



SWITCHOVER DOCUMENT

New ZH Series
Box Type (Built-in Silencer)
Vacuum Ejector

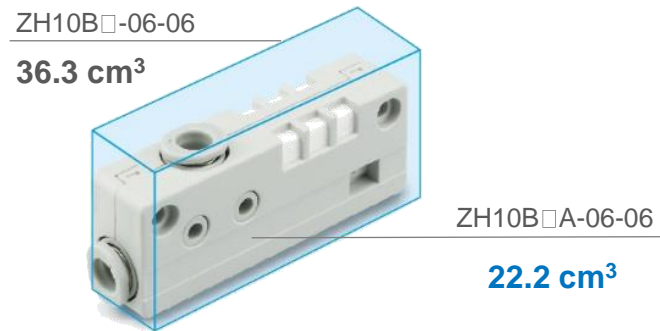
Improved features and related benefits

Feature

- Reduced overall volume, up to 39 %.
- Reduced port height, up to 20 %.
- Reduced weight, up to 59 %.

Customer Benefit

- Space saving and due to weight reduction, less inert moments when the ejector is mounted in mobile applications (example: robot arms).



Overall volume reduction up to 39 %
(reduced by up to 14.1 cm³)



Port height reduction up to 20 %
(reduced by up to 4.6 cm³)



Current product

**Weight reduction
up to 59 %**
(reduced by up to 19.4 g)



New product

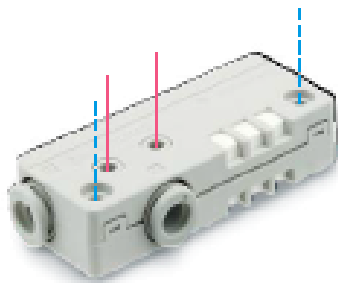
Improved features and related benefits

Feature

- 3 mounting types available:
 - Direct mounting
 - L-bracket mounting
 - DIN rail mounting

Customer Benefit

- Mounting flexibility, better adaptation to the installation.



— Body mounting
 - - - Cover mounting

Direct mounting



L-Bracket mounting



DIN rail mounting

Improved features and related benefits

Feature

- Greater maximum suction flow rate (up to 78 l/min), with a bit higher air consumption (up to 84 l/min) comparing with the current model.

Customer Benefit

- Ensures greater suction capacity of workpieces.

Feature

- Different colour of release button, light grey for metric type and orange for inch type (new).

Customer Benefit

- Easy identification of the product.



Release button:
light grey



Release button:
orange (new)

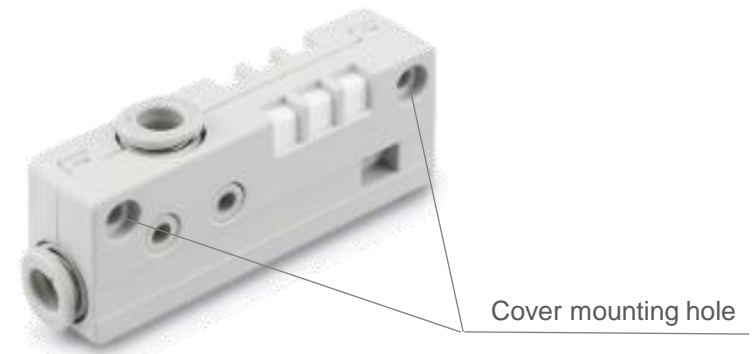
Interchangeability

Mounting is interchangeable with the current model (excludes the inch type with nozzle nominal sizes of 0.5 to 1.3).

