

PRODUCT SPECIFICATION

D2241/RJ CERTA-LOK® YELOMINE® PVC PRESSURE PIPE | Restrained Joint

Our D2241/RJ Certa-Lok Yelomine PVC Pressure Pipe is manufactured to meet the demands of today's municipal needs for water and wastewater applications. Certa-lok pipe utilizes precision-machined grooves on the pipe and in both sides of the coupling which, when aligned, allow a spline to be inserted, resulting a fully circumferential restrained joint. Flexible elastomeric gaskets in the coupling provide a hydraulic seal.

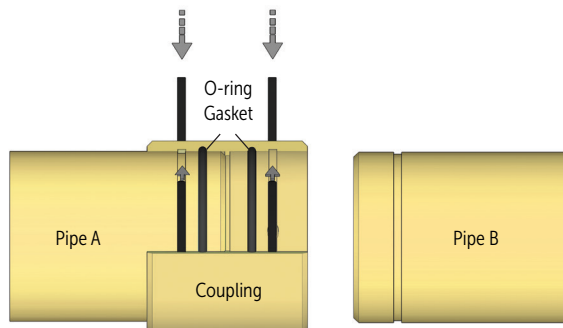
Trenchless & Restrained Joint Open-Cut Applications: This unique restrained joint pipe system is designed for trenchless applications with robust tensile strength for pulling multiple segments underground. This product reduces the jobsite footprint and minimizes community disruption with a reduced need for larger staging areas and traffic control.

Yelomine Formulation Enhancement for Aboveground and Temporary Bypass Applications: Yelomine products are manufactured from a specially formulated PVC compound that contains impact modifiers and UV inhibitors. This special formulation provides up to 6x the impact strength of normal PVC pipe over an extended period of time allowing for Yelomine products to be used aboveground and in high-impact situations like temporary bypass. Joints assembled with the non-permanent gasket option can be disassembled and reused for future jobs or system changes.

16" PR 200 psi couplings are manufactured from fiberglass and do not have enhanced UV resistance. For above ground installation, Yelomine products restrain the joints - the proposed installation should be analyzed for additional restraint requirements.

INSTALLATION METHODS

- Above Ground
- Temporary Bypass
- Static Pipe-bursting
- Horizontal Directional Drilling
- Open-cut



Applications	Potable Water	Wastewater	Reclaimed Water
Pipe Color:	Yellow	Green	Purple
Coupling Color:	Yellow	Yellow	Yellow
Certifications:*	NSF 61, NSF 14*	None	None

* SDR 26, SDR 21, SDR 17 pipe with PVC couplings rated up to 250 psi rated only.



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SHORT FORM SPECIFICATION

Pipe Standard:	ASTM D2241	
Diameter Std.:	Iron Pipe Size (IPS)	
Nominal Sizes:	2", 3", 4", 6", 8", 10", 12", 14", 16"	
Dimension Ratios & Pressure Ratings:	SDR 26 - 160 psi SDR 21 - 200 psi SDR 17 - 250 psi	SDR 13.5 - 315 psi DR 12.43 - 350 psi
Standard Lay Length:	20'	
Pipe Compound:	ASTM D1784 Cell Class 12454 with Yelomine Technology	
Coupling Compound	ASTM D1784 Cell Class 12454 with Yelomine Technology	
Pipe Joint Std.:	ASTM D3139	
Max. Angular Joint Deflection:†	0.5° per side of coupling 1° total per joint	
Gasket Standard:	ASTM F477	
Gasket Material Offering:	See Table	
Installation Std.:	ASTM D2774	

* See note about the proper gasket choice for your application.

† See Installation Guide for more information..

