NTK® Oscillators

A great motive force for compaction tables, feeders & screens!

ATEX Certified

Compact, settle, feed or screen – move material efficiently with NTK® Oscillators. Operation is quiet, and energy-efficient. NTK® Units start and stop instantly in any position and are explosion-proof and wash-down safe. Aluminum Units operate lubrication-free. No one builds industrial vibrators like MARTIN®!

FEATURES

No Lubrication Required

AL models are lubrication-free, eliminating the use of messy, maintenance-intensive lubricators. No oil mist is discharged into the atmosphere.

Quiet

Noise levels are 60 to 75 dBA, well below regulatory limits.

Infinite Adjustability

NTK® Oscillators offer separate and independent adjustment of both frequency and amplitude, providing exactly the right force time after time.

Additional Specifications

- Air pressure range: 30-60 psi
- Operating temperature: 32° - 120° F, special low & high temperature models available.
- Air Preparation: 5-micron filter, pressure regulator & lubricator for steel models. 3-way control valve required.
- Force (maximum): 7-900 force-lbs.
- Warranty: 3-years when operated within recommendations.
- Included: Muffler, nipple & mounting bolts.

NTK® Oscillators

DIMENSIONS (FIGURE 1)

	A	B	C	D	E	F	G
NTK 8 AL	0.32(8)	0.87(22)	3.58(91)	0.88(22)	0.2(5)	1.26(32)	0.73(18.5)
NTK 25 AL	0.99(25)	1.97(50)	5.44(138)	2.13(54)	0.28(7)	2.05(52)	1.16(29.5)
NTK 40 AL	1.58(40)	2.88(73)	5.52(140)	3.11(79)	0.47(12)	2.25(57)	1.36(34.5)
NTK 55 AL	2.17(55)	3.88(98)	5.24(133)	4.29(109)	0.79(20)	2.29(58)	1.52(38.5)

	H & J	K	L & M	R	S	T	U	SW
NTK 8 AL	M 5	N/A	M5	0.59(15)	0.28(7)	1.85(47)	3.01(77)	0.28(7)
NTK 25 AL	M 16	N/A	G 1/4	0.98(25)	0.71(18)	2.84(72)	4.75(121)	0.87(22)
NTK 40 AL	M 16	0.32(8)	G 3/8	0.98(25)	0.79(20)	2.88(73)	4.83(123)	1.26(32)
NTK 55 AL	M 20	0.39(10)	G 3/8	1.58(40)	1.38(35)	2.60(66)	4.53(115)	1.81(46)
inches (mm)								

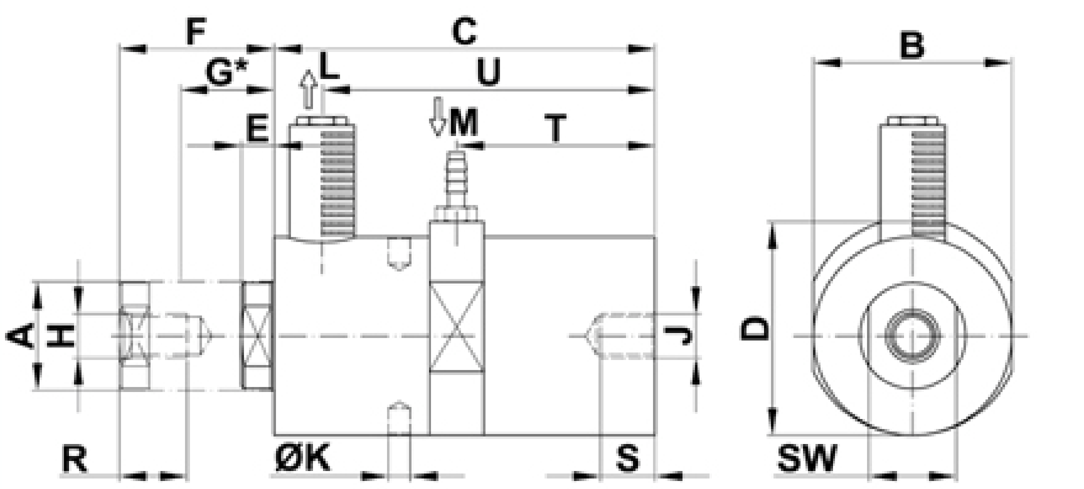
DIMENSIONS (FIGURE 2)

