O-RING

GMORS OFFER EDI SERVICES

Electronic Data Interchange

In November 2019, GMORS established a B2B Electronic Data Interchange (EDI) platform in support of customer electronic data exchange. This will save transaction processing time for both parties and enable exchange process verification and data security.
We welcome customers who are interested in our EDI services to contact our customer support representatives.

O-Ring Master

GMORS O-Ring Master provides international standard size lookup for rubber sealing rings. With this APP, you can operate it without an internet connection. In addition to O-rings, you can also find the size of X-rings and reinforcement rings (back-up rings). You can also search for the appropriate O-ring based on the groove size of the installed cylinder.

Material Master

GMORS Material Master provides material recommendations based on the application environment of your rubber seal products, such as "temperature" and "media". We provide nearly a thousand types of media to compare the compatibility of materials.

Android

GET IT ON Google Play

iOS

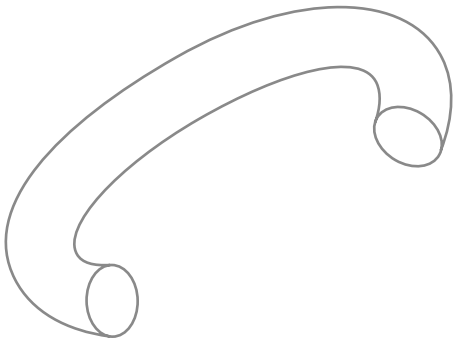
Available on the App Store

Android

GET IT ON Google Play

iOS

Available on the App Store



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About GMORS

GMORS- SEALS TO YOUR HEART !

GMORS Rubber- A company moving forward with continuous improvements. Servicing in Rubber industry for all kinds of application to fulfill a better world.

Welcome to GMORS Rubber!

Since 1986, GMORS has served as the leading rubber component manufacturer in Taiwan. Known for innovation and continuous improvements, GMORS products have been approved for industries of Automotive, Semi-conductor, Medical, Aerospace, Drinking Water, Food & Drug equipment, Sanitary and various industrial grades.

Marching into the 21th century, GMORS Rubber's commitment is to satisfy all industries with the optimum combination of competitive price, high quality and fast service. Our goal is to be your best global partner on rubber components.






Product Offerings

- O-Rings
- X-Rings
- Back-Up Rings
- U-Packings
- V-Seals
- Special Packing Series
- Wear Rings
- Bonded Seals
- Valve Seals
- Wiper Seals
- Hydraulic Seals
- Pneumatic Seals

Approved

Manufacturing Process System

- AS9100D (Aerospace industry approved)
- IATF 16949:2016
- ISO 9001:2015
- IS0 13485:2016 (Medical industry non-implantable approved)
- ISO 14001:2015
- ISO 45001:2018
- ISO/IEC 17025:2017(LAB TAF approved In-House Lab with Integrated Equipment)

38010-000

Testing Laboratory 0723

Material Certification

- NSF 61 (USA Drinking Water)
- NSF 42 (USA Drinking Water)
- WRAS (UK Drinking Water)
- ACS (France Drinking Water)
- W-270 (Germany Drinking Water)
- KTW (Germany Drinking Water)
- AS/NZS 4020 (Australian Drinking Water)
- USP VI (USA Biological Reactivity Test)
- UL 157 (Automotive, Gasoline)
- UL 1238 (Flammable Liquid Dispensing Devices)
- API 6A (H_2S Sour Gas Resistance)
- DIN EN 549 (Pipes, Gas Appliances)
- NORSOK M-710 (ISO 23936) (RGD Material Certified)
- NACE TM0297(RGD MaterialCertified)
- Total EP PVV 142 (Rapid Gas Decompression)
- RoHS 3 EU Directive 2015/863/EU
- REACH SVHC
- ADI FREE

Main Market

- General Industry
- Automotive
- Semi-conductor
- Drinking Water
- Food
- Hydraulic & Pneumatic
- Aerospace
- Oil & Gas
- Renewable Energy
- Medical
- Agriculture

ACM

Polyacrylate(ACM, PA)

Polyacrylates or simply acrylate rubbers are copolymers having two major components: the backbone (monomeric acid ester of alkyl or alkoxy) and the reactive curesite. ACMs have good resistance to high heat and oil which is better than NBRs. It also well resists oxygen and ozone even at high temperature, but is with poorer water and low temperature flexibility compared to NBRs. Special ACM can improve low temperature flexibility to -40°C (TR10 value) without reducing oil and heat resistance.

Cure system - Amine based & metal soaps Cured

Standard ACM compounds are Amine based and metal soaps combined to vulcanize.

Other Common Variations

- Polyacrylates usually are applied in automatic industry, especially in automatic transmission and steering fluids.

General Information	
ASTM D1418 Designation	ACM
ISO/DIN 1629 Designation	ACM
ASTM D2000 / SAE J 200 Codes	DF, DH, EH
Standard Color(s)	Black
Hardness Range	45 to 80 Shore A
Relative Cost	Medium-High

Service Temperatures	
Standard Low Temperature	-15°C 5°F
Standard High Temperature	150°C 302°F
Special Compound Low Temperature	-40°C -40°F
Special Compound High Temperature	175°C 347°F

Performs Well In...

- Mineral oils (transmission and steering fluids)
- Ozone, weather and hot air.

Doesn't Perform Well In...

- Alcohol
- Aromatics and chlorinated hydrocaebons
- Hot water and steam
- Acids, alkalis and amines
- Brake fluids

AEM

Ethylene/Acrylic elastomer(AEM, VAMAC®)

Ethylene/ acrylic elastomer is a copolymer of ethylene and methyl acrylate plus a small amount of a curesite monomer containing carboxylic acid groups. AEM is a tough, low-compression-set rubber with excellent resistance to high temperatures, hot mineral oil, fluids and weathering. The low temperature flexibility and mechanic properties are better than ACM, but it is not well resistant to low aniline oil (like ASTM No. 3 oil) and polar solvents. AEM is typically chosen for applications requiring improved performance versus Nitrile rubber, Neoprene or reduced cost versus higher-end elastomers such as HNBR, FKM. It also usually is applied in automatic industry.

Cure system - Amine-Cured

Standard AEM compounds are Amine based vulcanization system.

Other Common Variations

- AEM has good flexibility and good tear resistance, abrasion and compression set, and it usually is used in shaft lip seals especially in automatic transmission fluids.
- Special Vamac® compounds can improve oil resistance but will sacrifice some low temperature properties

Vamac® is a registered trademark of Celanese

General Information

ASTM D1418 Designation	AEM
ISO/DIN 1629 Designation	AEM
ASTM D2000 / SAE J 200 Codes	EE
Standard Color(s)	Black
Hardness Range	40 to 90 Shore A
Relative Cost	Medium-High

Service Temperatures

Standard Low Temperature	-30°C -22°F
Standard High Temperature	150°C 302°F
Special Compound Low Temperature	-40°C -40°F
Special Compound High Temperature	175°C 347°F

Performs Well In...

- Ozone, weather and hot air.
- Automatic transmission fluids (ATF) and Power steering fluids
- Water

Doesn't Perform Well In...

- Ketones
- Fuels
- Brake fluids

CR

Chloroprene Rubber(CR)

Chloroprene was one of the first successful synthetic elastomers in 1931 made by Dupont, and the trade name is Neoprene. It is prepared by emulsion polymerization of chloroprene, or 2-chlorobutadiene. CR is a multi-purposed elastomer which yields a balanced combination of properties. It has good resistance to sun, ozone, weather and performs well in contact with oils and many chemicals. It also displays outstanding physical toughness and good resistance to fire.

Cure system - Metal oxide cured

Standard CRs are metal oxides & organic accelerators.

Other Common Variations

- Chloroprene has been used in thousands of diverse environment, including automotive, wire and cable industries.
- CR is usually used in air condition system, especially old refrigerated media like R12 or R22 and lubricant with mineral oil.

General Information	
ASTM D1418 Designation	CR
ISO/DIN 1629 Designation	CR
ASTM D2000 / SAE J 200 Codes	BC, BE
Standard Color(s)	Black
Hardness Range	30 to 90 Shore A
Relative Cost	Low

Service Temperatures	
Standard Low Temperature	-40°C -40°F
Standard High Temperature	125°C 257°F
Special Compound Low Temperature	-55°C -67°F
Special Compound High Temperature	135°C 275°F

Performs Well In...

- Refrigerants
- Ammonia
- Water
- Silicone grease and oils
- High aniline point mineral oil

Doesn't Perform Well In...

- Aromatic hydrocarbons
- Ketones
- Esters
- Ethers
- Strong oxidizing acids
- Chlorinated hydrocarbons

ECO

Epichlorohydrin(CO, ECO, GECO)

Hydrin® is the trade name of epichlorohydrin elastomers made by Zeon Chemicals. epichlorohydrin elastomers are available as a homopolymer(CO), copolymer(ECO,GCO),and terpolmer(GECO). All epichlorohydrin rubbers offer low temperature flexibilities; resistance to oils, fuel and common solvents; higher temperature resistance than NBR; good weather ability and good dynamic properties.

Cure system - Sulfur-Cured vs. Peroxide-Cured

ECO are usually Peroxide-cured for standard compounds of Ge Mao. It also can be Sulfur-cured to improve flexible property in dynamic system but will reduce the heat resistance and cause poorer compression set.

Other Common Variations

- The typical applications of epichlorohydrin are fuels or LPG system in automotive.

Hydrin® is a registered trademark of Zeon Chemicals L.P.

General Information

ASTM D1418 Designation	CO, ECO GECO
ISO/DIN 1629 Designation	CO, ECO GECO
ASTM D2000 / SAE J 200 Codes	CH
Standard Color(s)	Black
Hardness Range	50 to 80 Shore A
Relative Cost	Medium

Service Temperatures

Standard Low Temperature	-40°C -40°F
Standard High Temperature	100°C 212°F
Special Compound High Temperature	135°C 275°F

Performs Well In...

- Mineral oil and grease
- LPG, fuels
- Silicone oil and grease
- Ozone, weather

Doesn't Perform Well In...

- Ketones and esters
- Aromatic and chlorinated hydrocarbon
- Brake fluids
- Aldehydes

EPDM

Ethylene Propylene Rubber(EPR, EPDM)

EPDM is a copolymer of ethylene and propylene, and further a terpolymer of ethylene and propylene with a small amount of a third monomer (usually a diolefin) to permit vulcanization with sulfur. Generally Ethylene Propylene Rubber possesses excellent resistance to ozone, sunlight and weathering, and has very good flexibility at low temperature, good chemical resistance (many dilute acids and alkalis, polar solvents), and good electrical insulation property.

Cure system - Sulfur-Cured vs. Peroxide-Cured

- Standard EPDMs are usually sulfur-cured. Sulfur-cured compounds offer better flexible properties but are more prone to hardening and poorer compression set with high temperature. Peroxide-cured EPDMs have better heat resistance and lower compression set. It complies with long time usage especially for hose system of construction industry, but at the same time is more expensive and more difficult for production than the sulfur-cured.

Other Common Variations

- EPDMs are often internally lubricated to improve ease of installation or reduce friction for dynamic applications.
- EPDMs can be formulated with only "white list" ingredients as specified in 21.CFR 177.2600 for use in applications where the elastomer will be in contact with food or beverages.
- EPDMs can be submitted for approval by the National Sanitation Foundation (NSF) for use in drinking water applications.
- EPDMs are usually used in automotive air conditioning system where R134a refrigerant gas and POE or PAG lubricant and new refrigerant for environment protection R744 is used. In R744 air conditioning system, it requires excellent resistance to explosive decompression in Carbon Dioxide at high pressure and high temperature.
- EPDMs are usually used in phosphate ester type hydraulic fluids.

General Information

ASTM D1418 Designation	EPM, EPDM
ISO/DIN 1629 Designation	EPM, EPDM
ASTM D2000 / SAE J 200 Codes	AA, BA CA, DA
Standard Color(s)	Black
Hardness Range	30 to 90 Shore A
Relative Cost	Low

Service Temperatures

Standard Low Temperature	-55°C -67°F
Standard High Temperature	125°C 257°F
Special Compound Low Temperature	-60°C -76°F
Special Compound High Temperature	150°C 302°F

Performs Well In...

- Alcohols
- Automotive brake fluid
- Ketones
- Dilute acids and alkalis
- Silicone oils & greases
- Steam to 400°F
- Water
- Phosphate ester based hydraulic fluids - Skydrol®
- Ozone, aging & weathering

Doesn't Perform Well In...

- Aliphatic & aromatic hydrocarbons
- Di-ester based lubricants
- Halogenated solvents
- Petroleum based oils & greases

FFKM

Perfluoroelastomers (FFKM)

Perfluoroelastomers(FFKM) contain fully fluorinated polymer chains and hence offer the ultimate performance of elastomers when considering heat and chemical resistance. Excellent resistance to fuels, all types of lubricating oils and greases, mineral-based and hydraulic fluids,solvents, alcohols, most acids and alkalis.

General Information

ASTM D1418 Designation	FFKM
ISO/DIN 1629 Designation	FFKM
ASTM D2000 / SAE J 200 Codes	KK
Standard Color(s)	Black
Hardness Range	60 to 95 Shore A
Relative Cost	Expensive

Service Temperatures

Standard Low Temperature	0°C 32°F
Standard High Temperature	250°C 482°F
Special Compound Low Temperature	-30°C -22°F
Special Compound High Temperature	315°C 599°F

Cure system - Peroxide-cured vs. Nitrile-cured

Standard FFKM are usually peroxide-cured. FFKM compounds with nitrile-cured have better heat resistance than the peroxide cured.

Other Common Variations

- FFKM has excellent resistance to high temperature, oil, solvent, flame,chemical and weather, and it is usually applied in semiconductor, chemical processing, aerospace and many industrials.
- FFKM can also be used in the oil and gas industry with highly aggressive media, high pressure, and in extreme temperature. They are resistant against rapid gas decompression as well.

Performs Well In...

- Hydrocarbons
- Alkilas
- Amines
- Lubricants
- Ketones/Esters/Ethers
- Ozone, weather and very high temperature air
- Acid (Organic and inorganic acids)
- Water/Steam
- Sour gas
- Aldehydes
- High vacuum

Doesn't Perform Well In...

- Fluorinated fluid

FKM

Fluorocarbon(FPM, FKM, Viton™)

Fluorocarbon is a well- known high performance rubber, and especially it has excellent resistance to high temperature, ozone, weather, oxygen, mineral oil, fuels, hydraulic fluids, aromatics and many organic solvents and chemicals.

Fluorine Content

Viton™ system gum like general type (A-TYPE, 66% fluorine), middle fluorine content type (B-, GBL-TYPE, 67~68.5% fluorine), high fluorine content type (F-, GF-TYPE,70% fluorine), improving low temperature flexibility type (GLT-, GFLT) and excellent resistance to more chemicals and solvents-- Viton™ ETP Extreme.
We also can supply excellent acid and alkali resistance parts made by AFLAS®.

Cure system Bisphenol cured vs. Peroxide-Cured

- Standard FKM compounds are Bisphenol cured. FKM compounds with peroxide-cured possess better acid solution resistance than the bisphenol cured. In Some lubricants adding a few organic amide or amine, choosing peroxide curing system Viton™ will be better than bisphenol curing system.

Other Common Variations

- FKM can also be submitted for approval to Underwriters Laboratories (UL) for use in applications as prescribed in UL157.
- FKM has excellent resistance to high temperature, oil, solvent, flame, chemical and weather, and it is usually applied in automotive, chemical processing, aerospace and many industrials.
- Viton™ GLT is broadly used in thermal range of -40°C to +250°C and it has outstanding resistance to aggressive HTS-type oils which are commonly used in aerospace industry.
- Viton™ ETP is usually applied in chemical industrial.
- In some fuels adding several methanol, Viton™ F and B-type are more usable than A-type especially F-type. If it requires lower temperature, GFLT and GBLT will be available .
- AFLAS® (TFE/propylene polymer) is better base and steam resistant than other general Vitons. It can be use in amine, amide and some bases.

Viton™ is a registered trademark of Chemours Fluoroelastomer.
AFLAS® is a registered trademark of AGC Chemicals.

General Information	
ASTM D1418 Designation	FKM
ISO/DIN 1629 Designation	FKM
ASTM D2000 / SAE J 200 Codes	HK
Standard Color(s)	Black
Hardness Range	50 to 95 Shore A
Relative Cost	High

Service Temperatures	
Standard Low Temperature	-26°C -14.8°F
Standard High Temperature	250°C 482°F
Special Compound Low Temperature	-40°C -40°F
Special Compound High Temperature	275°C 527°F

Performs Well In...

- Petroleum products
- Fuel or blend with methanol or ethanol
- Diesel or blend with biodiesel
- Mineral oil and grease
- Silicone oil and grease
- High vacuum
- Ozone, weather and very high temperature air
- Strong acid

Doesn't Perform Well In...

- Ketones
- Low molecular weight organic acids (formic and acetic acids)
- Superheat steam
- Low molecular weight esters and ethers.
- Phosphate ester based hydraulic fluids - Skydrol®

FVMQ

Fluorosilicone Rubber (FVMQ)

Fluorosilicone is like silicone rubber, bonding trifluoropropyl, methyl, and vinyl as side chains. The mechanical and physical properties are similar to VMQ. However, FVMQ offers improved fuel and mineral oil resistance, but poorer hot air resistance than standard VMQ.

Cure system - Peroxide-Cured

Standard FVMQ compounds are peroxide-cured.

Other Common Variations

- FVMQ offers excellent low-temperature flexibility and good resistance to fuel and aromatic mineral oil. It is usually applied in contact with jet and automotive fuels, most solvents, and engine oil especially in aerospace industry.
- FVMQ compounds meet MIL-R-25988 specification.

General Information

ASTM D1418 Designation	FVMQ
ISO/DIN 1629 Designation	FVMQ
ASTM D2000 / SAE J 200 Codes	FK
Standard Color(s)	Blue
Hardness Range	40 to 85 Shore A
Relative Cost	High

Service Temperatures

Standard Low Temperature	-60°C -76°F
Standard High Temperature	177°C 350.6°F
Special Compound Low Temperature	-65°C -85°F
Special Compound High Temperature	232°C 499.6°F

Performs Well In...

- Fuels
- Aromatic mineral oils
- Benzene, Toluene
- Ozone and weather

Doesn't Perform Well In...

- Brake Fluids
- Ketones
- Hydrazine

HNBR

Hydrogenated Nitrile Rubber(HNBR)

Hydrogenated Nitrile(HNBR) is a synthetic polymer that is obtained by saturating the double bonds in butadiene segments with hydrogen, and it is also called HSN(Highly Saturated Nitrile). This special hydrogenation process reduces lots of double bonds in main chains of NBR polymer, thus HNBR possesses superior heat, ozone, chemical resistance and mechanical characteristics over standard Nitrile.

Acrylonitrile Content

Same as NBR, there are different levels of Acrylonitrile (ACN) content in different HNBR polymers. The ACN content can be varied from 17% to 49%. Lower ACN content gives better low temperature properties but poorer fuels and polar lubricants. Higher ACN content gives poorer low temperature properties but improves fuels and polar lubricants resistance. Standard HNBRs typically have 36% ACN content.

Cure system - Peroxide-Cured

HNBRs are usually Peroxide-cured for standard compounds of Ge Mao. It also can be Sulfur-cured to improve flexible properties in dynamic system but will reduce the heat resistance and cause poorer compression set.

Other Common Variations

- HNBRs are often internally lubricated to improve ease of installation or reduce friction for dynamic applications.
- HNBRs can be formulated with only "white list" ingredients as specified in 21.CFR 177.2600 for use in applications where the elastomer will be in contact with food or beverages.
- HNBRs are usually used in automotive air conditioning system where R134a refrigerant gas or new refrigerant for environment protection like R401a, R404a, R410a, R507 and R744 is used.
- HNBRs are also used in automotive shaft system because of their excellent abrasion resistance.
- In deeper oil wells, it requires material resistance to heat, crude oil, hydrogen sulfide, steam and explosive decompressionetc. Special compounds of HNBR can be available for this application.

General Information

ASTM D1418 Designation	HNBR
ISO/DIN 1629 Designation	HNBR or NBM
ASTM D2000 / SAE J 200 Codes	CH, DF, DH
Standard Color(s)	Black Green
Hardness Range	50 to 90 Shore A
Relative Cost	High

Service Temperatures

Standard Low Temperature	-40°C -40°F
Standard High Temperature	150°C 302°F
Special Compound Low Temperature	-55°C -67°F
Special Compound High Temperature	165°C 329°F

Performs Well In...

- Petroleum based oils & fuels
- Aliphatic hydrocarbons
- Vegetable oils
- Silicone oils & greases
- Ethylene glycol
- Dilute acids, bases & salt solutions to moderate temperatures
- Water & steam to 150°C (302°F)

Doesn't Perform Well In...

- Chlorinated hydrocarbons
- Ketones
- Ethers
- Esters
- Strong acids

IIR

Butyl Rubber(IIR)

Butyl rubber is composed by copolymerizing isobutylene which is with small amount of isoprene. It is like EPDM possessing excellent resistance to chemical and polar fluid, outstanding electrical insulation and good ozone resistance. The special properties of butyl rubber are low gas and moisture permeability and high shock absorption. These properties have made butyl rubber the polymer choice in a variety of applications.

Cure system - Sulfur-Cured

Standard IIRs are sulfur-cured.

Other Common Variations

- IIRs can be formulated with only"white list" ingredients as specified in 21.CFR 177.2600 for use in applications where the elastomer will be in contact with food or beverages, ex. bottle top seal for alcohol or medical.

General Information

ASTM D1418 Designation	IIR, CIIR, BIIR
ISO/DIN 1629 Designation	IIR, CIIR, BIIR
ASTM D2000 / SAE J 200 Codes	AA, BA
Standard Color(s)	Black
Hardness Range	50 to 80 Shore A
Relative Cost	Low

Service Temperatures

Standard Low Temperature	-55°C -67°F
Standard High Temperature	100°C 212°F

Performs Well In...

- Alcohols
- Ketones
- Dilute acids and alkalis
- Silicone oils & greases
- Water and Steam
- Phosphate ester based hydraulic fluids - Skydrol®
- Ozone, aging & weathering

Doesn't Perform Well In...

- Aliphatic & aromatic hydrocarbons
- Halogenated solvents
- Petroleum based oils & greases

LSR

Liquid Silicone Rubber(LSR)

Liquid Silicone Rubber(LSRs) are low viscosity and high purity elastomers with two-part catalyzed silicone specifically designed for liquid injection molding. Each elastomer is supplied in a two-part kit (Part A and Part B), equal portions (by weight) of which must be thoroughly blended together prior to use. When blended and cured as indicated, the resulting elastomer consists of cross-linked dimethyl and methyl-vinyl siloxane copolymers and reinforcing silica.

Cure system - Platinum-Cured

Liquid Silicone Rubber(LSRs) are platinum-catalyzed, addition-cure products. This means no by-products and no release of substances that could impair odor or taste. And curing times are fast, too.

Other Common Variations

- Liquid Silicone Rubber are noted for their high transparency and excellent mechanical and electrical properties.
- Liquid Silicone Rubber applications are numerous, including the automotive, aerospace, appliance, medical, electrical and consumer industries.
- Liquid Silicone Rubber can be formulated with only "white list " ingredients as specified in 21.CFR 177.2600 for use in applications where the elastomer will be in contact with food or beverages.
- Liquid Silicone Rubber parts can be used in medical system which especially require compliance to USP CLASS VI.

General Information

ASTM D1418 Designation	Q, MQ, VMQ, PVMQ
ISO/DIN 1629 Designation	Q, MQ, VMQ, PVMQ
ASTM D2000 / SAE J 200 Codes	FC,FE,GE
Standard Color(s)	Transparent
Hardness Range	20 to 80 Shore A
Relative Cost	Medium

Service Temperatures

Standard Low Temperature	-55°C -67°F
Standard High Temperature	230°C 446°F

Performs Well In...

- Engine and transmission oil (mineral oils)
- Diluted salt solution
- Moderate water
- Dry heat
- Ozone, weather resistance

Doesn't Perform Well In...

- Concentrated acids and alkalis
- Steam over 120°C
- Petroleum oils and fuel
- Ketones

NBR

Nitrile Rubber (NBR)

Nitrile rubber, also known as NBR or Buna® N, is one of the most commonly used sealing elastomers due to its resistance to petroleum based fuels and lubricants and its relatively low price. Nitrile elastomers are copolymers of acrylonitrile and butadiene. There are a number of common variations of nitrile compounds.

Acrylonitrile Content

The acrylonitrile (ACN) content of the polymer chains can be varied from 18% to 50%. Lower ACN content gives better low temperature properties but poorer fuels and polar lubricants. Higher ACN content gives poorer low temperature properties but improved fuels and polar lubricants resistance. Standard NBRs typically have 34% ACN content.

Cure system - Sulfur-Cured vs. Peroxide-Cured

Standard Nitriles are usually sulfur-cured. Sulfur-cured compounds offer better low temperature properties but are more prone to hardening with high temperatures. Peroxide-cured nitriles have better heat resistance and lower compression sets but are more expensive and are more difficult to process.

Other Common Variations

- Nitriles are often internally lubricated to improve ease of installation or reduce friction for dynamic applications.
- Nitriles can be formulated with only "white list " ingredients as specified in 21.CFR 177.2600 for use in applications where the elastomer will be in contact with food or beverages.
- Nitriles can be submitted for approval by the National Sanitation Foundation (NSF) for use in drinking water applications.
- Nitriles can also be submitted for approval to Underwriters Laboratories (UL) for use in applications as prescribed in UL157.
- Nitrile rubber can be combined with polyvinyl chloride (PVC) to create fuel, ozone and weathering resistance NBR-PVC blends.

Buna® is a registered trademark of ARLANXEO.

General Information

ASTM D1418 Designation	NBR
ISO/DIN 1629 Designation	NBR
ASTM D2000 / SAE J 200 Codes	BF, BG BK, CH
Standard Color(s)	Black
Hardness Range	30 to 95 Shore A
Relative Cost	Low

Service Temperatures

Standard Low Temperature	-40°C -40°F
Standard High Temperature	100°C 212°F
Special Compound Low Temperature	-55°C -67°F
Special Compound High Temperature	135°C 275°F

Performs Well In...

- Petroleum based oils & fuels
- Aliphatic hydrocarbons
- Vegetable oils
- Silicone oils & greases
- Ethylene glycol
- Dilute acids
- Water to below 100°C (212°F)

Doesn't Perform Well In...

- Aromatic hydrocarbons
- Automotive brake fluid
- Chlorinated hydrocarbons
- Ketones
- Ethers
- Esters
- Phosphate ester hydraulic fluids
- Strong acids
- Ozone / weathering / sunlight

NR

Natural Rubber(NR)

Natural rubber is produced from the latex of the Hevea brasiliensis,and the chemical name of this polymer is polyisoprene. Polyisoprene also can be synthesized by polymerization from its monomer isoprene. Natural rubber possesses many excellent physical properties including high resilience and strength and good abrasion resistance. The defects are like SBR, having poor resistance to hydrocarbon oil and not suitable in UV, oxygen, ozone because of the double bond in the polymer backbone. But its poor weathering resistance can be modified by special additive.

Cure system - Sulfur-Cured

Standard NR compounds are sulfur-cured.

Other Common Variations

- NR is usually mixed with SBR and BR and applied in tire productions.

General Information	
ASTM D1418 Designation	NR
ISO/DIN 1629 Designation	NR
ASTM D2000 / SAE J 200 Codes	AA
Standard Color(s)	Black
Hardness Range	40 to 90 Shore A
Relative Cost	Low

Service Temperatures	
Standard Low Temperature	-50°C -58°F
Standard High Temperature	70°C 158°F

Performs Well In...

- Alcohols
- Organic acids

Doesn't Perform Well In...

- Ozone
- Petroleum oils
- Aromatic, aliphatic, or halogenated hydrocarbons

PU,AU,EU

Polyurethane(PU, AU, EU)

The millable Polyurethane rubbers are distinguished into two types; one is polyester urethane (AU), the other is polyether urethane (EU). AU type urethanes have outstanding oil, fuel and solvent resistance but can be attacked by hydrolysis, EU type urethanes are not attacked by hydrolysis and still offer a fuel and oil resistance comparable to low ACN (18~22% ACN) Nitriles or HNBRs. Any type polyurethane has excellent wear resistance, high tensile strength and high elasticity in comparison with any other elastomers.
We also can offer any type thermoplastic urethane (TPU).

As you know that polyester urethane (AU) exhibits an unique property of easily getting hydrolyzed, GMORS now no longer provides this product line.

Cure system - Peroxide-Cured

Standard PU compounds are peroxide-cured.

Other Common Variations

- Polyurethane usually is applied in mechanical industry, especially in the place where material must have higher wear resistance and higher strength.
- In some applying environment, moisture condensing will happen on the surface of rubber seal, and this will cause hydrolysis of AU so choosing EU is better. But EU does not resist oil very well, thus higher aniline point oil must be used for lubricant application.
- Appling in hydraulic system, TPU will be better than millable Polyurethane.

General Information

ASTM D1418 Designation	AU, EU
ISO/DIN 1629 Designation	AU, EU
ASTM D2000 / SAE J 200 Codes	BG
Standard Color(s)	Black Transparent
Hardness Range	60 to 95 Shore A
Relative Cost	Medium-High

Service Temperatures

Standard Low Temperature	-40°C -40°F
Standard High Temperature	80°C 176°F
Special Compound Low Temperature	-55°C -67°F
Special Compound High Temperature	100°C 212°F

Performs Well In...

- Aliphatic hydrocarbon
- Mineral oil and grease
- Silicone oil and grease
- Ozone
- Water up to 50°C (EU type)

Doesn't Perform Well In...

- Ketones
- Alcohols
- Esters
- Ethers
- Hot water and steam
- Alkalis, amines
- Acids
- Glycols

SBR

Styrene-Butadiene Rubber(SBR)

The most widely used synthetic rubber in the world is SBR, a copolymer of styrene and butadiene. SBR was also was called Buna® S (from the first trade name of Bayer). Where SBR rubber is used the most is in tire by blending it with natural rubber and butadiene rubber. SBR is weak and unusable without reinforcement by carbon black, but with carbon black it is strong and abrasion resistant. The defects of SBR are poor resistant to oil and not suitable in weathering, UV, oxygen, ozone because of the double bond in the polymer backbone.

Cure system - Sulfur-Cured

Standard SBR compounds are sulfur-cured.

Other Common Variations

- SBR is usually mixed with NR and BR and applied in tire productions.
- SBRs are mostly applied seals for non-mineral oil based brake fluid.

Buna® is a registered trademark of ARLANXEO.

General Information

ASTM D1418 Designation	SBR
ISO/DIN 1629 Designation	SBR
ASTM D2000 / SAE J 200 Codes	AA,BA
Standard Color(s)	Black
Hardness Range	40 to 90 Shore A
Relative Cost	Low

Service Temperatures

Standard Low Temperature	-55°C -67°F
Standard High Temperature	100°C 212°F

Performs Well In...

- Water
- Alcohol
- Silicone oil and grease
- Non-mineral oil based brake fluid
- Weak acids

Doesn't Perform Well In...

- Petroleum oils and fuels
- Aromatic, aliphatic, or halogenated hydrocarbons
- Strong acids
- Mineral oils

TPU

Thermoplastic Polyurethane (TPU)

Thermoplastic polyurethane (TPU) is an elastomer that is fully thermoplastic. Like all thermoplastic elastomers, TPU is elastic and melt-processable. Further, it can be processed on extrusion as well as injection, blow and compression molding equipment.
Thermopalstic polyurethane(TPU) is a unique category of plastic created when a polyaddition reaction occurs between a diisocyanate and one or more diols that results in high resilience, good compression set, plus resistance to impacts, abrasions, tears, weather, and even hydrocarbons. TPU offers flexibility without the use of plasticizers as well as a broad range of hardness and high elasticity. In fact, TPU bridges the material gap between rubbers and plastics.

General Information

Hardness Range	80 To 95 Shore A
Relative Cost	Medium-High

Service Temperatures

Standard Low Temperature	-35°C -31°F
Standard High Temperature	100°C 212°F

Other Common Variations

TPU have some common performance traits that set them apart from other plastic materials. These typically include:

- High abrasion resistance.
- Excellent low-temperature and impact strength.
- Resilience to oils, greases and numerous solvents.
- Good flexibility over a wide temperature range.
- Robust weather and high-energy radiation resistance.
- Suitability for bonding and welding.

Performs Well In...

- Diluted acids and alkaline solutions
- Mineral oil
- Ozone
- Aliphatic hydrocarbon
- Water up to 50°C
- lubricants

Doesn't Perform Well In...

- Ketones
- Esters
- Hot water and steam
- polar organic solvents
- Aromatic hydrocarbons
- Alkalis, amines
- Acids

VMQ

Silicone Rubber (MQ, VMQ, PVMQ)

Physically, silicones are based on silicon, an element derived from quartz. To create this class of synthetic elastomers, pendant organic groups such as methyl, phenyl and vinyl are attached to silicon atoms. The different addition of side chains can achieve significant variations in properties. Silicones have excellent heat, ozone and corona resistance, very well dielectric stability, and resistance to many oils, chemicals, and solvents. And for all elastomers, silicones possess the best flexible property at low temperature. But it also has some weakness like low tensile strength, poor tear and wear resistance.

Cure system - Peroxide-Cured vs. Platinum cured

Standard silicone compounds are usually peroxide-cured. Platinum-cured compounds offer better flexible properties and very low volatile matter. Platinum-cured silicones usually are applied in medical system or other required low volatile matter, but they need to be produced in clean room and higher cost of platinum catalyzer so they are more expensive than peroxide-cured ones.

Other Common Variations

- Silicones can be formulated with only "white list " ingredients as specified in 21.CFR 177.2600 for use in applications where the elastomer will be in contact with food or beverages.
- Silicones can be submitted for approval by the National Sanitation Foundation (NSF) for use in drinking water applications.
- Silicones are usually used in automotive system like boots, oil filter valve, gasket in light...etc.
- Silicone parts can be used in medical system which especially require compliance to USP CLASS VI.

General Information	
ASTM D1418 Designation	Q, MQ, VMQ, PVMQ,
ISO/DIN 1629 Designation	Q, MQ, VMQ, PVMQ,
ASTM D2000 / SAE J 200 Codes	FC, FE, GE,
Standard Color(s)	Rust
Hardness Range	20 to 90 Shore A
Relative Cost	Medium-High

Service Temperatures	
Standard Low Temperature	-60°C -76°F
Standard High Temperature	225°C 437°F
Special Compound Low Temperature	-100°C -148°F
Special Compound High Temperature	300°C 572°F

Performs Well In...

- Engine and transmission oil (mineral oils)
- Diluted salt solution
- Moderate water
- Dry heat
- Ozone, weather resistance

Doesn't Perform Well In...

- Concentrated acids and alkalis
- Steam over 120°C
- Petroleum oils and fuel
- Ketones

XNBR

Carboxylated Nitrile (XNBR)

Cabboxylated Nitrile is similar to Nitrile rubber, but the polymer backbone has been chemically modified with Carboxylic Acid containing group. This result is XNBR with more excellent abrasion and tear resistance than traditional NBR. For this reason, XNBR based parts are usually applied in dynamic assembly such as seals and rod wipers.

Cure system - Sulfur-Cured

Standard XNBR compounds are sulfur-cured.

General Information

ASTM D1418 Designation	XNBR
ISO/DIN 1629 Designation	XNBR
ASTM D2000 / SAE J 200 Codes	BG, BK, CH
Standard Color(s)	Black
Hardness Range	50 to 90 Shore A
Relative Cost	Low

Service Temperatures

Standard Low Temperature	-20°C -4°F
Standard High Temperature	100°C 212°F
Special Compound High Temperature	125°C 257°F

Performs Well In...

- Aliphatic hydrocarbon
- Vegetable and mineral oils and greases
- Diesel
- Water
- Dilute acids, alkali and salt solutions

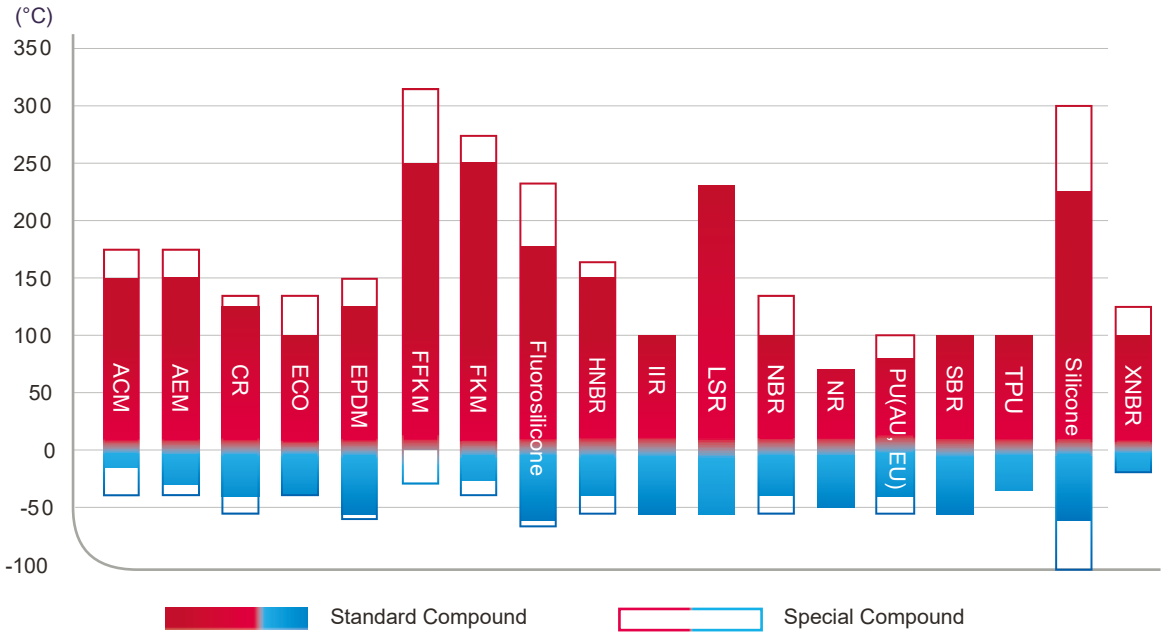
Doesn't Perform Well In...

- Aromatic hydrocarbon
- Chlorinated hydrocarbon
- Ketones
- Acetic acid
- Ethylene ester
- Strong acids
- Brake fluid with glycol base

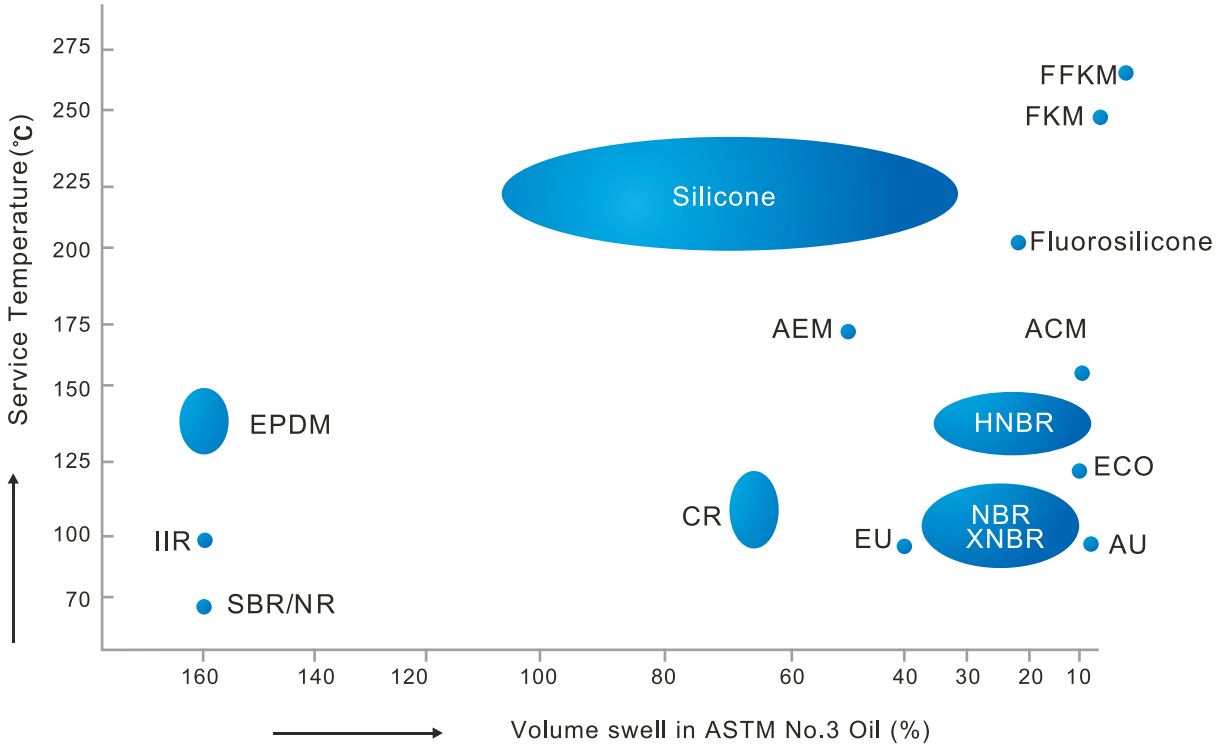
General Properties of Elastomers

Service Temperature Range Chart

This service temperature range is for reference only. In actual service environment, some specific compounds may not reach the maximum temperature as indicated in this chart. However, higher temperature may be attained if exposure is short period or intermittent.



Oil And Heat Resistance Comparison Chart



Elastomer Guidelines and Recommendations

General Properties of Elastomers

Elastomer Base	Durometer (Shore A)	General Recommendations
Butyle(IIR)	70	General ASTM D2000 M2BA710 B13 C12
Carboxylated Nitrile (XNBR)	70 70	General ASTM D2000 M2BG714 A14 B14 EO14 EO34 EF11 EF21 Internal lubrication (PTFE, Molysulfide, Erucamide)
Chloroprene Rubber (CR)	70 57 60	General ASTM M3BC710 A14 B14 EO14 EO34 F17 Electrical insulation 500v, 100m For UL94-V1 application
Epichlorohydrin (CO, ECO, GECO)	70	General M3CH710
Ethylene Propylene Rubber (EPR, EPDM)	70 70 70 70 70 70 70 70 70 70 75	General ASTM D2000 M3CA710 A25 B35 EA14 G11 General ASTM D2000 M3DA710 A26 B36 C32 EA14 F19 G21 Z1=Peroxide Internal Lubricant FDA 21 CRF177.2600 Class II spec. NSF61 approval. Peroxide Cured, Electric insulation General, ANTI-MICROBE Peroxide Cured, Coolant System Peroxide Cured, Brake System HFC-134A Plus PAG or POE Lubricant
Ethylene/ Acrylielastomer (AEM, VAMAC)	70	General ASTM D2000 M3EE710 A47 B46 EO16 EO36 F16 E1:ATF Dexron lll and l
Fluorocarbon (FPM, VITON, FKM)	75 90 75 75 75 75 75 75 75 75 75 95 75	General ASTM D2000 M2HK810 A1-10 B38 EF31 EO78 Z1=75+/- SHORE A. General ASTM D2000 M2HK910 A1-10 B38 EF31 EO78 EO88 FDA 21 CFR 177.2600 Internal Lubricant (PTFE, MOS2) AMS 7276, Mil-R-83248 Low Compression Set Viton GFLT for Chrysler MS-BZ832 Grade F. Viton F-type for Ford WSA-M2D401-A8 Viton GLT-type for Chrysler MS-BZ832 grade G Viton GF-type for Chrysler MS-BZ832 grade C Viton B-type for Chrysler MS-BZ832 grade B General meet F15 Low Temperature Anti Explosive Decompression (AED) GLT AMS-R-83485(Low Compression Set and Low Temperature)

General Properties of Elastomers

Elastomer Guidelines and Recommendations

General Properties of Elastomers

Elastomer Base	Durometer (Shore A)	General Recommendations
ETP	75	Viton ETP-type excellent oil, heat, chemical, solvent resistance
Fluorosilicone Rubber (FVMQ)	60	M25988/3 Type 1, Class 1, Grade 60
	70	M25988/1 Type 1, Class 1, Grade 70
	75	M25988/2 Type 1, Class 3, Grade 75
	80	M25988/4 Type 1, Class 1, Grade 80
Hydrogenated Nitrile Rubber (HNBR, HSN)	70	General ASTM D2000 M2DH710 A26 B16 EO16 Eo36 F17 Z1=Green color
	70	Ford WSH-M2D463-A
	70	FDA 21 CRF177.2600 Class II spec.
	70	Good fuel resistance and for adhesion metal seal.
	80	New Refrigerant for Environment Protection and HFC-134A
Natural Rubber (NR)	70	General ASTM D2000 M2AA710
	40	General ASTM D2000 M2AA410
Nitrile Rubber (NBR, BUNA-N)	70	General ASTM D2000 M2BG714 A14 B34 EA14 Ef11 EF21 EO14 EO34
	70	FDA 21 CFR177.2600 Class I
	70	40% Acn. Good fuel resistance.
	70	Internal lubricant (PTFE, Molysulfide, Wax)
	70	NBR/PVC blending, excellent ozone resistance, good fuel resistance.
	70	Higher heat resistance (M2CH714 A25 Eo15 EO35)
	70	18% Acn. Excellent low temperature resistance (-55°C)
	70	NSF61 approval.
	60	Insulation, resist to 2kv
	70	Non-nitosamine
Polyacrylate (ACM, PA)	70	General ASTM D2000 M2DH710 A26 B16 EO16 EO36 F13
	70	Improve low temperature flexibility
Polyurethane (PU, AU, EU)	70	Ether type-excellent water resistance, Ester type-excellent oil resistance.
	90	Ether type-excellent water resistance, Ester type-excellent oil resistance.
Silicone Rubber (MQ, VMQ, PVMQ)	70	General ASTM D2000 M2GE705 A19 B37 C12 Ea14 EO16 EO36 F19
	70	Meet FDA 21 CFR177.2600 Class II spec./NSF61 approval.
	70	ZZ-RP765E/ GEN,AMS 3340
	70	High heat resistance, service temperature -55°C~ +300°C
	70	Improve oil resistance
	70	USP Class VI
	60	UL 94-vo approval
Styrene-Butadiene Rubber (SBR)	70	General ASTM D2000 M2AA708

Fluid Compatibility Table

General Properties of Elastomers

COMPATIBILITY RATING
■ SATISFACTORY
● FAIR
(USUALLY OK FOR STATIC SEAL)
▲ DOUBTFUL
(SOMETIMES OK FOR STATIC SEAL)
✕ UNSATISFACTORY
— INSUFFICIENT DATA

	NITRILE(NBR)	EPDM	FLUOROCARBON(FKM)	NEOPRENE(CR)	POLYACRYLATE(ACM)	FLUOROSILICONE(FVMQ)	SILICONE
ACETALDEHYDE	▲	●	✕	▲	✕	✕	●
ACETAMIDE	■	■	▲	■	✕	■	●
ACETIC ACID,GLACIAL	●	●	✕	✕	✕	✕	●
HOT,HIGH PRESS	✕	▲	✕	✕	✕	✕	▲
5%	●	■	■	■	✕	●	■
ACETONE	✕	■	✕	✕	✕	✕	✕
ACETOPHENONE	✕	■	✕	✕	✕	✕	✕
ACETYLENE	■	■	■	●	—	—	●
AMMONIA,GAS,COLD	■	■	✕	■	✕	✕	■
GAS,HOT	✕	●	✕	●	✕	✕	■
LIQUID(ANHYDROUS)	●	■	✕	■	✕	✕	●
AMMONIUM HYDROXIDE,							
3 MOLAR	■	■	●	■	✕	■	■
CONCENTRATED	✕	■	▲	■	✕	■	■
AMYL ACETATE	✕	■	✕	✕	✕	✕	✕
ANDEROL,L-774(DI-ESTER)	●	✕	■	✕	●	●	✕
ANTIFREEZE	■	■	■	■	✕	—	■
ANILINE	✕	●	▲	✕	✕	▲	✕
ANSUL ETHER 161 OR 181	▲	▲	✕	✕	✕	▲	✕
AROCLOR,1248	▲	●	■	✕	✕	●	●
1254	✕	●	■	✕	✕	●	▲
1260	■	—	■	■	✕	■	■
ASKAREL	●	✕	■	✕	✕	●	✕
ASTM OIL NO.1	■	✕	■	■	■	■	■
NO.3	■	✕	■	✕	■	■	▲
ASTM REDERENCE FUEL A	■	✕	■	●	●	■	✕
B	■	✕	■	✕	✕	■	✕
C	●	✕	■	✕	✕	●	✕
D	●	✕	■	✕	✕	—	✕
AUTO. TRANSMISSION FLUID	■	✕	■	●	■	—	✕
BEER	■	■	■	■	✕	■	■
BENZALDEHYDE	✕	■	✕	✕	✕	✕	✕
BENZENE	✕	✕	■	✕	✕	■	✕
BENZINE	■	✕	■	●	■	■	✕
BENZOIC ACID	✕	✕	■	✕	✕	●	✕
BENZOPHENONE	—	●	■	—	✕	■	—
BENZYL ALCOHOL	✕	●	■	●	✕	●	—
BLEACH LIQUOR	✕	■	■	✕	✕	●	●
BORAX	●	■	■	✕	●	●	●
BORIC ACID	■	■	■	■	✕	■	■
BRAKE FLUID(NON-PETROLEUM)	▲	■	✕	●	—	✕	▲
BROMINE	✕	✕	■	✕	✕	●	✕
BROMOBENZENE	✕	✕	■	✕	✕	■	✕
BUNKER OIL	■	✕	■	✕	■	■	●
BUTANE	■	✕	■	■	■	■	✕
BUTTER-ANIMAL FAT	■	■	■	●	■	■	●
N-BUTYL ACETATE	✕	●	✕	✕	✕	✕	✕

	NITRILE(NBR)	EPDM	FLUOROCARBON(FKM)	NEOPRENE(CR)	POLYACRYLATE(ACM)	FLUOROSILICONE(FVMQ)	SILICONE
BUTYL ALCOHOL	■	●	■	■	✕	■	●
BUTYL AMINE OF N-BUT AMINE	▲	✕	✕	✕	✕	✕	●
BUTYL CARBITOL	✕	■	▲	▲	✕	✕	✕
BUTYL CELLOSOLVE	▲	●	✕	▲	✕	✕	—
BUTYRALDEHYD	✕	●	✕	✕	✕	✕	✕
CARBITOL	●	●	●	●	✕	●	●
CARBITOL ACETATE	✕	✕	■	✕	✕	—	✕
CARBON DISULFIDE	✕	✕	■	✕	▲	■	—
CARBON TETRACHLORIDE	●	✕	■	✕	✕	●	✕
CARBONIC ACID	●	■	■	■	■	■	■
CASTOR OIL	■	●	■	■	■	■	■
CELLOSOLVE	✕	●	✕	✕	✕	✕	✕
CHASSIS GREASE	■	✕	●	●	■	—	✕
CHLORACETIC ACID	✕	●	✕	✕	✕	✕	—
CHLORACETONE	✕	■	■	●	—	—	✕
CHLORODANE	●	✕	■	▲	—	●	✕
CHLORINE,DRY	✕	✕	■	✕	✕	■	✕
CHLORINE DIOXIDE	✕	▲	■	✕	✕	●	—
CHLORINE DIOXIDE,8% CL	✕	✕	■	✕	✕	●	—
AS NAC10 IN SOLUTION							
CHLORINE TRIFLUORIDE	✕	✕	✕	✕	✕	✕	✕
CHLORINE,WET	▲	●	■	✕	✕	●	—
CHLOROBENZOL	✕	✕	■	✕	✕	—	✕
CHLOROFORM	✕	✕	■	✕	✕	●	✕
CHLOROSULPHONIC ACID	✕	✕	✕	✕	✕	✕	✕
CHROME PLATING SOLUTIONS	✕	●	■	✕	✕	●	●
CHROMIC ACID,50%	✕	●	■	✕	✕	▲	▲
CITRIC ACID	■	■	■	■	—	■	■
COD LIVER OIL	■	■	■	●	■	■	●
COFFEE	■	■	■	■	✕	■	■
CORN OIL	■	▲	■	▲	■	■	■
CREOSOTE,COAL TAR	■	✕	■	●	■	■	✕
CREOSOTE OIL	■	✕	■	●	—	—	●
CREOSYLIC ACID	✕	✕	■	✕	✕	●	✕
CRUDE OIL	●	✕	■	✕	■	●	✕
CYCLOHEXANE	■	✕	■	▲	●	■	✕
CYCLOHEXNOL	■	✕	■	●	—	■	✕
DECALIN	✕	✕	■	✕	—	■	✕
DENATURED ALCOHOL	■	■	■	■	✕	■	■
DIACETONE	✕	■	✕	✕	✕	✕	✕
DIBUTYLAMINE	✕	✕	✕	▲	✕	✕	▲
DIBUTYL PHTHALATE	✕	●	▲	✕	✕	▲	—
DICHLORO ANILINE	✕	✕	●	✕	✕	—	✕
DICHLORO BUTANE	●	✕	■	✕	✕	●	✕
DIESEL OIL	■	✕	■	▲	■	■	✕
DIETHYLAMINE	●	●	✕	●	✕	✕	●
DIETHYL BENZENE	●	✕	■	✕	—	—	—

Fluid Compatibility Table

General Properties of Elastomers

COMPATIBILITY RATING
■ SATISFACTORY
● FAIR
(USUALLY OK FOR STATIC SEAL)
▲ DOUBTFUL
(SOMETIMES OK FOR STATIC SEAL)
✕ UNSATISFACTORY
— INSUFFICIENT DATA

	NITRILE(NBR)	EPDM	FLUOROCARBON(FKM)	NEOPRENE(CR)	POLYACRYLATE(ACM)	FLUOROSILICONE(FVMQ)	SILICONE
DIETHYLENE GLYCOL	■	■	■	■	✕	■	●
DIMETHYL ETHER	✕	✕	✕	▲	▲	▲	✕
DIMETHYL FORMAMIDE	✕	■	✕	—	—	—	■
DIMETHYL PHTHALATE	✕	■	■	✕	✕	—	—
DIMETHYL TEREPHTHALATE	✕	✕	■	✕	✕	—	✕
DIOCTYL PHTHALATE	✕	●	●	✕	✕	●	▲
DIOXANE	✕	●	✕	✕	✕	✕	✕
DIPHENYL	✕	✕	■	✕	✕	●	✕
DOW CORNING-550	■	■	■	■	■	■	▲
DOW GUARD	■	■	■	■	▲	■	■
DOWTHERM,A	✕	✕	■	✕	✕	●	✕
E	✕	✕	■	✕	✕	●	✕
ELCO 28-EP LUBRICANT	■	✕	■	▲	■	■	●
EPOXY RESINS	—	■	✕	■	—	—	—
ETHANE	■	✕	■	●	■	●	✕
ETHANOL	■	■	▲	■	✕	■	■
ETHANOL AMINE	●	●	✕	●	✕	✕	●
ETHYL ACETATE-ORGANIC ESTER	✕	●	✕	✕	✕	✕	●
ETHYL BENZENE	✕	■	■	✕	✕	■	✕
ETHYL CELLULOSE	●	●	✕	●	✕	✕	●
ETHYL CHLORIDE	■	■	■	■	▲	■	✕
ETHYL ETHER	▲	▲	✕	✕	✕	▲	✕
ETHYL FORMATE	✕	●	■	●	—	■	—
ETHYL HHEXANOL	■	■	■	■	✕	■	●
ETHYL MERCAPTAN	✕	▲	✕	●	—	—	▲
ETHYLENE CHLORIDE	✕	✕	■	✕	✕	—	✕
ETHYLENE OXIDE	✕	■	✕	✕	✕	—	✕
FORMALDEHYDE	▲	●	✕	▲	✕	✕	●
FORMIC ACID	●	■	✕	■	—	—	●
FREON 12	■	●	■	■	—	✕	✕
FUEL OIL	■	✕	■	●	■	■	✕
FURAN(FURFURAN)	✕	—	—	✕	✕	—	—
FURFURAL	✕	●	✕	✕	✕	—	✕
FURFURYL ALCOHOL	✕	●	—	✕	✕	✕	✕
FYRQUEL A60	✕	●	✕	✕	✕	✕	▲
GALLIC ACID	●	●	■	●	✕	■	—
GASOLINE	■	✕	■	✕	✕	■	✕
GELATIN	■	■	■	■	✕	■	■
GLUCOSE	■	■	■	■	—	■	■
GLYCERINE-GL YCEROL	■	■	■	■	✕	■	■
N-HEPTANE	■	✕	■	●	■	■	✕
N-HEXALDEHYDE	✕	■	✕	■	—	✕	●
N-HEXANE	■	✕	■	●	■	■	✕
HEXANOL	■	●	■	■	✕	—	■
HOME HEATING OIL	■	✕	■	●	■	—	■

