CHB-W/CHB-WR* Series

Port size: Rc3/8 to Rc2







Pneumatic auxiliary

JIS symbol

● CHB-W (double acting)

● CHB-WR1 (Single acting-NC)

● CHB-WR2 (Single acting-NO)

Common specifications

Ite	m	CHB-W	CHB-WR*			
Actuation		Air operated: Double acting	Air operated: Single acting			
Wo	rking fluid	Water/Air/Oil (500	mm²/s or less) (*1)			
Wo	rking pressure MPa	0 to	1.0			
Prod	of pressure (water) MPa	2.	.0			
Flui	id temperature °C	Water/Oil: 0 to 8	80 (no freezing)			
1 10	id temperature C	Air: -20 to 80 (n	no freezing) (*2)			
Am	bient temperature°C	Fluoro rubber: -10 to 60, Spe	ecial fluoro rubber: -20 to 60			
Wo	rking environment	Indoors/outdoors				
Valv	e seat leakage cm³/min	0 (at initial water pressure 1 MPa)				
Мо	unting orientation	Unrestricted				
Fre	quency cycles/min.	1 or less				
	Pilot fluid	Compressed air				
	Lubrication	Not required (*3)				
tor	Proof pressure (water) MPa	1.	.5			
stua	Working pressureMPa	0.35 to 0.7	0.4 to 0.7			
y ac	Fluid temperature°C	5 to	o 60			
Rotary actuator	Port size	Rc1/8	Rc1/8			

^{*1:} Dynamic viscosity varies with temperature. Check that the dynamic viscosity is 500mm²/s or less within the temperature range being used. When exceeding 500 mm²/s, operation will become unstable.

Item Model No.		Port size	Orifice size	Cv	Weight (kg)	
		1 011 0120	(mm)		Double acting	Single acting
	CHB-W(R*)-10	Rc3/8	10	10	1.0	1.1
е	CHB-W(R*)-15	Rc1/2	10	6	1.0	1.1
bore	CHB-W(R*)-20	Rc3/4	15	16	1.2	1.3
lard	CHB-W(R*)-25	Rc1	20	29	1.3	2.2
Standard	CHB-W(R*)-32	Rc1 ¹ / ₄	25	50	2.3	2.8
Ś	CHB-W(R*)-40	Rc1 ¹ / ₂	32	98	2.7	4.9
	CHB-W(R*)-50	Rc2	40	125	3.5	5.7

^{*1:} CHB-W (R*)-10 is a full bore type.

^{*2:} When using fluid: air at -20 to 80°C, select the special fluoro rubber (F).

^{*3:} Use turbine oil ISO VG32 for lubrication. Consult with CKD regarding use in low-temperature environments.

How to order					
CHB-WR1-15-E					
Model No.					
	Code	Desc	cription		
A Warranty	A War	ranty period			
period	W	1 year after delivery			
	WG	3 years after delivery *1, *2 inspection guidelines, trace			
	B Actu	uator			
B Actuator	Blank	Double acting			
	R1	Single acting NC (Normally	closed)		
	R2	Single acting NO (Normally	open)		
	© Port	size			
© Port size	10	Rc3/8			
	15	Rc1/2			
	20	Rc3/4			
	25	Rc1			
	32	Rc1 ¹ / ₄			
	40	Rc11/ ₂			
	50	Rc2			
	Bod	y / rubber material			
D Body / rubber material		Body	Rubber		
	Е	Ctainless start	Fluoro rubber *3		
	F	Stainless steel	Special fluoro rubber *3		

[Example of model No.]

CHB-WR1-15-E

Model No.: CHB (standard bore)

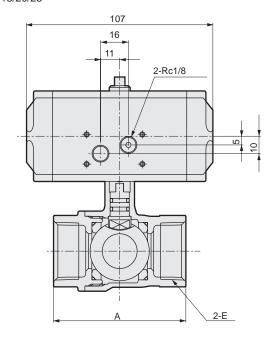
A Warranty period: 1 year after delivery

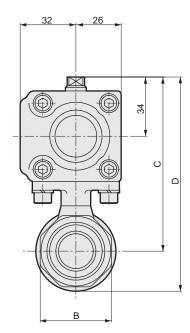
BActuator : Single acting NC (Normally closed)

© Port size : Rc1/2 D Body material : Stainless steel

- *1: The warranty period of option WG is guaranteed for a period of three years from the date of delivery or for a period of one year from the start of use, whichever comes first.
- *2: For option WG, the specifications and drawings must be exchanged. Refer to page 101 for details.
- *3: For option E, the ambient temperature is -10°C to 60°C. With option F, the ambient temperature is -20°C to 60°C.

