

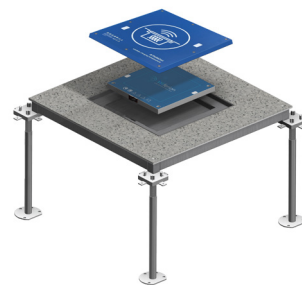
WCPS-R-3013™  
In-Floor Protection System



WCPS-Ramp™  
On-Floor Protection System



WCPS-400-SP1™  
On-Floor Protection System



WCPS-RF™  
Raised-Floor Protection System

# JORDAHL® WCPS™

## Wireless Charging Protection Systems

In-Floor, On-Floor & Raised-Floor Infrastructure

# Opportunity at Every Stop™

# In-Process Wireless “Opportunity” Charging

## Optimized Energy Management

The efficiency of autonomous logistics depends significantly on optimized energy management and when vehicles are charged as part of the working process, enormous productivity gains can be achieved. Autonomous transportation systems, EVs, AGVs & AMRs, are part of interlinked and highly efficient value chains where reliable and harmonized energy supplies are essential.

When the decision is made to automate intralogistics processes by using autonomous vehicles, it is imperative to integrate the appropriate charging methodology as a part of the working process.

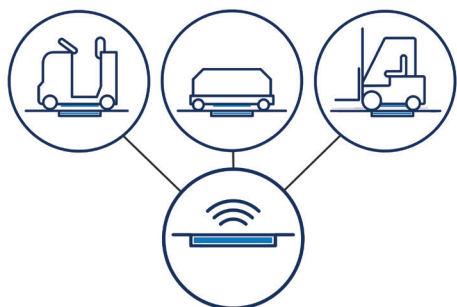
An efficiently planned energy supply has a large impact on the optimal deployment and availability of the fleet as well as their operational readiness in the workflow. Addressing the power supply of vehicles early and opting for contactless wireless charging technology unleashes the full potential of your autonomous fleet.

Implementation of in-process opportunity charging allows for optimized fleet management and significantly improved vehicle uptime while smaller fleet sizes with higher utilization result in increased efficiency throughout the entire process.

## Opportunity at Every Stop

Charging coils are placed in the ground under a protective cover and are activated only when a matching receiving coil is positioned above it.

Charging begins immediately and ends as soon as the 2 coils are no longer in position. More locations equal more opportunity to charge and intelligently planned charging points ensure a stable high state of charge and maximum utilization.



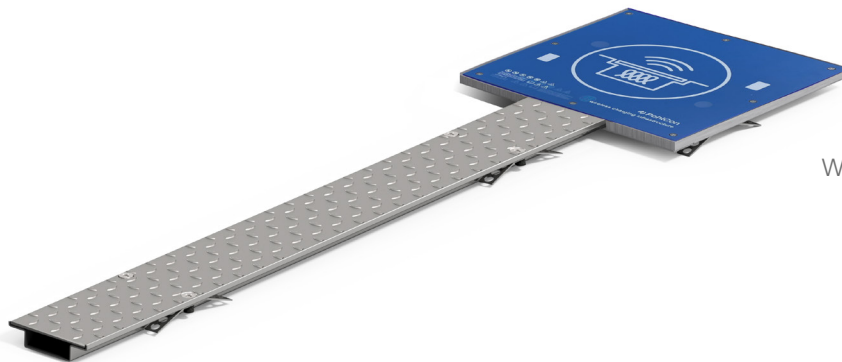
## Flexible, Scalable & Industry Ready

By eliminating restricted areas and detours for off-line charging, each process can be ideally interlocked optimally combining vehicle types with one another to create a smoother, more reliable and safer process.

