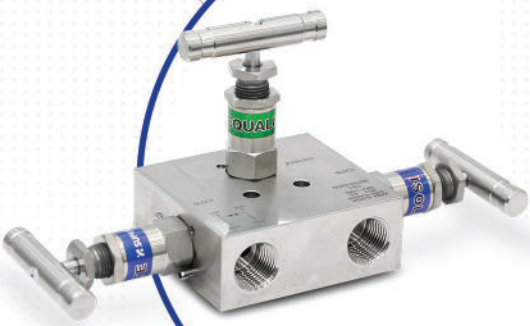
BMT

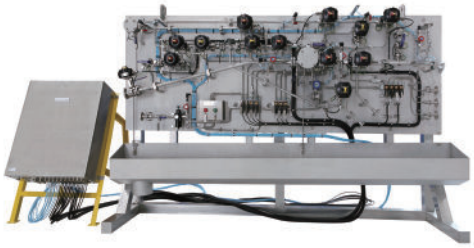
BMT
Company Profile



SUPERLOK®

Fuel Conversion and Supply Units

FVT (1", Methanol)
Fuel Valve Train



Dimension(WxDxH) / Weight(Approx.) : 3440 x 2130 x 800 mm / 1350 kg
Media for Engine : Methanol (CH3OH)
Media for Purge : Nitrogen (N2)
Design Pressure : 232 psi (16 bar)
Design Temperature : -13 to 140°F (-25~60℃)
Line Size : 1" Fuel & 1/2" N2 Line
Me-OH Max. Flow Rate : 3,500 kg/h

FVT (2", Methanol)
Fuel Valve Train

Dimension(WxDxH) / Weight(Approx.) 2780 x 910 x 2100 mm / 665 kg
Media for Engine : Methanol (CH3OH)
Media for Purge : Nitrogen (N2)
Design Pressure : 232 psi (16 bar)
Design Temperature : -13 to 140°F (-25~60℃)
Line Size : 2" Fuel & 1" N2 Line
Me-OH Max. Flow Rate : 19,000 kg/h

GVU (Methane)
Gas Valve Unit

Dimension(WxDxH) / Weight(Approx.) : 3900 x 640 x 1200 mm / 670kg
Media for Engine : Methane (CH4)
Media for Purge : Nitrogen (N2)
Design Pressure : 232 psi (16 bar)
Design Temperature : -13 to 140°F (-25~60℃)

GRU (NG)
Gas Regulating Unit

Dimension(WxDxH) / Weight(Approx.) : 1530 x 1120 x 2320mm / 1,380kg
Media for Engine : Natural Gas (NG)
Media for Purge : Nitrogen (N2)
Design Pressure : 232 psi (16 bar)
Design Temperature : 32 to 122°F (0 to 50℃)

Process & Cryogenic Valves

Ball Valves (Floating/Trunnion Mounted)

Size : 1/2 to 24 in.
Working Pressure : Class 150 to 2500
Temperature : -51 to 500°F (-46 to 260°C)
up to 842°F (450°C) with metal seat

Block & Bleed Valves

Size : 1/2 to 16 in.
Working Pressure : Class 150 to 2500
Temperature : -51 to 500°F (-46 to 260°C)
up to 842°F (450°C) with metal seat

Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

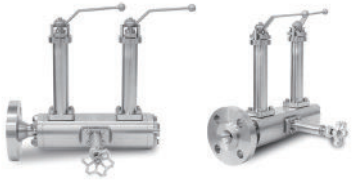
Globe Valves

Size : 1/2 to 16 in.
Working Pressure : Class 150 to 2500
Temperature : -49 to 842°F (-45 to 450°C)

Cryogenic Ball Valves

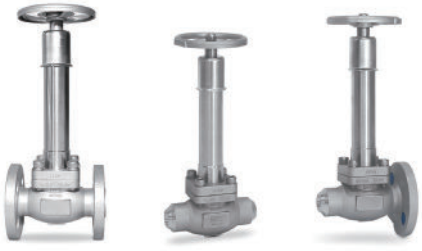
Size : 1/2 to 14 in.
Working Pressure : Class 150 to 2500
Temperature : down to -320°F (-196°C)

Cryogenic DBB Valves



Size : 1/2 to 4 in.
Working Pressure : Class 150 to 2500
Temperature : down to -320°F (-196°C)

Cryogenic Needle Valves



Size : 1/2 to 1-1/2 in.
Working Pressure : Class 150 to 2500
Temperature : down to -320°F (-196°C)

Cryogenic Globe Valves

Size : 1/2 to 14 in.
Working Pressure : Class 150 to 2500
Temperature : down to -320°F (-196°C)

Cryogenic Gate Valves

Size : 2 to 8 in.
Working Pressure : Class 150 to 300
Temperature : down to -320°F (-196°C)

Cryogenic Check Valves

Size : 1 to 14 in.
Working Pressure : Class 150 to 300
Temperature : down to -320°F (-196°C)

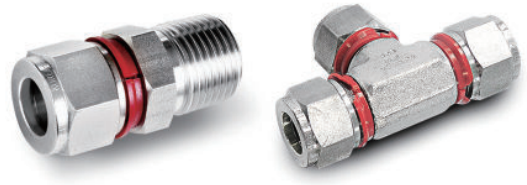
Others

Break-away Couplings

Size: up to 8 in.
Working Pressure: up to 362.5 psi (25 bar)
Temperature: Down to -321°F (-196°C)
Breaking Force : 13 KN

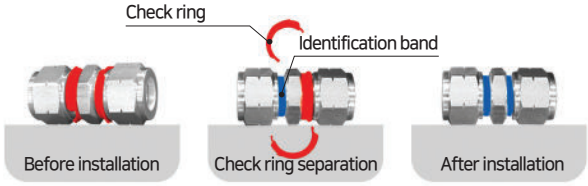
i-Fitting®

SUPERLOK Tube Fittings & Valves with i-Fitting



i-Fitting Features

- Size : 1/4 to 1 in., 6 to 25 mm
- Working Pressure : governed by the pressure rating of tubing
- Temperature : up to 1200˚F (649˚C)
- i-Fitting components include: body, front & back ferrule, nut, identification band, and check ring
- The check ring is essentially a built-in gap gauge, which separates when a fitting is tightened to the point of perfect compression
- Solves over- and under-tightening problems
- Increases installer safety in high pressure and dangerous chemical environments
- Improves productivity and reduces costs
- Industry changing, patented design by BMT



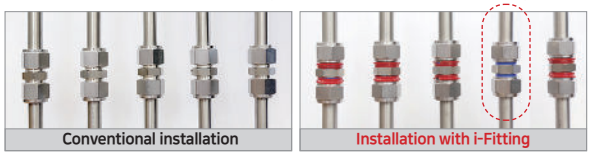
Why i-Fitting is the Right Choice?

