N BIS Pipe Connectors

BIS Pipe Connectors

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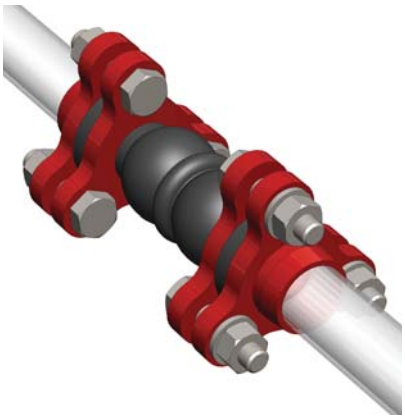
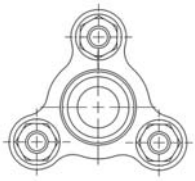
Flexible Pipe Connector

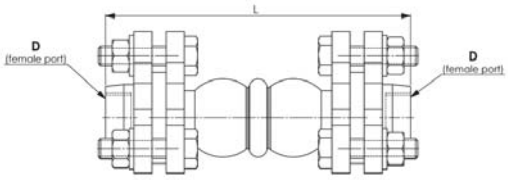


Features and Benefits

- can be applied in combination with:
  - inlet and outlet of fan coil units, air handling units, chillers and condensers
  - air suction and discharge of pumps
  - intervals in chilled water piping
- installation of Flexible Pipe Connectors is recommended to allow for axial pipe movements due to thermal expansion or contraction, thereby protecting the building structure from damaging stress. These connectors also help to isolate the low and high frequency vibrations transmitted through pipe walls
- allows for axial, angular and transverse pipe movements
- the triangular flange design offers much better reliability, safety and convenience as compared to union type connectors
- unique pressurized steel wire strand for additional safety
- Construction Features
  - bellow: Neoprene (NBR and EPDM available on request)
  - reinforcement: nylon cord fabric
  - pressurized ring: steel wire strand
  - flanges: forged steel, threaded to BS21 (NPT available on request); epoxy powder coated for corrosion resistance; nuts and bolts electrogalvanized; floating triangular thread design
- Technical Data
  - maximum pressure: 250 PSI / 17 bar
  - burst pressure: 650 PSI / 45 bar
  - temperature resistance: from -15 °C to +115 °C
  - working media: water, compressed air, oil, weak acids / alkalines
  - vacuum: 700 mm Hg
  - standards: testing as per BS5150 : 1974



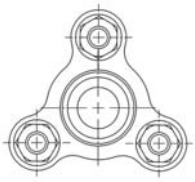
Part No.	D (")	L	Elongation (mm)	Compression (mm)	Deflection Angle
DMF P C15	½	155 mm	6	22	45°
DMF P C20	¾	155 mm	6	22	45°
DMF P C25	1	155 mm	6	22	45°
DMF P C30	1¼	155 mm	6	22	45°
DMF P C40	1½	175 mm	6	22	45°
DMF P C50	2	175 mm	6	22	45°
DMF P C65	2½	240 mm	10	24	45°

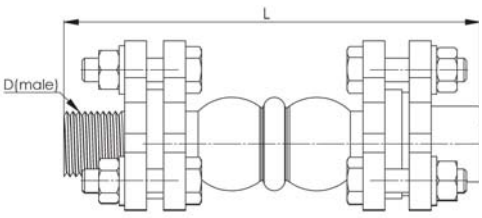


Flexible Pipe Connector (Brass Coupler)

