

JIS

JAPANESE INDUSTRIAL STANDARD

Classification and Dimensions of
of Screwed Type Couplings for Fire-Hose

JIS B 9912-1970
(Reaffirmed: 1984)

Translation without guarantee
In the event of any doubt arising, the original
standard in Japanese is to be evidence

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JAPANESE INDUSTRIAL STANDARD

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Classification and Dimensions of Screwed
Type Couplings for Fire-HoseB 9912-1970
(Reaffirmed:1984)1. Scope

This Japanese Industrial Standard specifies the classification and dimensions of screwed type couplings ⁽¹⁾ for fire-hose, hereinafter referred to as the "couplings".

Note ⁽¹⁾ The couplings are those which connect a suction pipe, suction opening, hose, discharge opening, nozzle, hydrant, and the like to each other with screw threads.

2. Classification

The couplings shall be classified into Type 1 and Type 2 according to their construction and into 40, 50, 65, 75, 90, 100, 115, 125, 140 and 150 according to their nominal sizes.

3. Names of Parts

The names of parts of the couplings shall be as given in the following Figure.

Reference Standards:

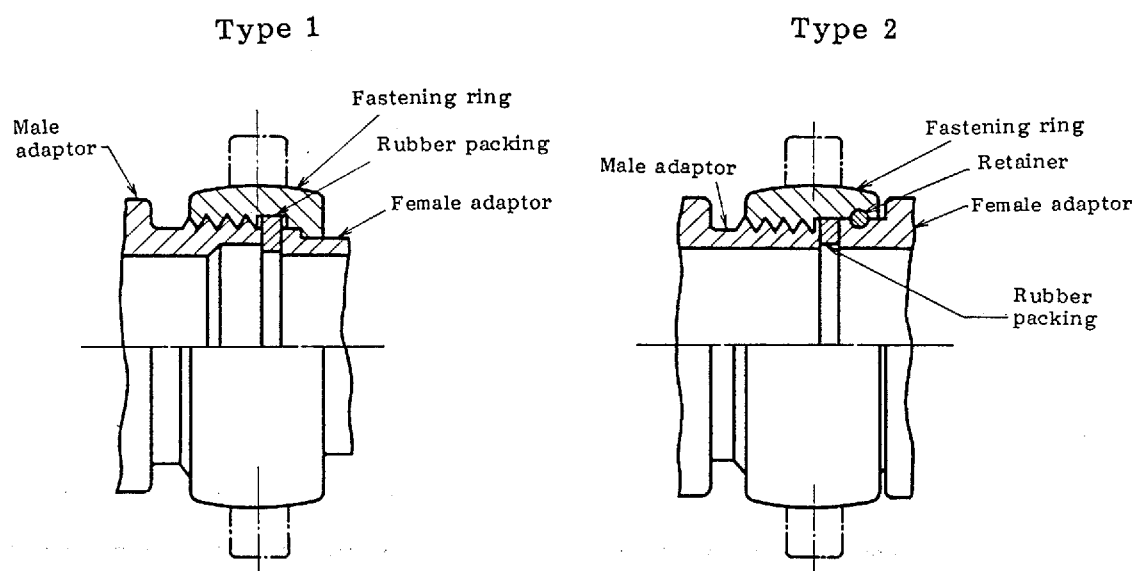
JIS B 0202-Parallel Pipe Threads

JIS B 0261-Measuring Method for Parallel Screw Gauges

JIS B 3102-Gauge Blanks for Screw Thread Limit Gauges

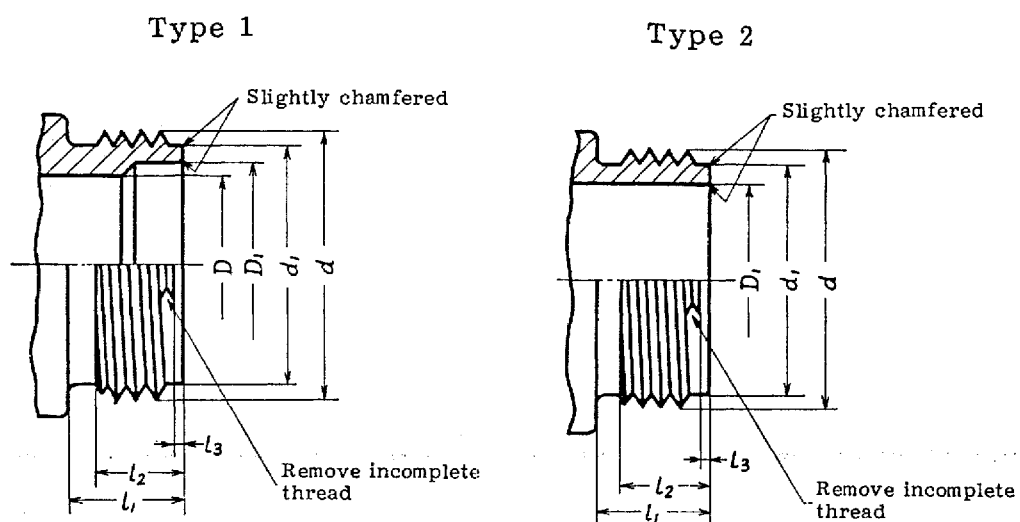
JIS G 4404-Alloy Tool Steels

Figure



4. Dimensions

4.1 Male Adaptor

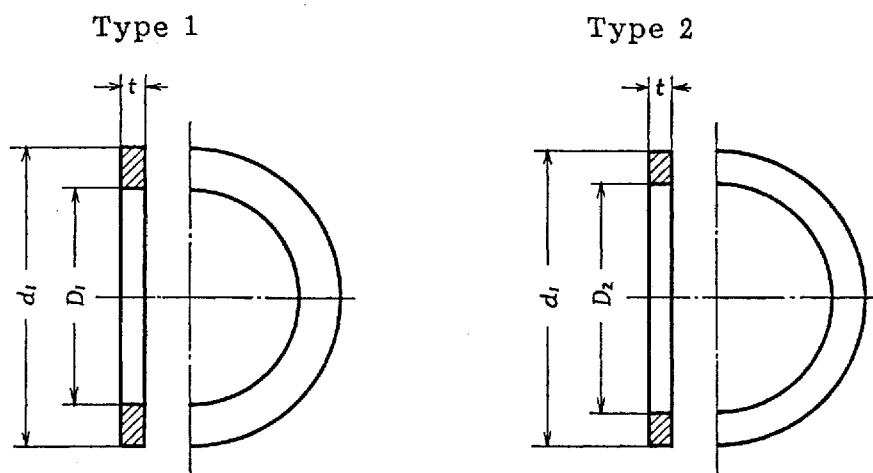


Unit: mm

Nominal size of coupling	Dimension Thread designation d	Deviations					
		d_1	D	D_1	l_1	l_2	l_3
		± 0.2	Minimum	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	Minimum	$\begin{matrix} +0.2 \\ 0 \end{matrix}$	$\begin{matrix} +0.2 \\ 0 \end{matrix}$
40	48	43.0	33.0	38.0	20.0	15.0	1.5
50	60	55.0	44.5	49.0	20.0	15.0	1.5
65	82.5	75.0	57.0	67.0	27.0	21.0	3.0
75	95	86.0	69.0	78.0	30.0	24.0	4.0
90	110	101.0	82.0	93.0	31.0	25.0	5.0
100	122.5	113.0	95.0	105.0	31.0	25.0	5.0
115	140	129.0	107.0	121.0	31.0	25.0	5.0
125	150	139.0	117.0	128.0	31.0	25.0	5.0
140	165	153.0	130.0	142.0	31.0	25.0	5.0
150	175	163.0	142.0	152.0	31.0	25.0	5.0

Remark: The screw threads shall be in accordance with Attached Tables 1 and 2.