PERFECT CONNECTION can be **SEEN**, **HEARD**, **FELT** with the **SAFEST** fitting in the market!!

Most tube fitting leaks are caused by improper installation. i-Fittings, developed by BMT, ensures a safe, quick, and precise connection every time.
i-Fittings eliminate errors during installation by incorporating a patented check ring on every fitting. The check rings, which function as a built-in gap gauge, separate as a fitting is tightened to the exact point of perfect compression.

Q1 Which one requires more tightening?

Q2 Which one is completely installed from pre-assembly?



Fittings

SUPERLOK Tube Fittings

Single/Double Ferrule Compression Type

Size : 1/16 to 2 in., 2 to 38 mm
Working Pressure : governed by the pressure rating of tubing
Temperature : up to 1200°F (649°C)

DIN Tube Fittings (DIN2353 Bite-Type)

Size : 4 to 42 mm
Working Pressure : PN 100 bar for LL (Very Light)
PN 315 bar for L (Light)
PN 630 bar for S (Heavy)
Temperature : -76 ~ 752°F (-60 ~ 400°C)

JIS Tube Fittings (JIS B2351 Bite-Type)

Size : 1/8 to 1-1/2 in., 4 to 50 mm
Working Pressure : up to 7250 psi (500 bar)
Temperature : -76 ~ 752°F (-60 ~ 400°C)

37º Flared Tube Fittings to SAE J514

Size : 1/8 to 2 in., 2 to 50 mm
Working Pressure : 8700 psi (600 bar) @100°F (38°C) with O-Ring
5000 psi (345 bar) @100°F (38°C) without O-Ring
Temperature : up to 800°F (427°C)

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O-Ring Face Seal Fittings

Size : 1/8 to 1 in.
Working Pressure : up to 13000 psi (910 bar) @100F (38°C)
Temperature : up to 550°F (287°C)

Instrumentation Thread Fittings

Size : 1/8 to 1 in.
Working Pressure : 10000 psi (689 bar) @100°F (38°C)
Temperature : -320 to 1000°F (-196 to 537°C)

Forged Fittings

Size : up to 4 in.
Working Pressure : 2000, 3000, 6000, 9000 lbs
Temperature : up to 1000°F (538°C)

Dielectric Fittings

Size : 6 to 12 mm
Working Pressure : up to 5000 psi (206 bar)
Temperature : -40 to 200°F (-40 to 93°C)
Electrical Resistance of Insulators : 10 × 106 Ω at 10 V (dc) at 70°F (20°C)

Push-On Hose Fittings

Size : 6 to 25 mm
Working Pressure : up to 350 psi (24 bar) @100°F (38°C)
Temperature : -40 to 212°F (-40 to 100°C)

Valves

Ball Valves to DIN Standard (SBVD370)

Size : 4mm to 42mm
Working Pressure : up to 7200 psi (496 bar) @100°F (38°C)
Temperature : -4 to 210°F (-20 to 100°C)

Forged High Pressure Ball Valves (SBVF360)

Size : 1/8 to 3/4 in., 3 to 16 mm
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -65 to 200°F (-54 to 93°C) with PCTFE seat
-65 to 350°F (-54 to 177°C) with PTFE seat

Manifold Valves

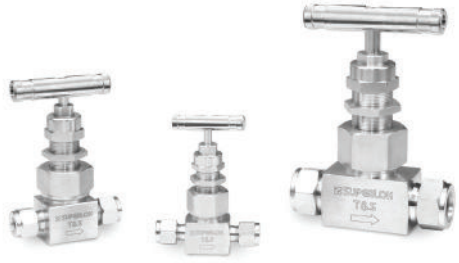
Size : 1/4 to 1/2 in
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing
up to 1200°F (649°C) with Graphite packing

Instrument Series

Modular Mounting System

Manifold (Standard) : 2- and 4-valve
Process/Vent Connection : G 1/4 Female, NPT 1/4 Female
Working Pressure : up to 6000 psi (414 bar) @38°C (100°F)
Temperature : up to 200°C (392°F)

Union Bonnet Needle Valves (SUNV)



Size : 1/4 to 1 in., 6 to 25 mm
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing
-65 to 600°F (-54 to 315°C) with PEEK packing
up to 1,200°F (649°C) with Graphite packing

Integral Bonnet Needle Valves (SINV)

Size : 1/8 to 3/4 in., 3 to 18 mm
Working Pressure : up to 5000 psi (345 bar) @100°F (38°C)
Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing
-65 to 600°F (-54 to 315°C) with PEEK packing

Integral Bonnet Bar Stock Needle Valves (SBNV)

Size : 1/8 to 1 in., 6 to 25 mm
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing
-65 to 600°F (-54 to 315°C) with PEEK packing

High Pressure Bar Stock Needle Valves (SHBNV)

Size : 1/4 to 1/2 in.
Working Pressure : up to 10000 psi (689 bar) @100°F (38°C)
Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing
up to 1200°F (649°C) with Graphite packing

SAE Flanged Ball Valves (SBVE)

Size : 1/2 to 5 in.
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -4 to 392°F (-20 to 200°C)

Ball Valves (SBV120H)

Size : 1/16 to 3/4 in., 3 to 12 mm
Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)
Temperature : 50 to 150°F (10 to 66°C)

Ball Valves (SBV210)

