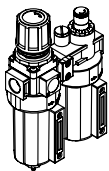
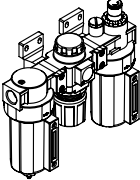
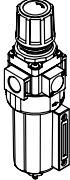
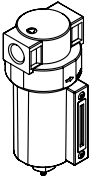
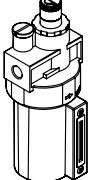
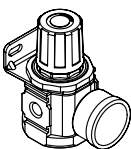
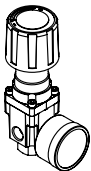
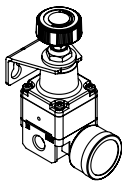
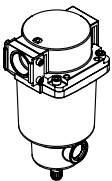


Family

Model	MACP	MACT	MAFR	MAF	MAL
Pictures					
100			●		
200	●	●	●	●	●
200L	●	●	●	●	●
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		●	
		●	●	●					302		●	◎
		●	●	●					400		●	◎
		●	●	●					401		●	◎
		●	●	●					403		●	◎
					●	●			501		●	◎
							●		900	●		◎
								●	901	●		◎
		●	●						25		●	◎
			●	●					35		●	◎
				●	●				45		●	◎
					●	●			55		●	◎

Selector table

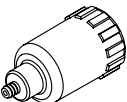
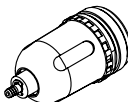
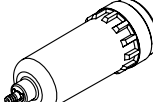
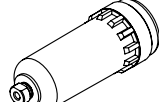
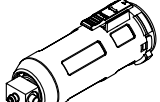
● Standard type ◎ Option

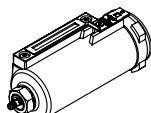
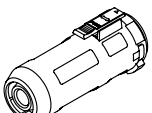
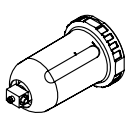
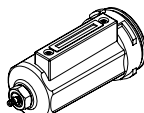
MAR Regulation (Adjustable pressure)						Series	MAF / MAM* Filter (Filter element)								
1K	2K	3K	4K	8.5K	15K		0.01 μ	0.3 μ	3 μ	5 μ	20 μ	40 μ	50 μ	Water separator	0.01 μ + Deodorization
				●		100				●		◎			
◎	◎	◎	◎	●		200	◎	◎		◎		●			
				●		200L	◎	◎		◎		●			
				●		302	◎	◎		●		◎		●	
				●		400	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

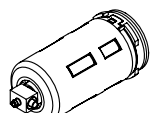
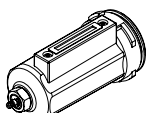
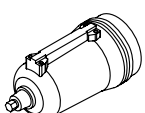
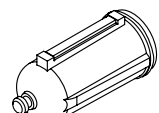
MAHR / MAIR Regulation (Adjustable pressure)					Series
2K	4K	8K	10K	27K	
			●	◎	MAHR200
●	●	●			MAIR100
●	●	●			MAIR200
●	●	●			MAIR300

Bowl assembly (MAFR, MAF, MAFV series)

● Standard type ◎ Option

Series	100	200	200L	200L	302
Fig					
Order example	BOWL-MAFR100	BOWL-MAF200-1 2	BOWL-MAF200L-1	BOWL-MAF200L-3	BOWL-MAF302-1 2 3
Applicable model	MAFR100	MAFR200, MAF200	MAFR200L, MAF200L	MAFR200L, MAF200L	MAFR302, MAF302
1 Bowl	PC	—	●	●	●
	Metal	M	◎		
	Nylon	N	◎		◎
2 Bowl	None	—			◎
	Guard	U	●		●
3 Drain valve	—	●	●		●
	D2				◎
	D8			◎	

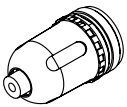
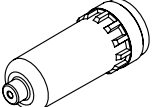
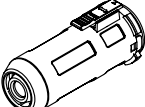
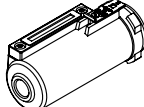
Series	302	302	400	401
Fig				
Order example	BOWL-MAF302-M 3	BOWL-MAFV302-NU	BOWL-MAF400-1 2 3	BOWL-MAF401(-W)-3
Applicable model	MAFR302, MAF302	MAFV302	MAFR400, MAF400	MAFR401(-W), MAF401(-W)
1 Bowl	PC	—	●	
	Metal	M	●	●
	Nylon	N	◎	
2 Bowl	None	—	◎	
	Guard	U	●	
3 Drain valve	—	●	●	●
	D2	◎	◎	◎
	D3		◎	◎
	D4		◎	◎

