

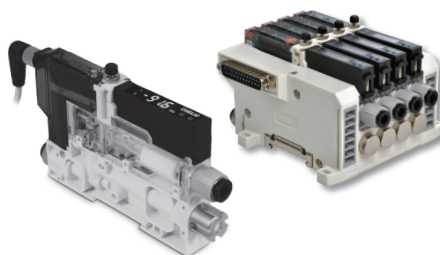
VKMT series Module Type Energy-saving Vacuum Ejector

Product features

CHELIC

Feature

- Modularization: Simple structure which can be changed easily.
- Fitting design, easy piping.
- Visualization: Digital display of pressure sensor which can visualiz by monitor.
- Multi-function: Vacuum ejector combined with breaking solenoid valve also with vacuum filter and silencer.
- It can be instal upright or sideways; Simple structure, easy installation and disassembly.



Specification

Item	Model	VKMT
Fluid		Air
Pressure range	MPa (kPa)	0.25 ~ 0.7 (250 ~ 700)
Proof pressure	MPa (kPa)	0.5(500)
Vacuum value	kPa	-90(675)
Nozzle diameter	Ømm	1.0
Max. suction flow	L/min	45
Ambient and fluid temperature	°C	0 ~ 50
Material	Body	Copper (Nickel plating)
	Plastic	NYLON, PBT
Port size	mm	Ø6, Ø8
Valve type		SR2 - 100
Rated voltage	V	24±10%VDC
Power consumption	W	1.2

Pressure switch specification

Item	Model	PST 2
Rated pressure range	kPa	- 100.0~0
Pressure range	kPa	-100.0~100.0
Withstanding pressure	kPa	500
Applicable fluid		Filtered air, Non-corrosive, Non-flammable gas
Power voltage		12 to 24V DC ± 10%, Ripple ≤ 10%
Repeatability		±0.2% F.S. ± 1 digit
Current consumption	mA	≤ 40(With no load)
Response time	ms	≤ 2.5(Chattering-proof function: 25, 100, 250, 500, 1000 and 1500 selectable)
Environmental resistance	Enclosure	IP40
	Ambient temp. range	0~50° C (No condensation or freezing)
	Ambient humidity range	Operation / S torage : 35 ~ 85 % RH (No c ondensation)
	Withstand voltage	1000 V AC in 1-min (between case and lead wire)
	Insulation	≥ 50 MΩ (a t 500 V DC, between case and lead wire)
	Vibration	Total amplitude 1.5 mm, 10 Hz ~ 55 Hz sc an for 1 minute, two hours each direction of X, Y and Z
Impact	980 m/s ² (100G), 3 times each in direction of X, Y and Z	
Temperature characteristic		±2% F.S. (within 0~50° C temperature range)
Weight (With 1 Meter Lead Wire)	g	33

EV

EVM

VA□

VM□

VM□U

VHS

VSL

VKM

VKMT

VCK

VK20□

VK30□

VQ20□

VFD

VFM

VFU

ERV

ERVL

MVS

DYC

VKMT series Module Type Energy-saving Vacuum Ejector

Code of order

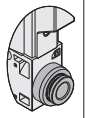

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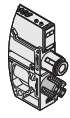
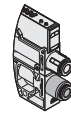
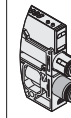
Code of order - Vacuum ejector/ Single unit

VKMT - A 06 - E1 - 10 - DC24 - H1 - P04 - S - C2

1 2 3 4 5 6 7 8 9

1	Mark	Model
	A	Single unit

2	Mark	P port
	06	Ø6 supply tube
	08	Ø8 supply tube
Image		
		
Ø6	Ø8	

3	Mark	Exhaust
	E1	Direct exhaust
	E2	Ø6 tube
	E3	Ø8 tube
Image		
		
Direct exhaust	Ø6 tube	Ø8 tube




4	Mark	Nozzle (mm)
	10	Ø1.0

5	Mark	Voltage
	DC 24	24V 1.2W

6	Mark	Electrical entry
	H1	Individual wiring

7	Mark	Output
	P04	NPN output
	P05	PNP output
	P06	Analog1-5V

8	Mark	Cable connector
	S	Straight type 2 M
	H	Angle type 2 M

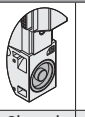
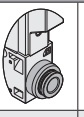
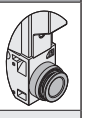
9	Mark	Bracket
	None	No bracket
	C1	Rail bracket
	C2	Mounting bracket
Image		
	No bracket	
	Rail bracket	
	Mounting bracket	

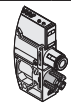
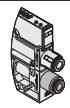
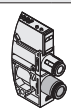
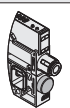
Code of order - Vacuum ejector/ Manifold type

VKMT - B 00 - E4 - 10 - DC24 - H2 - S - P04

1 2 3 4 5 6 7 8

1	Mark	Model
	B	Manifold type

2	Mark	P port
	00	Closed type
	06	Ø6 supply tube
	08	Ø8 supply tube
Image		
		
Closed type	Ø6	Ø8

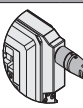
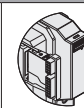
3	Mark	Exhaust
	E1	Direct exhaust
	E2	Ø6 tube
	E3	Ø8 tube
	E4	Closed type
Image		
		
Direct exhaust	Ø6 tube	
		
Ø8 tube	Closed type	

• While select E4, it can't be applied with E6 together

4	Mark	Nozzle (mm)
	10	Ø1.0

5	Mark	Voltage
	DC 24	24V 1.2W

6	Mark	Electrical entry
	H1	Individual wiring
	H2	Grouping wiring

Image	
	
Individual wiring	Grouping wiring

• H1: Apply with L type plug
• H2: Apply with "K1/K3" D type plug

7	Mark	Cable connector
	S	Straight type 2 M
	H	Angle type 2 M

8	Mark	Output
	P04	NPN output
	P05	PNP output
	P06	Analog1-5V

VKMT series Module Type Energy-saving Vacuum Ejector

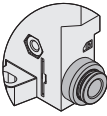
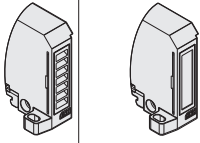
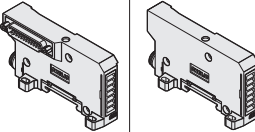
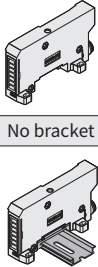
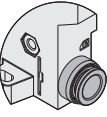
Code of order

