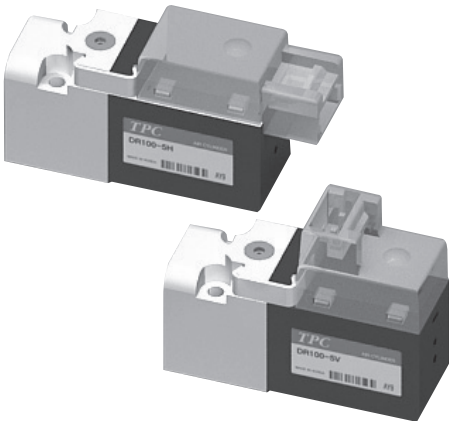


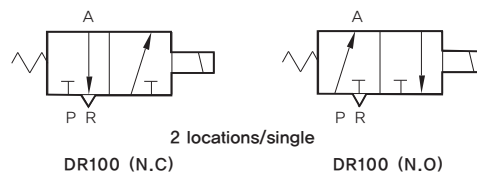
Series **DR 100**

3-port Miniature Solenoid Valve



- SUBCOMPACT (100MM WIDE) TYPE VALVE
- SUPERB UTILIZATION CONDITION IN HIGH PRESSURE (MAX' 0.8MPa)
- LARGE FLUX GUARANTEED (SUPPLY/EXHAUST=18/20ℓ /min)
- UPGRADE IMPACT-RESISTANCE VIBRATION-RESISTANCE PERFORMANCE
- VISUAL DISTANCE GUARANTEED BY LED LAMP (LAMP WINDOW LENS EQUIPPED, HIGH BRIGHTNESS LED APPLIED)
- MINIMIZED THERMAL DEFORMATION AND E/PLASTIC WITH EXCELLENT DIMENSION STABILITY APPLIED, FLUORINE SERIES SEALING SYSTEM APPLIED WHICH HAS HIGH PERFORMANCE IN HIGH TEMPERATURE.
- LOW ELECTRIC CONSUMPTION TYPE (OPTION ENERGY CONSERVATION TYPE)

Symbol



How to Order

DR 100 — **5 H N** — **M5** — **XWL * ***

1 2 3 4 5 6

1 DR100 Series

Subcompact type (10mm wide)
3 port valve
100 : N.C Type
120 : N.O Type

2 Voltage

1 : AC110V
2 : AC220V
5 : DC24V
6 : DC12V

* AC110V, AC220V are only for Vertical type.

3 Electrical Entry (DC, AC)

V : Vertical type connector
H : Horizontal type connector

4 PCB Type

Blank : Standard type (Lamp Type)
N : Lead wire excluded
D : Non-polar lamp type
S : Power saving PCB Type
(0.85 — 0.45W)

* Application range of D.S is V and H types of DC only.

5 Option

Blank : Without sub-plate
M5 : With sub-plate (M5×0.8)

6 Length of Lead Wire

Blank : 300mm
XWL01 : 100mm
XWL02 : 200mm
XWL04 : 400mm

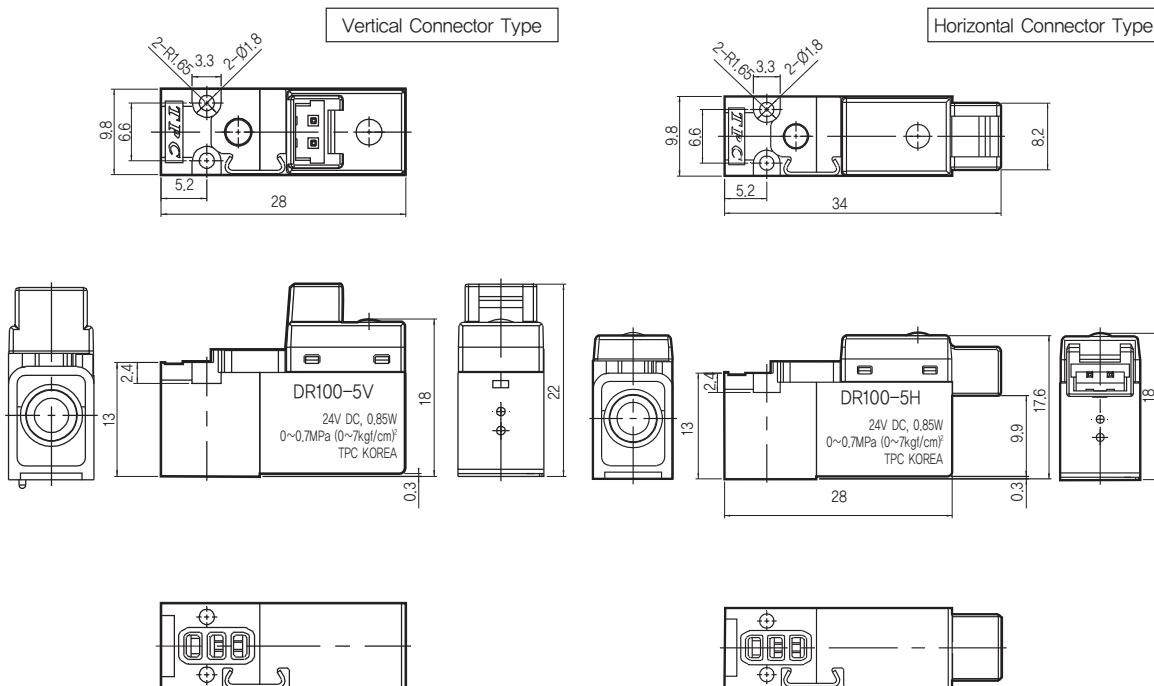
* Contact for standard and terminal type.

