



USASEALING

Catalog











CONTACT US

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Sealing & Gasketing

USA Sealing manufactures the broadest and deepest selection of sealing solutions in the market. Within these categories we have thousands of sizes, styles, and formulations to choose from. Our seals can be fabricated from compounds certified by NSF, 3A, and USP Class VI to meet the most stringent of requirements.

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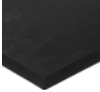



Tubing, Hose, Pipe & Fittings

USA Sealing’s selection of tubing and fittings provides a solution to any application requiring the movement of air, water, food, beverage, petroleum, or chemicals. We offer a deep selection of plastic and rubber tubing with lines developed specifically for high pressure, food processing, and high purity environments. We also offer a variety of metal and plastic tube, hose, and pipe fittings used to complete the connection on your line.

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Raw Materials

Whether prototyping a design or developing a maintenance and repair solution, USA Sealing has the raw materials to meet your needs. Our focus is on premium materials and grades designed for industrial applications. We stock rolls, sheets, bars, strips, films, cords, rods, tubes, and balls in a wide selection of sizes. We can fabricate custom sizes and shapes, add adhesive, and deliver finished product all in the matter of days.

	Plastic	27
	Rubber	28
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Sealing & Gasketing

O-Rings



USAGE	Oils
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div><div>-</div></div>
SHAPES	<div><div></div><div>X</div><div></div></div>
GRADES	<div><div></div><div>3A</div><div></div><div></div><div></div></div>



USAGE	Chemicals
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div><div>-</div></div>
SHAPES	<div><div></div><div>X</div><div></div></div>
GRADES	<div><div></div><div>3A</div><div></div><div>ENC</div><div></div></div>



USAGE	High Temperature
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div><div>3A</div><div>ENC</div><div></div><div></div></div>



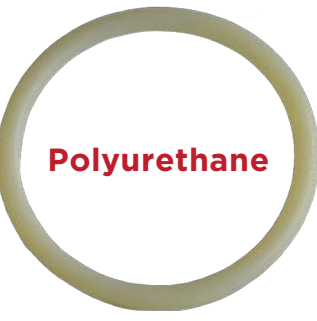
USAGE	Water & Steam
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div><div>NSF</div><div></div><div></div></div>



USAGE	Chemicals & High Temperature
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div><div>3A</div></div>



USAGE	Fuels & Low Temperature
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div></div>



USAGE	Abrasion
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div></div>



USAGE	Refrigerants
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div></div>



USAGE	Oils & Chemicals
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div></div>



USAGE	Chemicals & High Temperature
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div>-</div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	



USAGE	Oils
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div></div><div>-</div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	<div><div></div></div>



USAGE	Air Impermeable
SIZES	<div><div>in</div><div>mm</div></div>
HARDNESS	<div><div>-</div></div>
SHAPES	<div><div></div></div>
GRADES	

Key

SIZES

- in

Inch
- mm

Metric

HARDNESS

- Soft
easier to compress
for sealing at low pressures
- Standard
- Hard
better suited for abrasion and
higher pressures

SHAPES

- Round
- X

X-Ring
four contact points for a
better seal in dynamic
applications
- Square
flat edges for a
better seal in static
applications

GRADES

- FDA
made of FDA materials for
food and beverage
- NSF

NSF
certified for use with
drinking water
- 3A

3A
certified for use with dairy,
pharmaceutical, food and
beverage
- +

USP Class VI
certified for use with medical
devices
- Metal Detectable
broken fragments can be
picked up by metal detection
systems
- Clean Room
cleaned and bagged in ISO
Class 10,000 clean room
- ENC

Encapsulated
FEP shell enhances chemical
and high temperature
resistance
- Screen
catches particulates to protect
equipment and finished
product
- Internally Lubricated
makes installation easy and
reduces drag
- Electrically Conductive
conducts static electricity a
way to protect sensitive
equipment
- Brown
colored brown for easier
identification

Cord Stock



Buna-N

USAGE Oils

SIZES

HARDNESS

SHAPE

GRADES



Viton

USAGE Chemicals

SIZES

HARDNESS

SHAPE

GRADES



Silicone

USAGE High Temperature

SIZES

HARDNESS

SHAPE

GRADES



EPDM

USAGE Water and Steam

SIZES

HARDNESS

SHAPE

GRADES



Neoprene

USAGE Refrigerants

SIZES

HARDNESS

SHAPE

GRADES

Key

SIZES

Inch
 Metric

HARDNESS

Soft
easier to compress for
sealing at lower pressures
 Standard
 Hard
better suited for abrasion
and higher pressures

SHAPES

Round
 X
four contact points for
a better seal in dynamic
applications
 Square
flat edges for a better
seal in static applications

GRADES

Industrial
 FDA
made of FDA materials
for use with food and
beverage
 3A
certified for use with dairy,
pharmaceutical, food and
beverage
 NSF
certified for use with
drinking water
 Metal Detectable
broken fragments can be picked
up by metal detection systems
 Internally Lubricated
makes installation easy and
reduces drag
 Electrically Conductive
conducts static electricity a way
to protect sensitive equipment
 Brown
colored brown for easy
identification



Aflas

USAGE Oils and Chemicals

SIZES

HARDNESS

SHAPE

GRADES



FFKM

USAGE Chemicals &
High Temperature

SIZES

HARDNESS

SHAPE

GRADES



HNBR

USAGE Oils

SIZES

HARDNESS

SHAPE

GRADES



Butyl

USAGE Air Impermeable

SIZES

HARDNESS












SHAPE

























GRADES







Flange Gaskets


RING & FULL-FACE STYLE FLANGE GASKETS

Available in class 150 & 300 pressure classes




ARAMID				PLASTIC		GRAPHITE	
							
Buna-N	SBR	EPDM	Neoprene	PTFE	Expanded PTFE	Flexible	Reinforced
USAGE Oils	USAGE Abrasion	USAGE Water & Steam	USAGE Refrigerants	USAGE Chemicals & High Temperature	USAGE Chemicals & High Temperature	USAGE Extreme Temperature	USAGE Extreme Temperature & Pressure
GRADE 				GRADE 	GRADE 		

