

PTM-AP • FLOOR MOUNTING SINGLE SPRING ISOLATOR

PTM-AMS • HEAVY LOADING MULTIPLE SPRING ISOLATOR

TOZEN Model PTM-AP & AMS series isolators are unboxed spring vibration isolators consist of high deflection, laterally stable steel springs assembled with a levelling device at the top and non-skid acoustical pad at the bottom. Model PTM-AP employs the use of single spring element, while the PTM-AMS employs multiple spring elements for heavier applications. These are constructed with upper and lower holding cup with built in levelling feature and a mounting plate base to allow for bolting the isolators to the structure.

The design of the spring elements, within the isolators, complies with established standard JIS B2704, for semi-permanent use. To assure lateral stability, the outside diameter of the spring element is greater than 80% of the height of the compressed spring element when at rated load. All the spring elements are designed to provide a minimum of overloading capacity of 50%.

PTM-AP & PTM-AMS series vibration isolator are available in the standard deflections at 25mm, 50mm, 75mm and 100mm with various load capacities.

APPLICATION:

PTM-AP & AMS series spring isolators are typically used to reduce the transmission of noise and vibration from low-speed mechanical equipment into a building structure. PTM-AP & AMS series spring isolators are used in a wide range of applications, such as, reciprocating air or refrigeration compressors, close coupled and base mounted pumps, package air handling and refrigeration equipments, centrifugal fans, internal combustion engines and similar equipments.



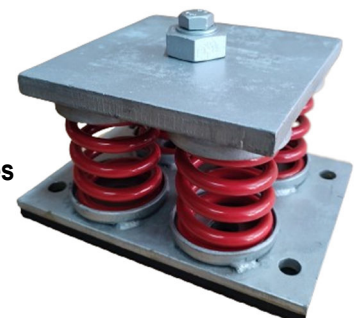
PTM-AP & AP2 series



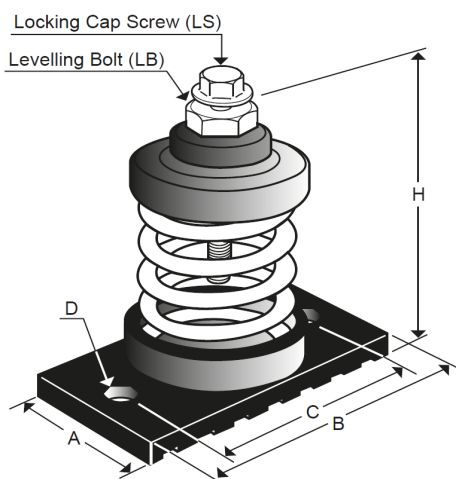
PTM-AP3 & AP4 series



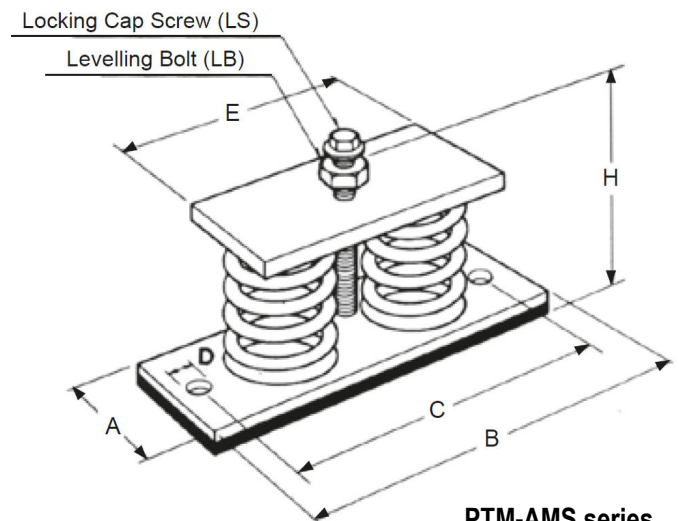
PTM-AMS series
(2-spring)



PTM-AMS series
(4-spring)