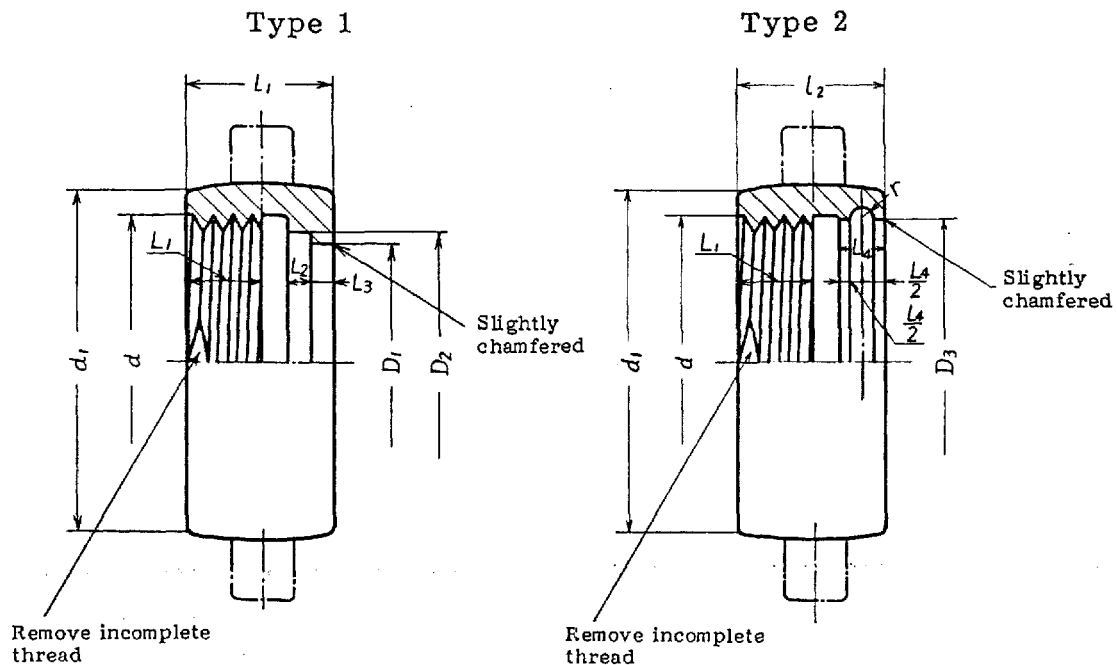
4.2 Rubber Packings



Unit: mm

Dimension Nominal size of coupling	d_1	D_1	D_2	t
Deviations	0 -0.5	+0.5 0	+0.5 0	+0.5 0
40	48.0	35.0	38.0	4.0
50	60.0	46.0	49.0	4.0
65	83.0	59.0	68.0	5.0
75	95.0	71.0	80.0	5.0
90	110.0	84.0	95.0	5.0
100	123.0	97.0	107.0	5.0
115	140.0	109.0	123.0	5.0
125	150.0	119.0	130.0	5.0
140	165.0	134.0	144.0	5.0
150	175.0	144.0	154.0	5.0

4.3 Fastening Rings



Unit: mm

Nominal size of coupling	Dimension Deviations Thread designation d	d_1	D_1	D_2	D_3	l_1	l_2	L_1	L_2	L_3	L_4	r
		Minimum	+0.6 +0.4	+0.2 0	+0.2 0	+0.5 0	+0.5 0	+0.2 0	+0.2 0	+0.2 0	+0.2 0	—
40	48	57.0	39.0	43.0	47.5	25.0	26.0	13.0	3.0	3.5	7.5	1.75
50	60	69.0	52.0	55.0	59.5	26.0	26.5	13.0	3.5	4.0	8.0	2.0
65	82.5	92.0	65.0	75.0	79.5	33.0	34.0	19.0	3.5	4.0	8.5	2.0
75	95	105.0	77.0	86.0	91.0	38.0	39.5	22.0	4.5	5.0	11.0	2.5
90	110	120.0	90.0	101.0	106.0	39.0	40.5	23.0	4.5	5.0	11.0	2.5
100	122.5	135.0	103.0	113.0	118.0	39.0	40.5	23.0	4.5	5.0	11.0	2.5
115	140	151.0	115.0	129.0	134.0	41.0	42.5	23.0	5.5	5.0	12.0	2.5
125	150	162.0	128.0	139.0	144.0	41.0	42.5	23.0	5.5	5.0	12.0	2.5
140	165	172.0	141.0	153.0	158.0	42.5	44.5	23.0	6.5	5.5	14.0	3.0
150	175	187.0	153.0	163.0	168.0	42.5	44.5	23.0	6.5	5.5	14.0	3.0