RUBBER						
						
Buna-N	Silicone	EPDM	Neoprene	SBR	Natural	Viton
USAGE Oils	USAGE High Temperature	USAGE Water & Steam	USAGE Refrigerants	USAGE Abrasion	USAGE Abrasion	USAGE Chemicals
GRADE    	GRADE  	GRADE  	GRADE     	GRADE  	GRADE 	GRADE 

FOAM					
					
Buna-N	Silicone	EPDM	Neoprene	Viton	Microcellular Polyurethane
USAGE Oils	USAGE High Temperature	USAGE Water & Steam	USAGE Refrigerants	USAGE Chemicals	USAGE Abrasion






FELT

Felt
USAGE Abrasion resistant
GRADE F1 / F3 / F5 / F13

METALLIC GASKETS

	Spiral Wound		Kammprofile		Ring Joint
USAGE Extreme Temperature & Pressure		USAGE Extreme Temperature & Pressure		USAGE Extreme Temperature & Pressure	
PRESSURE CLASSES 150 / 300 / 600 / 900 / 1500 / 2500		STYLE Ring / Fixed Guide / Floating Guide		STYLE R / RX / BX	
FILLER MATERIAL Graphite / PTFE / Ceramic		FILLER MATERIAL Graphite / PTFE			

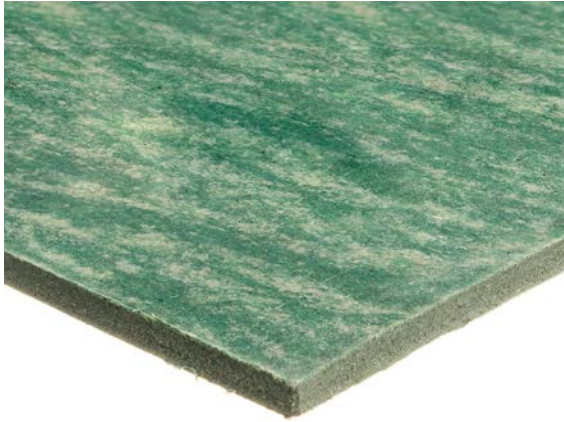
Key

GRADES

-  **Industrial**
-  **FDA**
made of FDA materials for use with food and beverage
-  **High Strength**
more durable and longer life
-  **Ultra Strength**
most durable and longest life
-  **Fabric Reinforced**
withstands heavy compression

Gasket Material

ARAMID



Buna-N Binder

USAGE Oils

COMPARABLE TO Garlock 3000
Klinger 4401



SBR Binder

USAGE Abrasives

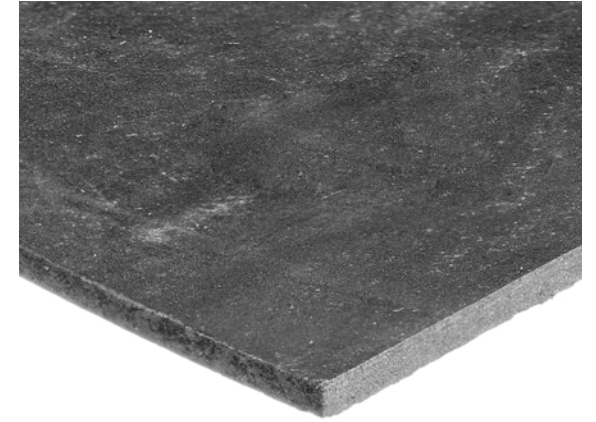
COMPARABLE TO Garlock 3200
Klinger 6400



EPDM Binder

USAGE Water & Steam

COMPARABLE TO Garlock 3700
Klinger 7400



Neoprene Binder

USAGE Refrigerants

COMPARABLE TO Garlock 3300
Klinger 5400

GRAPHITE



Compressible

USAGE High Temperature &
Good Machinability



Stainless Steel Foil Reinforced

USAGE High Temperature &
Good Pressure



Stainless Steel Tang Reinforced

USAGE High Temperature &
Extreme Pressure

GASKET TAPE



Expanded PTFE

Dynamic Seals



U-Cup

MATERIAL **B**

MOTION



Loaded Lip

MATERIAL **U**

MOTION



Rod Wiper

MATERIAL **B** **U**

MOTION



Rotary Shaft

MATERIAL **B** **V**

MOTION

TYPE **SC** **TC** **VC** **VB** **TB**



**Spring
Energized**

MATERIAL **P** **G**

MOTION

Key

MATERIAL

- B** **Buna-N**
Oil Resistant
- U** **Polyurethane**
Abrasion resistant
- V** **Viton**
Chemical resistant
- P** **PTFE**
High temperature and chemical resistant
- G** **Graphite-Filled PTFE**
Enhances wear resistance

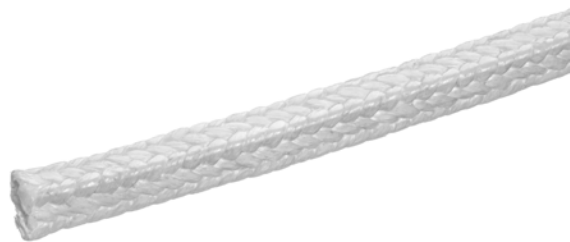
MOTION

- Linear**
- Rotary**

TYPE

- SC** **Single-Lip w/Spring, Rubber Covered OD**
- TC** **Double-Lip w/Spring, Rubber Covered OD**
- VC** **Single-Lip, Rubber Covered OD**
- VB** **Single-Lip, Metal OD**
- TB** **Double-Lip w/Spring, Metal OD**

Compression Packing



PTFE

USAGE	Chemicals
FILLER	<div>P</div> <div>L</div>
REINFORCEMENT	<div>SC</div> <div>AC</div>



Graphite-Filled PTFE

USAGE	Chemicals, High Temperatures & Pressures
FILLER	<div>P</div> <div>L</div>
REINFORCEMENT	<div>AC</div>



Graphite

USAGE	High Temperatures & Pressures
FILLER	<div>P</div> <div>PD</div>
REINFORCEMENT	<div>I</div>



