

O-Ring Face Seal Fittings

High Technology Valve & Flange & Fitting Series



- 1/8 to 1 in. sizes
- SUS316 or SUS316L stainless steel
- Tube, NPT, SAE thread, and Weld connections



 SUPERLOK[®]

Technical Data Material of Construction

Component	Material
Bodies, glands, nuts	SUS316
Automatic tube weld fittings	SUS316L
O-ring, Bodies	Fluorocarbon FKM
O-ring, SAE/MS threads	Fluorocarbon FKM
Lubricant	Silicone-based

O-Ring Uniform Size Number

VCO size in.	O-Ring Uniform Size Number
1/8 and 1/4	I.D 6.07 X 1.78T
3/8 and 1/2	I.D 10.77 X 2.62T
3/4	I.D 18.72 X 2.62T
1	I.D 26.57 X 3.53T

Material

70 durometer fluorocarbon(viton) is standard on fitting bodies .
 90 durometer fluorocarbon is used with SAE/MS threads.
 Perfluoroelastomer,BUNA-N , TFE , Ethylene-propylene are available for special applications

SAE/MS Thread Size	O-Ring Uniform Size Number
7/16-20	I.D 8.92 X 1.83T
9/16-18	I.D 11.89 X 1.98T
3/4-16	I.D 16.36 X 2.20T
1 1/16-12	I.D 23.47 X 2.95T
1 5/16-12	I.D 29.47 X 2.95T

Pressure Ratings

All ratings comply with calculations in accordance with ASME Code for Pressure Piping B31.3, Process Piping, and Asme B31.1, Power Piping.

Temperature Ratings

Temperature ratings for O-ring Face Seal fittings are determined by the O-ring materials.

Material	Temperature Rating °F (C)
Fluorocarbon FKM	400(204)
Buna N	250(121)
PTFE	450(232)
Perfluoroelastomer	550(287)
Ethylene propylene	300(148)

Testing

The O-ring Face Seal Fittings design has been helium leak tested to a maximum leak of 4×10^{-6} std cm³/s.

Dimensions

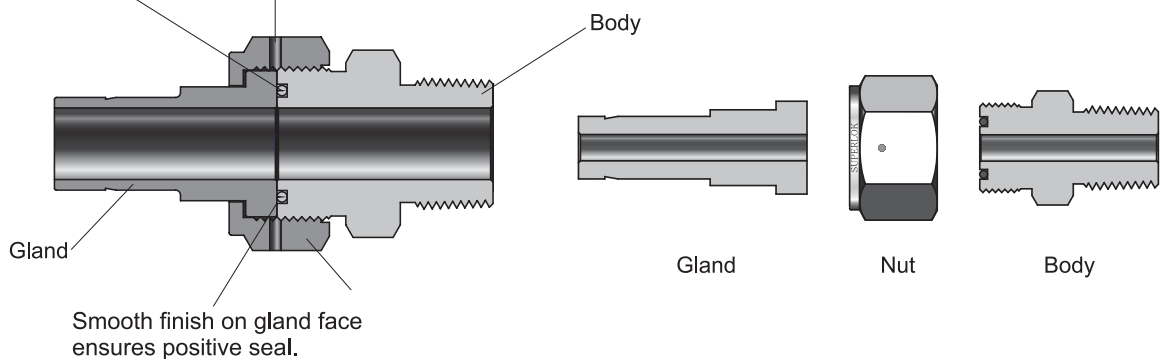
- *Dimensions are for reference only and are subject to change.
- *The D dimension refers to the smallest nominal inside diameter of the part

Features

Superlok O-ring Face Seal Fittings are designed for rapid assembly in pipe, tube and welded systems.

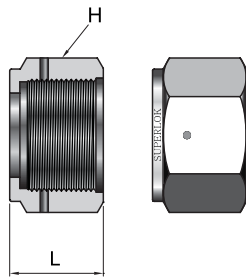
- *Unique design allows easy installation where space is limited.
- *No axial clearance is required.
- *Sealing is accomplished with a captive O-ring in the body component.
- *Assemblies can be used from high pressure to critical vacuum, within a wide range of temperatures.

