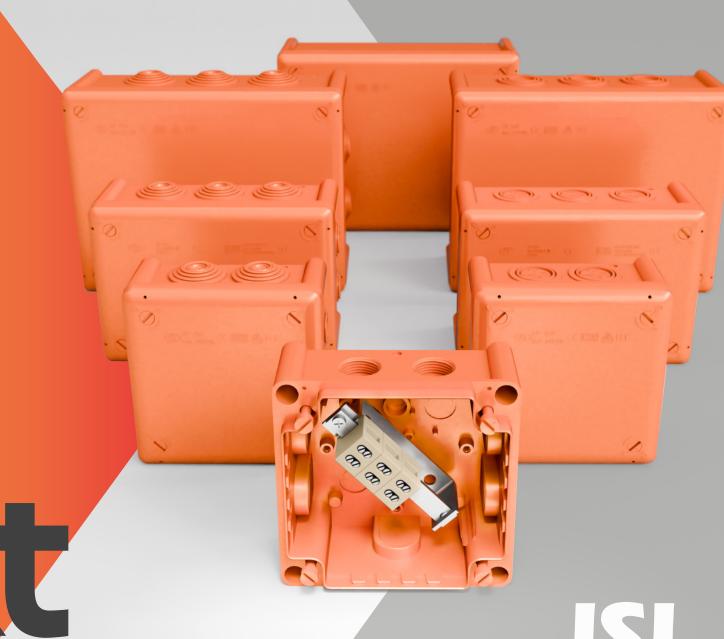
Easy. Versatile. Secure.



FireResistant E90

Key Features & Benefits



Functional Integrity

Functional Integrity for 90 minutes (compliant with DIN 4102 Part 12) E90

Mechanical Resistance

High impact resistance. IK10 available with accessory (metal armor)





Tested for continuous operation for **90 minutes** in case of emergency.

JSL E90 NEXT watertight junction boxes, designed to withstand fire by maintaining the integrity of electrical circuits under the most extreme fire conditions.

Environmental Protection

Ingress Protection against dust and powerful water jets



Nominal Voltage

Nominal System Voltage for E90 application





Applications

Guaranteed Safety

Ensures functional integrity for **90** minutes under extreme fire conditions, maintaining power supply to essential safety systems.



Emergency Systems

- Emergency lighting
 - Smoke extraction systems
 - Sprinkler pumps
 - Fire alarm systems





Security Systems

- · Video surveillance (CCTV)
- Access control systems
- · Evacuation systems (e.g., public address, voice alarm)
- Emergency communications systems



Built with high-resistance thermoplastic materials, halogen-free (PP VO, free of heavy metals), in a distinctive orange color.



Critical Infrastructures

- Tunnels
- · Public buildings (e.g., schools, government offices)
- · Commercial centers (e.g., shopping malls)
- · Hospitals and healthcare facilities





Ceramic Terminals



Designed for simple installation with pre-marked entries, standard cable gland compatibility, and flexible mounting options.

Double Terminal 6mm²

Cable Capacity (per pole):
Solid $0.8-6.0 \text{ mm}^2$; Flexible $0.8-4.0 \text{ mm}^2$ Dimensions: approx. $19 \times 13 \times 21.5 \text{ mm}$



Double Terminal 16mm²

Cable Capacity (per pole): Solid 1.5–16.0 mm²; Flexible 1.5–10.0 mm²

Dimensions: approx. 25.5 × 19 × 25.5 mm



Versatility

Offers multiple cable entry options and a range of connection capacities with ceramic terminals for various needs.

Double Terminal 25mm²

Cable Capacity (per pole):

Solid 2.5–25.0 mm²; Flexible 2.5–16.0 mm² Dimensions: approx. $32.4 \times 32.4 \times 25$ mm



Installation

Fasten directly to concrete walls using the hardened/treated metal anchors for fire conditions.





Reference Nomenclature System

Product references for the JSL BOXLINE E90 NEXT series follow a structured system:

Example: J100SF-N3P16 refers to a J100 Models box with Threaded entries (SF). From the E90 Next generation (N), containing 3 ceramic terminal blocks (3), each terminal blocks suitable for 16mm² conductors (P16).



To find the **appropriate reference for your project,** simply apply the formula described above for the box model and components.

As different projects have different requirements, if your project requires a **specific configuration**, please contact our technical team so we can find a solution tailored to your needs.

