

## Vibrators

# 7

Product group

## W ZA Y ZA Y ZU

- According to DIN VDE 0580
- Solid construction adjusted to the application
- For direct connection to the AC network or via one-way rectifier
- Open or encapsulated design
- Exciter coil corresponds class B
- Electrical connection and protection class with duly executed installation
  - Free flexible lead ends -  
Protection class according to VDE 0470 /  
EN 60529 - IP 00
- Mounting:
  - series W ZA W and Y ZA W via dedendum angle on the magnetic body and through bore hole in the armature
  - series Y ZU W via threaded tapped holes
- Modifications and special designs on request
- Application Examples:  
As drive unit for vibratory systems in the materials-handling technology,  
e. g. mining, sieving and compressing



Fig. 1: Type W ZA W 060 X00 A05



## Technical data

### Vibrator for direct connection to the AC network

Vibrations at twice supply frequency.

<b>W Z A W</b>		<b>010</b>	<b>040</b>	<b>060</b>	<b>080</b>
Nominal air gap	(mm)	1	2	2,5	2,5
Rated Power $P_s$	(VA)	15	45	103	205
Peak force $\hat{F}$	(N)	13,7	18,6	42	118
Armature weight $m_A$	(kg)	0,026	0,07	0,17	0,31
Solenoid weight (not encapsulated) $m_M$	(kg)	0,18	0,39	0,95	2,1
Solenoid weight (encapsulated) $m_M$	(kg)	0,21	0,52	1,12	2,3

### Vibrators for connection to the AC network via one-way rectifier

Vibrations at supply frequency.

<b>Y Z A W</b>		<b>010</b>	<b>040</b>	<b>060</b>	<b>080</b>
Nominal air gap	(mm)	1	2	2,5	2,5
Rated Power $P_s$	(VA)	15,5	40	76	180
Peak force $\hat{F}$	(N)	32	36	65	176
Armature weight $m_A$	(kg)	0,026	0,07	0,17	0,31
Solenoid weight (not encapsulated) $m_M$	(kg)	0,18	0,39	0,95	2,1
Solenoid weight (encapsulated) $m_M$	(kg)	0,21	0,52	1,12	2,3

## Vibrators for connection to the AC network via one-way rectifier

Vibrations at supply frequency.

Y ZU W		080	090	120	130
Nominal air gap	(mm)	2,5	3	3	3
Rated Power $P_s$	(VA)	250	425	1200	2060
Peak force $\hat{F}$	(N)	314	510	1450	2740
Armature weight $m_A$	(kg)	0,3	0,6	1,3	2,6
Solenoid weight $m_M$	(kg)	2	3,2	7,6	13,5

Table basis:      Normal operating temperature  
                          95 % rated voltage  
                          Reference temperature 35° C


Peak force  $\hat{F}$  - magnetic force with nominal air gap in a non-vibrating condition.

$P_s$  = approximate apparent power with nominal air gap in a non-vibrating condition.

### Note on the RoHS Directive

According to our current state of knowledge the devices pictured in this document do not contain any substances in concentration values or applications for which putting into circulation with products manufactured from them is prohibited in accordance to RoHS.

This part list is a document for technically qualified personnel. The present publication is for informational purposes only and shall not be construed as mandatory illustration of the products unless otherwise confirmed expressively.

**Please make sure that the described devices are suitable for your application. Supplementary information concerning its duly assembly can be found also in -Technical Explanations, in the effective DIN VDE0580 as well as in the relevant specifications.**

**Information and remarks concerning European directives** can be taken from the correspondent information sheet which is available under *Produktinfo.Magnet-Schultz.com*.

## Dimension drawing

### Type Y ZU W

Dim. in mm	$b_1$	$b_2$	$d$	$e_1$	$e_2$	$h_1$	$h_2$	$h_3$	$h_4$	$h_5$	$t_1$	$t_2$
Size <b>080</b>	100	66	M6	30	*	61.5	48	9	17.5	1	68	38
<b>090</b>	100	66	M6	30	40	61.5	48	9	17.5	1	100	70
<b>120</b>	155	108	M10	50	*	90.5	66	15	26.5	1	110	68
<b>130</b>	155	108	M10	50	80	90.5	66	15	26.5	1	168	126

\* Two threaded bores on central axis size 080 and 120.