Carbon

USAGE	High Pressures
FILLER	<div>GD</div> <div>PD</div>



Aramid

USAGE	Abrasion
FILLER	<div>L</div> <div>PD</div>

Key

FILLER	
<div>P</div>	Pure
<div>L</div>	Lubricated increases flexibility and reduces wear
<div>PD</div>	PTFE Dispersion fills gaps between fibers to improve seal
<div>GD</div>	Graphite Dispersion fills gaps between fibers to improve seal at high temperatures

REINFORCEMENT	
<div>SC</div>	Silicone Core absorbs vibration to control leakage
<div>AC</div>	Aramid Corner enhances strength and abrasion resistance
<div>I</div>	Inconel Wire retains shape even in harsh environments

Sanitary Gaskets



PTFE

RESISTANT TO Chemicals & High Temperature

STYLE TC BS JP QL IL S5

TYPES T1 T2

GRADES Apple 3A Plus Spark

FILTER Dot



Viton

RESISTANT TO Chemicals

STYLE TC BS JP QL IL ID S5

TYPES T1 T2

GRADES Apple 3A Plus Spark

FILTER Screen Perforated Sock Orifice



Silicone

RESISTANT TO High Temperature

STYLE TC BS JP QL IL ID S5

TYPES T1 T2

GRADES Apple 3A Plus Spark

FILTER Screen Perforated Sock Orifice



EPDM

RESISTANT TO Water & Steam

STYLE TC BS JP QL IL ID S5

TYPES T1 T2 T3

GRADES Apple 3A Plus Spark

FILTER Screen Perforated Sock Orifice



Buna-N

RESISTANT TO Oils

STYLE TC BS JP QL IL S5

TYPES T1 T2

GRADES Apple 3A Spark

FILTER Screen Perforated Sock Orifice

Key

STYLE

- TC Tri-clamp
- BS Bevel Seat
- JP John Perry
- QL Q-Line
- IL I-Line
- ID ISO/DIN
- S5 Schedule 5

TYPE

- T1 Standard (Type 1)
- T2 Flanged (Type 2)
- T3 Envelope (Type 3)

GRADES

- Apple FDA meets FDA requirements for use with food and beverage
- 3A 3A certified for use with dairy, pharmaceutical, food and beverage
- Plus USP Class VI certified for use with medical devices
- Spark Clean Room cleaned and bagged in ISO Class 10,000 clean room

GRADES

- Screen Screen mesh for small particle filtration
- Perforated perforated plate for large particle filtration
- Sock extended sock shape retains more particles
- Orifice controls flow rates and pressure

Cam-and-Groove Hose Gaskets



USAGE Oils

TYPES   

GRADES   



USAGE Chemicals

STYLES    

GRADES   



USAGE Water & Steam

STYLES  

GRADES   



USAGE High Temperature

TYPES   

GRADES   



USAGE Refrigerants

TYPES 

GRADES 



USAGE High Temperature & Chemicals

TYPES 




GRADES 

Key

TYPE

-  **Standard**
-  **Envelope**
PTFE envelope enhances chemical and high temperature resistance
-  **Encapsulated**
FEP shell enhances chemical and high temperature resistance
-  **Extra Thick**
maintains tight seal even through extended use
-  **Screen**
screen embedded for additional filtering

GRADES

-  **Industrial**
-  **FDA**
made of FDA materials for use with food and beverage
-  **Metal Detectable**
broken fragments can be picked up by metal detection systems

Push-In Grommets

Available in AN931/MS35489 Sizes



SBR

RESISTANCE Abrasion

HARDNESS 50 - 90A

GRADES  



Buna-N

RESISTANCE Oils

HARDNESS 50 - 90A

GRADES  



Silicone

RESISTANCE High Temperature

HARDNESS 50 - 90A

GRADES  



EPDM

RESISTANCE Water & Steam

HARDNESS 50 - 90A


GRADES  



Viton

RESISTANCE Chemicals

HARDNESS 50 - 90A

GRADES  



Neoprene

RESISTANCE Refrigerants

HARDNESS 50 - 90A

GRADES  





FFKM

RESISTANCE High Temperatures & Chemicals

HARDNESS 70 - 90A

GRADES 

Key






- GRADES
-  **Industrial**
 -  **FDA**
made of FDA materials for use with food and beverage

Custom Molded Rubber





MATERIALS	DUROMETERS	SPECIFICATIONS	GRADES
BUNA-N	20-90	   	   
VITON	50-90	    	  
SILICONE	10-90	    	  
EPDM	20-90	   	  
NEOPRENE	30-90	 	  
POLYURETHANE	55-90	 	  
SBR	30-90	 	  
NR	30-90	 	  
FFKM	50-90	 	  
FLUROSILICONE	30-90	  	  
AFLAS	30-90	 	  
BUTYL	15-90	 	  
HNBR	30-90	 	  
XNBR	40-90	 	  
POLYACRYATE	40-90	 	  
POLYBUTADIENE	40-90	 	  
POLYISOPRENE	40-90	 	  
HYPALON	40-90	 	  
EPICHLOROHYDRIN	40-90	 	  

Key

SPECIFICATIONS

-  FDA - made of FDA materials for use with food and beverage
-  NSF (61, 372) - certified for use with drinking water
-  3A (18-03) - certified for use with dairy, pharmaceutical, food and beverage
-  USP (Class VI) - certified for use with medical devices
-  UL 94 (HB, V-2, V-1, V-0) - meets specification to prevent the spread of fire

GRADES

-  Metal Detectable - broken fragments can be picked up by metal detection systems
-  Internally Lubricated - makes installation easy and reduces drag
-  Electrically Conductive - conducts static electricity away to protect sensitive equipment
-  Heat Dissipating - reduces heat buildup

