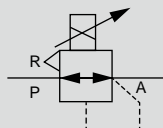


Thin electro pneumatic regulator/
reduced wiring manifold

MEVT Series

JIS symbol



Specifications (*1)

Item	EVT100	EVT500	
Working fluid	Clean compressed air (JIS B 8392-1: 2012 (ISO 8573-1: 2010) [1:3:2] or equivalent)		
Max. working pressure	200 kPa (≈29 psi, 2 bar)	0.7 MPa (≈100 psi, 7 bar)	
Min. working pressure	Set pressure + max. control pressure x 0.1		
Proof pressure	Inlet	300 kPa (≈44 psi, 3 bar)	
	Output side	150 kPa (≈22 psi, 1.5 bar)	
Pressure control range	0 (≈0 psi, 0 bar) to 100 kPa (≈15 psi, 1 bar)	0 (≈0 psi, 0 bar) to 0.5 MPa (≈73 psi, 5 bar)	
Power supply voltage	24 VDC ± 10% (stabilized power supply with ripple rate 1% or less)		
Current consumption	0.1A or less		
Input signal (input impedance)	0 to 10 VDC(6.6 kΩ)		
	0 to 5 VDC(3.3 kΩ)		
	4 to 20 mA		
Analog output	*2	1 to 5 VDC (load impedance 1 kΩ and over)	
Insulation resistance	100 MΩ (500 VDC) and over		
Withstand voltage	1500 VAC 1 min.		
Hysteresis	*3	0.4% F.S. or less	
Linearity	*3	±0.5% F.S. or less	
Resolution	*3	0.1% F.S. or less	
Repeatability	*3	0.3% F.S. or less	
Temperature characteristics	Zero point fluctuation	±0.15% F.S./°C or less	
	Span fluctuation	±0.07% F.S./°C or less	
Max. flow rate (ANR)	*4	2 l/min	
Step response	*5	No load	0.1 s or less
		15 cm ³ Load	0.5 s or less
Ambient temperature	5 (41°F) to 50 (122°F)°C		
Fluid temperature	5 (41°F) to 50 (122°F)°C		
Indicator	*6	2-color display	
Lubrication	Not available		
Mounting orientation	Free		
Atmosphere	Cannot be used in corrosive gas environments		
Boundary dimension	W14×D75×H75		
Port size	ø4, ø6 push-in fitting (selection)		
Weight	80 g		

*1 : The above characteristics are the values where power voltage is 24 ± V 0.1 VDC, and measured at room temperature.

*2 : Analog output is not available for the serial transmission.

DeviceNet-compatible (T9DAR) and CC-Link-compatible (T9GAR) types have pressure monitor data. Refer to the serial transmission slave station specifications on page 653.)

*3 : The condition of the values above is: 25 ± 3°C ambient temperature, no load, working pressure of the max. control pressure x 1.1 (EVT100: 110 kPa, EVT500: 0.55 MPa), and 10 to 100% control pressure.

In addition, when the secondary side is a closed circuit, pressure fluctuations will occur if the product is used for blowing or for similar applications.

*4 : The conditions where working pressure is maximum and control pressure is maximum are shown.

*5 : The properties above are obtained at the max. working pressure and when the step feed changes from

50% F.S. → 100% F.S.
50% F.S. → 60% F.S.
50% F.S. → 40% F.S.

*6 : The indicator is a guideline and does not guarantee accuracy.

Manifold specifications

Item	Wiring/supply and exhaust block	
	T11R/T30R	T9DAR/T9GAR
Manifold	Block manifold	
Mounting method	DIN rail mount	
Supply and exhaust method	Common supply/common exhaust	
Max. station No.	8 stations	12 stations *1
Port size	Output port (A)	ø4, ø6 push-in fitting (selection)
	Air supply (P)/exhaust port (R)	ø4, ø6 push-in fitting (selection)

*1: The max. station No. per slave unit is 4 (T9DAR/T9GAR).

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)

Drain
Separ
Mech
Press SW
Res press
exh valve

SlowStart
Anti-bac/Bac-
remove Filtr
Film
Resist FR

Oil-ProHR
Med
Press FR
No Cu/
PTFE FRL

Outdrs FRL
Adapter
Joiner
Press
Gauge

CompFRL
LgFRL
PrecsR

VacF/R
Clean FR
ElecPneuR

AirBoost
Speed Ctrl
Silncr

CheckV/
other
Fit/Tube
Nozzle

Air Unit
PrecsCompn
Electro
Press SW

ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl

WaterRiSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)

Gas
generator
RefrDry
DesicDry

HiPolymDry
MainFiltr
Dischrg
etc

Ending

How to order

Manifold model No.

