

# FIXED STEEL DEFLECTION GAUGES

Deflection Gauges (mandrels) are used to test flexible sewer pipe for out-of-roundness or deflection per ASTM specifications D3034 and F679. This testing ensures that flexible pipe has been properly bedded and backfilled (ASTM D2321) to give optimal performance.

Other gauges can get hung up – causing a deflection test to fail, even though the pipe is within tolerance. Sized to .02", steel deflection gauge styles meet ASTM requirements.

## Fixed Steel Style Deflection Gauge Features:

- Durable, zinc-plated construction resists corrosion
- Conforms to mandrel sizing specifications—blade length is equal to or greater than the nominal pipe size
- Nine-arm design ensures testing accuracy
- Open design allows gravel and debris pass-through



## 5% FIXED STEEL DEFLECTION GAUGES

### DEFLECTION GAUGES FOR SDR-35 PIPE PER ASTM D3034 (4" – 15" DIA.)

PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286568	6" (152.40 mm)	5.893" (149.68 mm)	5.742" (145.85 mm)	5.46" (138.68 mm)	5.0 lbs.
286578	8" (203.20 mm)	7.891" (200.43 mm)	7.665" (194.69 mm)	7.28" (184.91 mm)	7.0 lbs.
286588	10" (254.00 mm)	9.864" (250.55 mm)	9.563" (242.90 mm)	9.09" (230.89 mm)	8.0 lbs.
286598	12" (304.80 mm)	11.737" (298.12 mm)	11.360" (288.54 mm)	10.79" (274.07 mm)	9.0 lbs.
286608	15" (381.00 mm)	14.374" (365.10 mm)	13.897" (352.98 mm)	13.20" (335.28 mm)	13.5 lbs.

### DEFLECTION GAUGES FOR SDR-26 PIPE PER ASTM D3034 (4" – 15" DIA.)

PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286648	6" (152.40 mm)	5.764" (146.41 mm)	5.612" (142.54 mm)	5.33" (135.38 mm)	5.0 lbs.
286658	8" (203.20 mm)	7.715" (195.96 mm)	7.488" (190.20 mm)	7.11" (180.59 mm)	7.0 lbs.
286668	10" (254.00 mm)	9.644" (244.96 mm)	9.342" (237.29 mm)	8.87" (225.30 mm)	8.0 lbs.
286678	12" (304.80 mm)	11.480" (291.59 mm)	11.102" (281.99 mm)	10.55" (267.97 mm)	9.0 lbs.
286688	15" (381.00 mm)	14.053" (356.95 mm)	13.575" (344.81 mm)	12.90" (327.66 mm)	13.5 lbs.

### DEFLECTION GAUGES FOR PS 46 (SDR-35) PIPE PER ASTM F679 (18" – 48" DIA.)

PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286618	18" (457.20 mm)	17.643" (448.13 mm)	17.054" (433.17 mm)	16.20" (411.48 mm)	15.0 lbs.
286628	21" (533.40 mm)	20.800" (528.32 mm)	20.098" (510.49 mm)	19.09" (484.89 mm)	18.0 lbs.
286638	24" (609.60 mm)	23.402" (594.41 mm)	22.586" (573.68 mm)	21.46" (545.08 mm)	21.0 lbs.

### DEFLECTION GAUGES FOR PS 115 (SDR-26) PIPE PER ASTM F679 (18" – 48" DIA.)

PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286698	18" (457.20 mm)	17.278" (438.86 mm)	16.688" (423.87 mm)	15.85" (402.59 mm)	15.0 lbs.
286708	21" (533.40 mm)	20.370" (517.40 mm)	19.666" (499.52 mm)	18.68" (474.47 mm)	18.0 lbs.
286718	24" (609.60 mm)	22.918" (582.12 mm)	22.102" (561.39 mm)	21.00" (533.40 mm)	21.0 lbs.