**ROHS, REACH, CA Prop 65 compliant compounds available

** Custom colors available

Tubing, Hose, Pipe & Fittings



Tubing



PVC

USAGE	Multipurpose
GRADE	
REINFORCED	



Silicone

USAGE	High Temperature
GRADE	
REINFORCED	



PTFE

USAGE	High Temperature and Chemicals
GRADE	
REINFORCED	



Polyurethane

USAGE	Abrasion
GRADE	
REINFORCED	



Nylon

USAGE	Air
GRADE	
REINFORCED	



Latex

USAGE	Flexible
GRADE	
REINFORCED	



FEP

USAGE	High Temperature and Chemicals
GRADE	
REINFORCED	



Viton

USAGE	High Temperature and Chemicals
GRADE	
REINFORCED	



Buna-N

USAGE	Oils
GRADE	
REINFORCED	



Neoprene

USAGE	Refrigerants
GRADE	
REINFORCED	



EPDM

USAGE	Water & Steam
GRADE	
REINFORCED	

Key

GRADES



Industrial



FDA

made of FDA materials for use with food and beverage



3A

certified for use with dairy, pharmaceutical, food and beverage



NSF

certified for use with drinking water



Laboratory

high purity formulation that is free of phthalates and DEHP



Fuel and Lubricant

resists swelling and hardening caused by petroleum-based fluids



DOT

meets SAE J44 for use in air brake systems

REINFORCED



Polyester Braid

withstands High Pressure



Stainless Steel Wire

withstands Vacuum Pressure

Push-to-Connect Tube Fittings

Tubing slides into fitting and is held in place by an internal gripping ring.

STRAIGHTS



Union Straight

SUBTYPE B R

TUBE SIZE in mm



Male Straight

THREAD TYPE NPT BSPT

TUBE SIZE in mm



Female Straight

THREAD TYPE NPT

TUBE SIZE in



Caps

TUBE SIZE in mm



Plugs

TUBE SIZE in mm

Materials

FITTINGS AVAILABLE

Nylon
for transfer of air

Polybutylene
for transfer of water and high humidity air

THREADS

Nickel-Plated Brass
for enhanced corrosion resistance

PTFE Thread Sealant
protects against leaks

ELBOWS



Union Elbow

SUBTYPE B R

TUBE SIZE in mm



Male 90° Elbow

THREAD TYPE NPT BSPT

TUBE SIZE in mm



Male 45° Elbow

THREAD TYPE NPT

TUBE SIZE in



Female 90° Elbow

THREAD TYPE NPT

TUBE SIZE in

WYES



Union Wye

TUBE SIZE in



Male Wye

THREAD TYPE NPT

TUBE SIZE in

Key

SUBTYPE

- B **Bulkhead**
used to pass connection through wall or panel
- R **Reducer**
connects tubing of different sizes

THREAD TYPE

- NPT **NPT Thread**
- BSPT **BSPT Thread**

TUBE SIZE

- in **Inch**
- mm **Metric**

TEES



Union Tee

SUBTYPE R

TUBE SIZE in mm



Male Branch Tee

THREAD TYPE NPT

TUBE SIZE in mm



Male Run Tee

THREAD TYPE NPT

TUBE SIZE in



Female Tee

THREAD TYPE NPT

TUBE SIZE in

CROSSES



Union Cross

TUBE SIZE in

MANIFOLDS



Manifold Union

TUBE SIZE in

Quick Disconnect Tube Fittings

Couplings easily connect and disconnect for applications where frequent line access is required.

SOCKETS



Hose Barb Straight

SUBTYPE BH



Compression End Straight

SUBTYPE BH



Male NPT Straight

Features

- Acetal Body**
moisture resistant
- 316 Stainless Steel Latch**
corrosion resistant
- Auto Shut-Off**
valve stops flow when the coupling is separated

Key

- SUBTYPE
- BH **Bulkhead**
used to pass connection through wall or panel

PLUGS



Hose Barb Straight

SUBTYPE BH



Compression End Straight

SUBTYPE BH



Male NPT Straight



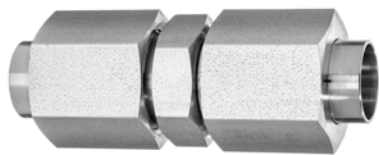
Hose Barb Elbow

Flared Tube Fittings

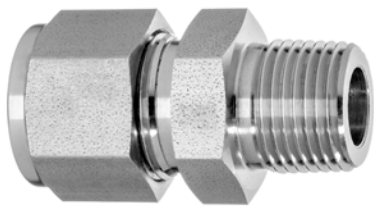
A sleeve bites into fluted tubing as you tighten the nut, which creates a seal that withstands extreme pressure.

STRAIGHTS

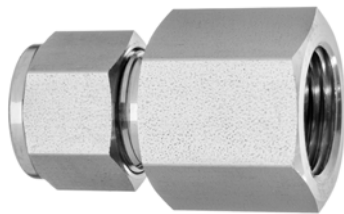
PLUGS & CAPS



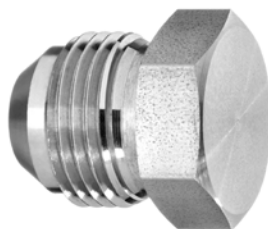
Union Straight



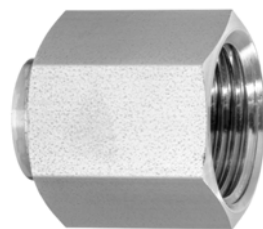
Male Straight



Female Straight



Plug



Cap

ELBOWS

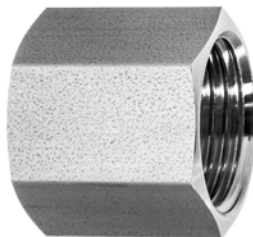
NUTS & SLEEVES



Male Elbow



Union Elbow



Nut



Sleeves

Material

304 Stainless Steel
Very good corrosion resistance

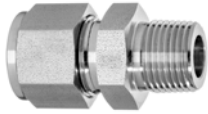
316 Stainless Steel
Excellent corrosion resistance

Brass
Good strength and corrosion resistance

Compression Tube Fittings

A single sleeve bites into tubing as you tighten the nut, which creates a strong seal.

STRAIGHTS




Male Straight



Male Elbow



Union Elbow



Male Branch Tee



Nut



Sleeves

Material

304 Stainless Steel

Very good corrosion resistance

316 Stainless Steel

Excellent corrosion resistance

Brass

Good strength and corrosion resistance

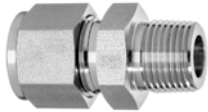
Zinc-Plated Steel

Excellent Strength

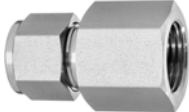
Instrumentation Tube Fittings

A nut with two sleeves gives these fittings extra gripping power and allows them to withstand higher pressures.

