



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-listed)
 - K - pin connector
- Protection type IP 54
- RoHS 2011/65/EU compliant



Applications

- Braking resistor
- Charging resistor
- Current limiting resistor

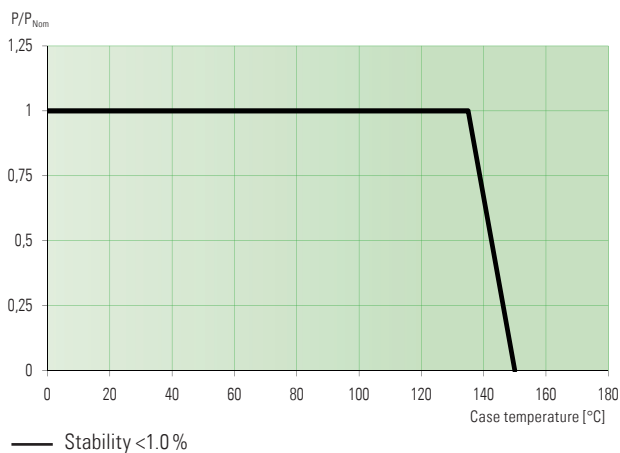
*not for new designs
end of life*

Technical data

Resistance values *	Ohm	10 to 400
Tolerance	%	10
Applicable temperature range	°C	-50 to +150
Power rating	W	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})	K/W	<0.15
Operating voltage	VAC / VDC	750 / 1000
Dielectric withstanding voltage	VAC	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





BRK // SIZE 5242 (METRIC)

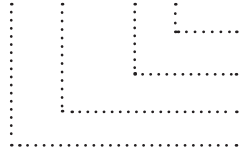
Available standard resistance values and tolerances*