	NITRILE(NBR)	EPDM	FLUOROCARBON(FKM)	NEOPRENE(CR)	POLYACRYLATE(ACM)	FLUOROSILICONE(FVMQ)	SILICONE
HYDRAZINE	●	■	—	●	—	—	●
HYDROCHLORIC ACID,							
3 MOLAR	▲	■	■	▲	●	●	✕
CONCENTRATED	✕	▲	■	✕	✕	▲	✕
HYDROCYANIC ACID	●	■	■	●	✕	●	▲
HYDROGEN PEROXIDE	●	■	■	■	✕	■	■
90%	✕	▲	■	✕	✕	●	●
HTDROGEN SULFIDE DRY,COLD	■	■	✕	■	✕	▲	▲
DRY,HOT	✕	■	✕	●	✕	▲	▲
WET,COLD	✕	■	✕	■	✕	▲	▲
WET,HOT	✕	■	✕	●	✕	▲	▲
HYDROQUINONE	▲	✕	●	✕	✕	●	—
HYPOID GEAR LUBE	■	✕	■	●	■	—	●
IODINE	●	●	■	✕	—	■	—
ISOCYANATE	—	—	■	—	—	—	—
ISO OCTANE	■	✕	■	●	■	■	✕
ISOPHORONE(KETONE)	✕	■	✕	✕	✕	✕	✕
ISOPAR	■	✕	■	■	■	—	✕
ISOPROPANOL	●	■	■	●	✕	●	■
ISOPROPYL ACETATE	✕	●	✕	✕	✕	✕	✕
JP-4(MIL-J-5624)	■	✕	■	✕	●	●	✕
JP-5(MIL-J-5624)	■	✕	■	✕	●	●	✕
KEROSINE	■	✕	■	●	■	■	✕
LACTIC ACID,COLD	■	■	■	■	✕	■	—
HOT	✕	✕	■	✕	✕	●	—
LACQUERS	✕	✕	✕	✕	✕	✕	✕
LARD,ANIMAL FAT	■	●	■	●	■	■	●
LINOLEIC ACID	●	✕	●	●	—	—	●
LINSEED OIL	■	▲	■	▲	■	■	■
LYE SOLUTIONS	●	■	●	●	✕	●	●
MALATHION	●	✕	■	—	—	●	✕
MALEIC ACID	✕	✕	■	✕	✕	—	—
MERCURY	■	■	■	■	—	—	—
METER-CRESOL	✕	✕	■	■	✕	—	✕
METHANE	■	✕	■	●	■	●	✕
METHANOL	■	■	✕	■	✕	■	■
METHYL ACETATE	✕	●	✕	●	✕	✕	✕
METHYLACRYLIC ACID	✕	●	▲	●	✕	✕	✕
METHYL CELLOSOLVE	▲	●	✕	▲	✕	✕	✕
METHYL CHLORIDE	✕	▲	■	✕	✕	●	✕
METHYL ETHYL KETONE(MEK)	✕	■	✕	✕	✕	✕	✕
MRTHYL MERCAPTAN	—	■	—	—	—	—	—
MILK	■	■	■	■	✕	■	■
MINERAL OILS	■	▲	■	●	■	■	●
MINERAL SPIRITS	■	✕	■	✕	■	—	✕
MONOVINYL ACETYLENE	■	■	■	●	—	—	●

Fluid Compatibility Table

General Properties of Elastomers

COMPATIBILITY RATING
■ SATISFACTORY
● FAIR
(USUALLY OK FOR STATIC SEAL)
▲ DOUBTFUL
(SOMETIMES OK FOR STATIC SEAL)
✕ UNSATISFACTORY
– INSUFFICIENT DATA

	NITRILE(NBR)	EPDM	FLUOROCARBON(FKM)	NEOPRENE(CR)	POLYACRYLATE(ACM)	FLUOROSILICONE(FVMQ)	SILICONE
MUSTARD	–	■	■	–	–	–	■
NAPHTHA	●	✕	■	✕	●	●	✕
NAPHTHALENE	✕	✕	■	✕	–	■	✕
NAPHTHENIC ACID	●	✕	■	✕	–	■	✕
NAYURAL GAS	■	✕	■	■	●	▲	■
NEATSFOOT OIL	■	●	■	✕	■	■	●
NITRIC ACID							
3 MOLAR	✕	●	■	✕	✕	▲	✕
CONCENTRATED	✕	✕	■	✕	✕	▲	✕
RED FUMING(RFNA)	✕	✕	●	✕	✕	✕	✕
INHIBITED RED FUMING(IRENA)	✕	✕	●	✕	✕	✕	✕
NITROBENZENE	✕	✕	●	✕	✕	✕	✕
NITROPROPANE	✕	●	✕	✕	✕	✕	✕
N-OCTANE	●	✕	■	✕	✕	●	✕
OCTANOL	■	■	■	■	✕	–	■
OLEIC ACID	▲	✕	●	✕	✕	–	✕
OLEUM(FUMING SULFURIC ACID)	✕	✕	■	✕	✕	–	✕
ORONITE 8200	●	✕	■	■	–	■	✕
OXALIC ACID	●	■	■	●	–	■	●
PEANUT OIL	■	▲	■	▲	■	■	■
PENTANE, 2 METHYL	■	✕	■	●	■	▲	✕
2-4,DIMETHYL	■	✕	■	●	■	▲	✕
3-METHYL	■	✕	■	●	■	▲	✕
PERCHLOROETHYLENE	●	✕	■	✕	✕	●	✕
PETROLEUM ETHER	✕	✕	■	✕	✕	–	✕
PHENOL	✕	✕	■	✕	✕	●	✕
PHENYLHYDRAZINE	✕	✕	■	✕	✕	–	–
PHOSPHORIC ACID							
3 MOLAR	✕	■	■	▲	–	●	●
CONCENTRATED	✕	●	■	✕	–	●	▲
PINE OIL	■	✕	■	✕	–	■	✕
POTASSIUM HYDROXIDE,50%	●	■	✕	●	✕	▲	▲
PROPANE	■	✕	■	●	■	●	✕
PROPANOL	■	■	■	■	✕	–	■
PROPYL ACETATE	✕	●	✕	✕	✕	✕	✕
PYDRAUL 10E,29ELT	✕	■	■	✕	✕	✕	✕
30E,50E,65E,90E	✕	■	■	✕	✕	■	■
115E	✕	■	■	✕	✕	▲	✕
230E,312C,540C	✕	✕	■	✕	✕	✕	✕
PYRANOL	■	✕	■	■	■	–	✕
PYRIDINE	✕	✕	✕	✕	✕	–	✕
RAPESEED OIL	●	■	■	●	●	■	✕
SAE10W30	■	✕	■	●	■	–	■
SEA(SALT) WATER	■	■	–	●	✕	■	■

COMPATIBILITY RATING
■ SATISFACTORY
● FAIR
(USUALLY OK FOR STATIC SEAL)
▲ DOUBTFUL
(SOMETIMES OK FOR STATIC SEAL)
✕ UNSATISFACTORY
– INSUFFICIENT DATA

	NITRILE(NBR)	EPDM	FLUOROCARBON(FKM)	NEOPRENE(CR)	POLYACRYLATE(ACM)	FLUOROSILICONE(FVMQ)	SILICONE
SILICONE GREASES	■	■	■	■	■	■	▲
SILVER NITRATE	●	■	■	■	■	■	■
SKELLY,SOLVENT B,C,E	■	✕	■	✕	–	■	–
SKYDROL	✕	■	■	✕	✕	–	✕
SKYDROL 500	✕	■	✕	✕	✕	▲	▲
SODIUM HYDROXIDE,3 MOLAR	●	■	●	●	✕	●	■
SOVASOL NO.1,2 AND 3	■	✕	■	●	●	■	✕
NO.73 AND 74	●	✕	■	●	●	■	✕
SOYBEAN OIL	■	▲	■	▲	■	■	■
STEARIC ACID	●	●	–	●	–	–	●
STODDARD SOLVENT	■	✕	■	●	■	■	✕
SUCROSE SOLUTIONS	■	■	■	●	✕	■	■
SULFURIC ACID							
3 MOLAR	✕	●	■	▲	●	▲	✕
CONCENTRATED	✕	✕	■	✕	✕	✕	✕
TALL OIL	■	✕	■	●	■	–	–
TANNIC ACID	■	■	■	●	✕	–	●
10%	■	■	■	■	✕	■	●
TAR,BITUMINOUS	●	✕	■	▲	✕	■	●
TARTARIC ACID	■	●	■	●	–	■	■
TETRACHOROETHANE	✕	✕	■	✕	✕	●	–
TETRALIN	✕	✕	■	✕	–	■	✕
TIDEWATER OIL-BEEDOL	■	✕	■	●	■	■	●
MULTIGEAR 140,EP LUBE	■	✕	■	●	■	■	✕
TOLUENE	✕	✕	■	✕	✕	●	✕
TRICHLOROETHYLENE	▲	✕	■	✕	✕	●	✕
TRIETHANOL AMINE	▲	●	✕	●	✕	✕	–
TURBINE OIL	■	✕	■	✕	■	■	✕
TURPENTINE	■	✕	■	✕	●	●	✕
UCDN 50HB 280X	■	■	■	■	–	–	■
UNIVIS J-43	■	✕	■	■	■	–	✕
VARNISH	●	✕	■	✕	✕	●	✕
VINEGAR	●	■	■	●	✕	▲	■
WATER	■	■	●	●	✕	■	■
WHEAT GERM OIL	■	✕	■	●	■	–	■
WHISKEY AND WINES	■	■	■	■	✕	■	■
WOOD OIL	■	✕	■	●	–	●	✕

Design Data: Extrusion Limit of O-Ring & Clearance Gap

The O-Ring is contained in the gland and forced to flow into the surface imperfections of the glands and any clearance gap available to it. So, O-Ring can perform sealing by means of squeeze under low-pressure conditions. However, as the pressure mounts, it becomes distorted. The distortion increases the strain, and the increased strain results in more tight sealing. Under high pressure, O-Ring would extrude out of the clearance gap. The extrusion will cause seal failure in a standard gland configuration.

An antiextrusion back-up ring, made of a tough, cut-resistant material such as leather, Teflon or hard rubber, is suggested. In static applications it may be possible to modify the gland design to withstand the higher pressure without the addition of a back-up ring. Anyway, care must be taken to make the extrusion as small as possible. The extent of this extrusion depends upon the hardness of O-Ring, pressure and clearance gap. Please refer to FIG 1, FIG 2 and TABLE 1.

FIG. 1

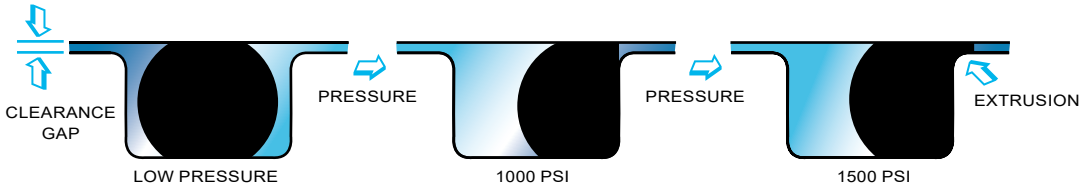
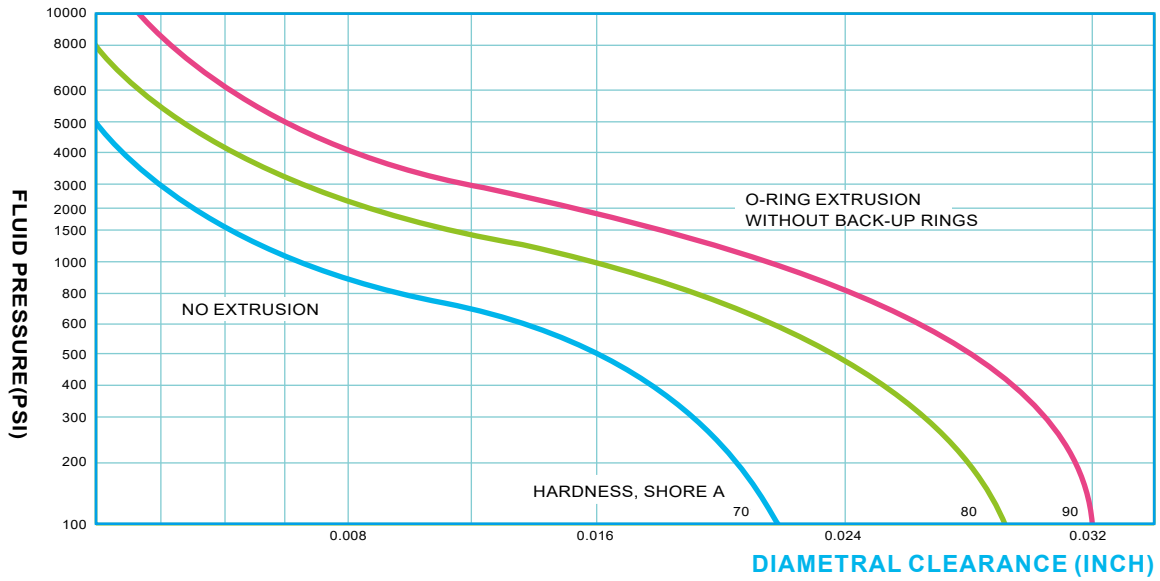


FIG.2: EXTRUSION LIMIT OF O-RING



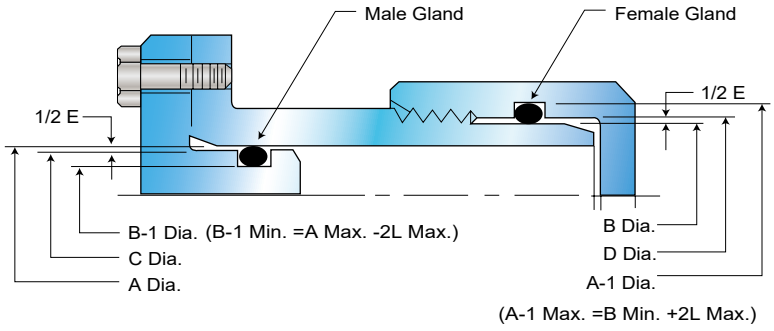
General Properties of Elastomers

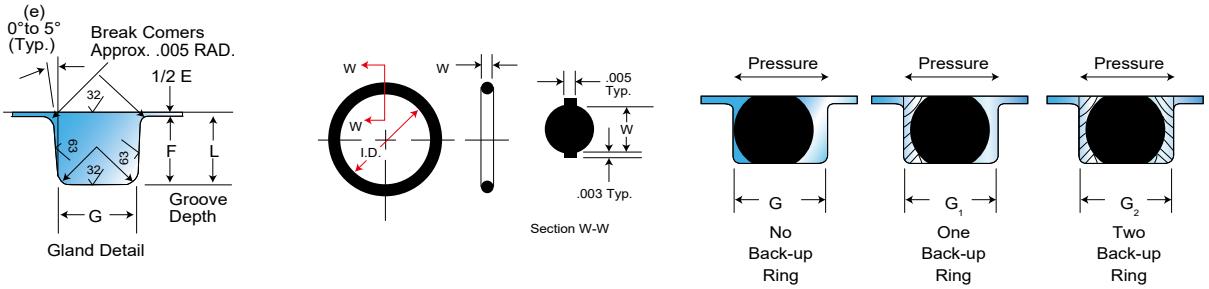
Table 1: Limit of the Diametral Clearance (Unit: Inch) Against Fluid Pressure

PRESSURE (PSI) / HARDNESS SHORE A	UP TO 500	500-1000	1000-1500	1500-2000	2000-3000
70	0.016	0.010	0.006	0.004	0.002
90	0.028	0.024	0.020	0.016	0.010

EXTRUSION HAPPENS BEYOND THE LIMIT OF DIAMETRAL CLEARANCE AGAINST FLUID PRESSURE.

Static O-Ring Sealing- Industrial Static Seal Glands





O-Ring Design Reference

Design- For Industrial O-Ring Static Seal Glands

O-Ring Size AS568	W Cross-Section		L Gland Depth	Squeeze		E(a) Diametral Clearance	G-Groove Width			R Groove Radius	Max Eccen-tricity(b)
	Nominal	Actual		Actual	%		No Back-up Ring(G)	One Back-up Ring(G1)	Two Back-up Ring(G2)		
004 through 050	1/16	.070 ±.003	.050 to .052	.015 to .023	22 to 32	.002 to .005	.093 to .098	.138 to .143	.205 to .210	.005 to .015	.002
102 through 178	3/32	.103 ±.003	.081 to .083	.017 to .025	17 to 24	.002 to .005	.140 to .145	.171 to .176	.238 to .243	.005 to .015	.002
201 through 284	1/8	.139 ±.004	.111 to .113	.022 to .032	16 to 23	.003 to .006	.187 to .192	.208 to .213	.275 to .280	.010 to .025	.003
309 through 395	3/16	.210 ±.005	.170 to .173	.032 to .045	15 to 21	.003 to .006	.281 to .286	.311 to .316	.410 to .415	.020 to .035	.004
425 through 475	1/4	.275 ±.006	.226 to .229	.040 to .055	15 to 20	.004 to .007	.375 to .380	.408 to .413	.538 to .543	.020 to .035	.005

(a) Clearance (extrusion gap) must be held to a minimum consistent with design requirements for temperature range variation.

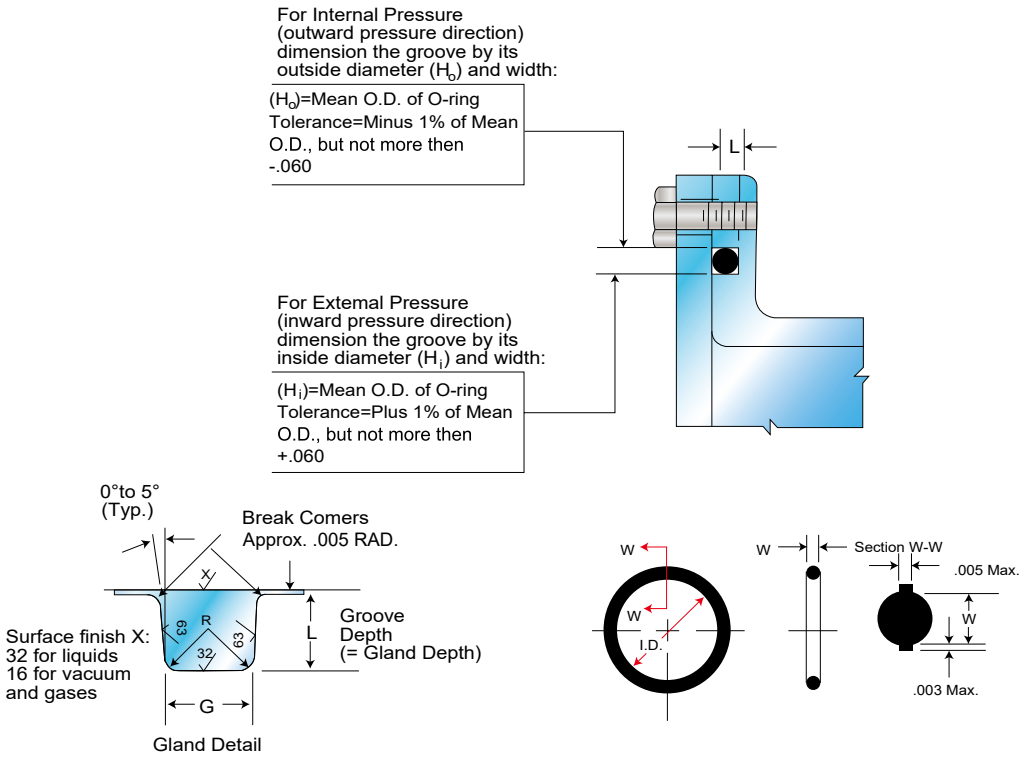
(b) Total indicator reading between groove and adjacent bearing surface.

(c) Reduce maximum diametral clearance 50% when using silicone or fluorosilicone O-rings.

(d) For ease of assembly, when Back-up Ring are used, gland depth may be increased up to 5%.

O-Ring Design Reference

Static O-Ring Sealing- Face Seal Glands



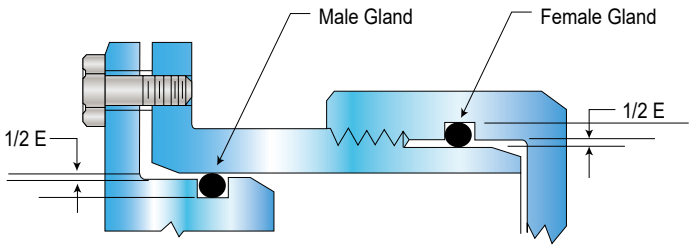
O-Ring Design Reference

Design- For Industrial O-Ring Static Seal Glands

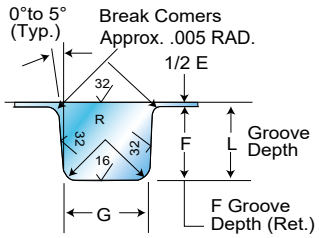
These dimensions are intended primarily for face type O-Ring seals and low temperature applications

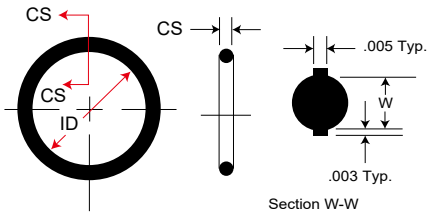
O-Ring Size AS568	W Cross-Section		L Gland Depth	Squeeze		G-Groove Width		R Groove Radius
	Nominal	Actual		Actual	%	Liquids	Vacuum and Gases	
004 through 050	1/16	.070 ±.003	.050 to .054	.013 to .023	19 to 32	.101 to .107	.084 to .089	.005 to .015
102 through 178	3/32	.103 ±.003	.074 to .080	.020 to .032	20 to 30	.136 to .142	.120 to .125	.005 to .015
201 through 284	1/8	.139 ±.004	.101 to .107	.028 to .042	20 to 30	.177 to .187	.158 to .164	.010 to .025
309 through 395	3/16	.210 ±.005	.152 to .162	.043 to .063	21 to 30	.270 to .290	.239 to .244	.020 to .035
425 through 475	1/4	.275 ±.006	.201 to .211	.058 to .080	21 to 29	.342 to .362	.309 to .314	.020 to .035
special	3/8	.275 ±.006	.276 to .286	.082 to .108	22 to 28	.475 to .485	.419 to .424	.030 to .045
special	1/2	.500 ±.008	.370 to .380	.112 to .138	22 to 27	.638 to 645	.560 to 565	.030 to .040

Static O-Ring Sealing- Industrial Static Seal Glands



Gland Detail





O-Ring Design Reference

Design- For Static Vacuum Seal Glands

O-Ring Size AS568	W Cross-Section		L Gland Depth	E Squeeze		Diametral Clearance	G Groove Width	R Groove Radius	Max* Eccen-tricity(b)
	Nominal	Actual		Actual	%				
004 through 050	1/16	.070 ±.003	.050 to .052	.015 to .023	22 to 32	.002 to .005	.093 to .098	.005 to .015	.002
102 through 178	3/32	.103 ±.003	.081 to .083	.017 to .025	17 to 24	.002 to .005	.140 to .145	.005 to .015	.002
201 through 284	1/8	.139 ±.004	.111 to .113	.022 to .032	16 to 23	.003 to .006	.187 to .192	.010 to .025	.003
309 through 395	3/16	.210 ±.005	.170 to .173	.032 to .045	15 to 21	.003 to .006	.281 to .286	.020 to .035	.004
425 through 475	1/4	.275 ±.006	.226 to .229	.040 to .055	15 to 20	.004 to .007	.375 to .380	.020 to .035	.005

*Total indicated reading between groove and adjacent bearing surface.

O-Ring Standard Size (AS 568)

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0001	1/32	3/32	1/32	0.029	0.004	0.040	0.003	0.74	0.10	1.02	0.08
A0002	3/64	9/64	3/64	0.042	0.004	0.050	0.003	1.07	0.10	1.27	0.08
A0003	1/16	3/16	1/16	0.056	0.004	0.060	0.003	1.42	0.10	1.52	0.08
A0004	5/64	13/64	1/16	0.070	0.005	0.070	0.003	1.78	0.13	1.78	0.08
A0005	3/32	7/32	1/16	0.101	0.005	0.070	0.003	2.57	0.13	1.78	0.08
A0006	1/8	1/4	1/16	0.114	0.005	0.070	0.003	2.90	0.13	1.78	0.08
A0007	5/32	9/32	1/16	0.145	0.005	0.070	0.003	3.68	0.13	1.78	0.08
A0008	3/16	5/16	1/16	0.176	0.005	0.070	0.003	4.47	0.13	1.78	0.08
A0009	7/32	11/32	1/16	0.208	0.005	0.070	0.003	5.28	0.13	1.78	0.08
A0010	1/4	3/8	1/16	0.239	0.005	0.070	0.003	6.07	0.13	1.78	0.08
A0011	5/16	7/16	1/16	0.301	0.005	0.070	0.003	7.65	0.13	1.78	0.08
A0012	3/8	1/2	1/16	0.364	0.005	0.070	0.003	9.25	0.13	1.78	0.08
A0013	7/16	9/16	1/16	0.426	0.005	0.070	0.003	10.82	0.13	1.78	0.08
A0014	1/2	5/8	1/16	0.489	0.005	0.070	0.003	12.42	0.13	1.78	0.08
A0015	9/16	11/16	1/16	0.551	0.007	0.070	0.003	14.00	0.18	1.78	0.08
A0016	5/8	3/4	1/16	0.614	0.009	0.070	0.003	15.60	0.23	1.78	0.08
A0017	11/16	13/16	1/16	0.676	0.009	0.070	0.003	17.17	0.23	1.78	0.08
A0018	3/4	7/8	1/16	0.739	0.009	0.070	0.003	18.77	0.23	1.78	0.08
A0019	13/16	15/16	1/16	0.801	0.009	0.070	0.003	20.35	0.23	1.78	0.08
A0020	7/8	1	1/16	0.864	0.009	0.070	0.003	21.95	0.23	1.78	0.08
A0021	15/16	1 1/16	1/16	0.926	0.009	0.070	0.003	23.52	0.23	1.78	0.08
A0022	1	1 1/8	1/16	0.989	0.010	0.070	0.003	25.12	0.25	1.78	0.08
A0023	1 1/16	1 3/16	1/16	1.051	0.010	0.070	0.003	26.70	0.25	1.78	0.08
A0024	1 1/8	1 1/4	1/16	1.114	0.010	0.070	0.003	28.30	0.25	1.78	0.08
A0025	1 3/16	1 5/16	1/16	1.176	0.011	0.070	0.003	29.87	0.28	1.78	0.08
A0026	1 1/4	1 3/8	1/16	1.239	0.011	0.070	0.003	31.47	0.28	1.78	0.08
A0027	1 5/16	1 7/16	1/16	1.301	0.011	0.070	0.003	33.05	0.28	1.78	0.08
A0028	1 3/8	1 1/2	1/16	1.364	0.013	0.070	0.003	34.65	0.33	1.78	0.08
A0029	1 1/2	1 5/8	1/16	1.489	0.013	0.070	0.003	37.82	0.33	1.78	0.08
A0030	1 5/8	1 3/4	1/16	1.614	0.013	0.070	0.003	41.00	0.33	1.78	0.08
A0031	1 3/4	1 7/8	1/16	1.739	0.015	0.070	0.003	44.17	0.38	1.78	0.08
A0032	1 7/8	2	1/16	1.864	0.015	0.070	0.003	47.35	0.38	1.78	0.08
A0033	2	2 1/8	1/16	1.989	0.018	0.070	0.003	50.52	0.46	1.78	0.08
A0034	2 1/8	2 1/4	1/16	2.114	0.018	0.070	0.003	53.70	0.46	1.78	0.08
A0035	2 1/4	2 3/8	1/16	2.239	0.018	0.070	0.003	56.87	0.46	1.78	0.08
A0036	2 3/8	2 1/2	1/16	2.364	0.018	0.070	0.003	60.05	0.46	1.78	0.08
A0037	2 1/2	2 5/8	1/16	2.489	0.018	0.070	0.003	63.22	0.46	1.78	0.08
A0038	2 5/8	2 3/4	1/16	2.614	0.020	0.070	0.003	66.40	0.51	1.78	0.08
A0039	2 3/4	2 7/8	1/16	2.739	0.020	0.070	0.003	69.57	0.51	1.78	0.08
A0040	2 7/8	3	1/16	2.864	0.020	0.070	0.003	72.75	0.51	1.78	0.08
A0041	3	3 1/8	1/16	2.989	0.024	0.070	0.003	75.92	0.61	1.78	0.08
A0042	3 1/4	3 3/8	1/16	3.239	0.024	0.070	0.003	82.27	0.61	1.78	0.08
A0043	3 1/2	3 5/8	1/16	3.489	0.024	0.070	0.003	88.62	0.61	1.78	0.08
A0044	3 3/4	3 7/8	1/16	3.739	0.027	0.070	0.003	94.97	0.69	1.78	0.08
A0045	4	4 1/8	1/16	3.989	0.027	0.070	0.003	101.32	0.69	1.78	0.08
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0046	4 1/4	4 3/8	1/16	4.239	0.030	0.070	0.003	107.67	0.76	1.78	0.08
A0047	4 1/2	4 3/8	1/16	4.489	0.030	0.070	0.003	114.02	0.76	1.78	0.08
A0048	4 3/4	4 7/8	1/16	4.739	0.030	0.070	0.003	120.37	0.76	1.78	0.08
A0049	5	5 1/8	1/16	4.989	0.037	0.070	0.003	126.72	0.94	1.78	0.08
A0050	5 1/4	5 3/8	1/16	5.239	0.037	0.070	0.003	133.07	0.94	1.78	0.08
A0051	5 1/2	5 5/8	1/16	5.489	0.037	0.070	0.003	139.42	0.94	1.78	0.08
A0052	5 3/4	5 7/8	1/16	5.739	0.037	0.070	0.003	145.77	0.94	1.78	0.08
A0053	6	6 1/8	1/16	5.989	0.037	0.070	0.003	152.12	0.94	1.78	0.08
A0054	6 1/4	6 3/8	1/16	6.239	0.040	0.070	0.003	158.47	1.02	1.78	0.08
A0055	6 1/2	6 5/8	1/16	6.489	0.040	0.070	0.003	164.82	1.02	1.78	0.08
A0102	1/16	1/4	3/32	0.049	0.005	0.103	0.003	1.24	0.13	2.62	0.08
A0103	3/32	9/32	3/32	0.081	0.005	0.103	0.003	2.06	0.13	2.62	0.08
A0104	1/8	5/16	3/32	0.112	0.005	0.103	0.003	2.84	0.13	2.62	0.08
A0105	5/32	11/32	3/32	0.143	0.005	0.103	0.003	3.63	0.13	2.62	0.08
A0106	3/16	3/8	3/32	0.174	0.005	0.103	0.003	4.42	0.13	2.62	0.08
A0107	7/32	13/32	3/32	0.206	0.005	0.103	0.003	5.23	0.13	2.62	0.08
A0108	1/4	7/16	3/32	0.237	0.005	0.103	0.003	6.02	0.13	2.62	0.08
A0109	5/16	1/2	3/32	0.299	0.005	0.103	0.003	7.59	0.13	2.62	0.08
A0110	3/8	9/16	3/32	0.362	0.005	0.103	0.003	9.19	0.13	2.62	0.08
A0111	7/16	5/8	3/32	0.424	0.005	0.103	0.003	10.77	0.13	2.62	0.08
A0112	1/2	11/16	3/32	0.487	0.005	0.103	0.003	12.37	0.13	2.62	0.08
A0113	9/16	3/4	3/32	0.549	0.007	0.103	0.003	13.94	0.18	2.62	0.08
A0114	5/8	13/16	3/32	0.612	0.009	0.103	0.003	15.54	0.23	2.62	0.08
A0115	11/16	7/8	3/32	0.674	0.009	0.103	0.003	17.12	0.23	2.62	0.08
A0116	3/4	15/16	3/32	0.737	0.009	0.103	0.003	18.72	0.23	2.62	0.08
A0117	13/16	1	3/32	0.799	0.010	0.103	0.003	20.29	0.25	2.62	0.08
A0118	7/8	1 1/16	3/32	0.862	0.010	0.103	0.003	21.89	0.25	2.62	0.08
A0119	15/16	1 1/8	3/32	0.924	0.010	0.103	0.003	23.47	0.25	2.62	0.08
A0120	1	1 3/16	3/32	0.987	0.010	0.103	0.003	25.07	0.25	2.62	0.08
A0121	1 1/16	1 1/4	3/32	1.049	0.010	0.103	0.003	26.64	0.25	2.62	0.08
A0122	1 1/8	1 5/16	3/32	1.112	0.010	0.103	0.003	28.24	0.25	2.62	0.08
A0123	1 3/16	1 3/8	3/32	1.174	0.012	0.103	0.003	29.82	0.30	2.62	0.08
A0124	1 1/4	1 7/16	3/32	1.237	0.012	0.103	0.003	31.42	0.30	2.62	0.08
A0125	1 5/16	1 1/2	3/32	1.299	0.012	0.103	0.003	32.99	0.30	2.62	0.08
A0126	1 3/8	1 9/16	3/32	1.362	0.012	0.103	0.003	34.59	0.30	2.62	0.08
A0127	1 7/16	1 5/8	3/32	1.424	0.012	0.103	0.003	36.17	0.30	2.62	0.08
A0128	1 1/2	1 11/16	3/32	1.487	0.012	0.103	0.003	37.77	0.30	2.62	0.08
A0129	1 9/16	1 3/4	3/32	1.549	0.015	0.103	0.003	39.34	0.38	2.62	0.08
A0130	1 5/8	1 13/16	3/32	1.612	0.015	0.103	0.003	40.94	0.38	2.62	0.08
A0131	1 11/16	1 7/8	3/32	1.674	0.015	0.103	0.003	42.52	0.38	2.62	0.08
A0132	1 3/4	1 15/16	3/32	1.737	0.015	0.103	0.003	44.12	0.38	2.62	0.08
A0133	1 13/16	2	3/32	1.799	0.015	0.103	0.003	45.69	0.38	2.62	0.08
A0134	1 7/8	2 1/16	3/32	1.862	0.015	0.103	0.003	47.29	0.38	2.62	0.08
A0135	1 15/16	2 1/8	3/32	1.925	0.017	0.103	0.003	48.90	0.43	2.62	0.08
A0136	2	2 3/16	3/32	1.987	0.017	0.103	0.003	50.47	0.43	2.62	0.08
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0137	2 1/16	2 1/4	3/32	2.050	0.017	0.103	0.003	52.07	0.43	2.62	0.08
A0138	2 1/8	2 5/16	3/32	2.112	0.017	0.103	0.003	53.64	0.43	2.62	0.08
A0139	2 3/16	2 3/8	3/32	2.175	0.017	0.103	0.003	55.25	0.43	2.62	0.08
A0140	2 1/4	2 7/16	3/32	2.237	0.017	0.103	0.003	56.82	0.43	2.62	0.08
A0141	2 5/16	2 1/2	3/32	2.300	0.020	0.103	0.003	58.42	0.51	2.62	0.08
A0142	2 3/8	2 9/16	3/32	2.362	0.020	0.103	0.003	59.99	0.51	2.62	0.08
A0143	2 7/16	2 5/8	3/32	2.425	0.020	0.103	0.003	61.60	0.51	2.62	0.08
A0144	2 1/2	2 11/16	3/32	2.487	0.020	0.103	0.003	63.17	0.51	2.62	0.08
A0145	2 9/16	2 3/4	3/32	2.550	0.020	0.103	0.003	64.77	0.51	2.62	0.08
A0146	2 5/8	2 13/16	3/32	2.612	0.020	0.103	0.003	66.34	0.51	2.62	0.08
A0147	2 11/16	2 7/8	3/32	2.675	0.022	0.103	0.003	67.95	0.56	2.62	0.08
A0148	2 3/4	2 15/16	3/32	2.737	0.022	0.103	0.003	69.52	0.56	2.62	0.08
A0149	2 13/16	3	3/32	2.800	0.022	0.103	0.003	71.12	0.56	2.62	0.08
A0150	2 7/8	3 1/16	3/32	2.862	0.022	0.103	0.003	72.69	0.56	2.62	0.08
A0151	3	3 3/16	3/32	2.987	0.024	0.103	0.003	75.87	0.61	2.62	0.08
A0152	3 1/4	3 7/16	3/32	3.237	0.024	0.103	0.003	82.22	0.61	2.62	0.08
A0153	3 1/2	3 11/16	3/32	3.487	0.024	0.103	0.003	88.57	0.61	2.62	0.08
A0154	3 3/4	3 15/16	3/32	3.737	0.028	0.103	0.003	94.92	0.71	2.62	0.08
A0155	4	4 3/16	3/32	3.987	0.028	0.103	0.003	101.27	0.71	2.62	0.08
A0156	4 1/4	4 7/16	3/32	4.237	0.030	0.103	0.003	107.62	0.76	2.62	0.08
A0157	4 1/2	4 11/16	3/32	4.487	0.030	0.103	0.003	113.97	0.76	2.62	0.08
A0158	4 3/4	4 15/16	3/32	4.737	0.030	0.103	0.003	120.32	0.76	2.62	0.08
A0159	5	5 3/16	3/32	4.987	0.035	0.103	0.003	126.67	0.89	2.62	0.08
A0160	5 1/4	5 7/16	3/32	5.237	0.035	0.103	0.003	133.02	0.89	2.62	0.08
A0161	5 1/2	5 11/16	3/32	5.487	0.035	0.103	0.003	139.37	0.89	2.62	0.08
A0162	5 3/4	5 15/16	3/32	5.737	0.035	0.103	0.003	145.72	0.89	2.62	0.08
A0163	6	6 3/16	3/32	5.987	0.035	0.103	0.003	152.07	0.89	2.62	0.08
A0164	6 1/4	6 7/16	3/32	6.237	0.040	0.103	0.003	158.42	1.02	2.62	0.08
A0165	6 1/2	6 11/16	3/32	6.487	0.040	0.103	0.003	164.77	1.02	2.62	0.08
A0166	6 3/4	6 15/16	3/32	6.737	0.040	0.103	0.003	171.12	1.02	2.62	0.08
A0167	7	7 3/16	3/32	6.987	0.040	0.103	0.003	177.47	1.02	2.62	0.08
A0168	7 1/4	7 7/16	3/32	7.237	0.045	0.103	0.003	183.82	1.14	2.62	0.08
A0169	7 1/2	7 11/16	3/32	7.487	0.045	0.103	0.003	190.17	1.14	2.62	0.08
A0170	7 3/4	7 15/16	3/32	7.737	0.045	0.103	0.003	196.52	1.14	2.62	0.08
A0171	8	8 3/16	3/32	7.987	0.045	0.103	0.003	202.87	1.14	2.62	0.08
A0172	8 1/4	8 7/16	3/32	8.237	0.050	0.103	0.003	209.22	1.27	2.62	0.08
A0173	8 1/2	8 11/16	3/32	8.487	0.050	0.103	0.003	215.57	1.27	2.62	0.08
A0174	8 3/4	8 15/16	3/32	8.737	0.050	0.103	0.003	221.92	1.27	2.62	0.08
A0175	9	9 3/16	3/32	8.987	0.050	0.103	0.003	228.27	1.27	2.62	0.08
A0176	9 1/4	9 7/16	3/32	9.237	0.055	0.103	0.003	234.62	1.40	2.62	0.08
A0177	9 1/2	9 11/16	3/32	9.487	0.055	0.103	0.003	240.97	1.40	2.62	0.08
A0178	9 3/4	9 15/16	3/32	9.737	0.055	0.103	0.003	247.32	1.40	2.62	0.08
A0179	10	10 3/16	3/32	9.987	0.055	0.103	0.003	253.67	1.40	2.62	0.08
A0201	3/16	7/16	1/8	0.171	0.005	0.139	0.004	4.34	0.13	3.53	0.10
A0202	1/4	1/2	1/8	0.234	0.005	0.139	0.004	5.94	0.13	3.53	0.10
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0203	5/16	9/16	1/8	0.296	0.005	0.139	0.004	7.52	0.13	3.53	0.10
A0204	3/8	5/8	1/8	0.359	0.005	0.139	0.004	9.12	0.13	3.53	0.10
A0205	7/16	11/16	1/8	0.421	0.005	0.139	0.004	10.69	0.13	3.53	0.10
A0206	1/2	3/4	1/8	0.484	0.005	0.139	0.004	12.29	0.13	3.53	0.10
A0207	9/16	13/16	1/8	0.546	0.007	0.139	0.004	13.87	0.18	3.53	0.10
A0208	5/8	7/8	1/8	0.609	0.009	0.139	0.004	15.47	0.23	3.53	0.10
A0209	11/16	15/16	1/8	0.671	0.009	0.139	0.004	17.04	0.23	3.53	0.10
A0210	3/4	1	1/8	0.734	0.010	0.139	0.004	18.64	0.25	3.53	0.10
A0211	13/16	1 1/16	1/8	0.796	0.010	0.139	0.004	20.22	0.25	3.53	0.10
A0212	7/8	1 1/8	1/8	0.859	0.010	0.139	0.004	21.82	0.25	3.53	0.10
A0213	15/16	1 3/16	1/8	0.921	0.010	0.139	0.004	23.39	0.25	3.53	0.10
A0214	1	1 1/4	1/8	0.984	0.010	0.139	0.004	24.99	0.25	3.53	0.10
A0215	1 1/16	1 5/16	1/8	1.046	0.010	0.139	0.004	26.57	0.25	3.53	0.10
A0216	1 1/8	1 3/8	1/8	1.109	0.012	0.139	0.004	28.17	0.30	3.53	0.10
A0217	1 3/16	1 7/16	1/8	1.171	0.012	0.139	0.004	29.74	0.30	3.53	0.10
A0218	1 1/4	1 1/2	1/8	1.234	0.012	0.139	0.004	31.34	0.30	3.53	0.10
A0219	1 5/16	1 9/16	1/8	1.296	0.012	0.139	0.004	32.92	0.30	3.53	0.10
A0220	1 3/8	1 5/8	1/8	1.359	0.012	0.139	0.004	34.52	0.30	3.53	0.10
A0221	1 7/16	1 11/16	1/8	1.421	0.012	0.139	0.004	36.09	0.30	3.53	0.10
A0222	1 1/2	1 3/4	1/8	1.484	0.015	0.139	0.004	37.69	0.38	3.53	0.10
A0223	1 5/8	1 7/8	1/8	1.609	0.015	0.139	0.004	40.87	0.38	3.53	0.10
A0224	1 3/4	2	1/8	1.734	0.015	0.139	0.004	44.04	0.38	3.53	0.10
A0225	1 7/8	2 1/8	1/8	1.859	0.018	0.139	0.004	47.22	0.46	3.53	0.10
A0226	2	2 1/4	1/8	1.984	0.018	0.139	0.004	50.39	0.46	3.53	0.10
A0227	2 1/16	2 3/8	1/8	2.109	0.018	0.139	0.004	53.57	0.46	3.53	0.10
A0228	2 1/4	2 1/2	1/8	2.234	0.020	0.139	0.004	56.74	0.51	3.53	0.10
A0229	2 3/8	2 5/8	1/8	2.359	0.020	0.139	0.004	59.92	0.51	3.53	0.10
A0230	2 1/2	2 3/4	1/8	2.484	0.020	0.139	0.004	63.09	0.51	3.53	0.10
A0231	2 5/8	2 7/8	1/8	2.609	0.020	0.139	0.004	66.27	0.51	3.53	0.10
A0232	2 3/4	3	1/8	2.734	0.024	0.139	0.004	69.44	0.61	3.53	0.10
A0233	2 7/8	3 1/8	1/8	2.859	0.024	0.139	0.004	72.62	0.61	3.53	0.10
A0234	3	3 1/4	1/8	2.984	0.024	0.139	0.004	75.79	0.61	3.53	0.10
A0235	3 1/8	3 3/8	1/8	3.109	0.024	0.139	0.004	78.97	0.61	3.53	0.10
A0236	3 1/4	3 1/2	1/8	3.234	0.024	0.139	0.004	82.14	0.61	3.53	0.10
A0237	3 3/8	3 5/8	1/8	3.359	0.024	0.139	0.004	85.32	0.61	3.53	0.10
A0238	3 1/2	3 3/4	1/8	3.484	0.024	0.139	0.004	88.49	0.61	3.53	0.10
A0239	3 5/8	3 7/8	1/8	3.609	0.028	0.139	0.004	91.67	0.71	3.53	0.10
A0240	3 3/4	4	1/8	3.734	0.028	0.139	0.004	94.84	0.71	3.53	0.10
A0241	3 7/8	4 1/8	1/8	3.859	0.028	0.139	0.004	98.02	0.71	3.53	0.10
A0242	4	4 1/4	1/8	3.984	0.028	0.139	0.004	101.19	0.71	3.53	0.10
A0243	4 1/8	4 3/8	1/8	4.109	0.028	0.139	0.004	104.37	0.71	3.53	0.10
A0244	4 1/4	4 1/2	1/8	4.234	0.030	0.139	0.004	107.54	0.76	3.53	0.10
A0245	4 3/8	4 5/8	1/8	4.359	0.030	0.139	0.004	110.72	0.76	3.53	0.10
A0246	4 1/2	4 3/4	1/8	4.484	0.030	0.139	0.004	113.89	0.76	3.53	0.10
A0247	4 5/8	4 7/8	1/8	4.609	0.030	0.139	0.004	117.07	0.76	3.53	0.10
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0248	4 3/4	5	1/8	4.734	0.030	0.139	0.004	120.24	0.76	3.53	0.10
A0249	4 7/8	5 1/8	1/8	4.859	0.035	0.139	0.004	123.42	0.89	3.53	0.10
A0250	5	5 1/4	1/8	4.984	0.035	0.139	0.004	126.59	0.89	3.53	0.10
A0251	5 1/8	5 3/8	1/8	5.109	0.035	0.139	0.004	129.77	0.89	3.53	0.10
A0252	5 1/4	5 1/2	1/8	5.234	0.035	0.139	0.004	132.94	0.89	3.53	0.10
A0253	5 3/8	5 5/8	1/8	5.359	0.035	0.139	0.004	136.12	0.89	3.53	0.10
A0254	5 1/2	5 3/4	1/8	5.484	0.035	0.139	0.004	139.29	0.89	3.53	0.10
A0255	5 5/8	5 7/8	1/8	5.609	0.035	0.139	0.004	142.47	0.89	3.53	0.10
A0256	5 3/4	6	1/8	5.734	0.035	0.139	0.004	145.64	0.89	3.53	0.10
A0257	5 7/8	6 1/8	1/8	5.859	0.035	0.139	0.004	148.82	0.89	3.53	0.10
A0258	6	6 1/4	1/8	5.984	0.035	0.139	0.004	151.99	0.89	3.53	0.10
A0259	6 1/4	6 1/2	1/8	6.234	0.040	0.139	0.004	158.34	1.02	3.53	0.10
A0260	6 1/2	6 3/4	1/8	6.484	0.040	0.139	0.004	164.69	1.02	3.53	0.10
A0261	6 3/4	7	1/8	6.734	0.040	0.139	0.004	171.04	1.02	3.53	0.10
A0262	7	7 1/4	1/8	6.984	0.040	0.139	0.004	177.39	1.02	3.53	0.10
A0263	7 1/4	7 1/2	1/8	7.234	0.045	0.139	0.004	183.74	1.14	3.53	0.10
A0264	7 1/2	7 3/4	1/8	7.484	0.045	0.139	0.004	190.09	1.14	3.53	0.10
A0265	7 3/4	8	1/8	7.734	0.045	0.139	0.004	196.44	1.14	3.53	0.10
A0266	8	8 1/4	1/8	7.984	0.045	0.139	0.004	202.79	1.14	3.53	0.10
A0267	8 1/4	8 1/2	1/8	8.234	0.050	0.139	0.004	209.14	1.27	3.53	0.10
A0268	8 1/2	8 3/4	1/8	8.484	0.050	0.139	0.004	215.49	1.27	3.53	0.10
A0269	8 3/4	9	1/8	8.734	0.050	0.139	0.004	221.84	1.27	3.53	0.10
A0270	9	9 1/4	1/8	8.984	0.050	0.139	0.004	228.19	1.27	3.53	0.10
A0271	9 1/4	9 1/2	1/8	9.234	0.055	0.139	0.004	234.54	1.40	3.53	0.10
A0272	9 1/2	9 3/4	1/8	9.484	0.055	0.139	0.004	240.89	1.40	3.53	0.10
A0273	9 3/4	10	1/8	9.734	0.055	0.139	0.004	247.24	1.40	3.53	0.10
A0274	10	10 1/4	1/8	9.984	0.055	0.139	0.004	253.59	1.40	3.53	0.10
A0275	10 1/2	10 3/4	1/8	10.484	0.055	0.139	0.004	266.29	1.40	3.53	0.10
A0276	11	11 1/4	1/8	10.984	0.065	0.139	0.004	278.99	1.65	3.53	0.10
A0277	11 1/2	11 3/4	1/8	11.484	0.065	0.139	0.004	291.69	1.65	3.53	0.10
A0278	12	12 1/4	1/8	11.984	0.065	0.139	0.004	304.39	1.65	3.53	0.10
A0279	13	13 1/4	1/8	12.984	0.065	0.139	0.004	329.79	1.65	3.53	0.10
A0280	14	14 1/4	1/8	13.984	0.065	0.139	0.004	355.19	1.65	3.53	0.10
A0281	15	15 1/4	1/8	14.984	0.065	0.139	0.004	380.59	1.65	3.53	0.10
A0282	16	16 1/4	1/8	15.955	0.075	0.139	0.004	405.26	1.91	3.53	0.10
A0283	17	17 1/4	1/8	16.955	0.080	0.139	0.004	430.66	2.03	3.53	0.10
A0284	18	18 1/4	1/8	17.955	0.085	0.139	0.004	456.06	2.16	3.53	0.10
A0309	7/16	13/16	3/16	0.412	0.005	0.210	0.005	10.46	0.13	5.33	0.13
A0310	1/2	7/8	3/16	0.475	0.005	0.210	0.005	12.07	0.13	5.33	0.13
A0311	9/16	15/16	3/16	0.537	0.007	0.210	0.005	13.64	0.18	5.33	0.13
A0312	5/8	1	3/16	0.600	0.009	0.210	0.005	15.24	0.23	5.33	0.13
A0313	11/16	1 1/16	3/16	0.662	0.009	0.210	0.005	16.81	0.23	5.33	0.13
A0314	3/4	1 1/8	3/16	0.725	0.010	0.210	0.005	18.42	0.25	5.33	0.13
A0315	13/16	1 3/16	3/16	0.787	0.010	0.210	0.005	19.99	0.25	5.33	0.13
A0316	7/8	1 1/4	3/16	0.850	0.010	0.210	0.005	21.59	0.25	5.33	0.13
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0317	15/16	1 5/16	3/16	0.912	0.010	0.210	0.005	23.16	0.25	5.33	0.13
A0318	1	1 3/8	3/16	0.975	0.010	0.210	0.005	24.77	0.25	5.33	0.13
A0319	1 1/16	1 7/16	3/16	1.037	0.010	0.210	0.005	26.34	0.25	5.33	0.13
A0320	1 1/8	1 1/2	3/16	1.100	0.012	0.210	0.005	27.94	0.30	5.33	0.13
A0321	1 3/16	1 9/16	3/16	1.162	0.012	0.210	0.005	29.51	0.30	5.33	0.13
A0322	1 1/4	1 5/8	3/16	1.225	0.012	0.210	0.005	31.12	0.30	5.33	0.13
A0323	1 5/16	1 11/16	3/16	1.287	0.012	0.210	0.005	32.69	0.30	5.33	0.13
A0324	1 3/8	1 3/4	3/16	1.350	0.012	0.210	0.005	34.29	0.30	5.33	0.13
A0325	1 1/2	1 7/8	3/16	1.475	0.015	0.210	0.005	37.47	0.38	5.33	0.13
A0326	1 5/8	2	3/16	1.600	0.015	0.210	0.005	40.64	0.38	5.33	0.13
A0327	1 3/4	2 1/8	3/16	1.725	0.015	0.210	0.005	43.82	0.38	5.33	0.13
A0328	1 7/8	2 1/4	3/16	1.850	0.015	0.210	0.005	46.99	0.38	5.33	0.13
A0329	2	2 3/8	3/16	1.975	0.018	0.210	0.005	50.17	0.46	5.33	0.13
A0330	2 1/8	2 1/2	3/16	2.100	0.018	0.210	0.005	53.34	0.46	5.33	0.13
A0331	2 1/4	2 5/8	3/16	2.225	0.018	0.210	0.005	56.52	0.46	5.33	0.13
A0332	2 3/8	2 3/4	3/16	2.350	0.018	0.210	0.005	59.69	0.46	5.33	0.13
A0333	2 1/2	2 7/8	3/16	2.475	0.020	0.210	0.005	62.87	0.51	5.33	0.13
A0334	2 5/8	3	3/16	2.600	0.020	0.210	0.005	66.04	0.51	5.33	0.13
A0335	2 3/4	3 1/8	3/16	2.725	0.020	0.210	0.005	69.22	0.51	5.33	0.13
A0336	2 7/8	3 1/4	3/16	2.850	0.020	0.210	0.005	72.39	0.51	5.33	0.13
A0337	3	3 3/8	3/16	2.975	0.024	0.210	0.005	75.57	0.61	5.33	0.13
A0338	3 1/8	3 1/2	3/16	3.100	0.024	0.210	0.005	78.74	0.61	5.33	0.13
A0339	3 1/4	3 5/8	3/16	3.225	0.024	0.210	0.005	81.92	0.61	5.33	0.13
A0340	3 3/8	3 3/4	3/16	3.350	0.024	0.210	0.005	85.09	0.61	5.33	0.13
A0341	3 1/2	3 7/8	3/16	3.475	0.024	0.210	0.005	88.27	0.61	5.33	0.13
A0342	3 5/8	4	3/16	3.600	0.028	0.210	0.005	91.44	0.71	5.33	0.13
A0343	3 3/4	4 1/8	3/16	3.725	0.028	0.210	0.005	94.62	0.71	5.33	0.13
A0344	3 7/8	4 1/4	3/16	3.850	0.028	0.210	0.005	97.79	0.71	5.33	0.13
A0345	4	4 3/8	3/16	3.975	0.028	0.210	0.005	100.97	0.71	5.33	0.13
A0346	4 1/8	4 1/2	3/16	4.100	0.028	0.210	0.005	104.14	0.71	5.33	0.13
A0347	4 1/4	4 5/8	3/16	4.225	0.030	0.210	0.005	107.32	0.76	5.33	0.13
A0348	4 3/8	4 3/4	3/16	4.350	0.030	0.210	0.005	110.49	0.76	5.33	0.13
A0349	4 1/2	4 7/8	3/16	4.475	0.030	0.210	0.005	113.67	0.76	5.33	0.13
A0350	4 5/8	5	3/16	4.600	0.030	0.210	0.005	116.84	0.76	5.33	0.13
A0351	4 3/4	5 1/8	3/16	4.725	0.030	0.210	0.005	120.02	0.76	5.33	0.13
A0352	4 7/8	5 1/4	3/16	4.850	0.030	0.210	0.005	123.19	0.76	5.33	0.13
A0353	5	5 3/8	3/16	4.975	0.037	0.210	0.005	126.37	0.94	5.33	0.13
A0354	5 1/8	5 1/2	3/16	5.100	0.037	0.210	0.005	129.54	0.94	5.33	0.13
A0355	5 1/4	5 5/8	3/16	5.225	0.037	0.210	0.005	132.72	0.94	5.33	0.13
A0356	5 3/8	5 3/4	3/16	5.350	0.037	0.210	0.005	135.89	0.94	5.33	0.13
A0357	5 1/2	5 7/8	3/16	5.475	0.037	0.210	0.005	139.07	0.94	5.33	0.13
A0358	5 5/8	6	3/16	5.600	0.037	0.210	0.005	142.24	0.94	5.33	0.13
A0359	5 3/4	6 1/8	3/16	5.725	0.037	0.210	0.005	145.42	0.94	5.33	0.13
A0360	5 7/8	6 1/4	3/16	5.850	0.037	0.210	0.005	148.59	0.94	5.33	0.13
A0361	6	6 3/8	3/16	5.975	0.037	0.210	0.005	151.77	0.94	5.33	0.13
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0362	6 1/4	6 5/8	3/16	6.225	0.040	0.210	0.005	158.12	1.02	5.33	0.13
A0363	6 1/2	6 7/8	3/16	6.475	0.040	0.210	0.005	164.47	1.02	5.33	0.13
A0364	6 3/4	7 1/8	3/16	6.725	0.040	0.210	0.005	170.82	1.02	5.33	0.13
A0365	7	7 3/8	3/16	6.975	0.040	0.210	0.005	177.17	1.02	5.33	0.13
A0366	7 1/4	7 5/8	3/16	7.225	0.045	0.210	0.005	183.52	1.14	5.33	0.13
A0367	7 1/2	7 7/8	3/16	7.475	0.045	0.210	0.005	189.87	1.14	5.33	0.13
A0368	7 3/4	8 1/8	3/16	7.725	0.045	0.210	0.005	196.22	1.14	5.33	0.13
A0369	8	8 3/8	3/16	7.975	0.045	0.210	0.005	202.57	1.14	5.33	0.13
A0370	8 1/4	8 5/8	3/16	8.225	0.050	0.210	0.005	208.92	1.27	5.33	0.13
A0371	8 1/2	8 7/8	3/16	8.475	0.050	0.210	0.005	215.27	1.27	5.33	0.13
A0372	8 3/4	9 1/8	3/16	8.725	0.050	0.210	0.005	221.62	1.27	5.33	0.13
A0373	9	9 3/8	3/16	8.975	0.050	0.210	0.005	227.97	1.27	5.33	0.13
A0374	9 1/4	9 5/8	3/16	9.225	0.055	0.210	0.005	234.32	1.40	5.33	0.13
A0375	9 1/2	9 7/8	3/16	9.475	0.055	0.210	0.005	240.67	1.40	5.33	0.13
A0376	9 3/4	10 1/8	3/16	9.725	0.055	0.210	0.005	247.02	1.40	5.33	0.13
A0377	10	10 3/8	3/16	9.975	0.055	0.210	0.005	253.37	1.40	5.33	0.13
A0378	10 1/2	10 7/8	3/16	10.475	0.060	0.210	0.005	266.07	1.52	5.33	0.13
A0379	11	11 3/8	3/16	10.975	0.060	0.210	0.005	278.77	1.52	5.33	0.13
A0380	11 1/2	11 7/8	3/16	11.475	0.065	0.210	0.005	291.47	1.65	5.33	0.13
A0381	12	12 3/8	3/16	11.975	0.065	0.210	0.005	304.17	1.65	5.33	0.13
A0382	13	13 3/8	3/16	12.975	0.065	0.210	0.005	329.57	1.65	5.33	0.13
A0383	14	14 3/8	3/16	13.975	0.070	0.210	0.005	354.97	1.78	5.33	0.13
A0384	15	15 3/8	3/16	14.975	0.070	0.210	0.005	380.37	1.78	5.33	0.13
A0385	16	16 3/8	3/16	15.955	0.075	0.210	0.005	405.26	1.91	5.33	0.13
A0386	17	17 3/8	3/16	16.955	0.080	0.210	0.005	430.66	2.03	5.33	0.13
A0387	18	18 3/8	3/16	17.955	0.085	0.210	0.005	456.06	2.16	5.33	0.13
A0388	19	19 3/8	3/16	18.955	0.090	0.210	0.005	481.46	2.29	5.33	0.13
A0389	20	20 3/8	3/16	19.955	0.095	0.210	0.005	506.86	2.41	5.33	0.13
A0390	21	21 3/8	3/16	20.955	0.095	0.210	0.005	532.26	2.41	5.33	0.13
A0391	22	22 3/8	3/16	21.955	0.100	0.210	0.005	557.66	2.54	5.33	0.13
A0392	23	23 3/8	3/16	22.940	0.105	0.210	0.005	582.68	2.67	5.33	0.13
A0393	24	24 3/8	3/16	23.940	0.110	0.210	0.005	608.08	2.79	5.33	0.13
A0394	25	25 3/8	3/16	24.940	0.115	0.210	0.005	633.48	2.92	5.33	0.13
A0395	26	26 3/8	3/16	25.940	0.120	0.210	0.005	658.88	3.05	5.33	0.13
A0400	1 3/8	1 7/8	1/4	1.350	0.013	0.275	0.006	34.29	0.33	6.99	0.15
A0401	1 1/2	2	1/4	1.475	0.014	0.275	0.006	37.47	0.36	6.99	0.15
A0402	1 5/8	2 1/8	1/4	1.600	0.015	0.275	0.006	40.64	0.39	6.99	0.15
A0403	1 3/4	2 1/4	1/4	1.725	0.016	0.275	0.006	43.82	0.41	6.99	0.15
A0404	1 7/8	2 3/8	1/4	1.850	0.017	0.275	0.006	46.99	0.44	6.99	0.15
A0405	2	2 1/2	1/4	1.975	0.018	0.275	0.006	50.17	0.46	6.99	0.15
A0406	2 1/8	2 5/8	1/4	2.100	0.019	0.275	0.006	53.34	0.48	6.99	0.15
A0407	2 1/4	2 3/4	1/4	2.225	0.020	0.275	0.006	56.52	0.51	6.99	0.15
A0408	2 3/8	2 7/8	1/4	2.350	0.021	0.275	0.006	59.69	0.54	6.99	0.15
A0409	2 1/2	3	1/4	2.475	0.022	0.275	0.006	62.87	0.56	6.99	0.15
A0410	2 5/8	3 1/8	1/4	2.600	0.023	0.275	0.006	66.04	0.59	6.99	0.15
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0411	2 3/4	3 1/4	1/4	2.725	0.024	0.275	0.006	69.22	0.61	6.99	0.15
A0412	2 7/8	3 3/8	1/4	2.850	0.025	0.275	0.006	72.39	0.64	6.99	0.15
A0413	3	3 1/2	1/4	2.975	0.026	0.275	0.006	75.57	0.66	6.99	0.15
A0414	3 1/8	3 5/8	1/4	3.100	0.026	0.275	0.006	78.74	0.67	6.99	0.15
A0415	3 1/4	3 3/4	1/4	3.225	0.028	0.275	0.006	81.92	0.71	6.99	0.15
A0416	3 3/8	3 7/8	1/4	3.350	0.029	0.275	0.006	85.09	0.73	6.99	0.15
A0417	3 1/2	4	1/4	3.475	0.030	0.275	0.006	88.27	0.75	6.99	0.15
A0418	3 5/8	4 1/8	1/4	3.600	0.031	0.275	0.006	91.44	0.79	6.99	0.15
A0419	3 3/4	4 1/4	1/4	3.725	0.032	0.275	0.006	94.62	0.81	6.99	0.15
A0420	3 7/8	4 3/8	1/4	3.850	0.033	0.275	0.006	97.79	0.83	6.99	0.15
A0421	4	4 1/2	1/4	3.975	0.033	0.275	0.006	100.97	0.84	6.99	0.15
A0422	4 1/8	4 5/8	1/4	4.100	0.034	0.275	0.006	104.14	0.87	6.99	0.15
A0423	4 1/4	4 3/4	1/4	4.225	0.035	0.275	0.006	107.32	0.89	6.99	0.15
A0424	4 3/8	4 7/8	1/4	4.350	0.036	0.275	0.006	110.49	0.91	6.99	0.15
A0425	4 1/2	5	1/4	4.475	0.033	0.275	0.006	113.67	0.84	6.99	0.15
A0426	4 5/8	5 1/8	1/4	4.600	0.033	0.275	0.006	116.84	0.84	6.99	0.15
A0427	4 3/4	5 1/4	1/4	4.725	0.033	0.275	0.006	120.02	0.84	6.99	0.15
A0428	4 7/8	5 3/8	1/4	4.850	0.033	0.275	0.006	123.19	0.84	6.99	0.15
A0429	5	5 1/2	1/4	4.975	0.037	0.275	0.006	126.37	0.94	6.99	0.15
A0430	5 1/8	5 5/8	1/4	5.100	0.037	0.275	0.006	129.54	0.94	6.99	0.15
A0431	5 1/4	5 3/4	1/4	5.225	0.037	0.275	0.006	132.72	0.94	6.99	0.15
A0432	5 3/8	5 7/8	1/4	5.350	0.037	0.275	0.006	135.89	0.94	6.99	0.15
A0433	5 1/2	6	1/4	5.475	0.037	0.275	0.006	139.07	0.94	6.99	0.15
A0434	5 5/8	6 1/8	1/4	5.600	0.037	0.275	0.006	142.24	0.94	6.99	0.15
A0435	5 3/4	6 1/4	1/4	5.725	0.037	0.275	0.006	145.42	0.94	6.99	0.15
A0436	5 7/8	6 3/8	1/4	5.850	0.037	0.275	0.006	148.59	0.94	6.99	0.15
A0437	6	6 1/2	1/4	5.975	0.037	0.275	0.006	151.77	0.94	6.99	0.15
A0438	6 1/4	6 3/4	1/4	6.225	0.040	0.275	0.006	158.12	1.02	6.99	0.15
A0439	6 1/2	7	1/4	6.475	0.040	0.275	0.006	164.47	1.02	6.99	0.15
A0440	6 3/4	7 1/4	1/4	6.725	0.040	0.275	0.006	170.82	1.02	6.99	0.15
A0441	7	7 1/2	1/4	6.975	0.040	0.275	0.006	177.17	1.02	6.99	0.15
A0442	7 1/4	7 3/4	1/4	7.225	0.045	0.275	0.006	183.52	1.14	6.99	0.15
A0443	7 1/2	8	1/4	7.475	0.045	0.275	0.006	189.87	1.14	6.99	0.15
A0444	7 3/4	8 1/4	1/4	7.725	0.045	0.275	0.006	196.22	1.14	6.99	0.15
A0445	8	8 1/2	1/4	7.975	0.045	0.275	0.006	202.57	1.14	6.99	0.15
A0446	8 1/2	9	1/4	8.475	0.055	0.275	0.006	215.27	1.40	6.99	0.15
A0447	9	9 1/2	1/4	8.975	0.055	0.275	0.006	227.97	1.40	6.99	0.15
A0448	9 1/2	10	1/4	9.475	0.055	0.275	0.006	240.67	1.40	6.99	0.15
A0449	10	10 1/2	1/4	9.975	0.055	0.275	0.006	253.37	1.40	6.99	0.15
A0450	10 1/2	11	1/4	10.475	0.060	0.275	0.006	266.07	1.52	6.99	0.15
A0451	11	11 1/2	1/4	10.975	0.060	0.275	0.006	278.77	1.52	6.99	0.15
A0452	11 1/2	12	1/4	11.475	0.060	0.275	0.006	291.47	1.52	6.99	0.15
A0453	12	12 1/2	1/4	11.975	0.060	0.275	0.006	304.17	1.52	6.99	0.15
A0454	12 1/2	13	1/4	12.475	0.060	0.275	0.006	316.87	1.52	6.99	0.15
A0455	13	13 1/2	1/4	12.975	0.060	0.275	0.006	329.57	1.52	6.99	0.15
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (AS 568)

