

# ***megaflexon*** *with Confidence*

## MOLDED TYPE

### RUBBER EXPANSION JOINTS



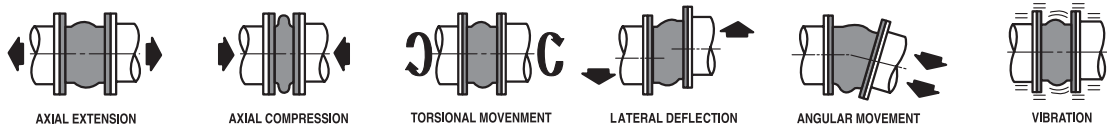
### MOLDED TYPE

## EXPANSION JOINTS

### APPLICATIONS

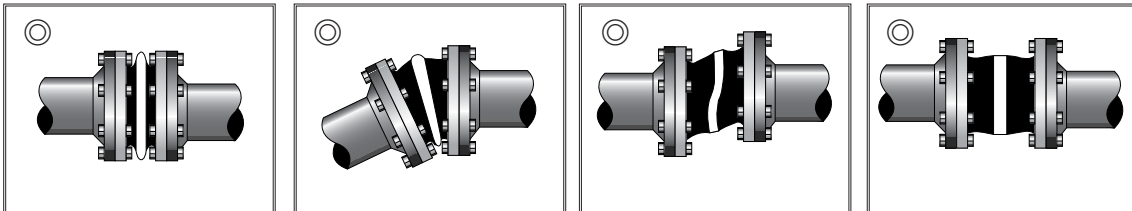
1. Water treatment, swage treatment and air purification systems.
2. Chemical and industrial process pipe line, vibration stress line, protect pumps and valves.
3. Heating, ventilation and air conditioning - isolate the mechanical noise and vibration.
4. Power plants - absorb thermal expansion lines, condenser lines, steam turbine exhaust lines, suction lines, nuclear and fossil fuel plant.
5. Shipboard installations involve system heating, circulation water suction and discharge.

### ABSORB MOVEMENTS

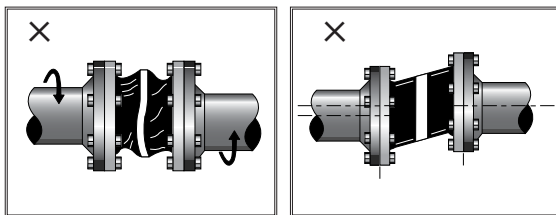


### INSTALLATION GUIDE

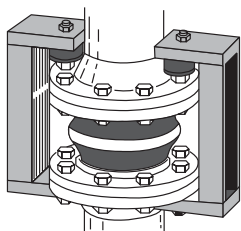
#### CORRECT ☉



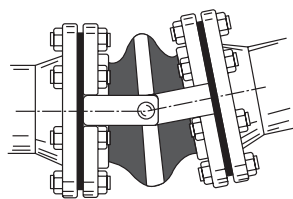
#### INCORRECT ✕



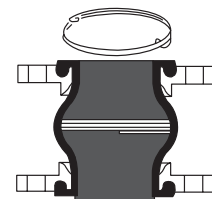
### CUSTOM-BUILT DESIGN



Rubber-metal limiters  
for subsequent installation



Link limiters for angular  
movement



Vacuum support ring

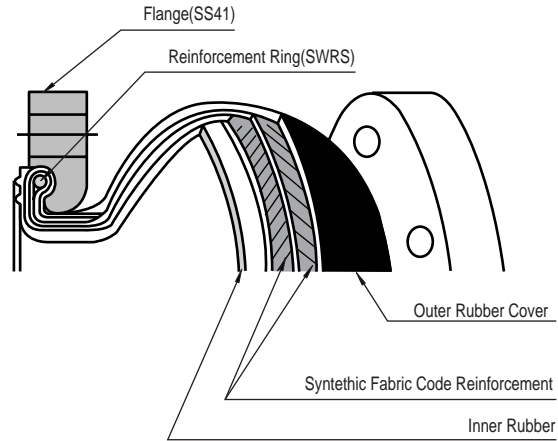
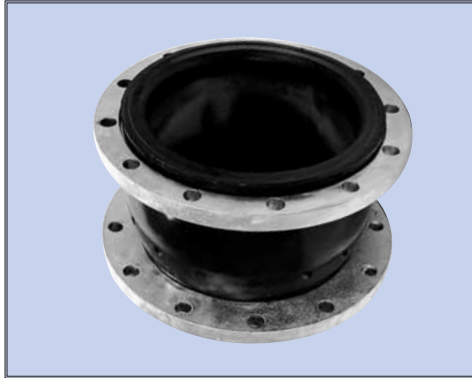
## Expansion Joint

