



API 5L PSL-1

Permissible Specified Outside Diameter and Specified Wall Thickness		
Specified Outside Diameter D mm (in)	Specified Wall Thickness	
	Special plain-end ^a	Regular plain end
≥ 10.3 (0.405) to < 13.7(0.540)	--	≥ 1.7 (0.068) to ≤ 2.4 (0.094)
≥ 13.7 (0.540) to < 17.1(0.675)	--	≥ 2.2 (0.088) to ≤ 3.0 (0.118)
≥ 17.1 (0.675) to < 21.3(0.840)	--	≥ 2.3 (0.091) to ≤ 3.2 (0.125)
≥ 21.3 (0.840) to < 26.7 (1.050)	--	≥ 2.1 (0.083) to ≤ 7.5 (0.294)
≥ 26.7 (1.050) to < 33.4(1.315)	--	≥ 2.1 (0.083) to ≤ 7.8 (0.308)
≥ 33.4 (1.315) to < 48.3 (1.900)	--	≥ 2.1 (0.083) to ≤ 10.0 (0.394)
≥ 48.3 (1.900) to < 60.3 (2.375)	--	≥ 2.1 (0.083) to ≤ 12.5 (0.492)
≥ 60.3 (2.375) to < 73.0 (2.875)	≥ 2.1 (0.083) to ≤ 3.6 (0.141)	> 3.6 (0.141) to ≤ 14.2 (0.559)
≥ 73.0 (2.875) to < 88.9 (3.500)	≥ 2.1 (0.083) to ≤ 3.6 (0.141)	> 3.6 (0.141) to ≤ 20.0 (0.787)
≥ 88.9 (3.500) to < 101,6 (4.000)	≥ 2.1 (0.083) to ≤ 4.0 (0.156)	> 4.0 (0.156) to ≤ 22.0 (0.866)
≥ 101.6 (4.000) to < 168.3 (6.625)	≥ 2.1 (0.083) to ≤ 4.0 (0.156)	> 4.0 (0.156) to ≤ 25.0 (0.984)
≥ 168.3 (6.625) to < 219.1 (8.625)	≥ 2.1 (0.083) to ≤ 4.0 (0.156)	> 4.0 (0.156) to ≤ 40.0 (1.575)
≥ 219.1 (8.625) to < 273.1 (10.750)	≥ 2.1 (0.083) to ≤ 4.0 (0.156)	> 4.0 (0.156) to ≤ 40.0 (1.575)
≥ 273.1 (10.750) to < 323.9 (12.750)	≥ 3.2 (0.125) to ≤ 4.0 (0.156)	> 5.2 (0.203) to ≤ 45.0 (1.771)
≥ 323.9 (12.750) to < 355.6 (14.000)	≥ 3.6 (0.141) to ≤ 5.2 (0.203)	> 5.6 (0.219) to ≤ 45.0 (1.771)
≥ 355.6 (14.000) to < 457 (18.000)	≥ 4.0 (0.156) to ≤ 5.6 (0.219)	> 7.1 (0.281) to ≤ 45.0 (1.771)
≥ 457 (18.000) to < 559 (22.000)	≥ 4.5 (0.177) to ≤ 7.1 (0.281)	> 7.1 (0.281) to ≤ 45.0 (1.771)
≥ 559 (22.000) to < 711 (28.000)	≥ 4.8 (0.188) to ≤ 7.1 (0.281)	> 7.1 (0.281) to ≤ 45.0 (1.771)
≥ 711 (28.000) to < 864 (34.000)	≥ 5.6 (0.219) to ≤ 7.1 (0.281)	> 7.1 (0.281) to ≤ 52,0 (2.050)
≥ 864 (34.000) to < 965 (38.000)	≥ 5,6 (0.219) to ≤ 7,1 (0.281)	> 5.6 (0.219) to ≤ 52.0 (2.050)
≥ 965 (38.000) to < 1442 (56.000)	--	≥ 6.4 (0.250) to ≤ 52.0 (2.050)
≥ 1442 (56.000) to < 1829 (72.000)	--	≥ 9.5 (0.375) to ≤ 52.0 (2.050)
≥ 1829 (72.000) to ≤ 2314 (84.000)	--	≥ 10.3 (0.406) to ≤ 52.0 (2.050)

Note:
a = pipe having the combination of specified outside diameter and specified wall thickness is defined as special plain end pipe. other combination given in this table are defined as regular plain-endpipe. pipe that has a combination of specified out side diameter and specified wall thickness that is intermediate to the tabulated values is considered to be special plain end if the next lower tabulated value is for special plain end pipe, other intermediate combination to be regular plain end pipe.

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Tolerances for diameter and out-of-roundness				
Specified outside diameter	Diameter tolerances		Out-of-round tolerances	
D	mm (in)		mm (in)	
mm (in)	Pipe except the end Welded Pipe	Pipe end ^{a,b,c} Welded Pipe	Pipe except the end	Pipe end ^{a,b,c}
			d	
= 60,3 (2.375) to ≤168,3 (6.625)	± 0,0075D	-0,4 (0.016) to + 1,6 (0.063)	0,020 D	0,015 D
= 168,3 (6.625) to ≤610 (24.000)	± 0,0075D but max of ±3,2 (0.125)	±0,005D but max of ±1,6 (0.063)		
Note:				
a) The pipe end includes a length of 100 mm (4.0") at each of the pipe extremities				
b) For SMLS pipe, the tolerance apply for to ≤25,0 mm (0.984)"and the tolerance for thicker pipe shall be as agreed.				
c) For pipe with D ≥ 219,1 mm (8.625)" the diameter tolerance and the out of roundness tolerance may be determined using the calculated inside diameter (the specified outside diameter minus two times the specified wall thickness) or measured inside diameter rather than the specified outside diameter				
d) Include in the diameter tolerance.				

Chemical Properties							
PSL 1	Carbon	Manganese	Phosphorous	Sulphur	Titanium	V + Nb	V + Nb + Ti
Grade A	0.22	0.9	0.03	0.03	-	-	-
Grade B	0.26	1.2	0.03	0.03	0.04	0.06	0.15
Grade X 42	0.26	1.3	0.03	0.03	0.04	-	0.15
Grade X 46	0.26	1.4	0.03	0.03	0.04	-	0.15
Grade X 52	0.26	1.4	0.03	0.03	0.04	-	0.15
Grade X 56	0.26	1.4	0.03	0.03	0.04	-	0.15
Grade X 60	0.26	1.4	0.03	0.03	0.04	-	0.15