

MAXIMUM JOINT DEFLECTION  
FULL-LENGTH PIPE-PUSH-ON TYPE JOINT PIPE

MAXIMUM JOINT DEFLECTION DUCTILE IRON PUSH ON PIPE

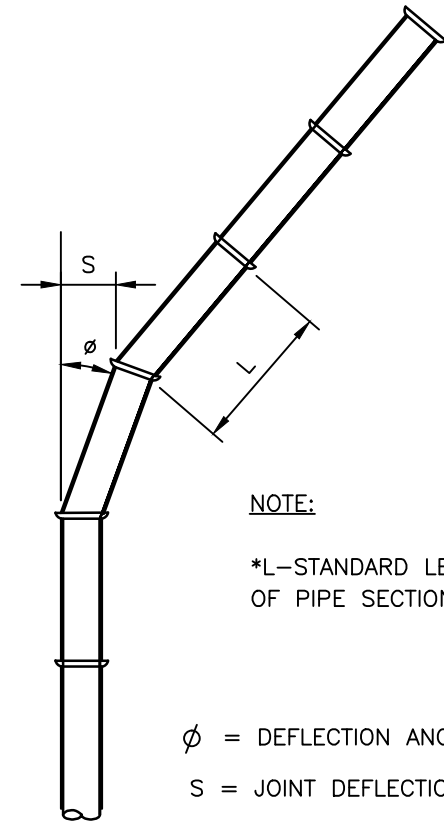
NOMINAL PIPE SIZE INCHES	DEFLECTION ANGLE DEGREES	MAX OFFSET -S INCHES		APPROX RADIUS OF CURVE - R PRODUCED BY SUCCESSION OF INCHES		CURRENT A/W DEFLECTION ANGLE DEGREES
		L=18 FT	L=20 FT	L=18 FT	L=20 FT	
3	4	15	17	256	285	
4	4	15	17	256	285	
6	4	15	17	256	285	4
8	4	15	17	256	285	4
10	4	15	17	256	285	
12	4	15	17	256	285	4
14	4	9	10	256	285	
16	2.5	9	10	429	476	2.5
18	2.5	9	10	429	476	
20	2.5	9	10	429	476	2
24	2.5	9	10	429	476	1.5

MAXIMUM JOINT DEFLECTION DUCTILE IRON MJ PIPE

NOMINAL PIPE SIZE INCHES	DEFLECTION ANGLE DEGREES	MAX OFFSET -S INCHES		APPROX RADIUS OF CURVE - R PRODUCED BY SUCCESSION OF INCHES		CURRENT A/W DEFLECTION ANGLE DEGREES
		L=18 FT	L=20 FT	L=18 FT	L=20 FT	
3	6.5	25	28	158	176	table deleted
4	6.5	25	28	158	176	
6	5.5	22	24	182	202	
8	4	16	18	256	285	
10	4	16	18	256	285	
12	4	16	18	256	285	
14	3	11	12	367	408	
16	3	11	12	367	408	
18	2.5	11	10	429	476	
20	2.5	9	10	429	476	
24	1.5	9	8	644	715	

NOTES:

1. PIPE JOINT DEFLECTION ALLOWED ON DUCTILE IRON PIPE ONLY. PIPE JOINT DEFLECTION AND BENDING NOT ALLOWED ON PVC PIPE.
2. FOR OTHER PIPE TYPES SUBMIT MANUFACTURER'S TABLE.



NOTE:

\*L-STANDARD LENGTH OF PIPE SECTION.

$\phi$  = DEFLECTION ANGLE  
 S = JOINT DEFLECTION OFFSET  
 L = LAYING LENGTH  
 R = RADIUS OF CURVE  
 $R = \frac{L}{2 \tan \frac{\phi}{2}}$

0201-0601-SD32

REVISIONS

MISSOURI AMERICAN WATER STANDARD  
CIVIL  
PIPE CURVE GEOMETRY  
DETAIL

MISSOURI AMERICAN WATER  
ST. LOUIS, MO. 63141

MISSOURI AMERICAN WATER ENGINEERING  
727 CRAIG ROAD  
ST. LOUIS, MO. 63141



AMERICAN WATER

DRAWN BY KKM  
PROJECT ENG'R  
APPROVED

DATE 11-13-08  
PROJECT IP

USE DIMENSIONS ONLY  
SCALE N.T.S.

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

0201-0601-SD32