

New improved ball valves Type GBC

Maximum flow in open position – maximum tightness in closed position

Danfoss proudly presents the newly designed GBC ball valves. Ball valves are manually operated shut-off valves suitable for bi-directional flow. The design is based on years of experience. As a leading manufacturer of a full program of refrigeration components and systems, Danfoss is able to transfer this knowledge from one product to another.

The new valve concept includes a high precision laser welding ensuring both a strong and a light slimline valve body design. Both the design, joining, and choice of the sealing material enables the ball valves to meet the most demanding requirements, e.g. high working pressure, when operating with R410A. The valves give maximum flow in the fully open position and are designed for operation within a large temperature range without problems occurring as a result of liquid being trapped internally. The cap of the GBC valves can also be sealed according to EN 378.



GBC: Excellent mounting and service

GBC ball valves are manually operated shut-off valves suitable for bi-directional flow. Ball valves are used in liquid, suction and hot gas lines in refrigeration, freezing 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.

Advantages

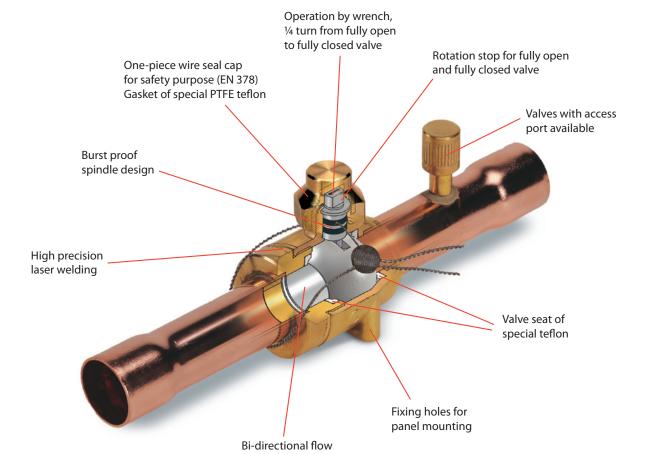
- Full flow with minimum pressure drop.
- Bi-directional flow, i.e. valve orientation is unimportant.
- Slimline design ensures easy operational handling.
- Burst proof spindle design prevents liquid from being trapped internally.
- Valve seat of special teflon to secure maximum tightness and a long lifetime.
- The available access port saves money if service at the system is necessary.

Facts

- GBC can be used for all fluorinated refrigerants (CFC, HCFC and HFC).
- Temperature range:
 -40 to +150°C (-40 to +300°F).
- Max. working pressure (PS/MWP) 45 bar (650 psig).
- Test pressure: 65 bar (940 psig).
- Approvals: UL, CSA and CE.

Features

- High precision laser welding ensuring both a strong and a light slimline valve body design.
- Double spindle o-ring seal.
- Valve seat of special teflon.
- Valves available with and without access port.
- One-piece wire seal cap solution for safety purpose (complies with the European Safety Directive EN 378).
- Operation by wrench, ¼ turn from fully open to fully closed valve.
- Rotation stop for fully open and fully closed valve.
- Ball status indicator on spindle top indicating open or closed position.
- Fixing holes for panel mounting.



Technical data and ordering

Standard valve

		Туре	Solder ODF connection		Solder ODF connection		K _v value ¹)
			in.	Code no.2)	mm	Code no.2)	m³/h
Standard GBC valve	097020	GBC 6s	1/4	009G7020	6	009G7030	2.0
	097021	GBC 10s	3/8	009G7021	10	009G7031	5.7
	097022	GBC 12s	1/2	009G7022	12	009G7032	10.6
	097023	GBC 16s	5/8	009G7023	16	009G7023	14.1
	_097024	GBC 18s	3/4	009G7024	18	009G7035	20.4
	097025	GBC 22s	⁷ / ₈	009G7025	22	009G7025	28.2
	097026	GBC 28s	11/8	009G7026	28	009G7033	52.0
	097027	GBC 35s	13/8	009G7027	35	009G7027	80.9
	097028	GBC 42s	15/8	009G7028	42	009G7034	121
	097029	GBC 54s	21/8	009G7029	54	009G7029	225
	097036	GBC 67s	25/8	009G7036			246
	097037	GBC 79s	31/8	009G7037			223

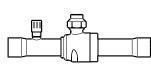
Valve with access port

Туре	Solder ODF	connection	Solder ODF	K _v value ¹)	
	in.	Code no. ²)	mm	Code no. ²)	m³/h
GBC 6s	1/4	009G7050	6	009G7060	2.0
GBC 10s	3/8	009G7051	10	009G7061	5.7
GBC 12s	1/2	009G7052	12	009G7062	10.6
GBC 16s	5/8	009G7053	16	009G7053	14.1
GBC 18s	3/4	009G7054	18	009G7065	20.4
GBC 22s	7/8	009G7055	22	009G7055	28.2
GBC 28s	11/8	009G7056	28	009G7063	52.0
GBC 35s	13/8	009G7057	35	009G7057	80.9
GBC 42s	15/8	009G7058	42	009G7064	121
GBC 54s	21/8	009G7059	54	009G7059	225
GBC 67s	25/8	009G7066			246
GBC 79s	31/8	009G7067			223



CFD calculated values (Computational Fluid Dynamics)
 Code numbers in bold are normally on stock and a shorter delivery time can therefore be expected.





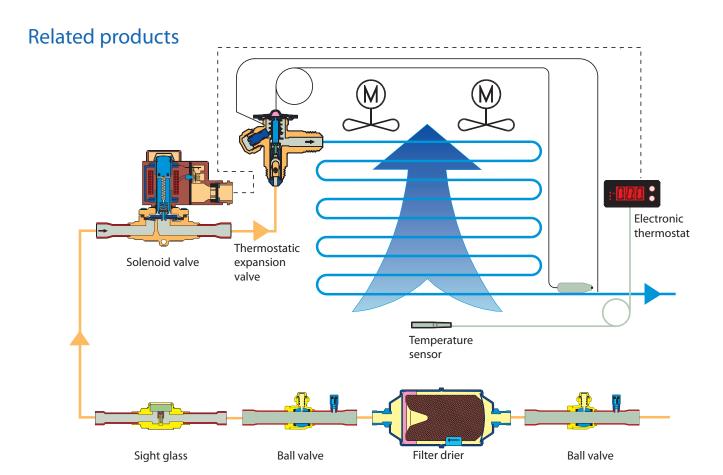
GBC valve with access port



Quality in everything we do

GBC ball valves are part of the Danfoss line components program which covers a wide range of components used in refrigeration systems. Our production utilises state-of-the-art processes and every product is thoroughly tested in accordance with the most demanding standards.

If the component you are looking for is not mentioned in this leaflet or if you have special requirements, Danfoss partner wholesalers or our local Danfoss team can offer you help and guidance and will do their utmost to fulfill your needs.



The Danfoss line components programme











Filter driers

Sight glasses

Shut-off valves

Check valves

Solder adapters

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