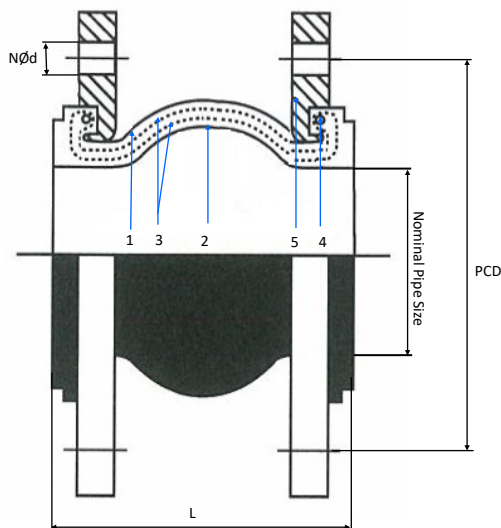
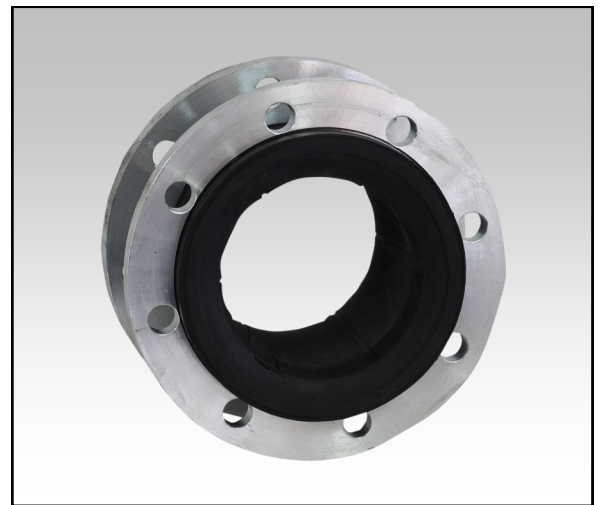


# RUBBER EXPANSION JOINT MODEL - WRJ



## FEATURES AND BENEFITS

- The rubber expansion joint compensates for lateral, torsional and angular movement to prevent damage and costly downtime in plant operation.
- Specially designed in a spherical shape, the rubber is reinforced with steel wire and nylon then vulcanised under high pressure.
- Water Hammer, pumping impulse and water born noise are cushioned and absorbed by the joint .
- The joint is supplied with floating metallic flanges .
- It excels in pressure resistance by the combination of spherical structure with super stability against internal pressure and strong reinforcing nylon.
- Widely used to absorb movement from piping and pumping equipment, isolate vibration, reduce system noise and compensate for misalignment. This product will also eliminate electrolysis, counter expansion and contraction against start up surge forces.
- Optional control tie rods available.

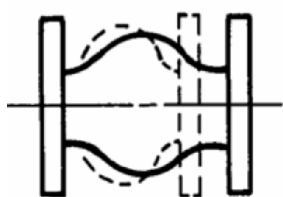


## TECHNICAL SPECIFICATION

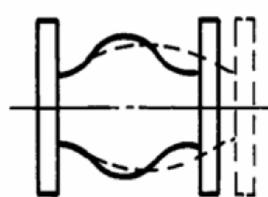
<b>Size:</b>	40mm - 600mm
<b>Operating Pressure:</b>	16 BAR (40mm - 300mm) 10 BAR (350mm - 600mm)
<b>Operating Temperature:</b>	-10°C to 80°C
<b>Applicable Fluids:</b>	Water, Warm Water, Sea Water, Air and Weak acid
<b>Flanges:</b>	Table E Table C/D DIN PN16 Inlet & Table E outlet
<b>Vacuum Rating:</b>	700mm/HG

ITEM	COMPONENT	MATERIAL
1	Body (outer layer)	EPDM
2	Body (inner layer)	EPDM
3	Reinforcing Fabric	Nylon Fabric
4	Wire	Hard Steel Wire
5	Flange	Mild Steel (Zinc Coated)
5a	Flange Option	316 Stainless Steel

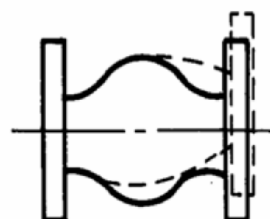
## Allowable Movements



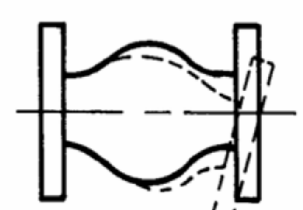
1. Axial Compression



2. Axial Elongation



3. Lateral Deflection



4. Angular Deflection

# RUBBER EXPANSION JOINT MODEL - WRJ



## TECHNICAL DATA:

Size (NB)	Natural Length (L)	Axial Compression	Axial Elongation	Lateral Deflection	Angular Deflection	DIMENSIONS						Weights
						PCD			NØd			
						Table E	Table C/D	DIN PN16	Table E	Table C/D	DIN PN16	
40	93	8	4	8	15	98	98	-	4 x 14mm	4 x 14mm	-	2
50	99	8	4	8	15	114	114	125	4 x 18mm	4 x 18mm	4 x 18mm	3
65	108	12	6	10	15	127	127	145	4 x 18mm	4 x 18mm	4 x 18mm	3
80	116	12	6	10	15	146	146	160	4 x 18mm	4 x 18mm	4 x 18mm	4
100	129	12	10	12	15	178	178	180	8 x 18mm	4 x 18mm	8 x 18mm	5
125	142	16	10	12	15	210	210	-	8 x 18mm	8 x 18mm	-	7
150	156	16	10	12	15	235	235	240	8 x 22mm	8 x 18mm	8 x 22mm	10
200	177	20	14	18	15	292	292	-	8 x 22mm	8 x 18mm	-	15
250	206	20	14	18	15	356	356	-	12 x 22mm	8 x 22mm	-	25
300	217	20	14	18	15	406	406	-	12 x 26mm	12 x 22mm	-	32
350	266	25	16	18	15	470	470	-	12 x 26mm	12 x 26mm	-	43
400	266	25	16	18	15	521	521	-	12 x 26mm	12 x 26mm	-	48
450	200	20	12	18	15	584	584	-	16 x 26mm	12 x 26mm	-	63
500	200	20	12	18	15	641	641	-	16 x 26mm	16 x 26mm	-	77
600	250	20	12	18	15	756	756	-	16 x 33mm	16 x 29mm	-	105

### Operating Temperature against Operating Pressure

Size: 40MM - 300MM					
Operating Temperature (°C)	Ambient	50	60	70	80
Max Operating Pressure (BAR)	16	12.4	10	7.5	6.5

Size: 350MM - 600MM					
Operating Temperature (°C)	Ambient	50	60	70	80
Max Operating Pressure (BAR)	10	7.5	6.2	5	4

#### NOTES:

- Higher temperatures affect movement and pressure. As temperature increases, rated values must be reduced accordingly
- Pressures shown are recommended "operating", test pressure is 1.5 times "operating"
- Vacuum rating based on neutral installed length without external load. Products shall not be installed "elongated" on vacuum applications.
- Expansion joints must not be exposed to direct sunlight once installed.
- Expansion joints may operate in pipelines or equipment's carting fluids at elevated temperatures and pressures. Normal precautions shall be taken to make sure these parts are installed correctly and inspected regularly. Precautions shall be taken to protect personnel in the event of leakage or splash.
- Consider stainless steel or hot dipped galvanised flanges in coastal or high corrosive areas.

\*For other kinds of applicable fluids except the above, to which the rubber joint becomes applicable, please contact Challenger Valves and Actuators