

# DOUBLE SPHERE RUBBER FLEXIBLE JOINT

PN16 F83DJ16  
 PN25 F83DJ25

## GENERAL

- Absorbs and reduces vibration and shock in the system
- Absorbs the stress generated by the expansion and compression of the pipe line
- Provides flexibility to the system as allowance connection and installation error
- Excellent resistance against pressure
- Control rods available upon request

## FEATURES

- Molded and vulcanised in hydraulic presses
- Solid carbon steel internal reinforcing ring
- With BS 4504 PN16 / BS 4504 PN25 / EN 1092-2 PN25 / EN 1092-2 PN16 / ANSI Class 150 floating flanges (Specify on order)

## APPLICATIONS

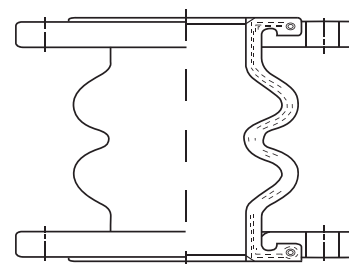
- Building Services, Air-Conditioning, Fire-Protection, Cold Water Plumbing, Sewerage & Water Treatment, Marine Services, General Industries
- Suitable for suction and discharge within specify working pressure



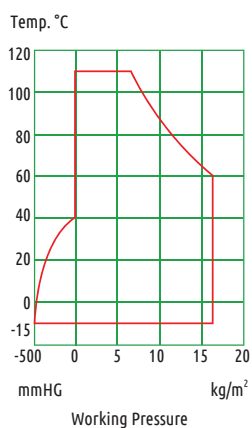
## MATERIAL SPECIFICATIONS

Part	Material
Flanges	Ductile Iron (DN32 ... DN300)
	Carbon Steel (DN350 ... DN600)
	Stainless Steel 304
	Stainless Steel 316
Reinforcing Ring	Carbon Steel
Inner Rubber	EPDM
Outer Rubber	EPDM
Reinforcing Cord	Nylon
Control Rod	Mild Steel

Notes : Carbon steel flanges only available for PN25 (DN25 ... DN300)



## OPERATING PRESSURE & TEMPERATURE



F83DJ16  
 DN32 ... DN300  
 Burst Pressure 48bar



F83DJ16  
 DN350 ... DN600  
 Burst Pressure 48bar



F83DJ25  
 DN32 ... DN200  
 Burst Pressure 60bar



F83DJ25  
 DN250 ... DN300  
 Burst Pressure 60bar

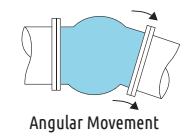
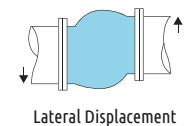
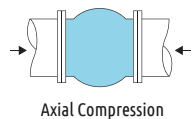
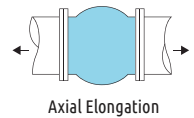
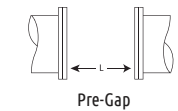
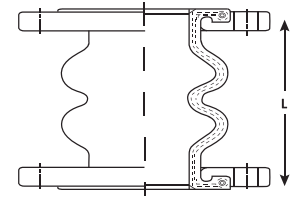
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PN25 F83DJ25



## DIMENSIONS AND MOVEMENTS

Diameter		Dimension		Pre-Gap		Allowable Movements(mm)			
mm	inch	L(mm)	L(mm)	Axial Elongation (mm)	Axial Compression (mm)	Lateral Displcement (mm)	Angle of Deflection (°)		
32	1¼	175	170-180	20	30	45	30		
40	1½	175	170-180	20	30	45	30		
50	2	175	170-180	20	30	45	30		
65	2½	175	170-180	25	50	45	30		
80	3	175	170-180	25	50	45	30		
100	4	225	220-230	35	50	35	30		
125	5	225	220-230	35	50	35	30		
150	6	225	220-230	35	50	35	30		
200	8	325	320-330	35	50	30	30		
250	10	325	320-330	35	50	30	15		
300	12	325	320-330	35	50	30	15		
350	14	345	340-350	25	40	28	10		
400	16	345	340-350	25	40	28	10		
450	18	345	340-350	25	40	28	10		
500	20	345	340-350	25	40	28	10		
600	24	345	340-350	25	40	28	10		



## USE OF CONTROL UNITS WITH RUBBER FLEXIBLE JOINTS

A control unit assembly is an accessory of two or more control rod units (limit rods, tie rods or compression sleeves) placed between the flanges across a flexible joint to minimize possible destruction caused by excessive motion of a pipeline. When used in this manner, control units are an additional safety factor which can minimize possible damage to the adjacent equipment.

A control unit is strongly recommended to use when:

- In case that proper anchoring cannot be provided
- In case that it is hard to withstand the line thrusts generated by internal pressure or wide temperature fluctuations
- In case that the anticipated elongation, compression and lateral movement are more than the design, pre-gap and/or installation tolerance
- In case that the anticipated angle of deflection is more than the design and/or installation tolerance.

## RECOMMENDED QUANTITY FOR CONTROL RODS

DN (mm) (inch)	25 1	32 1¼	40 1½	50 2	65 2½	80 3	100 4	125 5	150 6	200 8	250 10	300 12	350 14	400 16	450 18	500 20	600 24
Quantity - PN16	N/A	2	2	2	2	2	2	2	2	2	3	3	4	4	4	4	4
Quantity - PN25	N/A	2	2	2	2	2	2	2	2	3	4	4	-	-	-	-	-

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