

# IP65 connection components / FreeCon connectivity components

## Overview

IP65 connection components / FreeCon connecting components	FreeCon Passive V14	K.2
	FreeCon Active PROFINET	K.9
	FreeCon Contactless Power	K.11
	V1 junction boxes	K.12
	V4 junction boxes	K.14
	V5 junction boxes	K.16
	V6 junction boxes	K.17

Архангельск (8182)63-90-72  
Астана (7172)727-132  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
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  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81  
Киргизия (996)312-96-26-47

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  
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  
Казахстан (772)734-952-31

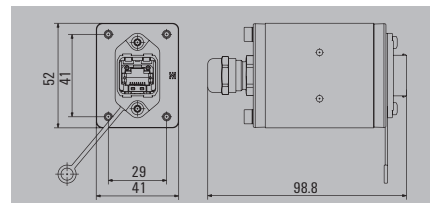
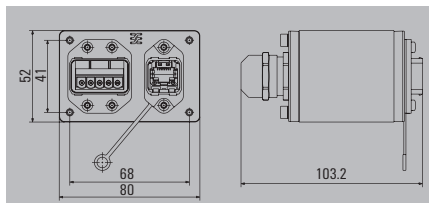
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
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Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Россия (495)268-04-70

Сургут (3462)77-98-35  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

FreeCon V14 - junction box

Double junction box, Power / RJ45

Single junction box, RJ45



Technical data

General data	
Housing main material	Aluminium profile, Cover: die-cast zinc, painted
Protection degree	IP65
Ambient temperature (operational)	-40 °C...70 °C
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5
Approvals	CULUS
Technical specifications power connector	
Housing base material	Zinc diecast, nickel-plated
Sealing material	NBR
Contact material	Copper alloy
Contact carrier material	PA
Contact surface	Gold over nickel
Plugging cycles	5
No. of poles	6 mm / 12 mm
Sheath diameter, min. / max.	Tension clamp
Connection	16 A
Electrical properties power connector	
Current-carrying capacity at 50 °C	24 V
Rated voltage	
Technical specifications for RJ45 module	
Housing base material	Zinc diecast, nickel-plated
Contact surface	Gold over nickel
Connection cross-section, flexible, min. / max.	AWG 26 / AWG 22
Connection 1	IDC
Sheath diameter, min./max.	5 mm / 10 mm
Electrical properties for RJ45 module	
Category	Cat.5 (ISO/IEC 11801)
Contact resistance	≤ 20 mΩ
Insulation resistance	> 500 MΩ
Dielectric strength, contact - contact, max.	≤ 1000 V DC
Dielectric strength, contact - contact, min.	≤ 1500 V DC
Current carrying capacity	1 A
Note	

General data		
Housing main material	Aluminium profile, Cover: die-cast zinc, painted	
Protection degree	IP65	
Ambient temperature (operational)	-40 °C...70 °C	
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5	
Approvals	CULUS	
Technical specifications power connector		
Housing base material	Zinc diecast, nickel-plated	
Sealing material	NBR	
Contact material	Copper alloy	
Contact carrier material	PA	
Contact surface	Gold over nickel	
Plugging cycles	5	
No. of poles	6 mm / 12 mm	
Sheath diameter, min. / max.	Tension clamp	
Connection	16 A	
Rated voltage	24 V	
Technical specifications for RJ45 module		
Housing base material	Zinc diecast, nickel-plated	
Contact surface	Gold over nickel	
Connection cross-section, flexible, min. / max.	AWG 26 / AWG 22	
Connection 1	IDC	
Sheath diameter, min./max.	5 mm / 10 mm	
Electrical properties for RJ45 module		
Category	Cat.5 (ISO/IEC 11801)	
Contact resistance	≤ 20 mΩ	
Insulation resistance	> 500 MΩ	
Dielectric strength, contact - contact, max.	≤ 1000 V DC	
Dielectric strength, contact - contact, min.	≤ 1500 V DC	
Current carrying capacity	1 A	
Note		

General data		
Housing main material	Aluminium profile, Cover: die-cast zinc, painted	
Protection degree	IP65	
Ambient temperature (operational)	-40 °C...70 °C	
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5	
Approvals	CULUS	
Technical specifications power connector		
Housing base material	Zinc diecast, nickel-plated	
Sealing material	NBR	
Contact material	Copper alloy	
Contact carrier material	PA	
Contact surface	Gold over nickel	
Plugging cycles	5	
No. of poles	6 mm / 12 mm	
Sheath diameter, min. / max.	Tension clamp	
Connection	16 A	
Rated voltage	24 V	
Technical specifications for RJ45 module		
Housing base material	Zinc diecast, nickel-plated	
Contact surface	Gold over nickel	
Connection cross-section, flexible, min. / max.	AWG 26 / AWG 22	
Connection 1	IDC	
Sheath diameter, min./max.	5 mm / 10 mm	
Electrical properties for RJ45 module		
Category	Cat.5 (ISO/IEC 11801)	
Contact resistance	≤ 20 mΩ	
Insulation resistance	> 500 MΩ	
Dielectric strength, contact - contact, max.	≤ 1000 V DC	
Dielectric strength, contact - contact, min.	≤ 1500 V DC	
Current carrying capacity	1 A	
Note		

