

SKH Series

Cylinder bore size: ø25 to ø125





Common specifications

4GB

With sensor

4GD/E

MAGD/E
MN4GD/E
4GA4/B4
MN3E
MN4E

W4GA/B2 W4GB4 MN3S0 MN4S0

4SA/B0

4KA/B

4KA/B

(master) 4F 4F (master) PV5G GMF PV5 GMF PV5S-0

MV3QR 3MA/B0 3PA/B

P/M/B NP/NAP

4G*0EJ 4F*0EX 4F*0E

HMV HSV

2QV 3QV

SKH
Silencer
TotAirSys
(Total Air)

TotAirSys (Gamma) Ending Variable speed unit

By integrating the solenoid valve for driving the air cylinder, the solenoid valve for deceleration, and the relief valve, it becomes possible to easily decelerate

Deceleration unit

By additionally installing this unit in an existing air cylinder driving circuit, it becomes possible to realize smooth decelerating and stopping effects at the end in accordance with a high speed drive.

By forming a unit with the end control on only one side of an existing air cylinder driving circuit, the solenoid valve for deceleration, and the relief valve, it becomes possible to decelerate and stop smoothly

Single-side deceleration unit

1		and stop smoothly at the end. at the end in accordance with a high speed drive.		. Decomes possible to decelerate and stop smoo				
	Item	SKH330 5	SKH430 5	2 SKH530 5	SKH338 5	SKH438 5	SKH318	SKH418
	Working fluid				Compressed air			
1	Valve and operation			Pilot o	perated soft spoo	l valve		
	Basic solenoid valve	4KB3	4K	B4	4KB3	4KB4	4KB3	4KB4
	Working pressure MPa			0.3 (≈44 psi	, 3 bar) to 0.7 (≈10	00 psi, 7 bar)		
4	Proof pressure MPa			1.	0 (≈150 psi, 10 ba	ar)		
	Ambient temperature (*1) °C		-5 (23°F) to 50 (122°F) (no freezing)					
1	Fluid temperature °C	5 (41°F) to 50 (122°F)						
	Lubrication	Not required						
+	· · · · · · · · · · · · · · · · · · ·							

- *1: The ambient temperature indicates the temperature for storage and upon installation, which will differ from the fluid temperature during operation.
- *2: Effective cross-sectional area S and sonic conductance C are converted as S \approx 5.0 x C.
- *3: The flow characteristics of SKH**0 are values for the direction of A/B ⇒ R when only the valve for high speed is operated.
- *4: The flow characteristics of SKH**8 are values for the direction of P \Rightarrow A/B.

Electrical specifications

Item			SKH330 5	SKH430 5	SKH530 5	SKH338 5	SKH438 5	SKH318	SKH418	
Rated volta	ige	AC			1	100,200(50/60 Hz)				
	V	DC				24				
Voltage fluct	uatio	n range				±10%				
Starting	AC	100 V	0.092/		0.138/0.126		0.046			
current		200 V	0.046/	0.042	0.069/0.063		0.023/	/0.021		
A	DC	24 V	-		-		-	=		
	AC	100 V	During high spe	ed: 0.046/0.042	During high speed: 0.069/0.063		0.023/	/n n21		
		100 V	During low spee	ed: 0.023/0.021	During low speed: 0.023/0.021		0.023/0.021			
Holding	70	200 V	During high spe	ed: 0.028/0.022	During high speed: 0.042/0.033	0.014/0.011				
current		200 V	During low spee	ed: 0.014/0.011	During low speed: 0.014/0.011		0.014/	0.011		
	DC	24 V	During high spe	ed: 0.15	During high speed: 0.225	0.075				
Α	DC	24 V	During low spee	ed: 0.075	During low speed: 0.075		0.073			
		100 V	During high spe	ed: 3.6/3.0	During high speed: 5.4/4.5		4.0/4.5			
	AC		During low spee	ed: 1.8/1.5	During low speed: 1.8/1.5		1.8/1.5			
Power	_	200.1/	During high spe	ed: 3.6/3.0	During high speed: 5.4/4.5		4.0	/A F		
consumption		200 V	During low spee	ed: 1.8/1.5	During low speed: 1.8/1.5		1.0/	/1.5		
	50	04.1/	During high spe	ed: 4.0	During high speed: 6.0		0	0		
W	DC	24 V	During low spee	ed: 2.0	During low speed: 2.0		2.	.0		
Temperature rise °C						30 (86°F)				
Thermal cla	ass					B (molded coil)				
Surge supp	ress	or				Varistor				
Indicator						Lamp (option)				

