

Integration Tube Fitting

High Technology Valve & Flange & Fitting Series



 **SUPERLOK[®]**

 **BMT Co., Ltd.**
www.superlok.com

INTEGRATION TUBE FITTING

Inaugurate a new era of fitting.

INTEGRATION TUBE FITTING is easy to confirm 1-1/4 turns with tightening inspection device.

To order, add **I** as a suffix to the SUPERLOK tube fitting ordering number.

Example : SUI-8-SS (Union 1/2" + Tightening inspection device)

Difficulties in installation existing Tube Fittings

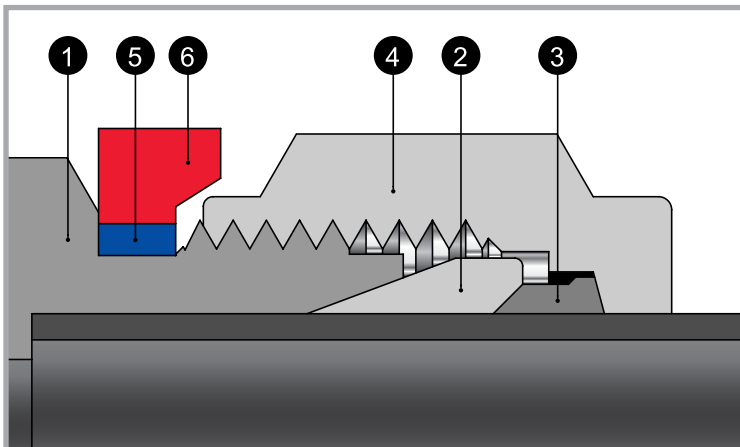
- Difficult to check 1-1/4 turns
- Use Inspection Gap Gauge to ensure sufficient pull-up installation
- Need Inspection Gap Gauge to assure fitting has been sufficiently pulled up.
- Difficult to check with Inspection Gap Gauge in limited spaces.
- These problems could cause poor installation and leakage.

Integration fittings features

- No Inspection Gap Gauge is required.
- Easy to ensure sufficient tightening without additional tools
- Easy to install and increase the installation efficiency
- Easy to ensure accurate fitting of all components
- Prevent leakage by poor installation
- Applicable to Bite type fitting as well as tube fitting

Structure

- Integration Tube Fitting is designed to insert tightening inspection device between the nut and the body before assembly
- Integration Tube Fitting consists of Check ring and Inspection ring



| No. | COMPONENT |
|-----|-----------------|
| 1 | BODY |
| 2 | FRONT FERRULE |
| 3 | BACK FERRULE |
| 4 | NUT |
| 5 | CHECK RING |
| 6 | INSPECTION RING |

How the SUPERLOK Integration Tube Fitting Works

- Rotate the nut in order to advance Inspection Ring.
- At proper turns of wrench pull-up, the Check Ring separates from the body.
- Available to assure the fitter that sufficient pull-up has been achieved by remained Check Ring on the body.

Installation Procedure

1. Assemble body, back & front ferrule, nut and tightening inspection device




























2. Fully insert the tube into the fitting and against the shoulder, rotate the nut finger-tight



3. Rotate the nut clockwise until Inspection ring separates from the body.
4. Confirm 1-1/4 turns by checking check ring on the body. The fitting is sufficiently tightened.



| | | | | | |
|--|---|---|---|--|---|
| UNION | | TEE | | AN TUBE | |
| SUI Union |  | SUTI Union Tee |  | SAUI An Union |  |
| SRUI Reducing Union |  | SRUTI Reducing Union Tee |  | O-RING SEAL | |
| CONNECTOR | | SMBTI Male Branch Tee |  | SOSCI O-Seal Straight Thread Connector |  |
| SMCI Male Connector |  | SPMRTI Positionable Male Run Tee |  | SSMCI SAE/MS Male Connector |  |
| SOMCI Male Connector For Metal Gasket Seal |  | SFBTI Female Branch Tee |  | WELD END | |
| SFCI Female Connector |  | SUCI Union Cross |  | SPWCI Male Pipe Weld Connector |  |
| SGCI Gauge Connector |  | STUB TUBE CONNECTOR | | SSWCI Socket Weld Connector |  |
| ELBOW | | SRI Reducer |  | SSWEI Socket Weld Elbow |  |
| SUEI Union Elbow |  | SFTCI Flange Lapped Tubes Connector |  | CAP | |
| SMEI Male Elbow |  | | | SCI Cap |  |
| SHMEI 45° Male Elbow |  | | | | |
| SPHMEI 45° Positionable Male Elbow |  | | | | |

Ordering Information

SMCI - 8 - 8N - SS

1

2-1

2-2

3

1 Type of fitting

To order, use "1" as a suffix to the desired Type of fitting ordering designation.

ex) SMC → **SMCI**
SUPERLOK Tube Fitting Male Connector Integration Fitting Male Connector

3 Material

A - Aluminum B - Brass
 C - Carbon Steel SS - Stainless Steel
 M - Monel Alloy 400 INC - Inconel Alloy 600

2 Size of Fitting

2-1) Tube O.D Designation

| Tube O.D (inch) | 1/16 | 1/8 | 3/16 | 1/4 | 5/16 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1 | 1 1/4 | 1 1/2 | 2 |
|-----------------|------|-----|------|-----|------|-----|-----|-----|-----|-----|-----|-------|-------|-----|
| Designation | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 20 | 24 | 36 |
| Tube O.D (mm) | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 16 | 20 | 22 | 25 | 28 | 32 | 38 |
| Designation | 2M | 3M | 4M | 6M | 8M | 10M | 12M | 16M | 20M | 22M | 25M | 28M | 32M | 38M |

2-2) Pipe Thread Designation

| Size (inch) | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1 |
|---------------|-----|-----|-----|-----|-----|-----|
| ISO Tapered | 2R | 4R | 6R | 8R | 12R | 16R |
| Screwed NPT | 2N | 4N | 6N | 8N | 12N | 16N |
| ISO Tapered | 2G | 4G | 6G | 8G | 12G | 16G |
| Unified Screw | 2U | 4U | 6U | 8U | 12U | 16U |