

# D - Line

## Technical Data



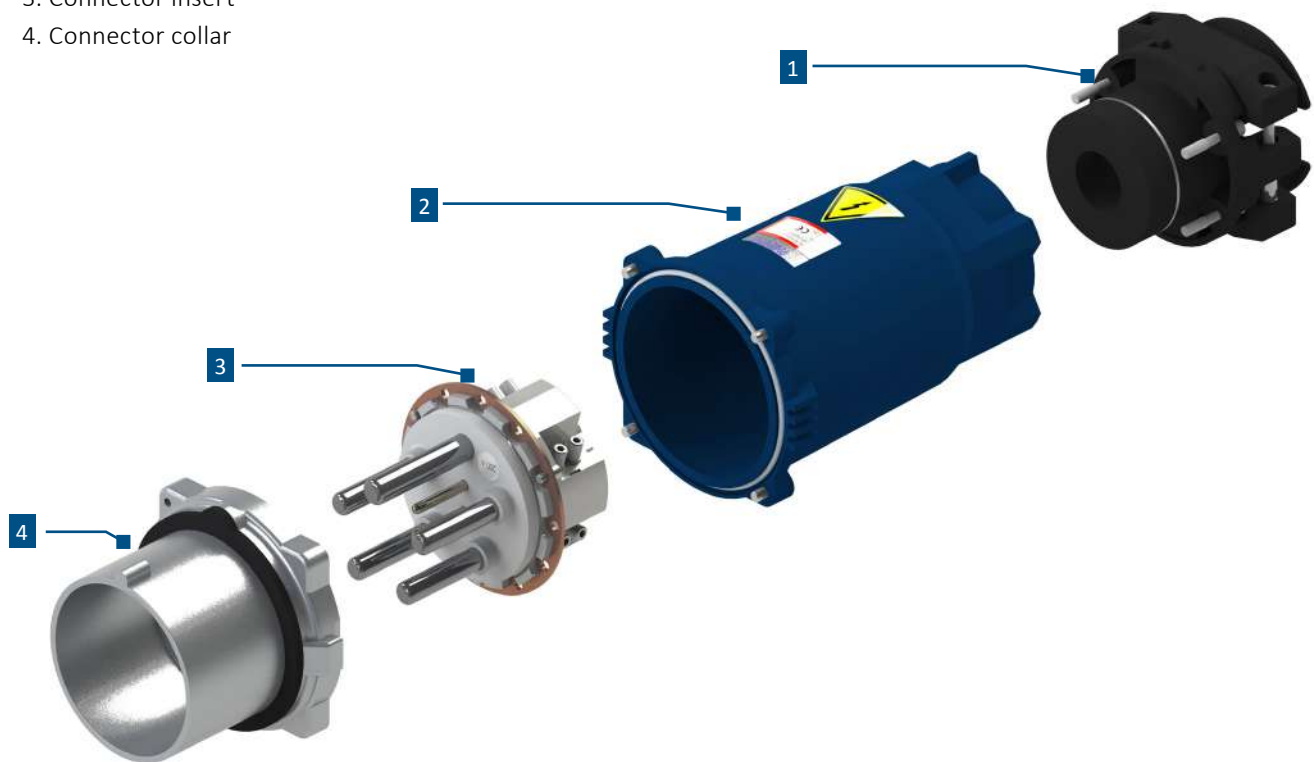
| Technical Data                                              | Unit            | D - Line     |
|-------------------------------------------------------------|-----------------|--------------|
| Nominal current                                             | A               | 160          |
| Rated current                                               | A               | 180          |
| Rated voltage                                               | V               | 1.000        |
| Rated frequency                                             | Hz              | 50 / 60      |
| Withstand voltage (1 min / 50 Hz)                           | V               | 4.000        |
| Protection grade                                            |                 | IP 67        |
| Shock resistance                                            |                 | IK 10        |
| Ambient temperature                                         | °C              | - 40 / + 100 |
| Insulation resistance (Phase-phase and phase-earth)         | MOhm            | > 500        |
| Comparative tracking index of the insert                    | CTI             | > 600        |
| Terminal cross-section (EN 60228 Class 5)                   | mm <sup>2</sup> | 35 - 150     |
| max. cross section pilot cable, conductor (EN60228 Class 5) | mm <sup>2</sup> | 4            |
| Diameter of cable                                           | mm              | 34 - 66      |
| Diameter of cable - separate pilot cable                    | mm              | 5 - 10       |

