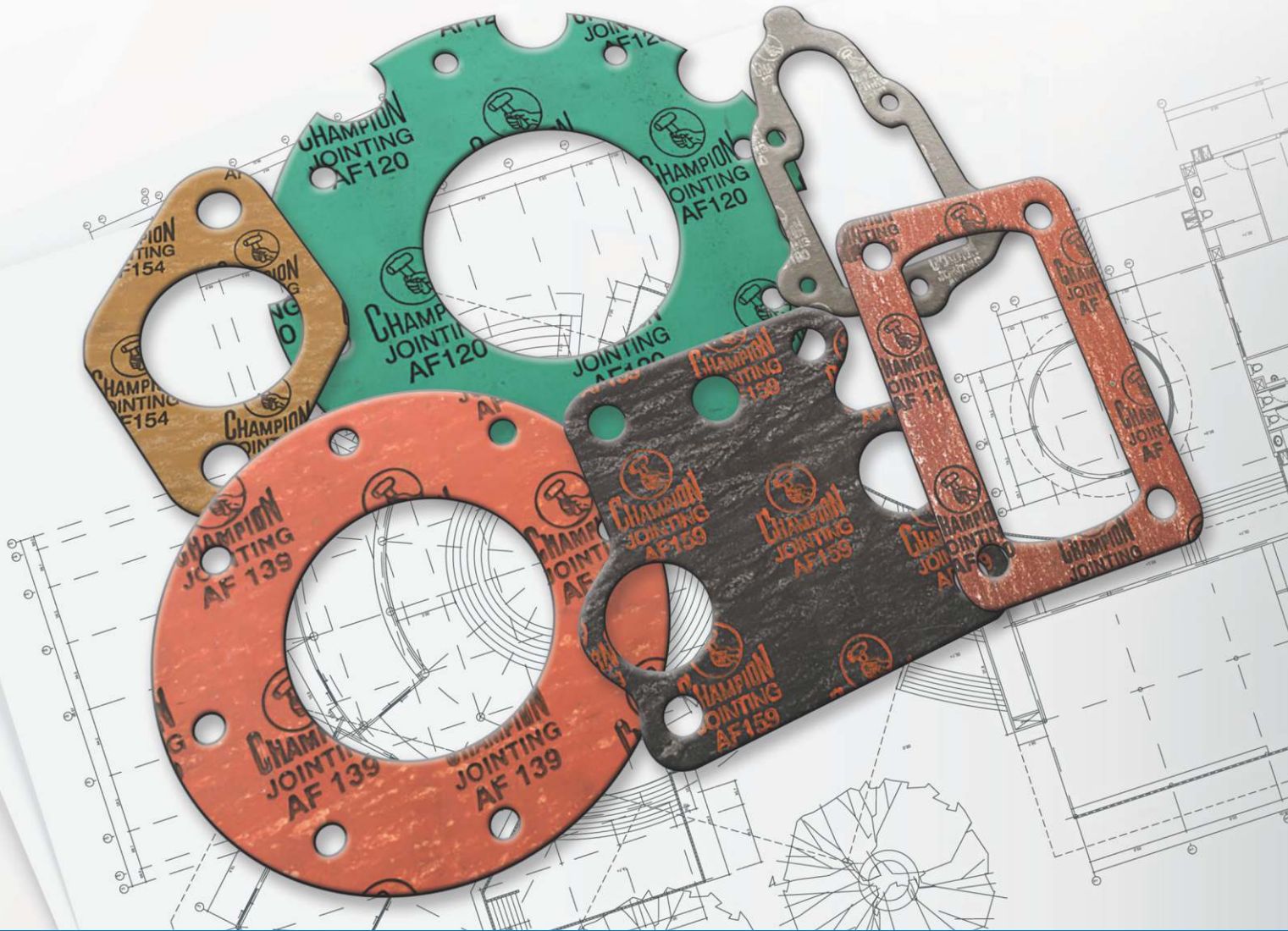




Champion AF (Asbestos Free) Jointing Sheets and Gaskets

Original Champion  Hatoda Brand



CHAMPION STYLE AF110 WATER



Champion Jointing AF 110 is a general-purpose jointing sheet designed for medium-performance duties. It is preferred as a gasket material for liquids and gases at low internal pressure and temperature. Suitable for flanges with low bolt loading conditions, this grade is available in both non-metallic and metallic variants—featuring steel wire-reinforced gauze insertion—and comes with a smooth, anti-stick graphite finish on the top.