MEVT 500-0 C4-T11R-8-U-3

Discrete EVT model No.

EVT 500-0 C4-E2-3

Model No.

A Pressure control range

B Input signal

C Port size
*1
*2

D Wiring/Supply and exhaust block

E Lead wire type

F Station No.

G DIN rail mounting direction

H Power supply voltage

* Be sure to fill in the "Manifold specifications" (page 659).

Code	Description				
A Pressure control range					
100	0 to 100 kPa				
500	0 to 0.5 MPa				
B Input signal					
		Wiring/supply and exhaust block			
		T11R	T30R	T9DAR	T9GAR
0	0 to 10 VDC	●	●		
1	0 to 5 VDC	●	●	●	●
2	4 to 20 mA	●	●		
C Port size (output port (A))					
C4	ø4 Push-in fitting				
C6	ø6 Push-in fitting				
D Wiring/supply and exhaust block					
T11R	Common terminal block				
T30R	D sub-connector				
T9DAR	Serial transmission (DeviceNet 4 input points/4 output points)				
T9GAR	Serial transmission (CC-Link Ver1.10 4 input points/4 output points)				
E Lead wire type					
		Wiring/supply and exhaust block			
		T11R	T30R	T9DAR	T9GAR
E2	4P connector	●	●	●	●
F Station No.					
1	1 station				
to	(Differs depending on the reduced wiring specifications.)				
12	12 stations \ Refer to the manifold specifications on page 658.				
G DIN rail mounting direction					
U	Bottom				
B	Back				
H Power supply voltage					
3	24 VDC				

⚠ Precautions for model selection

*1 : Indicate the port size of the input (P), exhaust (R) using the manifold specifications sheet of the wiring and supply/exhaust block sections.

*2 : A filter is integrated to input (P)/output (A) ports.

Clean-room specifications (Catalog No. CB-033SA)

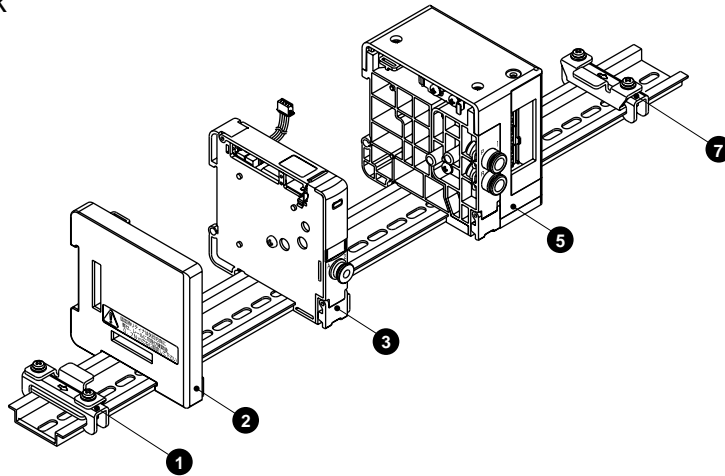
● Anti-dust generation structure for use in cleanrooms

MEVT - - P70

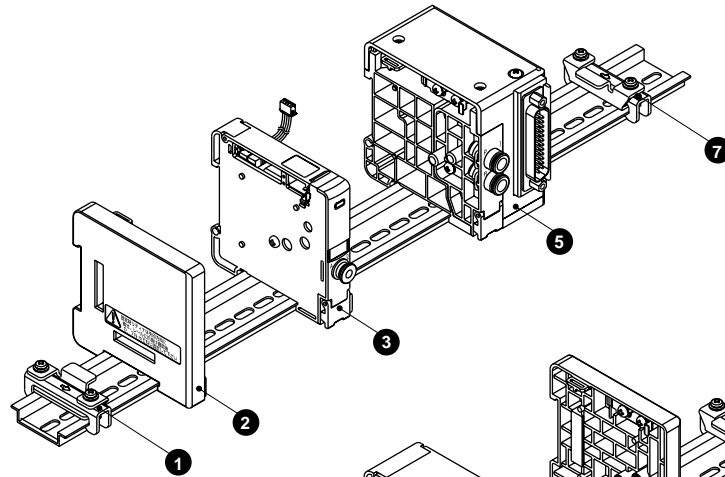
F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PresCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

