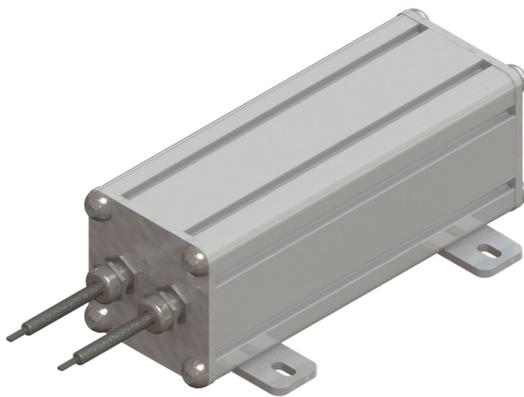


HVB70

Aluminium high pulse power
air cooled Resistor

285kJ - 570kJ



HVB70 style resistors are high pulse load resistors used in crowbar and high energy dump applications like in Wind turbines. They are very compact and therefore can be used in applications where space is an issue.

The **high pulse load energy** is absorbed by the wire and then transferred to the filling, which is normally quartz sand. In general the temperature of the housing will stay very low.

The HVB70 range is build up with one or multiple extruded aluminium profiles. The connection can be with 1 meter of cable (other lengths are possible) or with a connection box with IP65 or IP66 ingress protection degree.

The maximum pulse load energy strongly depends on the resistor wire and with that the ohm value. Please, ask for separate datasheet with the ohm value you require to get precise data.

The resistors have a low **thermal drift**, **low noise level**, are **very compact**, **have no life parts** on the outside and require minimum maintenance

Low Voltage Ride Through (LVRT) has become an important requirement for wind farms which defines their ability to remain connected and actively contribute to grid stability during a wide range of network faults. Fault ride-through specifications listed in modern transmission and distribution grid codes, specify that wind-turbine generators must remain connected to electricity networks at voltage levels well below nominal. The dynamic braking resistor dissipates active power and boosts generator voltage, potentially avoiding the need for pitch control and dynamic reactive power compensation.

Other applications for Alpha-type aluminium-housed brake resistors (HVB 70 types) include dynamic braking in traction applications, load-dump resistors in crowbar systems and snubbers in choppers and rectifiers .

The salient features of this resistor family are:

- Small dimensions
- Low- surface temperatures
- high pulse-load capabilities
- High vibration capabilities
- No external electrically-live parts
- high IP classes
- Fail-safe capabilities (on request)
- low noise levels
- high dielectric strengths.

HVB70

Type	Ohmic value [Ω] $\pm 5\%$	Energy [kJ]	Weight [kg]
HVB70.400.1	0.2 - 250	285	± 5
HVB70.400.2	0.3 - 500	570	± 9
General Specifications			
Insulation resistance	all types	$\geq 40 \text{ M}\Omega @ 5,000 \text{ VDC}$	
Dielectric strength	HVB70.400.1	18,000 VAC @ 50Hz 1 min	
	HVB70.400.2	12,000 VAC @ 50Hz 1 min	
Protection degree	IP65		
Dimensions	A [mm]	C [mm]	H [mm]
HVB70.400.1	400	70	74
HVB70.400.2	400	140	74