Ordering data

Type	Qty.	Order No.
IE-CD-V14MRJ/VAPM24V-FJ	1	1068830000

Type	Qty.	Order No.
IE-CD-V14MRJ/VAPM24V-FJ	1	1068830000

Type	Qty.	Order No.
IE-CD-V14MRJ-FJ	1	1068880000

Accessories

Mounting foot	
Type	IE-CD-MA
Qty.	10
Order No.	1099580000

Mounting foot	
Type	IE-CD-MA
Qty.	10
Order No.	1099580000

Dust protection cap	
Type	IE-BP-V14P
Qty.	10
Order No.	1058310000

Note	
	Protective cap IP54 protective cap

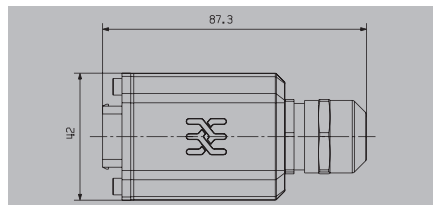
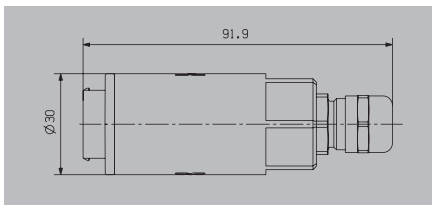
Note	

Note	

FreeCon V14 - single junction box

RJ45 cable coupling

PushPull Power cable coupling



Technical data

General data	
Housing main material	diecast aluminium
Protection degree	IP65
Ambient temperature (operational)	-40 °C...70 °C
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5
Approvals	CULUS
Technical specifications power connector	
Housing base material	
Sealing material	
Contact material	
Contact carrier material	
Contact surface	
Plugging cycles	
No. of poles	
Sheath diameter, min. / max.	
Connection	
Electrical properties power connector	
Current-carrying capacity at 50 °C	
Rated voltage	
Technical specifications for RJ45 module	
Housing base material	Zinc diecast, nickel-plated
Contact surface	Gold over nickel
Connection cross-section, flexible, min. / max.	AWG 26 / AWG 22
Connection 1	IDC
Sheath diameter, min./max.	5 mm / 10 mm
Electrical properties for RJ45 module	
Category	Cat.5 (ISO/IEC 11801)
Contact resistance	≤ 20 mΩ
Insulation resistance	> 500 MΩ
Dielectric strength, contact - contact, max.	≤ 1000 V DC
Dielectric strength, contact - contact, min.	≤ 1500 V DC
Current carrying capacity	1 A
Note	

General data		
Housing main material	diecast aluminium	
Protection degree	IP65	
Ambient temperature (operational)	-40 °C...70 °C	
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5	
Approvals	CULUS	
Technical specifications power connector		
Housing base material		
Sealing material		
Contact material		
Contact carrier material		
Contact surface		
Plugging cycles		
No. of poles		
Sheath diameter, min. / max.		
Connection		
Electrical properties power connector		
Current-carrying capacity at 50 °C		
Rated voltage		
Technical specifications for RJ45 module		
Housing base material	Zinc diecast, nickel-plated	
Contact surface	Gold over nickel	
Connection cross-section, flexible, min. / max.	AWG 26 / AWG 22	
Connection 1	IDC	
Sheath diameter, min./max.	5 mm / 10 mm	
Electrical properties for RJ45 module		
Category	Cat.5 (ISO/IEC 11801)	
Contact resistance	≤ 20 mΩ	
Insulation resistance	> 500 MΩ	
Dielectric strength, contact - contact, max.	≤ 1000 V DC	
Dielectric strength, contact - contact, min.	≤ 1500 V DC	
Current carrying capacity	1 A	
Note		

General data		
Housing main material	diecast aluminium	
Protection degree	IP65	
Ambient temperature (operational)	-40 °C...70 °C	
Connector standard	in accordance with PROFINET specification	
Approvals	CULUS	
Technical specifications power connector		
Housing base material	Zinc diecast, nickel-plated	
Sealing material	NBR	
Contact material	Copper alloy	
Contact carrier material	PA	
Contact surface	Gold over nickel	
Plugging cycles		
No. of poles	5	
Sheath diameter, min. / max.	6 mm / 12 mm	
Connection	Tension clamp	
Electrical properties power connector		
Current-carrying capacity at 50 °C	16 A	
Rated voltage	24 V	
Note		
We recommend using 10-mm-long wire-end ferrules		

Ordering data - Sets

Type	Qty.	Order No.
IE-CC-V14M-RJ45-FJ-P	1	1990600000
Note		

Type	Qty.	Order No.
IE-CC-V14M-RJ45-FJ-P	1	1990600000
Note		

Type	Qty.	Order No.
IE-CC-VAPM-24V	1	1990630000
Note		

Ordering data - Empty housings

Type	Qty.	Order No.
IE-CC-V14M-EH	1	2583100000
Note		

Type	Qty.	Order No.
IE-CC-V14M-EH	1	2583100000
Note		

Type	Qty.	Order No.
Note		

IP65 connection components / FreeCon connecting components

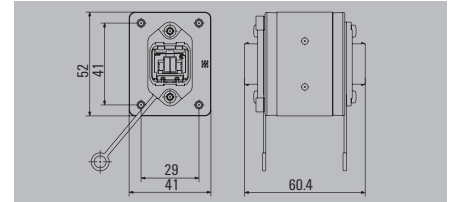
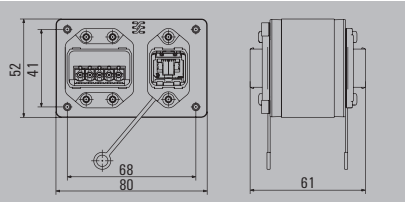
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# FreeCon Passive V14

