

BORTEK®

**KTW
W270**



2022

PIPE COUPLINGS

REPAIR COUPLING

Designed to repair leakage of any material of pipes such as PE100, HDPE, GRP, Asbestos, PVC, Ductile Font, Steel etc. The progressive sealing technology provides high pressure resistance. Angular deflection up to 3° depending on size.



➔ Between DN20 - DN175 available with hinged type.

➔ Between DN100 - 1800 available with body - 2 pcs as body width: 21cm - 33cm.

➔ Between DN150 - 1800 available with body - 2 pcs as body width: 21cm - 33cm and 42cm.

➔ Between DN400 - 1800 available with body - 2 pcs as body width: 50cm.

➔ Between DN1800 - 4000, available with body - 3 pcs.



| Product Materials | Standard | Optional | Scan For Installation Video |
|-------------------|---------------------------|------------------------|-----------------------------|
| Body | AISI 304 | AISI 316 | |
| Screw & Bolt | Steel coated dacromet 500 | AISI 304 or AISI 316 | |
| Rubber | EPDM | NBR, Silicone or Viton | |



FLEX COUPLING

Sleeve Type Flex Coupling, designed with a seamless progressive sealing joint. Mostly used for new pipe systems or to repair sections. A perfect assembly unit for valves application.



→ Between DN20 - DN175 available as single body.

→ Between DN100 - 1800 available with body - 2 pcs as body width: 21cm - 33cm.

→ Between DN150 - 1800 available with body - 2pcs as body width: 21cm - 33cm and 42cm.

→ Between DN400 - 1800 available with body - 2pcs as body width: 50cm.

→ Between DN1800 - 4000, available with body - 3pcs as body width: 21cm - 33cm - 42cm and 50cm



| Product Materials | Standard | Optional | Scan For Installation Video |
|-------------------|---------------------------|------------------------|-----------------------------|
| Body | AISI 304 | AISI 316 | |
| Screw & Bolt | Steel coated dacromet 500 | AISI 304 or AISI 316 | |
| Rubber | EPDM | NBR, Silicone or Viton | |



HIGH PRESSURE COUPLING



- For all of kind of pipe materials.
- Production until max PN100. (it can differ according to pipe type)
- Production between DN 63 mm - DN 4000 mm.
- Vacuum support part (optional).
- It affects flexible connection on pipes.
- Tension steel band (on the left and right side) on pipes tightly as circularly.
- These bands, even under full pressure, also allow pipes to turn around 360 degree.
- Tension bands are on opposite angles to the direction movement of the pipe and it holds on to pipe surface with pipe's movement.
- In addition to the tension bands of the body are fixed to rings body by special bolts.



| Product Materials | Standard | Optional | Scan For Installation Video |
|-------------------|---------------------------|----------------------|-----------------------------|
| Body | AISI 304 | AISI 316 | |
| Screw & Bolt | Steel coated dacromet 500 | AISI 304 or AISI 316 | |
| Rubber | EPDM | NBR | |



ANGULAR COUPLING

High Angular deflection of max. 12° (+6°-6°) for all pipes as PE100, HDPE, GRP, Asbestos, PVC, Ductile Font, Steel etc...

→ Between DN300 - 1800 available with body - 2 pcs as body width: 28cm - 37cm and 42cm

→ Between DN1800 - 4000 available with body - 3pcs as body width: 28cm - 37cm and 42cm.



| Product Material | Standard | Optional |
|------------------|---------------------------|----------------------|
| Body | AISI 304 | AISI 316 |
| Screw & Bolt | Steel coated dacromat 500 | AISI 304 or AISI 316 |
| Rubber | EPDM | NBR |



HDPE CLAMP (PATENTED)

Patented solution for axial restraint HDPE, PVC and PE100 pipe applications. The unique advantage is the possibility to use as a repair unit under most difficult circumstances – wet or underwater, cold climate, etc.



→ Between DN20 - DN175 available with hinged type.

→ Between DN100 - 1800 available with body - 2pcs as body width: 21cm - 33cm.

→ Between DN200 - 1800 available with body - 2pcs as body width: 21cm - 33cm and 42cm.

→ Between DN300 - 1800 available with body - 2pcs as body width: 50cm.

→ Between DN1800 - 4000, available with body - 3pcs.

