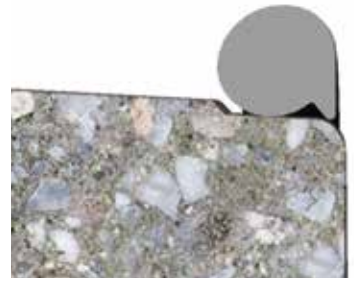


## PRODUCT DATA SHEET

# DS K



DS K is a ring seal made from elastomers with dense structure for the permanent sealing of concrete and reinforced concrete socket pipe connections.

- DS K is in accordance with the requirements of the European standard DIN EN 681-1 / DIN 4060 [88] (seals made from elastomers).
- DS K is a compression seal.
- DS K is mounted on the front of the pipe spigot and rolled and formed during the production of the pipe joint in the socket gap.
- DS K is supplied by the pipe manufacturer with the pipes loose to the job site.

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

### MATERIAL

DS K is usually produced from styrene-butadiene rubber (SBR), hardness 40+5 IRHD. The SBR material resists the usual stresses caused by sewage. In case of content of light liquids (oil, petrol, fuels) in the sewage water it is recommended to use DS K made of acryl-nitrile-butadiene-rubber (NBR), which has a higher resistance against light liquids.

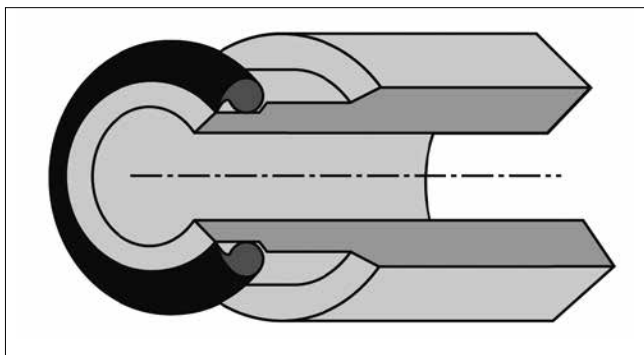


## USE OF DS K

DS K is used for concrete and reinforced concrete pipes according to DIN EN 1916.

It has a comma-shaped cross-section with the following advantages:

- twist-free installation of the sealing ring, which can easily be checked 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)

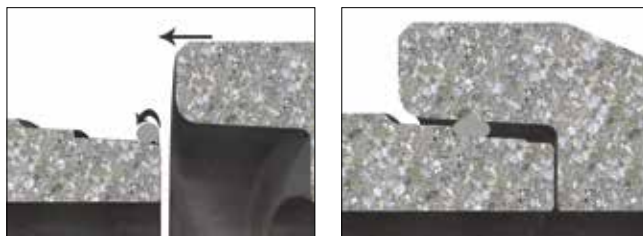
### DS K

(Range of application: 25% to 40%, pretension 12%)

$h_j$	$t_+$	$t_-$	max $w$	min $w$	$w \pm$	
14	0,8	0,4	9,6	7,0	8,3	1,3
16	0,8	0,4	11,1	7,9	9,5	1,6
18	0,8	0,4	12,5	8,9	10,7	1,8
20	1,2	0,4	13,9	10,0	12,0	1,9
22	1,2	0,4	15,3	11,0	13,1	2,2
24	1,2	0,4	16,7	11,9	14,3	2,4
26	1,2	0,4	18,1	12,9	15,5	2,6
28	1,2	0,4	19,6	13,8	16,7	2,9
30	1,2	0,4	21,0	14,7	17,9	3,1
32	1,6	0,4	22,4	15,9	19,1	3,3
34	1,6	0,4	23,8	16,8	20,3	3,5
36	1,6	0,4	25,2	17,8	21,5	3,7

Smaller or larger  $h_j$  on request.

## PIPE INSTALLATION TIPS



- Before connecting the pipes, sockets, edges and 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 and the standards DIN EN 1610 and the DWA-A 139 work sheet are to be observed.

Values and properties shown in diagrams and tables are not subject to any guarantees. Our warranty is limited to the values and properties as required by the relevant standards. Our literature, data sheets and recommendations represent our knowledge at the time of printing but are in no way legally binding on us. Our "General Conditions of Sale" apply to all sales.

**DS**<sup>+</sup>  
DICHTUNGSTECHNIK