

Concentrated wiring Connector for Manifold type **Sub-D Connector**

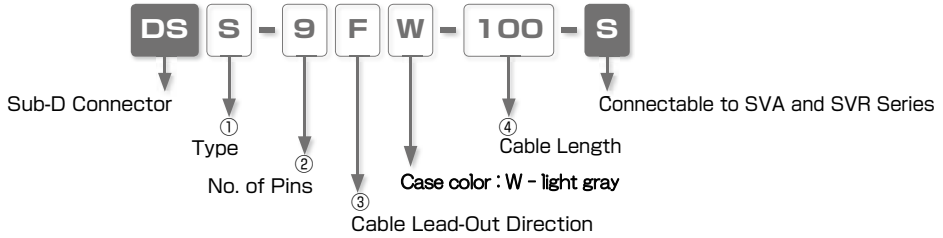
- *Lead-Out Direction of cable is selectable.*
- *Suitable for PISCO's Solenoid Valves manifolds SVR10 SVA20, Vacuum generator VZ series or other units.*
- *Low profile connector case for limited spaces*



SOLENOID VALVE Series

Sub-D Connector

■ Model Designation of Sub-D Connector & Cable (Example)



① Type

S : Socket

P : Pin

② Number of Pins

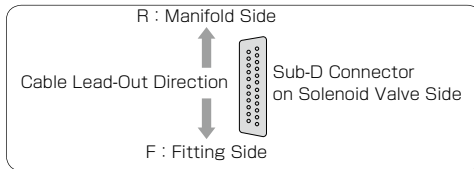
9 : 9 pins

25 : 25 pins

③ Cable Lead-Out Direction

F : Fitting Side

R : Manifold Side

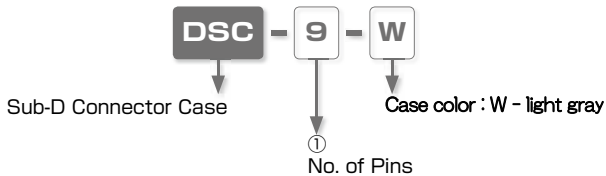


④ Cable Length

100 : 100cm

200 : 200cm

■ Model Designation of Connector Case Only (Example)

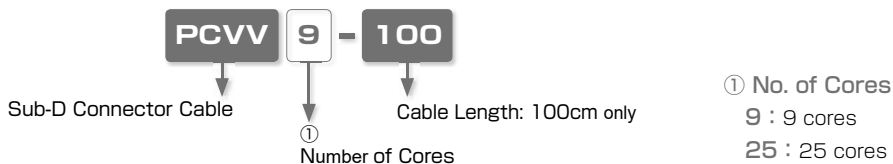


① Number of Pins

9 : 9 pins

25 : 25 pins

■ Model Designation of Cable Only (Example)



■ Specifications

Number of Cores		9	25
Conductor	Size	0.3mm ²	
	Material	Stranded Soft Copper Wire	
	Structures	60 leads / 0.08mm	
	Outer Diameter	0.72mm	
Insulator	Material	Semi-Hard Vinyl	
	Structures	0.25mm	
	Outer Diameter	1.2mm	
Sheath	Material	Soft Vinyl	
	Thickness	0.9mm	1mm
	Color	Black	
Rated Voltage		AC60V or DC60V	
Rated Temperature		167°F (75°C)	
Finished O.D (approx.)		6.3mm	9.3mm
Approx.Weight		60kg/km	135kg/km
Max. Conductor Resistance (20°C)		63.7Ω/km	
Withstand Voltage		AC350V or DC500V (1 min.)	
Min. Insulation Resistance (20°C)		50MΩ · km	

■ Terminal Number / Wire Color

Terminal Number	Insulator Color	Printing Mark	Terminal No.	Insulator Color	Printing Mark
1	Black	(No Marking)	14	Yellow	Black Dot
2	Brown	(No Marking)	15	Pink	Black Dot
3	Red	(No Marking)	16	Blue	White Dot
4	Orange	(No Marking)	17	Purple	(No Marking)
5	Yellow	(No Marking)	18	Gray	(No Marking)
6	Pink	(No Marking)	19	Orange	Black Dot
7	Blue	(No Marking)	20	Red	White Dot
8	Purple	White Dot	21	Brown	White Dot
9	Gray	Black Dot	22	Pink	Red Dot
10	White	Black Dot	23	Gray	Red Dot
11	White	Red Dot	24	Black	White Dot
12	Yellow	Red Dot	25	White	(No Marking)
13	Orange	Red Dot			



Sub-D Connector

Detailed Safety Instructions

Before using PISCO products, be sure to read "Safety Instructions" and "Safety Instruction Manual" and "Common Safety Instructions for Valve Series".