IDENTITY COLOUR: BROWN or GRAPHITED BLACK with Anti-stick Coating

TEMPERATURE:

Maximum Short-Term Service Temperature:

300°C / 572°F

Maximum Continuous Service Temperature:

250°C / 450°F

PRESSURE:

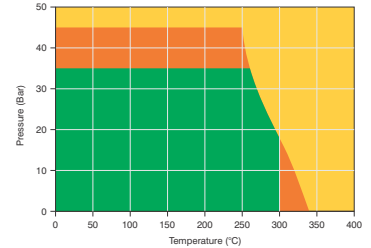
Maximum Pressure:

3.5 MPa / 35 Bar (507 psi) - Non Metallic

4.5 MPa / 45 Bar (653 psi) - Metallic

Specification Compliance:

(BS 7531:2006 Grade-Y) (IS 17796:2022 Grade-Y)



CHAMPION STYLE AF120 GP



Champion Style AF 120 Gasket is a popular flexible cut gasket used in various general industrial applications, offering a reliable and cost-effective sealing solution. It is made from compressed aramid fibres, combined with other functional fibres and bonded using a nitrile rubber binder to form a stable and durable matrix.

IDENTITY COLOUR: GREEN or GRAPHITED BLACK with Anti-Stick Coating

TEMPERATURE:

Maximum Short-Term Service Temperature:

400°C / 725°F

Maximum Continuous Service Temperature:

250°C / 482°F

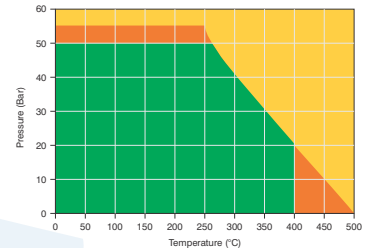
PRESSURE:

Maximum Pressure:

5 MPa / 50 Bar (725 psi)

Specification Compliance:

(BS 7531:2006 Grade-Y), (IS 17796:2022 Grade-Y)



CHAMPION STYLE AF120 METALLIC



Champion Style AF120 Metallic Gasket is made from compressed aramid fibres, bonded with a combination of other functional fibres and an elastomer binder. It features a steel wire-reinforced gauze insertion and is supplied with a smooth, proprietary anti-stick graphite finish on the top. This gasket is suitable for general-purpose steam and vapour applications.

IDENTITY COLOUR: GRAPHITED BLACK with Anti-Stick Coating

TEMPERATURE:

Maximum Short-Term Service Temperature:

400°C / 725°F

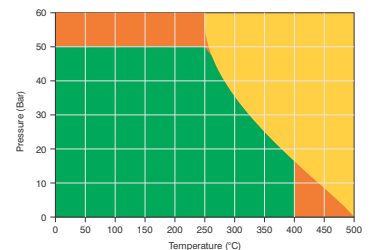
Maximum Continuous Service Temperature:

250°C / 482°F

PRESSURE:

Maximum Pressure:

6 MPa / 60 Bar (870 psi)



Guidelines for application: 🟢 General Suitability 🟡 Consultation is recommended 🟠 Technical consultation is mandatory
Always refer chemical resistance of gasket to the media

CHAMPION STYLE AF139 STEAM



Champion Jointing AF139 is a highly popular universal gasket suitable for a wide range of media, including steam and oil. It is made from compressed aramid fibres, bonded with a combination of functional fibres and a nitrile rubber binder to create a stable matrix for thermal and chemical medium service. This grade is available in both non-metallic and metallic variants—featuring steel wire-reinforced gauze insertion—and is supplied with a smooth, anti-stick graphite finish on the top.

