

کاتالوگ

فدراکاران تجهیز کالا

Instrument Tube & Fitting

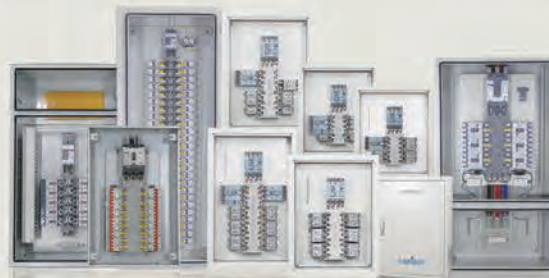
Superlok B.M.T

SUPERLOK®



SUPERLOK is best quality product

Tube and Pipe Fittings
Instrumentation and Process Valves



 **BMT Co., Ltd.**
<http://www.superlok.com>



Profile & History

1988 ~ 2003

- Established GyeongPoong Machinery Co. ● Changed the Company name to "BMT Co., Ltd"
- Designated as a "Clean Company" by Ministry of Labor ● Introduced ERP (Enterprise Resource Planning) SYSTEM
- Designated as a Fitting & Valve supplier by SAMSUNG ELECTRONICS
- Designated as a "New Technology Venture Business" by Small and Medium Business Administration (SMBA)
- Designated as a "Superior Technology Company" by Korea Technology Credit Guarantee Fund (KOTEC)

2004 ~ 2006

- Accredited as a "Promising Company" by an Industrial bank of Korea (KIUP)
- Certified an "Innovation Business Company" by Government
- Built and moved a new main factory and office to Noksan Industrial Complex in Busan.
- Established an R&D Institute. ● Awarded "The Grand Prix of the Busan Enterprises" in the Technical Field.
- Made a manager contract with Dong Yang Securities Co. regarding IPO.
- Registered a Patent and a Design of MCPD (Molded Case Power Distributor) and began an Electric business.

2007 ~ 2008

- Started to supply SUPERLOK product to KHNP (Korea Hydro & Nuclear Power company), HI and DSME, SK Energy and GS-Caltex, and GS EC.
- Registered as an official Supplier in SHI (Samsung Heavy Industries)
- Registered as an official Supplier in DSME (Daewoo Shipbuilding & Marin Engineering)
- Registered as an official Supplier in SK Corporation , GS-Caltex (Oil Refining, Crude Oil, Petroleum, Lubricants, Chemicals) and GS Engineering & Construction Corp.
- Registered as an official Supplier in Petronas Gr. Malaysia and started supply of SUPERLOK Double block & Bleed Valves and others
- Acquired the Nippon Kaiji Kyokai Certificate for Approval Mechanical Joint.
- Registered as an Official Supplier in Hyundai Heavy Industries (HHI).
- Have received the 40 and 199 pieces orders from the end-user, Petronas Carigali in Malaysia.
- Registered as an Official Vendor in Total Pazflor FPSO Project by Total S.A. for providing SUPERLOK Valves.(Total Pazflor FPSO Project to DSME)
- Registered as an Official Vendor in SK Engineering & Construction(SKEC).

2009 ~

- Completed developing the STANDARD Distribution Panel, "SPIDER", of 50 & 100 AF Plan to develop and mass-produce SPIDER for 225 AF by the end of this year Plan to advance in the Use for World-major Circuit Breakers such as ABB, Merlin Gerin, Siemens, GE and Mitsubishi as one of the BMT Core Tasks

Certification

<Fitting & Valve DIV.>

- ASME (American Society of Mechanical Engineers) 'N' Stamp
- ABS (American Bureau of Shipping)
- Lloyd (Lloyd's Register of Shipping)
- DNV (Det Norske Verita/Norwegian Assoc.)
- GL (Germanischer Lloyd)
- API (American Petroleum Institute)
- KEPIC (Korea Electric Power Industry Code)
- ISO 9001 (Renewal, 2006)
- ISO 14001 (Environmental Management System)
- OHSMS 18001 (Occupational Health and Safety Management System)
- Acquired the Nippon Kaiji Kyokai Certificate for Approval Mechanical Joint.
- Acquired Q-Class Certificate of KHNP's Qualified Supplier(KHNP:Korea Hydro & Nuclear Power Co.,Ltd).

Fitting Series

SUPERLOK TUBE FITTINGS



APPLICATIONS

Process instrumentation, High Temperature and Cryogenic service, High pressure service, Vacuum service.

SPECIFICATIONS

- The Working pressure of SUPERLOK Tube Fittings are limited by the Working pressure of tubing.
- Working Temperature Range : -320°F to 1200°F (-196°C to 649°C)

37° FLARED TUBE FITTINGS (SAE J514)



APPLICATIONS

Hydraulic system.

