

• VEM SERIE

The attraction and holding of the magnetic pieces are obtained feeding the winding inside the solenoid. When the power supply stops the electromagnet loses the piece.
When working with loads security norms must be respected.



Protection rate: **IP65**
Insulation class: **B (130°C)**
Standard voltage: **24 VDC**
Standard duty cycle: **ED100%**
Other voltages, ED and sizes: **Consult**

Flying leads for every size.
Supply possibilities under demand:
*With **campling screw** from the VEM25
*With **connector** from the VEM65.
The connector (1) has 4 possibilities of direction (4x90°) and it is possible to be incorporated to the same diodes of rectification for alternating current connection (AC).

Table 1

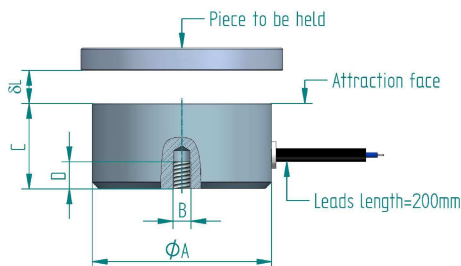
TYPE	øA (-0,3)	B	C±0.1	D	E	F	Weight (Kg)
VEM 20	20	M-3	12	5	---	---	0.02
VEM 25	25	M-4	20	6	---	40	0.06
VEM 30	30	M-4	22	6	---	45	0.10
VEM 40	40	M-5	26	8	---	55	0.20
VEM 50	50	M-5	30	8	---	65	0.30
VEM 65	65	M-8	35	12	112	80	0.80
VEM 80	80	M-8	38	12	127	95	1.30
VEM 100	100	M-10	43	15	147	115	2.10
VEM 150	150	M-16	56	24	197	165	6.40

Table 2

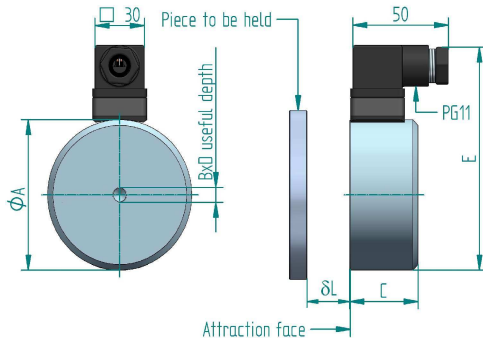
TYPE	P at 20°C (W)	e (mm)	Air gap (mm) δ_L					
			0	0,1	0,2	0,5	1	
VEM20	1.6	1 3	14.5 27	3.8 5.7	1.6 2.6	0.3 0.35		
VEM25	3.2	1 3 6	27 114 135	19 47 50	12 20 21	3 3.5 3.7		
VEM30	4	1 3 6	37 170 190	24 80 90	18 40 45	6 9.5 12	1.5 1.6 2	
VEM40	5.6	1 3 6	38 300 400	30 203 245	24 133 160	13 27 30	4 4.5 5	
VEM50	6.5	1 3 6	40 320 500	32 235 370	30 185 240	20 65 68	15 16 20	
VEM65	10	1 3 6 10	45 310 830 980	40 290 660 750	35 250 500 560	25 148 164 190	15 40 46 50	
VEM80	15	1 3 6 10	65 430 1150 2000	42 360 970 1350	40 325 830 1000	30 230 375 420	20 90 110 125	
VEM100	20	1 3 6 10	70 530 1400 2600	50 440 1200 2200	45 426 1050 1700	35 335 730 880	25 225 310 330	
VEM150	40	3 6 10 18	700 1810 5800 7104	580 1650 4350 5760	550 1580 3910 4992	480 1400 3000 3840	390 1100 1850 2400	

e (mm): Thickness of the piece to hold

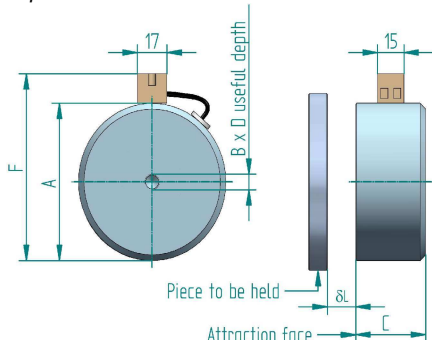
Flying leads: Ref: VEM (type)-V - ED%
Example: VEM 65-24Vdc- ED100%



Connector (C): Ref: VEM (type)/C-V-ED%
Example: VEM65/C-24Vdc ED100%
Connection:
see documentation that is enclosed with the material



Clamping screw (B): Ref: VEM(type)/B-V-ED%
Example: VEM50/B-24Vdc-ED100%



Important: the clamping screw does not have to exceed measure D

The table 2 gives for each type of holding magnet, the values of the force of maintenance (Fm) based on the air gap, measured in the following conditions:

- Direct current supply.
- Flat piece (3µm rugosity) in A°St37, thickness as shown in the table 2 and dimensions are similar or bigger than the attraction face.
- Room temperature 35°C.
- Coil working on its regime temperature.

At different conditions, the magnetic force (Fm) may decrease. The value of the magnetic remanence after the power supply stops is 5% of the holding force.

- *Earthing is recommended if the metallic parts are accessible.
- *Technical explanation: see pages 4 & 5.
- *Under demand: any size, voltage, duty cycle etc can be manufactured.



When lifting or handling heavy loads a minimum security margin of 3 must be respected, the weight of the load cannot exceed 33% of the magnetic force.