

SIZE TABLE & SETTING GUIDE

| Nominal Pipe Size (NPS) | OD of Pipe (mm) | OD of Pipe (Inches) | VERTICAL | | *HORIZONTAL |
|-------------------------|-----------------|---------------------|------------------------------|-------------------------------|-------------------------------|
| | | | Suggested Number of Segments | Approx Setting Guide Position | *Suggested Number of Segments |
| | 110 | 4.33 | 2 | 0 | 2 |
| 4 | 114.30 | 4.50 | 2 | 15 | 2 |
| 4.5 | 127.00 | 5.00 | 2 | 30 | 2 |
| 5 | 141.30 | 5.563 | 2 | 55 | 2 |
| | 160 | 6.30 | 2 | 85 | 3 |
| 6 | 168.27 | 6.625 | 3 | 5 | 3 |
| | 180 | 7.09 | 3 | 20 | 3 |
| | 200 | 7.87 | 3 | 40 | 3 |
| 8 | 219.08 | 8.625 | 3 | 65 | 3 |
| | 250 | 9.84 | 4 | 25 | 4 |
| 10 | 273.05 | 10.75 | 4 | 45 | **4 |
| 12 | 323.85 | 12.75 | 4 | 80 | **5 |
| 14 | 355.60 | 14.00 | 5 | 50 | **6 |
| 16 | 406.40 | 16.00 | 6 | 35 | **7 |
| 18 | 457.20 | 18.00 | 6 | 65 | **8 |
| 20 | 508.00 | 20.00 | 7 | 55 | **8 |
| 24 | 609.60 | 24.00 | 8 | 65 | **10 |
| | 650 | 25.59 | 9 | 50 | **11 |
| | 710 | 27.95 | 9 | 70 | **12 |
| | 800 | 31.50 | 10 | 75 | **14 |
| | 900 | 35.43 | 12 | 60 | **15 |
| | 1000 | 39.37 | 13 | 65 | **17 |
| | 1100 | 43.30 | 14 | 70 | **19 |
| | 1200 | 47.24 | 17 | 45 | **20 |

*HORIZONTAL APPLICATIONS:

*Note: For pipe installed in the horizontal position, (eg. 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.

kwik-ZIP®

INERT CENTRALIZER & SPACER SYSTEMS
FOR THE DRILLING & CIVIL CONSTRUCTION INDUSTRY

INSTALLATION GUIDE

FOR

HD SERIES CENTRALIZERS / SPACERS

FOR VERTICAL & HORIZONTAL APPLICATIONS INC:
CASING, SCREEN, DROP PIPE, SLIP LINING,
CASED CROSSINGS ETC.



IMPORTANT: PLEASE READ

PRODUCT SELECTION GUIDE

The table below details Model details, Part # and maximum operating temperatures:

| Model & (Bow Height) | Part # | Max Operating Temperature (Deg C/F) | Recommended for use on Pipe Diameter: |
|----------------------------|--------|--|---------------------------------------|
| HD 30 : (1 3/16" / ~ 30mm) | 00992 | - 20 C to 80 C | 4" Nominal (110mm OD and above) |
| HD 50 : (2" / ~ 50mm) | 00991 | - 4 F to 176 F in certain applications (temperatures above 50 C / 122 F may require closer intervals). | |
| HD 75 : (3" / ~ 75mm) | 00993 | | |
| HD 100: (4" / ~ 100mm) | 00100 | | |

All HD Series Centralizers / Spacers incorporate rubber grip pads under the collars to prevent slippage on the pipe.

INSTALLATION INSTRUCTIONS

The chart on the back page of this guide indicates the number of HD series *kwik-ZIP*[®] centralizer segments required and the approx setting position for various pipe diameters.

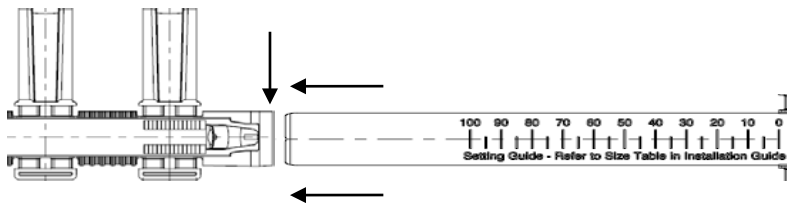
For heavy weight pipe and diameters greater than those listed, the following formula may be used to calculate the number of segments required. This will maximise the number of bows supporting the pipe for heavy loads.

Where: D = Outside Diameter of Casing (mm) **Note: 1 inch = 25.4 mm**

N = Number of *kwik-ZIP*[®] centralizer segments,

For heavy weight pipe: $N = [D \times (22/7)] \div 180$

SETTING GUIDE POSITION (REFER SIZE TABLE AND SETTING GUIDE)



Step 1. When you have established the appropriate setting guide position (see table on rear page), place the segments on a flat surface and insert the male section of each segment into the screw housing on the next segment as indicated by the arrows in the above diagram.

Step 2. Line the leading edge of each screw housing up with the appropriate number on the Setting Guide.

Step 3. Once all segments are set, they can be wrapped around the pipe and the final joints can be fastened. This method allows the centralizer to be made up mostly by hand.

A flat screwdriver of approx. 6mm (5/16") is required to tighten the screws once the segments are fixed to the pipe.

All screws must be tightened and for horizontal applications always tighten the screws underneath the pipe last as this will provide greater tension and better grip.

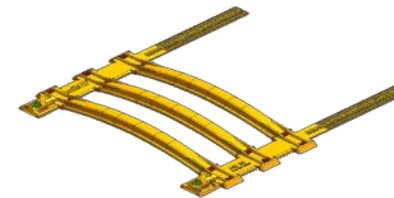
Important Note:

Do not over tension the screws as this may cause damage to the thread.



CAUTION:

kwik-ZIP[®] centralizers should not be exposed to a naked flame or sparks from welding. Failure to shield the product whilst welding may result in damage to the centralizer.



2 x HD 30 segments installed on 4" Stainless Steel Pipe.