Series DR 100

Specifications

DR Series		DR100	DR120
Applied Fluid		Air	
Applied Pressure Range		0~0.7(0~7)	
Operating Method		N.C Type	N.O Type
Ambient Temperature and Applied Fluid Temperature (°C)		Maximum 50	
Allowable Voltage Fluctuation (%)		-10~+10 of Voltage	
Maximum Operating Frequency (Hz)	DC	20	10
	AC	15	5
Minimum Operating Frequency		1 Time / 30 Days	
Lubrication		Not Required	
Impact-Resistance/Vibration-Resistance (m/s ²)		300 / 50	
Protecting Structure		Vibration-Resistance	
Mounting Position		Free	
Manual Override		NON LOCK PUSH Type	
Lead Track Extracting Method and Color		DC / Horizontal Type, Vertical Type (+ : Red, - : Black)	
Rated Voltage (V)	DC	12V, 24V	
	AC	110V, 220V	
Effective Sectional Area mm ² (l / min)		Supply(P→A) : 0.28(18), Exhaust(A→R) : 0.3(20)	
Power (W)		Standard : 0.85 or Less (Lamp Attached, Rated Voltage Approved) Power Saving : 0.45 or Less	
Response Time (ms)		Less Than 10 in Common (0.5MPa base)	

Dimensions (DR100 Series)