	A	B	C	E	F	G	H	J
NTK 15 X	0.59(15)	1.97(50)	4.49(114)	0.35(9)	1.5(38)	0.93(24)	M 10	N/A
NTK 16	0.63(16)	1.93(49)	4.37(111)	0.2(5)	1.5(38)	0.85(22)	M 10	N/A
NTK 18 AL	0.71(18)	1.93(49)	4.57(116)	0.31(8)	1.65(42)	0.98(25)	M 10	N/A
NTK 25	0.98(25)	2.52(64)	5.43(138	0.35(9)	2.05(52)	1.20(31)	M 16	N/A
NTK 40	1.57(40)	3.31(84)	5.51(140)	0.47(12)	2.13(54)	1.30(33)	M 16	N/A
NTK 55	2.17(55)	4.33(110)	4.92(125)	0.75(19)	2.17(55)	1.50(38)	M 20	3.78(96)
NTK 85	3.35(85)	6.3(160)	4.80(122)	0.79(20)	1.77(45)	1.28(33)	M 20	5.63(143)
NTK 110	4.33(110)	7.87(200)	4.80(122)	0.87(22)	2.17(55)	1.52(39)	M 20	7.17(182)

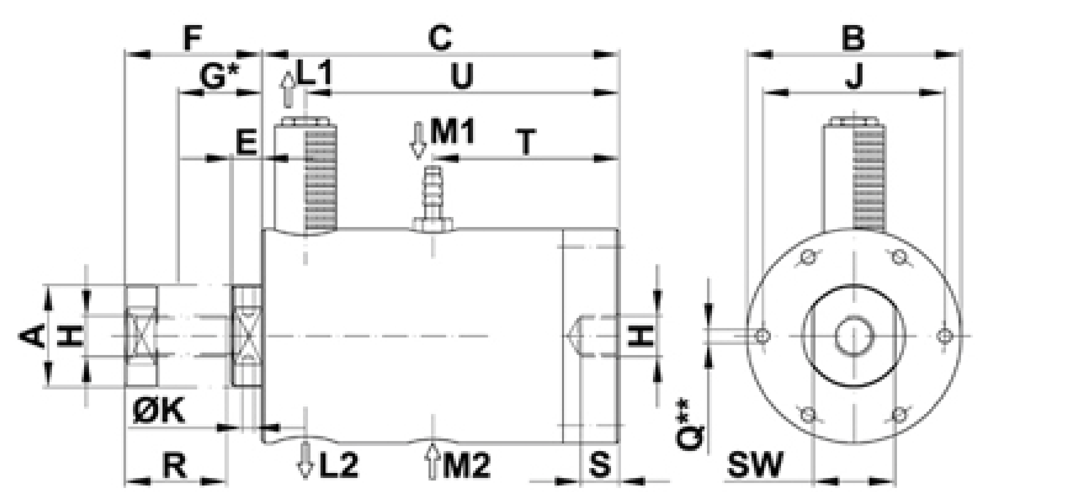
	K	L	M	Q	R	S	T	U	SW
NTK 15 X	N/A	G 1/8	G 1/8	N/A	0.79(20)	0.39(10)	2.17(55)	3.90(99)	0.5(13)
NTK 16	N/A	G 1/8	G 1/8	N/A	0.83(21)	0.39(10)	2.24(57)	3.78(96)	0.55(14)
NTK 18 AL	N/A	G 1/8	G 1/8	N/A	0.83(21)	0.39(10)	2.44(62)	3.98(101)	0.63(16)
NTK 25	N/A	G 1/4	G 1/4	N/A	0.98(25)	0.39(10)	2.87(73)	4.92(125)	0.87(22)
NTK 40	N/A	G 3/8	G 1/4	N/A	1.57(40)	0.59(15)	2.87(73)	4.84(123)	1.26(32)
NTK 55	N/A	G 3/8	G 3/8	4 ˘ 8,5	1.57(40)	1.18(30)	2.36(60)	4.25(108)	1.811(46)
NTK 85	0.50(13)	2 x G 3/8	G 3/8	6 ˘ 10,0	1.57(40)	0.79(20)	2.24(57)	4.13(105)	N/A
NTK 110	0.50(13)	2 x G1/2	2 x G 3/8	8 ˘ 12,5	1.57(40)	0.98(25)	2.24(57)	4.13(105)	N/A
inches (mm)									

