4008

2.1 dBi GAIN
915MHz BAND 1/2 WAVE DIPOLE ANTENNA

FEATURES

- **Indoor Mounting**
- **Mount Directly on Product or on Electrical Housing With Optional Cable**
- **Lightweight**
- **Range to 3000ft**

DESCRIPTION

Vertical omnidirectional antennas radiate in a pattern similar to a horizontal doughnut. Their gain is less than that of a yagi antenna which concentrates radiation in a single direction. This reduced gain limits the effective range of the omnidirectional antenna, but proves effective when directivity is not desired.

Omnidirectional antennas are useful in short range applications where their use eliminates the need for antenna alignment. Omnidirectional antennas are also useful on the control end of a polling system.

When an omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in possible interference due to the front to back ratio gain reduction of the yagi antenna.

The 4008 antenna swivels 90° at the base to allow the antenna to remain vertical with the base mounted either vertically or horizontally.

Designed for indoor mounting, this 7" whip offers flexibility in mounting and dependable performance for short range systems.

SPECIFICATIONS

ELECTRICAL

GAIN
2.1dBi

FREQUENCY
900-928MHz

VSWR
<2:1

IMPEDANCE
50 ohms

CONNECTOR
Reverse Polarity SMA Male Brass With Nickle and Gold Plating

MECHANICAL

RADIATOR
Spring SS Wire

WHIP
Polyurethene (Black)

SWIVEL MECHANISM
Polycarbonate (Black)

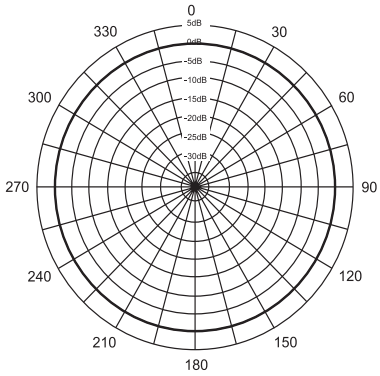
DIAMETER
0.5"

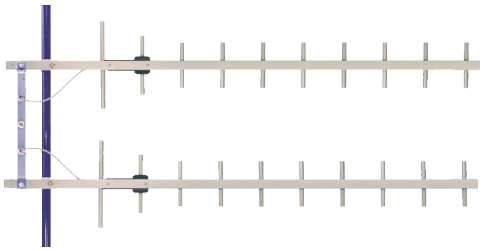
LENGTH
7"

WEIGHT
0.7 Ounces.

MOUNTING
Direct Connect to Product or Remote Mount With Optional Extension Cable

VERTICAL PATTERN





4152

17 dBi GAIN
915MHz BAND DUAL STACKED
10 ELEMENT HEAVY DUTY YAGI

FEATURES

- High Performance
- Rugged
- Weatherproof
- Lightweight
- Durable

DESCRIPTION

This kit includes two (2) 4025 heavy duty yagi antennas that are termninated with Type N male connectors that mate with a supplied 4074 two-port coupler. The coupler adds the output of the two antennas and provides approximately 2X the signal of one antenna (3dB).

A yagi antenna can be operated with the elements mounted vertically or horizontally, but the most common use for industrial wireless is vertical. The transmitting and receiving antenna must both have the same element polarization for satisfactory operation. A large loss in signal is experienced when the elements are crossed polarized.

When a vertical omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain front to back ratio gain reduction.

These heavy duty yagi antennas are constructed of 1" aluminum U channel with 3/8" solid elements. All exposed areas are coated with UV polyester. The balun assembly is filled and sealed with elastomeric thermoplastic.

The output of the 4074 two-port coupler is a Type N Female connector.

SPECIFICATIONS

ELECTRICAL

GAIN
17dBi
Front to Back Ratio
20dB

FREQUENCY
896-960MHz

IMPEDANCE
50 ohms

VSWR
60MHz
<1.5:1

POWER RATING
300 watts

CONNECTOR
Type N Female On 2 Port Coupler

MECHANICAL

MATERIAL
1" aluminum U channel boom
3/8" solid elements

FINISH
UV inhibited polyester coat

LENGTH
48"

WEIGHT
8 lbs.

