

DUCT
SEAL

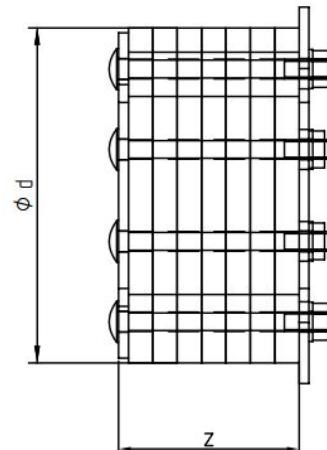
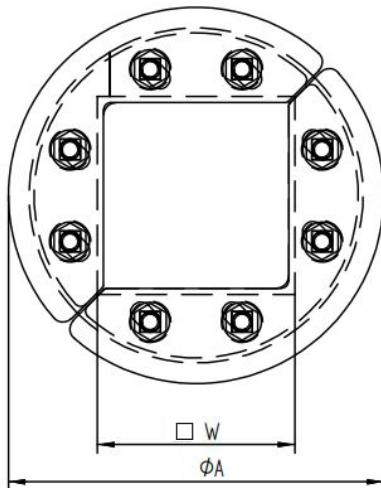
HBRT Family

HTS HBRT is a round sealing solution for multiple cables passing through corrugated pipes or ducts casted in concrete manholes/pits.

The seal is formed by tightening the compression bolts which expand the system radially with no need of a compression system.

CHARACTERISTICS

- Designed to be installed using HTS DM series: DM tolerant and blank sealing modules.
- Manufactured in elastomer polymer with stainless steel front and back plates.
- HBRT is always supplied as an open system. It enables to be installed after cable/pipe installation.
- Watertight protection.
- No extra tools are required for its installation.
- Working Temperature -35 °C to +120 °C
- Estimated life time at 20 °C = 15 years.



ϕA -d depends on corrugated tube internal diameter. $\square W$ depends on cables' quantity and size.

Remark: to ensure proper sealing of the system, the client must define the internal diameter of the corrugated pipe based on the actual duct dimensions on site.

→ Installation references

| | |
|----------------------|-----|
| See DM blocks | 114 |
| See assembly parts | 132 |
| See inspection check | 174 |

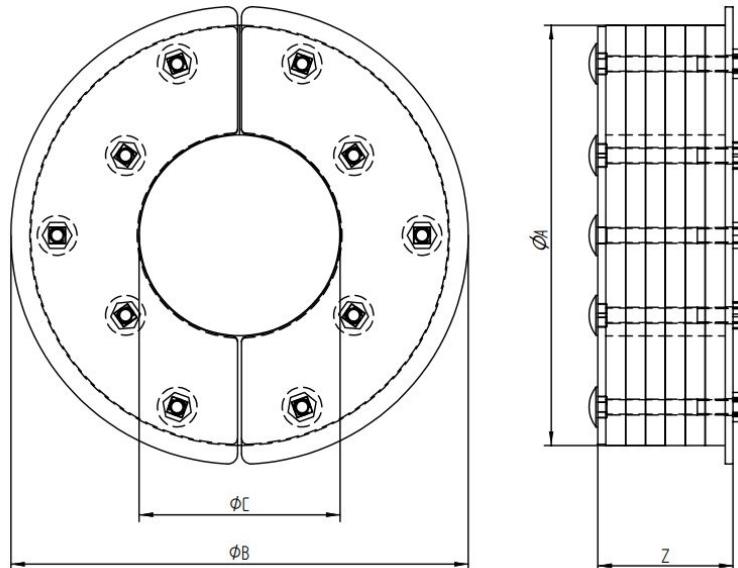
HBRST SINGLE CABLE/PIPE

HTS HBRST is a round sealing solution for a single cable/pipe passing through corrugated pipes or ducts casted in concrete manholes/pits.

The seal is formed by tightening the compression bolts which expand the system radially with no need of a compression system.

CHARACTERISTICS

- Manufactured in elastomer polymer with stainless steel front and back plates.
- HBRST is always supplied as an open system. It enables to be installed after cable/pipe installation.
- Watertight protection.
- No extra tools are required for its installation.
- Working Temperature -35 °C to +120 °C
- Estimated life time at 20 °C = 15 years.



