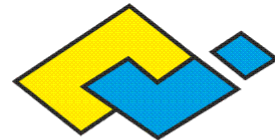


Improving Reliability.
Delivering Quality.
Developing Consistency.
Creating Perfection.



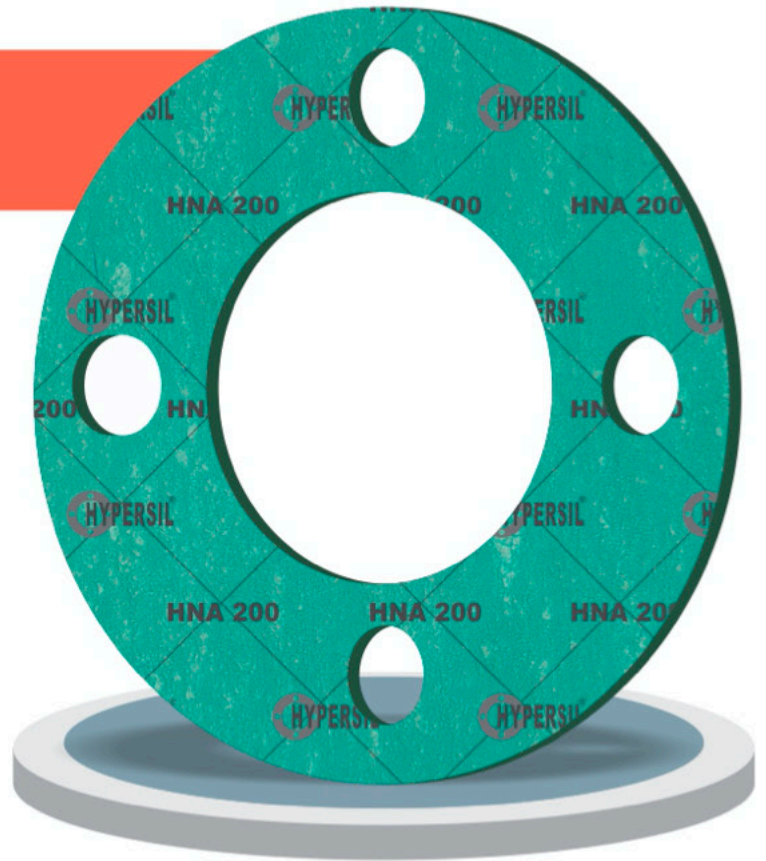
CHARMINAR
JOINTINGS

Jointing
Fibre sheeting

HNA 200

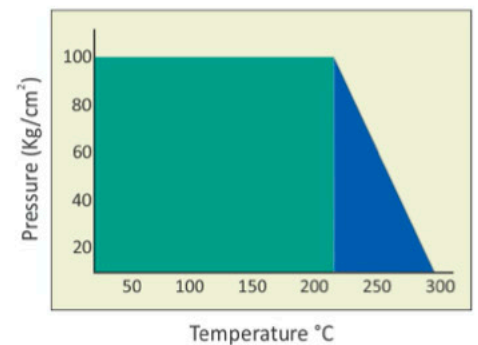
**Cellulose Fibre, NBR,
Water/Oil resistant.**

For light to medium loadings, suitable for low operating pressure, e.g. transformers, compressors, valve cover and oil pans internal combustion engines



Technical Specifications

Properties	Test Method	Unit	Specified Value
Density		gm/cm ³	1.70-2.00
Tensile Strength			
(a) ACC to ASTM F 152 (Across Grain)		N/mm ²	>8
(b) ACC to DIN 52910 (Across Grain)		N/mm ²	>5
Compressibility	ASTM F36A	%	7-15
Recovery	ASTM F36A	%	>50
Fluid Absorption	ASTM F146		
(a) In ASTM Oil No. 3			
Increase in Mass		%	<15
Increase in Thickness		%	<10
(b) In Fuel B	ASTM F146		
Increase in Mass		%	<10
Increase in Thickness		%	<10
(c) In Water/Antifreeze	ASTM F146		
Increase in Mass		%	<15
Increase in Thickness		%	<15
Ignition Loss	DIN 52911	%	<35
Sealability Against Nitrogen	DIN 3535	CM ³ /min	<1.0
Stress Resistance			-
16h 300 °C	DIN 52913	N/mm ²	-
16h 175 °C	DIN 52913	N/mm ²	-
Max. Peak Temperature		°C	300
Max. Continuous Temperature		°C	220
Max. Operating Pressure		Kg./CM ²	100



