

# Balflex®



**BALFLEX  
O-RING FACE  
SEAL TUBE  
CONNECTORS  
CATALOG**

# European Technology

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*Established since 1963, **Balflex®** is a European international group of companies dedicated to the design, production, assembly and distribution of all types of high-tech products for conduction of fluids, measuring of pressure and power transmission at very high quality level.*

*6 decades of know-how and expertise in this field, makes **Balflex®** the first choice for the mining, agriculture, off-shore and construction industries.*

*Today the **Balflex®** Group covers worldwide users through our own company's production facilities, branches and net of certified distributors.*

**Balflex®** valorizes the inside meaning of the words we use: **Excellence** the quality of being outstanding; **Innovation** the action or process of innovating; **Partnership** cooperation relationship between two or more people, having in mind a common goal; **Tradition** way of thinking or acting, inherited from previous generations.

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# Quality

Quality is very important for us. We have fully equipped, modern laboratories and equipment, employing the industries most experienced personnel.

Balflex® has earned various certifications for our Management Systems and Products. This reliable and consistent approach has allowed us to achieve our ISO 9001:2015 certification. At Balflex® quality and service always comes first. We are dedicated to continue the development of new products with a strong emphasis on quality.

## Member of:



## Certified by:





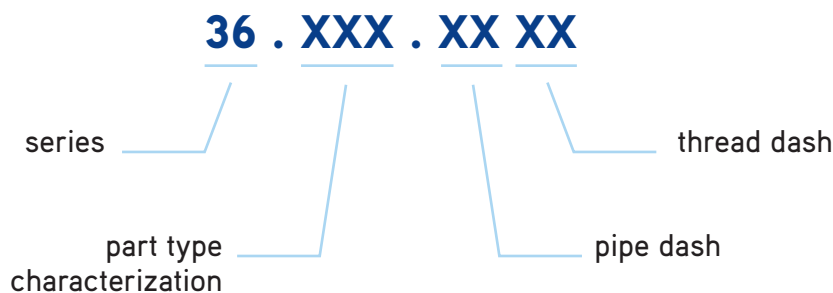


# Balfit® ORFS O’Ring Face Seal Fittings (Series 36)

The range of *Balfit® ORFS O’Ring Face Seal Fittings* is produced according to *Balflex® specifications* and to *ISO 8434-3* and *SAE J1453* standards. It covers a very wide variety of applications typical of hydraulic pressure lines.

**Balflex®** optimized the production of these fittings and their compatibility with a wide range of other types of hydraulic fittings, in order to assure the highest performance and the most extensive range of applications. The **Balfit®** hydraulic fittings program in this catalogue includes complete fittings line.

The **Balfit®** ORFS O’Ring Face Seal Fittings part code is composed of three groups of digits:



## Technical Characteristics

The **Balfit® ORFS O’Ring Face Seal Fittings** in carbon steel are designed for petroleum based hydraulic fluids applications with a **temperature range of - 20°C (- 4°F) to + 100°C (+ 212°F)**. Fittings without incorporated sealing rings may exceed these temperature limits up to 150°C. Stainless steel variants of the fittings with viton seals, achieving maximum temperatures of 200°C (+ 392°F), are listed in the catalogue pages. If other fluids are used, corrosion resistance of the fittings should be verified before application.

The **safety factor of 4:1** relating minimum burst pressure to recommended working pressure applies. The working pressure for each fitting and size is listed in the catalogue pages for working temperature of 20°C (+ 68°F). A linear de-rating

factor of 12% / 100°C (+ 212°F) should be used for higher working temperatures. A further de-rating factor of 60% should be used for applications with high impulse cycles.

All bend, tee and cross **Balfit® ORFS O’Ring Face Seal Fittings** fittings are made from forged parts, assuring higher reliability and longer service life-span. Straight parts are machined from stock bars.

Cylindrical and taper threads should be used always matched. In case of cylindrical threads used against softer materials, gasket type should always be preferred, to guarantee sealing even at low torque values.

## General Guidelines

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### **Hydraulic hose lines should always be inspected and hydraulically tested before installment.**

All hydraulic systems should be tested against leakage and with appropriate precautions after any intervention.

### **The failure of hydraulic lines may be dangerous and expose people and property to irreversible damage.**

Among other occurrences that must be prevented are the high velocity and high temperature projection of hydraulic fluid, the projection of connectors, pipes and it's parts, spillage or combustion of the fluid, immovability, fall or sudden movement of masses controlled by the hydraulic system.

Hydraulic connectors should be stored protected from humidity and other corrosion inducing factors. Packaging should protect sealing areas and threads against shocks and other damage.

Whenever the weight of the parts or the packaging type does not allow assuring this kind of protection, individual plastic caps should be used. All connectors should preferably be handled in small quantities and never in bulk quantities.

Recovered materials should never be used, as the degree of aging and fatigue is unknown and materials that pass visual inspection may be close to life limit. Good practice recommendations and standards exclude therefore the reutilization of used hose. The reutilization of recovered connectors should also be considered with the greatest restraint, as sealing and resistance characteristics may be sharply reduced.

Manufacturing processes leave dirt residues in the tube. Cutting and deburring may leave metal particles that should be removed In order to prevent contamination of the hydraulic system.

## Important notice

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**Selection, assembly and installation of hydraulic lines require specific professional training.** This catalogue only supplies additional information and technical data for selection and use of **Balfit® ORFS O'Ring Face Seal Fittings.**

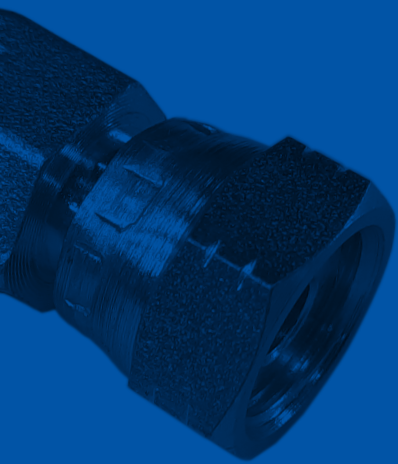
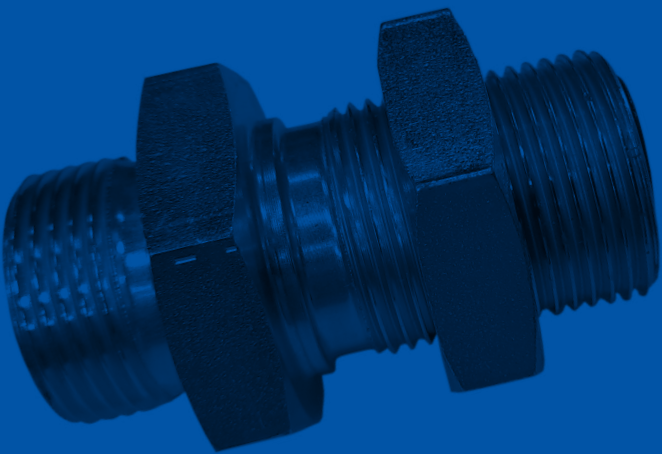


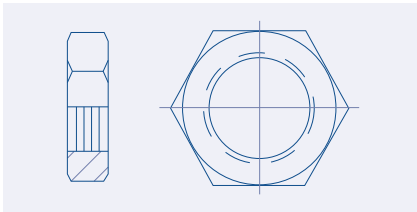


# Adapters

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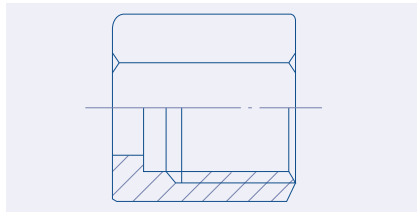




**Bulkhead Locknut**

36.017.

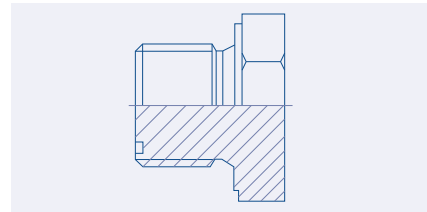
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**Tightening Nut**

36.110.

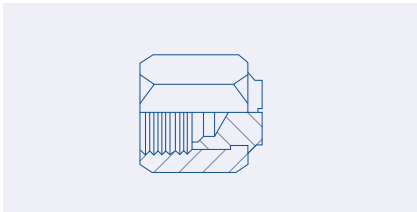
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**Plugs**

36.141.