Performance/Characteristics

Item		SKH330 5	SKH430 5	SKH530 5	SKH338 5	SKH438 5	SKH318	SKH418
Flow	C[dm ³ /(s·bar)]	4.3	8.9	16.3	4.1	7.9	4.4	8.5
characteristics	b	0.18	0.19	0.27	0.14	0.17	0.13	0.17

Weight

3	Item	SKH330 5	SKH430 5	SKH530 5	SKH338 5	SKH438 5	SKH318	SKH418
1	Weight g	1950	3250	4230	660	1030	500	810



How to order

4GA/B

M4GA/B

MN4GA/B

4GA/B

(master)

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B

(master)

(master)

PV5G

GMF

PV5 GMF

PV5S-0

3Q

MV3QR

3MA/B0 3PA/B

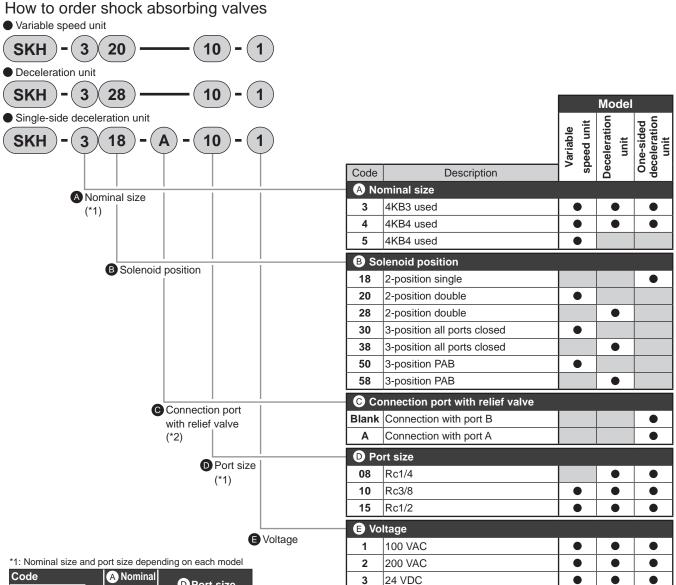
P/M/B

4F*0EX 4F*0EX 4F*0EX

4F

4F

4GB



Code	A Nominal	D Port size		
Model	size		FUIL SIZE	
Variable speed unit	3	10	Rc3/8	
32 SKH-430	4	15	Rc1/2	
55 55	5	15	Rc1/2	
B 1 11 11	3	08	Rc1/4	
Deceleration unit	3	10	Rc3/8	
SKH-328	4	10	Rc3/8	
. 5	4	15	Rc1/2	
One-sided	3	08	Rc1/4	
deceleration unit	3	10	Rc3/8	
SKH-3/18	4	10	Rc3/8	
·	4	15	Rc1/2	

Copper and PTFE free specifications

• Copper- and PTFE-based materials are not used in the flow path.

*2: For the air circuit, refer to "Example of piping connections and time chart diagram" (page 1870).

TotAirSys (TotAirSys (Gamma)

2QV 3QV

SKH

Silencer

Internal structure and parts list



4GA/B

4GB With sensor

4GD/E M4GD/E

MN4GD/E 4GA4/B4

MN3E MN4E W4GA/B2

W4GB4

MN3S0 MN4S0

4SA/B0

4KA/B 4KA/B (master)

4F 4F (master)

PV5G GMF PV5 GMF

PV5S-0 3Q

MV3QR

3MA/B0 3PA/B

P/M/B

NP/NAP

4G*0EJ 4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

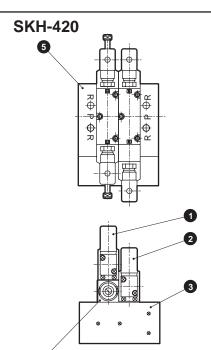
Silencer TotAirSys (Total Air) TotAirSys (Gamma)