SPECIFICATIONS

- Maximum Working Pressure:
8700psi(600bar)@100°F(38°C):With O-Ring Type.
5000psi(345bar)@100°F(38°C):Without O-Ring Type. And according to SAE J514
- Working Temperature Range : up to 800°F(427°C)

INSTRUMENT THREAD FITTINGS



APPLICATIONS

Process, power, instrumentation and general plumbing.

SPECIFICATIONS

- Maximum Working pressure : 10000psi(689bar)@100°F(38°C)
- Working Temperature Range : -320°F to 1000°F (-196°C to 537°C)

HIGH PRESSURE FITTINGS



APPLICATIONS

High pressure equipment, Pumping system, Hydraulic intensifier, Water blasting, Test stands.

SPECIFICATIONS

- Maximum Working pressure : up to 60000psi(4137bar)
- Working Temperature Range : -100°F to 600°F (-73°C to 315°C)

BITE TYPE TUBE FITTINGS (DIN2353)



APPLICATIONS

Hydraulic, Compressed Air, Fuel Heating, Auto Motive

SPECIFICATIONS

- Maximum Working pressure : Very Light (LL) Series PN 100bar
Light (L) Series PN 315bar
Heavy (S) Series PN 630bar
- Working Temperature Range : up to 800°F(427°C)

BITE TYPE TUBE FITTINGS (JIS B2351)



APPLICATIONS

Hydraulic, Compressed Air, Fuel Heating, Auto Motive.

SPECIFICATIONS

- Maximum Working pressure : 3600psi(25Mpa / 254kg/cm² / 248bar)
- Working Temperature Range : -4°F to 482°F (-20°C to 250°C)

FORGED FITTINGS



APPLICATIONS

Mainly for the purpose of power plant, oil and gas field.

SPECIFICATIONS

- Maximum Working pressure : 15NB to 1100NB in 2000LBS, 3000LBS, 6000LBS, 9000LBS
- Working Temperature Range : up to 1000°F (538°C)

HOSE CONNECTORS & PUSH-ON HOSE FITTINGS



APPLICATIONS

Air break system, Air conditioning system, Automotive industry.

SPECIFICATIONS

- Maximum Working pressure : 350psi(24bar)@100°F(38°C)
- Working Temperature Range : -40°F to 212°F (-40°C to 100°C)

O-RING FACE SEAL FITTINGS



APPLICATIONS

High Pressure Hydraulic System

SPECIFICATIONS

- Maximum Working pressure : 14000 psi (965bar) @ 100 °F(38°C)
- Working Temperature Range : -13 °F to 392 °F (-25°C to 200°C)

CLEAN FITTING



APPLICATIONS

Industry ultra-pure and high-purity gas line, Vacuum delivery system

SPECIFICATIONS

- Maximum Working pressure : 8500 psi (585 bar) @ 100°F (38°C)
- Working Temperature Range : up to 1000°F (537°C)

DIN TYPE BALL VALVES



APPLICATIONS

Hydraulic Lines

SPECIFICATIONS

- Maximum Working pressure : 7200 psi (496bar) @ 70°F(21°C)
- Working Temperature Range : -4°F to 210°F (-20°C to 100°C)

Valve Series

BALL VALVE SBV120 SERIES



APPLICATIONS

Control Sampling system, Process instrument.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207bar) @ 70°F(21°C)
- Working Temperature Range : 50°F to 150°F (10°C to 66°C)

BALL VALVE SBV210 SERIES



APPLICATIONS

Pneumatic System, Instrument System.

SPECIFICATIONS

- Maximum Working pressure : 1000psi (69 bar) @ 70°F(21°C)
- Working Temperature Range : 0°F to 450°F (-17°C to 232°C)

BALL VALVE SBVH360 SERIES



APPLICATIONS

High Pressure Instrument system, Hydraulic system.

SPECIFICATIONS

- Maximum Working pressure : 10000 psi @ 70°F (21°C)
- Working Temperature Range : -22°F to 265°F (-30°C to 130°C)

HIGH PRESSURE FORGED BALL VALVES SBVF360 SERIES



APPLICATIONS

High pressure Instrument Lines, OIL & GAS Production.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 70°F(21°C)
- Working Temperature Range :
-65°F to 450°F(-54°C to 232°C) with PEEK seat
-65°F to 350°F(-54°C to 177°C) with PCTFE seat

TRUNNION BALL VALVES



APPLICATIONS

Instrument Air lines, GAS & CNG industry, Sampling.

