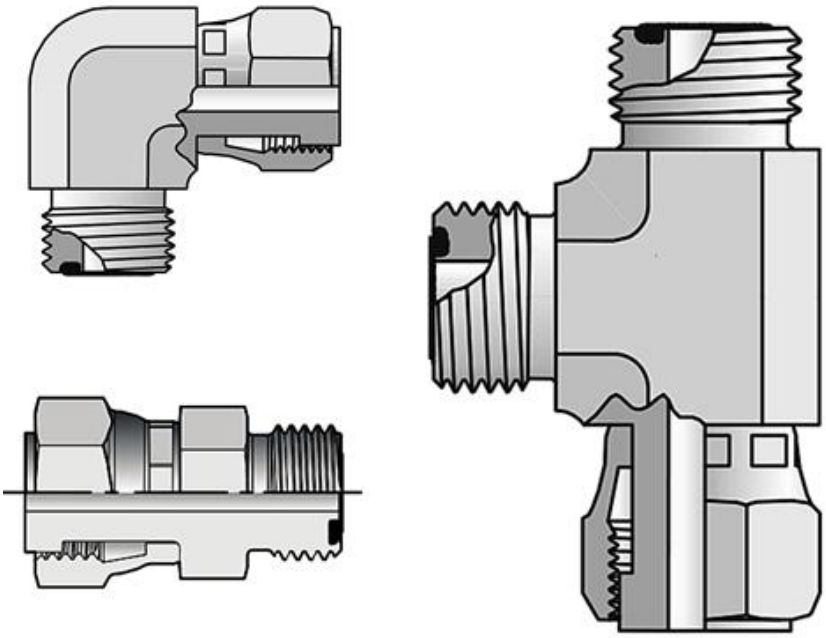
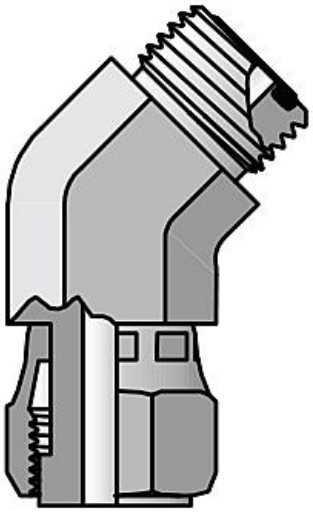
ORFS Swivel Fittings/ORFS Swivel Connector





Industry Standard:

SAE J1453 / ISO 8434-3

Design And Shape Type:

Straight Male ORFS to ORFS Female Swivel, ORFS Female Swivel Union

Elbow SAE 052M0221 ISO 8434-3 SWE

45 degree Elbow ORFS Female Swivel

Branch Tee ORFS Female Swivel SA52M0433 ISO 8434-3 SWBT

Run Tee ORFS Female Swivel SAE 52M0432 ISO 8434-3 SWRT

Straight ISO 6149 Metric Stud /ISO 11926 UNF Stud/ ISO 1179 BSPP ED stud/ISO 9974 Metric ED Stud to ORFS Female Swivel l

Material:

Carbon Steel/Stainless Steel

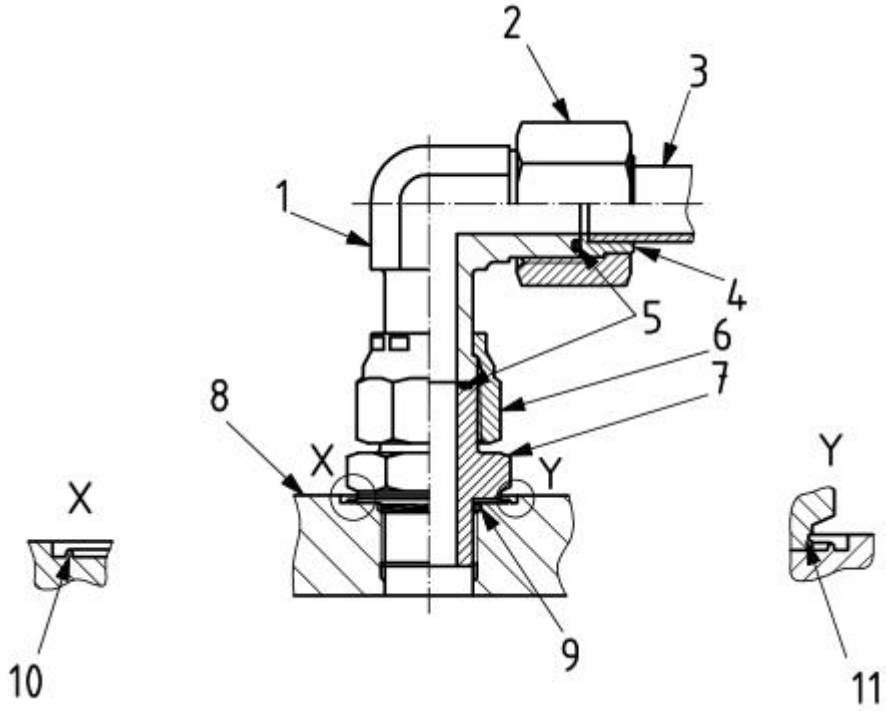
Finish:

Zinc Plated/Zn-Ni Alloy Plated

FITSCH

Introduction Of ORFS Swivel Fittings

ORFS swivel connector is designed with ORFS insert end and female swivel nut, method of attachment of swivel nut is at the option of the manufacturer such as crimped and thrust-wire. It meet the strict requirement of SAE J1453 and ISO 8434-3 standards. Female ORFS swivel fittings is often use for connecting the male stud straight fitting to hydraulic hose assembly or tubing, function of two parts together is the same as adjustable elbow locknut fittings. Assembly of ORFS swivel fittings(Key: 1 swivel elbow 2 tube nut 3 straight tube 4 sleeve 5 O-ring 6 swivel nut 7 straight stud 8 ISO 6149 port 9 O-ring 10 optional metric port identification 11 identification for metric stud end).



Overview Types Of ORFS Swivel Fittings Catalogue

ORFS female swivel nut to tube or stud connector is made of these shapes, from hex bar or forging body as follows:

Straight Male ORFS to ORFS Female Swivel, ORFS Female Swivel Union

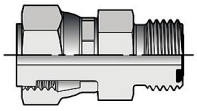
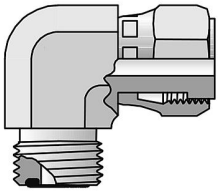
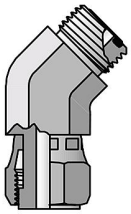
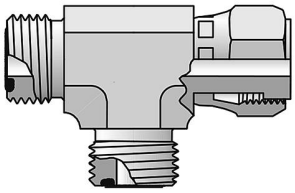
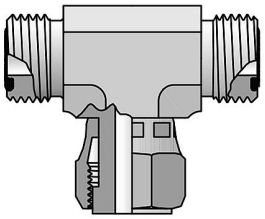
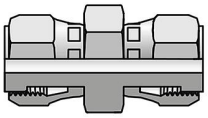
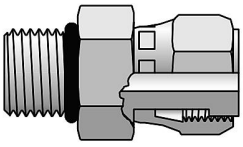
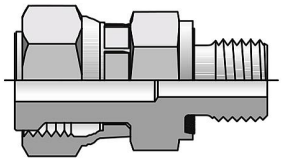
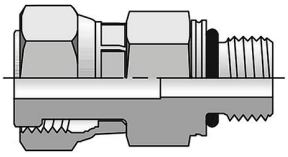
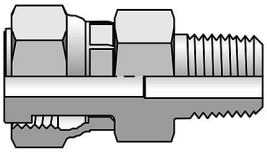
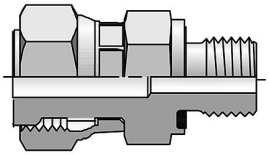
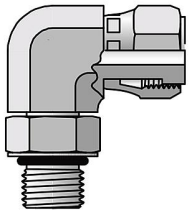
Elbow SAE 052M0221 ISO 8434-3 SWE

