Telegärtner

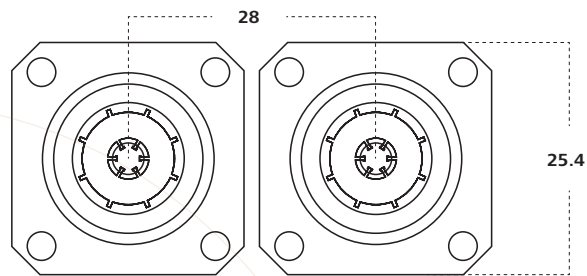1.5-3.5 Series

1/4
1/2
3/4
1/4
1/2
3/4

1
2
1
3
4
5
2

SMALL.
OUTDOOR.
LOW-PIM.

Best size-power ratio on the market:
the 1.5-3.5 Series.

YOU CHOOSE THE SIZE.
WE DELIVER
MAXIMUM POWER.

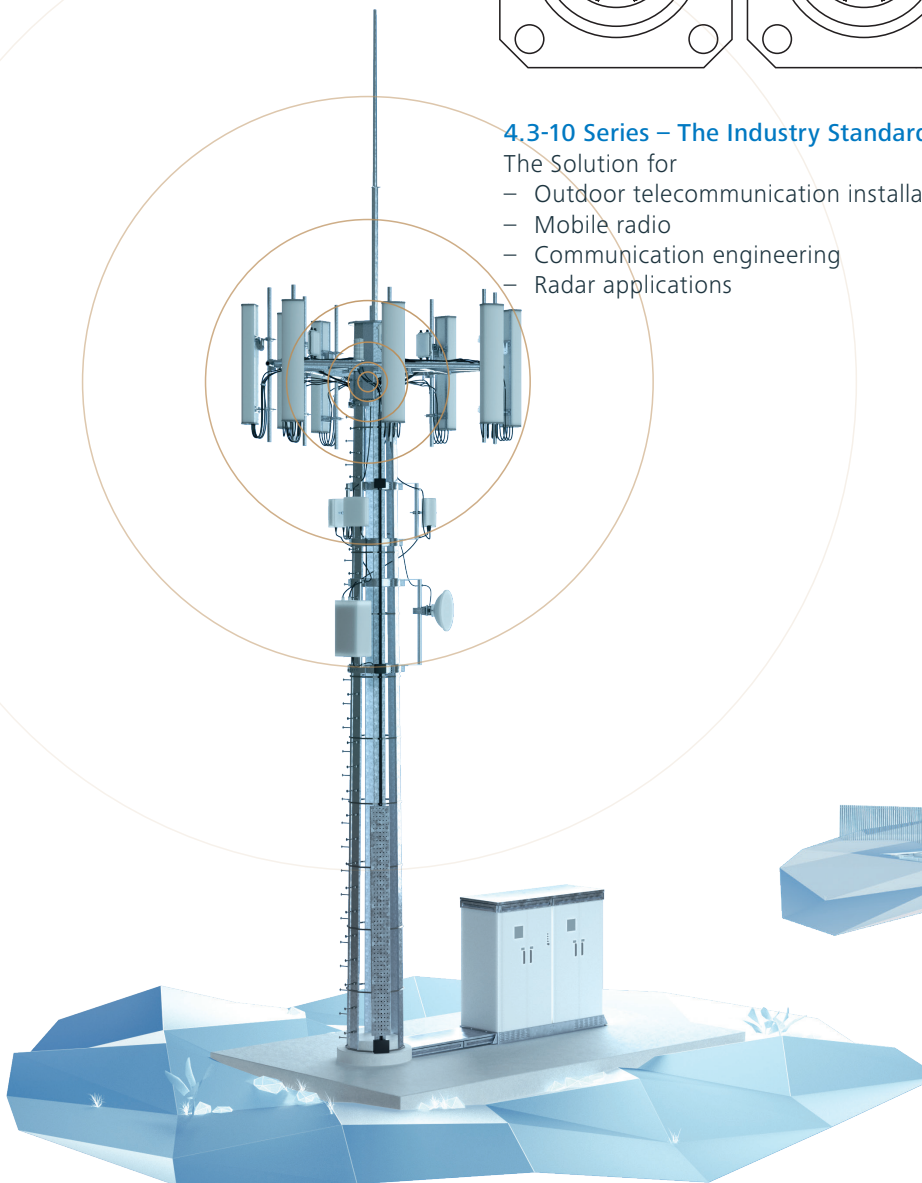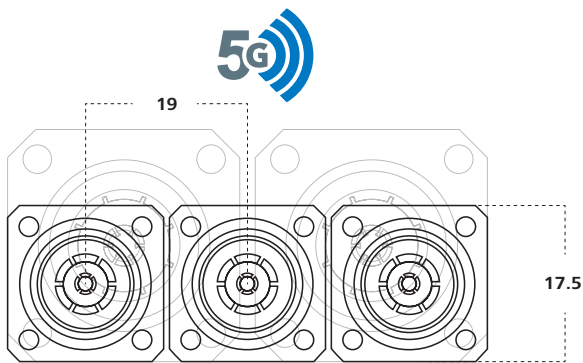## The Cell IQ Family made by Telegärtner.
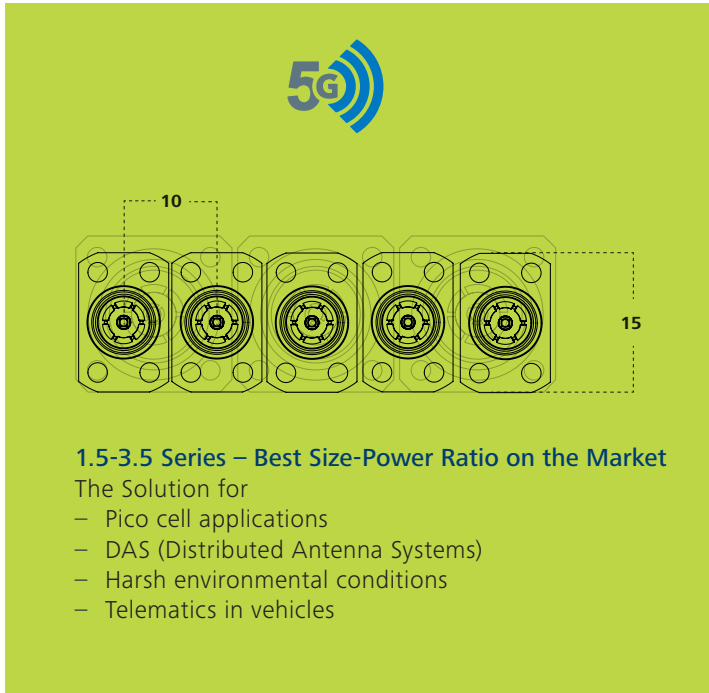
28

