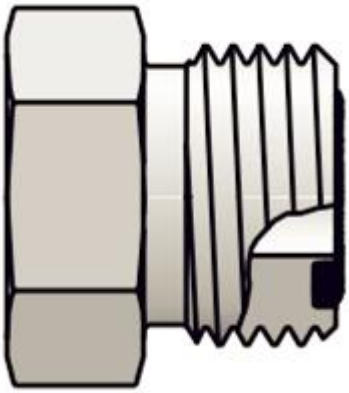
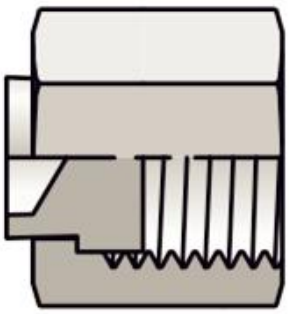
ORFS Plug and Caps



ORFS 37 Degree Flare Cap 	**ORFS UNF Plug and Caps Type:** Male ORFS Tube End Plug SAE 520109 Female ORFS Female Swivel Cap End SAE 520112 Dimensions of ORFS Cap and Plug Catalog of ORFS Cap and Plug

ORFS UNF Plug and Caps Introduction

All ORFS Plugs is designed with ISO 263 UNF thread and flat face tube end, it is used to match with female ORFS swivel nut end of hydraulic hose assembly. ORFS caps is designed with female UNF thread and ORFS plug insert, two types of ORFS caps. ORFS plug and cap sizes meet ISO 8434-3 and SAE J1453 standards.

Dimensions Of ORFS Plug SAE 520109

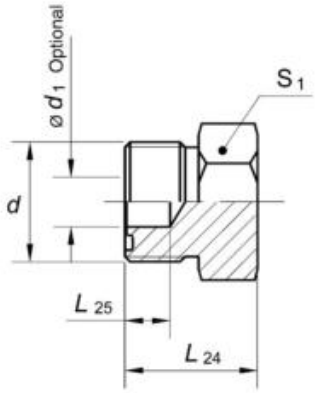


FIGURE 39 - PLUG
(520109)
REFER TO TABLE 20

NOTE: For dimensions not shown see SAE J1453-1.

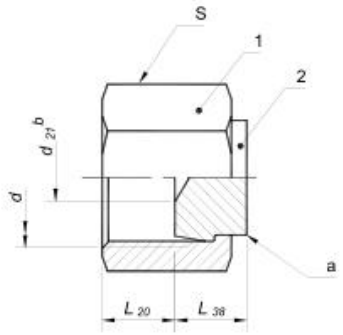
TABLE 20 - DIMENSIONS OF PLUG

Dimensions in millimeters (mm)

Ordering Size Code	Inch Tube[1] OD Dash Size	Inch Tube OD	Metric Tube OD	d[2] Thread	d_1 ref.	L_{24} ±0.8	L_{25} max	S_1 Hex
4	– 4	6.35	6	9/16-18	4.5	16.5	7.1	15.88
5	– 5	7.94	8	5/8-18	5.5	16.5	7.1	17.46
6	– 6	9.52	10	11/16-16	6.5	19	8.2	19.05
8	– 8	12.7	12	13/16-16	9.5	22	9.8	22.23
10	–10	15.88	16	1-14	12.5	26	12.2	26.99
12	–12	19.05	20	1-3/16-12	15.5	27.5	13.2	31.75
14	–14	22.23	22	1-5/16-12	18	28	13.2	34.93
16	–16	25.40	25	1-7/16-12	20.5	28	13.7	38.10
20	–20	31.75	30	1-11/16-12	26	28	13.7	44.45
24	–24	38.10	38	2-12	32	28	13.7	53.98

1. The dash size symbol applicable to all tube ends and straight thread O-ring boss ends shall consist of the number of sixteenth inch increments contained in the outside diameter of the tubing (nominal) OD or inside diameter of the hose (nominal hose ID). For example: –4 = 4/16 = 0.25 = 6.35 mm inch tube size or hose, or corresponding port.
2. See SAE J1453-1 Screw Thread Specifications.

