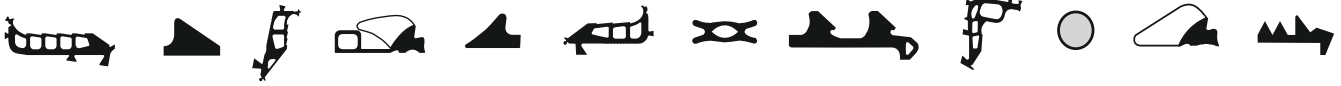
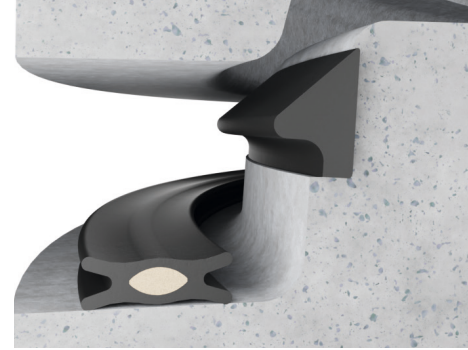


## PRODUCT DATA SHEET DS SG



DS SG is a sealing ring made from elastomers with dense structure for concrete and reinforced concrete manhole rings according to DIN EN 1917 and DIN 4034-1.

- DS SG is in accordance with the requirements of EN 681-1/ DIN 4060 - seals made from elastomers - and the FBS quality guideline.
- DS SG manhole connections fulfill the criteria of DIN EN 1916, method 1 regarding durability
- DS SG is normally supplied separately by the manhole ring manufacturer directly to the job site along with the manhole rings.
- DS SG eases the centering of the segments by the wedge-shape of the seal body.

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

### SPECIAL ADVANTAGES

- facilitates, by its form, quick, secure assembly and seal manhole components.

### MATERIAL

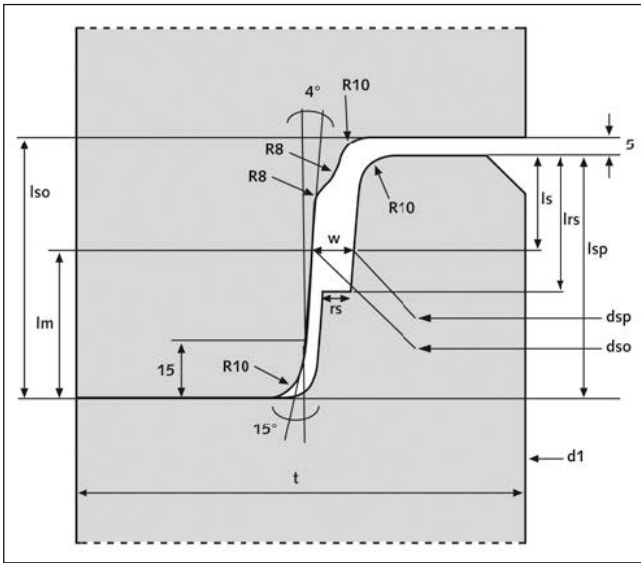
DS SG is usually produced from styrene-butadiene rubber (SBR), hardness  $40\pm 5$  IRHD or ethylene propylene diene rubber (EPDM), hardness  $50\pm 5$  IRHD. The material resists the usual stresses caused by sewage. In case of content of light liquids (oil, petrol, fuels) in the sewage water it is recommended to use DS SG out of acryl-nitrile-butadiene-rubber (NBR), hardness  $45\pm 5$  IRHD, which has a higher resistance against light liquids.



## 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.

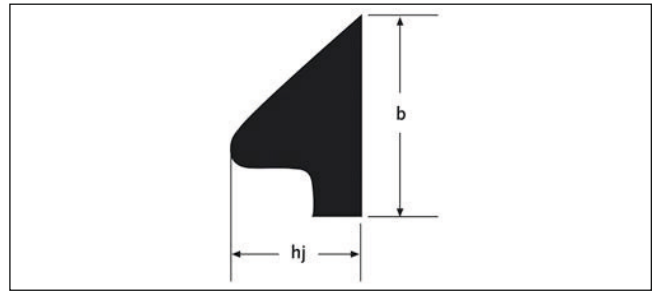
## DIMENSIONING OF THE SEALING RING

(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 of the outer diameter of the spigot end and the inner diameter of the socket end. Pipes and diameters are to be chosen to all appearances so that minimum and maximum values are included. Max  $w$  and min  $w$  of the socket gap width are then calculated from the measured values as follows:

$$\max w = \frac{\max dso - \min dsp}{2}$$

$$\min w = \frac{\min dso - \max dsp}{2}$$

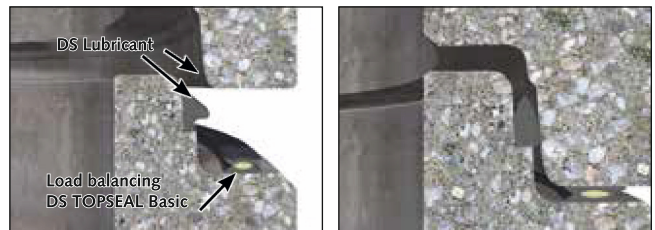


DN = d1	Sealing			Socket gap w	Measuring points	
	hj		b		lm	ls
	- 0,2 mm					
	+ 0,6 mm	+ 0,8 mm	± 1,5 mm			
800 / 1000	18,0	-	29,5	10,8 ± 1,4	39	26
	-	19,0	29,5	11,5 ± 1,5		
1200	-	20,0	30,0	12,1 ± 1,6	43	32
1500	-	26,0	44,5	16,0 ± 2,5	49	36

Smaller and larger DN on request.

## INSTALLATION TIPS

- Clean socket and spigot end.
- Mount DS SG sealing ring to spigot end of the manhole ring and place it next to the shoulder ensuring an even pre-stretching of the sealing ring.
- Cover thoroughly the inner surface of the manhole socket and the sealing ring with DS lubricant. The additional use of lubricant on the seal is recommended as this reduces the mounting forces.
- Install the load balancing.
- Insert the on next manhole ring centrally and vertically and let it slide downwards. If it cants, push carefully downwards.



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