O-ring contained completely for maximum efficiency.
 Test ports at two locations for easy leak testing.



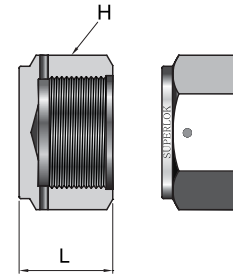
NUTS

FEMALE NUTS



Part No.	Size (inch)	H (HEX)	L
OFN-4	1/8 and 1/4	11/16	16.8
OFN-8	3/8 and 1/2	1	17.5
OFN-12	3/4	1-1/2	20.6
OFN-16	1	1-3/4	20.6

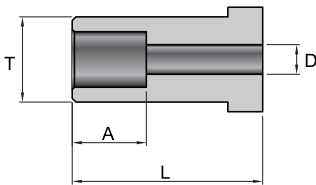
BLIND NUTS



Part No.	Size (inch)	H (HEX)	L
OBN-4	1/8 and 1/4	11/16	11.2
OBN-8	3/8 and 1/2	1	14.2
OBN-12	3/4	1-1/2	19.1
OBN-16	1	1-3/4	20.6

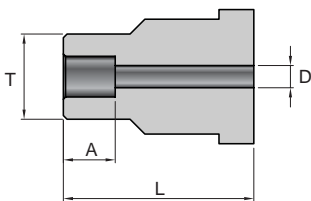
GLANDS

TUBE SOCKET WELD GLAND



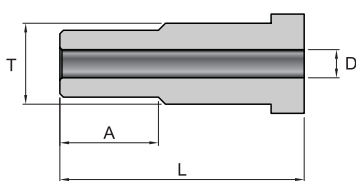
Part No.	Size (inch)	Tube size (inch)	L	A	D	T
OGSW2-2	1/8	1/8	19.6	2.5	2.3	9.7
OGSW4-4	1/4	1/4	19.6	7.1	4.6	9.7
OGSW6-6	3/8	3/8	20.6	7.9	7.1	15.2
OGSW8-8	1/2	1/2	20.6	9.7	10.2	15.2
OGSW12-12	3/4	3/4	23.9	11.2	15.7	23.4
OGSW16-16	1	1	24.9	15.7	22.1	30.2

TUBE SOCKET WELD REDUCING GLAND



Part No.	Size (inch)	Tube size (inch)	L	A	D	T
OGSWR2-2	1/4	1/8	19.6	2.5	2.3	7.4
OGSWR4-4	1/2	1/4	20.6	7.1	4.6	12.2

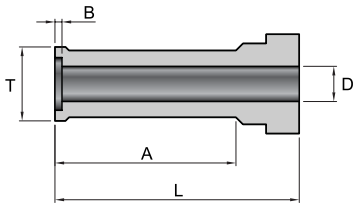
MALE TUBE WELD GLAND



Part No.	Size (inch)	Tube size (inch)	L	A	D	T
OGMW4-2	1/4	1/8	19.6	7.1	1.5	9.7
OGMW4-4	1/4	1/4	28.4	10.4	3.0	9.7
OGMW8-4	1/2	1/4	23.1	10.4	3.0	15.2
OGMW8-6	1/2	3/8	21.3	10.4	5.8	15.2
OGMW8-8	1/2	1/2	26.9	12.7	8.4	15.2

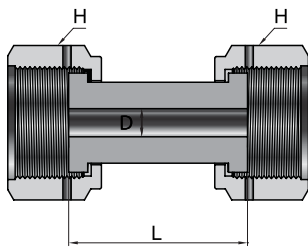
GLANDS

AUTOMATIC TUBE WELD GLAND



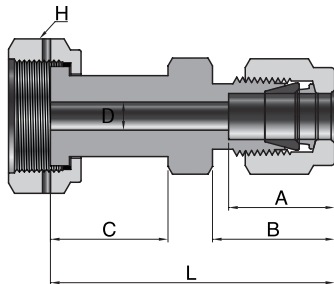
Part No.	Size (inch)	Tube size (inch)	L	A	B	D	T	Wall Thickness
OGAW4-4	1/4	1/4	28.4	19.8	0.51	4.6	7.4	0.9
OGAW8-6	1/2	3/8	28.7	20.0	0.76	7.9	10.4	0.9
OGAW8-8	1/2	1/2	29.0	20.3	1.0	10.2	14.0	1.2
OGAW12-12	3/4	3/4	30.5	20.3	1.0	16.5	20.3	1.2
OGAW16-16	1	1	35.8	25.4	1.0	22.1	26.9	1.7