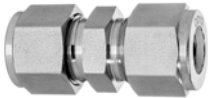
STRAIGHTS




Male Straight




Female Straight




Union Straight




Reducing Union Straight



Male Elbow



Female Elbow




Union Elbow


TEES




Male Branch Tee




Male Run Tee




Union Tee



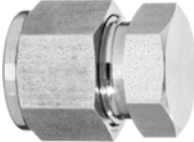
Nut



Sleeves



Plug



Cap

Sanitary Fittings

A highly polished interior makes these ultra-smooth and eliminates crevices where bacteria could grow.



TRI-CLAMP Allows for easy assembly and breakdown of process lines

Full line of gaskets available



Straights



90° Elbows



45° Elbows



Tees



45° Tees



Wyes



Crosses



Ferrules



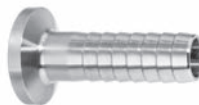
Tank Ferrules



Roll-on Ferrules



Pipe Adapters



Hose Adapters



Caps



Clamps

BUTT WELD Permanently welded in place

Polished and Unpolished finish available



Straights



90° Elbows



45° Elbows



Tees



Pipe Adapters



Hose Adapters



Caps

PROCESSING EQUIPMENT

Tri-Clamp and Butt Weld connections available



Ball Valves



Butterfly Valves



Sight Glass

Material

304 Stainless Steel
Very good corrosion resistance

316 Stainless Steel
Excellent corrosion resistance

Ultra-High Vacuum Fittings

Have a centering ring that allows these fittings to withstand ultra-high vacuum pressures.

Material

304 Stainless Steel

Very good corrosion resistance

STRAIGHTS



Straight Connector



Straight Reducer

ELBOWS



90° Elbows



45° Elbows

CLAMPS



Clamps

ADAPTERS



Male Adapters



Female Adapters



Butt Weld Adapters



Barbed Hose Adapters



Socket Connect Adapter

HOSE



Flexible Hose



Rigid Hose

CENTERING RINGS



Centering Ring



**Centering Ring
with Screen**

CAPS



Caps

Pipe Fittings & Nipples

Used in pipe systems to connect straight sections of pipe or tube, adapt to different sizes or shapes, and regulate flow.

All male threads are available with a pre-applied PTFE thread sealant to protect against leaks and save time in the field.



Key

CLASS

- 105** Class 150 for use in low pressure pipeline
- 3000** Class 3000 for use in high pressure pipeline

MATERIALS

- 304** 304 Stainless Steel very good corrosion resistance
- 316** 316 Stainless Steel excellent corrosion resistance
- BC** Black-Coated Steel excellent strength
- AL** Aluminium light weight and strong

SCHEDULE

- 40** Schedule 40 for use in low pressure pipeline
- 80** Schedule 80 for use in high pressure pipeline

STRAIGHTS



Coupling

CLASS 150 3000

MATERIALS 304 316 BC



Reducing Coupling

CLASS 150 3000

MATERIALS 304 316 BC



Half Coupling

CLASS 150 3000

MATERIALS 304 316 BC



Reducing Hex Bushing

CLASS 150

MATERIALS 304 316



Hex Nipple

CLASS 150

MATERIALS 304



Reducing Hex Nipple

CLASS 150

MATERIALS 304

TEES



Tee

CLASS 150 3000

MATERIALS 304 316 BC



Reducing Tee

CLASS 150 3000

MATERIALS 304 316



Elbow

CLASS 150 3000

MATERIALS 304 316 BC



Reducing Elbow

CLASS 150

MATERIALS 304 316



45° Elbow

CLASS 150 3000

MATERIALS 304 316 BC



Street Elbow

CLASS 150 3000

MATERIALS 304 316 BC



Locknut

CLASS 150

MATERIALS 304 316

CAPS AND PLUGS



Cap

CLASS 150 3000

MATERIALS 304 316 BC



Hex Socket Plug

CLASS 150

MATERIALS 304 316



Hex Head Plug

CLASS 150 3000

MATERIALS 304 316 BC



Square Head Plug

CLASS 150 3000

MATERIALS 304 316 BC



Close Nipple

CLASS 40 80

MATERIALS 304 316 AL



Nipple Threaded on Both Ends

CLASS 40 80

MATERIALS 304 316 AL



Nipple Threaded on One End

CLASS 40

MATERIALS 304 316

Pipe Flanges

Used in pipe systems to provide increased support for strength, block off a pipeline, or allow for attachment of more items.

AVAILABLE IN THE FOLLOWING PRESSURE CLASSES: 150, 300, 400, 600, 900, 1500 AND 2500



Slip On



Butt Weld



Socket Weld



Blind Cap



Lap Joint



Threaded



Ring Joint

Materials

304 Stainless Steel
very good corrosion resistance

316 Stainless Steel
excellent corrosion resistance

Carbon Steel
good strength and durability

Valves

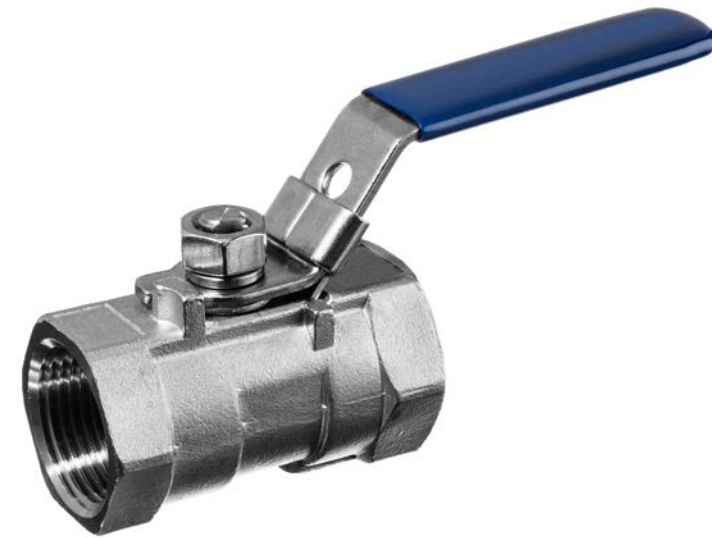
Used in pipe systems to regulate, direct or control the flow of fluid.



