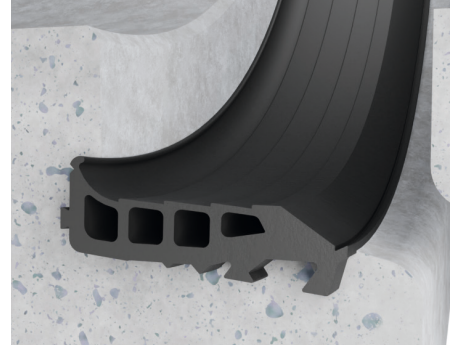


PRODUCT DATA SHEET DS BL-T



DS BL-T is a sealing ring made from elastomers with dense structure for the DS BL-T plug-in socket, a connection for concrete pipes and reinforced concrete pipes according to DIN EN 1916 and DIN V 1201, whereby the seal is firmly embedded in the socket during manufacture of the pipe.

- DS BL-T is in accordance with the requirements of DIN EN 681-1 / DIN 4060 (seals made from elastomers) and the FBS quality guidelines.
- DS BL-T pipe connections fulfill the criteria of DIN EN 1916, method 1-4.
- DS BL-T can be easily connected with the pipe. It is mounted on the base ring and is anchored during manufacture of the pipe in the pipe socket. After removal of the base ring the DS BL-T socket is ready for installation.
- DS BL-T can be used for all pipe production machines with core vibration and radial pressure roller head.
- DS BL-T requires special base rings which determine by their shape the seat of the seal.
- DS BL-T can be supplied for pipes DN 300 to DN 1500 in 3 specific cross sections.
- DS BL-T lines the inner wall of the socket up to the socket face. Lining the entire socket space prevents deposits of dirt and water (ice formation) behind the seal. Removal of a protective strip is not required.
- DS BL-T pipe connections resist high shearing forces.

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

SPECIAL ADVANTAGES

- Forms an integrated unit together with the pipe, which enables a quick and safe installation.
- The wedge shape of the seal body eases the pipe centering.
- Thanks to the deep, fully lined socket the pipe connection has a large freedom of movement while maintaining optimal water tightness security.

MATERIAL

DS BL-T is composed of styrene -butadiene rubber (SBR) or ethylene propylene rubber (EPDM), hardness 50 ± 5 IRHD. The material resists the usual stresses caused by wastewater. In case of content of light liquids (oil, petrol, fuels) in the sewage water it is recommended to use seals out of acryl-nitrile-butadiene-rubber (NBR), hardness 45 ± 5 , which has a higher resistance against light liquids.

Other materials on request.

QR 4060



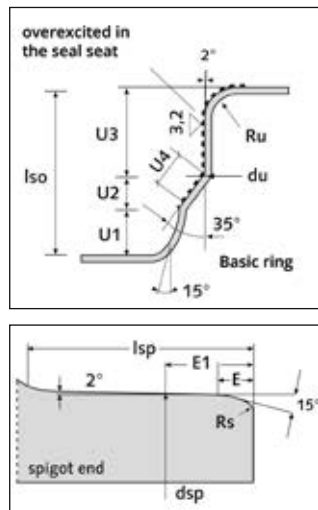
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DS⁺
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PIPE REQUIREMENTS (all dimensions in mm)

- Reinforced concrete pipes must comply with the requirements of DIN EN 1916 and DIN V 1201.
- DS BL-T requires finely dimensioned smooth pipe spigot ends. When producing the pipes inner and outer supporting rings must be used to ensure compliance with spigot end diameters dsp shown in the table.
- The seal seat and the sleeve diameter at the built-in seal must be checked regularly.



BASE RING

| DN | Iso | U1 | U2 | U3 -0/+0,5 | U4 min | Ru | du | Tolerance du |
|------|-----|----|----|---------------|-----------|----|---------|-----------------|
| 300 | 100 | 22 | 17 | 61 | 19 | 13 | 416,34 | -0/+0,5 |
| 400 | - | - | - | - | - | - | 516,34 | - |
| 500 | - | - | - | - | - | - | 616,34 | - |
| 600 | - | - | - | - | - | - | 716,34 | - |
| 700 | - | - | - | - | - | - | 831,7 | - |
| 800 | - | - | - | - | - | - | 949,7 | - |
| 900 | - | - | - | - | - | - | 1067,7 | - |
| 1000 | - | - | - | - | - | - | 1185,7 | - |
| 1100 | 130 | 25 | 28 | 77 | 32 | 17 | 1300,82 | -0,7/+0,7 |
| 1200 | - | - | - | - | - | - | 1418,82 | - |
| 1300 | - | - | - | - | - | - | 1536,82 | - |
| 1400 | - | - | - | - | - | - | 1654,82 | - |
| 1500 | - | - | - | - | - | - | 1772,82 | - |