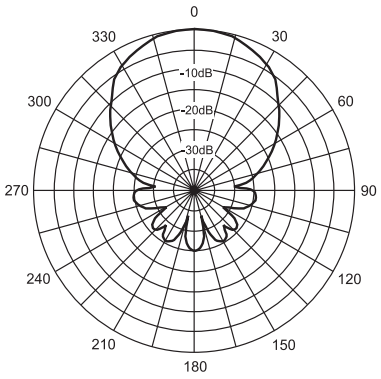
MOUNT
Stainless Hardware for $2^{3}/_{8}$" mast

FLAT PLATE AREA
.998 ft^2

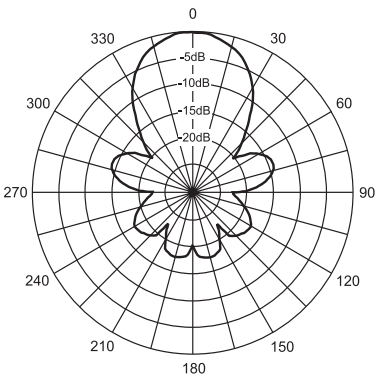
WIND RATING
125 MPH

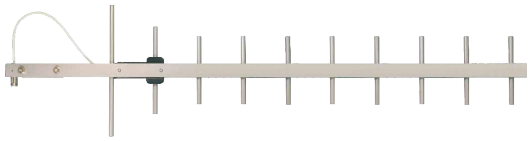
WIND LOAD
67.4 lbs.

HORIZONTAL PATTERN



VERTICAL PATTERN





4025

14 dBi GAIN
915MHz BAND 10 ELEMENT HEAVY DUTY YAGI

FEATURES

- **Rugged and Weatherproof**
- **Lightweight Aluminum**
- **SS Mounting Hardware Included**
- **Wind Survival to 125 MPH**

DESCRIPTION

Yagi antennas achieve more gain than vertical antennas by concentrating radiation in a single direction. Their reduced gain from the back end helps keep other signals from interfering with normal operation. The front to back ratio is an important characteristic of a yagi antenna.

A yagi antenna can be operated with the elements mounted vertically or horizontally, but the most common use for industrial wireless is vertical. The transmitting and receiving antenna must both have the same element polarization for satisfactory operation. A large loss in signal is experienced when the elements are crossed polarized.

When a vertical omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in interference due to the front to back ratio gain reduction.

These heavy duty yagi antennas are constructed of 1" aluminum U channel with 3/8" solid elements. All exposed areas are coated with UV polyester. The balun assembly is filled and sealed with elastomeric thermoplastic.

The connector is a Type N Female on a 12" teflon pigtail cable.

SPECIFICATIONS

ELECTRICAL

GAIN
14dBi
Front to Back Ratio
20dB

FREQUENCY
900-930MHz

IMPEDANCE
50 ohms

VSWR
<2:1

VERT BEAMWIDTH
45°

HORIZ BEAM WIDTH
50°

POWER RATING
300 watts

CONNECTOR
Type N Female on 12" Teflon Pigtail

MECHANICAL

MATERIAL
1" aluminum U channel boom
3/8" solid elements

FINISH
UV inhibited polyester coat

LENGTH
48"

WEIGHT
<4 lbs.

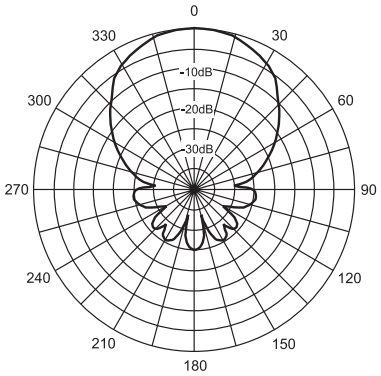
MOUNT
Stainless Hardware for $2^{3}/_{8}$" mast

FLAT PLATE AREA
.265 ft^2

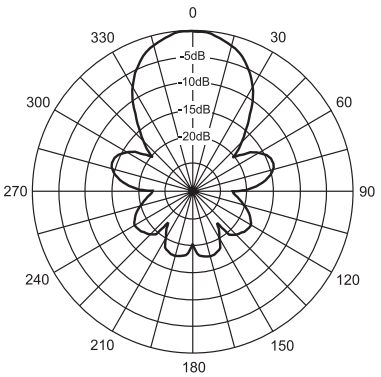
WIND RATING
125 MPH

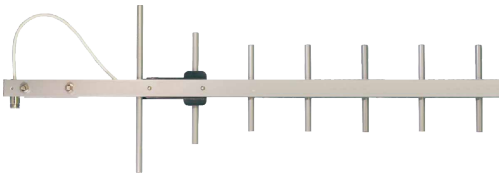
WIND LOAD
15.9 lbs.