Standard Port Ball Valve

NO. OF PIECES 1

PRESSURE 1000 psi, 3000 psi



Full Port Ball Valve

NO. OF PIECES 2, 3

PRESSURE 1000 psi, 2000 psi

Key

MATERIALS

304 Stainless Steel
very good corrosion resistance

316 Stainless Steel
excellent corrosion resistance

Instrumentation Pipe Fittings

Used in pipe systems that require extreme working pressures and tight tolerances.

CAPS AND PLUGS



Cap



Hex Socket Plug



Hex Head Plug



Female Cross

CROSSES

All male threads are available with a pre-applied PTFE thread sealant to protect against leaks and save time in the field.



Key

MATERIALS

316 Stainless Steel
excellent corrosion resistance

Galvanized Steel
excellent strength

Brass
good strength and corrosion resistance

STRAIGHTS



Hex Coupling



Reducing Hex Coupling



Close Nipple



Hex Nipple



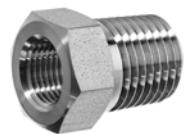
Reducing Hex Nipple



Adapter



Reducing Adapter



Reducing Hex Bushing

ELBOWS



Female Elbow



Male Elbow



Street Elbow



Female Tee



Male Tee



Branch Tee



Run Tee

TEES

Cam-and-Groove Hose Fittings

Meet A-A59326 / MIL-C-27487 Standards



316 Stainless Steel

USAGE Food and Chemicals



304 Stainless Steel

USAGE Food and Chemicals



Brass

USAGE Water



Aluminum

USAGE Air & Water



Polypropylene

USAGE Chemicals



Nylon

USAGE Chemicals & Abrasives

Fitting Type

A

Female NPT
x
Male Adapter



B

Female Coupler
x
Male NPT



C

Female Coupler
x
Hose Shank



D

Female Coupler
x
Female NPT



E

Male Adapter
x
Hose Shank



F

Male Adapter
x
Male NPT



DC

Female
Coupler



DP

Male
Adapter

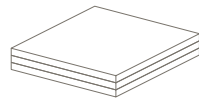




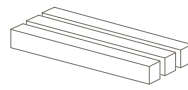
Raw Materials

Plastics

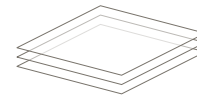
Sheets



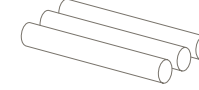
Bars



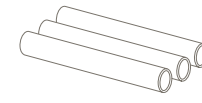
Films



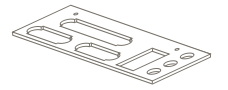
Rods



Tubes



Custom Shapes



MULTI-PURPOSE



Acetal

SPECS MET



UHMW Polyethylene

SPECS MET



HDPE

SPECS MET



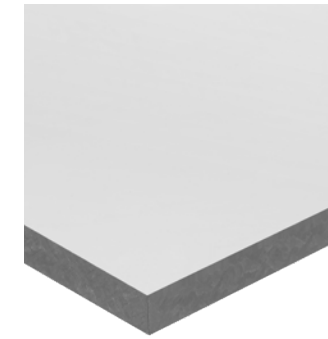
Nylon 6/6

SPECS MET



ABS

SPECS MET



PVC

SPECS MET

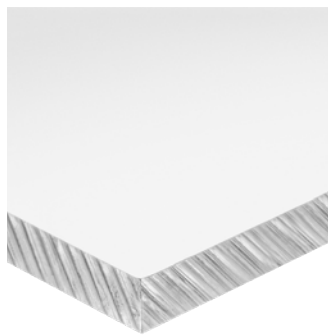


Polypropylene

SPECS MET

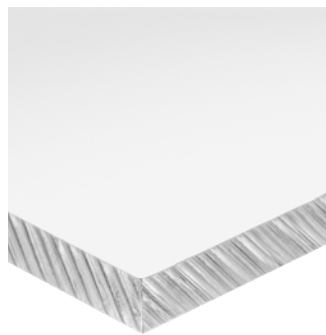


CLEAR



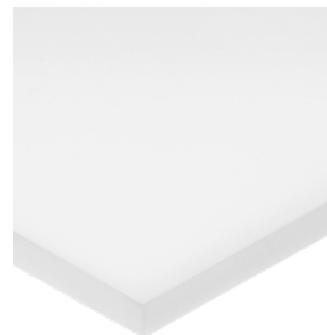
Cast Acrylic

SPECS MET



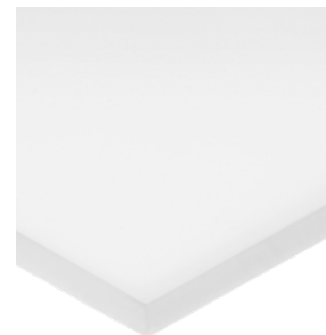
Polycarbonate

SPECS MET



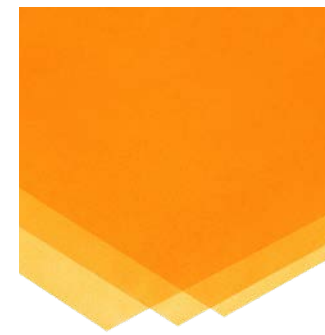
PTFE

SPECS MET



ePTFE

SPECS MET



Polyimide

SPECS MET



HIGH TEMPERATURE

Key

FDA

For use with food and beverage



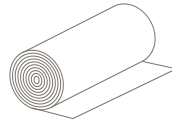
Fire Retardant

Meets UL flame extinguishing specifications to prevent the spread of fire.