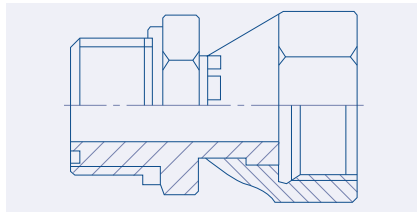
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**Cap**

36.142.

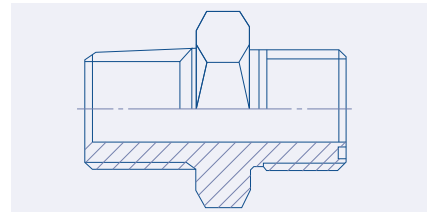
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**Swivel Connector ORFS  
Male x ORFS Female**

36.180.

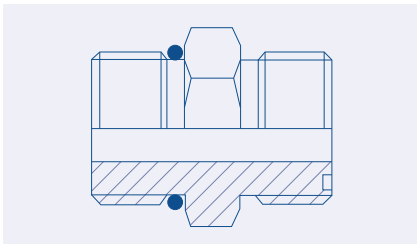
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**Male Connector (ORFS x NPT)**

36.200.

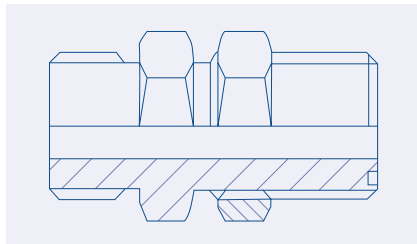
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**ORFS x SAE - ORB Straight  
Male Connector**

36.220.

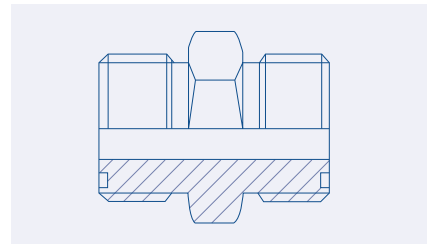
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**Straight Bulkhead Union  
ORFS Male**

36.250.

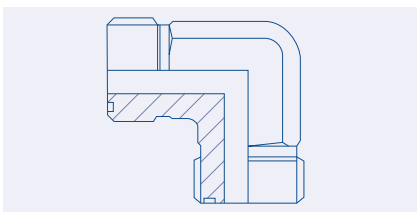
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**Straight ORFS Male Union**

36.260.

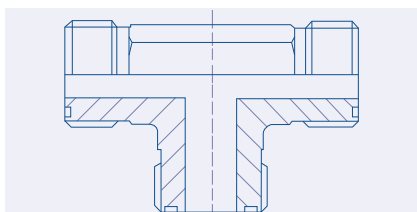
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**90° Elbow ORFS Male Union**

36.500.

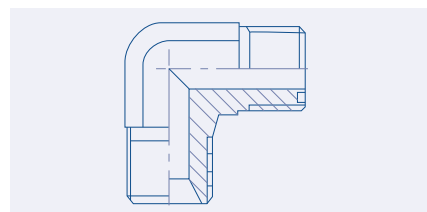
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**Union Tee ORFS Male**

36.505.

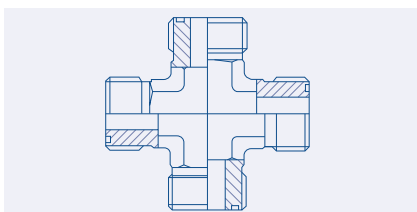
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**90° Elbow Male Connector  
(ORFS x NPT)**

36.525.

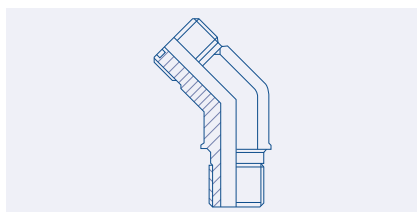
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**ORFS Union Cross**

36.595.

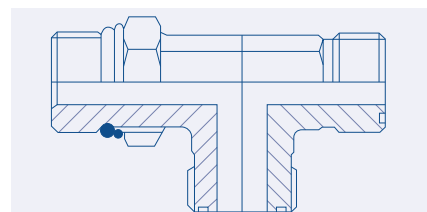
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**45° Elbow Male Connector  
(ORFS x NPT)**

36.540.

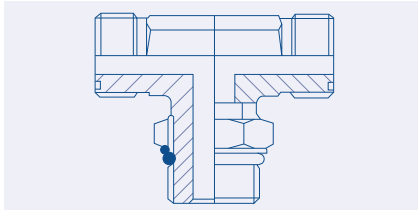
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**Orientable SAE - ORB  
Run Tee**

36.580.

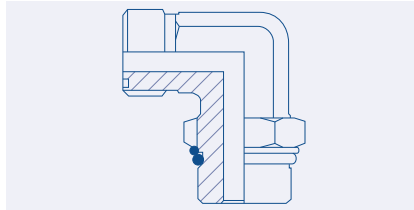
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**Orientable SAE-ORB  
Branch Tee**

36.585.

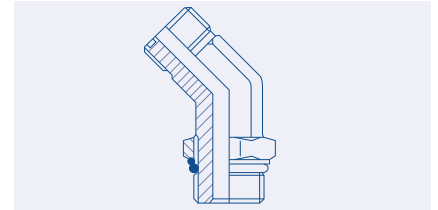
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**90° Elbow ORFS  
Male x SAE-ORB**

36.575.

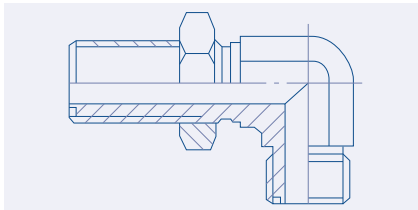
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**45° Elbow ORFS  
Male x SAE-ORB**

36.590.

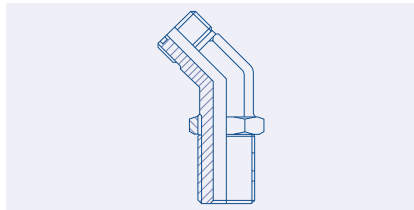
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**Bulkhead 90° Elbow Union**

36.650.

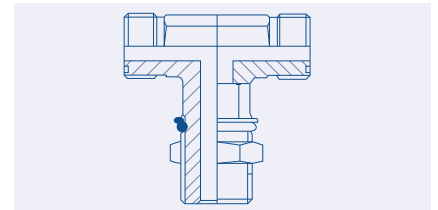
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**Bulkhead 45° Elbow Union**

36.510.

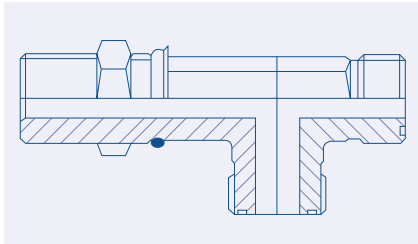
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**Bulkhead Branch Tee**

36.515.

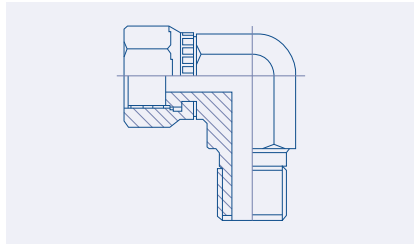
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**Bulkhead Run Tee**

36.520.

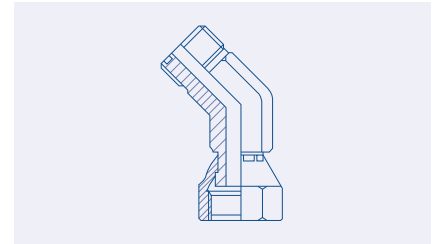
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**90° Swivel Connector ORFS  
M. x ORFS F.**

36.675.

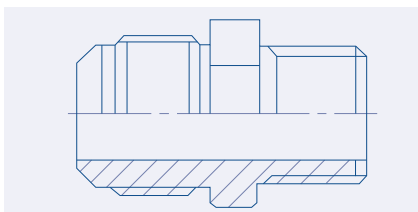
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**45° Swivel Connector  
ORFS M. x ORFS F.**

36.690.