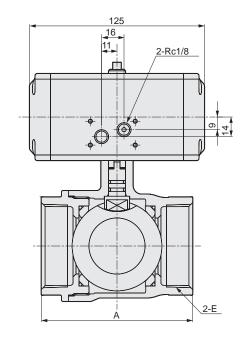
OHB-W-10/15/20/25





Model No.	Α	В	С	D	E
CHB-W-10	56	28	91	107	Rc3/8
CHB-W-15	56	28	91	107	Rc1/2
CHB-W-20	65	34	97	117.5	Rc3/4
CHB-W-25	76	41	100	124	Rc1

CHB-W-32/40/50

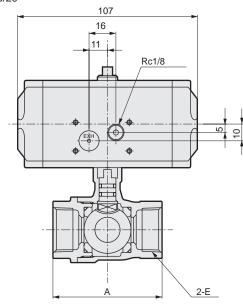


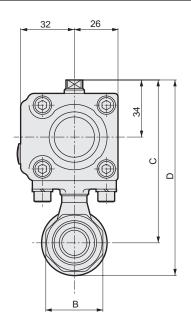
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Model No.	Α	В	С	D	E
CHB-W-32	84	50	116	145.5	Rc1 ¹ / ₄
CHB-W-40	94	57	122	157.5	Rc1 ¹ / ₂
CHB-W-50	108	70	131	171.5	Rc2

Dimensions: CHB-WR* Series

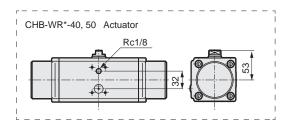
● CHB-WR*-10/15/20

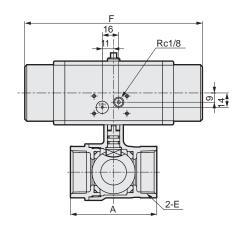


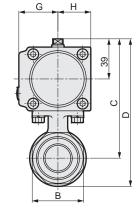


Model No.	Α	В	С	D	E
CHB-WR*-10	56	28	91	107	Rc3/8
CHB-WR*-15	56	28	91	107	Rc1/2
CHB-WR*-20	65	34	97	117.5	Rc3/4

● CHB-WR*-25/32/40/50







Model No.	Α	В	С	D	Е	F	G	Н
CHB-WR*-25	76	41	110	134	Rc1	173	38	32
CHB-WR*-32	84	50	116	145.5	Rc1 ¹ / ₄	173	38	32
CHB-WR*-40	94	57	156.5	192	Rc1 ¹ / ₂	244	43	38
CHB-WR*-50	108	70	165.5	206	Rc2	244	43	38

CHG-W/CHG-WR* Series

Port size: Rc1/2 to Rc2







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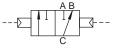
latic auxiliary Drai

Pneumatic valves

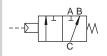
tic Fluid

JIS symbol

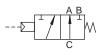
CHG-W (Double acting)



CHG-WR1 (Single acting - normally B-C path)



CHG-WR2(Single acting - normally A-C path)



