

**API 5L PSL 2 Pipe Mechanical Properties**  
**Tensile Strength, Yield Strength, Elongation**

Pipe grade	Pipe body of seamless and welded pipes						Weld seam of HPFW, SAW and CDW pipes
	Yield strength <sup>a</sup>		Tensile strength <sup>a</sup>		Ratio <sup>a,c</sup>	Elongation (on 50 mm or 2 in)	Tensile strength <sup>d</sup>
	R <sub>0.2</sub>		R <sub>m</sub>		R <sub>0.2</sub> /R <sub>m</sub>	A <sub>g</sub>	R <sub>m</sub>
	MPa (psi)		MPa (psi)		maximum	%	MPa (psi) minimum
	minimum	maximum	minimum	maximum		minimum	
L245R or BR L245N or BN L245Q or BQ L245M or BM	245 (35 500)	450 e (65 300) e	415 (60 200)	655 (95 000)	0.93	f	415 (60 200)
L290R or X42R L290N or X42N L290Q or X42Q L290M or X42M	290 (42 100)	495 (71 800)	415 (60 200)	655(95 000)	0.93	f	415 (60 200)
L320N or X46N L320Q or X46Q L320M or X46M	320 (46 400)	525 (76 100)	435 (63 100)	655 (95 000)	0.93	f	435 (63 100)
L360N or X52N L360Q or X52Q L360M or X52M	360 (52 200)	530 (76 900)	460 (66 700)	760 (110 200)	0.93	f	460 (66 700)
L390N or X56N L390Q or X56Q L390M or X56M	390 (56 600)	545 (79 000)	490 (71 100)	760 (110 200)	0.93	f	490 (71 100)
L415N or X60N L415Q or X60Q L415M or X60M	415 (60 200)	565 (81 900)	520 (75 400)	760 (110 200)	0.93	f	520 (75 400)
L450Q or X65Q L450M or X65M	450 (65 300)	600 (87 000)	535 (77 600)	760 (110 200)	0.93	f	535 (77 600)
L485Q or X70Q L485M or X70M	485 (70 300)	635 (92 100)	570 (82 700)	760 (110 200)	0.93	f	570 (82 700)
L555Q or X80Q L555M or X80M	555 (80 500)	705 (102 300)	625 (90 600)	825 (119 700)	0.93	f	625 (90 600)
L625M or X90M	625 (90 600)	775 (112 400)	695 (100 800)	915 (132 700)	0.95	f	695 (100 800)
L625Q or X90Q	625 (90 600)	775 (112 400)	695 (100 800)	915 (132 700)	0.97 <sup>e</sup>	f	695 (100 800)
L690M or X100M	690 <sup>b</sup> (100 100) <sup>b</sup>	840 <sup>b</sup> (121 800) <sup>b</sup>	760 (110 200)	990 (143 600)	0.97 <sup>b</sup>	f	760 (110 200)
L690Q or X100Q	690 <sup>b</sup> (100 100) <sup>b</sup>	840 <sup>b</sup> (121 800) <sup>b</sup>	760 (110 200)	990 (143 600)	0.97 <sup>b</sup>	f	760 (110 200)
L830M or X120M	830 <sup>b</sup> (120 400) <sup>b</sup>	1050 <sup>b</sup> (152 300) <sup>b</sup>	915 (132 700)	1 145 (166 100)	0.99 <sup>b</sup>	f	915 (132 700)

# Api 5l 45th Edition

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