









EDITION 0420

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Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.



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#### A SYMBOL OF QUALITY

Every KOA Sanitary Hose Fitting is compliant with the 3-A Sanitary Standard for Sanitary Fittings and certified to the 3-A RPSCQC 62-02 Standard for Hose Assemblies.



Every KOA Sanitary Hose Fitting is compliant with the 3-A Sanitary Standard for Sanitary Fittings and certified 3-A RPSCQC 62-02 for Standard Hose Assemblies.



Every KOA Sanitary Rubber Gasket is certified to meet the 3-A Sanitary Standard for Multiple-Use Rubber Materials Used as Product Contact Surfaces.



Kuriyama is certified to provide complete sanitary hose assemblies compliant with the 3-A Sanitary Standard for Hose Assemblies.

#### CONTACT KURIYAMA FOR YOUR CUSTOM MADE 3A CERTIFIED SANITARY HOSE ASSEMBLY!

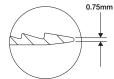
Custom, 3-A certified, sanitary hose assemblies can be purchased through the Kuriyama Value Added Services program, KVAS, using KOA Sanitary Fittings with Kuriyama's wide variety of 3-A compliant Tigerflex<sup>™</sup>, Kuri Tec<sup>®</sup>, & Alfagomma<sup>®</sup> industrial hoses.

By Fax	Fax to 1-800-800-0320 Attn: KVAS
By Phone	Call us at 1-847-755-0360. Ask to speak with a KVAS Customer Service Specialist.
By Email	Contact a KVAS Customer Service Specialist at kvas@kuriyama.com.

### THE KOA SANITARY ADVANTAGE

**Material Safety** – Every KOA Sanitary Fitting is made from 316L stainless steel, and can be traced back to its original Material Test Report (MTR) by the heat number imprinted on each individual fitting. Individual Material Test Reports are available upon request.

**Food Safety** – Sanitary fittings are manufactured with a smooth (32 Ra) polish on food contact surfaces, and without any pockets or tight radii where food could become trapped. Additionally, KOA Sanitary Fittings are designed with Finepoint<sup>™</sup> barb ends, virtually eliminating areas where food or other transferred materials can become trapped at the fitting to hose transition area.



Finepoint<sup>™</sup> barb ends help prevent food entrapment

**Quality Control** – In addition to the quality assurance inspections performed during manufacturing, KOA Sanitary Fittings are independently lab tested after their manufacture to ensure conformance of their physical properties using an Olympus Innov-X Alloys and Metals Analyzer.

**Cleaning & Packaging** – After manufacturing, KOA Sanitary Fittings undergo an ultrasonic cleaning process, and are individually bubble and shrink-wrapped to ensure they arrive in pristine condition.



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# Sanitary Tri-Clamp Fittings



### TCS-SS Series Sanitary Crimp Hose Fitting SS316 Tri-Clamp x Hose Shank

#### Features and Advantages:

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Designed for use with KOA sanitary and standard Kuri-Krimp Ferrules (pgs. 14, 15)
- Uses SPHDS, DPHDS or DBS series clamps (pg. 8)
- Uses Tri-Clamp gaskets (pgs. 16-21)

Part Number	Fitting End Size (in)	Hose Shank Size (in)	Weight Each (Ibs)	Standard Carton
TCS-SS100	1	1	0.46	70
TCS-SS150	1 1/2	1 1/2	0.63	35
TCS-SS200	2	2	1.20	24
TCS-SS250	2 1/2	2 1/2	1.41	12
TCS-SS300	3	3	2.34	12
TCS-SS400	4	4	3.79	6



#### BHAS-SS Series Sanitary Brewery Hose Adapter SS316 Tri-Clamp x Long Hose Shank

#### Features and Advantages:

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Uses SPHDS, DPHDS or DBS series clamps (pg. 8)
- Uses Tri-Clamp gaskets (pgs. 16-21)

Part Number	Fitting End Size (in)	Hose Shank Size (in)	Weight Each (lbs)	Standard Carton
BHAS-SS100	1	1	0.35	80
BHAS-SS150	1 1/2	1 1/2	0.62	40
BHAS-SS200	2	2	0.86	24
BHAS-SS300	3	3	1.90	12
BHAS-SS400	4	4	3.00	6





# Sanitary Tri-Clamp Fittings

#### RHAS-SS Series Sanitary Rubber Hose Adapter SS316 Tri-Clamp x Short Hose Shank

#### Features and Advantages:

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Uses SPHDS, DPHDS or DBS series clamps (pg. 8)
- Uses Tri-Clamp gaskets (pgs. 16-21)

Part Number	Fitting End Size (in)	Hose Shank Size (in)	Weight Each (lbs)	Standard Carton
RHAS-SS100038	1	3/8	0.18	210
RHAS-SS100050	1	1/2	0.20	210
RHAS-SS100075	1	3/4	0.22	168
RHAS-SS100	1	1	0.24	168
RHAS-SS150050	1 1/2	1/2	0.18	210
RHAS-SS150062	1 1/2	5/8	0.22	210
RHAS-SS150075	1 1/2	3/4	0.18	210
RHAS-SS150100	1 1/2	1	0.22	168
RHAS-SS150	1 1/2	1 1/2	0.26	168
RHAS-SS200150	2	1 1/2	0.37	72
RHAS-SS200	2	2	0.40	96
RHAS-SS250	2 1/2	2 1/2	0.75	12
RHAS-SS300	3	3	1.12	24
RHAS-SS400	4	4	1.94	12
RHAS-SS600	6	6	3.25	6





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NEW Size



# Sanitary Tri-Clamp Adapters Fittings





#### **TCMPS-SS Series**

Sanitary Adapter 316SS Tri-Clamp x Male Pipe (NPT Threads)

#### **Features and Advantages:**

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Uses SPHDS, DPHDS or DBS series clamps (pg. 8)
- Uses Tri-Clamp gaskets (pgs. 16-21)

Part Number	Size (in)	NPT Size (in)	Weight Each (lbs)	Standard Carton
TCMPS-SS100075	1	3/4	0.55	144
TCMPS-SS100	1	1	0.90	144
TCMPS-SS150	1 1/2	1 1/2	1.44	144
TCMPS-SS150200	1 1/2	2	2.48	144
TCMPS-SS200150	2	1 1/2	2.15	72
TCMPS-SS200	2	2	3.12	72
TCMPS-SS250200	2 1/2	2	2.60	48
TCMPS-SS250	2 1/2	2 1/2	2.76	48
TCMPS-SS300200	3	2	3.36	12
TCMPS-SS300	3	3	5.00	12
TCMPS-SS400	4	4	6.95	12



