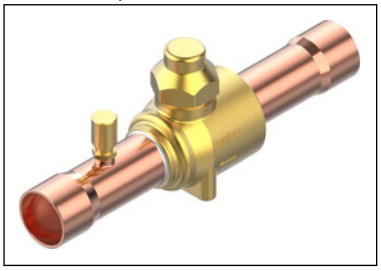


Table 9: GBC solderODF/ODF, copper connections

Type	Code no.		Connection		Kv(1)	Cv(1)	Multi pack	PED category		Max. working pressure PS/MWP	Media temperature range
	without access port	with access port	[in.]	[mm]	[m3/h]	[gal/min]	Qty/ pack	Fluid Group 1(2)	Fluid Group 2(3)		
GBC 6s	009L7020	009L7050	¼	-	1.83	2.12	30	Art. 4.3	Art. 4.3	45 bar / 650 psig	-40 °C ~ +100 °C / -40 °F ~ +212 °F
		009L7060	-	6	1.83	2.12	30				
GBC 10s	009L7030	009L7051	⅜	-	8.04	9.29	30				
		009L7061	-	10	8.04	9.29	30				
GBC 12s	009L7021	009L7052	½	-	13.17	15.22	30				
		009L7062	-	12	13.17	15.22	30				
GBC 16s	009L7031	009L7053	⅝	16	15.66	18.10	25				
		009L7054	¾	-	21.93	25.35	25				
GBC 18s	009L7022	009L7065	-	18	21.93	25.35	25				
		009L7055	⅞	22	33.34	38.54	25				
GBC 22s	009L7032	009L7056		-	62.25	71.96	5				
		009L7063	1⅛	28	62.25	71.96	5				
GBC 28s	009L7023	009L7057	-	35	92.76	107.23	5				
		009L7058	1⅜	-	134.76	155.78	4	-			
GBC 35s	009L7024	009L7064	1⅝	42	134.76	155.78	4				
		009L7059	-	54	240.11	277.57	2				
GBC 42s	009L7035	009L7960	2⅛	-	367.38	424.69	1				
		009L7066	2⅝	-	203.12	234.81	2				
GBC 54s	009L7025	009L7981	2⅝	-	528.87	611.37	1				
		009L7067	3⅛	-	171.89	198.70	2				
GBC 67s	009L7026		3⅛								
GBC 67s RP	009L7036										
GBC 79s	009L7027										
GBC 79s RP	009L7037										
	009L7028										
	009L7034										
	009L7029										
	009L7959										
	009L7036										

(1) Calculated based on uid dynamic equations. RP: Reduced Port
(2) Fluid group 1 (ammable or toxic refrigerants)
(3) Fluid group 2 (non-toxic and non- ammable refrigerants)

GBC solder ODF/ODM, copper connections

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

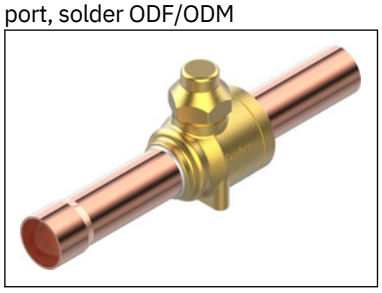


Figure 11: GBC with access port, solder ODF/ODM

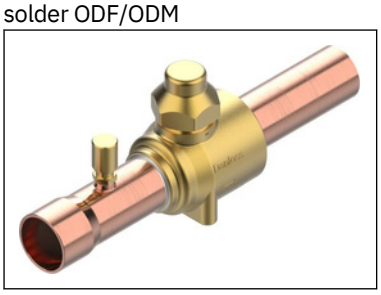


Table 10: GBC solder ODF/ODM, copper connections

Type	Code no.		Connection		Kv(1)	Cv(1)	Multi pack	PED category		Max. working pressure PS/MWP	Media temperature range
	without access port	with access port	[in.]	[mm]	[m3/h]	[gal/min]	Qty/ pack	Fluid Group 1(2)	Fluid Group 2(3)		
GBC 16s	009L7043 009L7000	009L7084 -	5/8	16	15.66	18.10	25	Art. 4.3	Art. 4.3	45 bar / 650 psig	-40 °C ~ +100 °C / -40 °F ~ +212 °F
GBC 22s	009L7001	009L7097	7/8	22	33.34	38.54	5				
GBC 28s	009L7002	009L7098	1 1/8	-	62.25	71.96	5				
GBC 35s	009L7003	009L7099	1 3/8	35	92.76	107.23	7002: 4 7098: 5	-			
GBC 42s	-	009L7069	1 5/8	-	134.76	155.78	4		Cat. I		
GBC 54s	-	009L7958	2 1/8	54	240.11	277.57	2				
GBC 67s	009L7969	009L7970	2 5/8	-	367.38	424.69	1				
GBC 79s			3 1/8	-	528.87	611.37	1				