HORIZONTAL PATTERN



VERTICAL PATTERN





4079

12 dBi GAIN
915MHz BAND 7 ELEMENT HEAVY DUTY YAGI

FEATURES

- **Rugged and Weatherproof**
- **Lightweight Aluminum**
- **SS Mounting Hardware Included**
- **Wind Survival to 125 MPH**

DESCRIPTION

Yagi antennas achieve more gain than vertical antennas by concentrating radiation in a single direction. Their reduced gain from the back end helps keep other signals from interfering with normal operation. The front to back ratio is an important characteristic of a yagi antenna.

A yagi antenna can be operated with the elements mounted vertically or horizontally, but the most common use for industrial wireless is vertical. The transmitting and receiving antenna must both have the same element polarization for satisfactory operation. A large loss in signal is experienced when the elements are crossed polarized.

When a vertical omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in interference due to the front to back ratio gain reduction.

These heavy duty yagi antennas are constructed of 1" aluminum U channel with 3/8" solid elements. All exposed areas are coated with UV polyester. The balun assembly is filled and sealed with elastomeric thermoplastic.

The connector is a Type N Female on a 12" teflon pigtail cable..

SPECIFICATIONS

ELECTRICAL

GAIN
11dBi
Front to Back Ratio
20dB

FREQUENCY
900-930MHz

IMPEDANCE
50 ohms

VSWR
<2:1

VERT BEAMWIDTH
50°

HORIZ BEAM WIDTH
55°

POWER RATING
300 watts

CONNECTOR
Type N Female on 12" Teflon Pigtail

MECHANICAL

MATERIAL
1" aluminum U channel boom
3/8" solid elements

FINISH
UV inhibited polyester coat

LENGTH
26"

WEIGHT
<4 lbs.

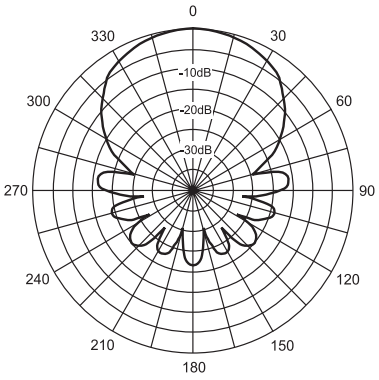
MOUNT
Stainless Hardware for $2\frac{3}{8}$" mast

FLAT PLATE AREA
.265 ft^2

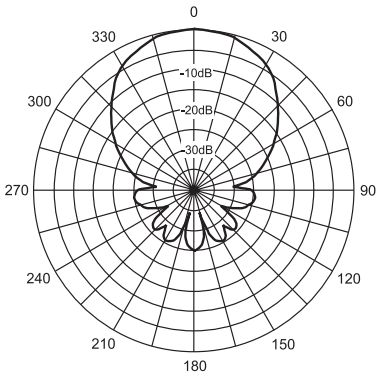
WIND RATING
125 MPH

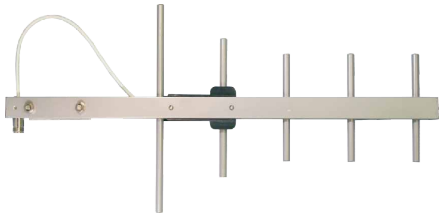
WIND LOAD
15.9 lbs.

HORIZONTAL PATTERN



VERTICAL PATTERN





4078

11 dBi GAIN
915MHz BAND 5 ELEMENT HEAVY DUTY YAGI

FEATURES

- **Rugged and Weatherproof**
- **Lightweight Aluminum**
- **SS Mounting Hardware Included**
- **Wind Survival to 125 MPH**

DESCRIPTION

Yagi antennas achieve more gain than vertical antennas by concentrating radiation in a single direction. Their reduced gain from the back end helps keep other signals from interfering with normal operation. The front to back ratio is an important characteristic of a yagi antenna.

