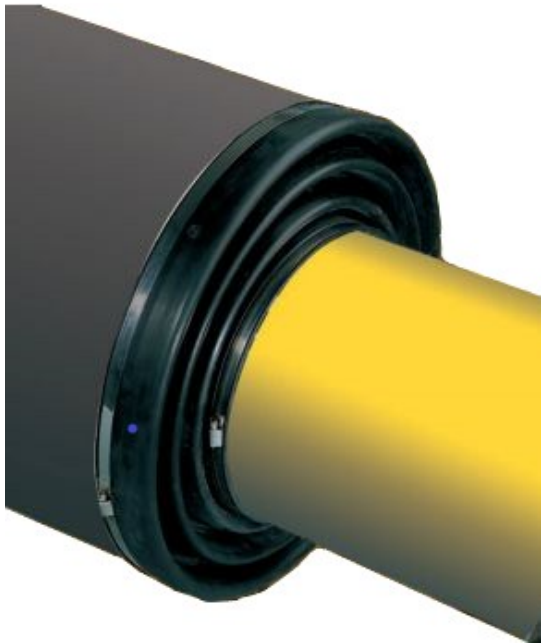




CASING END SEALS

When installing pipes for natural gas, oil, water etc., casing pipes are used where safety counts, that is for all kinds of underground installations under road crossings, highways and thoroughfares as well as in residential districts. The problem in all these cases is to keep the interior of the casing as dry and clean as possible in order to protect the carrier pipe and the inside of the casing pipe against corrosion.



Construction



Contractor



Water



VVS



Energy



Oil



Gas



Industry

Technical information type HA, DU , KG/KO and KT

The various models of casing end seals have been designed to provide a clean, solid and cost-effective solution to this problem.


CASING END SEALS are easy and quick to install. The seals are pulled over the outer edge of both the carrier pipe and the casing pipe and sealed by stainless steel bands and clamps. Thus, the problem of sealing the annulus between casing pipe and carrier pipe has found its simple, clean and cost-saving solution.

All CASING END SEALS are made of materials that are highly resistant to aging and have excellent mechanical strength. They CAN be produced as UV-resistant.


We are constantly adding new types to our wide range of cuffs, so we are sure to be able to solve all tasks - even if all types are not in the dimension table.

For pressurized sealing we recommend COBALCH SEAL **TEMP**.


IMPORTANT! Do not tighten straps too hard, they are **ONLY** used to keep the Seal in place.

| Type | Material | Shore | Media pipe | Casing pipe | Shut for gravel | Pressure for water | Assembly | Tension band |
|--|----------------|-------|------------|-------------|-----------------|--------------------|----------------------|--------------------|
|  <p>HA</p> | EPDM 2-3 mm | 50±5 | 25-50 mm | 50-90 mm | YES | NO | By new Installations | Stainless steel W2 |


The Casing end Seal is manufactured for small new pipe installations in the construction industry.

| | | | | | | | | |
|--|----------------|------|-----------|-----------|-----|----|----------------------|--------------------|
|  <p>DU</p> | EPDM 5-6 mm | 50±5 | 48-342 mm | 87-435 mm | YES | NO | By new Installations | Stainless steel W2 |
|--|----------------|------|-----------|-----------|-----|----|----------------------|--------------------|

The Casing end Seal can only be used for new installations. The special folding construction is adapted to the eccentric position of the pipes.

| | | | | | | | | |
|--|--------------------|------|------------|------------|-----|----|--|--------------------|
|  <p>KG/KO</p> | Neoprene 2-3 mm | 65±5 | 32-1320 mm | 48-2000 mm | YES | NO | KG by new Installations KO Retrofitting | Stainless steel W2 |
|--|--------------------|------|------------|------------|-----|----|--|--------------------|

The KG can only be used for new installations. The KO is used for retrofitting already installed pipes, and is therefore supplied open. The cuff is assembled using a bitumen strip.

| | | | | | | | | |
|--|----------------|------|-----------|------------|-----|----|----------------------|--------------------|
|  <p>KT</p> | EPDM 3-4 mm | 60±5 | 60-508 mm | 110-610 mm | YES | NO | By new Installations | Stainless steel W2 |
|--|----------------|------|-----------|------------|-----|----|----------------------|--------------------|

The advantages of this Casing end Seal are that there are only 5 types and one dimension spans 2 casings, can only be used for new installations.

