ELASTOMERIC ISOLATORS
ISI - ISI-P

Elastomeric isolators (HDRB) are anti-seismic devices that transmit both vertical and horizontal loads. They dissipate energy through horizontal rubber deformation. These bearings can achieve significantly greater dissipation with the addition of an internal lead core (LRB).

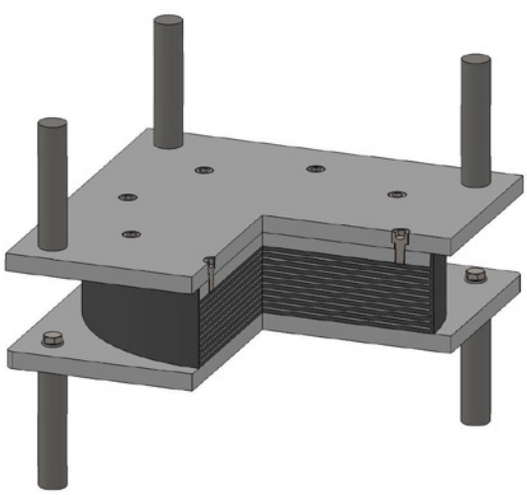
ELASTOMERIC ISOLATORS TYPE ISI AND ISI-P

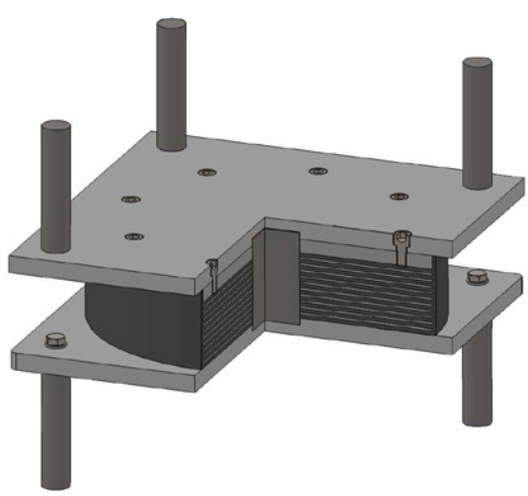
The ISI type elastomeric isolators consist of an alternation of rubber layers and steel plates joined together through a vulcanization process.
The internal steel plates increase the vertical stiffness of the bearing without altering its horizontal stiffness. The devices are completed with external plates to connect them to the structure.

The ISI-P type elastomeric isolators are ISI type with a central lead core. The lead core allows the device to achieve higher levels of damping, up to 30%.

The rubber layers have dissipative capacity, and they can be made of three different compounds:

- “Soft” - G = 0.4 MPa
- “Normal” - G = 0.8 MPa
- “Hard” - G = 1.4 MPa





CE Elastomeric isolators ISI and ISI-P are CE marked according to EN 15129 or comply to AASHTOO LRFD standard.

KEY TO LABEL

- **ISI S:** elastomeric isolator ISI type with Soft compound
- **ISI N:** elastomeric isolator ISI type with Normal compound
- **ISI H:** elastomeric isolator with Hard compound
- **ISI S 600/176:** elastomeric isolator ISI type with Soft compound, diameter of 600 mm and height of rubber of 176 mm (without considering any plate)
- **ISI S 600/176 P100:** elastomeric isolator ISI-P type with Soft compound, diameter of 600 mm, height of rubber of 176 mm (without considering any plate) and diameter of lead core of 100 mm.

ELEMENT	MATERIAL	STANDARD
RUBBER	ELASTOMER	EN 15129
INTERNAL STEEL SPLATES	S235JR	EN 10025
EXTERNAL STEEL SPLATES	S235JR	EN 10025
ANCHORS	C45Bon. / 39NiCrMo3	EN 10083
LEAD CORE (only for ISI-P)	PB 99.99%	EN 12659

ANTI-CORROSIVE PROTECTION

The components exposed to atmospheric agents are protected with C5 anticorrosive treatment compliant with ISO 12944-5, made with Sa 2.5 white metal sandblasting, a bicomponent epoxy primer Eponex ST HR aluminium and a Titania PU polyurethane finish.

On request, depending on the atmospheric agents acting on the device, it is possible to apply different protective treatments.

SOMMA	CE	DISPOSITIVE TYPE	YEAR	JOB
		DISPOSITIVE CODE	ORDER	SERIAL NUMBER
2204-CPR-0976.1				

ξ_e	$F_{max,\,SLU}$ [kN]	$F_{max,\,SLC}$ [kN]
RANK	d_{Ed} [mm]	K_h [kN/mm]

ANCHORING SYSTEM

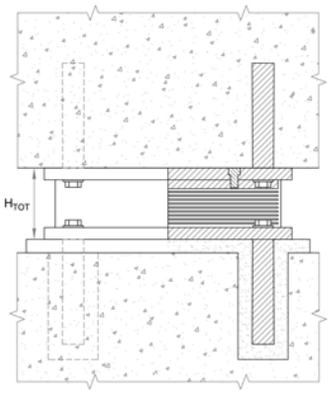
Different types of anchorages to the structure can be designed and provided:

- **Mechanical anchorage:** system used to connect the device to the structure, above and below, when the horizontal loads are significant and in any case in a seismic area. They can be made with long anchor bolts, bolts or pins.
- **Masonry plates:** if necessary, SOMMA designs and supplies steel masonry plates.

QUALITY ENSURANCE

SOMMA is CE certified according to EN15129 for the design and production of bearing devices and operates according to ISO 9001 and to ISO 45001 quality system. The entire design and production process is carried out according to the requirements of EN 15129. Independent third parties carry out regular inspections to verify the compliance to the regulations. For production according to EN 15129, SOMMA attach the declaration of Constancy of Performance to the delivery of the devices

ELASTOMERIC ISOLATORS “ISI” TYPE d_{Ed} = ±100 mm



d_{Ed} maximum displacement
Ø diameter
T_q total thickness of rubber
H_{TOT} total height of the isolator
k_h horizontal stiffness
k_v vertical stiffness
N_{Ed} maximum seismic vertical load, contemporary with maximum displacement
F_{zd} maximum static vertical load at zero displacement

The devices can be designed with different loads and displacements.

