

# *Daitron*

## Hermetic Connectors

Glass Seal Connectors



DAITRON CO., LTD.

# DPT02 series

## Features

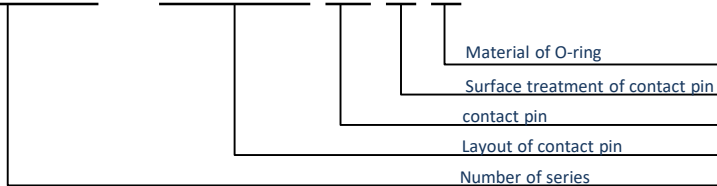
- Complies with MIL-DTL-26482 standard , Small and Highly Reliable
- Stainless Metal Housing - Less corrosion
- Superior airtight( $1 \times 10^{-10}$ Pa m<sup>3</sup>/sec) with glass sealing (helium gas test)
- DPT02 series could meet several requirements of heat resistance and vibration resistance , water resistance and water proof under the open sky and harsh environment

### ■structure and surface treatment

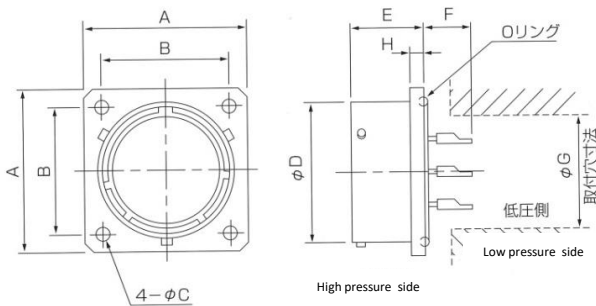
- Flange of metal housing is grooved for O-ring
- Flange of metal housing is finished surface with nickel plating

### ■Parts Number

D P T 0 2 - 1 6 - 2 6 P X Y



X	surface treatment of contact pin	Y	Material of O-ring
1	Nickel plating	1	silicon
2	Gold plating	2	Nitrile
3	others	3	Fluorine
		4	others



### ■characteristic

Insulation Resistance	Over 1000MΩ
Dielectric with standing voltage *	AC500Vrms
Rated Amps	Contact size 16 10A Contact size 20 5A
Contact Resistance	Contact size 16 65mV or less Contact size 20 70mV or less

\* Please contact us about high dielectric with standing voltage

Housing size	Part number	A	B	φC	φD	E	F	φG	H	O-ring size
8	DPT02-8-XXP	20.6	15.1	3.2	12.01	13	8	8	2	AS568-013
12	DPT02-12-XXP	26.6	20.6	3.2	19.05	13	8	14	2	AS568-017
14	DPT02-14-XXP	29.0	23.0	3.2	22.23	13	8	17	2	AS568-019
16	DPT02-16-XXP	31.4	24.6	3.2	25.40	13	8	20	2	AS568-021
18	DPT02-18-XXP	33.7	27.0	3.2	28.58	13	8	22	2	AS568-023
20	DPT02-20-XXP	37.0	29.4	3.2	31.75	17	8	25	2.7	AS568-013
22	DPT02-22-XXP	40.1	31.8	3.2	34.93	17	8	29	2.7	AS568-013

# DPT02 series

## CONTACT arrangement

Ray out	8-4	12-3	12-8	12-10
Size	20	16	20	20
number	4	3	8	10
Ray out	14-5	14-18	14-19	16-18
Size	16	20	20	16
number	5	18	19	8
Ray out	16-26	18-11	18-32	20-16
Size	20	16	20	16
number	26	11	32	16
Ray out	20-41	22-21	22-34	22-55
Size	20	16	20	20
number	41	21	34	55

# HMS02 series

## Features

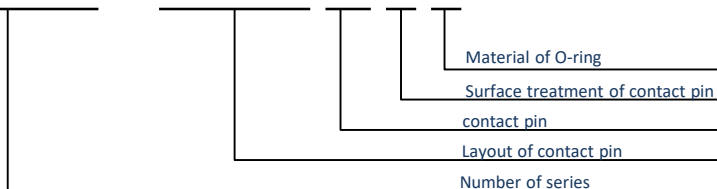
- Complies with MIL-DTL-5015 standard to meet the requirements of compact and high reliability
- It has no practical problem to corrode the metal housing by using Stainless
- It is providing superior airtight( $1 \times 10^{-10}$ Pa m<sup>3</sup>/sec) with glass sealing(helium gas test)
- HMS02 series are possible to meet requirements heat resistance and vibration resistance , water resistance and water proof under the open sky and hash conditions