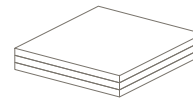


Rubber

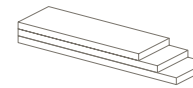
Rolls



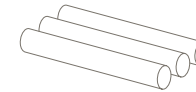
Sheets



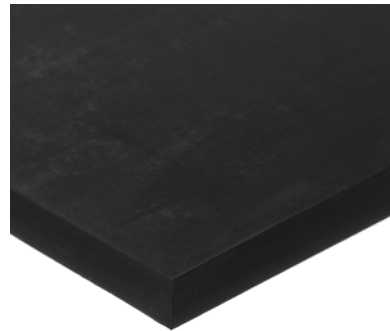
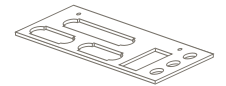
Strips





Cords



Custom Shapes




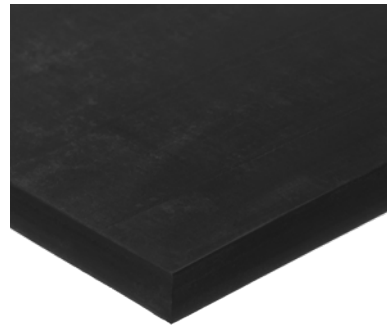
Neoprene

USAGE	Multipurpose
DUROMETER (HARDNESS)	40A / 50A / 60A / 70A
TENSILE STRENGTH (PSI)	1000 / 1500 / 2500
GRADE	  





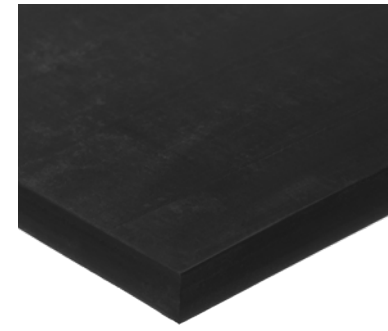
Silicone

USAGE	High Temperatures
DUROMETER (HARDNESS)	40A / 50A / 60A / 70A
TENSILE STRENGTH (PSI)	700 / 1000 / 1200
GRADE	



Buna-N

USAGE	Oils
DUROMETER (HARDNESS)	40A / 50A / 60A / 70A
TENSILE STRENGTH (PSI)	1000 / 1500 / 2500
GRADE	 



EPDM

USAGE	Weather
DUROMETER (HARDNESS)	40A / 50A / 60A / 70A
TENSILE STRENGTH (PSI)	1000 / 1800
GRADE	

Key

GRADES



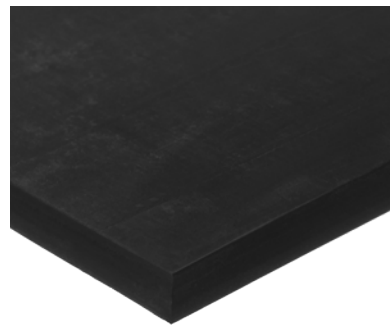
Food
made of FDA materials for use with food and beverage



Fabric Reinforced
fabric insert increases resistance to high stress and flex

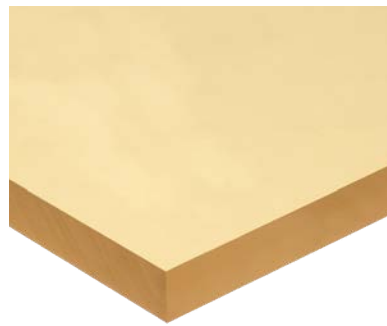


Non-Slip
crisscross texture provides a nonslip gripping surface



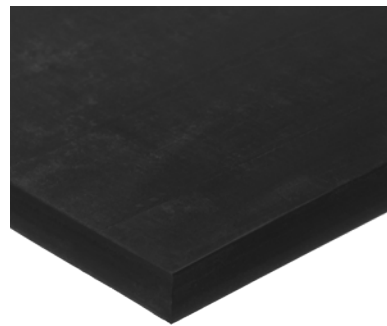
Viton

USAGE	Chemicals
DUROMETER (HARDNESS)	75A
TENSILE STRENGTH (PSI)	1000 / 1500



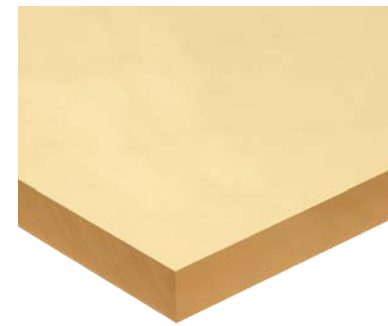
Polyurethane

USAGE	Wear Resistance
DUROMETER (HARDNESS)	60A
TENSILE STRENGTH (PSI)	3000



SBR

USAGE	Abrasion Resistance
DUROMETER (HARDNESS)	60A / 75A
TENSILE STRENGTH (PSI)	400 / 800 / 1000

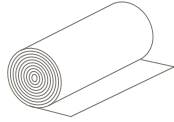


Natural Rubber

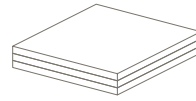
USAGE	Elastic
DUROMETER (HARDNESS)	40A
TENSILE STRENGTH (PSI)	3000