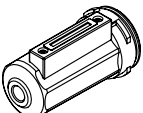
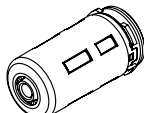
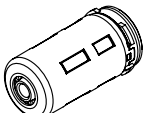
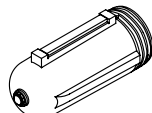
Series	403	501	900	901
Fig				
Order example	BOWL-MAF403-1 2 3	BOWL-MAF401-W-3	BOWL-MAF900-3	BOWL-MAF901-3
Applicable model	MAFR403, MAF403	MAFR501, MAF501	MAFR501-M, MAF501-M	MAFR900, MAF900
1 Bowl	PC	—	●	●
	Metal	M	●	●
	Nylon	N	◎	
2 Bowl	None	—	◎	
	Guard	U	●	
3 Drain valve	—	●	●	●
	D2	◎	◎	
	D3		◎	
	D4	◎	◎	
	D7		◎	◎

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

Bowl assembly (MAL series)

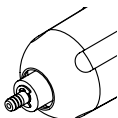
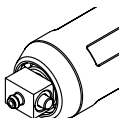
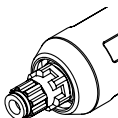
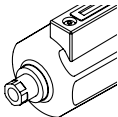
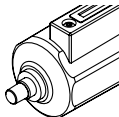
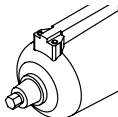
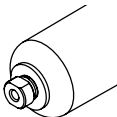
● Standard type ◎ Option

Series		200	200L	302	302	400
Fig						
Order example		BOWL-MAL200-1 2	BOWL-MAL200L-1	BOWL-MAL302-1 2 3	BOWL-MAL302-M 3	BOWL-MAL400-1 2
Applicable model		MAL200	MAL200L	MAL302	MAL302-M	MAL400
1	PC	—	●	●		●
	Metal	M	◎	◎	●	
	Nylon	N	◎	◎		◎
2	None	—	◎	◎		◎
	Guard	U	●	●		●
3	Float switch	F1		◎	◎	

Series		401	403	501	900
Fig					
Order example		BOWL-MAL401(-W)-3	BOWL-MAL403-1 2 3	BOWL-MAL403-1 2	BOWL-MAL401-W
Applicable model		MAL401(-W)	MAL403	MAL501	MAL501-M
1	PC	—	●	●	
	Metal	M	●		●
	Nylon	N	◎	◎	
2	None	—	◎	◎	
	Guard	U	●	●	
3	Float switch	F1	◎		

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

Drain valve (for MAFR, MAF series)

Blank		D2		
Fig				
Description	Semi-auto drain		FMRF300	
	D3	D4	D7	D8
Fig				
Description	MADV400-WA (Female thread)	MADV400-WB (Male thread)	SN-2636-01	MADV201

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)

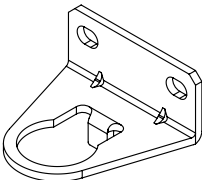
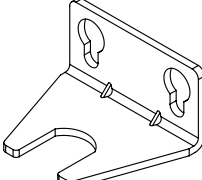
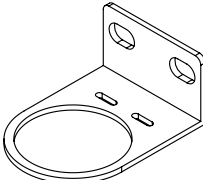
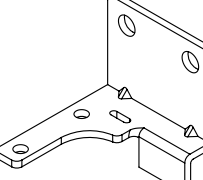
When supplying lubrication, use class 1 turbine oil (with no additive) ISO VG32, or class 2 turbine oil ISO VG32 in the following table. Without continued lubrication during manufacturing, malfunctions could occur. If turbine oil is used, refer to the Material Safety Data sheet (SDS) of the turbine oil.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