F.R.L. MEVT components and parts list

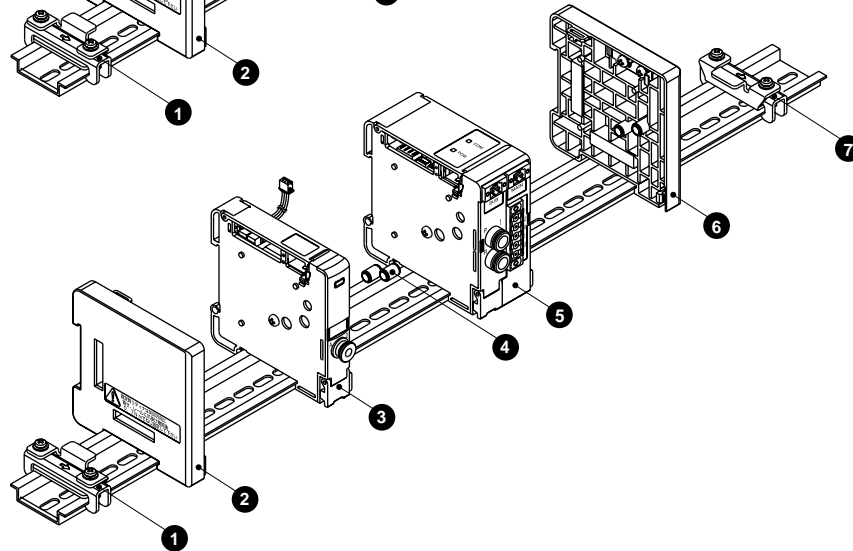
F.R. Common terminal block



D sub-connector



Serial transmission



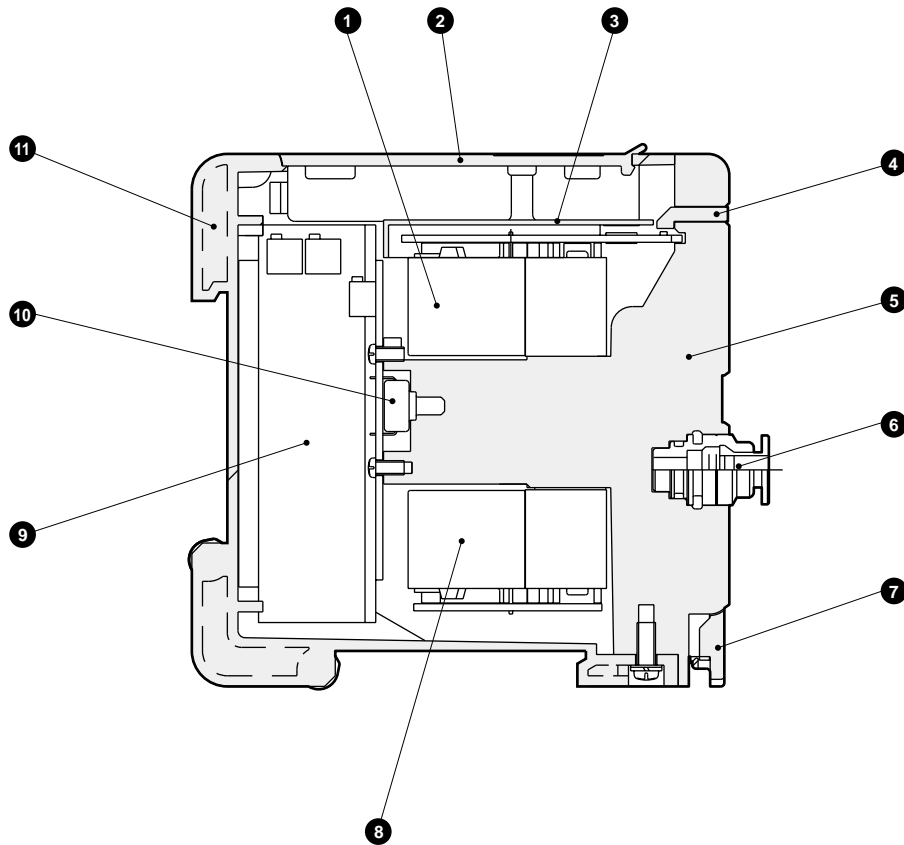
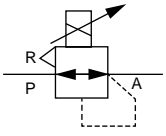
Main parts list

No.	Block component name	Model No.	No.	Block component name	Model No.
1	Retainer L	EVT-HL	5	Wiring/supply and exhaust block	EVT-T*
2	End block L	EVT-EL	6	End block R	EVT-ER
3	EVT	EVT*OO	7	Retainer R	EVT-HR
4	Piping fittings	EVT-P			

Weight

Block	Weight	Block	Weight	
EVT	80	T11R	115	
End block	EVT-EL	30	Wiring/supply and exhaust block	
	EVT-ER	30	T30R	125
			T9*R	145
		Retainer	EVT-H*	25
		Piping fittings	EVT-P	-

