



technical sheet

CERTIFICATION OF

ELASTOMERIC PRODUCTS

BENOR

This technical data sheet was printed on 20/06/2025.
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TECHNICAL DATA SHEET

QUICK CODE	VERSION	VALIDITY
0450/0010	3.0 - 11/07/2024	CERTIFIED
CERTIFICATE HOLDER	PRODUCTION UNIT	CERTIFICATE NUMBER
TRELLEBORG PIPE SEALS LELYSTAD Pascallaan 80 NL-8218NJ Lelystad +31 3 20 26 79 74	TRELLEBORG SEALING SOLUTIONS POLSKA Montazowa 7 PL-43-300 Bielsko-Biala +48 3 38 10 33 59	BENOR 450/32 Elastomeric products

PRODUCT

OFFICIAL NAME	COMMERCIAL NAME
ELASTOMERIC SEALS - VULCANIZED RUBBER	F116

CAPTION ON THE PRODUCT

- * BENOR + 450 + EN 681-1
- * Nominal dimensions
- * Rubber type: NBR
- * Manufacturer: Trelleborg Forsheda Pipe Seals, Poland
- * Type of application: WG
- * Hardness category: 40
- * Production date or production period

APPLICATION

- | | | |
|---|---|--|
| <input type="checkbox"/> CCT-Qualiroutes (2011) | <input type="checkbox"/> FBS-QR-FBS- | <input checked="" type="checkbox"/> EN 681-1 (1996) |
| <input type="checkbox"/> SB-250-versie 2.2-III | Qualitätsrichtlinie Teil 1-1 | <input checked="" type="checkbox"/> EN 681-1/A1 (1998) |
| 25.2.1.1 | <input type="checkbox"/> PTV 8681-1 (1.0) | <input checked="" type="checkbox"/> EN 681-1/A2 (2002) |
| <input checked="" type="checkbox"/> CCT/TB 2011 - C.24 (2011) | | <input checked="" type="checkbox"/> EN 681-1/A3 (2005) |
| <input type="checkbox"/> SB-250-versie 3.1 | | |
| <input type="checkbox"/> CCT-Qualiroutes (2016) | | |
| <input type="checkbox"/> CCT/TB 2015 | | |
| <input type="checkbox"/> CCT-Qualiroutes (2017) | | |

This product was not checked according to the crossed-out reference documents or does not comply with them.

Use: The type of application can be found at the certified properties and on the product identification.

EXPLANATIONS (THIS DOES NOT COME UNDER SUPERVISION IN THE CONTEXT OF BENOR CERTIFICATION)

ATTENTION POINTS - TO BE CHECKED BY CUSTOMER (NOT LIMITED)

* The nominal sizes, the hardness class and the type of application should still be checked in function of the intended use.

* If the sealant is provided separately, then the sealant must be delivered by the manufacturer of the pipes.

FORM OF DELIVERY

EXTRA INFORMATION

Contact at

* COPRO:

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* Certificate holder:

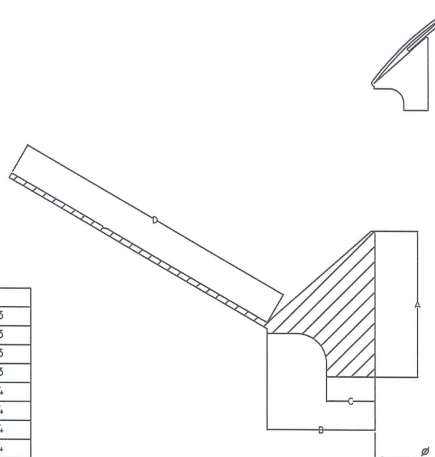
Marta Nycz

marta.nycz@trelleborg.com



PRODUCT CHARACTERISTICS					
PROPERTIES	ACCORDING TO	UNIT	VALUE	MIN	MAX
Hardness category	EN 681-1	IRHD	40	-	-
Nominal hardness (*)	ISO 48-2	IRHD	40	-	-
Type of application	EN 681-1 table 4		WG	-	-
ADDITIONAL PROPERTIES	ACCORDING TO	UNIT	VALUE	MIN	MAX
Tensile strength (*)	ISO 37	MPa	-	10	-
Elongation at break (*)	ISO 37	%	-	400	-
Ageing, 7 days at 70°C	ISO 188		-	-	-
Hardness change (*)	ISO 48-2	IRHD	-	-5	+8
Tensile strength change (*)	ISO 37	%	-	-15	+15
Elongation change (*)	ISO 37	%	-	-25	+10
Splices	See add. information	%	-	-	-
ADDITIONAL PROPERTIES			VALUE	MIN	MAX
Type of rubber			NBR	-	-
Identification of the rubber			(**)	(**)	(**)
(*) These product characteristics are a statement by the producer taken from its declaration of performance. The certificate holder declares that the values listed are in accordance with its declaration of performance.					
(**) These values are listed on the full datasheet that may be obtainable from the certificate holder.					

TECHNICAL DRAWING					

DIM	A	B	C	D
16	25±1	16±0,4	7 ±1	55±3
18	25±1	18±0,5	8 ±1	55±3
20	26,5±1	20±0,5	9 ±1	55±3
22	30±1	22±0,5	10 ±1	55±3
24	32±1	24±0,5	11 ±1	60±4
26	35±1	26±0,5	12 ±1	65±4
28	38±1	28±0,6	12,5 ±1	65±4
30	41±1	30±0,6	13,5 ±1	70±4



MATERIAL: SBR 40±5 IRHD, NBR 40±5 or EPDM 40±5 IRHD.
THIS PRODUCT IS ACC. TO EN 681-1.

JA	CHANGED TOL. ON C	CC	JUN	2007-01-09
REV	CHANGES	DESIGN	APPRO	DATE
		FORSHEA 116		
		DRAWN BY CC		
		DATE 2006-04-18		
TRELLISBORG FORSHEA BUILDING AB POK SEALS, SWEDEN TEL +46 (0) 370 48000 FAX +46 (0) 370 370 87740		APPROVED  SCALE		
		DRAWING NO. 131-116-000-01		

ATTESTATION

The BENOR certification of the product states that there is, on the basis of a periodic external supervision, a sufficient degree of confidence that the certificate holder is in a position to continuously guarantee the conformity of the product as specified in the reference documents and .

This datasheet contains the performance characteristics specified by the manufacturer. The datasheet is verified by the certification body.

The certificate holder declares that the product supplier/delivered by it conforms to the datasheet as set out on the delivery note.

By making it available digitally, the producer declares that he agrees with this sheet

Name: Marta Nycz

Date: 11/07/2024

COPRO

Name: Koen Van Daele

Date: 11/07/2024

Signature:

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Zellik