

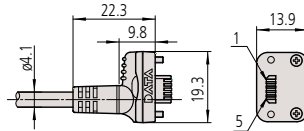
# SPC Connecting Cables

Digimatic data cable specifications (Dimensions)

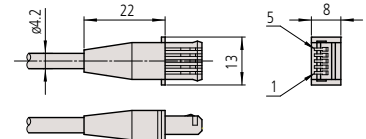
## Gage connector dimensions

Unit: mm

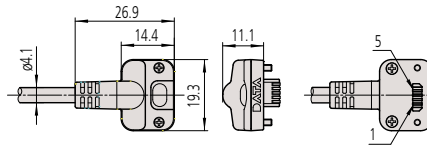
- A)** 1) 06AFM380A 3) 02AZD790A (Standard)  
2) 05CZA624 (1 m) 02AZE140A (FSW)  
05CZA625 (2 m)



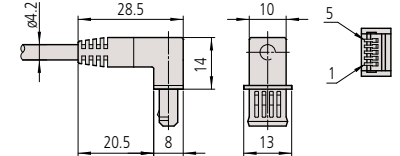
- F)** 1) 06AFM380F 3) 02AZD790F (Standard)  
2) 905338 (1 m) 02AZE140F (FSW)  
905409 (2 m)



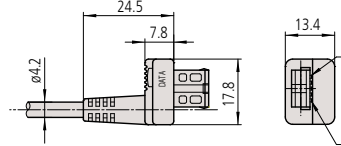
- B)** 1) 06AFM380B 3) 02AZD790B (Standard)  
2) 05CZA662 (1 m) 02AZE140B (FSW)  
05CZA663 (2 m)



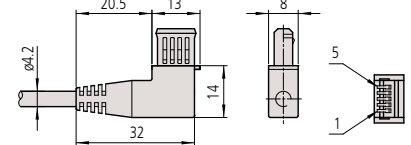
- FB)** 1) No applicable models 3) No applicable models  
2) 905689 (1 m) 905690 (2 m)



- C)** 1) 06AFM380C 3) 02AZD790C (Standard)  
2) 959149 (1 m) 02AZE140C (FSW)  
959150 (2 m)

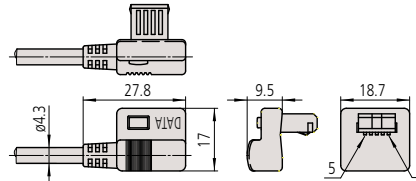


- FR)** 1) No applicable models 3) No applicable models  
2) 905691 (1 m) 905692 (2 m)

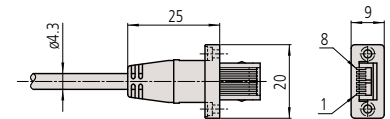


FL and FR is symmetrical and the same size.

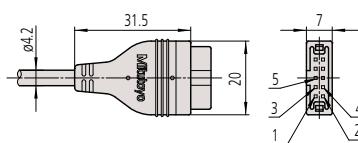
- CR)** 1) No applicable models 3) No applicable models  
2) 04AZB512 (1 m) 04AZB513 (2 m)



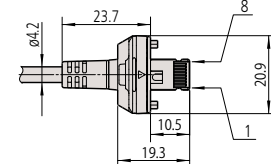
- G)** 1) 06AFM380G 3) 02AZD790G (Standard)  
2) 21EAA194 (1 m) 02AZE140G (FSW)  
21EAA190 (2 m)



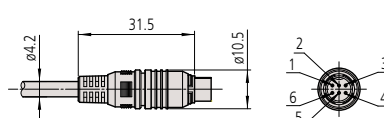
- D)** 1) 06AFM380D 3) 02AZD790D (Standard)  
2) 936937 (1 m) 02AZE140D (FSW)  
965014 (2 m)



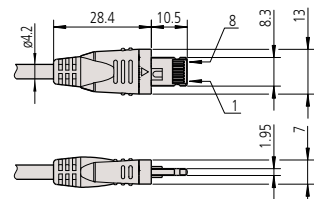
- SA)** 1) 06AGQ001A 3) No applicable models  
2) 06AGL111 (1 m) 06AGL121 (2 m)



- E)** 1) 06AFM380E 3) 02AZD790E (Standard)  
2) 937387 (1 m) 02AZE140E (FSW)  
965013 (2 m)



- SF)** 1) 06AGQ001F 3) 02AZG011 (Standard)  
2) 06AGL011 (1 m) 02AZG021 (FSW)  
06AGL021 (2 m)



Note: (1), (2) and (3) are for connecting cables listed in A-29.



