

METABEE

Spring Loaded Pogo Pins, Connectors & Cable Assemblies





Metabee (Chengdu) Technology Co., Ltd.

180+
Countries

300+
Workers

20,000 M²
Production Workshop

16M
Group Assets

Metabee (Chengdu) Technology Co., Ltd. established in 2022 located in Sichuan Province with convenient transportation. Our associated factory Jiangmen Dosin specialize in producing RF connectors, M series connectors, and cables.

We are committed to being the world's leading Manufacturer of electronic connectors and industrial cables. We have developed more than 20 product series and more than 5,000 varieties. These products have been widely sold to many countries and regions around the world. They are mainly used for outdoor lighting automation machinery, new energy vehicles, charging equipment, electricity generation facilities, and other industries.

We can also support OEM ODM and customized related products. All products have owned American UL, German TUV, and Europe CE ROHS certifications and have several design patents. Our associated factory has production workshop with an area of 20,000 square meters, more than 300 employees, 30 international advanced production lines, and tens of precision testing equipment. Moreover, we have constructed a specialized laboratory for product research and development. Our reliable product quality, good service, and rapid technical have helped us win many customers in China and overseas markets.

Metabee (Chengdu) Technology Co., Ltd. has become the leading technology and scale Enterprise in the connector field. We have a reliable reputation among our customers because of our professional services, quality products, and competitive prices. We welcome customers from home and abroad to cooperate with us for Common success.



Spring Loaded Pogo Pins & Connectors

1. Overview

Metabee Spring-Loaded Pins consist of a specially designed barrel and steel spring, available either as discrete components or integrated into an insulator carrier or magnetic assembly. They are trusted across multiple industries to deliver secure, highly reliable connections for a wide range of applications. This series is highly customizable to meet specific stroke lengths, heights, and electrical requirements. We utilize high-temperature plastics for our insulators, and our versatile molding capabilities allow us to create diverse shapes and styles tailored to your specific needs.

Features & Specifications

Features:

- High reliability, corrects connection between uneven surfaces and satisfies high vibration connection requirements;
- Increased durability for heavy duty applications;
- Highly customizable—Size, stroke, shape, pin count, etc.
- Low cost and easily integrated.

Packaging:

Anti-ESD plastic trays or tubes

Specifications:

Material:

Standard Insulator: PA46, rated UL94V-0

Optional Hi-Temp insulator: LCP

Insulator Color: Black

Shell: Copper Alloy

Spring: Stainless Steel

Contact Plating: Gold Flash over Nickel Underplate Overall

Electrical:

Operating Voltage: 12 Volts;

Current Rating: 1-3 Amps depending on spring height and construction option;

Contact Resistance at Working Stroke: 20 mohms max before test, 60 mohms mas after test;

Insulation Resistance: 100 M Ω min.

Dielectric Withstanding Voltage: 100 VRMS @ 60Hz.

Mechanical:

Spring Force: 90 +/- 20gf @ 1mm working stroke (3.30mm).

70 +/- 20gf @ 1mm working stroke (4.30mm and 5.30mm)

Full Stroke: 1.40mm.

Temperature Ratings:

Operating Temperature: -30°C to +85°C

Pogo Pin Part Number Configuration

PH - MH5F - 1113 - 200

Series:

PH = Discrete Pogo Pin

Gender, Mounting Orientation & Type:

1st Character for gender:

M = Male

F = Female

2nd Character for Mounting Orientation:

V = Straight Mount

H = Right Angle Mount

3rd and 4th Character for Type:

F = SMT

E = Side SMT

P = DIP

D = Double Head

S = Solder Cup

T = Thread

5F = High Current 5A SMT

5P = High Current 5A DIP

5S = High Current 5A Solder Cup

AF = High Current 10A SMT

C = Customized Cable

RP = Reverse Pogo Pin

Positions:

First 2 Characters for Barrel Height

11 = 1.10mm

13 = 1.30mm

15 = 1.50mm

17 = 1.70mm

19 = 1.90mm

20 = 2.00mm

23 = 2.30mm

26 = 2.60mm

30 = 3.00mm

33 = 3.30mm

36 = 3.60mm

43 = 4.30mm

50 = 5.00mm

53 = 5.30mm

55 = 5.50mm

73 = 7.30mm

A3 = 10.30mm

C3 = 12.30mm

13 = 1.30mm

Last 2 Characters for Barrel Height

13 = 1.30mm

15 = 1.50mm

17 = 1.70mm

19 = 1.90mm

21 = 2.10mm

23 = 2.30mm

25 = 2.50mm

27 = 2.70mm

29 = 2.90mm

31 = 3.10mm

33 = 3.30mm

35 = 3.50mm

37 = 3.70mm

40 = 4.00mm

42 = 4.20mm

44 = 4.40mm

45 = 4.50mm

50 = 5.00mm

60 = 6.00mm

64 = 6.40mm

65 = 6.50mm

70 = 7.00mm

75 = 7.50mm

80 = 8.00mm

85 = 8.50mm

90 = 9.00mm

A0 = 10.0mm

B0 = 11.0mm

B5 = 11.5mm

C0 = 12.0mm

C5 = 12.5mm

D0 = 13.0mm

D5 = 13.5mm

E0 = 14.0mm

E5 = 14.5mm

F0 = 15.0mm

Application:

1 = Digital

2 = Analog

Pogo Pin Connector Part Number Configuration

PH1 - C - 3A - 40 - +MHP(PPG)

Series:	Custom Part	Pitch & Insulation Height:	Application:	+MHP(PPG):
PH1 = Pogo Pin Connector Single Row PH2 = Pogo Pin Connector Double Row		<p><i>1st Character for Pitch</i></p> <p>3 = 2.54mm 5 = 2.50mm 6 = 1.8mm 7 = 2.7mm 8 = 5.0mm 9 = 1.7mm A1 = 4.0mm A2 = 1.8/1.5mm</p> <p><i>2nd Character for Insulation Height</i></p> <p>A = 1.27mm B = 1.50mm C = 3.80mm D = 4.00mm E = 2.00mm F = 2.50mm G = 3.00mm H = 4.50mm H = 3.50mm</p>	<p>Single Row = 01 thru 40 Dual Row = 02 thru 40</p>	<p>Follow by Discrete Pogo Pin PPG P/N - Standard (Ex, MHP-1113-11) Non-Standard or Customization (Ex, MVD-RD07511)</p>

Pogo Pin Cable Assembly Part Number Configuration

CA - ST2 - PH1 - 25410 - M

Series:	Orientation & Positions:	Row of Pin Header:	Pitch & Connector Length:	Gender:
CA = Cable Assembly	<p><i>First Character for Mounting Orientation:</i></p> <p>ST = Straight RA = Right Angle</p> <p><i>Second Character for Positions:</i></p> <p>2 = 2 Pins</p>	<p>1 = Single Row 2 = Dual Row R = Round Shape Connector w/magnet</p>	<p><i>First Character for Pitch:</i></p> <p>254 = 2.54mm</p> <p><i>Second Character for Connector Length:</i></p> <p>10 = 10mm</p>	<p>M = Male F = Female M1, M2, M3, ... for new type</p>

Spring Loaded Pogo Pins

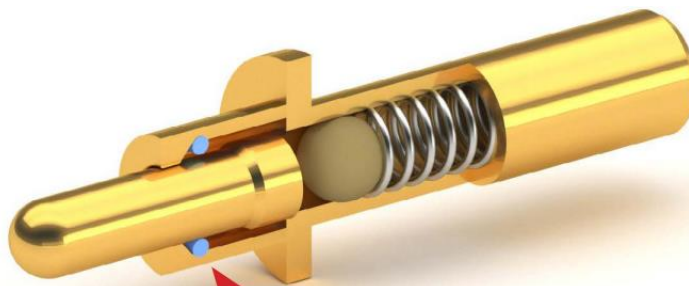
Metabee discrete spring-loaded pins are manufactured with precision from the highest quality brass barrels and plungers, supported by industry-leading spring steel to support long life cycles and high reliability. Our pins come in a wide range of heights, stroke lengths, mounting orientations, and electrical capabilities.



Part number	Gender	Mounting orientation	Termination type	Options
PH-MH5P-XXXX	Male	Right Angle	Through Hole	High Current (5 Amps)
PH-MHP-XXXX	Male	Right Angle	Through Hole	
PH-MV5F-XXXX	Male	Vertical	Surface Mount	High Current (5 Amps)
PH-MV5P-XXXX	Male	Vertical	Through Hole	High Current (5 Amps)
PH-MV5S-XXXX	Male	Vertical	Solder Cup	High Current (5 Amps)
PH-MVF-XXXX	Male	Vertical	Surface Mount	
PH-MVP-XXXX	Male	Vertical	Through Hole	
PH-MVS-XXXX	Male	Vertical	Solder Cup	
PH-MVT-XXXX	Male	Vertical	Threaded	

Waterproof Spring Loaded Pogo Pins

Metabee “Waterproof” Discrete Pogo Pins are manufactured with the same precision as our standard discrete pogo pins, with an added rubber seal. These pins are IP-rated for water resistance and suitable for outdoor applications in wet environments.



