

# PVC PRESSURE PIPE STANDARDS FOR WATER MAINS

Standard	Pipe Material	Outside Diameter Type	Nominal Diameter Range	Dimension Ratio (DR)	Pressure Class (PC) Pressure Rating (PR)	Available Joint Systems
AWWA C900	PVC	CIOD / DIOD or IPS	4" to 60"	DR 51	PC 80	Unrestrained Gasketed Internal Joint Restraint External Joint Restraint Butt Fusion
				DR 41	PC 100	
				DR 32.5	PC 125	
				DR 27.5	PC 150	
				DR 26	PC 160	
				DR 25	PC 165	
				DR 21	PC 200	
				DR 18	PC 235	
				DR 17	PC 250	
				DR 14	PC 305	
ASTM D2241	PVC	IPS or PIP	1/8" to 36"	DR 81	PR 50	Unrestrained Gasketed Internal Joint Restraint External Joint Restraint Solvent Cement
				DR 64	PR 63	
				DR 51	PR 80	
				DR 41	PR 100	
				DR 35	PR 118	
				DR 32.5	PR 125	
				DR 26	PR 160	
				DR 21	PR 200	
				DR 17	PR 250	
				DR 13.5	PR 315	
AWWA C909	PVCO	CIOD / DIOD	4" to 30"	N/A	PC 165 PC 235 PC 305	Unrestrained Gasketed Internal Joint Restraint External Joint Restraint
ASTM F1483	PVCO	CIOD / DIOD or IPS	4" to 16"	N/A	PR 150 PR 160 PR 200 PR 250	Unrestrained Gasketed Internal Joint Restraint External Joint Restraint

**Note:**

- Not all pressure classes/ratings are available in all OD types or sizes. Check with pipe manufacturer for specific availability.
- Abbreviations:  
CIOD: Cast Iron Outside Diameter (aka CIPS)  
DIOD: Ductile Iron Outside Diameter (aka DIPS)  
CIOD = DIOD  
IPS: Iron Pipe Size  
PIP: Plastic Irrigation Pipe