

Access valves



Access valves

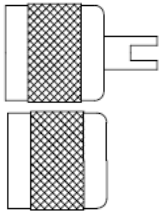


Access valves



Ordering

(continued)



Brass caps for access valves

Part number	Thread	Tightening torque	Notes
	ANSI/ASME B1.1 int thread (female)		
CAP-02	7/16" - 20 UNF	Hand tight	With wrench for internal mechanism.
CAP-03	7/16" - 20 UNF	Hand tight	Without wrench for internal mechanism.

Note: Caps are made in nickel-plated brass and are supplied with an internally pre-assembled gasket (not o-ring).

Internal mechanisms



Part number	Temperature range	Maximum working pressure, PS	Tightening torque
	°C (°F)	bar (psi)	Nm (lbf·ft)
MC-02	-40 ÷ +100 (-40 ÷ +212) Pick 30sec: +130 (+266)	Static: 140 (2 030) Operating: 60 (870)	0,4 ÷ 0,5 (3.5 ÷ 4.4)
MC-04	-40 ÷ +150 (-40 ÷ +300)	Static: 140 (2 030) Operating: 60 (870)	0,4 ÷ 0,5 (3.5 ÷ 4.4)
MC-05	-40 ÷ +100 (-40 ÷ +212) Pick 30sec: +130 (+266)	Static: 40 (580) Operating: 28 (406)	0,4 ÷ 0,5 (3.5 ÷ 4.4)
MC-06	-35 ÷ +100 (-31 ÷ +212) Pick 30sec: +125 (257)	Static: 40 (580) Operating: 28 (406)	0,3 ÷ 0,35 (2.6 ÷ 3.1)

Note: Internal mechanisms can be supplied pre-assembled into valves and access fittings, upon request.



Recommended fitting conditions

To prevent damage to the mechanism, remove the same before brazing.

Pressure resistance

Operating pressure is the maximum pressure under which the core plunger can be operated without being deteriorated during the opening-closing movement, while **static pressure** is the maximum pressure under which the mechanism can safely still in the closed position during its life. It may be called also *Working pressure*.

Refrigerants compatibility

All IGLOO internal mechanisms are suitable for refrigerants HCFC, HFC and R744 (CO₂). Mechanisms MC-02 and MC-04 are suitable also for applications up to 140bar (2 030psi).

Lubricants compatibility

All IGLOO internal mechanisms are suitable for lubricants PAG, POE and MO (mineral oil).

Typical applications

MC-02 is the latest design, highly recommended for all the most typical applications due to its quality/price ratio. External seal: PTFE, Internal seal: CR.

MC-04 is recommended for automotive A/C (due to its chemical resistance to fluids commonly used into cars) and for applications where high-temperature resistance is a key factor. External seal: PTFE, Internal seal: HNBR.

MC-05 and **MC-06** are the cheapest and the most commonly used mechanisms for a number of applications in commercial refrigeration and air-conditioning:

- **MC-05** has an external spring, and consequently an higher flow-rate. External seal: PTFE, Internal seal: CR.

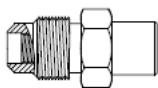
- **MC-06** has an internal spring, and consequently easier/stronger to handle. External seal: PTFE, Internal seal: CR.

Straight access fittings

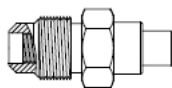
Part number	Flare conn. SAE J513 Thread ANSI/ASME B1.1 with mechanism seat		IDS Connections size of the internal diameter of the copper tube to be brazed		ODF Connections (aka ODS) size of the external diameter of the copper tube to be brazed		Threaded Connection withouth mechanism seat
	ext thread (male)	ext flare (male)	mm	inch	mm	inch	
UC-01	7/16" - 20 UNF	1/4"	-	3/8" (9,52mm)	6mm	-	-
UC-02	7/16" - 20 UNF	1/4"	-	-	-	-	7/16" - 20 UNF ext Flare 1/4" (male)
UC-03	7/16" - 20 UNF	1/4"	8mm 10mm	-	6mm	-	-
UC-4A	7/16" - 20 UNF	1/4"	-	-	-	-	NPT 1/8" ext (male)
UC-4B	7/16" - 20 UNF	1/4"	-	-	-	-	NPT 1/4" ext (male)
UC-4C	7/16" - 20 UNF	1/4"	-	-	-	-	NPT 3/8" ext (male)
UC-05	7/16" - 20 UNF	1/4"	8mm	1/4" (6,35mm) 3/8" (9,52mm)	5mm	-	-
UC-06	7/16" - 20 UNF	1/4"	6mm	-	-	-	-
UC-07	1/2" - 20 UNF	5/16"	7mm	3/8" (9,52mm)	-	-	-
UC-08	1/2" - 20 UNF	5/16"	6mm	3/8" (9,52mm)	-	-	-
UC-09	7/16" - 20 UNF	1/4"	-	3/8" (9,52mm)	-	1/4" (6,35mm)	-
UC-10	7/16" - 20 UNF	1/4"	-	-	-	-	7/16" - 20 UNF int Flare 1/4" (female)

Part number	Flare conn. SAE J513 Thread ANSI/ASME B1.1 with mechanism seat	Copper tube	
		External diameter	Lengths
UC-01X50	7/16" - 20 UNF ext flare 1/4" (male)	6mm	Tube length 50mm (2") Total length 76mm (3")
UC-01X100	7/16" - 20 UNF ext flare 1/4" (male)	6mm	Tube length 100mm (4") Total length 126mm (5")

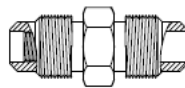
Note: All the access fittings can be supplied with a brazed copper tube of any length, internal mechanism and/or cap pre-assembled.