Technical modifications reserved

# Structure

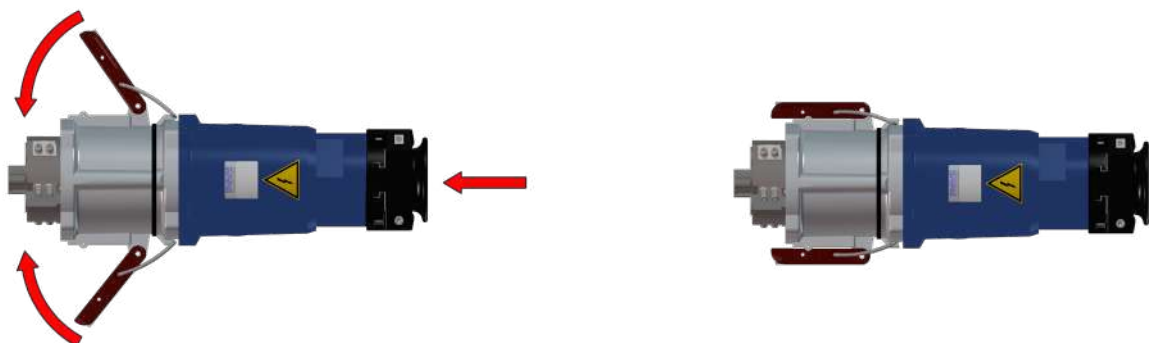
## Structure of D-Line connector

1. Cable gland
2. Plastic housing
3. Connector insert
4. Connector collar



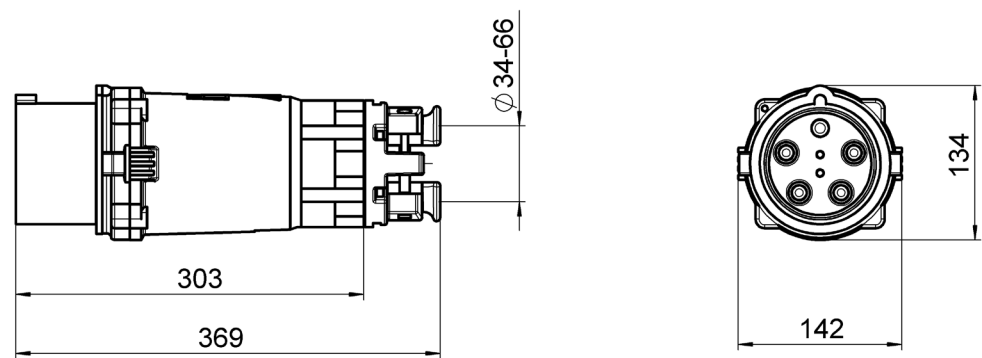
## Locking system

Mechanically easy designed locking system, which reduces the force required during plugging and pulling.

