

CENTRALIZER & SPACER SYSTEMS FOR THE DRILLING & CIVIL CONSTRUCTION INDUSTRIES



www.kwikzip.com

About kwik-ZIP

kwik-ZIP Centralizer and Spacer Systems have been developed to solve support, grading and centralization challenges in the trenchless, HDD, pipeline, vertical production drilling, and ground engineering industries.

From an initial focus of solving production casing centralization challenges in vertical drilling applications, the kwik-ZIP range has grown into a multi-industry series of innovative models that handle bar and pipe diametres from 18mm (0.70 inches) to greater than 1600 mm (63 inches).

Manufactured from high grade thermoplastic, kwik-ZIP products are specified, used and recommended by pipeline and civil contractors, water and gas utilities, drilling companies and international engineering firms across the world. kwik-ZIP products are suitable for use on steel, DICL, MSCL, GRE, PVC, HDPE and other pipe material and are a completely non-metallic solution.

kwik-ZIP centralizers and spacers are available in various product series (including HDXT, HDX, HD, GT, 380, and 155) each with varying bow/runner heights within each series.

kwik-ZIP maintains a focus on price effectiveness, simplicity and rapid on-site assembly, to ensure that our systems deliver significant cost, time and operational advantages to our customers.

The business has a proven track record of servicing a wide range of markets in diverse geographical locations including United States, Asia, Australia / New Zealand, Middle East, UK and Europe where our expertise, customer service, cost-effectiveness, innovative range of products and applicability across multiple industries continues to satisfy customer requirements.

kwik-ZIP has established distributors in Australia, New Zealand, United States and UK and operates from its Head Office in Bunbury and warehouse facilities in Sydney, Texas, and the UK.

kwik-ZIP Advantages

The use of kwik-ZIP's engineered thermoplastic blend provides a number of significant advantages and benefits to our customers, including;

- ✓ Corrosion Protection Metallic spacers are subject to corrosion and can impart corrosive damage to the pipeline. In some cases, metallic spacers can damage the pipe, particularly if the carrier pipe is a non-metallic composite pipe such as fiberglass or PVC. Kwik-ZIP spacers and centralizers have no metal parts which assists in overcoming some of the corrosion issues that exist with other products.
- ✓ Low co-efficient of friction Products are made from kwik-ZIP's modified Acetal (POM) engineering thermoplastic blend that has a low co-efficient of friction.
- Adjustable sizes kwik-ZIP spacers and centralizers are adjustable and can be used for varying pipe diameters – adding an extra layer of flexibility.
- Reduced insertion forces Allows for greater run lengths and the use of lower insertion forces during installation in trenchless projects. The use of lower insertion forces allows contractors to reduce the size of machine required to complete an installation, saving money, energy and physical space at the job site.
- Cost Real savings when multiple centralizers and spacers are required.

- **Time** Rapid on-site assembly for all pipe diameters.
- Simplicity No specialist skills required to assemble.
- Flexibility Various bow heights for different pipe/bar/ borehole combinations.
- Resilience Engineered from high impact thermoplastic, with no metal parts to corrode.
- Slip Prevention (HDX & HD Series) Integrated rubber grip pads to lock onto pipe/casing.
- Curved Profile Low friction coefficient for easy pipe/ casing insertion into casing/hole.
- Logistics Segmented design and packaging for low inventory and transport costs.
- Expertise Technical advice available on the best kwik-ZIP model for your project.

155 Series

Application

A non-metallic bow spring centralizer for applications such as gravel packed screens, water well casing, monitor wells, drop pipe, and pump installation plus Ground Engineering related applications such as piles, soil nails, anchors and sheathing installations. This model will fit casing and sheathing diameters from 58mm OD (2.28") to in excess of 180mm OD (8"), and is available in three bow heights of 20mm (0.78"), 30mm (1.18"), and 50mm (2").