Internal structure and parts list



Cannot be disassembled

Main parts list

No.	Part name	Material	No.	Part name	Material
1	Solenoid valve for aid supply		7	Connecting hook plate	Polyamide resin
2	Wiring cover	ABS resin	8	Solenoid valve for exhaust	
3	Valve cover	ABS resin	9	Control board	
4	Display lens	Polycarbonate resin	10	Pressure sensor	
5	Body	Polyamide resin	11	Case	ABS resin
6	Push-in fitting				

- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrescsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRISens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

MEVT-T1/3/9 Series

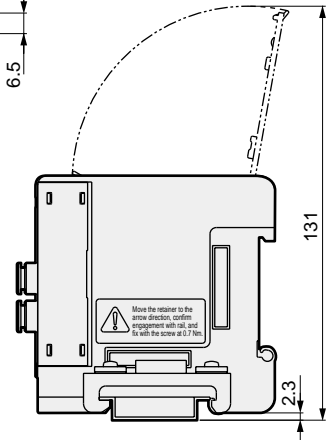
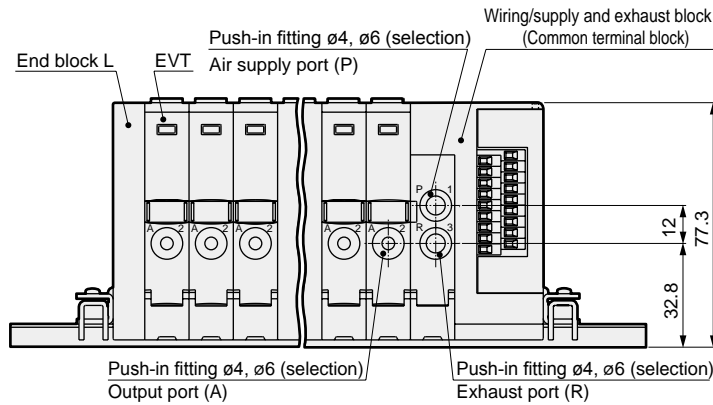
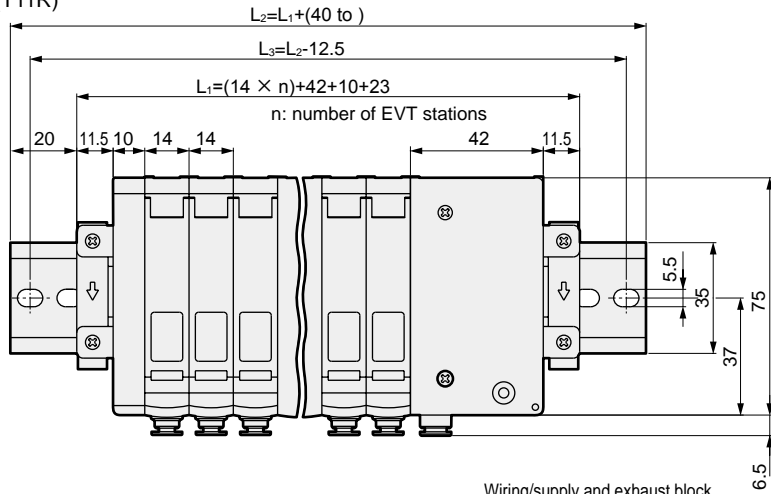
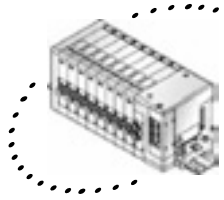
F.R.L. Dimensions