PTM-AP series



PTM-AMS series

PTM-AP & AMS 25mm DEFLECTION SINGLE & MULTIPLE SPRING VIBRATION ISOLATOR

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Element			Operating Height (H)	Dimension					Locking Cap Screw (LS)	Levelling Bolt (LB)
	(Kgs)	(Lbs)		Colour Code	O.D	Free Height		(A)	(B)	(C)	(D)	(E)		
PTM-AP-10S	10	22	0.4	GREEN										
PTM-AP-15S	15	33	0.6	BLUE										
PTM-AP-25S	25	55	1.0	WHITE										
PTM-AP-35S	35	77	1.4	YELLOW										
PTM-AP-50S	50	110	2.0	ORANGE	50	80	120	64	120	90	10	-	M10	M16
PTM-AP-80S	80	176	3.2	VIOLET										
PTM-AP-120S	120	264	4.8	RED										
PTM-AP-175ES	175	385	7.0	SILVER										
PTM-AP-225ES	225	495	9.0	BROWN										
PTM-AP-150M	150	330	6.0	ORANGE										
PTM-AP-200M	200	440	8.0	VIOLET										
PTM-AP-300M	300	660	12.0	RED										
PTM-AP-350EM	350	770	14.0	VIOLET+WHITE										
PTM-AP-450M	450	990	18.0	GREEN										
PTM-AP-500EM	500	1100	24.0	VIOLET+BROWN										
PTM-AP-600EM	600	1320	24.0	SILVER										
PTM-AP-750EM	750	1650	30.0	GREEN+BROWN	75	100	160	92	150	120	12	-	M12	M22
PTM-AP-825EM	825	1815	33.0	BROWN										
PTM-AP-900EM	900	1980	36.0	SILVER+BROWN										
PTM-AP-975EM	975	2145	39.0	BROWN+WHITE										
PTM-AP-1100EM	1100	2420	44.0	BLUE										
PTM-AP-1125EM	1125	2475	45.0	BROWN+BROWN										
PTM-AP-1250EM	1250	2750	50.0	BLUE+WHITE										
PTM-AP-1400EM	1400	3080	56.0	BLUE+BROWN										
PTM-AMS-1502EM	1500	3300	60.0	GREEN+BROWN										
PTM-AMS-1652EM	1650	3630	66.0	BROWN										
PTM-AMS-1802EM	1800	3960	72.0	SILVER+BROWN										
PTM-AMS-1952EM	1950	4290	78.0	BROWN+WHITE										
PTM-AMS-2202EM	2200	4840	88.0	BLUE	75	100	160	85	285	245	16	220	M12	M22
PTM-AMS-2252EM	2250	4950	90.0	BROWN+ BROWN										
PTM-AMS-2502EM	2500	5500	100.0	BLUE+WHITE										
PTM-AMS-2802EM	2800	6160	112.0	BLUE+BROWN										
PTM-AMS-3004EM	3000	6600	120.0	GREEN+BROWN										
PTM-AMS-3304EM	3300	7260	132.0	BROWN										
PTM-AMS-3604EM	3600	7920	144.0	SILVER+BROWN										
PTM-AMS-3904EM	3900	8580	156.0	BROWN+WHITE										
PTM-AMS-4404EM	4400	9680	176.0	BLUE	75	100	165	190	255	190	16	190	M16	M30
PTM-AMS-4504EM	4500	9900	180.0	BROWN+ BROWN										
PTM-AMS-5004EM	5000	11000	200.0	BROWN+WHITE										
PTM-AMS-5604EM	5600	12320	224.0	BLUE+BROWN										

We reserve the right to change without notice for error rectification or design modification.