# FIXED STEEL DEFLECTION GAUGES CONTINUED



## 7.5% FIXED STEEL DEFLECTION GAUGES

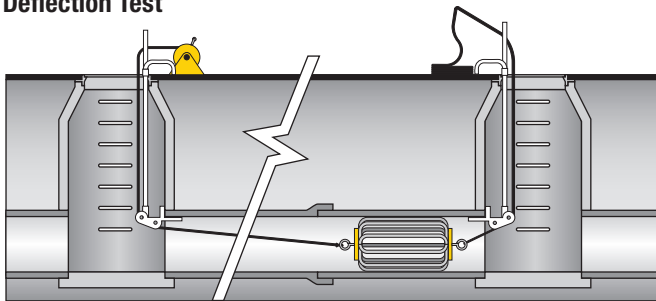
DEFLECTION GAUGES FOR SDR-35 PIPE PER ASTM D3034 (4" – 15" DIA.)					
PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286728	6" (152.40 mm)	5.893" (149.68 mm)	5.742" (145.85 mm)	5.31" (134.90 mm)	5.0 lbs.
286738	8" (203.20 mm)	7.891" (200.43 mm)	7.665" (194.69 mm)	7.09" (180.10 mm)	7.0 lbs.
286748	10" (254.00 mm)	9.864" (250.55 mm)	9.563" (242.90 mm)	8.85" (224.80 mm)	8.0 lbs.
286758	12" (304.80 mm)	11.737" (298.12 mm)	11.360" (288.54 mm)	10.51" (267.00 mm)	9.0 lbs.
286768	15" (381.00 mm)	14.374" (365.10 mm)	13.897" (352.98 mm)	12.85" (326.40 mm)	13.5 lbs.

DEFLECTION GAUGES FOR SDR-26 PIPE PER ASTM D3034 (4" – 15" DIA.)					
PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286808	6" (152.40 mm)	5.764" (146.41 mm)	5.612" (142.54 mm)	5.19" (131.80 mm)	5.0 lbs.
286818	8" (203.20 mm)	7.715" (195.96 mm)	7.488" (190.20 mm)	6.93" (176.00 mm)	7.0 lbs.
286828	10" (254.00 mm)	9.644" (244.96 mm)	9.342" (237.29 mm)	8.64" (219.50 mm)	8.0 lbs.
286838	12" (304.80 mm)	11.480" (291.59 mm)	11.102" (281.99 mm)	10.27" (260.90 mm)	9.0 lbs.
286848	15" (381.00 mm)	14.053" (356.95 mm)	13.575" (344.81 mm)	12.56" (319.00 mm)	13.5 lbs.

DEFLECTION GAUGES FOR PS 46 (SDR-35) PIPE PER ASTM F679 (18" – 48" DIA.)					
PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286778	18" (457.20 mm)	17.643" (448.13 mm)	17.054" (433.17 mm)	15.77" (400.56 mm)	15.0 lbs.
286788	21" (533.40 mm)	20.800" (528.32 mm)	20.098" (510.49 mm)	18.59" (472.19 mm)	18.0 lbs.
286798	24" (609.60 mm)	23.402" (594.41 mm)	22.586" (573.68 mm)	20.89" (530.61 mm)	21.0 lbs.

DEFLECTION GAUGES FOR PS 115 (SDR-26) PIPE PER ASTM F679 (18" – 48" DIA.)					
PART NUMBER	NOMINAL SIZE	AVERAGE PIPE I.D.	BASE PIPE I.D.*	PIPE I.D. @ DEFL.	PRODUCT WT.
286858	18" (457.20 mm)	17.278" (438.86 mm)	16.688" (423.87 mm)	15.44" (392.18 mm)	15.0 lbs.
286868	21" (533.40 mm)	20.370" (517.40 mm)	19.666" (499.52 mm)	18.19" (462.03 mm)	18.0 lbs.
286878	24" (609.60 mm)	22.918" (582.12 mm)	22.102" (561.39 mm)	20.44" (519.18 mm)	21.0 lbs.

### Deflection Test



PS 46 closely relates to SDR 35 and PS 115 closely relates to SDR 26  
 \*Base inside diameter (Base Pipe I.D.) allows for out of roundness and wall thickness tolerances as defined by ASTM standards.  
 For sizing and pricing contact Customer Service at [chernesupport@oatey.com](mailto:chernesupport@oatey.com) or 800-321-9532.