**Product information 01/2009****DK-Cable junction boxes
tested for functional integrity
in the event of fire**

- Functional integrity in accordance with DIN 4102 part 12 (german standard)
- Degree of protection: IP 65
- Rated connecting capacity 0.5-16 mm²
- Boxes made from duroplastic or sheet steel with powder coating

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Industrial Electrical Power Distribution Systems

DK Cable junction boxes

tested for functional integrity in the event of fire cable entry via included grommets

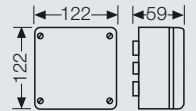
- degree of protection IP 65
- rated insulation voltage AC/DC400 V
- connecting terminal made from ceramic with resistance to high temperatures
- 2 attached universal anchors, fire protection tested
- **material: Duroplastic**
- colour orange RAL 2003

new



FK 7045 Connection box for 2 cables Ø 0,8 mm / 0,5-4 mm², Cu Junction box Ø 0,8 mm / 0,5-1,5 mm², Cu

5-pole,
per pole 4 x Ø 0,8 mm / 0,5 mm² sol, 4 x 1,5 mm² sol,
2 x 2,5 mm² sol, 2 x 4 mm² sol,
included cable entry 4 EDKF 32
(sealing range: Ø 8-23 mm)



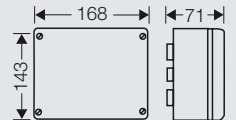
Tested with cable manufacturers Dätwyler and Nexans for the functional integrity class E30 and E90, see test certificate no.: P-MPA-E-02-032, download available from www.hensel-electric.de

new



FK 7105 Connection box for 2 cables 1,5-10 mm², Cu Junction box 1,5-4 mm², Cu

5-pole,
per pole 4 x 1,5 mm² sol, 4 x 2,5 mm² sol, 4 x 4 mm² sol,
2 x 6 mm² sol, 2 x 10 mm² sol,
included cable entry 4 EDKF 40
(sealing range: Ø 11-30 mm)



Tested with cable manufacturers Dätwyler and Nexans for the functional integrity class E30 and E90, see test certificate no.: P-MPA-E-02-032, download available from www.hensel-electric.de

new



FK 7165 Connection box for 2 cables 1,5-16 mm², Cu Junction box 1,5-6 mm², Cu

5-pole,
per pole 4 x 1,5 mm² sol, 4 x 2,5 mm² sol, 4 x 4 mm² sol,
4 x 6 mm² sol, 2 x 10 mm² sol, 2 x 16 mm² sol
included cable entry 4 EDKF 40
(sealing range: Ø 11-30 mm)



Tested with cable manufacturers Dätwyler and Nexans for the functional integrity class E30 and E90, see test certificate no.: P-MPA-E-02-032, download available from www.hensel-electric.de

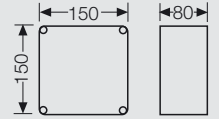
DK Cable junction boxes tested for functional integrity in the event of fire cable entry via mounted grommets

- degree of protection IP 65
- rated insulation voltage AC/DC400 V
- connecting terminal made from ceramic with resistance to high temperatures
- 4 mounted grommets IP 65, closed
- **material: sheet steel, powder-coated**
- colour orange, RAL 2003
- mounted using exterior wall fixings (for dowels refer to technical data)



**FK 9025 Connection box for 2 cables Ø 0,8 mm / 0,5-4 mm², Cu
Junction box Ø 0,8 mm / 0,5-1,5 mm², Cu**

5-pole,
per pole 4 x Ø 0,8 mm / 0,5 mm² sol, 4 x 1,5 mm² sol,
2 x 2,5 mm² sol, 2 x 4 mm² sol
mounted cable entry 4 EDKF 32
(sealing range: Ø 8-23 mm)

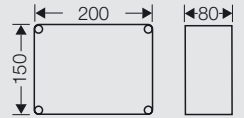


Tested with cable manufacturers Dätwyler, Eupen, Nexans, Studer, Pirelli and Lynenwerk for the functional integrity classes E30 and E90, see test certificate no.: P-MPA-E-02-032, download available from www.hensel-electric.de



**FK 9105 Connection box for 2 cables 1,5-10 mm², Cu
Junction box 1,5-4 mm², Cu**

5-pole,
per pole 4 x 1,5 mm² sol, 4 x 2,5 mm² sol, 4 x 4 mm² sol,
2 x 6 mm² sol, 2 x 10 mm² sol
mounted cable entry 4 EDKF 32
(sealing range: Ø 8-23 mm)

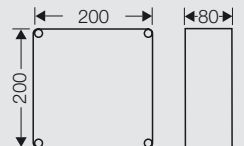


Tested with cable manufacturers Dätwyler, Eupen, Nexans and Pirelli for the functional integrity classes E30 and E90, see test certificate no.: P-MPA-E-02-032, download available from www.hensel-electric.de



**FK 9255 Connection box for 2 cables 1,5-16 mm², Cu
Junction box 1,5-6 mm², Cu**

5-pole,
per pole 4 x 1,5 mm² sol, 4 x 2,5 mm² sol, 4 x 4 mm² sol,
4 x 6 mm² sol, 2 x 10 mm² sol, 2 x 16 mm² sol
mounted cable entry 4 EDKF 40
(sealing range: Ø 11-30 mm)