SWIVEL UNION



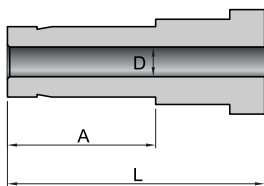
Part No.	Size (inch)	H (HEX)	L	D
OGSU-4	1/4	11/16	36.1	4.6
OGSU-8	1/2	1	40.9	10.2

SWIVEL TUBE FITTING CONNECTOR



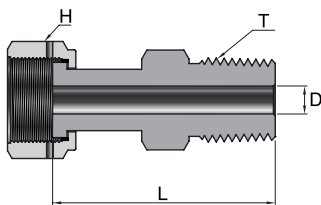
Part No.	Size (inch)	Tube size (inch)	H (HEX)	L	A	B	C	D
OGSC4-4	1/4	1/4	11/16	44.2	15.2	17.8	19.6	4.6
OGSC8-6	1/2	3/8	1	47.5	16.8	19.3	20.6	7.1
OGSC8-8	1/2	1/2	1	51.1	22.9	22.1	20.6	10.2
OGSC12-12	3/4	3/4	1-1/2	54.4	24.4	22.1	23.9	15.7
OGSC16-16	1	1	1-3/4	62.2	31.2	26.4	24.9	22.1

TUBE ADAPTER



Part No.	Size (inch)	Tube size (inch)	L	A	D
OGA4-4	1/4	1/4	33.3	16.3	4.6
OGA8-6	1/2	3/8	35.1	17.8	6.8
OGA8-8	1/2	1/2	41.1	24.4	9.3
OGA12-12	3/4	3/4	45.7	25.9	14.7
OGA16-16	1	1	52.1	33.0	20.3

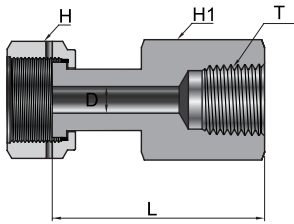
SWIVEL MALE CONNECTOR



Part No.	Size (inch)	T (NPT size) (inch)	L	D	H (HEX)
OGSMC4-4N	1/4	1/4	40.4	4.6	11/16
OGSMC8-6N	1/2	3/8	42.4	10.2	1
OGSMC8-8N	1/2	1/2	47.5	10.2	1
OGSMC12-12N	3/4	3/4	51.6	15.7	1-1/2
OGSMC16-16N	1	1	59.9	22.1	1-3/4

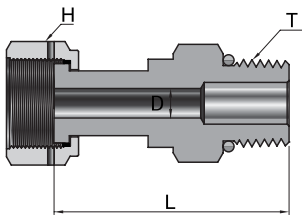
GLANDS

SWIVEL FEMALE CONNECTOR



Part No.	Size (inch)	T (NPT size) (inch)	L	D	H (HEX)	H1 (HEX)
OGSFC4-4N	1/4	1/4	39.9	4.6	11/16	3/4
OGSFC8-6N	1/2	3/8	43.9	10.2	1	7/8
OGSFC8-8N	1/2	1/2	49.8	10.2	1	1-1/16
OGSFC12-12N	3/4	3/4	53.8	15.7	1-1/2	1-5/16
OGSFC16-16N	1	1	58.2	22.1	1-3/4	1-5/8