Current product

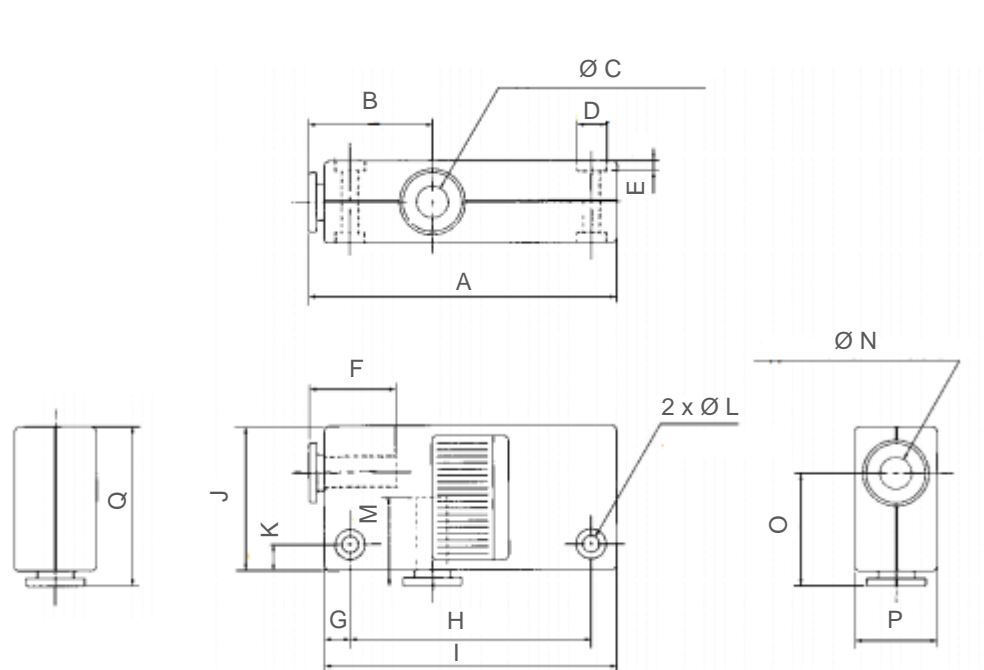


New product

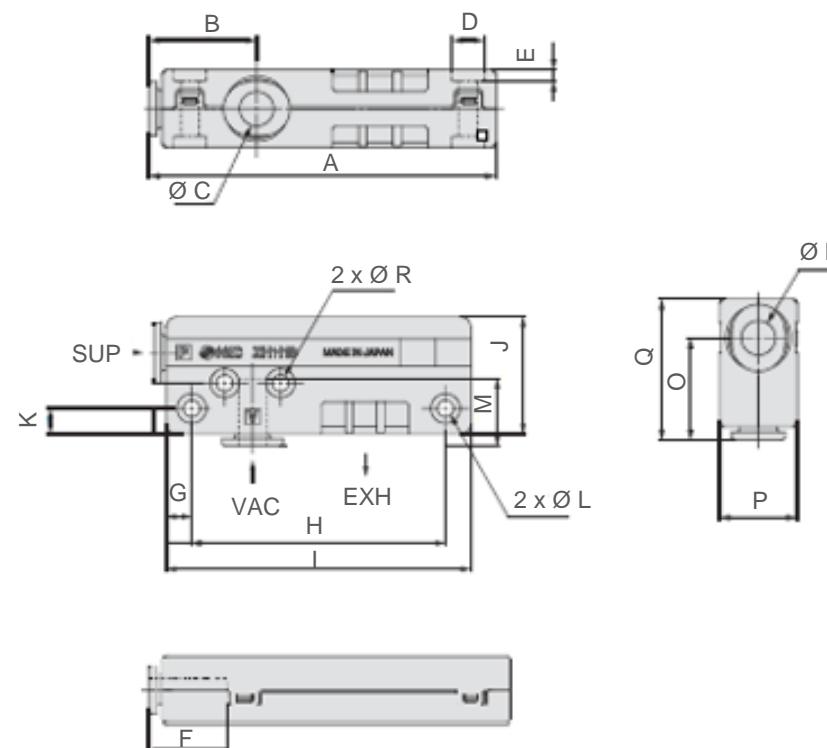


Interchangeability

- **One-touch connections** (Mounting dimensions are interchangeable, excludes the inch type with nozzle nominal sizes of 0.5 to 1.3).