NTK® Oscillators

NTK FIGURE 1



NTK FIGURE 2



NTK® Oscillators

PERFORMANCE

			AIR CONSUMPTION CFM (L/MIN)		FREQUENCY		CENTRIFUGAL FORCE LBS (N)		WORKING MOMENT IN/LB (CMKG)	
NTK	OSCILLATION MASS LBS(KG)	OSCILLATOR ASSEMBLY	30 PSI (2BAR)	60 PSI (4.1BAR)	30 PSI (2BAR)	60 PSI (4.1BAR)	30 PSI (2BAR)	60 PSI (4.1BAR)	30 PSI (2BAR)	60 PSI (4.1BAR)
8 AL	0.07(.03)	piston only	0.25(7)	0.7(20)	2440	3120	3.3(15)	7.1(32)	0.04(.05)	0.05(.06)
	0.10(.05)	+ SM 8-1	0.21(6)	0.66(19)	1858	2412	3.5(16)	7.1(32)	0.07(.08)	0.09(.10)
	0.13(.06)	+ 2x8-1	0.21(6)	0.63(18)	1680	2100	3.1(14)	7.1(32)	0.08(.09)	0.12(.14)
	0.19(.09)	+ SM 8-2	0.21(6)	0.56(16)	1380	1333	3.3(15)	8(36)	0.13(.15)	0.32(.37)
15 x	0.3(.14)	piston	0.6(17)	1.58(45)	1745	2182	10.9(49)	18.9(85)	0.25(.29)	0.29(.33)
	1.0(46)	+ SM 16-1	0.56(16)	1.3(37)	1029	1137	10.4(47)	18.9(85)	0.70(.81)	1.01(1.17)
	1.49(.68)	+ SM 16-2	0.5(14)	1.19(34)	758	720	11.8(53)	19.3(87)	1.47(1.69)	2.66(3.06)
16	0.33(.15)	piston	0.5(14)	1.26(36)	1680	1920	9.3(42)	16.7(75)	0.23(.27)	0.32(.37)
	1.03(.47)	+ SM 16-1	0.39(11)	0.98(28)	908	1309	9.3(42)	30.8(139)	0.99(1.14)	1.28(1.48)
	2.18(.99)	+ SM 16-1+SM 16-2	0.28(8)	0.88(25)	686	914	16.9(76)	30.9(139)	2.57(2.96)	2.62(3.02)
18 AL	0.46(.21)	piston	0.67(19)	1.54(44)	1600	1980	9.3(42)	15.5(70)	0.25(.29)	0.29(.33)
	1.39(.63)	+ SM 16-1	0.46(13)	1.26(36)	972	1321	13.6(61)	31.3(141)	1.02(1.18)	1.28(1.47)
	1.65(.75)	+ SM 16-2	0.39(11)	1.19(34)	878	1168	18.4(83)	38(171)	1.70(1.96)	1.99(2.29)
	2.31(1.05)	+ SM 16-1+SM 16-2	0.35(10)	1.05(30)	738	965	21.8(98)	37.1(167)	2.84(3.27)	2.84(3.27)
	2.79(1.27	+ 2 x SM 16-2	0.32(9)	0.98(28)	702	902	23.1(104)	40.9(184)	3.35(3.86)	3.58(4.13)
25 AL	0.92(.42)	piston	1.19(34)	3.22(92)	1289	1821	23.8(107)	55.6(250)	1.02(1.18)	1.2(1.38)
	1.70(.78)	+ SM 25-1	0.91(26)	2.87(82)	988	1371	30.9(139)	67.6(304)	2.25(2.59)	2.56(2.95)
	2.13(.97)	+ SM 25-2	0.84(24)	2.66(76)	894	1237	34.4(155)	72(324)	3.07(3.54)	3.35(3.86)
	3.64(1.66)	+ SM 25-3	0.77(22)	2.42(69)	686	898	39.3(177)	68.2(307)	5.97(6.88)	6.02(6.94)
	6.25(2.84)	+ 2 x SM 25-3	0.74(21)	2.21(63)	540	823	41.8(188)	94.4(425)	10.23(11.79)	9.95(11.5)