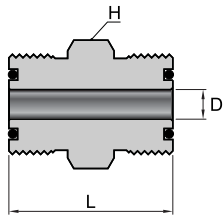
SWIVEL SAE/MS CONNECTOR



Part No.	Size (inch)	T (Straight Thread Size)	L	D	H (HEX)
OGSMC4-4U	1/4	7/16-20	39.1	4.6	11/16
OGSMC8-6U	1/2	9/16-18	41.7	10.2	1
OGSMC8-6U	1/2	3/4-16	43.4	10.2	1
OGSMC12-12U	3/4	1-1/16-12	52.6	15.7	1-1/2
OGSMC16-16U	1	1-5/16-12	55.1	22.1	1-3/4

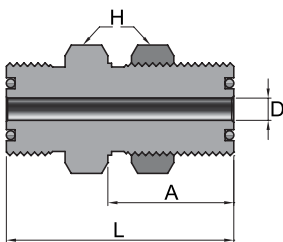
BODIES

UNION



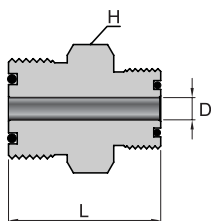
Part No.	Size (inch)	L	D	H (HEX)
OU-4	1/4	31.8	4.6	5/8
OU-8	1/2	38.1	10.2	15/16

BULKHEAD UNION



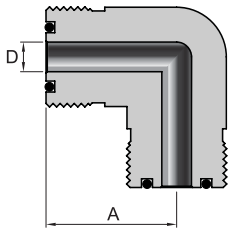
Part No.	Size (inch)	L	A	D	H (HEX)	Panel Drill Size	Max Panel Thickness
OBHU-4	1/4	47.8	26.9	4.6	3/4	14.7	9.1
OBHU-8	1/2	53.1	30.2	10.2	1-1/16	22.6	10.2

REDUCING UNION



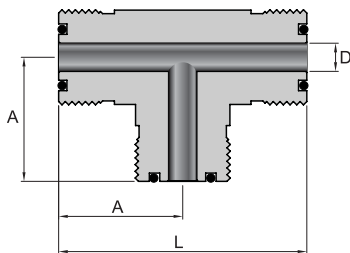
Part No.	Size (inch)	L	D	H (HEX)
ORU8-4	1/2 x 1/4	36.3	4.6	15/16

ELBOW



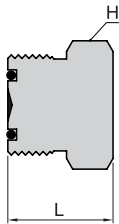
Part No.	Size (inch)	L	D
OE-4	1/4	24.4	4.6
OE-8	1/2	32.0	10.2
OE-12	3/4	37.6	15.7
OE-16	1	39.6	22.1

TEE



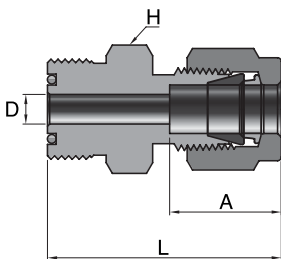
Part No.	Size (inch)	L	A	D
OT-4	1/4	48.8	24.4	4.6
OT-8	1/2	64.0	32.0	10.2
OT-12	3/4	75.2	37.6	15.7
OT-16	1	79.2	39.6	22.1

BLIND



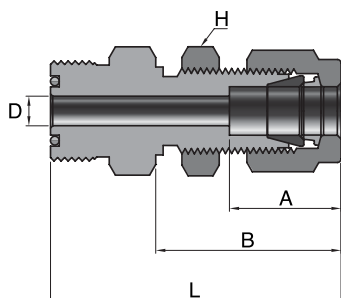
Part No.	Size (inch)	L	H (HEX)
OB-4	1/4	19.6	5/8
OB-8	1/2	22.6	15/16
OB-12	3/4	25.1	1-5/16
OB-16	1	25.9	1-5/8

TUBE FITTING CONNECTORS



Part No.	Size (inch)	Tube size (inch)	L	A	D	H (HEX)
OC4-2	1/4	1/8	35.1	13.0	2.3	5/8
OC4-4	1/4	1/4	37.3	15.2	4.6	5/8
OC8-6	1/2	3/8	41.9	16.8	7.1	15/16
OC8-8	1/2	1/2	45.2	22.9	10.2	15/16
OC12-12	3/4	3/4	47.2	24.4	15.7	1-5/16
OC16-16	1	1	52.3	31.2	22.1	1-5/8