Size : 1/4 to 1 in., 6 to 16 mm
Working Pressure : up to 1000 psi (69 bar) @100°F (38°C)
Temperature : 0 to 450°F (-17 to 232°C) with PTFE seat

Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

Ball Valves (SBVH360)

Size : 1/4 to 1 in., 6 to 25 mm
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -65 to 302°F (-54 to 150°C) with PCTFE seat
-65 to 500°F (-54 to 260°C) with PEEK seat

Trunnion Ball Valves (BT)

Size : 1/8 to 1/2 in., 6 to 12 mm
Working Pressure : up to 10000 psi (689 bar) @100°F (38°C)
Temperature : 0 to 450°F (-17 to 232°C)

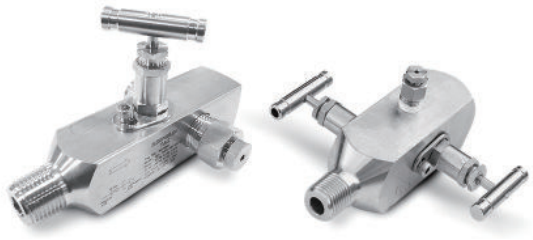
Swing-out Ball Valves (SWB)

Size : 1/4 to 2 in.
Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)
Temperature : -20 to 450°F (-29 to 232°C)

Key Operation Ball Valves (SBVL)

Size : 1/4 to 1 in., 6 to 25 mm
Working Pressure : up to 6000 psi (413 bar) @70°F (21°C)
Temperature : 0 to 450°F (-17 to 232°C) with PTFE seat

Instrument Gauge Valves



Size : 1/2 to 3/4 in.
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing
up to 1200°F (649°C) with Graphite packing

Check Valves (SPCV)

Size : 1/8 to 1 in., 6 to 25mm
Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)
Cracking Pressure : 1/3 to 25 psi (0.03 to 1.7 bar)
Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

Adjustable Check Valves (SACV)

Size : 1/4 to 3/8 in., 6 to 8mm
Working Pressure : up to 3000 psi (206 bar)
Cracking Pressure : 3 to 600 psi (0.2 to 14.3 bar)
Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

One-piece Check Valves (SOCV)

Size : 1/4 to 3/4 in.
Working Pressure : up to 3000 psi (206 bar)
Cracking Pressure : 1/3 to 25 psi (0.02 to 1.7 bar)
Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

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Instrument Series

One-piece Adjustable Check Valves (SOACV)

Size : 1/4 to 1/2 in.
Working Pressure : up to 3000 psi (206 bar)
Cracking Pressure : 3 to 600 psi (0.2 to 41.3 bar)
Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

High Pressure Check Valves (SHCV)

Size : 1/8 to 1 in., 6 to 25 mm
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Cracking Pressure : 1/3 to 25 psi (0.03 to 1.7 bar)
Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

Plug Valves (SPV130)

Size : 1/8 to 1/2 in., 6 to 12 mm
Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)
Temperature : -10 to 400°F (-23 to 204°C)

Rising Plug Valves (SRPV)

Size : 1/4 to 3/4 in.
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -20 to 400°F (-28 to 204°C)

Toggle Valves (STV)

Size : 1/8 to 1/2 in., 3 to 12mm
Working Pressure : up to 300 psi (20.6 bar) @100°F (38°C)
Temperature : -20 to 200°F (-28 to 93°C)

Industrial Excess Flow Valves (SEFV)

Size : 1/8 to 1/2 in., 6 to 12 mm
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)
Temperature : -10 to 400°F (-23 to 204°C) with Viton seal

Bleed Valves (SBLV)

Size : 1/8 to 3/4 in.
Working Pressure : 10000 psi (689 bar) @100°F (38°C)
Temperature : -65 to 850°F (-54 to 454°C)

Purge Valves (SPUV)

Size : 1/4 to 1/2 in.
Working Pressure : up to 4000 psi (275 bar) @100°F (38°C)
Temperature : -65 to 600°F (-54 to 315°C)

Relief Valves (SRVL & SRVH)

Size : 1/4 to 1/2 in., 6 to 12 mm
Working Pressure : up to 300 psi (21 bar) @100°F (38°C) for SRVL
up to 6000 psi (414 bar) @100°F (38°C) for SRVH
Opening Pressure : 10 to 250 psi (0.69 to 17.2 bar) for SRVL
225 to 6000 psi (15.5 to 414bar) for SRVH
Temperature : -10 to 400°F (-23 to 204°C)

Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

Others and Accessories

Micron Filter (SIF, STF)

Working Pressure : up to 3000 psi (207 bar) @70°F (21°C) for SIF (In-line)
up to 6000 psi (414 bar) @70°F (21°C) for STF (Tee)
Temperature : -20 to 900°F (-29 to 482°C) for SIF (In-line)
-40 to 250°F (-40 to 121°C) for STF (Tee)
Filtering Range : 0.5 to 90 Micron

Hydraulic Flanges

Working Pressure : up to 6000 psi (413 bar)
Temperature : -20 to 1000°F (-29 to 538°C)

Vacuum Clamps & ISO-KF Components

Vacuum rated to $1x10^{-8}$ Torr
Leak rating : $1x10^{-9}$ std cc/s

Instrument Quick Connectors

Working Pressure : 3000 psi (207 bar) @100°F (38°C)
Temperature : 400°F (204°C) with VITON

Hydraulic Quick Couplings

Working Pressure : 5000 psi (345 bar) @100°F (38°C)
Temperature : -15 to 400°F (-26 to 204°C)
Maximum Working Temperature : 400°F (204°C) with VITON

Tubing

Type : Seamless Coiled/Straight Tubing, Pre-insulated Tubing
Size : 1/8 to 2 in., 3 to 25 mm

Flexible Metal Hoses

Pressure Rating : up to 1600 psi (110 bar) @100°F (38°C)
Temperature : -325 to 800°F (-200 to 426°C)

Swaging Units

Tube Diameter Range (OD) : Maximum 42mm for Metric Tube
Maximum 2" for Fractional Tube

Tube Benders

Tube Diameter Range (OD) : 1/4 to 1/2 in.

