

JIS

JAPANESE INDUSTRIAL STANDARD

**Classification and Dimensions
of Connections for Fire
Department Nozzle-Tips**

JIS B 9913—1972

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JAPANESE INDUSTRIAL STANDARD

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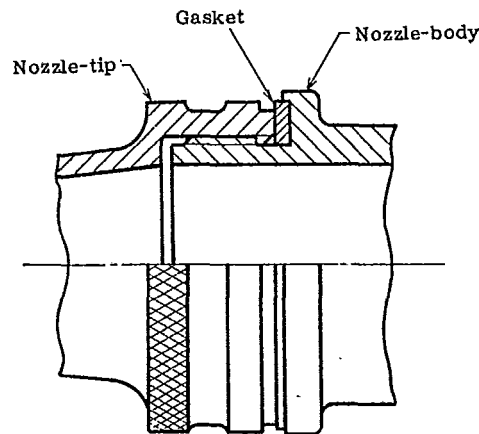
Classification and Dimensions of Connections
for Fire Department Nozzle-TipsB 9913-1972
(Reaffirmed: 1984)1. Scope

This Japanese Industrial Standard specifies the classification and dimensions of connections for fire department nozzle-tips, hereinafter referred to as the "connections".

2. Names of Respective Parts

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

Figure

3. Classification

The connections shall be classified into four sizes of 40, 50, 65 and 75 according to their nominal sizes.

4. Dimensions

The dimension of parts of the connections shall be as given in the following:

Reference Standards:

JIS B 0202-Parallel Pipe Threads

JIS B 0261-Measuring Method for Parallel Screw Gauges

JIS B 0951-Knurling

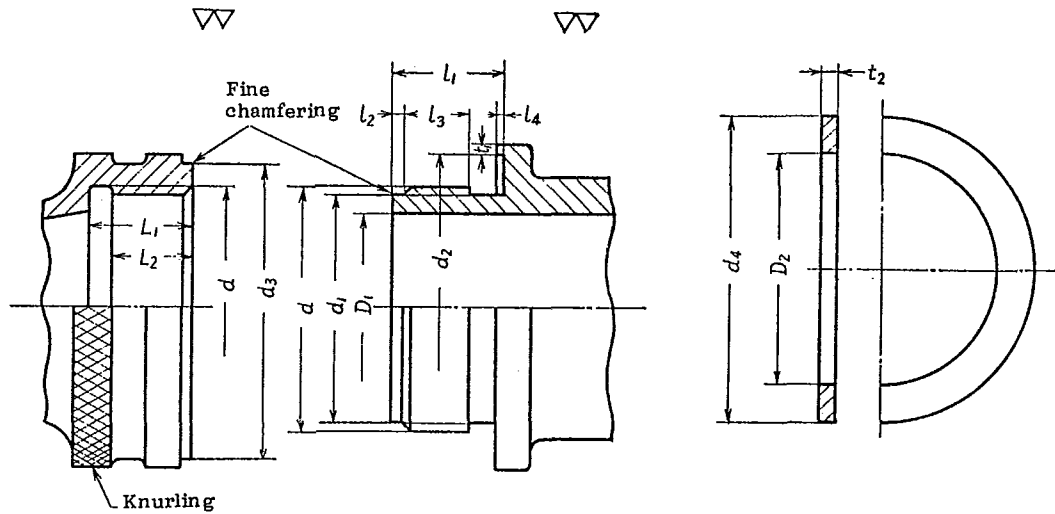
JIS B 3102-Gauge Blanks for Screw Thread Limit Gauges

