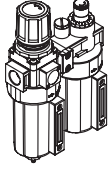
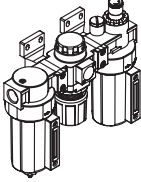
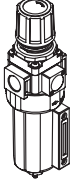
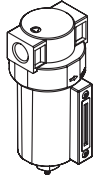
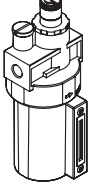
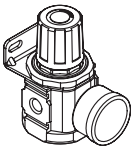
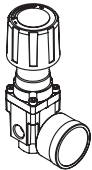
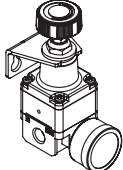
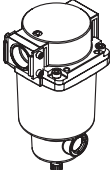


Family

Model	MACP	MACT	MAFR	MAF	MAL
Pictures					
100			●		
200	●	●	●	●	●
200L	●	●	●	●	●
300	●	●	●	●	●
300L	●	●	●	●	●
302	●	●	●	●	●
400	●	●	●	●	●
401	●	●	●	●	●
403	●	●	●	●	●
501	●	●	●	●	●
900				●	●
901				●	

Model	MAR	MAHR	MAIR
Pictures			
100	●		●
200	●	●	●
300	●		●
302	●		
400	●		
401	●		
403	●		
501	●		
900	●		
901	●		

Model	MAM*
Pictures	
25	●
35	●
45	●
55	●

Selector table

● Standard type ◎ Option

Port size									Series	Drain type		
M5	6A	8A	10A	15A	20A	25A	40A	50A		Manual	Semi-automatic	Automatic
●									100		●	
	●	●							200		●	
	●	●							200L		●	
		●	●						300		●	
		●	●						300L		●	◎
		●	●	●					302		●	◎
		●	●	●					400		●	◎
		●	●	●					401		●	◎
		●	●	●					403		●	◎
					●	●			501		●	◎
							●		900	●		◎
								●	901	●		◎
		●	●						25		●	◎
			●	●					35		●	◎
				●	●				45		●	◎
					●	●			55		●	◎

Selector table

● Standard type ◎ Option

MAR Regulation (Adjustable pressure)						Series	MAF / MAM* Filter (Filter element)							
1K	2K	3K	4K	8.5K	15K		0.01 μ	0.3 μ	3 μ	5 μ	20 μ	40 μ	50 μ	Water separator
				●		100			●		◎			
◎	◎	◎	◎	●		200	◎	◎	◎		●			
				●		200L	◎	◎	◎		●			
				●		300	◎	◎	●		◎			
				●		300L	◎	◎	●		◎			
				●		302	◎	◎	●		◎		●	
				●		400			◎		●			
				●	◎	401	◎	◎	◎		●			
				●		403			◎		●			
				●		501	◎	◎			●			
				●		900						●		
				●		901						●		
						25	●	●	●				●	●
						35	●	●	●				●	●
						45	●	●	●				●	●
						55	●	●	●				●	●

MAHR / MAIR Regulation (Adjustable pressure)					Series
2K	4K	8K	10K	27K	
			●	◎	MAHR200
●	●	●			MAIR100
●	●	●			MAIR200
●	●	●			MAIR300

Bowl assembly (MAFR, MAF series)

● Standard type ◎ Option

Series		100	200	200L	300	300L
Fig						
Order example		BOWL-MAFR100	BOWL-MAF200-1 2	BOWL-MAF200L-1	BOWL-MAF300-1 2	BOWL-MAF300L-1 2 3
Applicable model		MAFR100	MAFR200, MAF200	MAFR200L, MAF200L	MAFR300, MAF300	MAFR300L, MAF300L
1 Bowl	PC	-	●	●	●	●
	Metal	M		◎		
	Nylon	N	◎	◎	◎	◎
2 Bowl	None	-	◎		◎	◎
	Guard	U	●		●	●
3 Drain valve	-	●	●	●	●	●
	D2					◎