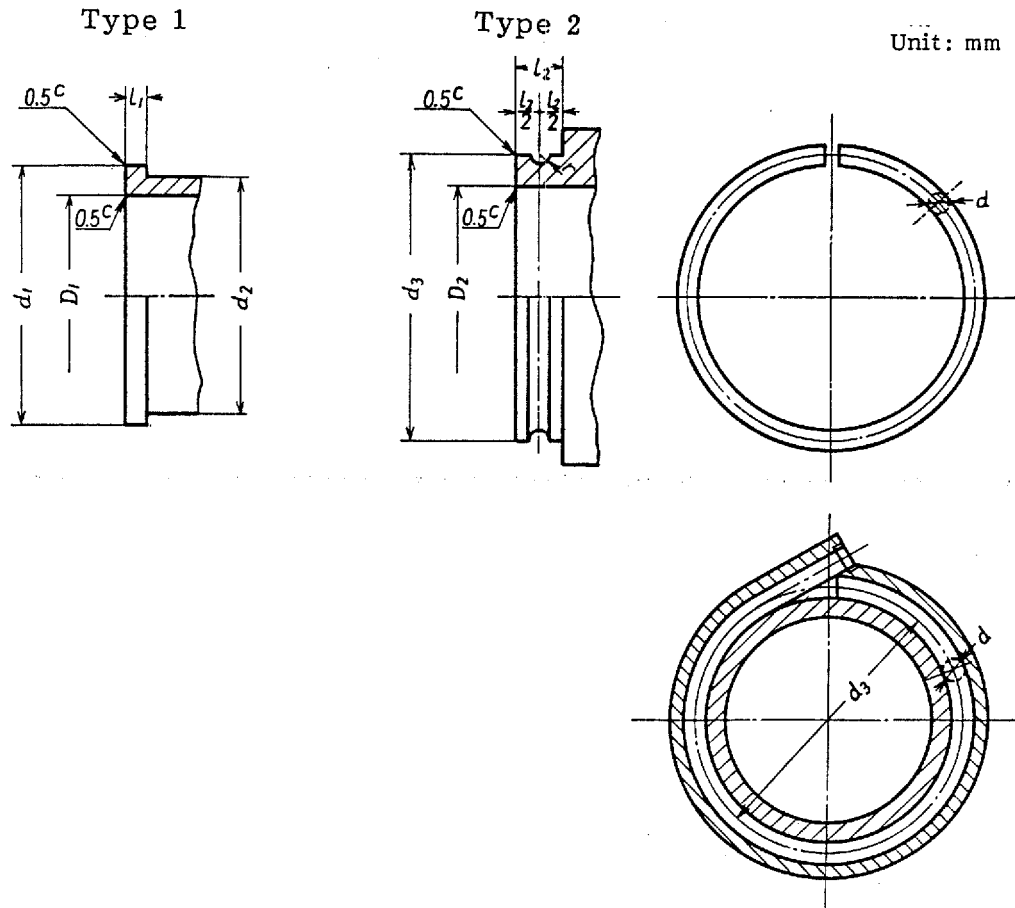
Remarks 1. The screw threads shall be in accordance with Attached Tables 1 and 2.