# NEW

#### **TCFPS-SS Series** Sanitary Adapter 316SS Tri-Clamp x Female Pipe (NPT Threads)

#### **Features and Advantages:**

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Uses SPHDS, DPHDS or DBS series clamps (pg. 8)
- Uses Tri-Clamp gaskets (pgs. 16-21)

Part Number	Size (in)	NPT Size (in)	Weight Each (lbs)	Standard Carton
TCFPS-SS100075	1	3/4	0.46	144
TCFPS-SS100	1	1	0.69	144
TCFPS-SS150	1 1/2	1 1/2	1.39	144
TCFPS-SS150200	1 1/2	2	2.52	144
TCFPS-SS200150	2	1 1/2	1.21	144
TCFPS-SS200	2	2	1.91	72
TCFPS-SS250200	2 1/2	2	1.66	72
TCFPS-SS250	2 1/2	2 1/2	1.91	72
TCFPS-SS300250	3	2 1/2	2.91	12
TCFPS-SS300	3	3	3.02	12
TCFPS-SS400	4	4	5.72	12







# Sanitary Tri-Clamp Adapters Fittings

#### TCWL-SS Series Sanitary Adapter 316SS Tri-Clamp x Weld (Long)

#### **Features and Advantages:**

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Meets 3-A 63-03 sanitary standard for sanitary fittings
- Uses SPHDS, DPHDS or DBS series clamps (pg.8)
- Uses Tri-Clamp gaskets (pgs. 16-21)

Part Number	Fitting End Size (in)	Weld End Size (in)	Weight Each (lbs)	Standard Carton
TCWL-SS050	1/2	1/2	0.05	480
TCWL-SS075	3/4	3/4	0.06	480
TCWL-SS100	1	1	0.19	240
TCWL-SS150	1 1/2	1 1/2	0.15	240
TCWL-SS200	2	2	0.21	192
TCWL-SS250	2 1/2	2 1/2	0.27	144
TCWL-SS300	3	3	0.34	144
TCWL-SS400	4	4	0.71	72
TCWL-SS600	6	6	1.15	36



#### TCWS-SS Series Sanitary Adapter 316SS Tri-Clamp x Weld (Short)

#### **Features and Advantages:**

**NEW** 

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Meets 3-A 63-03 sanitary standard for sanitary fittings
- Uses SPHDS, DPHDS or DBS series clamps (pg.8)
- Uses Tri-Clamp gaskets (pgs. 16-21)

Part Number	Fitting End Size (in)	Weld End Size (in)	Weight Each (lbs)	Standard Carton
TCWS-SS050	1/2	1/2	0.04	480
TCWS-SS075	3/4	3/4	0.04	480
TCWS-SS100	1	1	0.16	240
TCWS-SS150	1 1/2	1 1/2	0.10	240
TCWS-SS200	2	2	0.14	192
TCWS-SS250	2 1/2	2 1/2	0.18	144
TCWS-SS300	3	3	0.23	144
TCWS-SS400	4	4	0.41	72
TCWS-SS600	6	6	0.71	36



# **Sanitary Clamps**



#### SPHDS Series Sanitary Single Pin Clamp (for Tri-clamp)

- Durable 304 stainless steel
- For use with TCS-SS, RHAS-SS or BHAS-SS series fittings
- For use with adapters TCMPS-SS, TCFPS-SS, TCWL-SS, TCWS-SS

	Part Number	Fitting End Size (in)	Clamp Size (in)	Weight Each (lbs)	Standard Carton
I	SPHDS150	1 & 1 1/2	1 1/2	0.37	100
	SPHDS200	2	2	0.60	80
	SPHDS250	2 1/2	2 1/2	0.68	12
	SPHDS300	3	3	0.77	50
	SPHDS400	4	4	0.94	40
	SPHDS600	6	6	18.7	6



### **DPHDS Series**

NEW SIZE

#### Sanitary Double Pin Clamp (for Tri-clamp)

- Durable 304 stainless steel
- Double pin design for more even sealing pressure
- For use with TCS-SS, RHAS-SS or BHAS-SS series fittings
- For use with adapters TCMPS-SS, TCFPS-SS, TCWL-SS, TCWS-SS

Part Number	Fitting End Size (in)	Clamp Size (in)	Weight Each (lbs)	Standard Carton
DPHDS150	1 & 1 1/2	1 1/2	0.51	50
DPHDS200	2	2	0.60	40
DPHDS250	2 1/2	2 1/2	0.64	12
DPHDS300	3	3	0.74	20
DPHDS400	4	4	1.02	20



#### DBS Series Sanitary Bolted Clamp (for Tri-clamp)

- Durable 304 stainless steel
- Double bolt design for higher pressures
- For use with TCS-SS, RHAS-SS or BHAS-SS series fittings
- For use with adapters TCMPS-SS, TCFPS-SS, TCWL-SS, TCWS-SS

Part Number	Fitting End Size (in)	Clamp Size (in)	Weight Each (lbs)	Standard Carton
DBS150	1 & 1 1/2	1 1/2	0.55	40
DBS200	2	2	0.95	40
DBS300	3	3	1.21	30
DBS400	4	4	1.81	25



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# Sanitary Bevel Seat Fittings

### **FBS-SS Series**

### Sanitary Crimp Hose Fitting SS316 Female Bevel Seat x Hose Shank

#### Features and Advantages:

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Designed for use with KOA sanitary and standard Kuri-Krimp Ferrules (pgs. 14, 15)
- Uses HNS series hex nuts (pg. 9)
- Uses Bevel Seat gaskets (pg. 23)

Part Number	Fitting End Size (in)	Hose Shank Size (in)	Weight Each (Ibs)	Standard Carton
FBS-SS100	1	1	0.33	108
FBS-SS150	1 1/2	1 1/2	0.60	48
FBS-SS200	2	2	0.95	48
FBS-SS250	2 1/2	2 1/2	1.43	12
FBS-SS300	3	3	2.38	12
FBS-SS400	4	4	3.95	6

### **MBS-SS Series**

### NEW Sanitary Crimp Hose Fitting 316SS Male Bevel Seat x Hose Shank

#### **Features and Advantages:**

- Durable 316 stainless steel
  Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Designed for use with KOA sanitary and standard Kuri-Krimp Ferrules (pgs. 14, 15)
- Üses Bevel Seat gaskets (pg. 23)

