

Vibrating Solenoid OAC

Vibrating solenoids of the OAC series are solenoids with UI core shape and two excitation windings connected in series. They are primarily installed in spring-mass-systems. The peak forces given in the table refer to operational temperature and 90 % of the rated voltage with a reference temperature of 35°C. Peak force F = magnetic force reached at nominal air gap in non-vibrating state. By means of vibrating solenoids directional, linear oscillations of the utilization equipment are generated.

Coil and bobbin are encapsulated in casting resin. Therefore, they are not susceptible to moisture and dust and suitable for rough conditions. The oscillating direction is determined by the geometrical arrangement of the springs in the spring-mass system. The effective amplitude here corresponds to twice the amplitude of the oscillating frequency of the whole system. Vibrating solenoids are infinitely adjustable by the operating voltage. They reach the full conveying power immediately upon switching on, and there are no troublesome starting and stopping effects of unbalance drives.

Fields of Application

Oscillating conveyor drives

Bunker drives

Linear conveyor drives

Vibration tables

Screening technology



Accessories

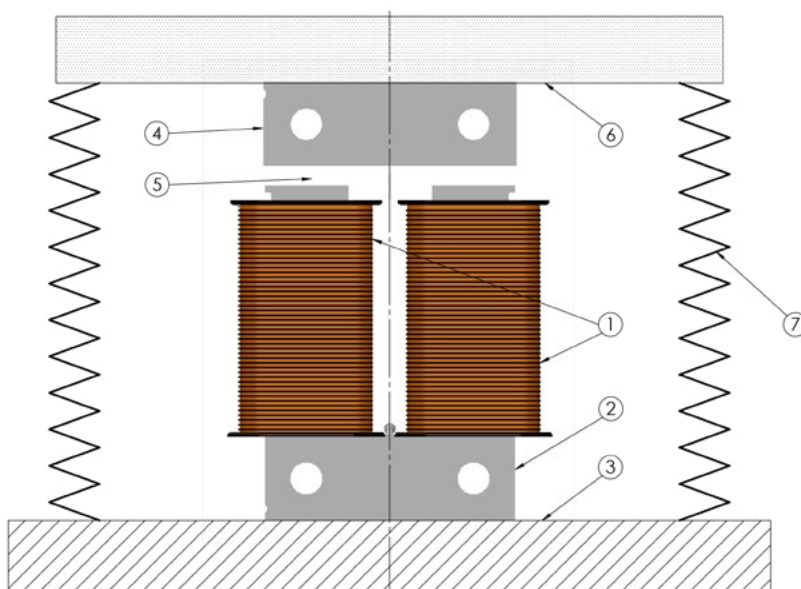
- Phase Angle Control

33 43303B00 / 33 43304B00

Advantages

- High performance at small size
- Ideally minimized eddy current losses
- Infinite adjustability using drive voltage and/or frequency