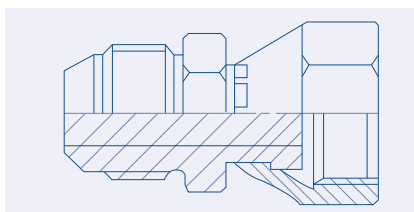
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**ORFS Male x JIC Male  
Connector**

36.280.

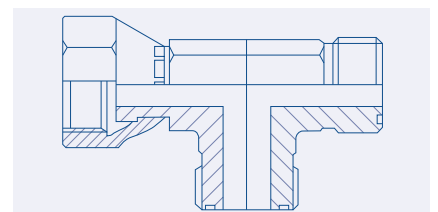
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**Swivel Connector ORFS  
Female x JIC Male**

36.281.

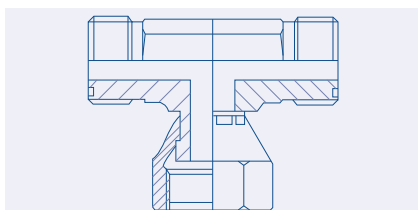
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**Swivel Connector Run Tee**

36.680.

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**Swivel Connector Branch Tee**

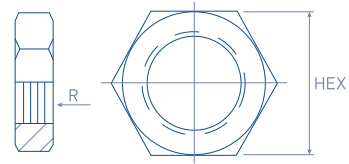
36.685.

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# Balfit® Bulkhead Locknut

36.017.

ISO 8434-3 / SAE J1453



REFERENCE	dimensions		dimensions	
	R		HEX	
36.017.04	9/16"	- 18	7	
36.017.06	11/16"	- 16	8	
36.017.08	13/16"	- 16	9	
36.017.10	1"	- 14	10,5	
36.017.12	1.3/16"	- 12	10,5	
36.017.16	1.7/16"	- 12	10,5	
36.017.20	1.11/16"	- 12	10,5	
36.017.24	2"	- 12	10,5	

**MATERIAL:** Carbon Steel 100R6

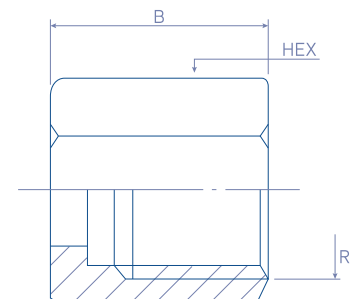
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
LOCKNUT (add an 'S' at the end of the part number; ex: 36.110.08S)

# Balfit® Tightening Nut

36.110.

ISO 8434-3 / SAE J1453



REFERENCE	tube		dimensions		
	mm	inch	R	B	HEX
36.110.04	6	1/4"	9/16" - 18	15	17
36.110.06	10	3/8"	11/16" - 16	17	22
36.110.08	12	1/2"	13/16" - 16	20	24
36.110.10	16	5/8"	1" - 14	24	30
36.110.12	20	3/4"	1.3/16" - 12	26.5	36
36.110.16	25	1"	1.7/16" - 12	27.5	41
36.110.20	32	1.1/4"	1.11/16" - 12	27.5	50
36.110.24	38	1.1/2"	2" - 12	27.5	60

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

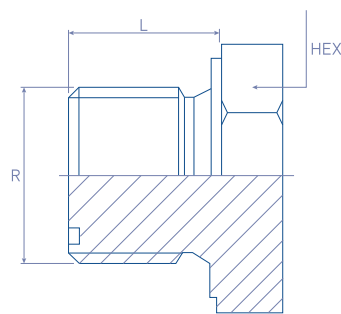
**VERSIONS:** BALFIT® STAINLESS STEEL  
TIGHTENING NUT (add an 'S' at the end of the part number; ex: 36.110.08S)



# Balfit® Plugs

36.141.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions	
	mm	inch	R	L	HEX
36.141.04		1/4"	9/16" - 18	10	17
36.141.06		3/8"	11/16" - 16	11	19
36.141.08		1/2"	13/16" - 16	13	22
36.141.10		5/8"	1" - 14	15.5	27
36.141.12		3/4"	1.3/16" - 12	17	32
36.141.16		1"	1.7/16" - 12	17.5	41
36.141.20		1.1/4"	1.11/16" - 12	17.5	46
36.141.24		1.1/2"	2" - 12	17.5	55

**MATERIAL:** Carbon Steel

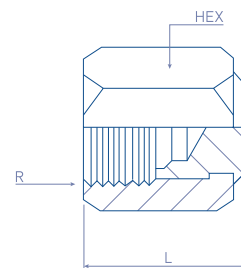
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL PLUGS (add an 'S' at the end of the part number; ex: 36.141.06S)

# Balfit® Cap

36.142.

ISO 8434-3 / SAE J1453



REFERENCE	thread	dimensions	
	R	L	HEX
36.142.04	9/16" - 18	16	17
36.142.06	11/16" - 16	18	22
36.142.08	13/16" - 16	22	24
36.142.10	1" - 14	24.5	30
36.142.12	1.3/16" - 12	27	36
36.142.16	1.7/16" - 12	28.5	41
36.142.20	1.11/16" - 12	28.5	50
36.142.24	2" - 12	28.5	60

**MATERIAL:** Carbon Steel

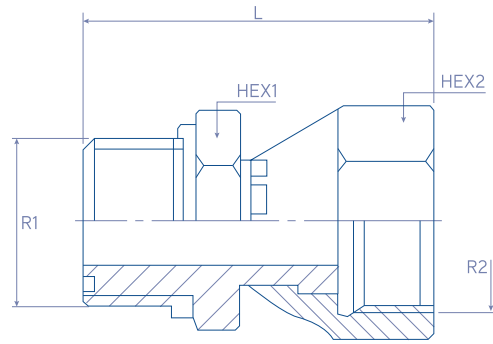
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL CAP (add an 'S' at the end of the part number; ex: 36.142.08S)

# Balfit® Swivel Connector ORFS Male x ORFS Female

36.180.

ISO 8434-3 / SAE J1453



REFERENCE	thread		dimensions		
	R1	R2	L	HEX1	HEX2
36.180.0404	9/16" - 18	9/16" - 18	33	17	19
36.180.0406	9/16" - 18	11/16" - 16	36	17	19
36.180.0604	11/16" - 16	9/16" - 18	34	19	19
36.180.0606	11/16" - 16	11/16" - 16	38	19	19
36.180.0608	11/16" - 16	13/16" - 16	41	22	22
36.180.0808	13/16" - 16	13/16" - 16	42	22	22
36.180.1008	1" - 14	13/16" - 16	46	27	22
36.180.1010	1" - 14	1" - 14	48	27	22
36.180.1208	1.3/16" - 12	13/16" - 16	50	27	22
36.180.1212	1.3/16" - 12	1.3/16" - 12	54	32	36
36.180.1616	1.7/16" - 12	1.7/16" - 12	57	41	41
36.180.2020	1.11/16" - 12	1.11/16" - 12	61	46	46
36.180.2424	2" - 12	2" - 12	66	50	50

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

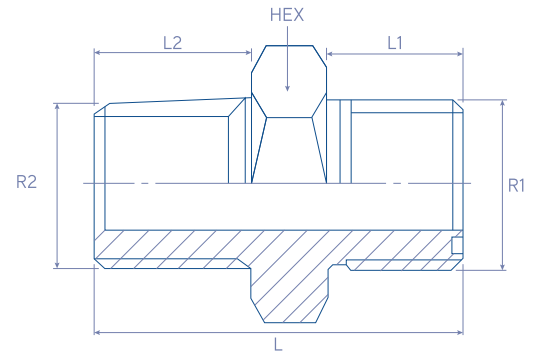
**VERSIONS:** BALFIT® STAINLESS STEEL SWIVEL CONNECTOR ORFS MALE x JIC FEMALE (add an 'S' at the end of the part number; ex: 36.180.0808S)



# Balfit® Male Connector (ORFS x NPT)

36.200.