## FreeCon V14 - coupling

### Double coupling, Power / RJ45

### Single coupling, RJ45



### Technical data

<b>General data</b>	
Housing main material	Aluminium profile, Cover: die-cast zinc, painted
Protection degree	IP65
Ambient temperature (operational)	-40 °C...70 °C
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5
Approvals	CULUS
<b>Technical specifications power connector</b>	
Housing base material	Zinc diecast, nickel-plated
Sealing material	NBR
Contact material	Copper alloy
Contact carrier material	PA
Contact surface	Gold over nickel
Plugging cycles	≥ 100
No. of poles	5
Sheath diameter, min. / max.	6 mm / 12 mm
Connection	Tension clamp
<b>Electrical properties power connector</b>	
Current-carrying capacity at 50 °C	16 A
Rated voltage	24 V
<b>Technical data for RJ45 coupling</b>	
Housing base material	Zinc diecast, PA 66
<b>Electrical properties RJ45 coupling</b>	
Category	Cat.6 <sub>A</sub> / Class E <sub>A</sub> (ISO/IEC 11801 2010)
Contact resistance	≤ 20 mΩ
Contact surface	Gold over nickel
Insulation resistance	> 500 MΩ
Dielectric strength, contact - contact, min.	≥ 1000 V DC
Dielectric strength, contact - shielding, max.	≥ 1500 V DC
Current carrying capacity	1 A
<b>Note</b>	

<b>General data</b>		
Housing main material	Aluminium profile, Cover: die-cast zinc, painted	
Protection degree	IP65	
Ambient temperature (operational)	-40 °C...70 °C	
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5	
Approvals	CULUS	
<b>Technical specifications power connector</b>		
Housing base material	Zinc diecast, nickel-plated	
Sealing material	NBR	
Contact material	Copper alloy	
Contact carrier material	PA	
Contact surface	Gold over nickel	
Plugging cycles	≥ 100	
No. of poles	5	
Sheath diameter, min. / max.	6 mm / 12 mm	
Connection	Tension clamp	
<b>Electrical properties power connector</b>		
Current-carrying capacity at 50 °C	16 A	
Rated voltage	24 V	
<b>Technical data for RJ45 coupling</b>		
Housing base material	Zinc diecast, PA 66	
<b>Electrical properties RJ45 coupling</b>		
Category	Cat.6 <sub>A</sub> / Class E <sub>A</sub> (ISO/IEC 11801 2010)	
Contact resistance	≤ 20 mΩ	
Contact surface	Gold over nickel	
Insulation resistance	> 500 MΩ	
Dielectric strength, contact - contact, min.	≥ 1000 V DC	
Dielectric strength, contact - shielding, max.	≥ 1500 V DC	
Current carrying capacity	1 A	
<b>Note</b>		

<b>General data</b>		
Housing main material	Aluminium profile, Cover: die-cast zinc, painted	
Protection degree	IP65	
Ambient temperature (operational)	-40 °C...70 °C	
Connector standard	IEC 61076-3-117 Var. 14, IEC 60603-7-5	
Approvals	CULUS	
<b>Technical specifications power connector</b>		
Housing base material	Zinc diecast, nickel-plated	
Sealing material	NBR	
Contact material	Copper alloy	
Contact carrier material	PA	
Contact surface	Gold over nickel	
Plugging cycles	≥ 100	
No. of poles	5	
Sheath diameter, min. / max.	6 mm / 12 mm	
Connection	Tension clamp	
<b>Electrical properties power connector</b>		
Current-carrying capacity at 50 °C	16 A	
Rated voltage	24 V	
<b>Technical data for RJ45 coupling</b>		
Housing base material	Zinc diecast, PA 66	
<b>Electrical properties RJ45 coupling</b>		
Category	Cat.6 <sub>A</sub> / Class E <sub>A</sub> (ISO/IEC 11801 2010)	
Contact resistance	≤ 20 mΩ	
Contact surface	Gold over nickel	
Insulation resistance	> 500 MΩ	
Dielectric strength, contact - contact, min.	≥ 1000 V DC	
Dielectric strength, contact - shielding, max.	≥ 1500 V DC	
Current carrying capacity	1 A	
<b>Note</b>		

### Ordering data

<b>Note</b>	
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Type	Qty.	Order No.
IE-CD-V14MRJ/VAPM24V-C-MA	1	1068820000
Including mounting foot		

Type	Qty.	Order No.
IE-CD-V14MRJ-C-MA	1	1068870000
Including mounting foot		

### Accessories

Dust protection cap	Type	Qty.	Order No.
Protective cap IP54 protective cap	IE-BP-V14P	10	1058310000
	IE-BP-VAPP	10	1068930000

Type	Qty.	Order No.
IE-BP-V14P	10	1058310000
IE-BP-VAPP	10	1068930000

Type	Qty.	Order No.
IE-BP-V14P	10	1058310000

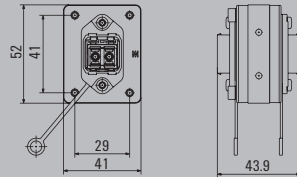
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<b>Note</b>		
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<b>Note</b>		
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## FreeCon V14 single coupling

## Single coupling, SCRJ



## Technical data

## General data

Housing main material	Aluminium profile, Cover: die-cast zinc, painted
Protection degree	IP65
Ambient temperature (operational)	-40...70 °C
Connector standard	IEC 61076-3-117 Var. 14, IEC 61754-24
Approvals	CULUS

## Technical specifications - fibre-optic coupler

Housing base material (fibre-optic coupling)	PA
Plugging cycles (fibre-optic coupling)	≥ 500
Seal material (fibre-optic coupling)	NBR
Connection 1 / 2	SCRJ / SCRJ
Insertion attenuation (fibre-optic coupling)	< 0.2 dB
Fibre type	Multimode, POF

## Note

## Ordering data

## Note

## Accessories

Dust protection cap	Protective cap
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Type	Qty.	Order No.
IE-CD-V14MSCRJ-MM-C-MA	1	1318150000

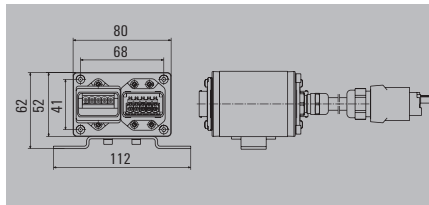
Type	Qty.	Order No.
IE-BP-V14P	10	1058310000