(1) Calculated based on uid dynamic equations.
(2) Fluid group 1 (ammable or toxic refrigerants)
(3) Fluid group 2 (non-toxic and non- ammable refrigerants)

GBC solder ODM/ODM, copper connections

Figure 12: GBC with access port,solder ODM/ODM

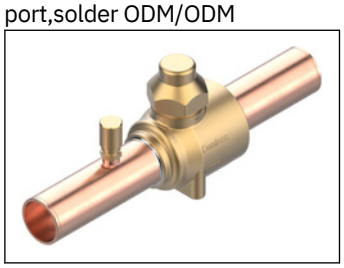


Table 11: GBC solder ODM/ODM, copper connections

Type	Code no.		Connection		Kv(1)	Cv(1)	Multi pack	PED category		Max. working pressure PS/MWP	Media temperature range
	without access port	with access port	[in.]	[mm]	[m3/h]	[gal/min]	Qty/ pack	Fluid Group 1(2)	Fluid Group 2(3)		
GBC 16s	-	009L7100	1	-	62.25	71.96	5	Art. 4.3	Art. 4.3	45 bar / 650 psig	-40 °C ~ +100 °C / -40 °F ~ +212 °F
GBC 22s	-	009L7101	1/8	-	134.76	155.78	4	-	Cat. I		
GBC 28s	-	009L7102	1	54	240.11	277.57	2				
GBC 35s	-	009L7103	5/8	-	367.38	424.69	1				
GBC 42s	-	009L7104	2	-	528.87	611.37	1				
GBC 54s			1/8								
GBC 67s			2								
GBC 79s			5/8								
			3								
			1/8								

(1) Calculated based on uid dynamic equations.
(2) Fluid group 1 (ammable or toxic refrigerants)
(3) Fluid group 2 (non-toxic and non- ammable refrigerants)

