



## ISA-PLAN® // HIGH LOAD AND BRAKING RESISTORS



### BRK // SIZE 5242 (METRIC)



#### Features

- 100 W power rating
- 1 kW pulse power for 1 s
- Overall thickness compatible to Econopack
- Thick Cu-substrate as heatsink for pulse power
- Flying leads and pin connectors available
  - L - flying leads with silicone insulation
  - M - copper wire with teflon insulation (UL-listet)
  - K - pin connector
- Protection type IP 54
- RoHS 2011/65/EU compliant



#### Applications

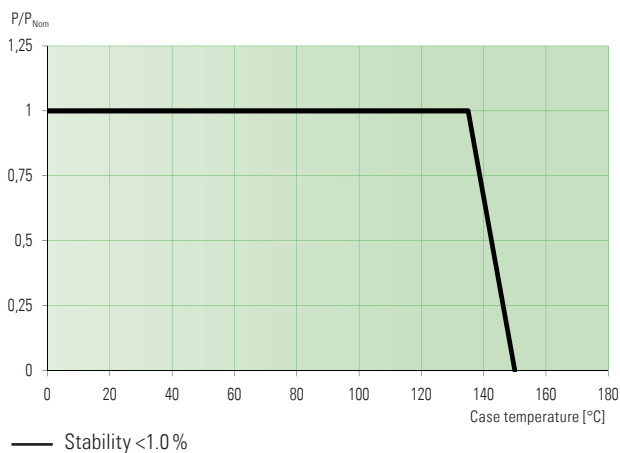
- Braking resistor
- Charging resistor
- Current limiting resistor

#### Technical data

Resistance values *	<b>Ohm</b>	10 to 400
Tolerance	<b>%</b>	10
Applicable temperature range	<b>°C</b>	-50 to +150
Power rating	<b>W</b>	100 (heatsink mounted)
Max. pulse power		1 kW at $t_p = 1\text{ s}$ ( $t_{off} > 10\text{ s}$ and $T_G = 80\text{ °C}$ )
Internal heat resistance ( $R_{thi}$ )	<b>K/W</b>	<0.15
Operating voltage	<b>VAC / VDC</b>	750 / 1000
Dielectric withstanding voltage	<b>VAC</b>	2500
Stability (Nominal load) deviation after 1000h, Cu-substrate		<1.0 % (Cu-substrate = 135 °C)

\* See all standard values and versions on page 2

#### Power derating curve for heatsink mounted BRK





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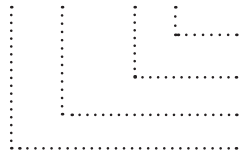
**Available standard resistance values and tolerances\***

Resistance values	Version		
	K	L	M
10R0		✓	
22R0		✓	
47R0		✓	
68R0		✓	
100R	✓	✓	✓
200R		✓	✓
400R			✓