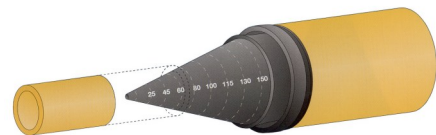
**Dimensionslist - standard
for HA, DU and KT-casing end seals**

| HA casing end seals | |
|---------------------|----------|
| Dimension Inch | OD mm |
| 1 x 1 3/4" | 32 x 50 |
| 1 x 2" | 32 x 63 |
| 1 x 3" | 32 x 89 |
| 1 3/4 x 2" | 50 x 63 |

| DU Step end seals | |
|-------------------|----------------------------------|
| Dimension Inch | OD mm |
| 0,25-3,5 x 4 | 10/20/25/32/40/50/63/75/90 x 110 |
| 0,5-2 x 3 | 20/25/60 x 90 |
| 1,0-1,5 x 3 | 30/40/68 x 90 |
| 1,0-2,5 x 4 | 30/40/48/75 x 110 |
| 1,0-1,5 x 5 | 30/40/48 x 135 |
| 1,5-2,5 x 5 | 48/60/75 x 135 |
| 1,0-1,5 x 6 | 30/40/48 x 160 |

| Dimension inch | DN | Ø A min | max | OD | Ø B min | max | H | Dimension inch | DN | Ø A min | max | OD | Ø B min | max | H |
|-------------------|----|------------|-----|-----|------------|-----|----|-------------------|-----|------------|-----|-----|------------|-----|----|
| 1 1/2 x 3 | 50 | 48 | 55 | 90 | 87 | 99 | 43 | 4 x 5 | 116 | 112 | 133 | 140 | 133 | 154 | 75 |
| 1 1/2 x 4 | 50 | 48 | 55 | 110 | 108 | 123 | 43 | 4 x 8 | 112 | 108 | 125 | 225 | 214 | 250 | 70 |
| 1 3/4 x 3 | 50 | 48 | 55 | 90 | 87 | 99 | 43 | 4 x 10 | 112 | 108 | 125 | 275 | 262 | 305 | 60 |
| 1 3/4 x 4 | 50 | 48 | 55 | 110 | 105 | 121 | 43 | 5 x 8 | 134 | 127 | 147 | 219 | 210 | 245 | 73 |
| 2 x 3 | 60 | 57 | 68 | 92 | 89 | 100 | 55 | 5 x 10 | 145 | 137 | 163 | 275 | 262 | 305 | 80 |
| 2 x 4 | 60 | 57 | 68 | 110 | 105 | 127 | 90 | 6 x 8 | 160 | 152 | 182 | 219 | 210 | 245 | 70 |
| 2 x 6 | 60 | 57 | 68 | 160 | 152 | 182 | 80 | 6 x 10 | 162 | 156 | 184 | 275 | 262 | 305 | 72 |
| 3 x 5 | 89 | 85 | 98 | 133 | 125 | 146 | 70 | 6 x 12 | 162 | 156 | 184 | 330 | 315 | 368 | 65 |
| 3 x 6 | 92 | 86 | 106 | 165 | 156 | 182 | 70 | 6 x 14 | 168 | 159 | 190 | 355 | 338 | 390 | 70 |
| 3 x 8 | 92 | 86 | 106 | 225 | 214 | 250 | 75 | 8 x 10 | 225 | 214 | 250 | 280 | 267 | 308 | 75 |
| 3 x 10 | 92 | 86 | 106 | 275 | 262 | 305 | 70 | 12 x 18 | 325 | | | 457 | | | |
| | | | | | | | | 20 x 26 | 508 | | | 660 | | | |


| KT casing end seals | |
|---------------------|---------------|
| Dimension Inch | OD mm |
| 100/125 - 0 | 110/135 - 0 |
| 150/200 - 0 | 165/215 - 0 |
| 250/300 - 50 | 270/320 - 60 |
| 350/400 - 80 | 350/402 - 90 |
| 500/600 - 150 | 508/610 - 150 |




| KG/KO casing end seals |
|------------------------|
| Produced for the job |

Technical information


type VDW[®], VDW[®] OD, STM[®] and TEMP i Rottolin

| Type | Material | Shore | Tight for water | Tensile strength | Break point | Tear strength | Temp. | Assembly | Tension band |
|--|---------------------|-------|-----------------|------------------|-------------|---------------|-----------|--|--------------------|
|  <p>VDW[®]</p> | ROTTOLIN 9-11 mm | 50±5 | Yes up to 1 bar | 11 N/mm | 400% | 27 N/mm | Max. 55°C | By new Installations /ask for after assembly | Stainless steel A2 |

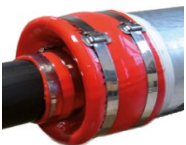
VDW[®] has been developed specifically for large radial and axial movements in pipelines. Suitable for both wall/foundation and deck/ceiling penetrations of district heating pipes on buildings without sealing foils.