PTM-AP2 & AMS2 50mm DEFLECTION SINGLE & MULTIPLE SPRING VIBRATION ISOLATOR

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Element			Operating Height (H)	Dimension					Locking Cap Screw (LS)	Levelling Bolt (LB)
	(Kgs)	(Lbs)		Colour Code	O.D	Free Height		(A)	(B)	(C)	(D)	(E)		
PTM-AP2-25S	25	55	0.5	WHITE										
PTM-AP2-35S	35	77	0.7	YELLOW										
PTM-AP2-50S	50	110	1.0	ORANGE										
PTM-AP2-80ES	80	176	1.6	VIOLET	75	120	180	92	150	120	12	-	M12	M22
PTM-AP2-125ES	125	275	2.5	RED										
PTM-AP2-175ES	175	385	3.5	SILVER										
PTM-AP2-250ES	250	550	5.0	BROWN										
PTM-AP2-175EM	175	385	3.5	ORANGE										
PTM-AP2-245EM	245	539	4.9	VIOLET										
PTM-AP2-350EM	350	770	7.0	RED										
PTM-AP2-475EM	475	1045	9.5	ORANGE+BROWN										
PTM-AP2-525EM	525	1155	10.5	GREEN										
PTM-AP2-545EM	545	1199	10.9	VIOLET+BROWN										
PTM-AP2-650EM	650	1430	13.0	RED+BROWN										
PTM-AP2-725EM	725	1595	14.5	ORANGE+WHITE										
PTM-AP2-750EM	750	1650	15.0	SILVER	90	145	200	106	160	130	14	-	M12	M22
PTM-AP2-795EM	795	1749	15.9	VIOLET+WHITE										
PTM-AP2-825EM	825	1815	16.5	GREEN+BROWN										
PTM-AP2-900EM	900	1980	18.0	RED+WHITE										
PTM-AP2-1000EM	1000	2200	20.0	BLUE										
PTM-AP2-1050EM	1050	2310	21.0	SILVER+BROWN										
PTM-AP2-1075EM	1075	2365	21.5	GREEN+WHITE										
PTM-AP2-1300EM	1300	2860	26.0	BLUE+BROWN										
PTM-AP2-1550EM	1550	3410	31.0	BLUE+WHITE										
PTM-AMS2-1092EM	1090	2398	21.8	VIOLET+BROWN										
PTM-AMS2-1302EM	1300	2860	26.0	RED+BROWN										
PTM-AMS2-1452EM	1450	3190	29.0	ORANGE+WHITE										
PTM-AMS2-1502EM	1500	3300	30.0	SILVER										
PTM-AMS2-1592EM	1590	3498	31.8	VIOLET+WHITE										
PTM-AMS2-1652EM	1650	3630	33.0	GREEN+BROWN	90	145	200	100	315	275	16	255	M12	M22
PTM-AMS2-1802EM	1800	3960	36.0	RED+WHITE										
PTM-AMS2-2002EM	2000	4400	40.0	BLUE										
PTM-AMS2-2102EM	2100	4620	42.0	SILVER+BROWN										
PTM-AMS2-2152EM	2150	4730	43.0	GREEN+WHITE										
PTM-AMS2-2602EM	2600	5720	52.0	BLUE+BROWN										
PTM-AMS2-3102EM	3100	6820	62.0	BLUE+WHITE										

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PTM-AMS2 50mm DEFLECTION MULTIPLE SPRING VIBRATION ISOLATOR

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Element			Operating Height (H)	Dimension					Locking Cap Screw (LS)	Levelling Bolt (LB)
	(Kgs)	(Lbs)		Colour Code	O.D	Free Height		(A)	(B)	(C)	(D)	(E)		
PTM-AMS2-1904EM	1900	4180	38.0	ORANGE+BROWN	90	145	210	240	285	245	16	225	M16	M30
PTM-AMS2-2104EM	2100	4620	42.0	GREEN										
PTM-AMS2-2184EM	2180	4796	43.6	VIOLET+BROWN										
PTM-AMS2-2604EM	2600	5720	52.0	RED+BROWN										
PTM-AMS2-2904EM	2900	6380	58.0	ORANGE+WHITE										
PTM-AMS2-3004EM	3000	6600	60.0	SILVER										
PTM-AMS2-3184EM	3180	6996	63.6	VIOLET+WHITE										
PTM-AMS2-3304EM	3300	7260	66.0	GREEN+BROWN										
PTM-AMS2-3604EM	3600	7920	72.0	RED+WHITE										
PTM-AMS2-4004EM	4000	8800	80.0	BLUE										
PTM-AMS2-4204EM	4200	9240	84.0	SILVER+BROWN										
PTM-AMS2-4304EM	4300	9460	86.0	GREEN+WHITE										
PTM-AMS2-5204EM	5200	11440	104.0	BLUE+BROWN										
PTM-AMS2-6204EM	6200	13640	124.0	BLUE+WHITE										

We reserve the right to change without notice for error rectification or design modification.