Series		300	302	302	400	401
Fig						
Order example		BOWL-MACC300-2	BOWL-MAF302-1 2 3	BOWL-MAF302-M 3	BOWL-MAF400-1 2 3	BOWL-MAF401(-W)-3
Applicable model		MACC300	MAFR302, MAF302	MAFR302, MAF302	MAFR400, MAF400	MAFR401(-W), MAF401(-W)
1 Bowl	PC	-	●		●	
	Metal	M		●		●
	Nylon	N	◎		◎	
2 Bowl	None	-	◎		◎	
	Guard	U	●	●	●	●
3 Drain valve	-	●	●	●	●	●
	D2		◎	◎	◎	◎
	D3				◎	◎
	D4				◎	◎

Series		403	501	900	901	
Fig						
Order example		BOWL-MAF403-1 2 3	BOWL-MAF401-W-3	BOWL-MAF900-3	BOWL-MAF901-3	
Applicable model		MAFR403, MAF403	MAFR501, MAF501	MAFR501-M, MAF501-M	MAF900	MAF901
1 Bowl	PC	-	●			
	Metal	M		●	●	
	Nylon	N	◎			
2 Bowl	None	-	◎			
	Guard	U	●			
3 Drain valve	-	●	●	●	●	
	D2	◎	◎			
	D3		◎			
	D4	◎	◎			
	D7			◎	◎	

*Order example: **BOWL-MAF400-NUD2** (N: Nylon, U: Bowl guard, D2: Auto drain valve)

MA* Selector table



AIR UNIT (F.R.L.UNIT)

mindman

Bowl assembly (MAL series)

● Standard type ◎ Option

Series	200	200L	300	300L	302
Fig					
Order example	BOWL-MAL200-^[1]^[2]	BOWL-MAL200L-^[1]	BOWL-MAL300-^[1]^[2]	BOWL-MAL300L-^[1]^[2]	BOWL-MAL302-^[1]^[2]
Applicable model	MAL200	MAL200L	MAL300	MAL300L	MAL302
^[1] Bowl	PC - ● Metal M ◎ Nylon N ◎	PC - ● Metal M ◎ Nylon N ◎	PC - ● Metal M ◎ Nylon N ◎	PC - ● Metal M ◎ Nylon N ◎	PC - ● Metal M ◎ Nylon N ◎
^[2] Bowl Guard	None - ◎ Guard U ●	None - ◎ Guard U ●	None - ◎ Guard U ●	None - ◎ Guard U ●	None - ◎ Guard U ●

Series	302	400	401	403
Fig				
Order example	BOWL-MAL302-M^[3]	BOWL-MAL400-^[1]^[2]	BOWL-MAL401(-W)-^[3]	BOWL-MAL403-^[1]^[2]
Applicable model	MAL302-M	MAL400	MAL401(-W)	MAL403
^[1] Bowl	PC - ● Metal M ● Nylon N ◎	PC - ● Metal M ◎ Nylon N ◎	PC - ● Metal M ● Nylon N ◎	PC - ● Metal M ◎ Nylon N ◎
^[2] Bowl Guard	None - ◎ Guard U ●	None - ◎ Guard U ●	None - ◎ Guard U ●	None - ◎ Guard U ●
^[3] Float switch	F1 ◎		F1 ◎	

Series	501	900
Fig		
Order example	BOWL-MAL403-^[1]^[2]	BOWL-MAL401-W
Applicable model	MAL501	MAL501-M
^[1] Bowl	PC - ● Metal M ● Nylon N ◎	PC - ● Metal M ● Nylon N ◎
^[2] Bowl Guard	None - ◎ Guard U ●	None - ◎ Guard U ●

*Order example: **BOWL-MAL302-NU** (N: Nylon, U: Bowl guard)

Drain valve (for MAFR, MAF series)

Auto drain valve	Blank	D2	D3	D4	D7
Fig					
Description	Semi-auto drain	FMRF300	MADV400-WA (Female thread)	MADV400-WB (Male thread)	SN-2636-01

Bowl material (Caution for safety)

Effects of atmosphere of organic solvents and chemicals, and where these elements are likely to adhere to the equipment. Chemical data for substances causing degradation (Reference)