F.R. MEVT

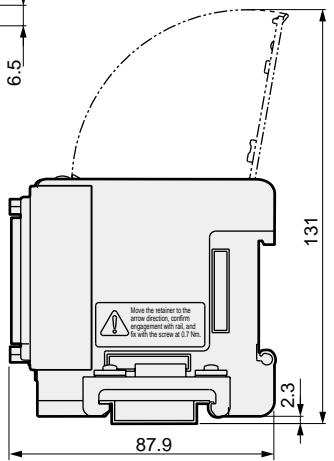
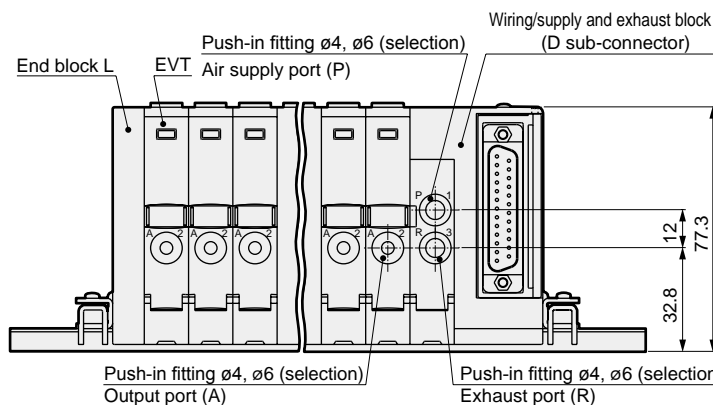
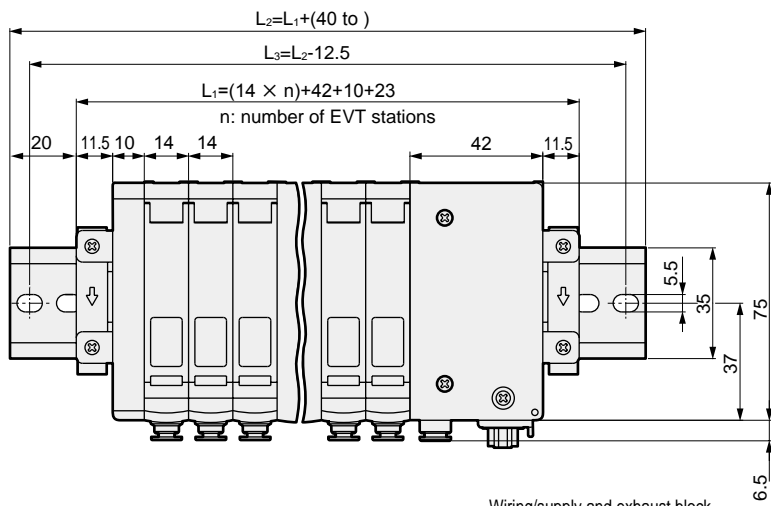
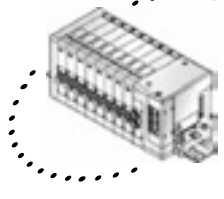
F (Filtr) ● Common terminal block (T11R)

- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneur
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending



MEVT

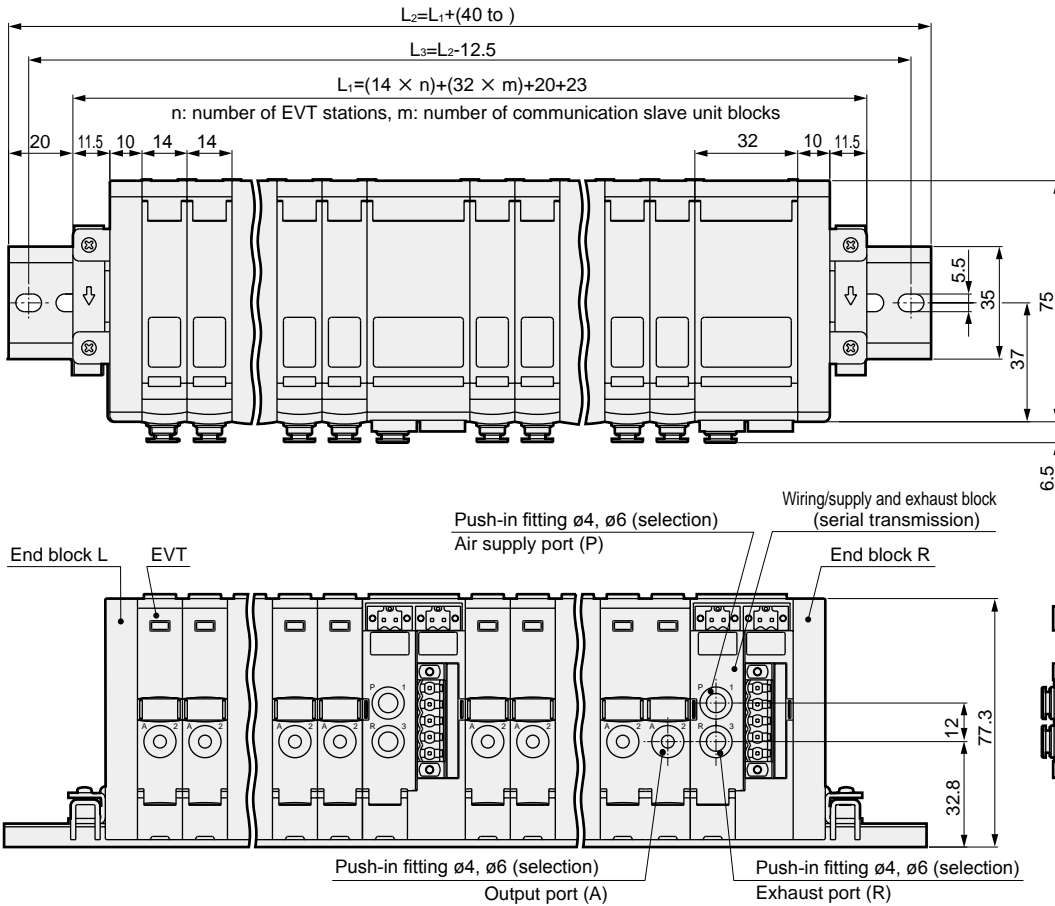
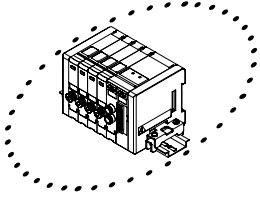
● D sub-connector (T30R)