## ■structure and surface treatment

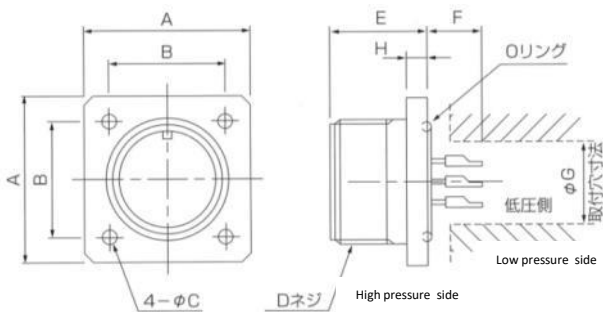
- Flange of metal housing is grooved for O-ring
- Flange of metal housing is finished surface with nickel plating

## ■Parts Number

H M S 0 2 - 2 0 - 2 9 P X Y



X	surface treatment of contact pin	Y	Material of O-ring
1	Nickel plating	1	silicon
2	Gold plating	2	Nitrile
3	others	3	Fluorine
		4	others



## ■characteristic

Insulation Resistance	Over 1000MΩ
Dielectric with standing voltage *	AC500Vrms
Rated Amps	Contact size 8 46A Contact size 12 23A Contact size 16 13A
Contact Resistance	Contact size 8 75mV or less Contact size 12 75mV or less Contact size 16 75mV or less

\* Please contact us about high dielectric with standing voltage

Housing size	Part number	A	B	φC	D-screw	E	F	φG	H	O-ring size
12S	HMS02-12S-XXP	27.8	20.7	3.2	0.750-20UNEF	17.1	11	11	2.8	AS568-017
14S	HMS02-14S-XXP	30.2	23.1	3.2	0.875-20UNEF	17.1	11	13	2.8	AS568-019
16	HMS02-16-XXP	32.6	24.7	3.2	1.000-20UNEF	21.9	18	16	3.4	AS568-021
18	HMS02-18-XXP	35.0	27.0	3.2	1.125-18NEF	22.7	17	19	3.7	AS568-023
20	HMS02-20-XXP	38.1	29.4	3.2	1.250-18NEF	22.7	17	23	3.7	AS568-025
22	HMS02-22-XXP	41.3	31.8	3.2	1.375-18NEF	22.7	17	26	3.7	AS568-027
24	HMS02-24-XXP	44.5	35.0	4.2	1.500-18NEF	24.3	15	29	3.7	AS568-029
28	HMS02-28-XXP	50.8	39.7	4.2	1.750-18NS	24.3	15	34	3.7	AS568-030
36	HMS02-36-XXP	63.5	49.3	4.5	2.250-16UN	26.2	13	46	4.0	AS568-034

## HMS02 series

### CONTACT arrangement

Ray out	12S-3	14S-2	14S-6	16-10
Size	16	16	16	12
number	2	4	6	3
Ray out	18-1	18-11	20-15	20-27
Size	16	12	12	16
number	10	5	7	14
Ray out	20-29	22-2	22-14	24-28
Size	16	8	16	16
number	17	3	19	24
Ray out	28-11	28-21	36-10	
Size	12/16	16	16	
number	4/18	37	48	

## DD series

### Features

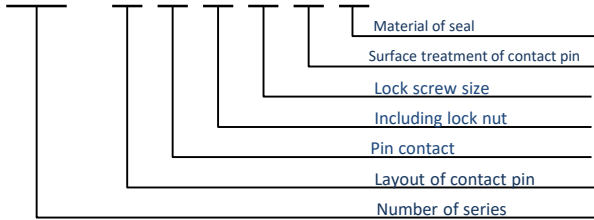
- DD series are designed for D-sub type
- It has no practical problem to corrode the metal housing by using Stainless
- It is providing superior airtight( $1 \times 10^{-10}$ Pa m<sup>3</sup>/sec) with glass sealing(helium gas test)

### ■structure and surface treatment

- Flange of metal housing is grooved for Seal
- Flange of metal housing is finished surface with nickel plating

### ■Parts Number

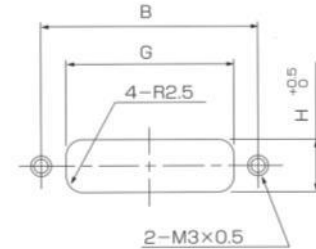
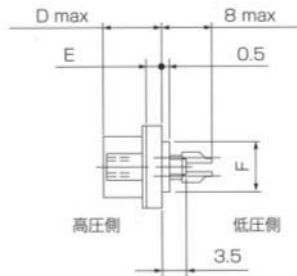
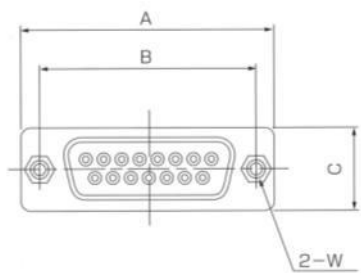
DD-15PLWX Y