# MSE-10

SERIES

**MOLDED TYPE**

**SINGLE SPHERE EXPANSION JOINTS**



**STRUCTURE**

No.	Description	Materials
1	Internal Rubber	EPDM or other elastomer
2	Reinforcement Layer	Nylon Tire Code
3	External Rubber	EPDM or other elastomer
4	Wire	Hard Steel Wire
5	Flange	Mild Steel, Stainless Steel

**ALLOWABLE MOVEMENT**

Diam. D $\phi$ mm(in)	L (mm)	Allowable Movement(mm)				Operating Condition			
		Axial Compression	Axial Extension	Lateral	Angular	Max. Pressure kg/cm <sup>2</sup> (PSIG)	Max. Temperature °C(°F)	Vacuum Rating mm Hg(in.)	Weight(kg)
32(1 1/4)	95	8	4	8	15°	10(150)	104(220)	400(16)	2.03
40(1 1/2)	95	8	4	8	15°	10(150)	104(220)	400(16)	2.61
50(2)	105	8	5	8	15°	10(150)	104(220)	400(16)	3.27
65(2 1/2)	115	12	6	10	15°	10(150)	104(220)	400(16)	4.73
80(3)	130	12	6	10	15°	10(150)	104(220)	400(16)	6.05
100(4)	135	18	10	12	15°	10(150)	104(220)	400(16)	7.44
125(5)	170	18	10	12	15°	10(150)	104(220)	400(16)	9.60
150(6)	180	18	10	12	15°	10(150)	104(220)	400(16)	12.25
200(8)	205	25	14	22	15°	10(150)	104(220)	400(16)	18.16
250(10)	240	25	14	22	15°	10(150)	104(220)	400(16)	25.26
300(12)	260	25	14	22	15°	10(150)	104(220)	400(16)	37.80
350(14)	265	25	16	22	15°	10(105)	104(220)	400(16)	47.80
400(16)	265	25	16	22	15°	10(105)	104(220)	400(16)	59.20
450(18)	265	25	16	22	15°	10(105)	104(220)	400(16)	61.90
500(20)	265	25	16	22	15°	10(105)	104(220)	400(16)	72.30
600(24)	265	25	16	22	15°	10(105)	104(220)	400(16)	90.20
700(28)	265	25	16	22	10°	10(105)	104(220)	400(16)	125.00
800(32)	265	25	16	22	10°	10(105)	104(220)	400(16)	140.00

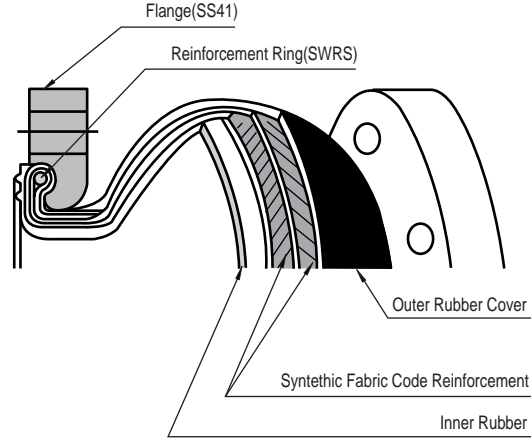
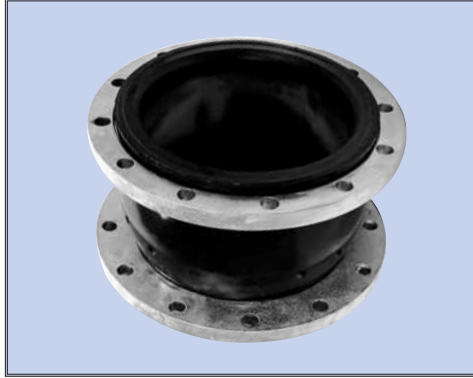
**Note**