| | | | | | | | | | |
|--|---------------------|------|-----------------|---------|------|---------|-----------|--|--------------------|
|  <p>VDW[®] OD</p> | ROTTOLIN 9-11 mm | 50±5 | Yes up to 1 bar | 11 N/mm | 400% | 27 N/mm | Max. 55°C | By new Installations /ask for after assembly | Stainless steel A2 |
|--|---------------------|------|-----------------|---------|------|---------|-----------|--|--------------------|

VDW[®] OD has been developed specifically for piping systems where pipes are angled up to 20°.

| | | | | | | | | | |
|--|--|------|---|---------|------|---------|-----------|--|--------------------|
|  <p>STM[®]</p> | ROTTOLIN 6-8 mm Reinforced version 9-11 mm Type TEMP | 50±5 | NO Yes up to 1 bar in 9-11 mm Type Temp | 11 N/mm | 400% | 27 N/mm | Max. 55°C | By new Installations /ask for after assembly | Stainless steel A2 |
|--|--|------|---|---------|------|---------|-----------|--|--------------------|

This type is specially designed for extreme eccentricity or if multiple openings are required, e.g. for additional cable. The ring gap should not exceed 70 mm, if the ring gap is >70 mm, support segment should be used.

| | | | | | | | | | |
|---|---------------------|------|-----------------|---------|------|---------|-----------|--|--------------------|
|  <p>TEMP</p> | ROTTOLIN 9-11 mm | 50±5 | Yes up to 1 bar | 11 N/mm | 400% | 27 N/mm | Max. 55°C | By new Installations /ask for after assembly | Stainless steel A2 |
|---|---------------------|------|-----------------|---------|------|---------|-----------|--|--------------------|

Temp (FW) has been specially developed to provide a pressure-tight seal between media and casing pipes. The excellent flexibility can absorb axial and radial movements between the casing and the media tube. To ensure the integrity of the seal, the ring gap should not exceed 70 mm, if the ring gap is >70 mm, support segment should be used.

A special, durable elastic sealant/adhesive is sprayed under the cuff all the way around. Before filling, the seal must be covered with an expanding sealant.

IMPORTANT INFORMATION:

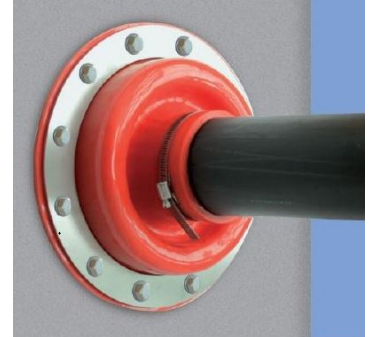
All Casing end Seals in Rottolin, can be supplied as UV-resistant upon request.

Most Casing end Seals in Rottolin, can be manufactured with the possibility of large movement, both axial and radial.

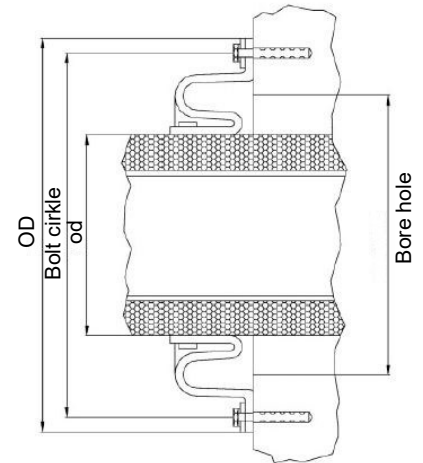
**Flexible Casing end Seal
type VDW® and VDW® OD i Rottolin**

Advantages by VDW® :

1. Support for load change axial and radial up to +/-25mm
2. VDW® compensates for eccentric laying of pipes, depending on pipe diameter up to 40 mm.
3. Waterproof up to 1 bar, MFPA tested.



| Dimensionstable VDW® | | | |
|----------------------|-----------------|---------------------------|----------------------------------|
| Pipe O.D. mm | Max. Hole mm | O.D. pressure plate mm | Bolt circle pressure plate mm |
| 75 | 150 | 292 | 265 |
| 90 | 150 | 292 | 265 |
| 110 | 200 | 340 | 305 |
| 125 | 200 | 340 | 305 |
| 140 | 250 | 389 | 360 |
| 160 | 250 | 389 | 360 |
| 200 | 300 | 450 | 410 |
| 225 | 300 | 450 | 410 |
| 250 | 350 | 500 | 460 |
| 280 | 350 | 500 | 460 |
| 315 | 400 | 550 | 510 |
| 355 | 450 | 600 | 560 |
| 400 | 500 | 650 | 610 |
| 450 | 550 | 700 | 660 |
| 500 | 600 | 750 | 710 |
| 560 | 650 | 800 | 760 |
| 630 | 700 | 850 | 810 |
| 670 | 800 | 990 | - |
| 710 | 800 | 990 | - |
| 810 | 900 | 1060 | - |
| 910 | 1000 | 1092 | - |