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Part Number	Size (in)	Hose Shank Size (in)	Weight Each (lbs)	Standard Carton		
MBS-SS100	1	1	0.55	200		
MBS-SS150	1 1/2	1 1/2	0.97	200		
MBS-SS200	2	2	1.81	200		
MBS-SS250	2 1/2	2 1/2	2.28	100		
MBS-SS300	3	3	3.58	100		
MBS-SS400	4	4	5.92	100		



## **HNS Series**

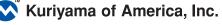
### Sanitary Hex Nuts (for Female Bevel Seat)

- Durable 304 stainless steel
- Acme 8TPI thread (1" 3"), Acme 6TPI thread (4")
- For use with FBS-SS series fittings

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
HNS100	1	0.33	144
HNS150	1 1/2	0.57	72
HNS200	2	0.84	60
HNS250	2 1/2	1.22	12
HNS300	3	1.96	18
HNS400	4	3.70	12











# **Sanitary I-Line Fittings**



### FILS-SS Series Sanitary Crimp Hose Fitting 316SS Female I-Line x Hose Shank

#### Features and Advantages:

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Designed for use with KOA sanitary and standard Kuri-Krimp Ferrules (pgs. 14, 15)
- Uses SPILC series clamps (pg. 10)
- Uses I-Line gaskets (pg. 22)

Part Number	Fitting End Size (in)	Hose Shank Size (in)	Weight Each (lbs)	Standard Carton
FILS-SS150	1 1/2	1 1/2	1.01	35
FILS-SS200	2	2	1.21	40
FILS-SS300	3	3	2.62	12
FILS-SS400	4	4	4.17	6



#### MILS-SS Series Sanitary Crimp Hose Fitting 316SS Male I-Line x Hose Shank

#### Features and Advantages:

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Designed for use with KOA sanitary and standard Kuri-Krimp Ferrules (pgs. 14, 15)
- Uses SPILC series clamps (pg. 10)
- Uses I-Line gaskets (pg. 22)

Part Number	Size (in)	Hose Shank Size (in)	Weight Each (lbs)	Standard Carton
MILS-SS150	1 1/2	1 1/2	0.77	200
MILS-SS200	2	2	1.55	200
MILS-SS300	3	3	3.36	100
MILS-SS400	4	4	5.15	100

#### SPILC Series Sanitary Single Pin Clamp (for I-line)

- Durable 304 stainless steel
- For use with FILS and MILS series fittings

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
SPILC150	1 1/2	0.64	48
SPILC200	2	0.77	36
SPILC300	3	1.34	12
SPILC400	4	1.74	12







# **Sanitary Tube End**

#### TES-SS Series Sanitary Crimp Hose Fitting 316SS Tube End x Hose Shank

#### Features and Advantages:

- Schedule 40 pipe size
- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Certified to 3-A RPSCQC 62-02 for sanitary assemblies
- Designed for use with KOA sanitary and standard Kuri-Krimp Ferrules (pgs. 14, 15)
- Welds onto sanitary weld fittings or tubing

Part Number	Fitting End Size (in)	Hose Shank Size (in)	Weight Each (Ibs)	Standard Carton
TES-SS150	1 1/2	1 1/2	0.53	48
TES-SS200	2	2	0.75	35
TES-SS300	3	3	2.09	12
TES-SS400	4	4	3.46	7



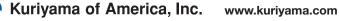






# Did you know Kuriyama offers 3-A certified sanitary hose assemblies through its Kuriyama Value Added Systems program KVAS?

Contact us at kvas@kuriyama.com for a quote.



# **Sanitary Accessories**





NEW

### DBS Series

Sanitary Double Bolt Clamp Kit

Part Number	Clamp Size (in)	Weight Each (Ibs)	Standard Carton
DBS-KIT	1 - 4	0.08	1



#### SPHDS-WNS Series Sanitary Clamp Wing Nut

Part Number	Clamp Size (in)	Weight Each (lbs)	Standard Carton
SPHDS-WNS	1 - 6	0.04	1



### SSHW Series

#### Sanitary Single Side Hex Wrench (for Bevel Seat Hex Nut)

- Durable plated carbon steel
- Soft-touch, food grade, silicone handle
- For use with HNS Series hex nut

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
SSHW100	1	0.60	1
SSHW150	1 1/2	0.82	1
SSHW200	2	1.52	1
SSHW250	2 1/2	2.14	1
SSHW300	3	3.13	1
SSHW400	4	3.73	1



### **TSHW Series**

#### Sanitary Double Side Hex Wrench (for Bevel Seat Hex Nut)

- Durable plated carbon steel
- Soft-touch, food grade, silicone handle
- For use with HNS Series hex nut

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
TSHW100150	1 X 1 1/2	1.08	1
TSHW200300	2 x 3	3.48	1







# **Sanitary Accessories**

#### TCSC-SS Series Sanitary Tri-clamp End Cap

- Durable 316 stainless steel
- Smooth 32 Ra food contact surface finish
- Meets 3A 63-03 sanitary standard for sanitary fittings
- For use with TCS-SS, RHAS-SS or BHAS-SS series fittings, For use with adapters TCMPS-SS, TCFPS-SS, TCWL-SS, TCWS-SS

Part Number	Fitting End Size (in)	Cap End Size (in)	Weight Each (lbs)	Standard Carton
TCSC-SS100150	1 & 1 1/2	1 1/2	0.17	250
TCSC-SS200	2	2	0.30	144
TCSC-SS250	2 1/2	2 1/2	0.44	60
TCSC-SS300	3	3	0.64	60
TCSC-SS400	4	4	1.32	36



62-02

#### SHB Series Sanitary Hose Bumpers

- Slides easily and securely over crimp ferrules
- Helps protect fittings from damage if dropped
- Durable, heat resistant, non-marking silicone
- Meets FDA CFR 21

Part Number	Size (in)	ID (in)	OD (in)	Standard Carton
SHB150	1 1/2	2.00	3.00	20
SHB200	2	2.58	3.55	16
SHB250	2 1/2	3.10	4.25	16
SHB300	3	3.60	4.72	16



#### SHR Series Sanitary Hose Risers

- Helps protect hose cover from abrasion
- Allows for easier hose dragging
- Easily attached by two stainless steel screws
- Durable, heat resistant polyethylene
- Meets FDA CFR 21