1. Applicable fluids : water, warm water, seawater, weak acids, alkalies, etc.
2. Available flange drilling : JIS, DIN, ANSI, BS and other standard drilling.
3. Available material : Neoprene, Butyl, Nitrile, EPDM, Hypalon, Natural Rubber, etc.
4. Burst pressure : 60kg/cm<sup>2</sup>(11/4" to 8") : 40kg/cm<sup>2</sup>(10" to 12")  
(Amb. Temperature)

Expansion Joint  
**MSE-15** SERIES

**MOLDED TYPE**

**SINGLE SPHERE EXPANSION JOINTS**



**STRUCTURE**

No.	Description	Materials
1	Internal Rubber	EPDM or other elastomer
2	Reinforcement Layer	Nylon Tire Code
3	External Rubber	EPDM or other elastomer
4	Wire	Hard Steel Wire
5	Flange	Mild Steel, Stainless Steel

**ALLOWABLE MOVEMENT**

Diam. D $\phi$ mm(in.)	L (mm)	Allowable Movement(mm)				Operating Condition		
		Axial Compression	Axial Extension	Lateral	Angular	Max. Pressure kg/cm <sup>2</sup> (PSIG)	Max. Temperature °C(°F)	Vacuum Rating mm Hg(in.)
32(1 1/4)	130	30	20	20	35°	10(150)	104(220)	400(16)
40(1 1/2)	130	30	20	20	35°	10(150)	104(220)	400(16)
50(2)	130	30	20	20	35°	10(150)	104(220)	400(16)
65(2 1/2)	130	30	20	20	30°	10(150)	104(220)	400(16)
80(3)	130	30	20	20	30°	10(150)	104(220)	400(16)
100(4)	130	30	20	20	25°	10(150)	104(220)	400(16)
125(5)	130	30	20	20	25°	10(150)	104(220)	400(16)
150(6)	130	30	20	20	15°	10(150)	104(220)	400(16)
200(8)	130	30	20	20	15°	10(150)	104(220)	400(16)
250(10)	130	30	20	20	10°	10(150)	104(220)	400(16)
300(12)	130	30	20	20	10°	10(150)	104(220)	400(16)

**Note**

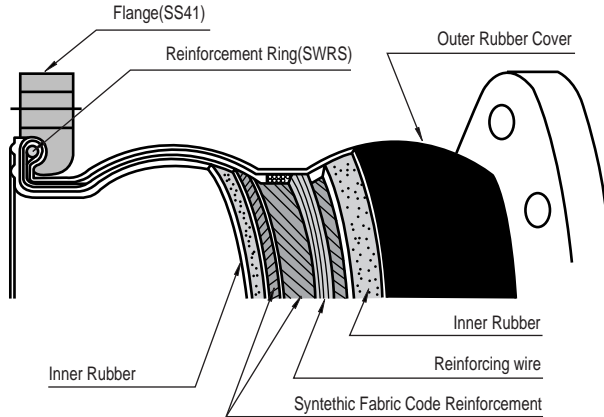
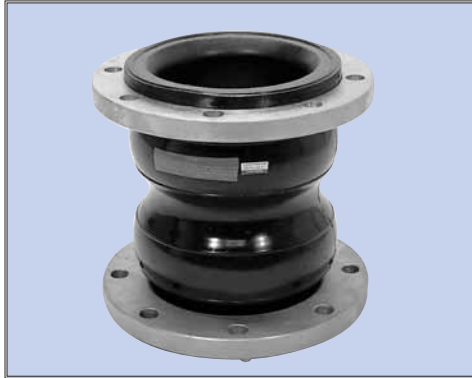
1. Applicable fluids : water, warm water, seawater, weak acids, alkalies, etc.
2. Available flange drilling : JIS, DIN, ANSI, BS and other standard drilling.
3. Available material : Neoprene, Butyl, Nitrile, EPDM, Hypalon, Natural Rubber, etc.
4. BURST PRESSURE : 60kg/cm<sup>2</sup>(11/4" to 8") : 40kg/cm<sup>2</sup>(10" to 12")  
(Amb. Temperature)

## Expansion Joint

# MDE SERIES

**MOLDED TYPE**

**DOUBLE SPHERE EXPANSION JOINTS**



**STRUCTURE**

No.	Description	Materials
1	Internal Rubber	EPDM or other elastomer
2	Reinforcement Layer	Nylon Tire Code
3	External Rubber	EPDM or other elastomer
4	Wire	Hard Steel Wire
5	Flange	Mild Steel, Stainless Steel