ISO 8434-3 / SAE J1453 / SAE J476 / ANSI B1.20.3



REFERENCE	thread		dimensions			
	R1	R2	L	L1	L2	HEX
36.200.0402	9/16" - 18	1/8" - 27	27	10	9.7	17
36.200.0404	9/16" - 18	1/4" - 18	32	10	14.2	17
36.200.0406	9/16" - 18	3/8" - 18	33.5	10	14.2	19
36.200.0604	11/16" - 16	1/4" - 18	33	11	14.2	19
36.200.0606	11/16" - 16	3/8" - 18	34	11	14.2	19
36.200.0608	11/16" - 16	1/2" - 14	39.5	11	19	22
36.200.0806	13/16" - 16	3/8" - 18	37.5	13	14.2	22
36.200.0808	13/16" - 16	1/2" - 14	41.5	13	19	22
36.200.0812	13/16" - 16	3/4" - 14	43	13	19	27
36.200.1008	1" - 14	1/2" - 14	45.5	15.5	19	27
36.200.1012	1" - 14	3/4" - 14	45.5	15.5	19	27
36.200.1208	1.3/16" - 12	1/2" - 14	49	17	19	32
36.200.1212	1.3/16" - 12	3/4" - 14	49	17	19	32
36.200.1216	1.3/16" - 12	1" - 11 1/2"	54	17	23.9	36
36.200.1612	1.7/16" - 12	3/4" - 14	49.5	17.5	19	41
36.200.1616	1.7/16" - 12	1" - 11.1/2"	55.5	17.5	23.9	41
36.200.2020	1.11/16" - 12	1.1/4" - 11.1/2"	58	17.5	24.6	46
36.200.2424	1.7/8" - 12	1.1/2" - 11.1/2"	61	17.5	25.4	55

**MATERIAL:** Carbon Steel

**FINISH:** Carbon Steel

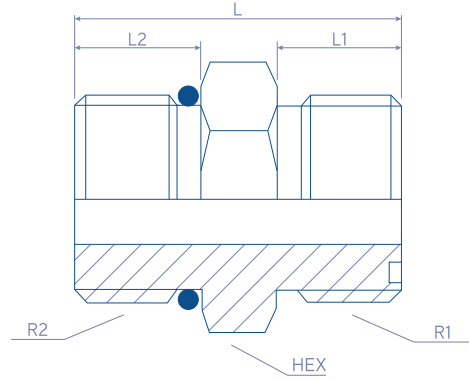
**VERSIONS:** BALFIT® STAINLESS STEEL  
MALE CONNECTOR (add an 'S' at the end of  
the part number; ex: 36.200.0806S)



# Balfit® ORFS x SAE-ORB Straight Male Connector

36.220.

ISO 8434-3 / SAE J1453 / ISO 11926-2 / SAE J1926-2



REFERENCE	tube		thread		dimensions			
	mm	inch	R1	R2	L	L1	L2	HEX
36.220.0404	6	1/4"	9/16" - 18	7/16" - 20	28.7	10.9	10	17
36.220.0406	6	1/4"	9/16" - 18	9/16" - 18	30.5	12	10	17
36.220.0606	10	3/8"	11/16" - 16	9/16" - 18	31.9	12	11	19
36.220.0608	10	3/8"	11/16" - 16	3/4" - 16	35	14	11	22
36.220.0808	12	1/2"	13/16" - 16	3/4" - 16	36.6	14	13	22
36.220.0810	12	1/2"	13/16" - 16	7/8" - 14	40.4	16	13	27
36.220.1008	14	5/8"	1" - 14	3/4" - 16	45	14	15.5	27
36.220.1010	15	5/8"	1" - 14	7/8" - 14	43	16	15.5	27
36.220.1012	16	5/8"	1" - 14	1.1/16" - 12	47	18.5	15.5	32
36.220.1210	20	3/4"	1.3/16" - 12	7/8" - 14	48.5	16	17	32
36.220.1212	20	3/4"	1.3/16" - 12	1.1/16" - 12	48.5	18.4	17	32
36.220.1216	20	3/4"	1.3/16" - 12	1.5/16" - 12	50	18.5	17	38
36.220.1612	25	1"	1.7/16" - 12	1.1/16" - 12	50.5	18.6	17.5	41
36.220.1616	25	1"	1.7/16" - 12	1.5/16" - 12	50.5	18.7	17.5	41
36.220.2020	32	1.1/4"	1.11/16" - 12	1.5/8" - 12	52	18.5	17.5	46
36.220.2424	38	1.1/2"	2" - 12	1.7/8" - 12	54	18.5	17.5	55

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

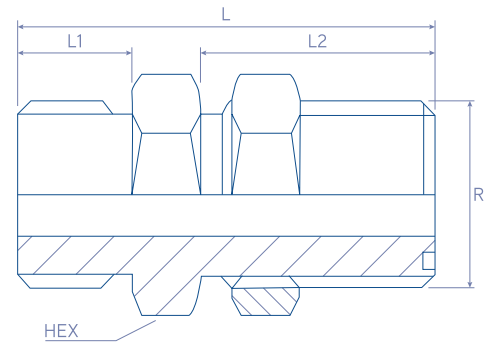
**VERSIONS:** BALFIT® STAINLESS STEEL  
STRAIGHT MALE CONNECTOR ORFS X  
SAE-ORB (add an 'S' at the end of the  
part number; ex: 36.220.0808S)



# Balfit® Straight Bulkhead Union ORFS Male

36.250.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions			
	mm	inch	R	L	L1	L2	HEX
36.250.0404	6	1/4"	<b>9/16" - 18</b>	48	10	31.5	22
36.250.0606	10	3/8"	<b>11/16" - 16</b>	53	11	34	27
36.250.0808	12	1/2"	<b>13/16" - 16</b>	58.5	13	36.5	30
36.250.1010	16	5/8"	<b>1" - 14</b>	66.5	15.5	40.5	36
36.250.1212	20	3/4"	<b>1.3/16" - 12</b>	69	17	41.5	41
36.250.1616	25	1"	<b>1.7/16" - 12</b>	70	17.5	42	46
36.250.2020	32	1.1/4"	<b>1.11/16" - 12</b>	70	17.5	42	50
36.250.2424	38	1.1/2"	<b>2" - 12</b>	70	17.5	42	60

**MATERIAL:** Carbon Steel

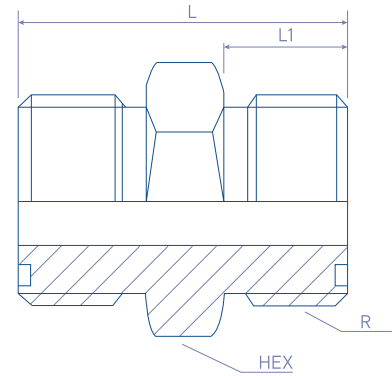
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
STRAIGHT BULKHEAD UNION ORFS MALE  
(add an 'S' at the end of the part number; ex:  
36.250.0808S)

# Balfit® Straight ORFS Male Union

36.260.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions		
	mm	inch	R	L	L1	HEX
36.260.0404	6	1/4"	<b>9/16" - 18</b>	27.5	10	17
36.260.0606	10	3/8"	<b>11/16" - 16</b>	31	11	19
36.260.0808	12	1/2"	<b>13/16" - 16</b>	35.5	13	22
36.260.1010	16	5/8"	<b>1" - 14</b>	42.5	15.5	27
36.260.1212	20	3/4"	<b>1.3/16" - 12</b>	47	17	32
36.260.1616	25	1"	<b>1.7/16" - 12</b>	49.5	17.5	41
36.260.2020	32	1.1/4"	<b>1.11/16" - 12</b>	51.5	17.5	46
36.260.2424	38	1.1/2"	<b>2" - 12</b>	53	17.5	55

**MATERIAL:** Carbon Steel

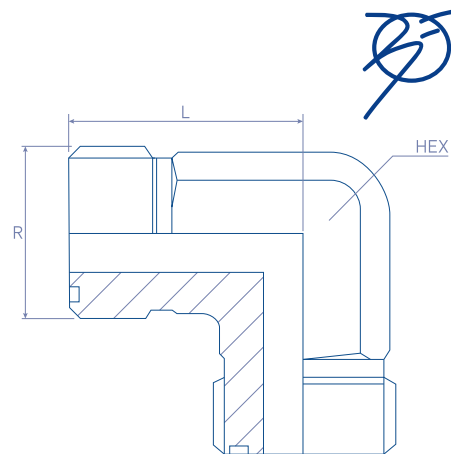
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
STRAIGHT ORFS MALE UNION  
(add an 'S' at the end of the part number;  
ex: 36.260.0808S)

