

Installation guide

# Shut-off ball valve

## Type GBCH 6s to GBCH 42s

009R8516

**Refrigerant:**  
R744 (CO<sub>2</sub>)

**Temperature range:**  
-40 °C – 100 °C / -40 °F – 212 °F

**Max. working pressure:**

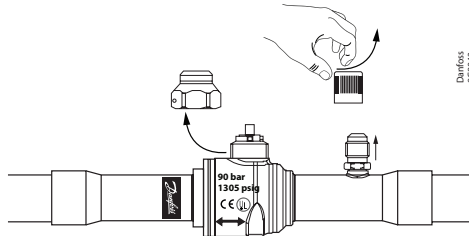
GBCH 6s - 28s: PS/MWP = 90 bar / 1305 psig  
GBCH 35s - 42s: PS/MWP = 75 bar / 1085 psig

009R8516

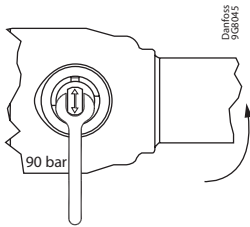


**Warning:** Applicable to all common non-flammable refrigerants, excluding R717 and to noncorrosive gases/liquids dependent on sealing material compatibility. The design pressure shall not be less than the value outlined in Section 9.2 of ANSI/ ASHRAE 15 for the refrigerant used in the system. Only authorized persons are allowed to operate this valve, as closing can cause build-up of excessive pressure in the system. For the application use with R744 as part of a secondary loop or cascade system should refer to the datasheet for more attentions.

Remove cap and access cap (if present)

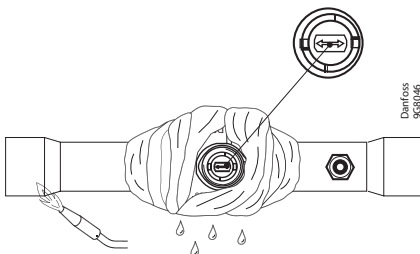


Opening valve

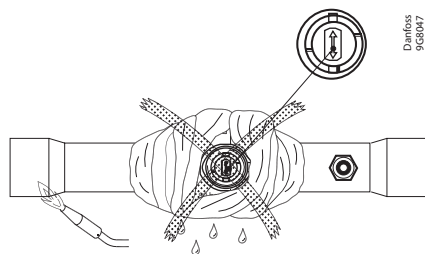


Valve size	Max. Torque	
	Nm	ft-lbs
6s - 22s	7	5.2
28s	26	19.2
35s	27	19.9
42s	48	35.4

OPEN Position



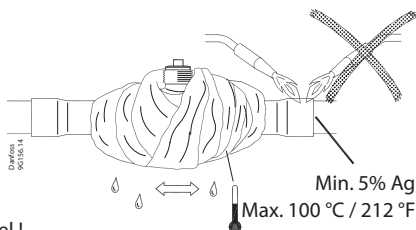
CLOSED Position



## Brazing (Copper and Copper alloy)



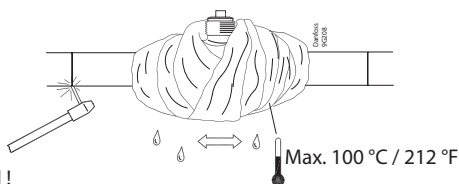
Wet cloth must cover the label !



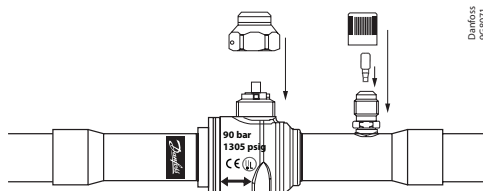
## Welding (stainless steel)



Wet cloth must cover the label !

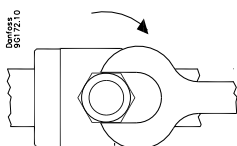


## Install Schrader valve (if present) and cap



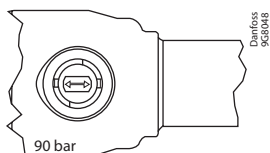
Install Schrader valve with approx. torque  
0.3 Nm / 0.2 ft-lbs

## Tighten cap



## Tighten the cap with approx. torque

Valve size	Max. Torque	
	Nm	ft-lbs
6s - 22s	15	11.0
28s - 35s	20	14.8
42s	32	23.6



Fully closed



Fully open

