

Уплотнения для кабельных проходок

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: jec@nt-rt.ru || сайт: <https://jockel.nt-rt.ru/>

Cable penetration seals prevent fire and smoke from spreading through cable penetrations into other areas



To supply electricity to buildings, cables are laid through walls and ceilings to form a network. Where they intersect fire compartments, cable penetrations must be sealed to prevent fire and smoke from spreading to other fire compartments. Cable penetration seals are available in various materials and fire resistance classes (S 30 to S 120), so they can be adapted to any environment and the respective fire resistance.

Cable insulation ...

- ... **prevent the spread of fire** and smoke through cable penetrations.
- ... are available in various designs and **fire resistance classes** .
- ... must **comply with DIN 4102-9** and have DIBt approval.

Overview Products

- mortar bulkhead
- Plate bulkhead
- Foam bulkhead, molded parts
- Cushion bulkhead
- Fire protection blocks
- pit bulkhead

Overview of services

- Consulting and planning
- Installation or assembly
- distribution
- Repairs, improvements to the existing stock
- Development of fire protection concepts

After initial discussions and subsequent site visits, we can offer customized solutions for your property. Only during these site visits can we determine which products make sense.

In the following steps, the work will be carried out and documented according to generally accepted technical standards. Jockel Brandschutztechnik-Service GmbH will provide you with comprehensive advice.

Cable penetration seals seal the openings for electrical cables in the room-enclosing components. They must have the same fire resistance class as the components themselves to maintain fire resistance and thus limit a fire to the smallest possible area (sealing principle).

Cable penetration seals must comply with DIN 4102-9. Table 1 of DIN 4102-9 shows the classification of cable penetration seals into fire resistance classes.

Fire resistance classes of cable penetration seals	Fire resistance duration in minutes
S30	≥ 30
S60	≥ 60
S90	≥ 90
S120	≥ 120

Types of cable penetration seals

A **mortar seal** seals openings in interior walls and ceilings through which electrical wires run. The dry mortar must be mixed with water to the required consistency, and the opening must be sealed by a specialist company.

A **fire protection partition** is formed by non-combustible fire protection panels made of mineral fibers with a minimum density of 150 kg/m^3 and a melting point of at least $1,000 \text{ }^\circ\text{C}$, which enclose the cables. Gaps are filled with special fire protection filler.

A **foam seal** is installed using foam concentrate in cartridges. Due to its rapid reaction time, the foam cures in 10-20 seconds and seals the opening tightly. This seal is particularly suitable for hard-to-reach openings. This allows for easy repairs.

Cushion bulkhead: Fire protection cushions have a shell made of non-combustible fiberglass fabric with internal sacks that expand when exposed to heat, creating a tightly sealed barrier. Gaps are filled with special fire protection filler.

A **box bulkhead** is a ready-to-assemble system consisting of a multi-part, detachable cable box with a housing. To seal the open ends of this box, sodium silicate foams under the influence of heat. This creates a solid block that can withstand loads. The box thus allows for quick installation and high flexibility.

Cable penetration seals must comply with DIN 4102-9. In addition, the individual systems must have their own approval from the German Institute for Building Technology (DIBt). Accordingly, proof must be provided that work involving cable penetration seal systems was carried out in accordance with these regulations.

With regard to the building regulations of the respective federal states, fire protection structures must be designed taking into account

- the flammability of the building materials
- the fire resistance period
- the tightness
- and the arrangement of escape routes

be designed to counteract the spread of fire and smoke in order to fulfil the general protection objectives of fire protection: rescue of people and animals, effective fire-fighting operations.

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: jec@nt-rt.ru || сайт: <https://jockel.nt-rt.ru/>