DW

DR100

DR200

RS1000,
2000

RS4000

SI UNIT

DV1000
DV3000
DV4000

DS300

DS3000

DS5000

DS2000

DS6000

DX1,DX2

DX1(2)R

DH

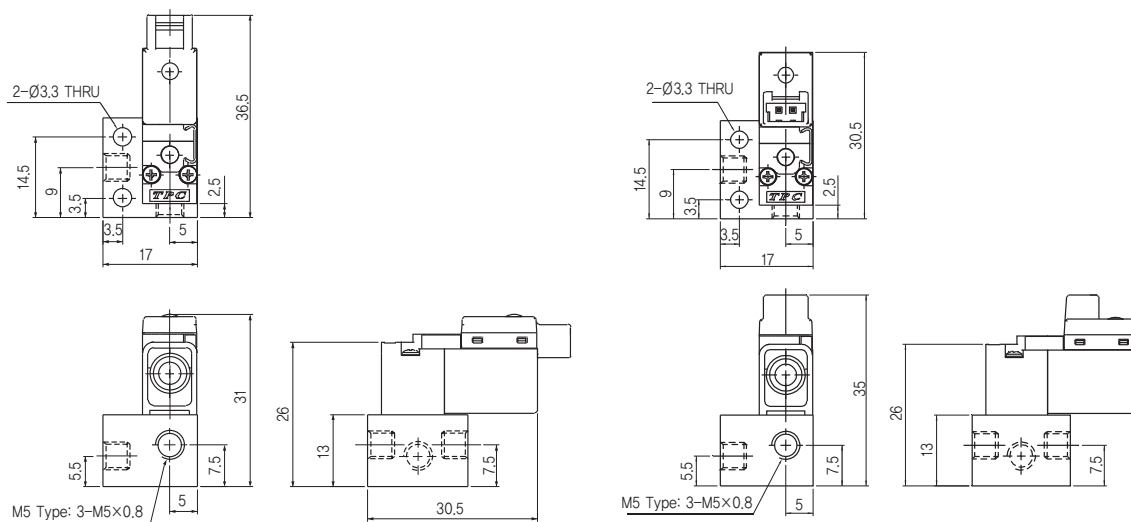
DP300
DP3000
DP5000

DM

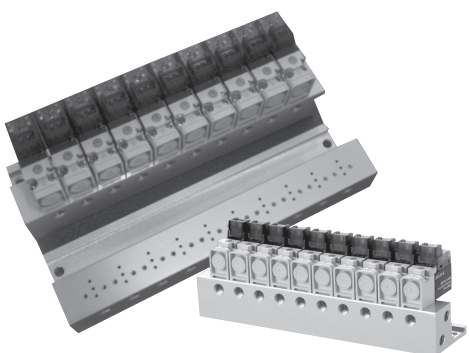
DT220

Series DR 100

Dimensions (DR100 Series Sub-Plate Type)



Manifold



How to Order

U — **DRM100** — **40** — **05** — **M5**

1 2 3 4 5

1 Blank : Rc(PT)
U : NPT

2 Manifold for DR100 Series
10mm body size valve

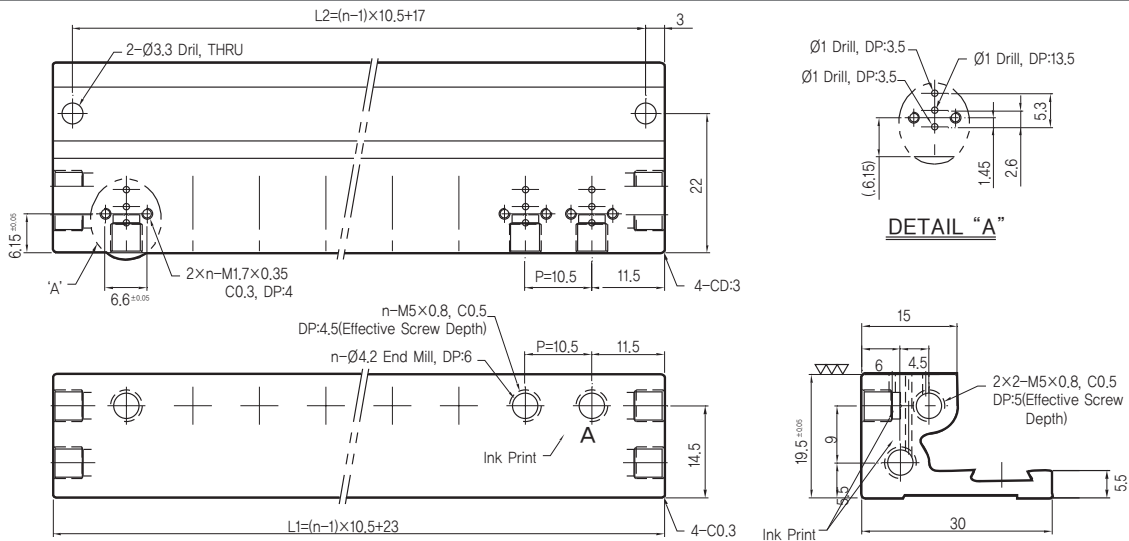
3 Manifold Specifications
40 : Base mounted

4 Stations
02 : 2 stations
03 : 3 stations
10 : 10 station
20 : 20 station

5 Port Size
M5:M5×0.8

Series DR 100

Exterior shape dimension drawing (DRM100)



* In case of using DR120 (N/O), please replace P and R of manifold for use.

(n=Connection Number)

n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	33.5	44	54.5	65	75.5	86	96.5	107	117.5	128	135.5	149	159.5	170	180.5	191	201.5	212	222.5
L2	27.5	38	48.5	59	69.5	80	90.5	101	111.5	122	132.5	143	153.5	164	174.5	185	195.5	206	216.5

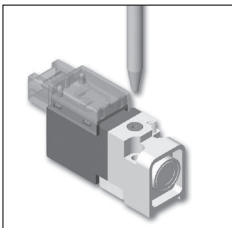
△ Notice for Product

User must fully understand the notice herein. Refer to a preface for notice and common notice contents for use.

△ Warning

● Manual (Non-lock push type) operation

Since manual operation runs installed equipment, it should be utilized after checking danger parameters.



△ Notice

- Do not use sharp end device to manipulate manual.
- Do not apply overload when pushing manual.