O-Ring Seal

Part number	Termination type
PH-MVP-26515-10-10-WP	Through Hole

Spring Loaded Pogo Pin Connectors

Metabee Spring-Loaded Connectors consist of a precision-engineered pin, barrel, and steel spring, available with or without an insulator carrier. Trusted across multiple industries, they deliver secure, highly reliable connections for a diverse range of applications. This series is fully customizable to meet your exact stroke lengths, working heights, and electrical requirements. Utilizing high-temperature plastics for our insulators, our versatile molding capabilities allow us to create custom shapes and configurations tailored to your specific applications.

Dual Row,
Vertical, Solder
Cup



Dual Row,
Vertical, Through
Hole



Dual Row,
Vertical, Surface
Mount



Single Row,
Vertical, Through
Hole



Single Row, Right
Angle, Through
Hole



Single Row,
Vertical, Surface
Mount



Part number	Rows	Mounting orientation	Termination type
PH1-3B-XX-MVF-XXXX	Single Row	Vertical	Surface Mount
PH1-3B-XX-MVP-XXXX	Single Row	Vertical	Through Hole
PH1-3B-XX-MVS-XXXX	Single Row	Vertical	Solder Cup
PH2-3B-XX-MVF-XXXX	Dual Row	Vertical	Surface Mount
PH2-3B-XX-MVF-XXXX-C1	Dual Row	Vertical	Surface Mount
PH2-3B-XX-MVP-XXXX	Dual Row	Vertical	Through Hole
PH2-3B-XX-MVS-XXXX	Dual Row	Vertical	Solder Cup
PH2-3B-XX-MVS-XXXX-C1	Dual Row	Vertical	Solder Cup

Special Spring Loaded Pogo Pin Connectors

Metabee offers comprehensive design customization for our spring-loaded connectors. Below, you will find a selection of customized connectors tailored for specific applications, all of which are readily available for purchase. We also welcome requests for unique shapes, sizes, and specific features to ensure a perfect fit for any application requirement. During the design phase, our team provides rapid turnaround times along with complete 2D/3D modeling. From concept to production, designing a custom spring-loaded connector with Metabee is a seamless process focused on delivering total customer satisfaction.



37 Pin Printer
 Cartridge Spring
 Loaded
 Connector



24 Pin Printer
 Cartridge Spring
 Loaded
 Connector



PART NUMBER	PRODUCT TYPE	PIN COUNT	HIGH SPEED DATA RATE
ADT-AN7975-C1	Printer Cartridge Connectors	24 Pins	
ADT-AN7975-C2	Printer Cartridge Connectors	37 Pins	
HDR-F-18-S-01-5	High Speed Data Rate Spring Loaded Set		High Speed Data Rate
HDR-M-18-S-01-5	High Speed Data Rate Spring Loaded Set		High Speed Data Rate

Mating Pad Connectors

Metabee Mating Pad Connectors provide the ideal solution for our line of spring-loaded connectors. Featuring a .100" [2.54mm] pitch, vertical mounting orientation, and through-hole termination, these connectors are available in single or dual-row configurations. With position options ranging from 1 to 40, they offer highly versatile compatibility for a wide array of pogo pin products.



PART NUMBER	ROWS	CENTERLINE	POSITIONS	GENDER	MOUNTING ORIENTATION	TERMINATION TYPE
PH1-3F-XX-FVP-24415-C1	Single Row	.100" [2.54mm]	01-40	Female	Vertical	Through Hole
PH2-3F-XX-FVP-24415-C1	Dual Row	.100" [2.54mm]	01-40	Female	Vertical	Through Hole

Magnetic Cable Assemblies & Connectors

Magnetic cable assemblies and connectors represent a rapidly growing and highly sought-after product category. Leveraging over 30 years of connector expertise, Metabee has developed a premier line of custom magnetic assembly solutions. Available in a wide variety of configurations, these products deliver several distinct advantages to the market:

- **Effortless Connectivity:** Intuitive blind-mating design for quick and easy connections.
- **Rugged Reliability:** Advanced waterproof capabilities for demanding environments.
- **Versatile Design:** A broad selection of pin counts and shapes to suit any requirement.
- **Enhanced User Experience:** Highly user-friendly and exceptionally intuitive.
- **Safe & Quick Detachment:** Easily snaps away to prevent equipment damage in dynamic real-world applications (e.g., fitness, medical, and outdoor gear).