2. The values of r given in Table are recommended dimensions.

4.4 Female Adaptor and Retainer

Female Adaptor

Retainer



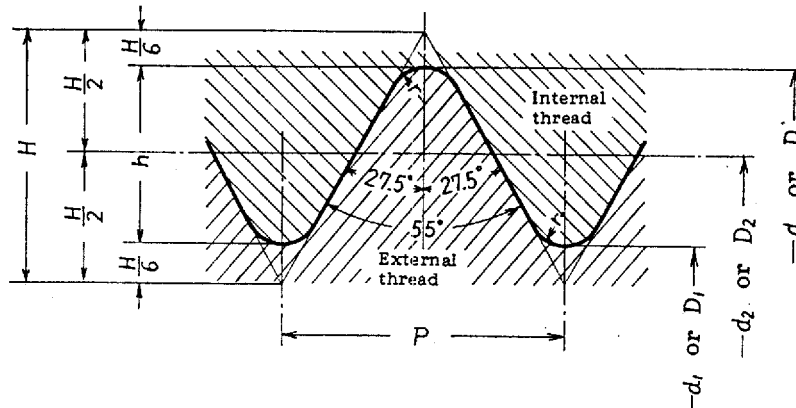
Unit: mm

Nominal size of coupling	Dimension	d	d_1	d_2	d_3	D_1	D_2	l_1	l_2	r
	Deviations	—	-0.2 -0.5	-0.2 -0.5	-0.2 -0.5	± 0.2	± 0.2	$+0.5$ -0.2	$+0.5$ $+0.2$	—
40		3.5	43.0	39.0	47.5	33.0	38.0	3.5	9.5	1.75
50		4.0	55.0	52.0	59.5	44.5	49.0	4.0	10.0	2.0
65		4.0	75.0	65.0	79.5	57.0	67.0	4.0	10.5	2.0
75		5.0	86.0	77.0	91.0	69.0	78.0	5.0	13.0	2.5
90		5.0	101.0	90.0	106.0	82.0	93.0	5.0	13.0	2.5
100		5.0	113.0	103.0	118.0	95.0	105.0	5.0	13.0	2.5
115		5.0	129.0	115.0	134.0	107.0	121.0	6.0	15.0	2.5
125		5.0	139.0	128.0	144.0	117.0	128.0	6.0	15.0	2.5
140		6.0	153.0	141.0	158.0	130.0	142.0	7.0	17.0	3.0
150		6.0	163.0	153.0	168.0	142.0	152.0	7.0	17.0	3.0

Remarks 1. The retainer may be composed by using balls.

2. The values of r and d given in Table are recommended dimensions.

Attached Table 1. Basic Profile and Basic Size of Screw Thread



(The thick continuous line indicates the basic profile of screw threads.)

$$P = \frac{25.4}{n}$$

$$H = 0.960491 P$$

$$d_2 = d - h \quad D_2 = d_2$$

$$h = 0.640327 P$$

$$d_1 = d - 2h \quad D_1 = d_1$$

$$r = 0.137329 P$$

Unit: mm

Nominal size of coupling	Thread designation	Threads per inch (per 25.4 mm) n	Pitch P	Height of external thread h	Root radius of external thread r	External thread			Internal thread		
						Major diameter d	Pitch diameter d_2	Minor diameter d_1	Major diameter D	Pitch diameter D_2	Minor diameter D_1
40	48	8	3.1750	2.033	0.436	48.000	45.967	43.934	48.000	45.967	43.934
50	60	8	3.1750	2.033	0.436	60.000	57.967	55.934	60.000	57.967	55.934
65	82.5	5	5.0800	3.253	0.697	82.500	79.247	75.994	82.500	79.247	75.994
75	95	4	6.3500	4.066	0.872	95.000	90.934	86.868	95.000	90.934	86.868
90	110	4	6.3500	4.066	0.872	110.000	105.934	101.868	110.000	105.934	101.868
100	122.5	4	6.3500	4.066	0.872	122.500	118.434	114.368	122.500	118.434	114.368
115	140	4	6.3500	4.066	0.872	140.000	135.934	131.868	140.000	135.934	131.868
125	150	4	6.3500	4.066	0.872	150.000	145.934	141.868	150.000	145.934	141.868
140	165	4	6.3500	4.066	0.872	165.000	160.934	156.868	165.000	160.934	156.868
150	175	4	6.3500	4.066	0.872	175.000	170.934	166.868	175.000	170.934	166.868

Remark: The basic profile of screw threads is in accordance with JIS B 0202. However, the basic sizes and threads per inch are exclusively used for screwed type couplings for fire-hose.