W	Lock screw size
U	NO.4-40UNC
M	M2.6 x 0.45

X	surface treatment of contact pin
1	Nickel plating
2	Gold plating
3	others

Y	Material of seal
1	silicon
2	Nitrile
3	Fluorine
4	others



取付部推奨寸法

Part number	A number of Pin	A	B	C	D	E	F	G	H	W
DD-9PLWXY	9	30.8	25.0	12.6	10.5	2.5	7.5	18.0	8	No.4-40UNC or M2.6 x 0.45
DD-15PLWXY	15	39.2	33.3	12.6	10.5	2.5	7.5	26.0	8	
DD-25PLWXY	25	53.0	47.0	12.6	10.5	2.5	7.5	40.0	8	
DD-37PLWXY	37	69.5	63.5	12.6	12.0	4.5	7.5	56.0	8	
DD-50PLWXY	50	66.9	61.1	15.4	12.0	4.5	10.5	51.5	11	

### [ specification ]

- 1) Service Rating : 3A
- 2) Insulation Resistance : 1000MΩ or more (at DC500V)
- 3) Dielectric With standing Voltage : AC500Vms
- 4) air leakage efficiency : under  $1 \times 10^{-10}$ Pa m<sup>3</sup>/sec
- 5) Surface treatment : Nickel plating



バッキン形状

## DDB series

### Features

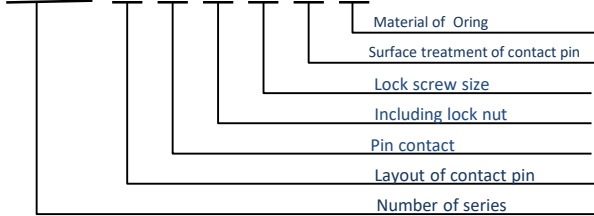
- DDB series are designed for D-sub type
- It has no practical problem to corrode the metal housing by using Stainless
- It is providing superior airtight( $1 \times 10^{-10}$ Pa m<sup>3</sup>/sec) with glass sealing(helium gas test)

### structure and surface treatment

- Flange of metal housing is grooved for seal
- Flange of metal housing is finished surface with nickel plating

### Parts Number

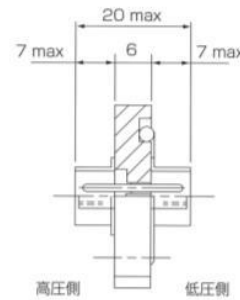
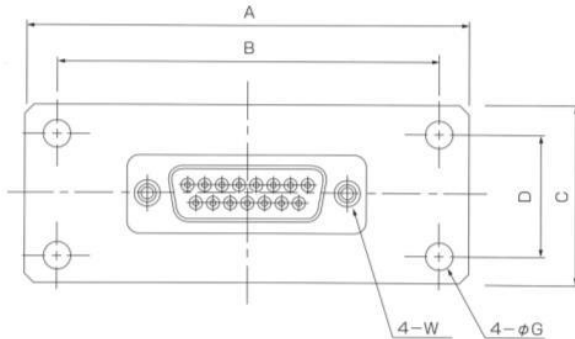
DDB-15PLWX Y



W	Lock screw size
U	N0.4-40UNC
M	M2.6 x 0.45

X	surface treatment of contact pin
1	Nickel plating
2	Gold plating
3	others

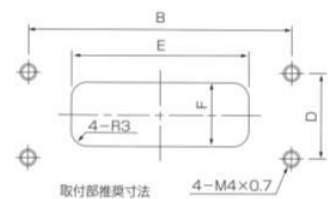
Y	Material of seal
1	silicon
2	Nitrile
3	Fluorine
4	others



Part number	A number of Pin	A	B	C	D	E	F	φG	W	O-ring size
DDB-9PLWXY	9	61.6	51.6	30	20	33.2	15	4.5	No.4-40UNC or M2.6 x 0.45	AS568-124
DDB-15PLWXY	15	73.0	63.0	30	20	42.2	15	4.5		AS568-128
DDB-25PLWXY	25	85.0	75.0	30	20	55.0	15	4.5		AS568-133
DDB-37PLWXY	37	100.0	91.0	30	20	72.0	15	4.5		AS568-140
DDB-50PLWXY	50	98.0	88.0	33	23	70.0	18	4.5		AS568-140

### [ specification ]

- 1) Service Rating : 3A
- 2) Insulation Resistance : 1000MΩ or more (at DC500V)
- 3) Dielectric With standing Voltage : AC500Vms
- 4) air leakage efficiency : under  $1 \times 10^{-10}$ Pa m<sup>3</sup>/sec
- 5) Surface treatment : Nickel plating