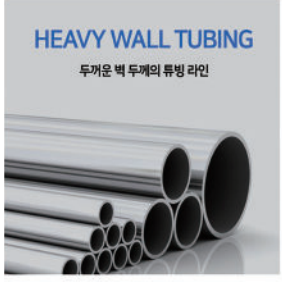
Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

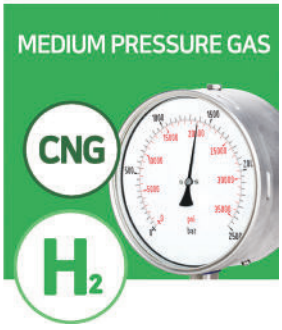
Fittings

Pre-Forming Fitting

Double Ferrule Tube Fittings for Medium Pressure Applications

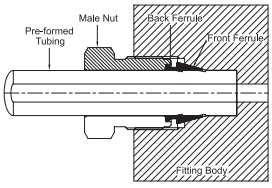
Pre-forming Fittings provide efficient solutions for industrial sites requiring medium pressure control (up to 15,000 psi), Leak-free operation, and highest safety.



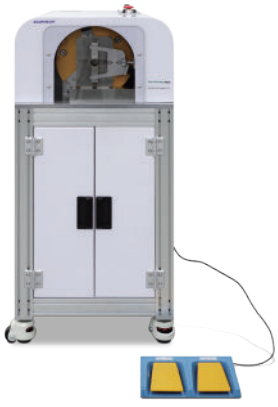


Design and Construction

It consists of body, front/back ferrule, and nut. When the nut is tightened, each front ferrule is clamped to the pre-formed tubing to form an airtight seal. In the meantime, the back ferrule hinges on grooves ofthe preformed tubing to provide additional grip to further strengthen the seal.



Pre-forming Fittings Tools



Automatic Pre-forming Tool

Manual Pre-forming Tool

Pre-forming Fittings

· BMT developed & patented design
· Medium-pressure double ferrule tube fittings

Size : 1/4 to 1 in., 6 to 25 mm
Working Pressure : up to 15000 psi (1,034 bar)
Temperature : -423 to 1200°F (-252 to 649°C)
Material : Titanium, Super Duplex, Alloy C-276/400/20, 316 Stainless Steel

Medium Pressure Fittings

Size : 1/4 to 1 in.
Working Pressure : up to 20000 psi (1380 bar)
Temperature : -423 to 1200°F (-252 to 649°C)

High Pressure Fittings

Size : 1/4 to 1 in.
Working Pressure : up to 60000 psi (4140 bar)
Temperature : -423 to 1200°F (-252 to 649°C)

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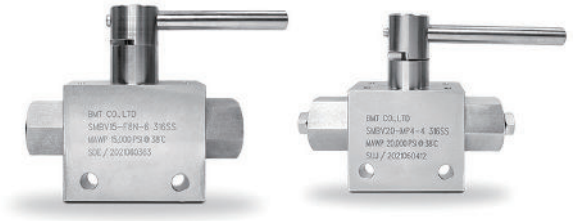
Valves

Medium Pressure Needle Valves (SMNV)

Size : 1/4 to 1 in.
Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C)
Temperature : 0 to 450°F (-17 to 232°C) with PTFE packing
up to 1200°F (648°C) with optional grafoil packing

Medium Pressure Ball Valves (SMBV)



Size : 1/4 to 1 in.
Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C)
Temperature : 0 to 400°F (-17.8 to 204°C)

Medium Pressure Check Valves (SMPCV)

Size : 1/4 to 1 in.
Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C)
Cracking pressure : 14 psig ~ 26 psig (0.966 bar ~ 1.794 bar)
Temperature : - O-ring type : -50°F (-45°C) to 500°F (260°C)
- Ball type : -110°F (-79°C) to 1200°F (649°C)

Medium Pressure Relief Valves (SMRV)

Size : 9/16 in.
Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C)
Temperature : 32°F (0°C) to 400°F (204°C)

High Pressure Needle Valves (SHNV)

Size : 1/4 to 1 in.
Working Pressure : up to 60000 psi (4137 bar) @72°F (22°C) for SHNV
Temperature : 0 to 450°F (-17 to 232°C) with PTFE packing
up to 1200°F (648°C) with optional grafoil packing

High Pressure Check Valves (SHPCV)

Size : 1/4 to 1 in.
Working Pressure : up to 60000 psi (4137 bar) @72°F (22°C) for SHPCV
Cracking pressure : 14 psig ~ 26 psig (0.966 bar ~ 1.794 bar)
Temperature : - O-ring type : -50°F (-45°C) to 500°F (260°C)
- Ball type : -110°F (-79°C) to 1200°F (649°C)

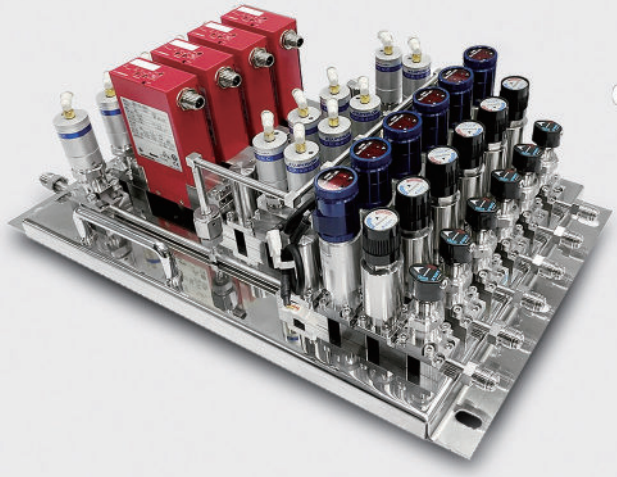
High Pressure Relief Valves (SHRV)