● Lead track length of plug connector

The length of plug connector lead track is approximately 300m.

● Surge voltage protection circuit → PCB circuit (H and V type plug connector type)

(1) DC Type

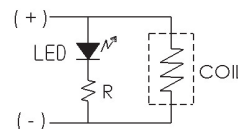
- Standard type (Lamp attached) → As a standard type, possible to use for any side, but should be cautious of polarity for turning on the lamp
- Non-polar type (Lamp attached) → Non-polar type, possible to use for any side
- Energy saving type (Lamp and voltage protection circuit attached) → should be cautious of polarity



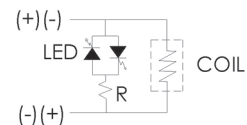
● Notice

Refer to DV Series of Basic notices

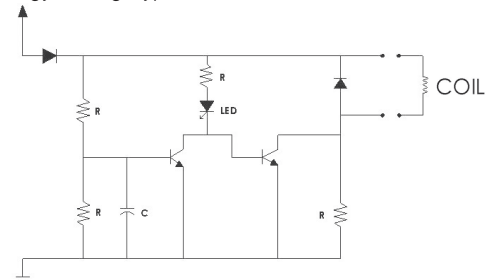
Polar Type



Non-Polar Type



Energy Saving Type



DW

DR100

DR200

RS1000,
2000

RS4000

SI UNIT

DV1000
DV3000
DV4000

DS300

DS3000

DS5000

DS2000

DS6000

DX1,DX2

DX1(2)R

DH

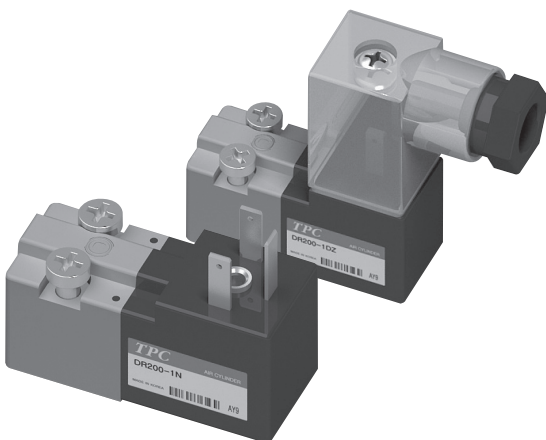
DP300
DP3000
DP5000

DM

DT220

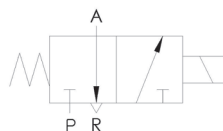
Series **DR 200**

3-Port Small (15mm) Solenoid Valve



- 15MM WIDE 3-PORT DIRECT MOTION TYPE VALVE
- SUPERB PERFORMANCE IN HIGH PRESSURE CONDITION (MAX' 1.0MPA)
- REALIZATION OF COMPACT SIZE AND LIGHT WEIGHT
- SUPERB PERFORMANCE E/PLASTIC APPLIED FOR CHEMICAL-RESISTANCE

symbol (N.C)



How to Order

DR 200 — **1** **D** — **M5**

1
2
3
4

1 DR200 Series

Small (15mm wide) 3-port valve

2 Voltage

1 : AC 110V
2 : AC 220V
5 : DC 24V

3 Electrical Entry

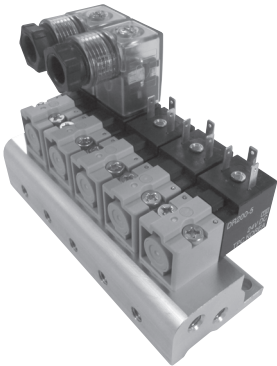
D : DIN type terminal (Lamp non-existed)
DZ : DIN type terminal (Lamp existed)
N : Connector non-existed

4 Sub Plate Option

Blank : None
M5 : Sub-plate attached
(for M5x0.8 pipe port installation)

Series DR200

Manifold



How to Order

DRM200 — 40 — 01 — M5

1

2

3

4

1 Manifold for DR200 Valve

Subcompact (15mm wide) valve

2 Piping Method

40 : Base piping type

3 Connection Number

01 : 1connection setting
(in case of single use of sub-plate)

02 : 2connection setting
03 : 3connection setting
04 : 4connection setting
:
12 : 12connection setting

4 Port Screw Classification

M5 : M5 X 0.8
(P, A and R port)