ØA-B depends on corrugated tube internal diameter.
ØC depends on cables' size.

Remark: To ensure proper sealing of the system, the client must define the internal diameter of the corrugated pipe based on the actual duct dimensions on site. Also the OD of the cables to be sealed.

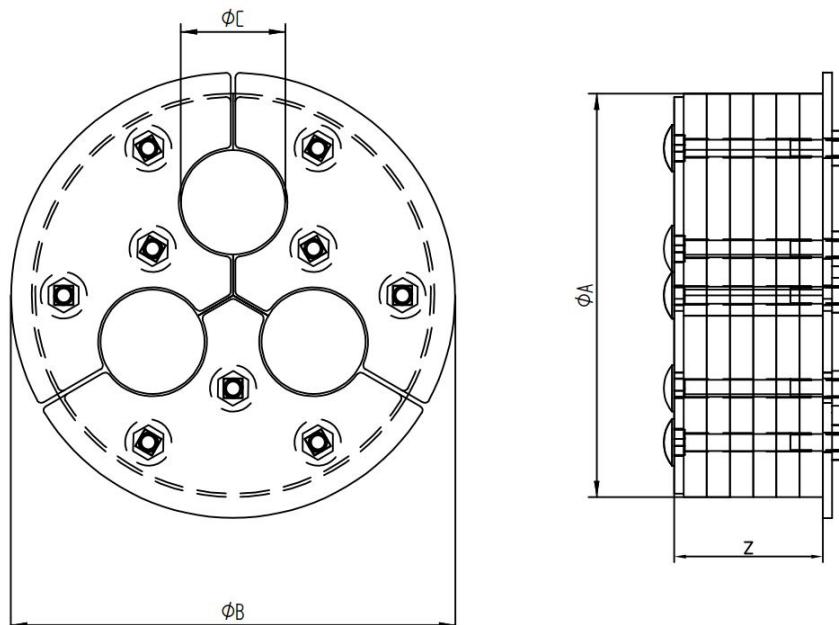
HBRST TREFOIL

HTS HBRST Trefoil is a round sealing solution for multiple cables passing through corrugated pipes or ducts casted in concrete manholes/pits.

The seal is formed by tightening the compression bolts which expand the system radially with no need of a compression system.

CHARACTERISTICS

- Manufactured in elastomer polymer with stainless steel front and back plates.
- HBRST is always supplied as an open system. It enables to be installed after cable/pipe installation.
- Watertight protection. DNV tested catastrophic pressure 2 bar according to DNV-CP-0165 Approval Program.
- No extra tools are required for its installation.
- Working Temperature -35 °C to +120 °C
- Estimated life time at 20 °C = 15 years.



ϕA - ϕB depends on corrugated tube internal diameter.
 ϕC depends on cables' size

Remark: To ensure proper sealing of the system, the client must define the internal diameter of the corrugated pipe based on the actual duct dimensions on site. Also the OD of the cables to be sealed.