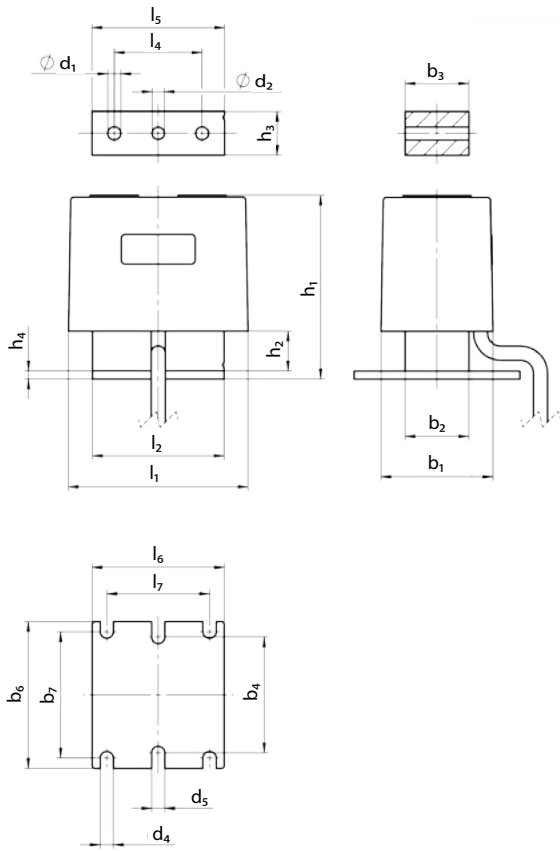
Operating Principle



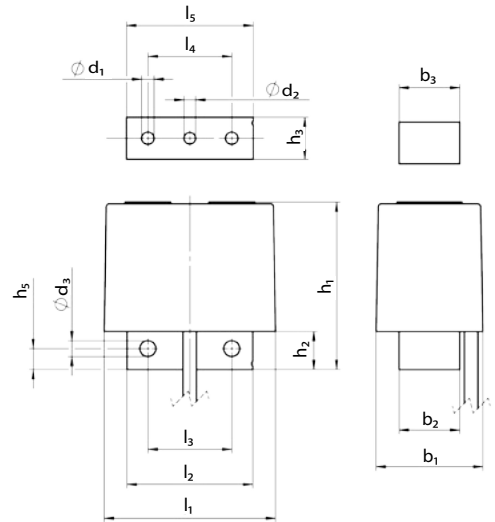
- 1 = Excitation winding
- 2 = Iron core (yoke)
- 3 = Counter load (free load)
- 4 = Armature
- 5 = Air gap
- 6 = Work load
- 7 = Spring system

Dimension Drawing

OACXXX001



OACXXX002



Dimension Table

Type	l_1	l_2	l_3	l_4	l_5	l_6	l_7	b_1	b_2	b_3	b_4	b_6	b_7	h_1	h_2	h_3	h_4	h_5	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	d_4	d_5
OAC003001	44	30	-	11	30.5	30	32	26	12	12	22	32	-	42	9.8	10	2	-	3.5	4.1	-	-	4.5
OAC003002	44	30	20	11	30.5	-	-	26	12	12	-	-	-	40	9.8	10	-	5	3.5	4.1	4.6	-	-
OAC005002	60.5	45	29	15	46	-	-	31	15.6	15.6	-	-	-	59	15	15	-	7.5	5.1	-	5.1	-	-
OAC006001	64	45	-	-	46	45	35	43	20.8	20.8	40	50	43	63	14	15	3	-	-	5.1	-	4.5	4.5
OAC006002	64	45	29	15	46	-	-	42	20.8	20.8	-	-	-	60	14	15	-	7.5	5.1	-	5.1	-	-
OAC007001	77	54	-	20	54.5	54	40	44	20.8	20.8	45	60	45	77	19	20	3	-	5.1	5.1	-	-	6.6
OAC007002	77	54	37	20	54.5	-	-	44	20.8	20.8	-	-	-	74	19	20	-	10	5.1	5.1	5.5	-	-
OAC009001	90	66	-	44	66.5	66	50	56	31.85	31.85	66	83	66	92	20	22	4	-	6.5	6.1	-	6.6	6.6
OAC009002	90	66	44	44	66.5	-	-	56	31.85	31.85	-	-	-	88	20	22	-	11	6.5	6.1	6.5	-	-
WSB010001	119	86	-	-	86.5	86	63	66	35	35	69	95	69	120	27	30	4	-	-	6.1	-	9	9
WSB010002	119	86	60	60	86.5	-	-	66	35	35	-	-	-	116	27	30	-	15	6.5	-	6.5	-	-
WSB011001	119	86	-	-	86.5	86	63	85	53	53	84	110	84	121	27	30	5	-	-	6.1	-	9	9
WSB011002	119	86	60	60	86.5	-	-	85	53	53	-	-	-	116	27	30	-	15	6.5	-	6.5	-	-
WSB012001	119	86	-	-	86.5	86	63	132	100	100	-	160	134	124	27	30	8	-	-	10.2	-	-	9
WSB012002	119	86	60	30	86.5	-	-	132	100	100	-	-	-	116	27	30	-	15	13	-	13	-	-
WSB013001	220	150	-	110	150	150	110	175	100	100	-	180	140	131.5	33	39.5	6	-	17	-	-	12	-
WSB013002	220	150	110	110	150	-	-	175	100	100	-	-	-	129.5	37	39.5	-	20	17	-	17	-	-
WSB014001	225	150	-	110	150	150	110	225	150	150	-	230	190	131.5	37	39.5	6	-	17	-	-	12	-
WSB014002	225	150	110	110	150	-	-	225	150	150	-	-	-	129.5	37	39.5	-	20	17	-	17	-	-