# Powered by Wiferion®, Protected by Jordahl®

## Introducing the WCPS™

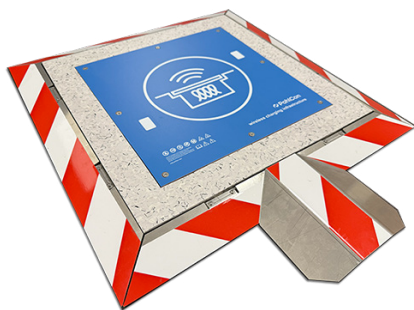
Introducing the heavy duty, industry ready, In-Floor WCPS-R-3013™, On-Floor WCPS-Ramp™, On-Floor WCPS-400-SP1™ and Raised-Floor WCPS-RF™ Wireless Charging Protection Systems (WCPS) from Jordahl. The ultimate protection for the etaLINK 3000™ and CW1000™ Wireless Charging Systems from PULS/Wiferion®.



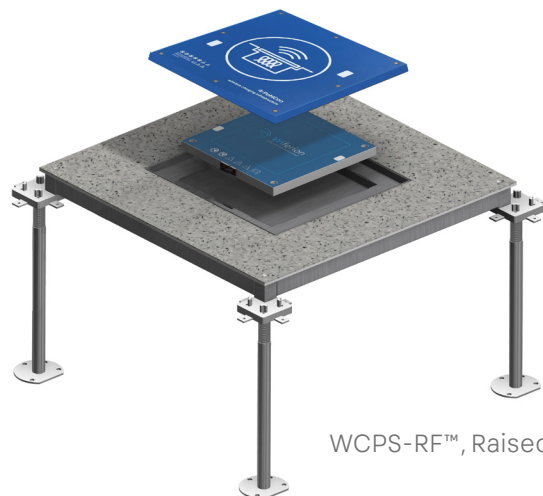
WCPS-R-3013™, In-Floor



WCPS-Ramp™, On-Floor



WCPS-400-SP1™, On-Floor



WCPS-RF™, Raised-Floor



# Jordahl® WCPS-R-3013™

## In-Floor, Wireless Charging Protection System

WCPS-R-3013™ The heavy duty, industry ready protection system for in-floor installation of the PULS/Wiferion® etaLINK 3000™ and CW1000™ wireless charging systems. The WCPS-R-3013 can be used as a stand-alone solution or in conjunction with other floor-mounted or vertically mounted charging solutions. Designed with mixed use traffic in mind and a static wheel load rating of 3,372lbs, the WCPS-R-3013 can be approached from all sides and easily tolerates cross traffic from other industrial vehicles providing maximum flexibility for the entire autonomous fleet.

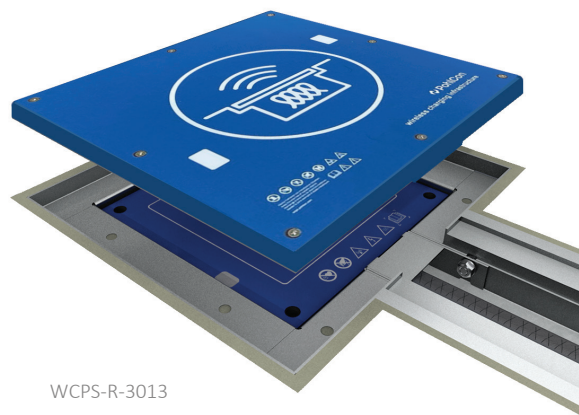
The WCPS-R-3013 consists of 4 primary components, the charging coil housing, the cable channel, channel covers and the charging coil cover.



WCPS-R-3013

## The WCPS-R-3013™ Advantage

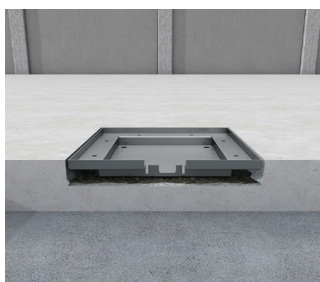
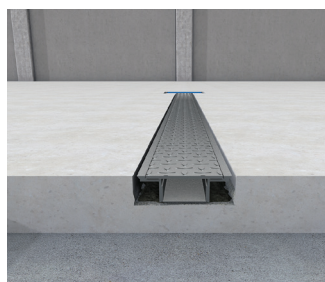
- VDE certified, IP65 protection class
- 15kN (3,372lb) static wheel load
- Heavy Duty protection
- Made for industry & demanding environments
- Flush mounted, safe and cross traffic ready
- Dynamic decentralized charging
- No exposed contacts or shock hazards
- Fully autonomous, no intervention required
- Superior safety with fewer restrictions
- Highly resistant to external elements



WCPS-R-3013

## Integrated & Industry Ready

At only 30 mm deep, the WCPS-R-3013 can be easily integrated into new or existing construction.