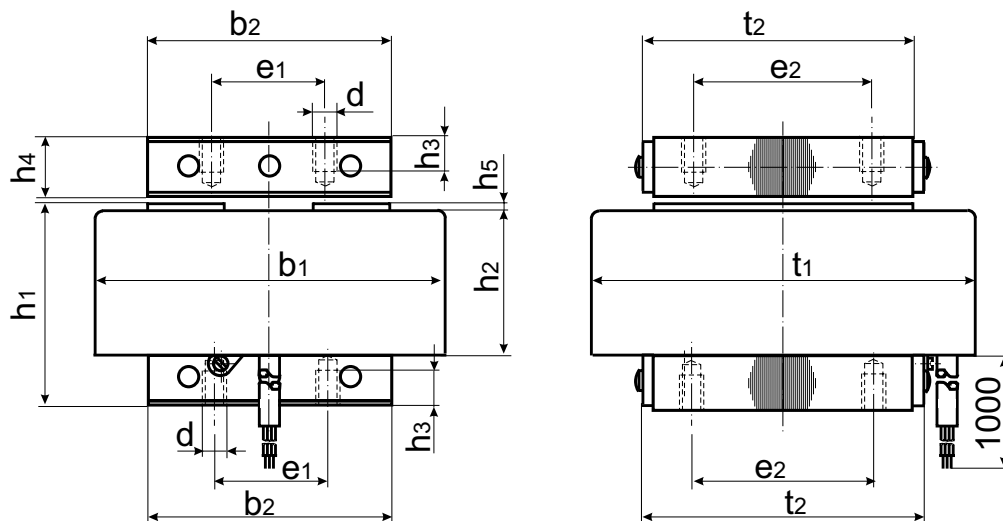


Fig. 2: Encapsulated design  
 Type Y ZU W 080 X00 A01  
 to Y ZU W 130 X00 A01

### Type W Z A W and Y Z A W ... A01

Dim. in mm	a	b <sub>4</sub>	b <sub>2</sub>	b <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	e	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	t <sub>1</sub>	t <sub>2</sub>	t <sub>3</sub>	stroke s
size 010	2	39	31.2	30	3.2	4.1	30	41.8	10	29.7	21	42	12	1
040	2	59	46.5	45	4.3	5.1	37	60.8	15	44.6	31	47.5	17,5	2
060	3	73	55.2	54	6.4	6.1	46	75.8	20	53.5	40	61.5	21,5	2,5
080	3	87	68.2	66	6.4	6.1	67	90.8	22	65.8	52	83	33	2,5