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{zd} [kN]
ISI S 300/50	100	300	50	128	0.57	533	927	1333
ISI S 350/50	100	350	50	128	0.76	578	1471	2030
ISI S 400/50	100	400	50	128	1.00	986	2063	3022
ISI S 450/54	100	450	54	138	1.17	1083	2650	3681
ISI S 500/54	100	500	54	138	1.45	1625	3356	4963
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{zd} [kN]**
ISI N 300/50	100	300	50	128	1.13	887	1854	2274
ISI N 350/50	100	350	50	128	1.52	995	2493	3082
ISI N 400/50	100	400	50	128	1.99	1632	4069	4069
ISI N 450/54	100	450	54	138	2.34	1814	5300	6490
ISI N 500/54	100	500	54	138	2.89	2633	6713	8062
ISI H G=1.4 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{zd} [kN]**
ISI H 300/50	100	300	50	128	1.98	1241	2274	2274
ISI H 350/50	100	350	50	128	2.66	1441	3082	3082
ISI H 400/50	100	400	50	128	3.48	2268	4069	4069
ISI H 450/54	100	450	54	138	4.09	2552	6490	6490
ISI H 500/54	100	500	54	138	5.06	3587	8062	8062

ELASTOMERIC ISOLATORS “ISI”
TYPE d_{Ed} = ±150 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 350/75	150	350	75	163	0.51	385	925	1460
ISI S 400/75	150	400	75	163	0.66	657	1729	2581
ISI S 450/78	150	450	78	174	0.81	750	2374	3402
ISI S 500/78	150	500	78	174	1.00	1125	3813	5251
ISI S 550/77	150	550	77	177	1.23	1290	5026	6040
ISI S 600/77	150	600	77	177	1.46	1789	6388	7737
ISI S 650/80	150	650	80	177	1.65	1896	7356	8709
ISI S 700/80	150	700	80	177	1.92	2492	8952	10690
ISI S 750/81	150	750	81	175	2.18	2662	9928	11753
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 350/75	150	350	75	163	1.01	663	1851	2922
ISI N 400/75	150	400	75	163	1.33	1088	3458	4069
ISI N 450/78	150	450	78	174	1.62	1256	4749	6490
ISI N 500/78	150	500	78	174	2.00	1823	7627	8062
ISI N 550/77	150	550	77	177	2.46	2118	8402	8402
ISI N 600/77	150	600	77	177	2.92	2855	10039	10039
ISI N 650/80	150	650	80	186	3.31	3066	13791	13791
ISI N 700/80	150	700	80	186	3.84	3932	16039	16039
ISI N 750/81	150	750	81	191	4.35	4254	19297	19297
ISI H G=1.4 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI H 350/75	150	350	75	163	1.77	961	3082	3082
ISI H 400/75	150	400	75	163	2.32	1512	4069	4069
ISI H 450/78	150	450	78	174	2.83	1767	6490	6490
ISI H 500/78	150	500	78	174	3.50	2483	8062	8062
ISI H 550/77	150	550	77	177	4.30	2922	8402	8402
ISI H 600/77	150	600	77	177	5.12	3835	10039	10039
ISI H 650/80	150	650	80	186	5.79	4169	13791	13791
ISI H 700/80	150	700	80	186	6.71	5227	16039	16039
ISI H 750/81	150	750	81	191	7.61	5721	19297	19297

ELASTOMERIC ISOLATORS “ISI”
TYPE d_{Ed} = ±200 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/100	200	400	100	198	0.50	493	1137	1935
ISI S 450/102	200	450	102	210	0.62	573	1626	2601
ISI S 500/102	200	500	102	210	0.77	860	2651	4049
ISI S 550/105	200	550	105	217	0.90	946	3408	5020
ISI S 600/105	200	600	105	217	1.07	1312	5040	7208
ISI S 650/104	200	650	104	210	1.27	1458	6354	8873
ISI S 700/104	200	700	104	210	1.48	1917	8807	11157
ISI S 750/108	200	750	108	211	1.63	1997	10191	12317
ISI S 800/100	200	800	100	221	2.01	2333	11068	13341
ISI S 850/100	200	850	100	221	2.26	2913	12988	15769
ISI S 900/100	200	900	100	221	2.54	3578	15026	18402
ISI S 950/110	200	950	110	231	2.57	3442	15026	18402
ISI S 1000/108	200	1000	108	225	2.90	3714	18343	21412
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/100	200	400	100	198	1.00	816	2275	2872
ISI N 450/102	200	450	102	210	1.24	960	3252	5203
ISI N 500/102	200	500	102	210	1.53	1394	5302	8062
ISI N 550/105	200	550	105	217	1.80	1553	6817	8402
ISI N 600/105	200	600	105	217	2.14	2094	10039	10039
ISI N 650/104	200	650	104	222	2.54	2359	12709	13791
ISI N 700/104	200	700	104	222	2.95	3025	16039	16039
ISI N 750/108	200	750	108	233	3.26	3191	19297	19297
ISI N 800/100	200	800	100	230	4.01	3767	21000	21000
ISI N 850/100	200	850	100	230	4.53	4611	23797	23797
ISI N 900/100	200	900	100	230	5.08	5555	26721	26721
ISI N 950/110	200	950	110	240	5.15	5407	27104	27104
ISI N 1000/108	200	1000	108	241	5.81	5890	33076	33076
ISI H G=1.4 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI H 400/100	200	400	100	198	1.74	1134	3981	4069
ISI H 450/102	200	450	102	210	2.17	1351	5691	6490
ISI H 500/102	200	500	102	210	2.68	1899	8062	8062
ISI H 550/105	200	550	105	217	3.15	2143	8402	8402
ISI H 600/105	200	600	105	217	3.75	2812	10039	10039
ISI H 650/104	200	650	104	222	4.45	3207	13791	13791
ISI H 700/104	200	700	104	222	5.16	4021	16039	16039
ISI H 750/108	200	750	108	233	5.71	4291	19297	19297
ISI H 800/100	200	800	100	230	7.02	5115	21000	21000
ISI H 850/100	200	850	100	230	7.93	6147	23797	23797
ISI H 900/100	200	900	100	230	8.89	7279	26721	26721
ISI H 950/110	200	950	110	240	9.01	7158	27104	27104
ISI H 1000/108	200	1000	108	241	10.16	7866	33076	33076