CHELIC

Code of order - Vacuum ejector/ Side end plate

VKMX 06 - E5 - K1 - 02 - C1

1 — 2 — 3 — 4 — 5

1	Mark	Unified exhaust type	2	Mark	Unified exhaust type	3	Mark	Electrical entry	5	Mark	Bracket
	06	Ø6 supply tube		E5	Complex exhaust		K1	D type plug: 1M cable length		None	No bracket
	08	Ø8 supply tube		E6	Closed type		K3	D type plug: 3M cable length		C1	Rail bracket
	Image			Image			Image			Image	
											
	Ø6			Complex exhaust Closed type			D type plug Without plug			No bracket Rail bracket	
				<ul style="list-style-type: none"> While select E6, it can't be applied with E4 together 							
	Ø8										
							4				
							Mark	Manifold quantity			
							01	1 M			
							02	2 M			
							:	:			
							07	7 M			

Product weight

Item	Model	Weight (g)						
Single unit vacuum ejector	VKMT-A-00-E1-10-DC24-H1-P04	143						
Manifold type vacuum ejector	VKMT-B-00-E4-10-DC24-H2-P04	141						
Side end plate type	VKMX-08-E5-K1-01-C1	1 M	2 M	3 M	4 M	5 M	6 M	7 M
	07	172	177	182	187	192	197	202

Maximum number of manifold stations that can operate simultaneously

Item	Specification	VKMX
Ø8 tube	Complex exhaust	6 M
	Individual EXH	7M

EV

EVM

VA □

VM □

VM □ U

VHS

VSL

VKM

VKMT

VCK

VK20 □

VK30 □

VQ20 □

VFD

VFM

VFU

ERV

ERVL

MVS

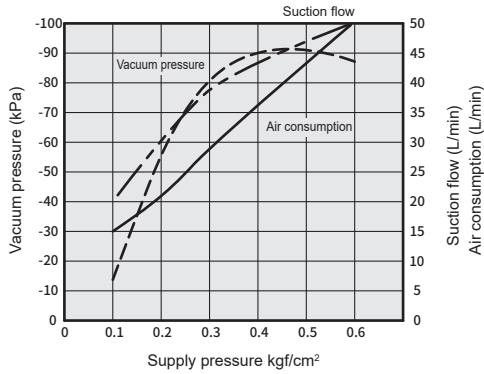
DYC

VKMT series Module Type Energy-saving Vacuum Ejector

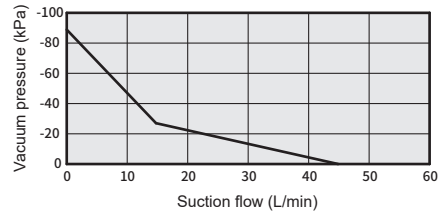
Product features

CHELIC

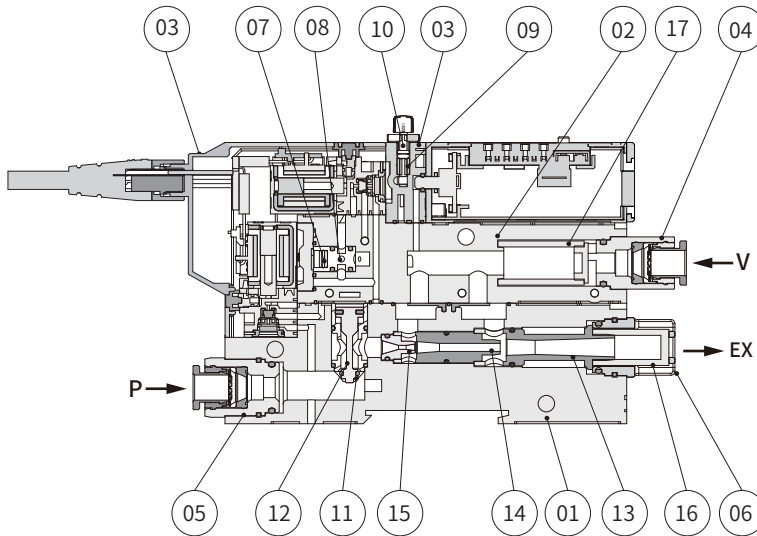
Characteristics



Flow rate characteristics



Internal structure



Components and Material list

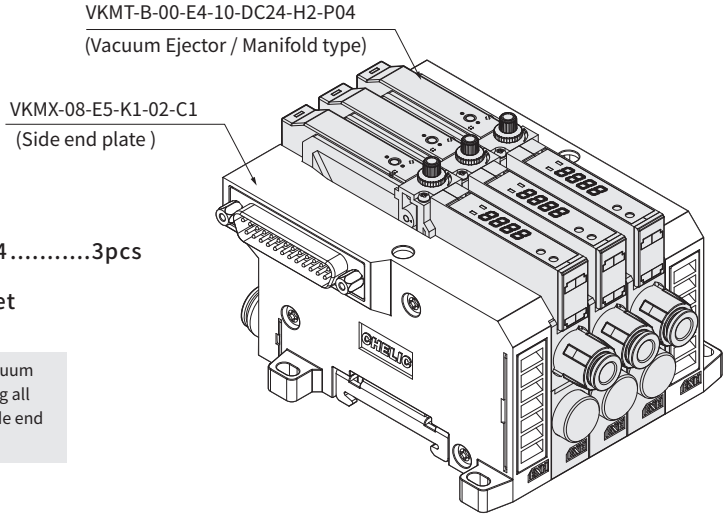
No.	Item	Material	No.	Item	Material
01	Base/ Single unit	PBT+Fiber	10	Release adjustor lever	Copper Alloy
02	Filter holder/ Single unit	PBT+Fiber	11	Inlet port lever	Copper Alloy
03	Cover /Single unit	PC	12	Inlet port holder	Copper Alloy
04	Filter knob	Nylon fiber	13	Spool #2	Copper Alloy
05	P port fitting	Copper Alloy	14	Spool #1	Copper Alloy
06	EXH port fitting	Copper Alloy	15	Vacuum nozzle	Copper Alloy
07	Break valve lever	Copper Alloy	16	EXH filter	Foam
08	Release holder	Copper Alloy	17	Suction filter	Foam
09	Break valve base	Copper Alloy			

VKMT series Module Type Energy-saving Vacuum Ejector

Description/ Setting

CHELIC

Manifold type ordering expression



1. VKMT-B-00-E4-10-DC24-H2-P043pcs
+
2. VKMX-08-E5-K1-02-C11set

* Before ordering, please confirm the type of vacuum ejector and quantity. After selection, gathering all the vacuum ejectors and chose the type of side end plate.