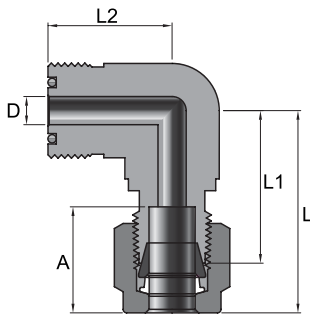
TUBE FITTING BULKHEAD CONNECTOR



Part No.	Size (inch)	Tube size (inch)	L	A	B	D	H (HEX)	Panel Drill Size	Max Panel Thickness
OBHC4-4N	1/4	1/4	53.3	15.2	33.5	4.6	5/8	11.5	10.2
OBHC8-6N	1/2	3/8	59.4	16.8	36.8	7.1	15/16	14.7	11.2
OBHC8-8N	1/2	1/2	64.8	22.9	41.9	10.2	15/16	19.4	12.7
OBHC12-12N	3/4	3/4	72.6	24.4	47.5	15.7	1-5/16	25.8	16.8
OBHC16-16N	1	1	83.6	31.2	57.4	22.1	1-5/8	33.7	19.1

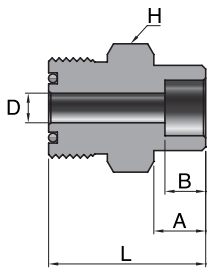
BODIES

TUBE FITTING ELBOW



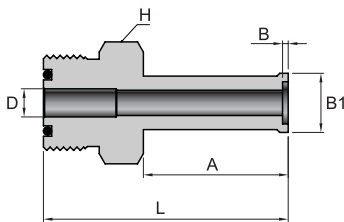
Part No.	Size (inch)	Tube size (inch)	L	L1	L2	A	D
OTE4-4	1/4	1/4	30.2	22.9	24.4	15.2	4.6
OTE8-6	1/2	3/8	35.3	27.9	32.0	16.8	7.1
OTE8-8	1/2	1/2	38.1	27.9	32.0	22.9	10.2
OTE12-12	3/4	3/4	45.7	35.6	37.6	24.4	15.7
OTE16-16	1	1	51.8	39.6	39.6	31.2	22.1

SOCKET WELD CONNECTOR



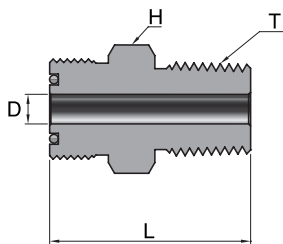
Part No.	Size (inch)	Tube size (inch)	L	A	D	B	H (HEX)
OWC2-2	1/8	1/8	22.4	2.5	2.3	7.4	5/8
OWC4-4	1/4	1/4	27.7	7.1	4.6	9.7	5/8
OWC6-6	3/8	3/8	32.5	7.9	7.1	15.2	15/16
OWC8-8	1/2	1/2	34.0	9.7	10.2	15.2	15/16
OWC12-12	3/4	3/4	38.1	11.2	15.7	23.4	1-5/16
OWC16-16	1	1	43.7	15.7	22.1	30.2	1-5/8

AUTOMATIC TUBE WELD CONNECTOR



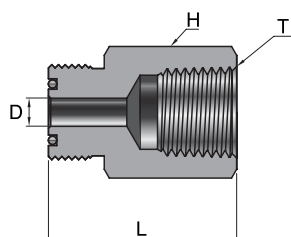
Part No.	Size (inch)	Tube size (inch)	L	A	B	D	B1	H (HEX)	Wall Thickness
OAWC4-4	1/4	1/4	40.4	19.8	0.51	4.6	7.4	5/8	0.9
OAWC8-6	1/2	3/8	44.2	20.0	0.76	7.9	10.4	15/16	0.9
OAWC8-8	1/2	1/2	44.4	20.3	1.0	10.2	14.0	15/16	1.2
OAWC12-12	3/4	3/4	45.2	20.3	1.0	16.5	20.3	1-5/16	1.2
OAWC16-16	1	1	51.6	25.4	1.0	22.1	26.9	1-5/8	1.7