Features and Benefits

- can be applied in combination with:
  - inlet and outlet of fan coil units, air handling units, chillers and condensers
  - air suction and discharge of pumps
  - intervals in chilled water piping
- installation of Flexible Pipe Connectors is recommended to allow for axial pipe movement due to thermal expansion or contraction, thereby protecting the building structure from damaging stress. These connectors also help to isolate the low and high frequency vibrations transmitted through pipe walls
- allows for axial, angular and transverse pipe movements
- the triangular flange design offers much better reliability, safety and convenience as compared to union type connectors
- unique pressurized steel wire strand for additional safety
- Construction Features
  - bellow: Neoprene (NBR and EPDM available on request)
  - reinforcement: nylon cord fabric
  - pressurized ring: steel wire strand
  - flanges: forged steel, threaded to BS21 (NPT available on request); epoxy powder coated for corrosion resistance; nuts and bolts electrogalvanized; floating triangular thread design
- Technical Data
  - maximum pressure: 250 PSI / 17 bar
  - burst pressure: 650 PSI / 45 bar
  - temperature resistance: from -15 °C to +115 °C
  - working media: water, compressed air, oil, weak acids / alkalines
  - vacuum: 700 mm Hg
  - standards: testing as per BS5150 : 1974





Part No.	D (mm)	D (")	L	Elongation (mm)	Compression (mm)	Deflection Angle
DMFP C 16C	16	½	155 mm	6	22	45°
DMFP C 22C	22	¾	155 mm	6	22	45°
DMFP C 28C	28	1	155 mm	6	22	45°
DMFP C 35C	35	1¼	155 mm	6	22	45°
DMFP C 42C	42	1½	175 mm	6	22	45°
DMFP C 54C	54	2	175 mm	6	22	45°
DMFP C 67C	67	2½	240 mm	6	22	45°
DMFP C 76C	76	3	260 mm	10	24	45°
DMFP C 80C	80	3	260 mm	10	24	45°

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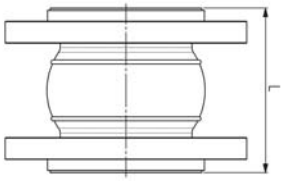
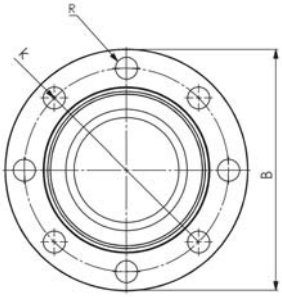
Flexible Expansion Joint

Features and Benefits

- can be applied in combination with:
  - inlet and outlet of air handling units, chillers, cooling towers and condensers
  - air suction and discharge of pumps
  - intervals in chilled water piping
- installation of Flexible Expansion Joints is recommended to compensate for axial, transverse and angular pipe movements, protecting the system from stress due to thermal pipe expansion or contraction
- due to the spherical shape of the bellow the flow of the fluid is smooth, resulting in negligible pressure drop across the joint
- control units for the flanges are available as optional attachments and are recommended to be used at installations where the rated movements of the joint are likely to be exceeded even if the piping system is anchored on both sides
- the control units consist of neoprene grommets, gusset plate, counter flange and control rod
- designed to protect the joint from damage due to excessive pipeline movements
- set comprises control rods with gusset plates titled with new preme gromments providing acoustic insulation
- Construction Features
  - bellow: Neoprene (NBR and EPDM available on request)
  - reinforcement: nylon cord fabric and spring steel wire
  - flanges: floating forged steel, drilled to BS4504 PN 16 (ANSI standards on request); epoxy powder coated for corrosion resistance
- Technical Data
  - temperature resistance: from -15 °C to +115 °C
  - working media: water, compressed air, oil, weak acids / alkalines
  - vacuum: 700 mm Hg
- Technical Data:
  - maximum pressure: 2" to 12": 250 PSI / 17 bar
  - maximum pressure: 14" to 20": 140 PSI / 10 bar
  - burst pressure: 2" to 12": 650 PSI / 45 bar
  - burst pressure: 14" to 20": 550 PSI / 40 bar