Common specifications

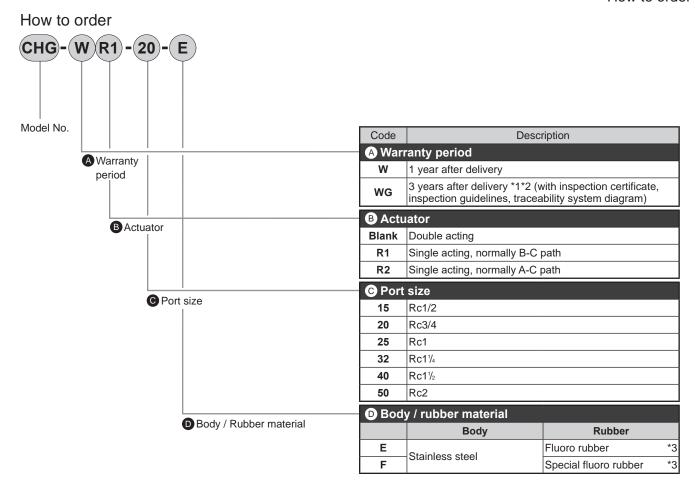
\mathcal{C}^{C}	minon specii	ioations				
Ite	m	CHG-W	CHG-WR*			
Act	uation	Air operated: Double acting	Air operated: Single acting			
Wo	rking fluid	Water/Air/Oil (500	mm ² /s or less) (*1)			
Wo	rking pressure MPa	0 to	1.0			
Pro	of pressure (water) MPa	2.	.0			
Flu	id temperature °C	Water/Oil: 0 to 80 (no fre	Water/Oil: 0 to 80 (no freezing)			
1 10	ia temperature o	Air: -20 to 80 (no freezing	g) (*2)			
Am	bient temperature°C	Fluoro rubber (E):-10 to 60, spe	ecial fluoro rubber (F):-20 to 60			
Wo	rking environment	Indoors / Outdoors				
Valv	e seat leakagecm³/min	0 (at initial water	pressure 1 MPa)			
Mounting orientation		Unrestricted				
Frequency cycles/min.		1 or less				
Pre	ssurization direction	Port C pressurization only				
Flo	w path shape	Multi-fluid type (90° Rotation switching method)				
	Pilot fluid	Compressed air				
ō	Lubrication	Not requ	uired(*3)			
actuator	Proof pressure (water) MPa	1.	.5			
	Working pressure MPa	0.35 to 0.7	0.4 to 0.7			
otary	Fluid temperature °C	5 to	60			
 	Port size	Rc1/8	Rc1/8			

^{*1:} Dynamic viscosity varies with temperature. Check that the dynamic viscosity is 500mm²/s or less within the temperature range being used. When exceeding 500 mm²/s, operation will become unstable.

Item Model No.	Port size	Orifice size(mm)	Cv		ht(kg) Single acting
CHG-W(R*)-15	Rc1/2	10	3	1.1	1.2
CHG-W(R*)-20	Rc3/4	14	6	1.3	1.4
CHG-W(R*)-25	Rc1	19	11	1.5	2.4
CHG-W(R*)-32	Rc1 ¹ / ₄	23	16	2.3	2.8
CHG-W(R*)-40	Rc1 ¹ / ₂	30	28	2.8	5.0
CHG-W(R*)-50	Rc2	38	47	3.7	5.9

^{*2:} When using fluid: air at -20 to 80°C, select the special fluoro rubber (F).

^{*3:} Use turbine oil ISO VG32 for lubrication. Consult with CKD regarding use in low-temperature environments.



[Example of model No.]

CHG-WR1-20-E

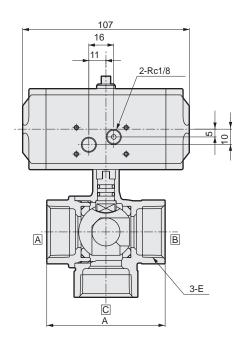
Model: CHG

A Warranty period : 1 year after delivery

B Actuator : Single acting, normally B-C path

Port size : Rc3/4 D Body material : Stainless steel

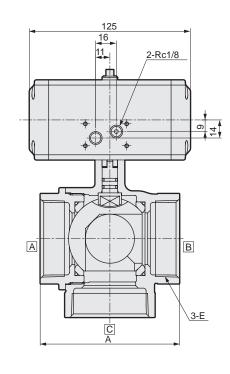
- *1: The warranty period of option WG is guaranteed for a period of three years from the date of delivery or for a period of one year from the start of use,
- *2: For option WG, the specifications and drawings must be exchanged. Refer to page 101 for details.
- *3: For option E, the ambient temperature is -10°C to 60°C. With option F, the ambient temperature is -20°C to 60°C.