## ■ Features

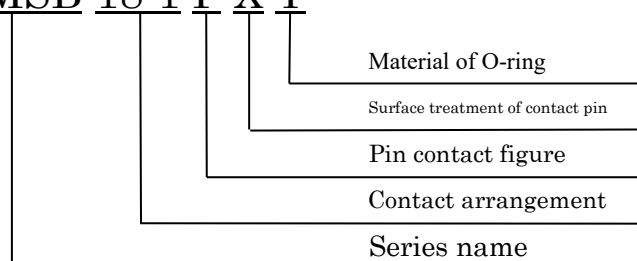
- Through bulkhead type Glass-sealed Hermetic Connector that complies with MIL-DTL-5015 standard
- Stainless Metal Housing – Low possibility of corrosion
- Superior Airtight ( $1.0 \times 10^{-10}$ Pa·m<sup>3</sup>/sec or less) with glass-sealed(helium gas test)  
Moreover, can be used in harsh environments with excellent heat resistance, vibration resistance
- Can be used at outdoors with the waterproof and drip-proof structure (when mated)

## ■ Structure and Surface treatment

- Flange of shell is groove for O-ring
- Flange of shell is finished surface with nickel plating

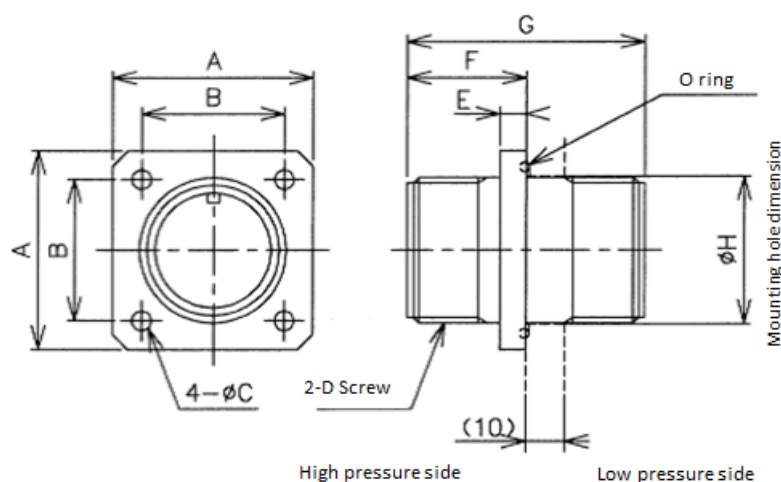
## ■ Part number

**HMSB-18-1 P X Y**



X	Surface treatment of contact pin
1	Nickel plate
2	Gold plate
3	Others

Y	Material of O-ring
1	Silicon
2	Nitrile
3	Fluorine
4	Others



## ■ Electrical characteristic

Insulation resistance	1000MΩ or higher (at DC500V)
Dielectric Withstanding Voltage ※	AC500Vrms
Rates current	Contact size 16 13A
Contact resistance (Voltage drop)	Contact size 16 less than 75mV

※ Please contact us for high withstand voltage specifications.

(Unit: mm)

Shell size	Part number	A	B	φC	D screw	E	F	G	φH	O-ring size *
14S	HMSB-14S-2PXY	35	27	3.2	.875-20UNEF	3	18	43	23	AS568-023
18	HMSB-18-1PXY	42	32	4.2	1.125-18UNEF	4	23	52	29	AS568-027
20	HMSB-20-29PXY	45	35	4.2	1.250-18UNEF	4	23	52	32.5	AS568-029
24	HMSB-24-28PXY	53	42	5.5	1.500-18UNEF	4	25	56	38.5	AS568-031
36	HMSB-36-10PXY	72	57	5.5	2.250-16UN	4	26	58	58	AS568-037

- Please ask us for custom requirements such as material, mounting dimensions, shape, high pressure specifications, etc.
- Please ask us if the pressure direction is reversed.
- Various contact arrays are possible production
- Please note that the product specifications are subject to change without notice due to improvements, etc.



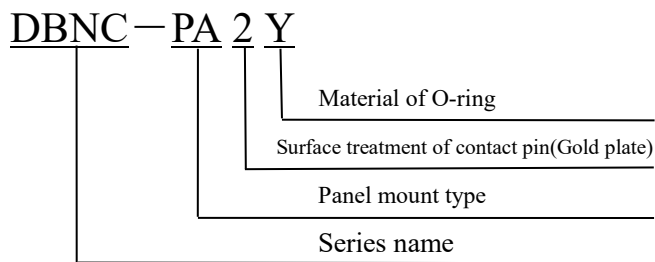
## ■ Features

- Through bulkhead type BNC coaxial Glass Hermetic Connector
- Stainless Metal Housing – Low possibility of corrosion
- Superior Airtight ( $1.0 \times 10^{-10}$ Pa m<sup>3</sup>/sec or less) with glass-sealed (helium gas test) , and it maintains high reliability.