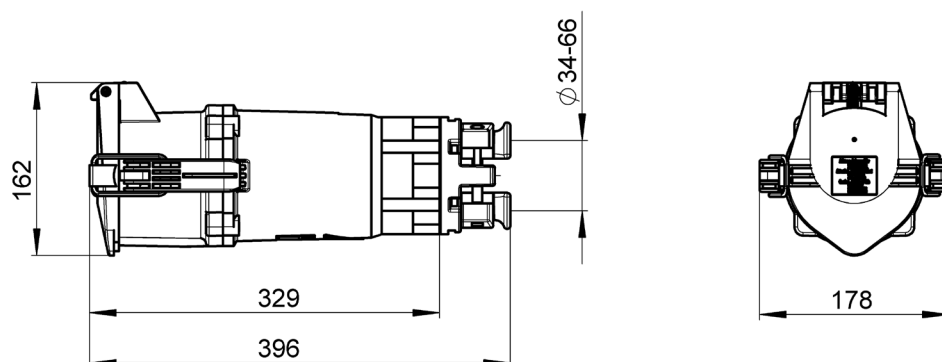


# MC

Plug



| Current | No. of Poles | Voltage | Type designation   | Article No. |
|---------|--------------|---------|--------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | MC-S4/160 230V-9h  | 25120       |
|         |              | 400V    | MC-S4/160 400V-6h  | 25121       |
|         |              | 500V    | MC-S4/160 500V-7h  | 25122       |
|         |              | 690V    | MC-S4/160 690V-5h  | 25123       |
|         |              | 1000V   | MC-S4/160 1000V-1h | 25124       |
|         | 5 (3L+N+PE)  | 230V    | MC-S5/160 230V-9h  | 25130       |
|         |              | 400V    | MC-S5/160 400V-6h  | 25131       |
|         |              | 500V    | MC-S5/160 500V-7h  | 25132       |
|         |              | 690V    | MC-S5/160 690V-5h  | 25133       |
|         |              | 1000V   | MC-S5/160 1000V-1h | 25134       |

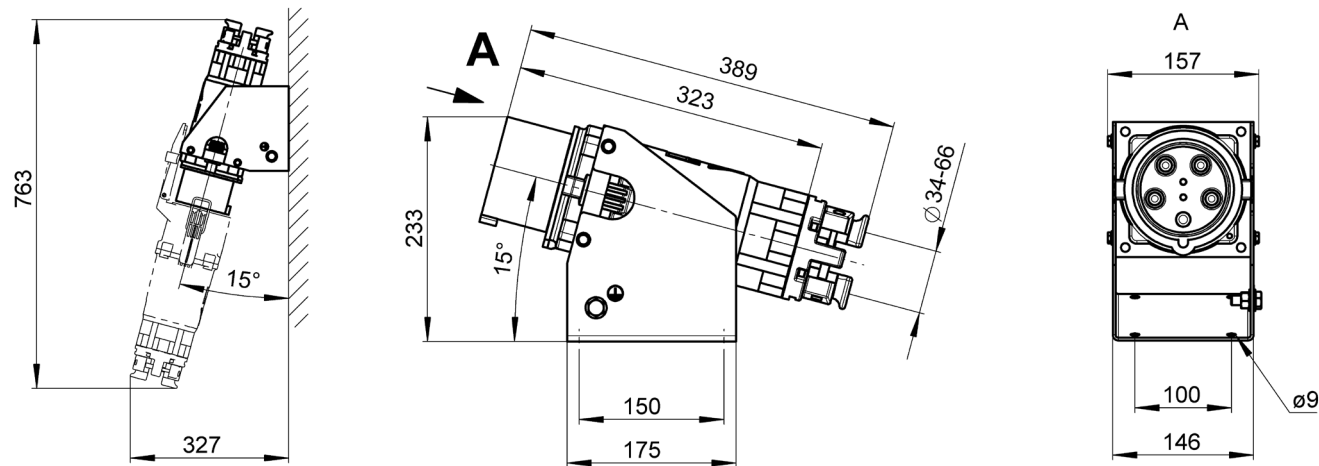


| Current | No. of Poles | Voltage | Type designation   | Article No. |
|---------|--------------|---------|--------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | FC-S4/160 230V-9h  | 25125       |
|         |              | 400V    | FC-S4/160 400V-6h  | 25126       |
|         |              | 500V    | FC-S4/160 500V-7h  | 25127       |
|         |              | 690V    | FC-S4/160 690V-5h  | 25128       |
|         |              | 1000V   | FC-S4/160 1000V-1h | 25129       |
|         | 5 (3L+N+PE)  | 230V    | FC-S5/160 230V-9h  | 25135       |
|         |              | 400V    | FC-S5/160 400V-6h  | 25136       |
|         |              | 500V    | FC-S5/160 500V-7h  | 25137       |
|         |              | 690V    | FC-S5/160 690V-5h  | 25138       |
|         |              | 1000V   | FC-S5/160 1000V-1h | 25139       |