ELASTOMERIC ISOLATORS “ISI”
TYPE d_{Ed} = ±250 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/125	250	400	125	233	0.40	394	782	1548
ISI S 450/126	250	450	126	246	0.50	464	1162	2106
ISI S 500/126	250	500	126	246	0.62	696	1931	3278
ISI S 550/126	250	550	126	247	0.75	788	2591	4183
ISI S 600/126	250	600	126	247	0.89	1093	3873	6007
ISI S 650/128	250	650	128	243	1.03	1185	4801	7209
ISI S 700/128	250	700	128	243	1.20	1558	6700	9793
ISI S 750/126	250	750	126	235	1.40	1711	8225	11752
ISI S 800/130	250	800	130	263	1.54	1795	9540	13369
ISI S 850/130	250	850	130	263	1.74	2241	12444	16417
ISI S 900/130	250	900	130	263	1.95	2752	15963	19270
ISI S 950/132	250	950	132	261	2.14	2869	17803	20700
ISI S 1000/132	250	1000	132	257	2.38	3038	19093	22051
ISI S 1050/132	250	1050	132	257	2.62	3620	21722	24338
ISI S 1100/132	250	1100	132	257	2.88	4268	24491	26738
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/125	250	400	125	233	0.80	653	1565	3097
ISI N 450/126	250	450	126	246	1.00	777	2325	4212
ISI N 500/126	250	500	126	246	1.24	1128	3862	6556
ISI N 550/126	250	550	126	247	1.50	1294	5184	8366
ISI N 600/126	250	600	126	247	1.79	1745	7746	10039
ISI N 650/128	250	650	128	258	2.07	1916	9603	13791
ISI N 700/128	250	700	128	258	2.40	2458	13401	16039
ISI N 750/126	250	750	126	261	2.80	2735	16451	19297
ISI N 800/130	250	800	130	275	3.09	2898	19081	21000
ISI N 850/130	250	850	130	275	3.48	3547	23797	23797
ISI N 900/130	250	900	130	275	3.91	4273	26721	26721
ISI N 950/132	250	950	132	283	4.29	4506	31172	31172
ISI N 1000/132	250	1000	132	277	4.75	4819	33076	33076
ISI N 1050/132	250	1050	132	277	5.24	5649	36508	36508
ISI N 1100/132	250	1100	132	277	5.75	6555	40108	40108
ISI H G=1.4 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI H 400/125	250	400	125	233	1.39	907	2739	4069
ISI H 450/126	250	450	126	246	1.75	1094	4070	6490
ISI H 500/126	250	500	126	246	2.17	1537	6760	8062
ISI H 550/126	250	550	126	247	2.63	1786	8402	8402
ISI H 600/126	250	600	126	247	3.13	2343	10039	10039
ISI H 650/128	250	650	128	258	3.62	2606	13791	13791
ISI H 700/128	250	700	128	258	4.20	3267	16039	16039
ISI H 750/126	250	750	126	261	4.89	3678	19297	19297
ISI H 800/130	250	800	130	275	5.40	3934	21000	21000
ISI H 850/130	250	850	130	275	6.10	4728	23797	23797
ISI H 900/130	250	900	130	275	6.84	5599	26721	26721
ISI H 950/132	250	950	132	283	7.50	5965	31172	31172
ISI H 1000/132	250	1000	132	277	8.32	6436	33076	33076
ISI H 1050/132	250	1050	132	277	9.17	7435	36508	36508
ISI H 1100/132	250	1100	132	277	10.07	8508	40108	40108

ELASTOMERIC ISOLATORS “ISI”
TYPE d_{Ed} = ±300 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 450/150	300	450	150	282	0.42	390	847	1769
ISI S 500/150	300	500	150	282	0.52	585	1441	2753
ISI S 550/154	300	550	154	287	0.61	645	1917	3422
ISI S 600/154	300	600	154	287	0.73	894	2901	4915
ISI S 650/152	300	650	152	276	0.87	998	3738	6071
ISI S 700/152	300	700	152	276	1.01	1312	5258	8247
ISI S 750/153	300	750	153	271	1.15	1409	6334	9678
ISI S 800/150	300	800	150	277	1.34	1555	7798	11587
ISI S 850/150	300	850	150	291	1.51	1942	10217	14862
ISI S 900/150	300	900	150	291	1.69	2385	13158	18787
ISI S 950/154	300	950	154	291	1.84	2459	14776	20757
ISI S 1000/156	300	1000	156	289	2.01	2571	16731	22051
ISI S 1050/156	300	1050	156	289	2.22	3063	20684	24338
ISI S 1100/156	300	1100	156	289	2.43	3611	25298	26738
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 450/150	300	450	150	282	0.84	653	1695	3538
ISI N 500/150	300	500	150	282	1.04	948	2884	5507
ISI N 550/154	300	550	154	287	1.23	1059	3834	6845
ISI N 600/154	300	600	154	287	1.46	1428	5803	9830
ISI N 650/152	300	650	152	294	1.74	1614	7478	12143
ISI N 700/152	300	700	152	294	2.02	2070	10518	16039
ISI N 750/153	300	750	153	303	2.30	2252	12709	19297
ISI N 800/150	300	800	150	305	2.67	2512	15596	21000
ISI N 850/150	300	850	150	305	3.02	3074	20435	23797
ISI N 900/150	300	900	150	305	3.39	3703	26316	26721
ISI N 950/154	300	950	154	317	3.68	3862	29553	31172
ISI N 1000/156	300	1000	156	313	4.02	4078	33076	33076
ISI N 1050/156	300	1050	156	313	4.43	4780	36508	36508
ISI N 1100/156	300	1100	156	313	4.87	5546	40108	40108
ISI H G=1.4 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI H 450/150	300	450	150	282	1.47	919	2967	6192
ISI H 500/150	300	500	150	282	1.82	1291	5048	8062
ISI H 550/154	300	550	154	287	2.15	1461	6710	8402
ISI H 600/154	300	600	154	287	2.56	1917	10039	10039
ISI H 650/152	300	650	152	294	3.04	2194	13087	13791
ISI H 700/152	300	700	152	294	3.53	2751	16039	16039
ISI H 750/153	300	750	153	303	4.03	3029	16406	16406
ISI H 800/150	300	800	150	305	4.68	3410	21000	21000
ISI H 850/150	300	850	150	305	5.28	4098	23797	23797
ISI H 900/150	300	900	150	305	5.93	4853	26721	26721
ISI H 950/154	300	950	154	317	6.43	5113	31172	31172
ISI H 1000/156	300	1000	156	313	7.04	5446	33076	33076
ISI H 1050/156	300	1050	156	313	7.76	6291	36508	36508
ISI H 1100/156	300	1100	156	313	8.52	7199	40108	40108