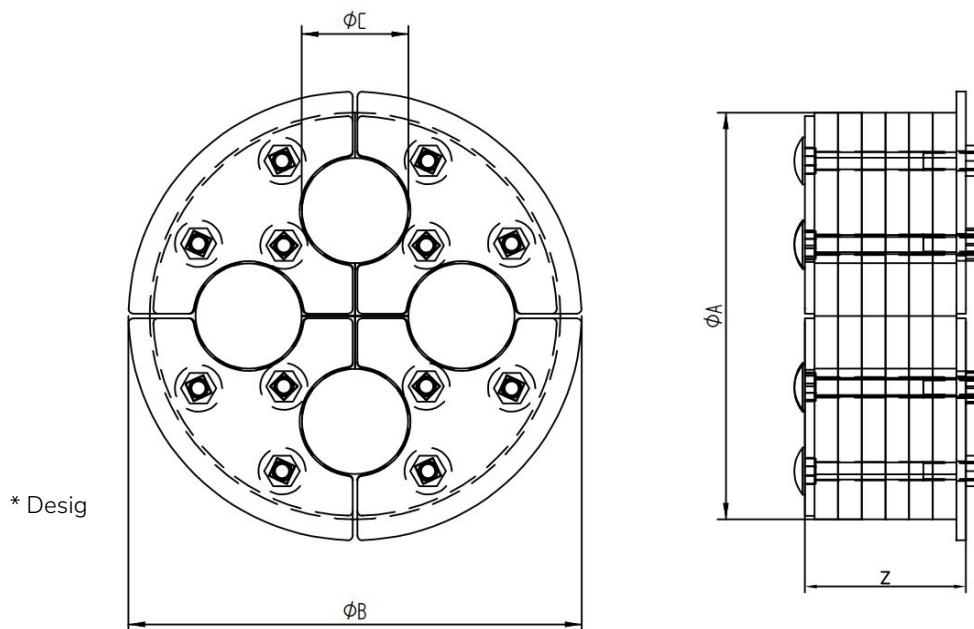
HBRST MULTICABLE/PIPE 4D

HTS HBRST Multicable is a round sealing solution for multiple cables passing through corrugated pipes or ducts casted in concrete manholes/pits.

The seal is formed by tightening the compression bolts which expand the system radially with no need of a compression system.

CHARACTERISTICS

- Manufactured in elastomer polymer with stainless steel front and back plates.
- HBRST is always supplied as an open system. It enables to be installed after cable/pipe installation.
- Watertight protection. DNV tested catastrophic pressure 2 bar according to DNV-CP-0165 Approval Program.
- No extra tools are required for its installation.
- Working Temperature -35 °C to +120 °C
- Estimated life time at 20 °C = 15 years.



ØA-B depends on corrugated tube internal diameter.
ØC depends on cables' size

Remark: To ensure proper sealing of the system, the client must define the internal diameter of the corrugated pipe based on the actual duct dimensions on site. Also the OD of the cables to be sealed.

DUCT Plug

HTS Duct Plug is a round sealing solution for corrugated pipes or ducts casted in concrete manholes/pits.

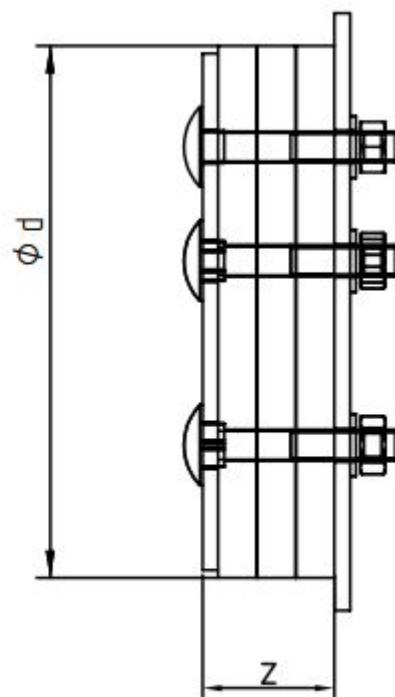
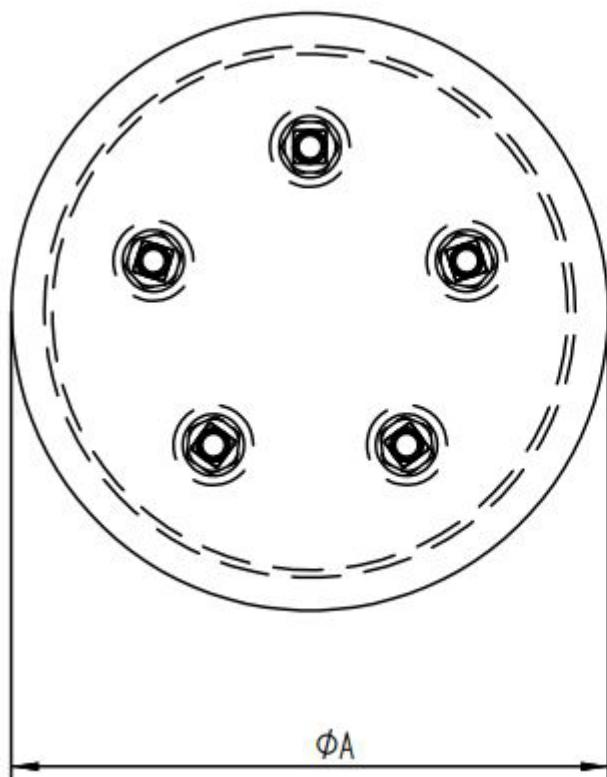
The seal is formed by tightening the compression bolts which expand the system radially