Dimensions

MEVT

- Serial transmission (T9*)

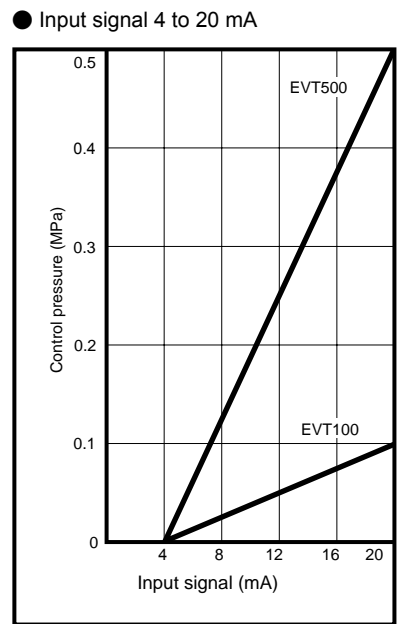
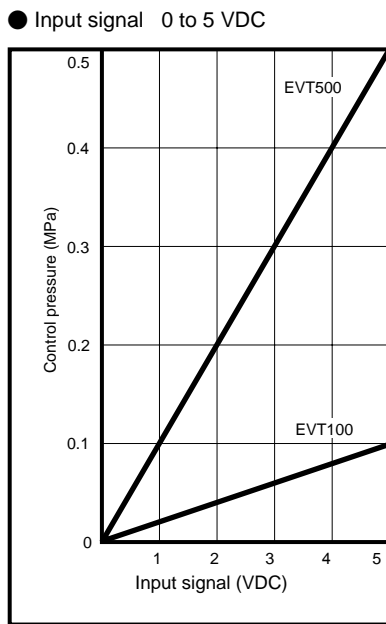
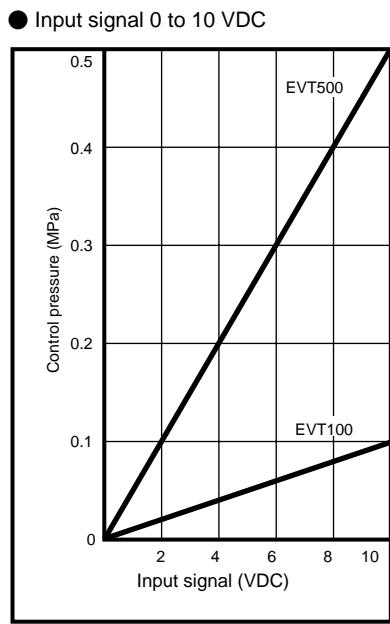


*1: The max. station No. per slave unit is 4 (T9DAR/T9GAR).

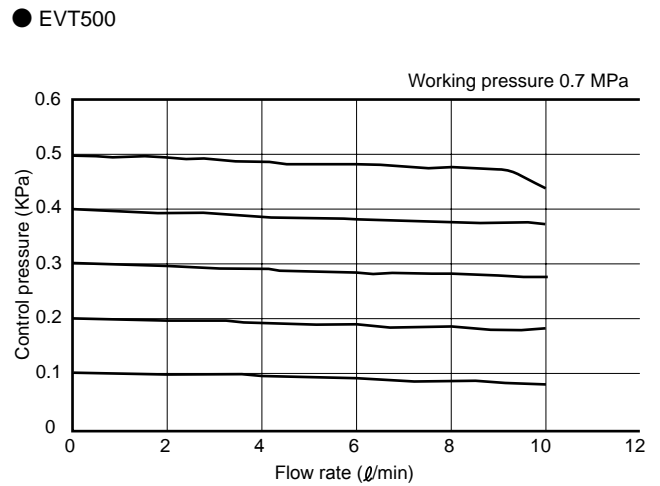
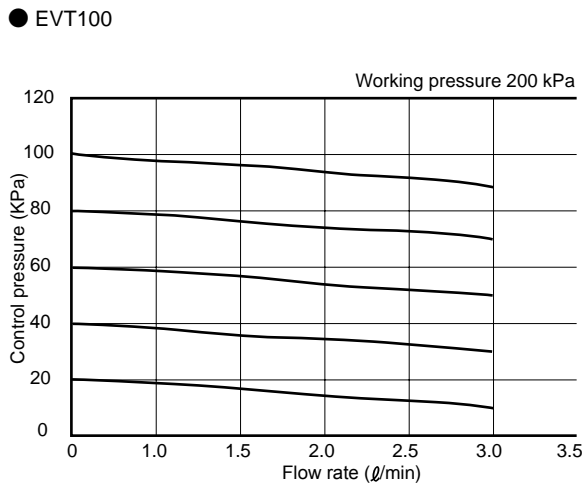
F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRISens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