PTM-AP3 & AMS3 75mm DEFLECTION SINGLE & MULTIPLE SPRING VIBRATION ISOLATOR

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Element			Operating Height (H)	Dimension					Locking Cap Screw (LS)	Levelling Bolt (LB)
	(Kgs)	(Lbs)		Colour Code	O.D	Free Height		(A)	(B)	(C)	(D)	(E)		
PTM-AP3-80ES	80	176	1.07	WHITE	90	170	220	100	170	140	14	-	M12	M22
PTM-AP3-125ES	125	275	1.67	YELLOW										
PTM-AP3-180ES	180	396	2.4	ORANGE										
PTM-AP3-255ES	255	561	3.4	VIOLET										
PTM-AP3-375ES	375	825	5.0	RED										
PTM-AP3-555EL	555	1221	7.4	VIOLET	110	190	250	125	195	165	14	-	M12	M22
PTM-AP3-810EL	810	1782	10.8	RED										
PTM-AP3-1065EL	1065	2343	14.2	RED+BROWN										
PTM-AMS3-1112EL	1110	2442	14.8	VIOLET	110	190	255	125	360	330	16	295	M12	M22
PTM-AMS3-1622EL	1620	3564	21.6	RED										
PTM-AMS3-2132EL	2130	4686	28.4	RED+BROWN										
PTM-AMS3-2224EL	2220	4884	29.6	VIOLET	110	190	260	290	335	295	16	265	M16	M30
PTM-AMS3-3244EL	3240	7128	43.2	RED										
PTM-AMS3-4264EL	4260	9372	56.8	RED+BROWN										

We reserve the right to change without notice for error rectification or design modification.

PTM-AP4 & AMS4 100mm DEFLECTION SINGLE & MULTIPLE SPRING VIBRATION ISOLATOR

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Element			Operating Height (H)	Dimension					Locking Cap Screw (LS)	Levelling Bolt (LB)
	(Kgs)	(Lbs)		Colour Code	O.D	Free Height		(A)	(B)	(C)	(D)	(E)		
PTM-AP4-180ES	180	396	1.80	VIOLET										
PTM-AP4-255ES	255	561	2.55	RED	110	200	260	125	195	165	14	-	M12	M22
PTM-AP4-375ES	375	825	3.75	RED+BROWN										
PTM-AP4-555EL	555	1221	5.55	VIOLET										
PTM-AP4-810EL	810	1782	8.10	RED	130	230	297	150	220	190	14	-	M12	M22
PTM-AP4-1065EL	1065	2343	10.65	RED+BROWN										
PTM-AMS4-1112EL	1110	2442	11.10	VIOLET										
PTM-AMS4-1622EL	1620	3564	16.20	RED	130	230	285	150	415	385	16	345	M12	M22
PTM-AMS4-2132EL	2130	4686	21.30	RED+BROWN										
PTM-AMS4-2224EL	2220	4884	22.20	VIOLET										
PTM-AMS4-3244EL	3240	7128	32.40	RED	130	230	293	345	390	350	16	315	M16	M30
PTM-AMS4-4264EL	4260	9372	42.60	RED+BROWN										

We reserve the right to change without notice for error rectification or design modification.

NOTE-1: All springs are free standing and laterally stable. (Outside diameter shall not less than 0.8 times of compressed height)

NOTE-2: All springs are designed to provide additional travel to solid of at least 50% rated load.

NOTE-3: Please refer to relevant brochure or contact our technical division for greater deflection and loading.

INSTALLATION INSTRUCTION:

- Block or lift up the equipment to a level so that the equipment's leg or base is 5mm higher than isolator's operating height (see catalogue). If common base & height saving isolator bracket is used, keep 50mm clearance between the base and floor. Maintain this height until piping installation is completed.
- Locate the spring isolator under the hole in equipment's leg or isolator's bracket. Connect locking cap screw and washer, but do not tighten.
- Transfer the equipment weight to the spring by taking two counter-clockwise turns on each leveling bolt around the unit until springs are compressed just enough to remove the blocks.
- Tighten the locking cap screw to lock the assembly.

REMARKS:

- DO NOT install the equipment on the support of a free spring. This will cause an insufficient operating height for the spring isolator when the installation is completed.
- Weight of vertical piping and valves must be supported by the suspension hangers or supports.
- Install the flexible joint at the end of the installation, following the pre-extension instruction which may specified or suggested by the flexible joint manufacturer.
- Bolting down the isolator to the floor, in most cases, is not necessary as the non-slip rubber pad or mounting cup will prevent movement. Where bolting is required, avoid a direct metal contact between bolt and mounting, to prevent transmission of noise; the bolt shank shall be clear in the hole and a rubber washer used under the bolt head. Bolts shall only be tightened a half turn more than hand tight.