O-Ring Standard Size (AS 568)

AS 568 SIZE	NOMINAL (REF.) MEASUREMENTS IN INCHES			STANDARD O-RING MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	ID	OD	CS	ID	±	CS	±	ID	±	CS	±
A0456	13 1/2	14	1/4	13.475	0.070	0.275	0.006	342.27	1.78	6.99	0.15
A0457	14	14 1/2	1/4	13.975	0.070	0.275	0.006	354.97	1.78	6.99	0.15
A0458	14 1/2	15	1/4	14.475	0.070	0.275	0.006	367.67	1.78	6.99	0.15
A0459	15	15 1/2	1/4	14.975	0.070	0.275	0.006	380.37	1.78	6.99	0.15
A0460	15 1/2	16	1/4	15.475	0.070	0.275	0.006	393.07	1.78	6.99	0.15
A0461	16	16 1/2	1/4	15.955	0.075	0.275	0.006	405.26	1.91	6.99	0.15
A0462	16 1/2	17	1/4	16.455	0.075	0.275	0.006	417.96	1.91	6.99	0.15
A0463	17	17 1/2	1/4	16.955	0.080	0.275	0.006	430.66	2.03	6.99	0.15
A0464	17 1/2	18	1/4	17.455	0.085	0.275	0.006	443.36	2.16	6.99	0.15
A0465	18	18 1/2	1/4	17.955	0.085	0.275	0.006	456.06	2.16	6.99	0.15
A0466	18 1/2	19	1/4	18.455	0.085	0.275	0.006	468.76	2.16	6.99	0.15
A0467	19	19 1/2	1/4	18.955	0.090	0.275	0.006	481.46	2.29	6.99	0.15
A0468	19 1/2	20	1/4	19.455	0.090	0.275	0.006	494.16	2.29	6.99	0.15
A0469	20	20 1/2	1/4	19.955	0.095	0.275	0.006	506.86	2.41	6.99	0.15
A0470	21	21 1/2	1/4	20.955	0.095	0.275	0.006	532.26	2.41	6.99	0.15
A0471	22	22 1/2	1/4	21.955	0.100	0.275	0.006	557.66	2.54	6.99	0.15
A0472	23	23 1/2	1/4	22.940	0.105	0.275	0.006	582.68	2.67	6.99	0.15
A0473	24	24 1/2	1/4	23.940	0.110	0.275	0.006	608.08	2.79	6.99	0.15
A0474	25	25 1/2	1/4	24.940	0.115	0.275	0.006	633.48	2.92	6.99	0.15
A0475	26	26 1/2	1/4	25.940	0.120	0.275	0.006	658.88	3.05	6.99	0.15
AS 568	ID	OD	CS	ID	±	CS	±	ID	±	CS	±

O-Ring For Use With Internal Straight Thread Fluid Connection Bosses And Tube Fittings

AS 568 SIZE	NOMINAL (REF.)	MEASUREMENTS IN INCHES				MEASUREMENTS IN MILLIMETERS			
	OD	ID	±	CS	±	ID	±	CS	±
A0901	3/32	0.185	0.005	0.056	0.003	4.70	0.13	1.42	0.08
A0902	1/8	0.239	0.005	0.064	0.003	6.07	0.13	1.63	0.08
A0903	3/16	0.301	0.005	0.064	0.003	7.65	0.13	1.63	0.08
A0904	1/4	0.351	0.005	0.072	0.003	8.92	0.13	1.83	0.08
A0905	5/16	0.414	0.005	0.072	0.003	10.52	0.13	1.83	0.08
A0906	3/8	0.468	0.005	0.078	0.003	11.89	0.13	1.98	0.08
A0907	7/16	0.530	0.007	0.082	0.003	13.46	0.18	2.08	0.08
A0908	1/2	0.644	0.009	0.087	0.003	16.36	0.23	2.21	0.08
A0909	9/16	0.706	0.009	0.097	0.003	17.93	0.23	2.46	0.08
A0910	5/8	0.755	0.009	0.097	0.003	19.18	0.23	2.46	0.08
A0911	11/16	0.863	0.009	0.116	0.004	21.92	0.23	2.95	0.10
A0912	3/4	0.924	0.009	0.116	0.004	23.47	0.23	2.95	0.10
A0913	13/16	0.986	0.010	0.116	0.004	25.04	0.25	2.95	0.10
A0914	7/8	1.047	0.010	0.116	0.004	26.59	0.25	2.95	0.10
A0916	1	1.171	0.010	0.116	0.004	29.74	0.25	2.95	0.10
A0918	1 1/8	1.355	0.012	0.116	0.004	34.42	0.30	2.95	0.10
A0920	1 1/4	1.475	0.014	0.118	0.004	37.47	0.36	3.00	0.10
A0924	1 1/2	1.720	0.014	0.118	0.004	43.69	0.36	3.00	0.10
A0928	1 3/4	2.090	0.018	0.118	0.004	53.09	0.46	3.00	0.10
A0932	2	2.337	0.018	0.118	0.004	59.36	0.46	3.00	0.10
AS 568	OD	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (BS 4518)

O-Ring Standard Size (BS 4518)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
3.1	0.14	1.6	0.08	0.122	0.006	0.063	0.003
4.1	0.14	1.6	0.08	0.161	0.006	0.063	0.003
5.1	0.15	1.6	0.08	0.201	0.006	0.063	0.003
6.1	0.16	1.6	0.08	0.240	0.006	0.063	0.003
7.1	0.17	1.6	0.08	0.280	0.007	0.063	0.003
8.1	0.18	1.6	0.08	0.319	0.007	0.063	0.003
9.1	0.18	1.6	0.08	0.358	0.007	0.063	0.003
10.1	0.19	1.6	0.08	0.398	0.007	0.063	0.003
11.1	0.20	1.6	0.08	0.437	0.008	0.063	0.003
12.1	0.21	1.6	0.08	0.476	0.008	0.063	0.003
13.1	0.21	1.6	0.08	0.516	0.008	0.063	0.003
14.1	0.22	1.6	0.08	0.555	0.009	0.063	0.003
15.1	0.23	1.6	0.08	0.594	0.009	0.063	0.003
16.1	0.24	1.6	0.08	0.634	0.009	0.063	0.003
17.1	0.24	1.6	0.08	0.673	0.009	0.063	0.003
18.1	0.25	1.6	0.08	0.713	0.010	0.063	0.003
19.1	0.26	1.6	0.08	0.752	0.010	0.063	0.003
20.1	0.27	1.6	0.08	0.791	0.011	0.063	0.003
21.1	0.27	1.6	0.08	0.831	0.011	0.063	0.003
22.1	0.28	1.6	0.08	0.870	0.011	0.063	0.003
25.1	0.30	1.6	0.08	0.988	0.012	0.063	0.003
27.1	0.32	1.6	0.08	1.067	0.013	0.063	0.003
29.1	0.33	1.6	0.08	1.146	0.013	0.063	0.003
32.1	0.35	1.6	0.08	1.264	0.014	0.063	0.003
35.1	0.37	1.6	0.08	1.382	0.015	0.063	0.003
37.1	0.39	1.6	0.08	1.461	0.015	0.063	0.003
3.6	0.14	2.4	0.09	0.142	0.006	0.094	0.004
4.6	0.15	2.4	0.09	0.181	0.006	0.094	0.004
5.6	0.16	2.4	0.09	0.220	0.006	0.094	0.004
6.6	0.16	2.4	0.09	0.260	0.006	0.094	0.004
7.6	0.17	2.4	0.09	0.299	0.007	0.094	0.004
8.6	0.18	2.4	0.09	0.339	0.007	0.094	0.004
9.6	0.19	2.4	0.09	0.378	0.007	0.094	0.004
10.6	0.19	2.4	0.09	0.417	0.007	0.094	0.004
11.6	0.20	2.4	0.09	0.457	0.008	0.094	0.004
12.6	0.21	2.4	0.09	0.496	0.008	0.094	0.004
13.6	0.22	2.4	0.09	0.535	0.009	0.094	0.004
14.6	0.22	2.4	0.09	0.575	0.009	0.094	0.004
15.6	0.23	2.4	0.09	0.614	0.009	0.094	0.004
16.6	0.24	2.4	0.09	0.654	0.009	0.094	0.004
17.6	0.25	2.4	0.09	0.693	0.010	0.094	0.004
18.6	0.25	2.4	0.09	0.732	0.010	0.094	0.004
19.6	0.26	2.4	0.09	0.772	0.010	0.094	0.004
20.6	0.27	2.4	0.09	0.811	0.011	0.094	0.004
21.6	0.28	2.4	0.09	0.850	0.011	0.094	0.004
24.6	0.30	2.4	0.09	0.969	0.012	0.094	0.004
27.6	0.32	2.4	0.09	1.087	0.013	0.094	0.004
29.6	0.33	2.4	0.09	1.165	0.013	0.094	0.004
31.6	0.35	2.4	0.09	1.244	0.014	0.094	0.004
34.6	0.37	2.4	0.09	1.362	0.015	0.094	0.004
35.6	0.38	2.4	0.09	1.402	0.015	0.094	0.004
37.6	0.39	2.4	0.09	1.480	0.015	0.094	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
39.6	0.41	2.4	0.09	1.559	0.016	0.094	0.004
41.6	0.42	2.4	0.09	1.638	0.017	0.094	0.004
44.6	0.44	2.4	0.09	1.756	0.017	0.094	0.004
45.6	0.45	2.4	0.09	1.795	0.018	0.094	0.004
47.6	0.46	2.4	0.09	1.874	0.018	0.094	0.004
49.6	0.48	2.4	0.09	1.953	0.019	0.094	0.004
51.6	0.49	2.4	0.09	2.031	0.019	0.094	0.004
54.6	0.51	2.4	0.09	2.150	0.020	0.094	0.004
55.6	0.52	2.4	0.09	2.189	0.020	0.094	0.004
57.6	0.53	2.4	0.09	2.268	0.021	0.094	0.004
58.6	0.54	2.4	0.09	2.307	0.021	0.094	0.004
59.6	0.55	2.4	0.09	2.346	0.022	0.094	0.004
61.6	0.56	2.4	0.09	2.425	0.022	0.094	0.004
62.6	0.57	2.4	0.09	2.465	0.022	0.094	0.004
64.6	0.58	2.4	0.09	2.543	0.023	0.094	0.004
67.6	0.60	2.4	0.09	2.661	0.024	0.094	0.004
69.6	0.62	2.4	0.09	2.740	0.024	0.094	0.004
19.5	0.26	3.0	0.09	0.768	0.010	0.118	0.004
21.5	0.28	3.0	0.09	0.846	0.011	0.118	0.004
22.5	0.28	3.0	0.09	0.886	0.011	0.118	0.004
24.5	0.30	3.0	0.09	0.965	0.012	0.118	0.004
25.5	0.31	3.0	0.09	1.004	0.012	0.118	0.004
26.5	0.31	3.0	0.09	1.043	0.012	0.118	0.004
27.5	0.32	3.0	0.09	1.083	0.013	0.118	0.004
29.5	0.33	3.0	0.09	1.161	0.013	0.118	0.004
31.5	0.35	3.0	0.09	1.240	0.014	0.118	0.004
32.5	0.36	3.0	0.09	1.280	0.014	0.118	0.004
34.5	0.37	3.0	0.09	1.358	0.015	0.118	0.004
35.5	0.38	3.0	0.09	1.398	0.015	0.118	0.004
36.5	0.38	3.0	0.09	1.437	0.015	0.118	0.004
37.5	0.39	3.0	0.09	1.476	0.015	0.118	0.004
39.5	0.41	3.0	0.09	1.555	0.016	0.118	0.004
41.5	0.42	3.0	0.09	1.634	0.017	0.118	0.004
42.5	0.43	3.0	0.09	1.673	0.017	0.118	0.004
44.5	0.44	3.0	0.09	1.752	0.017	0.118	0.004
49.5	0.48	3.0	0.09	1.949	0.019	0.118	0.004
54.5	0.51	3.0	0.09	2.146	0.020	0.118	0.004
55.5	0.52	3.0	0.09	2.185	0.020	0.118	0.004
57.5	0.53	3.0	0.09	2.264	0.021	0.118	0.004
59.5	0.55	3.0	0.09	2.343	0.022	0.118	0.004
62.5	0.57	3.0	0.09	2.461	0.022	0.118	0.004
64.5	0.58	3.0	0.09	2.539	0.023	0.118	0.004
69.5	0.62	3.0	0.09	2.736	0.024	0.118	0.004
74.5	0.65	3.0	0.09	2.933	0.026	0.118	0.004
79.5	0.68	3.0	0.09	3.130	0.027	0.118	0.004
84.5	0.72	3.0	0.09	3.327	0.028	0.118	0.004
89.5	0.75	3.0	0.09	3.524	0.030	0.118	0.004
94.5	0.79	3.0	0.09	3.720	0.031	0.118	0.004
99.5	0.82	3.0	0.09	3.917	0.032	0.118	0.004
104.5	0.86	3.0	0.09	4.114	0.034	0.118	0.004
109.5	0.89	3.0	0.09	4.311	0.035	0.118	0.004
114.5	0.92	3.0	0.09	4.508	0.036	0.118	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (BS 4518)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
119.5	0.96	3.0	0.09	4.705	0.038	0.118	0.004
124.5	0.99	3.0	0.09	4.902	0.039	0.118	0.004
129.5	1.02	3.0	0.09	5.098	0.040	0.118	0.004
134.5	1.06	3.0	0.09	5.295	0.042	0.118	0.004
139.5	1.09	3.0	0.09	5.492	0.043	0.118	0.004
144.5	1.12	3.0	0.09	5.689	0.044	0.118	0.004
149.5	1.16	3.0	0.09	5.886	0.046	0.118	0.004
154.5	1.19	3.0	0.09	6.083	0.047	0.118	0.004
159.5	1.22	3.0	0.09	6.280	0.048	0.118	0.004
164.5	1.26	3.0	0.09	6.476	0.050	0.118	0.004
169.5	1.29	3.0	0.09	6.673	0.051	0.118	0.004
174.5	1.32	3.0	0.09	6.870	0.052	0.118	0.004
179.5	1.36	3.0	0.09	7.067	0.054	0.118	0.004
184.5	1.39	3.0	0.09	7.264	0.055	0.118	0.004
189.5	1.42	3.0	0.09	7.461	0.056	0.118	0.004
194.5	1.45	3.0	0.09	7.657	0.057	0.118	0.004
199.5	1.49	3.0	0.09	7.854	0.059	0.118	0.004
209.5	1.55	3.0	0.09	8.248	0.061	0.118	0.004
219.5	1.62	3.0	0.09	8.642	0.064	0.118	0.004
229.5	1.68	3.0	0.09	9.035	0.066	0.118	0.004
239.5	1.75	3.0	0.09	9.429	0.069	0.118	0.004
244.5	1.78	3.0	0.09	9.626	0.070	0.118	0.004
249.5	1.81	3.0	0.09	9.823	0.071	0.118	0.004
44.3	0.44	5.7	0.13	1.744	0.017	0.224	0.005
45.3	0.45	5.7	0.13	1.783	0.018	0.224	0.005
49.3	0.48	5.7	0.13	1.941	0.019	0.224	0.005
49.5	0.48	5.7	0.13	1.949	0.019	0.224	0.005
52.3	0.50	5.7	0.13	2.059	0.020	0.224	0.005
54.3	0.51	5.7	0.13	2.138	0.020	0.224	0.005
55.3	0.52	5.7	0.13	2.177	0.020	0.224	0.005
59.3	0.55	5.7	0.13	2.335	0.022	0.224	0.005
61.3	0.56	5.7	0.13	2.413	0.022	0.224	0.005
62.3	0.57	5.7	0.13	2.453	0.022	0.224	0.005
64.3	0.58	5.7	0.13	2.531	0.023	0.224	0.005
69.3	0.61	5.7	0.13	2.728	0.024	0.224	0.005
74.3	0.65	5.7	0.13	2.925	0.026	0.224	0.005
79.3	0.68	5.7	0.13	3.122	0.027	0.224	0.005
84.3	0.72	5.7	0.13	3.319	0.028	0.224	0.005
89.3	0.75	5.7	0.13	3.516	0.030	0.224	0.005
94.3	0.79	5.7	0.13	3.713	0.031	0.224	0.005
99.3	0.82	5.7	0.13	3.909	0.032	0.224	0.005
104.3	0.85	5.7	0.13	4.106	0.033	0.224	0.005
109.3	0.89	5.7	0.13	4.303	0.035	0.224	0.005
114.3	0.92	5.7	0.13	4.500	0.036	0.224	0.005
119.3	0.96	5.7	0.13	4.697	0.038	0.224	0.005
124.3	0.99	5.7	0.13	4.894	0.039	0.224	0.005
129.3	1.02	5.7	0.13	5.091	0.040	0.224	0.005
134.3	1.06	5.7	0.13	5.287	0.042	0.224	0.005
139.3	1.09	5.7	0.13	5.484	0.043	0.224	0.005
144.3	1.12	5.7	0.13	5.681	0.044	0.224	0.005
149.3	1.16	5.7	0.13	5.878	0.046	0.224	0.005
154.3	1.19	5.7	0.13	6.075	0.047	0.224	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
159.3	1.22	5.7	0.13	6.272	0.048	0.224	0.005
164.3	1.26	5.7	0.13	6.468	0.050	0.224	0.005
169.3	1.29	5.7	0.13	6.665	0.051	0.224	0.005
174.3	1.32	5.7	0.13	6.862	0.052	0.224	0.005
179.3	1.35	5.7	0.13	7.059	0.053	0.224	0.005
184.3	1.39	5.7	0.13	7.256	0.055	0.224	0.005
189.3	1.42	5.7	0.13	7.453	0.056	0.224	0.005
194.3	1.45	5.7	0.13	7.650	0.057	0.224	0.005
199.3	1.49	5.7	0.13	7.846	0.059	0.224	0.005
209.3	1.55	5.7	0.13	8.240	0.061	0.224	0.005
219.3	1.62	5.7	0.13	8.634	0.064	0.224	0.005
229.3	1.68	5.7	0.13	9.028	0.066	0.224	0.005
239.3	1.75	5.7	0.13	9.421	0.069	0.224	0.005
249.3	1.81	5.7	0.13	9.815	0.071	0.224	0.005
259.3	1.88	5.7	0.13	10.209	0.074	0.224	0.005
269.3	1.94	5.7	0.13	10.602	0.076	0.224	0.005
279.3	2.01	5.7	0.13	10.996	0.079	0.224	0.005
289.3	2.07	5.7	0.13	11.390	0.081	0.224	0.005
299.3	2.14	5.7	0.13	11.783	0.084	0.224	0.005
309.3	2.20	5.7	0.13	12.177	0.087	0.224	0.005
319.3	2.26	5.7	0.13	12.571	0.089	0.224	0.005
339.3	2.39	5.7	0.13	13.358	0.094	0.224	0.005
359.3	2.52	5.7	0.13	14.146	0.099	0.224	0.005
379.3	2.65	5.7	0.13	14.933	0.104	0.224	0.005
389.3	2.71	5.7	0.13	15.327	0.107	0.224	0.005
399.3	2.77	5.7	0.13	15.720	0.109	0.224	0.005
419.3	2.90	5.7	0.13	16.508	0.114	0.224	0.005
439.3	3.03	5.7	0.13	17.295	0.119	0.224	0.005
459.3	3.15	5.7	0.13	18.083	0.124	0.224	0.005
479.3	3.28	5.7	0.13	18.870	0.129	0.224	0.005
489.3	3.34	5.7	0.13	19.264	0.131	0.224	0.005
499.3	3.40	5.7	0.13	19.657	0.134	0.224	0.005
144.1	1.12	8.4	0.15	5.673	0.044	0.331	0.006
149.1	1.15	8.4	0.15	5.870	0.045	0.331	0.006
154.1	1.19	8.4	0.15	6.067	0.047	0.331	0.006
159.1	1.22	8.4	0.15	6.264	0.048	0.331	0.006
164.1	1.25	8.4	0.15	6.461	0.049	0.331	0.006
169.1	1.29	8.4	0.15	6.657	0.051	0.331	0.006
174.1	1.32	8.4	0.15	6.854	0.052	0.331	0.006
179.1	1.35	8.4	0.15	7.051	0.053	0.331	0.006
184.1	1.39	8.4	0.15	7.248	0.055	0.331	0.006
189.1	1.42	8.4	0.15	7.445	0.056	0.331	0.006
194.1	1.45	8.4	0.15	7.642	0.057	0.331	0.006
199.1	1.49	8.4	0.15	7.839	0.059	0.331	0.006
204.1	1.52	8.4	0.15	8.035	0.060	0.331	0.006
209.1	1.55	8.4	0.15	8.232	0.061	0.331	0.006
219.1	1.62	8.4	0.15	8.626	0.064	0.331	0.006
229.1	1.68	8.4	0.15	9.020	0.066	0.331	0.006
234.1	1.71	8.4	0.15	9.217	0.067	0.331	0.006
239.1	1.75	8.4	0.15	9.413	0.069	0.331	0.006
249.1	1.81	8.4	0.15	9.807	0.071	0.331	0.006
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (GB/T 3452.1)

O-Ring Standard Size (GB/T 3452.1)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
1.80	0.13	1.8	0.08	0.071	0.005	0.071	0.003
2.00	0.13	1.8	0.08	0.079	0.005	0.071	0.003
2.24	0.13	1.8	0.08	0.088	0.005	0.071	0.003
2.50	0.13	1.8	0.08	0.098	0.005	0.071	0.003
2.80	0.13	1.8	0.08	0.110	0.005	0.071	0.003
3.15	0.14	1.8	0.08	0.124	0.006	0.071	0.003
3.55	0.14	1.8	0.08	0.140	0.006	0.071	0.003
3.75	0.14	1.8	0.08	0.148	0.006	0.071	0.003
4.00	0.14	1.8	0.08	0.157	0.006	0.071	0.003
4.50	0.15	1.8	0.08	0.177	0.006	0.071	0.003
4.75	0.15	1.8	0.08	0.187	0.006	0.071	0.003
4.87	0.15	1.8	0.08	0.192	0.006	0.071	0.003
5.00	0.15	1.8	0.08	0.197	0.006	0.071	0.003
5.15	0.15	1.8	0.08	0.203	0.006	0.071	0.003
5.30	0.15	1.8	0.08	0.209	0.006	0.071	0.003
5.60	0.16	1.8	0.08	0.220	0.006	0.071	0.003
6.00	0.16	1.8	0.08	0.236	0.006	0.071	0.003
6.30	0.16	1.8	0.08	0.248	0.006	0.071	0.003
6.70	0.16	1.8	0.08	0.264	0.006	0.071	0.003
6.90	0.17	1.8	0.08	0.272	0.007	0.071	0.003
7.10	0.17	1.8	0.08	0.280	0.007	0.071	0.003
7.50	0.17	1.8	0.08	0.295	0.007	0.071	0.003
8.00	0.17	1.8	0.08	0.315	0.007	0.071	0.003
8.50	0.18	1.8	0.08	0.335	0.007	0.071	0.003
8.75	0.18	1.8	0.08	0.344	0.007	0.071	0.003
9.00	0.18	1.8	0.08	0.354	0.007	0.071	0.003
9.50	0.19	1.8	0.08	0.374	0.007	0.071	0.003
9.75	0.19	1.8	0.08	0.384	0.007	0.071	0.003
10.00	0.19	1.8	0.08	0.394	0.007	0.071	0.003
10.60	0.19	1.8	0.08	0.417	0.007	0.071	0.003
11.20	0.20	1.8	0.08	0.441	0.008	0.071	0.003
11.60	0.20	1.8	0.08	0.457	0.008	0.071	0.003
11.80	0.20	1.8	0.08	0.465	0.008	0.071	0.003
12.10	0.21	1.8	0.08	0.476	0.008	0.071	0.003
12.50	0.21	1.8	0.08	0.492	0.008	0.071	0.003
12.80	0.21	1.8	0.08	0.504	0.008	0.071	0.003
13.20	0.21	1.8	0.08	0.520	0.008	0.071	0.003
14.00	0.22	1.8	0.08	0.551	0.009	0.071	0.003
14.50	0.22	1.8	0.08	0.571	0.009	0.071	0.003
15.00	0.23	1.8	0.08	0.591	0.009	0.071	0.003
15.50	0.23	1.8	0.08	0.610	0.009	0.071	0.003
16.00	0.24	1.8	0.08	0.630	0.009	0.071	0.003
17.00	0.24	1.8	0.08	0.669	0.009	0.071	0.003
18.00	0.25	1.8	0.08	0.709	0.010	0.071	0.003
19.00	0.26	1.8	0.08	0.748	0.010	0.071	0.003
20.00	0.26	1.8	0.08	0.787	0.010	0.071	0.003
20.60	0.27	1.8	0.08	0.811	0.011	0.071	0.003
21.20	0.27	1.8	0.08	0.835	0.011	0.071	0.003
22.40	0.28	1.8	0.08	0.882	0.011	0.071	0.003
23.00	0.29	1.8	0.08	0.906	0.011	0.071	0.003
23.60	0.29	1.8	0.08	0.929	0.011	0.071	0.003
24.30	0.30	1.8	0.08	0.957	0.012	0.071	0.003
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
25.00	0.30	1.8	0.08	0.984	0.012	0.071	0.003
25.80	0.31	1.8	0.08	1.016	0.012	0.071	0.003
26.50	0.31	1.8	0.08	1.043	0.012	0.071	0.003
27.30	0.32	1.8	0.08	1.075	0.013	0.071	0.003
28.00	0.32	1.8	0.08	1.102	0.013	0.071	0.003
29.00	0.33	1.8	0.08	1.142	0.013	0.071	0.003
30.00	0.34	1.8	0.08	1.181	0.013	0.071	0.003
31.50	0.35	1.8	0.08	1.240	0.014	0.071	0.003
32.50	0.36	1.8	0.08	1.280	0.014	0.071	0.003
33.50	0.36	1.8	0.08	1.319	0.014	0.071	0.003
34.50	0.37	1.8	0.08	1.358	0.015	0.071	0.003
35.50	0.38	1.8	0.08	1.398	0.015	0.071	0.003
36.50	0.38	1.8	0.08	1.437	0.015	0.071	0.003
37.50	0.39	1.8	0.08	1.476	0.015	0.071	0.003
38.70	0.40	1.8	0.08	1.524	0.016	0.071	0.003
40.00	0.41	1.8	0.08	1.575	0.016	0.071	0.003
41.20	0.42	1.8	0.08	1.622	0.017	0.071	0.003
42.50	0.43	1.8	0.08	1.673	0.017	0.071	0.003
43.70	0.44	1.8	0.08	1.720	0.017	0.071	0.003
45.00	0.44	1.8	0.08	1.772	0.017	0.071	0.003
46.20	0.45	1.8	0.08	1.819	0.018	0.071	0.003
47.50	0.46	1.8	0.08	1.870	0.018	0.071	0.003
48.70	0.47	1.8	0.08	1.917	0.019	0.071	0.003
50.00	0.48	1.8	0.08	1.969	0.019	0.071	0.003
4.50	0.15	2.65	0.09	0.177	0.006	0.104	0.004
5.30	0.15	2.65	0.09	0.209	0.006	0.104	0.004
6.00	0.16	2.65	0.09	0.236	0.006	0.104	0.004
6.90	0.17	2.65	0.09	0.272	0.007	0.104	0.004
8.00	0.17	2.65	0.09	0.315	0.007	0.104	0.004
9.00	0.18	2.65	0.09	0.354	0.007	0.104	0.004
9.50	0.19	2.65	0.09	0.374	0.007	0.104	0.004
10.00	0.19	2.65	0.09	0.394	0.007	0.104	0.004
10.60	0.19	2.65	0.09	0.417	0.007	0.104	0.004
11.20	0.20	2.65	0.09	0.441	0.008	0.104	0.004
11.60	0.20	2.65	0.09	0.457	0.008	0.104	0.004
11.80	0.20	2.65	0.09	0.465	0.008	0.104	0.004
12.10	0.21	2.65	0.09	0.476	0.008	0.104	0.004
12.50	0.21	2.65	0.09	0.492	0.008	0.104	0.004
12.80	0.21	2.65	0.09	0.504	0.008	0.104	0.004
13.20	0.21	2.65	0.09	0.520	0.008	0.104	0.004
14.00	0.22	2.65	0.09	0.551	0.009	0.104	0.004
14.50	0.22	2.65	0.09	0.571	0.009	0.104	0.004
15.00	0.23	2.65	0.09	0.591	0.009	0.104	0.004
15.50	0.23	2.65	0.09	0.610	0.009	0.104	0.004
16.00	0.24	2.65	0.09	0.630	0.009	0.104	0.004
17.00	0.24	2.65	0.09	0.669	0.009	0.104	0.004
18.00	0.25	2.65	0.09	0.709	0.010	0.104	0.004
19.00	0.26	2.65	0.09	0.748	0.010	0.104	0.004
20.00	0.26	2.65	0.09	0.787	0.010	0.104	0.004
20.60	0.27	2.65	0.09	0.811	0.011	0.104	0.004
21.20	0.27	2.65	0.09	0.835	0.011	0.104	0.004
22.40	0.28	2.65	0.09	0.882	0.011	0.104	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (GB/T 3452.1)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
23.00	0.29	2.65	0.09	0.906	0.011	0.104	0.004
23.60	0.29	2.65	0.09	0.929	0.011	0.104	0.004
24.30	0.30	2.65	0.09	0.957	0.012	0.104	0.004
25.00	0.30	2.65	0.09	0.984	0.012	0.104	0.004
25.80	0.31	2.65	0.09	1.016	0.012	0.104	0.004
26.50	0.31	2.65	0.09	1.043	0.012	0.104	0.004
27.30	0.32	2.65	0.09	1.075	0.013	0.104	0.004
28.00	0.32	2.65	0.09	1.102	0.013	0.104	0.004
29.00	0.33	2.65	0.09	1.142	0.013	0.104	0.004
30.00	0.34	2.65	0.09	1.181	0.013	0.104	0.004
31.50	0.35	2.65	0.09	1.240	0.014	0.104	0.004
32.50	0.36	2.65	0.09	1.280	0.014	0.104	0.004
33.50	0.36	2.65	0.09	1.319	0.014	0.104	0.004
34.50	0.37	2.65	0.09	1.358	0.015	0.104	0.004
35.50	0.38	2.65	0.09	1.398	0.015	0.104	0.004
36.50	0.38	2.65	0.09	1.437	0.015	0.104	0.004
37.50	0.39	2.65	0.09	1.476	0.015	0.104	0.004
38.70	0.40	2.65	0.09	1.524	0.016	0.104	0.004
40.00	0.41	2.65	0.09	1.575	0.016	0.104	0.004
41.20	0.42	2.65	0.09	1.622	0.017	0.104	0.004
42.50	0.43	2.65	0.09	1.673	0.017	0.104	0.004
43.70	0.44	2.65	0.09	1.720	0.017	0.104	0.004
45.00	0.44	2.65	0.09	1.772	0.017	0.104	0.004
46.20	0.45	2.65	0.09	1.819	0.018	0.104	0.004
47.50	0.46	2.65	0.09	1.870	0.018	0.104	0.004
48.70	0.47	2.65	0.09	1.917	0.019	0.104	0.004
50.00	0.48	2.65	0.09	1.969	0.019	0.104	0.004
51.50	0.49	2.65	0.09	2.028	0.019	0.104	0.004
53.00	0.50	2.65	0.09	2.087	0.020	0.104	0.004
54.50	0.51	2.65	0.09	2.146	0.020	0.104	0.004
56.00	0.52	2.65	0.09	2.205	0.020	0.104	0.004
58.00	0.54	2.65	0.09	2.283	0.021	0.104	0.004
60.00	0.55	2.65	0.09	2.362	0.022	0.104	0.004
61.50	0.56	2.65	0.09	2.421	0.022	0.104	0.004
63.00	0.57	2.65	0.09	2.480	0.022	0.104	0.004
65.00	0.58	2.65	0.09	2.559	0.023	0.104	0.004
67.00	0.60	2.65	0.09	2.638	0.024	0.104	0.004
69.00	0.61	2.65	0.09	2.717	0.024	0.104	0.004
71.00	0.63	2.65	0.09	2.795	0.025	0.104	0.004
73.00	0.64	2.65	0.09	2.874	0.025	0.104	0.004
75.00	0.65	2.65	0.09	2.953	0.026	0.104	0.004
77.50	0.67	2.65	0.09	3.051	0.026	0.104	0.004
80.00	0.69	2.65	0.09	3.150	0.027	0.104	0.004
82.50	0.71	2.65	0.09	3.248	0.028	0.104	0.004
85.00	0.72	2.65	0.09	3.346	0.028	0.104	0.004
87.50	0.74	2.65	0.09	3.445	0.029	0.104	0.004
90.00	0.76	2.65	0.09	3.543	0.030	0.104	0.004
92.50	0.77	2.65	0.09	3.642	0.030	0.104	0.004
95.00	0.79	2.65	0.09	3.740	0.031	0.104	0.004
97.50	0.81	2.65	0.09	3.839	0.032	0.104	0.004
100.00	0.82	2.65	0.09	3.937	0.032	0.104	0.004
103.00	0.85	2.65	0.09	4.055	0.033	0.104	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
106.00	0.87	2.65	0.09	4.173	0.034	0.104	0.004
109.00	0.89	2.65	0.09	4.291	0.035	0.104	0.004
112.00	0.91	2.65	0.09	4.409	0.036	0.104	0.004
115.00	0.93	2.65	0.09	4.528	0.037	0.104	0.004
118.00	0.95	2.65	0.09	4.646	0.037	0.104	0.004
122.00	0.97	2.65	0.09	4.803	0.038	0.104	0.004
125.00	0.99	2.65	0.09	4.921	0.039	0.104	0.004
128.00	1.01	2.65	0.09	5.039	0.040	0.104	0.004
132.00	1.04	2.65	0.09	5.197	0.041	0.104	0.004
136.00	1.07	2.65	0.09	5.354	0.042	0.104	0.004
140.00	1.09	2.65	0.09	5.512	0.043	0.104	0.004
142.50	1.11	2.65	0.09	5.610	0.044	0.104	0.004
145.00	1.13	2.65	0.09	5.709	0.044	0.104	0.004
147.50	1.14	2.65	0.09	5.807	0.045	0.104	0.004
150.00	1.16	2.65	0.09	5.906	0.046	0.104	0.004
152.50	1.18	2.65	0.09	6.004	0.046	0.104	0.004
160.00	1.23	2.65	0.09	6.299	0.048	0.104	0.004
170.00	1.29	2.65	0.09	6.693	0.051	0.104	0.004
180.00	1.36	2.65	0.09	7.087	0.054	0.104	0.004
18.00	0.25	3.55	0.1	0.709	0.010	0.140	0.004
19.00	0.26	3.55	0.1	0.748	0.010	0.140	0.004
20.00	0.26	3.55	0.1	0.787	0.010	0.140	0.004
20.60	0.27	3.55	0.1	0.811	0.011	0.140	0.004
21.20	0.27	3.55	0.1	0.835	0.011	0.140	0.004
22.40	0.28	3.55	0.1	0.882	0.011	0.140	0.004
23.00	0.29	3.55	0.1	0.906	0.011	0.140	0.004
23.60	0.29	3.55	0.1	0.929	0.011	0.140	0.004
24.30	0.30	3.55	0.1	0.957	0.012	0.140	0.004
25.00	0.30	3.55	0.1	0.984	0.012	0.140	0.004
25.80	0.31	3.55	0.1	1.016	0.012	0.140	0.004
26.50	0.31	3.55	0.1	1.043	0.012	0.140	0.004
27.30	0.32	3.55	0.1	1.075	0.013	0.140	0.004
28.00	0.32	3.55	0.1	1.102	0.013	0.140	0.004
29.00	0.33	3.55	0.1	1.142	0.013	0.140	0.004
30.00	0.34	3.55	0.1	1.181	0.013	0.140	0.004
31.50	0.35	3.55	0.1	1.240	0.014	0.140	0.004
32.50	0.36	3.55	0.1	1.280	0.014	0.140	0.004
33.50	0.36	3.55	0.1	1.319	0.014	0.140	0.004
34.50	0.37	3.55	0.1	1.358	0.015	0.140	0.004
35.50	0.38	3.55	0.1	1.398	0.015	0.140	0.004
36.50	0.38	3.55	0.1	1.437	0.015	0.140	0.004
37.50	0.39	3.55	0.1	1.476	0.015	0.140	0.004
38.70	0.40	3.55	0.1	1.524	0.016	0.140	0.004
40.00	0.41	3.55	0.1	1.575	0.016	0.140	0.004
41.20	0.42	3.55	0.1	1.622	0.017	0.140	0.004
42.50	0.43	3.55	0.1	1.673	0.017	0.140	0.004
43.70	0.44	3.55	0.1	1.720	0.017	0.140	0.004
45.00	0.44	3.55	0.1	1.772	0.017	0.140	0.004
46.20	0.45	3.55	0.1	1.819	0.018	0.140	0.004
47.50	0.46	3.55	0.1	1.870	0.018	0.140	0.004
48.70	0.47	3.55	0.1	1.917	0.019	0.140	0.004
50.00	0.48	3.55	0.1	1.969	0.019	0.140	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (GB/T 3452.1)

O-Ring Standard Size (GB/T 3452.1)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
51.50	0.49	3.55	0.1	2.028	0.019	0.140	0.004
53.00	0.50	3.55	0.1	2.087	0.020	0.140	0.004
54.50	0.51	3.55	0.1	2.146	0.020	0.140	0.004
56.00	0.52	3.55	0.1	2.205	0.020	0.140	0.004
58.00	0.54	3.55	0.1	2.283	0.021	0.140	0.004
60.00	0.55	3.55	0.1	2.362	0.022	0.140	0.004
61.50	0.56	3.55	0.1	2.421	0.022	0.140	0.004
63.00	0.57	3.55	0.1	2.480	0.022	0.140	0.004
65.00	0.58	3.55	0.1	2.559	0.023	0.140	0.004
67.00	0.60	3.55	0.1	2.638	0.024	0.140	0.004
69.00	0.61	3.55	0.1	2.717	0.024	0.140	0.004
71.00	0.63	3.55	0.1	2.795	0.025	0.140	0.004
73.00	0.64	3.55	0.1	2.874	0.025	0.140	0.004
75.00	0.65	3.55	0.1	2.953	0.026	0.140	0.004
77.50	0.67	3.55	0.1	3.051	0.026	0.140	0.004
80.00	0.69	3.55	0.1	3.150	0.027	0.140	0.004
82.50	0.71	3.55	0.1	3.248	0.028	0.140	0.004
85.00	0.72	3.55	0.1	3.346	0.028	0.140	0.004
87.50	0.74	3.55	0.1	3.445	0.029	0.140	0.004
90.00	0.76	3.55	0.1	3.543	0.030	0.140	0.004
92.50	0.77	3.55	0.1	3.642	0.030	0.140	0.004
95.00	0.79	3.55	0.1	3.740	0.031	0.140	0.004
97.50	0.81	3.55	0.1	3.839	0.032	0.140	0.004
100.00	0.82	3.55	0.1	3.937	0.032	0.140	0.004
103.00	0.85	3.55	0.1	4.055	0.033	0.140	0.004
106.00	0.87	3.55	0.1	4.173	0.034	0.140	0.004
109.00	0.89	3.55	0.1	4.291	0.035	0.140	0.004
112.00	0.91	3.55	0.1	4.409	0.036	0.140	0.004
115.00	0.93	3.55	0.1	4.528	0.037	0.140	0.004
118.00	0.95	3.55	0.1	4.646	0.037	0.140	0.004
122.00	0.97	3.55	0.1	4.803	0.038	0.140	0.004
125.00	0.99	3.55	0.1	4.921	0.039	0.140	0.004
128.00	1.01	3.55	0.1	5.039	0.040	0.140	0.004
132.00	1.04	3.55	0.1	5.197	0.041	0.140	0.004
136.00	1.07	3.55	0.1	5.354	0.042	0.140	0.004
140.00	1.09	3.55	0.1	5.512	0.043	0.140	0.004
142.50	1.11	3.55	0.1	5.610	0.044	0.140	0.004
145.00	1.13	3.55	0.1	5.709	0.044	0.140	0.004
147.50	1.14	3.55	0.1	5.807	0.045	0.140	0.004
150.00	1.16	3.55	0.1	5.906	0.046	0.140	0.004
152.50	1.18	3.55	0.1	6.004	0.046	0.140	0.004
155.00	1.19	3.55	0.1	6.102	0.047	0.140	0.004
157.50	1.21	3.55	0.1	6.201	0.048	0.140	0.004
160.00	1.23	3.55	0.1	6.299	0.048	0.140	0.004
162.50	1.24	3.55	0.1	6.398	0.049	0.140	0.004
165.00	1.26	3.55	0.1	6.496	0.050	0.140	0.004
167.50	1.28	3.55	0.1	6.594	0.050	0.140	0.004
170.00	1.29	3.55	0.1	6.693	0.051	0.140	0.004
172.50	1.31	3.55	0.1	6.791	0.052	0.140	0.004
175.00	1.33	3.55	0.1	6.890	0.052	0.140	0.004
177.50	1.34	3.55	0.1	6.988	0.053	0.140	0.004
180.00	1.36	3.55	0.1	7.087	0.054	0.140	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
182.50	1.38	3.55	0.1	7.185	0.054	0.140	0.004
185.00	1.39	3.55	0.1	7.283	0.055	0.140	0.004
187.50	1.41	3.55	0.1	7.382	0.056	0.140	0.004
190.00	1.43	3.55	0.1	7.480	0.056	0.140	0.004
195.00	1.46	3.55	0.1	7.677	0.057	0.140	0.004
200.00	1.49	3.55	0.1	7.874	0.059	0.140	0.004
40.00	0.41	5.3	0.13	1.575	0.016	0.209	0.005
41.20	0.42	5.3	0.13	1.622	0.017	0.209	0.005
42.50	0.43	5.3	0.13	1.673	0.017	0.209	0.005
43.70	0.44	5.3	0.13	1.720	0.017	0.209	0.005
45.00	0.44	5.3	0.13	1.772	0.017	0.209	0.005
46.20	0.45	5.3	0.13	1.819	0.018	0.209	0.005
47.50	0.46	5.3	0.13	1.870	0.018	0.209	0.005
48.70	0.47	5.3	0.13	1.917	0.019	0.209	0.005
50.00	0.48	5.3	0.13	1.969	0.019	0.209	0.005
51.50	0.49	5.3	0.13	2.028	0.019	0.209	0.005
53.00	0.50	5.3	0.13	2.087	0.020	0.209	0.005
54.50	0.51	5.3	0.13	2.146	0.020	0.209	0.005
56.00	0.52	5.3	0.13	2.205	0.020	0.209	0.005
58.00	0.54	5.3	0.13	2.283	0.021	0.209	0.005
60.00	0.55	5.3	0.13	2.362	0.022	0.209	0.005
61.50	0.56	5.3	0.13	2.421	0.022	0.209	0.005
63.00	0.57	5.3	0.13	2.480	0.022	0.209	0.005
65.00	0.58	5.3	0.13	2.559	0.023	0.209	0.005
67.00	0.60	5.3	0.13	2.638	0.024	0.209	0.005
69.00	0.61	5.3	0.13	2.717	0.024	0.209	0.005
71.00	0.63	5.3	0.13	2.795	0.025	0.209	0.005
73.00	0.64	5.3	0.13	2.874	0.025	0.209	0.005
75.00	0.65	5.3	0.13	2.953	0.026	0.209	0.005
77.50	0.67	5.3	0.13	3.051	0.026	0.209	0.005
80.00	0.69	5.3	0.13	3.150	0.027	0.209	0.005
82.50	0.71	5.3	0.13	3.248	0.028	0.209	0.005
85.00	0.72	5.3	0.13	3.346	0.028	0.209	0.005
87.50	0.74	5.3	0.13	3.445	0.029	0.209	0.005
90.00	0.76	5.3	0.13	3.543	0.030	0.209	0.005
92.50	0.77	5.3	0.13	3.642	0.030	0.209	0.005
95.00	0.79	5.3	0.13	3.740	0.031	0.209	0.005
97.50	0.81	5.3	0.13	3.839	0.032	0.209	0.005
100.00	0.82	5.3	0.13	3.937	0.032	0.209	0.005
103.00	0.85	5.3	0.13	4.055	0.033	0.209	0.005
106.00	0.87	5.3	0.13	4.173	0.034	0.209	0.005
109.00	0.89	5.3	0.13	4.291	0.035	0.209	0.005
112.00	0.91	5.3	0.13	4.409	0.036	0.209	0.005
115.00	0.93	5.3	0.13	4.528	0.037	0.209	0.005
118.00	0.95	5.3	0.13	4.646	0.037	0.209	0.005
122.00	0.97	5.3	0.13	4.803	0.038	0.209	0.005
125.00	0.99	5.3	0.13	4.921	0.039	0.209	0.005
128.00	1.01	5.3	0.13	5.039	0.040	0.209	0.005
132.00	1.04	5.3	0.13	5.197	0.041	0.209	0.005
136.00	1.07	5.3	0.13	5.354	0.042	0.209	0.005
140.00	1.09	5.3	0.13	5.512	0.043	0.209	0.005
142.50	1.11	5.3	0.13	5.610	0.044	0.209	0.005
ID	±	CS	±	ID	±	CS	±