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.
- Flexible bow able to deflect to handle tight annulus settings.
- The flexible bows can deflect under force to pass minor obstructions in the borehole.
- Larger diameters are accommodated by joining additional segments.
- A 155 Series setting tool is required for assembly.







Model	Runner (Bow) Height	Part #	Operating Temp (Deg C / F)	Recommended for use on Pipe/Nail Diameter	Units per carton	Carton Dimensions (L x W x H)	Gross Carton Weight
155 HT-C	20mm / 0.78"	09810	- 20 C to 80 C - 4 F to 176 F in		30	254mm x 205mm x 210mm 10" x 8.1" x 8.3"	1.7 Kg / 3.96 lbs
155 HT-D	30mm / 1.18"	09988	certain applications (temperatures above	58mm OD- 180mm OD 2.28" OD- 7.09" OD	30	260mm x 205mm x 210mm 10.3" x 8.1" x 8.3"	1.7 Kg / 3.96 lbs
155 HT-E	50mm / 2"	09865	50 C / 122 F may require closer intervals)		30	284mm x 205mm x 210mm 11.2" x 8.1" x 8.3"	1.7 Kg / 3.96 lbs
155 Series Setting Tool	-	09940	-	-	1	485mm x 150mm x 58mm 19.1" x 5.9" x 2.3"	1.5 Kg / 3.3 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.











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Sizing Table - 155 Series

Outside Dia of Casing mm (Inches)	Number of Segments	Approx Setting Guide Position
60 (2.362)	2	5
70 (2.756)	2	15
80 (3.150)	2	35
88.9 (3.50)	3	0
90 (3.543)	3	0
100 (3.937)	3	10
110 (4.331)	3	20
120 (4.724)	3	30
130 (5.118)	3	40
140 (5.512)	3	50
150 (5.905)	4	25
160 (6.299)	4	40
170 (6.693)	4	40
180 (7.087)	4	45

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

380 Series

Application

A non-metallic bow spring centralizer for vertical applications such as gravel packed screens, casing and drop pipe. This model will centralize casing and diameters of 160mm OD (6.3") up to 760mm OD (30") and is available in two flexible bow heights of 30mm (1.18") and 50mm (2").

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.
- Flexible bow able to deflect to handle tight annulus settings.
- A 380 Series setting tool is required for assembly.
- The flexible bows can deflect under force to pass minor obstructions in the borehole.
- Greater diameters are accommodated by joining additional segments.







Model	Runner (Bow) Height	Part #	Operating Temp (Deg C / F)	Recommended for use on Pipe/Nail Diameter	Units per carton	Carton Dimensions (L x W x H)	Gross Carton Weight
380 HT-D	30mm / 1.18"	09964	- 20 C to 80 C - 4 F to 176 F		50	475mm x 400mm x 440mm 18.7" x 15.7" x 17.3"	18 Kg / 39.6 lbs
380 HT-E	50mm / 2"	09858	in certain applications (temperatures above 50 C / 122 F may require closer intervals)	160mm OD- 760mm OD 6.3" OD- 30" OD	50	510mm x 400mm x 450mm 20.1" x 15.7" x 17.7"	18 Kg / 39.6 lbs
380 Series Setting Tool	-	09957	-	-	1	485mm x 150mm x 58mm 19.1" x 5.9" x 2.3"	2 Kg / 4.4 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.
- Complaint with lead free requirements of Section 1417 of the US Safe Water Drinking Act.







Models

Sizing Table - 380 Series

Outside Dia of Casing mm (Inches)	Number of Segments	Approx Setting Guide Position
160 (6.299)	2	5
170 (6.693)	2	20
180 (7.087)	2	35
190 (7.480)	2	50
200 (7.874)	2	65
210 (8.268)	2	85
220 (8.661)	2	100
240 (9.449)	3	0
260 (10.236)	3	20
270 (10.630)	3	35
300 (11.811)	3	65
320 (12.598)	3	85
340 (13.386)	3	105
360 (14.173)	4	30
380 (14.961)	4	45
400 (15.748)	4	60
410 (16.142)	4	70
440 (17.323)	4	95
460 (18.110)	4	110
480 (18.898)	5	50
510 (20.079)	5	70
520 (20.472)	5	75
540 (21.260)	5	85
560 (22.047)	5	100
580 (22.835)	5	110
600 (23.622)	6	60
610 (24.016)	6	65
640 (25.197)	6	80
660 (25.984)	6	90
680 (26.772)	6	105
700 (27.559)	6	110
710 (27.953)	7	65
760 (29.921)	7	90