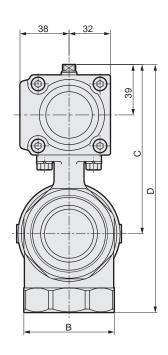


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Model No.	Α	В	С	D	E
CHG-W-15	56	28	91	121	Rc1/2
CHG-W-20	65	34	97	133	Rc3/4
CHG-W-25	76	41	100	142	Rc1

● CHG-W-32/40/50

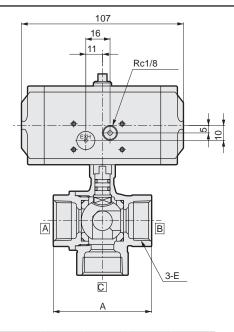


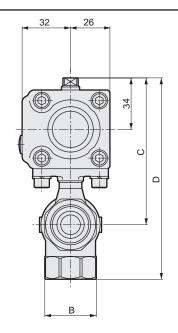


Model No.	Α	В	С	D	E
CHG-W-32	84	50	116	163	Rc1 ¹ / ₄
CHG-W-40	94	57	122	175	Rc1 ¹ / ₂
CHG-W-50	108	70	131	192	Rc2

Dimensions: CHG-WR* Series

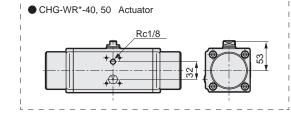
● CHG-WR*-15/20

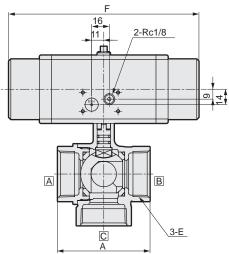




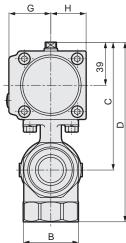
Model No.	Α	В	С	D	E
CHG-WR*-15	56	28	91	121	Rc1/2
CHG-WR*-20	65	34	97	133	Rc3/4

● CHG-WR*-25/32/40/50





Model No.	Α	В	С	D	E	F	G	н
CHG-WR*-25	76	41	110	152	Rc1	173	38	32
CHG-WR*-32	84	50	116	163	Rc1 ¹ / ₄	173	38	32
CHG-WR*-40	94	57	156.5	209.5	Rc1 ¹ / ₂	244	43	38
CHG-WR*-50	108	70	165.5	226.5	Rc2	244	43	38



Air operated ball type 2-port solenoid valve (Compact rotary valves)

CHB-WV1/, CHB-WX1 Series

Port size: Rc3/8 to Rc2





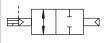


FR Lunit

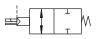
Fneumatic auxiliary

JIS symbol

CHB-WV1 (Double acting-NC)



CHB-WX1 (Single acting-NC)



Common specifications

Ite	m		CHB-WV1	CHB-WX1				
Actuation			With solenoid valve: Double acting With solenoid valve: Single ac					
Wo	rking fluid	t	Water/Air/Oil (500	mm ² /s or less) (*1)				
Wo	rking pre	ssure MPa	0 to	1.0				
Pro	of pressure(water) MPa	2.	0				
	id tompo	ature °C	Water/Oil: 0 to 80 (no fre	ezing)				
ΓIU	ıid temper	alure C	Air: -20 to 80 (no freezing	Air: -20 to 80 (no freezing) (*2)				
Am	bient tem	perature°C	Fluoro rubber (E): -10 to 60, spe	ecial fluoro rubber (F): -20 to 60				
Working environment			Indoors/outdoors					
Val	ve seat leal	kagecm3/min	0 (at initial water pressure 1 MPa)					
Mo	unting ori	entation	Vertical direction with the actuator on the top					
Fre	equency	cycles/min.	1 or less					
	Pilot fluid	t	Compre	ssed air				
itor	Lubricati	on	Not requ	ired (*3)				
actuator	Proof press	ure(water) MPa	1.	5				
			0.35 to 0.7	0.4 to 0.7				
Fluid temperature°C Ports \$, E1, E2		perature°C	5 to 60					
Ro	Port size	Ports S, E1, E2	Ro	1/4				
	Port Size	EXH port		Rc1/8				

Electrical specifications						
Rated voltage)	100 VAC (50/60Hz), 200 VAC (50/60Hz), 24 VDC				
Starting	100 VAC	0.170/0.140 (50/60Hz)				
Ü	200 VAC	0.090/0.070 (50/60Hz)				
current(A)	24 VDC	0.250				
Holding	100 VAC	0.100/0.080 (50/60Hz)				
J	200 VAC	0.050/0.040 (50/60Hz)				
current(A)	24 VDC	0.250				
Power	100 VAC	5.0/4.0 (50/60Hz)				
	200 VAC	5.0/4.0 (50/60Hz)				
consumption(W)	24 VDC	6.0				
Thermal class		Class 130 (B)				
Degree of protection		IP65				
Voltage fluctuation range		±10%				

^{*1:} Dynamic viscosity varies with temperature. Check that the dynamic viscosity is 500mm²/s or less within the temperature range being used. When exceeding 500 mm²/s, operation will become unstable.

