

HD Series - Horizontal



Application

A non-corroding, non-metallic heavy duty bow spring casing spacer for horizontal pipe-in-pipe (PIP) and open bore applications such as wastewater and sewer pipelines, slip lining and cased crossings. Suitable for light to medium weight carrier pipe materials including steel, ductile, MSCL, GRE, PVC, and HDPE. Will fit diameters from 110mm OD (4.33") to greater than 1600mm OD (63") by addition of multiple segments.

For heavy carrier pipe materials and diameters greater than 355mm (14") in non-grouted, pressure installations the kwik-ZIP® HDX or HDXT Series is recommended.

Construction & Features

- Made from Kwik-ZIP's modified Acetal (POM) engineering thermoplastic blend with high flexural strength, high temperature resistance, low co-efficient of friction, abrasion resistance and outstanding chemical resistance.
- Integrated rubber grip pads under collars to prevent slippage. No requirement to pre-wrap pipe.
- Load sharing bow spring system allowing heavy loads to be shared across multiple bows reducing point loading and increasing the overall load capacity of the spacer.
- The flexible bows can deflect under force to pass minor obstructions in the borehole.
- Requires only a flat blade screwdriver for installation.



Models

Model	Runner (Bow) Height	Part #	Operating Temp (Deg C / F)	Recommended for use on Pipe Diameter	Units per carton	Carton Dimensions (L x W x H)	Gross Carton Weight
HD 30	30mm / 1 3/16"	00992	- 20 C to 80 C - 4 F to 176 F in certain applications (temperatures above 50 C / 122 F may require closer intervals)	101 mm / 4" NPS & greater (consider the HDX or HDXT for pipe dia greater than 355mm / 14")	30	350mm x 330mm x 370mm 13.78" x 13" x 14.57"	8.36 Kg / 18.43 lbs
HD 50	50mm / 2"	00991			30	350mm x 330mm x 370mm 13.78" x 13" x 14.57"	8.48 Kg / 18.69 lbs
HD 75	75mm / 3"	00993			30	350mm x 330mm x 370mm 13.78" x 13" x 14.57"	9.26 Kg / 20.41 lbs
HD 100	100mm / 4"	00100			30	440mm x 330mm x 370mm 17.32" x 13" x 14.57"	10.25 Kg / 22.55 lbs

Compliance

- Manufactured under a certified ISO 9001 Quality Management System.
- Compliant with AS/NZS 4020:2005 Products for use in contact with drinking water.
- Compliant with lead free requirements of Section 1417 of the US Safe Water Drinking Act
- Compliant with WSAA Product Specification # 324 – Casing Spacers.
- Approved by MRWA and SEQ IPAM..



Sizing Table - HD Series - Horizontal

Nominal Pipe Size (NPS)	OD of Pipe (mm)	OD of Pipe (Inches)	Suggested Number of Segments	Approx Setting Guide Position
	110	4.33	2	0
4	114.30	4.50	2	15
4.5	127.00	5.00	2	30
5	141.30	5.563	2	55
	160	6.30	2	85
6	168.27	6.625	3	5
	180	7.09	3	20
	200	7.87	3	40
8	219.08	8.625	3	65
	250	9.84	4	25
10	273.05	10.75	**4	45
12	323.85	12.75	**5	80
14	355.60	14.00	**6	50
16	406.40	16.00	**7	35
18	457.20	18.00	**8	65
20	508.00	20.00	**8	55
24	609.60	24.00	**10	65
	650	25.59	**11	50
	710	27.95	**12	70
	800	31.50	**14	75
	900	35.43	**15	60
	1000	39.37	**17	65
	1100	43.30	**19	70
	1200	47.24	**20	45

Please refer to the relevant product series installation guide for additional information.

For pipe installed in the horizontal position, (e.g. Cased Crossings), it is recommended that the No. of bows be maximised to enable the highest load capacity per spacer.

Use the following formula to calculate the No. of segments per spacer for such pipe:

No. of Segments = [Pipe OD (mm) x 3.1428] ÷ 180. (Round the result down to nearest whole number).

Spacer intervals of 2m (approx. 6ft) are generally suitable for light weight pipe up to 300mm NPS (12" NPS).

**For heavy weight or large diameter carrier pipes installed in the horizontal position, kwik-ZIP's heavier duty HDX or HDXT Series spacer models should be considered, especially if the pipeline annulus will not be grouted after installation.