## Note

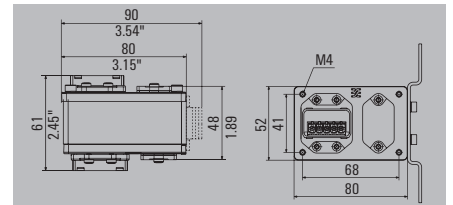
# FreeCon Passive V14

## FreeCon V14 - Power

### Y-distributor, Power



### Single coupling, Power



#### Technical data

General data	
Housing main material	Aluminium profile, Cover: die-cast zinc, painted
Protection degree	IP65
Ambient temperature (operational)	-40...70 °C
Connector standard	in accordance with PROFINET specification
Approvals	CULUS
Technical specifications power connector	
Housing base material	Zinc diecast, nickel-plated
Sealing material	NBR
Cable sealing material	TPE
Contact material	Copper alloy
Contact carrier material	PA
Contact surface	Gold over nickel
UL 94 flammability rating	V-0
Plugging cycles	≥ 100
Pollution severity level	2
Electrical properties power connector	
Current-carrying capacity at 50 °C	16 A at 20 °C
Rated voltage	24 V
No. of poles	5
Note	

Housing main material	Aluminium profile, Cover: die-cast zinc, painted
Protection degree	IP65
Ambient temperature (operational)	-40...70 °C
Connector standard	in accordance with PROFINET specification
Approvals	CULUS
Housing base material	Zinc diecast, nickel-plated
Sealing material	NBR
Cable sealing material	TPE
Contact material	Copper alloy
Contact carrier material	PA
Contact surface	Gold over nickel
UL 94 flammability rating	V-0
Plugging cycles	≥ 100
Pollution severity level	2
Current-carrying capacity at 50 °C	16 A at 20 °C
Rated voltage	24 V
No. of poles	5
Note	

Housing main material	Aluminium profile, Cover: die-cast zinc, painted
Protection degree	IP65, If thread-locking fluid is used
Ambient temperature (operational)	-40...70 °C
Connector standard	in accordance with PROFINET specification
Approvals	CULUS
Housing base material	Zinc diecast, nickel-plated
Sealing material	NBR
Cable sealing material	TPE
Contact material	Copper alloy
Contact carrier material	PA
Contact surface	Gold over nickel
UL 94 flammability rating	V-0
Plugging cycles	≥ 100
Pollution severity level	2
Current-carrying capacity at 50 °C	16 A at 20 °C
Rated voltage	24 V
No. of poles	5
Note	

#### Ordering data

Type	Qty.	Order No.
IE-CD-VAPM24V-Y-MA	1	1297010000
Note		

Type	Qty.	Order No.
IE-CD-VAPM24V-Y-MA	1	1297010000
Note		

Type	Qty.	Order No.
IE-CD-VAPM24V-C-MA	1	1397690000
Note		

#### Accessories

Dust protection cap	Type	Qty.	Order No.
IP54 protective cap	IE-BP-VAPP	10	1068930000

Dust protection cap	Type	Qty.	Order No.
IP54 protective cap	IE-BP-VAPP	10	1068930000

Dust protection cap	Type	Qty.	Order No.
IP54 protective cap	IE-BP-VAPP	10	1068930000

Note

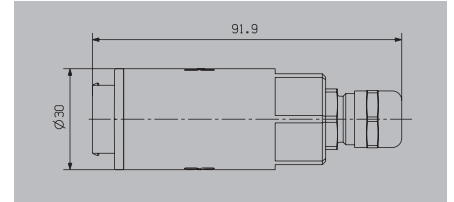
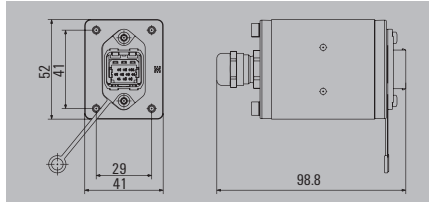
Note

Note

FreeCon V14 - junction box

Single junction box, Hybrid

Hybrid cable coupling



Technical data

General data	
Housing main material	Aluminium profile, Cover: die-cast zinc, painted
Protection degree	IP65
Ambient temperature (operational)	-40 °C...70 °C
Approvals	CULUS
Technical specifications hybrid connector	
Housing base material	Zinc diecast (flange), PA 66
Sealing material	NBR
Contact material	Copper alloy
Contact surface	Gold over nickel
Plugging cycles	500
Pole count	10
Connection cross-section, flexible, min. / max.	AWG 27 / AWG 20
Connection cross-section, flexible, min. / max.	0.08 mm <sup>2</sup> / 0.75 mm <sup>2</sup>
Electrical properties hybrid connector	
Rated current (hybrid connector)	3 A per contact
Rated voltage (DIN EN 61984)	24 V
Contact resistance	≤ 10 mΩ
<b>Note</b>	

Aluminium profile, Cover: die-cast zinc, painted		
IP65		
-40 °C...70 °C		
CULUS		
Zinc diecast (flange), PA 66		
NBR		
Copper alloy		
Gold over nickel		
500		
10		
AWG 27 / AWG 20		
0.08 mm <sup>2</sup> / 0.75 mm <sup>2</sup>		
3 A per contact		
24 V		
≤ 10 mΩ		

diecast aluminium		
IP65		
-40 °C...70 °C		
CULUS		
Zinc diecast (flange), PA 66		
NBR		
Copper alloy		
Gold over nickel		
500		
10		
AWG 27 / AWG 20		
0.08 mm <sup>2</sup> / 0.75 mm <sup>2</sup>		
3 A per contact		
24 V		
≤ 10 mΩ		

Ordering data

Type	Qty.	Order No.
IE-CD-V14MHYB-10P-FJ	1	1068850000
<b>Note</b>		

Type	Qty.	Order No.
IE-CD-V14MHYB-10P-FJ	1	1068850000
Order contacts separately		

Type	Qty.	Order No.
IE-CC-V14M-HYB-10P-FJ	1	1990610000
Contacts should be ordered separately		