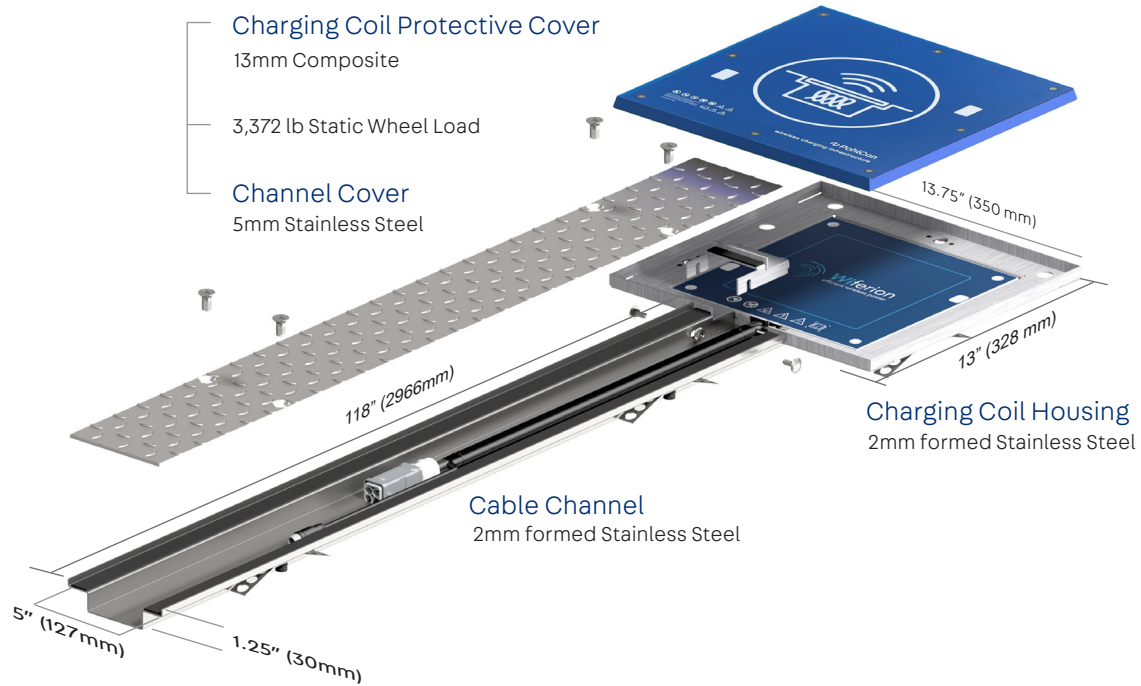


# WCPS-R-3013™

## Specifications

### WCPS-R-3013 In-Floor Specifications

#### Item: WCPS-R-3013



#### Primary Channel Sections:

- Material thickness: 2mm (0.08")
- Material type: Steel 1.0226 (Z275)
- Coating: Hot-dip Galvanized
- Depth: 30mm (1.25")
- Width Outer: 127.2mm (5")
- Length: 2,966mm (116.75")
- Weight: 24.9kg (54.9 lbs) \*including covers below

#### Channel Cover(s):

- Static Wheel Load: 15kN (3,372lbf)
- Thickness: 6mm (0.25")
- Material type: Steel 1.0122 (S235JRC)
- Coating: Hot-dip Galvanized
- Dimensions: 1000mm x 120mm (39.5" x 4.75")