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

GT Series

Application

A non-metallic bow spring centralizer for applications such as soil nails, rock bolts, anchors, sheathing, small diameter drop pipe, down hole cameras, geophysical tools and other data collection devices. Adjustable diameters to fit 18mm OD (0.70") up to 65mm OD (2.56") and four models to suit numerous ID-OD combinations.

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.
- Curved and wide bow profile for easy insertion.
- Simple integrated cable tie method of assembly. No special tool required for installation.
- The flexible bows can deflect under force to pass minor obstructions in the borehole.
- Larger diameters are accommodated by joining additional segments.



Models

Model	Runner (Bow) Height	Part #	Operating Temp (Deg C / F)	Recommended for use on Pipe/Nail Diameter	Units per carton	Carton Dimensions (L x W x H)	Gross Carton Weight
GT 10-1	10mm / 0.39"	00987	- 20 C to 80 C		100	265mm x 140mm x 210mm 10.43" x 5.51" x 8.27"	1.45 Kg / 3.19 lbs
GT 20-1	20mm / 0.78"	00989	- 4 F to 176 F in certain applications	18mm OD- 65mm OD	100	288mm x 184mm x 178mm 11.34" x 7.25" x 7"	1.67 Kg / 3.67 lbs
GT 30-1	30mm / 1.18"	00988	(temperatures above 50 C / 112 F may	0.70" OD- 2.56" OD	100	339mm x 184mm x 218mm 13.35" x 7.25" x 8.58"	2 Kg / 4.4 lbs
GT 40-1	40mm / 1.57"	00990	require closer intervals)		100	358mm x 184mm x 260mm 14.10" x 7.25" x 10.24"	2.69 Kg / 5.92 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.









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Sizing Table - GT Series

Bar / Pipe Dia mm (Inches)	Units per Centralizer
18mm - 29mm (0.70 inch - 1.14 inch)	2
29mm - 46mm (1.14 inch - 1.81 inch	3
46mm - 65mm (1.81 inch - 2.56 inch	4
Over 65mm (Over 2.56 inch)	Use 155 HT Series

HD Series - Horizontal

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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		30	325mm x 325mm x 375mm 12.8" x 12.8" x 14.8"	8.36 Kg / 18.43 lbs
HD 50	50mm / 2"	00991	- 4 F to 176 F in certain applications	101mm / 4" NPS & greater 50 for pipe dia greater than 355mm / 14")	30	340mm x 325mm x 375mm 13.4" x 12.8" x 14.8"	8.48 Kg / 18.69 lbs
HD 75	75mm / 3"	00993	(temperatures above 50 C / 122 F may require		30	385mm x 325mm x 375mm 15.1" x 12.8" x 14.8"	9.26 Kg / 20.41 lbs
HD 100	100mm / 4"	00100	cioser intervals)	,	30	460mm x 325mm x 375mm 18.1" x 12.8" x 14.8"	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] \div 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.





HD Series - Vertical

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Application

A non-corroding, non-metallic heavy duty bow spring centralizer for vertical applications such as production wells, gravel packed well screens, pump torque arrestor, water well casing, coal seam methane casing, pump riser/submersible pump installation, and piling and is suitable for all pipe materials including PVC, Poly, Stainless Steel, Fibreglass and GRP, etc. Will fit diameters from 110mm OD (4.33") to greater than 1600mm OD (63") by addition of multiple segments.

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.
- 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.







