API STD 622 GRAPHITE PACKING GR8622 ESP

Composition

Pure modified expanded mineral graphite
Nickel alloy, wire-reinforced



Characteristics

Advanced Graphite Material: The PGT4 GR8622 ESP is manufactured using the flexible modified graphite foil, Planigraph ESP, which is engineered under strict guidelines to ensure superior performance.
Low Emissions Compliance: This product meets the Low Emissions API std 622 3rd Edition and ISO 15848 BH C01/C02 standards, making it an ideal choice for reducing fugitive emissions in various industrial applications.
Versatility: Suitable for use in Oil & Gas, Cryogenic, Hydrogen, and most Chemical services, as well as steam applications, providing a wide range of utility.
Temperature and Pressure Tolerance and Chemical Compatibility: It is capable of withstanding extreme temperatures, from -200°C to 650°C, and pressures up to 500 bar, covering pressure classes from 150 to 2500 lbs, and compatible with a wide pH range (0 to 14), except for strong oxidizers, making it versatile for various industrial environment
Enhanced Sealing Capabilities: The PGT4 GR8622 ESP offers excellent sealing properties, a low coefficient of friction, and low permeability, outperforming current technologies without the use of lubricants.

Applications

Latest innovation in industrial valve sealing solutions – the Planigraph ESP and the Low Emissions PGT4 GR8622 ESP graphite stem packing for industrial valves. This groundbreaking product is designed to meet the stringent requirements of modern industry, ensuring both high performance and compliance with environmental standards.

Tech Data

	P bar	lbf/in2	Vm/S	f/pm	pH	T°C	T°F
	500	7500	2	400	0 ÷ 14	-200 ÷ 450 / 650	-330 ÷ 840 / 1200

- Never use the product at its maximum rated temperature and pressure simultaneously. Consult the manufacturer for further information.
- The peak temperature can be sustained only for short exposure periods.
- When used with weakly oxidizing agents or hot air, the temperature shall not exceed **450 °C**.
- When used with steam or non-oxidizing fluids, the temperature shall not exceed **650 °C**.
- Flexible graphite and carbon yarn shall not be used with oxidizing fluids.

API std 622 Graphite Packing GR8622 ESP

APPROVALS

- API std 622 3rd Ed. FE 260°C (500°F)
- API std 622 3rd Ed. ANNEX C FE 400°C (750°F)
- ISO 15848 BH-C01/C02-400°C (750°F)
- Limited detrimental materials and Ash
- Weight Loss API std 622 3rd Ed., EN 14772 S.6.7, FSA-G-604-07 METHOD B
- TQ39 - 50.000 h Target Temperature 408°C
- Fire Test API 607, API 6FA, ISO 10497
- Corrosion Test RT and HT
- MESC 85/203 and 85/204
- H2 Compatible
- PTFE Free
- PFAS Free
- Wet Lubricant Free

The information provided in this publication, as well as that supplied to users in other forms, is based on our experience and communicated according to the best knowledge available. However, since numerous factors beyond our knowledge and control may influence the use of the products, no warranty, explicit or implicit, is given regarding such content. The operating limits indicated do not constitute confirmation that these values can be applied simultaneously. Avoid using the product at the maximum temperature and pressure limits. The maximum temperature is sustainable only for short periods under specific conditions. Specifications may be changed without notice. The images in the DS may not exactly represent the product, its color and/or marking.

CARRARA® GLOBAL SEALING SOLUTIONS

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API STD 622 GRAPHITE PACKING GR8622 ESP

sezione mm	sezione inch	kg/box	lbs/box	mt/box	ft/box	mt/kg	ft/lbs
3	1/8"	1	2.2	58.8	192.9	58.8	87.6
4	-	1	2.2	37.0	121.4	37.0	55.1
5	3/16"	1	2.2	22.2	72.8	22.2	33.1
6	-	2.5	5.5	38.5	126.3	15.4	22.9
6.5	1/4"	2.5	5.5	31.3	102.7	12.5	18.7
8	5/16"	2.5	5.5	21.7	71.2	8.7	12.9
9.5	3/8"	2.5	5.5	18.5	60.7	7.4	11.0
10	-	2.5	5.5	16.7	54.8	6.7	10.0
11	7/16"	2.5	5.5	13.9	45.6	5.6	8.3
12	-	2.5	5.5	11.6	38.1	4.6	6.9
12.7	1/2"	2.5	5.5	10.4	34.1	4.2	6.2
14	9/16"	5	11	17.2	56.4	3.4	5.1
16	5/8"	5	11	13.5	44.3	2.7	4.0
17.5	-	5	11	12.5	41.0	2.5	3.7
18	11/16"	5	11	11.1	36.4	2.2	3.3
19	3/4"	5	11	10.0	32.8	2.0	3.0
22	7/8"	5	11	7.5	24.6	1.5	2.2
25.5	1"	5	11	5.8	19.0	1.2	1.7



- The weight per meter and the packaging weight may have a tolerance of ±10%. Other sizes and packaging options are available on request.

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