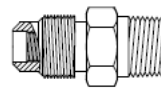
UC-01
UC-06
UC-09



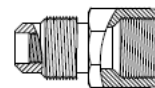
UC-03
UC-05
UC-07
UC-08



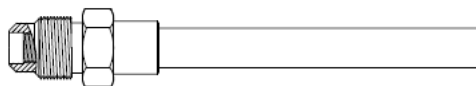
UC-02



UC-4A
UC-4B
UC-4C



UC-10



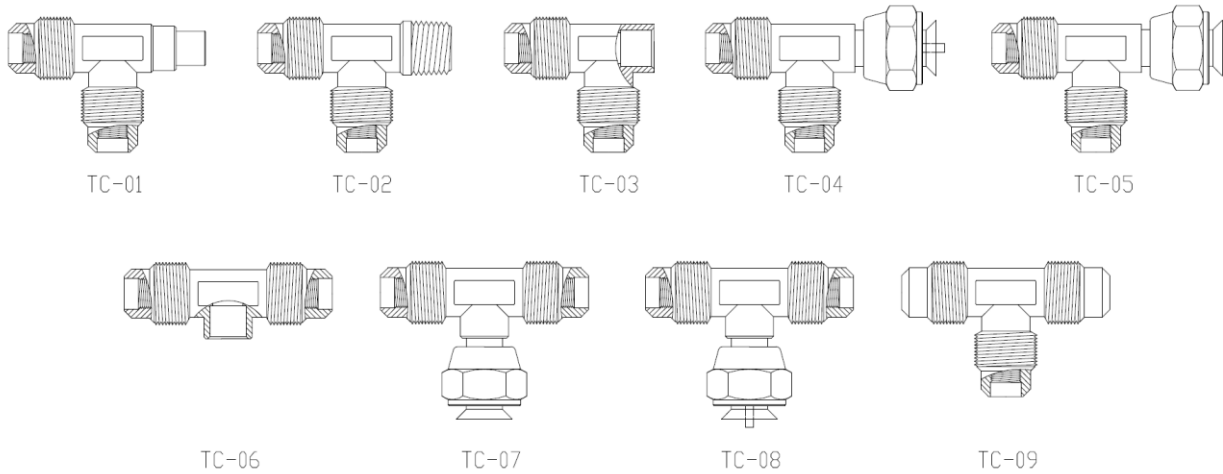
UC-01X50
UC-01X100

Tee access fittings

Part number	2x ext thread (male)	Flare conn. SAE J513 Thread ANSI/ASME B1.1 with mechanism seat ext flare (male)	IDS Connections size of the internal diameter of the copper tube to be brazed		ODF Connections (aka ODS) size of the external diameter of the copper tube to be brazed		Threaded Connection without mechanism seat
			mm	inch	mm	inch	
TC-01	7/16" - 20 UNF	1/4"	6	3/8" (9,52mm)	-	-	-
TC-02	7/16" - 20 UNF	1/4"	-	-	-	-	NPT 1/8" ext (male)
TC-03	7/16" - 20 UNF	1/4"	-	-	6	-	-
TC-04	7/16" - 20 UNF	1/4"	-	-	-	-	Swivel nut 1/4" with percussor
TC-05	7/16" - 20 UNF	1/4"	-	-	-	-	Swivel nut 1/4" without percussor
TC-06	7/16" - 20 UNF	1/4"	-	-	6	-	-
TC-07	7/16" - 20 UNF	1/4"	-	-	-	-	Swivel nut 1/4" without percussor
TC-08	7/16" - 20 UNF	1/4"	-	-	-	-	Swivel nut 1/4" with percussor

Part number	1x male thread	Flare conn. SAE J513 Thread ANSI/ASME B1.1 with mechanism seat		2x	Flare conn. SAE J513 Thread ANSI/ASME B1.1 without mechanism seat
		male thread	male flare		
TC-09	7/16" - 20 UNF	1/4"			7/16" - 20 UNF Ext Flare 1/4" (male)

Note: All the access fittings can be supplied with a brazed copper tube of any length, internal mechanism and/or cap pre-assembled.



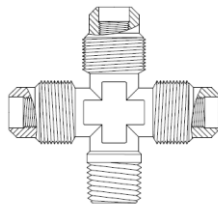
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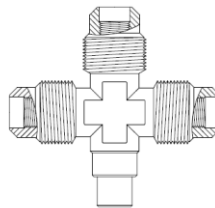
Cross access fittings

Part number	3x	Flare conn. SAE J513 Thread ANSI/ASME B1.1 with mechanism seat	IDS Connections		Threaded connection without mechanism seat
			size of the internal diameter of the copper tube to be brazed		
	male thread	male flare	mm	inch	
CC-01	7/16" - 20 UNF	1/4"	-	-	NPT 1/8" ext (male)
CC-02	7/16" - 20 UNF	1/4"	-	-	NPT 1/4" ext (male)
CC-03	7/16" - 20 UNF	1/4"	6	-	-
CC-04	7/16" - 20 UNF	1/4"	-	-	Swivel nut SAE Flare 1/4"

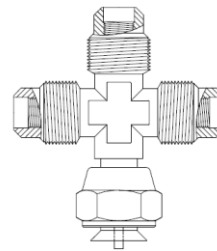
Note: All the access fittings can be supplied with a brazed copper tube of any length, internal mechanism and/or cap pre-assembled.



CC-01
CC-02



CC-03



CC-04