

## Laying instructions

for ductile cast iron  
pressure pipes and fittings,  
equipped with

TYTON® SIT®  
TYTON SIT PLUS®  
thrust resisting joints

# Laying instructions TYTON® SIT / TYTON SIT PLUS®

## General instructions

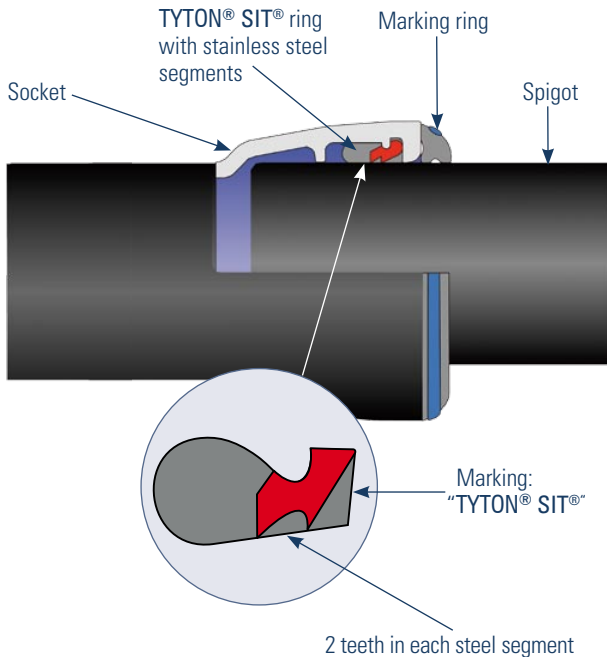
For laying pressure pipes and fittings with thrust resisting joint TYTON® SIT® and/or TYTON SIT PLUS® (TSP®) the „laying instructions for ductile cast iron pressure pipes and fittings with TYTON®-joint“ as well as special installation instructions of the pressure pipe manufacturer are to be observed.

Düker offers sealing and locking rings of the type TYTON® SIT® for dimensions DN 80 up to DN 400.

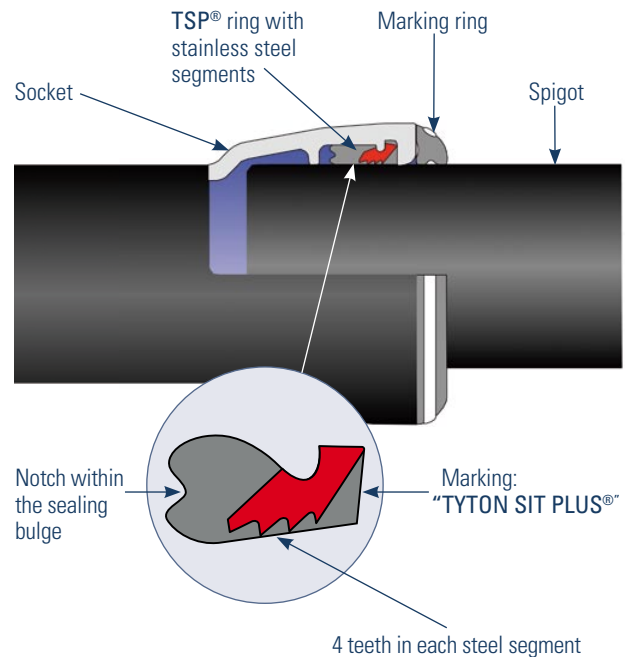
For the type TYTON SIT PLUS® (TSP®) these rings are available for dimensions DN 80 up to DN 600.

## Joint construction

### TYTON® SIT®



### TYTON SIT PLUS®



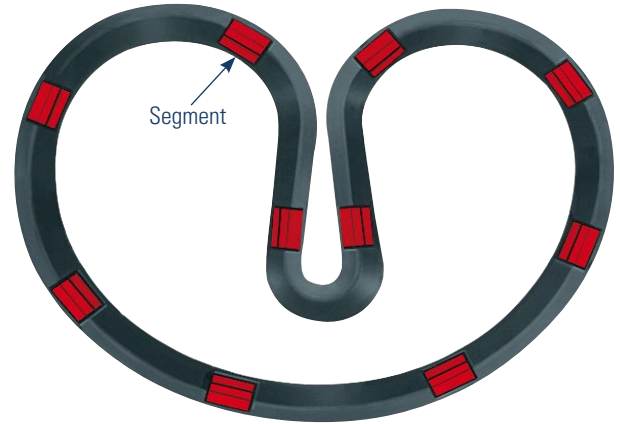
## Application field

DN	no. of segments	PFA bar	pressure class	PFA bar	pressure class	deflection max.
<b>TYTON® SIT®</b>						
80	4	16	C 100			3°
100	5	16	C 100			3°
125	5	16	C 64			3°
150	7	16	C 64			3°
200	10	16	C 64			3°
250	15	10	C 50			3°
300	20	10	C 50			3°
400	30	10	C 40			3°