Item		Port size	Orifice	Cv	Weight (kg)		
Mod	el No.	Port Size	size(mm)	CV	Double acting	Single acting	
	CHB-WV1/WX1-10-	Rc3/8	10	10	2.1	2.2	
bore	CHB-WV1/WX1-15-	Rc1/2	10	6	2.1	2.2	
	CHB-WV1/WX1-20-	Rc3/4	15	16	2.3	2.4	
larc	CHB-WV1/WX1-25-	Rc1	20	29	2.4	3.3	
Standard	CHB-WV1/WX1-32-	Rc1 ¹ / ₄	25	50	3.4	3.9	
Sţ	CHB-WV1/WX1-40-	Rc1 ¹ / ₂	32	98	3.8	6.0	
	CHB-WV1/WX1-50-	Rc2	40	125	4.6	6.8	

^{*2:} When using fluid: air at -20 to 80°C, select the special fluoro rubber (F).

^{*3:} Use turbine oil ISO VG32 for lubrication. Consult with CKD regarding use in low-temperature environments.

How to order			
CHB-(W)(V1)-(25)-(E)(B)-(S)-(AC100V)			
Model No.	Code	anty period	Description
Warranty period	W	1 year after delivery	,
	WG	3 years after deliver	ry *1, *2 (with inspection certificate, es, traceability system diagram)
	B Actua	ator	
B Actuator	V1	Double acting NC (Open when energized)
	X1	Single acting NC (C	pen when energized)
Dout size	© Port	size	
Port size	10	Rc3/8	
	15	Rc1/2	
	20	Rc3/4	
	25	Rc1	
	32 40	Rc11/ ₄ Rc11/ ₂	
	50	Rc1/2	
		/ rubber material	
Body / rubber material	Body	Body	Rubber
	E	-	Fluoro rubber *3
	F	Stainless steel	Special fluoro rubber *3
	■ Coil c	ption	
© Coil option	В	Round terminal box	(G½)
	BL	Round terminal box	with lamp (G½)
G Other options	Other	options	
Other options	Blank	No	
	S	Silencer	*4
⑤ Voltage	G Volta	ge	
G Voltage	ACTUUV	100 VAC 50/60 Hz,	
[Example of model No.]	AC200V		and 220 VAC 60 Hz
CHB-WV1-25-EB-S-AC100V	DC24V	24 VDC	

Model No.: CHB (standard bore)

A Warranty period: 1 year after delivery

A structure Parable and large NO (Or an

B Actuator : Double acting NC (Open when energized)

Port size : Rc1

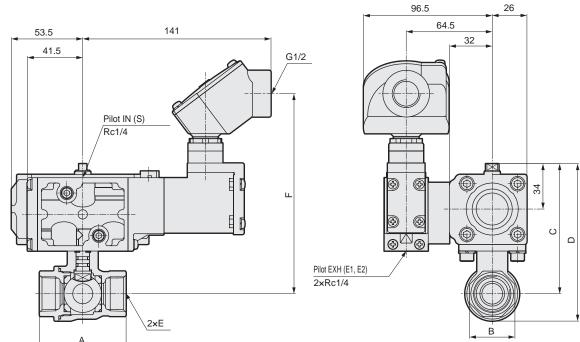
Body material : Stainless steel

Coil option : With round terminal box

Other options : With 2 silencers

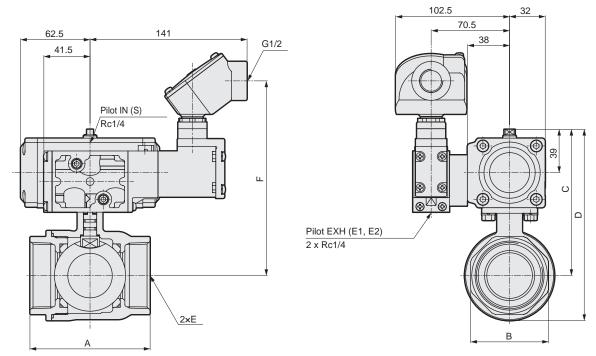
G Voltage : 100 VAC 50/60Hz. 110 VAC 60Hz

- *1: The warranty period of option WG is guaranteed for a period of three years from the date of delivery or for a period of one year from the start of use, whichever comes first.
- *2: For option WG, the specifications and drawings must be exchanged. Refer to page 101 for details.
- *3: For option E, the ambient temperature is -10°C to 60°C. With option F, the ambient temperature is -20°C to 60°C.
- *4: Two CKD SL-8A-W are included with **B** WV1, and one is included with **B** WX1.



