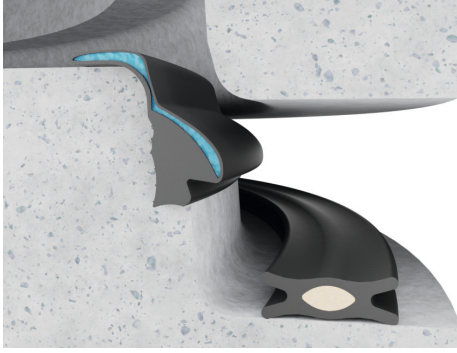


PRODUCT DATA SHEET

DS SDV-BALLOON

DS SDV-Balloon is a pre-lubricated sealing ring made from elastomers with dense structure for the sealing of connections of concrete and reinforced concrete manhole rings according to DIN EN 1917 and DIN 4034-1.

- DS SDV-Balloon is a compression slide seal with wedge-shaped cross section designed to the most up-to-date knowledge of sealing technology and an internally greased closed slide mantle.
- DS SDV-Balloon is in accordance with the requirements of DIN EN 681-1 / DIN 4060 (seals made from elastomers) and the FBS quality guideline.
- DS SDV-Balloon manhole connections fulfill the long term criteria of DIN EN 1916, method 1.
- DS SDV-Balloon is normally supplied separately by the manhole ring manufacturer directly to the job site along with the manhole rings.

Tested and quality controlled by MPA Berlin-Brandenburg.

SPECIAL ADVANTAGES

- Quick and secure mounting thanks to the integrated lubricant.
- Pre-centering of the manhole rings when mounting due to the wedge-shape of the seal body.
- Wider contact area between seal and concrete by the newly designed sealing body. This results in a higher sealing security.
- Easily mountable multiple times thanks to the enclosed slide mantle.
- Seal takes off some of the side loads because the slide mantle goes into the gap between shoulder and socket.

MATERIAL

DS SDV-Balloon is produced from styrene-butadiene rubber (SBR), hardness 40+5 IRHD. The material resists the usual stresses caused by sewage.

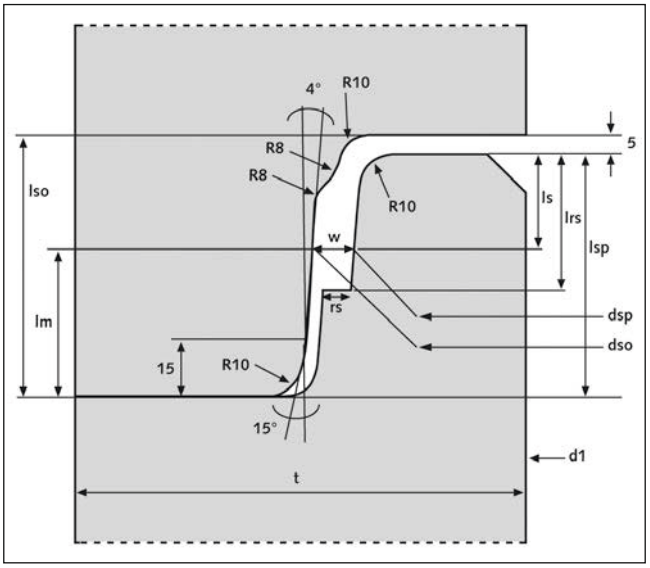
QR 4060 FBS MPA Berlin-Brandenburg KOMO CE

DS DICHTUNGSTECHNIK

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.

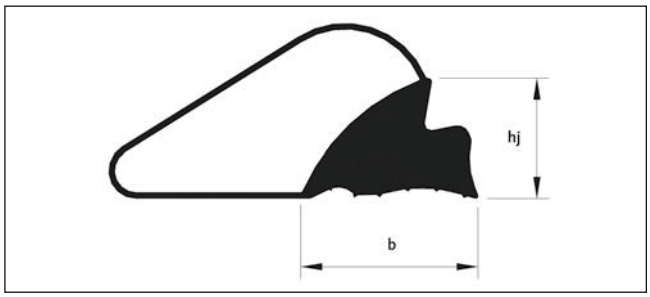
DIMENSIONING OF THE SEALING RING

(all dimensions in mm)

For the dimensioning of the necessary seal height hj 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:

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

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



DN = d1	Sealing			Socket gap w	Measuring points	
	hj - 0,2 mm		b			
	+ 0,6 mm	+ 0,8 mm	± 1,5 mm		lm	ls
800 / 1000	18,5	-	27,2	11,1 ± 1,4	39	26
	19,5	-	28,8	11,5 ± 1,5		
	20	-	28,8	12,1 ± 1,6		
1200	-	23	32,4	13,5 ± 2,0	43	32
1500	-	27	38,0	16,0 ± 2,5	49	36

Smaller and larger DN on request.

INSTALLATION TIPS

- Clean socket and spigot end.
- Mount DS SDV-Balloon sealing ring to spigot end so that the slide mantel faces to the outside. Place the seal next to the shoulder ensuring an even pre-stretching of the sealing ring.
- Install the load balancing.
- Mount the next component centrically and vertically and let it slide upwards. If it cants, push slightly.

DS DICHTUNGSTECHNIK