Note: Widths are given without grippers.



| Product Materials | Standard | Optional | Scan For Installation Video |
|-------------------|---------------------------|----------------------|-----------------------------|
| Body | AISI 304 | AISI 316 | |
| Screw & Bolt | Steel coated dacromet 500 | AISI 304 or AISI 316 | |
| Rubber | EPDM | NBR | |
| Grippers | Aluminium | AISI 304 or AISI 316 | |



GRIP COUPLING

Axial restraint pipe coupling. Absorbes vibration and is widely used in ships, machinery, sprinkler and mining.



| Product Materials | Standard | Optional | Scan For Installation Video |
|-------------------|---------------------------|------------------------|-----------------------------|
| Body | AISI 304 | AISI 316 | |
| Screw & Bolt | Steel coated dacromet 500 | AISI 304 or AISI 316 | |
| Rubber | EPDM | NBR, Silicone or Viton | |
| Gripper | Spring steel | | |

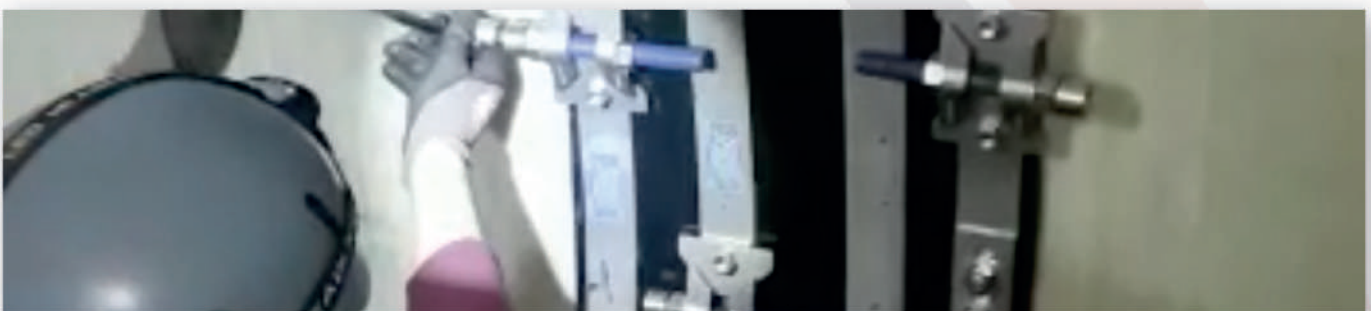


BORINLINE

Internal Repair Unit for all accessible pipes as PE100, HDPE, GRP, Asbestos, PVC, Ductile Font, Steel etc... Wide range of width and diameter. Optional **Borinfinite** version for unlimited length of lining application.



| Product Materials | Standard | Optional | Scan For Installation Video |
|-------------------|---------------------------|----------------------|-----------------------------|
| Bolt | Steel coated dacromet 500 | AISI 304 or AISI 316 | |
| Body | AISI 304 | AISI 316 | |
| Rubber | EPDM | NBR | |
| Tightening Key | AISI 316 | | |



BORINFINIT

L



BORINLINE

SMALL PIPE INLINE

Mechanical solution to repair smallest diameter of pipes. Installation is in combination with robot camera system.



Pressure:

➔ It provides sealing up to 10 Bar.

Pipe Connection Diameter:

➔ Available between DN 150 - DN 600 sizes.

Width:

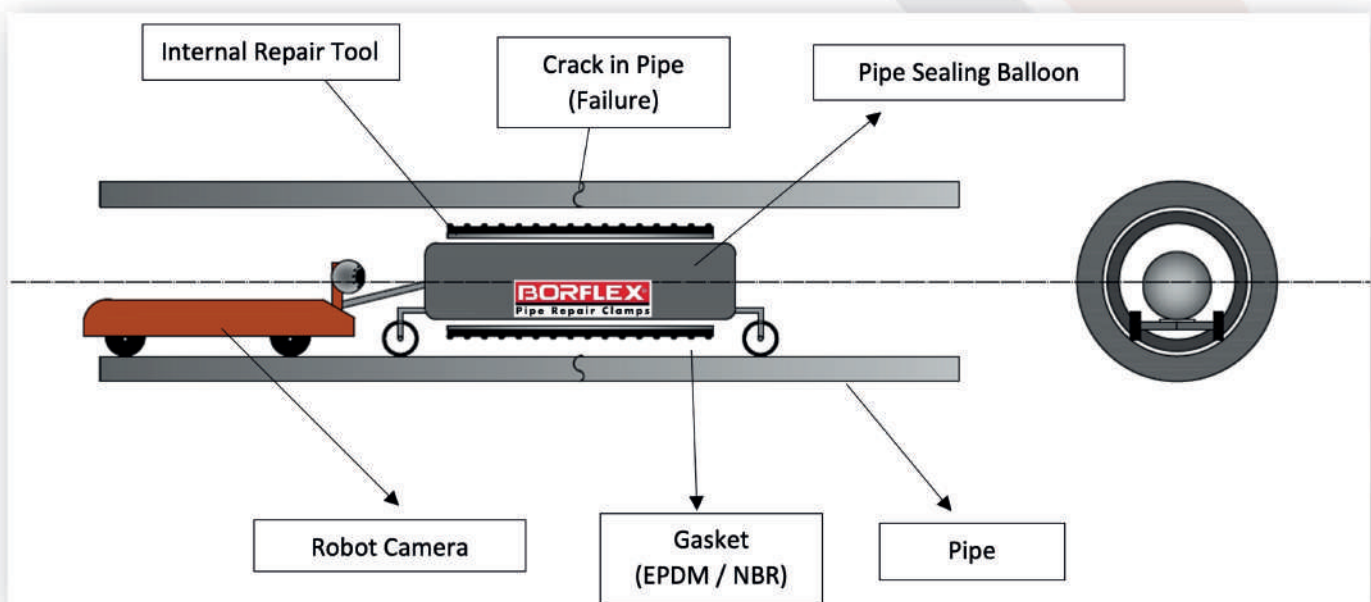
➔ 300mm - 400mm - 500mm - 600mm.



Installation :

1. First, fault detection is made with the robot camera.
2. Pipe inner surface and gasket shall be cleaned. The gasket is lubricated for easy handling.
3. Place the small internal repair product on the balloon. Center the crack with in the center of the gasket.
4. While carrying the product with the robot camera and inflating it with the balloon, make sure that the gasket does not slip from the body.
5. The balloon must be inside the body and inflated according to the compressive strength.
6. Inflate the balloon and ensure it is sealed.
7. The locking mechanism of the repair apparatus will be self-locked at the desired diameter.
8. After assembly, deflate the balloon and slowly pull it out of the pipe with the help of the robot camera.

The repair process is provided.



EASY REPAIR CLAMP

Most simple and easy way to repair low pressure pipes as PE100, HDPE, GRP, Asbestos, PVC, Ductile Font, Steel etc.
 Not recommended for coupling, repair purpose only.



One-piece body Easy Repair clamps

➔ Between DN 20 - 1000 available
 body width 10cm - 20cm - 30cm,
 200cm.



Two-pieces body Easy Repair clamps

➔ Between DN 500 - 2000 available
 body width 10cm - 20cm - 30cm, up to
 200cm.



➔ Three-pieces Easy Repair clamps
 (clamping range of 30mm)

➔ Between DN 200 - 2000 available
 body width 20cm - 30cm, up to 200cm.



| Product Materials | Standard | Optional | Scan For Installation Video |
|---------------------|----------|-------------|-----------------------------|
| Body | AISI 304 | AISI 316 | |
| Stud & Nut & Washer | AISI 304 | AISI 316 | |
| Rubber | EPDM | NBR / Viton | |



Branch Couplings

When branch is needed to an existing pipe. Easy and fast installation. Special custom-made production.

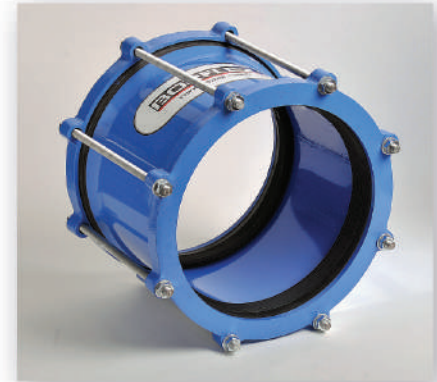


| Product Materials | Standard | Optional |
|-------------------|---------------------------|----------------------|
| Body | AISI 304 | AISI 316 |
| Screw & Bolt | Steel coated dacromet 500 | AISI 304 or AISI 316 |
| Rubber | EPDM | NBR |



UNIVERSAL ADAPTOR AND FLANGED ADAPTOR

To connect two different material or/and diameter of pipes as PE100, HDPE, GRP, Asbestos, PVC, Ductile Font, Steel etc...