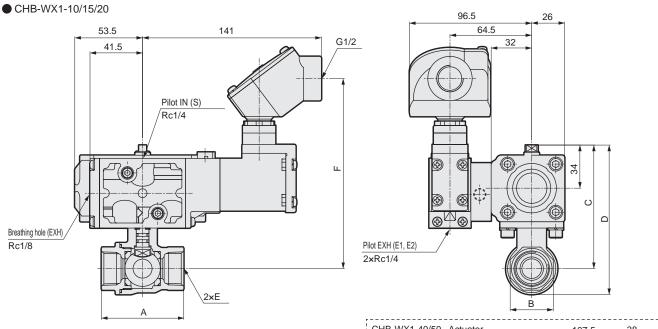
Model No.	Α	В	С	D	E	F
CHB-WV1-10	56	28	91	107	Rc3/8	144
CHB-WV1-15	56	28	91	107	Rc1/2	144
CHB-WV1-20	65	34	97	117.5	Rc3/4	150
CHB-WV1-25	76	41	100	124	Rc1	153

CHB-WV1-32/40/50

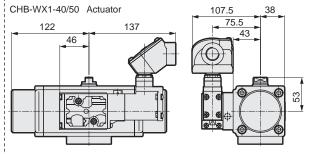


Model No.	Α	В	С	D	Е	F
CHB-WV1-32	84	50	116	145.5	Rc11/4	160
CHB-WV1-40	94	57	122	157.5	Rc11/2	166
CHB-WV1-50	108	70	131	171.5	Rc2	175

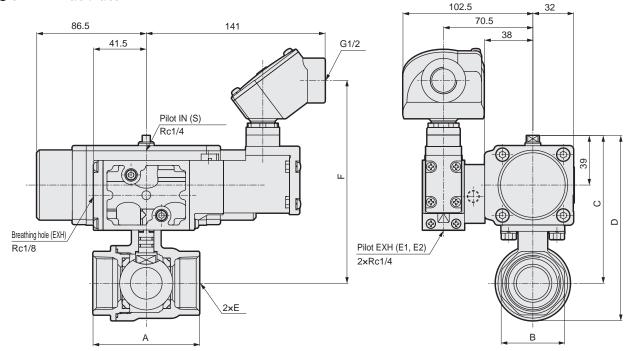
Dimensions CHB-WX1 Series



Model No.	Α	В	С	D	E	F
CHB-WX1-10	56	28	91	107	Rc3/8	144
CHB-WX1-15	56	28	91	107	Rc1/2	144
CHB-WX1-20	65	34	97	117.5	Rc3/4	150



● CHB-WX1-25/32/40/50



Model No.	Α	В	С	D	E	F
CHB-WX1-25	76	41	110	134	Rc1	153
CHB-WX1-32	84	50	116	145.5	Rc11/4	160
CHB-WX1-40	94	57	156.5	192	Rc11/2	194
CHB-WX1-50	108	70	165.5	206	Rc2	203



Air operated ball type 3-port solenoid valve (Compact rotary valves)

CHG-WV1, CHG-WX1 Series

Port size: Rc1/2 to Rc2

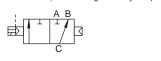






JIS symbol

● CHG-WV1 (Double acting - normally B-C path)



CHG-WX1(Single acting - normally B-C path)