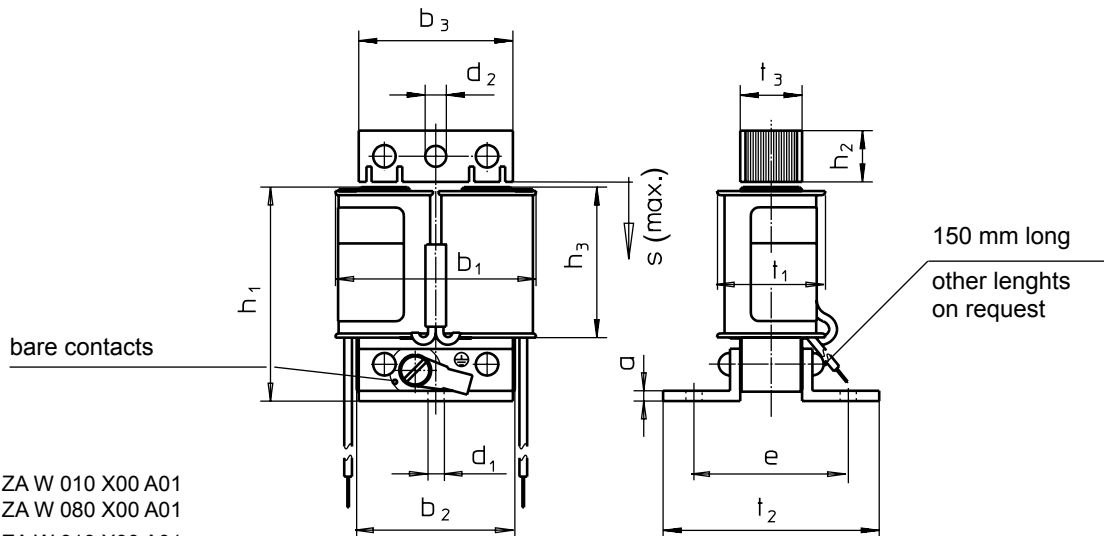


Fig. 3: Design

Type W Z A W 010 X00 A01  
to W Z A W 080 X00 A01  
and Y Z A W 010 X00 A01  
to Y Z A W 080 X00 A01

### Type W Z A W and Y Z A W ... A05

Dim. in mm	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	e	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	t <sub>1</sub>	t <sub>2</sub>	t <sub>3</sub>	t <sub>4</sub>
size 010	2	44	31.2	30	3.2	4.1	30	41.8	10	32	---	26	42	12	---
040	2	66	46.5	45	4.3	5.1	37	60.8	15	46.5	0.5	39	47.5	17.5	---
060	3	78	55.2	54	6.4	6.1	46	75.8	20	56.5	0.5	48	61.5	21.5	22
080	3	92	68.2	66	6.4	6.1	67	90.8	22	69	1	62	83	33	28.5

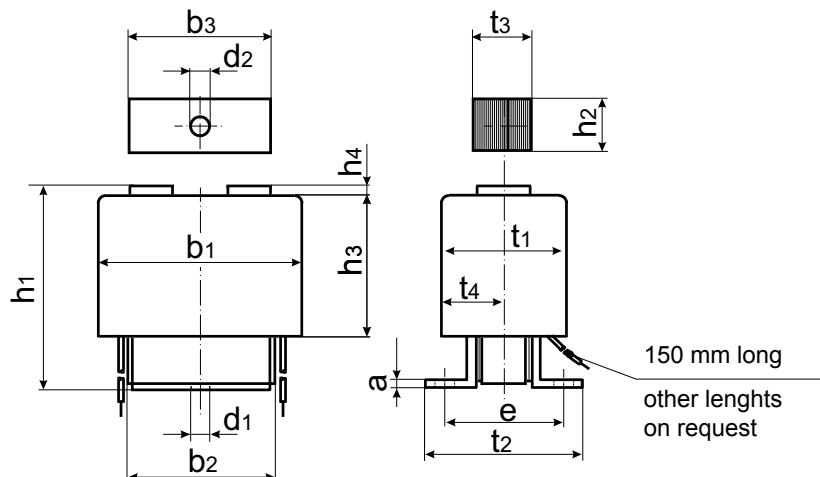
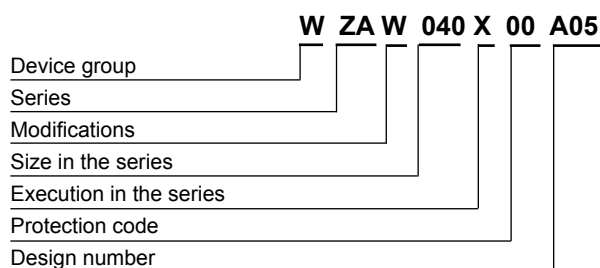


Fig. 4: Encapsulated Design

Type W Z A W 010 X00 A05  
to W Z A W 080 X00 A05  
and Y Z A W 010 X00 A05  
to Y Z A W 080 X00 A05




## Type code



## Order Example

Type	W Z A W 040 X00 A05
Voltage	230 V 50 Hz

## Special designs

Please do not hesitate to ask us for application-oriented problem solutions. In order to find rapidly a reliable solution we need complete details about your application conditions. The details should be specified as precisely as possible in accordance with the relevant  - technical explanations.

If necessary, please request the support of our corresponding technical office.