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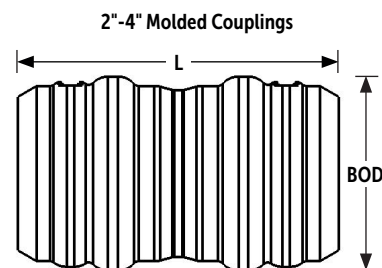
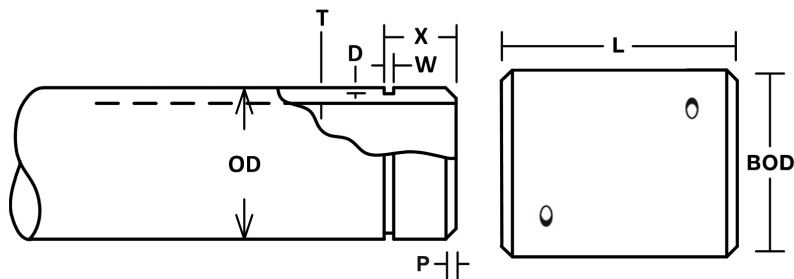
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PERFORMANCE DATA					
Nom. Size	Pipe Class	Pressure Rating (psi)	Min. Bend Radius (ft)	Max. Pull Force (lbf)	Max. % Change per 20' Stick
2"	SDR 17	250	39.6	1,400	25.38
3"	SDR 17	250	58.3	3,800	17.15
4"	SDR 21	200	75.0	5,200	13.30
	SDR 17	250		5,200	
	SDR 13.5	315		Contact	
	DR 12.43	350		Contact	
6"	SDR 26	160	110	6,200	9.10
	SDR 21	200		6,900	
	SDR 17	250		7,100	
	SDR 13.5	315		Contact	
	DR 12.43	350		Contact	
8"	SDR 26	160	144	10,900	7.00
	SDR 21	200		13,000	
	SDR 17	250		13,000	
	SDR 13.5	315		Contact	
	DR 12.43	350		Contact	
10"	SDR 26	160	179	17,700	5.60
	SDR 21	200		20,000	
12"	SDR 26	160	213	20,600	4.73
	SDR 21	200		23,300	
14"	SDR 26	160	233	21,400	4.38
16"	SDR 26	90**	267	20,000**	3.68
		160†		62,000†	
	SDR 21	200†		62,000†	

** = Rating limited by PVC coupling

† = Full rating achieved with fiberglass coupling



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D2241/RJ CERTA-LOK YELOMINE PIPE & COUPLING DIMENSIONS

Nom. Size	Outside Diameter (OD)	DR	Pipe							Coupling		
			Min. Wall Thickness (T)	Internal Diameter (ID)	X	W	D	P	Weight (lb/ft)	BOD	L	Weight (lb/ft)
2"	2.375	SDR 17#	0.140	2.095	1.750	0.250	0.098	0.182	0.65	3.300	5.485	0.8
3"	3.500	SDR 17#	0.206	3.088	2.500	0.375	0.135	0.182	1.4	4.435	7.200	1.5
4"	4.500	SDR 21#	0.214	4.072	3.000	0.375	0.135	0.182	1.9	5.470	8.250	3.2
		SDR 17	0.265	3.970					2.3			
		SDR 13.5#	0.333	3.834					2.9	5.964	8.250	5.1
		DR 12.43	0.362	3.776					3.0			
6"	6.625	SDR 26	0.255	6.115	3.000	0.375	0.135	0.302	3.3	7.840	8.250	5.7
		SDR 21	0.316	5.993					4.1			
		SDR 17	0.390	5.845					5.0			
		SDR 13.5#	0.491	5.643	6.2	8.366	8.250	8.6				
		DR 12.43	0.533	5.559	3.000	0.500	0.135	0.302	6.6	9.050	8.250	12.5
8"	8.625	SDR 26	0.332	7.961	3.163	0.500	0.145	0.631	5.6	10.190	10.125	11.8
		SDR 21	0.410	7.805					6.9			
		SDR 17	0.508	7.609					8.4			
		SDR 13.5#	0.639	7.347	10.6	10.947	10.125	18.3				
		DR 12.43	0.694	7.237	3.288	0.750	0.180	0.631	11.2	10.947	10.125	18.4
10"	10.750	SDR 26	0.413	9.924	3.500	0.500	0.215	0.631	8.7	12.438	12.125	18.9
		SDR 21	0.511	9.728					10.7			
12"	12.750	SDR 26	0.490	11.770	3.625	0.750	0.215	0.631	12.3	14.648	12.125	25.3
		SDR 21	0.606	11.538					15.0			
14"	14.000	SDR 26	0.538	12.924	3.500	0.500	0.215	0.631	14.8	16.000	12.125	29.1
16"	16.000	SDR 26	0.615	14.770	3.610	0.750	0.215	0.631	19.3	<i>PVC Coupling</i>		
									17.400	12.125	22.8	
		SDR 21	0.762	14.476					23.7	<i>Fiberglass Coupling</i>		
										17.224	12.000	31.5

= Pipe spigot has thickened wall to provide additional joint strength. Ask us for assistance with mandrel sizing if needed.

Notes:

- These dimensions are for estimating purposes only. All dimensions are in inches unless otherwise specified.
- SDR = Standard Dimension Ratio
- ASTM Pressure Rating @ 73°F and includes 2:1 safety factor. Coupling class chosen must meet or exceed pressure rating of pipe alone.
- Maximum Pull Force includes 2:1 safety factor.
- Internal diameter calculated using nominal outside diameter and minimum wall thickness.
- 2"-4" DR17 couplings are molded.