Part Number	Size (in)	OD (in)	Fit Hose (in)	Standard Carton
SHR150	1 1/2	6.50	1.80 - 2.15	10
SHR150200	1 1/2 & 2	6.50	2.10 - 2.35	10
SHR200	2	7.00	2.39 - 2.69	10
SHR250	2 1/2	7.00	2.65 - 2.90	10
SHR200300	2&3	8.00	3.30 - 3.75	10
SHR400	4	8.00	4.55 - 5.31	10









#### **SCF-SS Series**

### **Sanitary 304 Stainless Steel Crimp Ferrules**

- Smooth 64RA surface finish
- Designed for use with TCS-SS, FBS-SS, MBS-SS, FILS-SS, MILS-SS and TES-SS series fittings



TILO 00,						
Part Num	ber Hose ID (in)	Ferrule ID (in)	Wall Thickness (in)	Length (in)	Weight Each (lbs)	Standard Carto
SCF-SS10	138 1	1.38	0.108	2.28	0.28	126
SCF-SS10	146 1	1.46	0.108	2.28	0.29	126
SCF-SS10	153 1	1.53	0.108	2.28	0.31	144
SCF-SS10	157 1	1.57	0.108	2.28	0.33	144
SCF-SS10	161 1	1.61	0.108	2.28	0.35	144
SCF-SS10	165 1	1.65	0.108	2.28	0.36	144
SCF-SS10		1.73	0.108	2.28	0.37	96
SCF-SS15	201 1 1/2	2.01	0.118	2.36	0.46	105
SCF-SS15		2.06	0.118	2.36	0.49	90
SCF-SS15		2.10	0.118	2.36	0.49	90
SCF-SS15		2.15	0.118	2.36	0.51	72
SCF-SS15		2.20	0.118	2.36	0.53	72
SCF-SS15		2.28	0.118	2.36	0.55	72
SCF-SS15		2.36	0.118	2.36	0.60	72
SCF-SS20		2.48	0.128	2.80	0.68	60
SCF-SS20		2.56	0.128	2.80	0.68	60
SCF-SS20		2.64	0.128	2.80	0.73	60
SCF-SS20		2.68	0.128	2.80	0.75	60
SCF-SS20		2.73	0.128	2.80	0.75	45
SCF-SS20		2.79	0.128	2.80	0.80	45
SCF-SS20		2.79	0.128	2.80	0.84	45
SCF-3320 SCF-SS20		2.95	0.128	2.80	0.88	36
SCF-SS25		3.00	0.138	3.25	0.95	12 12
SCF-SS25		3.07	0.138	3.25	0.98	
SCF-SS25		3.15	0.138	3.25	1.02	12
SCF-SS25		3.23	0.138	3.25	1.06	12
SCF-SS25		3.31	0.138	3.25	1.10	12
SCF-SS25		3.39	0.138	3.25	1.14	12
SCF-SS25		3.46	0.138	3.25	1.18	12
SCF-SS30		3.54	0.138	3.94	1.23	24
SCF-SS30		3.60	0.138	3.94	1.30	24
SCF-SS30		3.68	0.138	3.94	1.43	12
SCF-SS30		3.74	0.138	3.94	1.54	12
SCF-SS30		3.82	0.138	3.94	1.70	12
SCF-SS30	390 3	3.90	0.138	3.94	1.81	12
SCF-SS30	398 3	3.98	0.138	3.94	1.96	12
SCF-SS30	409 3	4.09	0.138	3.94	2.07	12
SCF-SS40	457 4	4.57	0.158	4.19	2.20	12
SCF-SS40	465 4	4.65	0.158	4.19	2.36	12
SCF-SS40	472 4	4.72	1.580	4.19	2.51	12
SCF-SS40	480 4	4.80	0.158	4.19	2.71	12
SCF-SS40		4.88	0.158	4.19	2.91	12
SCF-SS40		4.96	0.158	4.19	3.09	8
SCF-SS40		5.08	0.158	4.19	3.26	8
SCF-SS40		5.20	0.158	4.19	3.46	8
SCF-SS40		5.31	0.158	4.19	3.64	8

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# **Kuri-Crimp<sup>™</sup> Ferrules**

### **CRF-SS Series**

Kuri-Crimp<sup>™</sup> 304 Stainless Steel Crimp Ferrules

• Designed for use with TCS-SS, FBS-SS, MBS-SS, FILS-SS, MILS-SS and TES-SS series fittings



Part Number	Hose ID (in)	Ferrule ID (in)	Wall Thickness (in)	Length (in)	Weight Each (Ibs)	Standard Carton
CRF-SS10108	1	1.50	0.059	2.29	0.20	200
CRF-SS10109	1	1.56	0.059	2.29	0.21	200
CRF-SS10110	1	1.63	0.059	2.29	0.21	200
CRF-SS10111	1	1.69	0.059	2.29	0.23	200
CRF-SS10112	1	1.75	0.059	2.29	0.23	200
CRF-SS10113	1	1.81	0.059	2.29	0.24	200
CRF-SS15200	1 1/2	2.00	0.059	2.36	0.27	128
CRF-SS15202	1 1/2	2.12	0.059	2.36	0.29	128
CRF-SS15204	1 1/2	2.25	0.059	2.36	0.29	80
CRF-SS15206	1 1/2	2.39	0.059	2.36	0.30	80
CRF-SS15208	1 1/2	2.50	0.059	2.36	0.35	80
CRF-SS20209	2	2.56	0.059	2.79	0.40	80
CRF-SS20210	2	2.62	0.059	2.79	0.43	80
CRF-SS20211	2	2.68	0.059	2.79	0.43	80
CRF-SS20213	2	2.81	0.059	2.79	0.44	80
CRF-SS20215	2	2.94	0.059	2.79	0.46	80
CRF-SS25302	2 1/2	3.12	0.059	3.11	0.56	60
CRF-SS25304	2 1/2	3.25	0.059	3.11	0.58	60
CRF-SS25306	2 1/2	3.39	0.059	3.11	0.60	60
CRF-SS25308	2 1/2	3.50	0.059	3.11	0.62	60
CRF-SS30309	3	3.56	0.098	3.94	1.27	40
CRF-SS30310	3	3.62	0.098	3.94	1.29	40
CRF-SS30312	3	3.75	0.098	3.94	1.31	40
CRF-SS30313	3	3.81	0.098	3.94	1.33	40
CRF-SS30315	3	3.94	0.098	3.94	1.36	40
CRF-SS30400	3	4.00	0.098	3.94	1.40	40
CRF-SS40409	4	4.56	0.098	4.19	1.57	30
CRF-SS40410	4	4.63	0.098	4.19	1.59	30
CRF-SS40411	4	4.68	0.098	4.19	1.74	30
CRF-SS40412	4	4.75	0.098	4.19	1.76	30
CRF-SS40413	4	4.81	0.098	4.19	1.78	30
CRF-SS40414	4	4.88	0.098	4.19	1.82	30
CRF-SS40500	4	5.00	0.098	4.19	1.86	30
CRF-SS40501	4	5.06	0.098	4.19	1.89	30





