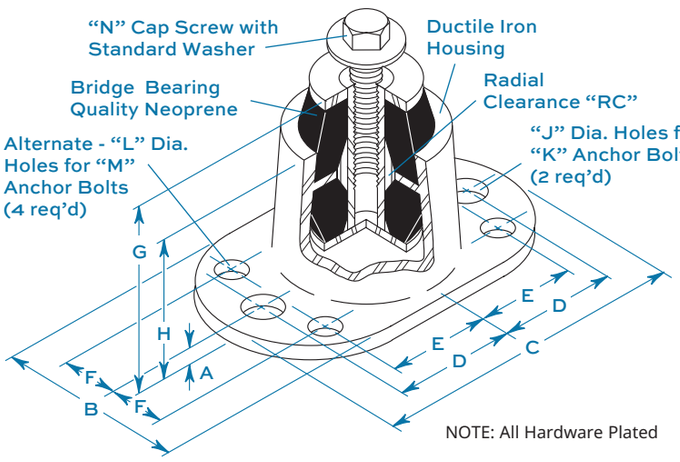
ALL DIRECTIONAL CAPTIVE MOUNTINGS

for SEISMIC, MOBILE, MARINE, WALL HUNG & OVERSEAS APPLICATIONS

BR



NOTE: All Hardware Plated

AASHTO BRIDGE BEARING SPECIFICATIONS FOR NEOPRENE

ORIGINAL PHYSICAL PROPERTIES			TESTED FOR AGING				COMPRESSION SET
			Oven Aging (70hrs/212°F) ASTM D-573			Ozone ASTM D-1149	ASTM D-395
Tests: ASTM D-2240 & D-412							
Durometer Shore A	Tensile Strength (min)	Elongat. at Break (min)	Hardness (max)	Tensile Strength (max)	Elongat. at Break (max)	100 pphm in air by Vol. 20% Strain 100°F	22 hrs/212°F Method B
40±5	2000 psi	450%	15	-15%	-40%	No Cracks	30% (max)
50±5	2250 psi	400%	15	-15%	-40%	No Cracks	35% (max)
60±5	2250 psi	350%	15	-15%	-40%	No Cracks	35% (max)
70±5	2250 psi	300%	15	-15%	-40%	No Cracks	35% (max)

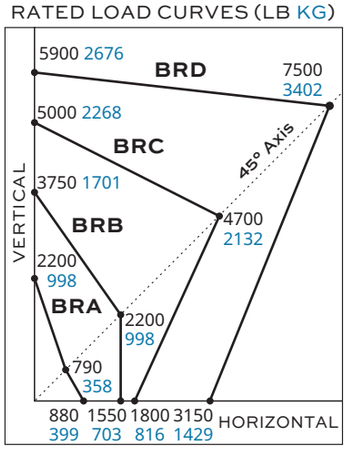
NOTE: 40 Durometer is not included in AASHTO Specifications. Numbers are Mason standard.

TYPE BR DIMENSIONS

Type	A (in)	A (mm)	B (in)	B (mm)	C (in)	C (mm)	D (in)	D (mm)	E (in)	E (mm)	F (in)	F (mm)	G (in)	G (mm)
BRX	3/16	5	2	50	33/4	95	13/8	35	1	25	5/8	16	21/2	64
BRA	3/16	5	21/2	64	41/4	108	15/8	41	13/8	35	3/4	19	3	76
BRB	3/16	5	31/4	83	53/4	146	21/4	57	17/8	48	7/8	22	3	76
BRC	1/4	6	51/4	133	9	229	35/8	92	3	76	11/2	38	61/2	165
BRD	1/4	6	6	152	101/2	267	43/8	111	35/8	92	15/8	41	61/2	165

Type	H (in)	H (mm)	J (in)	J (mm)	K (in)	K (mm)	L (in)	L (mm)	M (in)	M (mm)	N	RC (in)	RC (mm)
BRX	15/8	41	7/16	11	3/8	10	5/16	8	1/4	6	1/4 - 20UNC x 3/4	1/8	3
BRA	2	51	1/2	13	3/8	10	3/8	10	1/4	6	5/16 - 18UNC x 1	3/16	5
BRB	2	51	5/8	16	1/2	13	1/2	13	3/8	10	7/16 - 14UNC x 1	1/4	6
BRC	41/2	114	7/8	22	3/4	19	3/4	19	5/8	16	5/8 - 11UNC x 11/2	5/8	16
BRD	41/2	114	7/8	22	3/4	19	3/4	19	5/8	16	5/8 - 11UNC x 11/2	5/8	16