Part No.	D (")	R	L	B (mm)	k (mm)	Elongation (mm)	Compression (mm)	Holes (dia. - no. holes)	Control Rod Part No.
DMEJ50	2	M18	130 mm	165	125	10	13	18-4	DMCR50
DMEJ65	2½	M18	150 mm	185	145	10	13	18-4	DMCR65
DMEJ80	3	M20	150 mm	200	160	10	13	18-8	DMCR80
DME J 100	4	M20	152 mm	220	180	10	16	18-8	DMCR100
DME J 125	5	M22	152 mm	250	210	10	16	18-8	DMCR125
DME J 150	6	M22	152 mm	285	240	10	16	22-8	DMCR150
DME J 200	8	M24	165 mm	340	295	13	16	22-12	DMCR200
DME J 250	10	M26	203 mm	405	355	13	20	26-12	DMCR250
DME J 300	12	M28	203 mm	460	410	13	20	26-12	DMCR300
DME J 350	14	M30	255 mm	520	470	13	25	26-16	DMCR350
DME J 400	16	M32	255 mm	580	525	13	25	30-16	DMCR400
DME J 450	18	M34	255 mm	640	585	13	25	30-20	DMCR450
DME J 500	20	M36	255 mm	715	650	13	25	33-20	DMCR500
DME J 600	24	M40	260 mm	840	770	13	25	36-20	DMCR600

Di Electric Union

Features and Benefits

- designed for installation of two non similar pipes to prevent corrosion and detoriation in piping systems due to galvanic and stray current
- Construction Features
  - electrogalvanized threaded steel body with integral sweat end on one side with brass threaded/solder coupler
  - dielectric coupler sleeve and separator gasket to prevent metal to metal contact
  - lead free construction to comply with lead free installation requirements
- Technical Data
  - maximum pressure: 250 PSI / 17 bar
  - temperature resistance: from -30 °C to +120 °C
  - electrogalvanized as per ASTM B 633 Standards (SC3), BS 1706 FE/ZN 12
  - dielectric strength: ASTM D149, BS 2782, DIN 53483
  - threading: BS21 : 1985 (NPT available on request)

Model A

steel female thread to copper solder connection

Part No.	D (")	Model
DM DEU A 022	½	Steel FT ½" x Copper Solder ½" (16 mm)
DM DEU A 028	¾	Steel FT ¾" x Copper Solder ¾" (22 mm)
DM DEU A 035	1	Steel FT 1" x Copper Solder 1" (28mm)
DM DEU A 040	1¼	Steel FT 1¾" x Copper Solder 1¾" (35mm)
DM DEU A 048	1½	Steel FT x Copper Solder (42 mm)
DM DEU A 060	2	Steel MT x Copper Solder (84 mm)

Model B

steel female thread to copper female thread

Part No.	D (")	Model
DM DEU B 022	½	Steel FT ½" x Copper FT ½"
DM DEU B 028	¾	Steel FT ¾" x Copper FT ¾"
DM DEU B 035	1	Steel FT 1" x Copper FT 1"
DM DEU B 040	1¼	Steel FT 1¼" x Copper FT 1¼"
DM DEU B 048	1½	Steel FT 1½" x Copper FT 1½"
DM DEU B 060	2	Steel FT 2" x Copper FT 2"

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Model C

steel female thread to copper male thread

Part No.	D (")	Model
DM DEU C 022	½	Steel FT ½" x Copper MT ½"
DM DEU C 028	¾	Steel FT ¾" x Copper MT ¾"
DM DEU C 035	1	Steel FT 1" x Copper MT 1"
DM DEU C 040	1¼	Steel FT 1¼" x Copper MT 1¼"
DM DEU C 048	1½	Steel FT 1½" x Copper MT 1½"
DM DEU C 060	2	Steel FT 2" x Copper MT 2"

Model D

steel male thread to copper solder connection

Part No.	D (")	Model
DM DEU D 022	½	Steel MT ½" x Copper Solder ½" (16 mm)
DM DEU D 028	¾	Steel MT ¾" x Copper Solder ¾" (22 mm)
DM DEU D 035	1	Steel MT 1" x Copper Solder 1" (28 mm)

Model E

steel male thread to copper male thread

Part No.	D (")	Model
DM DEU E 022	½	Steel MT ½" x Copper MT ½"
DM DEU E 028	¾	Steel MT ¾" x Copper MT ¾"
DM DEU E 035	1	Steel MT 1" x Copper MT 1"
DM DEU E 040	1¼	Steel MT 1¼" x Copper MT 1¼"
DM DEU E 048	1½	Steel MT 1½" x Copper MT 1½"
DM DEU E 060	2	Steel MT 2" x Copper MT 2"