Warning

1. Keep Sub-D Connector away from water or oil drops. Since the product is not a drip-proof structure, there is a risk of short-circuit by water or oil.
2. Avoid an excessive tensile strength and bending on the cable. Otherwise, there is a risk of disconnection or the connector's damage.
3. Do not use the Sub-D connector with the voltage that is higher than the rated AC60V or DC60V. In the case of using/making your own voltage cables, you may still use our Connector Case.

Caution

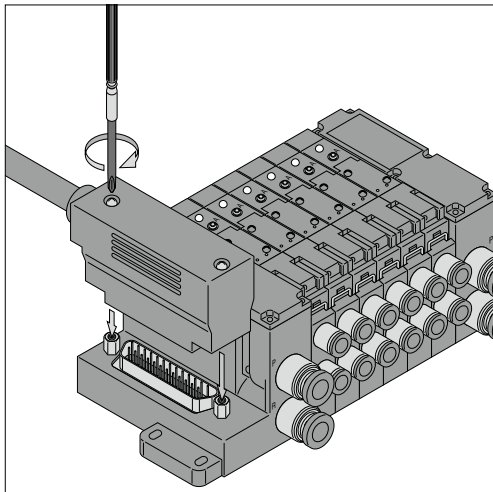
1. Fix the connector part with screws firmly.
2. Check the terminal no. and the wire color as described closely. Pay special attention to avoid wrong wiring.

■ Fixing Method of Sub-D Connector and Cable Lead-Out Direction

1. Fixing Method of Sub-D Connector

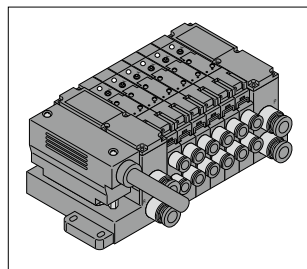
Tighten 2 pcs of fixing screws (M2.6x0.45) built-in the sub-D connector by a Phillips screwdriver.

(Recommended Torque Force: 0.25-0.35Nm)

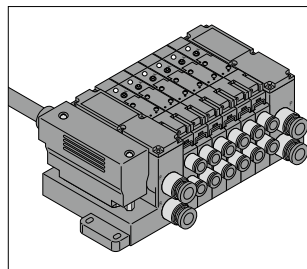


2. Cable Lead-Out Direction

- ① .To designate the cable lead-out direction tube fitting side as the right figure, select "F" in the model designation "③ Cable Lead-Out Direction".



- ② .To designate the cable lead-out direction manifold side as the right figure, select "R" in the model Designation "③ Cable Lead-Out Direction".



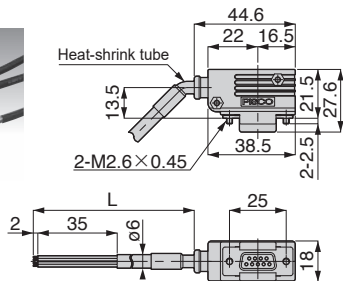
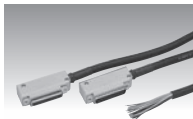
Sub-D Connector

DSS Socket

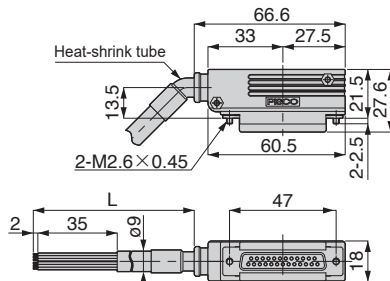
RoHS compliant

DSP Pin

RoHS compliant



DS□9RW-□-S



DS□25RW-□-S

Unit : mm

Model	L	Weight (g)
DS□-9□W-100-S	1000	79
DS□-9□W-200-S	2000	137
DS□-25□W-100-S	1000	170
DS□-25□W-200-S	2000	309

* Indicate connector type in the left□ of the model designation: "S" for Socket / "P" for pin. Indicate cable lead-out direction in the middle □. "F" for fitting side / "R" for manifold side.



SAFETY Instructions

This safety instructions aim to prevent personal injury and damage to properties by requiring proper use of PISCO products.

Be certain to follow ISO 4414 and JIS B 8370

ISO 4414 : Pneumatic fluid power...Recommendations for the application of equipment to transmission and control systems.

JIS B 8370 : General rules and safety requirements for systems and their components.

This safety instructions is classified into "Danger", "Warning" and "Caution" depending on the degree of danger or damages caused by improper use of PISCO products.



Danger

Hazardous conditions. It can cause death or serious personal injury.



Warning

Hazardous conditions depending on usages. Improper use of PISCO products can cause death or serious personal injury.



Caution

Hazardous conditions depending on usages. Improper use of PISCO products can cause personal injury or damages to properties.