## ■ Structure and Surface treatment

- Flange of shell is groove for O-ring
- Flange of shell is finished surface with nickel plating

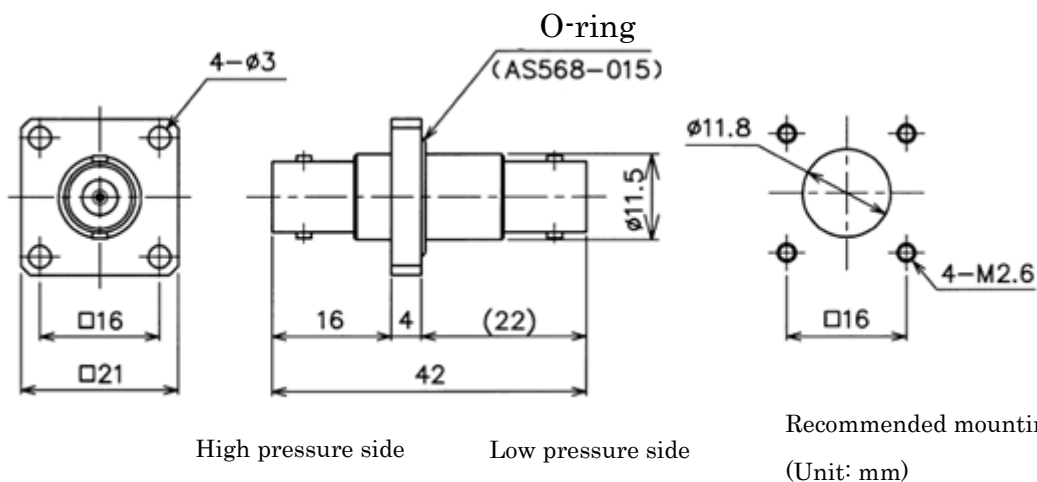
## ■ Parts Number



Y	Material of O-ring
1	Silicon
2	Nitrile
3	Fluorine
4	Others

## ■ Electrical characteristic

Characteristic impedance	50Ω
Insulation resistance	1000MΩ or higher (at DC500V)
Dielectric withstanding voltage	AC500Vrms



- Please contact us for custom requirements such as material, mounting dimensions, shape, high pressure specifications, etc.  
(Floating type of production is also available)
- Please ask us if the pressure direction is reversed.
- Please note that the product specifications are subject to change without notice due to improvements, etc.

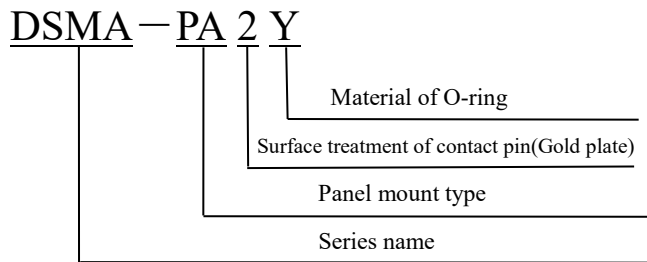
## ■ Features

- Through bulkhead type SMA coaxial Glass-sealed Hermetic Connector
- Shell is made of stainless steel – Low possibility of corrosion
- Superior Airtight ( $1 \times 10^{-10}$ Pa m<sup>3</sup>/sec or less) with glass-sealed (helium gas test), and it maintains high reliability.

## ■ Structure and Surface treatment

- Flange of shell is groove for O-ring
- Flange of shell is finished surface with nickel plating.