#### Extension Channels

- Material thickness: 2mm (0.08")
- Material type: Steel 1.0226 (Z275)
- Coating: Hot-dip Galvanized
- Depth: 30mm (1.25")
- Width Outer: 127.2mm (5")
- Length: 3,000mm (118")
- Weight: 24.9kg (54.9 lbs) \*including covers

#### Charging Coil Protective Cover:

- Thickness: 13mm (0.5")
- 322mm x 344mm (12.67" x 13.5")
- Dynamic surface pressure: 8MPa
- Certified static load 15kN (3,372lbf)
- Interference free
- Chemical resistant
- Weight: 4.3kg (9.5 lbs)

#### Charging Coil Housing:

- Depth: 30mm (1.25")
- Dimensions: 350mm x 328mm (13.75" x 13")
- Thickness: 2mm (0.08")
- Material type: Stainless Steel (1.4301)
- Weight: 2.2 kg (4.85 lbs)

#### Certifications & Ratings:

- IP65 Rating
- CE Certified
- VDE Certified (DIN EN 50085-2-2)
- Flame retardant cover plate (Bfl-S1)

## Jordahl® WCPS-RAMP™

### On-Floor, Wireless Charging Protection System

The WCPS-RAMP™ The on-floor wireless charging protection system for the PULS/Wiferion® etalink 3000™ and CW1000™ wireless charging systems. Designed specifically for demanding on-floor applications the stainless steel WCPS-RAMP is a repositionable, modular, expandable, safe, flexible, industry ready solution for protecting wireless charging systems in industry, manufacturing, clean rooms, laboratories and logistics.



WCPS-Ramp, as shown 2088mm x 800mm

### The WCPS-RAMP™ Advantage

- Safe, secure, work-flow optimized
- Easy installation and set up
- Customizable, expandable
- Repositionable non-invasive installation
- Bfl-S1 Fire protection rating
- Slip class: R9 (DIN 51130)
- ISO Class 3 Clean room compatible
- Electroconductive (DIN EN 108)
- 2721 kg (6,000lb) Load capacity
- Only 21mm (0.82 in) high with a 3% slope
- Dynamic decentralized charging
- No exposed contacts or shock hazards



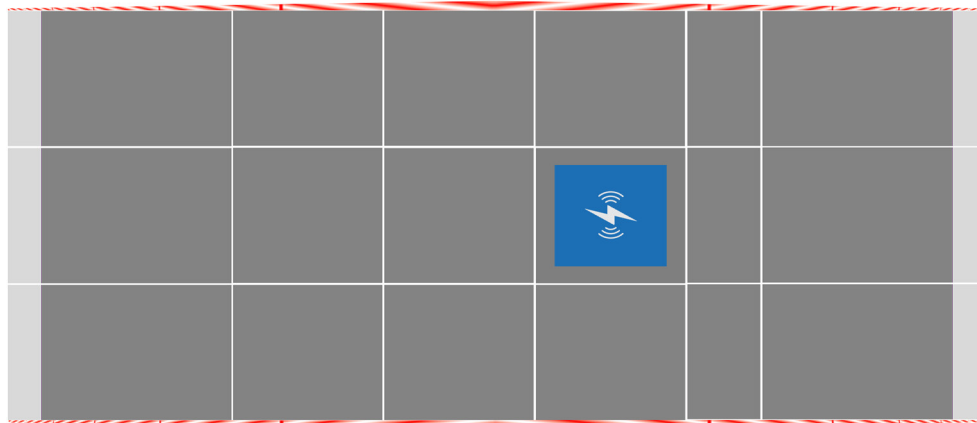
WCPS-Ramp

# WCPS-RAMP™

## Specifications

### WCPS-RAMP On-Floor Specifications

The WCPS-RAMP™ can be easily expanded in length and width by adding additional panels.