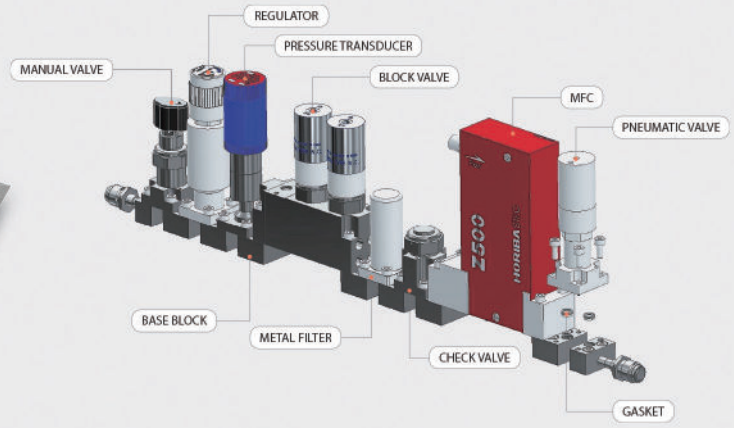
Size : 9/16 in.
Working Pressure : 30000 to 60,000 psi (206.8 to 4137 bar) @72°F (22°C) for SHRV
Temperature : -110°F (-79°C) to 500°F (260°C)

HGS®

High-integrated Gas System

HGS® : Trademark registered in Republic of Korea (as of April 2024)





HGS® Diaphragm Valves (HGSODV1)

Low Pressure·Manual·Shut-Off

Size (Cv) : 1.125 in., 1.5 in. (0.1 for standard, 0.2 for High Flow)
Working Pressure : 1 MPa (145 psi)
Temperature : PCTFE : -10 ~ 80°C (14 ~ 176°F)
PFA : -10 ~ 150°C (14 ~ 302°F)
Grades : BA, EP

HGS® Diaphragm Valves (HGBPDV1)

Low Pressure·Pneumatic·Block

Size (Cv) : 1.125 in., 1.5 in. (0.1 for standard, 0.2 for High Flow)
Working Pressure : 1 MPa (145 psi)
Temperature : PCTFE: -10 ~ 80°C (14 ~ 176°F)
PFA: -10 ~ 150°C (14 ~ 302°F)
Grades : BA, EP

HGS® Diaphragm Valves (HGPDV1)

Low Pressure·Pneumatic·Standard

Size (Cv) : 1.125 in., 1.5 in. (0.1 for standard, 0.2 for High Flow)
Working Pressure : 1 MPa (145 psi)
Temperature : PCTFE : -10 ~ 80°C (14 ~ 176°F)
PFA : -10 ~ 150°C (14 ~ 302°F)
Grades : BA, EP

HGS® Check Valves (HGCVSE, HGCVSP)

Size (Cv) : 1.125 in. (0.25)
Working Pressure : 1 MPa (145 psi)
Temperature : -10 ~ 80°C (14 ~ 176°F)
Grades : BA, EP

Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

HGS® Regulators (HGPR1, HGPRL1)

Size (Cv) : 1.125 in., 1.5 in. (0.04. 0.08)
Max. Rated Inlet Pressure : 150 psig (10.3 bar)
Outlet Pressure Ranges : 3 to 30, 60, 100 psig (0.2 to 2.1, 4.1, 6.9 bar)
Design Proof Pressure : 150% of Maximum rated pressure Operating
Temperature : -40 to 70 °C (-40 to 158°F)

HGS® Filters (HGFT1, HGFT2)

Size (Cv) : 1.125 in., 1.5 in.
Removal Rating : ≥ 0.002㎛
Retention : Greater than 99.9999999% Removal of all particles down to 0.002㎛
Rate Flow : 30, 60, 120 SLPM
Max. Inlet Pressure : 0.98Mpa (10kgf/cm^2) at 20°C (68°F),
Max. Working Temperature : 460°C (862°F)
Grade : BA, EP

HGS® Base Block

Size : 1.125 in., 1.5 in.
Grade : BA, EP

HGS® Gasket

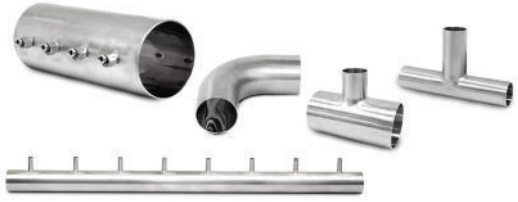
Size : 1.125 in., 1.5 in.
Grade : BA, EP

Fittings

Weld & Metal Seal Fittings

Size : 1/8 to 1 in.
Working Pressure : governed by the pressure rating of tubing
Temperature : up to 1000°F (537°C)
Grades : BA, EP

Bend Fittings



Size : Pipe 8 to 550A, Tube 1/4 to 6 in.
Working Pressure : governed by the pressure rating of tubing
Temperature : up to 1000°F (537°C)
Grades : AP, BA, EP

Valves

Diaphragm Valves (DV1)

Low Pressure·Manual·Standard

Size (Cv) : 1/4 to 3/4 in. (0.3 to 0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

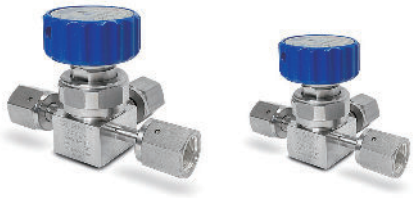
Diaphragm Valves (DV2)

Low Pressure·Manual·Forged

Size (Cv) : 1/4 to 3/4 in. (0.3 to 0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

UHP Series

Diaphragm Valves (DV3)
Low Pressure·Manual·3-Way



Size (Cv) : 1/4 to 1/2 in. (0.3 to 0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (LDV1)
Low Pressure·Manual·Loto

Size (Cv) : 1/4 to 1/2 in. (0.3 to 0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : MP, BA, EP

Diaphragm Valves (MNDV1)
Low Pressure·Manual·Mono

Size (Cv) : 1/4 in. (0.3)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (PDV1)
Low Pressure·Pneumatic·Standard

Size (Cv) : 1/4 to 3/4 in. (0.3 to 0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

Diaphragm Valves (PDV3)
Low Pressure·Pneumatic·3-Way

Size (Cv) : 1/4 to 1/2 in. (0.3 to 0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (MNPDV1)
Low Pressure·Pneumatic·Mono

Size (Cv) : 1/4 in. (0.3)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (SODV1)
Low Pressure·Manual·Shut-Off

Size (Cv) : 1/4" to 3/4" (0.3 to 0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