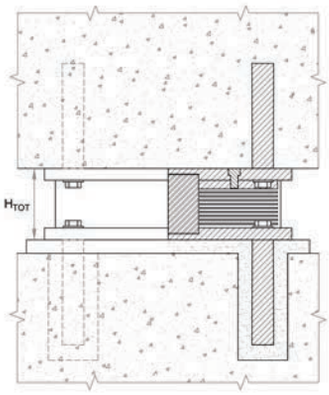
ELASTOMERIC ISOLATORS “ISI”
TYPE d_{Ed} = ±350 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 550/175	350	550	175	317	0.54	568	1508	3012
ISI S 600/175	350	600	175	317	0.64	787	2318	4325
ISI S 650/176	350	650	176	309	0.75	862	2966	5243
ISI S 700/176	350	700	176	309	0.87	1133	4210	7122
ISI S 750/180	350	750	180	307	0.98	1198	5044	8227
ISI S 800/180	350	800	180	316	1.11	1296	6106	9655
ISI S 850/180	350	850	180	333	1.26	1618	8041	12385
ISI S 900/180	350	900	180	333	1.41	1988	10400	15655
ISI S 950/176	350	950	176	321	1.61	2151	12309	18162
ISI S 1000/180	350	1000	180	335	1.74	2228	13849	20077
ISI S 1050/180	350	1050	180	335	1.92	2655	17170	24504
ISI S 1100/180	350	1100	180	335	2.11	3130	21052	29625
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 550/175	350	550	175	317	1.08	932	3016	6024
ISI N 600/175	350	600	175	317	1.29	1256	4636	8650
ISI N 650/176	350	650	176	330	1.50	1394	5933	10487
ISI N 700/176	350	700	176	330	1.74	1787	8421	14245
ISI N 750/180	350	750	180	345	1.96	1915	10089	16454
ISI N 800/180	350	800	180	350	2.23	2093	12212	19311
ISI N 850/180	350	850	180	350	2.52	2562	16083	23797
ISI N 900/180	350	900	180	350	2.82	3086	20801	26721
ISI N 950/176	350	950	176	351	3.22	3379	24619	31172
ISI N 1000/180	350	1000	180	349	3.49	3534	27699	33076
ISI N 1050/180	350	1050	180	349	3.84	4143	34341	36508
ISI N 1100/180	350	1100	180	349	4.22	4807	40108	40108
ISI H G=1.4 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI H 550/175	350	550	175	317	1.89	1286	5279	8402
ISI H 600/175	350	600	175	317	2.25	1687	8114	10039
ISI H 650/176	350	650	176	330	2.63	1895	10383	13791
ISI H 700/176	350	700	176	330	3.05	2376	14737	16039
ISI H 750/180	350	750	180	345	3.43	2575	17656	19297
ISI H 800/180	350	800	180	350	3.90	2842	21042	21042
ISI H 850/180	350	850	180	350	4.40	3415	23797	23797
ISI H 900/180	350	900	180	350	4.94	4044	26721	26721
ISI H 950/176	350	950	176	351	5.63	4473	31172	31172
ISI H 1000/180	350	1000	180	349	6.10	4720	33076	33076
ISI H 1050/180	350	1050	180	349	6.73	5452	36508	36508
ISI H 1100/180	350	1100	180	349	7.38	6239	40108	40108

ELASTOMERIC ISOLATORS “ISI”
TYPE d_{Ed} = ±400 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 600/203	400	600	203	357	0.55	678	1795	3728
ISI S 650/200	400	650	200	342	0.66	758	2379	4614
ISI S 700/200	400	700	200	342	0.77	997	3414	6267
ISI S 750/207	400	750	207	343	0.85	1042	4076	7154
ISI S 800/200	400	800	200	342	1.00	1167	5142	8690
ISI S 850/200	400	850	200	361	1.13	1456	6811	11146
ISI S 900/200	400	900	200	361	1.27	1789	8852	14090
ISI S 950/209	400	950	209	366	1.35	1812	9843	15294
ISI S 1000/204	400	1000	204	369	1.54	1966	11646	17715
ISI S 1050/204	400	1050	204	369	1.70	2342	14483	21621
ISI S 1100/204	400	1100	204	369	1.86	2762	17806	26140
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 600/203	400	600	203	357	1.11	1083	3591	7457
ISI N 650/200	400	650	200	366	1.32	1226	4758	9228
ISI N 700/200	400	700	200	366	1.53	1573	6828	12535
ISI N 750/207	400	750	207	387	1.70	1665	8153	14308
ISI N 800/200	400	800	200	380	2.01	1884	10285	17380
ISI N 850/200	400	850	200	380	2.26	2305	13623	22293
ISI N 900/200	400	900	200	380	2.54	2778	17705	26721
ISI N 950/209	400	950	209	402	2.71	2846	19687	30589
ISI N 1000/204	400	1000	204	385	3.08	3118	23292	33076
ISI N 1050/204	400	1050	204	385	3.39	3655	28967	36508
ISI N 1100/204	400	1100	204	385	3.72	4241	35613	40108
ISI H G=1.4 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI H 600/203	400	600	203	357	1.94	1455	6285	10039
ISI H 650/200	400	650	200	366	2.31	1668	8327	13791
ISI H 700/200	400	700	200	366	2.69	2091	11949	16039
ISI H 750/207	400	750	207	387	2.98	2239	14267	19297
ISI H 800/200	400	800	200	380	3.51	2557	17999	21042
ISI H 850/200	400	850	200	380	3.96	3073	23797	23797
ISI H 900/200	400	900	200	380	4.44	3640	26721	26721
ISI H 950/209	400	950	209	402	4.74	3767	31172	31172
ISI H 1000/204	400	1000	204	385	5.38	4164	33076	33076
ISI H 1050/204	400	1050	204	385	5.93	4811	36508	36508
ISI H 1100/204	400	1100	204	385	6.51	5505	40108	40108

ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 20% d_{Ed} = ±150 mm



d_{Ed} maximum displacement
Ø diameter
T_q total thickness of rubber
H_{TOT} total height of the isolator
k_h horizontal stiffness
k_v vertical stiffness
N_{Ed} maximum seismic vertical load, contemporary with maximum displacement
F_{zd} maximum static vertical load at zero displacement

The devices can be designed with different loads and displacements.

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{zd} [kN]
ISI S 400/75 - P55	150	400	75	158	0.82	999	1557	3230
ISI S 450/75 - P60	150	450	75	158	1.03	1491	2720	4562
ISI S 500/78 - P65	150	500	78	169	1.22	1613	3547	5657
ISI S 550/78 - P75	150	550	78	184	1.50	2221	4962	6871
ISI S 600/77 - P80	150	600	77	177	1.79	2470	6117	8202
ISI S 650/80 - P85	150	650	80	177	2.02	2611	7389	9651
ISI S 700/80 - P95	150	700	80	177	2.38	3350	8779	11218
ISI S 750/81 - P100	150	750	81	183	2.68	3576	10248	12903
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{zd} [kN]**
ISI N 400/75 - P75	150	400	75	158	1.60	1521	2205	3584
ISI N 450/75 - P85	150	450	75	158	2.03	2180	3007	4562
ISI N 500/78 - P95	150	500	78	169	2.43	2420	3925	5657
ISI N 550/78 - P100	150	550	78	184	2.90	3223	4962	6871
ISI N 600/77 - P110	150	600	77	177	3.49	3665	6117	8202
ISI N 650/80 - P120	150	650	80	177	3.98	3942	7389	9651
ISI N 700/80 - P130	150	700	80	177	4.63	4933	8779	11218
ISI N 750/81 - P135	150	750	81	183	5.20	5350	10287	12903