<b>TYTON SIT PLUS®</b>						
80	4	32	C 100	16	C 50	3°
100	5	32	C 100	16	C 50	3°
125	5	25	C 100	16	C 50	3°
150	7	25	C 100	16	C 50	3°
200	10	25	C 64	16	C 50	3°
250	15	25	C 64	16	C 50	3°
300	20	25	C 50	16	C 40	3°
350	25	25	C 50			2°
400	28	16	C 50			2°
500	35	16	C 40			2°
600	42	10	C 40			2°

This thrust resisting socket joint substitutes concrete anchoring blocks. The appropriate number of thrust resisting connections was laid down in DVGW standard GW 368 and is to be observed. Before installation in pipelines for bridges, ducts or river crossings, please contact our service team.

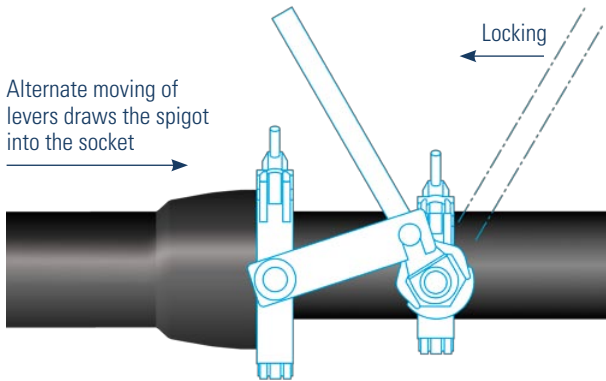
## Assembling steps



1. Clean the socket and the pipe spigot.
2. Clean the TYTON® SIT® / TYTON SIT PLUS® ring, fold according to the illustration and insert into the socket. Ensure that the inner loop is located between two steel segments (see illustration). Slightly lubricate the inner part of the inserted TYTON® SIT® / TYTON SIT PLUS® ring.
3. Push the blue-striped (TYTON® SIT®) / white-striped (TYTON SIT PLUS®) profiled marking ring onto the cast iron pipe.
4. Clean the spigot end, slightly lubricate and insert concentrically into the socket until it touches the TYTON® SIT® / TYTON SIT PLUS® ring.
5. Mount the laying tool onto the socket and spigot end and draw the spigot into the socket. **Avoid deflection of the spigot.**

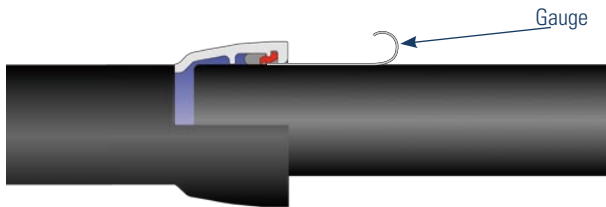
**Important:** Changes in a circumferential direction (e.g. aligning a lateral outlet) should be avoided and have to be carried out before the locking takes places.

## Laying device V 300 D



**Attention:** After connecting both parts, the locking of the segments is to be accomplished by moving the levers in the opposite direction.

The exact positioning of the TYTON® SIT® / TYTON SIT PLUS® ring must be checked by means of a suitable gauge on the whole circumference.



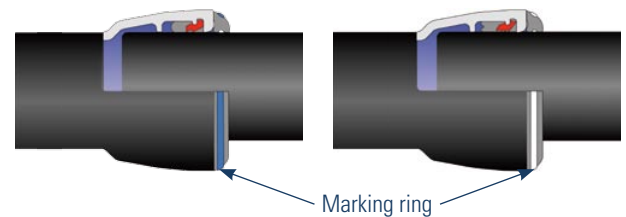
**Note:** Deviation after installation of thrust resisting joint is possible up to 3°.

A pipe with 6 m length and 1° deflection deviates by approximately 10 cm off the neutral axis.

## Marking of the installed thrust resisting joint

TYTON® SIT®

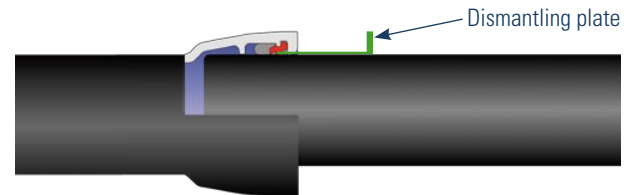
TYTON SIT PLUS®



For permanent marking, we supply profiled rubber with blue (TYTON® SIT®) or white (TYTON SIT PLUS®) stripes.

Fixing of these marking rings should be in accordance with the illustration.

## Dismantling of thrust resisting joints



- Push the spigot completely into the socket (relieving the steel segments) by using the laying device.
- Lubricate dismantling blades on both sides and drive them into the socket gap around the whole circumference with a hammering device.
- Dismount the joint with a dismantling clamp or the laying device.
- Should it be impossible to insert the blades properly on whole circumference, the pipeline has to be cut.

# Düker



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