CHARACTERISTICS

- Manufactured in elastomer polymer with stainless steel front and back plates
- Watertight protection.
- No extra tools are required for its installation.
- Working Temperature -35 °C to +120 °C
- Estimated life time at 20 °C = 15 years.

ROUND TRANSIT



ØA-d depends on corrugated tube internal diameter

Remark: To ensure proper sealing of the system, the client must define the ~~internal diameter of~~ the corrugated pipe based on the actual duct dimensions on site.

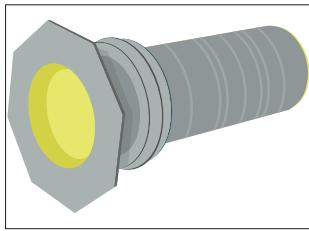
| | |
|--|----|
| Ver tacos | xx |
| Ver internal diameter of accesorios | xx |
| Ver guía de instalación | xx |
| Ver guía soldadura | xx |

CBP CASTING SLEEVE

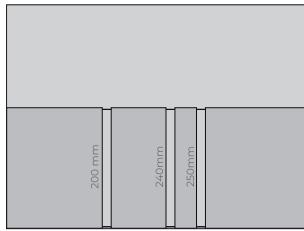
HTS CBP Sleeves are designed to be casted in concrete walls creating a uniform round opening that can later be used to install and seal cables or pipes using HTS Blind Plugs, HRST and HBRT Sealing Systems. Ensuring a watertight seal in the connection with the concrete.

CHARACTETISTICS

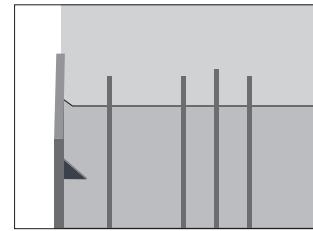
- Compatible with HTS HBRST, HBRT and HTS Blind Plugs sealing systems.
- Available in multitude of diameters: Ø100mm, Ø150mm, Ø200mm.
- Offered in multiple sleeve depths: 500mm to 100mm.
- Depths can be adjusted on-site by cutting to the required length. With grooves for cutting to length at the construction site.
- Material: ABS.



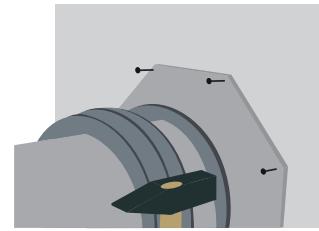
Supplied with removable end caps on both sides.



Depths can be adjusted on-site by cutting to the required length. With grooves for cutting to length at the construction site.



With waterstops for watertight.

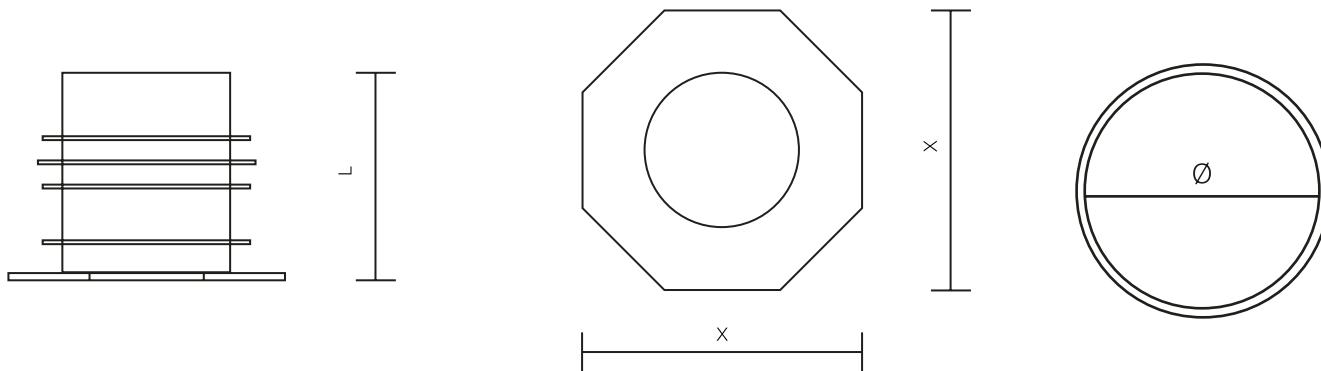


Tower Flange for fastening.

