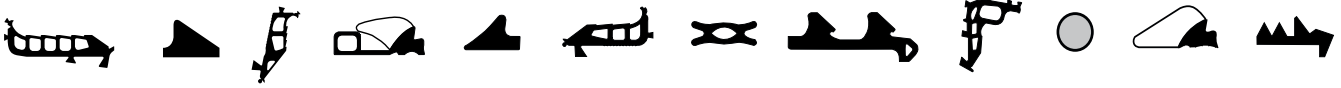
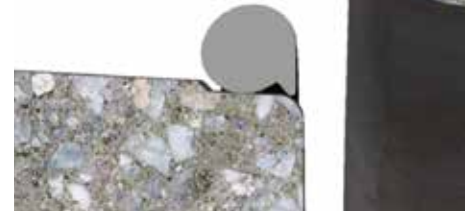


PRODUCT DATA SHEET
DS BK



DS BK is a sealing ring made from elastomers with closed cellular structure for the permanent sealing of socket pipe connections in the sewage area.

- DS BK is in accordance with the requirements of the European standard DIN EN 681-3 (seals made from cellular elastomers).
- DS BK is a compression seal.
- DS BK with cellular structure has a flatter load-deflection curve than a sealing ring with dense structure and therefore has lower reaction loads at the same deflection. So bigger cross sections are used, increasing the security against underflow (wider contact area). However the security of cellular seals against shear loads is less than that of dense structure.
- DS BK is mounted on the front of pipe spigot and rolled and formed in the socket gap during the production of the pipe joint.
- DS BK is supplied by the pipe manufacturer with the pipes loosely to the job site.

**Tested and quality controlled
by MPA Berlin-Brandenburg.**

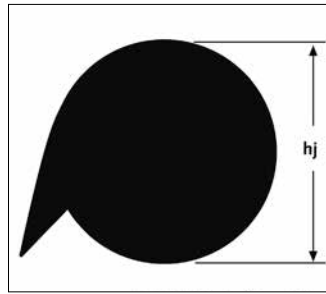
MATERIAL

DS BK is produced from styrene-butadiene rubber (SBR) with closed cellular structure. The material resists the usual stresses caused by sewage.



USE OF DS-ROLLRING BK

- DS BK is used as a joint seal for Seton socket pipes in the sewage area with 30% to 60% compression. As pre-stretching, 15% to 20% should be chosen.



DS BK has a comma shaped cross section. This offers the following advantages:

- twist-free installation of the sealing ring, which can be checked easily optically or (for smaller pipe diameters in the trench) by scanning.
- stable seat of the sealing ring as the peak of the comma of the sealing ring is elastically supported on the pipe end and thereby prevents it coming out.
- secure connection of the pipe joint, since the comma shape locks the pipe connection thereby preventing sliding out, which is common with round seals.

DIMENSIONING OF THE SEALING RING

(All dimensions in mm)

For the dimensioning of the necessary seal height h_j the socket gap width w has to be determined. To achieve this, the outer diameter of the spigot end d_{sp} and the inner diameter of the socket end must be measured on at least ten pipes of a production batch or delivery. The pipes and the diameters are to be selected according to information gained on site in such a way that the maximum and minimum values are recorded. Max w and min w of the socket gap width are then calculated from the measured values as follows:

$$\max w = \frac{\max d_{so} - \min d_{sp}}{2}$$

$$\min w = \frac{\min d_{so} - \max d_{sp}}{2}$$

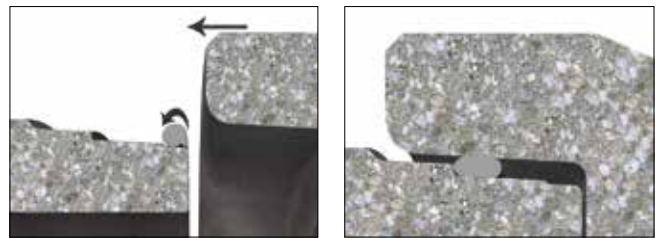
DIMENSION TABLES (all dimensions in mm)

DS BK as slide ring

(Range of application: 30% – 60%, pretension 17.5%)

h_j	t_+	t_-	max w	min w	$w \pm$	
14	1,2	0,4	8,8	5,6	7,2	1,6
16	1,2	0,4	10,1	6,4	8,2	1,9
18	1,2	0,4	11,4	7,1	9,2	2,1
20	1,6	0,4	12,7	8,0	10,3	2,3
22	1,6	0,4	14,0	8,7	11,4	2,6
24	1,6	0,4	15,3	9,5	12,4	2,9
26	1,6	0,4	16,6	10,2	13,4	3,2
28	1,6	0,4	17,9	10,9	14,4	3,5
30	1,6	0,4	19,2	11,7	15,4	3,7
32	2,6	0,4	20,4	12,8	16,6	3,8
34	2,6	0,4	21,7	13,5	17,6	4,1
36	2,6	0,4	23,0	14,3	18,7	4,4

Smaller or larger h_j on request.



- Before connecting the pipes, sockets, edges and the sealing rings must be cleaned of adherent coarse dirt.
- The roll ring selected for the pipe to be sealed is to be mounted as far forward without twisting on the spigot end, and in such a way that the comma of the ring cross section is located at the end of the pipe and rests on the spigot end.
- The pipe with the fitted sealing ring is to be brought to the beginning of the socket of the already laid pipe and inserted centrally into the socket.
- In addition, the installation recommendations of the pipe manufacturer, the standards DIN EN 1610 and the DWA-A 139 work sheet are to be observed

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