Diaphragm Valves(BDV1)
Low Pressure·Manual·Block

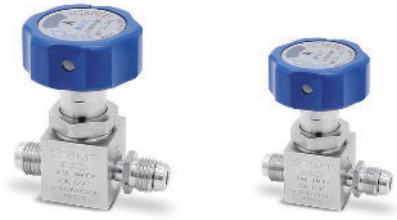
Size (Cv) : 1/4 in. (0.3), 1/2 in. (0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

Diaphragm Valves (PBDV1)
Low Pressure·Pneumatic·Block

Size (Cv) : 1/4 in. (0.3), 1/2 in. (0.7)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

Diaphragm Valves (MDV1)
Medium Pressure·Manual·Standard



Size (Cv) : 1/4 in. (0.3)
Working Pressure : up to 290 psi (20 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (MLDV1)
Medium Pressure·Manual·LOTO

Size (Cv) : 1/4 in. (0.3)
Working Pressure : up to 290 psi (20 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (MPDV1)
Medium Pressure·Pneumatic·Standard

Size (Cv) : 1/4 in. (0.3)
Working Pressure : up to 290 psi (20 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (MFDV1)
Medium Pressure·Manual·High Flow

Size (Cv) : 1/2 in. (0.5)
Working Pressure : up to 290 psi (20 bar)
Temperature : PCTFE : -10 ~ 80°C (14 ~ 176°F)
PFA, PI : -10 ~ 150°C (14 ~ 302°F)
Grades : MP, BA, EP

Diaphragm Valves (MFPDV1)
Medium Pressure·Pneumatic·High Flow

Size (Cv) : 1/2 in. (1.5)
Working Pressure : up to 290 psi (20 bar)
Temperature : PCTFE : -10 ~ 80°C (14 ~ 176°F)
PFA, PI : -10 ~ 150°C (14 ~ 302°F)
Grades : MP, BA, EP

Diaphragm Valves (MFDV2)
Medium Pressure·Manual·High Flow

Size (Cv) : 1/2 to 1 in. (2.8 to 3.5)
Working Pressure : up to 275 psi (19 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : MP, BA, EP

Diaphragm Valves (HDV1)
High Pressure·Manual·Standard

Size (Cv) : 1/4 in. (0.1), 1/2 in. (0.27)
Working Pressure : up to 3045 psi (210 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

UHP Series

Diaphragm Valves (HPDV1)
High Pressure·Pneumatic·Standard

Size (Cv) : 1/4 in. (0.1), 1/2 in. (0.27)
Working Pressure : up to 3045 psi (210 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

Diaphragm Valves (HPFDV1)
High Pressure·Manual·High Flow

Size (Cv) : 1/4 to 1/2 in. (0.3 to 0.5)
Working Pressure : up to 3,045 psi (210 bar)
Temperature : PCTFE : -10 ~ 80°C (14 ~ 176°F)
PI : -10 ~ 150°C (14 ~ 302°F)
Grades : MP, BA, EP

Diaphragm Valves (HPFPDV1)
High Pressure·Pneumatic·High Flow

Size (Cv) : 1/2 in. (0.5)
Working Pressure : up to 3,045 psi (210 bar)
Temperature : 14 to 104 °F (-10 to 40℃)
Grades : AP, BA, EP

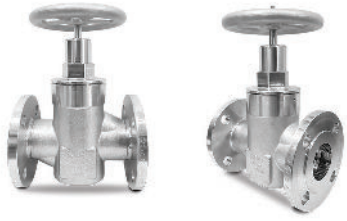
Bellows Valves (BV1)
Low Pressure·Manual·Standard

Size (Cv) : 1/4 to 3/4 in. (0.36 to 2.6)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

Bellows Valves (PBV1)
Low Pressure·Pneumatic·Standard

Size (Cv) : 1/4 to 1/2 in. (0.36 to 1.1)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 302°F (-10 to 150°C)
Grades : AP, BA, EP

Bellows Valves (BV2)
Low Pressure·Manual·Forged



Size (Cv) : 1 to 2 in. (4.1 to 16), 15 to 50A (2.9 to 21)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : AP, BA, EP

Bellows Valves (PBV2)
Low Pressure·Pneumatic·Forged

Size (Cv) : 3/4 to 2 in. (2.9 to 16), 15 to 50A (2.9 to 21)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : AP, BA, EP

Bellows Valves (BV3)
Low Pressure·Manual·Casting

Size (Cv) : 65 to 550A (81 to 3400)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : AP, BA, EP

Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

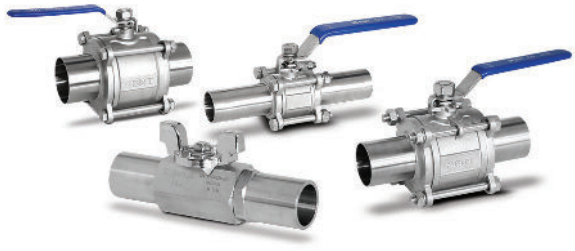
Bellows Valves (YMBV2)
Medium Pressure·Manual·Y-Type

Size (Cv) : 1 in. (20.0)
Working Pressure : up to 290 psi (20 bar)
Temperature : -10 ~ 80°C (14 ~ 176°F)
Grades : MP, BA, EP

Clean Ball Valves (SBV210)
Hex Two-Piece

Size (Cv) : 1/4 to 1 in. (1.25 to 16)
Working Pressure : up to 1000 psi (69 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : AP, BA, EP

Clean Ball Valves (BLV1)
Three-Piece



Size (Cv) : 15A to 100A (41 to 2317)
Working Pressure : up to 145 psi (10 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : AP, BA, EP

Check Valves (CV1)
Low Pressure·Manual·Standard

Size (Cv) : 1/4 to 1/2 in. (0.55 to 0.7)
Working Pressure : up to 3000 psi (206 bar)
Nominal Reseal Pressure : 4 psi (0.276 bar)
Nominal Cracking Pressure : 2 psi (0.138 bar)
Temperature : 14 to 176°F (-10 to 80°C)
Grades : AP, BA, EP