25	1.03(.47)	piston	1.33(38)	3.39(97)	1440	1946	28.2(127)	62.6(282)	0.97(1.12)	1.18(1.36)
	2.24(1.02)	+ SM 25-2	0.98(28)	2.52(72)	993	1320	36.9(166)	76.9(346)	2.66(3.07)	3.14(3.62)
	3.75(1.71)	+ SM 25-3	0.88(25)	2.28(65)	800	988	43.6(196)	76.2(343)	4.84(5.58)	5.56(6.41)
40 AL	2.73(1.24)	piston	1.89(54)	4.8(137)	1231	1620	53.1(239)	84.4(380)	2.5(2.88)	2.29(2.64)
	5.44(2.48)	+ SM 25-3	1.26(36)	4.30(123)	900	1168	66.2(298)	139(628)	5.83(6.72)	7.29(8.4)
	8.05(3.66)	+ 2 x SM 25-3	1.19(34)	3.64(104)	710	923	80.2(361)	137(617)	11.35(13.08)	11.46(13.2)
	10.80(4.91)	+ SM 25-4	1.16(33)	3.26(93)	565	780	94.2(424)	153(689)	21.04(24.24)	17.92(20.6)
40	2.79(1.27)	piston	1.72(49)	4.86(139)	1200	1629	62.7(282	115(520)	3.1(3.57)	3.01(3.57)
	5.51(2.51)	+ SM 25-3	1.33(38)	3.96(113)	889	1175	71.1(320)	145(653)	6.41(7.39)	7.48(8.62)
	8.19(3.69)	+ 2 x SM 25-3	1.23(35)	3.5(100)	673	933	66.7(300	150(677)	10.48(12.07)	12.3(14.17)
	10.87(4.94)	+ SM 25-4	1.12(32)	3.22(92)	554	778	101(456)	167(753)	23.52(27.1)	19.68(22.67)
55 AL	4.62(2.1)	piston	3.43(96)	8.68(248)	1500	1920	99.3(447)	157(708)	3.14(3.62)	3.04(3.5)
	7.57(3.43)	+ SM 85-1	2.91(83)	8.19(234)	1113	1440	109(492)	183(824)	6.29(7.25)	6.29(7.25)
	10.14(4.61)	+ 2 x SM 85-1	2.835(81)	7.91(226)	985	1292	131(591)	221(995)	9.64(11.11)	9.44(10.87)
	12.91(5.87)	+ SM 85-2	2.77(79)	7.80(223)	884	1175	138(621)	243(1097)	12.58(14.49)	12.58(14.5)
	18.23(8.29)	+ 2x SM 85-1 + SM 85-2	2.56(73)	7.49(214)	758	1011	160(723)	276(1244)	19.92(22.94)	19.29(22.22)
55	4.62(2.1)	piston NF	3.54(101)	8.93(255)	1405	1879	98(441)	154(696)	3.54(4.08)	3.12(3.6)
	10.14(4.61)	+ 2 x SM 85-1	2.42(69)	7.24(207)	973	1358	127(573)	264(1189)	9.57(11.03)	10.2(11.75)
	15.51(7.05)	+ 2x SM 85-1 + SM 85-2	2.20(63)	6.72(192)	853	1140	167(755)	311(1401)	16.44(18.94)	17.06(19.66)
	32.19(14.63)	+ SM 85-3	2.17(62)	6.65(190)	677	862	230(1039)	380(1708)	35.91(41.37)	36.43(41.97)
85	11.44(5.2)	piston NF	5.81(166)	12.46(356)	1892	2400	170(767)	328(1474)	3.39(3.91)	4.05(4.67)
	14.37(6.53)	+ SM 85-1	5.84(167)	12.46(356)	1622	2108	202(910)	355(1597)	5.48(6.31)	5.69(6.56)
