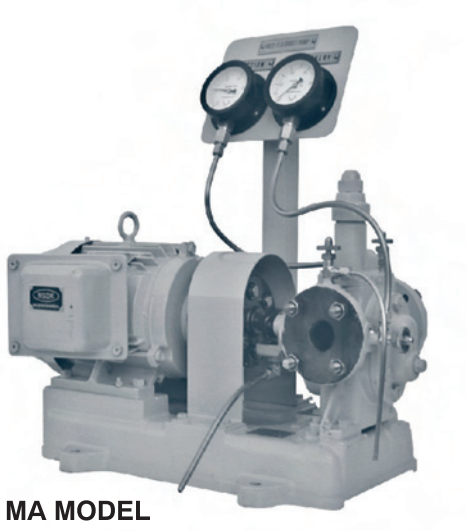
GEAR PUMP

GEAR PUMP
MA/MA-BH Model

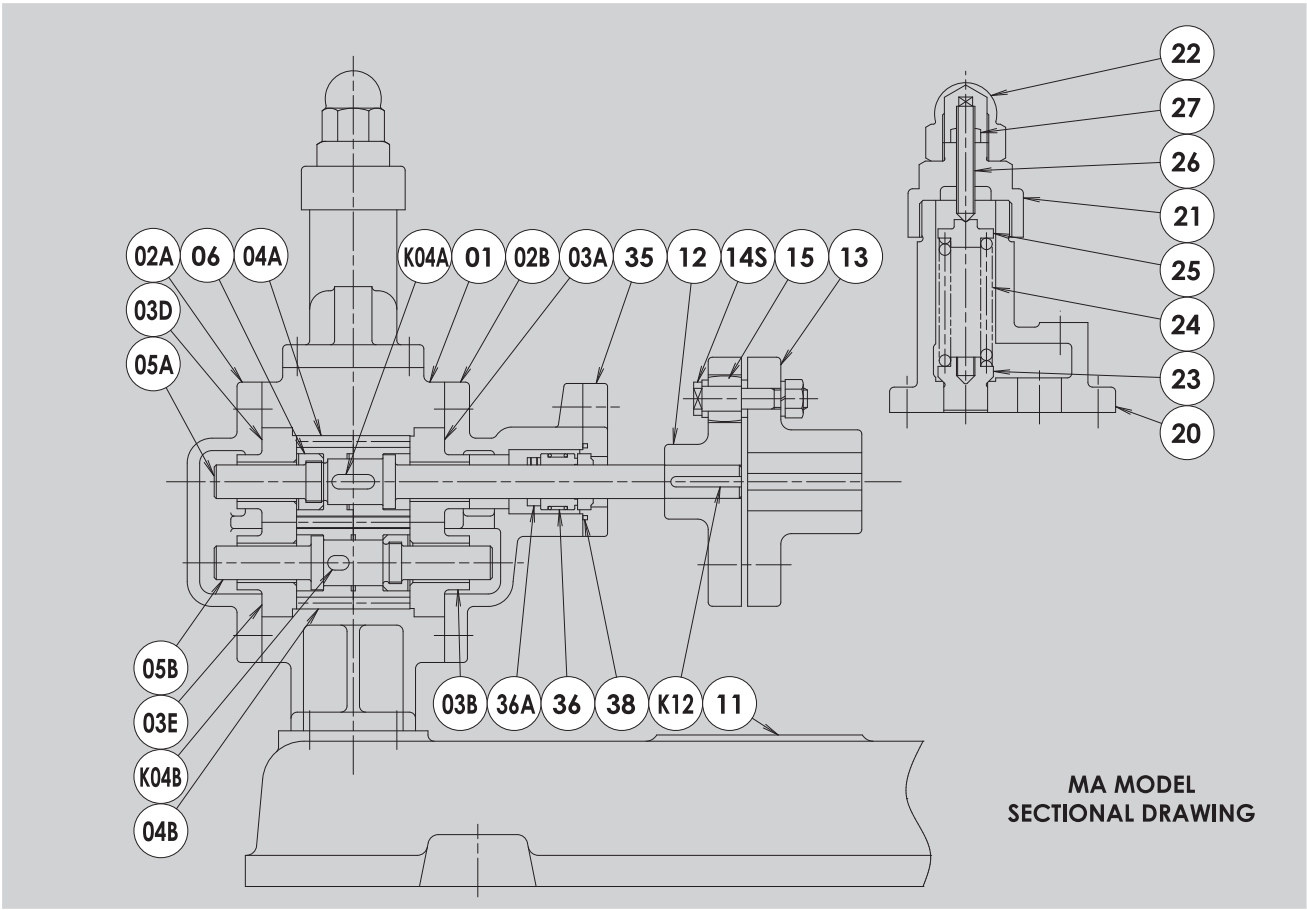


MA MODEL

用途/Service

* 燃料供給ポンプ
* 燃料循環ポンプ
* 燃料/潤滑油移送ポンプ
* その他

* F.O. SUPPLY (BOOSTER) PUMP
* F.O. CIRCULATION PUMP
* F.O. / L.O. TRANS.PUMP
* OTHERS



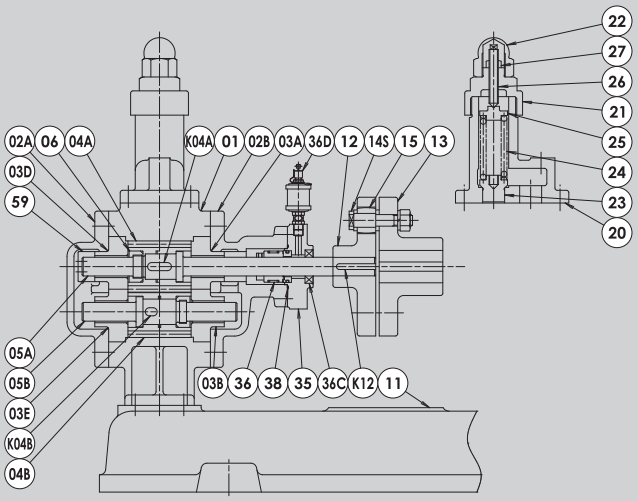
MA MODEL
SECTIONAL DRAWING

PART NO.	NAME OF PART	MATERIAL NOMINATION	QTY.
01	CASING	CAST IRON	1
02A	SIDE COVER	CAST IRON	1
02B	SIDE COVER	CAST IRON	1
03A	BEARING BUSH	CAST IRON	1
03B	BEARING BUSH	CAST IRON	1
03D	BEARING BUSH	CAST IRON	1
03E	BEARING BUSH	CAST IRON	1
04A	GEAR WHEEL (MAIN)	CARBON STEEL	1 SET
04B	GEAR WHEEL (COUNTER)	CARBON STEEL	1 SET
05A	PUMP SHAFT (MAIN)	CARBON STEEL	1
05B	PUMP SHAFT (COUNTER)	CARBON STEEL	1