Accessories

Mounting foot	
Crimp contacts	
	0.08...0.2 mm <sup>2</sup>
	0.2...0.5 mm <sup>2</sup>
	0.75 mm <sup>2</sup>
Crimping tool	
Dust protection cap	
	Protective cap
Mounting frame	
<b>Note</b>	

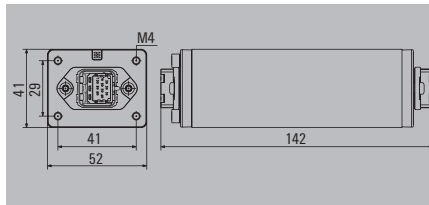
Type	Qty.	Order No.
IE-CD-MA	10	1099580000
IE-BIC-HYB-P-0,2-300	300	1135160000
IE-BIC-HYB-P-0,5-300	300	1096150000
IE-BIC-HYB-P-0,75-300	300	1068970000
HTF HYB	1	1119580000
IE-BP-V14P	10	1058310000
<b>Note</b>		

Type	Qty.	Order No.
IE-BIC-HYB-P-0,2-300	300	1135160000
IE-BIC-HYB-P-0,5-300	300	1096150000
IE-BIC-HYB-P-0,75-300	300	1068970000
HTF HYB	1	1119580000
IE-BP-V14P	10	1058310000
IE-CC-V14M-MF	1	1990620000
<b>Note</b>		

## FreeCon Passive V14

### FreeCon V14 single coupling

### Single coupling, hybrid



#### Technical data

General data	
Housing main material	
Protection degree	
Ambient temperature (operational)	
Technical specifications hybrid connector	
Housing base material	
Sealing material	
Contact material	
Contact surface	
Plugging cycles	
Electrical properties hybrid connector	
Rated current (hybrid connector)	
Rated voltage (DIN EN 61984)	
Contact resistance	
Pole count	
Approvals	
Note	

Aluminium profile, Cover: die-cast zinc, painted
IP65
-40...70 °C
Zinc diecast (flange), PA 66
NBR
Copper alloy
Gold over nickel
500
3 A per contact
24
≤ 10 mΩ
10
CULUS

#### Ordering data

Type	Qty.	Order No.
IE-CD-V14MHYB-10P-C-MA	1	1068840000

Type	Qty.	Order No.
IE-CD-V14MHYB-10P-C-MA	1	1068840000

#### Accessories

Dust protection cap	Protective cap
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Type	Qty.	Order No.
IE-BP-V14P	10	1058310000

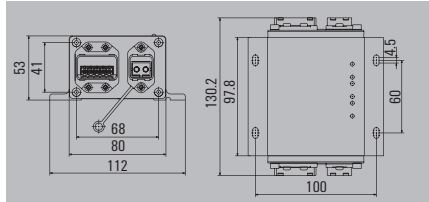
Note

Note

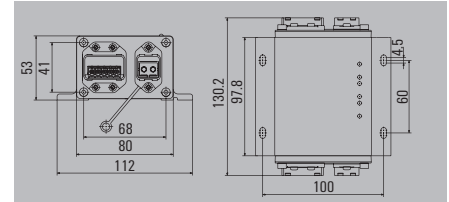


**FreeCon Active PROFINET**  
with diagnostics functionality

**POF repeater**



**POF media converter**



**Technical data**

General data	
Housing main material	
Weight	
Data interface	
Power interface	
Protection degree	
Ambient temperature (operational)	
Network standard	
Connector standard	
Electrical data	
Operating voltage	
Operational voltage range	
Current consumption	
Baud rate	
Protocol	
LED indicator	
Approvals	
Note	

Aluminium profile, Cover: die-cast zinc, painted		
PROFINET PushPull SCRJ POF (V14)		
PROFINET PushPull Power		
IP65		
-20 °C...55 °C		
IEC 61158, IEC 61784		
IEC 61076-3-117 Var. 14, IEC 61754-24		
24 V DC		
18...30 V DC		
200 mA typical		
100 MB		
PROFINET IRT		
F01: port active, F02: port active, SF: general error, BF: bus error, US1: voltage 1 (electronics), US2: voltage 2		
CE; CULUS		
Note		

Aluminium profile, Cover: die-cast zinc, painted		
PROFINET PushPull SCRJ POF (V14), PROFINET PushPull RJ45 (V14)		
PROFINET PushPull Power		
IP65		
-20 °C...55 °C		
IEC 61158, IEC 61784		
IEC 61076-3-117 Var. 14, IEC 61754-24, IEC 60603-7-51		
24 V DC		
18...30 V DC		
200 mA typical		
100 MB		
PROFINET IRT		
P1: port active, P2: port active, SF: general error, BF: bus error, US1: voltage 1 (electronics), US2: voltage 2		
CE; CULUS		
Note		

**Ordering data**

Type	Qty.	Order No.
IE-CDR-V14MSCPOF/VAPM-C	1	1253240000
Delivery incl. protective caps		
Note		

Type	Qty.	Order No.
IE-CDR-V14MSCPOF/VAPM-C	1	1253240000
Delivery incl. protective caps		
Note		

Type	Qty.	Order No.
IE-CDM-V14MRJSCP/VAPM-C	1	1324440000
Delivery incl. protective caps		
Note		