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MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
145.00	1.13	5.3	0.13	5.709	0.044	0.209	0.005
147.50	1.14	5.3	0.13	5.807	0.045	0.209	0.005
150.00	1.16	5.3	0.13	5.906	0.046	0.209	0.005
152.50	1.18	5.3	0.13	6.004	0.046	0.209	0.005
155.00	1.19	5.3	0.13	6.102	0.047	0.209	0.005
157.50	1.21	5.3	0.13	6.201	0.048	0.209	0.005
160.00	1.23	5.3	0.13	6.299	0.048	0.209	0.005
162.50	1.24	5.3	0.13	6.398	0.049	0.209	0.005
165.00	1.26	5.3	0.13	6.496	0.050	0.209	0.005
167.50	1.28	5.3	0.13	6.594	0.050	0.209	0.005
170.00	1.29	5.3	0.13	6.693	0.051	0.209	0.005
172.50	1.31	5.3	0.13	6.791	0.052	0.209	0.005
175.00	1.33	5.3	0.13	6.890	0.052	0.209	0.005
177.50	1.34	5.3	0.13	6.988	0.053	0.209	0.005
180.00	1.36	5.3	0.13	7.087	0.054	0.209	0.005
182.50	1.38	5.3	0.13	7.185	0.054	0.209	0.005
185.00	1.39	5.3	0.13	7.283	0.055	0.209	0.005
187.50	1.41	5.3	0.13	7.382	0.056	0.209	0.005
190.00	1.43	5.3	0.13	7.480	0.056	0.209	0.005
195.00	1.46	5.3	0.13	7.677	0.057	0.209	0.005
200.00	1.49	5.3	0.13	7.874	0.059	0.209	0.005
203.00	1.51	5.3	0.13	7.992	0.059	0.209	0.005
206.00	1.53	5.3	0.13	8.110	0.060	0.209	0.005
212.00	1.57	5.3	0.13	8.346	0.062	0.209	0.005
218.00	1.61	5.3	0.13	8.583	0.063	0.209	0.005
224.00	1.65	5.3	0.13	8.819	0.065	0.209	0.005
227.00	1.67	5.3	0.13	8.937	0.066	0.209	0.005
230.00	1.69	5.3	0.13	9.055	0.067	0.209	0.005
236.00	1.73	5.3	0.13	9.291	0.068	0.209	0.005
239.00	1.75	5.3	0.13	9.409	0.069	0.209	0.005
243.00	1.77	5.3	0.13	9.567	0.070	0.209	0.005
250.00	1.82	5.3	0.13	9.843	0.072	0.209	0.005
254.00	1.84	5.3	0.13	10.000	0.072	0.209	0.005
258.00	1.87	5.3	0.13	10.157	0.074	0.209	0.005
261.00	1.89	5.3	0.13	10.276	0.074	0.209	0.005
265.00	1.91	5.3	0.13	10.433	0.075	0.209	0.005
268.00	1.93	5.3	0.13	10.551	0.076	0.209	0.005
272.00	1.96	5.3	0.13	10.709	0.077	0.209	0.005
276.00	1.99	5.3	0.13	10.866	0.078	0.209	0.005
280.00	2.01	5.3	0.13	11.024	0.079	0.209	0.005
283.00	2.03	5.3	0.13	11.142	0.080	0.209	0.005
286.00	2.05	5.3	0.13	11.260	0.081	0.209	0.005
290.00	2.08	5.3	0.13	11.417	0.082	0.209	0.005
295.00	2.11	5.3	0.13	11.614	0.083	0.209	0.005
300.00	2.14	5.3	0.13	11.811	0.084	0.209	0.005
303.00	2.16	5.3	0.13	11.929	0.085	0.209	0.005
307.00	2.19	5.3	0.13	12.087	0.086	0.209	0.005
311.00	2.21	5.3	0.13	12.244	0.087	0.209	0.005
315.00	2.24	5.3	0.13	12.402	0.088	0.209	0.005
320.00	2.27	5.3	0.13	12.598	0.089	0.209	0.005
325.00	2.30	5.3	0.13	12.795	0.091	0.209	0.005
330.00	2.33	5.3	0.13	12.992	0.092	0.209	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
335.00	2.36	5.3	0.13	13.189	0.093	0.209	0.005
340.00	2.40	5.3	0.13	13.386	0.094	0.209	0.005
345.00	2.43	5.3	0.13	13.583	0.096	0.209	0.005
350.00	2.46	5.3	0.13	13.780	0.097	0.209	0.005
355.00	2.49	5.3	0.13	13.976	0.098	0.209	0.005
360.00	2.52	5.3	0.13	14.173	0.099	0.209	0.005
365.00	2.56	5.3	0.13	14.370	0.101	0.209	0.005
370.00	2.59	5.3	0.13	14.567	0.102	0.209	0.005
375.00	2.62	5.3	0.13	14.764	0.103	0.209	0.005
379.00	2.64	5.3	0.13	14.921	0.104	0.209	0.005
383.00	2.67	5.3	0.13	15.079	0.105	0.209	0.005
387.00	2.70	5.3	0.13	15.236	0.106	0.209	0.005
391.00	2.72	5.3	0.13	15.394	0.107	0.209	0.005
395.00	2.75	5.3	0.13	15.551	0.108	0.209	0.005
400.00	2.78	5.3	0.13	15.748	0.109	0.209	0.005
109.00	0.89	7	0.15	4.291	0.035	0.276	0.006
112.00	0.91	7	0.15	4.409	0.036	0.276	0.006
115.00	0.93	7	0.15	4.528	0.037	0.276	0.006
118.00	0.95	7	0.15	4.646	0.037	0.276	0.006
122.00	0.97	7	0.15	4.803	0.038	0.276	0.006
125.00	0.99	7	0.15	4.921	0.039	0.276	0.006
128.00	1.01	7	0.15	5.039	0.040	0.276	0.006
132.00	1.04	7	0.15	5.197	0.041	0.276	0.006
136.00	1.07	7	0.15	5.354	0.042	0.276	0.006
140.00	1.09	7	0.15	5.512	0.043	0.276	0.006
142.50	1.11	7	0.15	5.610	0.044	0.276	0.006
145.00	1.13	7	0.15	5.709	0.044	0.276	0.006
147.50	1.14	7	0.15	5.807	0.045	0.276	0.006
150.00	1.16	7	0.15	5.906	0.046	0.276	0.006
152.50	1.18	7	0.15	6.004	0.046	0.276	0.006
155.00	1.19	7	0.15	6.102	0.047	0.276	0.006
157.50	1.21	7	0.15	6.201	0.048	0.276	0.006
160.00	1.23	7	0.15	6.299	0.048	0.276	0.006
162.50	1.24	7	0.15	6.398	0.049	0.276	0.006
165.00	1.26	7	0.15	6.496	0.050	0.276	0.006
167.50	1.28	7	0.15	6.594	0.050	0.276	0.006
170.00	1.29	7	0.15	6.693	0.051	0.276	0.006
172.50	1.31	7	0.15	6.791	0.052	0.276	0.006
175.00	1.33	7	0.15	6.890	0.052	0.276	0.006
177.50	1.34	7	0.15	6.988	0.053	0.276	0.006
180.00	1.36	7	0.15	7.087	0.054	0.276	0.006
182.50	1.38	7	0.15	7.185	0.054	0.276	0.006
185.00	1.39	7	0.15	7.283	0.055	0.276	0.006
187.50	1.41	7	0.15	7.382	0.056	0.276	0.006
190.00	1.43	7	0.15	7.480	0.056	0.276	0.006
195.00	1.46	7	0.15	7.677	0.057	0.276	0.006
200.00	1.49	7	0.15	7.874	0.059	0.276	0.006
203.00	1.51	7	0.15	7.992	0.059	0.276	0.006
206.00	1.53	7	0.15	8.110	0.060	0.276	0.006
212.00	1.57	7	0.15	8.346	0.062	0.276	0.006
218.00	1.61	7	0.15	8.583	0.063	0.276	0.006
224.00	1.65	7	0.15	8.819	0.065	0.276	0.006
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (GB/T 3452.1)

O-Ring Standard Size (GB/T 3452.1)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
227.00	1.67	7	0.15	8.937	0.066	0.276	0.006
230.00	1.69	7	0.15	9.055	0.067	0.276	0.006
236.00	1.73	7	0.15	9.291	0.068	0.276	0.006
239.00	1.75	7	0.15	9.409	0.069	0.276	0.006
243.00	1.77	7	0.15	9.567	0.070	0.276	0.006
250.00	1.82	7	0.15	9.843	0.072	0.276	0.006
254.00	1.84	7	0.15	10.000	0.072	0.276	0.006
258.00	1.87	7	0.15	10.157	0.074	0.276	0.006
261.00	1.89	7	0.15	10.276	0.074	0.276	0.006
265.00	1.91	7	0.15	10.433	0.075	0.276	0.006
268.00	1.93	7	0.15	10.551	0.076	0.276	0.006
272.00	1.96	7	0.15	10.709	0.077	0.276	0.006
276.00	1.99	7	0.15	10.866	0.078	0.276	0.006
280.00	2.01	7	0.15	11.024	0.079	0.276	0.006
283.00	2.03	7	0.15	11.142	0.080	0.276	0.006
286.00	2.05	7	0.15	11.260	0.081	0.276	0.006
290.00	2.08	7	0.15	11.417	0.082	0.276	0.006
295.00	2.11	7	0.15	11.614	0.083	0.276	0.006
300.00	2.14	7	0.15	11.811	0.084	0.276	0.006
303.00	2.16	7	0.15	11.929	0.085	0.276	0.006
307.00	2.19	7	0.15	12.087	0.086	0.276	0.006
311.00	2.21	7	0.15	12.244	0.087	0.276	0.006
315.00	2.24	7	0.15	12.402	0.088	0.276	0.006
320.00	2.27	7	0.15	12.598	0.089	0.276	0.006
325.00	2.30	7	0.15	12.795	0.091	0.276	0.006
330.00	2.33	7	0.15	12.992	0.092	0.276	0.006
335.00	2.36	7	0.15	13.189	0.093	0.276	0.006
340.00	2.40	7	0.15	13.386	0.094	0.276	0.006
345.00	2.43	7	0.15	13.583	0.096	0.276	0.006
350.00	2.46	7	0.15	13.780	0.097	0.276	0.006
355.00	2.49	7	0.15	13.976	0.098	0.276	0.006
360.00	2.52	7	0.15	14.173	0.099	0.276	0.006
365.00	2.56	7	0.15	14.370	0.101	0.276	0.006
370.00	2.59	7	0.15	14.567	0.102	0.276	0.006
375.00	2.62	7	0.15	14.764	0.103	0.276	0.006
379.00	2.64	7	0.15	14.921	0.104	0.276	0.006
383.00	2.67	7	0.15	15.079	0.105	0.276	0.006
387.00	2.70	7	0.15	15.236	0.106	0.276	0.006
391.00	2.72	7	0.15	15.394	0.107	0.276	0.006
395.00	2.75	7	0.15	15.551	0.108	0.276	0.006
400.00	2.78	7	0.15	15.748	0.109	0.276	0.006
406.00	2.82	7	0.15	15.984	0.111	0.276	0.006
412.00	2.85	7	0.15	16.220	0.112	0.276	0.006
418.00	2.89	7	0.15	16.457	0.114	0.276	0.006
425.00	2.94	7	0.15	16.732	0.116	0.276	0.006
429.00	2.96	7	0.15	16.890	0.117	0.276	0.006
433.00	2.99	7	0.15	17.047	0.118	0.276	0.006
437.00	3.01	7	0.15	17.205	0.119	0.276	0.006
443.00	3.05	7	0.15	17.441	0.120	0.276	0.006
450.00	3.09	7	0.15	17.717	0.122	0.276	0.006
456.00	3.13	7	0.15	17.953	0.123	0.276	0.006
462.00	3.17	7	0.15	18.189	0.125	0.276	0.006
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
466.00	3.19	7	0.15	18.346	0.126	0.276	0.006
470.00	3.22	7	0.15	18.504	0.127	0.276	0.006
475.00	3.25	7	0.15	18.701	0.128	0.276	0.006
479.00	3.28	7	0.15	18.858	0.129	0.276	0.006
483.00	3.30	7	0.15	19.016	0.130	0.276	0.006
487.00	3.33	7	0.15	19.173	0.131	0.276	0.006
493.00	3.36	7	0.15	19.409	0.132	0.276	0.006
500.00	3.41	7	0.15	19.685	0.134	0.276	0.006
508.00	3.46	7	0.15	20.000	0.136	0.276	0.006
515.00	3.50	7	0.15	20.276	0.138	0.276	0.006
523.00	3.55	7	0.15	20.591	0.140	0.276	0.006
530.00	3.60	7	0.15	20.866	0.142	0.276	0.006
538.00	3.65	7	0.15	21.181	0.144	0.276	0.006
545.00	3.69	7	0.15	21.457	0.145	0.276	0.006
553.00	3.74	7	0.15	21.772	0.147	0.276	0.006
560.00	3.78	7	0.15	22.047	0.149	0.276	0.006
570.00	3.85	7	0.15	22.441	0.152	0.276	0.006
580.00	3.91	7	0.15	22.835	0.154	0.276	0.006
590.00	3.97	7	0.15	23.228	0.156	0.276	0.006
600.00	4.03	7	0.15	23.622	0.159	0.276	0.006
608.00	4.08	7	0.15	23.937	0.161	0.276	0.006
615.00	4.12	7	0.15	24.213	0.162	0.276	0.006
623.00	4.17	7	0.15	24.528	0.164	0.276	0.006
630.00	4.22	7	0.15	24.803	0.166	0.276	0.006
640.00	4.28	7	0.15	25.197	0.169	0.276	0.006
650.00	4.34	7	0.15	25.591	0.171	0.276	0.006
660.00	4.40	7	0.15	25.984	0.173	0.276	0.006
670.00	4.47	7	0.15	26.378	0.176	0.276	0.006
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

TABLE OF DIMENSIONS OF O-RINGS FOR DYNAMIC SEALING AND STATIC SEALING OF CYLINDRICAL SURFACE AND FLAT SURFACE

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
P3	2.80	0.14	1.90	0.07	0.110	0.006	0.075	0.003
P4	3.80	0.14	1.90	0.07	0.150	0.006	0.075	0.003
P5	4.80	0.15	1.90	0.07	0.189	0.006	0.075	0.003
P6	5.80	0.15	1.90	0.07	0.228	0.006	0.075	0.003
P7	6.80	0.16	1.90	0.07	0.268	0.006	0.075	0.003
P8	7.80	0.16	1.90	0.07	0.307	0.006	0.075	0.003
P9	8.80	0.17	1.90	0.07	0.346	0.007	0.075	0.003
P10	9.80	0.17	1.90	0.07	0.386	0.007	0.075	0.003
P10A	9.80	0.17	2.40	0.07	0.386	0.007	0.094	0.003
P11	10.80	0.18	2.40	0.07	0.425	0.007	0.094	0.003
P11.2	11.00	0.18	2.40	0.07	0.433	0.007	0.094	0.003
P12	11.80	0.19	2.40	0.07	0.465	0.007	0.094	0.003
P12.5	12.30	0.19	2.40	0.07	0.484	0.007	0.094	0.003
P13	12.80	0.19	2.40	0.07	0.504	0.007	0.094	0.003
P14	13.80	0.19	2.40	0.07	0.543	0.007	0.094	0.003
P15	14.80	0.20	2.40	0.07	0.583	0.008	0.094	0.003
P16	15.80	0.20	2.40	0.07	0.622	0.008	0.094	0.003
P17	16.80	0.21	2.40	0.07	0.661	0.008	0.094	0.003
P18	17.80	0.21	2.40	0.07	0.701	0.008	0.094	0.003
P19	18.80	0.21	2.40	0.07	0.740	0.008	0.094	0.003
P20	19.80	0.22	2.40	0.07	0.780	0.009	0.094	0.003
P21	20.80	0.23	2.40	0.07	0.819	0.009	0.094	0.003
P22	21.80	0.24	2.40	0.07	0.858	0.009	0.094	0.003
P22A	21.70	0.24	3.50	0.10	0.854	0.009	0.138	0.004
P22.4	22.10	0.24	3.50	0.10	0.870	0.009	0.138	0.004
P24	23.70	0.24	3.50	0.10	0.933	0.009	0.138	0.004
P25	24.70	0.25	3.50	0.10	0.972	0.010	0.138	0.004
P25.5	25.20	0.25	3.50	0.10	0.992	0.010	0.138	0.004
P26	25.70	0.26	3.50	0.10	1.012	0.010	0.138	0.004
P28	27.70	0.28	3.50	0.10	1.091	0.011	0.138	0.004
P29	28.70	0.29	3.50	0.10	1.130	0.011	0.138	0.004
P29.5	29.20	0.29	3.50	0.10	1.150	0.011	0.138	0.004
P30	29.70	0.29	3.50	0.10	1.169	0.011	0.138	0.004
P31	30.70	0.30	3.50	0.10	1.209	0.012	0.138	0.004
P31.5	31.20	0.31	3.50	0.10	1.228	0.012	0.138	0.004
P32	31.70	0.31	3.50	0.10	1.248	0.012	0.138	0.004
P33	32.70	0.31	3.50	0.10	1.287	0.012	0.138	0.004
P34	33.70	0.33	3.50	0.10	1.327	0.013	0.138	0.004
P35	34.70	0.34	3.50	0.10	1.366	0.013	0.138	0.004
P35.5	35.20	0.34	3.50	0.10	1.386	0.013	0.138	0.004
P36	35.70	0.34	3.50	0.10	1.406	0.013	0.138	0.004
P38	37.70	0.37	3.50	0.10	1.484	0.015	0.138	0.004
P39	38.70	0.37	3.50	0.10	1.524	0.015	0.138	0.004
P40	39.70	0.37	3.50	0.10	1.563	0.015	0.138	0.004
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
P41	40.70	0.38	3.50	0.10	1.602	0.015	0.138	0.004
P42	41.70	0.39	3.50	0.10	1.642	0.015	0.138	0.004
P44	43.70	0.41	3.50	0.10	1.720	0.016	0.138	0.004
P45	44.70	0.41	3.50	0.10	1.760	0.016	0.138	0.004
P46	45.70	0.42	3.50	0.10	1.799	0.017	0.138	0.004
P48	47.70	0.44	3.50	0.10	1.878	0.017	0.138	0.004
P49	48.70	0.45	3.50	0.10	1.917	0.018	0.138	0.004
P50	49.70	0.45	3.50	0.10	1.957	0.018	0.138	0.004
P48A	47.60	0.44	5.70	0.13	1.874	0.017	0.224	0.005
P50A	49.60	0.45	5.70	0.13	1.953	0.018	0.224	0.005
P52	51.60	0.47	5.70	0.13	2.031	0.019	0.224	0.005
P53	52.60	0.48	5.70	0.13	2.071	0.019	0.224	0.005
P55	54.60	0.49	5.70	0.13	2.150	0.019	0.224	0.005
P56	55.60	0.50	5.70	0.13	2.189	0.020	0.224	0.005
P58	57.60	0.52	5.70	0.13	2.268	0.020	0.224	0.005
P60	59.60	0.53	5.70	0.13	2.346	0.021	0.224	0.005
P62	61.60	0.55	5.70	0.13	2.425	0.022	0.224	0.005
P63	62.60	0.56	5.70	0.13	2.465	0.022	0.224	0.005
P65	64.60	0.57	5.70	0.13	2.543	0.022	0.224	0.005
P67	66.60	0.59	5.70	0.13	2.622	0.023	0.224	0.005
P68	67.60	0.59	5.70	0.13	2.661	0.023	0.224	0.005
P70	69.60	0.61	5.70	0.13	2.740	0.024	0.224	0.005
P71	70.60	0.62	5.70	0.13	2.780	0.024	0.224	0.005
P75	74.60	0.65	5.70	0.13	2.937	0.026	0.224	0.005
P80	79.60	0.69	5.70	0.13	3.134	0.027	0.224	0.005
P85	84.60	0.73	5.70	0.13	3.331	0.029	0.224	0.005
P90	89.60	0.77	5.70	0.13	3.528	0.030	0.224	0.005
P95	94.60	0.81	5.70	0.13	3.724	0.032	0.224	0.005
P100	99.60	0.84	5.70	0.13	3.921	0.033	0.224	0.005
P102	101.60	0.85	5.70	0.13	4.000	0.033	0.224	0.005
P105	104.60	0.87	5.70	0.13	4.118	0.034	0.224	0.005
P110	109.60	0.91	5.70	0.13	4.315	0.036	0.224	0.005
P112	111.60	0.92	5.70	0.13	4.394	0.036	0.224	0.005
P115	114.60	0.94	5.70	0.13	4.512	0.037	0.224	0.005
P120	119.60	0.98	5.70	0.13	4.709	0.039	0.224	0.005
P125	124.60	1.01	5.70	0.13	4.906	0.040	0.224	0.005
P130	129.60	1.05	5.70	0.13	5.102	0.041	0.224	0.005
P132	131.60	1.06	5.70	0.13	5.181	0.042	0.224	0.005
P135	134.60	1.09	5.70	0.13	5.299	0.043	0.224	0.005
P140	139.60	1.12	5.70	0.13	5.496	0.044	0.224	0.005
P145	144.60	1.16	5.70	0.13	5.693	0.046	0.224	0.005
P150	149.60	1.19	5.70	0.13	5.890	0.047	0.224	0.005
P150A	149.50	1.19	8.40	0.15	5.886	0.047	0.331	0.006
P155	154.50	1.23	8.40	0.15	6.083	0.048	0.331	0.006
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
P160	159.50	1.26	8.40	0.15	6.280	0.050	0.331	0.006
P165	164.50	1.30	8.40	0.15	6.476	0.051	0.331	0.006
P170	169.50	1.33	8.40	0.15	6.673	0.052	0.331	0.006
P175	174.50	1.37	8.40	0.15	6.870	0.054	0.331	0.006
P180	179.50	1.40	8.40	0.15	7.067	0.055	0.331	0.006
P185	184.50	1.44	8.40	0.15	7.264	0.057	0.331	0.006
P190	189.50	1.48	8.40	0.15	7.461	0.058	0.331	0.006
P195	194.50	1.51	8.40	0.15	7.657	0.059	0.331	0.006
P200	199.50	1.55	8.40	0.15	7.854	0.061	0.331	0.006
P205	204.50	1.58	8.40	0.15	8.051	0.062	0.331	0.006
P209	208.50	1.61	8.40	0.15	8.209	0.063	0.331	0.006
P210	209.50	1.62	8.40	0.15	8.248	0.064	0.331	0.006
P215	214.50	1.65	8.40	0.15	8.445	0.065	0.331	0.006
P220	219.50	1.68	8.40	0.15	8.642	0.066	0.331	0.006
P225	224.50	1.71	8.40	0.15	8.839	0.067	0.331	0.006
P230	229.50	1.75	8.40	0.15	9.035	0.069	0.331	0.006
P235	234.50	1.78	8.40	0.15	9.232	0.070	0.331	0.006
P240	239.50	1.81	8.40	0.15	9.429	0.071	0.331	0.006
P245	244.50	1.84	8.40	0.15	9.626	0.072	0.331	0.006
P250	249.50	1.88	8.40	0.15	9.823	0.074	0.331	0.006
P255	254.50	1.91	8.40	0.15	10.020	0.075	0.331	0.006
P260	259.50	1.94	8.40	0.15	10.217	0.076	0.331	0.006
P265	264.50	1.97	8.40	0.15	10.413	0.078	0.331	0.006
P270	269.50	2.01	8.40	0.15	10.610	0.079	0.331	0.006
P275	274.50	2.04	8.40	0.15	10.807	0.080	0.331	0.006
P280	279.50	2.07	8.40	0.15	11.004	0.081	0.331	0.006
P285	284.50	2.10	8.40	0.15	11.201	0.083	0.331	0.006
P290	289.50	2.14	8.40	0.15	11.398	0.084	0.331	0.006
P295	294.50	2.17	8.40	0.15	11.594	0.085	0.331	0.006
P300	299.50	2.20	8.40	0.15	11.791	0.087	0.331	0.006
P305	304.50	2.24	8.40	0.15	11.988	0.088	0.331	0.006
P310	309.50	2.27	8.40	0.15	12.185	0.089	0.331	0.006
P315	314.50	2.30	8.40	0.15	12.382	0.091	0.331	0.006
P320	319.50	2.33	8.40	0.15	12.579	0.092	0.331	0.006
P325	324.50	2.36	8.40	0.15	12.776	0.093	0.331	0.006
P330	329.50	2.39	8.40	0.15	12.972	0.094	0.331	0.006
P335	334.50	2.42	8.40	0.15	13.169	0.095	0.331	0.006
P340	339.50	2.45	8.40	0.15	13.366	0.096	0.331	0.006
P345	344.50	2.48	8.40	0.15	13.563	0.098	0.331	0.006
P350	349.50	2.51	8.40	0.15	13.760	0.099	0.331	0.006
P355	354.50	2.54	8.40	0.15	13.957	0.100	0.331	0.006
P360	359.50	2.57	8.40	0.15	14.154	0.101	0.331	0.006
P365	364.50	2.60	8.40	0.15	14.350	0.102	0.331	0.006
P370	369.50	2.63	8.40	0.15	14.547	0.104	0.331	0.006
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
P375	374.50	2.67	8.40	0.15	14.744	0.105	0.331	0.006
P380	379.50	2.70	8.40	0.15	14.941	0.106	0.331	0.006
P385	384.50	2.73	8.40	0.15	15.138	0.107	0.331	0.006
P390	389.50	2.77	8.40	0.15	15.335	0.109	0.331	0.006
P395	394.50	2.79	8.40	0.15	15.531	0.110	0.331	0.006
P400	399.50	2.82	8.40	0.15	15.728	0.111	0.331	0.006
P405	404.50	3.00	8.40	0.15	15.925	0.118	0.331	0.006
P410	409.50	3.00	8.40	0.15	16.122	0.118	0.331	0.006
P415	414.50	3.00	8.40	0.15	16.319	0.118	0.331	0.006
P420	419.50	3.00	8.40	0.15	16.516	0.118	0.331	0.006
P425	424.50	3.00	8.40	0.15	16.713	0.118	0.331	0.006
P430	429.50	3.00	8.40	0.15	16.909	0.118	0.331	0.006
P435	434.50	3.00	8.40	0.15	17.106	0.118	0.331	0.006
P440	439.50	3.00	8.40	0.15	17.303	0.118	0.331	0.006
P445	444.50	3.00	8.40	0.15	17.500	0.118	0.331	0.006
P450	449.50	3.00	8.40	0.15	17.697	0.118	0.331	0.006
P455	454.50	3.30	8.40	0.15	17.894	0.130	0.331	0.006
P460	459.50	3.30	8.40	0.15	18.091	0.130	0.331	0.006
P465	464.50	3.30	8.40	0.15	18.287	0.130	0.331	0.006
P470	469.50	3.30	8.40	0.15	18.484	0.130	0.331	0.006
P475	474.50	3.30	8.40	0.15	18.681	0.130	0.331	0.006
P480	479.50	3.30	8.40	0.15	18.878	0.130	0.331	0.006
P485	484.50	3.30	8.40	0.15	19.075	0.130	0.331	0.006
P490	489.50	3.30	8.40	0.15	19.272	0.130	0.331	0.006
P495	494.50	3.30	8.40	0.15	19.468	0.130	0.331	0.006
P500	499.50	3.30	8.40	0.15	19.665	0.130	0.331	0.006
P505	504.50	3.44	8.40	0.15	19.862	0.135	0.331	0.006
P540	539.50	3.66	8.40	0.15	21.240	0.144	0.331	0.006
P545	544.50	3.69	8.40	0.15	21.437	0.145	0.331	0.006
P590	589.50	3.97	8.40	0.15	23.209	0.156	0.331	0.006
P595	594.50	4.00	8.40	0.15	23.405	0.157	0.331	0.006
P600	599.50	4.03	8.40	0.15	23.602	0.159	0.331	0.006
P610	609.50	4.09	8.40	0.15	23.996	0.161	0.331	0.006
P620	619.50	4.15	8.40	0.15	24.390	0.163	0.331	0.006
P625	624.50	4.18	8.40	0.15	24.587	0.165	0.331	0.006
P635	634.50	4.25	8.40	0.15	24.980	0.167	0.331	0.006
P650	649.50	4.34	8.40	0.15	25.571	0.171	0.331	0.006
P680	679.50	4.52	8.40	0.15	26.752	0.178	0.331	0.006
P690	689.50	4.59	8.40	0.15	27.146	0.181	0.331	0.006
P700	699.50	4.65	8.40	0.15	27.539	0.183	0.331	0.006
P710	709.50	4.71	8.40	0.15	27.933	0.185	0.331	0.006
P720	719.50	4.77	8.40	0.15	28.327	0.188	0.331	0.006
P730	729.50	4.83	8.40	0.15	28.720	0.190	0.331	0.006
P740	739.50	4.89	8.40	0.15	29.114	0.193	0.331	0.006
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
P750	749.50	4.95	8.40	0.15	29.508	0.195	0.331	0.006
P760	759.50	5.02	8.40	0.15	29.902	0.197	0.331	0.006
P770	769.50	5.08	8.40	0.15	30.295	0.200	0.331	0.006
P780	779.50	5.14	8.40	0.15	30.689	0.202	0.331	0.006
P790	789.50	5.20	8.40	0.15	31.083	0.205	0.331	0.006
P800	799.50	5.26	8.40	0.15	31.476	0.207	0.331	0.006
P810	809.50	5.32	8.40	0.15	31.870	0.210	0.331	0.006
P820	819.50	5.38	8.40	0.15	32.264	0.212	0.331	0.006
P830	829.50	5.44	8.40	0.15	32.657	0.214	0.331	0.006
P840	839.50	5.51	8.40	0.15	33.051	0.217	0.331	0.006
P850	849.50	5.57	8.40	0.15	33.445	0.219	0.331	0.006
P860	859.50	5.63	8.40	0.15	33.839	0.222	0.331	0.006
P870	869.50	5.69	8.40	0.15	34.232	0.224	0.331	0.006
P880	879.50	5.75	8.40	0.15	34.626	0.226	0.331	0.006
P890	889.50	5.81	8.40	0.15	35.020	0.229	0.331	0.006
P900	899.50	5.87	8.40	0.15	35.413	0.231	0.331	0.006
P910	909.50	5.93	8.40	0.15	35.807	0.234	0.331	0.006
P915	914.50	5.96	8.40	0.15	36.004	0.235	0.331	0.006
P920	919.50	5.99	8.40	0.15	36.201	0.236	0.331	0.006
P930	929.50	6.05	8.40	0.15	36.594	0.238	0.331	0.006
P940	939.50	6.11	8.40	0.15	36.988	0.241	0.331	0.006
P950	949.50	6.18	8.40	0.15	37.382	0.243	0.331	0.006
P960	959.50	6.24	8.40	0.15	37.776	0.246	0.331	0.006
P970	969.50	6.30	8.40	0.15	38.169	0.248	0.331	0.006
P980	979.50	6.36	8.40	0.15	38.563	0.250	0.331	0.006
P990	989.50	6.42	8.40	0.15	38.957	0.253	0.331	0.006
P1000	999.50	6.48	8.40	0.15	39.350	0.255	0.331	0.006
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

TABLE OF DIMENSIONS OF O-RINGS FOR STATIC SEALING OF CYLINDRICAL SURFACE AND FLAT SURFACE

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
G20	19.40	0.22	3.10	0.10	0.764	0.009	0.122	0.004
G25	24.40	0.25	3.10	0.10	0.961	0.010	0.122	0.004
G30	29.40	0.29	3.10	0.10	1.157	0.011	0.122	0.004
G35	34.40	0.33	3.10	0.10	1.354	0.013	0.122	0.004
G40	39.40	0.37	3.10	0.10	1.551	0.015	0.122	0.004
G45	44.40	0.41	3.10	0.10	1.748	0.016	0.122	0.004
G50	49.40	0.45	3.10	0.10	1.945	0.018	0.122	0.004
G55	54.40	0.49	3.10	0.10	2.142	0.019	0.122	0.004
G58	57.40	0.51	3.10	0.10	2.260	0.020	0.122	0.004
G60	59.40	0.53	3.10	0.10	2.339	0.021	0.122	0.004
G65	64.40	0.57	3.10	0.10	2.535	0.022	0.122	0.004
G70	69.40	0.61	3.10	0.10	2.732	0.024	0.122	0.004
G75	74.40	0.65	3.10	0.10	2.929	0.026	0.122	0.004
G80	79.40	0.69	3.10	0.10	3.126	0.027	0.122	0.004
G85	84.40	0.73	3.10	0.10	3.323	0.029	0.122	0.004
G90	89.40	0.77	3.10	0.10	3.520	0.030	0.122	0.004
G95	94.40	0.81	3.10	0.10	3.717	0.032	0.122	0.004
G100	99.40	0.85	3.10	0.10	3.913	0.033	0.122	0.004
G105	104.40	0.87	3.10	0.10	4.110	0.034	0.122	0.004
G110	109.40	0.91	3.10	0.10	4.307	0.036	0.122	0.004
G115	114.40	0.94	3.10	0.10	4.504	0.037	0.122	0.004
G120	119.40	0.98	3.10	0.10	4.701	0.039	0.122	0.004
G125	124.40	1.01	3.10	0.10	4.898	0.040	0.122	0.004
G130	129.40	1.05	3.10	0.10	5.094	0.041	0.122	0.004
G135	134.40	1.08	3.10	0.10	5.291	0.043	0.122	0.004
G140	139.40	1.12	3.10	0.10	5.488	0.044	0.122	0.004
G145	144.40	1.16	3.10	0.10	5.685	0.046	0.122	0.004
G150	149.30	1.19	5.70	0.13	5.878	0.047	0.224	0.005
G155	154.30	1.23	5.70	0.13	6.075	0.048	0.224	0.005
G160	159.30	1.26	5.70	0.13	6.272	0.050	0.224	0.005
G165	164.30	1.30	5.70	0.13	6.468	0.051	0.224	0.005
G170	169.30	1.33	5.70	0.13	6.665	0.052	0.224	0.005
G175	174.30	1.37	5.70	0.13	6.862	0.054	0.224	0.005
G180	179.30	1.40	5.70	0.13	7.059	0.055	0.224	0.005
G185	184.30	1.44	5.70	0.13	7.256	0.057	0.224	0.005
G190	189.30	1.47	5.70	0.13	7.453	0.058	0.224	0.005
G195	194.30	1.51	5.70	0.13	7.650	0.059	0.224	0.005
G200	199.30	1.55	5.70	0.13	7.846	0.061	0.224	0.005
G205	204.30	1.58	5.70	0.13	8.043	0.062	0.224	0.005
G210	209.30	1.61	5.70	0.13	8.240	0.063	0.224	0.005
G215	214.30	1.65	5.70	0.13	8.437	0.065	0.224	0.005
G220	219.30	1.68	5.70	0.13	8.634	0.066	0.224	0.005
G225	224.30	1.71	5.70	0.13	8.831	0.067	0.224	0.005
G230	229.30	1.73	5.70	0.13	9.028	0.068	0.224	0.005
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
G235	234.30	1.78	5.70	0.13	9.224	0.070	0.224	0.005
G240	239.30	1.81	5.70	0.13	9.421	0.071	0.224	0.005
G245	244.30	1.85	5.70	0.13	9.618	0.073	0.224	0.005
G250	249.30	1.88	5.70	0.13	9.815	0.074	0.224	0.005
G255	254.30	1.91	5.70	0.13	10.012	0.075	0.224	0.005
G260	259.30	1.94	5.70	0.13	10.209	0.076	0.224	0.005
G265	264.30	1.98	5.70	0.13	10.405	0.078	0.224	0.005
G270	269.30	2.01	5.70	0.13	10.602	0.079	0.224	0.005
G275	274.30	2.04	5.70	0.13	10.799	0.080	0.224	0.005
G280	279.30	2.07	5.70	0.13	10.996	0.081	0.224	0.005
G285	284.30	2.11	5.70	0.13	11.193	0.083	0.224	0.005
G290	289.30	2.14	5.70	0.13	11.390	0.084	0.224	0.005
G295	294.30	2.17	5.70	0.13	11.587	0.085	0.224	0.005
G300	299.30	2.20	5.70	0.13	11.783	0.087	0.224	0.005
G305	304.30	2.24	5.70	0.13	11.980	0.088	0.224	0.005
G310	309.30	2.27	5.70	0.13	12.177	0.089	0.224	0.005
G315	314.30	2.30	5.70	0.13	12.374	0.091	0.224	0.005
G320	319.30	2.33	5.70	0.13	12.571	0.092	0.224	0.005
G325	324.30	2.36	5.70	0.13	12.768	0.093	0.224	0.005
G330	329.30	2.39	5.70	0.13	12.965	0.094	0.224	0.005
G335	334.30	2.42	5.70	0.13	13.161	0.095	0.224	0.005
G340	339.30	2.45	5.70	0.13	13.358	0.096	0.224	0.005
G345	344.30	2.48	5.70	0.13	13.555	0.098	0.224	0.005
G350	349.30	2.51	5.70	0.13	13.752	0.099	0.224	0.005
G355	354.30	2.54	5.70	0.13	13.949	0.100	0.224	0.005
G360	359.30	2.57	5.70	0.13	14.146	0.101	0.224	0.005
G365	364.30	2.60	5.70	0.13	14.342	0.102	0.224	0.005
G370	369.30	2.63	5.70	0.13	14.539	0.104	0.224	0.005
G375	374.30	2.67	5.70	0.13	14.736	0.105	0.224	0.005
G380	379.30	2.70	5.70	0.13	14.933	0.106	0.224	0.005
G385	384.30	2.73	5.70	0.13	15.130	0.107	0.224	0.005
G390	389.30	2.77	5.70	0.13	15.327	0.109	0.224	0.005
G395	394.30	2.79	5.70	0.13	15.524	0.110	0.224	0.005
G400	399.30	2.82	5.70	0.13	15.720	0.111	0.224	0.005
G405	404.30	3.00	5.70	0.13	15.917	0.118	0.224	0.005
G410	409.30	3.00	5.70	0.13	16.114	0.118	0.224	0.005
G415	414.30	3.00	5.70	0.13	16.311	0.118	0.224	0.005
G420	419.30	3.00	5.70	0.13	16.508	0.118	0.224	0.005
G425	424.30	3.00	5.70	0.13	16.705	0.118	0.224	0.005
G430	429.30	3.00	5.70	0.13	16.902	0.118	0.224	0.005
G435	434.30	3.00	5.70	0.13	17.098	0.118	0.224	0.005
G440	439.30	3.00	5.70	0.13	17.295	0.118	0.224	0.005
G445	444.30	3.00	5.70	0.13	17.492	0.118	0.224	0.005
G450	449.30	3.00	5.70	0.13	17.689	0.118	0.224	0.005
G455	454.30	3.30	5.70	0.13	17.886	0.130	0.224	0.005
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
G460	459.30	3.30	5.70	0.13	18.083	0.130	0.224	0.005
G465	464.30	3.30	5.70	0.13	18.279	0.130	0.224	0.005
G470	469.30	3.30	5.70	0.13	18.476	0.130	0.224	0.005
G475	474.30	3.30	5.70	0.13	18.673	0.130	0.224	0.005
G480	479.30	3.30	5.70	0.13	18.870	0.130	0.224	0.005
G485	484.30	3.30	5.70	0.13	19.067	0.130	0.224	0.005
G490	489.30	3.30	5.70	0.13	19.264	0.130	0.224	0.005
G495	494.30	3.30	5.70	0.13	19.461	0.130	0.224	0.005
G500	499.30	3.30	5.70	0.13	19.657	0.130	0.224	0.005
G510	509.30	3.30	5.70	0.13	20.051	0.130	0.224	0.005
G520	519.30	3.54	5.70	0.13	20.445	0.139	0.224	0.005
G525	524.30	3.56	5.70	0.13	20.642	0.140	0.224	0.005
G530	529.30	3.72	5.70	0.13	20.839	0.146	0.224	0.005
G535	534.30	3.72	5.70	0.13	21.035	0.143	0.224	0.005
G540	539.30	3.72	5.70	0.13	21.232	0.146	0.224	0.005
G545	544.30	3.72	5.70	0.13	21.429	0.145	0.224	0.005
G550	549.30	3.72	5.70	0.13	21.626	0.146	0.224	0.005
G555	554.30	3.75	5.70	0.13	21.823	0.148	0.224	0.005
G560	559.30	3.81	5.70	0.13	22.020	0.150	0.224	0.005
G570	569.30	3.81	5.70	0.13	22.413	0.150	0.224	0.005
G575	574.30	3.87	5.70	0.13	22.610	0.152	0.224	0.005
G580	579.30	3.90	5.70	0.13	22.807	0.154	0.224	0.005
G585	584.30	3.93	5.70	0.13	23.004	0.155	0.224	0.005
G590	589.30	3.97	5.70	0.13	23.201	0.156	0.224	0.005
G600	599.30	4.03	5.70	0.13	23.594	0.159	0.224	0.005
G605	604.30	4.06	5.70	0.13	23.791	0.160	0.224	0.005
G615	614.30	4.12	5.70	0.13	24.185	0.162	0.224	0.005
G620	619.30	4.15	5.70	0.13	24.382	0.163	0.224	0.005
G630	629.30	4.21	5.70	0.13	24.776	0.166	0.224	0.005
G860	859.30	5.63	5.70	0.13	33.831	0.222	0.224	0.005
G910	909.30	5.93	5.70	0.13	35.799	0.234	0.224	0.005
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
V10	9.50	0.17	4.00	0.10	0.374	0.007	0.157	0.004
V15	14.50	0.20	4.00	0.10	0.571	0.008	0.157	0.004
V24	23.50	0.24	4.00	0.10	0.925	0.009	0.157	0.004
V34	33.50	0.33	4.00	0.10	1.319	0.013	0.157	0.004
V40	39.50	0.37	4.00	0.10	1.555	0.015	0.157	0.004
V55	54.50	0.49	4.00	0.10	2.146	0.019	0.157	0.004
V58	57.50	0.52	4.00	0.10	2.264	0.020	0.157	0.004
V70	69.00	0.61	4.00	0.10	2.717	0.024	0.157	0.004
V85	84.00	0.72	4.00	0.10	3.307	0.028	0.157	0.004
V100	99.00	0.83	4.00	0.10	3.898	0.033	0.157	0.004
V120	119.00	0.97	4.00	0.10	4.685	0.038	0.157	0.004
V140	138.50	1.08	4.00	0.10	5.453	0.043	0.157	0.004
V150	148.50	1.18	4.00	0.10	5.846	0.046	0.157	0.004
V175	173.00	1.36	4.00	0.10	6.811	0.054	0.157	0.004
V225	222.50	1.70	6.00	0.15	8.760	0.067	0.236	0.006
V275	272.00	2.02	6.00	0.15	10.709	0.080	0.236	0.006
V315	312.00	2.22	6.00	0.15	12.283	0.087	0.236	0.006
V325	321.50	2.34	6.00	0.15	12.657	0.092	0.236	0.006
V380	376.00	2.68	6.00	0.15	14.803	0.106	0.236	0.006
V390	386.00	2.69	6.00	0.15	15.197	0.106	0.236	0.006
V430	425.50	2.99	6.00	0.15	16.752	0.118	0.236	0.006
V475	470.50	3.22	6.00	0.15	18.524	0.127	0.236	0.006
V480	475.00	3.30	10.00	0.30	18.701	0.130	0.394	0.012
V490	485.00	3.31	10.00	0.30	19.094	0.130	0.394	0.012
V510	504.50	3.44	10.00	0.30	19.862	0.135	0.394	0.012
V530	524.50	3.60	10.00	0.30	20.650	0.142	0.394	0.012
V585	579.00	3.92	10.00	0.30	22.795	0.154	0.394	0.012
V640	633.50	4.24	10.00	0.30	24.941	0.167	0.394	0.012
V690	683.00	4.54	10.00	0.30	26.890	0.179	0.394	0.012
V740	732.50	4.83	10.00	0.30	28.839	0.190	0.394	0.012
V790	782.00	5.12	10.00	0.30	30.787	0.202	0.394	0.012
V845	836.50	5.44	10.00	0.30	32.933	0.214	0.394	0.012
V950	940.50	6.06	10.00	0.30	37.027	0.239	0.394	0.012
V1055	1044.00	6.67	10.00	0.30	41.102	0.263	0.394	0.012
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

TABLE OF DIMENSIONS OF O-RINGS FOR STATIC SEALING

★ NBR tolerance per GMORS compound no. N7034AA.
★ For other NBR compounds, tolerance needs to be negotiated or new tool will be charged.

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
S3	2.50	0.13	1.50	0.08	0.098	0.005	0.059	0.003
S4	3.50	0.14	1.50	0.08	0.138	0.006	0.059	0.003
S5	4.50	0.14	1.50	0.08	0.177	0.006	0.059	0.003
S6	5.50	0.15	1.50	0.08	0.217	0.006	0.059	0.003
S7	6.50	0.15	1.50	0.08	0.256	0.006	0.059	0.003
S8	7.50	0.16	1.50	0.08	0.295	0.006	0.059	0.003
S9	8.50	0.16	1.50	0.08	0.335	0.006	0.059	0.003
S10	9.50	0.17	1.50	0.08	0.374	0.007	0.059	0.003
S11.2	10.70	0.18	1.50	0.08	0.421	0.007	0.059	0.003
S12	11.50	0.18	1.50	0.08	0.453	0.007	0.059	0.003
S12.5	12.00	0.19	1.50	0.08	0.472	0.007	0.059	0.003
S14	13.50	0.19	1.50	0.08	0.531	0.007	0.059	0.003
S15	14.50	0.19	1.50	0.08	0.571	0.007	0.059	0.003
S16	15.50	0.20	1.50	0.08	0.610	0.008	0.059	0.003
S18	17.50	0.21	1.50	0.08	0.689	0.008	0.059	0.003
S20	19.50	0.22	1.50	0.08	0.768	0.009	0.059	0.003
S22	21.50	0.23	1.50	0.08	0.846	0.009	0.059	0.003
S22.4	21.90	0.23	2.00	0.08	0.862	0.009	0.079	0.003
S24	23.50	0.24	2.00	0.08	0.925	0.009	0.079	0.003
S25	24.50	0.24	2.00	0.08	0.965	0.009	0.079	0.003
S26	25.50	0.25	2.00	0.08	1.004	0.010	0.079	0.003
S28	27.50	0.26	2.00	0.08	1.083	0.010	0.079	0.003
S29	28.50	0.28	2.00	0.08	1.122	0.011	0.079	0.003
S30	29.50	0.28	2.00	0.08	1.161	0.011	0.079	0.003
S31.5	31.00	0.29	2.00	0.08	1.220	0.011	0.079	0.003
S32	31.50	0.31	2.00	0.08	1.240	0.012	0.079	0.003
S34	33.50	0.32	2.00	0.08	1.319	0.013	0.079	0.003
S35	34.50	0.33	2.00	0.08	1.358	0.013	0.079	0.003
S35.5	35.00	0.33	2.00	0.08	1.378	0.013	0.079	0.003
S36	35.50	0.34	2.00	0.08	1.398	0.013	0.079	0.003
S38	37.50	0.36	2.00	0.08	1.476	0.014	0.079	0.003
S39	38.50	0.36	2.00	0.08	1.516	0.014	0.079	0.003
S40	39.50	0.38	2.00	0.08	1.555	0.015	0.079	0.003
S42	41.50	0.39	2.00	0.08	1.634	0.015	0.079	0.003
S44	43.50	0.40	2.00	0.08	1.713	0.016	0.079	0.003
S45	44.50	0.41	2.00	0.08	1.752	0.016	0.079	0.003
S46	45.50	0.42	2.00	0.08	1.791	0.017	0.079	0.003
S48	47.50	0.44	2.00	0.08	1.870	0.017	0.079	0.003
S50	49.50	0.45	2.00	0.08	1.949	0.018	0.079	0.003
S53	52.50	0.47	2.00	0.08	2.067	0.019	0.079	0.003
S55	54.50	0.50	2.00	0.08	2.146	0.020	0.079	0.003
S56	55.50	0.50	2.00	0.08	2.185	0.020	0.079	0.003
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JIS B 2401)

JIS B 2401 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
S60	59.50	0.52	2.00	0.08	2.343	0.020	0.079	0.003
S63	62.50	0.55	2.00	0.08	2.461	0.022	0.079	0.003
S65	64.50	0.56	2.00	0.08	2.539	0.022	0.079	0.003
S67	66.50	0.58	2.00	0.08	2.618	0.023	0.079	0.003
S70	69.50	0.61	2.00	0.08	2.736	0.024	0.079	0.003
S71	70.50	0.61	2.00	0.08	2.776	0.024	0.079	0.003
S75	74.50	0.64	2.00	0.08	2.933	0.025	0.079	0.003
S80	79.50	0.67	2.00	0.08	3.130	0.026	0.079	0.003
S85	84.50	0.71	2.00	0.08	3.327	0.028	0.079	0.003
S90	89.50	0.75	2.00	0.08	3.524	0.030	0.079	0.003
S95	94.50	0.79	2.00	0.08	3.720	0.031	0.079	0.003
S100	99.50	0.83	2.00	0.08	3.917	0.033	0.079	0.003
S105	104.50	0.87	2.00	0.08	4.114	0.034	0.079	0.003
S110	109.50	0.91	2.00	0.08	4.311	0.036	0.079	0.003
S112	111.50	0.91	2.00	0.08	4.390	0.036	0.079	0.003
S115	114.50	0.93	2.00	0.08	4.508	0.037	0.079	0.003
S120	119.50	0.97	2.00	0.08	4.705	0.038	0.079	0.003
S125	124.50	1.00	2.00	0.08	4.902	0.039	0.079	0.003
S130	129.50	1.05	2.00	0.08	5.098	0.041	0.079	0.003
S132	131.50	1.05	2.00	0.08	5.177	0.041	0.079	0.003
S135	134.50	1.08	2.00	0.08	5.295	0.043	0.079	0.003
S140	139.50	1.10	2.00	0.08	5.492	0.043	0.079	0.003
S145	144.50	1.13	2.00	0.08	5.689	0.044	0.079	0.003
S150	149.50	1.17	2.00	0.08	5.886	0.046	0.079	0.003
JIS B 2401	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JASO F404)

O-Ring Standard Size (JASO F404)

JASO F404 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
1003	2.80	0.13	1.90	0.08	0.110	0.005	0.075	0.003
1004	3.80	0.14	1.90	0.08	0.150	0.006	0.075	0.003
1005	4.80	0.15	1.90	0.08	0.189	0.006	0.075	0.003
1006	5.80	0.16	1.90	0.08	0.228	0.006	0.075	0.003
1007	6.80	0.17	1.90	0.08	0.268	0.007	0.075	0.003
1008	7.80	0.17	1.90	0.08	0.307	0.007	0.075	0.003
1009	8.80	0.18	1.90	0.08	0.346	0.007	0.075	0.003
1010	9.80	0.19	1.90	0.08	0.386	0.007	0.075	0.003
1011	11.00	0.20	1.90	0.08	0.433	0.008	0.075	0.003
1012	12.30	0.21	1.90	0.08	0.484	0.008	0.075	0.003
1013	13.00	0.21	1.90	0.08	0.512	0.008	0.075	0.003
1014	13.80	0.22	1.90	0.08	0.543	0.009	0.075	0.003
1015	14.80	0.23	1.90	0.08	0.583	0.009	0.075	0.003
1016	15.80	0.23	1.90	0.08	0.622	0.009	0.075	0.003
1017	16.80	0.24	1.90	0.08	0.661	0.010	0.075	0.003
1018	17.80	0.25	1.90	0.08	0.701	0.010	0.075	0.003
1019	18.80	0.26	1.90	0.08	0.740	0.010	0.075	0.003
1020	19.80	0.26	1.90	0.08	0.780	0.010	0.075	0.003
1021	21.00	0.27	1.90	0.08	0.827	0.011	0.075	0.003
1022	22.10	0.28	1.90	0.08	0.870	0.011	0.075	0.003
1023	23.30	0.29	1.90	0.08	0.917	0.011	0.075	0.003
1025	24.70	0.30	1.90	0.08	0.972	0.012	0.075	0.003
1026	26.20	0.31	1.90	0.08	1.031	0.012	0.075	0.003
1028	27.70	0.32	1.90	0.08	1.091	0.013	0.075	0.003
1030	29.70	0.34	1.90	0.08	1.169	0.013	0.075	0.003
1031	31.20	0.35	1.90	0.08	1.228	0.014	0.075	0.003
1033	33.20	0.36	1.90	0.08	1.307	0.014	0.075	0.003
1035	35.20	0.38	1.90	0.08	1.386	0.015	0.075	0.003
2010	9.80	0.19	2.40	0.09	0.386	0.007	0.094	0.004
2011	11.00	0.20	2.40	0.09	0.433	0.008	0.094	0.004
2012	12.30	0.21	2.40	0.09	0.484	0.008	0.094	0.004
2013	13.00	0.21	2.40	0.09	0.512	0.008	0.094	0.004
2014	13.80	0.22	2.40	0.09	0.543	0.009	0.094	0.004
2015	14.80	0.23	2.40	0.09	0.583	0.009	0.094	0.004
2016	15.80	0.23	2.40	0.09	0.622	0.009	0.094	0.004
2017	16.80	0.24	2.40	0.09	0.661	0.009	0.094	0.004
2018	17.80	0.25	2.40	0.09	0.701	0.010	0.094	0.004
2019	18.80	0.26	2.40	0.09	0.740	0.010	0.094	0.004
2020	19.80	0.26	2.40	0.09	0.780	0.010	0.094	0.004
2021	20.80	0.27	2.40	0.09	0.819	0.011	0.094	0.004
2022	22.10	0.28	2.40	0.09	0.870	0.011	0.094	0.004
2023	23.30	0.29	2.40	0.09	0.917	0.011	0.094	0.004
2025	24.70	0.30	2.40	0.09	0.972	0.012	0.094	0.004
2026	26.20	0.31	2.40	0.09	1.031	0.012	0.094	0.004
2028	27.70	0.32	2.40	0.09	1.091	0.013	0.094	0.004
2030	29.70	0.34	2.40	0.09	1.169	0.013	0.094	0.004
2031	31.20	0.35	2.40	0.09	1.228	0.014	0.094	0.004
2033	33.20	0.36	2.40	0.09	1.307	0.014	0.094	0.004
2035	35.20	0.38	2.40	0.09	1.386	0.015	0.094	0.004
2037	37.20	0.39	2.40	0.09	1.465	0.015	0.094	0.004
2040	39.20	0.40	2.40	0.09	1.543	0.016	0.094	0.004
2042	42.20	0.42	2.40	0.09	1.661	0.017	0.094	0.004
JASO F404	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (JASO F404)