F.R.L. I/O characteristics

- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-Prohr
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending



Flow characteristics



MEMO

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac- remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PresCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRISens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

F.R.L. MEVT: Block components

- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-Prohr
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

● EVT single unit

(1) Required station No. of EVT can be placed on a DIN rail.

However, the max. number of stations depends on the wiring method. (Refer to page 649.)

(2) Viewed from the fitting, nominal station No. of EVT is assigned as 1, 2, 3, ... from right.

(3) REG-Nos. on the EVT wiring covers are numbered in order of 1, 2, 3... from the nearest one and reset for each wiring and supply/exhaust block.

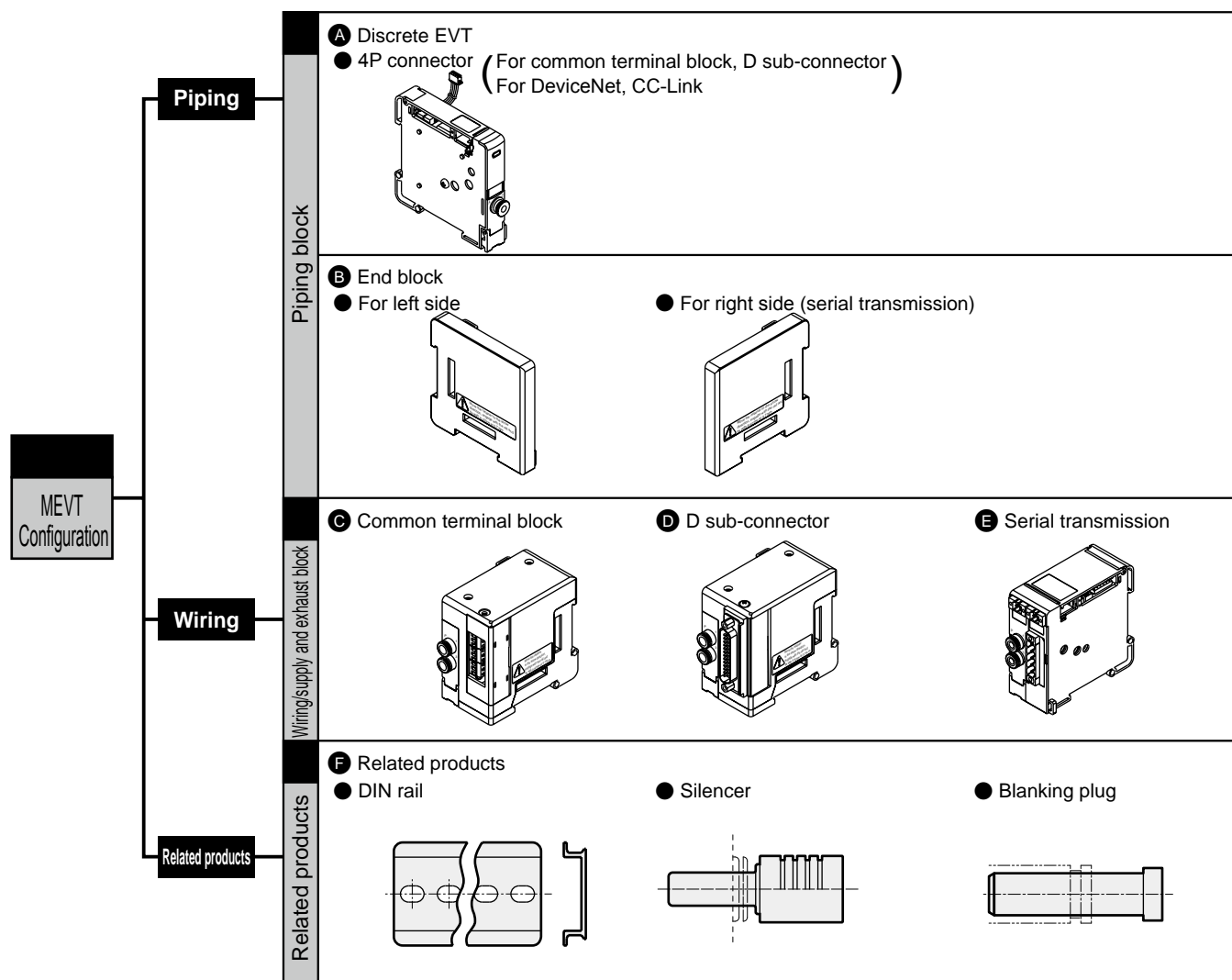
● Wiring/supply and exhaust block

(1) At the connecting part of each block, a number of blocks can be freely connected.