\* Further values on request  
 ✓ = available

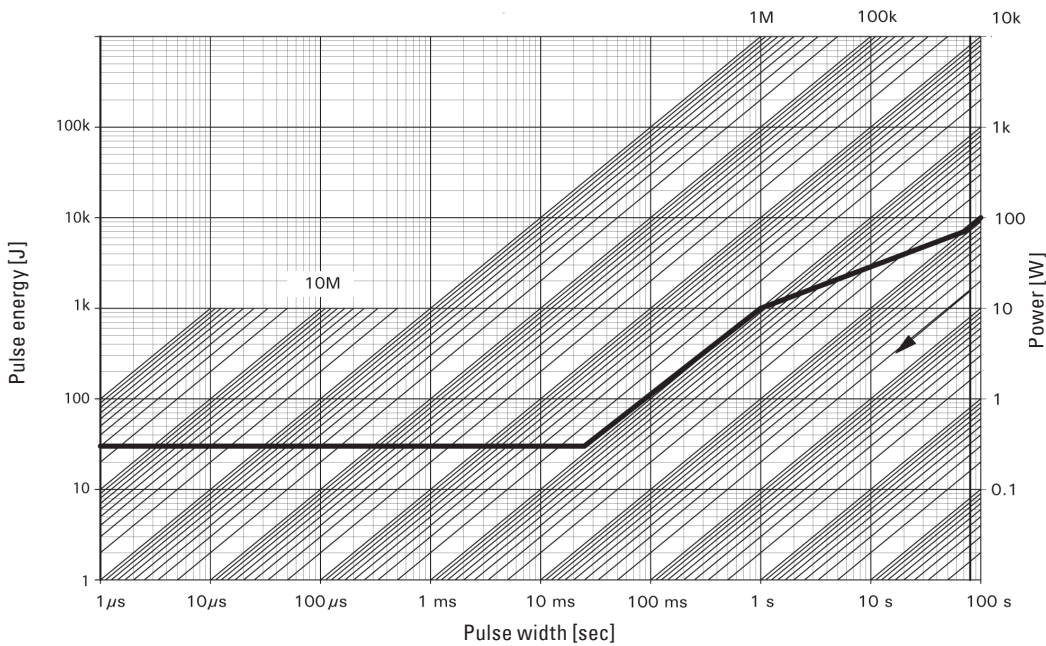
**Ordering code**

BRK - 10R0 - 10.0 - L



Version  
 Tolerance  
 Resistance value [Ohm] / „R“ represents decimal point  
 Type

**Maximum pulse energy respectively pulse power for permanent operation**

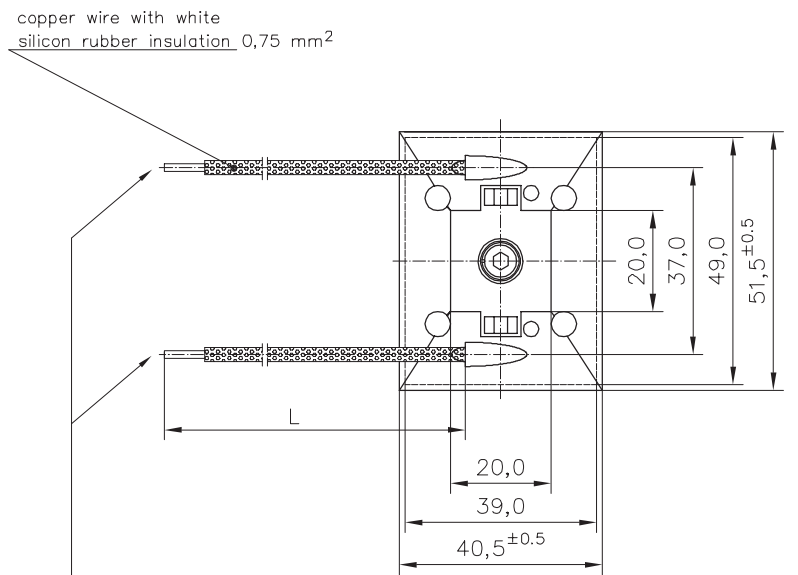
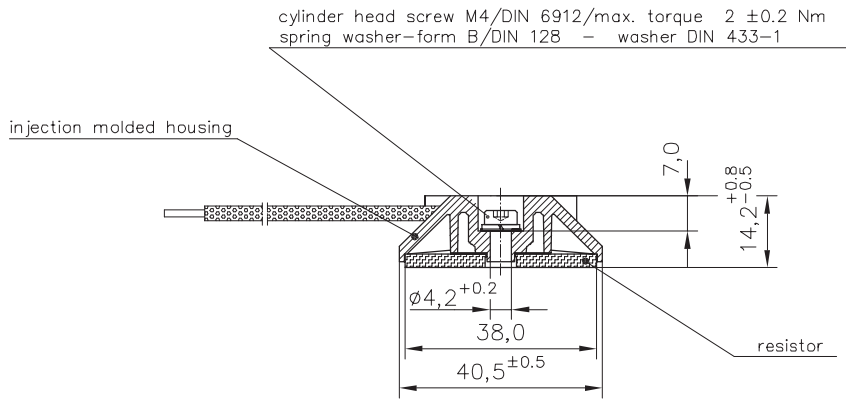


Maximum pulse energy / power versus pulse length.