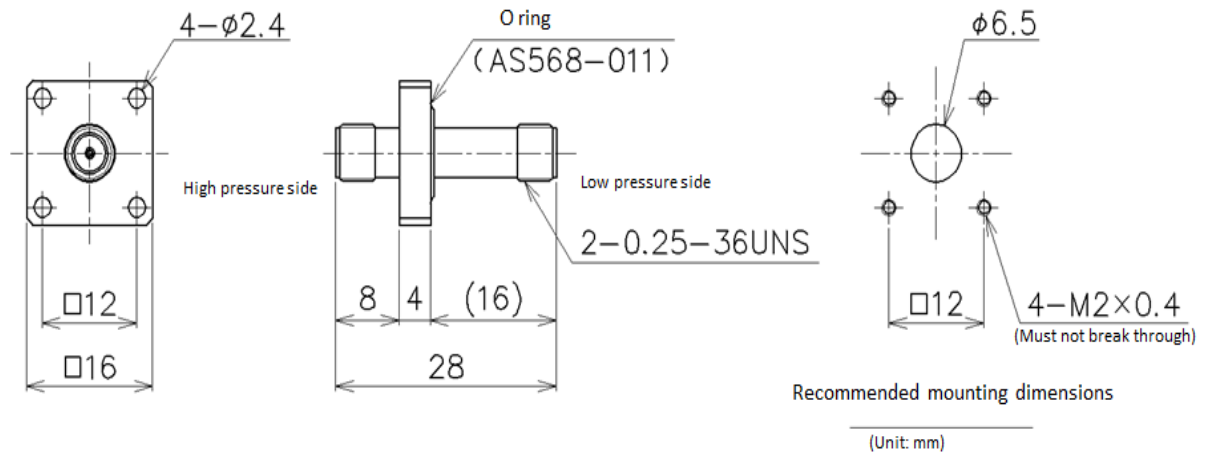
## ■ Part Number



Y	Material of O-ring
1	Silicon
2	Nitrile
3	Fluorine
4	Others

## ■ Electrical characteristic

Characteristic impedance	50Ω
Insulation Resistance	1000MΩ or higher (at DC500V)
Dielectric Withstanding Voltage	AC1000Vrms



- Please ask us for custom requirements such as material, mounting dimensions, shape, high pressure specifications, etc.
- Please ask us if the pressure direction is reversed.
- Please note that the product specifications are subject to change without notice due to improvements, etc.

## ■ Features

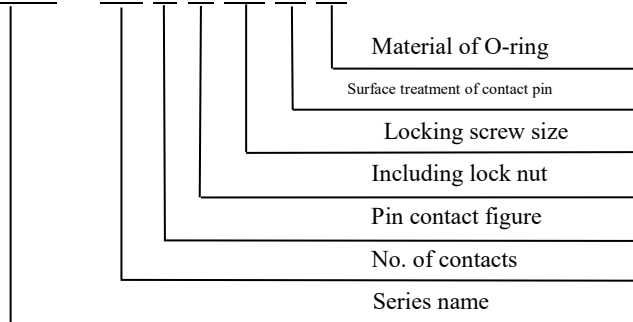
- Through bulkhead type high density D-sub Glass-sealed Hermetic Connector
- Can be used as current transmission terminal for vacuum vessels, pressure vessels, etc.
- Can mate with MIL-DTL-24308 high-density D-sub plug
- High-density type with the same shell size as the standard D-sub and a large number of contacts
- Superior airtight ( $1 \times 10^{-9}$  Pa·m<sup>3</sup>/sec or less) with glass sealed (helium gas test)

## ■ Structure and Surface treatment

- Flange of shell is groove for O-ring
- Flange of shell is finished surface with nickel plating

## ■ Part Number

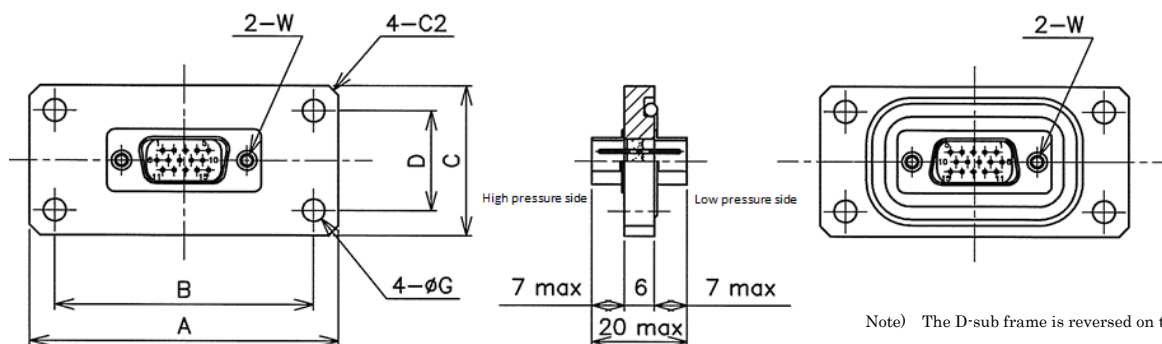
HDB - 15 P L W X Y



W	Locking screw size
U	No.4-40UNC
M	M2.6x0.45

Y	Material of O-ring
1	Silicon
2	Nitrile
3	Fluorine
4	Others

X	Surface treatment of contact pin
1	Nickel plate
2	Gold plate
3	Others



Note) The D-sub frame is reversed on the front and back.  
Please note that at the time of the mating connector wiring