06	GEAR NUT	MILD STEEL	2
11	COMMON BED	CAST IRON	1
12	FLEXIBLE COUPLING (PUMP)	CAST IRON	1
13	FLEXIBLE COUPLING (MOTOR)	CAST IRON	1
14S	COUPLING BOLT COMPLETE	MILD STEEL	1 SET

PART NO.	NAME OF PART	MATERIAL NOMINATION	QTY.
15	BUFFER RING	SYNTHETIC RUBBER	1 SET
20	RELIEF VALVE BODY	CAST IRON	1
21	RELIEF VALVE COVER	CAST IRON	1
22	RELIEF VALVE CAP	MILD STEEL	1
23	VALVE	CAST IRON	1
24	VALVE SPRING	SPRING STEEL	1
25	VALVE GUIDE	MILD STEEL	1
26	ADJUSTING BOLT	MILD STEEL	1
27	ADJUSTING NUT	MILD STEEL	1
35	GLAND COVER	CAST IRON	1 SET
36	MECHANICAL SEAL		1 SET
36A	MECHANICAL SEAL STOPPER	STAINLESS STEEL	1
38	O RING	SYNTHETIC RUBBER	1
K04A	KEY (MAIN GEAR)	CARBON STEEL	1
K04B	KEY (COUNTER GEAR)	CARBON STEEL	1
K12	KEY (COUPLING)	CARBON STEEL	1