# Balfit® 90° Elbow ORFS Male Union

36.500.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions	
	mm	inch	R	L	HEX
36.500.0404	6	1/4"	<b>9/16" - 18</b>	21.5	14
36.500.0606	10	3/8"	<b>11/16" - 16</b>	25	19
36.500.0808	12	1/2"	<b>13/16" - 16</b>	28	19
36.500.1010	15	5/8"	<b>1" - 14</b>	33.5	27
36.500.1212	20	3/4"	<b>1.3/16" - 12</b>	37.5	30
36.500.1616	25	1"	<b>1.7/16" - 12</b>	41.5	36
36.500.2020	32	1.1/4"	<b>1.11/16" - 12</b>	44.5	41
36.500.2424	38	1.1/2"	<b>2" - 12</b>	49	48

**MATERIAL:** Carbon Steel

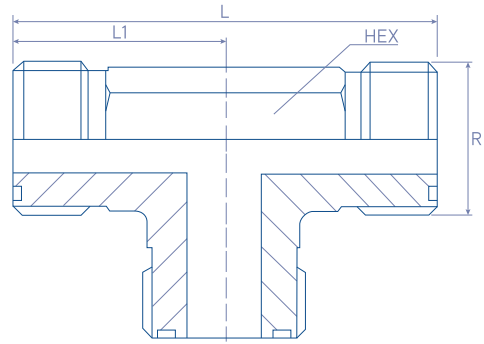
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL 90° ELBOW UNION (add an 'S' at the end of the part number; ex: 36.500.04S)

# Balfit® Union Tee ORFS Male

36.505.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions		
	mm	inch	R	L	L1	HEX
36.505.040404	6	1/4"	<b>9/16" - 18</b>	43	21.5	14
36.505.060606	10	3/8"	<b>11/16" - 16</b>	50	25	17
36.505.080808	12	1/2"	<b>13/16" - 16</b>	56	28	19
36.505.101010	15	5/8"	<b>1" - 14</b>	67	33.5	27
36.505.121212	20	3/4"	<b>1.3/16" - 12</b>	75	37.5	30
36.505.161616	25	1"	<b>1.7/16" - 12</b>	83	41.5	36
36.505.202020	32	1.1/4"	<b>1.11/16" - 12</b>	89	44.5	41
36.505.242424	38	1.1/2"	<b>2" - 12</b>	98	49	48

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

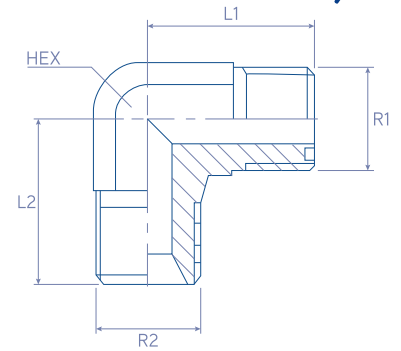
**VERSIONS:** BALFIT® STAINLESS STEEL  
UNION TEE (add an 'S' at the end of the part  
number; ex: 36.505.040404S)



# Balfit® 90° Elbow Male Connector (ORFS x NPT)

36.525.

ISO 8434-3 / SAE J1453 / SAE J476 / ANSI B1.20.3



REFERENCE	tube		thread		dimensions		
	mm	inch	R1	R2	L1	L2	HEX
36.525.0402	6	1/4"	9/16" - 18	1/8" - 27	21.5	22.8	14
36.525.0404	6	1/4"	9/16" - 18	1/4" - 18	21.5	27.7	14
36.525.0604	10	3/8"	11/16" - 16	1/4" - 18	25	27.7	19
36.525.0606	10	3/8"	11/16" - 16	3/8" - 18	25	31	19
36.525.0608	10	3/8"	11/16" - 16	1/2" - 14	29.5	37.3	22
36.525.0806	12	1/2"	13/16" - 16	3/8" - 18	28	35	19
36.525.0808	12	1/2"	13/16" - 16	1/2" - 14	28	37.3	22
36.525.0812	12	1/2"	13/16" - 16	3/4" - 14	33.5	40.4	27
36.525.1008	15	5/8"	1" - 14	1/2" - 14	33.5	40.4	27
36.525.1012	16	5/8"	1" - 14	3/4" - 14	36	40.4	27
36.525.1208	18	3/4"	1.3/16" - 12	1/2" - 14	37.5	40.4	30
36.525.1212	20	3/4"	1.3/16" - 12	3/4" - 14	37.5	40.4	30
36.525.1612	25	1"	1.7/16" - 12	3/4" - 14	41.5	45.5	36
36.525.1616	25	1"	1.7/16" - 12	1" - 11.1/2"	41.5	45.5	36
36.525.2020	32	1.1/4"	1.11/16" - 12	1.1/4" - 11.1/2"	44.5	60.5	41
36.525.2424	38	1.1/2"	2" - 12	1.1/2" - 11.1/2"	49	67.1	48

**MATERIAL:** Carbon Steel

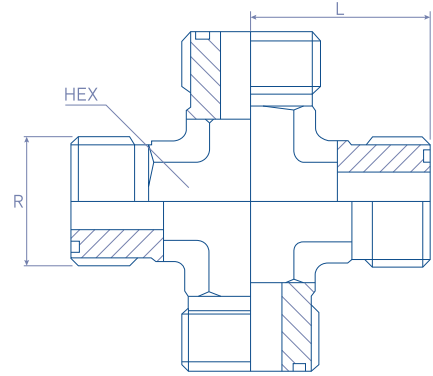
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL 90° ELBOW MALE CONNECTOR (ORFS x NPT) (add an 'S' at the end of the part number; ex: 36.525.0808S)

# Balfit® ORFS Union Cross

36.595.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions	
	mm	inch	R	L	HEX
36.595.04040404	6	1/4"	9/16" - 18	21,5	14
36.595.06060606	10	3/8"	11/16" - 16	25	19
36.595.08080808	12	1/2"	13/16" - 16	28	19
36.595.10101010	16	5/8"	1" - 14	33,5	27
36.595.12121212	20	3/4"	1.3/16" - 12	37,5	30
36.595.16161616	25	1"	1.7/16" - 12	41,5	36
36.595.20202020	32	1.1/4"	1.11/16" - 12	44,5	41
36.595.24242424	38	1.1/2"	2" - 12	49	48

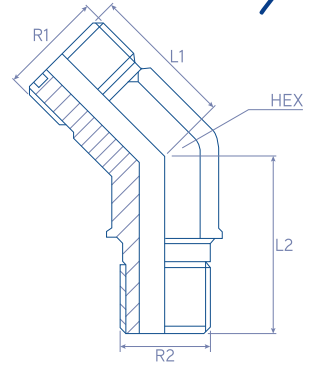
**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
ORFS UNION CROSS (add an 'S' at the end of  
the part number; ex: 36.595.08080808S)



# Balfit® 45° Elbow Male Connector (ORFS x NPT)



36.540.

ISO 8434-3 / SAE J1453 / SAE J476 / ANSI B1.20.3

REFERENCE	tube		thread		dimensions		
	mm	inch	R1	R2	L1	L2	HEX
36.540.0402	6	1/4"	9/16" - 18	1/8" - 27	16	18	14
36.540.0404	6	1/4"	9/16" - 18	1/4" - 18	16	22	14
36.540.0604	10	3/8"	11/16" - 16	1/4" - 18	19	24	19
36.540.0606	10	3/8"	11/16" - 16	3/8" - 18	19	24	19
36.540.0608	10	3/8"	11/16" - 16	1/2" - 14	19	24	22
36.540.0806	12	1/2"	13/16" - 16	3/8" - 18	20.5	24	19
36.540.0808	12	1/2"	13/16" - 16	1/2" - 14	23	30	22
36.540.1008	15	5/8"	1" - 14	1/2" - 14	24	31	27
36.540.1012	16	5/8"	1" - 14	3/4" - 14	25	31	27
36.540.1212	20	3/4"	1.3/16" - 12	3/4" - 14	26	31	30
36.540.1616	25	1"	1.7/16" - 12	1" - 11.1/2"	30	38	36
36.540.2020	32	1.1/4"	1.11/16" - 12	1.1/4" - 11.1/2"	32	42	41
36.540.2424	38	1.1/2"	2" - 12	1.1/2" - 11.1/2"	37	45	48

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

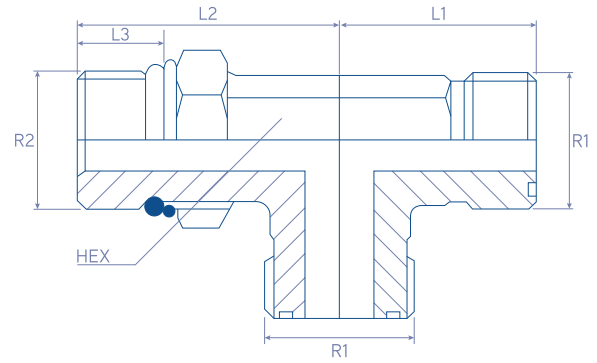
**VERSIONS:** BALFIT® STAINLESS STEEL 45° ELBOW CONNECTOR (add an 'S' at the end of the part number; ex: 36.540.0806S)



# Balfit® Orientable SAE-ORB Run Tee

36.580.

