

PRODUCT DATA SHEET
DS BLOCK-PROFILE



DS BLOCK Profile is a sealing ring made from elastomers with closed cellular structure for the sealing of water infiltration between steel collar rings. At the same time it supports and secures the position of the main seal against bentonite and external pressure exerted by water and protects the steel collar against aggressive substances within the pipe.

- DS BLOCK Profile is in accordance with the requirements of DIN EN 681-3 (seals made from cellular elastomers).
- DS BLOCK Profile is a compression seal.
- DS BLOCK Profile is fastened underneath the steel collar with DS special adhesive and deformed when the pipe fronts are joined (front seal).
- DS BLOCK Profile requires a butt joint width of very tight tolerance. It is only suitable for straight pipe jacking.

SPECIAL ADVANTAGES

- Pre-mounted elastomer profile for straight pipe jacking providing sealing, support and protection.
- Ensures a much more reliable seal of the pipe connection.

MATERIAL

DS BLOCK Profile is produced from closed cellular styrene butadiene rubber (SBR) or from ethylene propylene diene rubber (EPDM). The material resists the usual stresses caused by sewage.

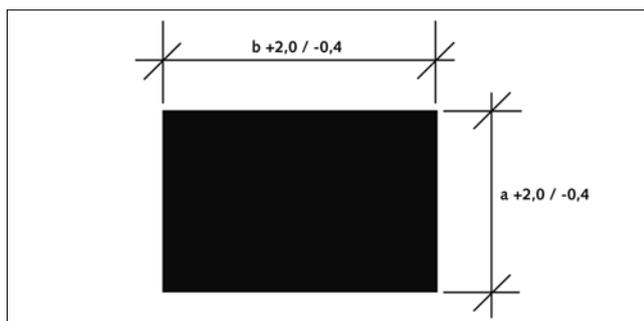
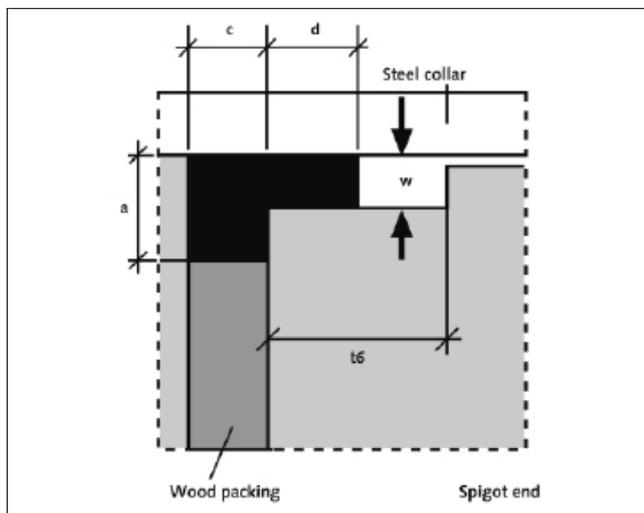


PIPE AND JACKING REQUIREMENTS

- Highly accurate parallelism and flatness of pipe front faces.
- When determining the allowable pipe jacking force the constriction of the wood packing by the DS BLOCK Profile must be taken into account.
- Straight jacking with minimal vertical and horizontal deviations caused by steering movements.
- Full sealing, support and corrosion protection against aggressive substances can only be guaranteed if all dimension criteria are met by the finished assembly.

DIMENSIONING OF THE SEALING RING

(Alle dimensions in mm)



The DS BLOCK Profile is to be determined on the basis of the estimated minimum and maximum butt joint width (c) and the geometry of the pipe joint (socket gap width w , position of shoulder t_6 , width of deformed main seal) by the following criteria:

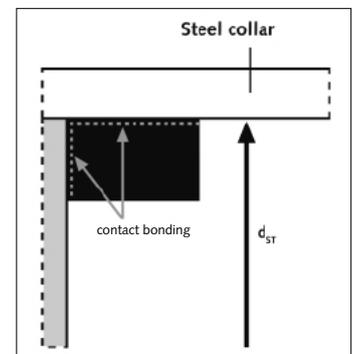
- Sufficient overlapping: $a \geq 2 \times w$
- Space required for rubber profile
 $a \times b \times k \leq a \times c_{min} + d \times w$
 with $k = 0,8$
 and $d = t_6 - F / ((1 + s/100) \times w)$
 (F = area of main seal,
 s = pre-stretching of main seal in %)
- Tightness $C_{max} \leq 0,75 \times b$ (cellular structure)

- Available BLOCK Profiles (a/b in mm):

18/18	22/22	25/25	25/30	28/28
29/34	30/30	30/35	30/40	50/50

INSTALLATION TIPS

- The wood packing must have a clearance from the steel collar of about $> a + 2\text{mm}$
- DS BLOCK Profile may be supplied as a cord or a ring.
- As the profile is a seal, the butt joint of the ring must be carefully cut and glued (e.g. with Sicomet 8000), if the seal is installed in the concrete factory or at the construction site.



1. Fasten DS BLOCK Profile as a cord underneath the steel collar ring with DS contact adhesive. Finally cut and glue joint carefully.
2. Prepare BLOCK Profile ring (cut length = $d_{ST} - a$) $\times \pi$, tolerance $\pm 0.5\%$) and fasten to wood packing with thin nails. When nailed the BLOCK Profile must neither be compressed nor stretched.
3. Prepare DS BLOCK Profile ring with 4% upsetting (cut length = $(d_{ST} - a) \pi / 0.97$, tolerance $\pm 0.5\%$) and fasten underneath steel collar with DS special adhesive.

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