JIS G 4404-Alloy Tool Steels

Nozzle-tip

Nozzle-body

Gasket

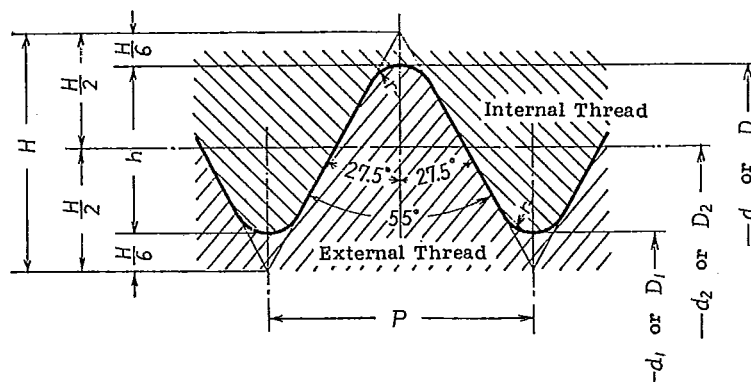


Unit: mm

Nominal size of connection	Dimension Deviation d	d_1	d_2	d_3	d_4	D_1	D_2	L_1	L_2	L_3	L_4	L_1	L_2	t_1	t_2
		0 - 0.2	+ 1.0 0	+ 0.5 0	0 - 0.5	-	-	+ 0.2 0	-	+ 0.2 0	-	+ 0.2 0	+ 0.2 0	Mini- mum	-
40	36	32.5	44	43	44	26	32.5	16	2	10	1.5	16	12	1	3
50	45	41.5	54	53	54	33	41.5	18	2	12	1.5	18	14	1	3
65	55	51	65	64	65	42	51	20	2	14	1.5	20	16	1	3
75	68	64	79	78	79	54	64	24	2	18	1.5	24	20	1	3

- Remarks 1. The screw threads shall be as given in Attached Tables 1 and 2.
2. The knurling shall generally be the crossed-cut of $m 0.3$ specified in JIS B 0951.
3. The dimensions on which their deviations are not specified are recommended dimensions.

Attached Table 1. Basic Profiles and Basic Dimensions of Nozzle Threads



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

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

$$H = 0.960491P \quad d_2 = d - h \quad D = d$$

$$h = 0.640327P \quad d_1 = d - 2h \quad D_2 = d_2$$

$$r = 0.137329P \quad D_1 = d_1$$

Unit: mm

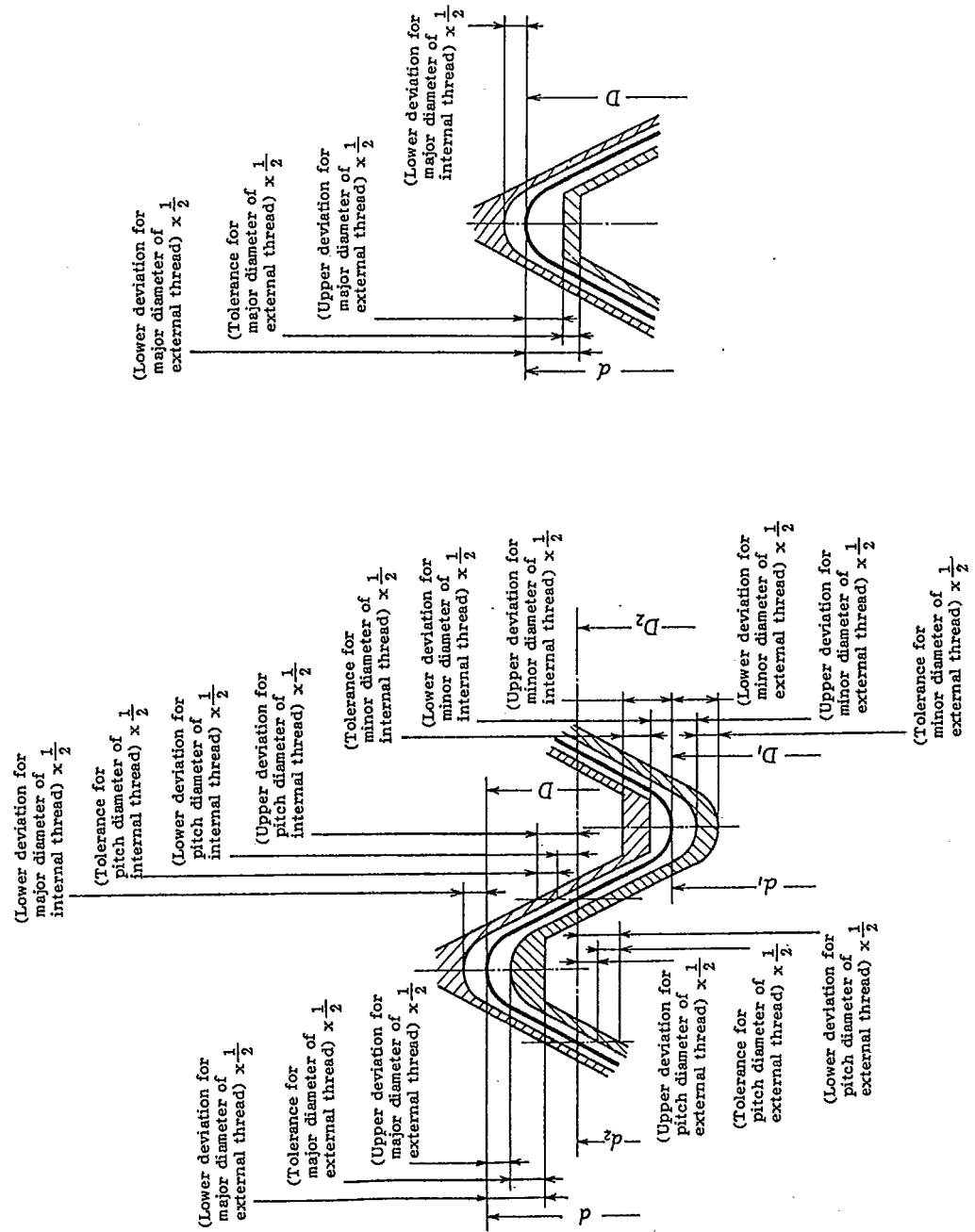
Nominal size of connection	Nominal designation of screw thread	Number of threads (per 25.4 mm) n	Pitch P	Height of external thread h	Root radius of external thread r	External thread			Internal thread		
						Major diameter d	Pitch diameter d_2	Minor diameter d_1	Major diameter D	Pitch diameter D_2	Minor diameter D_1
40	36	12	2.1167	1.355	0.291	36.000	34.645	33.290	36.000	34.645	33.290
50	45	12	2.1167	1.355	0.291	45.000	43.645	42.290	45.000	43.645	42.290
65	55	10	2.5400	1.626	0.349	55.000	53.374	51.748	55.000	53.374	51.748
75	68	10	2.5400	1.626	0.349	68.000	66.374	64.748	68.000	66.374	64.748

