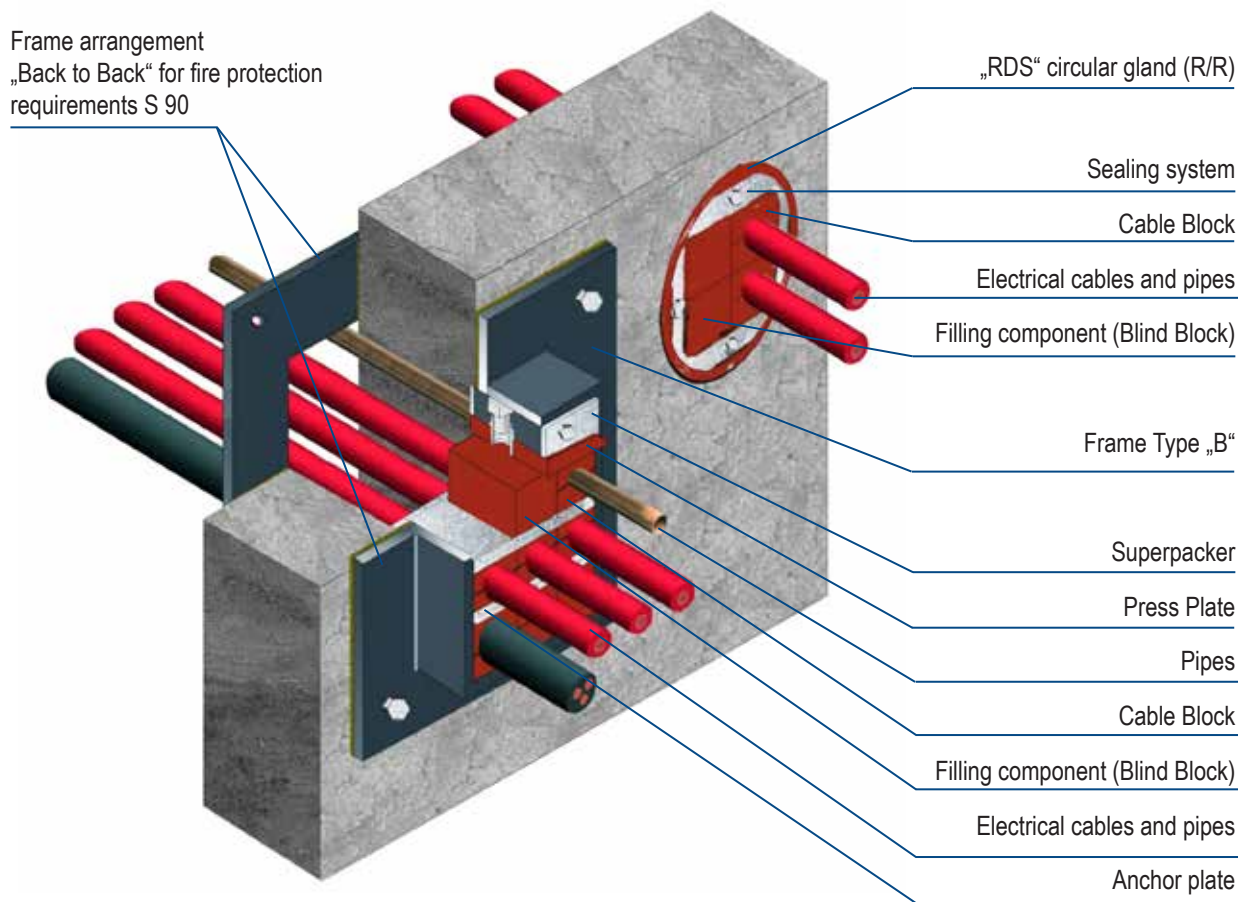


# PYRO-SAFE CMS Modular cable gland system

Versatilely applicable sealing system in modular construction for cables and pipes with Ø 3 mm - 110 mm.

Version as rectangular or circular frames. Certified gas-, pressurised water and air tightness;

fire resistance classes S 30, S 90 and S 120 acc. to DIN 4102-9.



## System description

### Applications

Sealing system in modular construction for cable and pipe penetrations through walls and floors. Standardised rectangular frames and frame groups type „B“ for embedding in concrete or flanging as well as type „S“ for welding. These frame types are also available for subsequent installation, i.e. for already existing cables or laid pipes (types „BO“ and „SO“). „RDS“ circular glands (R/R) for use in corings.

### Fire protection features

Up to 2 hours integrity and insulation according to DIN 4102-9.

### Applicability certificate

Approved by Deutsches Institut für Bautechnik, Berlin (DIBt).

National technical approvals:

Z-19.15-1044 - PYRO-SAFE CMS-B

Z-19.15-149 - PYRO-SAFE CMS-R/R

Z-19.15-154 - PYRO-SAFE CMS-B/B

Z-19.15-57 - PYRO-SAFE CMS-U

*For more certificates see next page.*

Pipes

Cables

## Technical Data

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### Applicability certificate

#### *Pressurised water tightness*

Germanischer Lloyd Nr. 57147 HH

Germanischer Lloyd Nr. 36202 HH

#### *Gas tightness*

Public Materials Testing Office, Hamburg, No. Z.600-51-77

#### *Air tightness*

Germanischer Lloyd Nr. 57157 HH

### Pressurised water tightness

- Continuous pressure: 3 bar
- 60 minutes: 9 bar
- 6 hours: 6 bar (RDS)
- Shock load: 16.5 bar

### Gas tightness

- Helium-leak test: 2.5 bar, 4 hours

### Permissible services

The limitations of the respective approval must be considered for cables of all types as well as pipes with diameters up to  $\varnothing \leq 110$  mm.

### Frame groups

If individual frames are insufficient due to the cable occupancy, or if penetrations should be centralised, single frames of any combination can be connected. Differentiation is made between the arrangements next to each other and below and next to each other.

### Installation

The space to be filled is closed with cable blocks and blind blocks. The cable modules consist of 2 half-shellcable blocks (K15- K60) or 1 cable block (K90 - K120) for various cable diameters and are manufactured of a flame-resistant, special self-extinguishing mixture. Blind blocks (filling components) form the reserve space for subsequent replacement with cable modules and are made of the same material. Anchor plates fix the cables and blind blocks and arrest them in the frame. A press-plate with integrated telescope screw squeeze the filling space together and thus seal them tightly. The remaining space is then filled by the endpacking "Superpacker". The two bolts of the "Superpacker" are tightened so firmly that the sealing expands and tightly seals off the remaining room between the press plate and the frame. The RDS circular glands are installed in corings or in steel or plastic lining tubes. RDS circular glands already contain the sealing system. By tightening the tension screws, the system presses the filling space together and simultaneously seals off in the direction of the penetration reveal.

### Retrospective installation

Cables and pipes can be removed at any time and reinstalled or replaced with other cross-sections. Reserve spaces for expanding the network can be immediately planned in this way. The „End Packing Puller special“ facilitates the professional dismantling of the press plate.