

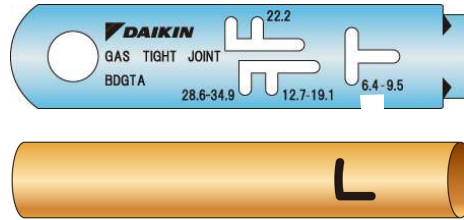
Simple 3 - Step Action



JIV1803A

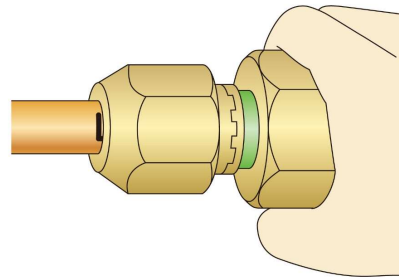
Mark

By using marking gauge,
draw insertion depth line
on the pipe surface



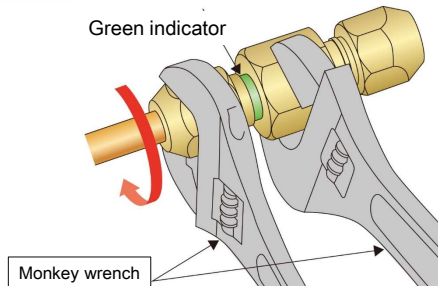
Insert

Insert the pipe until the
line disappears



Tighten

Tightening of nut until
the green indicator
disappears

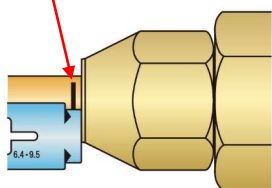


Check

1. Green indicator should be hidden
2. Be sure to check the position of depth line by the gauge end tail

Perfect !

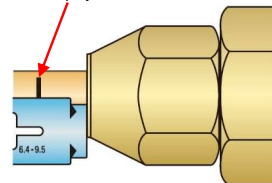
Good job !



Imperfect

Too shallow insertion

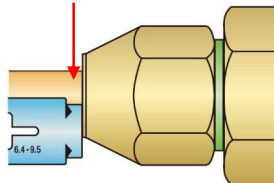
The line projection is too much



Imperfect

Loose tightening

The line is invisible



Daikin Gas Tight Joint (DGT)

Non-brazed connection for Refrigerant piping



Φ6.4 ~ Φ9.5

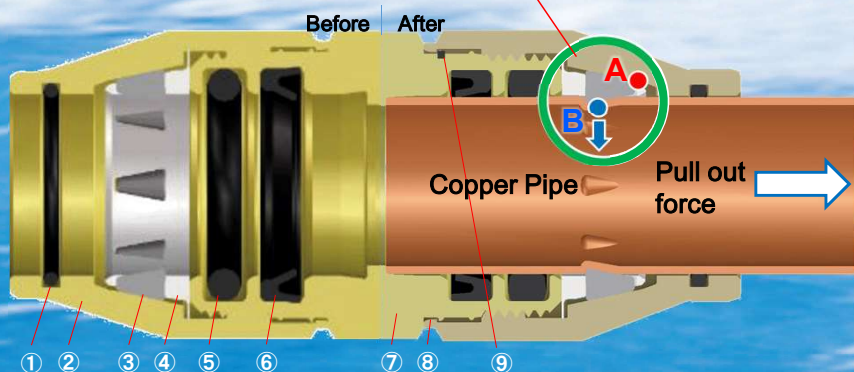
Φ12.7 ~ Φ34.9

Evolutionally-advanced Feature

A combination of rubber packing and screwed metal body offers gas-tight and rigid connection without brazing. Patented "Leverage Method" mechanically holds the pipe and prevents it from pull-out.

Mechanism

As the nut turns, the "B" point of leverage corns are compressed and encroached the surface of the pipe. When the pull out force increases, the corns are encroached more deeper to prevent pipe pull out.



Legends

Name	Materials	Remark
① O-ring	EPDM or NBR	Prevent condensation water insertion
② Nut	C37700	Forged brass and machining
③ Leverage corn	SUS410	Corn shape parts grip the Copper pipe from outside
④ Leverage ring	PE-RT	As support of the leverage corn
⑤ O-ring	EPDM	Secondly-sealing
⑥ V-seal	IIR	Primary-sealing (Main seal)
⑦ Main body	C37700	Forged brass and machining
⑧ Indicator	Luminous marking	Green color / Black-light fluorescent coating
⑨ C-shaped ring	SUS304-WPB	Tempering treatment

Applicable

Applicable Fluid	
Applicable Refrigerant	R32,R410A
Applicable Refrigerant oil	Ether oil
Max. Pressure	4.3Mpa
Min. Pressure	-755mmHg
Max. Temperature	130°C
Min. Temperature	-45°C
Standard	ISO14903
Applicable Copper Pipe	
Pipes to ASTM B280-08	B88-09 (Type L)
Pipe	Φ6.4 ~ Φ34.9
Wall Thickness	0.8mm ~ 2.0mm
Type	O (-Φ15.9) & H (Φ19.1 ~)
Form	Coiled Pipe & Straight Pipe

Quality criteria

Pressure Resistance	17.2MPa or over × 2 minutes
Negative Pressure	-755mmHg × 60 minutes
Long Term Gas tightness	New Refrigerant : 80°C × 4MPa × 1year
Bending Pressure	① Air Pressure 0.5MPa × Bending Angle 15° or more. ② Nitrogen Pressure 3.3MPa × Bending Deflection ±10mm × 5 times
Vibration Resistance	Air Pressure 0.5MPa × ±1mm × 30Hz × 10 million times
Thermal Shock Resistance Test	-45°C ⇄ 130°C. Each 30minutes × 100times
Tightening Torque	100N·m or below (reference)
Sealing life time	30 years of design life (reference)
Season Cracking Test	Under ammonia 11.8% or more moist condition for 10 days (240h)

■ Excellent performance

By the unique double sealing method, the sealing performance is secured over a long period even under such severe conditions as pressure of 4.3MPa during temperature of - (minus) 45 degree C through + (plus) 130 degree C.

■ Fire free connection (Safety first)

Neither nitrogen gas replacement nor fire prevention cure is required. The time for installation is shorten and the total cost is reduced. The installation quality is much more stable compared with a brazing method.

■ Durable for high pressure

By leverage method, the pull-out resistance is more than 4 times (17.2MPa) of the max. operating pressure.



■ Easy installation

The installation is completed by only one or two turns for a nut with low torque tightening without any special tools (regular wrenches or spanners are used) in the limited small space.

■ Authorized standards

ISO14903

Certification of international standards
Proof of safety and reliability

SGBP (Singapore Green Building Council)

- Certificate Number SGBP 2019-2405
- Green Mark compatible products



Matching for various piping sizes

Figure	Model name	Dimension (mm)			Weight/PC (g)
		ND	AF	L	
	BDGTA06	φ6.4	19.0	46.2	106
	BDGTA09	φ9.5	22.2	51.4	139
	BDGTA12	φ12.7	23.8	82.3	170
	BDGTA15	φ15.9	29.7	82.8	236
	BDGTA19	φ19.1	35.0	85.5	327
	BDGTA22	φ22.2	38.0	93.5	401
	BDGTA28	φ28.6	45.0	99.5	546
	BDGTA34	φ34.9	51.1	101.5	686