SPECIFICATIONS

- Maximum Working pressure : 10000 psi (689 bar) @ 100°F(38°C)
- Working Temperature Range : 0°F to 250°F (-17°C to 121°C)

SWING-OUT BALL VALVES



APPLICATIONS

Instrument Air lines, chemical process, Oil and Gas Production.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F(38°C)
- Working Temperature Range : -20°F to 450°F (-29°C to 232°C)

FLANGED BALL VALVES



APPLICATIONS

Hydraulic system , Chemical ,petrochemical , Oil and Gas production.

SPECIFICATIONS

- Maximum Working pressure : ANSI Class150 to Class2500
- Working Temperature Range : -20°F to 400°F (-29°C to 204°C)

SAE FLANGED BALL VALVES



APPLICATIONS

Hydraulic system .

SPECIFICATIONS

- Maximum Working pressure : up to 6000psi(414bar) @100°F (38°C)
- Working Temperature Range : -4°F to 210°F (-20°C to 100°C)

KEY OPERATION VALVES (Ball & Needle)



APPLICATIONS

Pneumatic System, Instrument System & isolation ,General service

BALL VALVE SPECIFICATIONS

- Maximum Working pressure : 1000psi (69 bar) @ 70°F(21°C)
6000psi (414 bar) @ 70°F(21°C)
- Working Temperature Range : 0°F to 450°F (-17°C to 232°C)

NEEDLE VALVE SPECIFICATIONS

- Maximum Working pressure : 5000 psi (345 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C)

PLUG VALVES



APPLICATIONS

Instrument Air Lines ,Refinery pilot plant .

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F(38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)

RISING PLUG VALVES



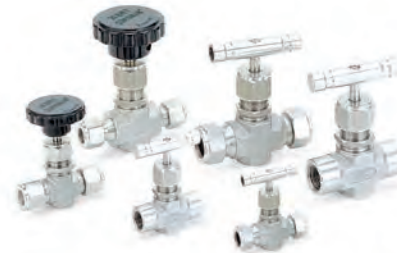
APPLICATIONS

Line which contain small solid impurities, Instrument lines which contain viscous fluids or slurries, System which require flow regulation and full flow capabilities .

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)

INTEGRAL BONNET NEEDLE VALVES



APPLICATIONS

Instrument isolation , General service , Test valve.

SPECIFICATIONS

- Maximum Working pressure : 5000 psi (345 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C)

UNION BONNET NEEDLE VALVES



APPLICATIONS

High temperature and pressure Radioactive Service, Condensates.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F(-54°C to 232°C) with PTFE packing
Up to 1200°F(649°C) with Graphite packing

HIGH PRESSURE NEEDLE VALVES



APPLICATIONS

High pressure service, Instrument Isolation.

SPECIFICATIONS

- Maximum Working pressure : up to 10000psi(689bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F(-54°C to 232°C) with PTFE packing
Up to 1200°F(649°C) with Graphite packing

INTEGRAL BONNET BAR STOCK NEEDLE VALVES



APPLICATIONS

Instrument Isolation, General service , Test Valves.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C)

MANIFOLD VALVES



APPLICATIONS

Pressure & Differential Pressure Instrumentation.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : 65°F to 450°F (-54°C to 232°C) with PTFE packing up to 1200°F(649°C) with Graphite packing

TOGGLE VALVES



APPLICATIONS

Instrument Line , Pneumatic system.

SPECIFICATIONS

- Maximum Working pressure : 300 psi (20.7 bar) @ 100°F(38°C)
- Working Temperature Range : -20°F to 200°F (-29°C to 93°C) with PTFE stem tip

RELIEF VALVES



APPLICATIONS

Prevent over pressure to protect.

SPECIFICATIONS

- Maximum Working pressure : SRVL-300 psi (21 bar) @ 100°F(38°C)
SRVH- 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)
- Opening Pressure : SRVL: 10psi(0.69 bar) to 250 psi (17.2bar)
SRVH: 225psi(15.5 bar) to 6000 psi (414 bar)

CHECK VALVES



APPLICATIONS

Instrument Lines, Prevent reversed flow, un-directional flow control.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 70°F(21°C)
- Cracking Pressure : 1/3 psi (0.03 bar) to 100 psi(6.9 bar)
- Working Temperature Range : -10°F to 375°F (-23°C to 191°C)

HIGH PRESSURE & ADJUSTABLE CRACKING PRESSURE CHECK VALVES



APPLICATIONS

Prevent Reversed flow, High Pressure characteristics.

