# Cylinder Valve Inlet Connections

## Taper Threads

SI. No.	Designation	Small End Major Diameter (mm)	Taper on Diameter	Thread Angle	Thread Per Inch (TPI)	Specification	Remarks	
1a	1/8-27 NGT	9.984			27			
1b	1/4-18 NGT	13.253			18	CGA V-1	Also as per IS: 12300	
1c	3/8-18 NGT	16.672					for refrigerant valves	
1d	1/2-14 NGT	20.716				Type 1, Size 1 of IS 3224		
1e	3/4-14 NGT	26.029				Type 1, Size 2 of IS 3224		
i)	3/4-14 NGT (CI)-1	26.029	1:16 60°		16 60° 14	Standard size for Chlorine as per IS 3224	Also as per CGA V-1	
ii)	3/4-14 NGT (Cl)-2	26.484				4 turns oversize as per IS 3224 for Chlorine and other gases		
iii)	3/4-14 NGT	26.824				7 turns oversize as per IS 3224 : 2002 other than Chlorine		
iv)	3/4-14 NGT (CI)-3	26.995				8-1/2 turns oversize as per IS 3224 for Chlorine		
v)	3/4-14 NGT (CI)-4	27.617				14 turns oversize as per IS 3224 for Chlorine		
vi)	3/4-14 NGT (CI)-5	29.204				28 turns oversize as per CGA V-1 for Chlorine		
1f	1-11 1/2 NGT	32.593				Type 1, Size 3 of IS 3224	Also as per CGA V-1	
i)	1-11 1/2 NGT (Cl)-1	32.593				Standard size as per CGA V-1 for Chlorine		
ii)	1-11 1/2 NGT (CI)-2	33.144			60° 11.5		4 turns oversize as per CGA V-1 for Chlorine	
iii)	1-11 1/2 NGT (CI)-3	33.766	1:16 60°			11.5	8-1/2 turns oversize as per CGA V-1 for Chlorine	Also as per Chlorine Institute P-17
iv)	1-11 1/2 NGT (CI)-4	34.523				14 turns oversize as per CGA V-1 for Chlorine		
v)	1-11 1/2 NGT (CI)-5	36.454				28 turns oversize as per CGA V-1 for Chlorine		
<b>2</b> a	W 19.8 (17E)	17.4				Type 2 Size 1 of IS 3224, fourth revision	Equivalent to 19.8 mm of DIN 477-1 : 1990, E 17 con of EN 144-1 and 17E of EN ISO 11363-1	
2b	W 28.8 (25E)	25.8	3:25	55°	14	Type 2 Size 2 of IS 3224	Equivalent to 28.8 mm of DIN 477-1 : 1990, 25T of BS: 341-1991, 25E of EN ISO 11363-1 (supersedes EN 629-1 : 1996)	
2c	W 31.3 (28E)	28.3				DIN 477-1		



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<b>3</b> a	18.16* (18T)	18.16				Type 4, Size 1 of IS 3224	Equivalent to 18T of BS 341-1: 1991 and 0.715-18AU of AS 2473.2  Also as per BS 341-1962	
3b	25.4 (1"BS)	25.4		1		Type 4, Size 2 of IS 3224	Equivalent to 1.0-25AU of AS 2473.2	
i)	26.194 (1 1/32")	26.194	1:8 55°		14	3.5 turns oversize as per IS 3224		
ii)	26.987 (1 1/16")	26.987				7 turns oversize as per IS 3224	Also as per BS 341-1962	
iii)	27.781 (1 3/32")	27.781		_		10.5 turns oversize as per IS 3224		
iv)	28.574 (1 1/8")	28.574				14 turns oversize as per IS 3224		
3c	31.75* (32T)	31.75			11	Type 4, Size 3 of IS 3224	Also as per BS 341-1 : 1991	
SI. No.	Designation	Large End Major Diameter (mm)	Taper on Diameter	Thread Angle	Thread Per Inch (TPI)	Specification	Remarks	
4a	V1	21.2						
4b	V2	29.5			14	JIS 8246		
4c	V3	29.5	3:26	55°	)			
4d	1.455" (W39)	40.3 (Approx.)			12	JIS 8244		

<sup>\*</sup> Oversize of 18.16 and 31.75 are also available (Refer IS 3224)

## **Parallel Threads**

SI. No.	Designation	Thread Angle	Major Diameter (mm)	Specification	Remarks
1	3/4-16 UNF-2A		19.012 / 18.773	JIS B 8246	Also as per IS 3224, fourth revision
2	1 1/8-12 UNF-2A		28.529 / 28.240	JIS B 6240	
3	3/4-14 NPSM	fourth revision		Equivalent to 3/4-14 NGS-2A as per AS 2473.2	
4	M18X1.5-6g	60°	17.968 / 17.732		Also as per EN 144-1,
5	M25X2.0-6g		24.962 / 24.682	EN ISO 15245	BS 341-1 : 1991 and IS 3224, fourth revision
6	M30X2.0-6g		29.982 / 29.662		Also as per BS 341-1 : 1991 and IS 3224, fourth revision