Current product



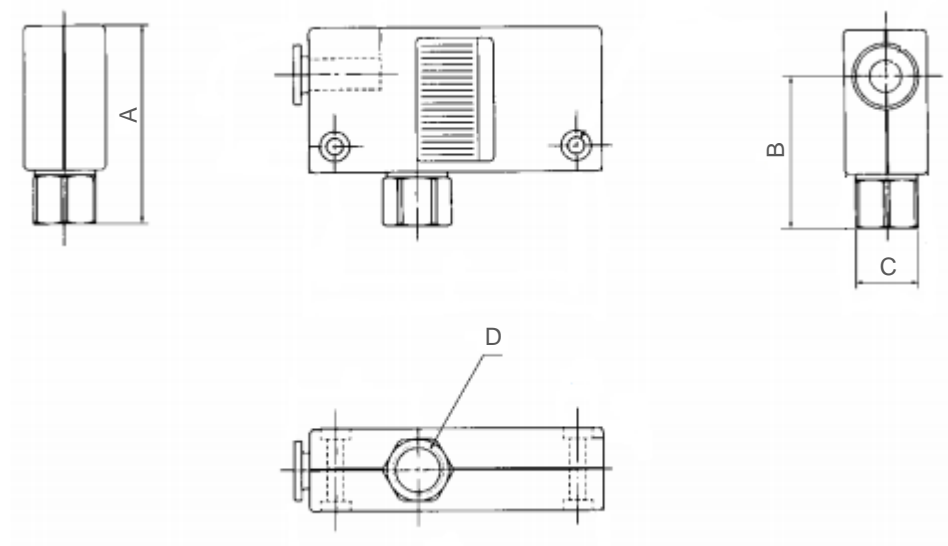
New product

[mm]	A		B		C		D		E		F		G		H		I	
Model	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
ZH10B□A (metric)	63	62.4	26	19.4	Ø 6	Ø 6	Ø 5.8	Ø 5.8	2	2	17	13.3	5	5	50	50	60	60
[mm]	J		K		L		M		N		O		P		Q		R	
Model	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
ZH10B□A (metric)	29	23	5	5	2 x Ø 3.2	2 x Ø 3.2	17	13.3	Ø 6	Ø 6	23	18.4	18	14	32	25.4	-	2 x Ø 3.2

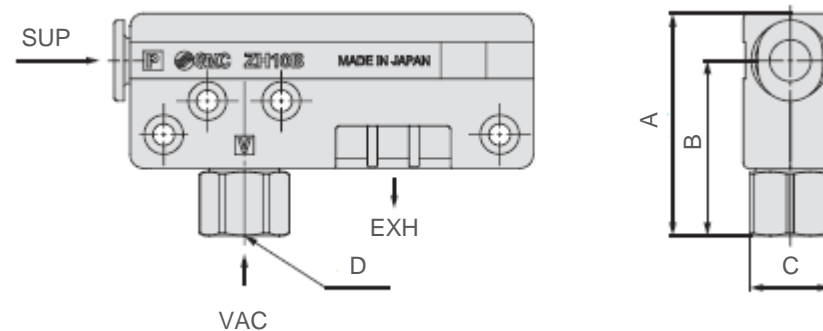
Difference in specifications

Interchangeability

- **One-touch and screw-in connections** (Mounting dimensions are interchangeable, excludes the inch type with nozzle nominal sizes of 0.5 to 1.3).