Pipe Adaptors

➔ Available with the desired width between DN 20-3000.



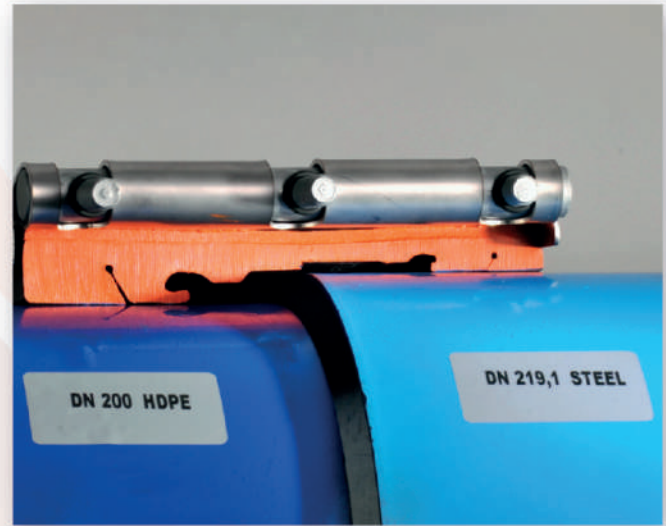
| Product Material | Standard | Optional |
|---------------------|-------------------------|----------------------------|
| Body | St 37 (epoxy coated) | Cast / AISI 304 / AISI 316 |
| Stud & Nut & Washer | Steel coated galvanized | AISI 304 / AISI 316 |
| Rubber | EPDM | NBR |



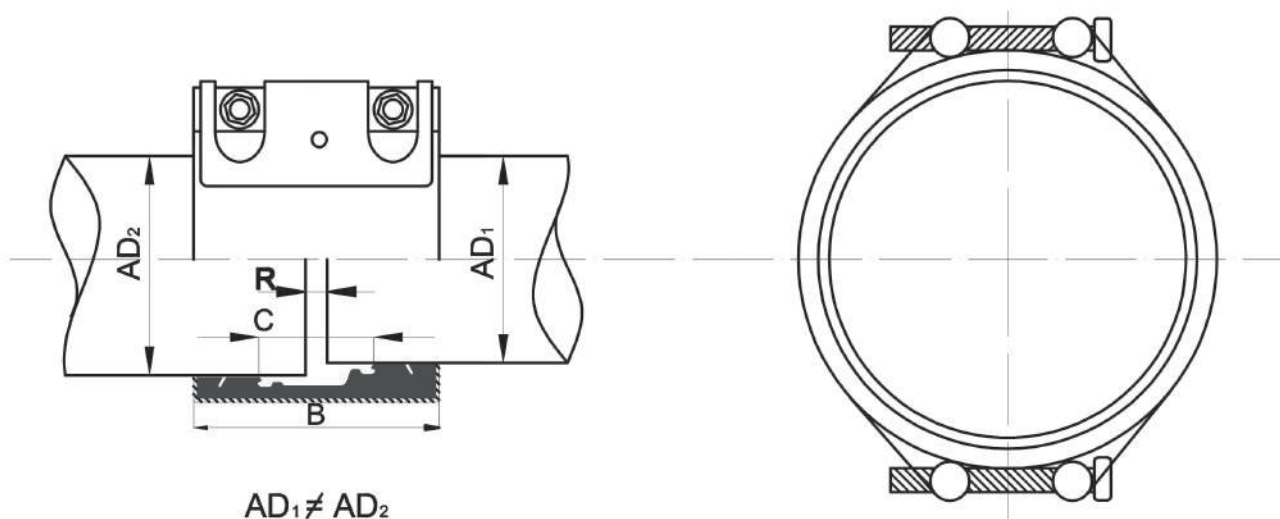
STEP COUPLING

To connect two different material or/and diameter of pipes as PE100, HDPE, GRP, Asbestos, PVC, Ductile Font, Steel etc... diameter steps off max. 30 mm possible

➔ Between DN200 - 4000 available with body - 2 pcs as body width 21cm.



| Product Materials | Standard | Optional |
|-------------------|-----------------------|----------------------|
| Body | AISI 304 | AISI 316 |
| Stem & Bolt | Steel coated dac. 500 | AISI 304 or AISI 316 |
| Rubber | EPDM | NBR |



