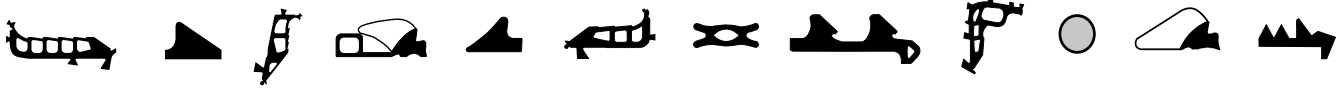
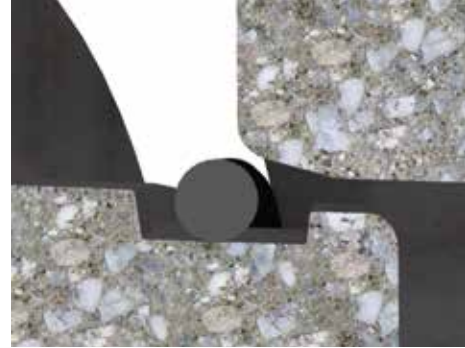


PRODUCT DATA SHEET  
**DS ROUND RING M**



DS round ring M is a sealing ring made of elastomers with dense structure for permanent sealing of connections of socket pipes made of concrete and reinforced concrete.

- DS round ring M is in accordance with the requirements of the European standard EN 681-1 / DIN 4060 [88] ( seals made from elastomers) and the FBS quality guideline.
- DS round ring M is a compression seal.
- DS round ring M is used as a sliding ring in a chamber or in front of a shoulder. For the manufacture of the pipe connection, DS lubricant has to be used.
- DS round ring M is supplied by the pipe manufacturer directly to the job site along with the pipes separately or fixed to the spigot end in the factory.

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

### **MATERIAL**

DS round ring M is usually produced from styrene-butadiene rubber (SBR), hardness  $45\pm 5$  IRHD or ethylene-propylene-diene rubber (EPDM), hardness  $40\pm 5$  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 M made of acryl-nitrile-butadiene-rubber (NBR), which has a higher resistance against light liquids.

QR 4060

MPA  
MATERIALPRÜFUNG  
ANSTALT

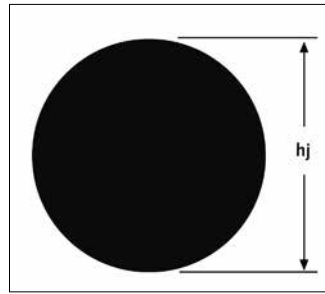
FBS

CE

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

## USE OF DS ROUND RING M

- DS round ring M is used for concrete and reinforced concrete pipes according to DIN EN 1916 and DIN 1201 V and sewage pressure pipes at a range of up to a maximum of 5 bar (hardness: 50±5 IHRD).



## 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 round ring M used as slide ring

(Range of application: 25% – 50%, pretension 12%)

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

Smaller or larger  $h_j$  on request



DS round ring M as pressure pipe seal



DS round ring M as pressure pipe seal with jacking pipe

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.