45 degree Elbow ORFS Female Swivel

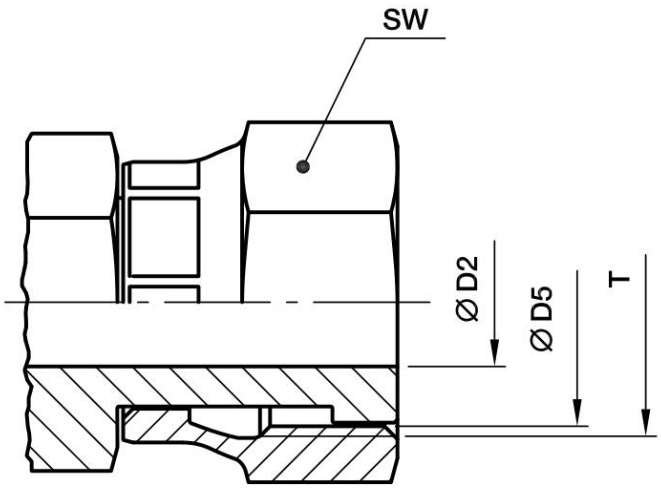
Branch Tee ORFS Female Swivel SA52M0433 ISO 8434-3 SWBT

Run Tee ORFS Female Swivel SAE 52M0432 ISO 8434-3 SWRT

Straight ISO 6149 Metric Stud /ISO 11926 UNF Stud/ ISO 1179 BSPP ED stud/ISO 9974 Metric ED Stud to ORFS Female Swivel

2F LOHL6 Straight 	2F9 C6MLO Elbow 	2F4 V6LO 45 Elbow 
CF R6LO Run Tee 	BF S6LO Branch Tee 	3F HL6 Straight Union 
F65OL SAE ORB 	2BF F642EDML BSPP-ED 	F687OML Metric ISO 6149 
F6L 2NF 	F682EDML Metric-ED Stud 	AOEL6 SAE-ORB 

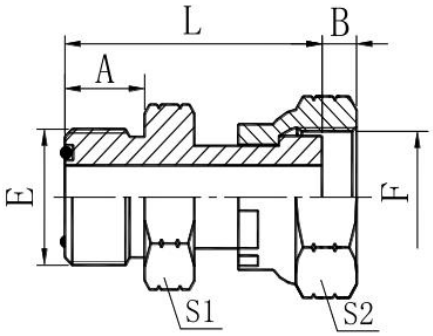
Dimensions of ORFS Swivel Fittings from ISO 8434-3 SAE J1453



Size	Tube O.D.		T UN/UNF	Ø D5 Thread core diameter mm	SW mm	Ø D2 mm
	inch	mm				
4	1/4	6	9/16-18	12.5	17	4
6	5/16, 3/8	8, 10	11/16-16	16	22	6.5
8	1/2	12	13/16-16	19	24	9
10	5/8	14, 15, 16	1-14	23	30	11.5
12	3/4	18, 20	1 3/16-12	28	36	14
16	7/8, 1	22, 25	1 7/16-12	34	41	20
20	1 1/4	28, 30, 32	1 11/16-12	40.5	50	26
24	1 1/2	35, 38	2-12	48	60	32

2F LOHL6 ORFS Female Swivel Fittings Straight

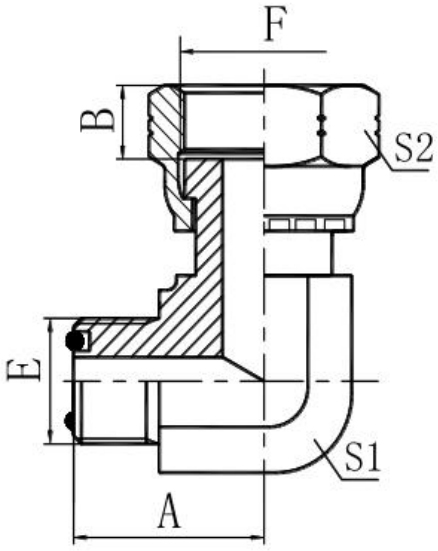
ORFS Female Swivel Straight Connectors REF: ISO 8434-3 / SAE J1453