Ending

SKH-320 Ф

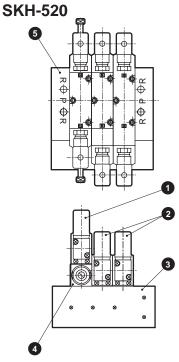
Main parts list

NO.	Part name	woaei no.	Qty.	Remarks
1	Solenoid valve	4KB329-00	1	For deceleration
2	Solenoid valve	4KB339-00	1	For high speed
3	Side plate	-	1	Aluminum alloy
4	Spacer relief valve	SKH-3-SR	1	Relief valve assy
5	Sub-plate	-	1	Aluminum alloy



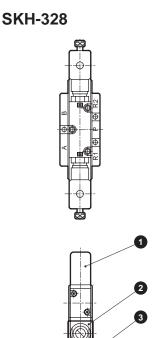
Main parts list

No.	Part name	Model No.	Qty.	Remarks
1	Solenoid valve	4KB429-00	1	For deceleration
2	Solenoid valve	4KB439-00	1	For high speed
3	Side plate	-	1	Aluminum alloy
4	Spacer relief valve	SKH-4-SR	1	Relief valve assy
5	Sub-plate	-	1	Aluminum alloy



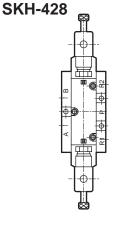
Main parts list

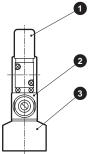
No.	Part name	Model No.	Qty.	Remarks
1	Solenoid valve	4KB429-00	1	For deceleration
2	Solenoid valve	4KB439-00	2	For high speed
3	Side plate	-	1	Aluminum alloy
4	Spacer relief valve	SKH-4-SR	1	Relief valve assy
5	Sub-plate	-	1	Aluminum alloy



Main parts list

No.	Part name	Model No.	Qty.	Remarks
1	Solenoid valve	4KB329-00	1	For deceleration
2	Spacer relief valve	SKH-3-SR	1	Relief valve assy
3	Sub-plate	-	1	Alum die-cast

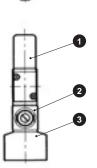


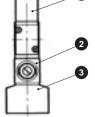


Main parts list

No.	Part name	Model No.	Qty.	Remarks
1	Solenoid valve	4KB429-00	1	For deceleration
2	Spacer relief valve	SKH-4-SR	1	Relief valve assy
3	Sub-plate	-	1	Alum die-cast

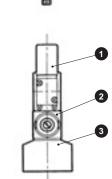






Main parts list

No.	Part name	Model No.	Qty.	Remarks
1	Solenoid valve	4KB319-00	1	For deceleration
2	Spacer relief valve	SKH-3S-SR SKH-3S-SR-A	1	Relief valve assembly
3	Sub-plate	-	1	Alum die-cast



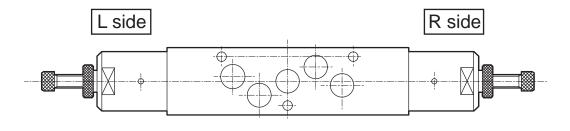
Main parts list

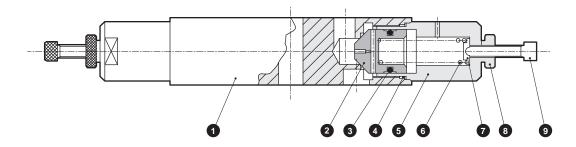
No.	Part name	Model No.	Qty.	Remarks
1	Solenoid valve	4KB419-00	1	For deceleration
2	Spacer relief valve	SKH-4S-SR SKH-4S-SR-A	1	Relief valve assembly
3	Sub-plate	-	1	Alum die-cast

^{*1)} The appearance shown is that of the SKH-318 and SKH-418 types (types where the relief valve connects with port B).