Di Electric Flanges

Part No.	D (")	Model
DM DEF 048	1½	Steel MT 1½" x Copper MT 1½"
DM DEF 060	2	Steel MT 2" x Copper MT 2"
DM DEF 072	2½	Steel MT 2½" x Copper MT 2½"
DM DEF 090	3	Steel MT 3" x Copper MT 3"
DM DEF 115	4	Steel MT 4" x Copper MT 4"
DM DEF 168	6	Steel MT 6" x Copper MT 6"
DM DEF 219	8	Steel MT 8" x Copper MT 8"

Features and Benefits

- designed for installation of two non similar pipes to prevent corrosion and detoriation in piping systems due to galvanic and stray current
- Construction Features
  - flange kit with threaded/ slip on plain weld type steel flange fixed with steel flange ring with threaded bronze coupler. Di electric protection is achieved by Di electric coupler sleeve and separator gasket.
- Technical Data
  - maximum pressure: 175 / 70 bar
  - temperature resistance: from -30 °C to +120 °C
  - electrogalvanized as per ASTM B 633 Standards (SC3), BS 1706 FE/ZN 12
  - dielectric strength: ASTM D149, BS 2782, DIN 53483
  - flange drilling: BS4504 PN16

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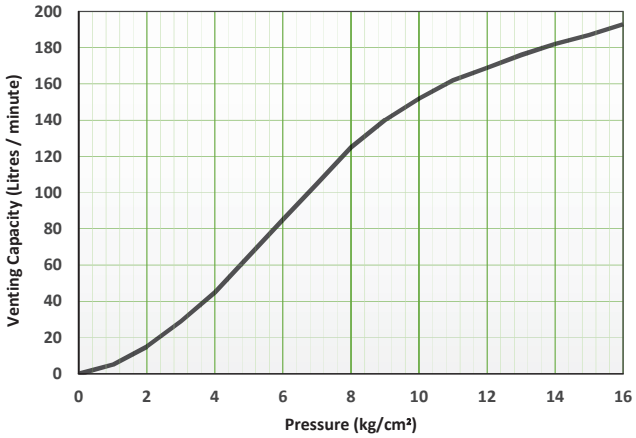
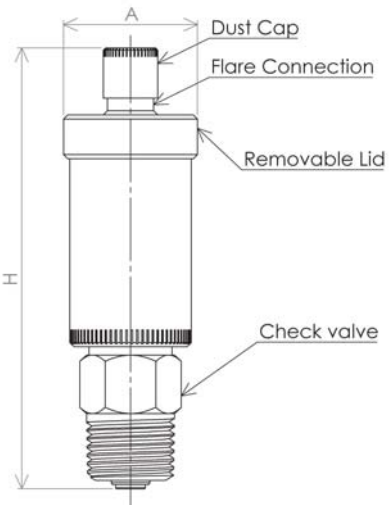
Automatic Air Vent



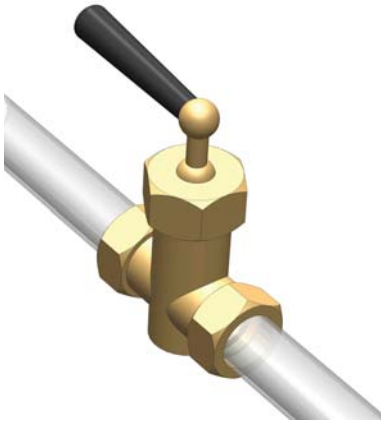
Features and Benefits

- Construction Features
  - body : brass
  - float : polypropylene
  - maximum operating pressure: 16 bar
  - maximum operating temperature: +110 °C
  - to be installed vertically in highest point of the system of airbottles, riser pipes, air separators, heat exchangers and air valves
- air outlet: ¼" flare connection
- check valve attachment provides cost savings and increases convenience
- prevents corrosion and premature wear of components