ELASTOMERIC ISOLATORS WITH LEAD CORE "ISI-P" TYPE - DAMPING = 20% d_{Ed} = ±200 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/100 - P55	200	400	100	193	0.62	749	979	2423
ISI S 450/100 - P60	200	450	100	193	0.77	1118	1661	3925
ISI S 500/102 - P70	200	500	102	189	0.95	1234	2278	4932
ISI S 550/102 - P75	200	550	102	220	1.14	1698	3597	6871
ISI S 600/105 - P80	200	600	105	217	1.32	1811	4502	8202
ISI S 650/104 - P85	200	650	104	210	1.55	2008	5749	9651
ISI S 700/104 - P95	200	700	104	210	1.82	2577	7966	11218
ISI S 750/108 - P100	200	750	108	222	2.01	2682	9370	12903
ISI S 800/108 - P105	200	800	108	237	2.28	3327	10982	14705
ISI S 850/100 - P115	200	850	100	221	2.76	3838	12667	16625
ISI S 900/100 - P125	200	900	100	221	3.13	4640	14469	18663
ISI S 950/110 - P125	200	950	110	231	3.16	4468	16390	20819
ISI S 1000/110 - P130	200	1000	110	231	3.49	5292	18428	23093
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/100 - P75	200	400	100	193	1.20	1141	1746	3584
ISI N 450/100 - P85	200	450	100	193	1.52	1635	2488	4562
ISI N 500/102 - P95	200	500	102	189	1.85	1850	3348	5657
ISI N 550/102 - P105	200	550	102	220	2.24	2464	4326	6871
ISI N 600/105 - P110	200	600	105	217	2.57	2688	5422	8202
ISI N 650/104 - P120	200	650	104	210	3.05	3032	6635	9651
ISI N 700/104 - P130	200	700	104	210	3.54	3794	7966	11218
ISI N 750/108 - P135	200	750	108	222	3.90	4012	9415	12903
ISI N 800/108 - P145	200	800	108	237	4.45	4869	10982	14705
ISI N 850/100 - P160	200	850	100	221	5.41	5702	12667	16625
ISI N 900/100 - P170	200	900	100	221	6.08	6759	14469	18663
ISI N 950/110 - P170	200	950	110	231	6.16	6599	16390	20819
ISI N 1000/110 - P180	200	1000	110	231	6.84	7681	18428	23093

ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 20% d_{Ed} = ±250 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/125 - P55	250	400	125	228	0.49	599	784	1938
ISI S 450/125 - P60	250	450	125	228	0.62	894	1271	3140
ISI S 500/126 - P70	250	500	126	221	0.77	999	1613	3993
ISI S 550/126 - P75	250	550	126	236	0.92	1375	2449	5889
ISI S 600/126 - P80	250	600	126	247	1.09	1510	3234	7193
ISI S 650/128 - P90	250	650	128	243	1.28	1632	4092	8579
ISI S 700/128 - P95	250	700	128	243	1.47	2094	5812	11218
ISI S 750/126 - P100	250	750	126	248	1.70	2299	7236	12903
ISI S 800/126 - P110	250	800	126	263	1.96	2851	9715	14705
ISI S 850/130 - P115	250	850	130	263	2.14	2953	11160	16625
ISI S 900/130 - P120	250	900	130	263	2.39	3569	13421	18663
ISI S 950/132 - P125	250	950	132	261	2.62	3724	15282	20819
ISI S 1000/132 - P135	250	1000	132	261	2.93	4410	17261	23093
ISI S 1050/132 - P140	250	1050	132	282	3.21	4641	19358	25485
ISI S 1100/130 - P145	250	1100	130	275	3.55	4960	21573	27994
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/125 - P75	250	400	125	228	0.96	913	1286	3584
ISI N 450/125 - P85	250	450	125	228	1.22	1308	1970	4562
ISI N 500/126 - P95	250	500	126	221	1.49	1498	2771	5657
ISI N 550/126 - P105	250	550	126	236	1.81	1995	3690	6871
ISI N 600/126 - P115	250	600	126	247	2.16	2240	4727	8202
ISI N 650/128 - P120	250	650	128	243	2.47	2464	5881	9651
ISI N 700/128 - P130	250	700	128	243	2.87	3083	7153	11218
ISI N 750/126 - P140	250	750	126	248	3.34	3439	8544	12903
ISI N 800/126 - P150	250	800	126	263	3.81	4173	10052	14705
ISI N 850/130 - P155	250	850	130	263	4.15	4386	11677	16625
ISI N 900/130 - P165	250	900	130	263	4.66	5199	13421	18663
ISI N 950/132 - P175	250	950	132	261	5.14	5500	15282	20819
ISI N 1000/132 - P185	250	1000	132	261	5.70	6400	17261	23093
ISI N 1050/132 - P195	250	1050	132	282	6.30	6822	19358	25485
ISI N 1100/130 - P205	250	1100	130	275	7.00	7373	21573	27994

ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 20% d_{Ed} = ±300 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/150 - P55	300	400	150	263	0.41	500	653	1615
ISI S 450/150 - P60	300	450	150	263	0.51	745	1059	2617
ISI S 500/150 - P70	300	500	150	253	0.65	839	1355	3354
ISI S 550/150 - P75	300	550	150	268	0.77	1155	2001	4947
ISI S 600/154 - P80	300	600	154	266	0.89	1235	2383	5886
ISI S 650/152 - P90	300	650	152	276	1.07	1374	2967	7224
ISI S 700/152 - P95	300	700	152	276	1.24	1763	4293	9760
ISI S 750/153 - P100	300	750	153	271	1.40	1893	5304	11402
ISI S 800/153 - P110	300	800	153	302	1.62	2348	7204	14705
ISI S 850/150 - P115	300	850	150	291	1.84	2559	8793	16625
ISI S 900/150 - P125	300	900	150	291	2.09	3093	11443	18663
ISI S 950/154 - P130	300	950	154	291	2.26	3192	12984	20819
ISI S 1000/154 - P135	300	1000	154	291	2.49	3780	16095	23093
ISI S 1050/156 - P140	300	1050	156	316	2.71	3927	18133	25485
ISI S 1100/156 - P145	300	1100	156	311	2.96	4133	20289	27994
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/150 - P75	300	400	150	263	0.80	761	827	3230
ISI N 450/150 - P85	300	450	150	263	1.01	1090	1451	4562
ISI N 500/150 - P95	300	500	150	253	1.25	1258	2194	5657
ISI N 550/150 - P105	300	550	150	268	1.52	1676	3054	6871
ISI N 600/154 - P110	300	600	154	266	1.75	1833	4031	8202
ISI N 650/152 - P120	300	650	152	276	2.08	2075	5127	9651
ISI N 700/152 - P130	300	700	152	276	2.41	2596	6341	11218
ISI N 750/153 - P140	300	750	153	271	2.76	2832	7672	12903
ISI N 800/153 - P150	300	800	153	302	3.14	3437	9121	14705
ISI N 850/150 - P160	300	850	150	291	3.61	3801	10688	16625
ISI N 900/150 - P170	300	900	150	291	4.05	4506	12372	18663
ISI N 950/154 - P175	300	950	154	291	4.38	4714	14175	20819
ISI N 1000/154 - P185	300	1000	154	291	4.86	5486	16095	23093
ISI N 1050/156 - P195	300	1050	156	316	5.31	5773	18133	25485
ISI N 1100/156 - P205	300	1100	156	311	5.84	6144	20289	27994

