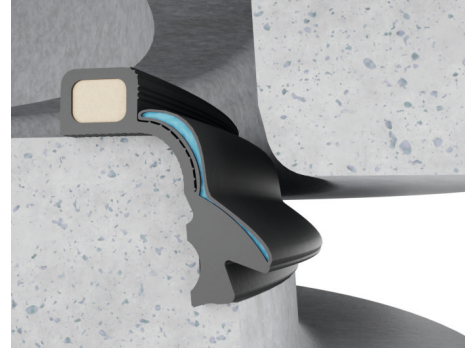


## PRODUCT DATA SHEET DS SDVSEAL



DS SDVseal is a combination of a pre-lubricated sealing ring made from elastomers with dense structure and load balancing for the tight and stable connection of concrete and reinforced concrete manhole rings according to DIN EN 1917 and DIN 4034-1.

- DS SDVseal is a compression slide ring seal with wedge-shaped cross section and an internally greased closed slide mantel. Connected to the seal is a quartz sand filled load transfer hose.
- DS SDVseal is in accordance with the requirements of DIN EN 681-1 / DIN 4060 – seals made from elastomers – and the FBS quality guideline.
- DS SDVseal manhole connections fulfill the long term criteria of DIN EN 1916, method 1.
- DS SDVseal fulfils the requirements of DIN 4034-1 with regard to an even and not springy load transfer.
- DS SDVseal is normally supplied separately by the manhole ring manufacturer directly to the job site along with the manhole ring.

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

### SPECIAL ADVANTAGES

- Quick and secure mounting by the integrated lubricant and load transfer in just one element.
- Easily mountable multiple times thanks to the enclosed slide mantel.
- Seal takes off some of the side loads because the slide mantel goes into the gap between shoulder and socket.
- Load transfer system can be seen from inside the manhole.
- Load transfer closes the joint to a great extent and hinders the entrance of condensation or surface water.

### MATERIAL

DS SDVseal is produced from styrene butadiene rubber (SBR), hardness  $40\pm 5$  IRHD. The material resists the usual stresses caused by sewage

Verified statics on the overall structure and Load bearing test on Shaft rings

QR 4060

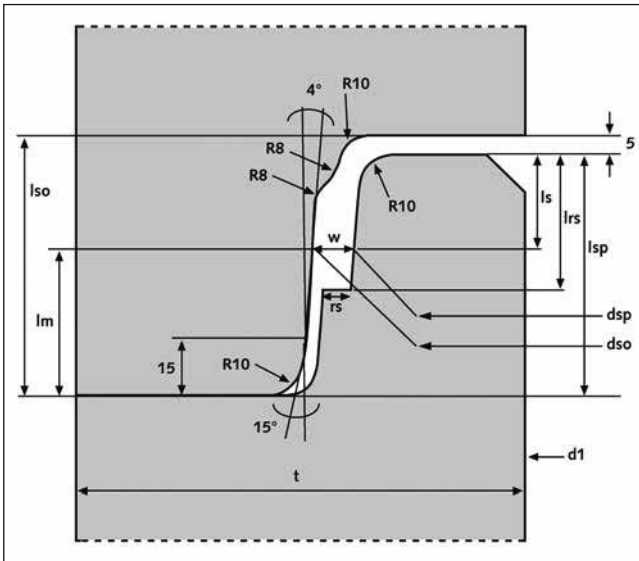


**DS**  
DICHUNGSTECHNIK

## MANHOLE COMPONENT REQUIREMENTS

(all dimensions in mm)

- Manhole rings must comply with the requirements and dimensions of DIN EN 1917 and of DIN 4034-1.



DN = d1	dso	dsp	lsp	lso	t	lrs	rs
800	913 ± 1	890 ± 2	65 -0/+2	70 ± 1,0	120	37	8
1000	1113 ± 1	1090 ± 2	65 -0/+2	70 ± 1,0	120	37	8
1200	1327 ± 1	1300 ± 3	75 -0/+3	80 ± 1,0	135	45	9
1500	1652 ± 1,5	1620 ± 3,5	85 -0/+3	90 ± 1,5	150	53	11

Smaller and larger DN on request.

## DIMENSIONING OF THE SEALING RING

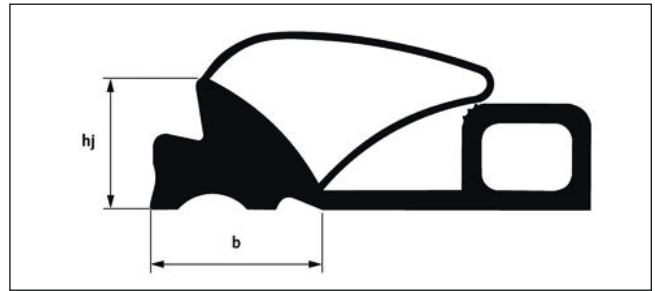
(all dimensions in mm)

For the dimensioning of the necessary seal height  $h_j$  the socket gap width  $w$  has to be determined. To achieve this, measurements must be taken of at least ten pipes of a production batch.

The outer diameter of the spigot end  $d_{sp}$  and the inner diameter of the socket end are measured. Max  $w$  and min  $w$  of the socket gap width are then calculated from the measured values as follows:

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

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



DN = d1	Sealing		Socket gap	Measuring points	
	$h_j \pm 0,8 \text{ mm}$	$b \pm 1,5 \text{ mm}$	$w$	$l_m$	$l_s$
800 / 1000	21	28,2	$11,5 \pm 1,5$	39	26
1200	24	32,5	$13,5 \pm 2,0$	43	32
1500	28	36,4	$16,0 \pm 2,5$	49	36

Smaller and larger DN on request.

## LOAD TRANSFER BETWEEN MANHOLE RINGS

DS TOPSEAL Plus fulfils the requirements of DIN 4034-1 with regard to proven static and connected investigations of load capacity.

„Manholes have to be constructed under consideration of DIN EN 1610, DVWK-A 139 and DVWK-A 157. An even and not springy vertical load transfer between all manhole rings always has to be ensured. [...] The load transfer layer has to be formed in such a way that a distance between manhole rings on the inner side of the manhole is not higher than 15 mm.“

## INSTALLATION TIPS

- Clean socket and spigot end.
- Mount DS SDVseal sealing ring to spigot end so that the slide mantel faces to the outside and the load transfer hose is comes to lie in the middle on the spigot end. Place the seal next to the shoulder ensuring an even pre-stretching of the sealing ring.
- Insert the on next manhole ring centrally and vertically and let it slide downwards. If it cants, push slightly downwards.



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