IDENTITY COLOUR: ORANGE or GRAPHITED BLACK with Anti-stick Coating

TEMPERATURE:

Maximum Short-Term Service Temperature:

400°C / 720°F

Maximum Continuous Service Temperature:

250°C / 450°F

PRESSURE:

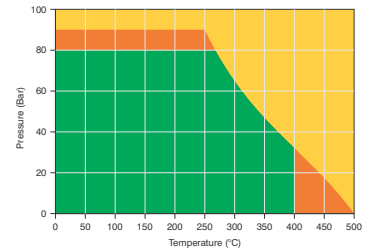
Maximum Pressure:

8 MPa / 80 Bar (1160 psi) - Non Metallic

9 MPa / 90 Bar (1305 psi) - Metallic

Specification Compliance:

(BS 7531:2006 Grade-X), (IS 17796:2022 Grade-X)



CHAMPION JOINTING STYLE AF154 HIGH PRESSURE



Champion Jointing Style AF 154 Super is a highly popular soft cut gasket designed for extreme industrial applications. It easily meets BS 7531 Grade-X requirements. It is a blend of superior heat-resistant compressed aramid fibres, bonded with a combination of other functional fibres and nitrile elastomeric binders.

IDENTITY COLOUR: YELLOW

TEMPERATURE:

Maximum Short-Term Service Temperature:

450°C / 810°F

Maximum Continuous Service Temperature:

300°C / 572°F

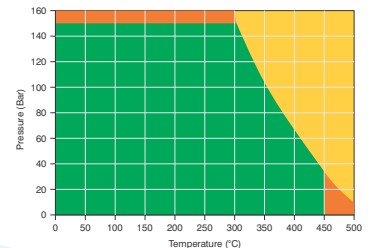
PRESSURE:

Maximum Pressure:

15 MPa / 150 Bar (2175 psi)

Specification Compliance:

(BS 7531:2006 Grade-X), (IS 17796:2022 Grade-X)



CHAMPION JOINTING STYLE AF154 METALLIC



Champion Jointing Style AF154 Metallic is a blend of heat-resistant compressed aramid fibres bonded with other functional fibres and nitrile elastomeric binders. Featuring steel wire reinforcement, it forms a stable matrix with anti-stick properties that minimize gasket adhesion to flange surfaces—even at high temperatures—reducing removal time. Suitable for high-pressure steam applications.

IDENTITY COLOUR: GRAPHITED BLACK with Anti-stick Coating

TEMPERATURE:

Maximum Short-Term Service Temperature:

450°C / 810°F

Maximum Continuous Service Temperature:

300°C / 572°F

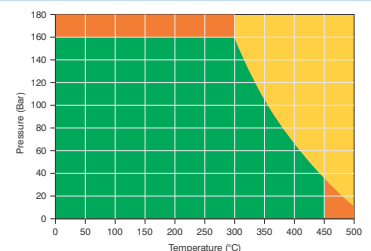
PRESSURE:

Maximum Pressure:

16 MPa / 160 Bar (2321 psi)

Specification Compliance:

(BS 7531:2006 Grade-X), (IS 17796:2022 Grade-X)



Guidelines for application: 🟢 General Suitability 🟡 Consultation is recommended 🟠 Technical consultation is mandatory
Always refer chemical resistance of gasket to the media

CHAMPION STYLE AF159 OIL



Champion Jointing AF 159 Oil is a widely used soft cut gasket for extreme industrial applications in oil engines, generators, pumps, fuel systems, hydraulic equipment, and service lines. It is made from heat-resistant compressed aramid fibres bonded with functional fibres and nitrile elastomeric binders (NBR).

Available in non-metallic and metallic variants, the metallic version includes steel wire reinforcement and anti-stick properties that reduce adhesion to flange surfaces—even at high temperatures—resulting in easier removal.