*2) Of the spacer relief valves, those on the upper row are for SKH-318, SKH-418 (types where the relief valve connects with port B) while those on the lower row are for SKH-318-A, SKH-418-A (types where the relief valve connects with port A).

Internal structure and parts list





- * The above part shows both-sided deceleration (SKH- 3_4 -SR).
- * Of single-sided deceleration types, **SKH-**³/₄**S-SR** will only have relief valves (**2** to **9**) on the left side as shown in the above diagram, while **SKH-**³/₄**S-SR-A** will only have relief valves (**2** to **9**) on the right side.

Main parts list

No.	Part name	Material	Qty.
1	Spacer	Aluminum alloy	1
2	Valve retainer	Polyacetal resin	2
3	O-ring	Nitrile rubber	2
4	O-ring	Nitrile rubber	2
5	Cover	Aluminum alloy	2
6	Cylindrical spring	Piano wire	2
7	Spring disc	Steel	2
8	Stop nut	Stainless steel	2
9	Adjusting screw	Copper alloy	2
	Gasket	Nitrile rubber	1
Accessory	Hexagon socket head cap screw	Alloy steel	3

 $^{^{\}star}$ The accessories are to be used when fixing the 4KB $_4^3$ valve and spacer onto the sub-plate.

Repair parts list

Repair parts	Soleno	id valve		Relief valve		
Series model No.	Solenoid valve for high speed	Solenoid valve for deceleration		Spacer relief valve *2	Maintenance kit *1	
4KB339-00-LS-		4KB3*9-00-LS-	For single-sided	SKH-3S-SR	SKH-3S-SRK	
SKH-3	— AC200V	— AC200V	deceleration *3	SKH-3S-SR-A	3KI1-33-3KK	
AC100V — DC24V	— AC100V — DC24V	For both-sided deceleration	SKH-3-SR	SKH-3-SRK		
SKH-4	4KB439-00-LS-	4KB4*9-00-LS-	For single-sided	SKH-4S-SR	SKH-4S-SRK	
ЭКП-4	AC200V — AC100V	AC200V	deceleration *3	SKH-4S-SR-A	3NH-43-3NN	
SKH-5		AC100V DC24V	For both-sided deceleration	SKH-4-SR	SKH-4-SRK	

^{*1)} The maintenance kit is **2** + **3** + **4** + **5** + **6** + **7**.

4GA/B

M4GA/B

MN4GA/B 4GA/B

(master) 4GB

With sensor

M4GD/E

MN4GD/E

4GA4/B4

MN3E MN4E

W4GA/B2

W4GB4 MN3S0

MN4S0

4SA/B0 4KA/B

> 4KA/B (master)

4F

4F (master) PV5G GMF PV5

GMF PV5S-0

3Q

MV3QR

3MA/B0 3PA/B

P/M/B

NP/NAP NVP 4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

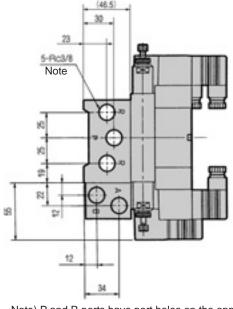
^{*2)} The spacer relief valve is an accessory of + 1 + 2 + 3 + 4 + 5 + 6 + 7 + 3 + 9.

^{*3)} Of the spacer relief valves for single-sided deceleration, those on the upper row are for SKH- 3_4 18 (type that connects with port B) while those on the lower row are for SKH- 3_4 18-A (type that connects with port A).