Part number	Type	Pin count	Shape
CA-RA2-PHR-15103-M	Cable Assembly	1	Circular
CA-RA2-PHR-32572-M	Cable Assembly	1	Circular
CA-RA2-PHR-34113-M-WT	Cable Assembly	1	Circular
CA-RA4-PHI-181279-M	Cable Assembly	4	Rectangular
CA-RA4-PHI-1888-M	Cable Assembly	4	Rectangular
CA-RA5-PHI-25736-M	Cable Assembly	5	Rectangular
CA-ST2-PHI-25410-M	Cable Assembly	2	Square
CA-ST2-PHI-558-M	Cable Assembly	2	Rounded Rectangular
CA-ST2-PHR-198-M	Cable Assembly	1	Circular
CA-ST2-PHR-202-M	Cable Assembly	1	Circular
CA-ST5-PHI-18S-M	Cable Assembly	5	Rectangular
CA-ST6-PH2-254105-M	Cable Assembly	6	Square
CA-USBAM-PH-3E02-MVCC	Cable Assembly	2	Rectangular
CA-USBAM-PH-3E03-MVCC	Cable Assembly	3	Rectangular
CA-USBAM-PH-3E04-MVCC	Cable Assembly	4	Rectangular
CA-USBAM-PH-3E05-MVCC	Cable Assembly	5	Rectangular
PH-MV15F-9012	Connector	1	Circular
PHI-3L-02-FVMP-4560	Connector	2	Rectangular
PHI-3L-03-FVMP-4560	Connector	3	Rectangular
PHI-3L-04-FVMP-4560	Connector	4	Rectangular
PHI-3L-05-FVMP-4560	Connector	5	Rectangular
PHI-C18395-05-FVP-585	Connector	5	Rectangular
PHI-C184-05-FVP-59	Connector	5	Rectangular
PHI-C1849-04-MVP-5S4S	Connector	4	Rounded Rectangular
PHI-C1853-04-MVP-7365	Connector	4	Rounded Rectangular
PHI-C1855-05-FHP-728	Connector	5	Rectangular

Part number	Type	Pin count	Shape
PHI-C1857-04-FHP-5	Connector	4	Rounded Rectangular
PHI-C18696-05-MVP-865975	Connector	5	Rectangular
PHI-C2118S-07-FVF-153	Connector	7	Rectangular
PHI-C2135-07-MVP-4351	Connector	7	Rectangular
PHI-C2446-08-MHP-826996	Connector	8	Rectangular
PHI-C24595-08-FHP-709	Connector	8	Rectangular
PHI-C2520-02-MVF-4565	Connector	2	Rectangular
PHI-C2524-05-MVF-2533	Connector	5	Rectangular
PHI-C2535-05-FHP-52	Connector	5	Rectangular
PHI-C25355-04-MVP-2635	Connector	4	Rectangular
PHI-C25381-05-MVP-464575	Connector	5	Rectangular
PHI-C315-03-MVF-3550	Connector	3	Rectangular
PHI-C365-04-FVRP-605685	Connector	4	Rounded Rectangular
PHI-C449-06-MHP-965A85	Connector	6	Rectangular
PHI-C463-06-FHP-71	Connector	6	Rectangular
PH2-C18575-14-MHP-A55935	Connector	14	Trapezoid
PH2-C18765-14-FHP-8	Connector	14	Trapezoid
PH2-C2528-08-MVP-40735	Connector	8	Rectangular
PH2-C25410-06-FVP	Connector	6	Square
PH2-C266-12-MVP-66	Connector	12	Rectangular
PH2-C272-12-FVP-76	Connector	12	Rectangular
PH2-C665-06-FVP-65S	Connector	6	Rectangular
PH2-C665-06-MVP-7792	Connector	6	Rectangular
PHR-C4777-02-FVP-800	Connector	2	Circular
PHR-C4777-02A-FVP-800	Connector	2	Circular

Thanks for Watching!

Our team of passionate experts brings a wealth of experience to the table, ready to collaborate with you and unlock your full potential. By joining forces, we can create innovative solutions and achieve remarkable things.



CONTACT US

Phone: +86 159 2624 1606

E-mail: sales@metabeeai.com

Web: www.metabeeai.com & www.metabee.com

Address: Room 601, Building 3, Wanhe Center, Guanghua North 3rd Road, Qingyang District, Chengdu, China