Current product



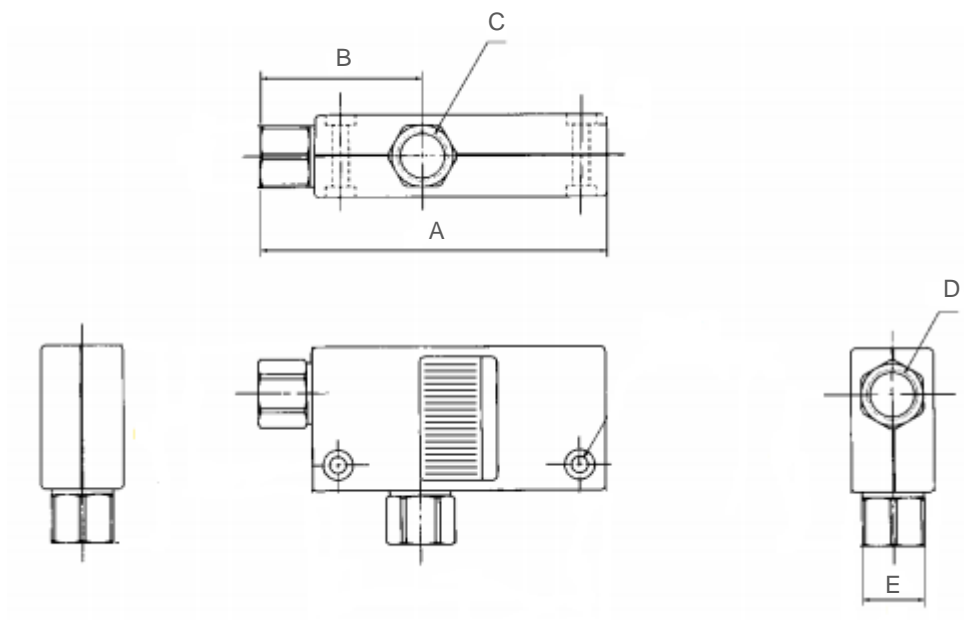
New product

[mm]	A		B		C		D	
Model	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
ZH10B□A (metric)	32	34	30.5	27	12	12	Rc1/8	G1/8

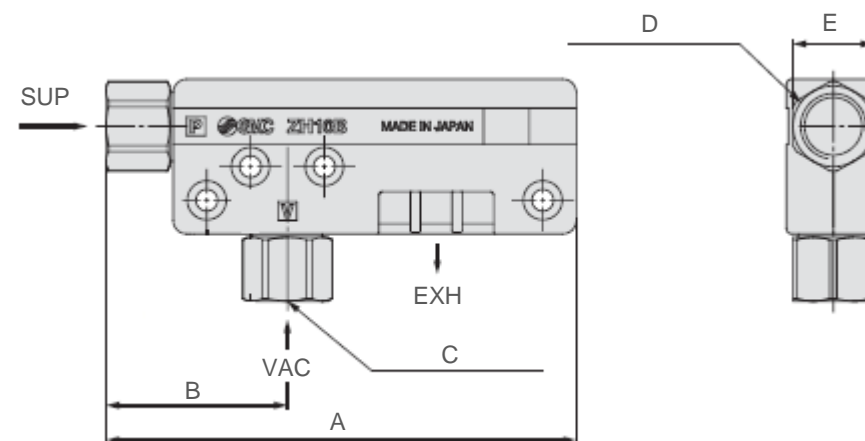
 Difference in specifications

Interchangeability

- **Screw-in connection** (Mounting dimensions are interchangeable).



Current product



New product

[mm]	A		B		C		D		E	
Model	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
ZH10B□A (metric)	70.5	71	33.5	28	Rc1/8	G1/8	Rc1/8	G1/8	12	12


Difference in specifications

Standard specifications

- The values indicating characteristics are representative values and may vary depending on the atmospheric pressure (weather, altitude, etc.).

Model	Nozzle nominal size [mm]	Vacuum pressure reached [kPa] *				Maximum suction flow rate [l/min (ANR)]				Air consumption [l/min (ANR)]	
		Type S		Type L		Type S		Type L		OLD	NEW
		OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW		
ZH05B□A	0.5	-88	-89	-48	-48	5	6	8	13	13	13
ZH07B□A	0.7					12	12	20	28	23	27
ZH10B□A	1.0					24	26	34	52	46	52
ZH13B□A	1.3					40	40	70	78	78	84

* Supply pressure: 0.45 MPa.

 Difference in specifications



SWITCHOVER DOCUMENT

New ZH Series Body Ported Type Vacuum Ejector

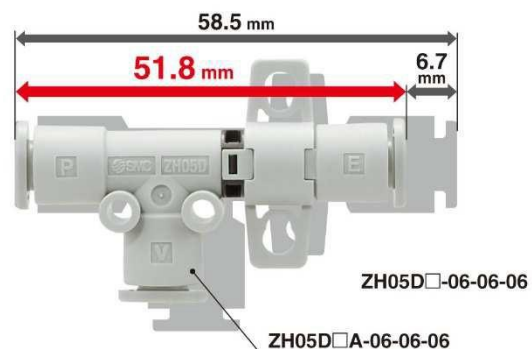
Improved features and related benefits

FEATURE: Reduced overall length, up to 11 %.

Reduced port height, up to 25 %.

Reduced weight, up to 74 %.

CUSTOMER BENEFIT: Space saving and due to weight reduction, less inert moments when the ejector is mounted in mobile applications (example: robot arms).



