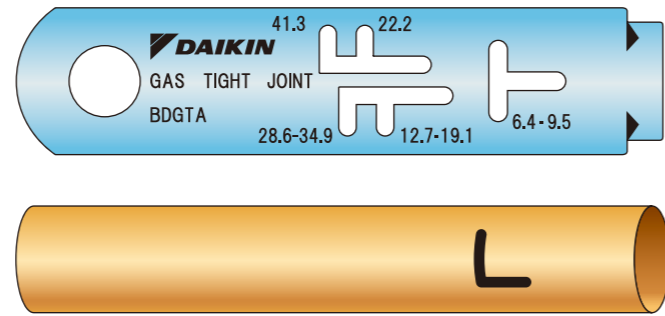


Simple 3 - Step Action

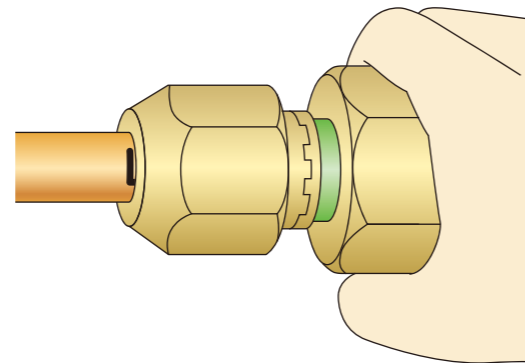
Mark

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



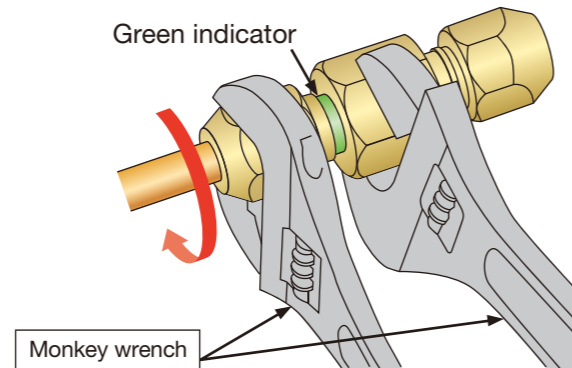
Insert

Insert the pipe until the line disappears



Tighten

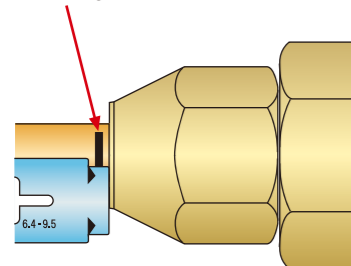
Tightening of nut until the green indicator disappears



Check

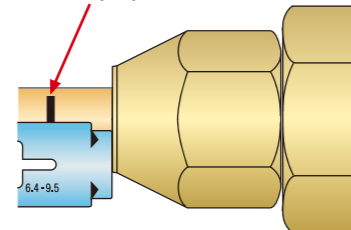
1. Green indicator should be hidden
2. Be sure to check the position of depth line by the gauge end tail

Perfect !
Good job !



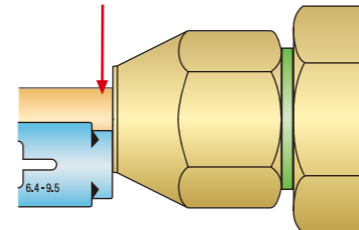
Imperfect

Too shallow insertion
The line projection is too much



Imperfect

Loose tightening
The line is invisible



JIV1803B

Daikin Gas Tight Joint (DGT)

