



## Pursuit of outdoor equipment requirements,

### Proven durability for outdoor use

- **Compound cycle test (JIS H8502:1999)** 960 hours cleared  
Durability related to coating on metal parts
- **Accelerated durability (sunshine weather meter test)** cleared 1000 hours  
Durability of resin parts
- **Ozone exposure test (JIS D0205:1987)** 400 hours cleared  
Durability for rubber and gaskets

Accelerated weather resistance test	Combined cycle test	Ozone exposure test
3 Years equivalent	7 Years equivalent	400 Hours

### Lineup of products compatible with min. ambient temp. of -20°C

Expanded range for use in harsh environments



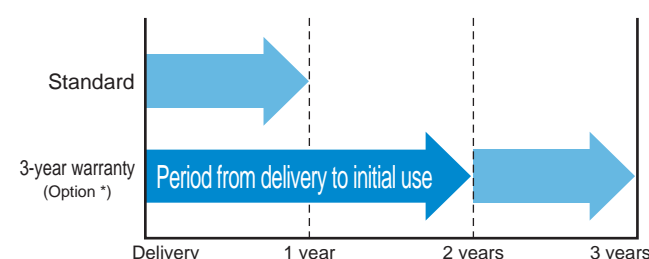
### Each product has a maximum warranty of 3 years

#### Long-term peace of mind (option)

In order to support plants and overseas, the product 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.

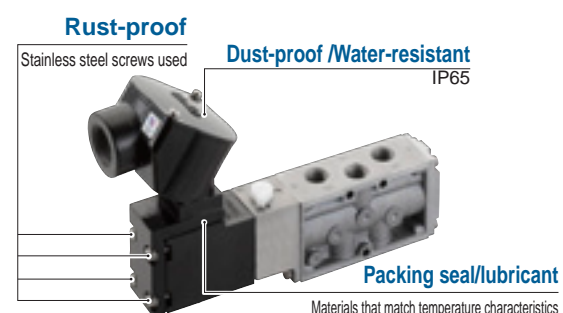
(with inspection certificate, inspection guidelines, drawings, traceability system diagram)

\* Cylinders, speed controllers and silencers are excluded.



\*A statement of specifications is exchanged to clarify the warranty period.