Common specifications

Item			CHG-WV1	CHG-WX1			
Ac	tuation		With solenoid valve: Double acting	With solenoid valve: Single acting			
Wo	rking flui	d	Water/Air/Oil(500	mm²/s or less) (*1)			
Wo	rking pres	sure MPa	0 to	1.0			
Pro	of pressure(water) MPa	2	.0			
	id tempe	ratura °C	Water/Oil: 0 to 80 (no fre	eezing)			
	iiu terripe	rature C	Air: -20 to 80 (no freezin	g) (*2)			
Am	bient temp	erature°C	Fluoro rubber (E): -10 to 60, spe	ecial fluoro rubber (F): -20 to 60			
Wo	rking env	rironment	Indoors/	outdoors			
Valv	e seat leaka	agecm³/min	0 (at initial water pressure 1 MPa)				
Мс	unting or	ientation	Vertical direction with the actuator on the top				
Fre	quencycy	cles/min.	1 or less				
Pre	ssurization	n direction	Port C pressurization only				
Flo	w path sl	hape	Multi-fluid type (90° Rot	ation switching method)			
	Pilot fluid	d	Compre	ssed air			
	Lubricati	ion	Not requ	ired (*3)			
atol	Proof pressu	re(water) MPa	1.	5			
actuator	Working pressure MPa		0.35 to 0.7	0.4 to 0.7			
	Fluid temp	erature °C	5 to 60				
Rotary	Dort size	Ports S, E1, E2	Rc	1/4			
	Port size	EXH port		Rc1/8			

Electrical s	pecific	cations				
Rated voltage		100 VAC (50/60Hz), 200 VAC (50/60Hz), 24 VDC				
01	100 VAC	0.170/0.140 (50/60Hz)				
Starting	200 VAC	0.090/0.070 (50/60Hz)				
current(A)	24 VDC	0.250				
I I a I aliana	100 VAC	0.100/0.080 (50/60Hz)				
Holding	200 VAC	0.050/0.040 (50/60Hz)				
current(A)	24 VDC	0.250				
Dames	100 VAC	5.0/4.0 (50/60Hz)				
Power	200 VAC	5.0/4.0 (50/60Hz)				
consumption(W)	24 VDC	6.0				
Thermal class		Class 130 (B)				
Degree of protection		IP65				
Voltage fluctuation range		±10%				

^{*1:} Dynamic viscosity varies with temperature. Check that the dynamic viscosity is 500mm²/s or less within the temperature range being used. When exceeding 500 mm²/s, operation will become unstable.

Item Model No.	Port size	Orifice size(mm)	Cv		nt (kg) Single acting
CHG-WV1/WX1-15-	Rc1/2	10	3	2.2	2.3
CHG-WV1/WX1-20-	Rc3/4	14	6	2.4	2.5
CHG-WV1/WX1-25-	Rc1	19	11	2.6	3.5
CHG-WV1/WX1-32-	Rc1 ¹ / ₄	23	16	3.4	3.9
CHG-WV1/WX1-40-	Rc1 ¹ / ₂	30	28	3.9	6.1
CHG-WV1/WX1-50-	Rc2	38	47	4.8	7.0

^{*2:} When using fluid: air at −20 to 80°C, select the special fluoro rubber (F).

^{*3:} Use turbine oil ISO VG32 for lubrication. Consult with CKD regarding use in low-temperature environments.

How to order				
CHG-WX1-15-EB-S-AC200V				
Model No. A Warranty period		ranty period	Description	
Wallanty period	W WG	year after delivery years after deliver inspection guideline	y *1, *2 (with inspection certificate, s, traceability system diagram)	,
B Actuator	V1 X1 C Port	Double acting, normal Single acting, normal		
© Port size	15 20 25 32	Rc1/2 Rc3/4 Rc1 Rc11/4		
	40 50	Rc1½ Rc2		
D Body / rubber material	E F	y / rubber materia Body Stainless steel	Rubber Fluoro rubber Special fluoro rubber	*3
© Coil option	B BL	Round terminal box Round terminal box	-:	
● Other options	Blank S	No Silencer		*4
⑥ Voltage	G Volt AC100V AC200V	age 100 VAC 50/60 Hz, 1 200 VAC 50/60 Hz ar		

DC24V

24 VDC

[Example of model No.]