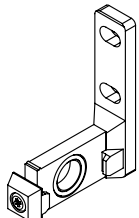
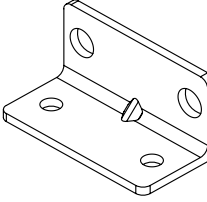
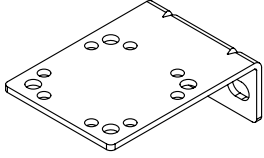
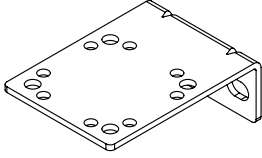
Lubricant brands	Manufacturer	Viscosity Grades
Super turbine oil 32	Idemitsu Kosan	ISO VG32
Mobil DTE LIGHT	Exxon Mobil Corporation	ISO VG32
Mobil rarus 424	Exxon Mobil Corporation	ISO VG32
GII 32	Formosa Petrochemical Corporation	ISO VG32
Turbo T 32	Royal Dutch Shell	ISO VG32
R32	CPC Corporation	ISO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

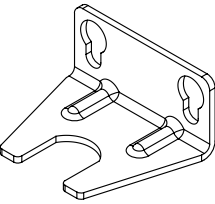
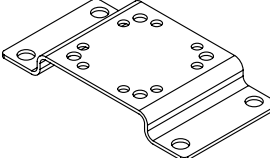
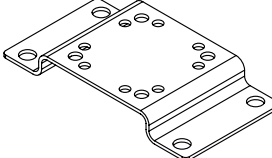
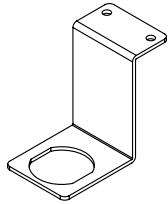
* Do not add additives. This may affect the operation of the product.

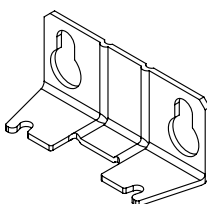
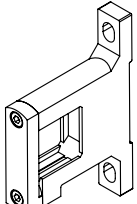
* The name of the lubricant manufacturer and the lubricant brand may change. Please contact each of the companies for details.

Bracket

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

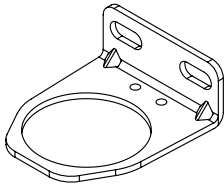
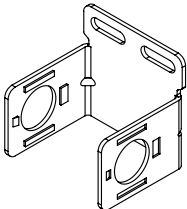
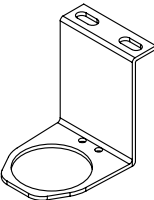
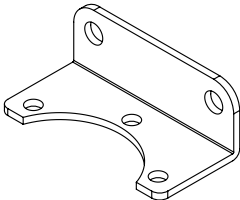
Order example	BL-MACP200	B1-MAF200	B1-MAER100	B1-MAER200
Pictures			 (M4×0.7×8L screws included)	 (M5×0.8×10L screws included)
Applicable model	MACP200, MACT200	MAF200	MAER100, MAER110	MAER200, MAER210 MAER300, MAER310

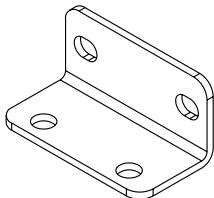
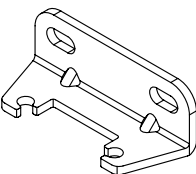
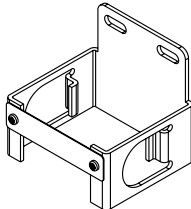
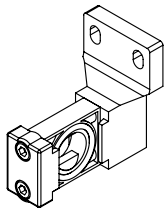
Order example	B1-MAIR200	B2-MAER100	B2-MAER200	B3-MAR200
Pictures		 (M4×0.7×8L screws included)	 (M5×0.8×10L screws included)	
Applicable model	MAIR200	MAER100, MAER110	MAER200, MAER210 MAER300, MAER310	MAFR200, MAR200

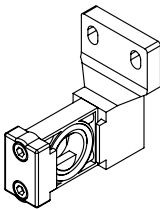
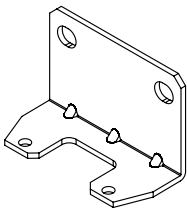
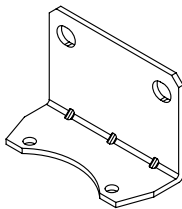
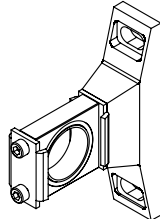
Order example	B1-MAIR300	BT-MACP302
Pictures		
Applicable model	MAIR300	MACP302, MACT302 MAIR200, MAER200