Remark: The basic profiles of threads are in accordance with JIS B 0202. However the basic dimensions and threads per inch are those of exclusive use for connections for fire department nozzle-tips.

Attached Table 2. Deviations and Tolerances of Threads

Round Type

Flat Type



Unit: 0.001 mm

Nominal size of connection	Nominal designation of screw thread	Number of threads (per 25.4 mm) n	Pitch P (mm)	External thread						Internal thread					
				Major diameter d			Pitch diameter d_2			Minor diameter d_1			Major diameter D		
				Round type			Flat type			Upper deviation			Upper deviation		
				Upper deviation	Lower deviation	Tolerance	Upper deviation	Lower deviation	Tolerance	Upper deviation	Lower deviation	Tolerance	Upper deviation	Lower deviation	Tolerance
40	36	12	2.1167	50	370	320	210	370	160	50	210	160	50	370	160
50	45	12	2.1167	50	370	320	210	370	160	50	210	160	50	370	160
65	55	10	2.5400	60	440	380	250	440	190	60	240	180	240	630	190
75	68	10	2.5400	60	440	380	250	440	190	60	240	180	240	630	190

Note (1) The lower deviation on the major diameter of the internal thread is not specified. However, as shown in Figure, some amount of clearance shall generally be provided between the root and the maximum dimension of the major diameter of the round type external thread.

Appendix

Limit Gauges for Threads of Connection of
Fire Department Nozzle-Tips

1. This Appendix specifies the limit gauges to be used for the dimensional inspection ⁽¹⁾ of threads of connections for the fire department nozzle-tips and gauges to be used for their checking.

Note ⁽¹⁾ In the case where inspections for the flank of thread, shapes of crest and root, circularity of pitch diameter, surface roughness and other inspections are required, other measuring instruments shall be used.

2. Types, Symbols, Shapes, Dimensions, Dimensional Deviations and Tolerances of Limit Gauges for Screw Threads

The types and symbols of the limit gauges for screw threads are given in Table 1, and the shapes, dimensions, dimensional deviations, hereinafter referred to as the "deviations" and tolerances for the limit gauges are given in Tables 3 to 10.

Table 1. Types and Symbols of Limit Gauges for Screw Threads

Screw thread to be inspected	Items to be inspected		Type of limit gauge for screw thread		Symbol	No. of Table
External thread	Pitch diameter	Virtual pitch diameter	GO screw ring gauge (common use for working and inspection)		GR	Table 3
		Nearly simple pitch diameter	NOT GO screw ring gauge for working		WR	Table 4
			NOT GO screw ring gauge for inspection		IR	Table 5
	Major diameter		Plain calliper gauge for working	Round type	WSR	Table 6
				Flat type	WSF	
			Plain calliper gauge for inspection	Round type	ISR	
				Flat type	ISF	
	Internal thread	Pitch diameter	Virtual pitch diameter	GO screw plug gauge (common use for working and inspection)		GP
Nearly simple pitch diameter			NOT GO screw plug gauge for working		WP	Table 8
			NOT GO screw plug gauge for inspection		IP	Table 9
Minor diameter		Plain plug gauge for working		WM	Table 10	
		Plain plug gauge for inspection		IM		