EV

EVM

VA

VM

VM U

VHS

VSL

VKM

VKMT

VCK

VK20

VK30

VQ20

VFD

VFM

VFU

ERV

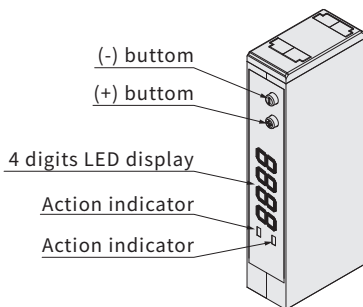
ERVL

MVS

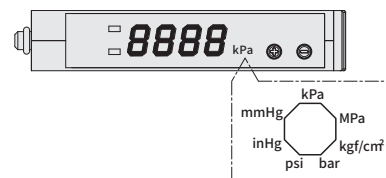
DYC

PST2 numeric display pressure switch setting instructions

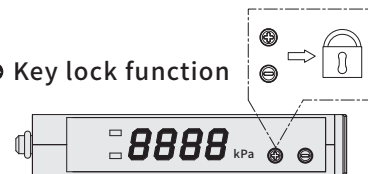
- 2 sets of output & linear analogy output (1~5V)
- Compact size: 50x10x20mm³(L x W x H)
- Key lock function
- Various pressure units available
kPa, MPa, kgf/cm², bar, psi, inHg, mmHg



▶ Various pressure units available



▶ Key lock function



Key lock mode can prevent improper operation to pressure switch.

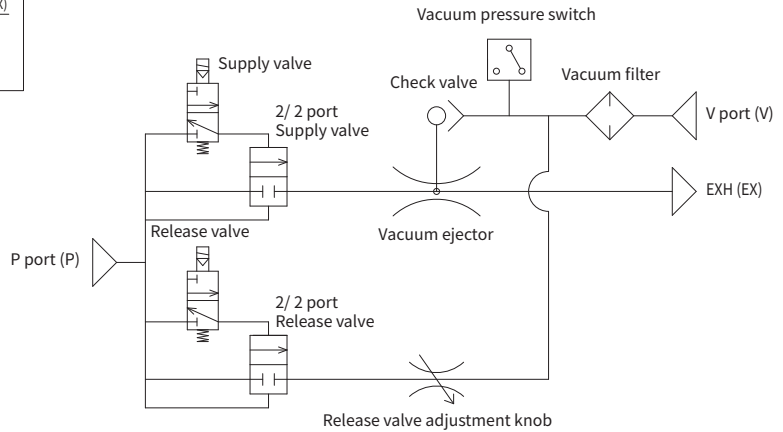
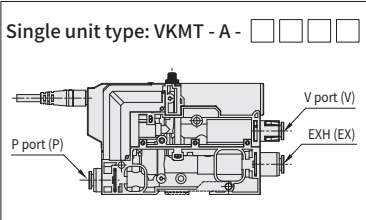
Key lock mode can pbe activated by pressing + and - for 3 seconds.

VKMT series Module Type Energy-saving Vacuum Ejector

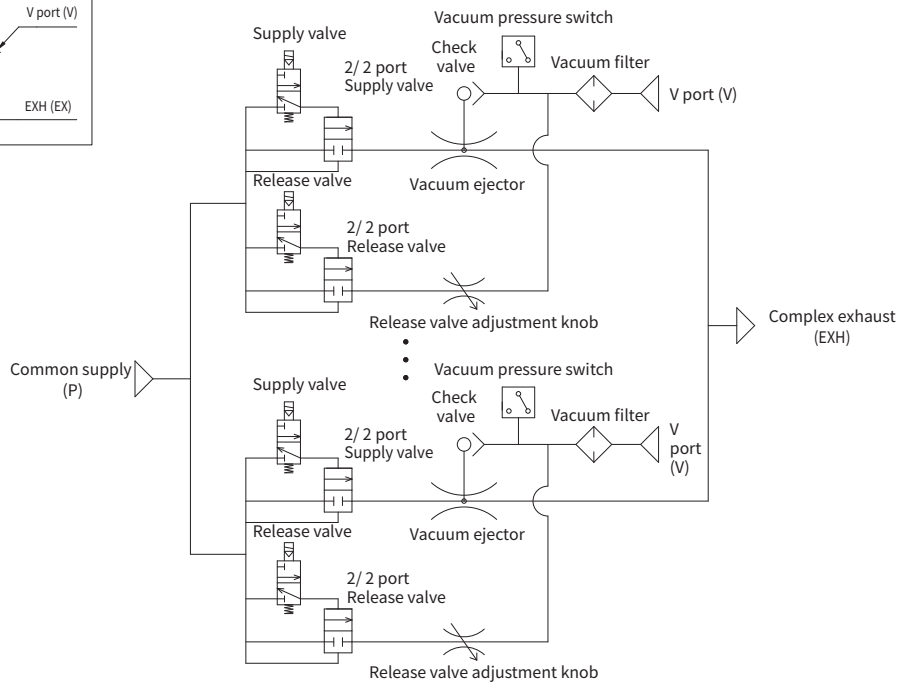
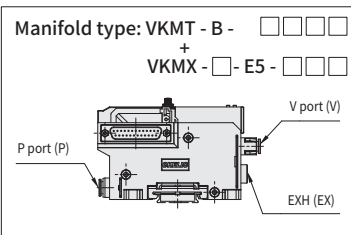
Circuit Expression

CHELIC

Vacuum ejector/ Single unit



Vacuum ejector/ Manifold type



VKMT series Module Type Energy-saving Vacuum Ejector

Description/ Setting

CHELIC

EV

EVM

VA □

VM □

VM □ U

VHS

VSL

VKM

VKMT

VCK

VK20 □

VK30 □

VQ20 □

VFD

VFM

VFU

ERV

ERVL

MVS

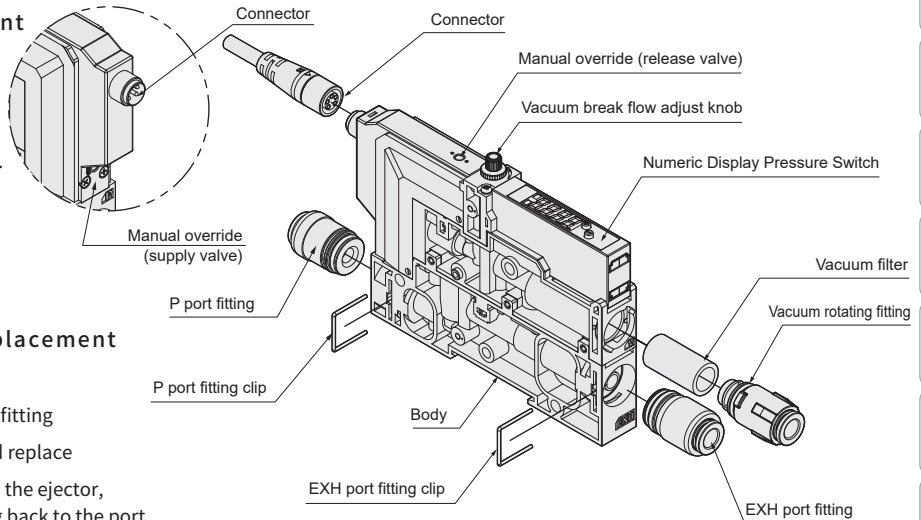
DYC

Single unit components

A. Fitting replacement

● P port/ EXH port:

- (1) Dismantling fitting clips
- (2) Take out the fittings, then put into new fittings.
- (3) Place new fittings onto ejectors and put back the fitting clips



B. Filter element replacement

● Vacuum port:

- (1) Pull out the vacuum port fitting
- (2) Take out the element and replace
- (3) Position the element into the ejector, then rotate vacuum fitting back to the port

Component replacement

A. How to increase manifold stations

- (1) Remove three tension bolts
- (2) Dismantling right end plate (Be careful not to drop the gasket and PC board)
- (3) Mount a single unit to the end surface (Be careful not to drop the gasket and PC board)
- (4) Lock three tension bolts

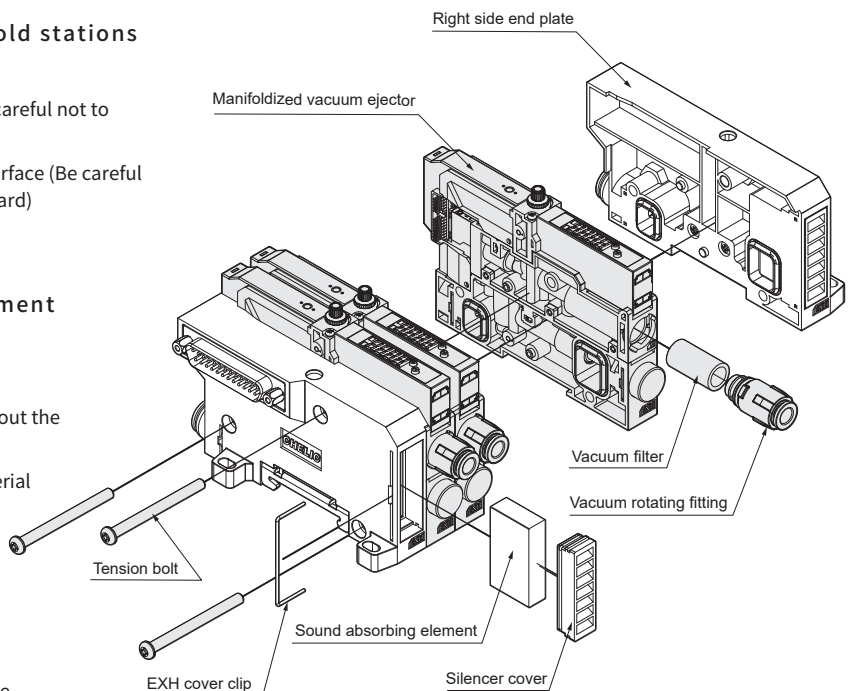
B. Silencer cover replacement

● Sound absorbing element:

- (1) Remove the clip
- (1) Remove the silencer cover, pull out the sound absorbing element
- (1) Replace the new absorbing material and position the silencer cover, then put the clip back to unit

● Vacuum port:

- (1) Pull out the vacuum port fitting
- (2) Take out the element and replace
- (3) Position the element into the ejector, then rotate vacuum fitting back to the port



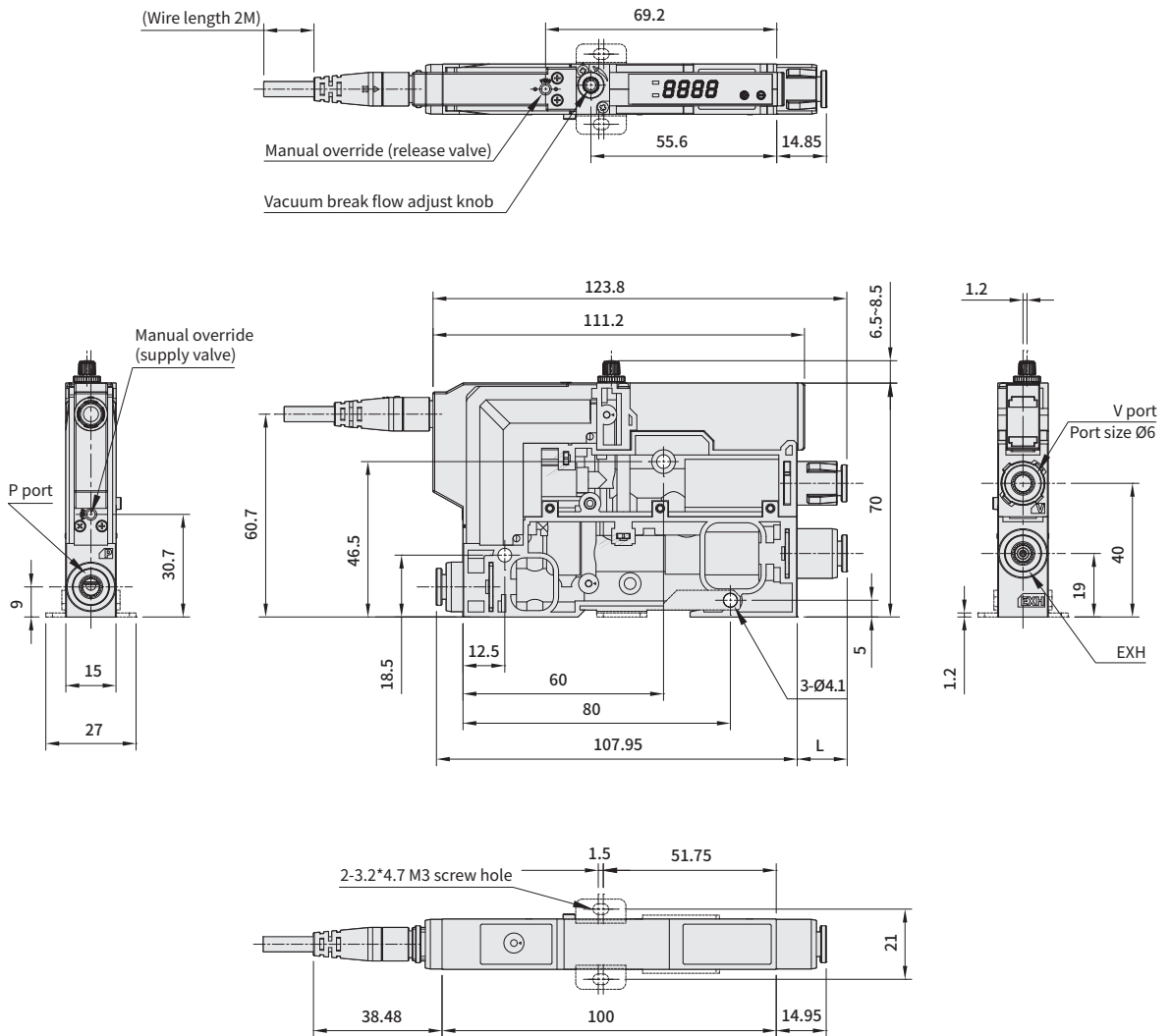
VKMT series Module Type Energy-saving Vacuum Ejector