SECTIONAL DRAWING

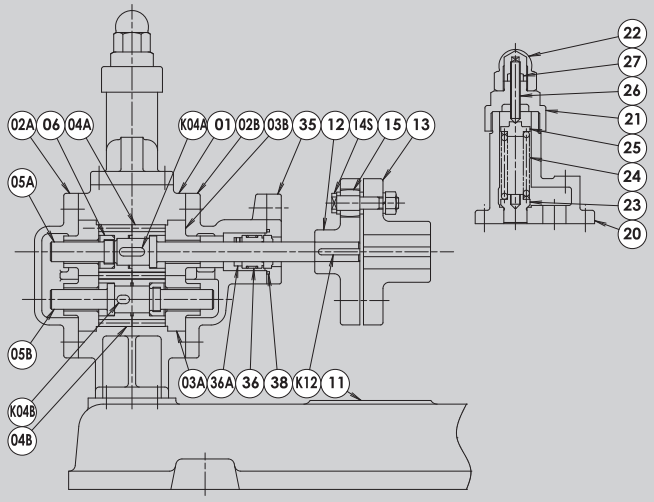
MA MODEL(with THRUST PLATE)



PART NO.	NAME OF PART	MATERIAL NOMINATION	QTY.
01	PUMP CASING	DUCTILE CAST IRON	1
02A	SIDE COVER	DUCTILE CAST IRON	1
02B	SIDE COVER	DUCTILE CAST IRON	1
03A	BEARING BUSH	CAST IRON	1
03B	BEARING BUSH	CAST IRON	1
03D	BEARING BUSH	CAST IRON	1
03E	BEARING BUSH	CAST IRON	1
04A	GEAR WHEEL (MAIN)	CARBON STEEL	1 SET
04B	GEAR WHEEL (COUNTER)	CARBON STEEL	1 SET
05A	PUMP SHAFT (MAIN)	CARBON STEEL	1
05B	PUMP SHAFT (COUNTER)	CARBON STEEL	1
06	GEAR NUT	MILD STEEL	2
11	COMMON BED	CAST IRON	1
12	FLEXIBLE COUPLING (PUMP)	CAST IRON	1
13	FLEXIBLE COUPLING (MOTOR)	CAST IRON	1
14S	COUPLING BOLT COMPLETE	MILD STEEL	1 SET
15	BUFFER RING	SYNTHETIC RUBBER	1 SET

PART NO.	NAME OF PART	MATERIAL NOMINATION	QTY.
20	RELIEF VALVE BODY	CAST IRON	1
21	RELIEF VALVE COVER	CAST IRON	1
22	RELIEF VALVE CAP	MILD STEEL	1
23	VALVE	CAST IRON	1
24	VALVE SPRING	PIANO WIRE	1
25	VALVE GUIDE	MILD STEEL	1
26	ADJUSTING BOLT	MILD STEEL	1
27	ADJUSTING NUT	MILD STEEL	1
35	GLAND COVER	CAST IRON	1
36	MECHANICAL SEAL		1 SET
36C	OIL SEAL	SYNTHETIC RUBBER	1
36D	OILER		1
38	O RING	SYNTHETIC RUBBER	1
59	THRUST PLATE	CARBON STEEL	1
K04A	KEY FOR MAIN GEAR	CARBON STEEL	1
K04B	KEY FOR COUNTER GEAR	CARBON STEEL	1
K12	KEY FOR COUPLING	CARBON STEEL	1

