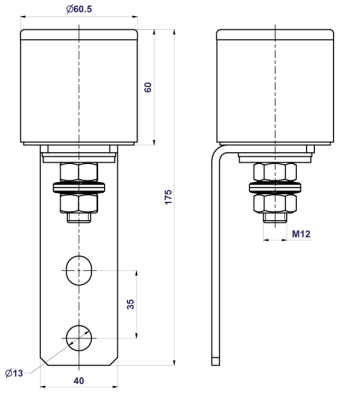

HGS 100 RW

- High power gas discharge tubes are intended for equipotential bonding between inactive parts, which are not conductively interconnected due to the operating conditions.
- In case of origin of potential difference between those parts, the high power gas discharge tube ignites and conductively interconnects both insulated parts for a transient time.
- High protection degree of the housing allows using indoors, outdoors and also in the underground.
- They can be used, for example, between utility pipelines and external lightning protection systems, between pipelines and other inactive metal parts, or between insulated flanges used on pipelines.
- The RW variant is primarily designed for railway systems where it provides effective protection for persons who may come into contact with inanimate parts of metallic structures in the event of lightning strikes or catenary failures.
- High power gas discharge tubes are able to discharge the highest lightning impulse currents, which ranks them in the class H – for heavy loads.

Type		HGS 100 RW
Certified for explosive areas		No
Installation according to EN 50122-1:2011 for the protection of railway equipment		Yes
Class according to EN 62561-3, IEC 62561-3		H (for heavy loads)
DC ignition voltage		300 ÷ 500 V
AC ignition voltage (50/60 Hz)	U_{aw}	≥ 250 V_{rms}
Maximum discharge current (8/20)	I_{max}	200 kA
Nominal discharge current (8/20)	I_n	150 kA
Rated impulse sparkover voltage	$U_{r\,imp}$	< 1 200 V
Impulse discharge current (10/350)	I_{imp}	150 kA
Charge	Q	75 As
Specific energy	W/R	5 625 kJ/Ω
Short-circuit withstanding current / 100 msec (AC mode)		≤ 8 kA_{rms}
Short-circuit withstanding current / 30 msec (DC mode)		≤ 20 kA_{rms}
Behaviour after subtantial overloading		Internal short circuit inside HGS body
Insulation resistance at 100 V DC	R_i	> 1 GΩ
Capacitance at 1 MHz	C	< 35 pF
Housing material		Stainless steel
Degree of protection		IP66
Operating temperature	ϑ	-40 ÷ 90 °C
Climatic category according to IEC 60068-1:2013		40/90/21
Operating position		Vertical
Installation		On the flange
Lifetime		> 100 000 h

HAKEL spol. s r.o. | Bratri Stefanu 980, 500 03 Hradec Kralove, Czech Republic
Phone: +420 494 942 314 | e-mail: info@hakel.com | www.hakel.com

Designed according to standards		
Lightning protection system components (LPSC) – Requirements for isolating spark gaps (ISG)		IEC 62561-3:2017
Application standards		
Protection against lightning		IEC 62305:2010
Ordering, packaging and additional data		
Mass	m	740 g
Mass (including the packaging)	m	822 g
Packaging dimensions (H x W x D)		87 x 260 x 154 mm
Packaging value	V	3.48 dm^3
ETIM group		EG000021
ETIM class		EC000510
Customs tariff no.		85354000
EAN code		8590681163917
Art. number		**10 002**

The link in the QR code leads to the online presentation of the **HGS 100 RW**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com**

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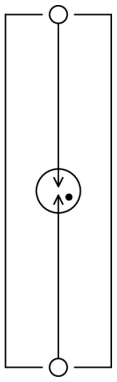
Internal diagram



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