Dimensions

CHELIC

Vacuum ejector/ Single unit

VKMT-A-06-**E2**-10-DC24-H1-P04-C2



Exhaust

Unit: mm

Mark	Model	Image	L	Mark	Model	Image	L	Mark	Model	Image	L
E1	Base/ Single unit		12	E2	Ø6 tube		15	E3	Ø8 tube		15

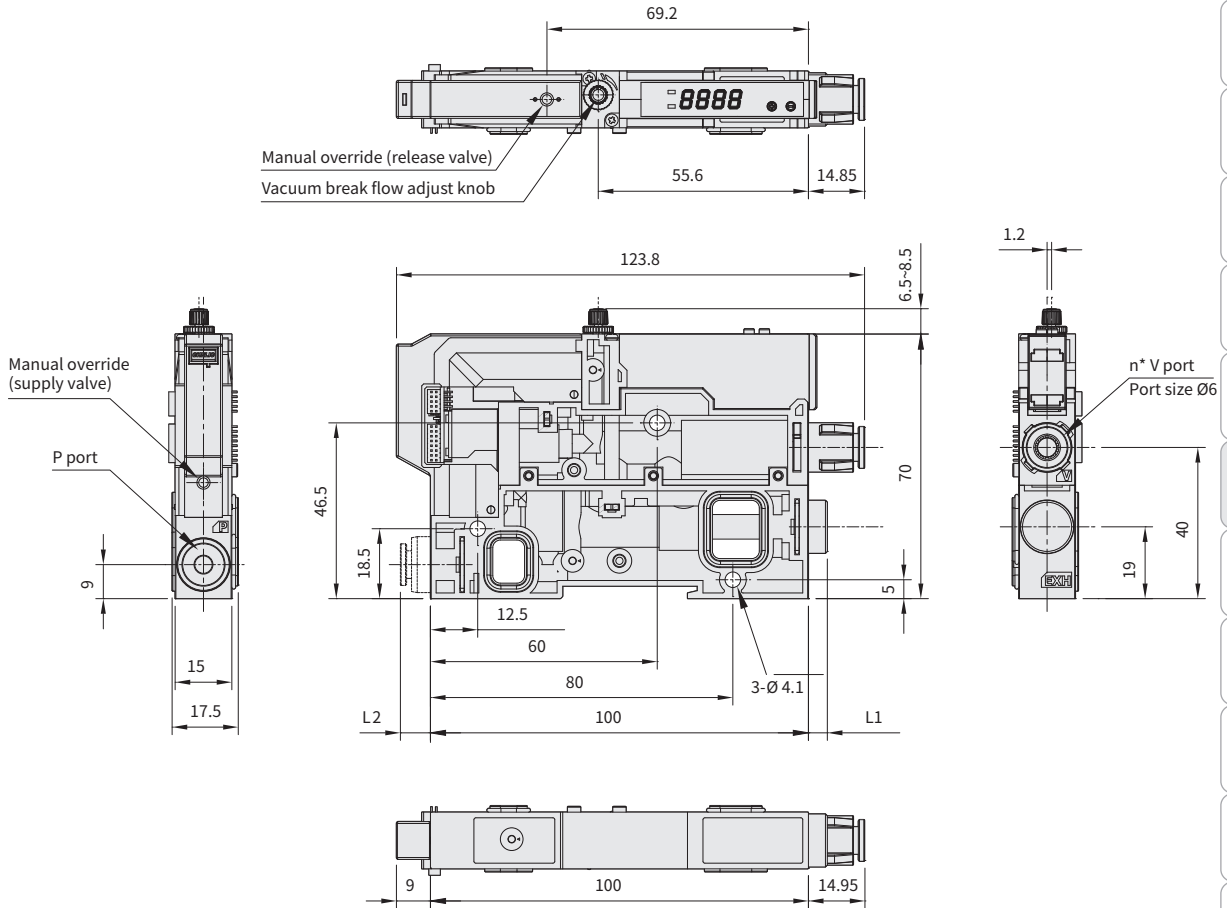
VKMT series Module Type Energy-saving Vacuum Ejector

Dimensions

CHELIC

Manifold vacuum ejector must with side end plate

VKMT-B---10-DC24-H2-P04



P port

Unit: mm

Mark	Model	Image	L2	Mark	Model	Image	L2	Mark	Model	Image	L2
00	Closed type		-	06	Ø6 supply tube		8	08	Ø8 supply tube		8

Exhaust

Unit: mm

Mark	Model	Image	L1	Mark	Model	Image	L1	Mark	Model	Image	L1	Mark	Model	Image	L1
E1	Base/Single unit		12	E2	Ø6 tube		15	E3	Ø8 tube		15	E4	Closed type		5