ISO 8434-3 / SAE J1453 / ISO 11926-2 / SAE J1926-2



REFERENCE	tube		thread		dimensions				
	mm	inch	R1	R2	L1	L2	L3	HEX1	HEX2
36.580.040404	6	1/4"	9/16" - 18	7/16" - 20	31.8	21.5	9	14	14
36.580.060606	10	3/8"	11/16" - 16	9/16" - 18	36	25	10	19	17
36.580.080808	12	1/2"	13/16" - 16	3/4" - 16	36.8	28	11	19	22
36.580.101010	15	5/8"	1" - 14	7/8" - 14	48	33.5	13	27	27
36.580.121212	20	3/4"	1.3/16" - 12	1.1/16" - 12	51	37.5	15	30	32
36.580.161616	25	1"	1.7/16" - 12	1.5/16" - 12	57	41.5	15	36	38
36.580.202020	32	1.1/4"	1.11/16" - 12	1.5/6" - 12	62	44.5	15	41	50
36.580.242424	38	1.1/2"	2" - 12	1.7/6" - 12	65	49	15	48	55

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

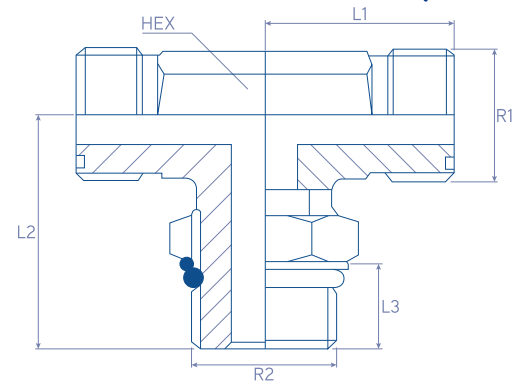
**VERSIONS:** BALFIT® STAINLESS STEEL  
ORIENTABLE SAE-ORB RUN TEE  
(add an 'S' at the end of the part number;  
ex: 36.580.080808S)



# Balfit® Orientable SAE-ORB Branch Tee

36.585.

ISO 8434-3 / SAE J1453 / ISO 11926-2 / SAE J1926-2



REFERENCE	tube		thread		dimensions				
	mm	inch	R1	R2	L1	L2	L3	HEX1	HEX2
36.585.040404	6	1/4"	9/16" - 18	7/16" - 20	21.5	31.8	9	14	14
36.585.060606	10	3/8"	11/16" - 16	9/16" - 18	25	36	10	19	17
36.585.080808	12	1/2"	13/16" - 16	3/4" - 16	28	36.8	11	19	22
36.585.101010	15	5/8"	1" - 14	7/8" - 14	33.5	48	13	27	27
36.585.121212	20	3/4"	1.3/16" - 12	1.1/16" - 12	37.5	51	15	30	32
36.585.161616	25	1"	1.7/16" - 12	1.5/16" - 12	41.5	57	15	36	38
36.585.202020	32	1.1/4"	1.11/16" - 12	1.1/16" - 12	44.5	62	15	41	50
36.585.242424	38	1.1/2"	2" - 12	1.5/16" - 12	49	65	15	48	55

**MATERIAL:** Carbon Steel

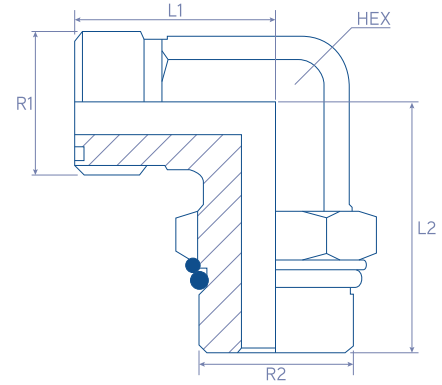
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
ORIENTABLE SAE-ORB BRANCH TEE  
(add an 'S' at the end of the part number;  
ex: 36.585.080808S)

# Balfit® 90° Elbow ORFS Male x SAE-ORB

36.575.

ISO 8434-3 / SAE J1453 / ISO 11926-2 / SAE J1926-2



REFERENCE	tube		thread		dimensions		
	mm	inch	R1	R2	L1	L2	HEX
36.575.0404	6	1/4"	9/16" - 18	7/16" - 20	21.5	32.5	14
36.575.0606	10	3/8"	11/16" - 16	9/16" - 18	25	36.8	19
36.575.0808	12	1/2"	13/16" - 16	3/4" - 16	28	36.8	19
36.575.1010	15	5/8"	1" - 14	7/8" - 14	33.5	45.2	27
36.575.1212	20	3/4"	1.3/16" - 12	1.1/16" - 12	37.5	49.3	30
36.575.1616	25	1"	1.7/16" - 12	1.5/16" - 12	41.5	57	36
36.575.2020	32	1.1/4"	1.11/16" - 12	1.5/8" - 12	44.5	60	41
36.575.2424	38	1.1/2"	2" - 12	1.7/8" - 12	49	65	48

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

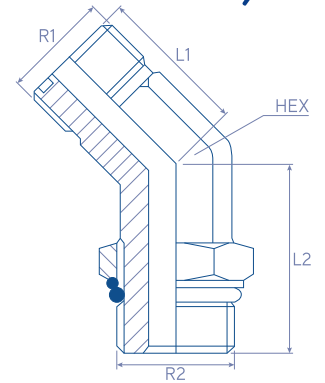
**VERSIONS:** BALFIT® STAINLESS STEEL 90°  
ELBOW ORFS MALE X SAE-ORB  
(add an 'S' at the end of the part number;  
ex: 36.575.0808S)



# Balfit® 45° Elbow ORFS Male x SAE-ORB

36.590.

ISO 8434-3 / SAE J1453 / ISO 11926-2 / SAE J1926-2



REFERENCE	tube		thread		dimensions		
	mm	inch	R1	R2	L1	L2	HEX
36.590.0404	6	1/4"	9/16" - 18	7/16" - 20	16	26	14
36.590.0606	10	3/8"	11/16" - 16	9/16" - 18	19	29	19
36.590.0808	12	1/2"	13/16" - 16	3/4" - 16	20.5	33	19
36.590.1010	15	5/8"	1" - 14	7/8" - 14	23.5	40	27
36.590.1212	20	3/4"	1.3/16" - 12	1.1/16" - 12	26	43.9	30
36.590.1616	25	1"	1.7/16" - 12	1.5/16" - 12	30	47.5	36
36.590.2020	32	1.1/4"	1.11/16" - 12	1.5/8" - 12	32	48.5	41
36.590.2424	38	1.1/2"	2" - 12	1.7/8" - 12	37	50	48

**MATERIAL:** Carbon Steel

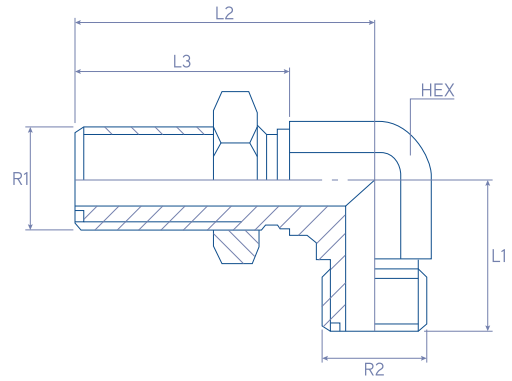
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL 45°  
ELBOW ORFS MALE x SAE-ORB  
(add an 'S' at the end of the part number;  
ex: 36.590.0808S)