25.4

-53 %
SIZE

4.3-10 Series – The Industry Standard
The Solution for
– Outdoor telecommunication installations
– Mobile radio
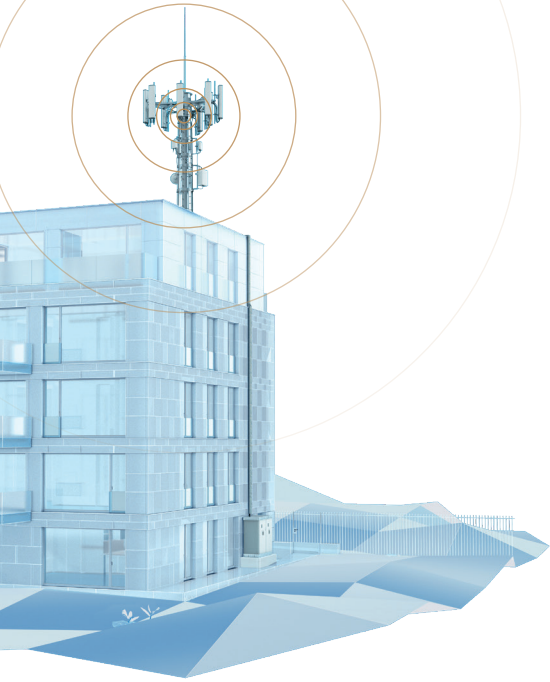– Communication engineering
– Radar applications