JACKING COUPLING



progressive sealing



| Product Materials | W4 | W5 |
|------------------------------|--|--|
| Body | AISI 304 | AISI 316 |
| Rubber standard joint (EPDM) | Temp.: -20° C and + 120° C | Temp.: -20° C and + 120° C |
| | Water, waste water, air, solid and chemical products | Water, waste water, air, solid and chemical products |
| Rubber optional joint (NBR) | Temp.: -20° C and + 100° C | Temp.: -20° C and + 100° C |
| | Water, gas, oil, petroleum and other hydrocarbons | Water, gas, oil, petroleum and other hydrocarbons |

SLEEVE COLLAR AND MUFF REPAIR KIT

Leakage at the Muff section is most common problem in piping PE100, HDPE, GRP, Asbestos, PVC, Ductile Font, Steel etc... This custom-made unit offers you efficient solution on side. Directly assembled over your sleeve or muff. Please ask for more information.



OTHER PRODUCT LIST

Fast Repair

To easy repair of low pressure PVC and HDPE lines.



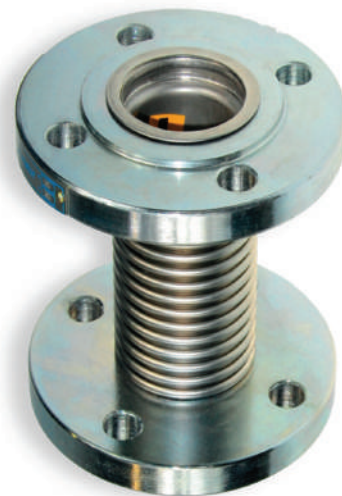
T O R G E N

Compensator

Available rubber type and with stainless steel bellow.



Rubber in Butyl / EPDM / NBR.



In different alloys available.

OTHER PRODUCT LIST

Muff Test Unit

For splice testing of the sleeves.



Socket Necklace

Subscriber connection clamp is available in ductile iron or stainless.



OTHER PRODUCT LIST

Duck bill Check Valve

DN 150 up to DN 1200.



Pipe Plug and Test Balloons

Up to DN 2200.

| NOMINAL INSIDE AND OUTSIDE DIAMETERS OF DIFFERENT PIPES | | | | | | | |
|---|--------|-----------------------|-----|-------|-----------|--------------|----------|
| Pipe Inside Diameter | | Pipe Outside Diameter | | | | | |
| DN | INCH | HDPE | PVC | STEEL | GG20 PIPE | DUCTILE FONT | GRP |
| 15 | 1/2" | - | - | 21,3 | - | - | - |
| 20 | 3/4" | 20 | 20 | 26,9 | - | - | - |
| 25 | 1" | 25 | 25 | 33,7 | - | - | - |
| 32 | 1 1/4" | 32 | 32 | 42,4 | - | - | - |
| 40 | 1 1/2" | 40 | 40 | 48,3 | - | - | - |
| 50 | 2" | 50 | 50 | 60,3 | - | - | - |
| 60 | - | 63 | 63 | - | 77 | - | - |
| 65 | 2 1/2" | - | - | 76,1 | - | 82 | - |
| 80 | 3" | 90 | 90 | 88,9 | 98 | 98 | - |
| 100 | 4" | 110 | 110 | 114,3 | 118 | 118 | - |
| 125 | 5" | 125 | 125 | 139,7 | 144 | 144 | - |
| 140 | - | 140 | 140 | - | - | - | - |
| 150 | 6" | 160 | 160 | 168,3 | 170 | 170 | - |
| 175 | - | 180 | 180 | - | 196 | - | - |
| 200 | 8" | 200 | 200 | 219,1 | 222 | 222 | 220 |
| 225 | - | 225 | 225 | - | 248 | - | - |
| 250 | 10" | 250 | 250 | 273 | 274 | 274 | 272 |
| 275 | - | 280 | 280 | - | 300 | - | - |
| 300 | 12" | 315 | 315 | 323,9 | 326 | 326 | 325,4 |
| 325 | - | - | - | - | 352 | - | - |
| 350 | 14" | 355 | 355 | 355,6 | 378 | 378 | 377,3 |
| 375 | - | - | - | - | 403 | - | - |
| 400 | 16" | 400 | 400 | 406,4 | 429 | 429 | 428,2 |
| 450 | 18" | 450 | - | 473 | 480 | 480 | 479,1 |
| 500 | 20" | 500 | - | 508 | - | 532 | 530,1 |
| 600 | 24" | 560 / 630 | - | 610 | - | 635 | 617-633* |
| 700 | 28" | 710 | - | 711 | - | 738 | 719,9 |
| 800 | 32" | 800 | - | 813 | - | 842 | 821,9 |
| 900 | 36" | 900 | - | 914 | - | 945 | 923,9 |
| 1000 | 40" | 1000 | - | 1016 | - | 1048 | 1026,1 |
| 1100 | 44" | - | - | 1120 | - | 1152 | 1127,9 |
| 1200 | 48" | 1200 | - | 1220 | - | 1255 | 1228,8 |
| 1300 | 52" | - | - | 132 | - | - | 1331,9 |
| 1400 | 56" | 1400 | - | 1420 | - | 1462 | 1433,6 |
| 1500 | 60" | - | - | 1520 | - | 1565 | 1535,6 |
| 1600 | 64" | 1600 | - | 1620 | - | 1668 | 1637,6 |
| 1700 | 68" | - | - | 1720 | - | - | 1739,9 |
| 1800 | 72" | - | - | 1820 | - | - | 1841,7 |
| 1900 | 76" | - | - | 1920 | - | - | 1943,9 |
| 2000 | 80" | - | - | 2020 | - | - | 2045,9 |
| 2100 | 84" | - | - | 2120 | - | - | 2147,9 |
| 2200 | 88" | - | - | 2220 | - | - | 2249,9 |
| 2300 | 92" | - | - | 2320 | - | - | 2351,9 |
| 2400 | 96" | - | - | 2420 | - | - | 2453,9 |