Technical Data

Designation	OAC003001	OAC003002	OAC005002	OAC006001	OAC006002
Nominal air gap [mm]	2.0	2.0	1.0	2.5	2.5
Connection at 50 Hz [VA]	15.0	15.0	60	70.0	70.0
Peak force at nominal air gap [N]	4.0	4.0	60.0	15.0	15.0
Connection via one-way rectifier [VA]	14.0	14.0	42.0	68.0	68.0
Peak force at nominal air gap at rectifier [N]	5.0	5.0	38.0	24.0	24.0
Armature weight [kg]	0.03	0.03	0.09	0.11	0.11
Magnet weight [kg]	0.18	0.14	0.50	0.64	0.65

Designation	OAC007001	OAC007002	OAC009001	OAC009002	WSB010001
Nominal air gap [mm]	3.0	3.0	3.0	3.0	3.5
Connection at 50 Hz [VA]	136.0	136.0	282.0	282.0	480.0
Peak force at nominal air gap [N]	40.0	40.0	110.0	110.0	160.0
Connection via one-way rectifier [VA]	125.0	125.0	315.0	315.0	525.0
Peak force at nominal air gap at rectifier [N]	45.0	45.0	159.0	159.0	200.0
Armature weight [kg]	0.15	0.15	0.33	0.33	0.68
Magnet weight [kg]	0.96	1.06	1.93	2.13	3.85

Designation	WSB011001	WSB012002	WSB013002	WSB014002
Nominal air gap [mm]	3.5	4.0	5.0	6.0
Connection at 50 Hz [VA]	650.0	1000.0	1826.0	3280.0
Peak force at nominal air gap [N]	320.0	360.0	400.0	550.0
Connection via one-way rectifier [VA]	730.0	1155.0	2200.0	3520.0
Peak force at nominal air gap at rectifier [N]	360.0	460.0	480.0	900.0
Armature weight [kg]	1.00	1.80	3.10	6.20
Magnet weight [kg]	6.43	9.20	19.00	26.30

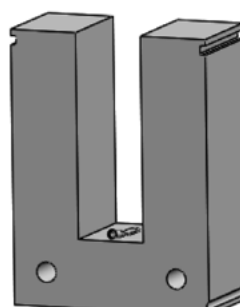
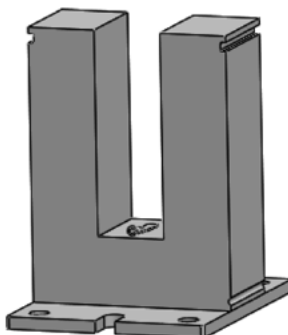
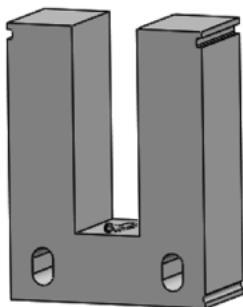
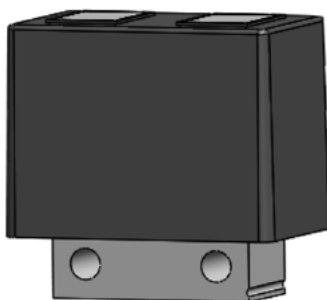
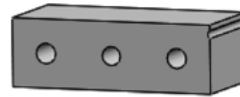
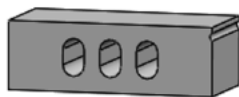


Please ask for other voltage, performance or frequency variants
+34 977206937 or binder@binder-es.com

Customer-Specific Adaptations

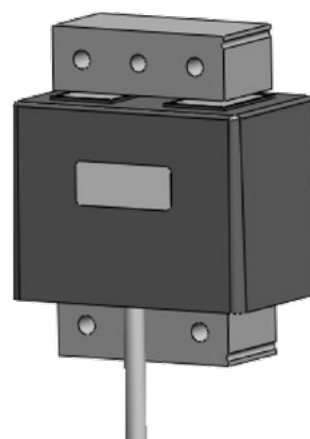
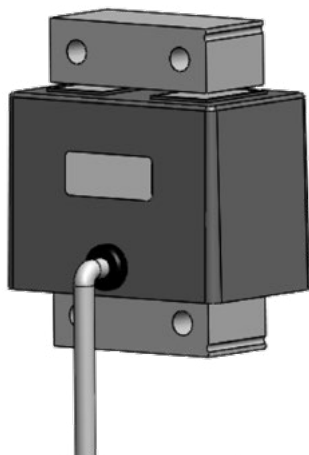
We adapt to your mounting requirements. The vibratory solenoids manufactured from a UI-core offer a variety of different mounting options and cable outlets with shielded and unshielded UL-approved connecting cables.