19

17.5

-53 %
SIZE

10

15

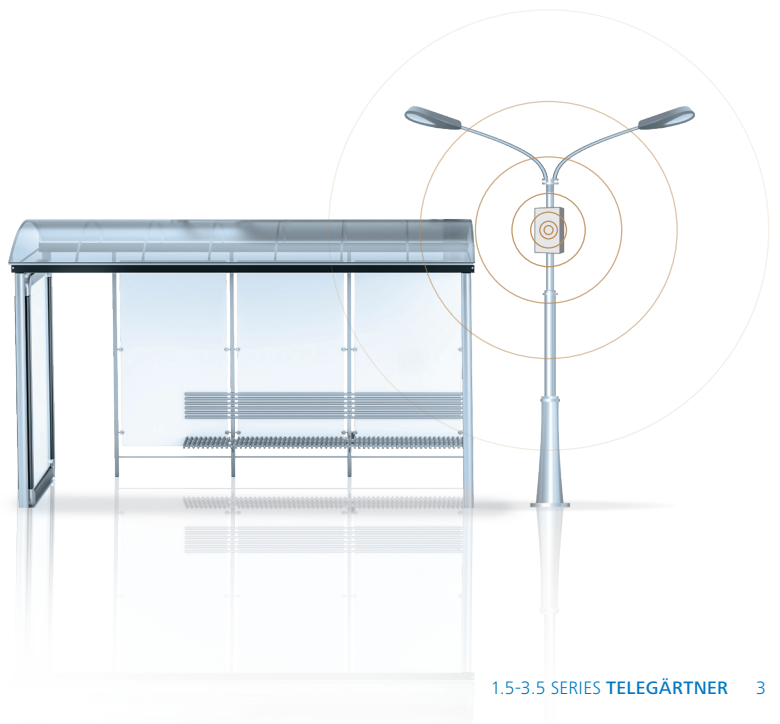## 2.2-5 Series – Highest RF Power in Class
The Solution for
– Small cell applications
– DAS (Distributed Antenna Systems)
– Lower power remote radio units