A yagi antenna can be operated with the elements mounted vertically or horizontally, but the most common use for industrial wireless is vertical. The transmitting and receiving antenna must both have the same element polarization for satisfactory operation. A large loss in signal is experienced when the elements are crossed polarized.

When a vertical omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in interference due to the front to back ratio gain reduction.

These heavy duty yagi antennas are constructed of 1" aluminum U channel with 3/8" solid elements. All exposed areas are coated with UV polyester. The balun assembly is filled and sealed with elastomeric thermoplastic.

The connector is a Type N Female on a 12" teflon pigtail cable.

SPECIFICATIONS

ELECTRICAL

GAIN
11dBi
Front to Back Ratio
18dB

FREQUENCY
866-960MHz

IMPEDANCE
50 ohms

VSWR
<2:1

VERT BEAM WIDTH
55°

HORIZ BEAM WIDTH
65°

POWER RATING
300 watts

CONNECTOR
Type N Female on 12" Teflon Pigtail

MECHANICAL

MATERIAL
1" aluminum U channel boom
3/8" solid elements

FINISH
UV inhibited polyester coat

LENGTH
21"

WEIGHT
<4 lbs.

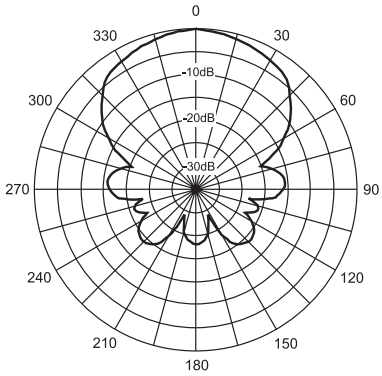
MOUNT
Stainless Hardware for $2^3/_8$" mast

FLAT PLATE AREA
.206 ft^2

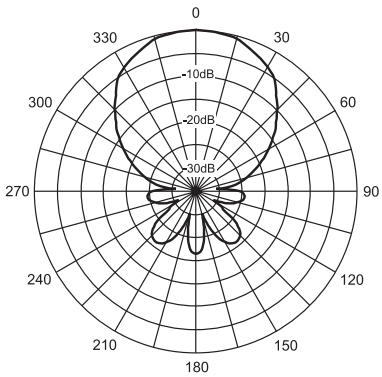
WIND RATING
125 MPH

WIND LOAD
12.3 lbs.

HORIZONTAL PATTERN



VERTICAL PATTERN



4009

8 dBi GAIN
915MHz BAND 3 ELEMENT HEAVY DUTY YAGI

FEATURES

- **Rugged and Weatherproof**
- **Lightweight Aluminum**
- **SS Mounting Hardware Included**
- **Wind Survival to 125 MPH**

DESCRIPTION

Yagi antennas achieve more gain than vertical antennas by concentrating radiation in a single direction. Their reduced gain from the back end helps keep other signals from interfering with normal operation. The front to back ratio is an important characteristic of a yagi antenna.

A yagi antenna can be operated with the elements mounted vertically or horizontally, but the most common use for industrial wireless is vertical. The transmitting and receiving antenna must both have the same element polarization for satisfactory operation. A large loss in signal is experienced when the elements are crossed polarized.

When a vertical omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in interference due to the front to back ratio gain reduction.

These heavy duty yagi antennas are constructed of 1" aluminum U channel with 3/8" solid elements. All exposed areas are coated with UV polyester. The balun assembly is filled and sealed with elastomeric thermoplastic.

The connector is a Type N Female on a 12" teflon pigtail cable.

SPECIFICATIONS

ELECTRICAL

GAIN
8dBi
Front to Back Ratio
15dB

FREQUENCY
900-930MHz

IMPEDANCE
50 ohms

VSWR
<2:1

VERT BEAM WIDTH
70°

HORIZ BEAM WIDTH
90°

POWER RATING
300 watts

CONNECTOR
Type N Female on 12" Teflon Pigtail

MECHANICAL

MATERIAL
1" aluminum U channel boom
3/8" solid elements

FINISH
UV inhibited polyester coat

LENGTH
18"

WEIGHT
<4 lbs.