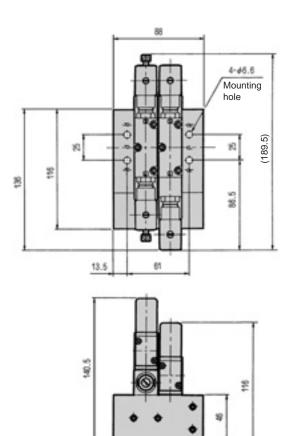
Dimensions



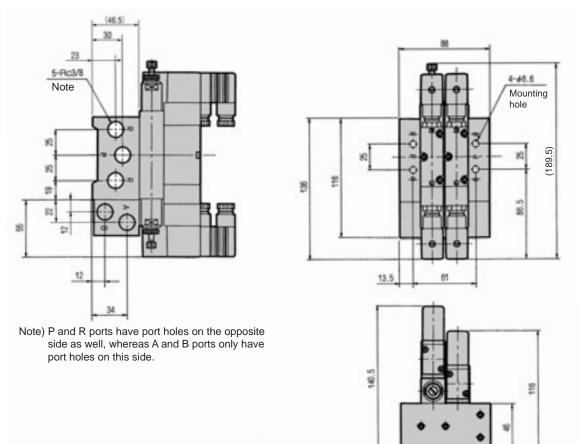
SKH-320



Note) P and R ports have port holes on the opposite side as well, whereas A and B ports only have port holes on this side.



SKH-3³₅0



4GA/B M4GA/B MN4GA/B 4GA/B (master) 4GB With sensor 4GD/E M4GD/E MN4GD/E 4GA4/B4 MN3E MN4E W4GA/B2 W4GB4 MN3S0 MN4S0 4SA/B0 4KA/B 4KA/B (master) 4F 4F (master) PV5G GMF PV5 GMF PV5S-0 3Q MV3QR 3MA/B0 3PA/B P/M/B NP/NAP NVP 4G*0EJ 4F*0EX 4F*0E HMV HSV 2QV 3QV SKH Silencer TotAirSys (Total Air)

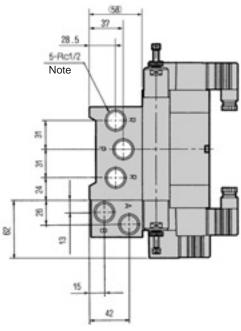
TotAirSys (Gamma)



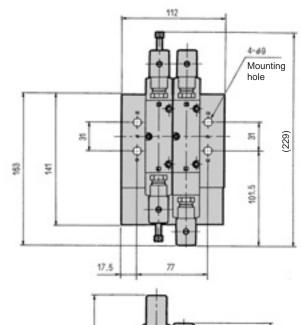
Dimensions

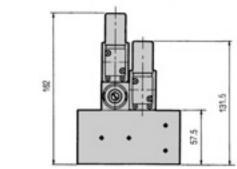


SKH-420

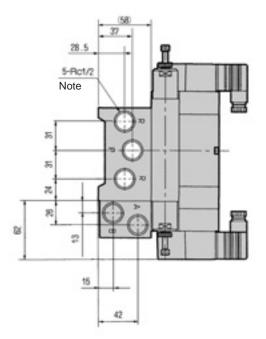


Note) P and R ports have port holes on the opposite side as well, whereas A and B ports only have port holes on this side.

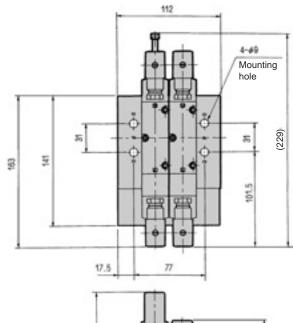




SKH-4³₅0



Note) P and R ports have port holes on the opposite side as well, whereas A and B ports only have port holes on this side.



57.5

4GA/B

M4GA/B

MN4GA/B

4GA/B (master) 4GB

With sensor 4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E MN4E

W4GA/B2

W4GB4 MN3S0 MN4S0

4SA/B0

4KA/B

4KA/B (master)

4F (master) PV5G GMF

PV5 GMF

PV5S-0

3Q

MV3QR 3MA/B0

3PA/B

P/M/B

NP/NAP NVP 4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

Silencer TotAirSys (Total Air)

(Total Air)
TotAirSys
(Gamma)

Ending

CKD

4GA/B **Dimensions**

M4GA/B

MN4GA/B 4GA/B

(master) 4GB With sensor

4GD/E

M4GD/E MN4GD/E

4GA4/B4

MN3E MN4E

W4GA/B2

W4GB4 MN3S0 MN4S0

4SA/B0

4KA/B

4KA/B

(master)