GBC E solder ODF/ODF, copper connections

Figure 13: GBC E without access port, solder ODF/ODF

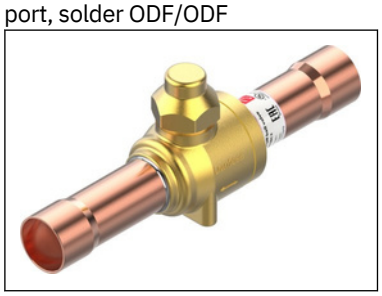


Figure 14: GBC E with access port, solder ODF/ODF

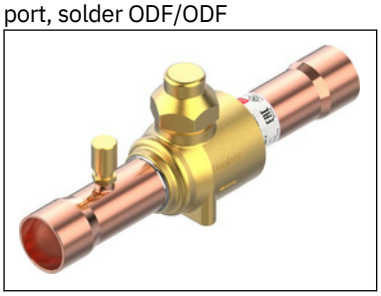


Table 12: GBC E solder ODF/ODF, copper connections

Type	Code no.		Connection		Kv(1)	Cv(1)	Multi pack	PED category		Max. working pressure PS/MWP	Media temperature range
	without access port	with access port	[in.]	[mm]	[m3/h]	[gal/min]	Qty/ pack	Fluid Group 1(2)	Fluid Group 2(3)		
GBC 6s E	009L9020	009L9050	1/4	-	1.83	2.12	25	Art. 4.3	Art. 4.3	49 bar / 710 psig	-40 °C ~ +150 °C / -40 °F ~ +300 °F
		009L9060	-	6	1.83	2.12	25				
GBC 10s E	009L9030	009L9051	3/8	-	8.04	9.29	25				
		009L9061	-	10	8.04	9.29	25				
GBC 12s E	009L9021	009L9052	1/2	-	13.17	15.22	25				
		009L9062	-	12	13.17	15.22	25				
GBC 16s E	009L9031	009L9053	5/8	16	15.66	18.10	25				
		009L9054	3/4	-	21.93	25.35	25				
GBC 18s E	009L9022	009L9065	-	18	21.93	25.35	25				
		009L9055	7/8	22	33.34	38.54	25				
GBC 22s E	009L9032	009L9056	1 1/8	-	62.25	71.96	5				
		009L9063	-	28	62.25	71.96	5				
GBC 28s E	009L9023	009L9057	1 3/8	35	92.76	107.23	5				
		009L9058	1 5/8	-	134.76	155.78	4	Cat. II	Cat. I		
GBC 35s E	009L9024	009L9064	-	42	134.76	155.78	4				
		009L9059	2 1/8	54	240.11	277.57	2				
GBC 42s E	009L9035	009L9960	2 5/8	-	367.38	424.69	1				
GBC 54s E	009L9025	009L9981	3 1/8	-	528.87	611.37	1				
GBC 67s E	009L9026										
GBC 79s E	009L9027										
	009L9028										
	009L9034										
	009L9029										
	009L9959										
	009L9980										

(1) Calculated based on uid dynamic equations.
(2) Fluid group 1 (ammable or toxic refrigerants)
(3) Fluid group 2 (non-toxic and non- ammable refrigerants)

Spare parts

Figure 15: Seal cap kit



Table 13: Seal cap kit

Type	Valve connection size		Industrial pack (pcs)	Code no. for 009Gxxxx series	Code no. for 009Lxxxx 45 bar series	Code no. for 009Lxxxx 49 bar series
	[in]	[mm]				
GBC 6s - GBC 12s	¼ – ½	6 – 12	6	009G7210	009L7209	009L7210
GBC 16s - GBC 22s	⅝ – 7⁄8	16 – 22	6		009L7210	
GBC 28s - GBC 35s	1 ⅛ – 1 3⁄8	28 – 35	4	009G7211	/	
			3	/	009L7211	
GBC 42s - GBC 79s	1 ⅝ – 3 ⅛	42 – 79	4	009G7212	/	
			3	/	009L7212	

Figure 16: Bracket kit



Table 14: Bracket kit

Type	Valve connection size		Industrial pack (pcs)	Code no. for 009Gxxxx series	Code no. for 009Lxxxx 45 bar series	Code no. for 009Lxxxx 49 bar series
	[in]	[mm]				
GBC 6s - GBC 12s	¼ – ½	6 – 12	12	009G7084	009G7089	009G7084
GBC 16s GBC 18s	⅝	16	12		009G7084	
- GBC 22s GBC	¾ – 7⁄8	18 – 22	12		009G7085	
28s GBC 35s GBC	1 1⁄8	28	10		009G7086	
42s	1 3⁄8	35	5		009G7087	
	1 5⁄8	42	4		009G7088	

Figure 17: Schrader valve



Table 15: Schrader valve

Type	Industrial pack [pcs.]	Code no.
GBC, GBC E	10	009L7213

Certi cates, declarations, and approvals

The list contains all certi cates, 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.



Table 16: Certi cates, declarations, and approvals

File name	Document type	Document topic	Approval authority
EAC RU Д-DK.PA01.B.02567_19	EAC Declaration	EAC	EAC - Eurasian Customs Union
EAC RU Д-DK.БЛ08.B.02139_19	EAC Declaration	EAC	EAC - Eurasian Customs Union
033F4001	Manufacturers Declaration	PED RoHS	Danfoss
033F4002	EU Declaration UK Declaration	PED UKCA	Danfoss
033F4006	Manufacturers Declaration	China RoHS	Danfoss
033F4017	Manufacturers Declaration	EN ISO 14903	Danfoss
UA.TR.089.1015.04-22	Pressure - Safety Certi cate	UA	LLC CDC EURO TYSK - Ukraine
UL SA7200	Mechanical - Safety Certi cate	UL 207	UL
TSSA CRN 0C24058.5267890TNY	Pressure Safety Certi cate	CRN(only for GBC 6s~67s)	TSSA-Canada

NOTE:

Type GBC E products don’t have CRN approval.