Type	Chemical name	Application examples	Material	
			Polycarbonate	Nylon
Acid	Hydrochloric acid, Chromic acid Sulfuric acid, Phosphoric acid	Acid washing liquid for metals	△	×
Alkaline	Sodium hydroxide (Caustic soda) Calcium hydroxide (Slack lime) Potash, Ammonia water Carbonate of soda	Degreasing of metals Industrial salts Water-soluble cutting oil	×	○
Inorganic salts	Sodium sulfide, Potassium nitrate Sulfate of soda	—	×	△
Chlorine solvents	Carbon tetrachloride, Chloroform Ethylene chloride, Methylene chloride	Cleansing liquid for metals Printing ink, Dilution	×	△
Aromatic series	Benzene, Toluene, Paint thinner	Coatings, Dry cleaning	×	△
Ketone	Acetone, Cyclohexane Methyl ethyl ketone	Photographic film Dry cleaning, Textile industries	×	×
Alcohol	Ethyl alcohol, IPA, Methyl alcohol	Anti-freeze, Adhesives	△	×
Oil	Gasoline, Kerosene	—	×	○
Ester	Dimethyl phthalate Diethyl phthalate, Acetic acid	Synthetic oil Anti-rust additives	×	○
Ether	Methyl ether, Ethyl ether	Brake oil additives	×	○
Amino	Methyl amino	Cutting oil, Brake oil additives Rubber accelerant	×	×
Others	Thread-lock fluid, Seawater, Leak tester	—	×	△

○ : Essentially safe △ : Some effects may occur. × : Effects will occur.

* When the above factors are present, or there is some doubt, use a metal bowl for safety.

MAL lubrication (Caution for safety)

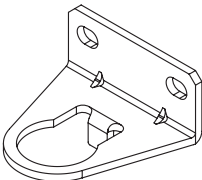
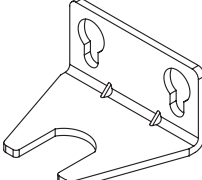
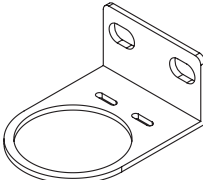
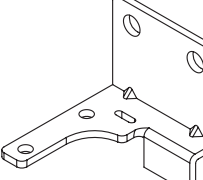
When supplying lubrication, use class 1 turbine oil (with no additive) ISO VG32, or class 2 turbine oil ISO VG32 in the following table. Without continued lubrication during manufacturing, malfunctions could occur. If turbine oil is used, refer to the Material Safety Data sheet (SDS) of the turbine oil. (Reference)

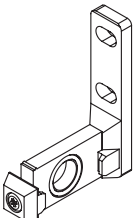
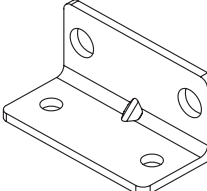
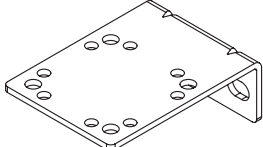
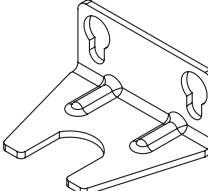
Lubricant brands	Manufacturer	Viscosity Grades
Super turbine oil 32	Idemitsu Kosan	ISO VG32
Mobil DTE LIGHT	Exxon Mobil Corporation	ISO VG32
Mobil rarus 424	Exxon Mobil Corporation	ISO VG32
GII 32	Formosa Petrochemical Corporation	ISO VG32
Turbo T 32	Royal Dutch Shell	ISO VG32
R32	CPC Corporation	ISO VG32

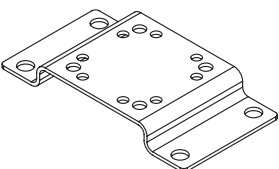
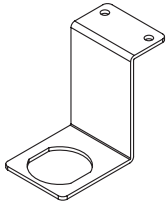
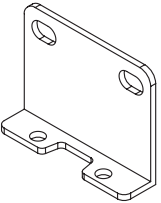
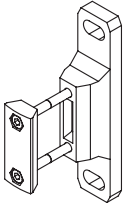
* Do not add additives. This may affect the operation of the product.