Specifications

Applied Fluid	Air	
Applied Pressure Range Mpa(kgf/cm ²)	0~1.0(0~10)	
Operating Method	N.C Type	
Ambient Temperature and Applied Fluid Temperature (°C)	Maximum 50	
Allowable Voltage Fluctuation (%)	-10~+10 of Voltage	
Maximum Operating Frequency (Hz)	10	
Minimum Operating Frequency	1 Time / 30 Days	
Lubrication	Not Required	
Impact-Resistance/Vibration-Resistance (m/s ²)	150 / 30	
Protecting Structure	IP65	
Mounting Position	Frdd	
Manual Override	Non Lock Push Type	
Lead Track Extracting Method	Din Type Connector	
Coil Rated Voltage (V)	AC 50/60Hz	110, 220
	DC	24
Apparent electric Power (VA)	3.5	
Energy Consumption (W)	1.8	
Effective Sectional Area mm ² (ℓ /min)	Supply(P→A) : 0.56 (36), Exhaust(A→R) : 0.65 (42)	
Response Time (ms)	15 or Less (0.5MPa base)	

DW

DR100

DR200

RS1000,
2000

RS4000

SI UNIT

DV1000
DV3000
DV4000

DS300

DS3000

DS5000

DS2000

DS6000

DX1,DX2

DX1(2)R

DH

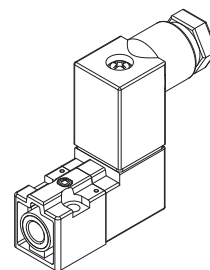
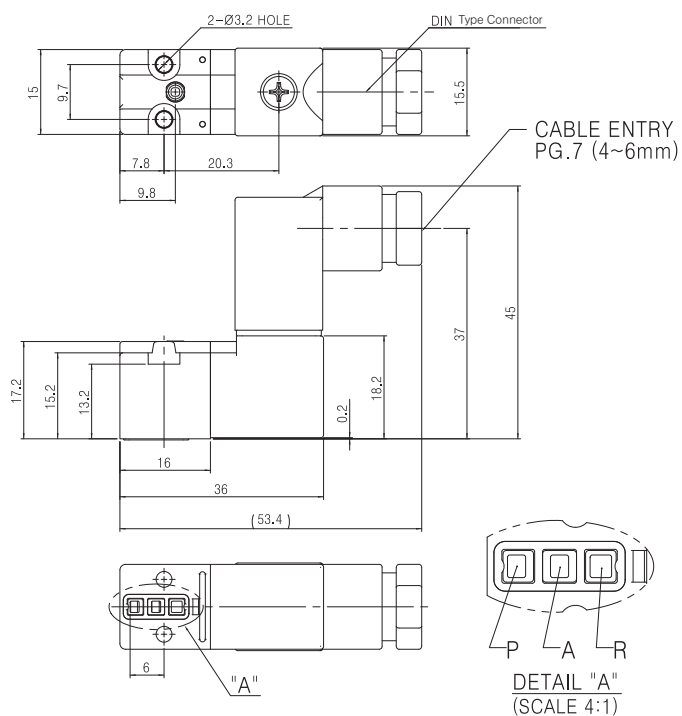
DP300
DP3000
DP5000

DM

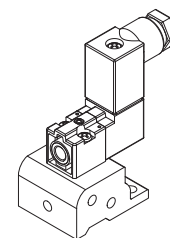
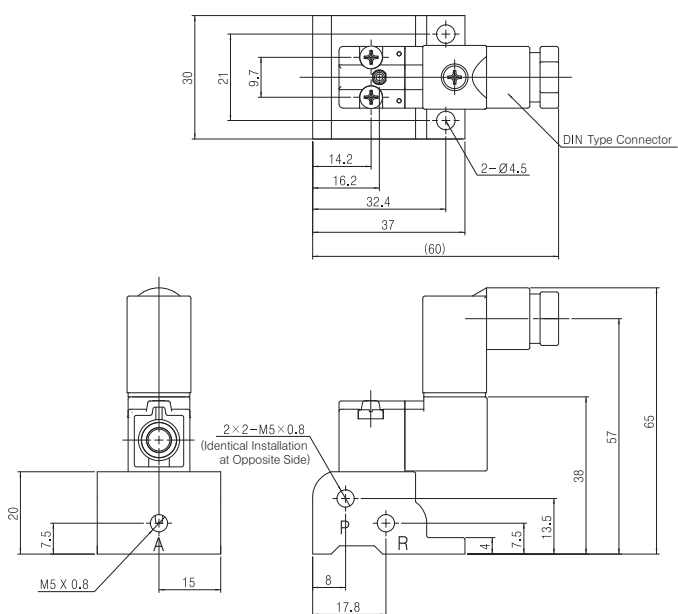
DT220