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	00.0 to 00.0	101mm / 4" NPS & greater	30	325mm x 325mm x 375mm 12.8" x 12.8" x 14.8"	8.36 Kg / 18.43 lbs
HD 50	50mm / 2"	00991	- 4 F to 176 F in certain applications		30	3340mm x 325mm x 375mm 13.4" x 12.8" x 14.8"	8.48 Kg / 18.69 lbs
HD 75	75mm / 3"	00993	(temperatures above 50 C / 122 F may require closer		30	385mm x 325mm x 375mm 15.1" x 12.8" x 14.8"	9.26 Kg / 20.41 lbs
HD 100	100mm / 4"	00100	intervais)		30	460mm x 325mm x 375mm 18.1" x 12.8" x 14.8"	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.
- Complaint with lead free requirements of Section 1417 of the US Safe Water Drinking Act











Models

Sizing Table - HD Series

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	4	80
14	355.60	14.00	5	50
16	406.40	16.00	6	35
18	457.20	18.00	6	65
20	508.00	20.00	7	55
24	609.60	24.00	8	65
	650	25.59	9	50
	710	27.95	9	70
	800	31.50	10	75
	900	35.43	12	60
	1000	39.37	13	65
	1100	43.30	14	70
	1200	47.24	17	45

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





HDX Series

Application

A non corroding, non-metallic casing spacer for Pipe-in-Pipe (PIP) applications such as slip lining and cased crossings for all medium to heavy weight pipe materials including steel, DICL, MSCL, GRE, PVC and HDPE. Suitable for all diameters from 100mm OD to 1600mm OD and beyond by addition of multiple segments.

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 suspension system allowing heavy loads to be shared across multiple runners reducing point loading and increasing the overall load capacity of the spacer.
- Minimizes spacer weight bearing capacity and reduces point loading via a unique load sharing runner system.
- Ability to combine different runner heights in the same spacer ring to assist in borehole grade correction.
- Larger diameters are accommodated by joining additional segments.
- Requires only a flat blade screwdriver for installation.

Models









Model	Runner 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
HDX 38	38mm / 1 ½"	00038	- 20 C to 80 C		20	370mm x 350mm x 300mm 14.6" x 13.8" x 11.8"	11 Kg / 24.2 lbs
HDX 65	65mm / 2.56"	00065	- 4 F to 176 F in certain applications	100mm 0D	20	370mm x 350mm x 330mm 14.6" x 13.8" x 12.9"	13 Kg / 28.6 lbs
HDX 90	90mm / 3.54"	00090	(temperatures above 50 C / 122 F may require closer	& greater	20	370mm x 350mm x 365mm 14.6" x 13.8" x 14.4"	14.6 Kg / 32.1 lbs
HDX 125	125mm / 4.92"	00125	interVals)		20	370mm x 350mm x 405mm 14.6" x 13.8" x 15.9"	17 Kg / 37.4 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.















Size table & setting guide

NPS (ASME)	*Carrier Pipe OD (mm)	*Carrier Pipe OD (Inches)	**Carrier Pipe Nominal Size (DN)	Rec # Segments	Banding	Approx Setting Guide Position
3.5	101.60	4.00		2	No	0
	110.00	4.33		2	No	10
	122.00	4.80	100	2	No	30
4.5	127.00	5.00		2	No	40
5	141.30	5.56		2	No	65
	160.00	6.30		3	No	15
6	168.27	6.62		3	No	20
	177.00	6.97	150	3	No	30
	200.00	7.87		3	No	55
8	219.08	8.63		4	No	10
	232.00	9.13	200	4	No	20
	259.00	10.20	225	4	No	40
10	273.05	10.75		5	No	10
	286.00	11.26	250	5	No	20
12	323.85	12.75		5	No	40
	345.00	13.58	300	6	No	20
16	406.40	16.00		7	No	20
	426.00	16.77	375	7	No	30
	453.00	17.83	400	8	No	20
20	507.00	19.96	450	9	No	20
22	560.00	22.05	500	10	No	15
24	609.60	24.00		11	No	15
	630.00	24.80		11	No	20
	667.00	26.26	600	12	No	15
28	711.20	28.00		12	No	25
30	762.00	30.00		13	No	25
	800.00	31.50		14	Yes	20
	826.00	32.52	750	14	Yes	25
	900.00	35.43		15	Yes	25
	1000.00	39.37		17	Yes	25
42	1066.80	42.00		18	Yes	30
44	1117.60	44.00		19	Yes	30
48	1219.20	48.00		21	Yes	30
52	1320.80	52.00		22	Yes	35
	1400.00	55.12		23	Yes	30
	1564.00	61.57		25	Yes	35
	1600.00	62.99		26	Yes	35
	1668.00	65.67		27	Yes	35