**Accessories**

Type	Qty.	Order No.
Note		

Type	Qty.	Order No.
Note		

Type	Qty.	Order No.
Note		

Note		

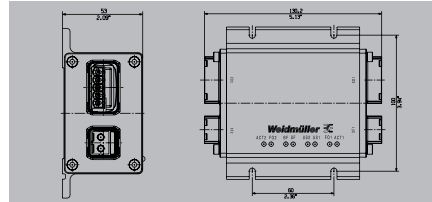
Note		

Note		

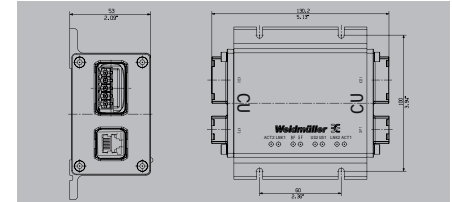
## FreeCon Active PROFINET

### FreeCon Active PROFINET with diagnostics functionality

#### POF repeater



#### Copper repeater



#### Technical data

General data	
Housing main material	
Weight	
Data interface	
Power interface	
Protection degree	
Ambient temperature (operational)	
Network standard	
Connector standard	
Electrical data	
Operating voltage	
Operational voltage range	
Current consumption	
Baud rate	
Protocol	
LED indicator	
Approvals	
Note	

Aluminium profile, Cover: die-cast zinc, nickel plated
661.8 g
PROFINET PushPull SCRJ PDF (V14)
PROFINET PushPull Power
IP65
-20 °C...55 °C
IEC 61158, IEC 61784
IEC 61076-3-117 Var. 14, IEC 61754-24
24 V DC
18...30 V DC
200 mA typical
100 MB
PROFINET IRT
FD1: port active, FD2: port active, SF: general error, BF: bus error, US1: voltage 1 (electronics), US2: voltage 2, ACT1: activity Port1, ACT2: activity Port2
CE, CULUS

Aluminium profile, Cover: die-cast zinc, nickel plated
661.8 g
PROFINET PushPull RJ45 (V14)
PROFINET PushPull Power
IP65
-20 °C...55 °C
IEC 61158, IEC 61784
IEC 61076-3-117 Var. 14
24 V DC
18...30 V DC
200 mA typical
100 MB
PROFINET IRT
ACT1: activity Port1, ACT2: activity Port2, SF: general error, BF: bus error, US1: voltage 1 (electronics), US2: voltage 2, LNK1: port active, LNK2: port active

#### Ordering data

Type	Qty.	Order No.
IE-CDR-V14MSCPOF/VAPM-C II	1	2455360000

Further development of 1253240000, IE-CDR-V14MSCPOF/VAPM-C. For commissioning, the new GSDML file (see Downloads) must be installed.

Type	Qty.	Order No.
IE-CDR-V14MRJ/VAPM-C	1	2581810000

Delivery incl. protective caps

#### Accessories

Type	Qty.	Order No.
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Type	Qty.	Order No.
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Note		
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Note		
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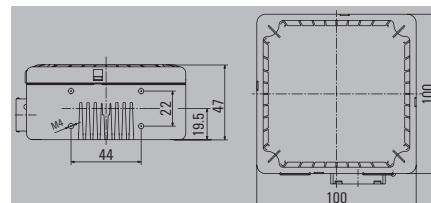
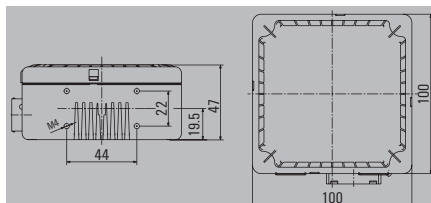
Note		
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**FreeCon Contactless**

- Contactless power transmission via air gap

**Primary side (base)**

**Secondary side (remote)**



**Technical data**

General data	
Housing main material	
Technologie, version	
Loads	
Turn-on time	
Coupling time	
Air gap	
Centre offset	
Power interface	
Protection degree	
Ambient temperature (operational)	
Weight	
Electrical data	
Primary voltage	
Secondary voltage	
Secondary current max.	
Degree of efficiency	
LED indicator	
Approvals	
Note	

Diecast zinc, painted, Cover PBT
Inductive resonance coupling
Inductive and resistive loads
1 s
0...5 mm
max. 5mm
PROFINET PushPull Power
IP65
-20...45 °C Consider derating
1020 g
24 V DC (21.6...26.4 V DC)
max. 91 %
Status indication via multi-coloured LED
CE

Diecast zinc, painted, Cover PBT
Inductive resonance coupling
Inductive and resistive loads
< 500 ms
0...5 mm
max. 5mm
PROFINET PushPull Power
IP65
-20...45 °C Consider derating
1020 g
24 V DC (19.2...28.8 V DC)
10 A
max. 91 %
Status indication via multi-coloured LED
CE

**Ordering data**

Type	Qty.	Order No.
IE-CL240W-PP-BASE	1	1547440000
Note		

Type	Qty.	Order No.
IE-CL240W-PP-BASE	1	1547440000

Type	Qty.	Order No.
IE-CL240W-PP-REMOTE	1	1547450000

**Accessories**

Plug	PushPull Power
Markers	

Type	Qty.	Order No.
IE-PS-VAPM-24V	10	1068910000
ESG 6/17 K MC NE WS	200	1880120000

Type	Qty.	Order No.
IE-PS-VAPM-24V	10	1068910000
ESG 6/17 K MC NE WS	200	1880120000

Note	
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Note	
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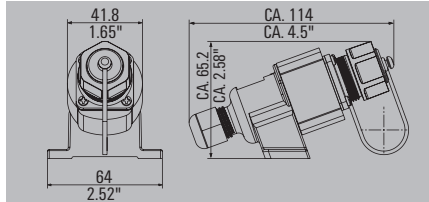
Note	
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## V1 junction boxes

### V1 junction boxes - plastic

### Single junction box



#### Technical data

Protection degree	IP67
Housing main material	PA UL 94 V0
Plugging cycles	750
Ambient temperature (operational)	-40 °C...70 °C
Connector standard	IEC 61076-3-106 Var. 1
Sheath diameter min. / max.	6 mm / 9.5 mm
Approvals	
<b>Note</b>	