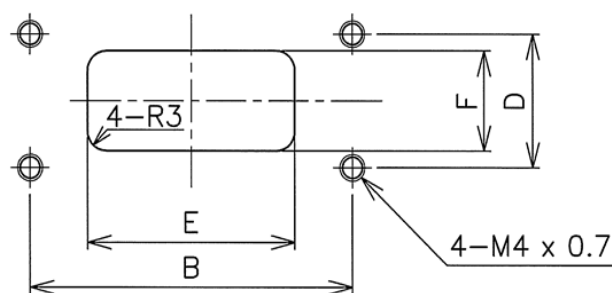
(Unit: mm)

Part number	No. of contacts	A	B	C	D	E	F	φG	W	O-ring size
HDB-15PLWXY	15	61.6	51.6	30	20	33.2	15	4.5	No.4-40UNC or M2.6x0.45	AS568-124

## [Specification]

- 1) Rated current: 1A
- 2) Isolation resistance: 1000MΩ or higher (at DC500V)
- 3) Dielectric Withstanding Voltage: AC500Vrms

- Please contact us for custom requirements such as material, mounting dimensions, shape, high pressure specifications, etc.
- Please note that the product specifications are subject to change without notice due to improvements, etc.



Reference dimensions for mounting part

# MDB series



## ■ Features

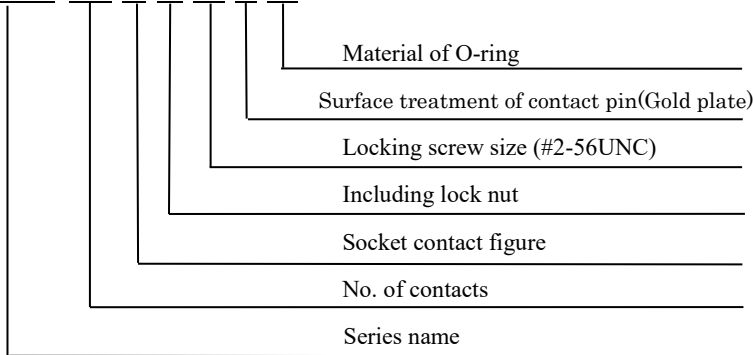
- Through bulkhead type Micro-D-sub Glass-sealed Hermetic Connector
- Can be used as current transmission terminal for vacuum vessels, pressure vessels, etc.
- Can mate with MIL-DTL-83513 Micro-D-sub plug connector
- Ultra-compact, high-density type with the contact pitch of 1.27 mm
- Superior airtight ( $1 \times 10^{-9}$ Pa·m<sup>3</sup>/sec or less) with glass sealed (helium gas test)

## ■ Structure and Surface treatment

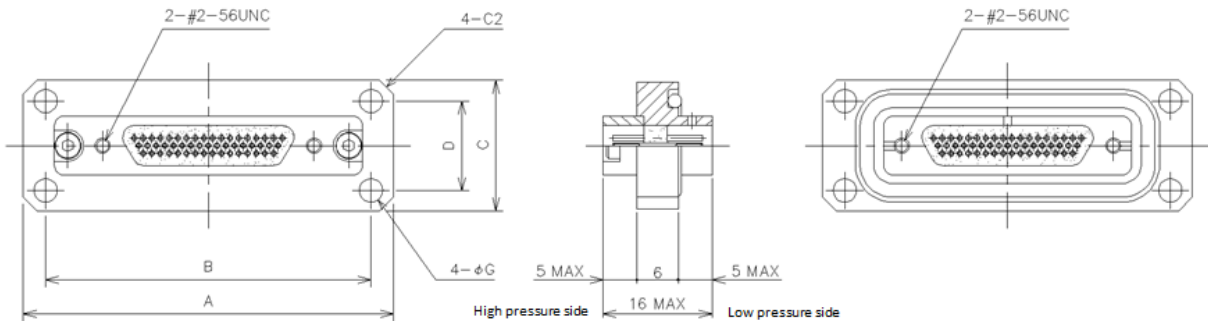
- Flange of shell is groove for O-ring
- Flange of shell is finished surface with nickel plating

## ■ Part number

MDB-37 S L U 2 Y



Y	Material of O-ring
1	Silicon
2	Nitrile
3	Fluorine
4	Others

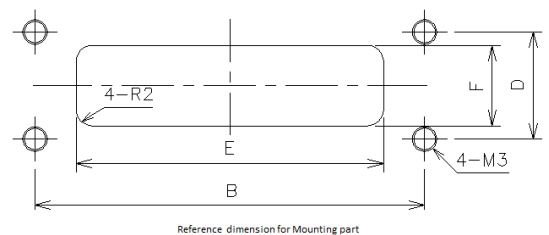


(Unit: mm)