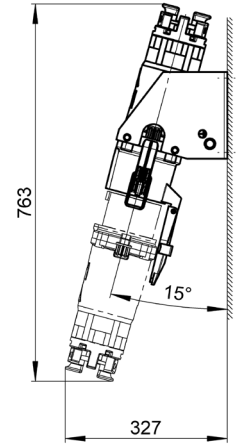
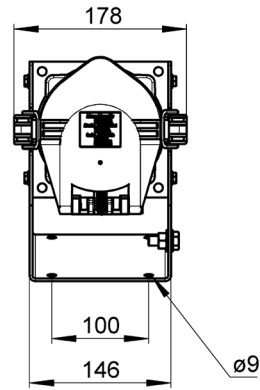
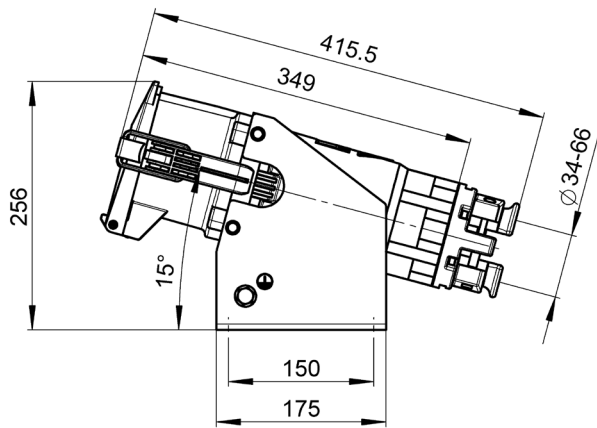


# MCW

Wall Mounted Inlet



| Current | No. of Poles | Voltage | Type designation    | Article No. |
|---------|--------------|---------|---------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | MCW-S4/160 230V-9h  | 25140       |
|         |              | 400V    | MCW-S4/160 400V-6h  | 25141       |
|         |              | 500V    | MCW-S4/160 500V-7h  | 25142       |
|         |              | 690V    | MCW-S4/160 690V-5h  | 25143       |
|         |              | 1000V   | MCW-S4/160 1000V-1h | 25144       |
|         | 5 (3L+N+PE)  | 230V    | MCW-S5/160 230V-9h  | 25150       |
|         |              | 400V    | MCW-S5/160 400V-6h  | 25151       |
|         |              | 500V    | MCW-S5/160 500V-7h  | 25152       |
|         |              | 690V    | MCW-S5/160 690V-5h  | 25153       |
|         |              | 1000V   | MCW-S5/160 1000V-1h | 25154       |

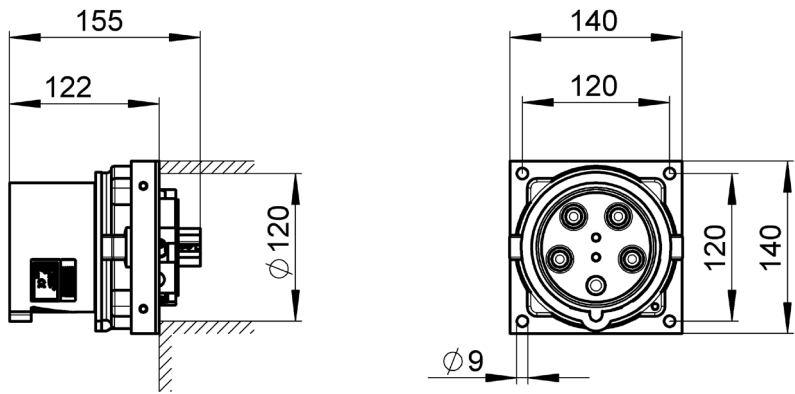


| Current | No. of Poles | Voltage | Type designation    | Article No. |
|---------|--------------|---------|---------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | FCW-S4/160 230V-9h  | 25145       |
|         |              | 400V    | FCW-S4/160 400V-6h  | 25146       |
|         |              | 500V    | FCW-S4/160 500V-7h  | 25147       |
|         |              | 690V    | FCW-S4/160 690V-5h  | 25148       |
|         |              | 1000V   | FCW-S4/160 1000V-1h | 25149       |
|         | 5 (3L+N+PE)  | 230V    | FCW-S5/160 230V-9h  | 25155       |
|         |              | 400V    | FCW-S5/160 400V-6h  | 25156       |
|         |              | 500V    | FCW-S5/160 500V-7h  | 25157       |
|         |              | 690V    | FCW-S5/160 690V-5h  | 25158       |
|         |              | 1000V   | FCW-S5/160 1000V-1h | 25159       |

