

Grafopak GRA 450 packing

GRA gland packing is made of flexible graphite of high purity with improved sliding properties. It is specially designed for working in dynamic applications, it ensures low friction and quick heat dissipation from the friction zone. A special addition of active inhibitors protects against the risk of corrosion or excessive wear of the shaft sleeve.

Features and advantages

The high thermal resistance and very good thermal conductivity of graphite ensure the high pV dynamic load factor without any impregnants addition. Thanks to this, Grafopak GRA packing is resistant to thermal shocks or risks of stuffing box overheating. In addition, graphite guarantees excellent lubricating properties, keeps low friction in all conditions, even without the liquid lubricating film also after other lubricating agents are dried out.

Areas of application

Grafopak GRA 450 graphite packing is perfect sealing for centrifugal pumps for water, chemicals and petroleum products, especially for high speed shaft pumps. But it is not recommended for strong oxidants, abrasive also contaminated with solid particles media. GRA packing requires good conditions of the stuffing box and precise montage technique, the use of special tools and extractors is recommended too.



Grafopak GRA packing have an excellent lubricating properties and guarantees low friction in all working conditions.

Operating parameters - GRA 450

	Scope of applications			
	Temperature	-200 to 450°C		
	p _{max} (bar)	40	n/a	200
	pH range	1 - 14 pH		
	V _L (m/s)	40	n/a	2
	Operating factors and use limits	Load ratio max pV ~ 600 bar·m/s Average density ρ ~ 1,15 g/cc Minimal bush hardness ~ 30 HRC		

Range of sizes and packaging

Grafopak graphite packing is delivered on 2,5 kg spools for small profiles up to S8 (square 8 x 8 mm) and on 5 kg or 20 kg spools for sizes S10 and larger. The spools are packed in 20 kgs collective boxes 46 x 46 x 29 cm. Bigger orders are delivered on pallet with 16 or 20 boxes, weight 320 or 400 kgs net.

Square profiles in the main range of sizes from S3 to S40 with tolerance ±10% are available in quick delivery directly from stock. Rectangular, round or strip profiles are manufactured to order, according to the customer's requirements. The table below presents the kind of packing, conversion factors and average roll lengths on unit packages. In addition, the following profiles are also available: S3, S7, S9, S28, S32, S35, S38, S40 and S50.



Square profiles [mm]	S4	S5	S6	S8	S10	S12	S14	S16	S18	S20	S22	S25	S30
Linear mass weight [g/m]	25	36	50	83	125	165	230	290	380	460	560	720	1000
Spool type	2,5 kg				5 kg				5 also 20 kg				
Converter to meters [m]	40	28	20	12	8	6	4,4	3,4	2,6	2,2	1,8	1,4	1
Roll length [m]	100	70	50	30	40	30	22	17	13	11	36	28	20