PART NO.	THREAD		O O-RING	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2F-04	9/16"X18	9/16"X18	O011	10	8.5	33	17	17
2F-04-06	9/16"X18	11/16"X16	O011	10	10	34.5	17	22
2F-04-08	9/16"X18	13/16"X16	O011	10	11	36.5	19	27
2F-06-04	11/16"X16	9/16"X18	O012	11.2	8.5	35.5	19	17
2F-06	11/16"X16	11/16"X16	O012	11.2	10	38.5	19	22
2F-06-08	11/16"X16	13/16"X16	O012	11.2	11	37.7	19	27
2F-06-10	11/16"X16	1"X14	O012	11.2	13	43.7	24	30
2F-08-06	13/16"X16	11/16"X16	O014	13	10	41	22	22
2F-08	13/16"X16	13/16"X16	O014	13	11	43	22	27
2F-08-10	13/16"X16	1"X14	O014	13	13	45.5	24	30
2F-08-12	13/16"X16	1.3/16"X12	O014	13	15	49	30	36
2F-10-08	1"X14	13/16"X16	O016	15.5	11	47.5	27	27
2F-10	1"X14	1"X14	O016	15.5	13.5	51.5	27	30
2F-10-12	1"X14	1.3/16"X12	O016	15.5	15	51.5	30	36
2F-10-16	1"X14	1.7/16"X12	O016	15.5	15	56	36	41
2F-12-08	1.3/16"X12	13/16"X16	O018	17	11	50.5	32	27
2F-12-10	1.3/16"X12	1"X14	O018	17	13.5	54.5	32	30
2F-12	1.3/16"X12	1.3/16"X12	O018	17	15	56	32	36
2F-12-16	1.3/16"X12	1.7/16"X12	O018	17	15	58	36	41
2F-16-12	1.7/16"X12	1.3/16"X12	O021	17.5	15	58	38	36
2F-16	1.7/16"X12	1.7/16"X12	O021	17.5	15	60	38	41
2F-16-20	1.7/16"X12	1.11/16"X12	O021	17.5	15	58	41	50
2F-20-16	1.11/16"X12	1.7/16"X12	O025	17.5	15	58.5	46	41
2F-20	1.11/16"X12	1.11/16"X12	O025	17.5	15	62	46	50
2F-20-24	1.11/16"X12	2"X12	O025	17.5	15	65.5	50	60
2F-24-20	2"X12	1.11/16"X12	O029	17.5	15	64	55	50
2F-24	2"X12	2"X12	O029	17.5	15	64	55	60

2F9 C6MLO ORFS Female Swivel Fittings Elbow

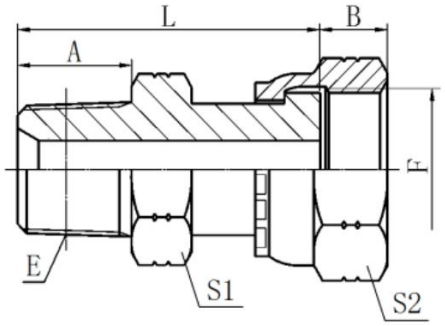
ORFS Female Swivel Elbow Connectors REF: ISO 8434-3 SWE/ SAE J1453 SAE 52M0221



PART NO.	THREAD		O O-RING	DIMENSIONS				
	E	F	E	A	B	S1	S2	
2F9-04	9/16X18	9/16X18	O011	23	8.5	14	17	
2F9-04-06	9/16X18	11/16"X16	O011	23	10	14	22	
2F9-06-04	11/16"X16	9/16X18	O012	27.5	8.5	19	17	
2F9-06	11/16"X16	11/16"X16	O012	27.5	10	19	22	
2F9-06-08	11/16"X16	13/16"X16	O012	27	11	19	27	
2F9-08-06	13/16"X16	11/16"X16	O014	31.5	10	22	22	
2F9-08	13/16"X16	13/16"X16	O014	31	11	22	27	
2F9-10-08	1"X14	13/16"X16	O016	36.5	11	27	27	
2F9-10	1"X14	1"X14	O016	36.5	13	27	30	
2F9-10-12	1"X14	1.3/16"X12	O016	36	15	27	36	
2F9-12	1.3/16"X12	1.3/16"X12	O018	41	15	30	36	
2F9-12-16	1.3/16"X12	1.7/16"X12	O018	42.5	15	33	41	
2F9-16-12	1.7/16"X12	1.3/16"X12	O021	44.5	15	36	36	
2F9-16	1.7/16"X12	1.7/16"X12	O021	44.5	15	36	41	
2F9-20	1.11/16"X12	1.11/16"X12	O025	44.5	15	41	50	
2F9-24	2"X12	2"X12	O029	53.5	15	50	60	

2NF F6L ORFS Female Swivel Fittings NPTF Stud Straight

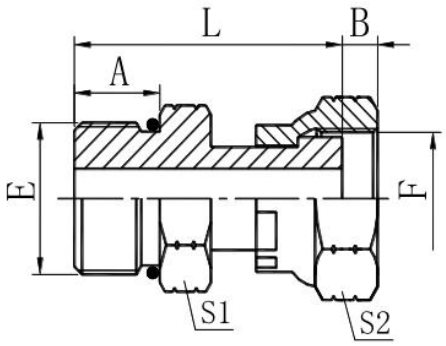
ORFS Female Swivel Straight NPTF Connectors REF: ISO 8434-3 / SAE J1453



PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2NF-02-04	1/8"X27	9/16"X18	10.5	8.5	32	14	17
2NF-04	1/4"X18	9/16"X18	15	8.5	36.5	17	17
2NF-04-06	1/4"X18	11/16"X16	15	10	40.3	17	22
2NF-06	3/8"X18	11/16"X16	16	10	40.5	19	22
2NF-06-08	3/8"X18	13/16"X16	16	11	42.5	19	27
2NF-08	1/2"X14	13/16"X16	19.5	11	48	22	27
2NF-08-10	1/2"X14	1"X14	19.5	13	52	24	30
2NF-12	3/4"X14	1.3/16"X12	19.5	15	55.5	30	36
2NF-12-16	3/4"X14	1.7/16"X12	19.5	15	58.5	36	41
2NF-16	1"X11.5	1.7/16"X12	25.5	15	64.5	36	41
2NF-16-20	1"X11.5	1.11/16"X12	25.5	15	70	41	50
2NF-20	1.1/4"X11.5	1.11/16"X12	26.5	15	70	46	50
2NF-24	1.1/2"X11.5	2"X12	27.5	15	74	50	60

2OF F65OL ORFS Female Swivel Fittings SAE ORB Stud Straight

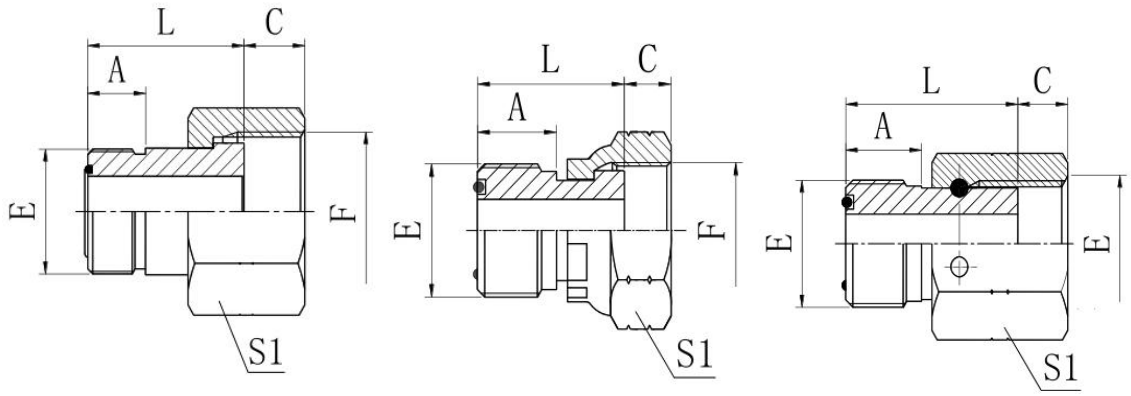
ORFS Female Swivel Straight SAE ORB Connectors REF: ISO 8434-3 / SAE J1453 SAE 520181



PART NO.	THREAD		O O-RING	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2OF-04	7/16"X20	9/16"X18	O904	11	8.5	32.5	17	17
2OF-04-06	7/16"X20	11/16"X16	O904	11	10	35.5	17	22
2OF-06-04	9/16"X18	9/16"X18	O906	12	8.5	33.5	17	17
2OF-06	9/16"X18	11/16"X16	O906	12	10	36.5	19	22
2OF-06-08	9/16"X18	13/16"X16	O906	12	11	38.5	19	27
2OF-08-06	3/4"X16	11/16"X16	O908	14	10	40.5	22	22
2OF-08	3/4"X16	13/16"X16	O908	14	11	42.5	22	27
2OF-10-08	7/8"X14	13/16"X16	O910	16	11	46.5	27	27
2OF-10	7/8"X14	1"X14	O910	16	13	50.5	27	30
2OF-12-10	1.1/16"X12	1"X14	O912	18.5	13	54	32	30
2OF-12	1.1/16"X12	1.3/16"X12	O912	18.5	15	56	32	36
2OF-16-12	1.5/16"X12	1.3/16"X12	O916	18.5	15	55.5	38	36
2OF-16	1.5/16"X12	1.7/16"X12	O916	18.5	15	57.5	38	41
2OF-20-16	1.5/8"X12	1.7/16"X12	O920	18.5	15	61.5	50	41
2OF-20	1.5/8"X12	1.11/16"X12	O920	18.5	15	65	50	50
2OF-24	2"X12	1.7/8"X12	O924	18.5	16	65	55	60