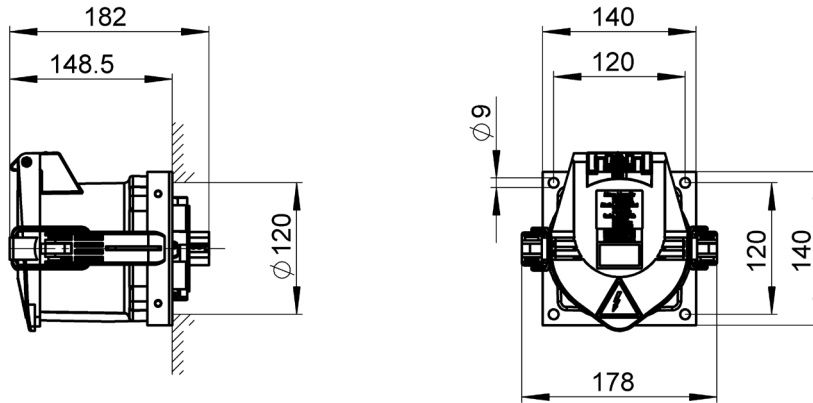


# MCP

Panel Mounted Inlet



| Current | No. of Poles | Voltage | Type designation    | Article No. |
|---------|--------------|---------|---------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | MCP-S4/160 230V-9h  | 25160       |
|         |              | 400V    | MCP-S4/160 400V-6h  | 25161       |
|         |              | 500V    | MCP-S4/160 500V-7h  | 25162       |
|         |              | 690V    | MCP-S4/160 690V-5h  | 25163       |
|         |              | 1000V   | MCP-S4/160 1000V-1h | 25164       |
|         | 5 (3L+N+PE)  | 230V    | MCP-S5/160 230V-9h  | 25170       |
|         |              | 400V    | MCP-S5/160 400V-6h  | 25171       |
|         |              | 500V    | MCP-S5/160 500V-7h  | 25172       |
|         |              | 690V    | MCP-S5/160 690V-5h  | 25173       |
|         |              | 1000V   | MCP-S5/160 1000V-1h | 25174       |