### Sanitary Buna-N Tri-Clamp Gasket Black

Color Code: • (1 Red Dot) Certification: 3A 18-03 sanitary standard Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
BUNA-40MPU100	1	0.012	25
BUNA-40MPU150	1 1/2	0.013	25
BUNA-40MPU200	2	0.014	25
BUNA-40MPU250	2 1/2	0.018	25
BUNA-40MPU300	3	0.020	25
BUNA-40MPU400	4	0.030	25
BUNA-40MPU600	6	0.040	25







Color Code: • (1 Red Dot)

Certification: 3A 18-03 sanitary standard Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
BUNA-40MPUW100	1	0.012	25
BUNA-40MPUW150	1 1/2	0.013	25
BUNA-40MPUW200	2	0.014	25
BUNA-40MPUW250	2 1/2	0.018	25
BUNA-40MPUW300	3	0.022	25
BUNA-40MPUW400	4	0.034	25

### Sanitary EPDM Tri-Clamp Gasket Black

**Color Code:** • • (3 Green Dots)

Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
EPDM-40MPE100	1	0.012	25
EPDM-40MPE150	1 1/2	0.013	25
EPDM-40MPE200	2	0.014	25
EPDM-40MPE250	2 1/2	0.016	25
EPDM-40MPE300	3	0.020	25
EPDM-40MPE400	4	0.030	25

### Sanitary FKM Tri-Clamp Gasket Black

**Color Code:** O = (1 White/1 Yellow Dot) Certification: 3A 18-03 sanitary standards Temperature Range: -20°F (-29°C) to +350°F (+177°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
FKM-40MPSFY100	1	0.013	25
FKM-40MPSFY150	1 1/2	0.014	25
FKM-40MPSFY200	2	0.018	25
FKM-40MPSFY300	3	0.030	25
FKM-40MPSFY400	4	0.046	25











#### Sanitary FKM Tri-Clamp Gasket White

**Color Code:** O • (1 White/1 Yellow Dot) **Certification:** 3A 18-03 sanitary standard **Temperature Range:** -20°F (-29°C) to +350°F (+177°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
FKM-40MPSFYW100	1	0.013	25
FKM-40MPSFYW150	1 1/2	0.014	25
FKM-40MPSFYW200	2	0.018	25
FKM-40MPSFYW300	3	0.030	25
FKM-40MPSFYW400	4	0.046	25



#### Sanitary PTFE Tri-Clamp Gasket White

Color Code: None Certification: USP Class VI standard Temperature Range: -40°F (-40°C) to +450°F (+232°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
PTFE-40MPG100	1	0.013	25
PTFE-40MPG150	1 1/2	0.014	25
PTFE-40MPG200	2	0.018	25
PTFE-40MPG300	3	0.028	25
PTFE-40MPG400	4	0.040	25



#### Sanitary Silicone Tri-Clamp Gasket White

Color Code: ● (1 Pink Dot) Certification: 3A 18-03 sanitary standard Temperature Range: -80°F (-62°C) to +450°F (+232°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
SIL-40MPX100	1	0.012	25
SIL-40MPX150	1 1/2	0.013	25
SIL-40MPX200	2	0.014	25
SIL-40MPX300	3	0.018	25
SIL-40MPX400	4	0.030	25





### Sanitary Buna-N Tri-Clamp 10 Mesh Screen Gasket Black

Color Code: ● (1 Red Dot) Certification: 3A 18-03 sanitary standard Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
BUNA-40MPSU100-10	1	0.014	25
BUNA-40MPSU150-10	1 1/2	0.016	25
BUNA-40MPSU200-10	2	0.022	25
BUNA-40MPSU300-10	3	0.040	25
BUNA-40MPSU400-10	4	0.063	25



### Sanitary Buna-N Tri-Clamp 20 Mesh Screen Gasket Black

**Color Code:** ● (1 Red Dot) **Certification:** 3A 18-03 sanitary standard **Temperature Range:** -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
BUNA-40MPSU100-20	1	0.014	25
BUNA-40MPSU150-20	1 1/2	0.016	25
BUNA-40MPSU200-20	2	0.022	25
BUNA-40MPSU300-20	3	0.040	25
BUNA-40MPSU400-20	4	0.063	25



### Sanitary Buna-N Tri-Clamp 40 Mesh Screen Gasket Black

**Color Code:** ● (1 Red Dot) **Certification:** 3A 18-03 sanitary standard **Temperature Range:** -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
BUNA-40MPSU100-40	1	0.014	25
BUNA-40MPSU150-40	1 1/2	0.016	25
BUNA-40MPSU200-40	2	0.022	25
BUNA-40MPSU300-40	3	0.040	25
BUNA-40MPSU400-40	4	0.063	25



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#### Sanitary Buna-N Tri-Clamp 60 Mesh Screen Gasket Black

Color Code: ● (1 Red Dot) Certification: 3A 18-03 sanitary standard Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
BUNA-40MPSU100-60	1	0.014	25
BUNA-40MPSU150-60	1 1/2	0.016	25
BUNA-40MPSU200-60	2	0.022	25
BUNA-40MPSU300-60	3	0.040	25
BUNA-40MPSU400-60	4	0.063	25



### Sanitary Buna-N Tri-Clamp 80 Mesh Screen Gasket Black

Color Code: ● (1 Red Dot) Certification: 3A 18-03 sanitary standard Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
BUNA-40MPSU100-80	1	0.014	25
BUNA-40MPSU150-80	1 1/2	0.016	25
BUNA-40MPSU200-80	2	0.022	25
BUNA-40MPSU300-80	3	0.040	25
BUNA-40MPSU400-80	4	0.063	25



#### Sanitary Buna-N Tri-Clamp 100 Mesh Screen Gasket Black

Color Code: ● (1 Red Dot) Certification: 3A 18-03 sanitary standards Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
BUNA-40MPSU100-100	1	0.014	25
BUNA-40MPSU150-100	1 1/2	0.016	25
BUNA-40MPSU200-100	2	0.022	25
BUNA-40MPSU300-100	3	0.040	25
BUNA-40MPSU400-100	4	0.063	25