Dimensions Of ORFS Cap SAE 520112



1. 520110A Nut
2. Cap Insert

NOTE: For dimensions not shown, see SAE J1453-1.

a. Stake insert must be free to turn.
b. Optional drill point permitted.

FIGURE 40 - CAP ASSEMBLY
(520112)
REFER TO TABLE 21

TABLE 21 - DIMENSIONS OF CAP ASSEMBLY

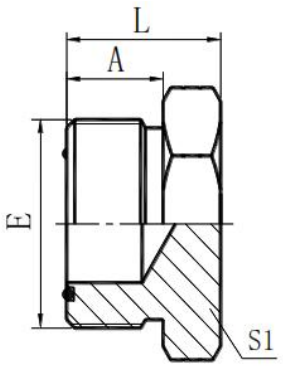
Dimensions in millimeters (mm)

Ordering Size Code	Inch[1] Tube OD Dash Size	Inch Tube OD	Metric Tube OD	d Thread	d_{21} max.	L_{20} ref.	L_{38} ±0.8	S Hex
4	– 4	6.35	6	9/16-18	4.5	7.8	9	17.46
5	– 5	7.94	8	5/8-18	5.5	7.8	10	19.05
6	– 6	9.52	10	11/16-16	6.5	8.3	10.5	20.64
8	– 8	12.7	12	13/16-16	9.5	10	12	23.81
10	–10	15.88	16	1-14	12.5	12.5	13.5	28.58
12	–12	19.05	20	1-3/16-12	15.5	13.5	15	34.93
14	–14	22.23	22	1-5/16-12	18	13.5	15	38.10
16	–16	25.40	25	1-7/16-12	20.5	13.5	16	41.28
20	–20	31.75	30	1-11/16-12	26	13.5	16	47.63
24	–24	38.10	38	2-12	32	13.5	16	57.15

1. The dash size symbol applicable to all tube ends and straight thread O-ring boss ends shall consist of the number of sixteenth inch increments contained in the outside diameter of the tubing (nominal) OD or inside diameter of the hose (nominal hose ID). For example: –4 = 4/16 = 0.25 = 6.35 mm inch tube size or hose, or corresponding port.

4F PNMLO Male UNF Plug with ORFS tube ends

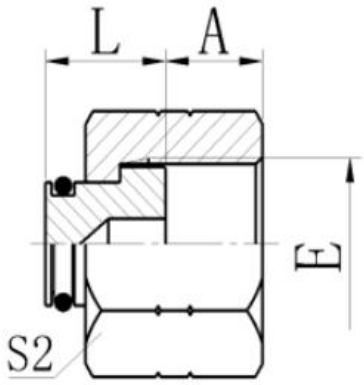
ISO 8434-3 SAE J1453 SAE 520109



PART NO.	THREAD	O-RING	DIMENSIONS		
	E	E	A	L	S1
4F-04Z	9/16"X18	O011	10	16.5	17
4F-06Z	11/16"X16	O012	11	19	19
4F-08Z	13/16"X16	O014	13	22	22
4F-10Z	1"X14	O016	15.5	26	27
4F-12Z	1.3/16"X12	O018	17	27.5	32
4F-16Z	1.7/16"X12	O021	17.5	28	41
4F-20Z	1.11/16"X12	O025	17.5	28	46
4F-24Z	2"X12	O029	17.5	28	55

9F FNML Male UNF Cap with ORFS Female Swivel

ISO 8434-3 SAE J1453 SAE 520112



PART NO.	THREAD	DIMENSIONS		
	E	A	L	S2
9F-04GMZ	9/16"X18	8.5	10.5	19
9F-06GMZ	11/16"X16	10	13	22
9F-08GMZ	13/16"X16	11	14	27
9F-10GMZ	1"X14	13	16	30
9F-12GMZ	1.3/16"X12	15	15	36
9F-16GMZ	1.7/16"X12	15	18	41
9F-20GMZ	1.11/16"X12	15	19	50
9F-24GMZ	2"X12	15	21	60