**ALLOWABLE MOVEMENT**

Diam. D $\varnothing$ mm(in)	L (mm)	Allowable Movement(mm)				Operating Condition			
		Axial Compression	Axial Extension	Lateral	Angular	Max. Pressure kg/cm <sup>2</sup> (PSIG)	Max. Temperature °C(°F)	Vacuum Rating mm Hg(in.)	Weight(kg)
32(1 1/4)	175	50	30	35	40°	10(150)	104(220)	400(16)	2.40
40(1 1/2)	175	50	30	35	40°	10(150)	104(220)	400(16)	2.98
50(2)	175	50	30	35	40°	10(150)	104(220)	400(16)	3.78
65(2 1/2)	175	50	30	35	40°	10(150)	104(220)	400(16)	5.45
80(3)	175	50	30	35	40°	10(150)	104(220)	400(16)	6.83
100(4)	225	57	35	40	35°	10(150)	104(220)	400(16)	8.83
125(5)	225	57	35	40	35°	10(150)	104(220)	400(16)	11.37
150(6)	225	57	35	40	35°	10(150)	104(220)	400(16)	14.65
200(8)	325	63	35	45	30°	10(150)	104(220)	400(16)	23.16
250(10)	325	63	35	45	30°	10(150)	104(220)	400(16)	32.16
300(12)	325	63	35	45	30°	10(150)	104(220)	400(16)	45.65
350(14)	325	63	35	45	30°	10(150)	104(220)	400(16)	58.20

**REMARKS**

1.Applicable fluids, available flange drillings and materials please refer to 10 series

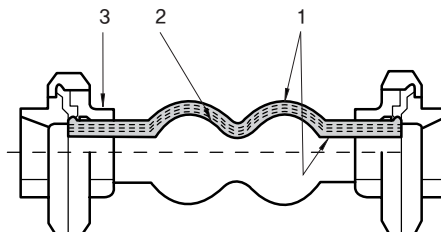
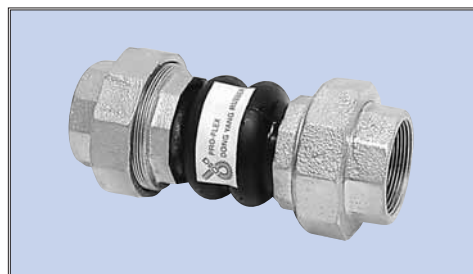
## Expansion Joint

# MUC

SERIES

**MOLDED TYPE**

**UNION THREADED RUBBER CONNECTOR**



**CONSTRUCTION**

Temp.(°C)	Max Working Pressure Kg/Cm <sup>2</sup>
50	10
70	8
90	5

Item No	Part	Materials
1	Body	Neoprene
2	Reinforce	Nylon tire cord
3	Union	Cast iron(PT or NPT)

Material / Neoprene, EPDM, Butyl, Hypalon, etc

BS and ANSI threaded union available.

**APPLICATION** / Pumps, Blowers, Fans, Absorption Machines, Chillers, Cooling Tower Airconditioning Heating and Ventilating Systems, Chemical-Petrochemical and Industrial Process Piping Systems. Power Generating Plant, Steel Mills, Marine Service, Pulp, Paper, Water-Wastewater-Sewage and Pollution Control Systems.

**Features** / Isolates Vibration and Motion  
Absorbs Pipe wall and Fluid Noise.  
Reduces system stress and strain compensate for misalignment.

Diam. Dφ mm	L (mm)	Allowable Movement(mm)				Operating Condition		
		Compression (X-)	Extension (X+)	Lateral (Y)	Angular (°)	Max. Pressure kg/cm <sup>2</sup> (PSIG)	Max. Temperature °C (°F)	Vacuum Rating mm Hg(in.)
20	200	22	6	22	45°	10(150)	115(240)	405 (16)
25	200	22	6	22	45°	10(150)	115(240)	405 (16)
32	200	22	6	22	45°	10(150)	115(240)	405 (16)
40	200	22	6	22	45°	10(150)	115(240)	405 (16)
50	200	22	6	22	45°	10(150)	115(240)	405 (16)
65	240	22	6	22	45°	10(150)	115(240)	405 (16)
80	240	22	6	22	45°	10(150)	115(240)	405 (16)