SPIGOT END

| DN | E | Rs | Lsp | E1 | dsp | Tolerance dsp recom. (extreme value*) |
|------|----|----|-----|----|------|--|
| 300 | 20 | 13 | 105 | 49 | 426 | -0,9/+1,4 (-1,9/+2,4) |
| 400 | - | - | - | - | 526 | - |
| 500 | - | - | - | - | 626 | - |
| 600 | - | - | - | - | 726 | - |
| 700 | 28 | 15 | 125 | 61 | 844 | -1,3/+1,3 (-2,6/+2,6) |
| 800 | - | - | - | - | 962 | - |
| 900 | - | - | - | - | 1080 | - |
| 1000 | - | - | - | - | 1198 | - |
| 1100 | 28 | 16 | 135 | 63 | 1316 | -1,5/+1,5 (-3,0/+3,0) |
| 1200 | - | - | - | - | 1434 | - |
| 1300 | - | - | - | - | 1552 | - |
| 1400 | - | - | - | - | 1670 | - |
| 1500 | - | - | - | - | 1788 | - |

größere DN auf Anfrage.

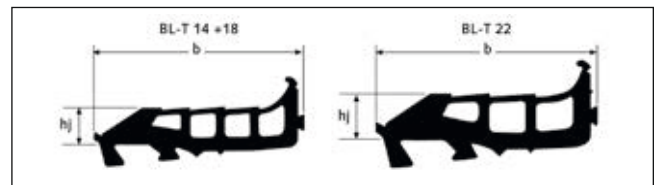
empfohlene Betontoleranz: Dichtungsverformung 30% bis 40%

Grenzwert der Betontoleranz: Dichtungsverformung 26,5% bis 43,5% *)

*) bei gefrästen Spitzenden ist die empfohlene Toleranz gleichzeitig Grenzwert der Betontoleranz

DIMENSIONING OF THE SEALING RING

(all dimensions in mm)



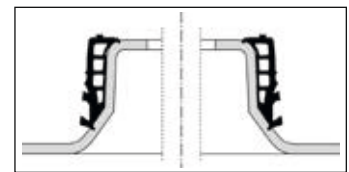
| DN | Profile type | b | hj **) | W *) |
|-----------|--------------|-------|--------------|------|
| 300-600 | BL-T 14 | 82,9 | 14 -0,4/+0,8 | 8,9 |
| 700-1000 | BL-T 18 | 104,0 | 18 -0,4/+0,8 | 11,5 |
| 1100-1500 | BL-T 22 | 110,3 | 22 -0,4/+1,2 | 14,0 |

*) Socket gap width: gap between spigot end and socket in the main sealing area.

**) heiff: $hj / \sqrt{1,04}$

PRODUCING DS BL-T PLUG-IN SOCKET PIPE

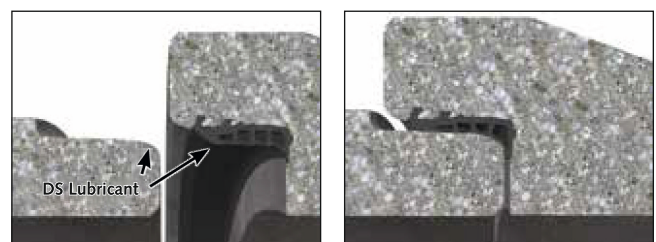
- Mount DS BL-T on the cleaned and lightly oiled base ring. Ensure correct seating and even prestretching of the sealing ring.



- Before vibrating ensure that the socket is completely filled with concrete. Then produce concrete pipe in normal manner.
- After removal of the pipe mould, place inner and outer supporting rings on the spigot end and leave them there until concrete has cured.
- Pull base ring centrally, remove supporting rings.
- After the concrete has fully cured DS BL-T plug-in socket pipe is ready for installation.

PIPE LAYING TIPS

The DS BL-T pipe connections can be installed without any problems using normal construction site equipment. When installing the pipes observe DIN EN 1610 and ATV-work sheet DWA-A 139.



- Clean socket and spigot end.
- Cover thoroughly the spigot end with DS lubricant.
- The additional use of lubricant on the seal is recommended as this reduces the mounting forces.
- Move spigot end centrally into socket and pull pipes together.

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