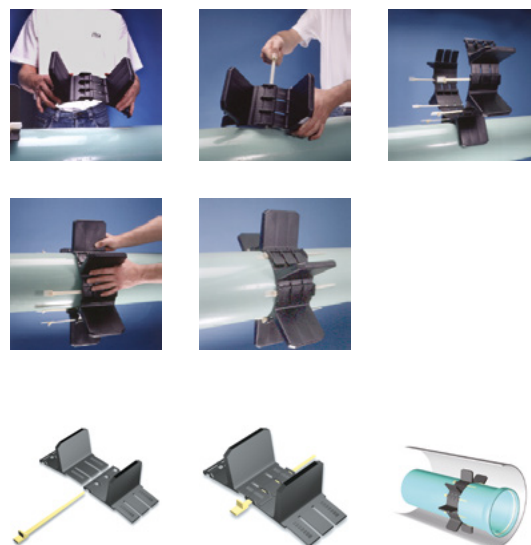


# INSTALLATION INSTRUCTION

1. Find out the number of segments needed per insulating ring by consulting the delivery note.
2. Connect the segments together inserting the male butt-straps into the slots of the next segment.
3. Insert the male butt-straps up to the vertical mark (notch on the central slot).
4. Do not close the ring entirely (leave the last connection open).
5. Wrap the pipe surfaces in the contact area of the pipe/spacer with an anti slipping protection band to ensure optimum safety against slipping.
6. Wrap the insulator ring around the pipe.
7. If necessary, work the connections regularly by hand until a loose fit is achieved.
8. Insert the pins in the slots provided following the arrow direction (the arrows are situated on the upper part of the connecting slots).  
Please note: the pins have to be inserted with the grooved side on top!
9. The insertion of the grooved pin into the segment slot pulls the segments further together, thereby tightening the ring.  
Please note: should the segments move back instead of drawing closer: the pin has been inserted wrongly (opposite the direction of the arrows).
10. Push in the pin as far as is manually possible. If you can insert the pin completely, pull it out and push in again one groove further left. By this procedure you can tighten the ring each time one groove more. This can be repeated as often as necessary.
11. Tap lightly with a hammer on all pins until the ring is tight and non removable on the pipe. Ensure that you tighten all pins and not only some.
12. **Important:**
  - a) After tightening the ring on the pipe all pins must be visible from both sides of the segment.
  - b) Make sure that the pins are not completely inserted. If all pins are completely inserted, the ring has not the maximal tension. In this case remove several pins partly and at least one completely. Then reinsert the pin by one groove further left.
  - c) Do not hammer too hard because the pin grooves could jump out of the segment toothing.
  - d) Please achieve a true and parallel interposition of the segments - this ensures that the pins grooves grip properly.
13. The pins may be withdrawn by hammer-taps and reinserted without damage to reform the ring.
14. Please attempt an identical or similar positioning of all the insulator skids along one pipe-length!



Number of segments	CaseX Ranger® S ø in mm	CaseX Ranger® M ø in mm	CaseX Ranger® L ø in mm
4	62 - 83	138 - 188	400-494
5	77 - 104	172 - 235	495-625
6	92 - 125	207 - 282	600-750
7	107 - 145	241 - 329	700-890
8	123 - 166	276 - 376	800-1000
9	138 - 187	310 - 423	900-1140
10	153 - 205	344 - 470	1000-1290
11	169 - 228	379 - 517	
12	184 - 249	413 - 564	

## Attaching a cable protective pipe

It can be firmly fasten by means of either polyamide quick-lock-binders or steel straps.

1. Pull the binding straps through the connecting slot of each insulator (or every second insulator) at those points where arrows indicate the direction for pin insertion.
2. Place the cable protective pipe in the shallow grooving along the connecting skid (with arrow).
3. Fasten each strap round the cable protective pipe and tighten.

## The maximum load capacity of the CaseX Ranger II Spacer per ring:

- Skid height 16,5 to 50 mm: S = 225 kg / M = 600 kg / L = 1500 Kg
- Skid height 65 to 75 mm: S = 185 kg / M = 450 kg / L = 1180 Kg
- Skid height 90 to 100 mm: S = 160 kg / M = 400 kg
- Skid height 125 to 150 mm: S = 115 kg / M = 285 kg
- Skid height 175 mm: M = 225 kg