IDENTITY COLOUR: BLACK or GRAPHITED BLACK with Anti-stick Coating

TEMPERATURE:

Maximum Short-Term Service Temperature:

450°C / 810°F

Maximum Continuous Service Temperature:

300°C / 540°F

PRESSURE:

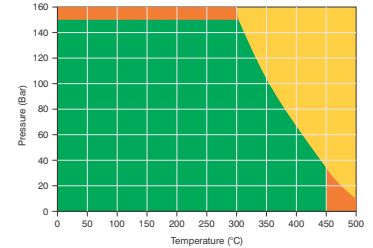
Maximum Pressure:

15 MPa / 150 Bar (2175 psi) - Non Metallic

16 MPa / 160 Bar (2321 psi) - Metallic

Specification Compliance:

(BS 7531:2006 Grade-X), (IS 17796:2022 Grade-X)



CHAMPION JOINTING STYLE AF160 ACID



Champion Style AF 160 Acid Gasket is commonly used for acid and chemical-resistant applications. This chemically resistant compressed fibre jointing sheet is made from aramid fibres bonded with a special blend of binders, including synthetic elastomer (NBR) and performance-enhancing additives.

IDENTITY COLOUR: OFF-WHITE

TEMPERATURE:

Maximum Short-Term Service Temperature:

300°C / 572°F

Maximum Continuous Service Temperature:

250°C / 482°F

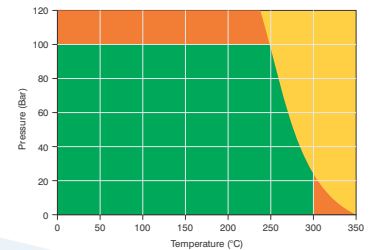
PRESSURE:

Maximum Pressure:

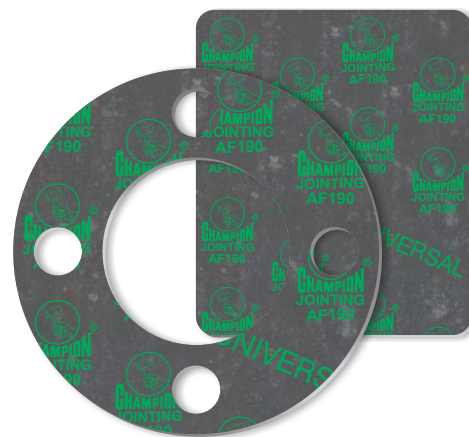
10 MPa / 100 Bar (1450 psi)

Specification Compliance:

(BS 7531:2006 Grade-X), (IS 17796:2022 Grade-X)



CHAMPION JOINTING STYLE AF190 PERFORMANCE



Champion Style AF 190 Performance Gasket provides excellent resistance to high temperatures, steam, oils, hydrocarbons, solvents, fuels, refrigerants, and gases. It combines premium-grade aramid fibres, heat-dissipating graphite, and carbon, bonded with HNBR elastomers, additives, and specialty chemicals.

IDENTITY COLOUR: DARK GREY / BLACK

TEMPERATURE:

Maximum Short-Term Service Temperature:

500°C / 932°F

Maximum Continuous Service Temperature:

300°C / 572°F

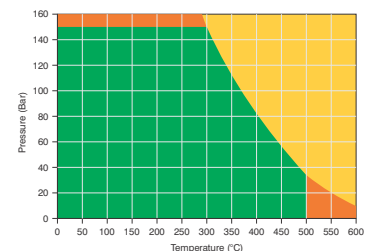
PRESSURE:

Maximum Pressure:

15 MPa / 150 Bar (2175 psi)

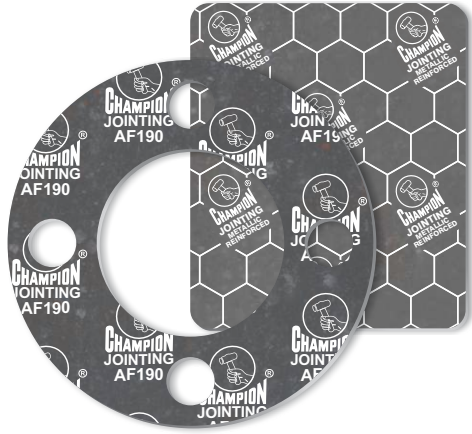
Specification Compliance:

(BS 7531:2006 Grade-X), (IS 17796:2022 Grade-X)



Guidelines for application: 🟢 General Suitability 🟡 Consultation is recommended 🟠 Technical consultation is mandatory
Always refer chemical resistance of gasket to the media

CHAMPION JOINTING STYLE AF190 METALLIC



Champion Jointing Style AF190 Metallic is a blend of premium-grade synthetic aramid fibres, heat-dissipating graphite, and carbon, bonded with HNBR elastomers, additives, and specialty chemicals. It features stainless steel wire reinforcement to create a stable matrix with anti-stick properties, minimizing gasket adhesion to flange surfaces—even at elevated temperatures—resulting in reduced removal time. Highly recommended as a universal metallic gasket for all critical applications, except those involving acids.

IDENTITY COLOUR: GRAPHITED BLACK COLOR

TEMPERATURE:

Maximum Short-Term Service Temperature:

500°C / 932°F

Maximum Continuous Service Temperature:

300°C / 572°F

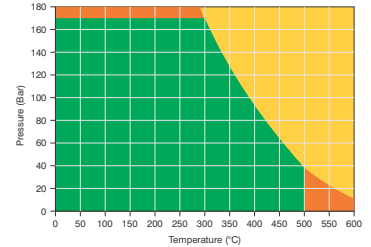
PRESSURE:

Maximum Pressure:

17 MPa / 170 Bar (2465 psi)

Specification Compliance:

(BS 7531:2006 Grade-X), (IS 17796:2022 Grade-X)



TECHNICAL DATA SHEET

GASKET SHEET	TENSILE STRENGTH	RESIDUAL STRESS	COMPRESSIBILITY*	RECOVERY*	IGNITION LOSS	CONTINUOUS SERVICE TEMPERATURE	RECOMMENDED* MAX. PRESSURE
Champion Style AF110 Water	7 N/mm ²	≥ 22 Mpa	8-13%	≥45%	≤40%	250°C	35 bar
Champion Style AF120 GP	10 N/mm ²	≥ 22 Mpa	8-13%	≥45%	≤35%	250°C	50 bar
Champion Style AF120 Metallic	10 N/mm ²	≥ 22 Mpa	8-13%	≥45%	≤35%	250°C	60 bar
Champion Style AF139 Steam	11.5 N/mm ²	≥ 25 Mpa	8-13%	≥50%	≤35%	250°C	80 bar
Champion Style AF154 High Pressure	15 N/mm ²	≥ 25 Mpa	8-13%	≥50%	≤35%	300°C	150 bar
Champion Jointing Style AF154 Metallic	15 N/mm ²	> 25 Mpa	8-13%	≥50%	≤35%	300°C	160 bar
Champion Style AF159 Oil	15 N/mm ²	> 25 Mpa	8-13%	≥50%	≤35%	300°C	150 bars
Champion Jointing Style AF160 Acid	10 N/mm ²	> 25 Mpa	8-13%	≥50%	≤35%	250°C	100 bars
Champion Jointing Style AF190 Performance	15 N/mm ²	> 25 Mpa	8-13%	≥50%	≤35%	300°C	150 bars
Champion Jointing Style AF190 Metallic	17 N/mm ²	> 25 Mpa	8-13%	≥50%	≤35%	300°C	170 bars

Champion Metallic Jointing Sheets: When the operating temperature and pressure is critical, when the effective gasket area is small, we recommend Champion Metallic Wire Reinforced Gaskets for critical applications in boiler, power generation, steel plants, oil and gas refineries.

*Technical Notes: Information given in this brochure is based on general experience and is given in good faith. As the company's products are used for various application's and having no control over the application or use, the company excludes all warranties, expressed or implied as to their products or their fitness for any particular application. Any technical advice/suggestion is given for the customers assistance without liability on part of the company, whatsoever.