OSHPD OPA-0201 RATED LOAD CURVES (LB KG)



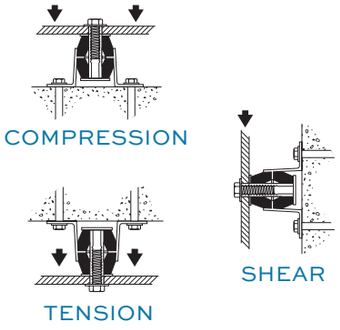
Horizontal, Vertical and 45° Plotted Ratings are California OSHPD approved values having the OSHPD Anchorage Preapproval Number OPA-0201. Testing and calculations were performed to meet OSHPD criteria.

To use approved OSHPD rated load curves:

1. Calculate Vertical and Horizontal Forces on mounting including translations and overturning moments.
2. Plot Horizontal Load vs Vertical Load. The point must fall within the area below the OSHPD curve.

TYPE BR RATINGS

Type	Size (Color Mark)	Duro-meter	COMPRESSION Rated Capacity (lb)	(kg)	Rated Defl. (in)	(mm)	TENSION Rated Capacity (lb)	(kg)	Rated Defl. (in)	(mm)	SHEAR Rated Capacity (lb)	(kg)	Rated Defl. (in)	(mm)	Maximum Horizontal Static G Rating*
BRX-	Green	40	30	14			30	14			20	9			12.0
	Red	50	45	20	0.12	3	45	20	0.12	3	35	16	0.08	2	8.0
	White	60	70	32			70	32			45	20			6.0
BRA-	Green	40	85	39			85	39			20	9			10.4
	Red	50	125	57	0.2	5	125	57	0.18	5	30	14	0.13	3	7.0
	White	60	205	93			205	93			50	23			4.3
	Yellow	70	290	132			290	132			70	32			3.0
BRB-	Red	50	450	204			500	227			100	45			3.4
	White	60	740	336	0.2	5	750	340	0.18	5	170	77	0.15	4	2.1
	Yellow	70	1040	472			1050	476			240	109			1.5
BRC-	Red	50	650	295			750	340			380	172			2.8
	White	60	1100	499	0.3	8	1150	522	0.25	6	500	227	0.50	13	1.6
	Yellow	70	1540	699			1610	730			700	318			1.2
BRD-	White	60	2390	1084	0.3	8	2450	1111	0.25	6	750	340	0.50	13	1.3
	Yellow	70	3150	1429			3430	1556			1050	476			1.0



All Rated Capacities are based on proper neoprene loadings without metal to metal contact. Seismic Max. G Ratings are based on metal failure under static seismic loadings as defined in the building codes.

*Horizontal G Ratings are for quick reference only – Use OSHPD Rated Load Curves.

SPECIFICATION

Captive neoprene elements shall be arranged in opposition within a steel or ductile iron housing to provide positive mechanical restraint in all directions. Neoprene elements shall prevent metal to metal contact during normal operation. Bonded assemblies without mechanical interlocks are not acceptable. Neoprene elements shall be of bridge bearing quality as tabulated.

All mountings shall have minimum 1.0 horizontal G ratings and anchorage preapproval "OPA" numbers from the Office of Statewide Health Planning and Development (OSHPD) in the state of California, attesting to the maximum horizontal and vertical load ratings. All mountings shall have bolts for rigid attachment to the equipment and adequate base bolting provision. Mountings shall have a minimum static deflection of 0.2" (5 mm).

In seismic zones, submittals shall include calculations showing that the intersection of the horizontal and vertical seismic loads fall below the OSHPD approved curves. Anchorages must be designed to meet the applicable building codes. All calculations must be signed by a professional engineer. Mountings shall be Type **BR** as manufactured by Mason Industries, Inc.