Series DR200

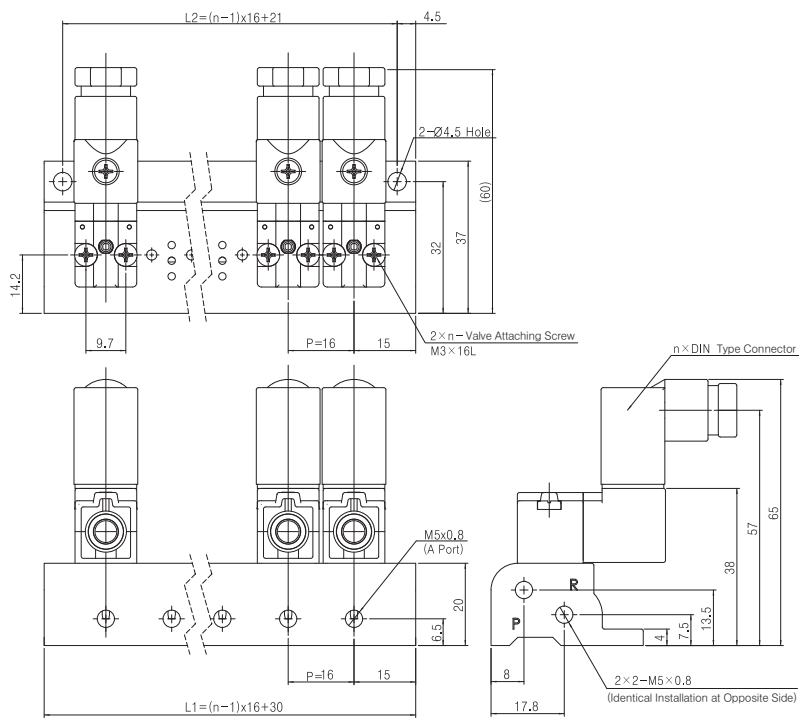
Dimensions



Dimensions (Sub-Plate Attaching Type)



Dimensions (DRM100)



n	1	2	3	4	5	6	7	8	9	10	11	12
L1	30	46	62	78	94	110	126	142	158	174	190	206
L2	21	37	53	69	85	101	117	133	149	165	181	197

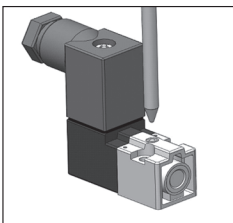
Notice for Product

User must fully understand the notice herein. Refer to a preface for notice and common notice contents for use.

⚠ Caution

- Manual (Non-lock push type) operation

Since manual operation runs installed equipment, it should be utilized after checking danger parameters.



⚠ Notice

- Do not use sharp end device to manipulate manual.
- Do not apply overload when pushing manual.

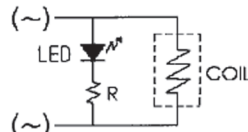
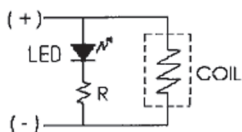
● Din type connector connecting guideline

- ① Disassembly connector from terminal with releasing fixed screw.
- ② Remove fixed screw, and disassembly case and terminal block by flat-head screwdriver with using a groove at lower side of connector.
- ③ Disassembly ground nut, and disassembly washer and grommet.
- ④ Pass electric wire through the sequence of ground, washer, grommet (rubber) and case.
- ⑤ Release terminal screw of separated terminal block, and firmly fix core wire.
- ⑥ Put terminal block into the case correctly.
- ⑦ Fasten ground nut, and fix wire.
- ⑧ After assembly of connector and terminal, connect fix screw.

- Note) 1. In case connector and terminal are not properly assembled, try it again after adjusting terminal (3 PIN) posture.
2. If overload is applied for fix screw connection, be cautious for damage to case.

- Notice for attaching valve at manifold

- ① It is recommended to use exclusive attaching screw enclosed with package.
- ② If excessive connecting torque during attachment is applied for screw, it causes deformation of body. Be cautious. (Proper connecting torque: 2.5~3kgf.cm)



DW

DR100

DR200

RS1000,
2000

RS4000

SI UNIT

DV1000
DV3000
DV4000

DS300

DS3000

DS5000

DS2000

DS6000

DX1.DX2

DX1(2)R

DH

DP300
DP3000
DP5000

DM

DT220