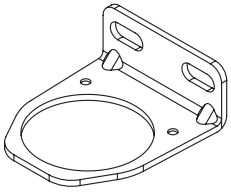
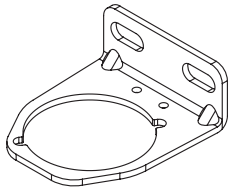
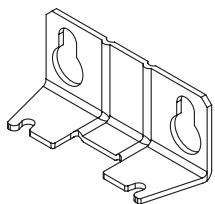
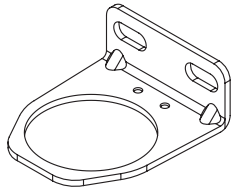
* The name of the lubricant manufacturer and the lubricant brand may change. Please contact each of the companies for details.

Bracket

Order example	B1-MAR100	B1-MAIR100	B1-MAR200	B1-MAL200 (*)
Pictures				
Applicable model	MAR100, MAFR100	MAIR100	MACP200, MACT200 MAFR200, MAR200	MAL200

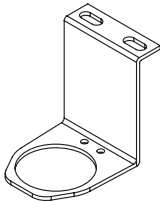
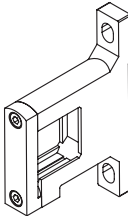
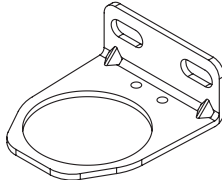
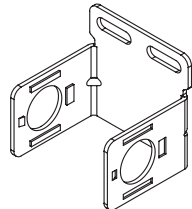
Order example	BL-MACP200	B1-MAF200	B1-MAER200	B1-MAIR200
Pictures				
Applicable model	MACP200, MACT200	MAF200	MAER200, MAER210 MAER300, MAER310	MAIR200

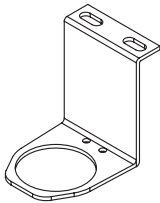
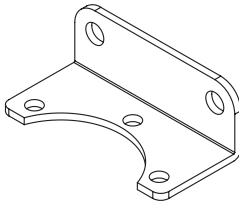
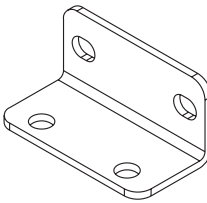
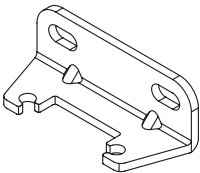
Order example	B2-MAER200	B3-MAR200	B1-MACC300	BT-MACP300
Pictures				
Applicable model	MAER200, MAER210 MAER300, MAER310	MAFR200, MAR200	MACC300	MACP300, MACT300 MACP300L, MACT300L

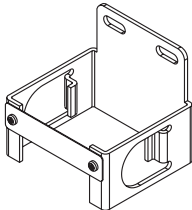
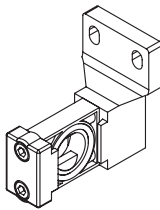
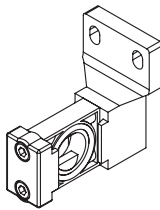
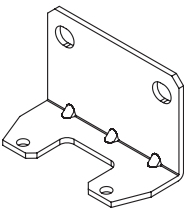
Order example	B1-MAR300	B1-MAF300 (*)	B1-MAIR300	B1-MAR301
Pictures				
Applicable model	MAR300	MAL300, MAF300 MAL300L, MAF300L	MAIR300	MAFR300, MAFR300L

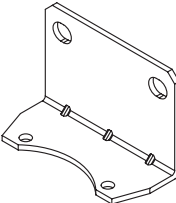
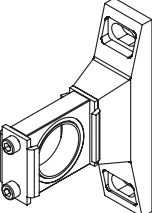
* Order **B1-MAL200**, **B1-MAF300** please note that the body need have the fixed threaded holes collocating with bracket.

Bracket

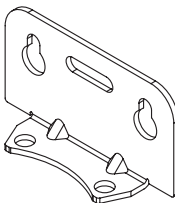
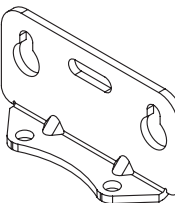
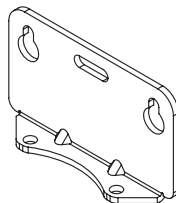
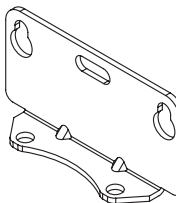
Order example	B3-MAR301	BT-MACP302	B1-MAR302	B2-MAF302
Pictures				
Applicable model	MAFR300(L)	MACP302, MACT302 MAIR200, MAER200	MAFR302, MAR302 MARV302	MAL302, MAF302 MAFV302