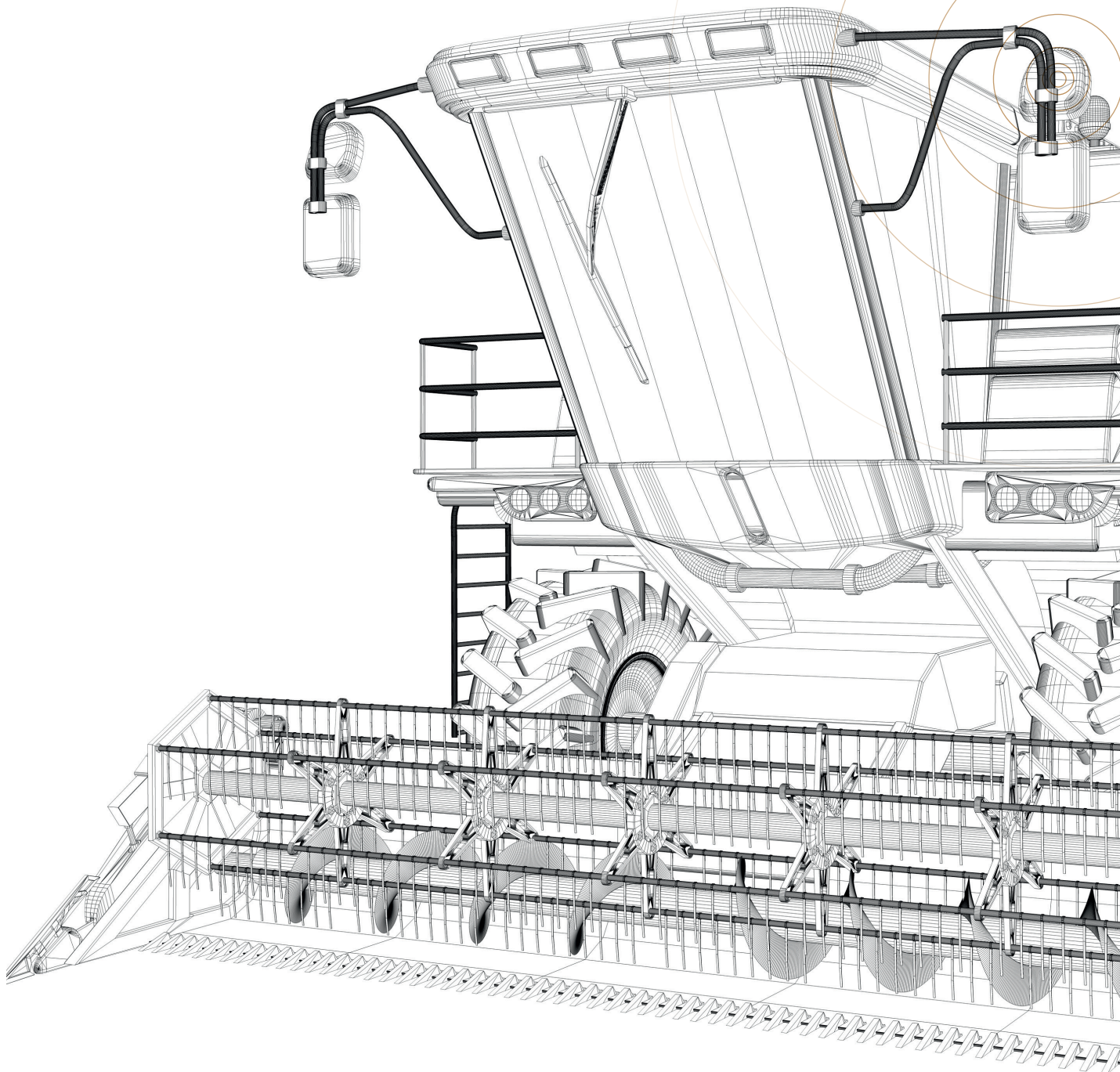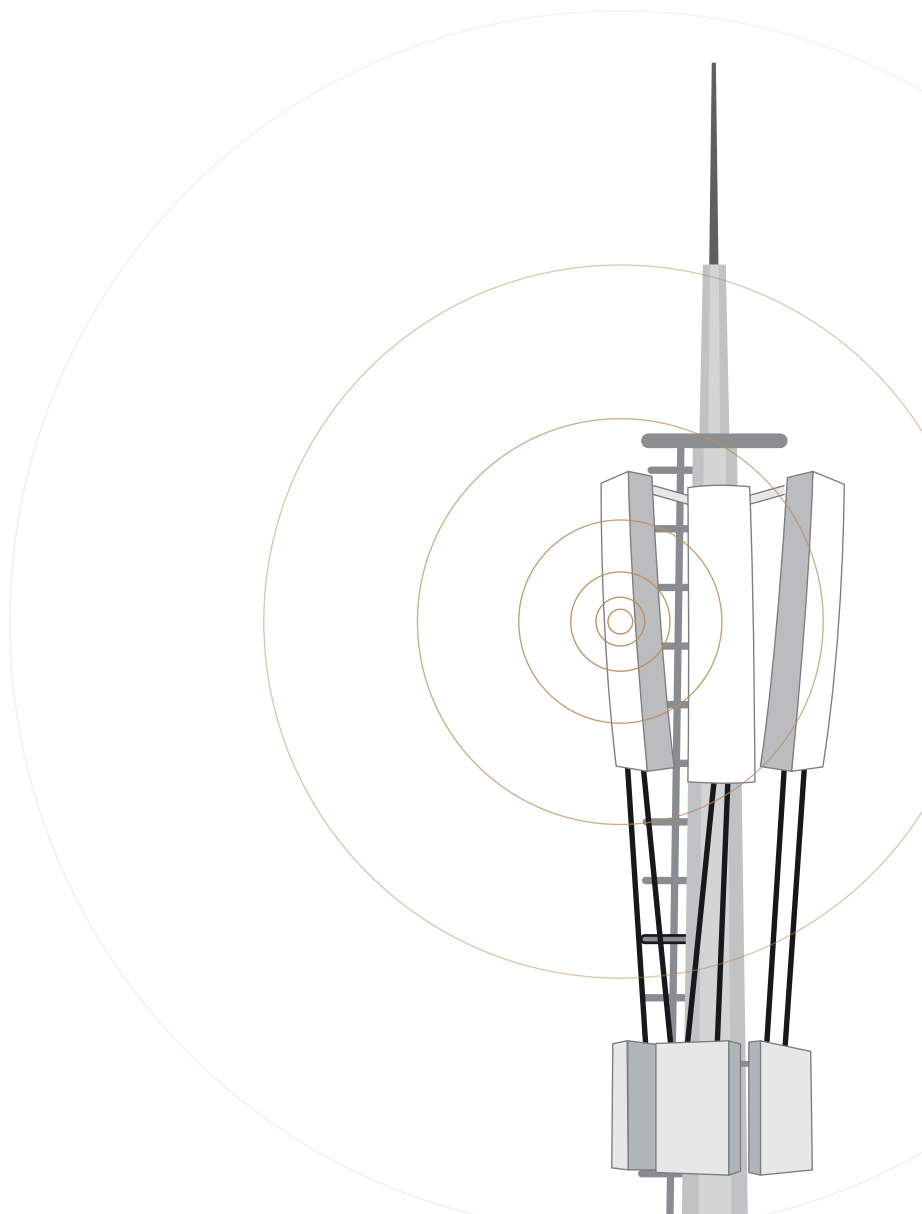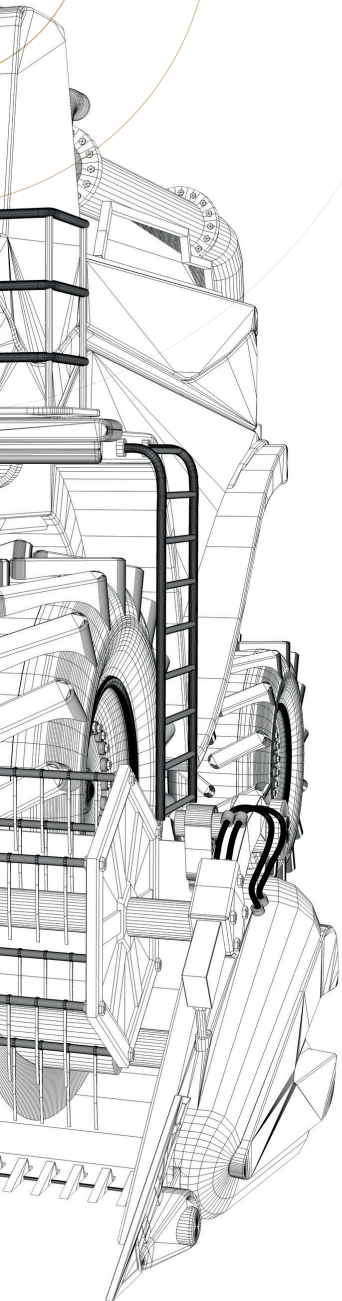## 1.5-3.5 Series – Best Size-Power Ratio on the Market
The Solution for
– Pico cell applications
– DAS (Distributed Antenna Systems)
– Harsh environmental conditions
– Telematics in vehicles

