APPROVED MAIN DISTRIBUTOR (SAUDI ARABIA)

**GULF SPECIALIST TRADING** 



# ELASTOMER EXPANSION

[Saudi Arabia Version]

/ww.doshinrubber.com

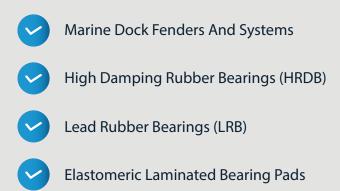
## ABOUT

# **DOSHIN RUBBER**

Doshin Rubber Engineering, established in 1978, is the pioneer in manufacturing laminated bridge bearing pad in Malaysia. With over 30 years of experience in providing rubber solution for the civil engineering & construction industries, Doshin Rubber is today a subsidiary of Kossan Group of companies, a public listed company at the Bursa Malaysia.

Doshin stands as a leader in the design and production of engineered rubber products thanks to scientific research, engineering design, material and product constant development and full control of production technology, Doshin combines state -of-the-art technology, experienced professional and innovative products as solution to clients' most difficult challenges.

#### RANGE OF PRODUCTS THAT INCLUDED:





Rubber Expansion Joints, Finger Joints and Modular Joints



Floating Slab Track Bearing Pads for the Rail Industry



Mechanical Steel Pot Bearings

### Elastomer Expansion Joints

**Doshin Elastomer Expansion Joints** are comprised of steel angles and steel bridging plate system encased in flexible elastomer.

**Doshin Elastomer Expansion Joint** is supplied in module lengths designed to be bolted to the structural deck on either side of the expansion joint in the structure.

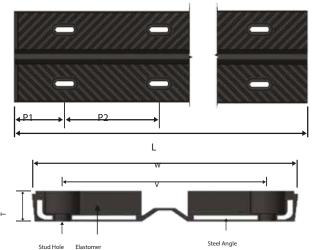
#### **Features**

- Heavy duty and long durability
- Movement accommodation up to 330mm
- Encased in corrosive resistant elastomer
- Anti-skidding & water tightness

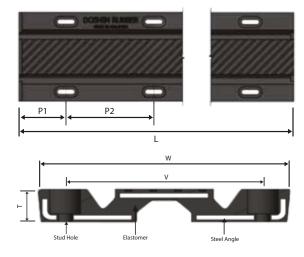


### Elastomer Expansion Joints Models

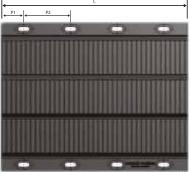
#### For Model: T20, T30

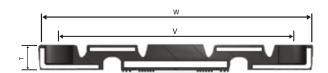


#### For Model : DR 50, DR 65, DR 75



#### For Model : DR 100, DR 120, DR 165, DR 230, DR 330





### **Specification**

Model	Movement Limit	т	w	v	P1	P2	L	Stud(M) or Bolt Diameter	Stud Length (mm)	No. of Stud (pcs)	Weight (kg)	* Construction Gap	** Max Gap
T 20	±10.0	33	256	180	112	332	1220	12	160	8	17	10	25
T 30	±15.0	40	300	195	112.5	330	1215	12	160	8	20	15	35
DR 50	±25.0	40	260	200	125	250	2000	12	160	16	37	25	60
DR 65	±32.5	50	356	280	165	334	2000	16	160	12	70	32	95
DR 75	±37.5	52	432	342	125	250	2000	16	180	16	95	37	110
DR 100	±50.0	54	590	500	167.5	333	2000	20	210	12	170	50	150
DR 120	±60.0	60	640	550	130	290	2000	20	220	14	215	60	160
DR 165	±82.5	78	716	610	162.5	335	2000	24	220	12	280	82	180
DR 230	±115.0	96	890	790	152.5	305	1220	24	220	8	250	115	273
DR 330	±165.0	127	1210	1080	152.5	305	1220	30	250	8	450	165	370

All unit in mm, unless stated otherwise

\* Norminal gap at mid-deck temperature

\*\* Max gap refers to maximum contraction movement of the expansion joint (i.e. during winter)

### Elastomer Properties

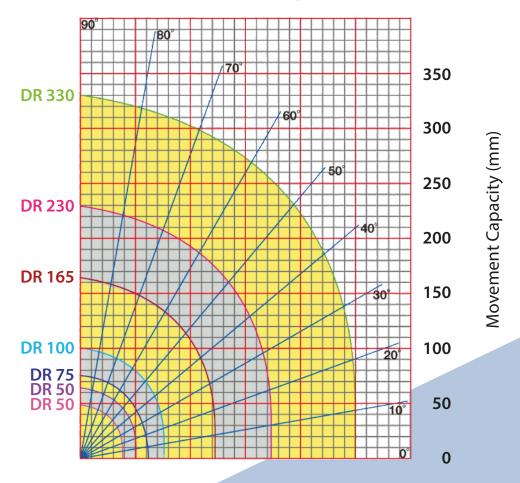
PROPERTIES	REQUIREMENT	TEST METHOD		
Hardness (Shore A)	60 ± 5	ASTM D 2240		
Tensile, MPa	13 MPa, min	ASTM D 412		
Elongation at break, %	300% , min	ASTM D 412		
Compression set, %	30%, max (22 hours at 70°c)	ASTM D 395 Method B		
Adhensive resistance, N/mm	7N/mm, min	ASTM D 429		
Ozone resistance (25pphm/72hrs/40°c/20% strain)	No crack	ASTM 1149		

#### **Steel Properties**

Steel

ASTM A36, BSEN S275JR, JIS SS400, or equivalent

#### Graph of Doshin Rubber Expansion Joint Capacity in Skew Angle



### Projects Reference





Penang Second Bridge Project

LRT, Malaysia

# Others Products Range



**Marine Fender** 



**Modular Joints** 



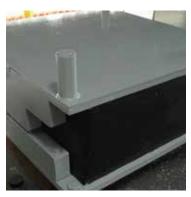
**High Damping Rubber Bearing** 



**Expansion Joint** 



**Mining Rubber Product** 



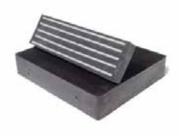
**Base Isolation HDRB** 



**Structural Pot Bearing** 



Floating Slab track bearing



Laminated Bearing





### Made in Malaysia QUALITY YOU CAN TRUST

#### DOSHIN RUBBER PRODUCTS (M) SDN BHD (114386-H)

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