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

* For PE Pipe refer to the nearest Carrier Pipe OD.

** OD for Nominal Size (DN) designations is a guide only. If unsure please confirm actual carrier pipe OD.

For pipe greater than 800mm OD (e.g. DN 750 and above), for very heavy weight pipe, or if the pipe material is slippery, it is recommended that 12mm stainless steel worm drive banding be applied over the collars. Contact kwik-ZIP for further information.

HDX Spacers are generally suitable for heavy pipe run lengths up to 300m (approx. 1,000 ft) in good condition casings. Longer run lengths may be possible with casing lubrication, banding, and/or closer spacer intervals. Contact kwik-ZIP for further advice.

Load sharing

Using a unique "load sharing runner" system, each HDX segment maximises its weight bearing capacity by distributing the pipe load across multiple runners. This reduces point loading at any one location, boosting and optimising the overall support capacity of the spacer exponentially as pipe size increases. The "load sharing runner" system also delivers a suspension and dampening effect, reducing the transfer of potentially damaging vibration and movement from the outer casing to the carrier pipe. This may be beneficial in tectonically active regions or high traffic areas where ongoing external vibration affects the outer casing.

When used in accordance with the Installation Guide, HDX Spacers will easily handle weights equivalent to a standard Ductile Iron Cement Lined (DICL) pipe full of fluid.

For specific advice on load capacities please contact sales@kwikzip.com (Australasia) or usa@kwikzip.com (USA).



Friction and Wear capabilities

Acetal (POM) is well known as being one of the best materials for applications requiring excellent abrasion / wear resistance and a low coefficient of friction. It performs better than alternative materials such as Nylon and HDPE.

HDX Spacers are fitted with wear pads made from kwik-ZIP's modified Acetal (POM) engineering thermoplastic blend to achieve even better abrasion resistance and a lower coefficient of friction, especially under high load conditions.

These properties allow for greater run lengths and lower insertion forces during carrier pipe installation.

The graphs below compare the dynamic coefficient of friction, and the wear rate (against carbon steel) of the material used to make the HDX wear pads versus standard Acetal (POM).



HDXT Series

Application

A completely non corroding, non-metallic casing spacer for Pipe-in-Pipe (PIP) applications such as slip lining and cased crossings for all heavy weight pipe materials including steel, ductile, MSCL, GRE, PVC, HDPE. Suitable for all diameters from 300mm (11.81") OD and beyond by addition of multiple segments.

Construction & Features

- Made from Kwik-ZIP's engineered 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 suspension system allowing heavy loads to be shared across multiple runners reducing point loading and increasing the overall load capacity of the spacer.
- Minimizes spacer weight bearing capacity and reduces point loading via a unique load sharing runner system.
- Ability to combine different runner heights in the same spacer ring to assist in borehole grade correction.
- Larger diameters are accommodated by joining additional segments.