JASO F404 SIZE	MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
	ID	±	CS	±	ID	±	CS	±
2045	44.70	0.44	2.40	0.09	1.760	0.017	0.094	0.004
2047	47.20	0.46	2.40	0.09	1.858	0.018	0.094	0.004
2050	49.70	0.48	2.40	0.09	1.957	0.019	0.094	0.004
2053	52.60	0.50	2.40	0.09	2.071	0.020	0.094	0.004
2056	55.60	0.52	2.40	0.09	2.189	0.020	0.094	0.004
2060	59.60	0.55	2.40	0.09	2.346	0.022	0.094	0.004
2063	62.60	0.57	2.40	0.09	2.465	0.022	0.094	0.004
2067	66.60	0.60	2.40	0.09	2.622	0.023	0.094	0.004
2071	70.60	0.62	2.40	0.09	2.780	0.025	0.094	0.004
3022	22.10	0.28	3.50	0.10	0.870	0.011	0.138	0.004
3024	23.70	0.29	3.50	0.10	0.933	0.011	0.138	0.004
3025	24.70	0.30	3.50	0.10	0.972	0.012	0.138	0.004
3026	25.70	0.31	3.50	0.10	1.012	0.012	0.138	0.004
3028	27.70	0.32	3.50	0.10	1.091	0.013	0.138	0.004
3030	29.70	0.34	3.50	0.10	1.169	0.013	0.138	0.004
3031	31.20	0.35	3.50	0.10	1.228	0.014	0.138	0.004
3032	31.70	0.35	3.50	0.10	1.248	0.014	0.138	0.004
3034	33.70	0.36	3.50	0.10	1.327	0.014	0.138	0.004
3035	35.20	0.38	3.50	0.10	1.386	0.015	0.138	0.004
3038	37.70	0.39	3.50	0.10	1.484	0.015	0.138	0.004
3039	38.70	0.40	3.50	0.10	1.484	0.015	0.138	0.004
3040	39.70	0.41	3.50	0.10	1.563	0.016	0.138	0.004
3042	41.70	0.42	3.50	0.10	1.642	0.017	0.138	0.004
3044	43.70	0.44	3.50	0.10	1.720	0.017	0.138	0.004
3045	44.70	0.44	3.50	0.10	1.760	0.017	0.138	0.004
3048	47.70	0.46	3.50	0.10	1.878	0.018	0.138	0.004
3050	49.70	0.48	3.50	0.10	1.957	0.019	0.138	0.004
3053	52.60	0.50	3.50	0.10	2.071	0.020	0.138	0.004
3056	55.60	0.52	3.50	0.10	2.189	0.020	0.138	0.004
3060	59.60	0.55	3.50	0.10	2.346	0.022	0.138	0.004
3063	62.60	0.57	3.50	0.10	2.465	0.022	0.138	0.004
3067	66.60	0.60	3.50	0.10	2.622	0.023	0.138	0.004
3071	70.60	0.62	3.50	0.10	2.780	0.025	0.138	0.004
3075	74.60	0.65	3.50	0.10	2.937	0.026	0.138	0.004
3080	79.60	0.69	3.50	0.10	3.134	0.027	0.138	0.004
3085	84.60	0.72	3.50	0.10	3.331	0.028	0.138	0.004
3090	89.60	0.75	3.50	0.10	3.528	0.030	0.138	0.004
3095	94.60	0.79	3.50	0.10	3.724	0.031	0.138	0.004
3100	99.60	0.82	3.50	0.10	3.921	0.032	0.138	0.004
3106	105.60	0.86	3.50	0.10	4.157	0.034	0.138	0.004
3112	111.60	0.90	3.50	0.10	4.394	0.036	0.138	0.004
3118	117.60	0.94	3.50	0.10	4.630	0.037	0.138	0.004
3125	124.60	0.99	3.50	0.10	4.906	0.039	0.138	0.004
3132	131.60	1.04	3.50	0.10	5.181	0.041	0.138	0.004
3140	139.60	1.09	3.50	0.10	5.496	0.043	0.138	0.004
3150	149.60	1.16	3.50	0.10	5.890	0.046	0.138	0.004
JASO F404	ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
1.00	0.12	1.00	0.08	0.039	0.005	0.039	0.003
1.50	0.12	1.00	0.08	0.059	0.005	0.039	0.003
2.00	0.13	1.00	0.08	0.079	0.005	0.039	0.003
2.50	0.13	1.00	0.08	0.098	0.005	0.039	0.003
3.00	0.14	1.00	0.08	0.118	0.006	0.039	0.003
3.50	0.14	1.00	0.08	0.138	0.006	0.039	0.003
4.00	0.14	1.00	0.08	0.157	0.006	0.039	0.003
4.50	0.15	1.00	0.08	0.177	0.006	0.039	0.003
5.00	0.15	1.00	0.08	0.197	0.006	0.039	0.003
5.50	0.16	1.00	0.08	0.217	0.006	0.039	0.003
6.00	0.16	1.00	0.08	0.236	0.006	0.039	0.003
6.50	0.16	1.00	0.08	0.256	0.006	0.039	0.003
7.00	0.17	1.00	0.08	0.276	0.007	0.039	0.003
7.50	0.17	1.00	0.08	0.295	0.007	0.039	0.003
8.00	0.17	1.00	0.08	0.315	0.007	0.039	0.003
8.50	0.18	1.00	0.08	0.335	0.007	0.039	0.003
9.00	0.18	1.00	0.08	0.354	0.007	0.039	0.003
9.50	0.19	1.00	0.08	0.374	0.007	0.039	0.003
10.00	0.19	1.00	0.08	0.394	0.007	0.039	0.003
10.50	0.19	1.00	0.08	0.413	0.007	0.039	0.003
11.00	0.20	1.00	0.08	0.433	0.008	0.039	0.003
11.50	0.20	1.00	0.08	0.453	0.008	0.039	0.003
12.00	0.21	1.00	0.08	0.472	0.008	0.039	0.003
12.50	0.21	1.00	0.08	0.492	0.008	0.039	0.003
13.00	0.21	1.00	0.08	0.512	0.008	0.039	0.003
13.50	0.22	1.00	0.08	0.531	0.009	0.039	0.003
14.00	0.22	1.00	0.08	0.551	0.009	0.039	0.003
14.50	0.22	1.00	0.08	0.571	0.009	0.039	0.003
15.00	0.23	1.00	0.08	0.591	0.009	0.039	0.003
15.50	0.23	1.00	0.08	0.610	0.009	0.039	0.003
16.00	0.24	1.00	0.08	0.630	0.009	0.039	0.003
16.50	0.24	1.00	0.08	0.650	0.009	0.039	0.003
17.00	0.24	1.00	0.08	0.669	0.009	0.039	0.003
17.50	0.25	1.00	0.08	0.689	0.010	0.039	0.003
18.00	0.25	1.00	0.08	0.709	0.010	0.039	0.003
18.50	0.25	1.00	0.08	0.728	0.010	0.039	0.003
19.00	0.26	1.00	0.08	0.748	0.010	0.039	0.003
19.50	0.26	1.00	0.08	0.768	0.010	0.039	0.003
20.00	0.26	1.00	0.08	0.787	0.010	0.039	0.003
20.50	0.27	1.00	0.08	0.807	0.011	0.039	0.003
21.00	0.27	1.00	0.08	0.827	0.011	0.039	0.003
21.50	0.28	1.00	0.08	0.846	0.011	0.039	0.003
22.00	0.28	1.00	0.08	0.866	0.011	0.039	0.003
22.50	0.28	1.00	0.08	0.886	0.011	0.039	0.003
23.00	0.29	1.00	0.08	0.906	0.011	0.039	0.003
23.50	0.29	1.00	0.08	0.925	0.011	0.039	0.003
24.00	0.29	1.00	0.08	0.945	0.011	0.039	0.003
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
24.50	0.30	1.00	0.08	0.965	0.012	0.039	0.003
25.00	0.30	1.00	0.08	0.984	0.012	0.039	0.003
25.50	0.31	1.00	0.08	1.004	0.012	0.039	0.003
26.00	0.31	1.00	0.08	1.024	0.012	0.039	0.003
27.00	0.32	1.00	0.08	1.063	0.013	0.039	0.003
28.00	0.32	1.00	0.08	1.102	0.013	0.039	0.003
29.00	0.33	1.00	0.08	1.142	0.013	0.039	0.003
30.00	0.34	1.00	0.08	1.181	0.013	0.039	0.003
31.00	0.34	1.00	0.08	1.220	0.013	0.039	0.003
32.00	0.35	1.00	0.08	1.260	0.014	0.039	0.003
33.00	0.36	1.00	0.08	1.299	0.014	0.039	0.003
34.00	0.37	1.00	0.08	1.339	0.015	0.039	0.003
35.00	0.37	1.00	0.08	1.378	0.015	0.039	0.003
36.00	0.38	1.00	0.08	1.417	0.015	0.039	0.003
37.00	0.39	1.00	0.08	1.457	0.015	0.039	0.003
38.00	0.40	1.00	0.08	1.496	0.016	0.039	0.003
39.00	0.40	1.00	0.08	1.535	0.016	0.039	0.003
40.00	0.41	1.00	0.08	1.575	0.016	0.039	0.003
41.00	0.42	1.00	0.08	1.614	0.017	0.039	0.003
42.00	0.42	1.00	0.08	1.654	0.017	0.039	0.003
43.00	0.43	1.00	0.08	1.693	0.017	0.039	0.003
44.00	0.44	1.00	0.08	1.732	0.017	0.039	0.003
45.00	0.44	1.00	0.08	1.772	0.017	0.039	0.003
46.00	0.45	1.00	0.08	1.811	0.018	0.039	0.003
48.00	0.47	1.00	0.08	1.890	0.019	0.039	0.003
56.00	0.52	1.00	0.08	2.205	0.020	0.039	0.003
1.00	0.12	1.50	0.08	0.039	0.005	0.059	0.003
1.50	0.12	1.50	0.08	0.059	0.005	0.059	0.003
2.00	0.13	1.50	0.08	0.079	0.005	0.059	0.003
2.50	0.13	1.50	0.08	0.098	0.005	0.059	0.003
3.00	0.14	1.50	0.08	0.118	0.006	0.059	0.003
3.50	0.14	1.50	0.08	0.138	0.006	0.059	0.003
4.00	0.14	1.50	0.08	0.157	0.006	0.059	0.003
4.50	0.15	1.50	0.08	0.177	0.006	0.059	0.003
5.00	0.15	1.50	0.08	0.197	0.006	0.059	0.003
5.50	0.16	1.50	0.08	0.217	0.006	0.059	0.003
6.00	0.16	1.50	0.08	0.236	0.006	0.059	0.003
6.50	0.16	1.50	0.08	0.256	0.006	0.059	0.003
7.00	0.17	1.50	0.08	0.276	0.007	0.059	0.003
7.50	0.17	1.50	0.08	0.295	0.007	0.059	0.003
8.00	0.17	1.50	0.08	0.315	0.007	0.059	0.003
8.50	0.18	1.50	0.08	0.335	0.007	0.059	0.003
9.00	0.18	1.50	0.08	0.354	0.007	0.059	0.003
9.50	0.19	1.50	0.08	0.374	0.007	0.059	0.003
10.00	0.19	1.50	0.08	0.394	0.007	0.059	0.003
10.50	0.19	1.50	0.08	0.413	0.007	0.059	0.003
11.00	0.20	1.50	0.08	0.433	0.008	0.059	0.003
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
11.50	0.20	1.50	0.08	0.453	0.008	0.059	0.003
12.00	0.21	1.50	0.08	0.472	0.008	0.059	0.003
12.50	0.21	1.50	0.08	0.492	0.008	0.059	0.003
13.00	0.21	1.50	0.08	0.512	0.008	0.059	0.003
13.50	0.22	1.50	0.08	0.531	0.009	0.059	0.003
14.00	0.22	1.50	0.08	0.551	0.009	0.059	0.003
14.50	0.22	1.50	0.08	0.571	0.009	0.059	0.003
15.00	0.23	1.50	0.08	0.591	0.009	0.059	0.003
15.50	0.23	1.50	0.08	0.610	0.009	0.059	0.003
16.00	0.24	1.50	0.08	0.630	0.009	0.059	0.003
16.50	0.24	1.50	0.08	0.650	0.009	0.059	0.003
17.00	0.24	1.50	0.08	0.669	0.009	0.059	0.003
17.50	0.25	1.50	0.08	0.689	0.010	0.059	0.003
18.00	0.25	1.50	0.08	0.709	0.010	0.059	0.003
18.50	0.25	1.50	0.08	0.728	0.010	0.059	0.003
19.00	0.26	1.50	0.08	0.748	0.010	0.059	0.003
19.50	0.26	1.50	0.08	0.768	0.010	0.059	0.003
20.00	0.26	1.50	0.08	0.787	0.010	0.059	0.003
20.50	0.27	1.50	0.08	0.807	0.011	0.059	0.003
21.00	0.27	1.50	0.08	0.827	0.011	0.059	0.003
21.50	0.28	1.50	0.08	0.846	0.011	0.059	0.003
22.00	0.28	1.50	0.08	0.866	0.011	0.059	0.003
22.50	0.28	1.50	0.08	0.886	0.011	0.059	0.003
23.00	0.29	1.50	0.08	0.906	0.011	0.059	0.003
23.50	0.29	1.50	0.08	0.925	0.011	0.059	0.003
24.00	0.29	1.50	0.08	0.945	0.011	0.059	0.003
24.50	0.30	1.50	0.08	0.965	0.012	0.059	0.003
25.00	0.30	1.50	0.08	0.984	0.012	0.059	0.003
25.50	0.31	1.50	0.08	1.004	0.012	0.059	0.003
26.00	0.31	1.50	0.08	1.024	0.012	0.059	0.003
26.50	0.31	1.50	0.08	1.043	0.012	0.059	0.003
27.00	0.32	1.50	0.08	1.063	0.013	0.059	0.003
27.50	0.32	1.50	0.08	1.083	0.013	0.059	0.003
28.00	0.32	1.50	0.08	1.102	0.013	0.059	0.003
28.50	0.33	1.50	0.08	1.122	0.013	0.059	0.003
29.00	0.33	1.50	0.08	1.142	0.013	0.059	0.003
29.50	0.33	1.50	0.08	1.161	0.013	0.059	0.003
30.00	0.34	1.50	0.08	1.181	0.013	0.059	0.003
30.50	0.34	1.50	0.08	1.201	0.013	0.059	0.003
31.00	0.34	1.50	0.08	1.220	0.013	0.059	0.003
32.00	0.35	1.50	0.08	1.260	0.014	0.059	0.003
32.50	0.36	1.50	0.08	1.280	0.014	0.059	0.003
33.00	0.36	1.50	0.08	1.299	0.014	0.059	0.003
33.50	0.36	1.50	0.08	1.319	0.014	0.059	0.003
34.00	0.37	1.50	0.08	1.339	0.015	0.059	0.003
34.50	0.37	1.50	0.08	1.358	0.015	0.059	0.003
35.00	0.37	1.50	0.08	1.378	0.015	0.059	0.003
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
35.50	0.38	1.50	0.08	1.398	0.015	0.059	0.003
36.00	0.38	1.50	0.08	1.417	0.015	0.059	0.003
36.50	0.38	1.50	0.08	1.437	0.015	0.059	0.003
37.00	0.39	1.50	0.08	1.457	0.015	0.059	0.003
37.50	0.39	1.50	0.08	1.476	0.015	0.059	0.003
38.00	0.40	1.50	0.08	1.496	0.016	0.059	0.003
38.50	0.40	1.50	0.08	1.516	0.016	0.059	0.003
39.00	0.40	1.50	0.08	1.535	0.016	0.059	0.003
39.50	0.41	1.50	0.08	1.555	0.016	0.059	0.003
40.00	0.41	1.50	0.08	1.575	0.016	0.059	0.003
41.00	0.42	1.50	0.08	1.614	0.017	0.059	0.003
42.00	0.42	1.50	0.08	1.654	0.017	0.059	0.003
43.00	0.43	1.50	0.08	1.693	0.017	0.059	0.003
44.00	0.44	1.50	0.08	1.732	0.017	0.059	0.003
45.00	0.44	1.50	0.08	1.772	0.017	0.059	0.003
46.00	0.45	1.50	0.08	1.811	0.018	0.059	0.003
47.00	0.46	1.50	0.08	1.850	0.018	0.059	0.003
48.00	0.47	1.50	0.08	1.890	0.019	0.059	0.003
49.00	0.47	1.50	0.08	1.929	0.019	0.059	0.003
50.00	0.48	1.50	0.08	1.969	0.019	0.059	0.003
51.00	0.49	1.50	0.08	2.008	0.019	0.059	0.003
51.50	0.49	1.50	0.08	2.028	0.019	0.059	0.003
52.00	0.49	1.50	0.08	2.047	0.019	0.059	0.003
53.00	0.50	1.50	0.08	2.087	0.020	0.059	0.003
54.00	0.51	1.50	0.08	2.126	0.020	0.059	0.003
55.00	0.52	1.50	0.08	2.165	0.020	0.059	0.003
56.00	0.52	1.50	0.08	2.205	0.020	0.059	0.003
57.00	0.53	1.50	0.08	2.244	0.021	0.059	0.003
58.00	0.54	1.50	0.08	2.283	0.021	0.059	0.003
59.00	0.54	1.50	0.08	2.323	0.021	0.059	0.003
60.00	0.55	1.50	0.08	2.362	0.022	0.059	0.003
61.00	0.56	1.50	0.08	2.402	0.022	0.059	0.003
62.00	0.56	1.50	0.08	2.441	0.022	0.059	0.003
63.00	0.57	1.50	0.08	2.480	0.022	0.059	0.003
64.00	0.58	1.50	0.08	2.520	0.023	0.059	0.003
65.00	0.58	1.50	0.08	2.559	0.023	0.059	0.003
66.00	0.59	1.50	0.08	2.598	0.023	0.059	0.003
67.00	0.60	1.50	0.08	2.638	0.024	0.059	0.003
68.00	0.61	1.50	0.08	2.677	0.024	0.059	0.003
69.00	0.61	1.50	0.08	2.717	0.024	0.059	0.003
70.00	0.62	1.50	0.08	2.756	0.024	0.059	0.003
71.00	0.63	1.50	0.08	2.795	0.025	0.059	0.003
71.50	0.63	1.50	0.08	2.815	0.025	0.059	0.003
72.00	0.63	1.50	0.08	2.835	0.025	0.059	0.003
73.00	0.64	1.50	0.08	2.874	0.025	0.059	0.003
74.00	0.65	1.50	0.08	2.913	0.026	0.059	0.003
75.00	0.65	1.50	0.08	2.953	0.026	0.059	0.003
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
76.00	0.66	1.50	0.08	2.992	0.026	0.059	0.003
77.00	0.67	1.50	0.08	3.031	0.026	0.059	0.003
78.00	0.67	1.50	0.08	3.071	0.026	0.059	0.003
79.00	0.68	1.50	0.08	3.110	0.027	0.059	0.003
80.00	0.69	1.50	0.08	3.150	0.027	0.059	0.003
81.00	0.70	1.50	0.08	3.189	0.028	0.059	0.003
82.00	0.70	1.50	0.08	3.228	0.028	0.059	0.003
83.00	0.71	1.50	0.08	3.268	0.028	0.059	0.003
84.00	0.72	1.50	0.08	3.307	0.028	0.059	0.003
85.00	0.72	1.50	0.08	3.346	0.028	0.059	0.003
86.00	0.73	1.50	0.08	3.386	0.029	0.059	0.003
87.00	0.74	1.50	0.08	3.425	0.029	0.059	0.003
88.00	0.74	1.50	0.08	3.465	0.029	0.059	0.003
89.00	0.75	1.50	0.08	3.504	0.030	0.059	0.003
90.00	0.76	1.50	0.08	3.543	0.030	0.059	0.003
91.00	0.76	1.50	0.08	3.583	0.030	0.059	0.003
92.00	0.77	1.50	0.08	3.622	0.030	0.059	0.003
93.00	0.78	1.50	0.08	3.661	0.031	0.059	0.003
94.00	0.78	1.50	0.08	3.701	0.031	0.059	0.003
95.00	0.79	1.50	0.08	3.740	0.031	0.059	0.003
96.00	0.80	1.50	0.08	3.780	0.031	0.059	0.003
97.00	0.80	1.50	0.08	3.819	0.031	0.059	0.003
98.00	0.81	1.50	0.08	3.858	0.032	0.059	0.003
99.00	0.82	1.50	0.08	3.898	0.032	0.059	0.003
100.00	0.82	1.50	0.08	3.937	0.032	0.059	0.003
110.00	0.89	1.50	0.08	4.331	0.035	0.059	0.003
112.00	0.91	1.50	0.08	4.409	0.036	0.059	0.003
1.00	0.12	2.00	0.08	0.039	0.005	0.079	0.003
2.00	0.13	2.00	0.08	0.079	0.005	0.079	0.003
2.50	0.13	2.00	0.08	0.098	0.005	0.079	0.003
3.00	0.14	2.00	0.08	0.118	0.006	0.079	0.003
3.50	0.14	2.00	0.08	0.138	0.006	0.079	0.003
4.00	0.14	2.00	0.08	0.157	0.006	0.079	0.003
4.50	0.15	2.00	0.08	0.177	0.006	0.079	0.003
5.00	0.15	2.00	0.08	0.197	0.006	0.079	0.003
5.50	0.16	2.00	0.08	0.217	0.006	0.079	0.003
6.00	0.16	2.00	0.08	0.236	0.006	0.079	0.003
6.50	0.16	2.00	0.08	0.256	0.006	0.079	0.003
7.00	0.17	2.00	0.08	0.276	0.007	0.079	0.003
7.50	0.17	2.00	0.08	0.295	0.007	0.079	0.003
8.00	0.17	2.00	0.08	0.315	0.007	0.079	0.003
8.50	0.18	2.00	0.08	0.335	0.007	0.079	0.003
9.00	0.18	2.00	0.08	0.354	0.007	0.079	0.003
9.50	0.19	2.00	0.08	0.374	0.007	0.079	0.003
10.00	0.19	2.00	0.08	0.394	0.007	0.079	0.003
10.50	0.19	2.00	0.08	0.413	0.007	0.079	0.003
11.00	0.20	2.00	0.08	0.433	0.008	0.079	0.003
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
11.50	0.20	2.00	0.08	0.453	0.008	0.079	0.003
12.00	0.21	2.00	0.08	0.472	0.008	0.079	0.003
12.50	0.21	2.00	0.08	0.492	0.008	0.079	0.003
13.00	0.21	2.00	0.08	0.512	0.008	0.079	0.003
13.50	0.22	2.00	0.08	0.531	0.009	0.079	0.003
14.00	0.22	2.00	0.08	0.551	0.009	0.079	0.003
14.50	0.22	2.00	0.08	0.571	0.009	0.079	0.003
15.00	0.23	2.00	0.08	0.591	0.009	0.079	0.003
15.50	0.23	2.00	0.08	0.610	0.009	0.079	0.003
16.00	0.24	2.00	0.08	0.630	0.009	0.079	0.003
16.50	0.24	2.00	0.08	0.650	0.009	0.079	0.003
17.00	0.24	2.00	0.08	0.669	0.009	0.079	0.003
17.50	0.25	2.00	0.08	0.689	0.010	0.079	0.003
18.00	0.25	2.00	0.08	0.709	0.010	0.079	0.003
18.50	0.25	2.00	0.08	0.728	0.010	0.079	0.003
19.00	0.26	2.00	0.08	0.748	0.010	0.079	0.003
19.50	0.26	2.00	0.08	0.768	0.010	0.079	0.003
20.00	0.26	2.00	0.08	0.787	0.010	0.079	0.003
20.50	0.27	2.00	0.08	0.807	0.011	0.079	0.003
21.00	0.27	2.00	0.08	0.827	0.011	0.079	0.003
21.50	0.28	2.00	0.08	0.846	0.011	0.079	0.003
22.00	0.28	2.00	0.08	0.866	0.011	0.079	0.003
22.50	0.28	2.00	0.08	0.886	0.011	0.079	0.003
23.00	0.29	2.00	0.08	0.906	0.011	0.079	0.003
23.50	0.29	2.00	0.08	0.925	0.011	0.079	0.003
24.00	0.29	2.00	0.08	0.945	0.011	0.079	0.003
24.50	0.30	2.00	0.08	0.965	0.012	0.079	0.003
25.00	0.30	2.00	0.08	0.984	0.012	0.079	0.003
25.50	0.31	2.00	0.08	1.004	0.012	0.079	0.003
26.00	0.31	2.00	0.08	1.024	0.012	0.079	0.003
26.50	0.31	2.00	0.08	1.043	0.012	0.079	0.003
27.00	0.32	2.00	0.08	1.063	0.013	0.079	0.003
27.50	0.32	2.00	0.08	1.083	0.013	0.079	0.003
28.00	0.32	2.00	0.08	1.102	0.013	0.079	0.003
28.50	0.33	2.00	0.08	1.122	0.013	0.079	0.003
29.00	0.33	2.00	0.08	1.142	0.013	0.079	0.003
29.50	0.33	2.00	0.08	1.161	0.013	0.079	0.003
30.00	0.34	2.00	0.08	1.181	0.013	0.079	0.003
30.50	0.34	2.00	0.08	1.201	0.013	0.079	0.003
31.00	0.34	2.00	0.08	1.220	0.013	0.079	0.003
31.50	0.35	2.00	0.08	1.240	0.014	0.079	0.003
32.00	0.35	2.00	0.08	1.260	0.014	0.079	0.003
32.50	0.36	2.00	0.08	1.280	0.014	0.079	0.003
33.00	0.36	2.00	0.08	1.299	0.014	0.079	0.003
33.50	0.36	2.00	0.08	1.319	0.014	0.079	0.003
34.00	0.37	2.00	0.08	1.339	0.015	0.079	0.003
34.50	0.37	2.00	0.08	1.358	0.015	0.079	0.003
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
35.00	0.37	2.00	0.08	1.378	0.015	0.079	0.003
35.50	0.38	2.00	0.08	1.398	0.015	0.079	0.003
36.00	0.38	2.00	0.08	1.417	0.015	0.079	0.003
36.50	0.38	2.00	0.08	1.437	0.015	0.079	0.003
37.00	0.39	2.00	0.08	1.457	0.015	0.079	0.003
37.50	0.39	2.00	0.08	1.476	0.015	0.079	0.003
38.00	0.40	2.00	0.08	1.496	0.016	0.079	0.003
38.50	0.40	2.00	0.08	1.516	0.016	0.079	0.003
39.00	0.40	2.00	0.08	1.535	0.016	0.079	0.003
39.50	0.41	2.00	0.08	1.555	0.016	0.079	0.003
40.00	0.41	2.00	0.08	1.575	0.016	0.079	0.003
41.00	0.42	2.00	0.08	1.614	0.017	0.079	0.003
41.50	0.42	2.00	0.08	1.634	0.017	0.079	0.003
42.00	0.42	2.00	0.08	1.654	0.017	0.079	0.003
42.50	0.43	2.00	0.08	1.673	0.017	0.079	0.003
43.00	0.43	2.00	0.08	1.693	0.017	0.079	0.003
43.50	0.43	2.00	0.08	1.713	0.017	0.079	0.003
44.00	0.44	2.00	0.08	1.732	0.017	0.079	0.003
44.50	0.44	2.00	0.08	1.752	0.017	0.079	0.003
45.00	0.44	2.00	0.08	1.772	0.017	0.079	0.003
45.50	0.45	2.00	0.08	1.791	0.018	0.079	0.003
46.00	0.45	2.00	0.08	1.811	0.018	0.079	0.003
46.50	0.46	2.00	0.08	1.831	0.018	0.079	0.003
47.00	0.46	2.00	0.08	1.850	0.018	0.079	0.003
47.50	0.46	2.00	0.08	1.870	0.018	0.079	0.003
48.00	0.47	2.00	0.08	1.890	0.019	0.079	0.003
48.50	0.47	2.00	0.08	1.909	0.019	0.079	0.003
49.00	0.47	2.00	0.08	1.929	0.019	0.079	0.003
49.50	0.48	2.00	0.08	1.949	0.019	0.079	0.003
50.00	0.48	2.00	0.08	1.969	0.019	0.079	0.003
51.00	0.49	2.00	0.08	2.008	0.019	0.079	0.003
52.00	0.49	2.00	0.08	2.047	0.019	0.079	0.003
52.50	0.50	2.00	0.08	2.067	0.020	0.079	0.003
53.00	0.50	2.00	0.08	2.087	0.020	0.079	0.003
54.00	0.51	2.00	0.08	2.126	0.020	0.079	0.003
54.50	0.51	2.00	0.08	2.146	0.020	0.079	0.003
55.00	0.52	2.00	0.08	2.165	0.020	0.079	0.003
55.50	0.52	2.00	0.08	2.185	0.020	0.079	0.003
56.00	0.52	2.00	0.08	2.205	0.020	0.079	0.003
57.00	0.53	2.00	0.08	2.244	0.021	0.079	0.003
58.00	0.54	2.00	0.08	2.283	0.021	0.079	0.003
59.00	0.54	2.00	0.08	2.323	0.021	0.079	0.003
59.50	0.55	2.00	0.08	2.343	0.022	0.079	0.003
60.00	0.55	2.00	0.08	2.362	0.022	0.079	0.003
61.00	0.56	2.00	0.08	2.402	0.022	0.079	0.003
61.50	0.56	2.00	0.08	2.421	0.022	0.079	0.003
62.00	0.56	2.00	0.08	2.441	0.022	0.079	0.003
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
62.50	0.57	2.00	0.08	2.461	0.022	0.079	0.003
63.00	0.57	2.00	0.08	2.480	0.022	0.079	0.003
64.00	0.58	2.00	0.08	2.520	0.023	0.079	0.003
64.50	0.58	2.00	0.08	2.539	0.023	0.079	0.003
65.00	0.58	2.00	0.08	2.559	0.023	0.079	0.003
66.00	0.59	2.00	0.08	2.598	0.023	0.079	0.003
66.50	0.60	2.00	0.08	2.618	0.024	0.079	0.003
67.00	0.60	2.00	0.08	2.638	0.024	0.079	0.003
68.00	0.61	2.00	0.08	2.677	0.024	0.079	0.003
68.50	0.61	2.00	0.08	2.697	0.024	0.079	0.003
69.00	0.61	2.00	0.08	2.717	0.024	0.079	0.003
69.50	0.62	2.00	0.08	2.736	0.024	0.079	0.003
70.00	0.62	2.00	0.08	2.756	0.024	0.079	0.003
70.50	0.62	2.00	0.08	2.776	0.024	0.079	0.003
71.00	0.63	2.00	0.08	2.795	0.025	0.079	0.003
72.00	0.63	2.00	0.08	2.835	0.025	0.079	0.003
72.50	0.64	2.00	0.08	2.854	0.025	0.079	0.003
73.00	0.64	2.00	0.08	2.874	0.025	0.079	0.003
73.50	0.64	2.00	0.08	2.894	0.025	0.079	0.003
74.00	0.65	2.00	0.08	2.913	0.026	0.079	0.003
74.50	0.65	2.00	0.08	2.933	0.026	0.079	0.003
75.00	0.65	2.00	0.08	2.953	0.026	0.079	0.003
76.00	0.66	2.00	0.08	2.992	0.026	0.079	0.003
77.00	0.67	2.00	0.08	3.031	0.026	0.079	0.003
78.00	0.67	2.00	0.08	3.071	0.026	0.079	0.003
79.00	0.68	2.00	0.08	3.110	0.027	0.079	0.003
79.50	0.68	2.00	0.08	3.130	0.027	0.079	0.003
80.00	0.69	2.00	0.08	3.150	0.027	0.079	0.003
81.00	0.70	2.00	0.08	3.189	0.028	0.079	0.003
81.50	0.70	2.00	0.08	3.209	0.028	0.079	0.003
82.00	0.70	2.00	0.08	3.228	0.028	0.079	0.003
83.00	0.71	2.00	0.08	3.268	0.028	0.079	0.003
83.50	0.71	2.00	0.08	3.287	0.028	0.079	0.003
84.00	0.72	2.00	0.08	3.307	0.028	0.079	0.003
84.50	0.72	2.00	0.08	3.327	0.028	0.079	0.003
85.00	0.72	2.00	0.08	3.346	0.028	0.079	0.003
86.00	0.73	2.00	0.08	3.386	0.029	0.079	0.003
87.00	0.74	2.00	0.08	3.425	0.029	0.079	0.003
88.00	0.74	2.00	0.08	3.465	0.029	0.079	0.003
89.00	0.75	2.00	0.08	3.504	0.030	0.079	0.003
89.50	0.75	2.00	0.08	3.524	0.030	0.079	0.003
90.00	0.76	2.00	0.08	3.543	0.030	0.079	0.003
91.00	0.76	2.00	0.08	3.583	0.030	0.079	0.003
91.50	0.77	2.00	0.08	3.602	0.030	0.079	0.003
92.00	0.77	2.00	0.08	3.622	0.030	0.079	0.003
93.00	0.78	2.00	0.08	3.661	0.031	0.079	0.003
94.00	0.78	2.00	0.08	3.701	0.031	0.079	0.003
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
95.00	0.79	2.00	0.08	3.740	0.031	0.079	0.003
96.00	0.80	2.00	0.08	3.780	0.031	0.079	0.003
97.00	0.80	2.00	0.08	3.819	0.031	0.079	0.003
98.00	0.81	2.00	0.08	3.858	0.032	0.079	0.003
99.00	0.82	2.00	0.08	3.898	0.032	0.079	0.003
99.50	0.82	2.00	0.08	3.917	0.032	0.079	0.003
100.00	0.82	2.00	0.08	3.937	0.032	0.079	0.003
102.00	0.84	2.00	0.08	4.016	0.033	0.079	0.003
103.00	0.85	2.00	0.08	4.055	0.033	0.079	0.003
104.00	0.85	2.00	0.08	4.094	0.033	0.079	0.003
104.50	0.86	2.00	0.08	4.114	0.034	0.079	0.003
105.00	0.86	2.00	0.08	4.134	0.034	0.079	0.003
106.00	0.87	2.00	0.08	4.173	0.034	0.079	0.003
107.00	0.87	2.00	0.08	4.213	0.034	0.079	0.003
108.00	0.88	2.00	0.08	4.252	0.035	0.079	0.003
109.00	0.89	2.00	0.08	4.291	0.035	0.079	0.003
109.50	0.89	2.00	0.08	4.311	0.035	0.079	0.003
110.00	0.89	2.00	0.08	4.331	0.035	0.079	0.003
111.00	0.90	2.00	0.08	4.370	0.035	0.079	0.003
111.50	0.90	2.00	0.08	4.390	0.036	0.079	0.003
112.00	0.91	2.00	0.08	4.409	0.036	0.079	0.003
114.00	0.92	2.00	0.08	4.488	0.036	0.079	0.003
114.50	0.92	2.00	0.08	4.508	0.036	0.079	0.003
115.00	0.93	2.00	0.08	4.528	0.037	0.079	0.003
117.00	0.94	2.00	0.08	4.606	0.037	0.079	0.003
118.00	0.95	2.00	0.08	4.646	0.037	0.079	0.003
119.00	0.95	2.00	0.08	4.685	0.037	0.079	0.003
119.50	0.96	2.00	0.08	4.705	0.038	0.079	0.003
120.00	0.96	2.00	0.08	4.724	0.038	0.079	0.003
124.50	0.99	2.00	0.08	4.902	0.039	0.079	0.003
125.00	0.99	2.00	0.08	4.921	0.039	0.079	0.003
128.00	1.01	2.00	0.08	5.039	0.040	0.079	0.003
129.50	1.02	2.00	0.08	5.098	0.040	0.079	0.003
130.00	1.03	2.00	0.08	5.118	0.041	0.079	0.003
131.50	1.04	2.00	0.08	5.177	0.041	0.079	0.003
134.50	1.06	2.00	0.08	5.295	0.042	0.079	0.003
135.00	1.06	2.00	0.08	5.315	0.042	0.079	0.003
139.50	1.09	2.00	0.08	5.492	0.043	0.079	0.003
140.00	1.09	2.00	0.08	5.512	0.043	0.079	0.003
142.00	1.11	2.00	0.08	5.591	0.044	0.079	0.003
144.50	1.12	2.00	0.08	5.689	0.044	0.079	0.003
145.00	1.13	2.00	0.08	5.709	0.044	0.079	0.003
146.00	1.13	2.00	0.08	5.748	0.044	0.079	0.003
149.50	1.16	2.00	0.08	5.886	0.046	0.079	0.003
150.00	1.16	2.00	0.08	5.906	0.046	0.079	0.003
155.00	1.19	2.00	0.08	6.102	0.047	0.079	0.003
160.00	1.23	2.00	0.08	6.299	0.048	0.079	0.003
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
165.00	1.26	2.00	0.08	6.496	0.050	0.079	0.003
170.00	1.29	2.00	0.08	6.693	0.051	0.079	0.003
175.00	1.33	2.00	0.08	6.890	0.052	0.079	0.003
180.00	1.36	2.00	0.08	7.087	0.054	0.079	0.003
185.00	1.39	2.00	0.08	7.283	0.055	0.079	0.003
190.00	1.43	2.00	0.08	7.480	0.056	0.079	0.003
194.00	1.45	2.00	0.08	7.638	0.057	0.079	0.003
195.00	1.46	2.00	0.08	7.677	0.057	0.079	0.003
200.00	1.49	2.00	0.08	7.874	0.059	0.079	0.003
210.00	1.56	2.00	0.08	8.268	0.061	0.079	0.003
220.00	1.62	2.00	0.08	8.661	0.064	0.079	0.003
2.00	0.13	2.50	0.09	0.079	0.005	0.098	0.004
3.00	0.14	2.50	0.09	0.118	0.006	0.098	0.004
4.00	0.14	2.50	0.09	0.157	0.006	0.098	0.004
5.00	0.15	2.50	0.09	0.197	0.006	0.098	0.004
5.50	0.16	2.50	0.09	0.217	0.006	0.098	0.004
6.00	0.16	2.50	0.09	0.236	0.006	0.098	0.004
6.50	0.16	2.50	0.09	0.256	0.006	0.098	0.004
7.00	0.17	2.50	0.09	0.276	0.007	0.098	0.004
7.50	0.17	2.50	0.09	0.295	0.007	0.098	0.004
8.00	0.17	2.50	0.09	0.315	0.007	0.098	0.004
8.50	0.18	2.50	0.09	0.335	0.007	0.098	0.004
9.00	0.18	2.50	0.09	0.354	0.007	0.098	0.004
9.50	0.19	2.50	0.09	0.374	0.007	0.098	0.004
10.00	0.19	2.50	0.09	0.394	0.007	0.098	0.004
10.50	0.19	2.50	0.09	0.413	0.007	0.098	0.004
11.00	0.20	2.50	0.09	0.433	0.008	0.098	0.004
11.50	0.20	2.50	0.09	0.453	0.008	0.098	0.004
12.00	0.21	2.50	0.09	0.472	0.008	0.098	0.004
12.50	0.21	2.50	0.09	0.492	0.008	0.098	0.004
13.00	0.21	2.50	0.09	0.512	0.008	0.098	0.004
13.50	0.22	2.50	0.09	0.531	0.009	0.098	0.004
14.00	0.22	2.50	0.09	0.551	0.009	0.098	0.004
14.50	0.22	2.50	0.09	0.571	0.009	0.098	0.004
15.00	0.23	2.50	0.09	0.591	0.009	0.098	0.004
15.50	0.23	2.50	0.09	0.610	0.009	0.098	0.004
16.00	0.24	2.50	0.09	0.630	0.009	0.098	0.004
16.50	0.24	2.50	0.09	0.650	0.009	0.098	0.004
17.00	0.24	2.50	0.09	0.669	0.009	0.098	0.004
17.50	0.25	2.50	0.09	0.689	0.010	0.098	0.004
18.00	0.25	2.50	0.09	0.709	0.010	0.098	0.004
18.50	0.25	2.50	0.09	0.728	0.010	0.098	0.004
19.00	0.26	2.50	0.09	0.748	0.010	0.098	0.004
19.50	0.26	2.50	0.09	0.768	0.010	0.098	0.004
20.00	0.26	2.50	0.09	0.787	0.010	0.098	0.004
20.50	0.27	2.50	0.09	0.807	0.011	0.098	0.004
21.00	0.27	2.50	0.09	0.827	0.011	0.098	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
21.50	0.28	2.50	0.09	0.846	0.011	0.098	0.004
22.00	0.28	2.50	0.09	0.866	0.011	0.098	0.004
22.50	0.28	2.50	0.09	0.886	0.011	0.098	0.004
23.00	0.29	2.50	0.09	0.906	0.011	0.098	0.004
23.50	0.29	2.50	0.09	0.925	0.011	0.098	0.004
24.00	0.29	2.50	0.09	0.945	0.011	0.098	0.004
24.50	0.30	2.50	0.09	0.965	0.012	0.098	0.004
25.00	0.30	2.50	0.09	0.984	0.012	0.098	0.004
25.50	0.31	2.50	0.09	1.004	0.012	0.098	0.004
26.00	0.31	2.50	0.09	1.024	0.012	0.098	0.004
26.50	0.31	2.50	0.09	1.043	0.012	0.098	0.004
27.00	0.32	2.50	0.09	1.063	0.013	0.098	0.004
27.50	0.32	2.50	0.09	1.083	0.013	0.098	0.004
28.00	0.32	2.50	0.09	1.102	0.013	0.098	0.004
28.50	0.33	2.50	0.09	1.122	0.013	0.098	0.004
29.00	0.33	2.50	0.09	1.142	0.013	0.098	0.004
29.50	0.33	2.50	0.09	1.161	0.013	0.098	0.004
30.00	0.34	2.50	0.09	1.181	0.013	0.098	0.004
30.50	0.34	2.50	0.09	1.201	0.013	0.098	0.004
31.00	0.34	2.50	0.09	1.220	0.013	0.098	0.004
31.50	0.35	2.50	0.09	1.240	0.014	0.098	0.004
32.00	0.35	2.50	0.09	1.260	0.014	0.098	0.004
32.50	0.36	2.50	0.09	1.280	0.014	0.098	0.004
33.00	0.36	2.50	0.09	1.299	0.014	0.098	0.004
33.50	0.36	2.50	0.09	1.319	0.014	0.098	0.004
34.00	0.37	2.50	0.09	1.339	0.015	0.098	0.004
34.50	0.37	2.50	0.09	1.358	0.015	0.098	0.004
35.00	0.37	2.50	0.09	1.378	0.015	0.098	0.004
35.50	0.38	2.50	0.09	1.398	0.015	0.098	0.004
36.00	0.38	2.50	0.09	1.417	0.015	0.098	0.004
36.50	0.38	2.50	0.09	1.437	0.015	0.098	0.004
37.00	0.39	2.50	0.09	1.457	0.015	0.098	0.004
37.50	0.39	2.50	0.09	1.476	0.015	0.098	0.004
38.00	0.40	2.50	0.09	1.496	0.016	0.098	0.004
38.50	0.40	2.50	0.09	1.516	0.016	0.098	0.004
39.00	0.40	2.50	0.09	1.535	0.016	0.098	0.004
39.50	0.41	2.50	0.09	1.555	0.016	0.098	0.004
40.00	0.41	2.50	0.09	1.575	0.016	0.098	0.004
41.00	0.42	2.50	0.09	1.614	0.017	0.098	0.004
42.00	0.42	2.50	0.09	1.654	0.017	0.098	0.004
43.00	0.43	2.50	0.09	1.693	0.017	0.098	0.004
44.00	0.44	2.50	0.09	1.732	0.017	0.098	0.004
45.00	0.44	2.50	0.09	1.772	0.017	0.098	0.004
46.00	0.45	2.50	0.09	1.811	0.018	0.098	0.004
47.00	0.46	2.50	0.09	1.850	0.018	0.098	0.004
48.00	0.47	2.50	0.09	1.890	0.019	0.098	0.004
49.00	0.47	2.50	0.09	1.929	0.019	0.098	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
50.00	0.48	2.50	0.09	1.969	0.019	0.098	0.004
51.00	0.49	2.50	0.09	2.008	0.019	0.098	0.004
52.00	0.49	2.50	0.09	2.047	0.019	0.098	0.004
53.00	0.50	2.50	0.09	2.087	0.020	0.098	0.004
54.00	0.51	2.50	0.09	2.126	0.020	0.098	0.004
54.50	0.51	2.50	0.09	2.146	0.020	0.098	0.004
55.00	0.52	2.50	0.09	2.165	0.020	0.098	0.004
56.00	0.52	2.50	0.09	2.205	0.020	0.098	0.004
57.00	0.53	2.50	0.09	2.244	0.021	0.098	0.004
58.00	0.54	2.50	0.09	2.283	0.021	0.098	0.004
59.00	0.54	2.50	0.09	2.323	0.021	0.098	0.004
60.00	0.55	2.50	0.09	2.362	0.022	0.098	0.004
61.00	0.56	2.50	0.09	2.402	0.022	0.098	0.004
62.00	0.56	2.50	0.09	2.441	0.022	0.098	0.004
63.00	0.57	2.50	0.09	2.480	0.022	0.098	0.004
63.50	0.57	2.50	0.09	2.500	0.022	0.098	0.004
64.00	0.58	2.50	0.09	2.520	0.023	0.098	0.004
65.00	0.58	2.50	0.09	2.559	0.023	0.098	0.004
66.00	0.59	2.50	0.09	2.598	0.023	0.098	0.004
66.50	0.60	2.50	0.09	2.618	0.024	0.098	0.004
67.00	0.60	2.50	0.09	2.638	0.024	0.098	0.004
67.50	0.60	2.50	0.09	2.657	0.024	0.098	0.004
68.00	0.61	2.50	0.09	2.677	0.024	0.098	0.004
69.00	0.61	2.50	0.09	2.717	0.024	0.098	0.004
70.00	0.62	2.50	0.09	2.756	0.024	0.098	0.004
71.00	0.63	2.50	0.09	2.795	0.025	0.098	0.004
72.00	0.63	2.50	0.09	2.835	0.025	0.098	0.004
73.00	0.64	2.50	0.09	2.874	0.025	0.098	0.004
74.00	0.65	2.50	0.09	2.913	0.026	0.098	0.004
75.00	0.65	2.50	0.09	2.953	0.026	0.098	0.004
76.00	0.66	2.50	0.09	2.992	0.026	0.098	0.004
77.00	0.67	2.50	0.09	3.031	0.026	0.098	0.004
77.50	0.67	2.50	0.09	3.051	0.026	0.098	0.004
78.00	0.67	2.50	0.09	3.071	0.026	0.098	0.004
79.00	0.68	2.50	0.09	3.110	0.027	0.098	0.004
80.00	0.69	2.50	0.09	3.150	0.027	0.098	0.004
81.00	0.70	2.50	0.09	3.189	0.028	0.098	0.004
82.00	0.70	2.50	0.09	3.228	0.028	0.098	0.004
83.00	0.71	2.50	0.09	3.268	0.028	0.098	0.004
84.00	0.72	2.50	0.09	3.307	0.028	0.098	0.004
85.00	0.72	2.50	0.09	3.346	0.028	0.098	0.004
86.00	0.73	2.50	0.09	3.386	0.029	0.098	0.004
87.00	0.74	2.50	0.09	3.425	0.029	0.098	0.004
88.00	0.74	2.50	0.09	3.465	0.029	0.098	0.004
89.00	0.75	2.50	0.09	3.504	0.030	0.098	0.004
90.00	0.76	2.50	0.09	3.543	0.030	0.098	0.004
91.00	0.76	2.50	0.09	3.583	0.030	0.098	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
92.00	0.77	2.50	0.09	3.622	0.030	0.098	0.004
93.00	0.78	2.50	0.09	3.661	0.031	0.098	0.004
94.00	0.78	2.50	0.09	3.701	0.031	0.098	0.004
95.00	0.79	2.50	0.09	3.740	0.031	0.098	0.004
96.00	0.80	2.50	0.09	3.780	0.031	0.098	0.004
97.00	0.80	2.50	0.09	3.819	0.031	0.098	0.004
98.00	0.81	2.50	0.09	3.858	0.032	0.098	0.004
99.00	0.82	2.50	0.09	3.898	0.032	0.098	0.004
100.00	0.82	2.50	0.09	3.937	0.032	0.098	0.004
101.00	0.83	2.50	0.09	3.976	0.033	0.098	0.004
102.00	0.84	2.50	0.09	4.016	0.033	0.098	0.004
103.00	0.85	2.50	0.09	4.055	0.033	0.098	0.004
104.00	0.85	2.50	0.09	4.094	0.033	0.098	0.004
105.00	0.86	2.50	0.09	4.134	0.034	0.098	0.004
106.00	0.87	2.50	0.09	4.173	0.034	0.098	0.004
107.00	0.87	2.50	0.09	4.213	0.034	0.098	0.004
108.00	0.88	2.50	0.09	4.252	0.035	0.098	0.004
109.00	0.89	2.50	0.09	4.291	0.035	0.098	0.004
110.00	0.89	2.50	0.09	4.331	0.035	0.098	0.004
111.00	0.90	2.50	0.09	4.370	0.035	0.098	0.004
112.00	0.91	2.50	0.09	4.409	0.036	0.098	0.004
113.00	0.91	2.50	0.09	4.449	0.036	0.098	0.004
114.00	0.92	2.50	0.09	4.488	0.036	0.098	0.004
115.00	0.93	2.50	0.09	4.528	0.037	0.098	0.004
116.00	0.93	2.50	0.09	4.567	0.037	0.098	0.004
117.00	0.94	2.50	0.09	4.606	0.037	0.098	0.004
118.00	0.95	2.50	0.09	4.646	0.037	0.098	0.004
119.00	0.95	2.50	0.09	4.685	0.037	0.098	0.004
120.00	0.96	2.50	0.09	4.724	0.038	0.098	0.004
121.00	0.97	2.50	0.09	4.764	0.038	0.098	0.004
122.00	0.97	2.50	0.09	4.803	0.038	0.098	0.004
123.00	0.98	2.50	0.09	4.843	0.039	0.098	0.004
124.00	0.99	2.50	0.09	4.882	0.039	0.098	0.004
125.00	0.99	2.50	0.09	4.921	0.039	0.098	0.004
126.00	1.00	2.50	0.09	4.961	0.039	0.098	0.004
127.00	1.01	2.50	0.09	5.000	0.040	0.098	0.004
128.00	1.01	2.50	0.09	5.039	0.040	0.098	0.004
129.00	1.02	2.50	0.09	5.079	0.040	0.098	0.004
130.00	1.03	2.50	0.09	5.118	0.041	0.098	0.004
131.00	1.03	2.50	0.09	5.157	0.041	0.098	0.004
132.00	1.04	2.50	0.09	5.197	0.041	0.098	0.004
133.00	1.05	2.50	0.09	5.236	0.041	0.098	0.004
134.00	1.05	2.50	0.09	5.276	0.041	0.098	0.004
135.00	1.06	2.50	0.09	5.315	0.042	0.098	0.004
136.00	1.07	2.50	0.09	5.354	0.042	0.098	0.004
137.00	1.07	2.50	0.09	5.394	0.042	0.098	0.004
138.00	1.08	2.50	0.09	5.433	0.043	0.098	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
139.00	1.09	2.50	0.09	5.472	0.043	0.098	0.004
140.00	1.09	2.50	0.09	5.512	0.043	0.098	0.004
141.00	1.10	2.50	0.09	5.551	0.043	0.098	0.004
142.00	1.11	2.50	0.09	5.591	0.044	0.098	0.004
143.00	1.11	2.50	0.09	5.630	0.044	0.098	0.004
144.00	1.12	2.50	0.09	5.669	0.044	0.098	0.004
145.00	1.13	2.50	0.09	5.709	0.044	0.098	0.004
146.00	1.13	2.50	0.09	5.748	0.044	0.098	0.004
147.00	1.14	2.50	0.09	5.787	0.045	0.098	0.004
148.00	1.15	2.50	0.09	5.827	0.045	0.098	0.004
149.00	1.15	2.50	0.09	5.866	0.045	0.098	0.004
150.00	1.16	2.50	0.09	5.906	0.046	0.098	0.004
155.00	1.19	2.50	0.09	6.102	0.047	0.098	0.004
156.00	1.20	2.50	0.09	6.142	0.047	0.098	0.004
160.00	1.23	2.50	0.09	6.299	0.048	0.098	0.004
166.00	1.27	2.50	0.09	6.535	0.050	0.098	0.004
167.00	1.27	2.50	0.09	6.575	0.050	0.098	0.004
170.00	1.29	2.50	0.09	6.693	0.051	0.098	0.004
185.00	1.39	2.50	0.09	7.283	0.055	0.098	0.004
195.00	1.46	2.50	0.09	7.677	0.057	0.098	0.004
205.00	1.52	2.50	0.09	8.071	0.060	0.098	0.004
212.00	1.57	2.50	0.09	8.346	0.062	0.098	0.004
275.00	1.98	2.50	0.09	10.827	0.078	0.098	0.004
3.00	0.14	3.00	0.09	0.118	0.006	0.118	0.004
3.50	0.14	3.00	0.09	0.138	0.006	0.118	0.004
4.00	0.14	3.00	0.09	0.157	0.006	0.118	0.004
4.50	0.15	3.00	0.09	0.177	0.006	0.118	0.004
5.00	0.15	3.00	0.09	0.197	0.006	0.118	0.004
5.50	0.16	3.00	0.09	0.217	0.006	0.118	0.004
6.00	0.16	3.00	0.09	0.236	0.006	0.118	0.004
6.50	0.16	3.00	0.09	0.256	0.006	0.118	0.004
7.00	0.17	3.00	0.09	0.276	0.007	0.118	0.004
7.50	0.17	3.00	0.09	0.295	0.007	0.118	0.004
8.00	0.17	3.00	0.09	0.315	0.007	0.118	0.004
8.50	0.18	3.00	0.09	0.335	0.007	0.118	0.004
9.00	0.18	3.00	0.09	0.354	0.007	0.118	0.004
9.50	0.19	3.00	0.09	0.374	0.007	0.118	0.004
10.00	0.19	3.00	0.09	0.394	0.007	0.118	0.004
10.50	0.19	3.00	0.09	0.413	0.007	0.118	0.004
11.00	0.20	3.00	0.09	0.433	0.008	0.118	0.004
11.50	0.20	3.00	0.09	0.453	0.008	0.118	0.004
12.00	0.21	3.00	0.09	0.472	0.008	0.118	0.004
12.50	0.21	3.00	0.09	0.492	0.008	0.118	0.004
13.00	0.21	3.00	0.09	0.512	0.008	0.118	0.004
13.50	0.22	3.00	0.09	0.531	0.009	0.118	0.004
14.00	0.22	3.00	0.09	0.551	0.009	0.118	0.004
14.50	0.22	3.00	0.09	0.571	0.009	0.118	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
15.00	0.23	3.00	0.09	0.591	0.009	0.118	0.004
15.50	0.23	3.00	0.09	0.610	0.009	0.118	0.004
16.00	0.24	3.00	0.09	0.630	0.009	0.118	0.004
16.50	0.24	3.00	0.09	0.650	0.009	0.118	0.004
17.00	0.24	3.00	0.09	0.669	0.009	0.118	0.004
17.50	0.25	3.00	0.09	0.689	0.010	0.118	0.004
18.00	0.25	3.00	0.09	0.709	0.010	0.118	0.004
18.50	0.25	3.00	0.09	0.728	0.010	0.118	0.004
19.00	0.26	3.00	0.09	0.748	0.010	0.118	0.004
19.50	0.26	3.00	0.09	0.768	0.010	0.118	0.004
20.00	0.26	3.00	0.09	0.787	0.010	0.118	0.004
20.50	0.27	3.00	0.09	0.807	0.011	0.118	0.004
21.00	0.27	3.00	0.09	0.827	0.011	0.118	0.004
21.50	0.28	3.00	0.09	0.846	0.011	0.118	0.004
22.00	0.28	3.00	0.09	0.866	0.011	0.118	0.004
22.50	0.28	3.00	0.09	0.886	0.011	0.118	0.004
23.00	0.29	3.00	0.09	0.906	0.011	0.118	0.004
23.50	0.29	3.00	0.09	0.925	0.011	0.118	0.004
24.00	0.29	3.00	0.09	0.945	0.011	0.118	0.004
24.50	0.30	3.00	0.09	0.965	0.012	0.118	0.004
25.00	0.30	3.00	0.09	0.984	0.012	0.118	0.004
25.50	0.31	3.00	0.09	1.004	0.012	0.118	0.004
26.00	0.31	3.00	0.09	1.024	0.012	0.118	0.004
26.50	0.31	3.00	0.09	1.043	0.012	0.118	0.004
27.00	0.32	3.00	0.09	1.063	0.013	0.118	0.004
27.50	0.32	3.00	0.09	1.083	0.013	0.118	0.004
28.00	0.32	3.00	0.09	1.102	0.013	0.118	0.004
28.50	0.33	3.00	0.09	1.122	0.013	0.118	0.004
29.00	0.33	3.00	0.09	1.142	0.013	0.118	0.004
29.50	0.33	3.00	0.09	1.161	0.013	0.118	0.004
30.00	0.34	3.00	0.09	1.181	0.013	0.118	0.004
30.50	0.34	3.00	0.09	1.201	0.013	0.118	0.004
31.00	0.34	3.00	0.09	1.220	0.013	0.118	0.004
31.50	0.35	3.00	0.09	1.240	0.014	0.118	0.004
32.00	0.35	3.00	0.09	1.260	0.014	0.118	0.004
32.50	0.36	3.00	0.09	1.280	0.014	0.118	0.004
33.00	0.36	3.00	0.09	1.299	0.014	0.118	0.004
33.50	0.36	3.00	0.09	1.319	0.014	0.118	0.004
34.00	0.37	3.00	0.09	1.339	0.015	0.118	0.004
34.50	0.37	3.00	0.09	1.358	0.015	0.118	0.004
35.00	0.37	3.00	0.09	1.378	0.015	0.118	0.004
35.50	0.38	3.00	0.09	1.398	0.015	0.118	0.004
36.00	0.38	3.00	0.09	1.417	0.015	0.118	0.004
36.50	0.38	3.00	0.09	1.437	0.015	0.118	0.004
37.00	0.39	3.00	0.09	1.457	0.015	0.118	0.004
37.50	0.39	3.00	0.09	1.476	0.015	0.118	0.004
38.00	0.40	3.00	0.09	1.496	0.016	0.118	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
38.50	0.40	3.00	0.09	1.516	0.016	0.118	0.004
39.00	0.40	3.00	0.09	1.535	0.016	0.118	0.004
39.50	0.41	3.00	0.09	1.555	0.016	0.118	0.004
40.00	0.41	3.00	0.09	1.575	0.016	0.118	0.004
41.00	0.42	3.00	0.09	1.614	0.017	0.118	0.004
41.50	0.42	3.00	0.09	1.634	0.017	0.118	0.004
42.00	0.42	3.00	0.09	1.654	0.017	0.118	0.004
42.50	0.43	3.00	0.09	1.673	0.017	0.118	0.004
43.00	0.43	3.00	0.09	1.693	0.017	0.118	0.004
44.00	0.44	3.00	0.09	1.732	0.017	0.118	0.004
44.50	0.44	3.00	0.09	1.752	0.017	0.118	0.004
45.00	0.44	3.00	0.09	1.772	0.017	0.118	0.004
46.00	0.45	3.00	0.09	1.811	0.018	0.118	0.004
47.00	0.46	3.00	0.09	1.850	0.018	0.118	0.004
48.00	0.47	3.00	0.09	1.890	0.019	0.118	0.004
49.00	0.47	3.00	0.09	1.929	0.019	0.118	0.004
49.50	0.48	3.00	0.09	1.949	0.019	0.118	0.004
50.00	0.48	3.00	0.09	1.969	0.019	0.118	0.004
50.50	0.48	3.00	0.09	1.988	0.019	0.118	0.004
51.00	0.49	3.00	0.09	2.008	0.019	0.118	0.004
52.00	0.49	3.00	0.09	2.047	0.019	0.118	0.004
52.50	0.50	3.00	0.09	2.067	0.020	0.118	0.004
53.00	0.50	3.00	0.09	2.087	0.020	0.118	0.004
54.00	0.51	3.00	0.09	2.126	0.020	0.118	0.004
54.50	0.51	3.00	0.09	2.146	0.020	0.118	0.004
55.00	0.52	3.00	0.09	2.165	0.020	0.118	0.004
56.00	0.52	3.00	0.09	2.205	0.020	0.118	0.004
57.00	0.53	3.00	0.09	2.244	0.021	0.118	0.004
57.50	0.53	3.00	0.09	2.264	0.021	0.118	0.004
58.00	0.54	3.00	0.09	2.283	0.021	0.118	0.004
59.00	0.54	3.00	0.09	2.323	0.021	0.118	0.004
59.50	0.55	3.00	0.09	2.343	0.022	0.118	0.004
60.00	0.55	3.00	0.09	2.362	0.022	0.118	0.004
60.50	0.55	3.00	0.09	2.382	0.022	0.118	0.004
61.00	0.56	3.00	0.09	2.402	0.022	0.118	0.004
62.00	0.56	3.00	0.09	2.441	0.022	0.118	0.004
62.50	0.57	3.00	0.09	2.461	0.022	0.118	0.004
63.00	0.57	3.00	0.09	2.480	0.022	0.118	0.004
64.00	0.58	3.00	0.09	2.520	0.023	0.118	0.004
64.50	0.58	3.00	0.09	2.539	0.023	0.118	0.004
65.00	0.58	3.00	0.09	2.559	0.023	0.118	0.004
66.00	0.59	3.00	0.09	2.598	0.023	0.118	0.004
67.00	0.60	3.00	0.09	2.638	0.024	0.118	0.004
67.50	0.60	3.00	0.09	2.657	0.024	0.118	0.004
68.00	0.61	3.00	0.09	2.677	0.024	0.118	0.004
69.00	0.61	3.00	0.09	2.717	0.024	0.118	0.004
69.50	0.62	3.00	0.09	2.736	0.024	0.118	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
70.00	0.62	3.00	0.09	2.756	0.024	0.118	0.004
71.00	0.63	3.00	0.09	2.795	0.025	0.118	0.004
72.00	0.63	3.00	0.09	2.835	0.025	0.118	0.004
73.00	0.64	3.00	0.09	2.874	0.025	0.118	0.004
74.00	0.65	3.00	0.09	2.913	0.026	0.118	0.004
74.50	0.65	3.00	0.09	2.933	0.026	0.118	0.004
75.00	0.65	3.00	0.09	2.953	0.026	0.118	0.004
76.00	0.66	3.00	0.09	2.992	0.026	0.118	0.004
77.00	0.67	3.00	0.09	3.031	0.026	0.118	0.004
78.00	0.67	3.00	0.09	3.071	0.026	0.118	0.004
79.00	0.68	3.00	0.09	3.110	0.027	0.118	0.004
79.50	0.68	3.00	0.09	3.130	0.027	0.118	0.004
80.00	0.69	3.00	0.09	3.150	0.027	0.118	0.004
81.00	0.70	3.00	0.09	3.189	0.028	0.118	0.004
82.00	0.70	3.00	0.09	3.228	0.028	0.118	0.004
83.00	0.71	3.00	0.09	3.268	0.028	0.118	0.004
83.50	0.71	3.00	0.09	3.287	0.028	0.118	0.004
84.00	0.72	3.00	0.09	3.307	0.028	0.118	0.004
84.50	0.72	3.00	0.09	3.327	0.028	0.118	0.004
85.00	0.72	3.00	0.09	3.346	0.028	0.118	0.004
86.00	0.73	3.00	0.09	3.386	0.029	0.118	0.004
87.00	0.74	3.00	0.09	3.425	0.029	0.118	0.004
88.00	0.74	3.00	0.09	3.465	0.029	0.118	0.004
89.00	0.75	3.00	0.09	3.504	0.030	0.118	0.004
89.50	0.75	3.00	0.09	3.524	0.030	0.118	0.004
90.00	0.76	3.00	0.09	3.543	0.030	0.118	0.004
91.00	0.76	3.00	0.09	3.583	0.030	0.118	0.004
92.00	0.77	3.00	0.09	3.622	0.030	0.118	0.004
93.00	0.78	3.00	0.09	3.661	0.031	0.118	0.004
94.00	0.78	3.00	0.09	3.701	0.031	0.118	0.004
94.50	0.79	3.00	0.09	3.720	0.031	0.118	0.004
95.00	0.79	3.00	0.09	3.740	0.031	0.118	0.004
96.00	0.80	3.00	0.09	3.780	0.031	0.118	0.004
97.00	0.80	3.00	0.09	3.819	0.031	0.118	0.004
98.00	0.81	3.00	0.09	3.858	0.032	0.118	0.004
98.50	0.81	3.00	0.09	3.878	0.032	0.118	0.004
99.00	0.82	3.00	0.09	3.898	0.032	0.118	0.004
99.50	0.82	3.00	0.09	3.917	0.032	0.118	0.004
100.00	0.82	3.00	0.09	3.937	0.032	0.118	0.004
101.00	0.83	3.00	0.09	3.976	0.033	0.118	0.004
102.00	0.84	3.00	0.09	4.016	0.033	0.118	0.004
103.00	0.85	3.00	0.09	4.055	0.033	0.118	0.004
104.00	0.85	3.00	0.09	4.094	0.033	0.118	0.004
104.50	0.86	3.00	0.09	4.114	0.034	0.118	0.004
105.00	0.86	3.00	0.09	4.134	0.034	0.118	0.004
106.00	0.87	3.00	0.09	4.173	0.034	0.118	0.004
106.50	0.87	3.00	0.09	4.193	0.034	0.118	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
107.00	0.87	3.00	0.09	4.213	0.034	0.118	0.004
108.00	0.88	3.00	0.09	4.252	0.035	0.118	0.004
109.00	0.89	3.00	0.09	4.291	0.035	0.118	0.004
109.50	0.89	3.00	0.09	4.311	0.035	0.118	0.004
110.00	0.89	3.00	0.09	4.331	0.035	0.118	0.004
111.00	0.90	3.00	0.09	4.370	0.035	0.118	0.004
112.00	0.91	3.00	0.09	4.409	0.036	0.118	0.004
113.00	0.91	3.00	0.09	4.449	0.036	0.118	0.004
114.00	0.92	3.00	0.09	4.488	0.036	0.118	0.004
114.50	0.92	3.00	0.09	4.508	0.036	0.118	0.004
115.00	0.93	3.00	0.09	4.528	0.037	0.118	0.004
116.00	0.93	3.00	0.09	4.567	0.037	0.118	0.004
117.00	0.94	3.00	0.09	4.606	0.037	0.118	0.004
118.00	0.95	3.00	0.09	4.646	0.037	0.118	0.004
119.00	0.95	3.00	0.09	4.685	0.037	0.118	0.004
119.50	0.96	3.00	0.09	4.705	0.038	0.118	0.004
120.00	0.96	3.00	0.09	4.724	0.038	0.118	0.004
121.00	0.97	3.00	0.09	4.764	0.038	0.118	0.004
122.00	0.97	3.00	0.09	4.803	0.038	0.118	0.004
123.00	0.98	3.00	0.09	4.843	0.039	0.118	0.004
124.00	0.99	3.00	0.09	4.882	0.039	0.118	0.004
124.50	0.99	3.00	0.09	4.902	0.039	0.118	0.004
125.00	0.99	3.00	0.09	4.921	0.039	0.118	0.004
126.00	1.00	3.00	0.09	4.961	0.039	0.118	0.004
127.00	1.01	3.00	0.09	5.000	0.040	0.118	0.004
128.00	1.01	3.00	0.09	5.039	0.040	0.118	0.004
128.50	1.02	3.00	0.09	5.059	0.040	0.118	0.004
129.00	1.02	3.00	0.09	5.079	0.040	0.118	0.004
129.50	1.02	3.00	0.09	5.098	0.040	0.118	0.004
130.00	1.03	3.00	0.09	5.118	0.041	0.118	0.004
131.00	1.03	3.00	0.09	5.157	0.041	0.118	0.004
132.00	1.04	3.00	0.09	5.197	0.041	0.118	0.004
133.00	1.05	3.00	0.09	5.236	0.041	0.118	0.004
134.00	1.05	3.00	0.09	5.276	0.041	0.118	0.004
134.50	1.06	3.00	0.09	5.295	0.042	0.118	0.004
135.00	1.06	3.00	0.09	5.315	0.042	0.118	0.004
136.00	1.07	3.00	0.09	5.354	0.042	0.118	0.004
137.00	1.07	3.00	0.09	5.394	0.042	0.118	0.004
138.00	1.08	3.00	0.09	5.433	0.043	0.118	0.004
139.00	1.09	3.00	0.09	5.472	0.043	0.118	0.004
139.50	1.09	3.00	0.09	5.492	0.043	0.118	0.004
140.00	1.09	3.00	0.09	5.512	0.043	0.118	0.004
141.00	1.10	3.00	0.09	5.551	0.043	0.118	0.004
141.50	1.10	3.00	0.09	5.571	0.043	0.118	0.004
142.00	1.11	3.00	0.09	5.591	0.044	0.118	0.004
143.00	1.11	3.00	0.09	5.630	0.044	0.118	0.004
144.00	1.12	3.00	0.09	5.669	0.044	0.118	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
144.50	1.12	3.00	0.09	5.689	0.044	0.118	0.004
145.00	1.13	3.00	0.09	5.709	0.044	0.118	0.004
146.00	1.13	3.00	0.09	5.748	0.044	0.118	0.004
147.00	1.14	3.00	0.09	5.787	0.045	0.118	0.004
148.00	1.15	3.00	0.09	5.827	0.045	0.118	0.004
149.00	1.15	3.00	0.09	5.866	0.045	0.118	0.004
149.50	1.16	3.00	0.09	5.886	0.046	0.118	0.004
150.00	1.16	3.00	0.09	5.906	0.046	0.118	0.004
151.00	1.17	3.00	0.09	5.945	0.046	0.118	0.004
152.00	1.17	3.00	0.09	5.984	0.046	0.118	0.004
153.00	1.18	3.00	0.09	6.024	0.046	0.118	0.004
154.00	1.19	3.00	0.09	6.063	0.047	0.118	0.004
154.50	1.19	3.00	0.09	6.083	0.047	0.118	0.004
155.00	1.19	3.00	0.09	6.102	0.047	0.118	0.004
156.00	1.20	3.00	0.09	6.142	0.047	0.118	0.004
157.00	1.21	3.00	0.09	6.181	0.048	0.118	0.004
158.00	1.21	3.00	0.09	6.220	0.048	0.118	0.004
159.00	1.22	3.00	0.09	6.260	0.048	0.118	0.004
159.50	1.22	3.00	0.09	6.280	0.048	0.118	0.004
160.00	1.23	3.00	0.09	6.299	0.048	0.118	0.004
161.00	1.23	3.00	0.09	6.339	0.048	0.118	0.004
162.00	1.24	3.00	0.09	6.378	0.049	0.118	0.004
163.00	1.25	3.00	0.09	6.417	0.049	0.118	0.004
164.00	1.25	3.00	0.09	6.457	0.049	0.118	0.004
164.50	1.26	3.00	0.09	6.476	0.050	0.118	0.004
165.00	1.26	3.00	0.09	6.496	0.050	0.118	0.004
166.00	1.27	3.00	0.09	6.535	0.050	0.118	0.004
167.00	1.27	3.00	0.09	6.575	0.050	0.118	0.004
168.00	1.28	3.00	0.09	6.614	0.050	0.118	0.004
169.00	1.29	3.00	0.09	6.654	0.051	0.118	0.004
169.50	1.29	3.00	0.09	6.673	0.051	0.118	0.004
170.00	1.29	3.00	0.09	6.693	0.051	0.118	0.004
171.00	1.30	3.00	0.09	6.732	0.051	0.118	0.004
172.00	1.31	3.00	0.09	6.772	0.052	0.118	0.004
173.00	1.31	3.00	0.09	6.811	0.052	0.118	0.004
174.00	1.32	3.00	0.09	6.850	0.052	0.118	0.004
174.50	1.32	3.00	0.09	6.870	0.052	0.118	0.004
175.00	1.33	3.00	0.09	6.890	0.052	0.118	0.004
176.00	1.33	3.00	0.09	6.929	0.052	0.118	0.004
177.00	1.34	3.00	0.09	6.968	0.053	0.118	0.004
178.00	1.35	3.00	0.09	7.008	0.053	0.118	0.004
179.00	1.35	3.00	0.09	7.047	0.053	0.118	0.004
179.50	1.36	3.00	0.09	7.067	0.054	0.118	0.004
180.00	1.36	3.00	0.09	7.087	0.054	0.118	0.004
181.00	1.37	3.00	0.09	7.126	0.054	0.118	0.004
182.00	1.37	3.00	0.09	7.165	0.054	0.118	0.004
183.00	1.38	3.00	0.09	7.205	0.054	0.118	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
183.50	1.38	3.00	0.09	7.224	0.054	0.118	0.004
184.00	1.39	3.00	0.09	7.244	0.055	0.118	0.004
184.50	1.39	3.00	0.09	7.264	0.055	0.118	0.004
185.00	1.39	3.00	0.09	7.283	0.055	0.118	0.004
186.00	1.40	3.00	0.09	7.323	0.055	0.118	0.004
187.00	1.41	3.00	0.09	7.362	0.056	0.118	0.004
188.00	1.41	3.00	0.09	7.402	0.056	0.118	0.004
189.00	1.42	3.00	0.09	7.441	0.056	0.118	0.004
189.50	1.42	3.00	0.09	7.461	0.056	0.118	0.004
190.00	1.43	3.00	0.09	7.480	0.056	0.118	0.004
191.00	1.43	3.00	0.09	7.520	0.056	0.118	0.004
191.50	1.44	3.00	0.09	7.539	0.057	0.118	0.004
192.00	1.44	3.00	0.09	7.559	0.057	0.118	0.004
193.00	1.45	3.00	0.09	7.598	0.057	0.118	0.004
194.00	1.45	3.00	0.09	7.638	0.057	0.118	0.004
194.50	1.45	3.00	0.09	7.657	0.057	0.118	0.004
195.00	1.46	3.00	0.09	7.677	0.057	0.118	0.004
196.00	1.46	3.00	0.09	7.717	0.057	0.118	0.004
197.00	1.47	3.00	0.09	7.756	0.058	0.118	0.004
198.00	1.48	3.00	0.09	7.795	0.058	0.118	0.004
199.00	1.48	3.00	0.09	7.835	0.058	0.118	0.004
199.50	1.49	3.00	0.09	7.854	0.059	0.118	0.004
200.00	1.49	3.00	0.09	7.874	0.059	0.118	0.004
201.00	1.50	3.00	0.09	7.913	0.059	0.118	0.004
202.00	1.50	3.00	0.09	7.953	0.059	0.118	0.004
203.00	1.51	3.00	0.09	7.992	0.059	0.118	0.004
204.00	1.52	3.00	0.09	8.031	0.060	0.118	0.004
204.50	1.52	3.00	0.09	8.051	0.060	0.118	0.004
205.00	1.52	3.00	0.09	8.071	0.060	0.118	0.004
206.00	1.53	3.00	0.09	8.110	0.060	0.118	0.004
207.00	1.54	3.00	0.09	8.150	0.061	0.118	0.004
208.00	1.54	3.00	0.09	8.189	0.061	0.118	0.004
209.00	1.55	3.00	0.09	8.228	0.061	0.118	0.004
209.50	1.55	3.00	0.09	8.248	0.061	0.118	0.004
210.00	1.56	3.00	0.09	8.268	0.061	0.118	0.004
211.00	1.56	3.00	0.09	8.307	0.061	0.118	0.004
212.00	1.57	3.00	0.09	8.346	0.062	0.118	0.004
213.00	1.58	3.00	0.09	8.386	0.062	0.118	0.004
214.00	1.58	3.00	0.09	8.425	0.062	0.118	0.004
215.00	1.59	3.00	0.09	8.465	0.063	0.118	0.004
216.00	1.60	3.00	0.09	8.504	0.063	0.118	0.004
217.00	1.60	3.00	0.09	8.543	0.063	0.118	0.004
218.00	1.61	3.00	0.09	8.583	0.063	0.118	0.004
219.00	1.62	3.00	0.09	8.622	0.064	0.118	0.004
219.50	1.62	3.00	0.09	8.642	0.064	0.118	0.004
220.00	1.62	3.00	0.09	8.661	0.064	0.118	0.004
221.00	1.63	3.00	0.09	8.701	0.064	0.118	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
222.00	1.64	3.00	0.09	8.740	0.065	0.118	0.004
223.00	1.64	3.00	0.09	8.780	0.065	0.118	0.004
224.00	1.65	3.00	0.09	8.819	0.065	0.118	0.004
224.50	1.65	3.00	0.09	8.839	0.065	0.118	0.004
225.00	1.65	3.00	0.09	8.858	0.065	0.118	0.004
226.00	1.66	3.00	0.09	8.898	0.065	0.118	0.004
227.00	1.67	3.00	0.09	8.937	0.066	0.118	0.004
228.00	1.67	3.00	0.09	8.976	0.066	0.118	0.004
229.00	1.68	3.00	0.09	9.016	0.066	0.118	0.004
229.50	1.68	3.00	0.09	9.035	0.066	0.118	0.004
230.00	1.69	3.00	0.09	9.055	0.067	0.118	0.004
231.00	1.69	3.00	0.09	9.094	0.067	0.118	0.004
232.00	1.70	3.00	0.09	9.134	0.067	0.118	0.004
233.00	1.71	3.00	0.09	9.173	0.067	0.118	0.004
234.00	1.71	3.00	0.09	9.213	0.067	0.118	0.004
235.00	1.72	3.00	0.09	9.252	0.068	0.118	0.004
236.00	1.73	3.00	0.09	9.291	0.068	0.118	0.004
237.00	1.73	3.00	0.09	9.331	0.068	0.118	0.004
238.00	1.74	3.00	0.09	9.370	0.069	0.118	0.004
239.00	1.75	3.00	0.09	9.409	0.069	0.118	0.004
239.50	1.75	3.00	0.09	9.429	0.069	0.118	0.004
240.00	1.75	3.00	0.09	9.449	0.069	0.118	0.004
241.00	1.76	3.00	0.09	9.488	0.069	0.118	0.004
242.00	1.77	3.00	0.09	9.528	0.070	0.118	0.004
243.00	1.77	3.00	0.09	9.567	0.070	0.118	0.004
244.00	1.78	3.00	0.09	9.606	0.070	0.118	0.004
244.50	1.78	3.00	0.09	9.626	0.070	0.118	0.004
245.00	1.78	3.00	0.09	9.646	0.070	0.118	0.004
246.00	1.79	3.00	0.09	9.685	0.070	0.118	0.004
247.00	1.80	3.00	0.09	9.724	0.071	0.118	0.004
248.00	1.80	3.00	0.09	9.764	0.071	0.118	0.004
249.00	1.81	3.00	0.09	9.803	0.071	0.118	0.004
249.50	1.81	3.00	0.09	9.823	0.071	0.118	0.004
250.00	1.82	3.00	0.09	9.843	0.072	0.118	0.004
253.00	1.84	3.00	0.09	9.961	0.072	0.118	0.004
254.50	1.85	3.00	0.09	10.020	0.073	0.118	0.004
255.00	1.85	3.00	0.09	10.039	0.073	0.118	0.004
256.00	1.86	3.00	0.09	10.079	0.073	0.118	0.004
257.00	1.86	3.00	0.09	10.118	0.073	0.118	0.004
258.00	1.87	3.00	0.09	10.157	0.074	0.118	0.004
260.00	1.88	3.00	0.09	10.236	0.074	0.118	0.004
261.00	1.89	3.00	0.09	10.276	0.074	0.118	0.004
264.00	1.91	3.00	0.09	10.394	0.075	0.118	0.004
265.00	1.91	3.00	0.09	10.433	0.075	0.118	0.004
270.00	1.95	3.00	0.09	10.630	0.077	0.118	0.004
274.00	1.97	3.00	0.09	10.787	0.078	0.118	0.004
275.00	1.98	3.00	0.09	10.827	0.078	0.118	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
280.00	2.01	3.00	0.09	11.024	0.079	0.118	0.004
285.00	2.04	3.00	0.09	11.220	0.080	0.118	0.004
287.00	2.06	3.00	0.09	11.299	0.081	0.118	0.004
290.00	2.08	3.00	0.09	11.417	0.082	0.118	0.004
295.00	2.11	3.00	0.09	11.614	0.083	0.118	0.004
300.00	2.14	3.00	0.09	11.811	0.084	0.118	0.004
305.00	2.17	3.00	0.09	12.008	0.085	0.118	0.004
310.00	2.20	3.00	0.09	12.205	0.087	0.118	0.004
315.00	2.24	3.00	0.09	12.402	0.088	0.118	0.004
318.00	2.26	3.00	0.09	12.520	0.089	0.118	0.004
320.00	2.27	3.00	0.09	12.598	0.089	0.118	0.004
322.00	2.28	3.00	0.09	12.677	0.090	0.118	0.004
330.00	2.33	3.00	0.09	12.992	0.092	0.118	0.004
335.00	2.36	3.00	0.09	13.189	0.093	0.118	0.004
340.00	2.40	3.00	0.09	13.386	0.094	0.118	0.004
350.00	2.46	3.00	0.09	13.780	0.097	0.118	0.004
354.00	2.49	3.00	0.09	13.937	0.098	0.118	0.004
360.00	2.52	3.00	0.09	14.173	0.099	0.118	0.004
370.00	2.59	3.00	0.09	14.567	0.102	0.118	0.004
390.00	2.71	3.00	0.09	15.354	0.107	0.118	0.004
400.00	2.78	3.00	0.09	15.748	0.109	0.118	0.004
405.00	2.81	3.00	0.09	15.945	0.111	0.118	0.004
410.00	2.84	3.00	0.09	16.142	0.112	0.118	0.004
415.00	2.87	3.00	0.09	16.339	0.113	0.118	0.004
420.00	2.90	3.00	0.09	16.535	0.114	0.118	0.004
421.50	2.91	3.00	0.09	16.594	0.115	0.118	0.004
425.00	2.94	3.00	0.09	16.732	0.116	0.118	0.004
430.00	2.97	3.00	0.09	16.929	0.117	0.118	0.004
435.00	3.00	3.00	0.09	17.126	0.118	0.118	0.004
440.00	3.03	3.00	0.09	17.323	0.119	0.118	0.004
445.00	3.06	3.00	0.09	17.520	0.120	0.118	0.004
450.00	3.09	3.00	0.09	17.717	0.122	0.118	0.004
500.00	3.41	3.00	0.09	19.685	0.134	0.118	0.004
542.00	3.67	3.00	0.09	21.339	0.144	0.118	0.004
2.00	0.13	3.50	0.10	0.079	0.005	0.138	0.004
3.00	0.14	3.50	0.10	0.118	0.006	0.138	0.004
5.00	0.15	3.50	0.10	0.197	0.006	0.138	0.004
6.00	0.16	3.50	0.10	0.236	0.006	0.138	0.004
6.50	0.16	3.50	0.10	0.256	0.006	0.138	0.004
7.00	0.17	3.50	0.10	0.276	0.007	0.138	0.004
7.50	0.17	3.50	0.10	0.295	0.007	0.138	0.004
8.00	0.17	3.50	0.10	0.315	0.007	0.138	0.004
9.00	0.18	3.50	0.10	0.354	0.007	0.138	0.004
10.00	0.19	3.50	0.10	0.394	0.007	0.138	0.004
11.00	0.20	3.50	0.10	0.433	0.008	0.138	0.004
11.50	0.20	3.50	0.10	0.453	0.008	0.138	0.004
12.00	0.21	3.50	0.10	0.472	0.008	0.138	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
13.00	0.21	3.50	0.10	0.512	0.008	0.138	0.004
14.00	0.22	3.50	0.10	0.551	0.009	0.138	0.004
15.00	0.23	3.50	0.10	0.591	0.009	0.138	0.004
16.00	0.24	3.50	0.10	0.630	0.009	0.138	0.004
17.00	0.24	3.50	0.10	0.669	0.009	0.138	0.004
17.50	0.25	3.50	0.10	0.689	0.010	0.138	0.004
18.00	0.25	3.50	0.10	0.709	0.010	0.138	0.004
19.00	0.26	3.50	0.10	0.748	0.010	0.138	0.004
19.50	0.26	3.50	0.10	0.768	0.010	0.138	0.004
20.00	0.26	3.50	0.10	0.787	0.010	0.138	0.004
20.50	0.27	3.50	0.10	0.807	0.011	0.138	0.004
21.00	0.27	3.50	0.10	0.827	0.011	0.138	0.004
22.00	0.28	3.50	0.10	0.866	0.011	0.138	0.004
23.00	0.29	3.50	0.10	0.906	0.011	0.138	0.004
24.00	0.29	3.50	0.10	0.945	0.011	0.138	0.004
25.00	0.30	3.50	0.10	0.984	0.012	0.138	0.004
25.50	0.31	3.50	0.10	1.004	0.012	0.138	0.004
26.00	0.31	3.50	0.10	1.024	0.012	0.138	0.004
26.50	0.31	3.50	0.10	1.043	0.012	0.138	0.004
27.00	0.32	3.50	0.10	1.063	0.013	0.138	0.004
28.00	0.32	3.50	0.10	1.102	0.013	0.138	0.004
29.00	0.33	3.50	0.10	1.142	0.013	0.138	0.004
30.00	0.34	3.50	0.10	1.181	0.013	0.138	0.004
31.00	0.34	3.50	0.10	1.220	0.013	0.138	0.004
31.50	0.35	3.50	0.10	1.240	0.014	0.138	0.004
32.00	0.35	3.50	0.10	1.260	0.014	0.138	0.004
32.50	0.36	3.50	0.10	1.280	0.014	0.138	0.004
33.00	0.36	3.50	0.10	1.299	0.014	0.138	0.004
34.00	0.37	3.50	0.10	1.339	0.015	0.138	0.004
35.00	0.37	3.50	0.10	1.378	0.015	0.138	0.004
35.50	0.38	3.50	0.10	1.398	0.015	0.138	0.004
36.00	0.38	3.50	0.10	1.417	0.015	0.138	0.004
37.00	0.39	3.50	0.10	1.457	0.015	0.138	0.004
37.50	0.39	3.50	0.10	1.476	0.015	0.138	0.004
38.00	0.40	3.50	0.10	1.496	0.016	0.138	0.004
39.00	0.40	3.50	0.10	1.535	0.016	0.138	0.004
40.00	0.41	3.50	0.10	1.575	0.016	0.138	0.004
41.00	0.42	3.50	0.10	1.614	0.017	0.138	0.004
42.00	0.42	3.50	0.10	1.654	0.017	0.138	0.004
43.00	0.43	3.50	0.10	1.693	0.017	0.138	0.004
44.00	0.44	3.50	0.10	1.732	0.017	0.138	0.004
45.00	0.44	3.50	0.10	1.772	0.017	0.138	0.004
46.00	0.45	3.50	0.10	1.811	0.018	0.138	0.004
47.00	0.46	3.50	0.10	1.850	0.018	0.138	0.004
48.00	0.47	3.50	0.10	1.890	0.019	0.138	0.004
49.00	0.47	3.50	0.10	1.929	0.019	0.138	0.004
50.00	0.48	3.50	0.10	1.969	0.019	0.138	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
51.00	0.49	3.50	0.10	2.008	0.019	0.138	0.004
52.00	0.49	3.50	0.10	2.047	0.019	0.138	0.004
53.00	0.50	3.50	0.10	2.087	0.020	0.138	0.004
54.00	0.51	3.50	0.10	2.126	0.020	0.138	0.004
55.00	0.52	3.50	0.10	2.165	0.020	0.138	0.004
56.00	0.52	3.50	0.10	2.205	0.020	0.138	0.004
57.00	0.53	3.50	0.10	2.244	0.021	0.138	0.004
58.00	0.54	3.50	0.10	2.283	0.021	0.138	0.004
59.00	0.54	3.50	0.10	2.323	0.021	0.138	0.004
60.00	0.55	3.50	0.10	2.362	0.022	0.138	0.004
61.00	0.56	3.50	0.10	2.402	0.022	0.138	0.004
62.00	0.56	3.50	0.10	2.441	0.022	0.138	0.004
63.00	0.57	3.50	0.10	2.480	0.022	0.138	0.004
64.00	0.58	3.50	0.10	2.520	0.023	0.138	0.004
65.00	0.58	3.50	0.10	2.559	0.023	0.138	0.004
66.00	0.59	3.50	0.10	2.598	0.023	0.138	0.004
67.00	0.60	3.50	0.10	2.638	0.024	0.138	0.004
68.00	0.61	3.50	0.10	2.677	0.024	0.138	0.004
69.00	0.61	3.50	0.10	2.717	0.024	0.138	0.004
70.00	0.62	3.50	0.10	2.756	0.024	0.138	0.004
70.50	0.62	3.50	0.10	2.776	0.024	0.138	0.004
71.00	0.63	3.50	0.10	2.795	0.025	0.138	0.004
72.00	0.63	3.50	0.10	2.835	0.025	0.138	0.004
73.00	0.64	3.50	0.10	2.874	0.025	0.138	0.004
74.00	0.65	3.50	0.10	2.913	0.026	0.138	0.004
75.00	0.65	3.50	0.10	2.953	0.026	0.138	0.004
76.00	0.66	3.50	0.10	2.992	0.026	0.138	0.004
77.00	0.67	3.50	0.10	3.031	0.026	0.138	0.004
78.00	0.67	3.50	0.10	3.071	0.026	0.138	0.004
79.00	0.68	3.50	0.10	3.110	0.027	0.138	0.004
80.00	0.69	3.50	0.10	3.150	0.027	0.138	0.004
81.00	0.70	3.50	0.10	3.189	0.028	0.138	0.004
82.00	0.70	3.50	0.10	3.228	0.028	0.138	0.004
83.00	0.71	3.50	0.10	3.268	0.028	0.138	0.004
84.00	0.72	3.50	0.10	3.307	0.028	0.138	0.004
85.00	0.72	3.50	0.10	3.346	0.028	0.138	0.004
86.00	0.73	3.50	0.10	3.386	0.029	0.138	0.004
87.00	0.74	3.50	0.10	3.425	0.029	0.138	0.004
88.00	0.74	3.50	0.10	3.465	0.029	0.138	0.004
89.00	0.75	3.50	0.10	3.504	0.030	0.138	0.004
90.00	0.76	3.50	0.10	3.543	0.030	0.138	0.004
91.00	0.76	3.50	0.10	3.583	0.030	0.138	0.004
92.00	0.77	3.50	0.10	3.622	0.030	0.138	0.004
93.00	0.78	3.50	0.10	3.661	0.031	0.138	0.004
94.00	0.78	3.50	0.10	3.701	0.031	0.138	0.004
95.00	0.79	3.50	0.10	3.740	0.031	0.138	0.004
96.00	0.80	3.50	0.10	3.780	0.031	0.138	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
97.00	0.80	3.50	0.10	3.819	0.031	0.138	0.004
98.00	0.81	3.50	0.10	3.858	0.032	0.138	0.004
99.00	0.82	3.50	0.10	3.898	0.032	0.138	0.004
100.00	0.82	3.50	0.10	3.937	0.032	0.138	0.004
101.00	0.83	3.50	0.10	3.976	0.033	0.138	0.004
102.00	0.84	3.50	0.10	4.016	0.033	0.138	0.004
103.00	0.85	3.50	0.10	4.055	0.033	0.138	0.004
104.00	0.85	3.50	0.10	4.094	0.033	0.138	0.004
105.00	0.86	3.50	0.10	4.134	0.034	0.138	0.004
106.00	0.87	3.50	0.10	4.173	0.034	0.138	0.004
107.00	0.87	3.50	0.10	4.213	0.034	0.138	0.004
107.50	0.88	3.50	0.10	4.232	0.035	0.138	0.004
108.00	0.88	3.50	0.10	4.252	0.035	0.138	0.004
109.00	0.89	3.50	0.10	4.291	0.035	0.138	0.004
109.50	0.89	3.50	0.10	4.311	0.035	0.138	0.004
110.00	0.89	3.50	0.10	4.331	0.035	0.138	0.004
111.00	0.90	3.50	0.10	4.370	0.035	0.138	0.004
112.00	0.91	3.50	0.10	4.409	0.036	0.138	0.004
113.00	0.91	3.50	0.10	4.449	0.036	0.138	0.004
114.00	0.92	3.50	0.10	4.488	0.036	0.138	0.004
115.00	0.93	3.50	0.10	4.528	0.037	0.138	0.004
116.00	0.93	3.50	0.10	4.567	0.037	0.138	0.004
117.00	0.94	3.50	0.10	4.606	0.037	0.138	0.004
118.00	0.95	3.50	0.10	4.646	0.037	0.138	0.004
119.00	0.95	3.50	0.10	4.685	0.037	0.138	0.004
120.00	0.96	3.50	0.10	4.724	0.038	0.138	0.004
121.00	0.97	3.50	0.10	4.764	0.038	0.138	0.004
122.00	0.97	3.50	0.10	4.803	0.038	0.138	0.004
123.00	0.98	3.50	0.10	4.843	0.039	0.138	0.004
124.00	0.99	3.50	0.10	4.882	0.039	0.138	0.004
125.00	0.99	3.50	0.10	4.921	0.039	0.138	0.004
126.00	1.00	3.50	0.10	4.961	0.039	0.138	0.004
127.00	1.01	3.50	0.10	5.000	0.040	0.138	0.004
128.00	1.01	3.50	0.10	5.039	0.040	0.138	0.004
129.00	1.02	3.50	0.10	5.079	0.040	0.138	0.004
130.00	1.03	3.50	0.10	5.118	0.041	0.138	0.004
131.00	1.03	3.50	0.10	5.157	0.041	0.138	0.004
132.00	1.04	3.50	0.10	5.197	0.041	0.138	0.004
133.00	1.05	3.50	0.10	5.236	0.041	0.138	0.004
134.00	1.05	3.50	0.10	5.276	0.041	0.138	0.004
135.00	1.06	3.50	0.10	5.315	0.042	0.138	0.004
136.00	1.07	3.50	0.10	5.354	0.042	0.138	0.004
137.00	1.07	3.50	0.10	5.394	0.042	0.138	0.004
138.00	1.08	3.50	0.10	5.433	0.043	0.138	0.004
139.00	1.09	3.50	0.10	5.472	0.043	0.138	0.004
140.00	1.09	3.50	0.10	5.512	0.043	0.138	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
141.00	1.10	3.50	0.10	5.551	0.043	0.138	0.004
142.00	1.11	3.50	0.10	5.591	0.044	0.138	0.004
143.00	1.11	3.50	0.10	5.630	0.044	0.138	0.004
144.00	1.12	3.50	0.10	5.669	0.044	0.138	0.004
145.00	1.13	3.50	0.10	5.709	0.044	0.138	0.004
146.00	1.13	3.50	0.10	5.748	0.044	0.138	0.004
147.00	1.14	3.50	0.10	5.787	0.045	0.138	0.004
148.00	1.15	3.50	0.10	5.827	0.045	0.138	0.004
149.00	1.15	3.50	0.10	5.866	0.045	0.138	0.004
150.00	1.16	3.50	0.10	5.906	0.046	0.138	0.004
151.00	1.17	3.50	0.10	5.945	0.046	0.138	0.004
152.00	1.17	3.50	0.10	5.984	0.046	0.138	0.004
153.00	1.18	3.50	0.10	6.024	0.046	0.138	0.004
154.00	1.19	3.50	0.10	6.063	0.047	0.138	0.004
155.00	1.19	3.50	0.10	6.102	0.047	0.138	0.004
156.00	1.20	3.50	0.10	6.142	0.047	0.138	0.004
157.00	1.21	3.50	0.10	6.181	0.048	0.138	0.004
158.00	1.21	3.50	0.10	6.220	0.048	0.138	0.004
159.00	1.22	3.50	0.10	6.260	0.048	0.138	0.004
160.00	1.23	3.50	0.10	6.299	0.048	0.138	0.004
161.00	1.23	3.50	0.10	6.339	0.048	0.138	0.004
162.00	1.24	3.50	0.10	6.378	0.049	0.138	0.004
163.00	1.25	3.50	0.10	6.417	0.049	0.138	0.004
164.00	1.25	3.50	0.10	6.457	0.049	0.138	0.004
165.00	1.26	3.50	0.10	6.496	0.050	0.138	0.004
166.00	1.27	3.50	0.10	6.535	0.050	0.138	0.004
167.00	1.27	3.50	0.10	6.575	0.050	0.138	0.004
168.00	1.28	3.50	0.10	6.614	0.050	0.138	0.004
169.00	1.29	3.50	0.10	6.654	0.051	0.138	0.004
170.00	1.29	3.50	0.10	6.693	0.051	0.138	0.004
171.00	1.30	3.50	0.10	6.732	0.051	0.138	0.004
172.00	1.31	3.50	0.10	6.772	0.052	0.138	0.004
173.00	1.31	3.50	0.10	6.811	0.052	0.138	0.004
174.00	1.32	3.50	0.10	6.850	0.052	0.138	0.004
175.00	1.33	3.50	0.10	6.890	0.052	0.138	0.004
176.00	1.33	3.50	0.10	6.929	0.052	0.138	0.004
177.00	1.34	3.50	0.10	6.968	0.053	0.138	0.004
178.00	1.35	3.50	0.10	7.008	0.053	0.138	0.004
179.00	1.35	3.50	0.10	7.047	0.053	0.138	0.004
180.00	1.36	3.50	0.10	7.087	0.054	0.138	0.004
181.00	1.37	3.50	0.10	7.126	0.054	0.138	0.004
182.00	1.37	3.50	0.10	7.165	0.054	0.138	0.004
183.00	1.38	3.50	0.10	7.205	0.054	0.138	0.004
184.00	1.39	3.50	0.10	7.244	0.055	0.138	0.004
185.00	1.39	3.50	0.10	7.283	0.055	0.138	0.004
186.00	1.40	3.50	0.10	7.323	0.055	0.138	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
187.00	1.41	3.50	0.10	7.362	0.056	0.138	0.004
188.00	1.41	3.50	0.10	7.402	0.056	0.138	0.004
189.00	1.42	3.50	0.10	7.441	0.056	0.138	0.004
190.00	1.43	3.50	0.10	7.480	0.056	0.138	0.004
191.00	1.43	3.50	0.10	7.520	0.056	0.138	0.004
192.00	1.44	3.50	0.10	7.559	0.057	0.138	0.004
193.00	1.45	3.50	0.10	7.598	0.057	0.138	0.004
194.00	1.45	3.50	0.10	7.638	0.057	0.138	0.004
195.00	1.46	3.50	0.10	7.677	0.057	0.138	0.004
196.00	1.46	3.50	0.10	7.717	0.057	0.138	0.004
197.00	1.47	3.50	0.10	7.756	0.058	0.138	0.004
198.00	1.48	3.50	0.10	7.795	0.058	0.138	0.004
199.00	1.48	3.50	0.10	7.835	0.058	0.138	0.004
200.00	1.49	3.50	0.10	7.874	0.059	0.138	0.004
201.00	1.50	3.50	0.10	7.913	0.059	0.138	0.004
202.00	1.50	3.50	0.10	7.953	0.059	0.138	0.004
203.00	1.51	3.50	0.10	7.992	0.059	0.138	0.004
204.00	1.52	3.50	0.10	8.031	0.060	0.138	0.004
205.00	1.52	3.50	0.10	8.071	0.060	0.138	0.004
206.00	1.53	3.50	0.10	8.110	0.060	0.138	0.004
207.00	1.54	3.50	0.10	8.150	0.061	0.138	0.004
208.00	1.54	3.50	0.10	8.189	0.061	0.138	0.004
209.00	1.55	3.50	0.10	8.228	0.061	0.138	0.004
210.00	1.56	3.50	0.10	8.268	0.061	0.138	0.004
215.00	1.59	3.50	0.10	8.465	0.063	0.138	0.004
220.00	1.62	3.50	0.10	8.661	0.064	0.138	0.004
225.00	1.65	3.50	0.10	8.858	0.065	0.138	0.004
230.00	1.69	3.50	0.10	9.055	0.067	0.138	0.004
235.00	1.72	3.50	0.10	9.252	0.068	0.138	0.004
240.00	1.75	3.50	0.10	9.449	0.069	0.138	0.004
245.00	1.78	3.50	0.10	9.646	0.070	0.138	0.004
250.00	1.82	3.50	0.10	9.843	0.072	0.138	0.004
255.00	1.85	3.50	0.10	10.039	0.073	0.138	0.004
260.00	1.88	3.50	0.10	10.236	0.074	0.138	0.004
265.00	1.91	3.50	0.10	10.433	0.075	0.138	0.004
270.00	1.95	3.50	0.10	10.630	0.077	0.138	0.004
273.00	1.97	3.50	0.10	10.748	0.078	0.138	0.004
275.00	1.98	3.50	0.10	10.827	0.078	0.138	0.004
280.00	2.01	3.50	0.10	11.024	0.079	0.138	0.004
283.00	2.03	3.50	0.10	11.142	0.080	0.138	0.004
285.00	2.04	3.50	0.10	11.220	0.080	0.138	0.004
290.00	2.08	3.50	0.10	11.417	0.082	0.138	0.004
295.00	2.11	3.50	0.10	11.614	0.083	0.138	0.004
300.00	2.14	3.50	0.10	11.811	0.084	0.138	0.004
305.00	2.17	3.50	0.10	12.008	0.085	0.138	0.004
310.00	2.20	3.50	0.10	12.205	0.087	0.138	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
315.00	2.24	3.50	0.10	12.402	0.088	0.138	0.004
320.00	2.27	3.50	0.10	12.598	0.089	0.138	0.004
325.00	2.30	3.50	0.10	12.795	0.091	0.138	0.004
328.00	2.32	3.50	0.10	12.913	0.091	0.138	0.004
330.00	2.33	3.50	0.10	12.992	0.092	0.138	0.004
335.00	2.36	3.50	0.10	13.189	0.093	0.138	0.004
338.00	2.38	3.50	0.10	13.307	0.094	0.138	0.004
340.00	2.40	3.50	0.10	13.386	0.094	0.138	0.004
343.00	2.42	3.50	0.10	13.504	0.095	0.138	0.004
345.00	2.43	3.50	0.10	13.583	0.096	0.138	0.004
350.00	2.46	3.50	0.10	13.780	0.097	0.138	0.004
351.00	2.47	3.50	0.10	13.819	0.097	0.138	0.004
355.00	2.49	3.50	0.10	13.976	0.098	0.138	0.004
360.00	2.52	3.50	0.10	14.173	0.099	0.138	0.004
363.00	2.54	3.50	0.10	14.291	0.100	0.138	0.004
365.00	2.56	3.50	0.10	14.370	0.101	0.138	0.004
370.00	2.59	3.50	0.10	14.567	0.102	0.138	0.004
378.00	2.64	3.50	0.10	14.882	0.104	0.138	0.004
380.00	2.65	3.50	0.10	14.961	0.104	0.138	0.004
390.00	2.71	3.50	0.10	15.354	0.107	0.138	0.004
400.00	2.78	3.50	0.10	15.748	0.109	0.138	0.004
410.00	2.84	3.50	0.10	16.142	0.112	0.138	0.004
420.00	2.90	3.50	0.10	16.535	0.114	0.138	0.004
427.00	2.95	3.50	0.10	16.811	0.116	0.138	0.004
430.00	2.97	3.50	0.10	16.929	0.117	0.138	0.004
440.00	3.03	3.50	0.10	17.323	0.119	0.138	0.004
475.00	3.25	3.50	0.10	18.701	0.128	0.138	0.004
483.00	3.30	3.50	0.10	19.016	0.130	0.138	0.004
553.00	3.74	3.50	0.10	21.772	0.147	0.138	0.004
2.00	0.13	4.00	0.10	0.079	0.005	0.157	0.004
3.00	0.14	4.00	0.10	0.118	0.006	0.157	0.004
4.00	0.14	4.00	0.10	0.157	0.006	0.157	0.004
5.00	0.15	4.00	0.10	0.197	0.006	0.157	0.004
6.00	0.16	4.00	0.10	0.236	0.006	0.157	0.004
7.00	0.17	4.00	0.10	0.276	0.007	0.157	0.004
8.00	0.17	4.00	0.10	0.315	0.007	0.157	0.004
9.00	0.18	4.00	0.10	0.354	0.007	0.157	0.004
9.50	0.19	4.00	0.10	0.374	0.007	0.157	0.004
10.00	0.19	4.00	0.10	0.394	0.007	0.157	0.004
11.00	0.20	4.00	0.10	0.433	0.008	0.157	0.004
11.50	0.20	4.00	0.10	0.453	0.008	0.157	0.004
12.00	0.21	4.00	0.10	0.472	0.008	0.157	0.004
13.00	0.21	4.00	0.10	0.512	0.008	0.157	0.004
14.00	0.22	4.00	0.10	0.551	0.009	0.157	0.004
14.50	0.22	4.00	0.10	0.571	0.009	0.157	0.004
15.00	0.23	4.00	0.10	0.591	0.009	0.157	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
15.50	0.23	4.00	0.10	0.610	0.009	0.157	0.004
16.00	0.24	4.00	0.10	0.630	0.009	0.157	0.004
17.00	0.24	4.00	0.10	0.669	0.009	0.157	0.004
18.00	0.25	4.00	0.10	0.709	0.010	0.157	0.004
19.00	0.26	4.00	0.10	0.748	0.010	0.157	0.004
19.50	0.26	4.00	0.10	0.768	0.010	0.157	0.004
20.00	0.26	4.00	0.10	0.787	0.010	0.157	0.004
21.00	0.27	4.00	0.10	0.827	0.011	0.157	0.004
21.50	0.28	4.00	0.10	0.846	0.011	0.157	0.004
22.00	0.28	4.00	0.10	0.866	0.011	0.157	0.004
23.00	0.29	4.00	0.10	0.906	0.011	0.157	0.004
23.50	0.29	4.00	0.10	0.925	0.011	0.157	0.004
24.00	0.29	4.00	0.10	0.945	0.011	0.157	0.004
25.00	0.30	4.00	0.10	0.984	0.012	0.157	0.004
26.00	0.31	4.00	0.10	1.024	0.012	0.157	0.004
27.00	0.32	4.00	0.10	1.063	0.013	0.157	0.004
27.50	0.32	4.00	0.10	1.083	0.013	0.157	0.004
28.00	0.32	4.00	0.10	1.102	0.013	0.157	0.004
29.00	0.33	4.00	0.10	1.142	0.013	0.157	0.004
30.00	0.34	4.00	0.10	1.181	0.013	0.157	0.004
31.00	0.34	4.00	0.10	1.220	0.013	0.157	0.004
32.00	0.35	4.00	0.10	1.260	0.014	0.157	0.004
33.00	0.36	4.00	0.10	1.299	0.014	0.157	0.004
33.50	0.36	4.00	0.10	1.319	0.014	0.157	0.004
34.00	0.37	4.00	0.10	1.339	0.015	0.157	0.004
34.50	0.37	4.00	0.10	1.358	0.015	0.157	0.004
35.00	0.37	4.00	0.10	1.378	0.015	0.157	0.004
36.00	0.38	4.00	0.10	1.417	0.015	0.157	0.004
37.00	0.39	4.00	0.10	1.457	0.015	0.157	0.004
38.00	0.40	4.00	0.10	1.496	0.016	0.157	0.004
39.00	0.40	4.00	0.10	1.535	0.016	0.157	0.004
39.50	0.41	4.00	0.10	1.555	0.016	0.157	0.004
40.00	0.41	4.00	0.10	1.575	0.016	0.157	0.004
41.00	0.42	4.00	0.10	1.614	0.017	0.157	0.004
42.00	0.42	4.00	0.10	1.654	0.017	0.157	0.004
43.00	0.43	4.00	0.10	1.693	0.017	0.157	0.004
43.50	0.43	4.00	0.10	1.713	0.017	0.157	0.004
44.00	0.44	4.00	0.10	1.732	0.017	0.157	0.004
45.00	0.44	4.00	0.10	1.772	0.017	0.157	0.004
46.00	0.45	4.00	0.10	1.811	0.018	0.157	0.004
47.00	0.46	4.00	0.10	1.850	0.018	0.157	0.004
48.00	0.47	4.00	0.10	1.890	0.019	0.157	0.004
49.00	0.47	4.00	0.10	1.929	0.019	0.157	0.004
50.00	0.48	4.00	0.10	1.969	0.019	0.157	0.004
51.00	0.49	4.00	0.10	2.008	0.019	0.157	0.004
52.00	0.49	4.00	0.10	2.047	0.019	0.157	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
53.00	0.50	4.00	0.10	2.087	0.020	0.157	0.004
54.00	0.51	4.00	0.10	2.126	0.020	0.157	0.004
54.50	0.51	4.00	0.10	2.146	0.020	0.157	0.004
55.00	0.52	4.00	0.10	2.165	0.020	0.157	0.004
56.00	0.52	4.00	0.10	2.205	0.020	0.157	0.004
57.00	0.53	4.00	0.10	2.244	0.021	0.157	0.004
57.50	0.53	4.00	0.10	2.264	0.021	0.157	0.004
58.00	0.54	4.00	0.10	2.283	0.021	0.157	0.004
58.50	0.54	4.00	0.10	2.303	0.021	0.157	0.004
59.00	0.54	4.00	0.10	2.323	0.021	0.157	0.004
60.00	0.55	4.00	0.10	2.362	0.022	0.157	0.004
61.00	0.56	4.00	0.10	2.402	0.022	0.157	0.004
62.00	0.56	4.00	0.10	2.441	0.022	0.157	0.004
63.00	0.57	4.00	0.10	2.480	0.022	0.157	0.004
64.00	0.58	4.00	0.10	2.520	0.023	0.157	0.004
65.00	0.58	4.00	0.10	2.559	0.023	0.157	0.004
66.00	0.59	4.00	0.10	2.598	0.023	0.157	0.004
67.00	0.60	4.00	0.10	2.638	0.024	0.157	0.004
67.50	0.60	4.00	0.10	2.657	0.024	0.157	0.004
68.00	0.61	4.00	0.10	2.677	0.024	0.157	0.004
68.50	0.61	4.00	0.10	2.697	0.024	0.157	0.004
69.00	0.61	4.00	0.10	2.717	0.024	0.157	0.004
69.50	0.62	4.00	0.10	2.736	0.024	0.157	0.004
70.00	0.62	4.00	0.10	2.756	0.024	0.157	0.004
71.00	0.63	4.00	0.10	2.795	0.025	0.157	0.004
72.00	0.63	4.00	0.10	2.835	0.025	0.157	0.004
73.00	0.64	4.00	0.10	2.874	0.025	0.157	0.004
74.00	0.65	4.00	0.10	2.913	0.026	0.157	0.004
75.00	0.65	4.00	0.10	2.953	0.026	0.157	0.004
76.00	0.66	4.00	0.10	2.992	0.026	0.157	0.004
77.00	0.67	4.00	0.10	3.031	0.026	0.157	0.004
78.00	0.67	4.00	0.10	3.071	0.026	0.157	0.004
79.00	0.68	4.00	0.10	3.110	0.027	0.157	0.004
80.00	0.69	4.00	0.10	3.150	0.027	0.157	0.004
81.00	0.70	4.00	0.10	3.189	0.028	0.157	0.004
82.00	0.70	4.00	0.10	3.228	0.028	0.157	0.004
83.00	0.71	4.00	0.10	3.268	0.028	0.157	0.004
84.00	0.72	4.00	0.10	3.307	0.028	0.157	0.004
85.00	0.72	4.00	0.10	3.346	0.028	0.157	0.004
86.00	0.73	4.00	0.10	3.386	0.029	0.157	0.004
87.00	0.74	4.00	0.10	3.425	0.029	0.157	0.004
88.00	0.74	4.00	0.10	3.465	0.029	0.157	0.004
89.00	0.75	4.00	0.10	3.504	0.030	0.157	0.004
90.00	0.76	4.00	0.10	3.543	0.030	0.157	0.004
90.50	0.76	4.00	0.10	3.563	0.030	0.157	0.004
91.00	0.76	4.00	0.10	3.583	0.030	0.157	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
92.00	0.77	4.00	0.10	3.622	0.030	0.157	0.004
93.00	0.78	4.00	0.10	3.661	0.031	0.157	0.004
94.00	0.78	4.00	0.10	3.701	0.031	0.157	0.004
95.00	0.79	4.00	0.10	3.740	0.031	0.157	0.004
96.00	0.80	4.00	0.10	3.780	0.031	0.157	0.004
97.00	0.80	4.00	0.10	3.819	0.031	0.157	0.004
98.00	0.81	4.00	0.10	3.858	0.032	0.157	0.004
99.00	0.82	4.00	0.10	3.898	0.032	0.157	0.004
100.00	0.82	4.00	0.10	3.937	0.032	0.157	0.004
101.00	0.83	4.00	0.10	3.976	0.033	0.157	0.004
102.00	0.84	4.00	0.10	4.016	0.033	0.157	0.004
103.00	0.85	4.00	0.10	4.055	0.033	0.157	0.004
104.00	0.85	4.00	0.10	4.094	0.033	0.157	0.004
105.00	0.86	4.00	0.10	4.134	0.034	0.157	0.004
106.00	0.87	4.00	0.10	4.173	0.034	0.157	0.004
107.00	0.87	4.00	0.10	4.213	0.034	0.157	0.004
108.00	0.88	4.00	0.10	4.252	0.035	0.157	0.004
109.00	0.89	4.00	0.10	4.291	0.035	0.157	0.004
110.00	0.89	4.00	0.10	4.331	0.035	0.157	0.004
111.00	0.90	4.00	0.10	4.370	0.035	0.157	0.004
112.00	0.91	4.00	0.10	4.409	0.036	0.157	0.004
113.00	0.91	4.00	0.10	4.449	0.036	0.157	0.004
114.00	0.92	4.00	0.10	4.488	0.036	0.157	0.004
115.00	0.93	4.00	0.10	4.528	0.037	0.157	0.004
116.00	0.93	4.00	0.10	4.567	0.037	0.157	0.004
117.00	0.94	4.00	0.10	4.606	0.037	0.157	0.004
118.00	0.95	4.00	0.10	4.646	0.037	0.157	0.004
119.00	0.95	4.00	0.10	4.685	0.037	0.157	0.004
120.00	0.96	4.00	0.10	4.724	0.038	0.157	0.004
121.00	0.97	4.00	0.10	4.764	0.038	0.157	0.004
122.00	0.97	4.00	0.10	4.803	0.038	0.157	0.004
123.00	0.98	4.00	0.10	4.843	0.039	0.157	0.004
124.00	0.99	4.00	0.10	4.882	0.039	0.157	0.004
125.00	0.99	4.00	0.10	4.921	0.039	0.157	0.004
126.00	1.00	4.00	0.10	4.961	0.039	0.157	0.004
127.00	1.01	4.00	0.10	5.000	0.040	0.157	0.004
128.00	1.01	4.00	0.10	5.039	0.040	0.157	0.004
128.50	1.02	4.00	0.10	5.059	0.040	0.157	0.004
129.00	1.02	4.00	0.10	5.079	0.040	0.157	0.004
130.00	1.03	4.00	0.10	5.118	0.041	0.157	0.004
131.00	1.03	4.00	0.10	5.157	0.041	0.157	0.004
132.00	1.04	4.00	0.10	5.197	0.041	0.157	0.004
133.00	1.05	4.00	0.10	5.236	0.041	0.157	0.004
134.00	1.05	4.00	0.10	5.276	0.041	0.157	0.004
135.00	1.06	4.00	0.10	5.315	0.042	0.157	0.004
136.00	1.07	4.00	0.10	5.354	0.042	0.157	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
137.00	1.07	4.00	0.10	5.394	0.042	0.157	0.004
138.00	1.08	4.00	0.10	5.433	0.043	0.157	0.004
138.50	1.08	4.00	0.10	5.453	0.043	0.157	0.004
139.00	1.09	4.00	0.10	5.472	0.043	0.157	0.004
140.00	1.09	4.00	0.10	5.512	0.043	0.157	0.004
140.50	1.10	4.00	0.10	5.531	0.043	0.157	0.004
141.00	1.10	4.00	0.10	5.551	0.043	0.157	0.004
142.00	1.11	4.00	0.10	5.591	0.044	0.157	0.004
143.00	1.11	4.00	0.10	5.630	0.044	0.157	0.004
144.00	1.12	4.00	0.10	5.669	0.044	0.157	0.004
145.00	1.13	4.00	0.10	5.709	0.044	0.157	0.004
146.00	1.13	4.00	0.10	5.748	0.044	0.157	0.004
147.00	1.14	4.00	0.10	5.787	0.045	0.157	0.004
148.00	1.15	4.00	0.10	5.827	0.045	0.157	0.004
148.50	1.15	4.00	0.10	5.846	0.045	0.157	0.004
149.00	1.15	4.00	0.10	5.866	0.045	0.157	0.004
150.00	1.16	4.00	0.10	5.906	0.046	0.157	0.004
151.00	1.17	4.00	0.10	5.945	0.046	0.157	0.004
152.00	1.17	4.00	0.10	5.984	0.046	0.157	0.004
153.00	1.18	4.00	0.10	6.024	0.046	0.157	0.004
154.00	1.19	4.00	0.10	6.063	0.047	0.157	0.004
155.00	1.19	4.00	0.10	6.102	0.047	0.157	0.004
156.00	1.20	4.00	0.10	6.142	0.047	0.157	0.004
157.00	1.21	4.00	0.10	6.181	0.048	0.157	0.004
158.00	1.21	4.00	0.10	6.220	0.048	0.157	0.004
159.00	1.22	4.00	0.10	6.260	0.048	0.157	0.004
160.00	1.23	4.00	0.10	6.299	0.048	0.157	0.004
161.00	1.23	4.00	0.10	6.339	0.048	0.157	0.004
162.00	1.24	4.00	0.10	6.378	0.049	0.157	0.004
163.00	1.25	4.00	0.10	6.417	0.049	0.157	0.004
164.00	1.25	4.00	0.10	6.457	0.049	0.157	0.004
165.00	1.26	4.00	0.10	6.496	0.050	0.157	0.004
166.00	1.27	4.00	0.10	6.535	0.050	0.157	0.004
167.00	1.27	4.00	0.10	6.575	0.050	0.157	0.004
168.00	1.28	4.00	0.10	6.614	0.050	0.157	0.004
169.00	1.29	4.00	0.10	6.654	0.051	0.157	0.004
170.00	1.29	4.00	0.10	6.693	0.051	0.157	0.004
171.00	1.30	4.00	0.10	6.732	0.051	0.157	0.004
172.00	1.31	4.00	0.10	6.772	0.052	0.157	0.004
173.00	1.31	4.00	0.10	6.811	0.052	0.157	0.004
174.00	1.32	4.00	0.10	6.850	0.052	0.157	0.004
175.00	1.33	4.00	0.10	6.890	0.052	0.157	0.004
176.00	1.33	4.00	0.10	6.929	0.052	0.157	0.004
177.00	1.34	4.00	0.10	6.968	0.053	0.157	0.004
178.00	1.35	4.00	0.10	7.008	0.053	0.157	0.004
179.00	1.35	4.00	0.10	7.047	0.053	0.157	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
180.00	1.36	4.00	0.10	7.087	0.054	0.157	0.004
181.00	1.37	4.00	0.10	7.126	0.054	0.157	0.004
182.00	1.37	4.00	0.10	7.165	0.054	0.157	0.004
183.00	1.38	4.00	0.10	7.205	0.054	0.157	0.004
184.00	1.39	4.00	0.10	7.244	0.055	0.157	0.004
185.00	1.39	4.00	0.10	7.283	0.055	0.157	0.004
186.00	1.40	4.00	0.10	7.323	0.055	0.157	0.004
187.00	1.41	4.00	0.10	7.362	0.056	0.157	0.004
187.50	1.41	4.00	0.10	7.382	0.056	0.157	0.004
188.00	1.41	4.00	0.10	7.402	0.056	0.157	0.004
189.00	1.42	4.00	0.10	7.441	0.056	0.157	0.004
190.00	1.43	4.00	0.10	7.480	0.056	0.157	0.004
191.00	1.43	4.00	0.10	7.520	0.056	0.157	0.004
192.00	1.44	4.00	0.10	7.559	0.057	0.157	0.004
193.00	1.45	4.00	0.10	7.598	0.057	0.157	0.004
193.50	1.45	4.00	0.10	7.618	0.057	0.157	0.004
194.00	1.45	4.00	0.10	7.638	0.057	0.157	0.004
195.00	1.46	4.00	0.10	7.677	0.057	0.157	0.004
196.00	1.46	4.00	0.10	7.717	0.057	0.157	0.004
197.00	1.47	4.00	0.10	7.756	0.058	0.157	0.004
198.00	1.48	4.00	0.10	7.795	0.058	0.157	0.004
199.00	1.48	4.00	0.10	7.835	0.058	0.157	0.004
200.00	1.49	4.00	0.10	7.874	0.059	0.157	0.004
201.00	1.50	4.00	0.10	7.913	0.059	0.157	0.004
202.00	1.50	4.00	0.10	7.953	0.059	0.157	0.004
203.00	1.51	4.00	0.10	7.992	0.059	0.157	0.004
204.00	1.52	4.00	0.10	8.031	0.060	0.157	0.004
205.00	1.52	4.00	0.10	8.071	0.060	0.157	0.004
206.00	1.53	4.00	0.10	8.110	0.060	0.157	0.004
207.00	1.54	4.00	0.10	8.150	0.061	0.157	0.004
208.00	1.54	4.00	0.10	8.189	0.061	0.157	0.004
209.00	1.55	4.00	0.10	8.228	0.061	0.157	0.004
210.00	1.56	4.00	0.10	8.268	0.061	0.157	0.004
211.00	1.56	4.00	0.10	8.307	0.061	0.157	0.004
212.00	1.57	4.00	0.10	8.346	0.062	0.157	0.004
213.00	1.58	4.00	0.10	8.386	0.062	0.157	0.004
214.00	1.58	4.00	0.10	8.425	0.062	0.157	0.004
215.00	1.59	4.00	0.10	8.465	0.063	0.157	0.004
216.00	1.60	4.00	0.10	8.504	0.063	0.157	0.004
217.00	1.60	4.00	0.10	8.543	0.063	0.157	0.004
218.00	1.61	4.00	0.10	8.583	0.063	0.157	0.004
219.00	1.62	4.00	0.10	8.622	0.064	0.157	0.004
220.00	1.62	4.00	0.10	8.661	0.064	0.157	0.004
221.00	1.63	4.00	0.10	8.701	0.064	0.157	0.004
222.00	1.64	4.00	0.10	8.740	0.065	0.157	0.004
223.00	1.64	4.00	0.10	8.780	0.065	0.157	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
224.00	1.65	4.00	0.10	8.819	0.065	0.157	0.004
225.00	1.65	4.00	0.10	8.858	0.065	0.157	0.004
226.00	1.66	4.00	0.10	8.898	0.065	0.157	0.004
227.00	1.67	4.00	0.10	8.937	0.066	0.157	0.004
228.00	1.67	4.00	0.10	8.976	0.066	0.157	0.004
229.00	1.68	4.00	0.10	9.016	0.066	0.157	0.004
230.00	1.69	4.00	0.10	9.055	0.067	0.157	0.004
231.00	1.69	4.00	0.10	9.094	0.067	0.157	0.004
232.00	1.70	4.00	0.10	9.134	0.067	0.157	0.004
233.00	1.71	4.00	0.10	9.173	0.067	0.157	0.004
234.00	1.71	4.00	0.10	9.213	0.067	0.157	0.004
235.00	1.72	4.00	0.10	9.252	0.068	0.157	0.004
236.00	1.73	4.00	0.10	9.291	0.068	0.157	0.004
237.00	1.73	4.00	0.10	9.331	0.068	0.157	0.004
238.00	1.74	4.00	0.10	9.370	0.069	0.157	0.004
239.00	1.75	4.00	0.10	9.409	0.069	0.157	0.004
240.00	1.75	4.00	0.10	9.449	0.069	0.157	0.004
241.00	1.76	4.00	0.10	9.488	0.069	0.157	0.004
242.00	1.77	4.00	0.10	9.528	0.070	0.157	0.004
243.00	1.77	4.00	0.10	9.567	0.070	0.157	0.004
244.00	1.78	4.00	0.10	9.606	0.070	0.157	0.004
245.00	1.78	4.00	0.10	9.646	0.070	0.157	0.004
246.00	1.79	4.00	0.10	9.685	0.070	0.157	0.004
247.00	1.80	4.00	0.10	9.724	0.071	0.157	0.004
248.00	1.80	4.00	0.10	9.764	0.071	0.157	0.004
249.00	1.81	4.00	0.10	9.803	0.071	0.157	0.004
250.00	1.82	4.00	0.10	9.843	0.072	0.157	0.004
251.00	1.82	4.00	0.10	9.882	0.072	0.157	0.004
252.00	1.83	4.00	0.10	9.921	0.072	0.157	0.004
253.00	1.84	4.00	0.10	9.961	0.072	0.157	0.004
254.00	1.84	4.00	0.10	10.000	0.072	0.157	0.004
255.00	1.85	4.00	0.10	10.039	0.073	0.157	0.004
256.00	1.86	4.00	0.10	10.079	0.073	0.157	0.004
257.00	1.86	4.00	0.10	10.118	0.073	0.157	0.004
258.00	1.87	4.00	0.10	10.157	0.074	0.157	0.004
259.00	1.88	4.00	0.10	10.197	0.074	0.157	0.004
260.00	1.88	4.00	0.10	10.236	0.074	0.157	0.004
261.00	1.89	4.00	0.10	10.276	0.074	0.157	0.004
262.00	1.89	4.00	0.10	10.315	0.074	0.157	0.004
263.00	1.90	4.00	0.10	10.354	0.075	0.157	0.004
264.00	1.91	4.00	0.10	10.394	0.075	0.157	0.004
265.00	1.91	4.00	0.10	10.433	0.075	0.157	0.004
266.00	1.92	4.00	0.10	10.472	0.076	0.157	0.004
267.00	1.93	4.00	0.10	10.512	0.076	0.157	0.004
268.00	1.93	4.00	0.10	10.551	0.076	0.157	0.004
269.00	1.94	4.00	0.10	10.591	0.076	0.157	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
270.00	1.95	4.00	0.10	10.630	0.077	0.157	0.004
271.00	1.95	4.00	0.10	10.669	0.077	0.157	0.004
272.00	1.96	4.00	0.10	10.709	0.077	0.157	0.004
273.00	1.97	4.00	0.10	10.748	0.078	0.157	0.004
274.00	1.97	4.00	0.10	10.787	0.078	0.157	0.004
274.50	1.98	4.00	0.10	10.807	0.078	0.157	0.004
275.00	1.98	4.00	0.10	10.827	0.078	0.157	0.004
276.00	1.99	4.00	0.10	10.866	0.078	0.157	0.004
278.00	2.00	4.00	0.10	10.945	0.079	0.157	0.004
279.00	2.00	4.00	0.10	10.984	0.079	0.157	0.004
280.00	2.01	4.00	0.10	11.024	0.079	0.157	0.004
281.00	2.02	4.00	0.10	11.063	0.080	0.157	0.004
282.00	2.02	4.00	0.10	11.102	0.080	0.157	0.004
283.00	2.03	4.00	0.10	11.142	0.080	0.157	0.004
284.00	2.04	4.00	0.10	11.181	0.080	0.157	0.004
285.00	2.04	4.00	0.10	11.220	0.080	0.157	0.004
286.00	2.05	4.00	0.10	11.260	0.081	0.157	0.004
287.00	2.06	4.00	0.10	11.299	0.081	0.157	0.004
288.00	2.06	4.00	0.10	11.339	0.081	0.157	0.004
289.00	2.07	4.00	0.10	11.378	0.081	0.157	0.004
290.00	2.08	4.00	0.10	11.417	0.082	0.157	0.004
291.00	2.08	4.00	0.10	11.457	0.082	0.157	0.004
292.00	2.09	4.00	0.10	11.496	0.082	0.157	0.004
293.00	2.10	4.00	0.10	11.535	0.083	0.157	0.004
294.00	2.10	4.00	0.10	11.575	0.083	0.157	0.004
295.00	2.11	4.00	0.10	11.614	0.083	0.157	0.004
296.00	2.11	4.00	0.10	11.654	0.083	0.157	0.004
297.00	2.12	4.00	0.10	11.693	0.083	0.157	0.004
298.00	2.13	4.00	0.10	11.732	0.084	0.157	0.004
300.00	2.14	4.00	0.10	11.811	0.084	0.157	0.004
302.00	2.15	4.00	0.10	11.890	0.085	0.157	0.004
303.00	2.16	4.00	0.10	11.929	0.085	0.157	0.004
305.00	2.17	4.00	0.10	12.008	0.085	0.157	0.004
306.00	2.18	4.00	0.10	12.047	0.086	0.157	0.004
307.00	2.19	4.00	0.10	12.087	0.086	0.157	0.004
308.00	2.19	4.00	0.10	12.126	0.086	0.157	0.004
309.00	2.20	4.00	0.10	12.165	0.087	0.157	0.004
310.00	2.20	4.00	0.10	12.205	0.087	0.157	0.004
311.00	2.21	4.00	0.10	12.244	0.087	0.157	0.004
312.00	2.22	4.00	0.10	12.283	0.087	0.157	0.004
313.00	2.22	4.00	0.10	12.323	0.087	0.157	0.004
314.00	2.23	4.00	0.10	12.362	0.088	0.157	0.004
315.00	2.24	4.00	0.10	12.402	0.088	0.157	0.004
316.00	2.24	4.00	0.10	12.441	0.088	0.157	0.004
318.00	2.26	4.00	0.10	12.520	0.089	0.157	0.004
320.00	2.27	4.00	0.10	12.598	0.089	0.157	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
325.00	2.30	4.00	0.10	12.795	0.091	0.157	0.004
330.00	2.33	4.00	0.10	12.992	0.092	0.157	0.004
335.00	2.36	4.00	0.10	13.189	0.093	0.157	0.004
340.00	2.40	4.00	0.10	13.386	0.094	0.157	0.004
345.00	2.43	4.00	0.10	13.583	0.096	0.157	0.004
350.00	2.46	4.00	0.10	13.780	0.097	0.157	0.004
355.00	2.49	4.00	0.10	13.976	0.098	0.157	0.004
360.00	2.52	4.00	0.10	14.173	0.099	0.157	0.004
364.00	2.55	4.00	0.10	14.331	0.100	0.157	0.004
365.00	2.56	4.00	0.10	14.370	0.101	0.157	0.004
370.00	2.59	4.00	0.10	14.567	0.102	0.157	0.004
373.00	2.61	4.00	0.10	14.685	0.103	0.157	0.004
375.00	2.62	4.00	0.10	14.764	0.103	0.157	0.004
380.00	2.65	4.00	0.10	14.961	0.104	0.157	0.004
385.00	2.68	4.00	0.10	15.157	0.106	0.157	0.004
390.00	2.71	4.00	0.10	15.354	0.107	0.157	0.004
391.00	2.72	4.00	0.10	15.394	0.107	0.157	0.004
393.00	2.73	4.00	0.10	15.472	0.107	0.157	0.004
395.00	2.75	4.00	0.10	15.551	0.108	0.157	0.004
400.00	2.78	4.00	0.10	15.748	0.109	0.157	0.004
402.00	2.79	4.00	0.10	15.827	0.110	0.157	0.004
405.00	2.81	4.00	0.10	15.945	0.111	0.157	0.004
410.00	2.84	4.00	0.10	16.142	0.112	0.157	0.004
415.00	2.87	4.00	0.10	16.339	0.113	0.157	0.004
416.00	2.88	4.00	0.10	16.378	0.113	0.157	0.004
420.00	2.90	4.00	0.10	16.535	0.114	0.157	0.004
425.00	2.94	4.00	0.10	16.732	0.116	0.157	0.004
430.00	2.97	4.00	0.10	16.929	0.117	0.157	0.004
435.00	3.00	4.00	0.10	17.126	0.118	0.157	0.004
439.50	3.03	4.00	0.10	17.303	0.119	0.157	0.004
440.00	3.03	4.00	0.10	17.323	0.119	0.157	0.004
445.00	3.06	4.00	0.10	17.520	0.120	0.157	0.004
450.00	3.09	4.00	0.10	17.717	0.122	0.157	0.004
455.00	3.13	4.00	0.10	17.913	0.123	0.157	0.004
460.00	3.16	4.00	0.10	18.110	0.124	0.157	0.004
465.00	3.19	4.00	0.10	18.307	0.126	0.157	0.004
470.00	3.22	4.00	0.10	18.504	0.127	0.157	0.004
475.00	3.25	4.00	0.10	18.701	0.128	0.157	0.004
480.00	3.28	4.00	0.10	18.898	0.129	0.157	0.004
485.00	3.31	4.00	0.10	19.094	0.130	0.157	0.004
490.00	3.35	4.00	0.10	19.291	0.132	0.157	0.004
495.00	3.38	4.00	0.10	19.488	0.133	0.157	0.004
500.00	3.41	4.00	0.10	19.685	0.134	0.157	0.004
505.00	3.44	4.00	0.10	19.882	0.135	0.157	0.004
512.00	3.48	4.00	0.10	20.157	0.137	0.157	0.004
515.00	3.50	4.00	0.10	20.276	0.138	0.157	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
520.00	3.53	4.00	0.10	20.472	0.139	0.157	0.004
525.00	3.56	4.00	0.10	20.669	0.140	0.157	0.004
530.00	3.60	4.00	0.10	20.866	0.142	0.157	0.004
535.00	3.63	4.00	0.10	21.063	0.143	0.157	0.004
540.00	3.66	4.00	0.10	21.260	0.144	0.157	0.004
545.00	3.69	4.00	0.10	21.457	0.145	0.157	0.004
550.00	3.72	4.00	0.10	21.654	0.146	0.157	0.004
555.00	3.75	4.00	0.10	21.850	0.148	0.157	0.004
560.00	3.78	4.00	0.10	22.047	0.149	0.157	0.004
565.00	3.81	4.00	0.10	22.244	0.150	0.157	0.004
582.00	3.92	4.00	0.10	22.913	0.154	0.157	0.004
585.00	3.94	4.00	0.10	23.031	0.155	0.157	0.004
6.00	0.16	4.50	0.10	0.236	0.006	0.177	0.004
8.00	0.17	4.50	0.10	0.315	0.007	0.177	0.004
9.00	0.18	4.50	0.10	0.354	0.007	0.177	0.004
9.50	0.19	4.50	0.10	0.374	0.007	0.177	0.004
10.00	0.19	4.50	0.10	0.394	0.007	0.177	0.004
10.50	0.19	4.50	0.10	0.413	0.007	0.177	0.004
11.00	0.20	4.50	0.10	0.433	0.008	0.177	0.004
12.00	0.21	4.50	0.10	0.472	0.008	0.177	0.004
13.00	0.21	4.50	0.10	0.512	0.008	0.177	0.004
15.00	0.23	4.50	0.10	0.591	0.009	0.177	0.004
15.50	0.23	4.50	0.10	0.610	0.009	0.177	0.004
16.00	0.24	4.50	0.10	0.630	0.009	0.177	0.004
17.00	0.24	4.50	0.10	0.669	0.009	0.177	0.004
18.00	0.25	4.50	0.10	0.709	0.010	0.177	0.004
19.00	0.26	4.50	0.10	0.748	0.010	0.177	0.004
20.00	0.26	4.50	0.10	0.787	0.010	0.177	0.004
21.00	0.27	4.50	0.10	0.827	0.011	0.177	0.004
21.50	0.28	4.50	0.10	0.846	0.011	0.177	0.004
22.00	0.28	4.50	0.10	0.866	0.011	0.177	0.004
22.50	0.28	4.50	0.10	0.886	0.011	0.177	0.004
23.00	0.29	4.50	0.10	0.906	0.011	0.177	0.004
24.00	0.29	4.50	0.10	0.945	0.011	0.177	0.004
24.50	0.30	4.50	0.10	0.965	0.012	0.177	0.004
25.00	0.30	4.50	0.10	0.984	0.012	0.177	0.004
26.00	0.31	4.50	0.10	1.024	0.012	0.177	0.004
27.00	0.32	4.50	0.10	1.063	0.013	0.177	0.004
27.50	0.32	4.50	0.10	1.083	0.013	0.177	0.004
28.00	0.32	4.50	0.10	1.102	0.013	0.177	0.004
28.50	0.33	4.50	0.10	1.122	0.013	0.177	0.004
29.00	0.33	4.50	0.10	1.142	0.013	0.177	0.004
29.50	0.33	4.50	0.10	1.161	0.013	0.177	0.004
30.00	0.34	4.50	0.10	1.181	0.013	0.177	0.004
31.00	0.34	4.50	0.10	1.220	0.013	0.177	0.004
31.50	0.35	4.50	0.10	1.240	0.014	0.177	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
32.00	0.35	4.50	0.10	1.260	0.014	0.177	0.004
33.00	0.36	4.50	0.10	1.299	0.014	0.177	0.004
34.00	0.37	4.50	0.10	1.339	0.015	0.177	0.004
34.50	0.37	4.50	0.10	1.358	0.015	0.177	0.004
35.00	0.37	4.50	0.10	1.378	0.015	0.177	0.004
35.50	0.38	4.50	0.10	1.398	0.015	0.177	0.004
36.00	0.38	4.50	0.10	1.417	0.015	0.177	0.004
37.00	0.39	4.50	0.10	1.457	0.015	0.177	0.004
37.50	0.39	4.50	0.10	1.476	0.015	0.177	0.004
38.00	0.40	4.50	0.10	1.496	0.016	0.177	0.004
39.00	0.40	4.50	0.10	1.535	0.016	0.177	0.004
40.00	0.41	4.50	0.10	1.575	0.016	0.177	0.004
40.50	0.41	4.50	0.10	1.594	0.016	0.177	0.004
41.00	0.42	4.50	0.10	1.614	0.017	0.177	0.004
42.00	0.42	4.50	0.10	1.654	0.017	0.177	0.004
43.00	0.43	4.50	0.10	1.693	0.017	0.177	0.004
44.00	0.44	4.50	0.10	1.732	0.017	0.177	0.004
45.00	0.44	4.50	0.10	1.772	0.017	0.177	0.004
46.00	0.45	4.50	0.10	1.811	0.018	0.177	0.004
47.00	0.46	4.50	0.10	1.850	0.018	0.177	0.004
48.00	0.47	4.50	0.10	1.890	0.019	0.177	0.004
49.00	0.47	4.50	0.10	1.929	0.019	0.177	0.004
50.00	0.48	4.50	0.10	1.969	0.019	0.177	0.004
51.00	0.49	4.50	0.10	2.008	0.019	0.177	0.004
53.00	0.50	4.50	0.10	2.087	0.020	0.177	0.004
56.00	0.52	4.50	0.10	2.205	0.020	0.177	0.004
57.00	0.53	4.50	0.10	2.244	0.021	0.177	0.004
58.00	0.54	4.50	0.10	2.283	0.021	0.177	0.004
60.00	0.55	4.50	0.10	2.362	0.022	0.177	0.004
61.00	0.56	4.50	0.10	2.402	0.022	0.177	0.004
63.00	0.57	4.50	0.10	2.480	0.022	0.177	0.004
64.00	0.58	4.50	0.10	2.520	0.023	0.177	0.004
65.00	0.58	4.50	0.10	2.559	0.023	0.177	0.004
66.00	0.59	4.50	0.10	2.598	0.023	0.177	0.004
68.00	0.61	4.50	0.10	2.677	0.024	0.177	0.004
69.00	0.61	4.50	0.10	2.717	0.024	0.177	0.004
70.00	0.62	4.50	0.10	2.756	0.024	0.177	0.004
71.00	0.63	4.50	0.10	2.795	0.025	0.177	0.004
73.00	0.64	4.50	0.10	2.874	0.025	0.177	0.004
74.00	0.65	4.50	0.10	2.913	0.026	0.177	0.004
75.00	0.65	4.50	0.10	2.953	0.026	0.177	0.004
76.00	0.66	4.50	0.10	2.992	0.026	0.177	0.004
80.00	0.69	4.50	0.10	3.150	0.027	0.177	0.004
81.00	0.70	4.50	0.10	3.189	0.028	0.177	0.004
83.00	0.71	4.50	0.10	3.268	0.028	0.177	0.004
85.00	0.72	4.50	0.10	3.346	0.028	0.177	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
86.00	0.73	4.50	0.10	3.386	0.029	0.177	0.004
89.00	0.75	4.50	0.10	3.504	0.030	0.177	0.004
90.00	0.76	4.50	0.10	3.543	0.030	0.177	0.004
92.00	0.77	4.50	0.10	3.622	0.030	0.177	0.004
93.50	0.78	4.50	0.10	3.681	0.031	0.177	0.004
95.00	0.79	4.50	0.10	3.740	0.031	0.177	0.004
97.50	0.81	4.50	0.10	3.839	0.032	0.177	0.004
98.00	0.81	4.50	0.10	3.858	0.032	0.177	0.004
99.50	0.82	4.50	0.10	3.917	0.032	0.177	0.004
100.00	0.82	4.50	0.10	3.937	0.032	0.177	0.004
100.50	0.83	4.50	0.10	3.957	0.033	0.177	0.004
101.00	0.83	4.50	0.10	3.976	0.033	0.177	0.004
103.50	0.85	4.50	0.10	4.075	0.033	0.177	0.004
105.00	0.86	4.50	0.10	4.134	0.034	0.177	0.004
106.00	0.87	4.50	0.10	4.173	0.034	0.177	0.004
110.00	0.89	4.50	0.10	4.331	0.035	0.177	0.004
115.00	0.93	4.50	0.10	4.528	0.037	0.177	0.004
118.00	0.95	4.50	0.10	4.646	0.037	0.177	0.004
120.00	0.96	4.50	0.10	4.724	0.038	0.177	0.004
121.00	0.97	4.50	0.10	4.764	0.038	0.177	0.004
122.00	0.97	4.50	0.10	4.803	0.038	0.177	0.004
124.00	0.99	4.50	0.10	4.882	0.039	0.177	0.004
126.00	1.00	4.50	0.10	4.961	0.039	0.177	0.004
127.50	1.01	4.50	0.10	5.020	0.040	0.177	0.004
128.00	1.01	4.50	0.10	5.039	0.040	0.177	0.004
130.00	1.03	4.50	0.10	5.118	0.041	0.177	0.004
131.50	1.04	4.50	0.10	5.177	0.041	0.177	0.004
134.00	1.05	4.50	0.10	5.276	0.041	0.177	0.004
134.50	1.06	4.50	0.10	5.295	0.042	0.177	0.004
137.00	1.07	4.50	0.10	5.394	0.042	0.177	0.004
140.00	1.09	4.50	0.10	5.512	0.043	0.177	0.004
140.50	1.10	4.50	0.10	5.531	0.043	0.177	0.004
150.00	1.16	4.50	0.10	5.906	0.046	0.177	0.004
153.00	1.18	4.50	0.10	6.024	0.046	0.177	0.004
155.00	1.19	4.50	0.10	6.102	0.047	0.177	0.004
157.00	1.21	4.50	0.10	6.181	0.048	0.177	0.004
160.00	1.23	4.50	0.10	6.299	0.048	0.177	0.004
165.00	1.26	4.50	0.10	6.496	0.050	0.177	0.004
167.00	1.27	4.50	0.10	6.575	0.050	0.177	0.004
172.00	1.31	4.50	0.10	6.772	0.052	0.177	0.004
175.00	1.33	4.50	0.10	6.890	0.052	0.177	0.004
178.00	1.35	4.50	0.10	7.008	0.053	0.177	0.004
180.00	1.36	4.50	0.10	7.087	0.054	0.177	0.004
185.00	1.39	4.50	0.10	7.283	0.055	0.177	0.004
186.00	1.40	4.50	0.10	7.323	0.055	0.177	0.004
189.50	1.42	4.50	0.10	7.461	0.056	0.177	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
192.00	1.44	4.50	0.10	7.559	0.057	0.177	0.004
208.00	1.54	4.50	0.10	8.189	0.061	0.177	0.004
215.00	1.59	4.50	0.10	8.465	0.063	0.177	0.004
218.50	1.61	4.50	0.10	8.602	0.063	0.177	0.004
225.00	1.65	4.50	0.10	8.858	0.065	0.177	0.004
227.00	1.67	4.50	0.10	8.937	0.066	0.177	0.004
250.00	1.82	4.50	0.10	9.843	0.072	0.177	0.004
267.00	1.93	4.50	0.10	10.512	0.076	0.177	0.004
280.00	2.01	4.50	0.10	11.024	0.079	0.177	0.004
300.00	2.14	4.50	0.10	11.811	0.084	0.177	0.004
315.00	2.24	4.50	0.10	12.402	0.088	0.177	0.004
353.00	2.48	4.50	0.10	13.898	0.098	0.177	0.004
375.00	2.62	4.50	0.10	14.764	0.103	0.177	0.004
388.00	2.70	4.50	0.10	15.276	0.106	0.177	0.004
455.00	3.13	4.50	0.10	17.913	0.123	0.177	0.004
4.00	0.14	5.00	0.13	0.157	0.006	0.197	0.005
5.00	0.15	5.00	0.13	0.197	0.006	0.197	0.005
6.00	0.16	5.00	0.13	0.236	0.006	0.197	0.005
7.00	0.17	5.00	0.13	0.276	0.007	0.197	0.005
8.00	0.17	5.00	0.13	0.315	0.007	0.197	0.005
9.00	0.18	5.00	0.13	0.354	0.007	0.197	0.005
10.00	0.19	5.00	0.13	0.394	0.007	0.197	0.005
11.00	0.20	5.00	0.13	0.433	0.008	0.197	0.005
12.00	0.21	5.00	0.13	0.472	0.008	0.197	0.005
13.00	0.21	5.00	0.13	0.512	0.008	0.197	0.005
14.00	0.22	5.00	0.13	0.551	0.009	0.197	0.005
15.00	0.23	5.00	0.13	0.591	0.009	0.197	0.005
16.00	0.24	5.00	0.13	0.630	0.009	0.197	0.005
17.00	0.24	5.00	0.13	0.669	0.009	0.197	0.005
18.00	0.25	5.00	0.13	0.709	0.010	0.197	0.005
19.00	0.26	5.00	0.13	0.748	0.010	0.197	0.005
20.00	0.26	5.00	0.13	0.787	0.010	0.197	0.005
21.00	0.27	5.00	0.13	0.827	0.011	0.197	0.005
22.00	0.28	5.00	0.13	0.866	0.011	0.197	0.005
23.00	0.29	5.00	0.13	0.906	0.011	0.197	0.005
23.50	0.29	5.00	0.13	0.925	0.011	0.197	0.005
24.00	0.29	5.00	0.13	0.945	0.011	0.197	0.005
25.00	0.30	5.00	0.13	0.984	0.012	0.197	0.005
26.00	0.31	5.00	0.13	1.024	0.012	0.197	0.005
27.00	0.32	5.00	0.13	1.063	0.013	0.197	0.005
28.00	0.32	5.00	0.13	1.102	0.013	0.197	0.005
29.00	0.33	5.00	0.13	1.142	0.013	0.197	0.005
30.00	0.34	5.00	0.13	1.181	0.013	0.197	0.005
31.00	0.34	5.00	0.13	1.220	0.013	0.197	0.005
32.00	0.35	5.00	0.13	1.260	0.014	0.197	0.005
33.00	0.36	5.00	0.13	1.299	0.014	0.197	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
34.00	0.37	5.00	0.13	1.339	0.015	0.197	0.005
35.00	0.37	5.00	0.13	1.378	0.015	0.197	0.005
36.00	0.38	5.00	0.13	1.417	0.015	0.197	0.005
37.00	0.39	5.00	0.13	1.457	0.015	0.197	0.005
38.00	0.40	5.00	0.13	1.496	0.016	0.197	0.005
39.00	0.40	5.00	0.13	1.535	0.016	0.197	0.005
40.00	0.41	5.00	0.13	1.575	0.016	0.197	0.005
41.00	0.42	5.00	0.13	1.614	0.017	0.197	0.005
42.00	0.42	5.00	0.13	1.654	0.017	0.197	0.005
43.00	0.43	5.00	0.13	1.693	0.017	0.197	0.005
44.00	0.44	5.00	0.13	1.732	0.017	0.197	0.005
45.00	0.44	5.00	0.13	1.772	0.017	0.197	0.005
46.00	0.45	5.00	0.13	1.811	0.018	0.197	0.005
47.00	0.46	5.00	0.13	1.850	0.018	0.197	0.005
48.00	0.47	5.00	0.13	1.890	0.019	0.197	0.005
49.00	0.47	5.00	0.13	1.929	0.019	0.197	0.005
50.00	0.48	5.00	0.13	1.969	0.019	0.197	0.005
51.00	0.49	5.00	0.13	2.008	0.019	0.197	0.005
52.00	0.49	5.00	0.13	2.047	0.019	0.197	0.005
53.00	0.50	5.00	0.13	2.087	0.020	0.197	0.005
54.00	0.51	5.00	0.13	2.126	0.020	0.197	0.005
55.00	0.52	5.00	0.13	2.165	0.020	0.197	0.005
56.00	0.52	5.00	0.13	2.205	0.020	0.197	0.005
57.00	0.53	5.00	0.13	2.244	0.021	0.197	0.005
58.00	0.54	5.00	0.13	2.283	0.021	0.197	0.005
58.50	0.54	5.00	0.13	2.303	0.021	0.197	0.005
59.00	0.54	5.00	0.13	2.323	0.021	0.197	0.005
60.00	0.55	5.00	0.13	2.362	0.022	0.197	0.005
61.00	0.56	5.00	0.13	2.402	0.022	0.197	0.005
62.00	0.56	5.00	0.13	2.441	0.022	0.197	0.005
63.00	0.57	5.00	0.13	2.480	0.022	0.197	0.005
64.00	0.58	5.00	0.13	2.520	0.023	0.197	0.005
65.00	0.58	5.00	0.13	2.559	0.023	0.197	0.005
66.00	0.59	5.00	0.13	2.598	0.023	0.197	0.005
67.00	0.60	5.00	0.13	2.638	0.024	0.197	0.005
67.50	0.60	5.00	0.13	2.657	0.024	0.197	0.005
68.00	0.61	5.00	0.13	2.677	0.024	0.197	0.005
69.00	0.61	5.00	0.13	2.717	0.024	0.197	0.005
70.00	0.62	5.00	0.13	2.756	0.024	0.197	0.005
71.00	0.63	5.00	0.13	2.795	0.025	0.197	0.005
72.00	0.63	5.00	0.13	2.835	0.025	0.197	0.005
73.00	0.64	5.00	0.13	2.874	0.025	0.197	0.005
74.00	0.65	5.00	0.13	2.913	0.026	0.197	0.005
75.00	0.65	5.00	0.13	2.953	0.026	0.197	0.005
76.00	0.66	5.00	0.13	2.992	0.026	0.197	0.005
77.00	0.67	5.00	0.13	3.031	0.026	0.197	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
78.00	0.67	5.00	0.13	3.071	0.026	0.197	0.005
79.00	0.68	5.00	0.13	3.110	0.027	0.197	0.005
80.00	0.69	5.00	0.13	3.150	0.027	0.197	0.005
80.50	0.69	5.00	0.13	3.169	0.027	0.197	0.005
81.00	0.70	5.00	0.13	3.189	0.028	0.197	0.005
82.00	0.70	5.00	0.13	3.228	0.028	0.197	0.005
83.00	0.71	5.00	0.13	3.268	0.028	0.197	0.005
84.00	0.72	5.00	0.13	3.307	0.028	0.197	0.005
85.00	0.72	5.00	0.13	3.346	0.028	0.197	0.005
86.00	0.73	5.00	0.13	3.386	0.029	0.197	0.005
87.00	0.74	5.00	0.13	3.425	0.029	0.197	0.005
88.00	0.74	5.00	0.13	3.465	0.029	0.197	0.005
89.00	0.75	5.00	0.13	3.504	0.030	0.197	0.005
90.00	0.76	5.00	0.13	3.543	0.030	0.197	0.005
91.00	0.76	5.00	0.13	3.583	0.030	0.197	0.005
92.00	0.77	5.00	0.13	3.622	0.030	0.197	0.005
93.00	0.78	5.00	0.13	3.661	0.031	0.197	0.005
94.00	0.78	5.00	0.13	3.701	0.031	0.197	0.005
95.00	0.79	5.00	0.13	3.740	0.031	0.197	0.005
96.00	0.80	5.00	0.13	3.780	0.031	0.197	0.005
97.00	0.80	5.00	0.13	3.819	0.031	0.197	0.005
98.00	0.81	5.00	0.13	3.858	0.032	0.197	0.005
99.00	0.82	5.00	0.13	3.898	0.032	0.197	0.005
100.00	0.82	5.00	0.13	3.937	0.032	0.197	0.005
101.00	0.83	5.00	0.13	3.976	0.033	0.197	0.005
102.00	0.84	5.00	0.13	4.016	0.033	0.197	0.005
103.00	0.85	5.00	0.13	4.055	0.033	0.197	0.005
104.00	0.85	5.00	0.13	4.094	0.033	0.197	0.005
105.00	0.86	5.00	0.13	4.134	0.034	0.197	0.005
106.00	0.87	5.00	0.13	4.173	0.034	0.197	0.005
107.00	0.87	5.00	0.13	4.213	0.034	0.197	0.005
108.00	0.88	5.00	0.13	4.252	0.035	0.197	0.005
109.00	0.89	5.00	0.13	4.291	0.035	0.197	0.005
110.00	0.89	5.00	0.13	4.331	0.035	0.197	0.005
111.00	0.90	5.00	0.13	4.370	0.035	0.197	0.005
112.00	0.91	5.00	0.13	4.409	0.036	0.197	0.005
113.00	0.91	5.00	0.13	4.449	0.036	0.197	0.005
114.00	0.92	5.00	0.13	4.488	0.036	0.197	0.005
115.00	0.93	5.00	0.13	4.528	0.037	0.197	0.005
116.00	0.93	5.00	0.13	4.567	0.037	0.197	0.005
117.00	0.94	5.00	0.13	4.606	0.037	0.197	0.005
118.00	0.95	5.00	0.13	4.646	0.037	0.197	0.005
119.00	0.95	5.00	0.13	4.685	0.037	0.197	0.005
120.00	0.96	5.00	0.13	4.724	0.038	0.197	0.005
121.00	0.97	5.00	0.13	4.764	0.038	0.197	0.005
122.00	0.97	5.00	0.13	4.803	0.038	0.197	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
122.50	0.98	5.00	0.13	4.823	0.039	0.197	0.005
123.00	0.98	5.00	0.13	4.843	0.039	0.197	0.005
124.00	0.99	5.00	0.13	4.882	0.039	0.197	0.005
125.00	0.99	5.00	0.13	4.921	0.039	0.197	0.005
126.00	1.00	5.00	0.13	4.961	0.039	0.197	0.005
127.00	1.01	5.00	0.13	5.000	0.040	0.197	0.005
128.00	1.01	5.00	0.13	5.039	0.040	0.197	0.005
129.00	1.02	5.00	0.13	5.079	0.040	0.197	0.005
130.00	1.03	5.00	0.13	5.118	0.041	0.197	0.005
131.00	1.03	5.00	0.13	5.157	0.041	0.197	0.005
132.00	1.04	5.00	0.13	5.197	0.041	0.197	0.005
133.00	1.05	5.00	0.13	5.236	0.041	0.197	0.005
134.00	1.05	5.00	0.13	5.276	0.041	0.197	0.005
135.00	1.06	5.00	0.13	5.315	0.042	0.197	0.005
136.00	1.07	5.00	0.13	5.354	0.042	0.197	0.005
137.00	1.07	5.00	0.13	5.394	0.042	0.197	0.005
138.00	1.08	5.00	0.13	5.433	0.043	0.197	0.005
139.00	1.09	5.00	0.13	5.472	0.043	0.197	0.005
140.00	1.09	5.00	0.13	5.512	0.043	0.197	0.005
141.00	1.10	5.00	0.13	5.551	0.043	0.197	0.005
142.00	1.11	5.00	0.13	5.591	0.044	0.197	0.005
143.00	1.11	5.00	0.13	5.630	0.044	0.197	0.005
144.00	1.12	5.00	0.13	5.669	0.044	0.197	0.005
145.00	1.13	5.00	0.13	5.709	0.044	0.197	0.005
146.00	1.13	5.00	0.13	5.748	0.044	0.197	0.005
147.00	1.14	5.00	0.13	5.787	0.045	0.197	0.005
148.00	1.15	5.00	0.13	5.827	0.045	0.197	0.005
149.00	1.15	5.00	0.13	5.866	0.045	0.197	0.005
150.00	1.16	5.00	0.13	5.906	0.046	0.197	0.005
151.00	1.17	5.00	0.13	5.945	0.046	0.197	0.005
152.00	1.17	5.00	0.13	5.984	0.046	0.197	0.005
153.00	1.18	5.00	0.13	6.024	0.046	0.197	0.005
154.00	1.19	5.00	0.13	6.063	0.047	0.197	0.005
155.00	1.19	5.00	0.13	6.102	0.047	0.197	0.005
156.00	1.20	5.00	0.13	6.142	0.047	0.197	0.005
157.00	1.21	5.00	0.13	6.181	0.048	0.197	0.005
158.00	1.21	5.00	0.13	6.220	0.048	0.197	0.005
159.00	1.22	5.00	0.13	6.260	0.048	0.197	0.005
160.00	1.23	5.00	0.13	6.299	0.048	0.197	0.005
161.00	1.23	5.00	0.13	6.339	0.048	0.197	0.005
162.00	1.24	5.00	0.13	6.378	0.049	0.197	0.005
163.00	1.25	5.00	0.13	6.417	0.049	0.197	0.005
164.00	1.25	5.00	0.13	6.457	0.049	0.197	0.005
165.00	1.26	5.00	0.13	6.496	0.050	0.197	0.005
166.00	1.27	5.00	0.13	6.535	0.050	0.197	0.005
167.00	1.27	5.00	0.13	6.575	0.050	0.197	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
168.00	1.28	5.00	0.13	6.614	0.050	0.197	0.005
169.00	1.29	5.00	0.13	6.654	0.051	0.197	0.005
170.00	1.29	5.00	0.13	6.693	0.051	0.197	0.005
171.00	1.30	5.00	0.13	6.732	0.051	0.197	0.005
172.00	1.31	5.00	0.13	6.772	0.052	0.197	0.005
173.00	1.31	5.00	0.13	6.811	0.052	0.197	0.005
174.00	1.32	5.00	0.13	6.850	0.052	0.197	0.005
175.00	1.33	5.00	0.13	6.890	0.052	0.197	0.005
176.00	1.33	5.00	0.13	6.929	0.052	0.197	0.005
177.00	1.34	5.00	0.13	6.968	0.053	0.197	0.005
178.00	1.35	5.00	0.13	7.008	0.053	0.197	0.005
179.00	1.35	5.00	0.13	7.047	0.053	0.197	0.005
180.00	1.36	5.00	0.13	7.087	0.054	0.197	0.005
181.00	1.37	5.00	0.13	7.126	0.054	0.197	0.005
182.00	1.37	5.00	0.13	7.165	0.054	0.197	0.005
183.00	1.38	5.00	0.13	7.205	0.054	0.197	0.005
184.00	1.39	5.00	0.13	7.244	0.055	0.197	0.005
185.00	1.39	5.00	0.13	7.283	0.055	0.197	0.005
186.00	1.40	5.00	0.13	7.323	0.055	0.197	0.005
187.00	1.41	5.00	0.13	7.362	0.056	0.197	0.005
188.00	1.41	5.00	0.13	7.402	0.056	0.197	0.005
189.00	1.42	5.00	0.13	7.441	0.056	0.197	0.005
190.00	1.43	5.00	0.13	7.480	0.056	0.197	0.005
191.00	1.43	5.00	0.13	7.520	0.056	0.197	0.005
192.00	1.44	5.00	0.13	7.559	0.057	0.197	0.005
193.00	1.45	5.00	0.13	7.598	0.057	0.197	0.005
194.00	1.45	5.00	0.13	7.638	0.057	0.197	0.005
195.00	1.46	5.00	0.13	7.677	0.057	0.197	0.005
196.00	1.46	5.00	0.13	7.717	0.057	0.197	0.005
197.00	1.47	5.00	0.13	7.756	0.058	0.197	0.005
197.50	1.47	5.00	0.13	7.776	0.058	0.197	0.005
198.00	1.48	5.00	0.13	7.795	0.058	0.197	0.005
199.00	1.48	5.00	0.13	7.835	0.058	0.197	0.005
200.00	1.49	5.00	0.13	7.874	0.059	0.197	0.005
201.00	1.50	5.00	0.13	7.913	0.059	0.197	0.005
202.00	1.50	5.00	0.13	7.953	0.059	0.197	0.005
203.00	1.51	5.00	0.13	7.992	0.059	0.197	0.005
204.00	1.52	5.00	0.13	8.031	0.060	0.197	0.005
205.00	1.52	5.00	0.13	8.071	0.060	0.197	0.005
206.00	1.53	5.00	0.13	8.110	0.060	0.197	0.005
207.00	1.54	5.00	0.13	8.150	0.061	0.197	0.005
208.00	1.54	5.00	0.13	8.189	0.061	0.197	0.005
209.00	1.55	5.00	0.13	8.228	0.061	0.197	0.005
210.00	1.56	5.00	0.13	8.268	0.061	0.197	0.005
211.00	1.56	5.00	0.13	8.307	0.061	0.197	0.005
212.00	1.57	5.00	0.13	8.346	0.062	0.197	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
213.00	1.58	5.00	0.13	8.386	0.062	0.197	0.005
214.00	1.58	5.00	0.13	8.425	0.062	0.197	0.005
215.00	1.59	5.00	0.13	8.465	0.063	0.197	0.005
216.00	1.60	5.00	0.13	8.504	0.063	0.197	0.005
217.00	1.60	5.00	0.13	8.543	0.063	0.197	0.005
218.00	1.61	5.00	0.13	8.583	0.063	0.197	0.005
219.00	1.62	5.00	0.13	8.622	0.064	0.197	0.005
220.00	1.62	5.00	0.13	8.661	0.064	0.197	0.005
221.00	1.63	5.00	0.13	8.701	0.064	0.197	0.005
222.00	1.64	5.00	0.13	8.740	0.065	0.197	0.005
223.00	1.64	5.00	0.13	8.780	0.065	0.197	0.005
224.00	1.65	5.00	0.13	8.819	0.065	0.197	0.005
225.00	1.65	5.00	0.13	8.858	0.065	0.197	0.005
226.00	1.66	5.00	0.13	8.898	0.065	0.197	0.005
227.00	1.67	5.00	0.13	8.937	0.066	0.197	0.005
228.00	1.67	5.00	0.13	8.976	0.066	0.197	0.005
229.00	1.68	5.00	0.13	9.016	0.066	0.197	0.005
230.00	1.69	5.00	0.13	9.055	0.067	0.197	0.005
231.00	1.69	5.00	0.13	9.094	0.067	0.197	0.005
232.00	1.70	5.00	0.13	9.134	0.067	0.197	0.005
233.00	1.71	5.00	0.13	9.173	0.067	0.197	0.005
234.00	1.71	5.00	0.13	9.213	0.067	0.197	0.005
235.00	1.72	5.00	0.13	9.252	0.068	0.197	0.005
236.00	1.73	5.00	0.13	9.291	0.068	0.197	0.005
237.00	1.73	5.00	0.13	9.331	0.068	0.197	0.005
238.00	1.74	5.00	0.13	9.370	0.069	0.197	0.005
239.00	1.75	5.00	0.13	9.409	0.069	0.197	0.005
240.00	1.75	5.00	0.13	9.449	0.069	0.197	0.005
241.00	1.76	5.00	0.13	9.488	0.069	0.197	0.005
242.00	1.77	5.00	0.13	9.528	0.070	0.197	0.005
242.50	1.77	5.00	0.13	9.547	0.070	0.197	0.005
243.00	1.77	5.00	0.13	9.567	0.070	0.197	0.005
244.00	1.78	5.00	0.13	9.606	0.070	0.197	0.005
245.00	1.78	5.00	0.13	9.646	0.070	0.197	0.005
246.00	1.79	5.00	0.13	9.685	0.070	0.197	0.005
247.00	1.80	5.00	0.13	9.724	0.071	0.197	0.005
248.00	1.80	5.00	0.13	9.764	0.071	0.197	0.005
249.00	1.81	5.00	0.13	9.803	0.071	0.197	0.005
250.00	1.82	5.00	0.13	9.843	0.072	0.197	0.005
255.00	1.85	5.00	0.13	10.039	0.073	0.197	0.005
258.00	1.87	5.00	0.13	10.157	0.074	0.197	0.005
260.00	1.88	5.00	0.13	10.236	0.074	0.197	0.005
265.00	1.91	5.00	0.13	10.433	0.075	0.197	0.005
270.00	1.95	5.00	0.13	10.630	0.077	0.197	0.005
275.00	1.98	5.00	0.13	10.827	0.078	0.197	0.005
280.00	2.01	5.00	0.13	11.024	0.079	0.197	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
283.00	2.03	5.00	0.13	11.142	0.080	0.197	0.005
285.00	2.04	5.00	0.13	11.220	0.080	0.197	0.005
290.00	2.08	5.00	0.13	11.417	0.082	0.197	0.005
294.00	2.10	5.00	0.13	11.575	0.083	0.197	0.005
295.00	2.11	5.00	0.13	11.614	0.083	0.197	0.005
297.00	2.12	5.00	0.13	11.693	0.083	0.197	0.005
300.00	2.14	5.00	0.13	11.811	0.084	0.197	0.005
305.00	2.17	5.00	0.13	12.008	0.085	0.197	0.005
310.00	2.20	5.00	0.13	12.205	0.087	0.197	0.005
315.00	2.24	5.00	0.13	12.402	0.088	0.197	0.005
320.00	2.27	5.00	0.13	12.598	0.089	0.197	0.005
325.00	2.30	5.00	0.13	12.795	0.091	0.197	0.005
330.00	2.33	5.00	0.13	12.992	0.092	0.197	0.005
335.00	2.36	5.00	0.13	13.189	0.093	0.197	0.005
336.00	2.37	5.00	0.13	13.228	0.093	0.197	0.005
340.00	2.40	5.00	0.13	13.386	0.094	0.197	0.005
345.00	2.43	5.00	0.13	13.583	0.096	0.197	0.005
350.00	2.46	5.00	0.13	13.780	0.097	0.197	0.005
355.00	2.49	5.00	0.13	13.976	0.098	0.197	0.005
358.00	2.51	5.00	0.13	14.094	0.099	0.197	0.005
360.00	2.52	5.00	0.13	14.173	0.099	0.197	0.005
365.00	2.56	5.00	0.13	14.370	0.101	0.197	0.005
370.00	2.59	5.00	0.13	14.567	0.102	0.197	0.005
375.00	2.62	5.00	0.13	14.764	0.103	0.197	0.005
380.00	2.65	5.00	0.13	14.961	0.104	0.197	0.005
385.00	2.68	5.00	0.13	15.157	0.106	0.197	0.005
390.00	2.71	5.00	0.13	15.354	0.107	0.197	0.005
395.00	2.75	5.00	0.13	15.551	0.108	0.197	0.005
398.00	2.77	5.00	0.13	15.669	0.109	0.197	0.005
400.00	2.78	5.00	0.13	15.748	0.109	0.197	0.005
405.00	2.81	5.00	0.13	15.945	0.111	0.197	0.005
410.00	2.84	5.00	0.13	16.142	0.112	0.197	0.005
415.00	2.87	5.00	0.13	16.339	0.113	0.197	0.005
420.00	2.90	5.00	0.13	16.535	0.114	0.197	0.005
425.00	2.94	5.00	0.13	16.732	0.116	0.197	0.005
427.00	2.95	5.00	0.13	16.811	0.116	0.197	0.005
430.00	2.97	5.00	0.13	16.929	0.117	0.197	0.005
435.00	3.00	5.00	0.13	17.126	0.118	0.197	0.005
440.00	3.03	5.00	0.13	17.323	0.119	0.197	0.005
445.00	3.06	5.00	0.13	17.520	0.120	0.197	0.005
450.00	3.09	5.00	0.13	17.717	0.122	0.197	0.005
455.00	3.13	5.00	0.13	17.913	0.123	0.197	0.005
460.00	3.16	5.00	0.13	18.110	0.124	0.197	0.005
465.00	3.19	5.00	0.13	18.307	0.126	0.197	0.005
470.00	3.22	5.00	0.13	18.504	0.127	0.197	0.005
475.00	3.25	5.00	0.13	18.701	0.128	0.197	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
480.00	3.28	5.00	0.13	18.898	0.129	0.197	0.005
485.00	3.31	5.00	0.13	19.094	0.130	0.197	0.005
490.00	3.35	5.00	0.13	19.291	0.132	0.197	0.005
495.00	3.38	5.00	0.13	19.488	0.133	0.197	0.005
500.00	3.41	5.00	0.13	19.685	0.134	0.197	0.005
505.00	3.44	5.00	0.13	19.882	0.135	0.197	0.005
510.00	3.47	5.00	0.13	20.079	0.137	0.197	0.005
515.00	3.50	5.00	0.13	20.276	0.138	0.197	0.005
520.00	3.53	5.00	0.13	20.472	0.139	0.197	0.005
525.00	3.56	5.00	0.13	20.669	0.140	0.197	0.005
528.00	3.58	5.00	0.13	20.787	0.141	0.197	0.005
530.00	3.60	5.00	0.13	20.866	0.142	0.197	0.005
535.00	3.63	5.00	0.13	21.063	0.143	0.197	0.005
540.00	3.66	5.00	0.13	21.260	0.144	0.197	0.005
545.00	3.69	5.00	0.13	21.457	0.145	0.197	0.005
550.00	3.72	5.00	0.13	21.654	0.146	0.197	0.005
555.00	3.75	5.00	0.13	21.850	0.148	0.197	0.005
560.00	3.78	5.00	0.13	22.047	0.149	0.197	0.005
565.00	3.81	5.00	0.13	22.244	0.150	0.197	0.005
570.00	3.85	5.00	0.13	22.441	0.152	0.197	0.005
575.00	3.88	5.00	0.13	22.638	0.153	0.197	0.005
580.00	3.91	5.00	0.13	22.835	0.154	0.197	0.005
585.00	3.94	5.00	0.13	23.031	0.155	0.197	0.005
590.00	3.97	5.00	0.13	23.228	0.156	0.197	0.005
595.00	4.00	5.00	0.13	23.425	0.157	0.197	0.005
600.00	4.03	5.00	0.13	23.622	0.159	0.197	0.005
690.00	4.59	5.00	0.13	27.165	0.181	0.197	0.005
6.00	0.16	6.00	0.13	0.236	0.006	0.236	0.005
7.00	0.17	6.00	0.13	0.276	0.007	0.236	0.005
8.00	0.17	6.00	0.13	0.315	0.007	0.236	0.005
9.00	0.18	6.00	0.13	0.354	0.007	0.236	0.005
10.00	0.19	6.00	0.13	0.394	0.007	0.236	0.005
11.00	0.20	6.00	0.13	0.433	0.008	0.236	0.005
12.00	0.21	6.00	0.13	0.472	0.008	0.236	0.005
13.00	0.21	6.00	0.13	0.512	0.008	0.236	0.005
14.00	0.22	6.00	0.13	0.551	0.009	0.236	0.005
15.00	0.23	6.00	0.13	0.591	0.009	0.236	0.005
16.00	0.24	6.00	0.13	0.630	0.009	0.236	0.005
17.00	0.24	6.00	0.13	0.669	0.009	0.236	0.005
18.00	0.25	6.00	0.13	0.709	0.010	0.236	0.005
19.00	0.26	6.00	0.13	0.748	0.010	0.236	0.005
19.50	0.26	6.00	0.13	0.768	0.010	0.236	0.005
20.00	0.26	6.00	0.13	0.787	0.010	0.236	0.005
21.00	0.27	6.00	0.13	0.827	0.011	0.236	0.005
22.00	0.28	6.00	0.13	0.866	0.011	0.236	0.005
23.00	0.29	6.00	0.13	0.906	0.011	0.236	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
23.50	0.29	6.00	0.13	0.925	0.011	0.236	0.005
24.00	0.29	6.00	0.13	0.945	0.011	0.236	0.005
25.00	0.30	6.00	0.13	0.984	0.012	0.236	0.005
26.00	0.31	6.00	0.13	1.024	0.012	0.236	0.005
27.00	0.32	6.00	0.13	1.063	0.013	0.236	0.005
28.00	0.32	6.00	0.13	1.102	0.013	0.236	0.005
29.00	0.33	6.00	0.13	1.142	0.013	0.236	0.005
30.00	0.34	6.00	0.13	1.181	0.013	0.236	0.005
31.00	0.34	6.00	0.13	1.220	0.013	0.236	0.005
32.00	0.35	6.00	0.13	1.260	0.014	0.236	0.005
33.00	0.36	6.00	0.13	1.299	0.014	0.236	0.005
34.00	0.37	6.00	0.13	1.339	0.015	0.236	0.005
35.00	0.37	6.00	0.13	1.378	0.015	0.236	0.005
36.00	0.38	6.00	0.13	1.417	0.015	0.236	0.005
37.00	0.39	6.00	0.13	1.457	0.015	0.236	0.005
38.00	0.40	6.00	0.13	1.496	0.016	0.236	0.005
39.00	0.40	6.00	0.13	1.535	0.016	0.236	0.005
39.50	0.41	6.00	0.13	1.555	0.016	0.236	0.005
40.00	0.41	6.00	0.13	1.575	0.016	0.236	0.005
41.00	0.42	6.00	0.13	1.614	0.017	0.236	0.005
41.50	0.42	6.00	0.13	1.634	0.017	0.236	0.005
42.00	0.42	6.00	0.13	1.654	0.017	0.236	0.005
43.00	0.43	6.00	0.13	1.693	0.017	0.236	0.005
44.00	0.44	6.00	0.13	1.732	0.017	0.236	0.005
44.50	0.44	6.00	0.13	1.752	0.017	0.236	0.005
45.00	0.44	6.00	0.13	1.772	0.017	0.236	0.005
46.00	0.45	6.00	0.13	1.811	0.018	0.236	0.005
47.00	0.46	6.00	0.13	1.850	0.018	0.236	0.005
48.00	0.47	6.00	0.13	1.890	0.019	0.236	0.005
49.00	0.47	6.00	0.13	1.929	0.019	0.236	0.005
50.00	0.48	6.00	0.13	1.969	0.019	0.236	0.005
51.00	0.49	6.00	0.13	2.008	0.019	0.236	0.005
52.00	0.49	6.00	0.13	2.047	0.019	0.236	0.005
53.00	0.50	6.00	0.13	2.087	0.020	0.236	0.005
54.00	0.51	6.00	0.13	2.126	0.020	0.236	0.005
55.00	0.52	6.00	0.13	2.165	0.020	0.236	0.005
56.00	0.52	6.00	0.13	2.205	0.020	0.236	0.005
57.00	0.53	6.00	0.13	2.244	0.021	0.236	0.005
58.00	0.54	6.00	0.13	2.283	0.021	0.236	0.005
59.00	0.54	6.00	0.13	2.323	0.021	0.236	0.005
59.50	0.55	6.00	0.13	2.343	0.022	0.236	0.005
60.00	0.55	6.00	0.13	2.362	0.022	0.236	0.005
61.00	0.56	6.00	0.13	2.402	0.022	0.236	0.005
62.00	0.56	6.00	0.13	2.441	0.022	0.236	0.005
63.00	0.57	6.00	0.13	2.480	0.022	0.236	0.005
64.00	0.58	6.00	0.13	2.520	0.023	0.236	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
65.00	0.58	6.00	0.13	2.559	0.023	0.236	0.005
66.00	0.59	6.00	0.13	2.598	0.023	0.236	0.005
67.00	0.60	6.00	0.13	2.638	0.024	0.236	0.005
68.00	0.61	6.00	0.13	2.677	0.024	0.236	0.005
69.00	0.61	6.00	0.13	2.717	0.024	0.236	0.005
70.00	0.62	6.00	0.13	2.756	0.024	0.236	0.005
72.00	0.63	6.00	0.13	2.835	0.025	0.236	0.005
73.00	0.64	6.00	0.13	2.874	0.025	0.236	0.005
74.00	0.65	6.00	0.13	2.913	0.026	0.236	0.005
75.00	0.65	6.00	0.13	2.953	0.026	0.236	0.005
76.00	0.66	6.00	0.13	2.992	0.026	0.236	0.005
78.00	0.67	6.00	0.13	3.071	0.026	0.236	0.005
78.50	0.68	6.00	0.13	3.091	0.027	0.236	0.005
79.00	0.68	6.00	0.13	3.110	0.027	0.236	0.005
80.00	0.69	6.00	0.13	3.150	0.027	0.236	0.005
81.00	0.70	6.00	0.13	3.189	0.028	0.236	0.005
81.50	0.70	6.00	0.13	3.209	0.028	0.236	0.005
82.00	0.70	6.00	0.13	3.228	0.028	0.236	0.005
84.00	0.72	6.00	0.13	3.307	0.028	0.236	0.005
85.00	0.72	6.00	0.13	3.346	0.028	0.236	0.005
86.00	0.73	6.00	0.13	3.386	0.029	0.236	0.005
88.00	0.74	6.00	0.13	3.465	0.029	0.236	0.005
90.00	0.76	6.00	0.13	3.543	0.030	0.236	0.005
92.00	0.77	6.00	0.13	3.622	0.030	0.236	0.005
93.00	0.78	6.00	0.13	3.661	0.031	0.236	0.005
95.00	0.79	6.00	0.13	3.740	0.031	0.236	0.005
96.00	0.80	6.00	0.13	3.780	0.031	0.236	0.005
98.00	0.81	6.00	0.13	3.858	0.032	0.236	0.005
99.00	0.82	6.00	0.13	3.898	0.032	0.236	0.005
100.00	0.82	6.00	0.13	3.937	0.032	0.236	0.005
101.00	0.83	6.00	0.13	3.976	0.033	0.236	0.005
103.00	0.85	6.00	0.13	4.055	0.033	0.236	0.005
104.00	0.85	6.00	0.13	4.094	0.033	0.236	0.005
104.50	0.86	6.00	0.13	4.114	0.034	0.236	0.005
105.00	0.86	6.00	0.13	4.134	0.034	0.236	0.005
106.00	0.87	6.00	0.13	4.173	0.034	0.236	0.005
107.00	0.87	6.00	0.13	4.213	0.034	0.236	0.005
108.00	0.88	6.00	0.13	4.252	0.035	0.236	0.005
109.00	0.89	6.00	0.13	4.291	0.035	0.236	0.005
110.00	0.89	6.00	0.13	4.331	0.035	0.236	0.005
111.00	0.90	6.00	0.13	4.370	0.035	0.236	0.005
112.00	0.91	6.00	0.13	4.409	0.036	0.236	0.005
113.00	0.91	6.00	0.13	4.449	0.036	0.236	0.005
114.00	0.92	6.00	0.13	4.488	0.036	0.236	0.005
115.00	0.93	6.00	0.13	4.528	0.037	0.236	0.005
116.00	0.93	6.00	0.13	4.567	0.037	0.236	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
117.00	0.94	6.00	0.13	4.606	0.037	0.236	0.005
118.00	0.95	6.00	0.13	4.646	0.037	0.236	0.005
119.00	0.95	6.00	0.13	4.685	0.037	0.236	0.005
120.00	0.96	6.00	0.13	4.724	0.038	0.236	0.005
122.00	0.97	6.00	0.13	4.803	0.038	0.236	0.005
123.00	0.98	6.00	0.13	4.843	0.039	0.236	0.005
124.00	0.99	6.00	0.13	4.882	0.039	0.236	0.005
125.00	0.99	6.00	0.13	4.921	0.039	0.236	0.005
128.00	1.01	6.00	0.13	5.039	0.040	0.236	0.005
130.00	1.03	6.00	0.13	5.118	0.041	0.236	0.005
132.00	1.04	6.00	0.13	5.197	0.041	0.236	0.005
134.00	1.05	6.00	0.13	5.276	0.041	0.236	0.005
135.00	1.06	6.00	0.13	5.315	0.042	0.236	0.005
136.00	1.07	6.00	0.13	5.354	0.042	0.236	0.005
138.00	1.08	6.00	0.13	5.433	0.043	0.236	0.005
140.00	1.09	6.00	0.13	5.512	0.043	0.236	0.005
142.00	1.11	6.00	0.13	5.591	0.044	0.236	0.005
144.00	1.12	6.00	0.13	5.669	0.044	0.236	0.005
145.00	1.13	6.00	0.13	5.709	0.044	0.236	0.005
146.00	1.13	6.00	0.13	5.748	0.044	0.236	0.005
148.00	1.15	6.00	0.13	5.827	0.045	0.236	0.005
149.00	1.15	6.00	0.13	5.866	0.045	0.236	0.005
150.00	1.16	6.00	0.13	5.906	0.046	0.236	0.005
151.00	1.17	6.00	0.13	5.945	0.046	0.236	0.005
152.00	1.17	6.00	0.13	5.984	0.046	0.236	0.005
153.00	1.18	6.00	0.13	6.024	0.046	0.236	0.005
154.00	1.19	6.00	0.13	6.063	0.047	0.236	0.005
155.00	1.19	6.00	0.13	6.102	0.047	0.236	0.005
155.50	1.20	6.00	0.13	6.122	0.047	0.236	0.005
156.00	1.20	6.00	0.13	6.142	0.047	0.236	0.005
157.00	1.21	6.00	0.13	6.181	0.048	0.236	0.005
158.00	1.21	6.00	0.13	6.220	0.048	0.236	0.005
159.00	1.22	6.00	0.13	6.260	0.048	0.236	0.005
160.00	1.23	6.00	0.13	6.299	0.048	0.236	0.005
162.00	1.24	6.00	0.13	6.378	0.049	0.236	0.005
163.00	1.25	6.00	0.13	6.417	0.049	0.236	0.005
165.00	1.26	6.00	0.13	6.496	0.050	0.236	0.005
166.00	1.27	6.00	0.13	6.535	0.050	0.236	0.005
169.00	1.29	6.00	0.13	6.654	0.051	0.236	0.005
170.00	1.29	6.00	0.13	6.693	0.051	0.236	0.005
172.00	1.31	6.00	0.13	6.772	0.052	0.236	0.005
175.00	1.33	6.00	0.13	6.890	0.052	0.236	0.005
176.00	1.33	6.00	0.13	6.929	0.052	0.236	0.005
180.00	1.36	6.00	0.13	7.087	0.054	0.236	0.005
182.00	1.37	6.00	0.13	7.165	0.054	0.236	0.005
184.00	1.39	6.00	0.13	7.244	0.055	0.236	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
185.00	1.39	6.00	0.13	7.283	0.055	0.236	0.005
188.00	1.41	6.00	0.13	7.402	0.056	0.236	0.005
190.00	1.43	6.00	0.13	7.480	0.056	0.236	0.005
192.00	1.44	6.00	0.13	7.559	0.057	0.236	0.005
193.00	1.45	6.00	0.13	7.598	0.057	0.236	0.005
195.00	1.46	6.00	0.13	7.677	0.057	0.236	0.005
196.00	1.46	6.00	0.13	7.717	0.057	0.236	0.005
198.00	1.48	6.00	0.13	7.795	0.058	0.236	0.005
200.00	1.49	6.00	0.13	7.874	0.059	0.236	0.005
201.00	1.50	6.00	0.13	7.913	0.059	0.236	0.005
202.00	1.50	6.00	0.13	7.953	0.059	0.236	0.005
203.00	1.51	6.00	0.13	7.992	0.059	0.236	0.005
203.50	1.51	6.00	0.13	8.012	0.059	0.236	0.005
204.00	1.52	6.00	0.13	8.031	0.060	0.236	0.005
205.00	1.52	6.00	0.13	8.071	0.060	0.236	0.005
207.00	1.54	6.00	0.13	8.150	0.061	0.236	0.005
208.00	1.54	6.00	0.13	8.189	0.061	0.236	0.005
210.00	1.56	6.00	0.13	8.268	0.061	0.236	0.005
212.00	1.57	6.00	0.13	8.346	0.062	0.236	0.005
215.00	1.59	6.00	0.13	8.465	0.063	0.236	0.005
216.00	1.60	6.00	0.13	8.504	0.063	0.236	0.005
217.00	1.60	6.00	0.13	8.543	0.063	0.236	0.005
218.00	1.61	6.00	0.13	8.583	0.063	0.236	0.005
220.00	1.62	6.00	0.13	8.661	0.064	0.236	0.005
221.00	1.63	6.00	0.13	8.701	0.064	0.236	0.005
222.50	1.64	6.00	0.13	8.760	0.064	0.236	0.005
225.00	1.65	6.00	0.13	8.858	0.065	0.236	0.005
226.00	1.66	6.00	0.13	8.898	0.065	0.236	0.005
229.00	1.68	6.00	0.13	9.016	0.066	0.236	0.005
230.00	1.69	6.00	0.13	9.055	0.067	0.236	0.005
235.00	1.72	6.00	0.13	9.252	0.068	0.236	0.005
236.00	1.73	6.00	0.13	9.291	0.068	0.236	0.005
237.00	1.73	6.00	0.13	9.331	0.068	0.236	0.005
237.50	1.74	6.00	0.13	9.350	0.069	0.236	0.005
238.00	1.74	6.00	0.13	9.370	0.069	0.236	0.005
240.00	1.75	6.00	0.13	9.449	0.069	0.236	0.005
242.00	1.77	6.00	0.13	9.528	0.070	0.236	0.005
244.00	1.78	6.00	0.13	9.606	0.070	0.236	0.005
245.00	1.78	6.00	0.13	9.646	0.070	0.236	0.005
246.00	1.79	6.00	0.13	9.685	0.070	0.236	0.005
247.00	1.80	6.00	0.13	9.724	0.071	0.236	0.005
249.00	1.81	6.00	0.13	9.803	0.071	0.236	0.005
250.00	1.82	6.00	0.13	9.843	0.072	0.236	0.005
255.00	1.85	6.00	0.13	10.039	0.073	0.236	0.005
258.00	1.87	6.00	0.13	10.157	0.074	0.236	0.005
259.00	1.88	6.00	0.13	10.197	0.074	0.236	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
260.00	1.88	6.00	0.13	10.236	0.074	0.236	0.005
262.00	1.89	6.00	0.13	10.315	0.074	0.236	0.005
265.00	1.91	6.00	0.13	10.433	0.075	0.236	0.005
266.00	1.92	6.00	0.13	10.472	0.076	0.236	0.005
270.00	1.95	6.00	0.13	10.630	0.077	0.236	0.005
272.00	1.96	6.00	0.13	10.709	0.077	0.236	0.005
275.00	1.98	6.00	0.13	10.827	0.078	0.236	0.005
278.00	2.00	6.00	0.13	10.945	0.079	0.236	0.005
280.00	2.01	6.00	0.13	11.024	0.079	0.236	0.005
284.00	2.04	6.00	0.13	11.181	0.080	0.236	0.005
285.00	2.04	6.00	0.13	11.220	0.080	0.236	0.005
288.00	2.06	6.00	0.13	11.339	0.081	0.236	0.005
290.00	2.08	6.00	0.13	11.417	0.082	0.236	0.005
294.00	2.10	6.00	0.13	11.575	0.083	0.236	0.005
295.00	2.11	6.00	0.13	11.614	0.083	0.236	0.005
300.00	2.14	6.00	0.13	11.811	0.084	0.236	0.005
302.00	2.15	6.00	0.13	11.890	0.085	0.236	0.005
305.00	2.17	6.00	0.13	12.008	0.085	0.236	0.005
307.00	2.19	6.00	0.13	12.087	0.086	0.236	0.005
308.00	2.19	6.00	0.13	12.126	0.086	0.236	0.005
310.00	2.20	6.00	0.13	12.205	0.087	0.236	0.005
311.00	2.21	6.00	0.13	12.244	0.087	0.236	0.005
312.00	2.22	6.00	0.13	12.283	0.087	0.236	0.005
315.00	2.24	6.00	0.13	12.402	0.088	0.236	0.005
320.00	2.27	6.00	0.13	12.598	0.089	0.236	0.005
321.50	2.28	6.00	0.13	12.657	0.090	0.236	0.005
325.00	2.30	6.00	0.13	12.795	0.091	0.236	0.005
330.00	2.33	6.00	0.13	12.992	0.092	0.236	0.005
331.50	2.34	6.00	0.13	13.051	0.092	0.236	0.005
335.00	2.36	6.00	0.13	13.189	0.093	0.236	0.005
338.00	2.38	6.00	0.13	13.307	0.094	0.236	0.005
340.00	2.40	6.00	0.13	13.386	0.094	0.236	0.005
345.00	2.43	6.00	0.13	13.583	0.096	0.236	0.005
348.00	2.45	6.00	0.13	13.701	0.096	0.236	0.005
350.00	2.46	6.00	0.13	13.780	0.097	0.236	0.005
355.00	2.49	6.00	0.13	13.976	0.098	0.236	0.005
358.00	2.51	6.00	0.13	14.094	0.099	0.236	0.005
360.00	2.52	6.00	0.13	14.173	0.099	0.236	0.005
365.00	2.56	6.00	0.13	14.370	0.101	0.236	0.005
368.00	2.57	6.00	0.13	14.488	0.101	0.236	0.005
370.00	2.59	6.00	0.13	14.567	0.102	0.236	0.005
375.00	2.62	6.00	0.13	14.764	0.103	0.236	0.005
376.00	2.63	6.00	0.13	14.803	0.104	0.236	0.005
380.00	2.65	6.00	0.13	14.961	0.104	0.236	0.005
385.00	2.68	6.00	0.13	15.157	0.106	0.236	0.005
386.00	2.69	6.00	0.13	15.197	0.106	0.236	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Metric)