- Suitable Area
- Suitable Area, but technical advice for steam is recommended
- Area in which technical advice is required

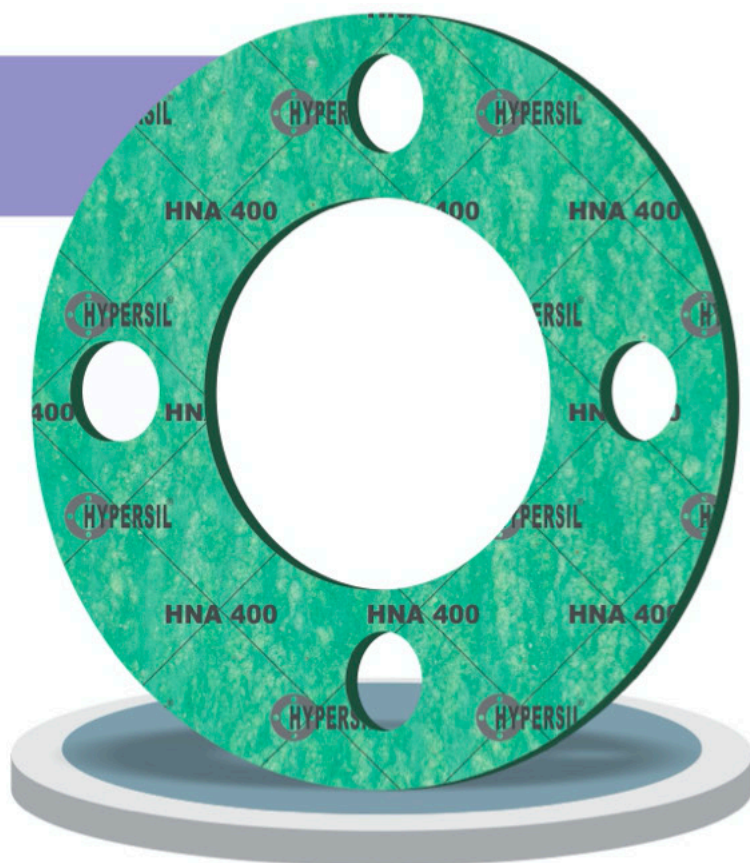
Graphite coating, teflon coating, antistick coating are also available on request. Properties applicable for 2.0mm thick material



HNA 400

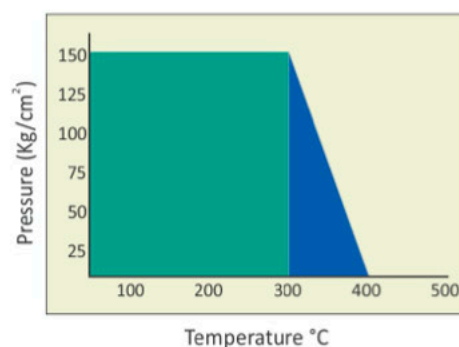
Aramid Fibre, Mineral Fibre, NBR, High Performance Oil Resistant.

For high loadings, excellent thermal, chemical & mechanical properties, For compressors, pipelines, gas meters and internal combustion engines pipeunions, pumps etc.



Technical Specifications

Properties	Test Method	Unit	Specified Value
Density		gm/cm ³	1.70-2.00
Tensile Strength			
(a) ACC to ASTM F 152 (Across Grain)		N/mm ²	>14
(b) ACC to DIN 52910 (Across Grain)		N/mm ²	>11
Compressibility	ASTM F36A	%	6-12
Recovery	ASTM F36A	%	>50
Fluid Absorption	ASTM F146		
(a) In ASTM Oil No. 3			
Increase in Mass		%	<10
Increase in Thickness		%	<8
(b) In Fuel B	ASTM F146		
Increase in Mass		%	<10
Increase in Thickness		%	<7
(c) In Water/Antifreeze	ASTM F146		
Increase in Mass		%	<15
Increase in Thickness		%	<8
Ignition Loss	DIN 52911	%	<30
Sealability Against Nitrogen	DIN 3535	CM ³ /min	<0.5
Stress Resistance			-
16h 300 °C	DIN 52913	N/mm ²	20
16h 175 °C	DIN 52913	N/mm ²	30
Max. Peak Temperature		°C	400
Max. Continuous Temperature		°C	300
Max. Operating Pressure		Kg./CM ²	150



