



X-CROSS.
PATTERN



Our packing that has exceeded all performance expectations.

CARBO:KING® CR represents the pinnacle of dynamic sealing engineering for high pressure. Its core is composed of high-purity flexible graphite, guaranteeing superior sealing and exceptional heat transfer.

To structurally reinforce the **HEXA:GRAF®** graphite, the four corners have been reinforced with a structural braid of high-tenacity **CARBO:KING®** carbon fibers, creating an "anti-extrusion" structure that withstands the most severe conditions. Its low coefficient of friction allows it to operate at high shaft speeds and enables it to function without the need for cooling water, with zero leakage.

CARBO:KING® CR is a packing constructed using our unique diagonal X-CROSS™ design, allowing it to work in virtually any application where mechanical strength is essential.

The **CARBO:KING® CR** design makes it the ultimate solution for:

- **Power Generation Plants:** Sealing superheated steam valves and boiler feed pumps.
- **Refineries and Petrochemicals:** Handling high-temperature hydrocarbons and heat transfer fluids.
- **Pulp and Paper Industry:** Equipment handling black liquors and abrasive fluids at high pressure.
- **Steel Industry:** Cooling and control systems in furnaces and rolling mills.

Benefits:

- **Total Anti-Extrusion:** The carbon fiber corners act as mechanical barriers, preventing graphite from flowing into equipment clearances under high pressure.
- **Superior Thermal Conductivity:** Dissipates shaft heat much faster than synthetic seals, extending seal and equipment life.
- **Zero Shaft Wear:** Graphite acts as a self-lubricating solid lubricant, minimizing friction and energy consumption.
- **Mechanical Strength:** Unlike graphite, the carbon reinforcement makes the seal easier to handle and more durable during installation.

Common Equipment:

- High-pressure centrifugal pumps.
- High-temperature and steam control valves.
- Agitators and mixers in heavy chemical processes.
- Soot blowers.
- Refiners.
- Pulpers.
- Digesters.

Page 1/1

Common Fluids:

- High-pressure steam, condensate, and feedwater.
- Hydrocarbons.
- Hot oils.
- Solvents.
- Acidic and alkaline solutions.
- Fluids with suspended particles.

TECHNICAL DATA

Properties:	CARBO:KING® CR Packing
Composition:	CARBO:KING® XT Carbon Fiber + HEXA:GRAF® Expanded Graphite
Temperature, Max:	1,202 °F (Inert Atm.)
Temperature, Continuous:	842 °F
Temperature, Min:	-400 °F
Max. Pressure, Rotating:	435 psi
Max. Pressure, Reciprocating:	2,901 psi
Max. Pressure, Valves:	4,351 psi
Shaft Speed:	4,135 fpm
pH Range:	0-14

****The maximum temperature and pressure limits should not occur simultaneously.**

AVAILABILITY:

Availability:	FLURO:MASTER® X	Packing
1/8", 5# Boxes:	70.84	ft / lbs.
3/16", 5# Boxes:	38.99	ft / lbs.
1/4", 5# Boxes:	18.90	ft / lbs.
5/16", 5# Boxes:	12.95	ft / lbs.
3/8", 5# Boxes:	8.33	ft / lbs.
7/16", 5# Boxes:	6.85	ft / lbs.
1/2", 5# Boxes:	5.06	ft / lbs.
9/16", 5# Boxes:	4.17	ft / lbs.
5/8", 11# Boxes:	3.42	ft / lbs.
3/4", 11# Boxes:	2.38	ft / lbs.
7/8", 11# Boxes:	1.79	ft / lbs.
1", 11# Boxes:	1.34	ft / lbs.
Thickness Tolerance:	±10 %	
Notes:	The packaged product may have a variation of ±10%. *Other millimeter measurements and larger cross-sections are available upon request.	