**BRK // SIZE 5242 (METRIC)**

**Mechanical dimensions [mm], version (L/M) with flying leads**



Copper wire:

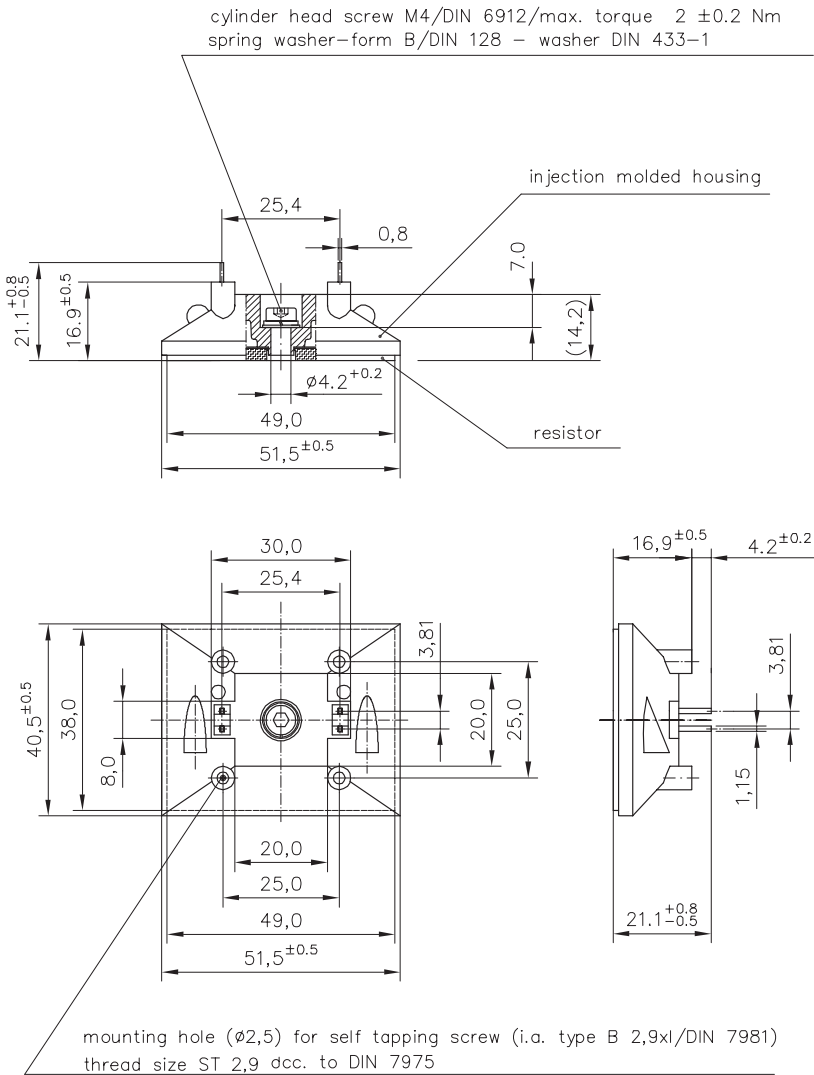
Version L: copper wire with silicone rubber insulation 0.75 mm<sup>2</sup> L=275 ±10 mm

Version M: copper wire with teflon insulation FEP-TE, AWG 18 (1.00 mm<sup>2</sup>) L=325 ±10 mm, Style 10203 150 °C / 1,000 V



**BRK // SIZE 5242 (METRIC)**

**Mechanical dimensions [mm], version (K) with pin connectors**



Z-DK-182a

Type with pin connectors, overall thickness compatible to Econopack

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