Order example	B3-MAR302	B1-MAR400	B1-MAF400	B2-MAR401
Pictures				
Applicable model	MAFR302, MAR302	MACP400, MACT400 MAFR400, MAR400	MAF400, MAL400	MAFR401, MAR401 MAFR403, MAR403

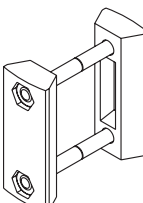
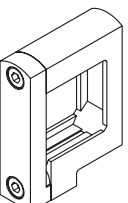
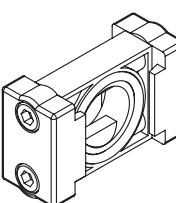
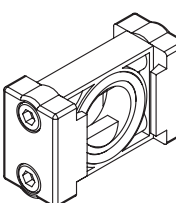
Order example	B2-MAF401	BL-MACP401	BL-MACP403	B1-MAR501
Pictures				
Applicable model	MAF401, MAL401 MAF403, MAL403	MACP401, MACT401	MACP401-W, MACT401-W MACP403, MACT403, MAIR300	MAR501, MAFR501

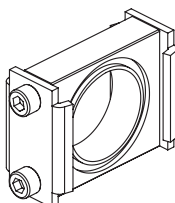
Order example	B1-MAF501	BT-MACP501
Pictures		
Applicable model	MAF501, MAL501	MACP501, MACT501

Bracket

Order example	B1-MAMG25	B1-MAMG35	B1-MAMG45	B1-MAMG55
Pictures				
Applicable model	MAM*25	MAM*35	MAM*45	MAM*55

Joiner set

Order example	BS-MACP300	BS-MACP302	BS-MACP401	BS-MACP403
Pictures				
Applicable model	MACP300, MACT300 MACP300L, MACT300L	MACP302, MACT302 MAIR200, MAER200	MACP401, MACT401	MACP401-W, MACT401-W MACP403, MACT403, MAM*25, MAM*35

Order example	BS-MACP501
Pictures	
Applicable model	MACP501, MACT501 MAM*45, MAM*55

Gauge adapter set *Order example: A-MAR302-NPT

● Standard type ○ Option

	Applicable model	Order example	Port thread	
			—	NPT
			Rc thread	NPT thread
MAR302, MAFR302	A-MAR302-□	●	○	
MAR401, MAFR401	A-MAR401-□	●	○	
MAR401-W, MAFR401-W MAR403, MAFR403 MAR501, MAFR501	A-MAR302-□ (Shared with 302)	●	○	

* Recommended tightening torque is between 1.5 to 2.5 Nm for the female thread (1/8") and 0.3 to 0.5Nm for the screws(M2.6).

T type module mounting bracket *Order example : T8-MACP302-G

● Standard type ○ Option

	Applicable model	Order example	Port size		Port thread	
			T8,T10	T15	—	G, NPT
			1/4, 3/8	1/2	Rc thread	G,NPT thread
MACP302, MACT302	T8/T10/T15-MACP302-□	○	○	●	○	
MACP401, MACT401	T8/T10/T15-MACP401-□	○	○	●	○	
MACP401-W, MACT401-W MACP403, MACT403	T8/T10/T15-MACP403-□					
MACP501, MACT501	T8/T10/T15-MACP501-□	○	○	●	○	
MAM*25, MAM*35	T8/T10/T15-MAMG25-□	○	○	●	○	
MAM*45, MAM*55	T8/T10/T15-MAMG45-□	○	○	●	○	

Check valve *Order example : K8-MACP401-G

● Standard type ○ Option

	Applicable model	Order example	Port size	Port thread	
			K8,K10	—	G, NPT
			1/4, 3/8	Rc thread	G,NPT thread
MACP302, MACT302	K8/K10-MACP302-□	○	●	○	
MACP401, MACT401	K8/K10-MACP401-□				
MACP401-W, MACT401-W MACP403, MACT403	K8/K10-MACP403-□				
MAM*25, MAM*35	K8/K10-MAMG25-□	○	●	○	