#### Sanitary EPDM Tri-Clamp 10 Mesh Screen Gasket Black

Color Code: ● ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
EPDM-40MPSE100-10	1	0.014	25
EPDM-40MPSE150-10	1 1/2	0.016	25
EPDM-40MPSE200-10	2	0.022	25
EPDM-40MPSE300-10	3	0.040	25
EPDM-40MPSE400-10	4	0.063	25



#### Sanitary EPDM Tri-Clamp 20 Mesh Screen Gasket Black

Color Code: ● ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
EPDM-40MPSE150-20	1 1/2	0.016	25
EPDM-40MPSE200-20	2	0.022	25
EPDM-40MPSE300-20	3	0.040	25
EPDM-40MPSE400-20	4	0.063	25



### Sanitary EPDM Tri-Clamp 40 Mesh Screen Gasket Black

Color Code: ● ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
EPDM-40MPSE150-40	1 1/2	0.016	25
EPDM-40MPSE200-40	2	0.022	25
EPDM-40MPSE300-40	3	0.040	25
EPDM-40MPSE400-40	4	0.063	25



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#### Sanitary EPDM Tri-Clamp 60 Mesh Screen Gasket Black

Color Code: ● ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
EPDM-40MPSE150-60	1 1/2	0.016	25
EPDM-40MPSE200-60	2	0.022	25
EPDM-40MPSE300-60	3	0.040	25
EPDM-40MPSE400-60	4	0.063	25



#### Sanitary EPDM Tri-Clamp 80 Mesh Screen Gasket Black

Color Code: ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
EPDM-40MPSE150-80	1 1/2	0.016	25
EPDM-40MPSE200-80	2	0.022	25
EPDM-40MPSE300-80	3	0.040	25
EPDM-40MPSE400-80	4	0.063	25



#### Sanitary EPDM Tri-Clamp 100 Mesh Screen Gasket Black

Color Code: ● ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
EPDM-40MPSE150-100	1 1/2	0.016	25
EPDM-40MPSE200-100	2	0.022	25
EPDM-40MPSE300-100	3	0.040	25
EPDM-40MPSE400-100	4	0.063	25





### Sanitary Buna-N I-Line Gasket Black

Color Code: ● (1 Red Dot) Certification: 3A 18-03 sanitary standard Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
BUNA-40IH150	1 1/2	0.006	25
BUNA-40IH200	2	0.007	25
BUNA-40IH300	3	0.012	25
BUNA-40IH400	4	0.016	25

### Sanitary EPDM I-Line Gasket Black

Color Code: ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range: -60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (lbs)	Standard Carton
EPDM-40IE150	1 1/2	0.006	25
EPDM-40IE200	2	0.008	25
EPDM-40IE300	3	0.014	25
EPDM-40IE400	4	0.018	25

### Sanitary PTFE I-Line Gasket White

**Color Code:** None **Certification:** USP class VI standard **Temperature Range:** -40°F (-40°C) to +450°F (+232°C)

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Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
PTFE-40IT150	1 1/2	0.006	25
PTFE-40IT200	2	0.008	25
PTFE-40IT300	3	0.014	25
PTFE-40IT400	4	0.018	25

### Sanitary FKM I-Line Gasket Black

**Color Code:** O – (1 White/1 Yellow Dot) **Certification:** 3A 18-03 sanitary standard **Temperature Range:** -20°F (-29°C) to +350°F (+177°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
FKM-40IV150	1 1/2	0.006	25
FKM-40IV200	2	0.008	25
FKM-40IV300	3	0.014	25
FKM-40IV400	4	0.018	25







# **Bevel Seat Gaskets**

#### Sanitary Buna-N Bevel Seat Gasket Black

Color Code: ● (1 Red Dot) Certification: 3A 18-03 sanitary standard Temperature Range: -65°F (-54°C) to +210°F (+99°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
BUNA-40BS0100	1	0.008	25
BUNA-40BS0150	1 1/2	0.014	25
BUNA-40BS0200	2	0.018	25
BUNA-40BS0250	2 1/2	0.018	25
BUNA-40BS0300	3	0.034	25
BUNA-40BS0400	4	0.038	25



#### Sanitary EPDM Bevel Seat Gasket Black

Color Code: ● ● ● (3 Green Dots) Certification: 3A 18-03 sanitary standard Temperature Range:-60°F (-51°C) to +300°F (+149°C)

Part Number	Size (in)	Weight Each (Ibs)	Standard Carton
EPDM-40BSE100	1	0.008	25
EPDM-40BSE150	1 1/2	0.014	25
EPDM-40BSE200	2	0.018	25
EPDM-40BSE250	2 1/2	0.026	25
EPDM-40BSE300	3	0.034	25
EPDM-40BSE400	4	0.038	25



### Sanitary PTFE Bevel Seat Gasket White

Color Code: None Certification: USP Class VI standard Temperature Range: -40°F (-40°C) to +450°F (+232°C)

-	· · ·	. ,		1
	Part Number	Size (in)	Weight Each (lbs)	Standard Carton
	PTFE-40BSS100	1	0.012	25
	PTFE-40BSS150	1 1/2	0.016	25
	PTFE-40BSS200	2	0.024	25
	PTFE-40BSS250	2 1/2	0.030	25
	PTFE-40BSS300	3	0.036	25
	PTFE-40BSS400	4	0.038	25



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#### SANITARY FITTING TYPES (CLAMPED)

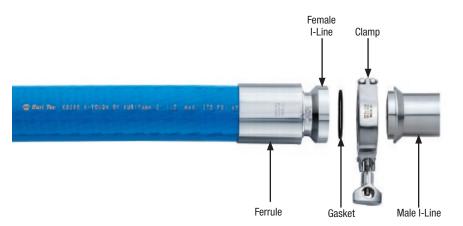


#### Tri-Clamp

Tri-Clamp fittings are the industry standard. The connection consists of two identical, flat-faced flanges, connected by use of a clamp. A gasket is placed into the grooves on the faces to prevent leakage.

KOA Sanitary Fittings offers both crimpable Tri-Clamps for clean in place (CIP), and also clampable, rubber hose and brewery hose Tri-Clamp fittings, for clean out of place (COP) operations.