	19.73(8.97)	+ SM 85-2	5.56(159)	12.18(348)	1345	1714	211(950)	361(1626)	8.32(9.58)	8.76(10.09)
	38.5(17.5)	+ SM 85-3	4.48(128)	11.24(321)	894	1166	248(1116)	439(1975)	22.11(25.47)	22.98(26.48)
	46.2(21)	+ SM 85-2 + SM 85-3	4.2(120)	10.96(313)	821	1060	263(1187)	449(2021)	27.91(32.16)	28.46(32.79)
	63.58(28.9)	+ SM 85-4	3.88(111)	10.60(303)	707	879	276(1244)	487(2191)	39.41(45.4)	44.88(51.7)
	89.65(40.7)	+ SM 85-5	3.60(103)	9.73(278)	592	784	296(1333)	566(2548)	60.20(69.36)	65.67(75.66)
110	17.6(8)	piston	7.35(210)	15.08(431)	2133	2571	334(1505)	634(2852)	5.23(6.03)	6.83(7.87)
	25.89(11.7)	+ SM 85-2	7.32(209)	15.05(430)	1760	2160	346(1559)	641(2884)	7.97(9.18)	9.78(11.27)
	45.17(20.5)	+ SM 85-3	7.21(206)	14.66(419)	1324	1655	364(1638)	665(2993)	14.79(17.04)	17.3(19.93)
	53(24)	+ SM 85-2 + SM 85-3	7.10(203)	14.56(416)	1200	1527	372(1677	671(3018)	18.44(21.24)	20.48(23.6)
	70.38(32)	+ SM 85-4	6.68(191)	14.10(403)	1046	1292	398(1794)	667(3001)	25.94(29.89)	28.45(32.78)
	97.8(44.5)	+ SM 85-5	6.3(180)	13.76(393)	900	1143	381(1718)	709(3192)	33.57(38.67)	38.60(44.57)

inches (mm)

NTK® Oscillators

PHOTOS

Problem: Material traveling on a conveyor belt needed compaction. Solution: A special compaction table was designed to allow the top strand of the belt to be shaken by an NTK® 40 AL Oscillator. The return strand passed through the "middle" of the table.

Problem: Fine material was building up on the walls of a fill tube. Solution: An NTK® 25 AL Oscillator, operated by a timer, taps on the pipe, 5 seconds/ minute, eliminating the build-up.

A small roller compaction table compacts boxes of powder as they are packaged. The drive is a lubrication-free NTK® 25 AL Oscillator.

A cereal manufacturer needed to separate and spread the individual pieces of product before they were coated. The shaking zone is isolated, by springs, from the mainframe. An NTK® Oscillator is fastened to the shaking zone frame, vibrating the conveyor belt and cereal.

MARTIN® NTK® Oscillator tapping on plastic hopper.

Separating donuts in a bakery for faster drying time.