### Parts with consideration for weather resistance

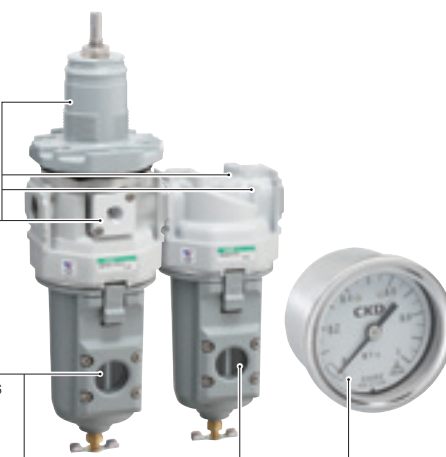


#### All-metal

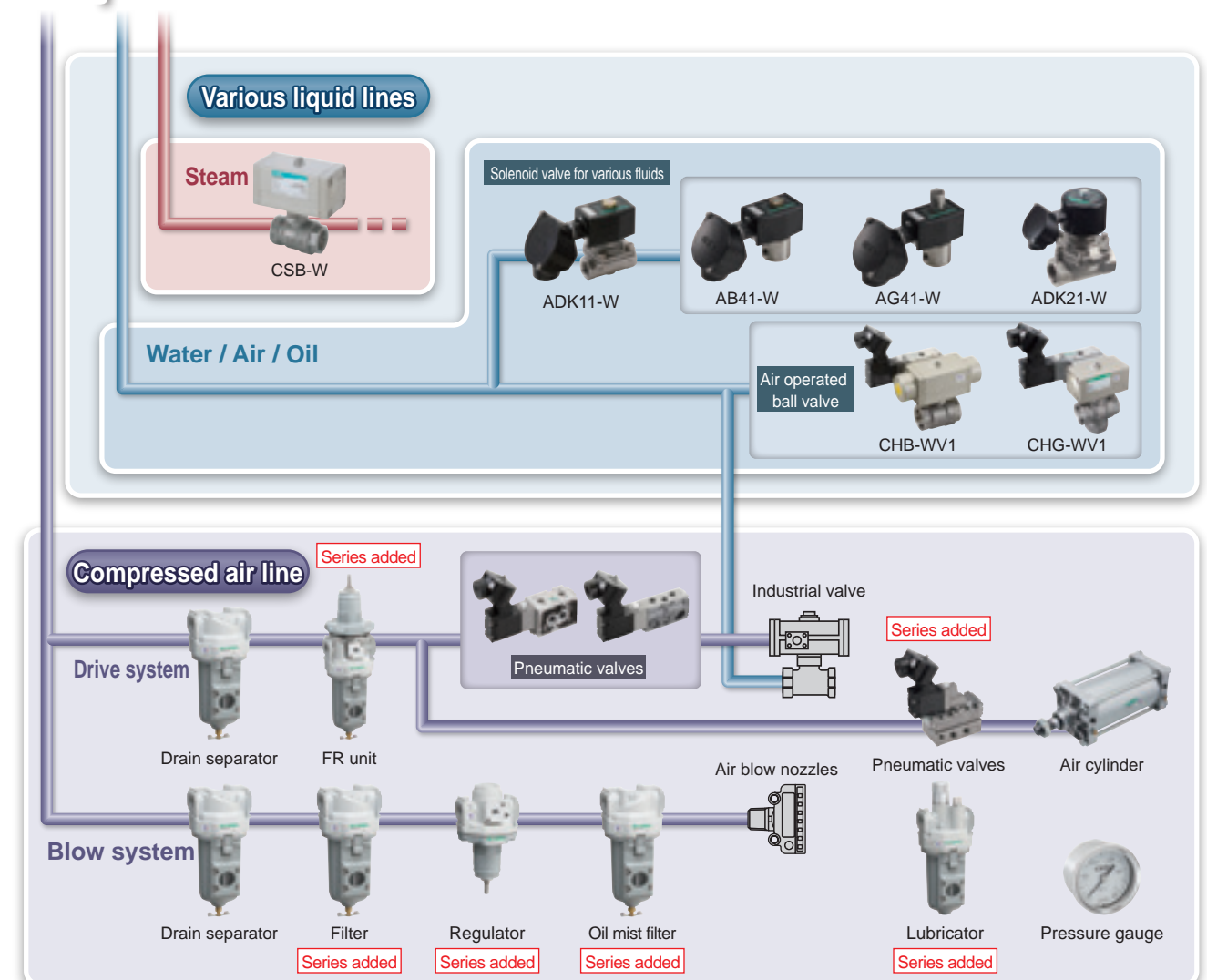
Weather resistance improved for general-purpose items such as covers and gauge plugs

#### Lens

Tempered glass specifications



## expanded area of use and variations.



### Outdoor series even for air cylinders (ø40 to ø250)

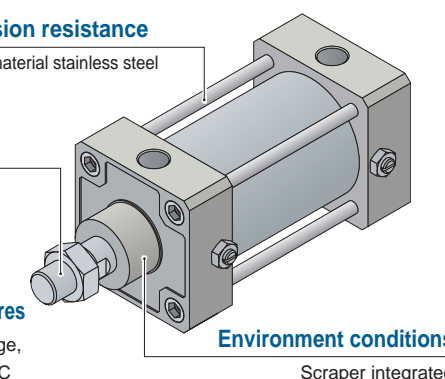
#### Standard

**Corrosion resistance**  
Tie rod material stainless steel

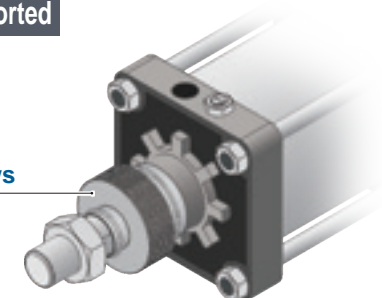
#### Individually supported

**Corrosion resistance**  
Piston rod material  
Stainless steel

**Low temperature measures**  
Packing and grease change,  
can be used even at -20°C



**Silicone bellows**





Compressed air line

Drain separator / F.R.L. unit

Drain separator **FXW Series** P.1

	Port size Rc,NPT,G	Max. flow rate m³/min	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
FXW1004	1/4, 3/8	0.55	●	●
FXW1011	1/4, 3/8, 1/2	1.8	●	●
FXW1037	3/4, 1	6.1	●	●



Regulator **RW Series** P.9

	Port size Rc,NPT,G	Max. flow rate m³/min	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
RW3000-W	1/4, 3/8	2.0/2.6	●	●
RW4000-W	1/4, 3/8, 1/2	2.5/4.4/5.0	●	●
RW8000-W	3/4, 1	14.0/11.0	●	●



F.R. unit **WW Series** P.21

	Port size Rc,NPT,G	Max. flow rate m³/min	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
WW3000-W	1/4, 3/8, 1/2	2.15/2.43/ 2.43	●	●
WW4000-W	1/4, 3/8, 1/2	2.5/4.35/ 4.75	●	●
WW8000-W	3/4, 1	10	●	●