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D2241/RJ CERTA-LOK YELOMINE ACCESSORIES												
Application*	Nom. Size	Couplings			Splines				Gaskets			
		Material	Max. Pressure (psi)	Part Number**	Material	Size	Length	Part Number	Material	Shape	Size	Part Number
Permanent Standard	2"	PVC	250	82157715020	Nylon	0.188 Dia.	10.5	S0210RN0	NBR	Round	0.240	OR020YMPI
	3"	PVC	250	82157715037	Nylon	0.250 Dia.	16	S0316RN0	NBR	Round	0.240	OR030YMPI
	4"	PVC	250	82157715044	Nylon	0.250 Dia.	18	S4518RN0	NBR	Round	0.240	OR040YMPI
			350	82157745232	Nylon	0.250x0.250	18	S0418SN0				
	6"	PVC	250	82157715068	Nylon	0.250 Dia.	24	S0624RN0	NBR	Round	0.313	OR060YMPI
			315	82157745249	Nylon	0.250x0.250	24	S0624SN0				
			350	Contact	Contact Customer Service							
	8"	PVC	250	82157715075	Nylon	0.313x0.313	32	S0832SN1 S0832SN1	NBR	Round	0.400	OR080YMPI
			315	82157745256								
			350	Contact								
	10"	PVC	200	82157715105	Nylon	0.375x0.375	39	S1039SN0	IR/SBR	Round	0.438	OR100YMPI
	12"	PVC	200	82157716652	Nylon	0.375x0.625	46	S1246TN0	IR/SBR	Round	0.438	OR120YMPI
	14"	PVC	160	82157745218	Nylon	0.375x0.375	48	S1448SN0	IR/SBR	Round	0.438	OR140YMPI
	16"	PVC	90	82157745225	Nylon	0.375x0.625	60	S1656TN0	IR/SBR	Round	0.438	OR160YMPI
		Fiberglass Composite	200	82157745409								
Non-Permanent Standard	2"	PVC	250	82157705021	Nylon	0.188 Dia.	10.5	S0210RN0	NBR	Round	0.210	OR020YMNN
	3"	PVC	250	82157705038	Nylon	0.250 Dia.	16	S0316RN0	NBR	Round	0.210	OR030YMNN
	4"	PVC	250	82157705045	Nylon	0.250 Dia.	18	S4518RN0	NBR	Round	0.210	OR040YMNN
			350	82157745034	Nylon	0.250x0.250	18	S0418SN0				
	6"	PVC	250	82157705069	Nylon	0.250 Dia.	24	S0624RN0	NBR	Round	0.275	OR060YMNN
			315	82157745041	Nylon	0.250x0.250	24	S0624SN0	NBR	Round	0.275	OR060YMNN
			350	82157745096	Nylon	0.250x0.375	32	S0832SN1	NBR	Round	0.275	OR060YMNN
	8"	PVC	250	82157705076	Nylon	0.313x0.313	32	S0832SN1	NBR	Round	0.375	OR080YMNI
			315	82157745058								
			350	82157745102								
	10"	PVC	200	82157705106	Nylon	0.375x0.375	39	S1039SN0	IR/SBR	Round	0.407	OR100YMNI
	12"	PVC	200	82157716669	Nylon	0.375x0.625	46	S1246TN0	IR/SBR	Round	0.407	OR120YMNI
	14"	PVC	160	82157745218	Nylon	0.375x0.375	48	S1448SN0	IR/SBR	Round	0.407	OR140YMNI
	16"	PVC	90	82157745027	Nylon	0.375x0.625	60	S1656TN0	IR/SBR	Round	0.407	OR160YMNI
		Fiberglass Composite	200	82157745416								



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** Non-permanent gaskets are typically used in temporary bypass applications that require disassembly and reuse of the joint. They should never be specified for permanent, buried, or submerged applications.*

Permanent gaskets are slightly larger and make disassembly of the joint more difficult. They are intended for all installations that do not require disassembly during the system's service life including buried installation, river and road crossings, and all installations that would expose joints to long-term or excessive misalignment due to external loads.

If in doubt as to which gasket should be chosen, consult your Sales Representative or Technical Services Group.

*** = Includes coupling, 2 gaskets, and 2 splines*

Some or all of these products are protected by patents. Visit www.westlakepipe.com/patents for more information.