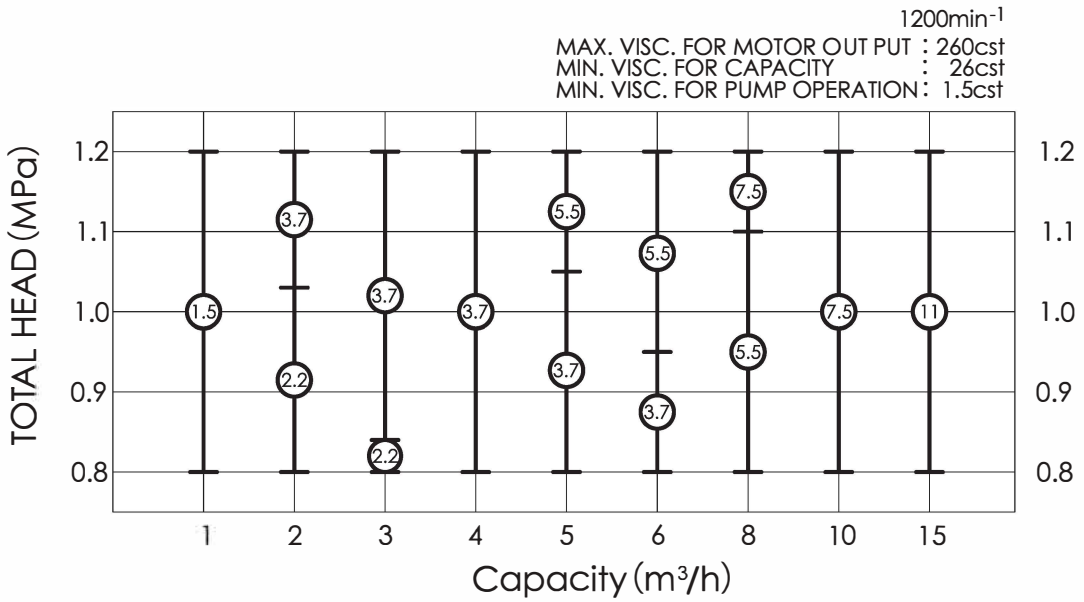
MA-BH MODEL



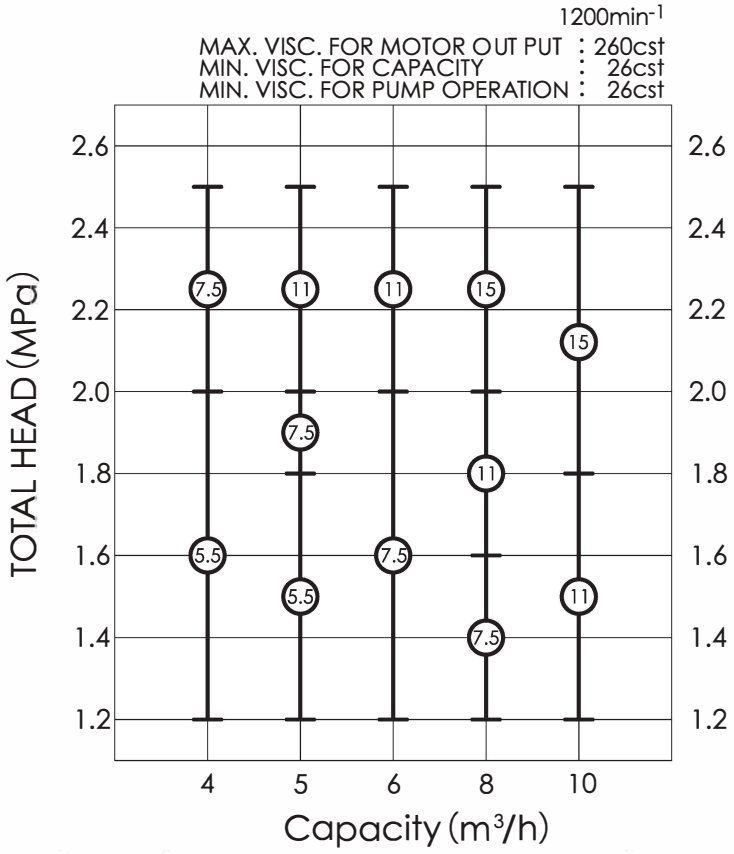
PART NO.	NAME OF PART	MATERIAL NOMINATION	QTY.
01	CASING	CAST IRON	1
02A	SIDE COVER	CAST IRON	1
02B	SIDE COVER	CAST IRON	1
03A	BEARING BUSH	LEADED BRONZE CASTING	3
03B	BEARING BUSH	LEADED BRONZE CASTING	1
04A	GEAR WHEEL (MAIN)	CARBON STEEL	1 SET
04B	GEAR WHEEL (COUNTER)	CARBON STEEL	1 SET
05A	PUMP SHAFT (MAIN)	CARBON STEEL	1
05B	PUMP SHAFT (COUNTER)	CARBON STEEL	1
06	GEAR NUT	MILD STEEL	2
11	COMMON BED	CAST IRON	1
12	FLEXIBLE COUPLING (PUMP)	CAST IRON	1
13	FLEXIBLE COUPLING (MOTOR)	CAST IRON	1
14S	COUPLING BOLT COMPLETE	MILD STEEL	1 SET
15	BUFFER RING	SYNTHETIC RUBBER	1 SET