MALE NPT CONNECTOR



Part No.	Size (inch)	T (NPT size) (inch)	L	D	H (HEX)
OMC4-2N	1/4	1/8	29.5	4.6	5/8
OMC4-4N	1/4	1/4	34.0	4.6	5/8
OMC8-6N	1/2	3/8	37.1	9.7	15/16
OMC8-8N	1/2	1/2	41.9	10.2	15/16
OMC12-12N	3/4	3/4	44.4	15.7	1-5/16
OMC16-16N	1	1	50.0	22.1	1-5/8

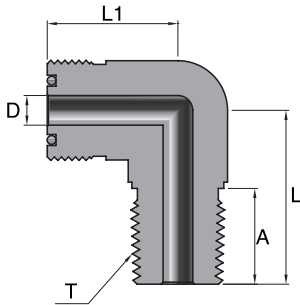
FEMALE NPT CONNECTOR



Part No.	Size (inch)	T (NPT size) (inch)	L	D	H (HEX)
OFC4-2N	1/4	1/8	31.8	4.6	5/8
OFC4-4N	1/4	1/4	35.3	4.6	3/4
OFC8-6N	1/2	3/8	39.9	10.2	15/16
OFC8-8N	1/2	1/2	45.0	10.2	1-1/16
OFC12-12N	3/4	3/4	49.0	15.7	1-5/16
OFC16-16N	1	1	51.3	22.1	1-5/8

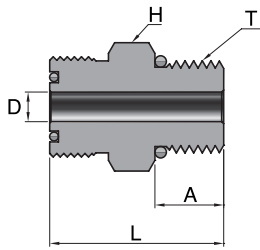
BODIES

MALE ELBOW



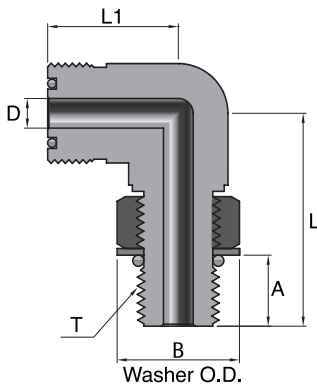
Part No.	Size (inch)	T (NPT size) (inch)	L	L1	A	D
OME4-2N	1/4	1/8	22.1	24.4	9.7	4.6
OME4-4N	1/4	1/4	26.7	24.4	14.2	4.6
OME8-6N	1/2	3/8	32.0	32.0	14.2	9.7
OME8-8N	1/2	1/2	36.8	32.0	19.1	10.2
OME12-12N	3/4	3/4	42.4	37.6	19.1	15.7
OME16-16N	1	1	49.3	39.6	23.9	22.1

MALE SAE/MS CONNECTOR



Part No.	Size (inch)	T (Straight Thread Size)	L	A	D	H (HEX)
OSMC4-4U	1/4	7/16-20	31.5	9.1	4.6	11/16
OSMC4-6U	1/4	9/16-18	29.7	9.9	4.6	11/16
OSMC8-4U	1/2	7/16-20	34.5	9.1	4.6	15/16
OSMC8-6U	1/2	9/16-18	35.3	9.9	7.6	15/16
OSMC8-8U	1/2	3/4-16	37.3	11.2	10.2	1
OSMC12-12U	3/4	1-1/16-12	43.9	15.0	15.7	1-3/8
OSMC16-16U	1	1-5/16-12	45.5	15.0	21.6	1-5/8

MALE SAE/MS POSITIONABLE ELBOW



Part No.	Size (inch)	T (Straight Thread Size)	L	L1	A	B	D
OSPE4-4U	1/4	7/16-20	30.2	24.4	9.9	16.5	4.6
OSPE8-6U	1/2	9/16-18	39.1	33.8	11.2	20.1	7.6
OSPE8-8U	1/2	3/4-16	41.9	33.8	12.7	25.7	10.2
OSPE12-12U	3/4	1-1/16-12	54.1	38.9	16.8	36.6	15.7
OSPE16-16U	1	1-5/16-12	58.7	43.7	16.8	43.9	22.1