Models 116 x 116 x 62 mm



J100SF-N



• With 7x M20 threaded entries (for M20 cable glands, cable Ø7-13.3mm)



The most compact range in the E90 NEXT series, ideal for smaller junction points requiring fire resistance.

J100BF-N



• with 7x rubber grommet entries (IP66) (for cables Ø3.5-25mm)





Terminal Blocks



3-pole ceramic terminal block for a 6 mm² nominal cross-section

• Cable Capacity (per pole): Solid/Stranded: 0.8-6.0 mm²; Flexible: 0.8-4.0 mm².



Terminal Block Configurations for J100 box models (116 x 116 x 62 mm)

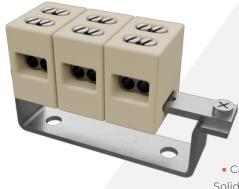
These terminal blocks allow for the connection of cables with different cross-sectional areas.



N5P6

5-pole ceramic terminal block for a 6 mm² nominal cross-section

• Cable Capacity (per pole): Solid/Stranded: 0.8-6.0 mm²; Flexible: 0.8-4.0 mm².



N3P16

3-pole ceramic terminal block for a 16 mm² nominal cross-section

• Cable Capacity (per pole): Solid: 1.5-16.0 mm²; Flexible: 1.5-10.0 mm².





Terminal Blocks



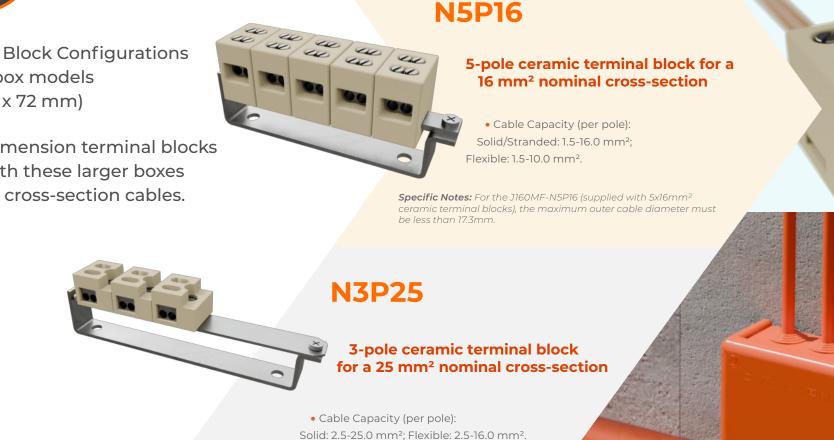
• Cable Capacity (per pole): Solid/Stranded: 0.8-6.0 mm²; Flexible: 0.8-4.0 mm².





Terminal Block Configurations for J160 box models (116 x 166 x 72 mm)

Larger dimension terminal blocks to use with these larger boxes for wider cross-section cables.





Models 166 x 216 x 92 mm





• With 10x grommet entries (for cables Ø3.5-32mm).





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 With 10x marked (knock-out) entries for cable glands PG13.5 (Ø9-12mm),
 M20 (Ø7-13.3mm), M25 (Ø12-17.5mm),
 or M32 (Ø16-20.5mm).



The largest model, providing suficient space for demanding installations and larger cable diameters.

J200LF-N



• With smooth walls (plain sides), allowing for custom entry drilling.





Terminal Blocks





5-pole ceramic terminal block for a 16 mm² nominal cross-section

• Cable Capacity (per pole):

Solid/Stranded: 1.5-16.0 mm²; Flexible: 1.5-10.0 mm².



Terminal Block Configurations for J200 box models (166 x 216 x 92 mm)

Larger dimension terminal blocks in a box with ample space for installations using larger cross-section cables.

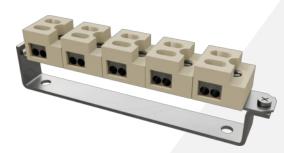
N3P25



• Cable Capacity (per pole):

Solid: 2.5-25.0 mm²; Flexible: 2.5-16.0 mm².

Specific Notes: For the J200MF-N5P25 (supplied with 5x25mm² ceramic terminal blocks), the maximum outer cable diameter must be less than 20.5mm.



N5P25

5-pole ceramic terminal block for a 25 mm² nominal cross-section

• Cable Capacity (per pole): Solid: 2.5-25.0 mm²; Flexible: 2.5-16.0 mm².