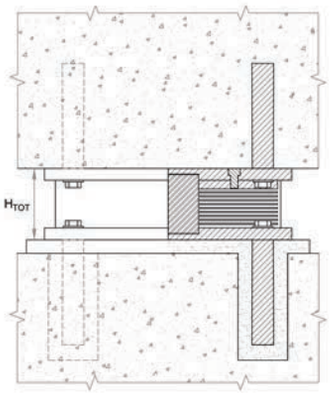
ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 20% d_{Ed} = ±350 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/175 - P55	350	400	175	298	0.35	428	368	1384
ISI S 450/175 - P60	350	450	175	298	0.44	639	908	2243
ISI S 500/180 - P70	350	500	180	293	0.54	699	1129	2795
ISI S 550/180 - P75	350	550	180	308	0.65	962	1668	4122
ISI S 600/175 - P80	350	600	175	293	0.78	1087	2097	5179
ISI S 650/176 - P90	350	650	176	288	0.93	1187	2523	6239
ISI S 700/176 - P95	350	700	176	309	1.07	1523	3411	8429
ISI S 750/180 - P100	350	750	180	307	1.20	1609	3951	9692
ISI S 800/180 - P110	350	800	180	322	1.38	1996	5447	12589
ISI S 850/180 - P115	350	850	180	333	1.54	2132	6595	14482
ISI S 900/180 - P120	350	900	180	333	1.72	2578	8679	18251
ISI S 950/176 - P130	350	950	176	321	1.97	2793	10407	20819
ISI S 1000/176 - P135	350	1000	176	321	2.17	3308	13226	23093
ISI S 1050/180 - P140	350	1050	180	350	2.34	3403	14854	25485
ISI S 1100/182 - P145	350	1100	182	347	2.54	3543	16780	27994
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/175 - P75	350	400	175	298	0.68	652	368	2769
ISI N 450/175 - P85	350	450	175	298	0.87	934	933	4486
ISI N 500/180 - P95	350	500	180	293	1.05	1048	1616	5590
ISI N 550/180 - P100	350	550	180	308	1.25	1396	2417	6871
ISI N 600/175 - P115	350	600	175	293	1.55	1613	3336	8202
ISI N 650/176 - P120	350	650	176	288	1.79	1792	4373	9651
ISI N 700/176 - P130	350	700	176	309	2.08	2242	5528	11218
ISI N 750/180 - P140	350	750	180	307	2.35	2407	6800	12903
ISI N 800/180 - P150	350	800	180	322	2.68	2921	8190	14705
ISI N 850/180 - P160	350	850	180	333	3.02	3168	9698	16625
ISI N 900/180 - P165	350	900	180	333	3.36	3755	11324	18663
ISI N 950/176 - P180	350	950	176	321	3.86	4125	13067	20819
ISI N 1000/176 - P190	350	1000	176	321	4.28	4800	14929	23093
ISI N 1050/180 - P195	350	1050	180	350	4.59	5003	16908	25485
ISI N 1100/182 - P205	350	1100	182	347	5.00	5266	19005	27994

ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 20% d_{Ed} = ±400 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 450/200 - P60	400	450	200	333	0.39	559	415	1962
ISI S 500/204 - P70	400	500	204	325	0.48	617	996	2466
ISI S 550/204 - P75	400	550	204	340	0.57	849	1471	3637
ISI S 600/203 - P80	400	600	203	329	0.68	937	1808	4465
ISI S 650/200 - P90	400	650	200	318	0.81	1044	2220	5490
ISI S 700/200 - P95	400	700	200	318	0.94	1340	3002	7418
ISI S 750/207 - P100	400	750	207	343	1.04	1399	3413	8428
ISI S 800/207 - P105	400	800	207	358	1.18	1736	4436	10947
ISI S 850/200 - P115	400	850	200	342	1.38	1919	5276	13034
ISI S 900/200 - P125	400	900	200	361	1.56	2320	7015	16426
ISI S 950/209 - P125	400	950	209	366	1.65	2352	7972	17782
ISI S 1000/209 - P135	400	1000	209	366	1.84	2786	10199	21878
ISI S 1050/204 - P140	400	1050	204	384	2.06	3003	12083	25022
ISI S 1100/208 - P145	400	1100	208	383	2.22	3100	13616	27334
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 450/200 - P85	400	450	200	333	0.76	817	415	3925
ISI N 500/204 - P95	400	500	204	325	0.92	925	1039	4932
ISI N 550/204 - P105	400	550	204	373	1.12	1232	1781	6871
ISI N 600/203 - P110	400	600	203	357	1.32	1390	2641	8202
ISI N 650/200 - P120	400	650	200	342	1.57	1577	3619	9651
ISI N 700/200 - P130	400	700	200	342	1.83	1973	4715	11218
ISI N 750/207 - P140	400	750	207	365	2.04	2093	5928	12903
ISI N 800/207 - P150	400	800	207	380	2.33	2540	7259	14705
ISI N 850/200 - P160	400	850	200	361	2.71	2851	8708	16625
ISI N 900/200 - P170	400	900	200	361	3.04	3380	10275	18663
ISI N 950/209 - P175	400	950	209	366	3.24	3473	11960	20819
ISI N 1000/209 - P185	400	1000	209	366	3.60	4042	13763	23093
ISI N 1050/204 - P195	400	1050	204	384	4.05	4414	15683	25485
ISI N 1100/208 - P205	400	1100	208	383	4.38	4608	17721	27994

ELASTOMERIC ISOLATORS WITH LEAD CORE "ISI-P" TYPE - DAMPING = 28% d_{Ed} = ±150 mm



d_{Ed} maximum displacement
Ø diameter
T_q total thickness of rubber
H_{TOT} total height of the isolator
k_h horizontal stiffness
k_v vertical stiffness
N_{Ed} maximum seismic vertical load, contemporary with maximum displacement
F_{zd} maximum static vertical load at zero displacement

The devices can be designed with different loads and displacements.