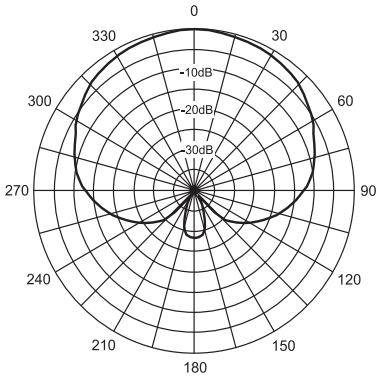
MOUNT
Stainless Hardware for $2^3/_8$" mast

FLAT PLATE AREA
.147 ft^2

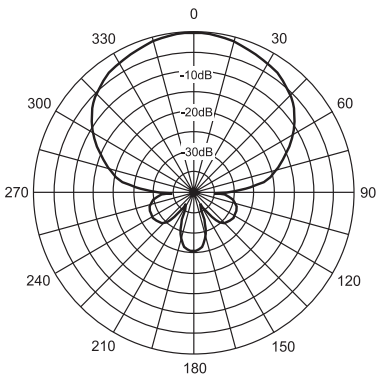
WIND RATING
125 MPH

WIND LOAD
8.8 lbs.

HORIZONTAL PATTERN



VERTICAL PATTERN



4241

8.5 dBi GAIN
915MHz BAND OMNIDIRECTIONAL ANTENNA

FEATURES

- **White Fiberglass Cover**
- **Weatherproof For Outdoor Mounting**
- **Lightweight 5 Pounds**

DESCRIPTION

Vertical omnidirectional antennas radiate in a pattern similar to a horizontal doughnut. Their gain is proportional to their length. Increasing the length makes the doughnut pattern thinner and thereby increases the power radiated horizontally.

Omnidirectional antennas are useful in applications where their use eliminates the need for antenna alignment. Omnidirectional antennas are routinely used on the control end of a polling system.

When an omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in possible interference due to the front to back ratio gain reduction of the yagi antenna.

Designed for outdoor mounting, this 60" vertical antenna offers gain and flexibility in mounting, for ease of installation and dependable performance for medium to long range systems.

The radiating structure of this antenna is encased in a fiberglass radome to provide protection for the copper radiators. The fiberglass radome is ultraviolet inhibited. The heavy wall aluminum mounting sleeve is epoxy coated for superior weather protection.

These antennas are lightweight at 5 lbs. and are designed to survive winds to 125 MPH.

SPECIFICATIONS

ELECTRICAL

GAIN
8.5dBi

FREQUENCY
900-930MHz

IMPEDANCE
50 ohms

BANDWIDTH
30MHz

VSWR
<2.0:1

VERT BEAM WIDTH
15°

POWER RATING
250 watts

CONNECTOR
Type N Female

MECHANICAL

RADIATOR
Copper alloy elements

RADOME
White UV inhibited fiberglass

MOUNTING SLEEVE
Heavy wall epoxy coated aluminum

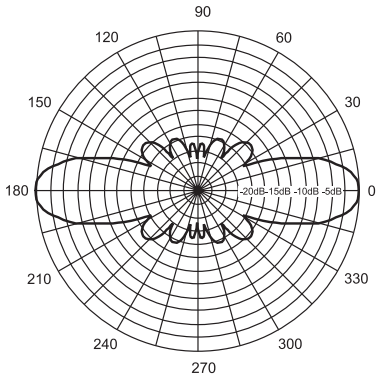
SLEEVE DIAMETER
1.35"

LENGTH
60"

WEIGHT
5 lbs.

WIND SURVIVAL
125 MPH

VERTICAL PATTERN



4275

6 dBi GAIN
915MHz BAND OMNIDIRECTIONAL ANTENNA

FEATURES

- **White Fiberglass Cover**
- **Weatherproof For Outdoor Mounting**
- **Lightweight <3 Pounds**
- **Mounting Hardware Included**

DESCRIPTION

Vertical omnidirectional antennas radiate in a pattern similar to a horizontal doughnut. Their gain is proportional to their length. Increasing the length makes the doughnut pattern thinner and thereby increases the power radiated horizontally.