Lubricator **LW Series** P.13

	Port size Rc,NPT,G	Max. flow rate m³/min	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
LW3000-W	1/4, 3/8	1.1/2.25	●	●
LW4000-W	1/4, 3/8, 1/2	1/1.7/ 2.7	●	●
LW8000-W	3/4, 1	6.3/10.0	●	●



Pneumatic valves

4F Series P.31, P.39

	Port size		Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
4F2-*-W	Rp, NPT, G	1/4,	●	●
4F3-*-W		1/4, 3/8	●	●
4F4-*-W		1/4, 3/8	●	▲
4F5-*-W	Rc, NPT, G	3/8, 1/2	●	▲
4F6-*-W		1/2, 3/4	●	▲
4F7-*-W		3/4, 1	●	▲



4F NAMUR Series P.35

	Port size Rc	Ambient temp. compatibility	
		-10 to 60°C	-20 to 60°C
4F1-NM-*-W	1/4	●	▲
4F3-NM-*-W	1/4, 3/8	●	●



Air filter **FW Series** P.5

	Port size Rc,NPT,G	Max. flow rate m³/min	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
FW3000-W	1/4, 3/8	1.23/1.5	●	●
FW4000-W	1/4, 3/8, 1/2	1.32/ 2.14/3.0	●	●
FW8000-W	3/4, 1	6.4/6.8	●	●



Oil mist filter **MW Series** P.17

	Port size Rc,NPT,G	Max. flow rate m³/min	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
MW3000-W	1/4, 3/8	0.36	●	●
MW4000-W	1/4, 3/8, 1/2	0.825	●	●
MW8000-W	3/4, 1	2.6	●	●



F.R. unit **BW7019** P.25

	Port size Rc	Max. flow rate m³/min	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
BW7019	1/4	0.9	●	●



General-purpose pressure gauge **GW49D Series** P.28

	Port size Rc	Pressure range MPa	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
GW49D	1/8, 1/4	0 to 1.0	●	●



Pneumatic auxiliary components

SL-W Series P.29

	Port size R	Application Cylinder diameter (Guideline)	Ambient temperature compatibility	
			-10 to 60°C	-20 to 60°C
SL-8A-W	1/4	ø40 to 100	●	●
SL-10A-W	3/8	ø63 to 140	●	●
SL-15A-W	1/2	ø75 to 180	●	●



SC1-W Series P.30

	Port size Rc	Application Cylinder diameter (Guideline)	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
SC1-8-W	1/4	ø32 to 75	●	●
SC1-10-W	3/8	ø50 to 140	●	●
SC1-15-W	1/2	ø80 to 160	●	●



Various fluid lines

Fluid control valves

Direct acting 2-port solenoid valve **AB41 Series** P.47

	Port size Rc	Working fluid	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
AB41-*-W	1/4 to 1/2 Orifice size ø1.5 to 10	Air, low vacuum, Water, kerosene	●	●



Pilot kick 2-port solenoid valve **ADK11 Series** P.55

	Port size Rc	Working fluid	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
ADK11-*-W	1/2 to 1 Orifice size ø16 to 28	Air, low vacuum, Water, kerosene	●	●



Air operated ball valve **CHB/G-W, -WV, -WX Series** P.63

	Port size Rc	Working fluid	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
CHB/CHG-W CHB/CHG-WV, X (With solenoid valve)	1/4 to 1 Orifice size ø10 to 40	Air, low vacuum, Water, kerosene	●	●



Direct acting 3-port solenoid valve **AG41 Series** P.51

	Port size Rc	Working fluid	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
AG41-*-W	1/4 to 3/8 Orifice size ø2.0 to 2.3	Air, low vacuum, Water, kerosene	●	●



Pilot kick 2-port solenoid valve **ADK21 Series** P.59

	Port size Rc, flange	Working fluid	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
ADK21-*-W	1 1/4 to 2 32F, 40F, 50F Orifice size ø35 to 53	Air, low vacuum, Water, kerosene	●	●



Air operated ball valve **CSB-W Series** P.79

	Port size Rc	Working fluid	Ambient temp. compatibility	
			-10 to 60°C	-20 to 60°C
CSB-W	3/8 to 1 Orifice size ø10 to 40	Steam/hot water	●	●



Drive components

Pneumatic cylinders

Medium bore size cylinder **SCA2-W, SCS2-W Series** P.83, P.87

	Bore size	Ambient temperature compatibility	
		-10 to 60°C	-20 to 60°C
SCA2-*-W	ø40 to 100	●	●
SCS2-*-W	ø125 to 250	●	●

