Brass fittings

IGLOO brass fittings for refrigeration and air conditioning systems are compatible with fittings manufactured according to all major standards, including DIN 8912 and SAE J513.

Features

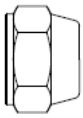
- Maximum recommended pressure (PS): 140 bar
- Manufactured from forged brass (compliant with EN 12420 and EN 12165 standards) or drawn brass rod (compliant with EN 12164 standard) which eliminate the possibility of leaks due to material porosity
- Precision machined and protected during all shipping, handling and storage phases to prevent fitting leaks
- Low roughness internal machining to ensure lower pressure drop and higher refrigerant flow rate through the joints
- Very low roughness sealing surfaces and very tight tolerances to eliminate the risk of leaks
- PED exemption as per Art. 4 Par. 3 of PED Directive 2014/68/EU

Approvals CE (PED, RoHS, REACH)

Technical data Suitable for HC, HFC, HFO refrigerants (and their blends)
IGLOO fittings are guaranteed for a leak rate lower than 0,1 gram/year of refrigerant.

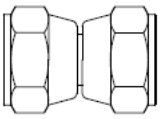
Standard packaging IGLOO fittings are packaged in plastic bags of 10 pieces each inside cardboard boxes of 100 pieces each.
Each plastic bag and each cardboard box has a label indicating bilingual description (Italian/English), barcode, article code and quantity of pieces contained.

Available models *Forged nuts*



Mod.	Thread ANSI/ASME B1.1	Flare connection SAE J513	Tube diameter		Tightening torque
	int thread (female)		mm	inch	Nm (lbf·ft)
NS4-4	7/16" - 20 UNF	1/4"	6	1/4"	11÷14 (8÷10)
NS4-5	1/2" - 20 UNF	5/16"	8	5/16"	11÷14 (8÷10)
NRS4-64	5/8" - 18 UNF	3/8"	6	1/4"	20÷25 (15÷18.5)
NRS4-65	5/8" - 18 UNF	3/8"	8	5/16"	20÷25 (15÷18.5)
NS4-6	5/8" - 18 UNF	3/8"	-	3/8"	20÷25 (15÷18.5)
NS4-6M10	5/8" - 18 UNF	3/8"	10	-	20÷25 (15÷18.5)
NRS4-86	3/4" - 16 UNF	1/2"	-	3/8"	34÷47 (25÷34.5)
NS4-8M10	3/4" - 16 UNF	1/2"	10	-	34÷47 (25÷34.5)
NS4-8M12	3/4" - 16 UNF	1/2"	12	-	34÷47 (25÷34.5)
NS4-8	3/4" - 16 UNF	1/2"	-	1/2"	34÷47 (25÷34.5)
NS4-10M12	7/8" - 14 UNF	5/8"	12	-	54÷75 (40÷55)
NRS4-108	7/8" - 14 UNF	5/8"	-	1/2"	54÷75 (40÷55)
NS4-10M14	7/8" - 14 UNF	5/8"	14	-	54÷75 (40÷55)
NS4-10	7/8" - 14 UNF	5/8"	16	5/8"	54÷75 (40÷55)
NS4-12M14	1.1/16" - 14 UNS	3/4"	14	-	68÷71 (50÷52)
NRS4-1210	1.1/16" - 14 UNS	3/4"	16	5/8"	68÷71 (50÷52)
NS4-12M18	1.1/16" - 14 UNS	3/4"	18	-	68÷71 (50÷52)
NS4-12	1.1/16" - 14 UNS	3/4"	19	3/4"	68÷71 (50÷52)
NS4-14	1.1/4" - 12 UNF	7/8"	22	7/8"	90÷120 (66÷98)
NRS4-1614	1.3/8" - 12 UNF	1"	22	7/8"	120÷150 (98÷110)
NS4-16	1.3/8" - 12 UNF	1"	-	1"	120÷150 (98÷110)

Swivel nuts

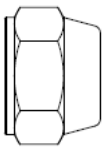


Mod.	Thread ANSI/ASME B1.1	Flare connection SAE J513	Tightening torque
	int thread (female)		Nm (lbf·ft)
US4-4	7/16" - 20 UNF	1/4"	11÷14 (8÷10)
US4-6	5/8" - 18 UNF	3/8"	20÷25 (15÷18.5)
US4-8	3/4" - 16 UNF	1/2"	34÷47 (25÷34.5)
US4-10	7/8" - 14 UNF	5/8"	54÷75 (40÷55)