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Models

Model	Runner 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
HDXT 43	43mm / 1.69"	00002	- 20 C to 80 C - 4 F to 176 F in certain applications (HDXT Hi Load Inserts should be used for service	300mm (11.81") OD & greater	20	640mm x 360mm x 350mm 25.20" x 14.17" x 13.78"	20.2 Kg / 44.5 lbs
HDXT 63	63mm / 2.48"	00004			20	640mm x 360mm x 375mm 25.20" x 14.17" x 14.76"	22.8 Kg / 50.2 lbs
HDXT 103	103mm / 4.05"	00006			20	640mm x 360mm x 520mm 25.20" x 14.17" x 20.47"	26.2 Kg / 57.8 lbs
HDXT 153	153mm / 6.02"	00008	temperatures above 50 C / 122 F)		20	640mm x 360mm x 570mm 25.20" x 14.17" x 22.44"	31.2 Kg / 68.8 lbs

Compliance

- Manufactured under a certified ISO 9001 Quality Management System.
- Compliant with AS/NZS 4020:1999 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 Spacer.



Size table

NPS (ASME)	*Carrier Pipe OD (mm)	*Carrier Pipe OD (Inches)	Recommended # Segments	Banding				
	300.00	11.81	3					
12	323.85	12.75	3					
14	355.60	14.00	3					
	400.00	15.75	4					
16	406.40	16.00	4					
	426.00	16.77	4					
18	457.00	17.99	4					
	500.00	19.69	5					
20	508.00	20.00	5					
22	560.00	22.05	5					
24	610.00	24.02	6					
26	660.00	25.98	6					
28	711.20	28.00	7					
30	762.00	30.00	7					
	800.00	31.50	8					
	826.00	32.52	8					
	900.00	35.43	8					
36	914.00	35.98	8					
	1000.00	39.37	9					
42	1066.80	42.00	10	Yes				
44	1117.60	44.00	10	Yes				
48	1219.20	48.00	11	Yes				
52	1320.80	52.00	12	Yes				
	1400.00	55.12	13	Yes				
	1564.00	61.57	14	Yes				
	1600.00	62.99	15	Yes				
	1668.00	65.67	16	Yes				
	1800.00	70.87	17	Yes				
	1900.00	74.80	18	Yes				
	2000.00	78.74	19	Yes				
	2200.00	86.61	20	Yes				
	2500.00	98.43	23	Yes				
	3000.00	118.11	27	Yes				
Contact kwik-ZIP for carrier pipe diameters greater than 3000 mm (118.11") 0D								

* For PE Pipe refer to the nearest Carrier Pipe OD.

Important: Please read HDXT Spacer Installation Guide before use.

For pipe greater than 1000mm OD, or if the pipe material is slippery, it is recommended that 12mm stainless steel worm drive banding be considered for application over the collars.

HDXT Spacers are generally suitable for heavy pipe run lengths up to 300m (approx. 1,000 ft) in good condition casings. Longer run lengths may be possible with casing lubrication, banding, and/or closer spacer intervals.

Contact kwik-ZIP for further advice.

Load sharing

Using a unique "load sharing runner" system, each HDXT segment maximises its weight bearing capacity by distributing the pipe load across multiple runners. This reduces point loading at any one location, boosting and optimising the overall support capacity of the spacer exponentially as pipe size increases. The "load sharing runner" system also delivers a suspension and dampening effect, reducing the transfer of potentially damaging vibration and movement from the outer casing to the carrier pipe. This may be beneficial in tectonically active regions or high traffic areas where ongoing external vibration affects the outer casing.

When used in accordance with the Installation Guide, HDXT Spacers will easily handle weights equivalent to a standard Ductile Iron Cement Lined (DICL) pipe full of fluid.



Friction and Wear capabilities

HDXT Spacers are fitted with wear pads made from kwik-ZIP's engineered thermoplastic blend to achieve superior abrasion resistance and a low coefficient of friction, especially under high load conditions.

These properties allow for greater run lengths and lower insertion forces during carrier pipe installation.

For specific advice on load, friction or wear capacities please contact sales@kwikzip.com (Australasia) or usa@kwikzip.com (USA).