# Balfit® Bulkhead 90° Elbow Union

36.650.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions			
	mm	inch	R1	L1	L2	L3	HEX
36.650.0404	6	1/4"	<b>9/16" - 18</b>	22.5	47	31.5	14
36.650.0606	10	3/8"	<b>11/16" - 16</b>	26	52	34	19
36.650.0808	12	1/2"	<b>13/16" - 16</b>	29	55.5	36.5	19
36.650.1010	15	5/8"	<b>1" - 14</b>	34.5	63	40.5	27
36.650.1212	20	3/4"	<b>1.3/16" - 12</b>	38.5	67	41.5	30
36.650.1616	25	1"	<b>1.7/16" - 12</b>	42.5	71	42	36
36.650.2020	32	1.1/4"	<b>1.11/16" - 12</b>	45.5	75.5	42	41
36.650.2424	38	1.1/2"	<b>2" - 12</b>	49.5	79.5	42	48

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

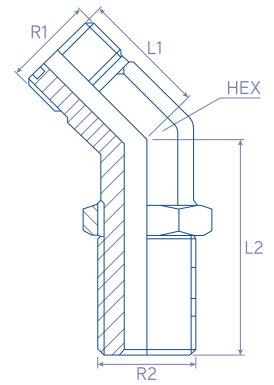
**VERSIONS:** BALFIT® STAINLESS STEEL  
BULKHEAD 90° ELBOW UNION  
(add an 'S' at the end of the part number;  
ex: 36.650.0808S)



# Balfit® Bulkhead 45° Elbow Union

36.510.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions		
	mm	inch	R1	L1	L2	HEX
36.510.0404	6	1/4"	9/16" - 18	16	44	14
36.510.0606	10	3/8"	11/16" - 16	19	48,5	19
36.510.0808	12	1/2"	13/16" - 16	20,5	51	19
36.510.1010	15	5/8"	1" - 14	23,5	56,5	27
36.510.1212	20	3/4"	1.3/16" - 12	26	60,5	30
36.510.1616	25	1"	1.7/16" - 12	30	65	36
36.510.2020	32	1.1/4"	1.11/16" - 12	32	67	41
36.510.2424	38	1.1/2"	2" - 12	37	67	48

**MATERIAL:** Carbon Steel

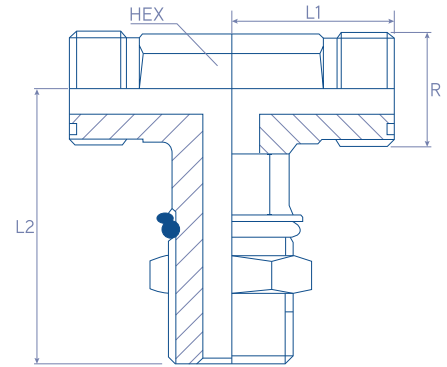
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
BULKHEAD 45° ELBOW UNION  
(add an 'S' at the end of the part number;  
ex: 36.510.0808S)

# Balfit® Bulkhead Branch Tee

36.515.

ISO 8434-3 / SAE J1453 / ISO 11926-2 / SAE J1926-2



REFERENCE	tube		thread	dimensions		
	mm	inch	R	L1	L2	HEX
36.515.040404	6	1/4"	9/16" - 18	22.5	47	14
36.515.060606	10	3/8"	11/16" - 16	26	52	19
36.515.080808	12	1/2"	13/16" - 16	29	55.5	19
36.515.101010	15	5/8"	1" - 14	34.5	63	27
36.515.121212	20	3/4"	1.3/16" - 12	38.5	67	30
36.515.161616	25	1"	1.7/16" - 12	42.5	71	36
36.515.202020	32	1.1/4"	1.11/16" - 12	45.5	75.5	41
36.515.242424	38	1.1/2"	2" - 12	49.5	79.5	48

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

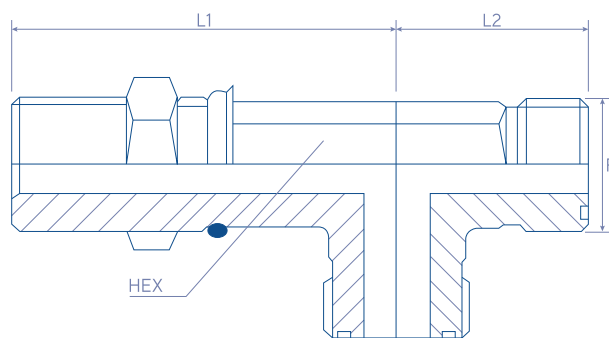
**VERSIONS:** BALFIT® STAINLESS STEEL  
BULKHEAD BRANCH TEE  
(add an 'S' at the end of the part number;  
ex: 36.515.080808S)



# Balfit® Bulkhead Run Tee

36.520.

ISO 8434-3 / SAE J1453 / ISO 11926-2 / SAE J1926-2



REFERENCE	tube		thread	dimensions		
	mm	inch	R	L1	L2	HEX
36.520.040404	6	1/4"	9/16" - 18	47	22.5	14
36.520.060606	10	3/8"	11/16" - 16	52	26	19
36.520.080808	12	1/2"	13/16" - 16	55.5	29	19
36.520.101010	15	5/8"	1" - 14	63	34.5	27
36.520.121212	20	3/4"	1.3/16" - 12	67	38.5	30
36.520.161616	25	1"	1.7/16" - 12	71	42.5	36
36.520.202020	32	1.1/4"	1.11/16" - 12	75.5	45.5	41
36.520.242424	38	1.1/2"	2" - 12	79.5	49.5	48

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

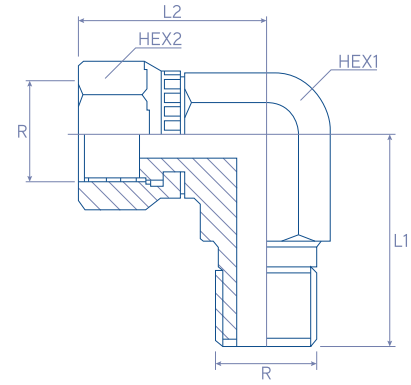
**VERSIONS:** BALFIT® STAINLESS STEEL  
BULKHEAD RUN TEE (add an 'S' at the end of  
the part number; ex:36.520.080808S)



# Balfit® 90° Swivel Connector ORFS M. x ORFS F.

36.675.

ISO 8434-3 / SAE J1453



REFERENCE	thread		dimensions			
	R1	R2	L1	L2	HEX1	HEX2
36.675.0404	9/16" - 18	9/16" - 18	21,5	26,5	14	19
36.675.0606	11/16" - 16	11/16" - 16	25	29	19	22
36.675.0808	13/16" - 16	13/16" - 16	28	38	19	24
36.675.1010	1" - 14	1" - 14	33,5	41	27	30
36.675.1212	1.3/16" - 12	1.3/16" - 12	37,5	46,5	30	36
36.675.1616	1.7/16" - 12	1.7/16" - 12	41,5	53,5	36	41
36.675.2020	1.11/16" - 12	1.11/16" - 12	44,5	58	41	50
36.675.2424	2" - 12	2" - 12	49	61	48	60

**MATERIAL:** Carbon Steel

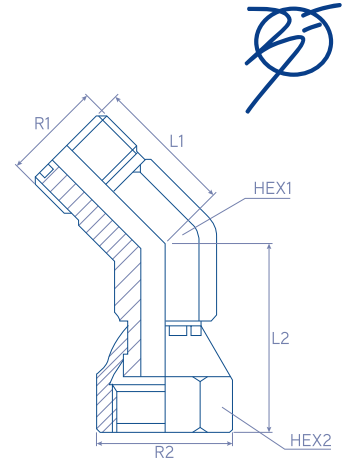
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
SWIVEL CONNECTOR ORFS MALE  
x ORFS FEMALE (add an 'S' at the end  
of the part number; ex: 36.675.0808S)

# Balfit® 45° Swivel Connector ORFS M. x ORFS F.

36.690.