Talk to Sales

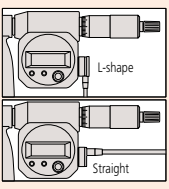
# Cable Connection Guide

Connection cables and applicable gage models

A

|                                                                                                                                                                                                                         |                 |     |                                               |                                               |                                            |                                                                                                                        |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|-----------------------------------------------|-----------------------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>1) USB Input Tool Direct USB-ITN</b><br>                                                                                            | Connector type  |     | <b>A)</b> Water-proof type with output button | <b>B)</b> Water-proof type with output button | <b>C)</b> Straight type with output button | <b>CR)</b> L-shape type with output button, cable outlet on right                                                      | <b>D)</b> Flat 10-pin type           |
|                                                                                                                                                                                                                         | Model Order No. |     | <b>USB-ITN-A</b><br><b>06AFM380A</b>          | <b>USB-ITN-B</b><br><b>06AFM380B</b>          | <b>USB-ITN-C</b><br><b>06AFM380C</b>       | No applicable models<br><b>USB-ITN-C</b> can be used.<br>See figure below                                              | <b>USB-ITN-D</b><br><b>06AFM380D</b> |
| <b>2) 264-020/264-007/DP-1VA LOGGER/MIG/ EC Counter</b><br><br>Connector (A to G, SA and SF)<br>Type D on the other end for all models | Connector type  |     | <b>A)</b> Water-proof type with output button | <b>B)</b> Water-proof type with output button | <b>C)</b> Straight type with output button | <b>CR)</b> L-shape type with output button, cable outlet on right                                                      | <b>D)</b> Flat 10-pin type           |
|                                                                                                                                                                                                                         | Order No.       | 1 m | <b>05CZA624</b>                               | <b>05CZA662</b>                               | <b>959149</b>                              | <b>04AZB512</b>                                                                                                        | <b>936937</b>                        |
|                                                                                                                                                                                                                         |                 | 2 m | <b>05CZA625</b>                               | <b>05CZA663</b>                               | <b>959150</b>                              | <b>04AZB513</b>                                                                                                        | <b>965014</b>                        |
| <b>3) U-WAVE-T</b><br>                                                                                                                 | Connector type  |     | <b>A)</b> Water-proof type with output button | <b>B)</b> Water-proof type with output button | <b>C)</b> Straight type with output button | <b>CR)</b> L-shape type with output button, cable outlet on right                                                      | <b>D)</b> Flat 10-pin type           |
|                                                                                                                                                                                                                         | Standard        |     | <b>02AZD790A</b>                              | <b>02AZD790B</b>                              | <b>02AZD790C</b>                           | No applicable models<br>Type C can be used, but be careful of the cable when operating the thimble. (See figure below) | <b>02AZD790D</b>                     |
|                                                                                                                                                                                                                         | For foot switch |     | <b>02AZE140A</b>                              | <b>02AZE140B</b>                              | <b>02AZE140C</b>                           |                                                                                                                        | <b>02AZE140D</b>                     |

For connector types (circled in broken lines), select the model (A to G,SA,SF) that matches the connector shape of the Digimatic gage you are using.