Available models
(continued)

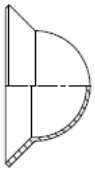
Brass fittings

Cap nuts



Mod.	Thread ANSI/ASME B1.1 int thread (female)	Flare connection SAE J513	Tightening torque Nm (lbf·ft)
N5-4	7/16" - 20 UNF	1/4"	11÷14 (8÷10)
N5-5	1/2" - 20 UNF	5/16"	8.5÷11.5 (6÷8.5)
N5-6	5/8" - 18 UNF	3/8"	20÷25 (15÷18.5)
N5-8	3/4" - 16 UNF	1/2"	34÷47 (25÷34.5)

Copper caps and gaskets

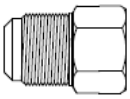


Mod.	Flare connection SAE J513	Maximum working pressure PS bar (psi)
B1-4	1/4"	30 (430)
B1-6	3/8"	30 (430)
B1-8	1/2"	30 (430)
B1-10	5/8"	30 (430)
B1-12	3/4"	30 (430)

B2-4	1/4"
B2-6	3/8"
B2-8	1/2"
B2-10	5/8"
B2-12	3/4"

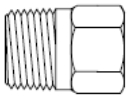
B3-4	1/4"
B3-6	3/8"
B3-8	1/2"
B3-10	5/8"
B3-12	3/4"

Threaded plugs, SAE type



Mod.	Thread ANSI/ASME B1.1 ext thread (male)	Flare connection SAE J513
P2-4	7/16" - 20 UNF	1/4"
P2-6	5/8" - 18 UNF	3/8"
P2-8	3/4" - 16 UNF	1/2"

Threaded plugs, NPT type

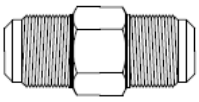


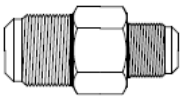
Mod.	Thread NPT ANSI B1.20.1 ext thread (male)
P1-A	NPT 1/8"
P1-B	NPT 1/4"
P1-C	NPT 3/8"
P1-D	NPT 1/2"

Available models
(continued)

Brass fittings

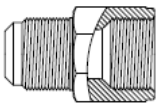
Straight unions, male-male Flare





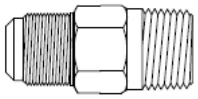
Mod.	Thread ANSI/ASME B1.1		Flare connection SAE J513	
	ext thread (male)	ext thread (male)	ext flare (male)	ext flare (male)
U2-4	7/16" - 20 UNF	7/16" - 20 UNF	1/4"	1/4"
UR2-64	5/8" - 18 UNF	7/16" - 20 UNF	3/8"	1/4"
U2-6	5/8" - 18 UNF	5/8" - 18 UNF	3/8"	3/8"
UR2-84	3/4" - 16 UNF	7/16" - 20 UNF	1/2"	1/4"
UR2-86	3/4" - 16 UNF	5/8" - 18 UNF	1/2"	3/8"
U2-8	3/4" - 16 UNF	3/4" - 16 UNF	1/2"	1/2"
UR2-104	7/8" - 14 UNF	7/16" - 20 UNF	5/8"	1/4"
UR2-106	7/8" - 14 UNF	5/8" - 18 UNF	5/8"	3/8"
UR2-108	7/8" - 14 UNF	3/4" - 16 UNF	5/8"	1/2"
U2-10	7/8" - 14 UNF	7/8" - 14 UNF	5/8"	5/8"
UR2-128	1.1/16" - 14 UNS	3/4" - 16 UNF	3/4"	1/2"
UR2-1210	1.1/16" - 14 UNS	7/8" - 14 UNF	3/4"	5/8"
U2-12	1.1/16" - 14 UNS	1.1/16" - 14 UNS	3/4"	3/4"