PERFECT FOR HARSH ENVIRONMENTS

The 1.5-3.5 Series and Agriculture 4.0

Digitalization has revolutionized agriculture. GPS-supported, intelligent harvesting systems are already in use today in the field of agricultural machinery. The applications are exposed to adverse conditions such as extreme temperature fluctuations, humidity and dust. Secure data transmission is crucial in such environmental conditions.

Telegärtner's 1.5-3.5 series offers:
– Durable connectors that are resistant to harsh environmental influences
– Resistance to the operating materials commonly used in agriculture, e.g. diesel or grease
– Simple and safe handling when plugging, screwing, locking and sealing

BEST SIZE-POWER RATIO IN THE MARKET

The 1.5-3.5 Series

Universal Jack

The 1.5-3.5 series enables a robust and PIM stable design in the smallest space. The space requirements for a typical 4 hole flange jack are only either 15 × 9.7 mm or 12.7 × 12.7 mm. Therefore the 1.5-3.5, based on the SMA form factor, requires around 53 % less space than the 2.2-5 series and 75 % less space than the 4.3-10 series.

Hand in hand with the size and material reduction, there is also a cost and weight reduction, meaning this series is ideal for small cell applications. Despite the small size, low loss cables up to 1/4" can be used.

– Quick mate / unmate
– No tooling required
– Self-locking
– For indoor and outdoor applications

Push-Pull

Screw

– Screw-on variant with recommended torque
  of 1 Nm
– For indoor and outdoor applications
– For use in extreme climatic conditions

VARIOUS POSSIBILITIES

Standard and Customized Solutions by Telegärtner

– Saving on space and weight due to compact design
– Optimized for corrugated and low loss cables
– Very low PIM values, independent of locking mechanism
– Contact areas protected from damage even when not mated
– Extremely reliable: rugged design for harsh environmental conditions
– Customized solutions

Cable Types

Jack 1.5-3.5

Plug 1.5-3.5

Optimized for:

| Flexible Cables		Semiflex Cables			Corrugated Cables	Semiflex Cables	Flexible Cables		
RG174	RG58	UT-85	UT-141	UT-250	1/4"	UT-141	RG174	RG58	LL1.5/3.8

Electrical Parameters

|	
Passive Intermodulation	-166 dBc @ 2 x 43 dBm
Power handling	100 W (2 GHz @ 85 °C)
Return loss (typ.)	– 32 dB up to 6 GHz
Frequency range	Up to 6 GHz (Standard) Up to 30 GHz (Special Version)
Mating cycles	> 100
Recommended torque / screw type	1 Nm
Degree of protection	IP68

Mounting Dimensions

Bulkhead Type

⌀11,9   13   7.65   ⌀8,1

Square Flange Type

□ 12.7   13   ⌀2,2   ⌀8,5   □8,6
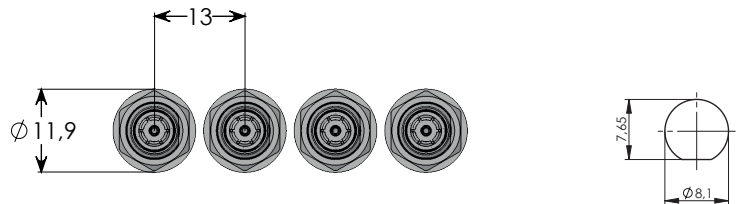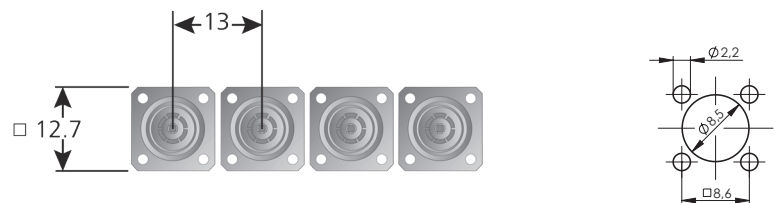
Rectangle Flange Type