SPECIFICATIONS

- Maximum Working pressure : up to 6000 psi (414 bar) @ 100°F(38°C)
- Cracking Pressure : 1/3 psi (0.03 bar) to 25 psi(1.7 bar)
- Working Temperature Range : -10°F to 375°F (-23°C to 191°C)

GAUGE & GAUGE ROOT VALVES



APPLICATIONS

Pressure Gauge , primary Isolation.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : 65°F to 450°F (-54°C to 232°C) with PTFE packing up to 1200°F(649°C) with Graphite packing

EXCESS FLOW VALVES



APPLICATIONS

Fuel system , Gas system , Hydraulic & Pneumatic system.

SPECIFICATIONS

- Maximum Working pressure : up to 6000psi(414bar)@100°F(38°C)
- Working Temperature Range : up to 400°F(204°C)

DOUBLE BLOCK & BLEED VALVES



APPLICATIONS

Process piping isolation points, Direct mount to instruments, Vents and drains.

SPECIFICATIONS

- Maximum Working pressure : Class 150 to Class 2500
- Working Temperature Range :
-58°F to 400°F (-50°C to 204°C) for stainless steel and duplex valve assemblies
-50°F to 400°F (-46°C to 204°C) for carbon steel valve assemblies

BLEED & PURGE VALVES



APPLICATIONS

Venting & purging of Instrument system , Hydraulic & Pneumatic system.

SPECIFICATIONS

- Maximum Working pressure : up to 10000psi(689bar) @100°F (38°C)
- Working Temperature Range : -65°F to 850°F (-54°C to 454°C) with stainless steel ,
from -20°F to 450°F (-29°C to 232°C) with carbon steel

WATER REGULATORS



APPLICATIONS

Water Pressure Reducing system.

SPECIFICATIONS

- Maximum Working pressure : up to 220 psi (15.1 bar) @ 100°F (38°C)
- Reducing Pressure Range : 8psi (0.6 bar) to 60psi (4.1bar)
- Working Temperature Range : up to 176°F (80°C)

Others

HYDRAULIC FLANGES (SAE J518, ISO 6162)



APPLICATIONS

High pressure hydraulic system.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F (38°C)
- Working Temperature Range : -13°F to 392°F (-25°C to 200°C) with sealing material FKM

FLANGES



APPLICATIONS

Petroleum , Power plant , Chemical , Boiler heat , Exchanger , Shipbuilding , Construction.

SPECIFICATIONS

- ANSI/ASME , BS , DIN , JIS , MSS
- CLASS 150, 300, 400, 600, 900, 1500, 2500

MICRON IN-LINE FILTERS



APPLICATIONS

Protection of instrument system.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F (38°C)
- Working Temperature Range : -20°F to 900°F (-29°C to 482°C)
- Filtering Range : 1 to 90 Micron

VACUUM CLAMPS & ISO-KF COMPONENTS



APPLICATIONS

Vacuum system.

SPECIFICATIONS

- Vacuum rated to 1×10^{-8} Torr
- Leak rating : 1×10^{-9} std cc/s
- Maximum Working Temperature : 200°C with sealing material VITON

QUICK CONNECTORS



APPLICATIONS

All types of Instruments, Control panels, Hydraulic and Pneumatic system , Test stands, Gas supply system.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F (38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)

FLEXIBLE METAL HOSES



APPLICATIONS

High Vibration , Misalignment, Piping Works for expansion, Moveable Equipment.

SPECIFICATIONS

- Maximum Working pressure : 1600 psi (110 bar) @ 70°F (21°C)
- Working Temperature Range : up to 1000°F (538°C)



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

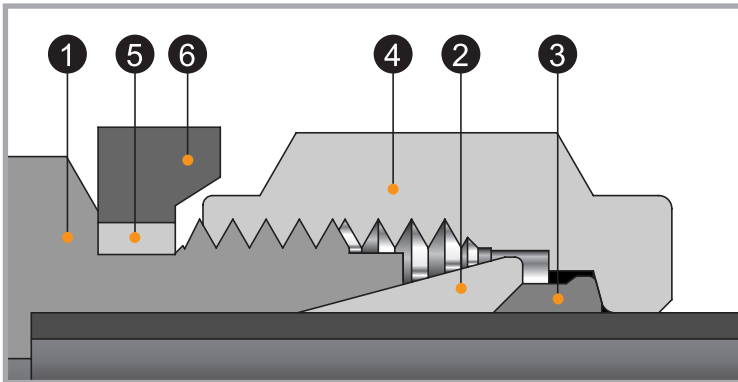
- Difficult to check 1-1/4 turns
- Use Inspection Gap Gauge to ensure sufficient pull-up installation
- Need Inspection Gap Gauge to assure fitting has been sufficiently pulled up.
- Difficult to check with Inspection Gap Gauge in limited spaces.
- These problems could cause poor installation and leakage.

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

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.