Accessories



Stainless Steel External Mounting Plates

MP100 (For installation with all J100 series models)
MP160 (For installation with all J160 series models)
MP200 (For installation with all J200 series models)



V0 Fire-Retardant Metric Cable Glands

V0 classification, orange color, to maintain the system's integrity. **Available sizes: M20, M25, and M32.**





MCP Metal Guard

Provides extra protection with the IK10 metal guard.





Fuse Holders

For the protection of lighting systems and other circuits.





Technical Specifications

Box Material

- Type: Halogen-free Thermoplastic Polypropylene (PP V0), without heavy metals
- Color: Orange (similar to RAL 2003/2004)
- Terminal blocks Anchorage: Galvanized steel chassis
- External Fixing Plate: Optional, for external mounting without compromising box integrity

Available Dimensions

- J100: 116x116x62 mm
- J160: 116x166x72 mm
- J200: 166x216x92 mm

Electrical Specifications

- Nominal Voltage: 500V
- IP Rating: IP66
- IK Rating: IK08

Standards Compliance



- Functional Integrity: DIN 4102 Part 12 (E90)
- Junction Boxes: EN 60670-1. EN 60670-22
- Glow Wire Test: IEC 60695-2-10
- Ingress Protection: EN 60529 (IP66)
- Directives: Low Voltage Directive (2014/35/EU), RoHS Directive (2011/65/EU), REACH Regulation (EC No. 1907/2006)

Terminal blocks

- Material: Steatite ceramic
- Connector Material: Nickel-plated Brass (Cu Zn37)
- Connection Points per Pole: 4

Terminal Configurations

P6 (6mm² Terminal blocks)

- Rated Current: 55A (individual terminal rating up to 690V, system limited to 500V for E90)
- Cable Capacity (per pole): Rigid/Stranded 0.8-6.0 mm²; Flexible 0.8-4.0 mm²
- Dimensions: approx. 19 x 13 x 21.5 mm
- Rated Torque: 0.8 Nm

P16 (16mm² Terminal blocks)

- Rated Current: 80A (individual terminal rating up to 690V, system limited to 500V for E90)
- Cable Capacity (per pole): Rigid 1.5-16.0 mm²; Flexible 1.5-10.0 mm²
- Dimensions: approx. 25.5 x 19 x 25.5 mm
- Rated Torque: 1.2 Nm

P25 (25mm² Terminal blocks)

- Rated Current: 125A (individual terminal rating up to 690V, system limited to 500V for E90)
- Cable Capacity (per pole): Rigid 2.5-25.0 mm²; Flexible 2.5-16.0 mm²
- Dimensions: approx. 32.4 x 32.4 x 25 mm
- Rated Torque: 2.0 Nm

Detailed Wire Clamping Capacity

(per single entry point on terminal block, total 4 per pole)

For 6mm² terminal blocks:

- 0.8 mm² wire: 5 wires (total 20 per pole)
- 1.0 mm² wire: 4 wires (total 16 per pole)
- 1.5 mm² wire: 3 wires (total 12 per pole)
- 2.5 mm² wire: 1 wire (total 4 per pole)
- 4.0 mm² wire: 1 wire (total 4 per pole)
- 6.0 mm² wire: 1 wire (total 4 per pole)
- Rated Torque: 0.8 Nm

For 16mm² terminal blocks:

- 1.5 mm² wire: 5 wires (total 20 per pole)
- 2.5 mm² wire: 4 wires (total 16 per pole)
- 4.0 mm² wire: 3 wires (total 12 per pole)
- 6.0 mm² wire: 2 wires (total 8 per pole)
- 10 mm² wire: 1 wire (total 4 per pole)
- 16 mm² wire: 1 wire (total 4 per pole)