PART NO.	NAME OF PART	MATERIAL NOMINATION	QTY.
20	RELIEF VALVE BODY	CAST IRON	1
21	RELIEF VALVE COVER	CAST IRON	1
22	RELIEF VALVE CAP	MILD STEEL	1
23	VALVE	CAST IRON	1
24	VALVE SPRING	SPRING STEEL	1
25	VALVE GUIDE	MILD STEEL	1
26	ADJUSTING BOLT	MILD STEEL	1
27	ADJUSTING NUT	MILD STEEL	1
35	GLAND COVER	CAST IRON	1
36	MECHANICAL SEAL		1 SET
36A	MECHANICAL SEAL STOPPER	STAINLESS STEEL	1
38	O RING	SYNTHETIC RUBBER	1
K04A	KEY (MAIN GEAR)	CARBON STEEL	1
K04B	KEY (COUNTER GEAR)	CARBON STEEL	1
K12	KEY (COUPLING)	CARBON STEEL	1

PERFORMANCE CHART



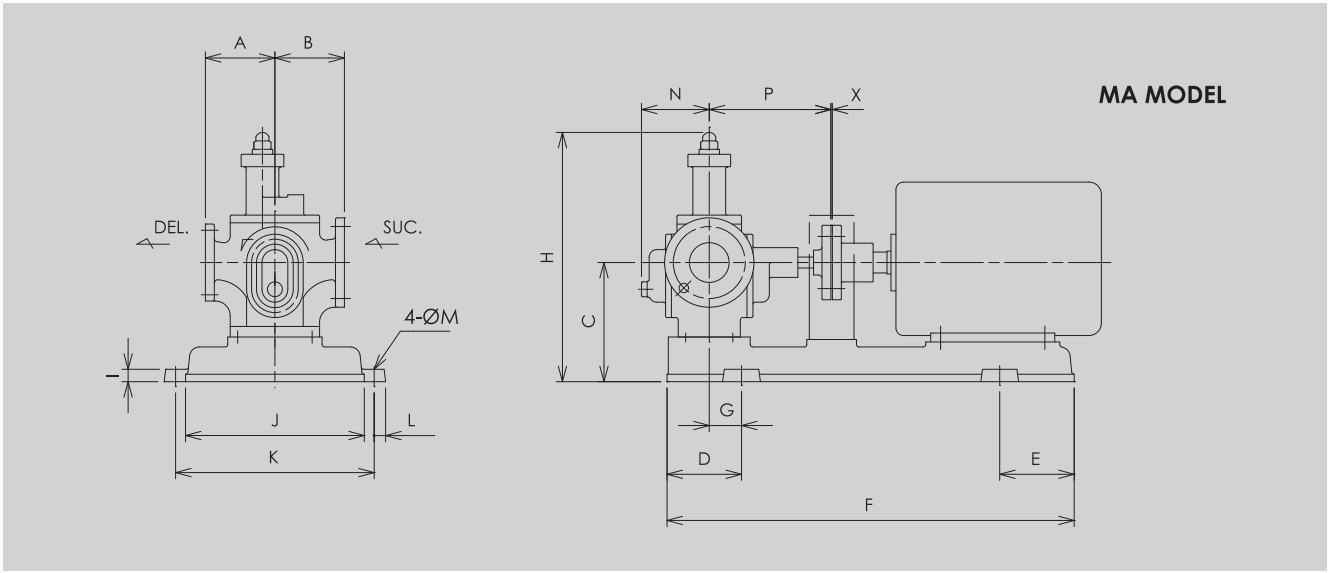
MODEL	MA								
	-1BL -1BLS	-2BNL -2BNLS	-3BNL -3BNLS	-4BNL -4BNLS	-5BNL -5BNLS	-6BNL -6BNLS	-8BNL -8BNLS	-10BL -10BLS	-15BL -15BLS