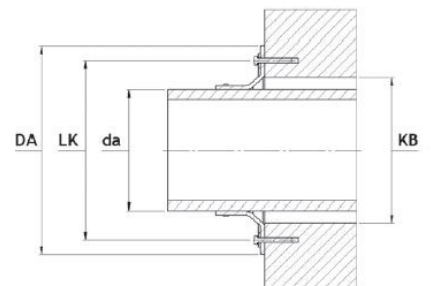


Advantages by VDW® OD:

1. VDW® OD compensates for angles up to 20°, depending on pipe dia.
2. Waterproof up to 1 bar.



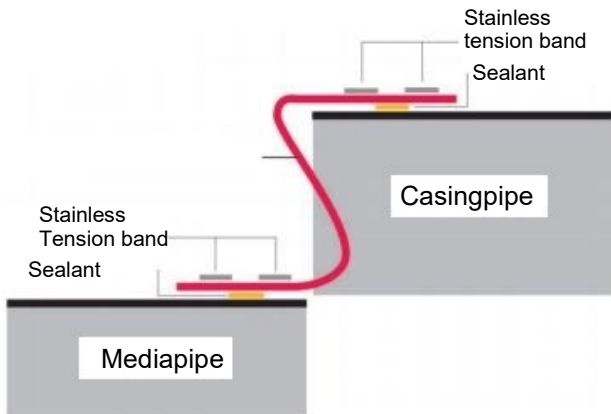
| Dimensionstable VDW® OD | | | | |
|-------------------------|-----|---------------|--|--|
| Pipe dia in mm | | Hole KB mm | Outside diameter on pressure plate DA mm | Bolt circle on- pressure plate LK mm |
| from* | to* | | | |
| 50 | 135 | 150 | 292 | 265 |
| 135 | 185 | 200 | 340 | 305 |
| 185 | 235 | 250 | 389 | 360 |
| 235 | 285 | 300 | 450 | 410 |
| 285 | 335 | 350 | 500 | 460 |
| 335 | 385 | 400 | 550 | 510 |
| 385 | 435 | 450 | 600 | 560 |
| 435 | 485 | 500 | 650 | 610 |
| 485 | 535 | 550 | 700 | 660 |
| 535 | 585 | 600 | 750 | 710 |
| 585 | 635 | 650 | 800 | 760 |
| 635 | 685 | 700 | 850 | 810 |
| 685 | 785 | 800 | 990 | 940 |
| 785 | 885 | 900 | 1060 | 1010 |



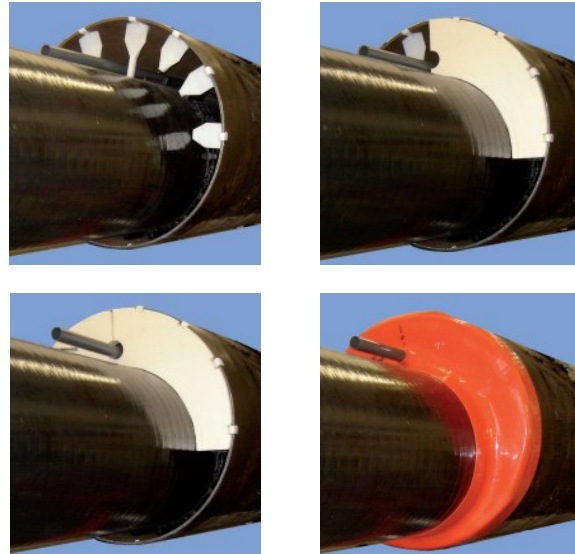
* The outer pipe diameter must be stated on request, and angle if any;

**Casing end Seal
type RottoX STM® TEMP i Rottolin**

| |
|--|
| Dimensionstable STM® and TEMP |
| Manufactured to task in desired dimensions |



Support segment



Certificates

To offer our customer the best possible quality and service, the producer are organized according to DIN EN ISO 9001:2015 and have this continuously checked and certified.

Certificate ISO 9001:2015

This certification documents the producers conformity of the quality management system.

AEO-certificates

Authorized Economic Operator "AEOC (customs simplification)"



- VDW® - MPFA Leipzig: Pressure tight when installed
- RottoX Temp - MPFA Leipzig: Pressure tight when installed

Technical modifications reserved

05-26-211