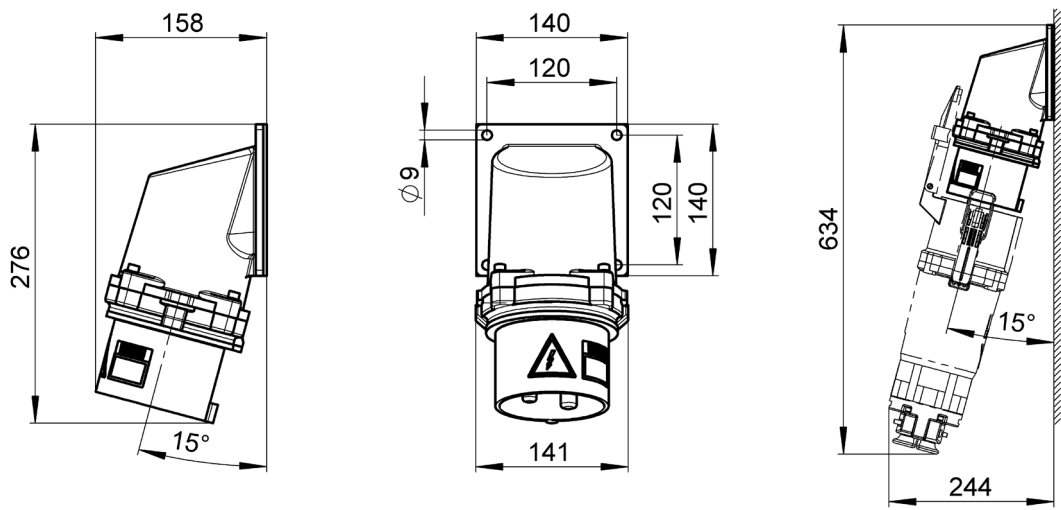


| Current | No. of Poles | Voltage | Type designation    | Article No. |
|---------|--------------|---------|---------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | FCP-S4/160 230V-9h  | 25165       |
|         |              | 400V    | FCP-S4/160 400V-6h  | 25166       |
|         |              | 500V    | FCP-S4/160 500V-7h  | 25167       |
|         |              | 690V    | FCP-S4/160 690V-5h  | 25168       |
|         |              | 1000V   | FCP-S4/160 1000V-1h | 25169       |
|         | 5 (3L+N+PE)  | 230V    | FCP-S5/160 230V-9h  | 25175       |
|         |              | 400V    | FCP-S5/160 400V-6h  | 25176       |
|         |              | 500V    | FCP-S5/160 500V-7h  | 25177       |
|         |              | 690V    | FCP-S5/160 690V-5h  | 25178       |
|         |              | 1000V   | FCP-S5/160 1000V-1h | 25179       |

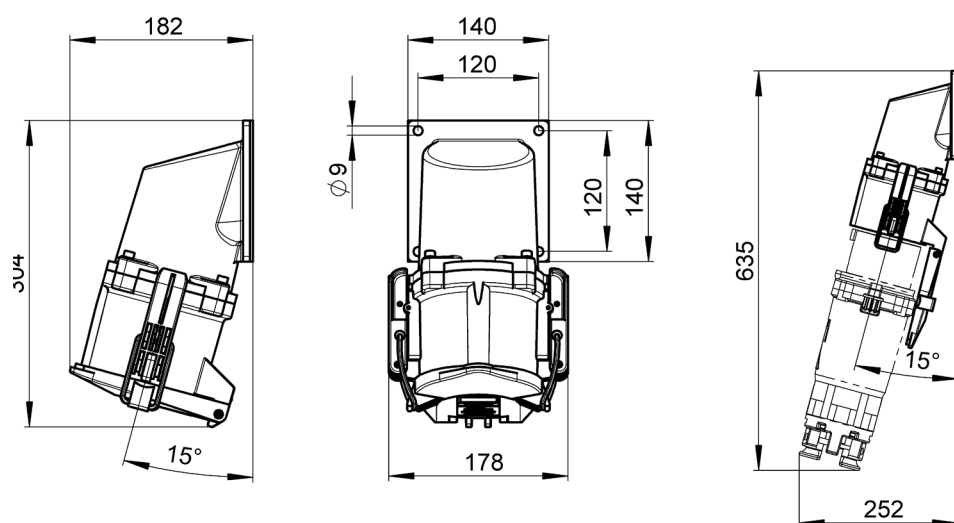


# MCPA

Panel Mounted Inlet Angled



| Current | No. of Poles | Voltage | Type designation     | Article No. |
|---------|--------------|---------|----------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | MCPA-S4/160 230V-9h  | 25180       |
|         |              | 400V    | MCPA-S4/160 400V-6h  | 25181       |
|         |              | 500V    | MCPA-S4/160 500V-7h  | 25182       |
|         |              | 690V    | MCPA-S4/160 690V-5h  | 25183       |
|         |              | 1000V   | MCPA-S4/160 1000V-1h | 25184       |
|         | 5 (3L+N+PE)  | 230V    | MCPA-S5/160 230V-9h  | 25190       |
|         |              | 400V    | MCPA-S5/160 400V-6h  | 25191       |
|         |              | 500V    | MCPA-S5/160 500V-7h  | 25192       |
|         |              | 690V    | MCPA-S5/160 690V-5h  | 25193       |
|         |              | 1000V   | MCPA-S5/160 1000V-1h | 25194       |



| Current | No. of Poles | Voltage | Type designation     | Article No. |
|---------|--------------|---------|----------------------|-------------|
| 160 A   | 4 (3L+PEN)   | 230V    | FCPA-S4/160 230V-9h  | 25185       |
|         |              | 400V    | FCPA-S4/160 400V-6h  | 25186       |
|         |              | 500V    | FCPA-S4/160 500V-7h  | 25187       |
|         |              | 690V    | FCPA-S4/160 690V-5h  | 25188       |
|         |              | 1000V   | FCPA-S4/160 1000V-1h | 25189       |
|         | 5 (3L+N+PE)  | 230V    | FCPA-S5/160 230V-9h  | 25195       |
|         |              | 400V    | FCPA-S5/160 400V-6h  | 25196       |
|         |              | 500V    | FCPA-S5/160 500V-7h  | 25197       |
|         |              | 690V    | FCPA-S5/160 690V-5h  | 25198       |
|         |              | 1000V   | FCPA-S5/160 1000V-1h | 25199       |