O-Ring Standard Size (Metric)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
388.00	2.70	6.00	0.13	15.276	0.106	0.236	0.005
389.00	2.71	6.00	0.13	15.315	0.107	0.236	0.005
390.00	2.71	6.00	0.13	15.354	0.107	0.236	0.005
392.00	2.73	6.00	0.13	15.433	0.107	0.236	0.005
394.00	2.74	6.00	0.13	15.512	0.108	0.236	0.005
395.00	2.75	6.00	0.13	15.551	0.108	0.236	0.005
398.00	2.77	6.00	0.13	15.669	0.109	0.236	0.005
400.00	2.78	6.00	0.13	15.748	0.109	0.236	0.005
410.00	2.84	6.00	0.13	16.142	0.112	0.236	0.005
415.00	2.87	6.00	0.13	16.339	0.113	0.236	0.005
422.00	2.92	6.00	0.13	16.614	0.115	0.236	0.005
425.00	2.94	6.00	0.13	16.732	0.116	0.236	0.005
425.50	2.94	6.00	0.13	16.752	0.116	0.236	0.005
429.00	2.96	6.00	0.13	16.890	0.117	0.236	0.005
435.50	3.00	6.00	0.13	17.146	0.118	0.236	0.005
440.00	3.03	6.00	0.13	17.323	0.119	0.236	0.005
445.00	3.06	6.00	0.13	17.520	0.120	0.236	0.005
446.00	3.07	6.00	0.13	17.559	0.121	0.236	0.005
448.00	3.08	6.00	0.13	17.638	0.121	0.236	0.005
450.00	3.09	6.00	0.13	17.717	0.122	0.236	0.005
465.50	3.19	6.00	0.13	18.327	0.126	0.236	0.005
470.00	3.22	6.00	0.13	18.504	0.127	0.236	0.005
470.50	3.22	6.00	0.13	18.524	0.127	0.236	0.005
475.00	3.25	6.00	0.13	18.701	0.128	0.236	0.005
478.00	3.27	6.00	0.13	18.819	0.129	0.236	0.005
480.00	3.28	6.00	0.13	18.898	0.129	0.236	0.005
486.00	3.32	6.00	0.13	19.134	0.131	0.236	0.005
489.00	3.34	6.00	0.13	19.252	0.131	0.236	0.005
490.00	3.35	6.00	0.13	19.291	0.132	0.236	0.005
500.00	3.41	6.00	0.13	19.685	0.134	0.236	0.005
504.00	3.43	6.00	0.13	19.842	0.135	0.236	0.005
505.00	3.44	6.00	0.13	19.882	0.135	0.236	0.005
508.00	3.46	6.00	0.13	20.000	0.136	0.236	0.005
510.00	3.47	6.00	0.13	20.079	0.137	0.236	0.005
515.00	3.50	6.00	0.13	20.276	0.138	0.236	0.005
516.00	3.51	6.00	0.13	20.315	0.138	0.236	0.005
525.00	3.56	6.00	0.13	20.669	0.140	0.236	0.005
530.00	3.60	6.00	0.13	20.866	0.142	0.236	0.005
532.50	3.61	6.00	0.13	20.965	0.142	0.236	0.005
540.00	3.66	6.00	0.13	21.260	0.144	0.236	0.005
541.00	3.66	6.00	0.13	21.299	0.144	0.236	0.005
544.00	3.68	6.00	0.13	21.417	0.145	0.236	0.005
549.00	3.71	6.00	0.13	21.614	0.146	0.236	0.005
550.00	3.72	6.00	0.13	21.654	0.146	0.236	0.005
555.00	3.75	6.00	0.13	21.850	0.148	0.236	0.005
560.00	3.78	6.00	0.13	22.047	0.149	0.236	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
568.00	3.83	6.00	0.13	22.362	0.151	0.236	0.005
569.00	3.84	6.00	0.13	22.402	0.151	0.236	0.005
575.00	3.88	6.00	0.13	22.638	0.153	0.236	0.005
579.00	3.90	6.00	0.13	22.795	0.154	0.236	0.005
580.00	3.91	6.00	0.13	22.835	0.154	0.236	0.005
590.00	3.97	6.00	0.13	23.228	0.156	0.236	0.005
600.00	4.03	6.00	0.13	23.622	0.159	0.236	0.005
625.00	4.19	6.00	0.13	24.606	0.165	0.236	0.005
650.00	4.34	6.00	0.13	25.591	0.171	0.236	0.005
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Swedish SMS 1586)