What others are saying about kwik-ZIP

"The GT-Series Centraliser is highly popular with our customers across a wide range of geotechnical projects for installation on both bar and sheathing. I think that's because the units provide a very simple, versatile, and economical centralizing solution, many times in settings where time and money are critical factors." **Steve Dube, Business Unit Manager, Dywidag Systems**

International

"These centralizers have provided excellent centering capability and a resulting grout job that meets all specifications. ...It's a good product and after recent failures with stainless centralizers, I am real happy to see a product with good strength properties available for contractors to use."

Jim Frazee, Hydrogeologist, St John River Water, Management District, Florida USA.

"We use the HD series on our sewer installations on different pipe diameters. The curved bow spring allows easy insertion of the pipe into the casing. We also find that the rubber pads grip tightly onto the pipe to prevent slip. Because the units lock together easily Kwik-Zip saves us a lot of time."

Cliff Bailey, Project Manager, ADK Civil

"To date we have used well over a hundred thousand of Kwik-Zip's GT centralisers on our soil stabilization projects. We find the units to be quick and easy to assemble and versatile with different bar and hole sizes. I am happy with the product and would recommend it." **Raegan Rumbold, Project Manager,**

Rock Australia Mining and Civil

"Kwik-Zip's HD segments were delivered to site in compact boxes. In no time we had assembled multiple spacers on a 610 mm OD steel water main pipe run for friction reduction and centralization before we grouted. It was that simple."

Graeme Morton, Project Manager, Underground Services Australia

"When I first saw your product I knew it would be a huge success. I will forever be a customer and always speak highly of Kwik-ZIP products."

Don Huckfeldt, Owner, Huckfeldt Well Drilling, Napa, California

"kwik-ZIP's HD75 spacers were quick & easy to install and helped to make the carrier pipe installation a trouble-free process." Brett Moore – Construction Manager, Microtunnelling, Adept Civil Group.

"Kwik-ZIP's customer service & technical support was excellent the spacers were supplied at very short notice from their Sydney warehouse and the installation crews found them quick & easy to install"

Rod Dean, Engineering Designer, Shoalhaven Water.

"kwik-ZIP spacers robust design and low coefficient of friction assisted to make the installation process trouble free, and ensured complete protection of the carrier pipe."

Michael Allen: Project Engineer, Ledonne Constructions Pty Ltd.

"The spacers were delivered on-time as requested and our crew found the Kwik-ZIP spacers simple and easy to install given they didn't require any special tools. Their robust design and ability to protect the carrier pipe and handle tough abrasive conditions made them the perfect solution for our project."

Errol Alley: National Manager, Axis Civil and Hydraulics.

I was particularly impressed with Kwik-ZIP's professional and timely delivery; the team at Kwik-ZIP were cordial and supportive as their understanding of our requirement saved the project time." – Matthew Akinsanya: Site Engineer, Diona.

"Kwik-ZIP products are simple and quick to install and ensure the carrier pipe is appropriately protected from abrasion and other damage during installation. Minimal force is required during installation of the carrier pipe due to the products low coefficient of friction."

Michael Allen: Project Engineer, Ledonne Constructions Pty Ltd.

"Pipeline Drillers utilised Kwik-ZIP HDX-38 on two steel casing sections required to protect the client's asset from existing and future roadways on the Mountain Creek to Kawana Sewerage Pipeline Project. Our construction partner, Dormway, installed the casing spacers at one metre intervals across the 900-millimetre diameter high-density polyethylene Kawana Way Road Crossings, and found the assembly extremely fast, simple and unfailing. Overall the team were impressed with the product, which delivered sound support for a seamless installation."

Colin Harris: Project Manager, Pipeline Drillers.

"Kwikzip centralizers are strong and easy to use and keep the pipe perfectly on grade."

Chris Dean, L&D Micro Tunnelling.

"kwik-Zip spacers were easy to use and the pipe slid through with ease the only tool needed was a screwdriver " Stuart Rose : Works Supervisor, Riverina Water.

"Denso Australia found the Kwik-ZIP 155 HT-E was a perfect selection due to the ease of application and the competitive price." David Towns: Business Development Manager SA/NT, Denso Australia.