CHG-WX1-15-EB-S-AC200V

Model: CHG

A Warranty period : 1 year after delivery

B Actuator : Single acting, normally B-C path

Port size : Rc1/2

D Body material : Stainless steel

E Coil option : With round terminal box

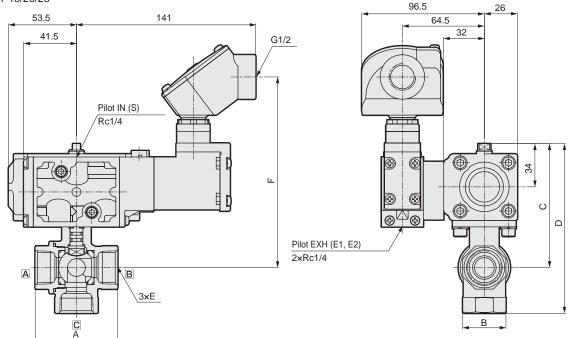
Other options : With 1 silencer

G Voltage : 200 VAC 50/60Hz. 220 VAC 60Hz

- *1: The warranty period of option WG is guaranteed for a period of three years from the date of delivery or for a period of one year from the start of use, whichever comes first.
- *2: For option WG, the specifications and drawings must be exchanged. Refer to page 101 for details.
- *3: For option E, the ambient temperature is -10°C to 60°C. With option F, the ambient temperature is -20°C to 60°C.
- *4: Two CKD SL-8A-W are included with **B** WV1, and one is included with **B** WX1.

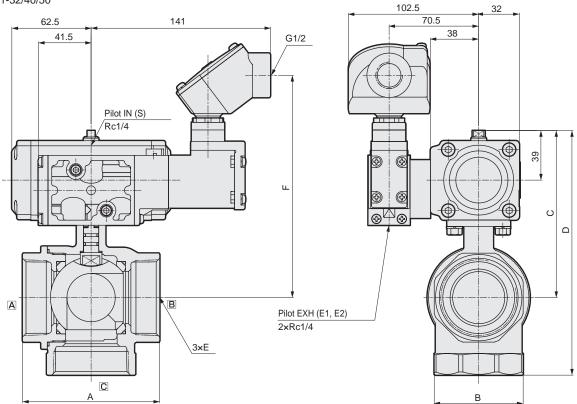






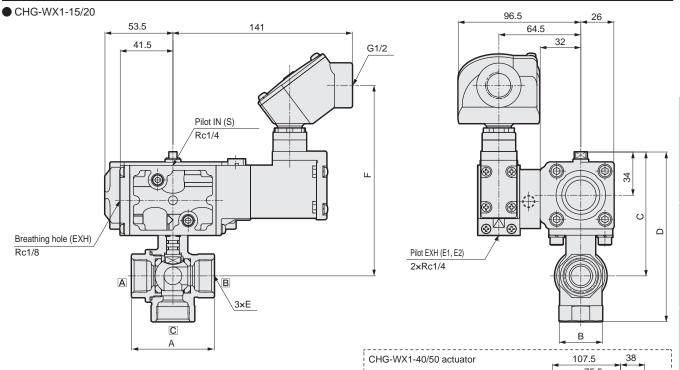
Model No.	Α	В	С	D	E	F
CHG-WV1-15	56	28	91	121	Rc1/2	144
CHG-WV1-20	65	34	97	133	Rc3/4	150
CHG-WV1-25	76	41	100	142	Rc1	153

OHG-WV1-32/40/50

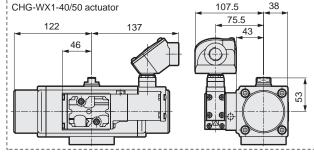


Model No.	Α	В	С	D	Е	F
CHG-WV1-32	84	50	116	163	Rc1 1/4	160
CHG-WV1-40	94	57	122	175	Rc1 1/2	166
CHG-WV1-50	108	70	131	192	Rc2	175

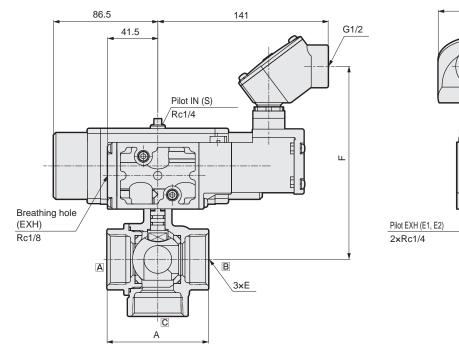
Dimensions CHG-WX1 Series



Model No.	Α	В	С	D	E	F
CHG-WX1-15	56	28	91	121	Rc1/2	144
CHG-WX1-20	65	34	97	133	Rc3/4	150



● CHG-WX1-25/32/40/50



Model No.	Α	В	С	D	E	F
CHG-WX1-25	76	41	110	152	Rc1	153
CHG-WX1-32	84	50	116	163	Rc1 1/4	160
CHG-WX1-40	94	57	156.5	209.5	Rc1 1/2	194
CHG-WX1-50	108	70	165.5	226.5	Rc2	203

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