4F (master) PV5G GMF

PV5 GMF

PV5S-0 3Q

MV3QR

3MA/B0

3PA/B P/M/B NP/NAP NVP

4G*0EJ

4F*0EX 4F*0E HMV HSV

2QV 3QV

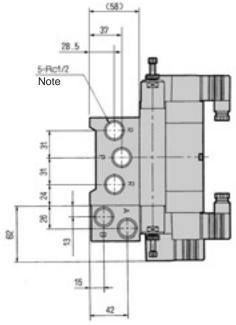
SKH

Silencer

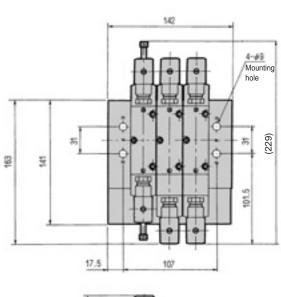
4F

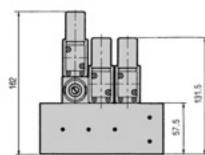


SKH-520

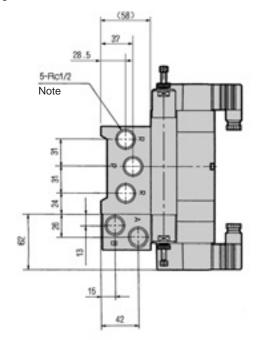


Note) P and R ports have port holes on the opposite side as well, whereas A and B ports only have port holes on this side.

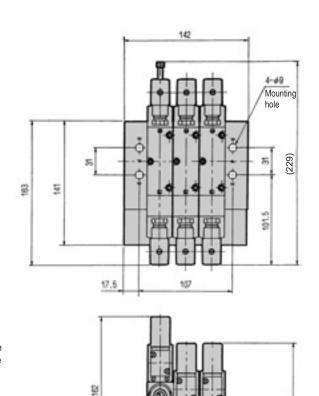




SKH-5³₅0



Note) P and R ports have port holes on the opposite side as well, whereas A and B ports only have port holes on this side.



131.5

57.5

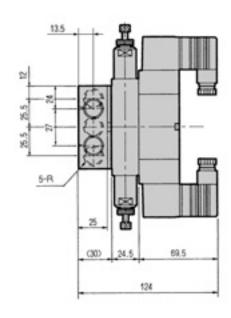
TotAirSys (Total Air) TotAirSys (Gamma)



Dimensions



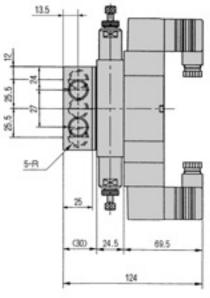
SKH-328



	***************************************	Mounting hole
37.5	. 3	28.5 26 28 38
	22	(53)
	a	
	24	

Model No.	R
SKH-328-08	Rc1/4
SKH-328-10	Rc3/8

SKH-3³₅8



		5-62	4.5 6	0.5	37.5	22	245 28	61.5	(189.5)
Model No. SKH-3 ³ ₅ 8-08 SKH-3 ⁵ ₅ 8-10	R Rc1/4 Rc3/8					24			

4GA/B

M4GA/B

MN4GA/B

4GA/B (master) 4GB With sensor

4GD/E

M4GD/E

MN4GD/E 4GA4/B4

MN3E MN4E

W4GA/B2

W4GB4 MN3S0 MN4S0

4SA/B0

4KA/B 4KA/B

(master) 4F

4F (master) PV5G GMF PV5 GMF

PV5S-0

3Q

MV3QR 3MA/B0

3PA/B

P/M/B NP/NAP NVP

4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

Silencer TotAirSys (Total Air)

Ending

TotAirSys (Gamma)



Mounting hole

Dimensions

4GA/B

M4GA/B

MN4GA/B 4GA/B

(master) 4GB With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E MN4E

W4GA/B2 W4GB4

MN3S0 MN4S0

4SA/B0 4KA/B 4KA/B (master)

4F (master)