MODEL	MA				
	-4BH	-5BH	-6BH	-8BH	-10BH

MA-S MODELS HAVE THRUST PLATE FOR SUCTION BOOST PRESSURE.

OUTLINE DRAWING



Model	Capacity (m³/h) (26cSt)	Motor (kW)※1 (260cSt)	Casing Bore(JIS) Suc.	Casing Bore(JIS) Del.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	X	Weight (Kg)
MA-1BL(S)	1	1.5	32	25	105	105	210	100	100	550	35	410	25	260	300	23	15	98	185	3	75
MA-2BNL(S)	2	2.2 3.7	40	32	105	105	210	100	100	550	35 40	411	25	260 180	300 320	23	15	98	185	3	80
MA-3BNL(S)	3	2.2 3.7	40	32	109	103	225 230	100 130	100 130	600 640	20 60	450 455	25	280 300	320 330	23 25	15	114	200	3	75
MA-4BNL(S)	4	3.7	50	40	105	105	225	100	100	630	20	455	25	280	320	23	15	117	200	3	77
MA-5BNL(S)	5	3.7 5.5	65	50	105	105	230	130	130	640	60 75	465	25	300	330	25	15	100	200	3	77
MA-6BNL(S)	6	3.7 5.5	65	50	130	120	225	110 130	110 130	640 680	45 65	460	25	310	350	23	15	127	220	3	77
MA-8BNL(S)	8	5.5 7.5	80	65	150	150	230 245	150	150	750 800	50 70	470 485	25 30	310 360	350 390	23 25	15	124	245	3	115
MA-10BL(S)	10	7.5	80	65	150	150	260	100 110	100 110	750 770	20	531	25	310	350	23	15	165	300	3	95
MA-15BL(S)	15	11	80	65	175	175	325	200	200	1000	100	665	30	370 400	420 450	25	19	200	340	3	140

※1. Oil Viscosity : Design base for motor output

Model	Capacity (m³/h) (26cSt)	Motor (kW)※1 (260cSt)	Casing Bore(JIS) Suc.	Casing Bore(JIS) Del.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	X	Weight (Kg)
MA-4BH	4	5.5 7.5	50	40	130	120	245	150	150	800	40	532	30	360	390	25	15	110	215	3	95
MA-5BH	5	5.5 7.5 11	65	50	130	120	245	150	150	850	70	542	30	360	390	25	15	103	245	3	95
MA-6BH	6	7.5 11	65	50	130	120	285	200	200	900	105	572	30	380	420	25	19	120	245	3	95
MA-8BH	8	7.5 11 15	80	65	150	150	285	150	150	950	70	597	30	400	450	25	19	120	300	3	165
MA-10BH	10	11 15	80	65	150	150	285	150	150	950	70	597	30	400	450	25	19	160	300	3	175

※1. Oil Viscosity : Design base for motor output