#### Ordering data

Variant 1	Type	Qty.	Order No.
Junction box	IE-OP-V01P-1S	10	<b>1061830000</b>
<b>Note</b>	Order RJ45 modules separately		

#### Accessories

Inserts, Data	Type	Qty.	Order No.
RJ45 module EIA/TIA T568 B	IE-BI-RJ45-FJ-B	10	<b>1963840000</b>
RJ45 module PROFINET	IE-BI-RJ45-FJ-P	10	<b>1963830000</b>
RJ45 module EIA/TIA T568 A	IE-BI-RJ45-FJ-A	10	<b>1962850000</b>

**Note**

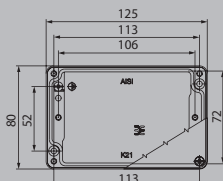
**Note**



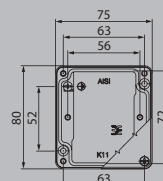
V1 junction boxes - metal

- IP67
- For wall or floor mounting

Double junction box



Single junction box



Technical data

Protection degree
Housing main material
Colour
Type of mounting
Ambient temperature (operational)
Plugging cycles
Connector standard
Sheath diameter min. / max.
Approvals
Note

IP67
Al - Si 12
Grey
Floor-mounted, Wall mounting
-40 °C...70 °C
750
IEC 61076-3-106 Var. 1
5 mm / 10 mm
GOSTME25

IP67
Al - Si 12
Grey
Floor-mounted, Wall mounting
-40 °C...70 °C
750
IEC 61076-3-106 Var. 1
5 mm / 10 mm

Ordering data

Variant 1	
	2 ports. straight
	1 port. straight
Note	

Type	Qty.	Order No.
IE-OM-V01M-K21-2S	1	1966330000
RJ45 modules can be ordered separately		

Type	Qty.	Order No.
IE-OM-V01M-K11-1S	1	1966300000
RJ45 modules can be ordered separately		

Accessories

Inserts, Data	
	RJ45 module EIA/TIA T568 B
	RJ45 module PROFINET
	RJ45 module EIA/TIA T568 A

Type	Qty.	Order No.
IE-BI-RJ45-FJ-B	10	1963840000
IE-BI-RJ45-FJ-P	10	1963830000
IE-BI-RJ45-FJ-A	10	1962850000

Type	Qty.	Order No.
IE-BI-RJ45-FJ-B	10	1963840000
IE-BI-RJ45-FJ-P	10	1963830000
IE-BI-RJ45-FJ-A	10	1962850000

Note
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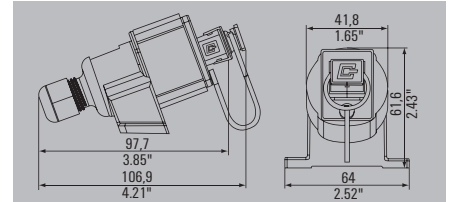
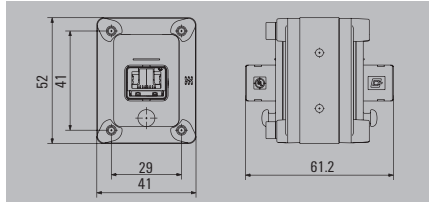
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## V4 junction boxes

### FreeCon V4 junction boxes

### Single coupling, RJ45

### Single junction box



#### Technical data

General data	
Plugging cycles	
Housing main material	
Contact surface	
UL 94 flammability rating	
Connector standard	
Protection degree	
Ambient temperature (operational)	
Sheath diameter min. / max.	
Approvals	
Electrical properties for RJ45 module	
Category	
Contact resistance	
Insulation resistance	
Dielectric strength, contact - contact, min.	
Dielectric strength, contact - shielding, max.	
Current carrying capacity	
Material properties RJ45 coupling	
Housing base material	
Note	

750
Aluminium profile, Cover: die-cast zinc, painted
Gold over nickel
IEC 61076-3-106 Var. 4, IEC 60603-7-5
IP65
-40 °C...70 °C
CULUS
Cat.6 <sub>x</sub> / Class E <sub>x</sub> (ISO/IEC 11801 2010)
≤ 20 mΩ
> 500 MΩ
≥ 1000 V DC
≥ 1500 V DC
1 A
Zinc diecast, PA 66

750
PA
Gold over nickel
V-0
IEC 61076-3-106 Var. 4
IP67
-40 °C...70 °C
6 mm / 9.5 mm

#### Ordering data

	Junction box
	Coupling
Note	

Type	Qty.	Order No.
IE-CD-V04PRJ-C-MA	1	1122710000
Including mounting foot		

Type	Qty.	Order No.
IE-OP-V04P-1S	10	1045780000
Order RJ45 modules separately, IP67 protective cap included in delivery		

#### Accessories

Dust protection cap	
	Flange-mounted housing protective cap
Inserts, Data	
	RJ45 module PROFINET
	RJ45 module EIA/TIA T568 A
	RJ45 module EIA/TIA T568 B

Type	Qty.	Order No.
IE-BP-V04P	10	1963900000

Type	Qty.	Order No.
IE-BP-V04P	10	1963900000
IE-BI-RJ45-FJ-P	10	1963830000
IE-BI-RJ45-FJ-A	10	1962850000
IE-BI-RJ45-FJ-B	10	1963840000

Note

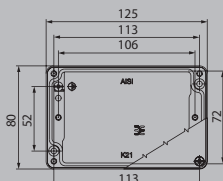
Note

Note

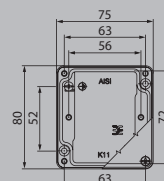
V4 junction boxes

- IP67
- For wall or floor mounting

Double junction box



Single junction box



Technical data

Protection degree  
 Housing main material  
 Colour  
 Type of mounting  
 Ambient temperature (operational)  
 Plugging cycles  
 Connector standard  
 Sheath diameter min. / max.  
 Approvals