WCPS-Ramp, as shown 2688 mm x 1200 mm

As shown: 2688 x 1200 mm

Example at left consists of:

- 6 x Incline Panels
- 8 x Square Panels,
- 3 x Rectangle Panels,
- 1 x Charging Coil Panel

#### Ramp Structure:

- Base Dimensions: 2688mm x 800mm (106" x 31.5")
- Material: Stainless Steel (1.4301)
- Slope: 3%
- Load Capacity: 2721 kg (6000lb)
- Height: 21 mm (0.83")

#### Charging Coil Housing:

- Height: 21mm (0.83")
- Dimensions: 350mm x 328mm (13.75" x 13")
- Thickness: 2mm (.08")
- Material type: 1.4301 Stainless Steel

#### Charging Coil Protective Cover:

- Depth: 6mm (0.24")
- Dimension: 310mm x 310mm (12.2" x 12.2")
- Certified static wheel load 500kg (1,102lb)
- Interference free
- Chemical resistant
- ISO Class 3 Clean room compatible

#### Ramp Surface Covering

- Slip Protection: Bfl-S1 / Cover UL-94-V0
- Fire Protection: R9 (DIN 51130)
- ISO Class 3 Clean room compatible
- Load Category: 43 (Heavy)
- Electrically Conductive: DIN EN 1081

#### Trip Protection Modules

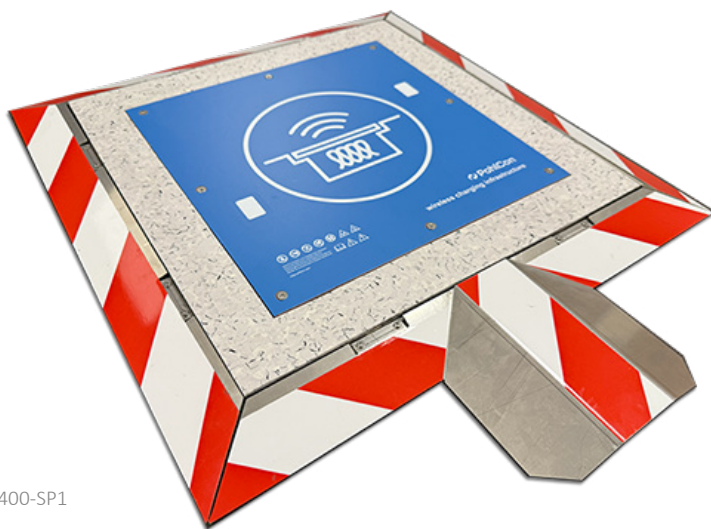
- Material: Stainless Steel (1.4301)
- ISO Class 3 Clean room compatible



## Jordahl® WCPS-400-SP1™

### On-Floor Wireless Charging Protection System

The WCPS-400-SP1™ is our on-floor, single panel, portable, repositionable wireless charging protection system for the PULS/Wiferion® etaLINK 3000™ and CW1000™ wireless charging systems. Designed to work almost anywhere, the WCPS-400-SP1 is built on the same heavy duty stainless steel construction as the WCPS-Ramp and is the ideal solution for AGVs & AMRs that have a higher ground clearance and installations where additional positioning flexibility is required. The WCPS-400-SP1 can be placed directly on the floor and secured using the included floor connector plates. Additionally, if the charging coil needs to be approached from all sides, the cable can be protected using the same in-floor channel system as the WCPS-R-3013.



WCPS-400-SP1

### The WCPS-400-SP1™ Advantage

- Workflow optimized
- Easy assembly & deployment
- Portable, repositionable, non-invasive
- Bfl-S1 Fire protection rating
- ISO Class 3 Clean room compatible
- Electroconductive (DIN EN 108)
- 500mm x 500mm x 21mm (19.7" x 19.7" x 0.83")
- Dynamic decentralized charging
- No exposed contacts or shock hazards
- Superior safety with fewer restrictions



WCPS-400-SP1



# WCPS-400-SP1™

## Specifications

### WCPS-400-SP1 On-Floor Specifications

#### Item: WCPS-400-SP1

#### Floor Panel:

- Height: 21mm (0.83")
- Dimensions: 500mm x 500mm (19.7" x 19.7")
- Material type: Stainless Steel (1.4301)
- Weight: 9.3kg (20lbs)