|                                                                                                                                                                                                                                                                                                                                                                                                   |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gage connectors on data cable</b><br>The connector dimensions are given on page A-28.                                                                                                                                                                                                                                                                                                          | Connector type                               | <b>A)</b> Water-proof type with output button                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>B)</b> Water-proof type with output button                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>C)</b> Straight type with output button                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>CR)</b> L-shape type with output button, cable outlet on right                                                                                                                                                                                                                                       | <b>D)</b> Flat 10-pin type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                   | Cable connector shape on Digimatic gage side |                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   | Data switch                                  | Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Available                                                                                                                                                                                                                                                                                               | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Digimatic ports on gage</b><br>Please note that some high-precision Digimatic gages are capable of displaying the measurement result to more than 6 digits. However, according to the Digimatic output specification, the result may be output in 6 digits only.<br>Digimatic gages whose display may exceed 6 digits<br>• Laser Scan Micrometers<br>• Litematic<br>• Linear gage counter (EH) | Picture of Digimatic port                    |                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   | Applicable models                            | <ul style="list-style-type: none"> <li>• Digimatic caliper<br/>500-776/500-777, etc.<br/>500-712-20/500-713-20, etc.<br/>500-712 etc.</li> <li>• 550-301-10/550-331-10, etc.<br/>551-301-10/551-331-10, etc.<br/>552-302-10/552-303-10, etc.<br/>552-150-10/552-151-10, etc.<br/>552-155-10/552-156-10, etc.<br/>552-181-10/552-182-10, etc.</li> <li>• 573-601/573-602, etc.</li> <li>• Digimatic depth gage<br/>571-251-10/571-252-10, etc.</li> <li>• Digimatic scale unit<br/>572-600, 572-601, etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic micrometer<br/>293-140-30/293-141-30, etc.<br/>293-230-30 etc.</li> <li>• 340-251-30/340-252-30<br/>293-666-20/293-667-20, etc.<br/>227-201-20/227-203-20, etc.<br/>227-205-20/227-206-20, etc.<br/>227-221-20 etc.<br/>227-223-20 etc.</li> <li>• 422-230-30/422-231-30, etc.<br/>406-250-30/406-251-30, etc.</li> <li>• 343-250-30/343-251-30, etc.<br/>369-250-30/369-251-30, etc.<br/>345-250-30/345-251-30, etc.<br/>314-251-30/314-252-30, etc.</li> <li>• Digimatic micrometer head<br/>350-251-30/350-261-30, etc.</li> <li>• Digimatic holtest<br/>468-161/468-162, etc.</li> <li>• Digimatic depth gage<br/>329-250-30/329-251-30, etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic caliper<br/>500-150-30/500-151-30, etc.<br/>500-500-10/500-501-10, etc.<br/>500-443 etc.</li> <li>• 573-118-10/573-119-10, etc.<br/>573-116-10/573-117-10, etc.<br/>573-191-30/573-291-30<br/>573-181-30/573-182-30, etc.</li> <li>• Digimatic depth gage<br/>571-201-30/571-202-30, etc.</li> <li>• Digimatic micrometer head<br/>164-163/164-164</li> <li>• Digimatic scale unit<br/>572-203-10/572-213-10<br/>572-300-10/572-301-10, etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic micrometer<br/>293-582/293-583, etc.<br/>389-514/389-714</li> </ul>  <p>Type C straight connectors are available, but may interfere with thimble operation.</p> | <ul style="list-style-type: none"> <li>• Digimatic indicator<br/>ID-H<br/>ID-F (Note 1)</li> <li>• High-precision height gage<br/>QMH-AX/BX</li> <li>• Mu-checker<br/>Digital Mu Checker (Note 1)</li> <li>• Laser scan micrometer<br/>LSM-9506</li> <li>• Linear gage counter<br/>EF/EH (Note 2)</li> <li>• EB (Note 1) and (Note 4),<br/>EC-101D (Note 1)</li> <li>• Litematic<br/>VL-B/S-B (Note 2)</li> <li>• Surface roughness measuring machine<br/>SJ-210 (Note 4)/<br/>310/410<br/>SJ-500/SV-2100 (Note 3)</li> <li>• Hardness testing machines<br/>HM-210/220<br/>HV-110/120<br/>HR-530<br/>HR-600</li> </ul> |

# Cable Connection Guide

Connection cables and applicable gage models

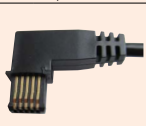
| E) Round 6-pin type    | F) Flat straight type  | FB) Flat L-shape (cable outlet is back)            | FR) Flat L-shape (cable outlet is right) | FL) Flat L-shape (cable outlet is left) | G) Flat straight water-proof type | SA) Water-proof straight model with output button | SF) Straight standard type |
|------------------------|------------------------|----------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------|---------------------------------------------------|----------------------------|
| USB-ITN-E<br>06AFM380E | USB-ITN-F<br>06AFM380F | No applicable models<br>USB-ITN-F is available.    |                                          |                                         | USB-ITN-G<br>06AFM380G            | USB-ITN-SA<br>06AGQ001A                           | USB-ITN-SF<br>06AGQ001F    |
| E) Round 6-pin type    | F) Flat straight type  | FB) Flat L-shape (cable outlet is back)            | FR) Flat L-shape (cable outlet is right) | FL) Flat L-shape (cable outlet is left) | G) Flat straight water-proof type | SA) Water-proof straight model with output button | SF) Straight standard type |
| 937387                 | 905338                 | 905689                                             | 905691                                   | 905693                                  | 21EAA194                          | 06AGL111                                          | 06AGL011                   |
| 965013                 | 905409                 | 905690                                             | 905692                                   | 905694                                  | 21EAA190                          | 06AGL121                                          | 06AGL021                   |
| E) Round 6-pin type    | F) Flat straight type  | FB) Flat L-shape (cable outlet is back)            | FR) Flat L-shape (cable outlet is right) | FL) Flat L-shape (cable outlet is left) | G) Flat straight water-proof type | SA) Water-proof straight model with output button | SF) Straight standard type |
| 02AZD790E              | 02AZD790F              | No applicable models<br>Use 02AZD790F or 02AZE140F |                                          |                                         | 02AZD790G                         | No applicable models<br>Use 02AZG011 or 02AZG021  | 02AZG011                   |
| 02AZE140E              | 02AZE140F              |                                                    |                                          |                                         | 02AZE140G                         |                                                   | 02AZG021                   |