Mounting Options



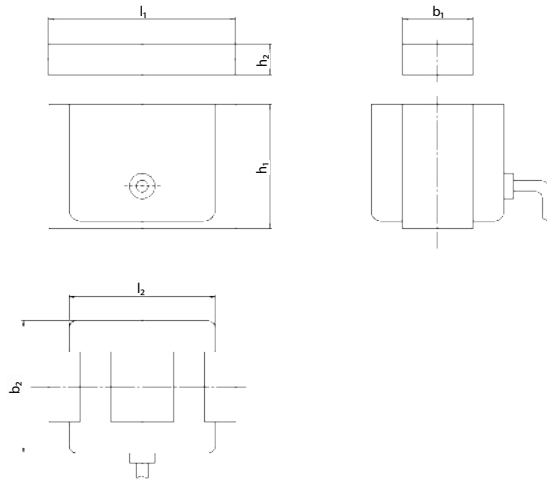
Cable outlet to the side

Cable outlet to the bottom



Dimension Drawing

WEXXXX002



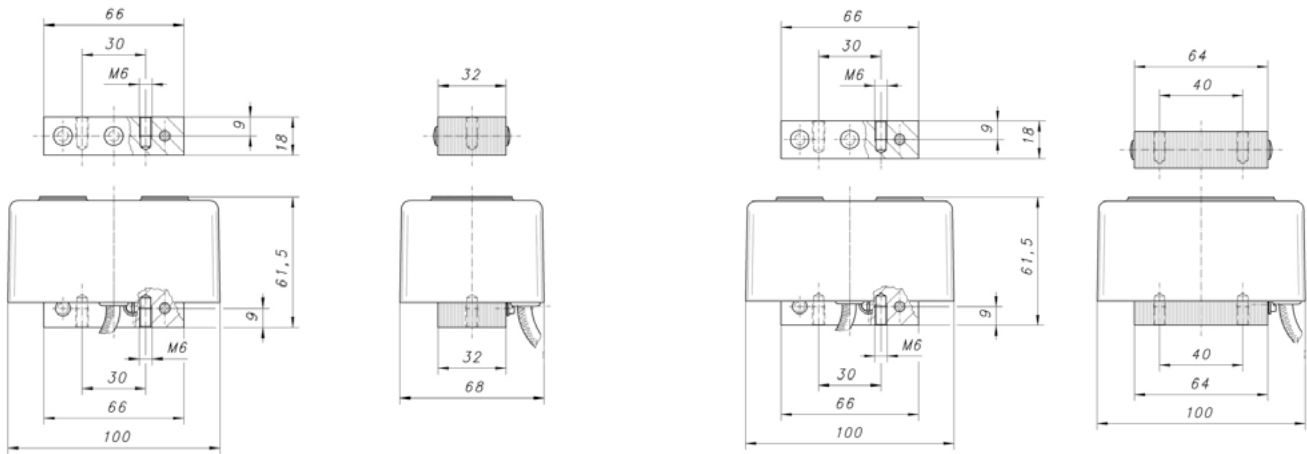
Dimension Table

Type	l_1	l_2	b_1	b_2	h_1	h_2
WEG019002	54	44	19	42	36	9
WEL027002	78	64	27.5	53	52	13
WEO036002	96	74.5	36	68	64	15.5

Dimension Drawing

WSN007002

WSN008002



Technical Data

Designation	WSN007002	WSN008002	WEG019002	WEL027002	WEO036002
Nominal air gap [mm]	2.5	3.0	0.6	1	1.2
Connection at 50 Hz [VA]	250.0	410.0	42	140	276
Peak force at nominal air gap [N]	300	495	120	250	430
Connection via one-way rectifier [VA]	250.0	605.0	-	110	240
Peak force at nominal air gap at rectifier [N]	380	600	-	340	570
Armature weight [kg]	0.29	0.56	0.13	0.18	0.42
Magnet weight [kg]	1.85	2.80	0.34	0.96	1.9