Tested with cable manufacturers Dätwyler, Eupen, Nexans and Pirelli for the functional integrity classes E30 and E90, see test certificate no.: P-MPA-E-02-032, download available from www.hensel-electric.de

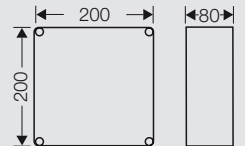
DK Cable junction boxes tested for functional integrity in the event of fire cable entry via mounted grommets

- cable junction box with fused outgoing unit
- functional integrity E 30 following DIN 4102 part 12
- degree of protection IP 65
- rated insulation voltage AC400 V
- terminal block made from ceramic with resistance to high temperatures
- D 01 neozed fuse base
- **material: sheet steel, powder-coated**
- colour orange, RAL 2003
- 4 mounted grommets IP 65, closed
- mounted using exterior wall fixings (for dowels refer to technical data)



FK 9259 1,5-10 mm², Cu

5-pole,
2 connecting terminals
2 junction terminals
2 PE terminals
each 1,5-10 mm² sol,
mounted cable entry 4 EDKF 40
(sealing range: Ø 11-30 mm)



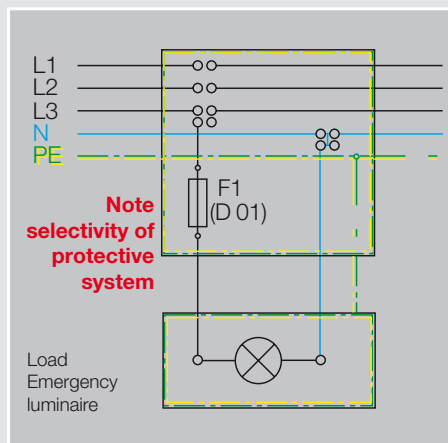
Tested with the cable manufacturers Dätwyler, Eupen, Studer, Prysmian and Nexans for the functional integrity classes E30 and E90, see test certificate no.: P-MPA-E-08-021, download available from www.hensel-electric.de

FK 9259, with fused outgoing circuit

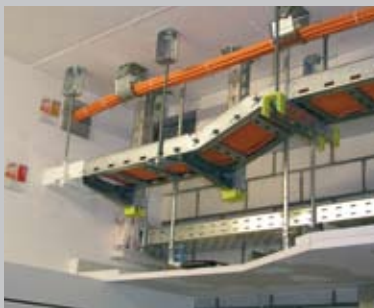
Can be used in emergency lighting in installations that cover a large area (e.g. tunnels). The use of a fused branch circuit makes it possible to supply a group of emergency luminaires with one supply lead.

If one or several emergency luminaires are damaged during a fire, the back-up fuse is tripped and ensures that the power supply of the common supply lead is maintained.

The use of this equipment requires approval from the planning department and building control office for individual cases.



Connection of cables and wires for operation and functional integrity in the event of fire:



Source: Elektro Technologie Zentrum Stuttgart - Seminars on "Structural fire protection" available at www.etz-stuttgart.de

Functional integrity for installation systems

Functional integrity in accordance with DIN 4102 part 12 is required for safety-related circuits, such as the power supply for safety lighting, firemen's lifts, fire alarm systems, ventilation and smoke exhaust systems and pumps in sprinkler systems.

Therefore the circuits that are affected are those which are important in the event of fire for rescuing people or for fire fighting.

Requirements for cable junction boxes

Irrespective of the functional integrity, the selection of a suitable cable junction box is determined by the requirements of the installation environment and the electrical requirements.

Ambient conditions

- place of assembly
- humidity, dust (IP degree of protection)
- ambient temperature
- corrosion
- impact strength

Electrical conditions

- power supply system / protection measures
- earthed, insulated

Material

Insulating material / Duroplastic



Sheet steel, powder-coated



Special characteristics

Degree of protection IP 65

Ambient temperature:
-25° C to + 35° C

Material: Insulating material /
Duroplastic

Impact strength:
IK 06 (1 Joule)

Mounting via internal fixing with
approved universal anchors (included)

Halogen-free

Connecting terminal made from
ceramic with resistance to high
temperatures

Manufactured and tested in accordance
with IEC 60670-22

Protection against electric shock:
insulated

Special characteristics

Degree of protection IP 65

Ambient temperature:
-25° C to + 35° C

Material: sheet steel,
powder-coated

Impact strength:
IK 10 (20 Joule)

Mounting via external brackets for use
with fixings approved by the building
authorities

Halogen-free

Connecting terminal made from
ceramic with resistance to high
temperatures

Manufactured and tested in accordance
with IEC 60670-22

Protection against electric shock:
earthed

Protection against direct contact also
maintained due to the box

No additional fire load, no toxic or
corrosive emissions



DK Cable junction boxes tested for functional integrity in the event of fire Application areas

Hensel FK Boxes are suitable for the use in applications like for instance:

- Power plants
- Metro
- Railways
- Car tunnels
- Hotels
- Hospitals
- Airports
- Banks
- Petrol stations
- Industry
- Public buildings
- etc