Note: Most tri-clamp fitting sizes match the size of their corresponding clamp. However, to increase clamp interchangeability (thereby reducing the variety of clamps which must be stocked) the 1-1/2" clamp is used with the 1" tri-clamp fitting. Please refer to the tri-clamp sizing chart on page 27 to determine the correct clamp required based on fitting size.



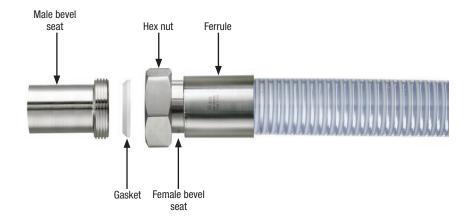
#### I-Line

I-Line fittings are heavier duty for use in more demanding applications. The connection consists of male and female versions, nested together and secured with a gasket and clamp. They're able to withstand greater temperatures, vibrations and pressures than standard tri-clamp fittings. Also, the design helps eliminate over compression of the gasket. They're popular in the wine and tomato processing industries.





#### SANITARY FITTING TYPES (NON-CLAMPED)



#### **Bevel Seat**

Bevel Seat fittings, also referred to as Acme threads, are generally used in lower pressure applications such as milk transfer. The connection consists of a male and a female end, the faces of which are angled 45° to create a metal on metal sealing surface. The male bevel seat is threaded, and the two are joined together by use of a nut. The metal on metal seal is sometimes considered sufficient to prevent leakage at lower pressures, however, a gasket can be used for higher pressure applications. Special Bevel Seat Hex Wrenches are available to assist with nut tightening and untightening.



#### Tube End

Tube end fittings, also referred to as butt-weld fittings, are used for welding onto sanitary tube fittings. The connection consists of a schedule 40 tube end which is welded directly onto the sanitary tubing, giving the versatility to create any type of sanitary fitting hose end connection.





### SANITARY CLAMP TYPES

#### SINGLE PIN

Single pin, or single hinge, clamps are available for both Tri-Clamp and I-Line fittings, and are the industry standard. They consist of two segments connected by a single pin and wing nut, allowing for easy hand tightening.

#### DOUBLE PIN

Double pin clamps are available for the Tri-Clamp fitting. They have an additional pin, which helps provide more evenly distributed sealing pressure.

#### DOUBLE BOLT

Double bolts are also available for the Tri-Clamp fittings. They're a heavier duty construction, connected by tightening two bolts. They're popular in more permanent applications and have higher pressure ratings than the single and double pin clamps.

	Pressure	Rating (psi)*	Toursuo Dotina
Part Number	at 70°F (+21°C)	at 250°F (+121°C)	Torque Rating (In/Ibs)
SPHDS150	500	250	25
SPHDS200	450	250	25
SPHDS250	400	200	25
SPHDS300	350	150	25
SPHDS400	200	125	25
SPHDS600	150	75	25
DPHDS150	500	250	25
DPHDS200	450	250	25
DPHDS250	400	200	25
DPHDS300	350	150	25
DPHDS400	200	125	25
DBS150	1500	1200	30
DBS200	1000	800	30
DBS300	1000	800	30
DBS400	800	800	30
SPILC150	500	250	25
SPILC200	450	250	25
SPILC300	350	150	25
SPILC400	200	125	25

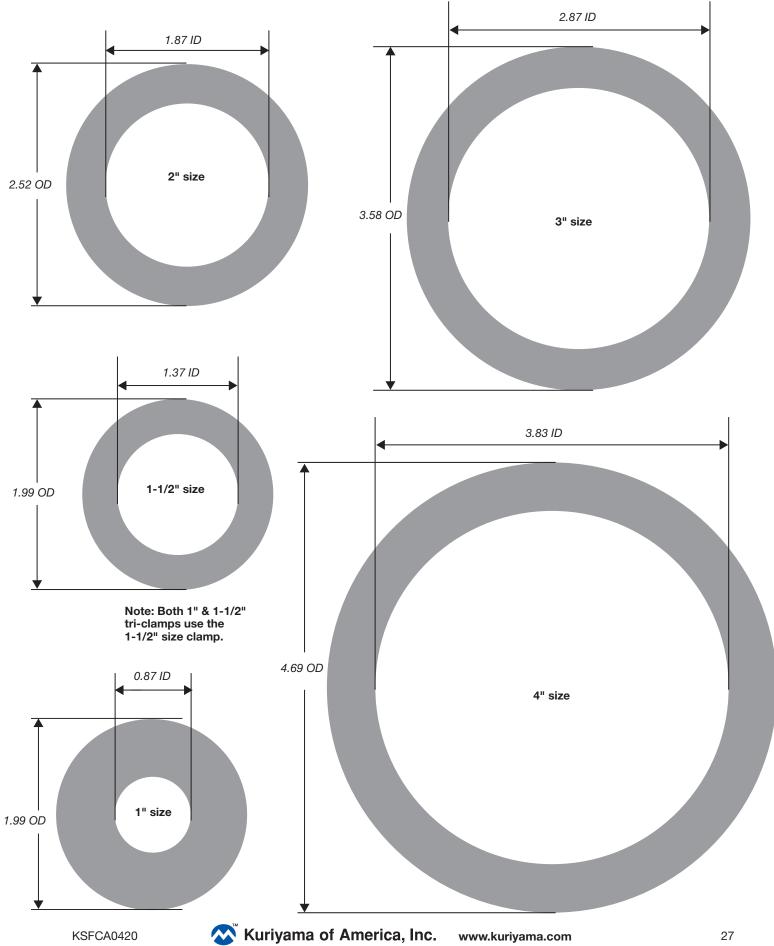
#### SANITARY CLAMP TORQUE AND PRESSURE RATINGS

\*Note: Pressure ratings shown represent those of the clamp alone and are generally higher than those of a full union, including a gasket, which will fail before the clamp.



#### SIZING GUIDE FOR TRI-CLAMP FITTINGS & GASKETS

Place the face of the tri-clamp over the following, actual-size drawings, to determine the size of the fitting or corresponding clamp needed. Note: the clamp and fitting sizes are determined by the ID of the hose, not the ID or OD of the tri-clamp.





#### SANITARY GASKET TYPES

Sanitary gaskets are available in a variety of materials, each possessing unique performance characteristics, and should be selected based on the specific demands of the application in which they will be used. Please refer to the following sanitary gasket elastomer characteristics to assist with proper gasket selection.

**Buna (Nitrile) gaskets** are the most popular and economic, and are common in food and beverage applications. They have good resistance to oils and animal fats, and good resistance to moderately aggressive chemicals.