# Options

## Accessories for every requirement



### Seawater resistant connector

For port applications, an option often requested by the customer. The seawater-resistant design prevents oxidation on the housing.

Seawater resistant connectors upon request.



### Vibration resistant connectors

On request there are vibration resistant connectors available. This option is frequently asked for railway applications.



### Accessories:

- Protective cover aluminium (article number: 12122)
- Protective cover plastic (article number: 26263)
- Screwed cable gland for separate pilot cable (article number 13642)
- Padlock (article number: 14349)

# General information

## Plastic housing D-Line

The D-Line connectors have a special plastic housing. This housing has special properties for applications and is resistant to many chemicals (see table).

- High thermal stability
- Very good insulating properties
- High dielectric strength
- Resistance to many different chemicals
- Compliant with RoHS Directive 2011/65 / EU
- High impact strength and resistance

## Plastic housing characteristics

| Chemicals                 | Resistant | Not resistant |
|---------------------------|-----------|---------------|
| Acetic acid               | X         |               |
| Citric acid solution      | X         |               |
| Lactic acid               | X         |               |
| Hydrochloric acid         |           | X             |
| Nitric acid               |           | X             |
| Sulfuric acid             |           | X             |
| Chromic Acid Solution     |           | X             |
| Sodium hydroxide solution | X         |               |
| Isopropanol               | X         |               |
| Methanol                  | X         |               |
| Ethanol                   | X         |               |
| Hydrogen peroxide         |           | X             |

| Chemicals                    | Resistant | Not resistant |
|------------------------------|-----------|---------------|
| N-hexane                     | X         |               |
| Toluene                      | X         |               |
| Iso-octane                   | X         |               |
| Acetone                      | X         |               |
| Diethyl ether                | X         |               |
| SAE10W40 Multi-range oil     | X         |               |
| Diesel oil                   | X         |               |
| Sodium hypochlorite solution |           | X             |
| Zinc chloride solution       |           | X             |
| Ethyl acetate                | X         |               |
| Ethylene glycol              |           | X             |
| Water                        | X         |               |

## Weight and packaging-information

| Article                              |         | Weight (kg) | Packaging Bulk outside (mm) |
|--------------------------------------|---------|-------------|-----------------------------|
| Plug MC                              | 4-polig | 2.7         | 405 x 190 x 185             |
|                                      | 5-polig | 2.9         | 405 x 190 x 185             |
| Panel Mounted Inlet MCP              | 4-polig | 2.2         | 286 x 204 x 140             |
|                                      | 5-polig | 2.4         | 286 x 204 x 140             |
| Panel Mounted Inlet Angled MCPA      | 4-polig | 4.2         | 462 x 240 x 242             |
|                                      | 5-polig | 4.4         | 462 x 240 x 242             |
| Wall Mounted Inlet MCW               | 4-polig | 3.6         | 360 x 240 x 200             |
|                                      | 5-polig | 3.8         | 360 x 240 x 200             |
| Coupling FC                          | 4-polig | 3.4         | 405 x 190 x 185             |
|                                      | 5-polig | 3.6         | 405 x 190 x 185             |
| Panel Mounted Receptacle FCP         | 4-polig | 3.2         | 405 x 190 x 185             |
|                                      | 5-polig | 3.5         | 405 x 190 x 185             |
| Panel Mounted Receptacle Angled FCPA | 4-polig | 4.4         | 462 x 240 x 242             |
|                                      | 5-polig | 4.6         | 462 x 240 x 242             |
| Wall Mounted Receptacle FCW          | 4-polig | 4.3         | 360 x 240 x 200             |
|                                      | 5-polig | 4.5         | 360 x 240 x 200             |