O-Ring Standard Size (Swedish SMS 1586)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
3.1	0.14	1.6	0.08	0.122	0.006	0.063	0.003
4.1	0.14	1.6	0.08	0.161	0.006	0.063	0.003
5.1	0.15	1.6	0.08	0.201	0.006	0.063	0.003
6.1	0.16	1.6	0.08	0.240	0.006	0.063	0.003
7.1	0.17	1.6	0.08	0.280	0.007	0.063	0.003
8.1	0.18	1.6	0.08	0.319	0.007	0.063	0.003
9.1	0.18	1.6	0.08	0.358	0.007	0.063	0.003
10.1	0.19	1.6	0.08	0.398	0.007	0.063	0.003
11.1	0.2	1.6	0.08	0.437	0.008	0.063	0.003
12.1	0.21	1.6	0.08	0.476	0.008	0.063	0.003
13.1	0.21	1.6	0.08	0.516	0.008	0.063	0.003
14.1	0.22	1.6	0.08	0.555	0.009	0.063	0.003
15.1	0.23	1.6	0.08	0.594	0.009	0.063	0.003
16.1	0.24	1.6	0.08	0.634	0.009	0.063	0.003
17.1	0.24	1.6	0.08	0.673	0.009	0.063	0.003
18.1	0.25	1.6	0.08	0.713	0.010	0.063	0.003
19.1	0.26	1.6	0.08	0.752	0.010	0.063	0.003
20.1	0.27	1.6	0.08	0.791	0.011	0.063	0.003
21.1	0.27	1.6	0.08	0.831	0.011	0.063	0.003
22.1	0.28	1.6	0.08	0.870	0.011	0.063	0.003
25.1	0.3	1.6	0.08	0.988	0.012	0.063	0.003
27.1	0.32	1.6	0.08	1.067	0.013	0.063	0.003
29.1	0.33	1.6	0.08	1.146	0.013	0.063	0.003
32.1	0.35	1.6	0.08	1.264	0.014	0.063	0.003
35.1	0.37	1.6	0.08	1.382	0.015	0.063	0.003
37.1	0.39	1.6	0.08	1.461	0.015	0.063	0.003
3.3	0.14	2.4	0.09	0.130	0.006	0.094	0.004
4.3	0.15	2.4	0.09	0.169	0.006	0.094	0.004
5.3	0.15	2.4	0.09	0.209	0.006	0.094	0.004
6.3	0.16	2.4	0.09	0.248	0.006	0.094	0.004
7.3	0.17	2.4	0.09	0.287	0.007	0.094	0.004
8.3	0.18	2.4	0.09	0.327	0.007	0.094	0.004
9.3	0.18	2.4	0.09	0.366	0.007	0.094	0.004
10.3	0.19	2.4	0.09	0.406	0.007	0.094	0.004
11.3	0.2	2.4	0.09	0.445	0.008	0.094	0.004
12.3	0.21	2.4	0.09	0.484	0.008	0.094	0.004
13.3	0.22	2.4	0.09	0.524	0.009	0.094	0.004
14.3	0.22	2.4	0.09	0.563	0.009	0.094	0.004
15.3	0.23	2.4	0.09	0.602	0.009	0.094	0.004
16.3	0.24	2.4	0.09	0.642	0.009	0.094	0.004
17.3	0.25	2.4	0.09	0.681	0.010	0.094	0.004
18.3	0.25	2.4	0.09	0.720	0.010	0.094	0.004
19.3	0.26	2.4	0.09	0.760	0.010	0.094	0.004
20.3	0.27	2.4	0.09	0.799	0.011	0.094	0.004
21.3	0.27	2.4	0.09	0.839	0.011	0.094	0.004
22.3	0.28	2.4	0.09	0.878	0.011	0.094	0.004
23.3	0.29	2.4	0.09	0.917	0.011	0.094	0.004
25.3	0.3	2.4	0.09	0.996	0.012	0.094	0.004
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
27.3	0.32	2.4	0.09	1.075	0.013	0.094	0.004
30.3	0.34	2.4	0.09	1.193	0.013	0.094	0.004
33.3	0.36	2.4	0.09	1.311	0.014	0.094	0.004
17.2	0.24	3	0.09	0.677	0.009	0.118	0.004
18.2	0.25	3	0.09	0.717	0.010	0.118	0.004
19.2	0.26	3	0.09	0.756	0.010	0.118	0.004
20.2	0.27	3	0.09	0.795	0.011	0.118	0.004
21.2	0.27	3	0.09	0.835	0.011	0.118	0.004
22.2	0.28	3	0.09	0.874	0.011	0.118	0.004
24.2	0.3	3	0.09	0.953	0.012	0.118	0.004
25.2	0.3	3	0.09	0.992	0.012	0.118	0.004
26.2	0.31	3	0.09	1.031	0.012	0.118	0.004
28.2	0.32	3	0.09	1.110	0.013	0.118	0.004
29.2	0.33	3	0.09	1.150	0.013	0.118	0.004
30.2	0.34	3	0.09	1.189	0.013	0.118	0.004
31.2	0.35	3	0.09	1.228	0.014	0.118	0.004
32.2	0.35	3	0.09	1.268	0.014	0.118	0.004
34.2	0.37	3	0.09	1.346	0.015	0.118	0.004
35.2	0.38	3	0.09	1.386	0.015	0.118	0.004
36.2	0.38	3	0.09	1.425	0.015	0.118	0.004
37.2	0.39	3	0.09	1.465	0.015	0.118	0.004
39.2	0.4	3	0.09	1.543	0.016	0.118	0.004
40.2	0.41	3	0.09	1.583	0.016	0.118	0.004
42.2	0.42	3	0.09	1.661	0.017	0.118	0.004
44.2	0.44	3	0.09	1.740	0.017	0.118	0.004
45.2	0.45	3	0.09	1.780	0.018	0.118	0.004
46.2	0.45	3	0.09	1.819	0.018	0.118	0.004
49.5	0.48	3	0.09	1.949	0.019	0.118	0.004
50.2	0.48	3	0.09	1.976	0.019	0.118	0.004
54.5	0.51	3	0.09	2.146	0.020	0.118	0.004
55.2	0.52	3	0.09	2.173	0.020	0.118	0.004
56.2	0.52	3	0.09	2.213	0.020	0.118	0.004
57.2	0.53	3	0.09	2.252	0.021	0.118	0.004
59.5	0.55	3	0.09	2.343	0.022	0.118	0.004
60.5	0.55	3	0.09	2.382	0.022	0.118	0.004
62.2	0.57	3	0.09	2.449	0.022	0.118	0.004
64.5	0.58	3	0.09	2.539	0.023	0.118	0.004
69.5	0.62	3	0.09	2.736	0.024	0.118	0.004
74.5	0.65	3	0.09	2.933	0.026	0.118	0.004
79.5	0.68	3	0.09	3.130	0.027	0.118	0.004
84.5	0.72	3	0.09	3.327	0.028	0.118	0.004
89.5	0.75	3	0.09	3.524	0.030	0.118	0.004
94.5	0.79	3	0.09	3.720	0.031	0.118	0.004
99.5	0.82	3	0.09	3.917	0.032	0.118	0.004
104.5	0.86	3	0.09	4.114	0.034	0.118	0.004
109.5	0.89	3	0.09	4.311	0.035	0.118	0.004
114.5	0.92	3	0.09	4.508	0.036	0.118	0.004
119.5	0.96	3	0.09	4.705	0.038	0.118	0.004
ID	±	CS	±	ID	±	CS	±