TYPICAL USE CASES

- Electrical and communication cable infrastructure.
- Industrial and civil ducting systems.
- Pre-installation sealing for underground or wall-mounted conduits.

| Ø | L | X |
|-----|---------|-----|
| 100 | 100-500 | 220 |
| 150 | 100-500 | 270 |
| 200 | 100-500 | 320 |



DUCT Seal

HTS Duct Seal is a sealing system for cables passing through ducts or pipes, which ensures cabling is protected from water, smoke, corrosive chemicals, rodents and debris.

Tried and tested in the field, Duct Seal is suitable for a wide range of cable including optical fiber, electrical wire, twisted pair or coax. Its typical applications range from telecommunications to power distribution.

CHARACTERISTICS

- Each Duct Seal is provided with up to 4 apertures for cables or grommets.
- Designed to be installed on both ends of a duct or pipe.
- Available with integral test valve with unique central position maintaining utilization of all 4 ports, unlike other products in the market.
- Available in open version (Duct Seal and plugs) for retrofit installations, when cables are already in position.
- Manufactured in elastomer polymer with stainless steel front and back plates, with nickel plated brass valves, which consequently, prevents corrosion.
- No extra tools are required for its installation.
- The 50/11 and 50/13 duct seals give an airtight and watertight seal up to 2 bars. 4 port design tested to 1 bar as standard.
- Suitable for ducting used within concrete maintenance chambers, kerb side cabinets and civil installations.



| Description | | Duct/pipe inside diameter (mm) | Number of apertures | Aperture diameter (mm) |
|---------------|------------|--------------------------------|---------------------|------------------------|
| Without valve | With valve | | | |
| 90/4 | 90/4/V | 89-90 | 4 | 2x34 & 2x23 |
| 93/4 | 93/4/V | 92-93 | 4 | 34 |
| 95/4 | 95/4/V | 94-95 | 4 | 34 |
| 97/4 | 97/4/V | 97 | 4 | 34 |
| 100/4 | 100/4/V | 100 | 4 | 34 |
| 106/4 | 106/4/V | 105-106 | 4 | 34 |
| 50/11/11 | - | 50 | 2 | 2x11 |
| 50/11/13 | - | 50 | 2 | 1x11 & 1x13 |
| 50/13/13 | - | 50 | 2 | 2x13 |

DUCT Seal

Duct Seal Cable Grommet

| Description | Cable diameter | | Number of cables |
|-------------|----------------|--------------|------------------|
| | Minimum (mm) | Maximum (mm) | |
| 23/1* | 6 | 9.5 | 1 |
| 23/2* | 9 | 12.5 | 1 |
| 23/3* | 12 | 15.5 | 1 |
| 23/4* | 15 | 18 | 1 |
| 34/1 | 9 | 12.5 | 1 |
| 34/2 | 12 | 15.5 | 1 |
| 34/3 | 15 | 18.5 | 1 |
| 34/4 | 18 | 21.5 | 1 |
| 34/5 | 21 | 24.5 | 1 |
| 34/6 | 24 | 27.5 | 1 |
| 34/7 | 27 | 30 | 1 |
| 344x10 | 10 | 10 | 4 |

* For use with 90/4 Duct Seal



Duct Seal Filler plugs

| Description | | Aperture diameter (mm) |
|---------------|------------|------------------------|
| Without valve | With valve | |
| 34 | 34/V | 34 |
| 23 | 23/V | 23 |
| 13 | 13/V | 13 |
| 11 | 11/V | 11 |



- Other frames, seal grommets or plugs sizes available under request. Please contact HTS Sales Department.