Regulators and Filters

Regulators (PR1, PR2)
Tied-type

Size (Cv) : 1/4 in. (0.06 or 0.2), 1/2 in. (0.5)
Max. Rated Inlet Pressure : 600, 1000, 3500 psi (41.4, 69, 241 bar)
Outlet Pressure Range : 30, 60, 100, 150, 250 psi (2.1, 4.1, 6.9, 10.3, 17.3 bar)
Temperature : -15 to 302°F (-26 to 150°C)
Grades : BA, EP

Regulators (PRL1, PRL2)
Standard type

Size (Cv) : 1/4 in. (0.06 or 0.2), 1/2 in. (0.5)
Max. Rated Inlet Pressure : 600, 1000, 3500 psi (41.4, 69, 241 bar)
Outlet Pressure Range : 30, 60, 100, 150, 250 psi (2.1, 4.1, 6.9, 10.3, 17.3 bar)
Temperature : PCTFE : -26 ~ 80℃ (-15 ~ 176°F)
PFA, PI : -26 ~ 150℃ (-15 ~ 302°F)
Grades : BA, EP

Gas Filters (FT, FTH, FTF)
Low Pressure (FT) / High Pressure (FTH) / High Flow (FTF)

Size: 1/4 in., 1/2 in.
Removal Rating : ≥ 0.002㎛
Retention : Greater than 99.9999999% Removal of all particles down to 0.002㎛
Rate Flow : 60, 120, 200 SLPM
Max. Inlet Pressure : 12 Mpa (122kgf/cm^2), 21 Mpa (210kgf/cm^2) at 20°C (68°F),
Max. Working Temperature : 450°C (842°F)

METAL CLAD SWITCHGEAR (MCSG)

BMT's Metal Clad Switchgear (MCSG) has the **highest level of safety** and **reliability features**. The segregation between compartments (Circuit Breaker, Main Bus Bar, Cable, and Low Voltage compartments) using metal partitions minimizes the spread of internal arc / explosion accident to peripheral devices.

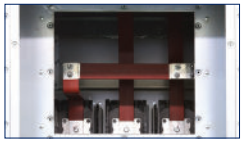
- ☑ Reduced installation space
- ☑ Enhanced safety / reliability
- ☑ Convenient maintenance and inspection
- ☑ Digitalization of protection/control systems
- ☑ Reliable design and performance

Low Voltage Compartment

· Enough space for connection, disconnectionm and testing of internal wiring.
· Steel construction of the panel connecting wiring duct (at the top of the panel).

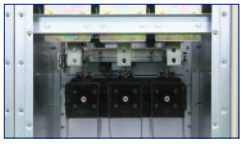
CB Compartment

· The positions of the breaker can be flipped (Run ↔ Test) while the door is closed.
· Inspection window for circuit breakers on the door.
· Strong internal pressure structure of the hinges and lockers.
· Metal Shutter and Shutter Padlock for safe repair and maintenance.
· IP cover on the front of the breaker.



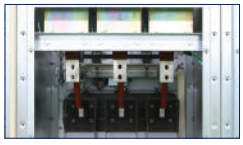
Bus Compartment

The isolated structure of the busbar compartment prevents the fault spread of accident to adjacent switchgears.



Earthing Switch

A device to ensure the safety of maintenance by discharging the load side current in the Test and Drawout position.



Cable Compartment

· Sufficient spces for main circuit wiring.
· Insulation cap for dielectric of Earthing Switch.
· Bottom-entry incoming & outgoing (Top-entry is not available).

Ventilation Cover

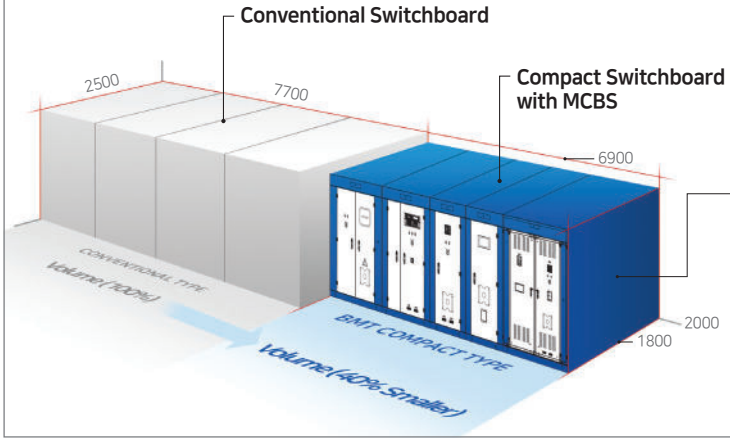
COMPACT SWITCHBOARDS

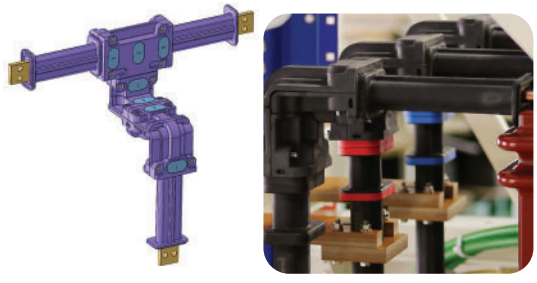
Volume Reduced by 40% & Busbar Saved by 10%

BMT Compact Switchboard dramatically reduces spatial constraints of power receiving facilities and electrical rooms in factories, buildings, etc.

BMT compact switchboards are designed and manufactured safer and more compact with MCBS, BMT's own patented technology. With a seismic design and type certified quality, BMT compact switchboards are suitable for the requirements of various industrial fields including power generation facilities, plants, and construction.