**EPDM gaskets** are also very popular, economic gaskets, and are common in food and beverage, pharmaceutical and cosmetic/personal care applications. They exhibit higher chemical and heat resistance than Buna, but are acceptable for steam only intermittently and at lower pressures. They can experience swelling and deformation when exposed to certain oils and animal fats.

**FKM (Viton®) gaskets** exhibit good all-around characteristics, with good oil, alcohol and acid resistance, and a slightly higher heat and steam tolerance than EPDM.

**PTFE (Teflon®) gaskets** exhibit exceptional chemical resistance, and extremely high tolerances to heat and steam. However, they're a plastic as opposed to an elastomer, and therefore not as compressible as other gasket materials, which can lead to difficulty in sealing if misaligned. They can experience cold flow, especially if clamps are misaligned or overtightened, resulting in a reduction in sealing pressure.

**Silicone gaskets** exhibit the widest temperature range. They're often used in place of PTFE gaskets in fluid or steam applications when greater compressibility and leak resistance is required.

Characteristic	Buna-N (Nitrile)	EPDM	FKM (Viton®)	PTFE (Teflon®)	Silicone
Identification Dot Code	1 red	3 green	1 white and 1 yellow	None	1 pink
Industry Designation	U	E	SFY	G	Х
Temperature Range	-65°F (-54°C) to +210°F (+99°C)	-60°F (-51°C) to +300°F (+149°C)	-20°F (-29°C) to +350°F (+177°C)	-40°F (-40°C) to +450°F (+232°C)*	-80°F (-62°C) to +450°F (+232°C)
Fats & Oils Resistance	Good to Excellent	Poor	Good to Excellent	Excellent	Fair
Acid Resistance	Good	Good to Excellent	Good to Excellent	Good to Excellent	Fair
Alkali Resistance	Good	Good to Excellent	Fair	Excellent	Poor to Fair
Abrasion Resistance	Excellent	Good	Good	Fair	Good
Compression Set Resistance	Good	Fair	Good to Excellent	Cold Flows*	Good to Excellent
FDA CFR 21 Compliant	Yes	Yes	Yes	Yes	Yes
Certification	3A	3A	3A	USP Class VI	3A

#### Elastomer Characteristics

\*PTFE can experience cold flow over time, especially when subjected to temperature fluctuations, resulting in reduction of sealing pressure. Note: the performance of sanitary gaskets depends on many factors that are governed by the application. This chart cannot be construed as an approval of the gasket for any particular purpose, use, or application.

Note: Viton<sup>®</sup> and Teflon<sup>®</sup> are registered trademarks of DuPont Dow Elastomers.





# Sanitary Gasket Information



#### **Gasket Identification**

The particular type of gasket material can be identified by the dot pattern printed on the side of each gasket.

Material	Identification Dot Code	Example
Buna-N (Nitrile)	1 red dot	•
EPDM	3 green dots	•••
FKM (Viton®)	1 white and 1 yellow dot	0 😐
PTFE (Teflon®)	None	
Silicone	1 pink dot	•



### Mesh Gaskets

Gaskets with a mesh screen are available to help filter particulates from the material stream, protecting tanks and pumps from clogging or foreign particle contamination. They come in a variety of mesh sizes, generally ranging from 10 mesh to 100 mesh, with higher values correlating to a higher mesh density.

Mesh	Micron Equivalent	Wire Diameter (in)	Opening Width (in)	Openings Per in <sup>2</sup>
10	1887	0.0230	0.075	100
20	855	0.0160	0.034	400
40	377	0.0100	0.015	1600
60	226	0.0075	0.009	3600
80	176	0.0055	0.007	6400
100	151	0.0045	0.006	10000

Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.

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#### **Hose Bumpers**

Hose bumpers are installed near the hose ends to help protect the fittings from damage if the hose is accidentally dropped, and to keep the hose ends clean by elevating them off the floor. Each bumper is made from chemical and heat resistant, shock absorbing silicone. The bumpers slide easily and securely over the end of the ferrule after crimping.



#### **Hose Risers**

Hose risers elevate the hose off the floor, helping it slide easily when being moved from place to place, keeping it clean and protecting the outside from damage. They also allow for better floor drainage by preventing damming and pooling of liquids near the hose during wash down. The risers are made from durable, chemical resistant polyethylene, and are easily attached tthroughout the hose with two stainless steel screws.





# **Crimp Procedure**

#### **CRIMP PROCEDURE**

#### **Needed Measurments**

- Measured Hose ID
- Measured Hose OD
- Fitting Shank OD
- Ferrule Wall Thickness
- Compression Percentage

#### **Suggested Compression Percentages**

- Industrial Rubber Hose -22%
- Industrial PVC/Urethane Hose -15%

KOA Sanitary Fittings are designed for use with either sanitary or non-sanitary KOA crimp ferrules, and use the same crimp calculation as our standard KOA Couplings.

#### **Crimp Diameter Formula**

Crimp Diameter Formula = Hose OD - Hose ID + Shank OD + (2 x Ferrule/Sleeve Wall Thickness) + [ ( - Compression Percentage) x (Hose OD - Hose ID) /100]

#### **Crimping Calculator**

An easy-to-use, electronic version of this crimp calculator is available online in the products section of the Kuriyama website located at: **www.kuriyama.com/products/crimp-diameter-calculator.php** 

Note: Crimp diameter calculation instructions and compression percentages are only to be used as a guide. Hydrostatic pressure testing of all assemblies is highly recommended to assure maximum performance.



# KuriCrimp<sup>™</sup> Crimping Equipment

Check out our full line of KuriCrimp<sup>™</sup> crimping equipment at www.kuriyama.com





KC4-V159

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Hose or tubing used in bent configurations will be subjected to increased abrasion. Hose clamps or couplings may loosen after initial installation and all sections of hose and tubing including connections, couplings, clamps, conductivity and bonding should be inspected frequently, regularly and consistently, and should be replaced, adjusted or re-tightened for the avoidance of leakage, for the prevention of injuries or damages, and for general safety purposes. Except as indicated in its Limited Warranty, Seller shall not be liable or responsible for direct or indirect injuries or damages caused by or attributed to the failure or malfunction of any Products sold or distributed by it.

Purchasers or users of the Products should frequently and consistently undertake inspections and protective measures with respect to the use and application of Products, which should include the examination of tube and cover, conditions of the hose or tubing, and the identification, repair or replacement of sections showing cracking, blistering, separations, internal and external abrasions, leaking or slipped couplings or connections and make proper proof tests.

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