

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 .01", steel deflection gauge styles meet ASTM requirements.

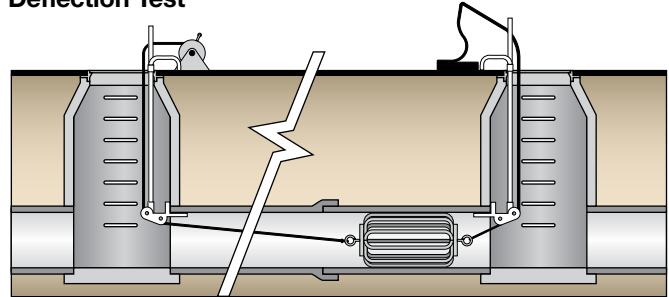
Fixed Steel Style Deflection Gauge:

- 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



Custom sizes available!

Deflection Test



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.
286068	6" (152.40 mm)	5.893" (149.68 mm)	5.742" (145.85 mm)	5.46" (138.68 mm)	5.0 lbs.
286078	8" (203.20 mm)	7.891" (200.43 mm)	7.665" (194.69 mm)	7.28" (184.91 mm)	7.0 lbs.
286088	10" (254.00 mm)	9.864" (250.55 mm)	9.563" (242.90 mm)	9.09" (230.89 mm)	8.0 lbs.
286098	12" (304.80 mm)	11.737" (298.12 mm)	11.360" (288.54 mm)	10.79" (274.07 mm)	9.0 lbs.
286108	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 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.
286118	18" (457.20 mm)	17.643" (448.13 mm)	17.054" (433.17 mm)	16.20" (411.48 mm)	15.0 lbs.
286278	21" (533.40 mm)	20.800" (528.32 mm)	20.098" (510.49 mm)	19.09" (484.89 mm)	18.0 lbs.
286288	24" (609.60 mm)	23.402" (594.41 mm)	22.586" (573.68 mm)	21.46" (545.08 mm)	21.0 lbs.

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.
286188	6" (152.40 mm)	5.893" (149.68 mm)	5.742" (145.85 mm)	5.31" (134.90 mm)	5.0 lbs.
286198	8" (203.20 mm)	7.891" (200.43 mm)	7.665" (194.69 mm)	7.09" (180.10 mm)	7.0 lbs.
286208	10" (254.00 mm)	9.864" (250.55 mm)	9.563" (242.90 mm)	8.85" (224.80 mm)	8.0 lbs.
286218	12" (304.80 mm)	11.737" (298.12 mm)	11.360" (288.54 mm)	10.51" (267.00 mm)	9.0 lbs.
286228	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 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.
286238	18" (457.20 mm)	17.643" (448.13 mm)	17.054" (433.17 mm)	15.77" (400.56 mm)	15.0 lbs.
286248	21" (533.40 mm)	20.800" (528.32 mm)	20.098" (510.49 mm)	18.59" (472.19 mm)	18.0 lbs.
286258	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 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.
286008	6" (152.40 mm)	5.764" (146.41 mm)	5.612" (142.54 mm)	5.33" (135.38 mm)	5.0 lbs.
286018	8" (203.20 mm)	7.715" (195.96 mm)	7.488" (190.20 mm)	7.11" (180.59 mm)	7.0 lbs.
286028	10" (254.00 mm)	9.644" (244.96 mm)	9.342" (237.29 mm)	8.87" (225.30 mm)	8.0 lbs.
286038	12" (304.80 mm)	11.480" (291.59 mm)	11.102" (281.99 mm)	10.55" (267.97 mm)	9.0 lbs.
286048	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 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.
286058	18" (457.20 mm)	17.278" (438.86 mm)	16.688" (423.87 mm)	15.85" (402.59 mm)	15.0 lbs.
286528	21" (533.40 mm)	20.370" (517.40 mm)	19.666" (499.52 mm)	18.68" (474.47 mm)	18.0 lbs.
286538	24" (609.60 mm)	22.918" (582.12 mm)	22.102" (561.39 mm)	21.00" (533.40 mm)	21.0 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.
286128	6" (152.40 mm)	5.764" (146.41 mm)	5.612" (142.54 mm)	5.19" (131.80 mm)	5.0 lbs.
286138	8" (203.20 mm)	7.715" (195.96 mm)	7.488" (190.20 mm)	6.93" (176.00 mm)	7.0 lbs.
286148	10" (254.00 mm)	9.644" (244.96 mm)	9.342" (237.29 mm)	8.64" (219.50 mm)	8.0 lbs.
286158	12" (304.80 mm)	11.480" (291.59 mm)	11.102" (281.99 mm)	10.27" (260.90 mm)	9.0 lbs.
286168	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 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.
Custom	18"	17.278"	16.688"	15.44"	15.0 lbs.
286548	21" (533.40 mm)	20.370" (517.40 mm)	19.666" (499.52 mm)	18.19" (462.03 mm)	18.0 lbs.
286558	24" (609.60 mm)	22.918" (582.12 mm)	22.102" (561.39 mm)	20.44" (519.18 mm)	21.0 lbs.

PS 46 closely relates to SDR 35 and PS 115 closely relates to SDR 26
 *Base inside diameter (Base Pipe I.D.) allows for our of roundness and wall thickness tolerances as defined by ASTM standards.
 Custom sizes available - consult factory