- ☑ Outstanding safety/convenience
- ☑ Compact Structure
- ☑ Convenient Operability and Expandability
- ☑ Certified Product with Patented Technologies





MCBS Basic Structure

Interior of Compact Switchboard (MCBS applied)

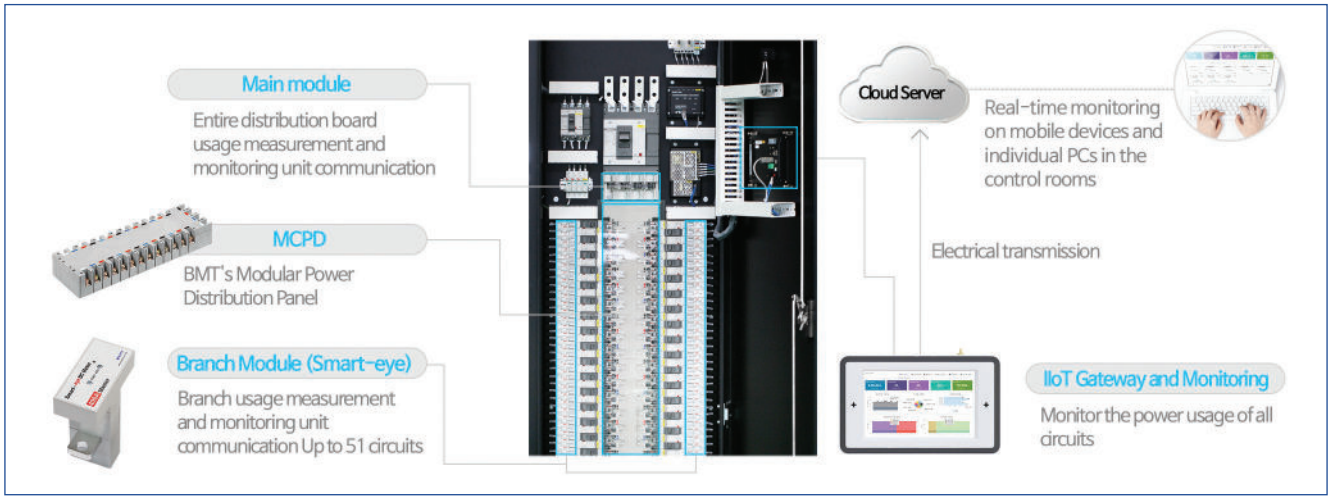
Any products not mentioned in this publication, please consult BMT (SUPERLOK) sales representative for availability.

SMART DISTRIBUTION BOARDS

BMT Smart Distribution Board is an
optimum system to increase power energy efficiency

BMT Smart Distribution Boards use MCPD and Smart-eye technologies – BMT's own patented technologies-to offer values differentiated from conventional distribution boards. Smart-eye provides solutions for energy monitoring and control; and MCPD simplifies the existing complex and costly busbar assembly process and enhances the safety.

- ☑ Easy and Simple Installation and Maintenance
- ☑ Safety Accident Prevention
- ☑ Smart Electric Power Management: Power Quality Control and Energy Savings (up to 30%)
- ☑ Interfaces between Various Systems such as EMS, BAS, and Enterprise Management System

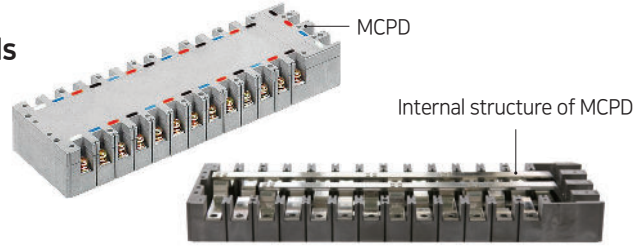


Conceptual Diagram of Smart Distribution Boards

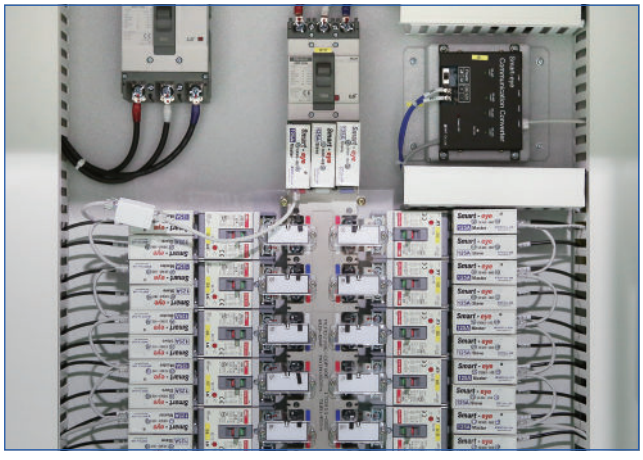
MCPD (MOLDED CASE POWER DISTRIBUTOR)

Essential for more convenient, safe easy-to-use, and economical distribution boards and switchboards

MCPD is a new-concept power distribution unit that replaces the traditional complex busbars (arranged vertically and horizontally) by one integrated configuration where busbars are pre-configured inside one Molded Case, an insulation case uniformized, modularized, and standardized. This feature enables simple and excellent production of distribution boards and switchboards without complex and expensive busbar assembly processes, and allows easy repair and maintenance.



- ☑ Excellent Usability
- ☑ Uniformization and Standardization
- ☑ Economical
- ☑ High Electrical Safety
- ☑ Compact and Perfect
- ☑ Compatibility and Applicability
- ☑ Suitable for Emergency Construction Patented Product



Interior of MCPD installed distribution board

BMT Co., Ltd.

Heasdquarters
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TEL: +82 51 780 5000 FAX: +82 51 780 5100
E-mail: superlok@superlok.com
WEB: www.superlok.com

Fittings & Valves

Industrial

- Instrumentation Tube Fittings
- i-Fitting®
- Ball/Plug Valves
- Double Block & Bleed Valves
- Manifold/Gauge Valves
- Globe/Needle Valves
- Cryogenic Valves
- Check/Relief/Excess Flow Valves
- Medium/High Pressure Fittings & Valves
- Eco-fuel Gas Valve Units

Ultra High Purity

- HGS® (High-integrated Gas System)
- Weld & Metal Face Seal Fittings
- Bend Fittings
- Diaphragm Valves
- Bellows Valves
- Check Valves
- Clean Ball Valves
- Regulators
- Gas Filters

HGS® : Trademark registered in Republic of Korea (as of April 2024)

Electric & Energy

- Metal Clad Switchgear (MCSG)
- Compact Switchboard
- Motor Control Center (MCC)
- Smart Distribution Board
- Energy Management System (EMS)

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