Straight unions, male-female Flare



Mod.	Thread ANSI/ASME B1.1		Flare connection SAE J513	
	int thread (female)	ext thread (male)	int flare (female)	ext flare (male)
UP3-4	7/16" - 20 UNF	7/16" - 20 UNF	1/4"	1/4"
UR3-46	7/16" – 20 UNF	5/8" - 18 UNF	1/4"	3/8"
UR3-64	5/8" - 18 UNF	7/16" – 20 UNF	3/8"	1/4"
UP3-6	5/8" - 18 UNF	5/8" - 18 UNF	3/8"	3/8"
UR3-68	5/8" - 18 UNF	3/4" - 16 UNF	3/8"	1/2"
UR3-84	3/4" - 16 UNF	7/16" - 20 UNF	1/2"	1/4"
UR3-86	3/4" - 16 UNF	5/8" - 18 UNF	1/2"	3/8"
UP3-8	3/4" – 16 UNF	3/4" – 16 UNF	1/2"	1/2"
UR3-810	3/4" – 16 UNF	7/8" – 14 UNF	1/2"	5/8"
UR3-812	3/4" – 16 UNF	1.1/16" - 14 UNS	1/2"	3/4"
UR3-108	7/8" – 14 UNF	3/4" – 16 UNF	5/8"	1/2"
UR3-1012	7/8" – 14 UNF	1.1/16" - 14 UNS	5/8"	3/4"
UR3-128	1.1/16" - 14 UNS	3/4" – 16 UNF	3/4"	1/2"
UR3-1210	1.1/16" - 14 UNS	7/8" – 14 UNF	3/4"	5/8"

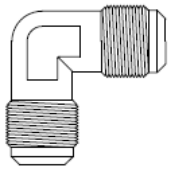
Flare-to-NPT straight unions



Mod.	Flare connection SAE J513 Thread ANSI/ASME B1.1		NPT Connection Thread ANSI B1.20.1
	ext thread (male)	ext flare (male)	ext thread (male)
U1-4A	7/16" - 20 UNF	1/4"	NPT 1/8"
U1-4B	7/16" - 20 UNF	1/4"	NPT 1/4"
U1-6B	5/8" - 18 UNF	3/8"	NPT 1/4"
U1-6C	5/8" - 18 UNF	3/8"	NPT 3/8"
U1-8C	3/4" – 16 UNF	1/2"	NPT 3/8"
U1-8D	3/4" – 16 UNF	1/2"	NPT 1/2"
U1-10D	7/8" – 14 UNF	5/8"	NPT 1/2"
U1-12F	1.1/16" - 14 UNS	3/4"	NPT 3/4"
			int thread (female)
U3-4A	7/16" - 20 UNF	1/4"	NPT 1/8"

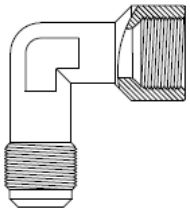
Available models
(continued)

Elbow fittings, male-male Flare



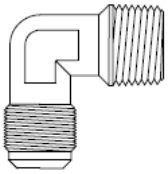
Mod.	Thread ANSI/ASME B1.1		Flare connection SAE J513	
	ext thread (male)	ext thread (male)	ext flare (male)	ext flare (male)
E2-4	7/16" - 20 UNF	7/16" - 20 UNF	1/4"	1/4"
E2-6	5/8" - 18 UNF	5/8" - 18 UNF	3/8"	3/8"
E2-8	3/4" - 16 UNF	3/4" - 16 UNF	1/2"	1/2"
E2-10	7/8" - 14 UNF	7/8" - 14 UNF	5/8"	5/8"
E2-12	1.1/16" - 14 UNS	1.1/16" - 14 UNS	3/4"	3/4"

Elbow fittings, male-female Flare



Mod.	Thread ANSI/ASME B1.1		Flare connection SAE J513	
	int thread (female)	ext thread (male)	int thread (female)	ext thread (male)
E3-4	7/16" - 20 UNF	7/16" - 20 UNF	1/4"	1/4"
E3-6	5/8" - 18 UNF	5/8" - 18 UNF	3/8"	3/8"
E3-8	3/4" - 16 UNF	3/4" - 16 UNF	1/2"	1/2"