EV

EVM

VA □

VM □

VM □ U

VHS

VSL

VKM

VKMT

VCK

VK20 □

VK30 □

VQ20 □

VFD

VFM

VFU

ERV

ERVL

MVS

DYC

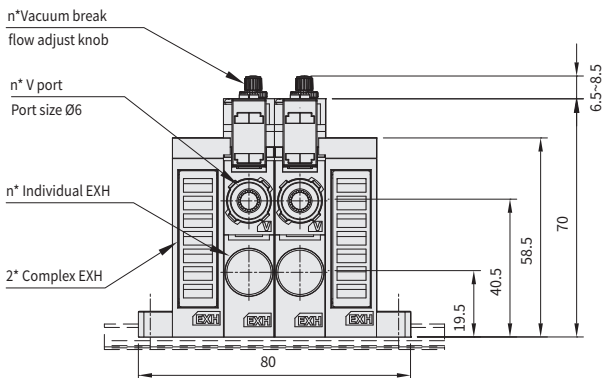
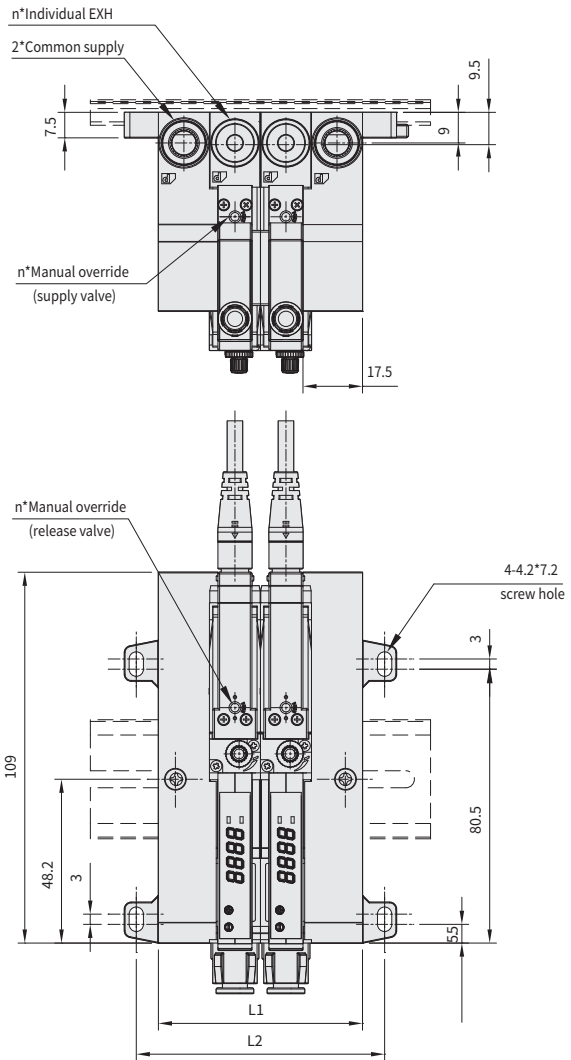
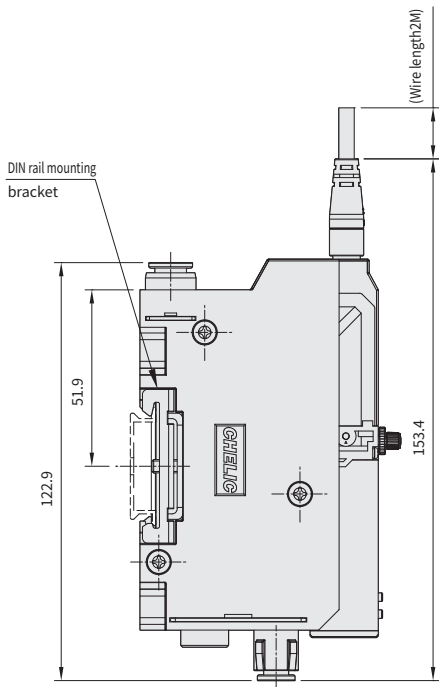
VKMT series Module Type Energy-saving Vacuum Ejector

Dimensions

CHELIC

Manifold individual wiring

VKMT - B - 00 - E4 - 10 - DC24 - H1 - P04* 2pcs
+
VKMX-06-E5-**L1** -02-C1*1set



Unit: mm

Manifold no.	1	2	3	4	5	6	7	8	9	10
L1	45	60	75	90	105	120	135	150	165	180
L2	58	73	88	103	118	133	148	163	178	193

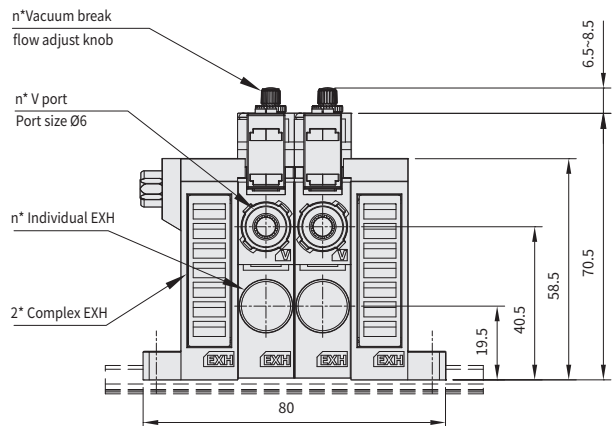
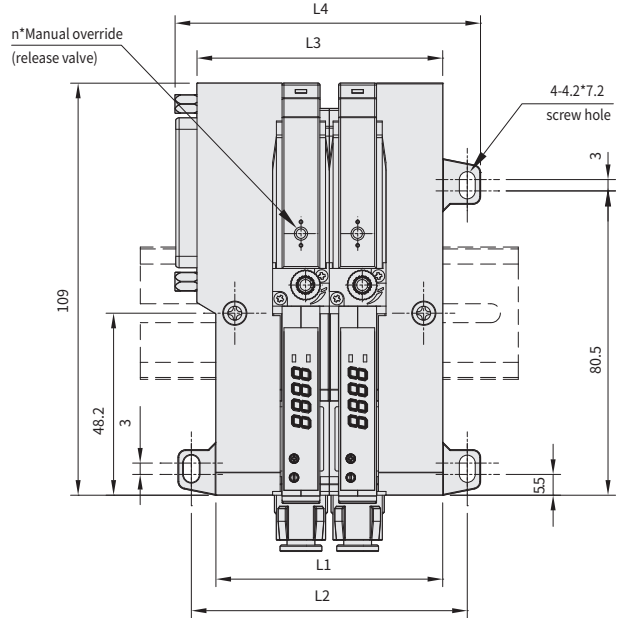
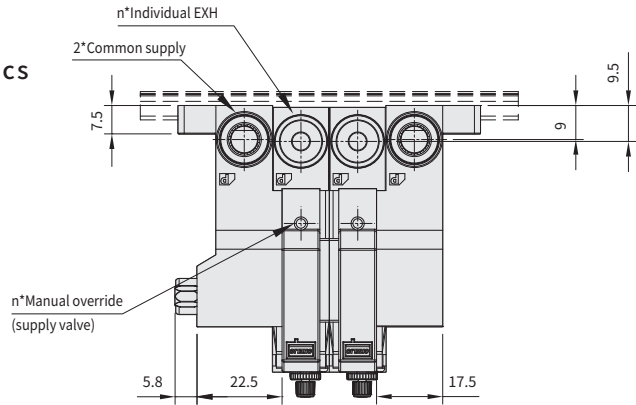
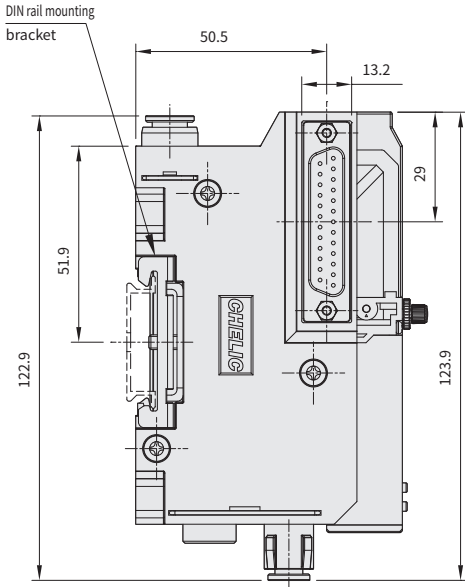
VKMT series Module Type Energy-saving Vacuum Ejector