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

* Further values on request
 ✓ = available

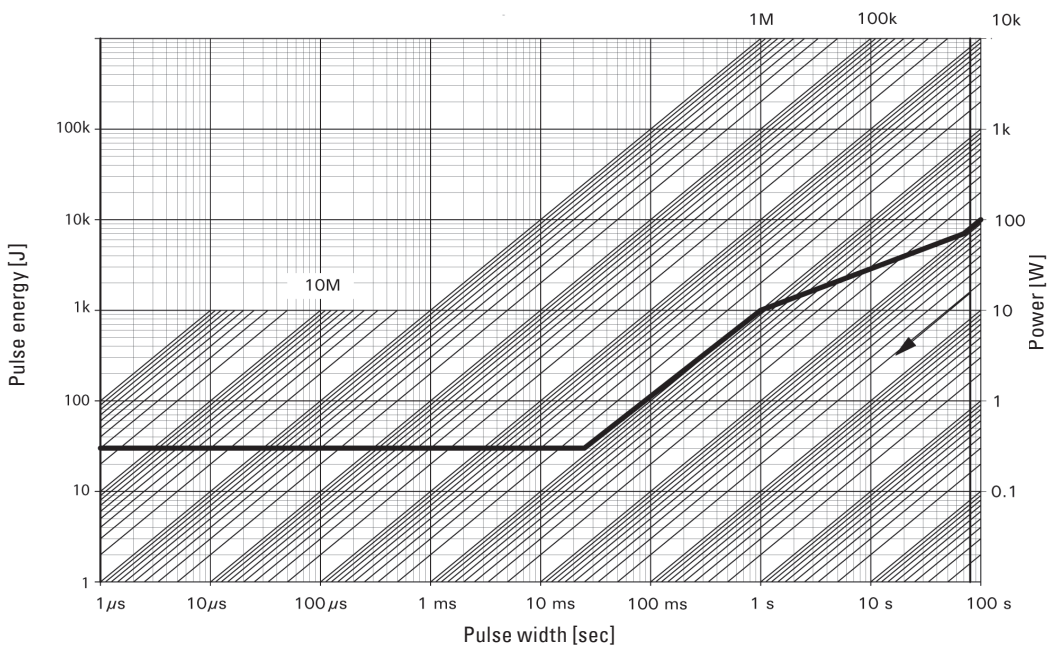
Ordering code

BRK - 10R0 - 10.0 - L



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

Maximum pulse energy respectively pulse power for permanent operation

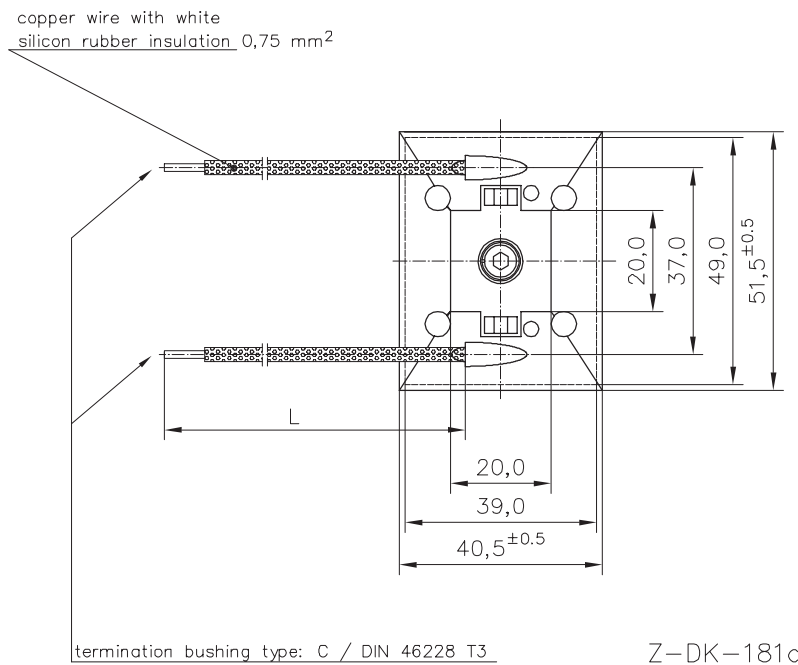
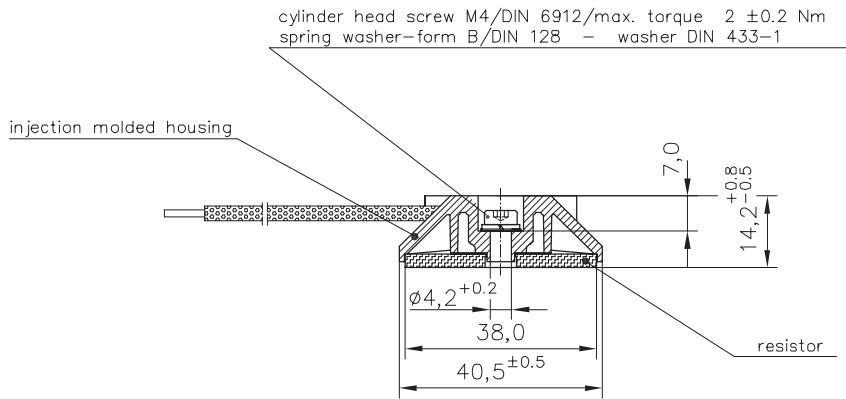


Maximum pulse energy / power versus pulse length.



BRK // SIZE 5242 (METRIC)

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



Copper wire:

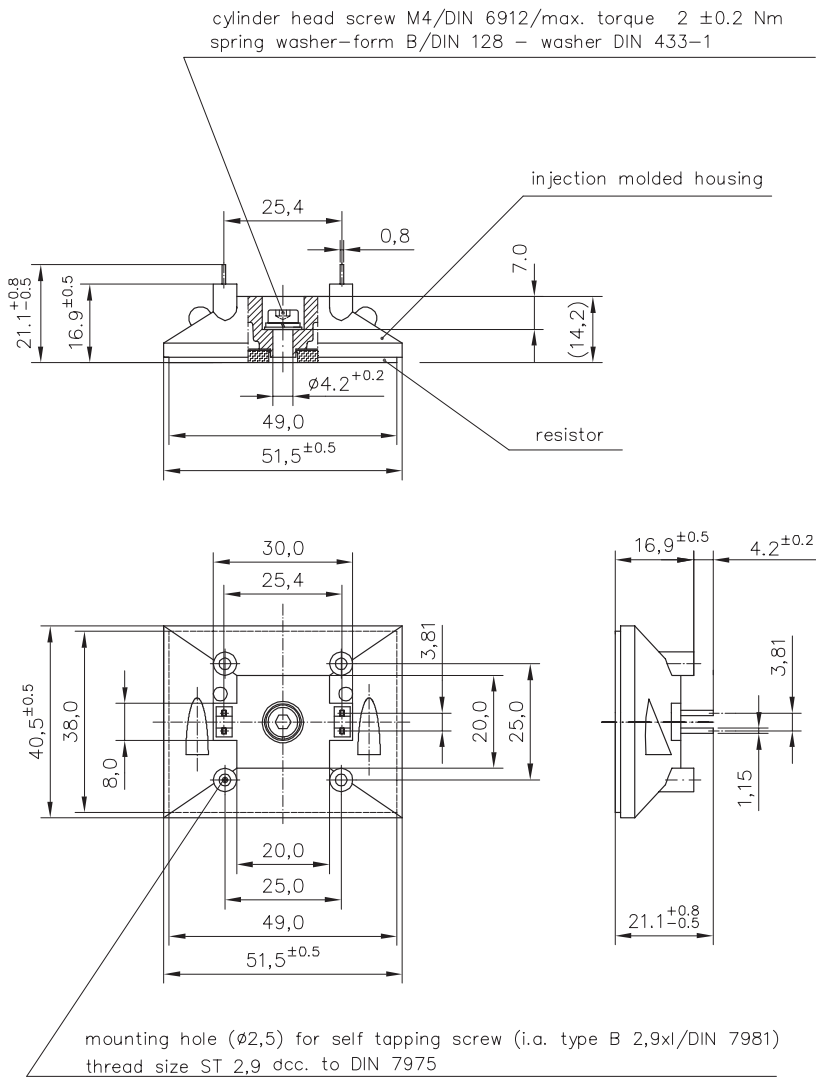
Version L: copper wire with silicone rubber insulation 0.75 mm² L=275 ±10 mm

Version M: copper wire with teflon insulation FEP-TE, AWG 18 (1.00 mm²) 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

Disclaimer // All products, product specifications and data are subject to change without notice.

The product specifications do not expand or otherwise modify Isabellenhütte's terms and conditions of sale, including but not limited to, the warranty expressed therein. Isabellenhütte makes no warranty, representation or guarantee other than as set forth in its terms and conditions of sale. Information provided in datasheets and/or specifications may vary from actual results in different applications. Any statements made by Isabellenhütte regarding the suitability of products for certain types of applications are based on its knowledge of typical requirements that are often placed on its products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in the application intended.

No license, express or implied, or otherwise, to any intellectual property rights is granted by this document.

Any and all liability arising out of the application or use of any product shall be as set forth in Isabellenhütte's terms and conditions of sale.