Part No.	Check valve	H (mm)	A (mm)
DMA A V38	3/8"	103	32
DMA A V12	1/2"	103	32
DMA A V34	3/4"	103	32



Gauge Cock



Features and Benefits

- gauge cocks provide an economical way to shut off the flow of air to the pressure device, allowing the device to be isolated from the pressure media or removed from the service
- Construction Features
  - forged brass body
  - glass reinforced nylon handle
  - integral teflon sealing
- Technical Data
  - rated for 25 kg/m^3 operating pressure

Part No.	D (")
DMGC38	3/8
DMGC12	1/2

Siphon

Features and Benefits

- siphon tube is connected between the pressure gauge and the process in applications where high temperature vapours or fluids are present
- it acts as a cooling coil and protects the gauge from high temperature vapours by dissipating heat
- Construction Features
  - forged brass body
  - mild steel epoxy powder coated
- Technical Data
  - rated for 25 kg/m^3 operating pressure

Part No.	D (")	Model
DMUS38	3/8	U Shape
DMUS12	1/2	U Shape
DMOS38	3/8	O Shape
DMOS12	1/2	O Shape

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Pressure Temperature Test Plug

Features and Benefits

- test plugs provide an economical solution to installing pressure and temperature gauges in chilled water systems
- the unique "Dual Core" design allows for the bottom seal to close, sealing the system before the probe is fully removed through the top core
- extensions allow the same test plug to be used for insulated pipe lines, as the core is always on top
- nylon retainer cap is supplied as an option
- Construction Features
  - full brass / stainless steel body
  - nordel core
- Technical Data
  - pressure rated up to 1,000 PSI / 68 bar
  - maximum temperature -350 °F / 175°C
- test kit is available which has a complete range of thermometers, pressure gauges and a gauge adaptor in a rugged case

Part No.	D (")	Model
DMBT P N14	¼	Test Plug: material: brass; connection: NPT
DMBT P N12	½	Test Plug: material: brass; connection: NPT
DMBT P B14	¼	Test Plug: material: brass; connection: BSP
DMBT P B12	½	Test Plug: material: brass; connection: BSP
DM SST P N14	¼	Test Plug: material: stainless steel; connection: NPT
DM SST P N12	½	Test Plug: material: stainless steel; connection: NPT
DM SST P B14	¼	Test Plug: material: stainless steel; connection: BSP
DM SST P B12	½	Test Plug: material: stainless steel; connection: BSP
DMEX T 14N	¼	Accessory: brass extension 1¾"; connection: NPT
DMEX T 12N	½	Accessory: brass extension 1¾"; connection: NPT
DMEX T 14B	¼	Accessory: brass extension 1¾"; connection: BSP
DMEX T 12B	½	Accessory: brass extension 1¾"; connection: BSP
DMG A 123	⅛	Accessory: Gauge Adaptor

Pressure Temperature Test Kits

Part No.	D (")	Model
DM TK1 - 2.5	-	Test Kit consisting of: 1x 2½" Gauge, 2x Thermometers and 1 Gauge Adaptor
DM TK2 - 2.5	-	Test Kit consisting of: 2x 2½" Gauges, 2x Thermometers and 2 Gauge Adaptors
DMP G -30	¼	Pressure Gauge Thread: NPT; Range: 0-30 PSI
DMP G -60	¼	Pressure Gauge Thread: NPT; Range: 0-60 PSI
DMPG - 100	¼	Pressure Gauge Thread: NPT; Range: 0-100 PSI
DMPG - 160	¼	Pressure Gauge Thread: NPT; Range: 0-160 PSI
DMPG - 200	¼	Pressure Gauge Thread: NPT; Range: 0-200 PSI
DMT M 125	-	Thermometer temperature range: 25°F to 125°F
DMT M 160	-	Thermometer temperature range: -40°F to 160°F
DMT M 220	-	Thermometer temperature range: 0°F to 220°F
DMT M 550	-	Thermometer temperature range: 50°F to 500°F