Dimensions

CHELIC

D-Sub Connector

VKMT-B-00-E4-10-DC24-H2-P04 *2pcs
+
VKMX-06-E5-K1-02-C1*1set



Unit: mm

Manifold no.	1	2	3	4	5	6	7	8	9	10
L1	45	60	75	90	105	120	135	150	165	180
L2	58	73	88	103	118	133	148	163	178	193
L3	50	65	80	95	110	125	140	155	170	185
L4	65.8	80.8	95.8	110.8	125.8	140.8	155.8	170.8	185.8	200.8

EV

EVM

VA □

VM □

VM □ U

VHS

VSL

VKM

VKMT

VCK

VK20 □

VK30 □

VQ20 □

VFD

VFM

VFU

ERV

ERVL

MVS

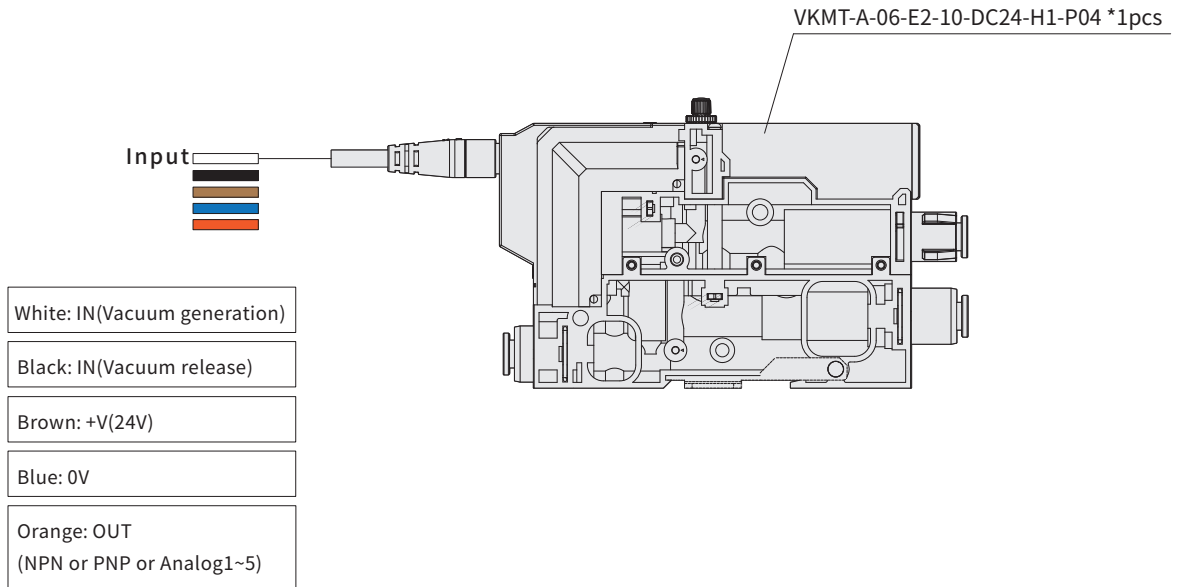
DYC

VKMT series Module Type Energy-saving Vacuum Ejector

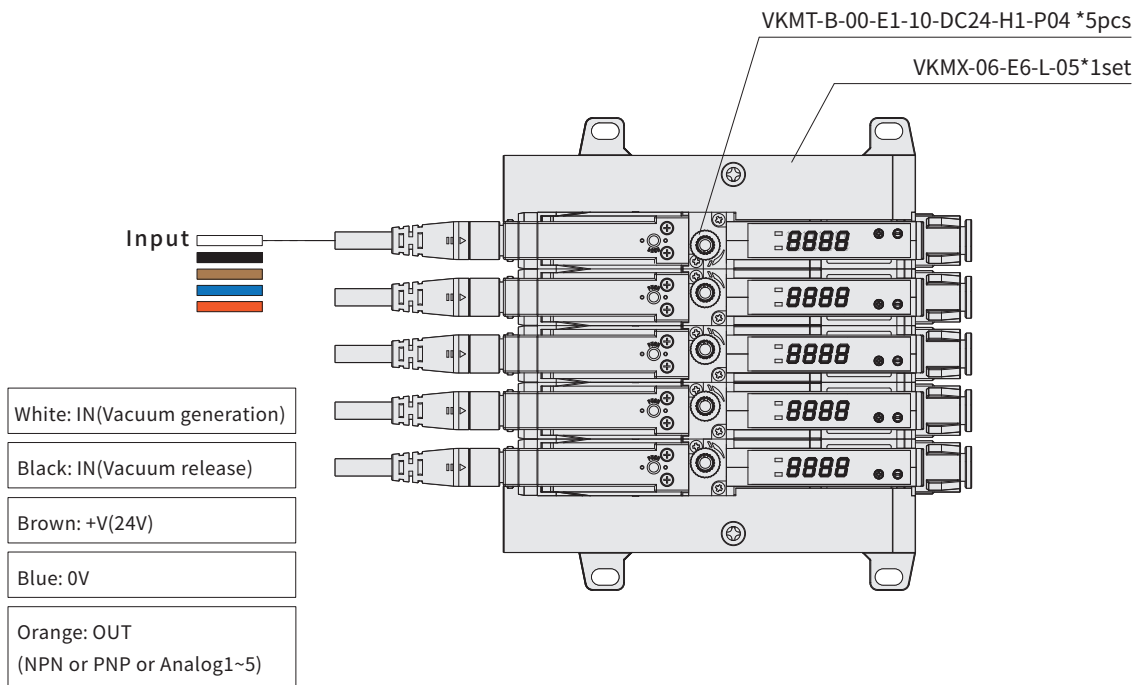
Wiring expression

CHELIC

Vacuum ejector/ Single unit



Manifold vacuum ejector with individual wiring

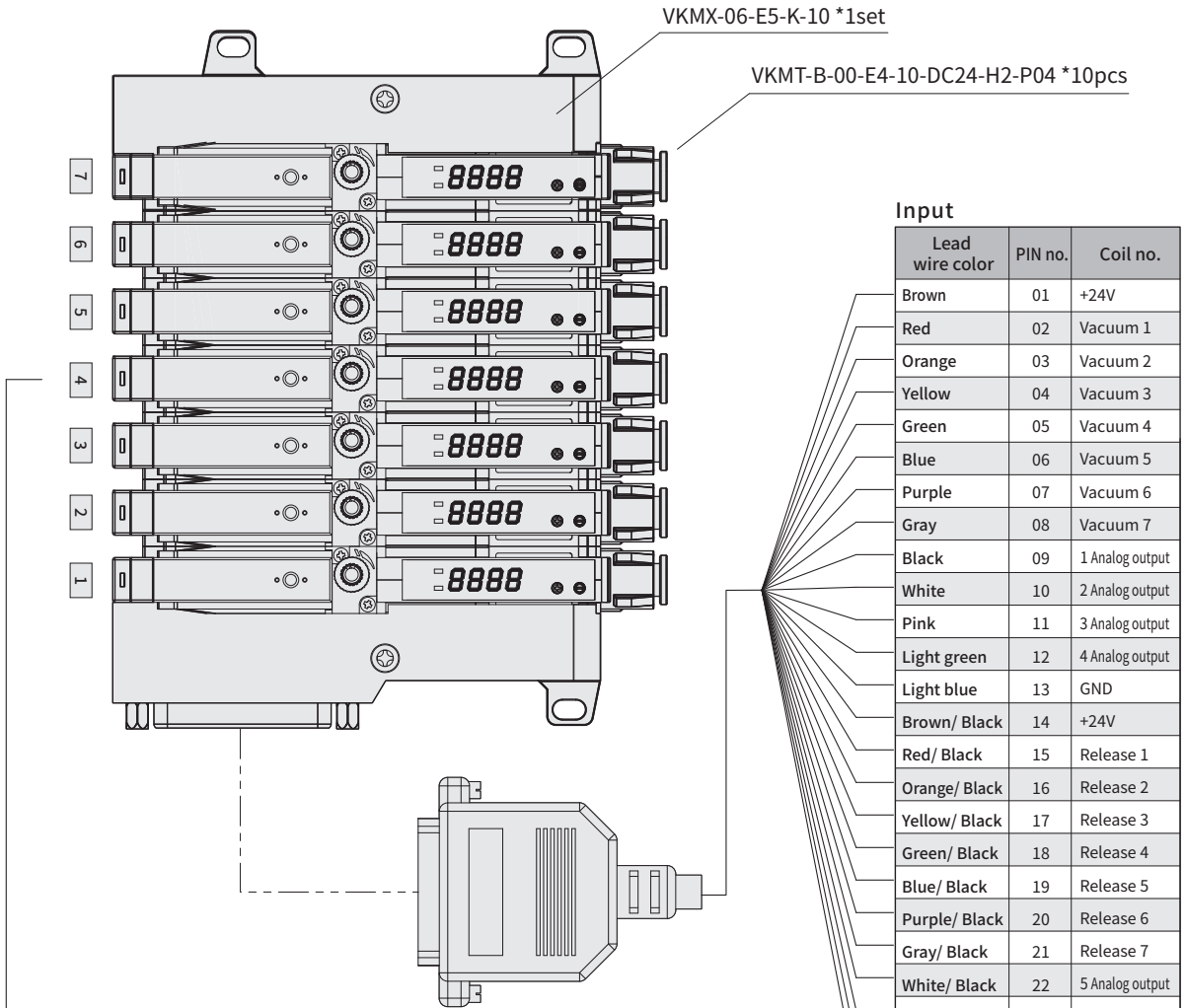


VKMT series Module Type Energy-saving Vacuum Ejector

Wiring expression

CHELIC

Manifold vacuum ejector with D-Sub connector



Input

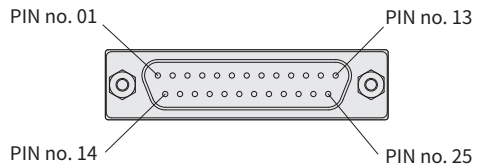
Lead wire color	PIN no.	Coil no.