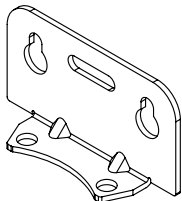
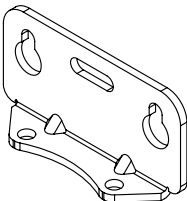
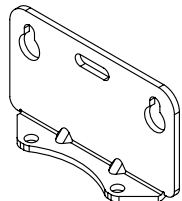
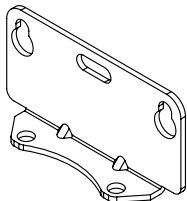
* For order **B1-MAL200**, please note that the body needs to have fixed threaded holes collocating with bracket.

Bracket

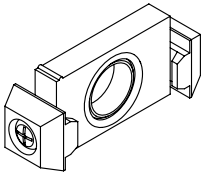
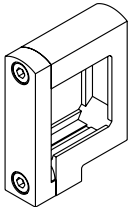
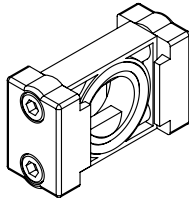
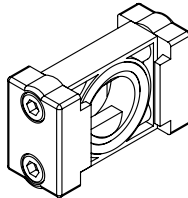
Order example	B1-MAR302	B2-MAF302	B3-MAR302	B1-MAR400
Pictures				
Applicable model	MAFR302, MAR302 MARV302	MAL302, MAF302 MAFV302	MAFR302, MAR302	MACP400, MACT400 MAFR400, MAR400

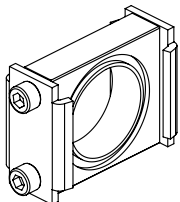
Order example	B1-MAF400	B2-MAR401	B2-MAF401	BL-MACP401
Pictures				
Applicable model	MAF400, MAL400	MAFR401, MAR401 MAFR403, MAR403	MAF401, MAL401 MAF403, MAL403	MACP401, MACT401

Order example	BL-MACP403	B1-MAR501	B1-MAF501	BT-MACP501
Pictures				
Applicable model	MACP401-W, MACT401-W MACP403, MACT403, MAIR300	MAR501, MAFR501	MAF501, MAL501	MACP501, MACT501

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

Joiner set

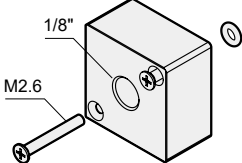
Order example	BS-MACP200	BS-MACP302	BS-MACP401	BS-MACP403
Pictures				
Applicable model	MACP200, MACT200, MAER100	MACP302, MACT302 MAIR200, MAER200	MACP401, MACT401	MACP401-W, MACT401-W MACP403, MACT403, MAM*25, MAM*35

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

Gauge adapter set

*Order example: **A-MAR302-NPT**

● Standard type ◎ Option

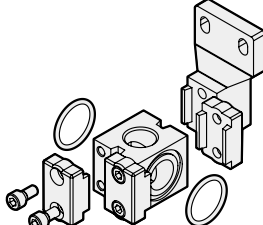
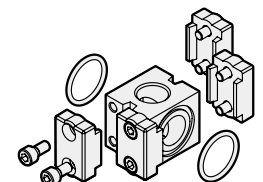
	Applicable model	Order example	Port thread	
			—	NPT
			Rc thread	NPT thread
	MAR302, MAFR302	A-MAR302 —□	●	◎
	MAR401, MAFR401	A-MAR401 —□	●	◎
	MAR401-W, MAFR401-W MAR403, MAFR403 MAR501, MAFR501	A-MAR302 —□ (Shared with 302)	●	◎

* 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**

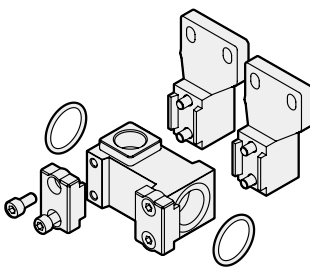
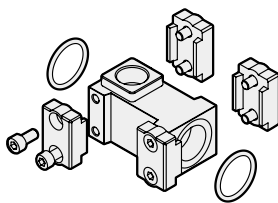
● Standard type ◎ Option

	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 —□			