ISO 8434-3 / SAE J1453



REFERENCE	thread		dimensions			
	R1	R2	L1	L2	HEX1	HEX2
36.690.0404	9/16" - 18	9/16" - 18	16	24.5	14	19
36.690.0606	11/16" - 16	11/16" - 16	19	26	19	22
36.690.0808	13/16" - 16	13/16" - 16	20.5	29	19	24
36.690.1010	1" - 14	1" - 14	23.5	33	27	30
36.690.1212	1.3/16" - 12	1.3/16" - 12	26	35.5	30	36
36.690.1616	1.7/16" - 12	1.7/16" - 12	30	41	36	41
36.690.2020	1.11/16" - 12	1.11/16" - 12	32	45.5	41	50
36.690.2424	2" - 12	2" - 12	37	51	48	60

**MATERIAL:** Carbon Steel

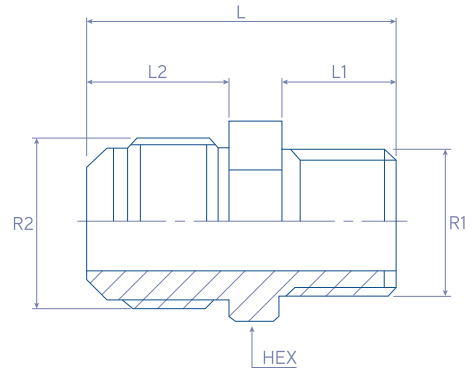
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
SWIVEL CONNECTOR ORFS MALE  
x ORFS FEMALE (add an 'S' at the end  
of the part number; ex: 36.690.0808S)

# Balfit® ORFS Male x JIC Male Connector

36.280.

ISO 8434-3 / SAE J1453 / ISO 8434-2



REFERENCE	thread		dimensions			
	R1	R2	L	L1	L2	HEX
36.280.0404	9/16" - 18	7/16" - 20	32	10	14	17
36.280.0606	11/16" - 16	9/16" - 18	34	11	14,1	19
36.280.0808	13/16" - 16	3/4" - 16	39,5	13	16,7	22
36.280.1010	1" - 14	7/8" - 14	46,5	15,5	19,3	27
36.280.1212	1.3/16" - 12	1.1/16" - 12	52	17	21,9	32
36.280.1616	1.7/16" - 12	1.5/16" - 12	55	17,5	23,1	41
36.280.2020	1.11/16" - 12	1.5/8" - 12	58	17,5	24,3	46
36.280.2424	2" - 12	1.7/8" - 12	63	17,5	27,5	55

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

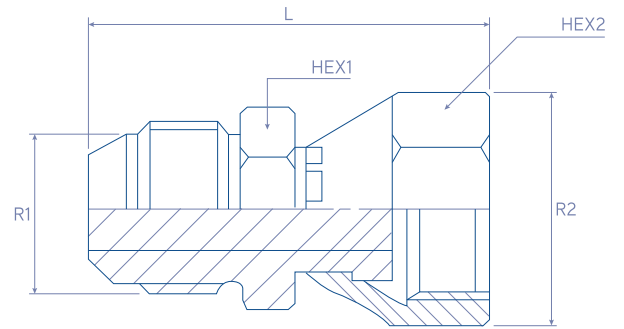
**VERSIONS:** BALFIT® STAINLESS STEEL  
SWIVEL CONNECTOR ORFS MALE  
x JIC MALE (add an 'S' at the end of the part  
number; ex: 36.280.0808S)



# Balfit® Swivel Connector ORFS Female x JIC Male

36.281.

ISO 8434-3 / SAE J1453 / ISO 8434-2



REFERENCE	thread		dimensions		
	R1	R2	L	HEX1	HEX2
36.281.0404	7/16" - 20	9/16" - 18	36	14	18
36.281.0606	9/16" - 18	11/16" - 16	38	19	22
36.281.0808	3/4" - 16	13/16" - 16	46.2	22	26
36.281.1010	7/8" - 14	1" - 14	52	26	30
36.281.1212	1.1/16" - 12	1.3/16" - 12	57.4	32	36
36.281.1616	1.5/16" - 12	1.7/16" - 12	62	38	42
36.281.2020	1.5/8" - 12	1.11/16" - 12	63	50	50
36.281.2424	1.7/8" - 12	2" - 12	68	55	60

**MATERIAL:** Carbon Steel

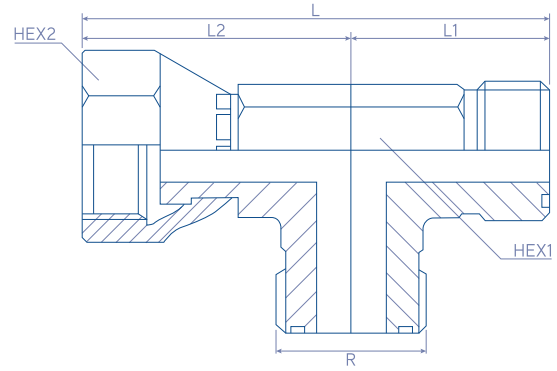
**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
STEEL SWIVEL CONNECTOR ORFS MALE x  
JIC FEMALE (add an "S" at the end  
of the part number; ex: 36.281.0808S)

# Balfit® Swivel Connector Run Tee

36.680.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions					
	mm	inch	R	L	L1	L2	HEX1	HEX2	
36.680.040404	6	1/4"	<b>9/16" - 18</b>	48	26.5	21.5	14	19	
36.680.060606	10	3/8"	<b>11/16" - 16</b>	54	29	25	19	22	
36.680.080808	12	1/2"	<b>13/16" - 16</b>	66	38	28	19	24	
36.680.101010	15	5/8"	<b>1" - 14</b>	74.5	41	33.5	27	30	
36.680.121212	20	3/4"	<b>1.3/16" - 12</b>	84	46.5	37.5	30	36	
36.680.161616	25	1"	<b>1.7/16" - 12</b>	95	53.5	41.5	36	41	
36.680.202020	32	1.1/4"	<b>1.11/16" - 12</b>	102.5	58	44.5	41	50	
36.680.242424	38	1.1/2"	<b>2" - 12</b>	110	61	49	48	60	

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

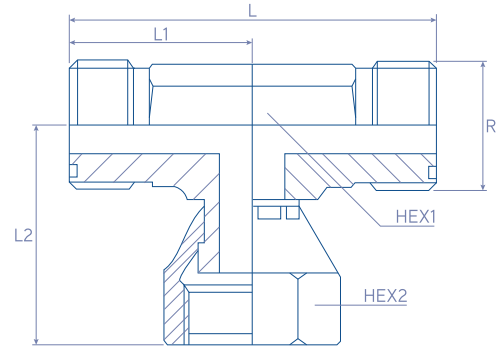
**VERSIONS:** BALFIT® STAINLESS STEEL  
SWIVEL ORFS RUN TEE  
(add an 'S' at the end of the part number;  
ex: 36.680.080808S)



# Balfit® Swivel Connector Branch Tee

36.685.

ISO 8434-3 / SAE J1453



REFERENCE	tube		thread	dimensions				
	mm	inch	R	L	L1	L2	HEX1	HEX2
36.685.040404	6	1/4"	9/16" - 18	43	21,5	26,5	14	19
36.685.060606	10	3/8"	11/16" - 16	50	25	29	19	22
36.685.080808	12	1/2"	13/16" - 16	56	28	38	19	24
36.685.101010	15	5/8"	1" - 14	67	33,5	41	27	30
36.685.121212	20	3/4"	1.3/16" - 12	75	37,5	46,5	30	36
36.685.161616	25	1"	1.7/16" - 12	83	41,5	53,5	36	41
36.685.202020	32	1.1/4"	1.11/16" - 12	89	44,5	58	41	50
36.685.242424	38	1.1/2"	2" - 12	98	49	61	48	60

**MATERIAL:** Carbon Steel

**FINISH:** Zinc-plated

**VERSIONS:** BALFIT® STAINLESS STEEL  
SWIVEL ORFS BRANCH TEE  
(add an 'S' at the end of the part number;  
ex: 36.685.080808S)

## **PRODUCTS LIMITED WARRANTY**

The products sold by Balflex® are warranted to our customers to be free from defects in material and workmanship when shipment at Balflex® warehouses takes place.

All warranty claims shall be made present in writing to Balflex®. Balflex® liability hereunder is limited to the purchase price of the merchandise proving to be defective or, at balflex sole discretion, to the replacement of such merchandise upon its authorized return to Balflex®.

This warranty is in lieu of and excludes all other warranties, or conditions expressed, implied, statutory or otherwise created under applicable law including, but not limited to the warranty of merchantability and the warranty of fitness for a particular purpose.

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