Note 1: **USB-ITN** is required to use in the combination with **USB-ITPAK**, when connected to D) **ID-F**, D) digital Mu-checker, **EB**, **EC-101D**, and F) **ID-U**, **ID-SS**, **ID-SX**.

Note 2: **USB-ITN**, **USB Input Tool**, and **U-WAVE-T** cannot be used with D) **EF/EH** and D) **VL-B/S-B**.

Note 3: **USB-ITN** and **U-WAVE-T** cannot be used with D) **SJ-500/SV-2100**.

Note 4: **264-020** and **USB-ITN-SF** cannot be used with D) **SJ-210** and D) **EB**.

| E) Round 6-pin type                                                                 | F) Flat straight type                                                               | FB) Flat L-shape (cable outlet is back)                                             | FR) Flat L-shape (cable outlet is right)                                            | FL) Flat L-shape (cable outlet is left)                                             | G) Flat straight water-proof type                                                    | SA) Water-proof straight model with output button                                     | SF) Straight standard type                                                            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |
| N/A                                                                                 | N/A                                                                                 | N/A                                                                                 | N/A                                                                                 | N/A                                                                                 | N/A                                                                                  | Available                                                                             | N/A                                                                                   |

|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                 |                                                                                                            |                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                |                                                                                       |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                |                                                                                                                                                                                                                                                                                                                                                              |                                                                              |                         |                      |                                               |                                                                                                                                                                                                                                                                                           |  |
| [Hardness testing machines]<br><b>HM-102</b><br><b>HM-103</b><br><b>HM-320</b><br><b>HM-430</b><br><b>HM-411</b> | <ul style="list-style-type: none"> <li>• Digimatic indicator<br/><b>ID-CX</b>, <b>ID-C112AX</b>, <b>ID-C112RXB</b>, <b>ID-C112GXB</b>, <b>ID-U</b> (Note 1), <b>ID-SS</b> (Note 1), <b>ID-SX</b> (Note 1)</li> <li>• <b>HDM-AX</b>, <b>HD-AX</b>, <b>HDS-HC</b>, <b>HDS-C</b></li> <li>• <b>ABS borematic</b><br/><b>568-361/568-362</b>, etc.</li> <li>• <b>Scale unit</b><br/><b>SD-E</b>, <b>SDV-E</b>, <b>SD-F</b>, <b>SDV-F</b></li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic bore gage<br/><b>511-501/511-502</b>, etc.</li> <li>• Hardness testing machines<br/><b>HH-300</b></li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic depth gage<br/><b>Digimatic type (ID-CX)</b></li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic indicator<br/><b>ID-N</b><br/><b>ID-B</b></li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic micrometer<br/><b>QuantuMike</b><br/><b>(293-14X-40/293-18X-40)</b></li> </ul> | <ul style="list-style-type: none"> <li>• Digimatic indicator<br/><b>ID-CNX</b><br/><b>ID-FNX</b></li> <li>• Digimatic depth gage<br/><b>Digimatic type (ID-CNX)</b></li> <li>• Digimatic thickness gage<br/><b>Digimatic type (ID-CNX)</b></li> <li>• Surface roughness measuring machine<br/><b>SJ-220</b></li> <li>• High-accuracy height gage<br/><b>LH-600F</b></li> </ul> |                                                                                       |

[How to check the order No. of the connecting cable used for the measuring instrument]

- For models currently being sold  
Please check the optional accessories for the applicable Digimatic gage in the general catalog.
- Regarding discontinued models not listed in the general catalog  
Please contact Tech.Support@Mitutoyo.com