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{zd} [kN]
ISI S 400/75 - P80	150	400	75	158	0.99	999	1522	3230
ISI S 450/75 - P90	150	450	75	158	1.25	1491	2656	4562
ISI S 500/78 - P100	150	500	78	169	1.51	1613	3460	5657
ISI S 550/78 - P110	150	550	78	184	1.82	2221	4962	6871
ISI S 600/77 - P120	150	600	77	177	2.19	2470	6117	8202
ISI S 650/80 - P125	150	650	80	177	2.44	2611	7389	9651
ISI S 700/80 - P135	150	700	80	177	2.84	3350	8779	11218
ISI S 750/81 - P145	150	750	81	183	3.23	3576	10248	12903
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{zd} [kN]**
ISI N 400/75 - P110	150	400	75	158	1.89	1521	2205	3584
ISI N 450/75 - P125	150	450	75	158	2.41	2180	3007	4562
ISI N 500/78 - P135	150	500	78	169	2.85	2420	3925	5657
ISI N 550/78 - P150	150	550	78	184	3.47	3223	4962	6871
ISI N 600/77 - P160	150	600	77	177	4.11	3665	6117	8202
ISI N 650/80 - P175	150	650	80	177	4.73	3942	7389	9651
ISI N 700/80 - P185	150	700	80	177	5.43	4933	8779	11218
ISI N 750/81 - P200	150	750	81	183	6.21	5350	10287	12903

ELASTOMERIC ISOLATORS WITH LEAD CORE "ISI-P" TYPE - DAMPING = 28% d_{Ed} = ±200 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/100 - P80	200	400	100	193	0.74	749	957	2423
ISI S 450/100 - P90	200	450	100	193	0.94	1118	1622	3925
ISI S 500/102 - P100	200	500	102	189	1.14	1234	2228	4932
ISI S 550/102 - P110	200	550	102	220	1.38	1698	3516	6871
ISI S 600/105 - P115	200	600	105	217	1.57	1811	4412	8202
ISI S 650/104 - P130	200	650	104	210	1.91	2008	5611	9651
ISI S 700/104 - P135	200	700	104	210	2.16	2577	7873	11218
ISI S 750/108 - P145	200	750	108	222	2.43	2682	9178	12903
ISI S 800/108 - P155	200	800	108	237	2.76	3327	10982	14705
ISI S 850/100 - P170	200	850	100	221	3.35	3838	12667	16625
ISI S 900/100 - P180	200	900	100	221	3.75	4640	14469	18663
ISI S 950/110 - P180	200	950	110	231	3.80	4468	16390	20819
ISI S 1000/110 - P190	200	1000	110	231	4.21	5292	18428	23093
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/100 - P110	200	400	100	193	1.42	1141	1746	3584
ISI N 450/100 - P125	200	450	100	193	1.81	1635	2488	4562
ISI N 500/102 - P135	200	500	102	205	2.16	1850	3348	5657
ISI N 550/102 - P150	200	550	102	220	2.63	2464	4326	6871
ISI N 600/105 - P160	200	600	105	217	3.04	2688	5422	8202
ISI N 650/104 - P175	200	650	104	210	3.61	3032	6635	9651
ISI N 700/104 - P190	200	700	104	210	4.20	3794	7966	11218
ISI N 750/108 - P200	200	750	108	222	4.66	4012	9415	12903
ISI N 800/108 - P210	200	800	108	237	5.25	4869	10982	14705
ISI N 850/100 - P230	200	850	100	221	6.35	5702	12667	16625
ISI N 900/100 - P245	200	900	100	221	7.14	6759	14469	18663
ISI N 950/110 - P250	200	950	110	231	7.33	6599	16390	20819
ISI N 1000/110 - P265	200	1000	110	231	8.15	7681	18428	23093

ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 28% d_{Ed} = ±250 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/125 - P80	250	400	125	228	0.59	599	766	1938
ISI S 450/125 - P90	250	450	125	228	0.75	894	1241	3140
ISI S 500/126 - P100	250	500	126	221	0.92	999	1578	3993
ISI S 550/126 - P110	250	550	126	236	1.12	1375	2393	5889
ISI S 600/126 - P120	250	600	126	247	1.33	1510	3158	7193
ISI S 650/128 - P130	250	650	128	243	1.54	1632	4002	8579
ISI S 700/128 - P140	250	700	128	243	1.79	2094	5680	11218
ISI S 750/126 - P150	250	750	126	248	2.07	2299	7068	12903
ISI S 800/126 - P160	250	800	126	263	2.36	2851	9501	14705
ISI S 850/130 - P165	250	850	130	263	2.56	2953	10935	16625
ISI S 900/130 - P175	250	900	130	263	2.87	3569	13421	18663
ISI S 950/132 - P185	250	950	132	261	3.17	3724	15282	20819
ISI S 1000/132 - P195	250	1000	132	261	3.52	4410	17261	23093
ISI S 1050/132 - P205	250	1050	132	282	3.88	4641	19358	25485
ISI S 1100/130 - P215	250	1100	130	275	4.31	4960	21573	27994
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/125 - P110	250	400	125	228	1.13	913	1286	3584
ISI N 450/125 - P125	250	450	125	228	1.44	1308	1970	4562
ISI N 500/126 - P135	250	500	126	241	1.75	1498	2771	5657
ISI N 550/126 - P150	250	550	126	256	2.12	1995	3690	6871
ISI N 600/126 - P165	250	600	126	247	2.54	2240	4727	8202
ISI N 650/128 - P175	250	650	128	243	2.91	2464	5881	9651
ISI N 700/128 - P190	250	700	128	243	3.40	3083	7153	11218
ISI N 750/126 - P205	250	750	126	248	3.96	3439	8544	12903
ISI N 800/126 - P220	250	800	126	263	4.52	4173	10052	14705
ISI N 850/130 - P230	250	850	130	263	4.95	4386	11677	16625
ISI N 900/130 - P240	250	900	130	263	5.50	5199	13421	18663
ISI N 950/132 - P255	250	950	132	261	6.09	5500	15282	20819
ISI N 1000/132 - P265	250	1000	132	261	6.70	6400	17261	23093
ISI N 1050/132 - P280	250	1050	132	282	7.41	6822	19358	25485
ISI N 1100/130 - P295	250	1100	130	275	8.24	7373	21573	27994

ELASTOMERIC ISOLATORS WITH LEAD CORE "ISI-P" TYPE - DAMPING = 28% d_{Ed} = ±300 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/150 - P80	300	400	150	263	0.49	500	638	1615
ISI S 450/150 - P90	300	450	150	263	0.63	745	1034	2617
ISI S 500/150 - P100	300	500	150	253	0.77	839	1326	3354
ISI S 550/150 - P110	300	550	150	268	0.93	1155	1956	4947
ISI S 600/154 - P120	300	600	154	266	1.09	1235	2327	5886
ISI S 650/152 - P130	300	650	152	276	1.29	1374	2902	7224
ISI S 700/152 - P140	300	700	152	276	1.50	1763	4196	9760
ISI S 750/153 - P150	300	750	153	271	1.72	1893	5181	11402
ISI S 800/153 - P160	300	800	153	302	1.95	2348	7045	14705
ISI S 850/150 - P170	300	850	150	291	2.23	2559	8594	16625
ISI S 900/150 - P180	300	900	150	291	2.50	3093	11196	18663
ISI S 950/154 - P185	300	950	154	291	2.69	3192	12725	20819
ISI S 1000/154 - P195	300	1000	154	291	2.99	3780	16053	23093
ISI S 1050/156 - P205	300	1050	156	316	3.27	3927	18087	25485
ISI S 1100/156 - P215	300	1100	156	311	3.59	4133	20289	27994
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/150 - P110	300	400	150	263	0.95	761	827	3230
ISI N 450/150 - P125	300	450	150	263	1.20	1090	1451	4562
ISI N 500/150 - P135	300	500	150	277	1.46	1258	2194	5657
ISI N 550/150 - P150	300	550	150	292	1.78	1676	3054	6871
ISI N 600/154 - P160	300	600	154	287	2.05	1833	4031	8202
ISI N 650/152 - P175	300	650	152	276	2.45	2075	5127	9651
ISI N 700/152 - P190	300	700	152	276	2.85	2596	6341	11218
ISI N 750/153 - P205	300	750	153	287	3.27	2832	7672	12903
ISI N 800/153 - P215	300	800	153	302	3.68	3437	9121	14705
ISI N 850/150 - P230	300	850	150	291	4.23	3801	10688	16625
ISI N 900/150 - P245	300	900	150	291	4.76	4506	12372	18663
ISI N 950/154 - P255	300	950	154	291	5.17	4714	14175	20819
ISI N 1000/154 - P270	300	1000	154	291	5.75	5486	16095	23093
ISI N 1050/156 - P280	300	1050	156	316	6.24	5773	18133	25485
ISI N 1100/156 - P295	300	1100	156	311	6.87	6144	20289	27994

ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 28% d_{Ed} = ±350 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 400/175 - P80	350	400	175	298	0.42	428	368	1384
ISI S 450/175 - P90	350	450	175	298	0.54	639	886	2243
ISI S 500/180 - P100	350	500	180	293	0.65	699	1105	2795
ISI S 550/180 - P110	350	550	180	308	0.79	962	1630	4122
ISI S 600/175 - P120	350	600	175	293	0.95	1087	2048	5179
ISI S 650/176 - P130	350	650	176	288	1.11	1187	2467	6239
ISI S 700/176 - P140	350	700	176	309	1.29	1523	3334	8429
ISI S 750/180 - P150	350	750	180	307	1.46	1609	3860	9692
ISI S 800/180 - P160	350	800	180	322	1.66	1996	5327	12589
ISI S 850/180 - P170	350	850	180	333	1.88	2132	6446	14482
ISI S 900/180 - P175	350	900	180	333	2.07	2578	8498	18251
ISI S 950/176 - P190	350	950	176	321	2.38	2793	10176	20819
ISI S 1000/176 - P200	350	1000	176	321	2.64	3308	12927	23093
ISI S 1050/180 - P205	350	1050	180	350	2.82	3403	14541	25485
ISI S 1100/182 - P215	350	1100	182	347	3.08	3543	16418	27994
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 400/175 - P110	350	400	175	298	0.81	652	368	2769
ISI N 450/175 - P125	350	450	175	298	1.03	934	933	4486
ISI N 500/180 - P135	350	500	180	322	1.23	1048	1616	5590
ISI N 550/180 - P150	350	550	180	337	1.50	1396	2417	6871
ISI N 600/175 - P165	350	600	175	317	1.82	1613	3336	8202
ISI N 650/176 - P175	350	650	176	309	2.11	1792	4373	9651
ISI N 700/176 - P190	350	700	176	309	2.45	2242	5528	11218
ISI N 750/180 - P200	350	750	180	326	2.75	2407	6800	12903
ISI N 800/180 - P215	350	800	180	341	3.14	2921	8190	14705
ISI N 850/180 - P230	350	850	180	333	3.56	3168	9698	16625
ISI N 900/180 - P245	350	900	180	333	4.01	3755	11324	18663
ISI N 950/176 - P260	350	950	176	321	4.54	4125	13067	20819
ISI N 1000/176 - P270	350	1000	176	321	4.99	4800	14929	23093
ISI N 1050/180 - P285	350	1050	180	350	5.44	5003	16908	25485
ISI N 1100/182 - P295	350	1100	182	347	5.89	5266	19005	27994

ELASTOMERIC ISOLATORS WITH LEAD CORE “ISI-P” TYPE - DAMPING = 28% d_{Ed} = ±400 mm

ISI S G=0.4 MPa	d_{Ed} [mm]	Ø [mm]	T_q [mm]	H_{TOT} [mm]	k_h [kN/mm]	k_v [kN/mm]	N_{Ed} [kN]	F_{Zd} [kN]
ISI S 450/200 - P90	400	450	200	333	0.47	559	415	1962
ISI S 500/204 - P100	400	500	204	325	0.57	617	975	2466
ISI S 550/204 - P110	400	550	204	340	0.69	849	1438	3637
ISI S 600/203 - P120	400	600	203	329	0.83	937	1766	4465
ISI S 650/200 - P130	400	650	200	318	0.98	1044	2171	5490
ISI S 700/200 - P140	400	700	200	318	1.14	1340	2934	7418
ISI S 750/207 - P150	400	750	207	343	1.27	1399	3334	8428
ISI S 800/207 - P155	400	800	207	358	1.42	1736	4342	10947
ISI S 850/200 - P170	400	850	200	342	1.67	1919	5156	13034
ISI S 900/200 - P180	400	900	200	361	1.88	2320	6864	16426
ISI S 950/209 - P185	400	950	209	366	2.00	2352	7801	17782
ISI S 1000/209 - P195	400	1000	209	366	2.22	2786	9989	21878
ISI S 1050/204 - P210	400	1050	204	384	2.52	3003	11805	25022
ISI S 1100/208 - P215	400	1100	208	383	2.69	3100	13322	27334
ISI N G=0.8 MPa	**d_{Ed} [mm]**	**Ø [mm]**	**T_q [mm]**	**H_{TOT} [mm]**	**k_h [kN/mm]**	**k_v [kN/mm]**	**N_{Ed} [kN]**	**F_{Zd} [kN]**
ISI N 450/200 - P85	400	450	200	333	0.90	817	415	3925
ISI N 500/204 - P95	400	500	204	325	1.08	925	1039	4932
ISI N 550/204 - P105	400	550	204	373	1.32	1232	1781	6871
ISI N 600/203 - P110	400	600	203	357	1.58	1390	2641	8202
ISI N 650/200 - P120	400	650	200	342	1.85	1577	3619	9651
ISI N 700/200 - P130	400	700	200	342	2.16	1973	4715	11218
ISI N 750/207 - P140	400	750	207	365	2.39	2093	5928	12903
ISI N 800/207 - P150	400	800	207	380	2.74	2540	7259	14705
ISI N 850/200 - P160	400	850	200	361	3.17	2851	8708	16625
ISI N 900/200 - P170	400	900	200	361	3.57	3380	10275	18663
ISI N 950/209 - P175	400	950	209	366	3.83	3473	11960	20819
ISI N 1000/209 - P185	400	1000	209	366	4.26	4042	13763	23093
ISI N 1050/204 - P195	400	1050	204	384	4.79	4414	15683	25485
ISI N 1100/208 - P205	400	1100	208	383	5.15	4608	17721	27994

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