5F TRMLO ORFS Female Swivel Fittings Straight

ORFS Female Swivel Straight tube reducer Connectors REF: ISO 8434-3 / SAE J1453 SAE 520123/A

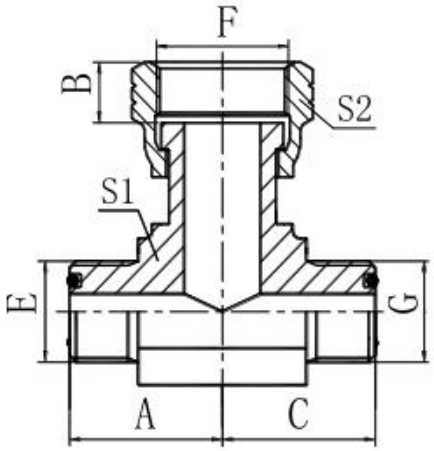


PART NO.	THREAD		O O-RING	DIMENSIONS			
	E	F	E	A	C	L	S1
5F-04S	9/16"X18	9/16"X18	O011	10	8.5	18.5	17
5F-04-06S	9/16"X18	11/16"X16	O011	10	10	19.6	22
5F-04-08S	9/16"X18	13/16"X16	O011	10	11	21.5	24
5F-04-10S	9/16"X18	1"X14	O011	10	13	23	30
5F-04-12S	9/16"X18	1.3/16"X12	O011	10	15	24	41
5F-04-16S	9/16"X18	1.7/16"X12	O011	10	15	25	36
5F-04-20S	9/16"X18	1.11/16"X12	O011	10	15	25	50
5F-06S	11/16"X16	11/16"X16	O012	11.2	10	22.2	22
5F-06-04S	11/16"X16	9/16"X18	O012	11.2	8.5	20	17
5F-06-08S	11/16"X16	13/16"X16	O012	11.2	11	22.4	27
5F-06-10S	11/16"X16	1"X14	O012	11	13	24.5	30
5F-06-12S	11/16"X16	1.3/16"X12	O012	11.2	15	25	36
5F-06-16S	11/16"X16	1.7/16"X12	O012	11	15	27	41
5F-06-20S	11/16"X16	1.11/16"X12	O012	11.2	15	26.5	50
5F-08S	13/16"X16	13/16"X16	O014	13	11	24	27
5F-08-04S	13/16"X16	9/16"X18	O014	13	8.5	22	17
5F-08-06S	13/16"X16	11/16"X16	O014	13	10	24	22
5F-08-10S	13/16"X16	1"X14	O014	13	13	25.7	30
5F-08-12S	13/16"X16	1.3/16"X12	O014	13	15	27.7	36
5F-08-16S	13/16"X16	1.7/16"X12	O014	13	15	29.2	41
5F-08-20S	13/16"X16	1.11/16"X12	O014	12.8	15	29.2	50
5F-10S	1"X14	1"X14	O016	15.5	13	28	30
5F-10-06S	1"X14	11/16"X16	O016	15.5	10	26.5	22
5F-10-08S	1"X14	13/16"X16	O016	15.5	11	26.5	27
5F-10-12S	1"X14	1.3/16"X12	O016	15.5	15	29.5	36
5F-10-16S	1"X14	1.7/16"X12	O016	15.5	15	30.5	41
5F-10-20S	1"X14	1.11/16"X12	O016	15.5	15	31	50
5F-12S	1.3/16"X12	1.3/16"X12	O018	17	15	30	36