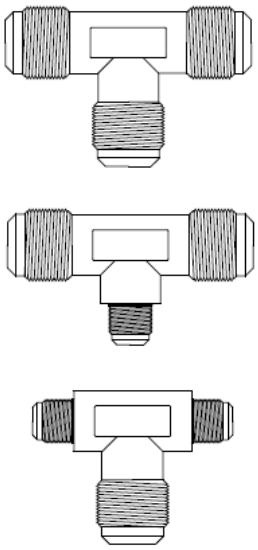
Flare-to-NPT elbow fittings



Mod.	Flare connection SAE J513 Thread ANSI/ASME B1.1		Thread NPT ANSI B1.20.1
	ext thread (male)	ext flare (male)	ext thread (male)
E1-4A	7/16" - 20 UNF	1/4"	NPT 1/8"
E1-4B	7/16" - 20 UNF	1/4"	NPT 1/4"
E1-6B	5/8" - 18 UNF	3/8"	NPT 1/4"
E1-6C	5/8" - 18 UNF	3/8"	NPT 3/8"
E1-8C	3/4" – 16 UNF	1/2"	NPT 3/8"
E1-8D	3/4" – 16 UNF	1/2"	NPT 1/2"
E1-10D	7/8" – 14 UNF	5/8"	NPT 1/2"
E1-12F	1.1/16" - 14 UNS	3/4"	NPT 3/4"

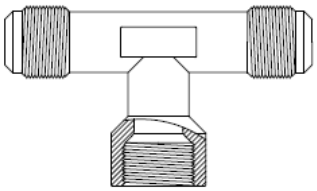
Available models
(continued)

Tee fittings, male-male-male Flare



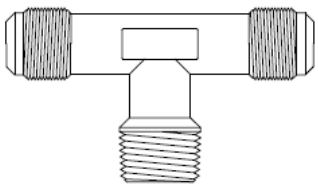
Mod.	Thread ANSI/ASME B1.1						Flare connection SAE J513
	1	ext thread (male)	2	ext thread (male)	3	ext thread (male)	ext-ext-ext (male-male-male)
T2-4	7/16" - 20 UNF		7/16" - 20 UNF		7/16" - 20 UNF		1/4"-1/4"-1/4"
TR2-46	7/16" - 20 UNF		5/8" - 18 UNF		7/16" - 20 UNF		1/4"-3/8"-1/4"
TR2-64	5/8" - 18 UNF		7/16" - 20 UNF		5/8" - 18 UNF		3/8"-1/4"-3/8"
T2-6	5/8" - 18 UNF		5/8" - 18 UNF		5/8" - 18 UNF		3/8"-3/8"-3/8"
TR2-68	5/8" - 18 UNF		3/4" - 16 UNF		5/8" - 18 UNF		3/8"-1/2"-3/8"
TR2-86	3/4" - 16 UNF		5/8" - 18 UNF		3/4" - 16 UNF		1/2"-3/8"-1/2"
T2-8	3/4" - 16 UNF		3/4" - 16 UNF		3/4" - 16 UNF		1/2"-1/2"-1/2"
TR2-810	3/4" - 16 UNF		7/8" - 14 UNF		3/4" - 16 UNF		1/2"-5/8"-1/2"
TR2-108	7/8" - 14 UNF		3/4" - 16 UNF		7/8" - 14 UNF		5/8"-1/2"-5/8"
T2-10	7/8" - 14 UNF		7/8" - 14 UNF		7/8" - 14 UNF		5/8"-5/8"-5/8"
TR2-1012	7/8" - 14 UNF		1.1/16" - 14 UNS		7/8" - 14 UNF		5/8"-3/4"-5/8"
TR2-1210	1.1/16" - 14 UNS		7/8" - 14 UNF		1.1/16" - 14 UNS		3/4"-5/8"-3/4"
T2-12	1.1/16" - 14 UNS		1.1/16" - 14 UNS		1.1/16" - 14 UNS		3/4"-3/4"-3/4"

Tee fittings, male-female-male Flare

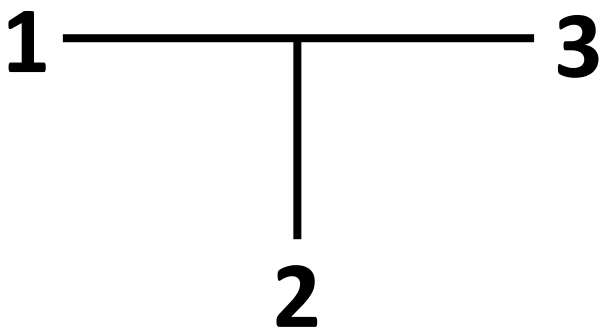


Mod.	Thread ANSI/ASME B1.1						Flare connection SAE J513
	1	ext thread (male)	2	int thread (female)	3	ext thread (male)	ext-int-ext (male-female-male)
T6-4	7/16" - 20 UNF		7/16" - 20 UNF		7/16" - 20 UNF		1/4"-1/4"-1/4"