Part number	No. of contacts	A	B	C	D	E	F	φ G	O-ring size
MDB-37SLU2Y	37	55	49	17.5	11.5	38.8	8.8	3.4	S-31.5
MDB-51SLU2Y	51	54	47.5	19	13	37.5	9.8	3.4	S-31.5

### [Specification]

- 1) Rated current: 1A(without include lapse rate)
  - 2) Isolation resistance: 1000MΩ or higher (at DC500V)
  - 3) Dielectric Withstanding Voltage: AC500Vrms
- Please contact us for custom requirements such as material, mounting dimensions, shape, high pressure specifications, etc.
  - Please note that the product specifications are subject to change without notice due to improvements, etc.



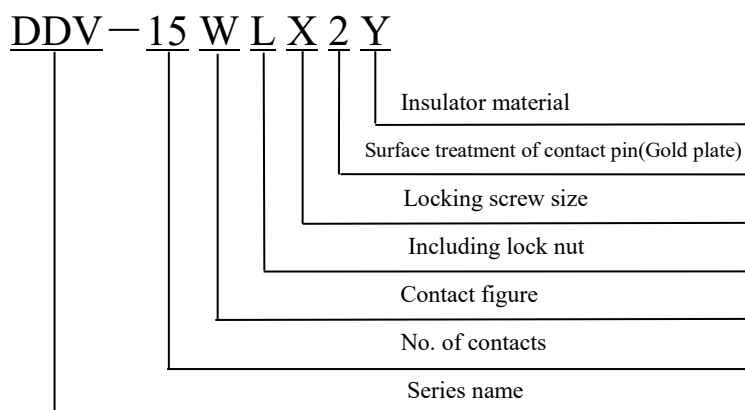
## ■ Features

- D-sub type connector for vacuum chamber
- Can be used as a D-sub type connection connector in a vacuum chamber  
(S type can be mated with DDB series connectors)
- Wiring method of contact is crimping type
- Shell is made of Teflon or Ceramic. Then Excellent outgas characteristics under high vacuum environment

## ■ Structure and Surface treatment

- Shell has a mono-block structure
- Contacts are gold-plated copper alloy

## ■ Part Number

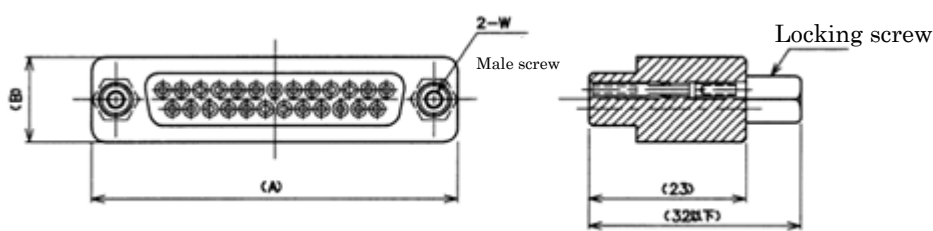


W	Contact figure
S	S type(Socket contact)
P	P type(Pin contact)

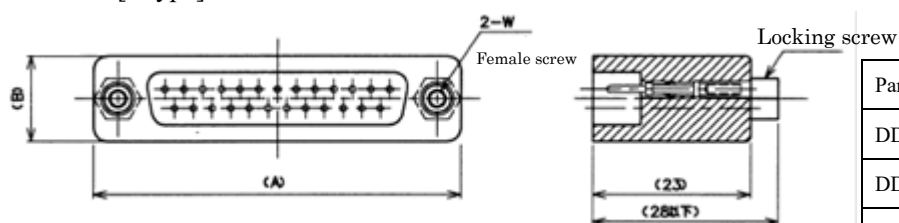
X	Lock screw size
U	No.4-40UNC
M	M2.6x0.45

Y	Insulator material
1	Teflon(PTFE)
2	Ceramic(Macor)
3	Others

[S type]



[P type]



## ■ Electrical characteristic

Insulation Resistance	1000MΩ or higher (at DC500V)
Dielectric Withstanding Voltage	AC500Vrms
Rated current	3A

(unit: mm)

Part Number	No. of contacts	A	B	X
DDV-9WLX2Y	9	32.5	12.6	No.4-40UNC Or M2.6x0.45
DDV-15WLX2Y	15	41	12.6	
DDV-25WLX2Y	25	54	12.6	
DDV-37WLX2Y	37	71	12.6	
DDV-50WLX2Y	50	69	15.4	

- Please ask us for custom requirements such as material, mounting dimensions, shape, etc.
- Please note that the product specifications are subject to change without notice due to improvements, etc.