Foam

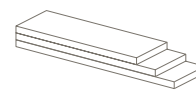
Rolls



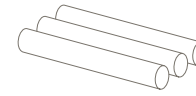
Sheets



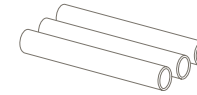
Strips



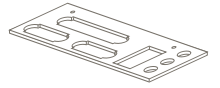
Cords



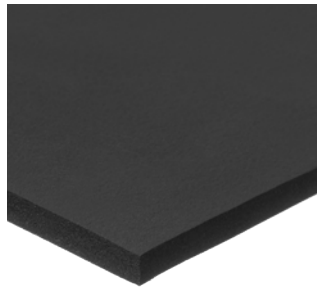
Tubes



Custom Shapes



SEALING & GASKETING



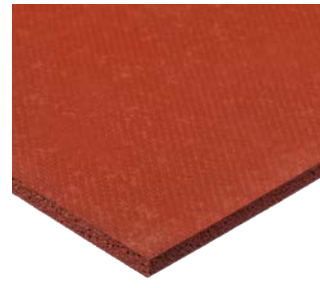
Neoprene

USAGE Multipurpose

FIRMNESS   

CELL TYPE  

GRADES 



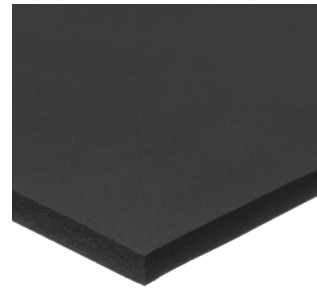
Silicone

USAGE High Temperatures

FIRMNESS   

CELL TYPE  

GRADES    

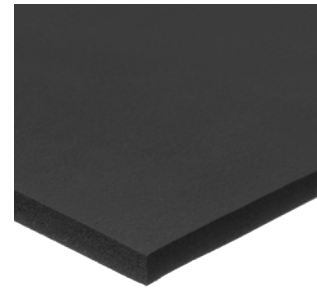


Buna-N

USAGE Oils

FIRMNESS  

CELL TYPE  

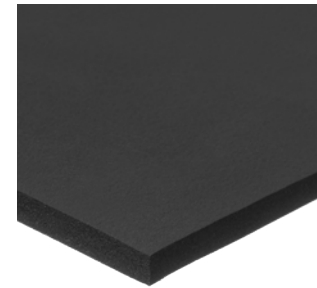


EPDM

USAGE Weather

FIRMNESS  

CELL TYPE  



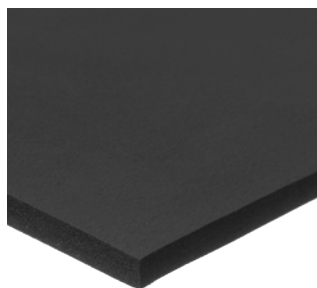
Viton

USAGE Chemicals

FIRMNESS 

CELL TYPE 

CUSHIONING & INSULATING

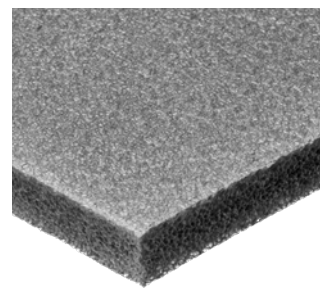


Polyurethane

FIRMNESS 

CELL TYPE 

GRADES    

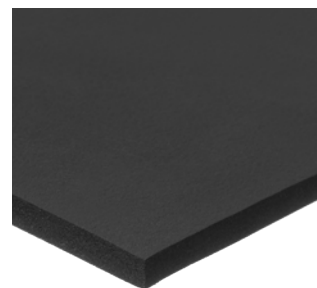


Polyethylene

FIRMNESS 

CELL TYPE 

GRADES 



EVA




FIRMNESS 

CELL TYPE 



GRADES 

Key

FIRMNESS

-  **Soft (3 – 8 psi)**
easier to compress for sealing at low pressures
-  **Medium (9 – 13 psi)**
-  **Firm (14+ psi)**
better suited for abrasion and higher pressures

CELL TYPE

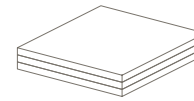
-  **Closed Cell**
prevents liquids and gases from passing through
-  **Open Cell**
allows liquids and gases to pass through

GRADES

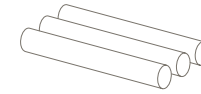
-  **Fire Retardant**
meets UL 94 specification to prevent the spread of fire
-  **Extended Life**
bounces back to shape even after extended compression
-  **Food Grade**
made of FDA materials for use with food and beverage
-  **Black**
colored black to blend in with equipment and machinery
-  **Antistatic**
conducts static electricity a way to protect sensitive equipment
-  **Memory**
excellent shock absorbing and vibration isolating properties
-  **Reticulated**
porous structure for use in filtering applications

Composites

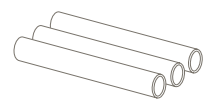
Sheets



Rods



Tubes



GAROLITE



Glass-Based

GRADES G10 FR4 G11 FR5 G7 G9



Cotton-Based

GRADES CE LE



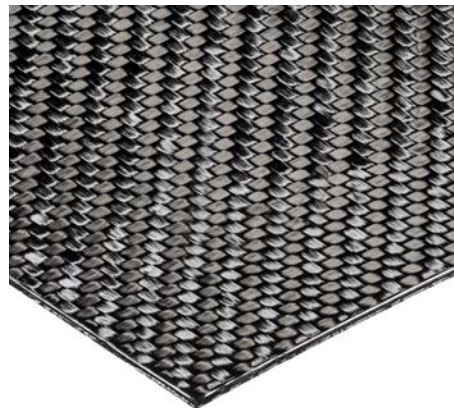
Paper-Based

GRADES XX XXX

CARBON FIBER



Unidirectional



Woven

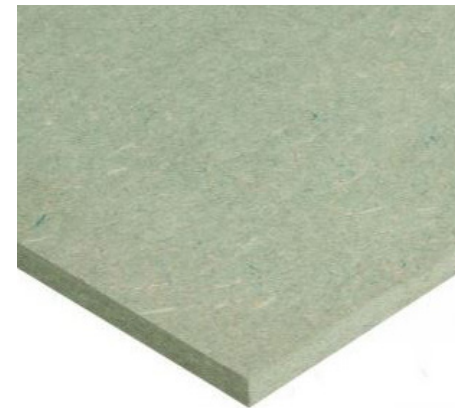
MEDIUM DENSITY FIBER BOARD



Standard



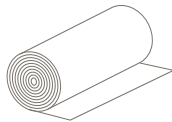
Fire Retardant



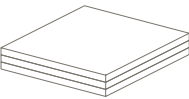
Moisture Resistant

Felt

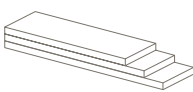
Rolls



Sheets



Strips



F1 Felt

VIBRATION ABSORPTION	High
ABRASION RESISTANCE	Excellent



F3 Felt

VIBRATION ABSORPTION	High
ABRASION RESISTANCE	Excellent



F5 Felt

VIBRATION ABSORPTION	Medium
ABRASION RESISTANCE	Good



F13 Felt

VIBRATION ABSORPTION	Low
ABRASION RESISTANCE	Fair