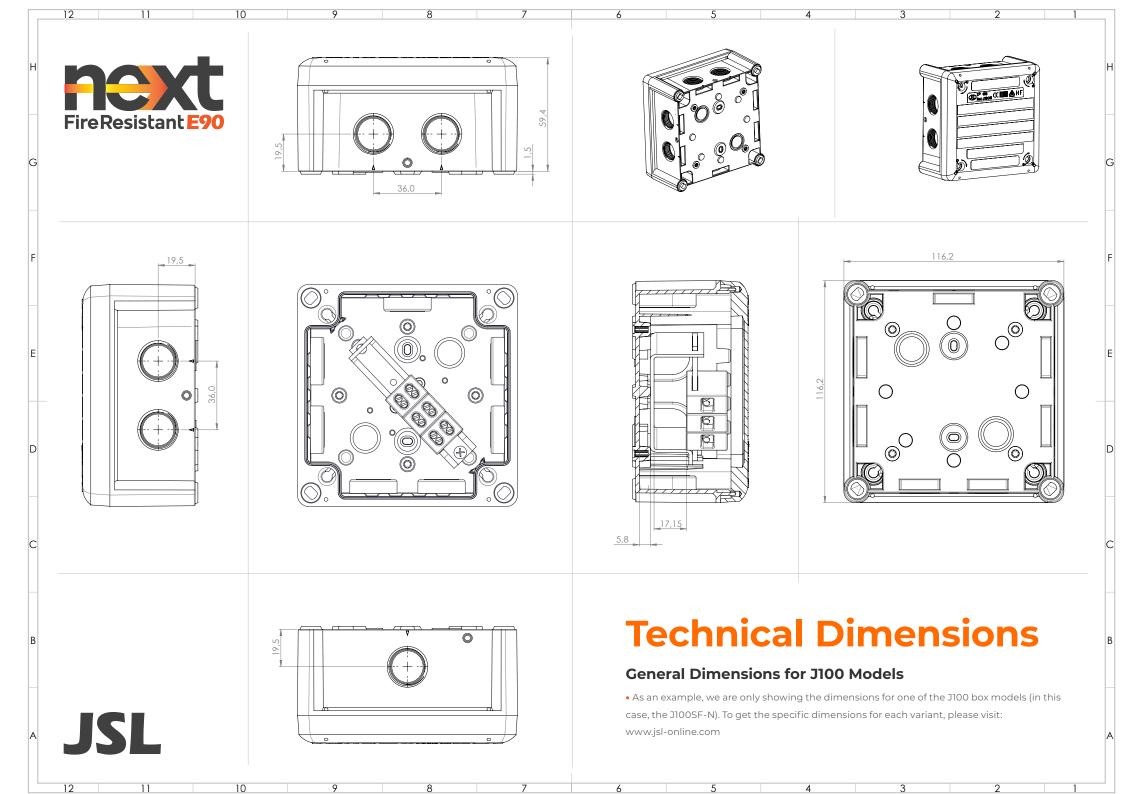
For 25mm² terminal blocks:

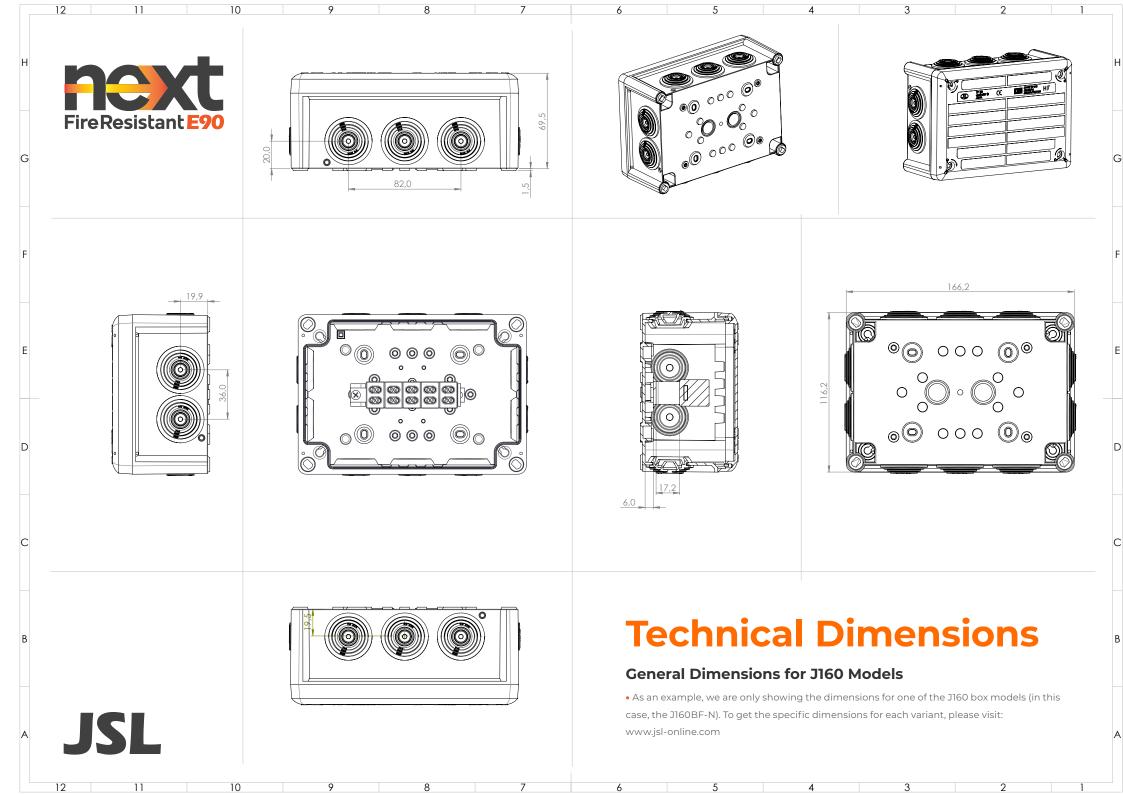
- 2.5 mm² wire: 6 wires (total 24 per pole)
- 4.0 mm² wire: 4 wires (total 16 per pole)
- 6.0 mm² wire: 2 wires (total 8 per pole)
- 1. 0 mm² wire: 1 wire (total 4 per pole)