Warning

1. Selection of pneumatic products

- ① A user who is a pneumatic system designer or has sufficient experience and technical expertise should select PISCO products.
- ② Due to wide variety of operating conditions and applications for PISCO products, carry out the analysis and evaluation on PISCO products. The pneumatic system designer is solely responsible for assuring that the user's requirements are met and that the application presents no health or safety hazards. All designers are required to fully understand the specifications of PISCO products and constitute all systems based on the latest catalog or information, considering any malfunctions.

2. Handle the pneumatic equipment with enough knowledge and experience

- ① Improper use of compressed air is dangerous. Assembly, operation and maintenance of machines using pneumatic equipment should be conducted by a person with enough knowledge and experience.

3. Do not operate machine / equipment or remove pneumatic equipment until safety is confirmed.

- ① Make sure that preventive measures against falling work-pieces or sudden movements of machine are completed before inspection or maintenance of these machine.
- ② Make sure the above preventive measures are completed. A compressed air supply and the power supply to the machine must be off, and also the compressed air in the systems must be exhausted.
- ③ Restart the machines with care after ensuring to take all preventive measures against sudden movements.

Disclaimer

1. PISCO does not take any responsibility for any incidental or indirect loss, such as production line stop, interruption of business, loss of benefits, personal injury, etc., caused by any failure on use or application of PISCO products.
2. PISCO does not take any responsibility for any loss caused by natural disasters, fires not related to PISCO products, acts by third parties, and intentional or accidental damages of PISCO products due to incorrect usage.
3. PISCO does not take any responsibility for any loss caused by improper usage of PISCO products such as exceeding the specification limit or not following the usage the published instructions and catalog allow.
4. PISCO does not take any responsibility for any loss caused by remodeling of PISCO products, or by combinational use with non-PISCO products and other software systems.
5. The damages caused by the defect of Pisco products shall be covered but limited to the full amount of the PISCO products paid by the customer.



SAFETY INSTRUCTION MANUAL

PISCO products are designed and manufactured for use in general industrial machines. Be sure to read and follow the instructions below.

Danger

1. Do not use PISCO products for the following applications.
 - ① Equipment used for maintaining / handling human life and body.
 - ② Equipment used for moving / transporting human.
 - ③ Equipment specifically used for safety purposes.

Warning

1. Do not use PISCO products under the following conditions.
 - ① Beyond the specifications or conditions stated in the catalog, or the instructions.
 - ② Under the direct sunlight or outdoors.
 - ③ Excessive vibrations and impacts.
 - ④ Exposure / adhere to corrosive gas, inflammable gas, chemicals, seawater, water and vapor. *
* Some products can be used under the condition above(④), refer to the details of specification and condition of each product.
2. Do not disassemble or modify PISCO products, which affect the performance, function, and basic structure of the product.
3. Turn off the power supply, stop the air supply to PISCO products, and make sure there is no residual air pressure in the pipes before maintenance and inspection.
4. Do not touch the release-ring of push-in fitting when there is a working pressure. The lock may be released by the physical contact, and tube may fly out or slip out.
5. Frequent switchover of compressed air may generate heat, and there is a risk of causing burn injury.
6. Avoid any load on PISCO products, such as a tensile strength, twisting and bending. Otherwise, there is a risk of causing damage to the products.
7. As for applications where threads or tubes swing / rotate, use Rotary Joints, High Rotary Joints or Multi-Circuit Rotary Block only. The other PISCO products can be damaged in these applications.
8. Use only Die Temperature Control Fitting Series, Tube Fitting Stainless SUS316 Series, Tube Fitting Stainless SUS316 Compression Fitting Series or Tube Fitting Brass Series under the condition of over 60°C (140° F) water or thermal oil. Other PISCO products can be damaged by heat and hydrolysis under the condition above.
9. As for the condition required to dissipate static electricity or provide an antistatic performance, use EG series fitting and antistatic products only, and do not use other PISCO products. There is a risk that static electricity can cause system defects or failures.
10. Use only Fittings with a characteristic of spatter-proof such as Anti-spatter or Brass series in a place where flame and weld spatter is produced. There is a risk of causing fire by sparks.
11. Turn off the power supply to PISCO products, and make sure there is no residual air pressure in the pipes and equipment before maintenance. Follow the instructions below in order to ensure safety.
 - ① Make sure the safety of all systems related to PISCO products before maintenance.
 - ② Restart of operation after maintenance shall be proceeded with care after ensuring safety of the system by preventive measures against unexpected movements of machines and devices where pneumatic equipment is used.
 - ③ Keep enough space for maintenance when designing a circuit.
12. Take safety measures such as providing a protection cover if there is a risk of causing damages or fires on machine / facilities by a fluid leakage.