Flare-to-NPT Tee fittings

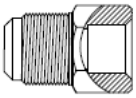


Mod.	Thread ANSI/ASME B1.1 Flare connection SAE J513		Thread NPT ANSI B1.20.1		Thread ANSI/ASME B1.1 Flare connection SAE J513	
	1	ext thread (male)	2	ext thread (male)	3	ext thread (male)
T1-4A	7/16" - 20 UNF SAE Flare 1/4"		NPT 1/8"		7/16" - 20 UNF SAE Flare 1/4"	
T1-4B	7/16" - 20 UNF SAE Flare 1/4"		NPT 1/4"		7/16" - 20 UNF SAE Flare 1/4"	



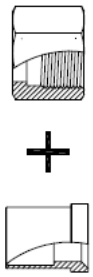
Available models
(continued)

Flare-to-solder straight unions



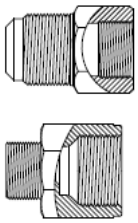
Mod.	Flare connection SAE J513 Thread ANSI/ASME B1.1		ODF Connection	
	ext thread (male)	ext flare (male)	mm	inch
US3-44	7/16" - 20 UNF	1/4"	-	1/4"
US3-4M8	7/16" - 20 UNF	1/4"	8	-
US3-66	5/8" - 18 UNF	3/8"		3/8"
US3-6M10	5/8" - 18 UNF	3/8"	10	-
US3-8M12	3/4" - 16 UNF	1/2"	12	-
US3-88	3/4" - 16 UNF	1/2"	-	1/2"
US3-1010	7/8" - 14 UNF	5/8"	16	5/8"
US3-12M18	1.1/16" - 14 UNS	3/4"	18	-

Flare-to-solder swivel nut + adapter



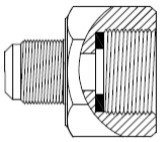
Mod.	Thread ANSI/ASME B1.1	Flare connection SAE J513	Tube diameter		Tightening torque
	int thread (female)		mm	inch	Nm (lbf·ft)
NGR-4M6	7/16" - 20 UNF	1/4"	6	-	11÷14 (8÷10)
NGR-4	7/16" - 20 UNF	1/4"	-	1/4"	11÷14 (8÷10)
NGR-6	5/8" - 18 UNF	3/8"	-	3/8"	20÷25 (15÷18.5)
NGR-6M10	5/8" - 18 UNF	3/8"	10	-	20÷25 (15÷18.5)
NGR-8M12	3/4" - 16 UNF	1/2"	12	-	34÷47 (25÷34.5)
NGR-8	3/4" - 16 UNF	1/2"	-	1/2"	34÷47 (25÷34.5)
NGR-10	7/8" - 14 UNF	5/8"	16	5/8"	54÷75 (40÷55)
NGR-12M18	1.1/16" - 14 UNS	3/4"	18	-	68÷71 (50÷52)
NGR-12	1.1/16" - 14 UNS	3/4"	19	3/4"	68÷71 (50÷52)
NGR-14	1.1/4" - 12 UNF	7/8"	22	7/8"	90÷120 (66÷98)

Flare-to-BSP / Flare-to-GAS straight unions



Mod.	Flare connection SAE J513 Thread ANSI/ASME B1.1		Thread GAS ISO 228 (BSP)	
	ext thread (male)	int thread (female)	ext thread (male)	int thread (female)
UP3-4G4F	7/16" - 20 UNF Flare 1/4"	-	-	GAS f-1/4"
UP3-4G4M	-	7/16" - 20 UNF Flare 1/4"	GAS m-1/4"	-

Bottle adaptors: SAE Flare-to-BSW / SAE Flare-to-Withworth



Mod.	Flare connection SAE J513 Thread ANSI/ASME B1.1	Filetto Withworth BS 84	Note
	ext thread (male)	int thread (female)	
U3X-4DX	7/16" - 20 UNF Flare 1/4"	W21,8-14 (right hand thread)	The adapters are supplied with a Teflon® (PTFE) gasket inside.
U3X-4SX	7/16" - 20 UNF Flare 1/4"	W20-14 (left hand thread)	
U32-4SX **	7/16" - 20 UNF Flare 1/4"	W21,8-14 (left hand thread)	

** Adapter U32-4SX is specific for R32 refrigerant bottles.