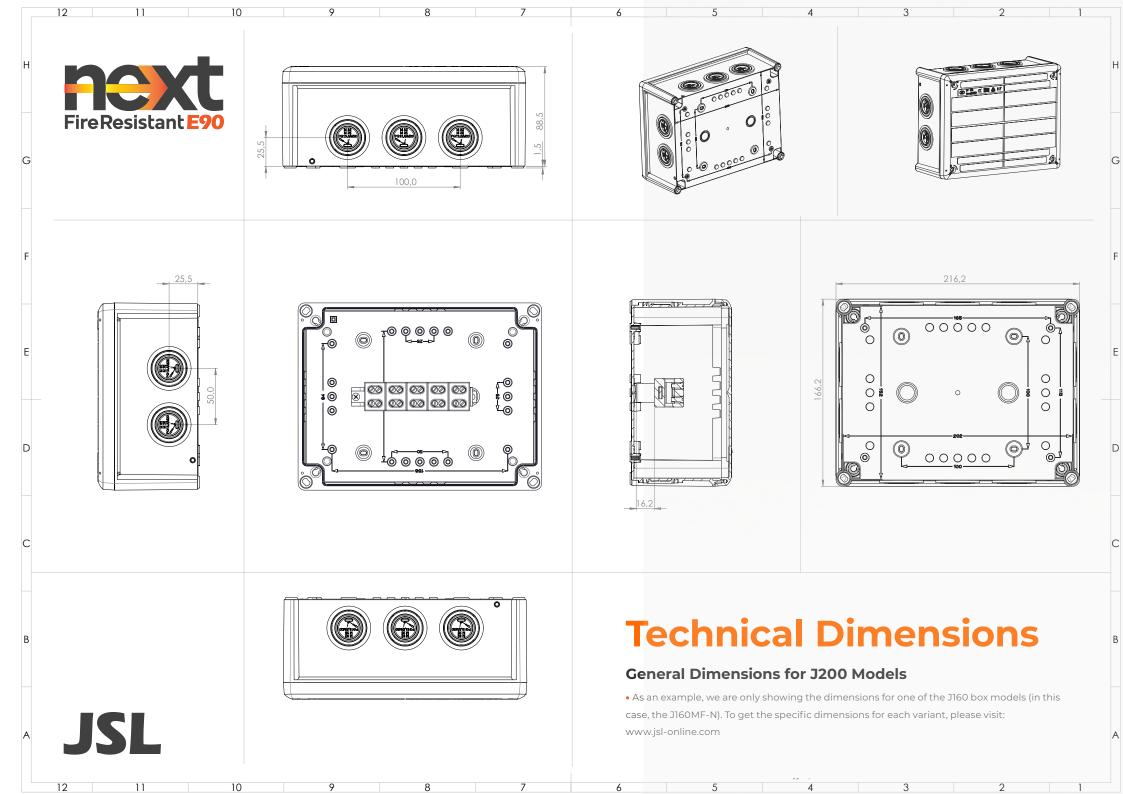
- Rated Torque: 1.2 Nm
- 16 mm² wire: 1 wire (total 4 per pole)
- 25 mm² wire: 1 wire (total 4 per pole)
- Rated Torque: 2.0 Nm













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