| ASBESTOS PIPE AND OUTSIDE DIAMETERS (ACCORDING TO WORKING PRESSURE) | | | | | | | |
|---|---------|-------|---------|--------|----------|--------|----------|
| DN | 2,5 BAR | 5 BAR | 7,5 BAR | 10 BAR | 12,5 BAR | 15 BAR | 17,5 BAR |
| 60 | 83 | 83 | 83 | 83 | 83 | - | - |
| 80 | 100 | 100 | 100 | 100 | 100 | - | - |
| 100 | 120 | 120 | 120 | 120 | 126 | 132 | 132 |
| 125 | 145 | 145 | 145 | 149 | 153 | 159 | 163 |
| 150 | 170 | 170 | 174 | 176 | 182 | 190 | 194 |
| 175 | 197 | 197 | 201 | 207 | 213 | 219 | 223 |
| 200 | 222 | 226 | 230 | 234 | 244 | 252 | 256 |
| 250 | 274 | 276 | 284 | 288 | 298 | 306 | 310 |
| 300 | 326 | 326 | 338 | 344 | 356 | 366 | 370 |
| 350 | 378 | 382 | 390 | 400 | 414 | 426 | 430 |
| 400 | 436 | 440 | 446 | 456 | 472 | 490 | 496 |
| 450 | 488 | 492 | 500 | 512 | 526 | 546 | 550 |
| 500 | 540 | 544 | 552 | 568 | 584 | 604 | 610 |
| 600 | 642 | 650 | 660 | 676 | 692 | 710 | 720 |
| 700 | 760 | 760 | 760 | 770 | 792 | 808 | - |
| 800 | 864 | 864 | 879 | 900 | 924 | - | - |
| 900 | 972 | 972 | 984 | 1012 | 1040 | 808 | - |
| 1000 | 1080 | 1080 | 1098 | 1124 | 1158 | - | - |


All information subject of change.


BORTEK®



 bortek.com.tr


 info@bortek.com.tr

 +90 212 8759922 / +90 212 8790368 (Pbx)

 Beysan Sanayi Sitesi, Yakuplu Mah.
Dereboyu Cad. Pınar Süt Apt. No: 34 2/2
BEYLİKDÜZÜ / İSTANBUL - TÜRKİYE

Europe Office:

 info@torgen.ch

 +41 (0)56 4197100 / +41 (0)56 4197109 (Pbx)

 TORGEN (Switzerland) GmbH
Zweifelstrasse 2 Postfach 1318
CH-8957 Spreitenbach