#### Charging Coil Cover:

- Depth: 6mm (0.24")
- Dimension: 344mm x 322mm (13.5" x 12.68")
- Material type: Composite
- Interference free
- Chemical resistant

#### Surface Covering

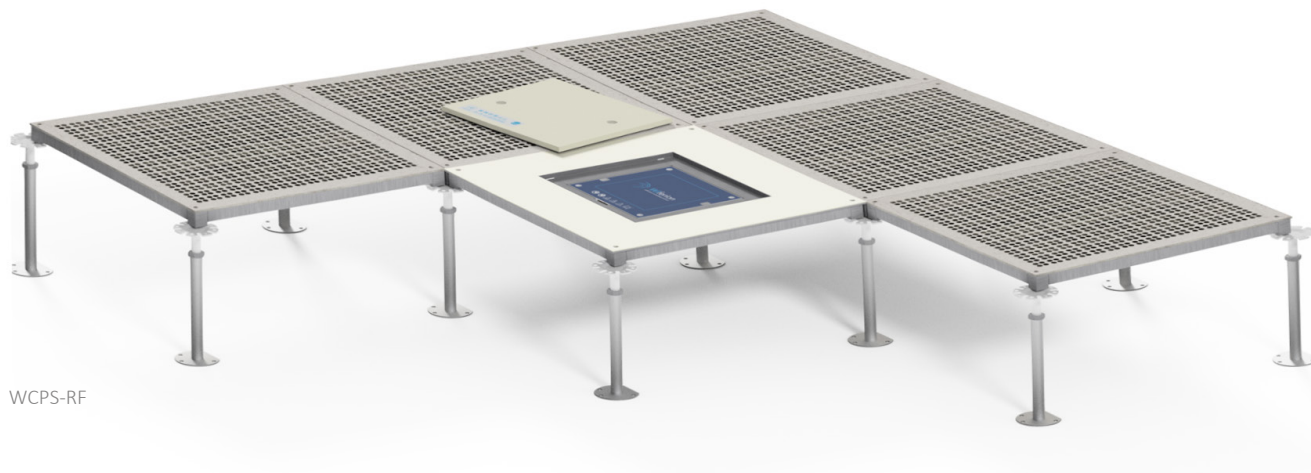
- Slip Protection: Bfl-S1 / Cover UL-94-V0
- Fire Protection: R9 (DIN 51130)
- ISO Class 3 Clean room compatible
- Load Category: 43 (Heavy)
- Electrically Conductive: DIN EN 1081

#### Trip Protection Safety Strips

- 2 mm Stainless Steel with red & white caution markings
- ISO Class 3 Clean room compatible

## Jordahl® WCPS-RF™

### Wireless Charging Protection System for Raised Floors



WCPS-RF

The WCPS-RF™ is a fully integrated wireless charging protection system for the PULs/Wiferion® etaLINK 3000™ and CW1000™ wireless charging systems. Designed for raised floor applications in industry, logistics, laboratories and clean rooms, the ISO 3 certified WCPS-RF consists of 3 primary components, the protective charging coil housing, the integrated floor panel and the protective PCX charging coil cover.



WCPS-RF

### The WCPS-RF™ Advantage

- Integrated floor panel (DIN 51130)
- Protective charging coil housing
- PCX Protective coil cover
- Load rated to 1,122 lbs (DIN 12825)
- Bfl-S1 Fire protection rating
- ISO Class 3 Clean room compatible
- Electroconductive (DIN EN 1081)
- Flush to the floor
- Dynamic decentralized charging
- No exposed contacts, trip or shock hazards
- Safe, clean, chemical resistant.