IP67  
 Al - Si 12  
 Grey  
 Floor-mounted, Wall mounting  
 -40 °C...70 °C  
 750  
 IEC 61076-3-106 Var. 4  
 5 mm / 10 mm  
 GOSTME25

IP67  
 Al - Si 12  
 Grey  
 Floor-mounted, Wall mounting  
 -40 °C...70 °C  
 750  
 IEC 61076-3-106 Var. 4  
 5 mm / 10 mm

Note

Ordering data

Variant 4	
	2 ports. straight
	1 port. straight

Note

Type	Qty.	Order No.
IE-OM-V04P-K21-2S	1	1966250000

RJ45 modules can be ordered separately

Type	Qty.	Order No.
IE-OM-V04P-K11-1S	1	1966220000

RJ45 modules can be ordered separately

Accessories

Inserts, Data	
	RJ45 module EIA/TIA T568 B
	RJ45 module PROFINET
	RJ45 module EIA/TIA T568 A

Type	Qty.	Order No.
IE-BI-RJ45-FJ-B	10	1963840000
IE-BI-RJ45-FJ-P	10	1963830000
IE-BI-RJ45-FJ-A	10	1962850000

Type	Qty.	Order No.
IE-BI-RJ45-FJ-B	10	1963840000
IE-BI-RJ45-FJ-P	10	1963830000
IE-BI-RJ45-FJ-A	10	1962850000

Note

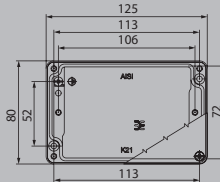


## V5 junction boxes

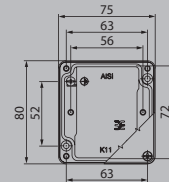
### V5 junction boxes

- IP67
- For wall or floor mounting

### Double junction box



### Single junction box



### Technical data

Protection degree  
Housing main material  
Colour  
Type of mounting  
Ambient temperature (operational)  
Plugging cycles  
Connector standard  
Sheath diameter min. / max.  
Approvals

IP67  
Al - Si 12  
Grey  
Floor-mounted, Wall mounting  
-40 °C...70 °C  
750  
IEC 61076-3-106 Var. 5  
5 mm / 10 mm  
GOSTME25

IP67  
Al - Si 12  
Grey  
Floor-mounted, Wall mounting  
-40 °C...70 °C  
750  
IEC 61076-3-106 Var. 5  
5 mm / 10 mm

**Note**

### Ordering data

Variant 5	
	2 ports. straight
	1 port. straight

**Note**

Type	Qty.	Order No.
IE-OM-V05M-K21-2S	1	1966290000

RJ45 modules can be ordered separately

Type	Qty.	Order No.
IE-OM-V05M-K11-1S	1	1966260000

RJ45 modules can be ordered separately

### Accessories

Inserts, Data	
	RJ45 module EIA/TIA T568 B
	RJ45 module PROFINET
	RJ45 module EIA/TIA T568 A



Type	Qty.	Order No.
IE-BI-RJ45-FJ-B	10	1963840000
IE-BI-RJ45-FJ-P	10	1963830000
IE-BI-RJ45-FJ-A	10	1962850000

Type	Qty.	Order No.
IE-BI-RJ45-FJ-B	10	1963840000
IE-BI-RJ45-FJ-P	10	1963830000
IE-BI-RJ45-FJ-A	10	1962850000

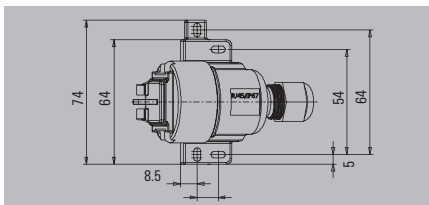
**Note**



V6 junction boxes

- Cat. 6
- IP67

Single junction box, RJ45



Technical data

Protection degree	IP67
Housing main material	PA 66, UL 94: V-0
Colour	Light Grey
Type of mounting	Floor-mounted, for exposed connections, Wall mounting
Configuration	Screw-on junction box including RJ45 module with IDC connection
Wiring	EIA/TIA T568 A, EIA/TIA T568 B
Ambient temperature (operational)	-40 °C...70 °C
Plugging cycles	750
Connector standard	IEC 61076-3-106 Var. 6
Sheath diameter min. / max.	6 mm / 9.5 mm
Approvals	GERMLLOYD
<b>Note</b>	

Ordering data

Type	Qty.	Order No.
IE-S-IP67	1	8808370000
<b>Note</b>		

Accessories

Type	Qty.	Order No.
TT 8 RS MP 8	1	9202800000
<b>Note</b>		



Crimping tool

**Note**

**Note**

Архангельск (8182)63-90-72  
 Астана (7172)727-132  
 Астрахань (8512)99-46-04  
 Барнаул (3852)73-04-60  
 Белгород (4722)40-23-64  
 Брянск (4832)59-03-52  
 Владивосток (423)249-28-31  
 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  
 Краснодар (861)203-40-90  
 Красноярск (391)204-63-61  
 Курск (4712)77-13-04  
 Липецк (4742)52-20-81  
 Киргизия (996)312-96-26-47

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  
 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  
 Казахстан (772)734-952-31

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  
 Симферополь (3652)67-13-56  
 Смоленск (4812)29-41-54  
 Сочи (862)225-72-31  
 Ставрополь (8652)20-65-13  
 Россия (495)268-04-70

Сургут (3462)77-98-35  
 Тверь (4822)63-31-35  
 Томск (3822)98-41-53  
 Тула (4872)74-02-29  
 Тюмень (3452)66-21-18  
 Ульяновск (8422)24-23-59  
 Уфа (347)229-48-12  
 Хабаровск (4212)92-98-04  
 Челябинск (351)202-03-61  
 Череповец (8202)49-02-64  
 Ярославль (4852)69-52-93