PV5G GMF

PV5 GMF

PV5S-0

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP NVP

4G*0EJ 4F*0EX

4F*0E

HMV HSV

2QV 3QV

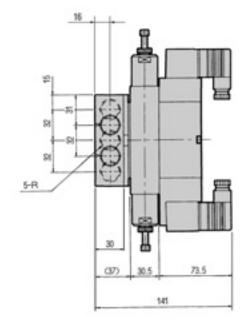
SKH

Silencer

3Q



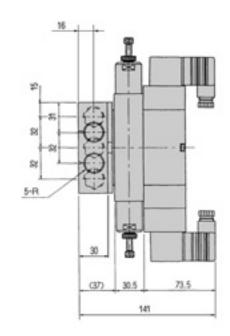
SKH-428



Model No.	R
SKH-428-10	Rc3/8
SKH-428-15	Rc1/2

Mounting hole (59)

SKH-4³₅8



Model No.	R
SKH-4 ³ ₅ 8-10	Rc3/8
SKH-4 ³ ₅ 8-15	Rc1/2
31(1-450-13	IXC1/2

Mounting hole (622)

42

TotAirSys (Total Air) TotAirSys (Gamma)

Ending

1866 **CKD**

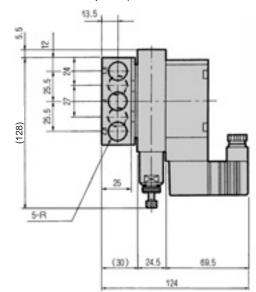


Dimensions



SKH-318

(Type where the relief valve connects with port B)



	× ×
Mounting hole	275 275 2711
	23
	24
	40

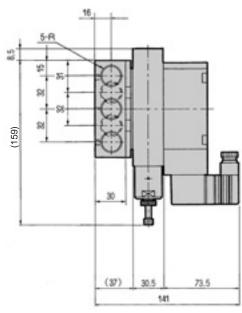
Model No.	R
SKH-318-08	Rc1/4
SKH-318-10	Rc3/8

SKH-418

Model No.

SKH-418-10 SKH-418-15

(Type where the relief valve connects with port B)



	(159)			Mounting hole	26 at
		(37) 30,5	73.5	29	
R Rc3/8					1
Rc1/2				30 52	CK

4GA/B

M4GA/B

MN4GA/B

4GA/B (master)

4GB

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E MN4E

W4GA/B2

W4GB4

MN3S0 MN4S0

4SA/B0

4KA/B

4KA/B (master)

4F

4F (master) PV5G GMF

PV5 GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP NVP

4G*0EJ

4F*0EX

4F*0E

HMV HSV

2QV 3QV

SKH

Silencer TotAirSys (Total Air)

TotAirSys (Gamma) **Ending**

4GA/B Dimensions



M4GA/B SKH-318-A

MN4GA/B 4GA/B

(master)

4GB With sensor

4GD/E M4GD/E MN4GD/E

4GA4/B4 MN3E MN4E

W4GA/B2 W4GB4

MN3S0 MN4S0

4SA/B0

4KA/B

4KA/B

(master)

4F

4F

(master)

PV5G

GMF

PV5 GMF

PV5S-0

3Q

MV3QR 3MA/B0

3PA/B

P/M/B

NP/NAP NVP

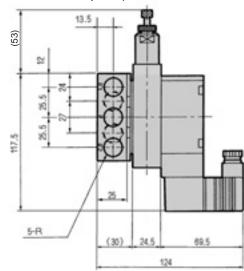
4G*0EJ 4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKHSilencer

(Type where the relief valve connects with port A)

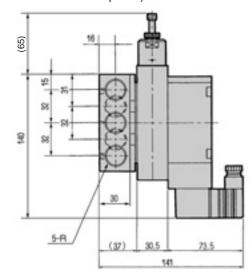


	í		
28 245	100	0	37.5
3-44.3 Mounting hole	E		
	t	Φ-	

Model No.	R
SKH-318-08	Rc1/4
SKH-318-10	Rc3/8

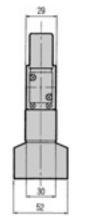
SKH-418-A

(Type where the relief valve connects with port A)



84	Q 3
Mounting hole	

24



8
2

Ending

TotAirSys (Total Air) TotAirSys (Gamma)