Overall length reduction



Port height reduction



Current model (ZH20D□-12-16-16)
88.4 g



New model (ZH20D□A-10-12-12N)
23.3 g

Weight reduction

Improved features and related benefits

FEATURE: 4 mounting types available:

- Direct mounting
- Standard bracket mounting
- L-bracket mounting
- DIN rail mounting

CUSTOMER BENEFIT: Mounting flexibility, better adaptation to the installation.



Direct mounting



Standard bracket
mounting



L-Bracket mounting



DIN rail mounting

FEATURE: Greater "maximum suction flow rate", with a bit higher air consumption comparing with the old ejector.

CUSTOMER BENEFIT: Ensures greater suction capacity of workpieces.

Improved features and related benefits

FEATURE: Silencer and standard bracket are available as accessories.

CUSTOMER BENEFIT: Flexibility and easy adaptation of the product to different conditions.



FEATURE: Different colour of release button, light grey for metric type and orange for inch type.

CUSTOMER BENEFIT: Easy identification of the product.



Technical details

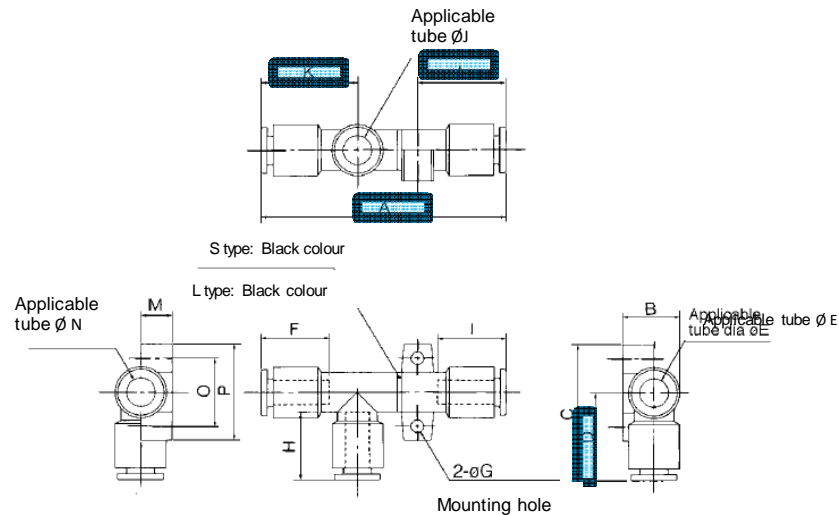
- Standard specifications

Model	Nozzle nominal size [mm]	Vacuum pressure reached* [kPa]				Maximum suction flow rate [l/min (ANR)]				Air consumption [l/min (ANR)]	
		Type S		Type L		Type S		Type L		OLD	NEW
		OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW		
ZH05D□A	0.5	-88	-90	-48	-48	5	6	8	13	13	13
ZH07D□A	0.7					12	12	20	28	23	27
ZH10D□A	1.0					24	26	34	52	46	52
ZH13D□A	1.3			-53	-66	40	40	70	78	78	84
ZH15D□A	1.5					55	58	75	78	95	113
ZH18D□A	1.8					65	76	110	128	150	162
ZH20D□A	2.0					85	90	135	155	185	196