Non-brazed connection For Refrigerant piping



$\phi 6.4 \sim \phi 9.5$

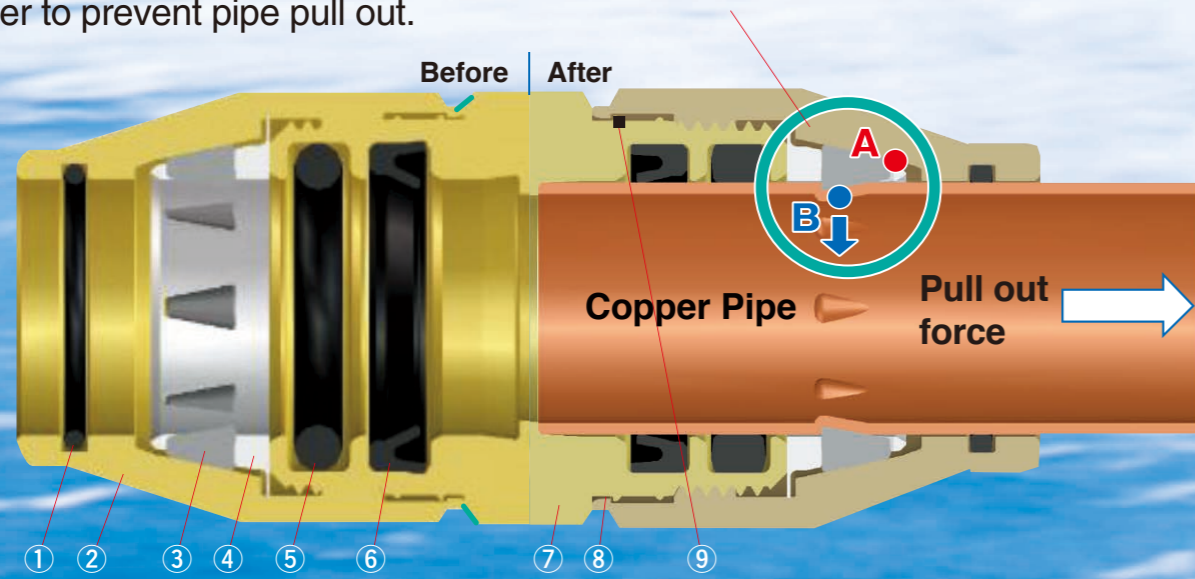
$\phi 12.7 \sim \phi 41.3$

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 corns |
| 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, B88 (Type L) | |
| Pipe | φ6.4~φ41.3 |
| Wall Thickness | 0.76mm~1.52mm |
| 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

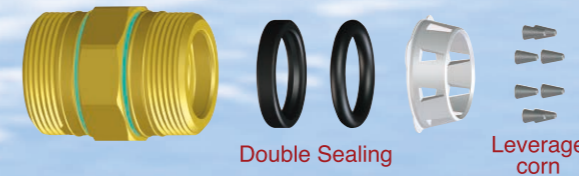
By the unique double sealing method, the sealing performance is secured over a long period even under such severe conditions as pressure of 4.3MPa during temperature of - (minus) 45 degree C through + (plus) 130 degree C.

■ 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

Standard joints (Connecting the same pipes)

| Figure | Model name | Dimension (mm) | | | Weight/PC (g) |
|--------|--------------------|----------------|------|-------|---------------|
| | | ND | AF | L | |
| | BDGTA06 | φ6.4 | 19.0 | 46.2 | 106 |
| | BDGTA09 | φ9.5 | 22.0 | 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 |
| | NEW BDGTA41 | φ41.3 | 58.3 | 103.5 | 881 |

Asymmetry joints (Connecting different size pipes)

| Figure | Model name | Dimension (mm) | | | Weight/PC (g) |
|--------|----------------------|----------------|------|------|---------------|
| | | ND | AF1 | AF2 | |
| | NEW BDGTA1209 | φ12.7-φ9.5 | 24.0 | 22.0 | 62.4 |
| | NEW BDGTA1512 | φ15.9-φ12.7 | 29.7 | 23.8 | 83.2 |
| | NEW BDGTA2219 | φ22.2-φ19.1 | 38.0 | 35.0 | 87.4 |
| | NEW BDGTA2825 | φ28.6-φ25.4 | 45.0 | 41.8 | 94.4 |