

# CYLINDER VALVE INLET CONNECTIONS

Sl. No.	Designation	Small End Major Diameter (mm)	Taper on Diameter	Thread Angle	Thread Per Inch (TPI)	Specification	Remarks		
<b>TAPER THREADS</b>									
1a	1/8-27 NGT	9.984	1:16	60°	27	CGA V-1	Also as per IS : 12300		
1b	1/4-18 NGT	13.253			18				
1c	3/8-18 NGT	16.672			14				
1d	1/2-14 NGT	20.716			Type 1, Size 1 of IS 3224 Type 1, Size 2 of IS 3224 Standard size for Chlorine as per IS 3224 4 turns oversize for Chlorine as per IS 3224 7 turns oversize <u>other than Chlorine</u> as per IS 3224 8-1/2 turns oversize for Chlorine as per IS 3224 14 turns oversize for Chlorine as per IS 3224 28 turns oversize for Chlorine as per CGA V-1	Also as per CGA V-1			
1e	3/4-14 NGT	26.029							
i)	3/4-14 NGT (CI)-1								
ii)	3/4-14 NGT (CI)-2								
iii)	3/4-14 NGT								
iv)	3/4-14 NGT (CI)-3								
v)	3/4-14 NGT (CI)-4				27.617				
vi)	3/4-14 NGT (CI)-5	29.204			28 turns oversize for Chlorine as per CGA V-1				
1f	1-11 1/2 NGT	32.593			1:16	60°	11.5	Type 1, Size 3 of IS 3224	Also as per CGA V-1
i)	1-11 1/2 NGT (CI)-1							Standard size for Chlorine as per CGA V-1	Also as per Chlorine Institute P-17
ii)	1-11 1/2 NGT (CI)-2							4 turns oversize for Chlorine as per CGA V-1	
iii)	1-11 1/2 NGT (CI)-3		8-1/2 turns oversize for Chlorine as per CGA V-1						
iv)	1-11 1/2 NGT (CI)-4		14 turns oversize for Chlorine as per CGA V-1						
v)	1-11 1/2 NGT (CI)-5		28 turns oversize for Chlorine as per CGA V-1						
2a	17E (W 19.8)	17.4	3:25	55°	14	Type 2 Size 1 of IS 3224	Equivalent to 19.8 mm of DIN 477-1:1990 & 17E of EN ISO 11363-1		
2b	25E (W 28.8)	25.8				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	28E (W 31.3)	28.3				DIN 477			





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

\* Oversize of 18.16 & 31.75 are also available as per IS 3224

Sl. No.	Designation	Thread Angle	Major Diameter (mm)	Specification	Remarks
<b>PARALLEL THREADS</b>					
1	3/4-16 UNF-2A	60°	19.012 / 18.773	IS 3224	Also as per JIS B 8246
2	1 1/8-12 UNF-2A		28.529 / 28.240		
3	3/4-14 NPSM		26.264 / 26.010		1. Also as per JIS B 8246 2. Equivalent to 3/4-14 NGS-2A as per AS 2473.2
4	M18X1.5-6g		17.968 / 17.732	ISO 15245	Also as per IS 3224 & BS 341-1:1991
5	M25X2.0-6g		24.962 / 24.682		
6	M30X2.0-6g		29.982 / 29.662		

**NOTE** The list contains commonly used Cylinder Valve Inlet Connections & is not exhaustive. Refer ISO/TR 11364, for additional connections used worldwide.