● End block

(1) For a serial transmission, install the blocks to both sides.

(2) When using the common terminal block or D sub-connector, mount only on the opposite side of the wiring and supply/exhaust blocks.



- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PreCsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PresCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterR/Sens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

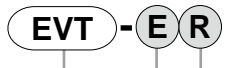
Piping

A. EVT single unit

Refer to pages 638 and 639 for selection guide.

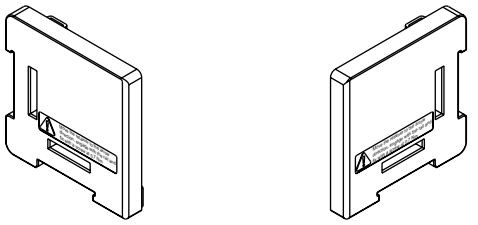
B. End block

For a serial transmission (T9*), install the block to both ends of the manifold.
 When using the common terminal block (T11R) or D sub-connector (T30R), mount only on the opposite side (EVT-EL) of the wiring and supply/exhaust blocks.



Model No. **A** Type **B** Installation position

A Type		B Installation position	
E	Common exhaust	L	For left side
		R	For right side (serial transmission)



[Retainer]

Fix at both ends of manifold.



Model No. **A** Installation position

A Installation position	
L	For left side
R	For right side



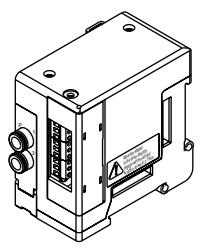
Wiring/supply and exhaust block

C. Common terminal block



Model No. Type **A** Input (P)/exhaust (R) port sizes

A Input (P)/exhaust (R) port sizes	
C4	ø4 push-in fitting
C6	ø6 push-in fitting

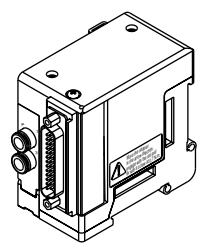


D. D sub-connector



Model No. Type **A** Input (P)/exhaust (R) port sizes

A Input (P)/exhaust (R) port sizes	
C4	ø4 push-in fitting
C6	ø6 push-in fitting

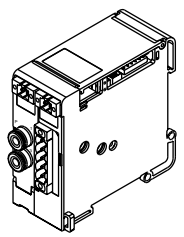


E. Serial transmission



Model No. **A** Type **B** Input (P)/exhaust (R) port sizes

A Type		B Input (P)/exhaust (R) port sizes	
T9DAR	DeviceNet 4 input points/4 output points	C4	ø4 push-in fitting
T9GAR	CC-Link Ver 1.10 4 input points/4 output points	C6	ø6 push-in fitting



MEVT-T1/3/9 Series

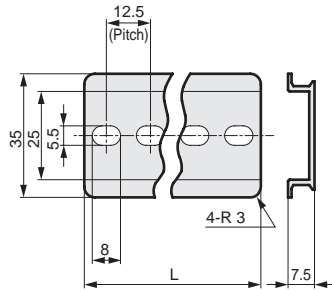
- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneur
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

Related products

DIN rail, silencer, blanking plug

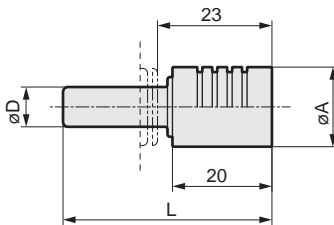
● DIN rail

EVT-BAA [Length]



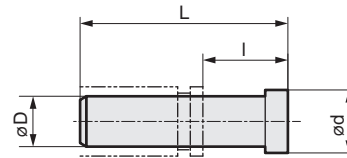
* Select [Length] from the DIN rail length selection table L₂ on page 658.

● Silencer



Model No.	D	L	A	Weight g
SLW-H6	ø6	41	16	3.9

● Blanking plug



Model No.	D	L	I	d	Weight g
GWP4-B	ø4	27	9	6	0.4
GWP6-B	ø6	29	11	8	0.8