Omnidirectional antennas are useful in applications where their use eliminates the need for antenna alignment. Omnidirectional antennas are routinely used on the control end of a polling system.

When an omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in possible interference due to the front to back ratio gain reduction of the yagi antenna.

Designed for outdoor mounting, this 27" vertical antenna offers gain and flexibility in mounting, for ease of installation and dependable performance for medium to long range systems.

The radiating structure of this antenna is encased in a fiberglass radome to provide protection for the copper radiators. The fiberglass radome is ultraviolet inhibited.

This antenna is supplied with integrated mounting hardware for easy mounting on a 1 1/2" standard mast.

SPECIFICATIONS

ELECTRICAL

GAIN
6dBi

FREQUENCY
890-970MHz

IMPEDANCE
50 ohms

VSWR
<2:1

VERT BEAM WIDTH
35°

POWER RATING
100 watts

CONNECTOR
Type N Female

MECHANICAL

RADIATOR
Copper structure

RADOME
White UV inhibited fiberglass

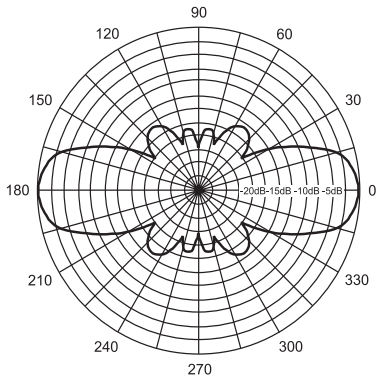
SLEEVE DIAMETER
1.35"

LENGTH
27"

WEIGHT
<3 lbs.

MOUNTING
1 1/2" mast kit (supplied)

VERTICAL PATTERN



4023

2.1 dBi GAIN
915MHz / 2.4GHz DUAL BAND OMNI ANTENNA

FEATURES

- **Dual Band 880-1200MHz / 2.3-2.6GHz**
- **Polyester Coated Brass Radiator**
- **Gold Plated Contacts**
- **Requires Accessory 4024 or 4044 for Mounting**

DESCRIPTION

Vertical omnidirectional antennas radiate in all directions therefore their gain is less than that of a yagi antenna that concentrates radiation in a single direction. This reduced gain limits the effective range of the omnidirectional antenna.

Omnidirectional antennas are useful in applications where their use eliminates the need for antenna alignment. Omnidirectional antennas are routinely used on the control end of a polling system.

When an omnidirectional antenna is used on the control end of a polling system, a yagi can be used on each slave unit for maximum gain and reduction in possible interference due to the front to back ratio gain reduction of the yagi antenna.

This Dual Band antenna has an ultra wide bandwidth for the 880-1200MHz and 2300-2600MHz bands and provides 2.1dBi gain on both.

The brass radiator is coated with a polyester radome for corrosion resistance. The contacts are gold plated for corrosion resistance.

This antenna requires accessory 4024 or 4044 for mounting. Part 4024 is a Type N female connector designed for bulkhead mounting. The other end of the bulkhead mount interfaces with the antenna.

Part 4044 allows the bulkhead connector (4024) to be mounted on a right angle bracket which has hardware to allow mounting the antenna vertically on a vertical pipe.

To insure specified operation, this antenna must have a conductive surface under it when it is mounted. Mounting the antenna on a metal electrical box provides a satisfactory ground plane.

When mounting the antenna on a mast, accessory 4044 provides an adequate ground plane for 2.4GHz operation. When used for 900MHz systems, a larger ground plane is required (4045).

SPECIFICATIONS

ELECTRICAL

FREQUENCY RANGE:
880-1200MHz
2300-2600MHz

GAIN:
2.1dBi

VSWR:
<2:1

IMPEDANCE:
50 ohms

POWER RATING:
200 watts

MECHANICAL

RADIATOR:
Polyester coated Brass

BASE:
ABS, Ultrasonic Brass Insert.

CONTACT:
Gold plated spring loaded contact

LENGTH:
2 3/4"

MOUNTING:
Accessories 4024, 4044, 4045

FINISH:
Black

VERTICAL PATTERN