5F-12-06S	1.3/16"X12	11/16"X16	O018	17	10	28	22
5F-12-08S	1.3/16"X12	13/16"X16	O018	17	11	28	27
5F-12-10S	1.3/16"X12	1"X14	O018	17	13	29.5	30
5F-12-16S	1.3/16"X12	1.7/16"X12	O018	17	15	31	41
5F-12-20S	1.3/16"X12	1.11/16"X12	O018	17	15	32.5	50
5F-12-24S	1.3/16"X12	2"X12	O018	17	15	33.5	60
5F-16S	1.7/16"X12	1.7/16"X12	O021	17.5	15	31.5	41
5F-16-04S	1.7/16"X12	9/16"X18	O021	17.5	8.5	27	17
5F-16-06S	1.7/16"X12	11/16"X16	O021	17.5	10	28.5	22
5F-16-08S	1.7/16"X12	13/16"X16	O021	17.5	11	28.5	27
5F-16-10S	1.7/16"X12	1"X14	O021	17.5	13	30	30
5F-16-12S	1.7/16"X12	1.3/16"X12	O021	17.5	15	30.5	36
5F-16-20S	1.7/16"X12	1.11/16"X12	O021	17.5	15	34.5	50
5F-16-24S	1.7/16"X12	2"X12	O021	17.5	15	34	60
5F-20S	1.11/16"X12	1.11/16"X12	O025	17.5	15	35	50
5F-20-12S	1.11/16"X12	1.3/16"X12	O025	17.5	15	30.5	36
5F-20-16S	1.11/16"X12	1.7/16"X12	O025	17.5	15	31.5	41
5F-20-24S	1.11/16"X12	2"X12	O025	17.5	15	34	60
5F-24S	2"X12	1.11/16"X12	O029	17.5	15	36.5	60
5F-24-20S	2"X12	1.11/16"X12	O029	17.5	15	36	50

BF S6MLO ORFS Female Swivel Fittings Branch Tee

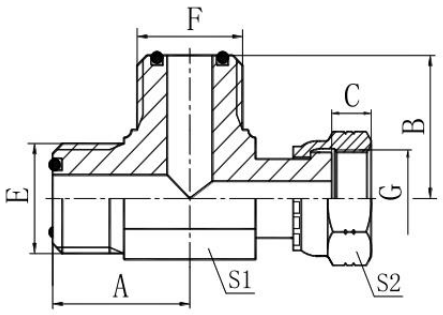
ORFS Female Swivel Branch Tee Connectors REF: ISO 8434-3 SWBT / SAE J1453 SAE 52M0433



PART NO.	THREAD		G	E	G	A	B	C	S1	S2
	E	F								
BF-04Z	9/16"X18	9/16"X18	9/16"X18	7.65X1.78	7.65X1.78	23	8.5	23	14	17
BF-06Z	11/16"X16	11/16"X16	11/16"X16	9.25X1.78	9.25X1.78	27.5	10	27	19	22
BF-08Z	13/16"X16	13/16"X16	13/16"X16	12.42X1.78	12.42X1.78	31	11	31	22	27
BF-10Z	1"X14	1"X14	1"X14	15.6X1.78	15.6X1.78	36.5	13.5	36.5	27	30
BF-12Z	1.3/16"X12	1.3/16"X12	1.3/16"X12	18.77X1.78	18.77X1.78	42	15	42	33	36
BF-16Z	1.7/16"X12	1.7/16"X12	1.7/16"X12	23.52X1.78	23.52X1.78	41.5	15	41.5	36	41
BF-20Z	1.11/16"X12	1.11/16"X12	1.11/16"X12	29.87X1.78	29.87X1.78	47.5	15	47.5	41	50
BF-24Z	2"X12	2"X12	2"X12	37.82X1.78	37.82X1.78	53.5	15	53.5	50	60

CF R6MLO ORFS Female Swivel Fittings Run Tee

ORFS Female Swivel Run Tee Connectors REF: ISO 8434-3 SWRT/ SAE J1453 SAE 52M0432



PART NO.	E	F	G	A	B	C	S1	S2
CF-04	9/16"X18	9/16"X18	9/16"X18	23	23	8.2	14	17
CF-06	11/16"X16	11/16"X16	11/16"X16	27.9	27.9	9	19	22
CF-08	13/16"X16	13/16"X16	13/16"X16	31	31	11	22	27
CF-10	1"X14	1"X14	1"X14	36.5	36.5	13.5	27	30
CF-12	1.3/16"X12	1.3/16"X12	1.3/16"X12	37.5	37.5	15	30	36
CF-16	1.7/16"X12	1.7/16"X12	1.7/16"X12	41.5	41.5	15	36	41
CF-20	1.11/16"X12	1.11/16"X12	1.11/16"X12	47.5	47.5	15	41	50
CF-24	2"X12	2"X12	2"X12	53.5	53.5	15	50	60