15 × 9.7   10   ⌀2,2   ⌀8,5   10.8   5.6
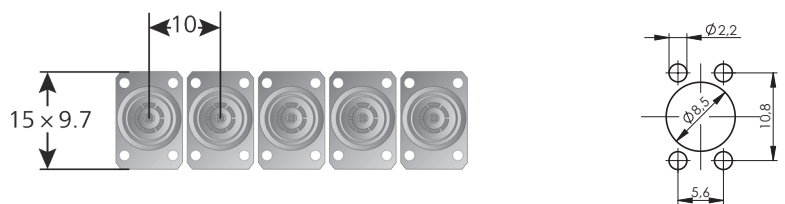
Order Information

1.5-3.5 Straight Plug	Order no.	Cable group	Type	Remark/ Mounting dim.
	J01480A0001	G10 (UT-141)	Screw	
	J01480A3001	G10 (UT-141)	Push-Pull	
	J01480A0007	G30 (1.5/3.8)	Screw	
	J01480A3007	G30 (1.5/3.8)	Push-Pull	

1.5-3.5 Angle Plug				
	J01480A0005	G10 (UT-141)	Screw	
	J01480A3005	G10 (UT-141)	Push-Pull	

1.5-3.5 Straight Jack				
	J01481A0007	G11 (UT-85)		
	J01481A0003	G10 (UT-141)		

1.5-3.5 Panel Jack	Order no.	Cable group	Flange size	Remark/ Mounting dim.
	J01481A0004	G11 (UT-85)	12.7 x 12.7 mm	Z174
	J01481A0000	G10 (UT-141)	12.7 x 12.7 mm	Z174
	J01481A0005	G11 (UT-85)	9.7 x 15 mm	Z175
	J01481A0001	G10 (UT-141)	9.7 x 15 mm	Z175

1.5-3.5 Bulkhead Jack	Order no.	Cable group	Type	Remark/ Mounting dim.
	J01481A0006	G11 (UT-85)		Z173
	J01481A0002	G10 (UT-141)		Z173

Adapter 4.3-10 to 1.5-3.5	Order no.	Description	Type	Remark/ Mounting dim.
	J01443A0023	f-m	Screw	
	J01443A0025	f-f		
	J01443A0026	m-f	Screw	
	J01443A0028	m-m	Screw - Screw	

Adapter 7-16 to 1.5-3.5
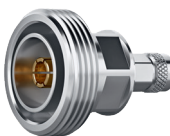
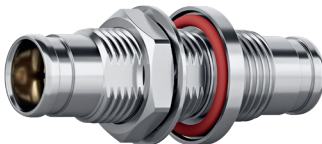|				
	J01122A0037	f-m	Screw	
	J01122A0039	f-f		
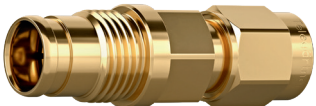
1.5-3.5 Jumper Cables with 1/4" Corrugated

Different types and lengths on request.

Adapter 1.5-3.5 to PC3.5	Order no.	Description	Type	Remark/ Mounting dim.
	J01483A0001	f-m		
	J01483A0003	f-f		
	J01483A0002	m-f	Screw	
	J01483A0000	m-m	Screw	

1.5-3.5 Adapter

	Order no.	Description	Type	Remark/ Mounting dim.
	J01482A0000	f-f		
	J01482A0001	f-f		Z173
	J01482A0002	m-m	Screw - Screw	
	J01482A0004	m-f	Screw	

SPECIAL SOLUTIONS.
FAST AND CUSTOMIZED.

Development

Computer-aided engineering and RF simulation techniques realize your requirements. This allows us to efficiently and swiftly meet your technical specifications, thanks to short coordination channels and direct cooperation between all departments at a single location.

Prototyping

Telegärtner's in-house prototype manufacturing and own machine pool means prototypes can be built within 4 weeks.

Laboratory Tests

Fast prototype testing in our own laboratories.

Run Production

Order fulfilment in batch sizes from 1,000 upwards thanks to manual and semi-automatic production. Manufacturing in Germany guarantees consistently high quality.

Do you have individual requirements?
We would be pleased to develop an individual solution together and advise you.

Telegärtner

Your distributor:

T00013A0388