- Suitable Area
- Suitable Area, but technical advice for steam is recommended
- Area in which technical advice is required

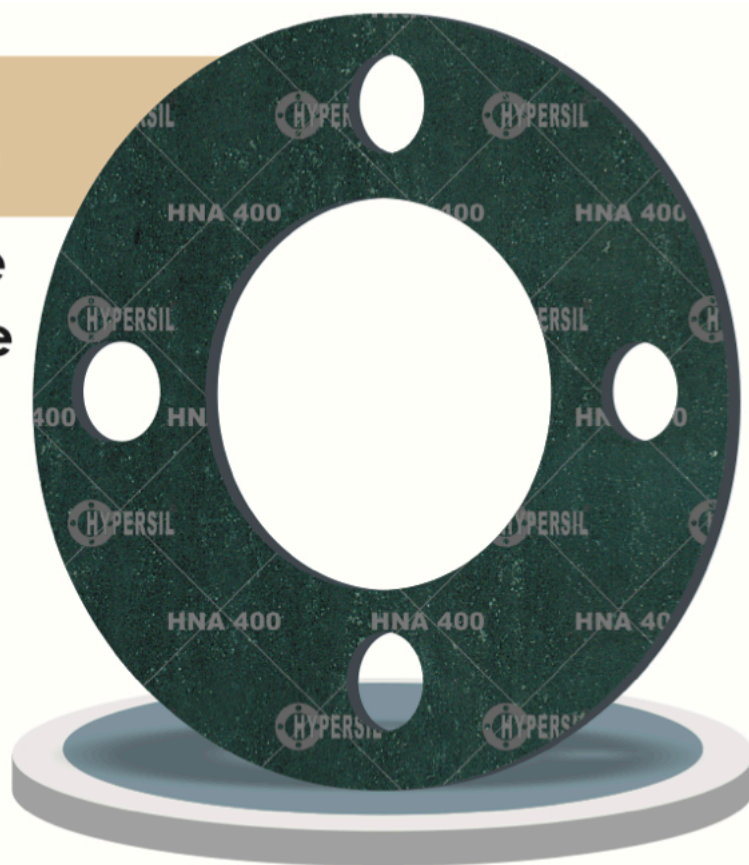
Graphite coating, teflon coating, antistick coating are also available on request. Properties applicable for 2.0mm thick material



HNA 400 (Metallic)

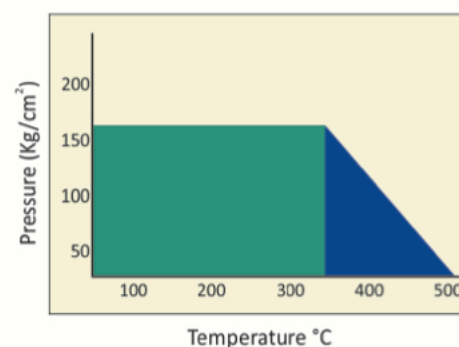
Aramid Fibre, Mineral Fibre and NBR with Metal Gauge Centre, High Performance Oil Resistant, Excellent Thermal, Chemical & Mechanical Properties.

For compressors, pipelines, gas meters and internal combustion engines pipe unions, pumps etc.



Technical Specifications

Properties	Unit	Specified Value
Density	gm/cm ³	1.70-2.10
Tensile Strength		
(a) ACC to ASTM F 152 (Across Grain)	N/mm ²	>14
(b) ACC to DIN 52910 (Across Grain)	N/mm ²	>11
Compressibility	%	7-15
Recovery	%	>50
Fluid Absorption		
(a) In ASTM Oil No. 3		
Increase in Mass	%	<10
Increase in Thickness	%	<8
(b) In Fuel B		
Increase in Mass	%	<10
Increase in Thickness	%	<7
(c) In Water/Antifreeze		
Increase in Mass	%	<15
Increase in Thickness	%	<10
Ignition Loss	%	<30
Sealability Against Nitrogen	CM ³ /min	0.5
Stress Resistance		-
16h 300 °C	N/mm ²	25
16h 175 °C	N/mm ²	30
Max. Peak Temperature	°C	510
Max. Continuous Temperature	°C	350
Max. Operating Pressure	Kg./CM ²	160



- Suitable Area
- Suitable Area, but technical advice for steam is recommended
- Area in which technical advice is required

Graphite coating, teflon coating, antistick coating are also available on request. Properties applicable for 2.0mm thick material