O-Ring Standard Size (Swedish SMS 1586)

O-Ring Standard Size (Swedish SMS 1586)

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
124.5	0.99	3	0.09	4.902	0.039	0.118	0.004
129.5	1.02	3	0.09	5.098	0.040	0.118	0.004
134.5	1.06	3	0.09	5.295	0.042	0.118	0.004
139.5	1.09	3	0.09	5.492	0.043	0.118	0.004
144.5	1.12	3	0.09	5.689	0.044	0.118	0.004
35.2	0.38	5.7	0.13	1.386	0.015	0.224	0.005
36.2	0.38	5.7	0.13	1.425	0.015	0.224	0.005
37.2	0.39	5.7	0.13	1.465	0.015	0.224	0.005
39.2	0.4	5.7	0.13	1.543	0.016	0.224	0.005
41.2	0.42	5.7	0.13	1.622	0.017	0.224	0.005
44.2	0.44	5.7	0.13	1.740	0.017	0.224	0.005
45.2	0.45	5.7	0.13	1.780	0.018	0.224	0.005
47.2	0.46	5.7	0.13	1.858	0.018	0.224	0.005
49.2	0.47	5.7	0.13	1.937	0.019	0.224	0.005
51.2	0.49	5.7	0.13	2.016	0.019	0.224	0.005
52.2	0.5	5.7	0.13	2.055	0.020	0.224	0.005
54.2	0.51	5.7	0.13	2.134	0.020	0.224	0.005
57.2	0.53	5.7	0.13	2.252	0.021	0.224	0.005
59.2	0.54	5.7	0.13	2.331	0.021	0.224	0.005
61.2	0.56	5.7	0.13	2.409	0.022	0.224	0.005
62.2	0.57	5.7	0.13	2.449	0.022	0.224	0.005
64.2	0.58	5.7	0.13	2.528	0.023	0.224	0.005
67.2	0.6	5.7	0.13	2.646	0.024	0.224	0.005
69.2	0.61	5.7	0.13	2.724	0.024	0.224	0.005
71.2	0.63	5.7	0.13	2.803	0.025	0.224	0.005
72.2	0.63	5.7	0.13	2.843	0.025	0.224	0.005
74.2	0.65	5.7	0.13	2.921	0.026	0.224	0.005
77.2	0.67	5.7	0.13	3.039	0.026	0.224	0.005
79.2	0.68	5.7	0.13	3.118	0.027	0.224	0.005
81.2	0.7	5.7	0.13	3.197	0.028	0.224	0.005
82.2	0.7	5.7	0.13	3.236	0.028	0.224	0.005
84.2	0.72	5.7	0.13	3.315	0.028	0.224	0.005
87.2	0.74	5.7	0.13	3.433	0.029	0.224	0.005
89.2	0.75	5.7	0.13	3.512	0.030	0.224	0.005
92.2	0.77	5.7	0.13	3.630	0.030	0.224	0.005
94.2	0.79	5.7	0.13	3.709	0.031	0.224	0.005
97.2	0.81	5.7	0.13	3.827	0.032	0.224	0.005
99.2	0.82	5.7	0.13	3.906	0.032	0.224	0.005
104.2	0.85	5.7	0.13	4.102	0.033	0.224	0.005
109.2	0.89	5.7	0.13	4.299	0.035	0.224	0.005
114.2	0.92	5.7	0.13	4.496	0.036	0.224	0.005
119.2	0.95	5.7	0.13	4.693	0.037	0.224	0.005
124.2	0.99	5.7	0.13	4.890	0.039	0.224	0.005
129.2	1.02	5.7	0.13	5.087	0.040	0.224	0.005
134.2	1.06	5.7	0.13	5.283	0.042	0.224	0.005
139.2	1.09	5.7	0.13	5.480	0.043	0.224	0.005
144.2	1.12	5.7	0.13	5.677	0.044	0.224	0.005
149.2	1.16	5.7	0.13	5.874	0.046	0.224	0.005
ID	±	CS	±	ID	±	CS	±

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHES			
ID	±	CS	±	ID	±	CS	±
154.2	1.19	5.7	0.13	6.071	0.047	0.224	0.005
159.2	1.22	5.7	0.13	6.268	0.048	0.224	0.005
164.2	1.26	5.7	0.13	6.465	0.050	0.224	0.005
169.2	1.29	5.7	0.13	6.661	0.051	0.224	0.005
174.2	1.32	5.7	0.13	6.858	0.052	0.224	0.005
179.2	1.35	5.7	0.13	7.055	0.053	0.224	0.005
184.2	1.39	5.7	0.13	7.252	0.055	0.224	0.005
189.2	1.42	5.7	0.13	7.449	0.056	0.224	0.005
194.2	1.45	5.7	0.13	7.646	0.057	0.224	0.005
199.2	1.49	5.7	0.13	7.843	0.059	0.224	0.005
204.2	1.52	5.7	0.13	8.039	0.060	0.224	0.005
209.2	1.55	5.7	0.13	8.236	0.061	0.224	0.005
219.2	1.62	5.7	0.13	8.630	0.064	0.224	0.005
229.2	1.68	5.7	0.13	9.024	0.066	0.224	0.005
239.2	1.75	5.7	0.13	9.417	0.069	0.224	0.005
249.2	1.81	5.7	0.13	9.811	0.071	0.224	0.005
259.2	1.88	5.7	0.13	10.205	0.074	0.224	0.005
269.2	1.94	5.7	0.13	10.598	0.076	0.224	0.005
279.2	2.01	5.7	0.13	10.992	0.079	0.224	0.005
289.2	2.07	5.7	0.13	11.386	0.081	0.224	0.005
299.2	2.13	5.7	0.13	11.780	0.084	0.224	0.005
319.2	2.26	5.7	0.13	12.567	0.089	0.224	0.005
339.2	2.39	5.7	0.13	13.354	0.094	0.224	0.005
359.2	2.52	5.7	0.13	14.142	0.099	0.224	0.005
379.2	2.65	5.7	0.13	14.929	0.104	0.224	0.005
399.2	2.77	5.7	0.13	15.717	0.109	0.224	0.005
419.2	2.9	5.7	0.13	16.504	0.114	0.224	0.005
439.2	3.03	5.7	0.13	17.291	0.119	0.224	0.005
459.2	3.15	5.7	0.13	18.079	0.124	0.224	0.005
479.2	3.28	5.7	0.13	18.866	0.129	0.224	0.005
499.2	3.4	5.7	0.13	19.654	0.134	0.224	0.005
144.1	1.12	8.4	0.15	5.673	0.044	0.331	0.006
149.1	1.15	8.4	0.15	5.870	0.045	0.331	0.006
154.1	1.19	8.4	0.15	6.067	0.047	0.331	0.006
159.1	1.22	8.4	0.15	6.264	0.048	0.331	0.006
164.1	1.25	8.4	0.15	6.461	0.049	0.331	0.006
169.1	1.29	8.4	0.15	6.657	0.051	0.331	0.006
174.1	1.32	8.4	0.15	6.854	0.052	0.331	0.006
179.1	1.35	8.4	0.15	7.051	0.053	0.331	0.006
184.1	1.39	8.4	0.15	7.248	0.055	0.331	0.006
189.1	1.42	8.4	0.15	7.445	0.056	0.331	0.006
194.1	1.45	8.4	0.15	7.642	0.057	0.331	0.006
199.1	1.49	8.4	0.15	7.839	0.059	0.331	0.006
209.1	1.55	8.4	0.15	8.232	0.061	0.331	0.006
219.1	1.62	8.4	0.15	8.626	0.064	0.331	0.006
229.1	1.68	8.4	0.15	9.020	0.066	0.331	0.006
239.1	1.75	8.4	0.15	9.413	0.069	0.331	0.006
249.1	1.81	8.4	0.15	9.807	0.071	0.331	0.006
ID	±	CS	±	ID	±	CS	±

O-Ring Kits

Available in NBR 70/90 and FKM 75

Benefits

Reduce down-time with immediate available of the required O-Rings Size

Reduce cost as no minimum order quantity is required for a single line item

Save cost as the O-Rings can be replaced without replacing the whole box

Box color AS568 ● JIS ● Metric ○

O-Ring Kits

O-Ring Kit Series 1(AS568)

NBR 70/ 90 black or FKM 75/ 90 black
382 O-Rings in 30 different sizes ●

Position NO.	Size	Dimensions (mm)	Dimensions (inch)	Quantity
006	A0006	2.90x1.78	0.114x0.070	20
007	A0007	3.68x1.78	0.145x0.070	20
008	A0008	4.47x1.78	0.176x0.070	20
009	A0009	5.28x1.78	0.208x0.070	20
010	A0010	6.07x1.78	0.239x0.070	20
011	A0011	7.65x1.78	0.301x0.070	20
012	A0012	9.25x1.78	0.364x0.070	20
110	A0110	9.19x2.62	0.362x0.103	13
111	A0111	10.77x2.62	0.424x0.103	13
112	A0112	12.37x2.62	0.487x0.103	13
113	A0113	13.94x2.62	0.549x0.103	13
114	A0114	15.54x2.62	0.612x0.103	13
115	A0115	17.12x2.62	0.674x0.103	13
116	A0116	18.72x2.62	0.737x0.103	13
210	A0210	18.64x3.53	0.734x0.139	10
211	A0211	20.22x3.53	0.796x0.139	10
212	A0212	21.82x3.53	0.859x0.139	10
213	A0213	23.39x3.53	0.921x0.139	10
214	A0214	24.99x3.53	0.984x0.139	10
215	A0215	26.57x3.53	1.046x0.139	10
216	A0216	28.17x3.53	1.109x0.139	10
217	A0217	29.74x3.53	1.171x0.139	10
218	A0218	31.34x3.53	1.234x0.139	10
219	A0219	32.92x3.53	1.296x0.139	10
220	A0220	34.52x3.53	1.359x0.139	10
221	A0221	36.09x3.53	1.421x0.139	10
222	A0222	37.69x3.53	1.484x0.139	10
325	A0325	37.47x5.33	1.475x0.210	7
326	A0326	40.64x5.33	1.600x0.210	7
327	A0327	43.82x5.33	1.725x0.210	7
Position NO.	Size	Dimensions (mm)	Dimensions (inch)	Quantity

O-Ring Kit Series 2(JIS)

NBR 70/ 90 black or FKM 75/ 90 black
391 O-Rings in 30 different sizes ●

Position NO.	Size	Dimensions (mm)	Dimensions (inch)	Quantity
006	P3	2.80x1.90	0.110x0.075	18
007	P4	3.80x1.90	0.150x0.075	18
008	P5	4.80x1.90	0.189x0.075	18
009	P6	5.80x1.90	0.228x0.075	18
010	P7	6.80x1.90	0.268x0.075	18
011	P8	7.80x1.90	0.307x0.075	18
012	P9	8.80x1.90	0.346x0.075	18
110	P10A	9.80x2.40	0.386x0.094	14
111	P11	10.80x2.40	0.425x0.094	14
112	P12	11.80x2.40	0.465x0.094	14
113	P14	13.80x2.40	0.543x0.094	14
114	P16	15.80x2.40	0.622x0.094	14
115	P18	17.80x2.40	0.701x0.094	14
116	P20	19.80x2.40	0.780x0.094	14
210		20.00x3.00	0.787x0.118	11
211		22.00x3.00	0.866x0.118	11
212	P22.4	22.10x3.50	0.870x0.138	10
213	G25	24.40x3.10	0.961x0.122	11
214	P25	24.70x3.50	0.972x0.138	10
215	P26	25.70x3.50	1.012x0.138	10
216	G30	29.40x3.10	1.157x0.122	11
217	P30	29.70x3.50	1.169x0.138	10
218	P32	31.70x3.50	1.248x0.138	10
219	P34	33.70x3.50	1.327x0.138	10
220	G35	34.40x3.10	1.354x0.122	11
221	P36	35.70x3.50	1.406x0.138	10
222	G40	39.40x3.10	1.551x0.122	11
325	P40	39.70x3.50	1.563x0.138	10
326	G45	44.40x3.10	1.748x0.122	11
327	P48	47.70x3.50	1.878x0.138	10
Position NO.	Size	Dimensions (mm)	Dimensions (inch)	Quantity

O-Ring Kits

O-Ring Kit Series 3(Metric)

NBR 70/ 90 black or FKM 75/ 90 black
386 O-Rings in 30 different sizes

Position NO.	Dimensions (mm)	Dimensions (inch)	Quantity
6	3.00 X 2.00	0.118x0.079	16
7	4.00 X 2.00	0.157x0.079	16
8	5.00 X 2.00	0.197x0.079	16
9	6.00 X 2.00	0.236x0.079	16
10	7.00 X 2.00	0.276x0.079	16
11	8.00 X 2.00	0.315x0.079	16
12	10.00 X 2.00	0.394x0.079	16
110	10.00 X 2.50	0.394x0.098	13
111	11.00 X 2.50	0.433x0.098	13
112	12.00 X 2.50	0.472x0.098	13
113	14.00 X 2.50	0.551x0.098	13
114	16.00 X 2.50	0.630x0.098	13
115	17.00 X 2.50	0.669x0.098	13
116	19.00 X 2.50	0.748x0.098	13
210	19.00 X 3.00	0.748x0.118	12
Position NO.	Dimensions (mm)	Dimensions (inch)	Quantity

Position NO.	Dimensions (mm)	Dimensions (inch)	Quantity
211	20.00 X 3.00	0.787x0.118	12
212	22.00 X 3.00	0.866x0.118	12
213	24.00 X 3.00	0.945x0.118	12
214	25.00 X 3.00	0.984x0.118	12
215	27.00 X 3.00	1.063x0.118	12
216	28.00 X 3.00	1.102x0.118	12
217	30.00 X 3.00	1.181x0.118	12
218	32.00 X 3.00	1.260x0.118	12
219	33.00 X 3.00	1.299x0.118	12
220	35.00 X 3.00	1.378x0.118	12
221	36.00 X 3.00	1.417x0.118	12
222	38.00 X 3.00	1.496x0.118	12
325	38.00 X 4.00	1.496x0.157	9
326	41.00 X 4.00	1.614x0.157	9
327	44.00 X 4.00	1.732x0.157	9
Position NO.	Dimensions (mm)	Dimensions (inch)	Quantity

Infinite Size O-Ring

Available in NBR 70-90 / HNBR 70-90 / EPDM 70-90 / FKM 70-90

Benefits

No inner diameter size limitation

No mold cost

No minimum quantity of purchase order

Mechanical performance comparable to traditional O-Ring manufacturing process (molding or injection molding)

Competitive price and fast lead time.

Infinite Size O-Ring

MEASUREMENTS IN MILLIMETERS				MEASUREMENTS IN INCHS			
ID	±	CS	±	ID	±	CS	±
800 ~ Unlimited	6.40 ~	3.00	0.09	31.496 ~ Unlimited	0.25 ~	0.118	0.004
		3.53	0.10			0.139	0.004
		4.00	0.10			0.157	0.004
		4.50	0.10			0.177	0.004
		5.00	0.13			0.197	0.005
		5.33	0.13			0.210	0.005
		5.50	0.13			0.217	0.005
		5.70	0.13			0.224	0.005
		6.00	0.13			0.236	0.005
		6.50	0.15			0.256	0.006
		6.99	0.15			0.275	0.006
		7.30	0.15			0.287	0.006
		7.50	0.15			0.295	0.006
		7.70	0.15			0.303	0.006
		8.00	0.15			0.315	0.006
		8.40	0.15			0.331	0.006
		8.50	0.20			0.335	0.008
		9.00	0.20			0.354	0.008
		9.50	0.20			0.374	0.008
		10.00	0.20			0.394	0.008
		11.00	0.22			0.433	0.009
		12.00	0.24			0.472	0.009
		13.00	0.26			0.512	0.010
		14.00	0.28			0.551	0.011
		15.00	0.30			0.591	0.012
		15.88	0.32			0.625	0.013
		16.00	0.32			0.630	0.013
		18.00	0.36			0.709	0.014
		19.00	0.38			0.748	0.015
		25.00	0.50			0.984	0.020
		28.00	0.56			1.102	0.022
ID	±	CS	±	ID	±	CS	±

Material Certified

Approval	Description	Elastomer	Hardness (Shore A)
USP VI	USA Biological Reactivity Test	FKM	70
		EPDM	70
WRAS	UK Drinking Water	EPDM	60 / 70 / 80 / 90
		NBR	70 / 80
W270 / DVGW	Germany Drinking Water-Microbial Testing	EPDM	70
NSF 61	USA Drinking Water	NBR	70
		HNBR	70 / 75 / 80 / 85
		EPDM	60 / 70 / 80
		FKM	65 / 70 / 75 / 80
		VMQ	40 / 50 / 60 / 70 / 80
NSF 42	USA Drinking Water	NBR	70
UBA / KTW	Germany Drinking Water	EPDM	70
AS / NZS 4020	Australian Drinking Water	NBR	70
		EPDM	70
ACS	France Drinking Water	EPDM	60/70
NORSOK M-710 / ISO 23936	Rapid Gas Decompression	FKM	90 / 95
		HNBR	90
		FFKM	90
NACE TM0297	Rapid Gas Decompression	FKM	90
		FFKM	90
Total EP PVV 142	Rapid Gas Decompression	FKM	90
		HNBR	90
API 6A	Sour Gas Resistance	FKM	75 / 90 / 95
		HNBR	90
		FFKM	90
UL 157	Standard for Gaskets and Seals	FKM	70 / 75
		NBR	50 / 70 / 80
		FVMQ	70
		VMQ	70
		CR	70
UL 1238	Standard for Control Equipment for Use with Flammable Liquid Dispensing Devices	FVMQ	30
DIN EN 549	Gas Appliances, gas equipment	NBR	50 / 60 / 70 / 85 / 90
		HNBR	70
		FKM	75 / 80

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Rubber is commonly seen in sealing industry due to its elastomeric characteristics. However, in some working environment, what we need is not only rubber itself but also other auxiliary material, to withstand long-term usage. Either through chemical bonding or mechanical bonding, GMORS is experienced to provide customer the best adherence of metal to rubber with professional skills.
By bonding rubber with plastic, the stiffness of plastic provide solid constructive support to the rubber part, but lighter and cheaper than metal. Besides, people may bond rubber with PTFE for its chemical inert property to prevent failure in corrosive chemicals.

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Precision Machining Part (Aluminum)

Precision Machining Part (Brass)

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Stamping Part Metal Bonding Gasket

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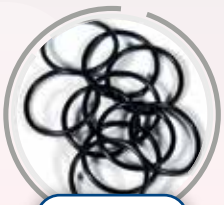
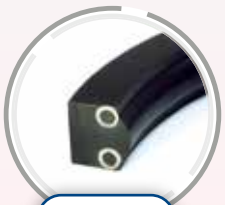
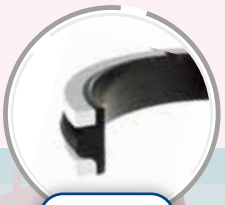

O-Ring


Hammer Union Seal


S-Seal


FS-Seal


U-Cup Seal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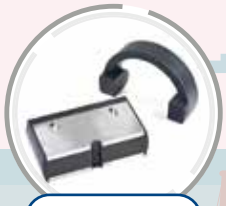
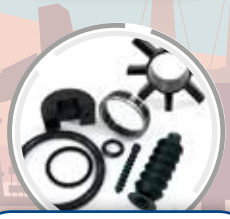

BOP Seal


Packer Elements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UA2 Double Lip Rod Wiper Seal

- This seal prevents entry of dust, and protects equipment by maintaining sealing performance of the packing. It can be fitted into an integrated groove. It's a double-lip all rubber wiper seal that prevents oil scraping off.
- Material : NBR / FKM
- Working Temperature : -25°C ~ +100°C / -20°C ~ +225°C

UF1 Symmetrical Piston & Rod U-Cup Seal

- This can be used for both piston and rod seals,and has a small section that can be fitted into an integrated groove.
- Material : NBR / FKM
- Working Temperature : -25°C ~ +100°C / -20°C ~ +225°C

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