

O-Rings for Hydraulic Tube Fittings

1. SCOPE

1.1 This standard specifies the general characteristics, applications, and preferred part numbers of O-Rings to be used on hydraulic tube fittings.

1.2 This standard covers O-Rings that are used on SAE Straight Thread hydraulic tube fittings (SAE J514) and SAE O-Rings Face Seal fittings (SAE J1453).

2. RELATED SPECIFICATIONS

2.1 RELATED STANDARDS

86557314 (FNHA-1-D-147.00)—O-Rings—90 Durometer Nitrile
 SAE J514—Hydraulic Tube Fittings
 SAE J515—Hydraulic O-Rings
 SAE J1453—Fitting O-Ring Face Seal
 SAE J200—Classification System for Rubber Materials for Automotive Application
 ASTM D 2000—Rubber Products in Automotive Application

2.2 This standard replaces the following company standards:

New Holland	2-10-3
Versatile	1-C-303

3. GENERAL SERVICE

High pressure applications of pneumatics, water base hydraulic fluids, lubricating oil, hydraulic oils and gasoline.

4. REQUIREMENTS

4.1 TEMPERATURE RANGE

-35 to +120 °C (-30 to +250 °F)

4.2 SHORE HARDNESS

90 pts +/- 5 pts

4.3 ELONGATION

100% Min

4.4 TENSILE STRENGTH

10.3 MPa min (1500 psi min)

4.5 COMPOUND

Buna N to ASTM D 2000 or SAE J200
 4CH915B14EO15E035

4.6 LUBRICATION

O-rings should be coated with fluid used or petrolatum before assembly to ease installation.

4.7 MECHANICAL DIMENSIONS

The general dimensions shall meet the requirements of Tables 1 and 2 per SAE J515.

4.8 SHELF LIFE

Shelf life for nitrile O-rings is four years if stored under proper conditions.

ALL	J	BJF	118965	16JUL02	NAME	STD ORING HYDRA - FTNG		
ALL	H	BJF	116097	31MAY01				
ALL	G	BJF	115468	19JAN01	 NEW HOLLAND THE INFORMATION HEREON IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF NEW HOLLAND N. V. AND/OR ITS SUBSIDIARIES. ANY USE, EXCEPT THAT FOR WHICH IT MAY BE LOANED, IS PROHIBITED.	ENGINEERING SPECIFICATION		
ALL	F	BJF	115335	20NOV00		FRAME 1	OF 3	
ALL	E	BJF	111131	12/97		PART NUMBER		
ALL	D	RLF	110244	8/97				
ALL	C	RE	108326	11/96				
FRAME NO.	REV	BY	ECN NO.	DATE				
APP. KHH 12/95	DRAWN	JPC	11/95					
	CHECKED							

Figure 1

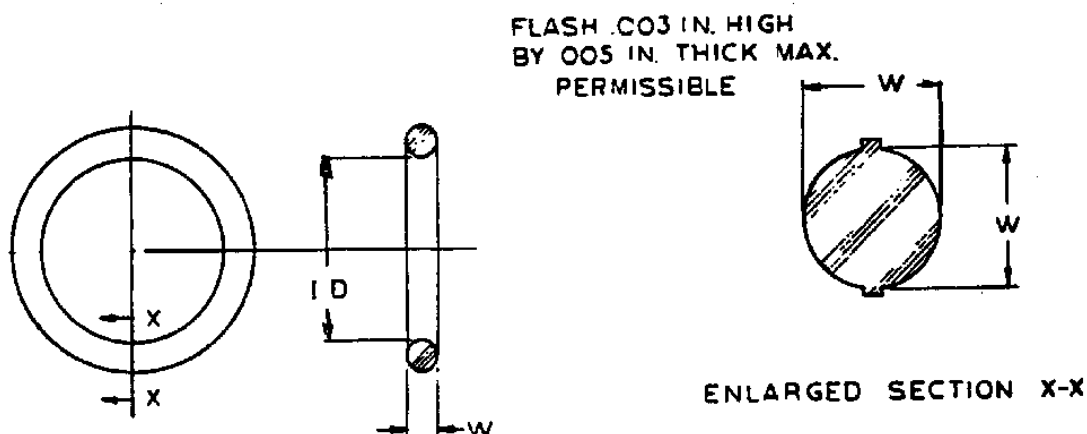


Table 1: O-Rings for Use with SAE STRAIGHT THREAD Fittings (SAE J514)

Tube Dash Size	Thread Size UN / UNF - 2A	SAE Size Number, O-Ring	O-Ring I.D. Nominal	W = O-Ring Width Nominal	O-Ring Part Number
-02	5/16 - 24	2-1	0.239 ± 0.005	0.064 ± 0.003	86010510
-03	3/8 - 24	3-1	0.301 ± 0.005	0.064 ± 0.003	86513328
-04	7/16 - 20	4-1	0.351 ± 0.005	0.072 ± 0.003	165202
-05	1/2 - 20	5-1	0.414 ± 0.005	0.072 ± 0.003	129270
-06	9/16 - 18	6-1	0.468 ± 0.005	0.078 ± 0.003	9617873
-08	3/4 - 16	8-1	0.644 ± 0.005	0.087 ± 0.003	128825
-10	7/8 - 14	10-1	0.755 ± 0.005	0.097 ± 0.003	167269
-12	1/16 - 12	12-1	0.924 ± 0.006	0.116 ± 0.004	167266
-14	1 3/16 - 12	14-1	1.048 ± 0.006	0.116 ± 0.004	9626929
-16	1 5/16 - 12	16-1	1.171 ± 0.006	0.116 ± 0.004	167268
-20	1 5/8 - 12	20-1	1.475 ± 0.010	0.118 ± 0.004	570186
-24	1 7/8 - 12	24-1	1.720 ± 0.010	0.118 ± 0.004	9626930
-32	2 1/2 - 12	32-1	2.337 ± 0.010	0.118 ± 0.004	9846875



NAME

STD ORING HYDRA - FTNG

ENGINEERING SPECIFICATION

REV.
JFRAME
2OF
3

PART NUMBER

86523752



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