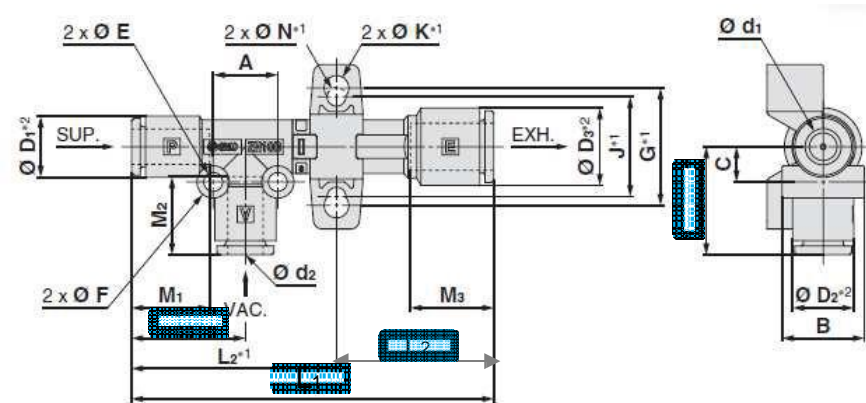
*Supply pressure: 0.45 MPa

Technical details

- **Dimensions:** One-touch connection piping



Existing product

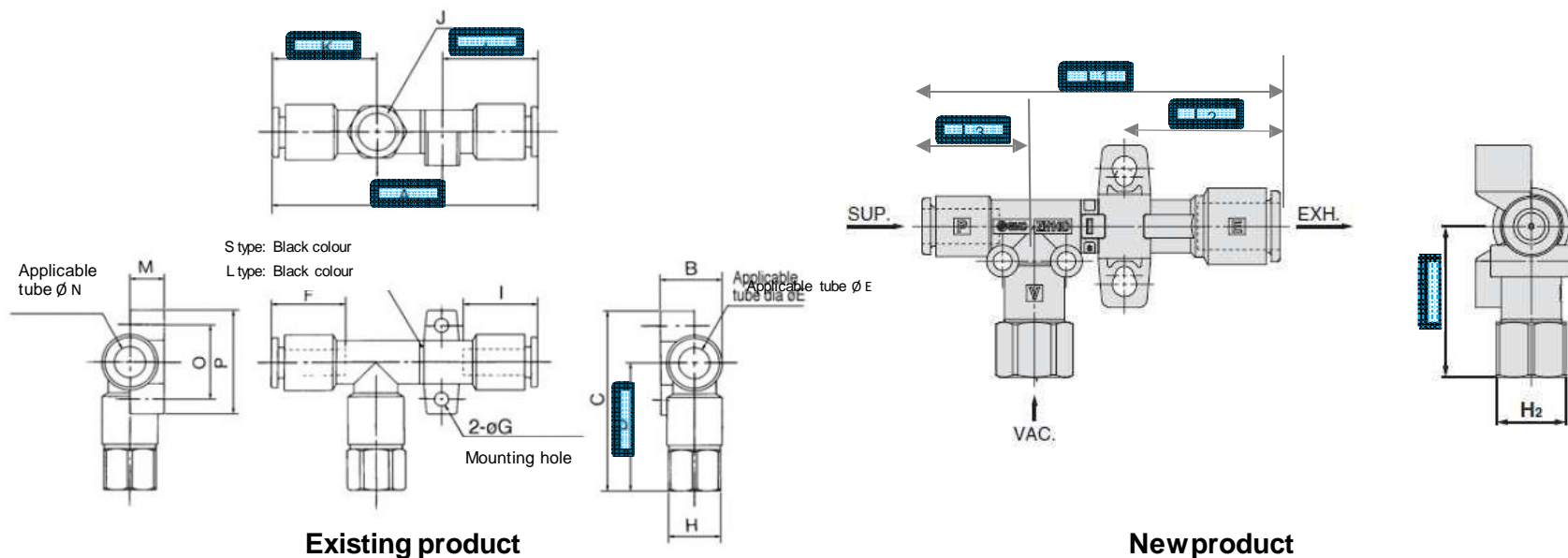


New product

[mm]	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
Model	A	L ₁	K	L ₃	D	L ₄	L	L ₂
ZH05D□(A)-06-06-06	58	51.8	24	19.4	22	18.4	21	16,9
ZH07D□(A)-06-06-06	61	55	24	19.4	22	18.4	22	20,1
ZH10D□(A)-06-06-08	66(S) / 70(L)	61.7	26	19.4	23	18.4	24.5	26,8
ZH13D□(A)-08-10-10	74(S) / 79(L)	71.8	28	22.4	27	24.4	26.5	27,9
ZH15D□(A)-08-10-10	93.3	83.6	31.5	22.4	29.5	24.4	32.8	32,2
ZH18D□(A)-10-12-12	114	105.7	35.5	28.4	30.5	26.4	50	44,8
ZH20D□(A)-10-12-12	124.6	112.2	38.5	28.4	35.5	26.4	54.3	50