Brown	01	+24V
Red	02	Vacuum 1
Orange	03	Vacuum 2
Yellow	04	Vacuum 3
Green	05	Vacuum 4
Blue	06	Vacuum 5
Purple	07	Vacuum 6
Gray	08	Vacuum 7
Black	09	1 Analog output
White	10	2 Analog output
Pink	11	3 Analog output
Light green	12	4 Analog output
Light blue	13	GND
Brown/ Black	14	+24V
Red/ Black	15	Release 1
Orange/ Black	16	Release 2
Yellow/ Black	17	Release 3
Green/ Black	18	Release 4
Blue/ Black	19	Release 5
Purple/ Black	20	Release 6
Gray/ Black	21	Release 7
White/ Black	22	5 Analog output
Pink/ Black	23	6 Analog output
Light green/Black	24	7 Analog output
Light blue/Black	25	GND

Wiring expression:

PIN Coil	Series	1	2	3	4	5	6	7
Analog (DC1~5V)	09	10	11	12	22	23	24	
Vacuum	02	03	04	05	06	07	08	
Release	12	16	17	18	19	20	21	

Cable assembly:

Cable length (L)	Model	Note
1M	VKMX-***-K1	Cable
3M	VKMX-***-K3	0.3mm ² x 25 Core



EV

EVM

VA□

VM□

VM□U

VHS

VSL

VKM

VKMT

VCK

VK20□

VK30□

VQ20□

VFD

VFM

VFU

ERV

ERVL

MVS

DYC