# WCPS-RF™

## Specifications

### WCPS-RF Raised Floor Specifications

Item: WCPS-RF-610

#### Floor Panel:

- Depth: 36mm (1.42")
- Dimensions: 610mm x 610mm (24" x 24")
- Material type: Stainless Steel (1.4301)
- Load Rating, 509kg (1,122lbs)
- Weight: 20kg (44lbs)

#### Charging Coil Housing:

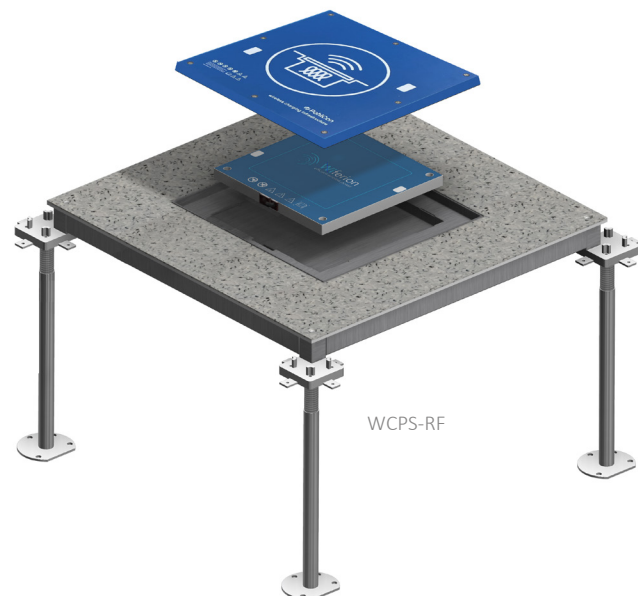
- Depth: 36mm (1.42")
- Dimensions: 358mm x 356mm (14.1" x 14")
- Thickness: 2mm (0.08")
- Material type: Stainless Steel (1.4301)

#### Charging Coil Cover:

- Depth: 13mm (0.5")
- Dimension: 344mm x 322mm (13.5" x 12.68")
- Material type: Composite
- Interference free
- Chemical resistant

#### Surface Covering

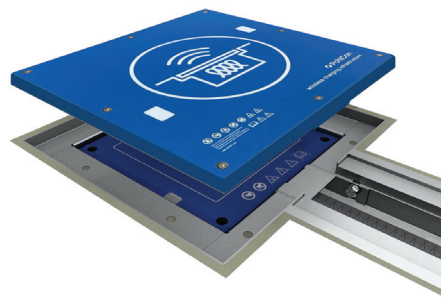
- Slip Protection: Bfl-S1 / Cover UL-94-V0
- Fire Protection: R9 (DIN 51130)
- ISO Class 3 Clean room compatible
- Load Category: 43 (Heavy)
- Electrically Conductive: DIN EN 1081



## About JORDAHL

Jordahl, a PohlCon Company, is a globally active family business that has been inspiring its customers as a reliable engineering, manufacturing & infrastructure supply partner in the construction industry for over 110 years.

Thanks to the inventiveness and expertise of our employees, our product range has grown steadily over decades. Today you will find more than 18,000 products for a wide range of applications and product categories.



## About Wiferion

Wiferion, a PULS brand, is the industry leader in wireless charging energy systems for AGVs, AMRs and mobile robotics. Building on the etaLINK 3000™ and CW-1000™ inductive charging systems in combination with standardized battery modules, the company offers highly efficient, scalable, inter-operable, maintenance and wear-free energy systems with an efficiency of up to 93%.



### United States

Jordahl USA, Inc.  
 34420 Gateway Drive  
 Palm Desert, CA 92211  
 Tel: (866) 332-6687  
[jordahlusa.com](http://jordahlusa.com)



### Blaine Transue

WCPS Account Manager  
 (760) 750-2205  
[blaine.transue@jordahlusa.com](mailto:blaine.transue@jordahlusa.com)

### Canada

Jordahl Canada, Inc.  
 35 Devon Road  
 Brampton, Ontario, L6T 5B6  
 Tel: (800) 363-3266  
[jordahl.ca](http://jordahl.ca)