Technical details

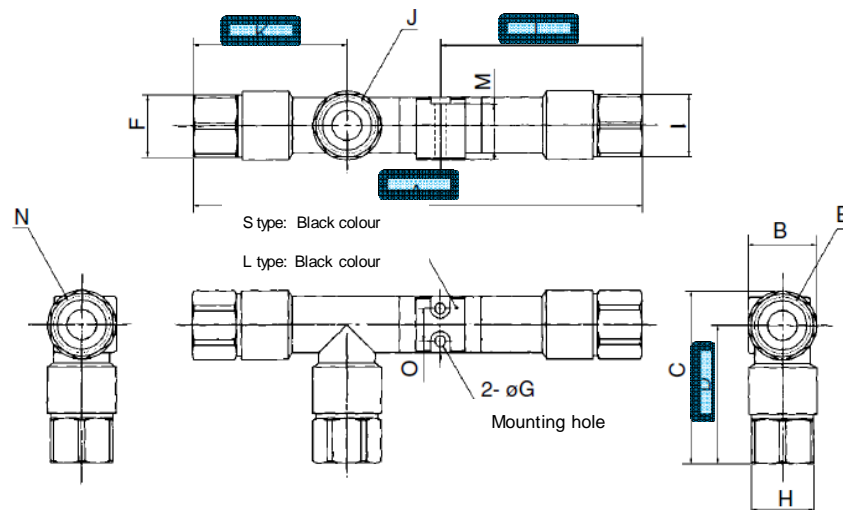
- **Dimensions:** One-touch and screw-in connection piping



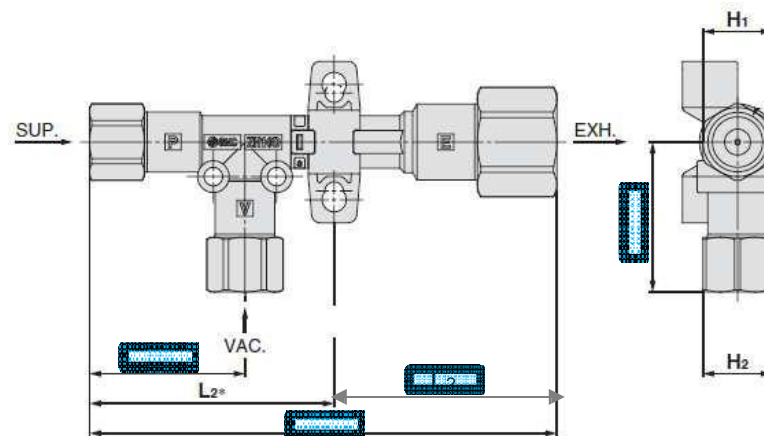
[mm]	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
Model	A	L ₁	K	L ₃	D	L ₄	L	L ₂
ZH05D□(A)-06-06-06	58	51.8	24	19.4	29.5	26	21	16,9
ZH07D□(A)-06-06-06	61	55	24	19.4	29.5	26	22	20,1
ZH10D□(A)-06-06-08	66(S) / 70(L)	61.7	26	19.4	30.5	26	24.5	26,8
ZH13D□(A)-08-10-10	74(S) / 79(L)	71.8	28	22.4	39	36.3	26.5	27,9
ZH15D□(A)-08-10-10	93.3	83.6	31.5	22.4	41	37.1	32.8	32,2
ZH18D□(A)-10-12-12	114	105.7	35.5	28.4	42	39.1	50	44,8
ZH20D□(A)-10-12-12	124.6	112.2	38.5	28.4	50.5	44.1	54.3	50

Technical details

• Dimensions: Screw-in connection piping



Existing product



New product

[mm]	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
Model	A	L ₁	K	L ₃	D	L ₄	L	L ₂
ZH05D□(A)-06-06-06	73.5	67	31.5	27	29.5	26	28.5	24,5
ZH07D□(A)-06-06-06	76	70.2	31.5	27	29.5	26	29.5	27,7
ZH10D□(A)-06-06-08	82(S) / 86(L)	76.4	33.5	27	30.5	26	33	33,9
ZH13D□(A)-08-10-10	94.5(S) / 99.5(L)	90.8	36.5	29.5	39	36.3	38.5	39,8
ZH15D□(A)-08-10-10	116.5	108.2	43	34.3	41	37.1	44.5	44,9
ZH18D□(A)-10-12-12	137	131.1	47	41.1	42	39.1	61.5	57,5
ZH20D□(A)-10-12-12	151.1	142.6	50	41.1	50.5	44.1	69.3	67,7