Gasket selection should be done as per the operating parameters, i.e. temperature, pressure, media and equipment. All gasket are recommended to be cut on a hydraulic press or on an automated laser cutting CNC machine. To ensure a leakage free gasket installation, the flange seat has to be clean, without any surface damage. It is not advisable to cut gaskets using a chisel / hammer.

Since 1959, Champion offers its valued customers, 100% guaranteed assurance for its products to ensure leak-proof sealing and insulation products subject to the above technical notes. Please be aware of spurious and duplicate products which may damage your plant and machinery; injure factory employees, workmen. Spurious products cause downtime, production loss and emergency shutdown.

Champion “Hammer in Hand” Brand Jointing Sheet and Gaskets are manufactured as per BS (British Standard)

Gasket Selection

Gaskets must maintain a leak proof seal for an acceptable period of time, against all of the operational forces involved and to achieve this, there are eight important properties which any good gasket should possess:

- The gasket should not be porous to the fluid being sealed.
- The gasket should compress into the imperfections on the flange to create initial seal on application of sealing force.
- The gasket should not show significant creep under the influence of load and temperature. Such flow will allow the bolts to relax, reduce gasket surface stress and cause leakage.
- The gasket should be capable of catering to slight distortion between the flanges.
- The gasket should withstand chemical attack from the media being handled.
- The gasket has to be easily dismantled after use.
- The gasket should be able to withstand effects of temperature and pressure of the confined media.
- The gasket should not cause corrosion of the flange faces.

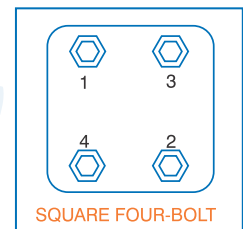
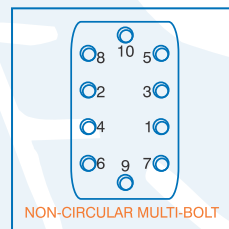
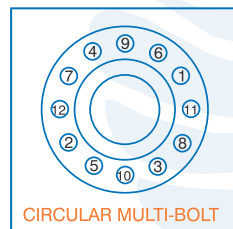
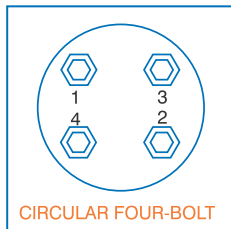
(Please visit our website: www.championseals.in for the questionnaire form to be filled and sent to us for our guidance on appropriate style selection for any new/existing applications.)

Champion “Hammer in Hand” Brand Jointing Sheet and Gaskets are manufactured on British and Italian calendaring machinery to ensure the product specifications are manufactured to international standards.

Champion AF Jointing Sheets are manufactured in the following sheet sizes:

Available Sheet Sizes in mm (+/- 5%)	1600 mm x 1500 mm	1600 mm x 4500 mm
	1500 mm x 2000 mm	2000 mm x 6000 mm
Thickness (mm)	0.4/0.5 mm; 0.75/0.8 mm; 1.0 mm; 1.5 mm; 2.0 mm; 3.0 mm; 4.0 mm; 5.0 mm	

Bolting Installation Procedure



The sequence in which bolts are tightened has a substantial bearing upon the distribution of contact area stress. Improper bolting may cock the flange out of parallel. It is important for proper sealability that the flanges are clean and free from any serious defect.

To identify original Champion “Hammer in Hand” Brand Jointing Sheet and Gaskets; kindly look for company’s website (www.championseals.in) printed diagonally across every sheet. To verify if the product is original, please send us a photo of the gasket sheet, along with the product label on the sheet to the below contact co-ordinates.

CHAMPION SEALS INDIA PRIVATE LIMITED SEALANT & GASKET INDIA PRIVATE LIMITED

Champion House, 15 Parsi Panchayat Road, Andheri (East), Mumbai – 400069. INDIA

Product Inquiry (India) : sales@championseals.in

Product Inquiry (Exports) : exports@championseals.in

General Inquiry : info@championseals.in

Customer Care Number : +91 98201 71162

Website : www.championseals.in

