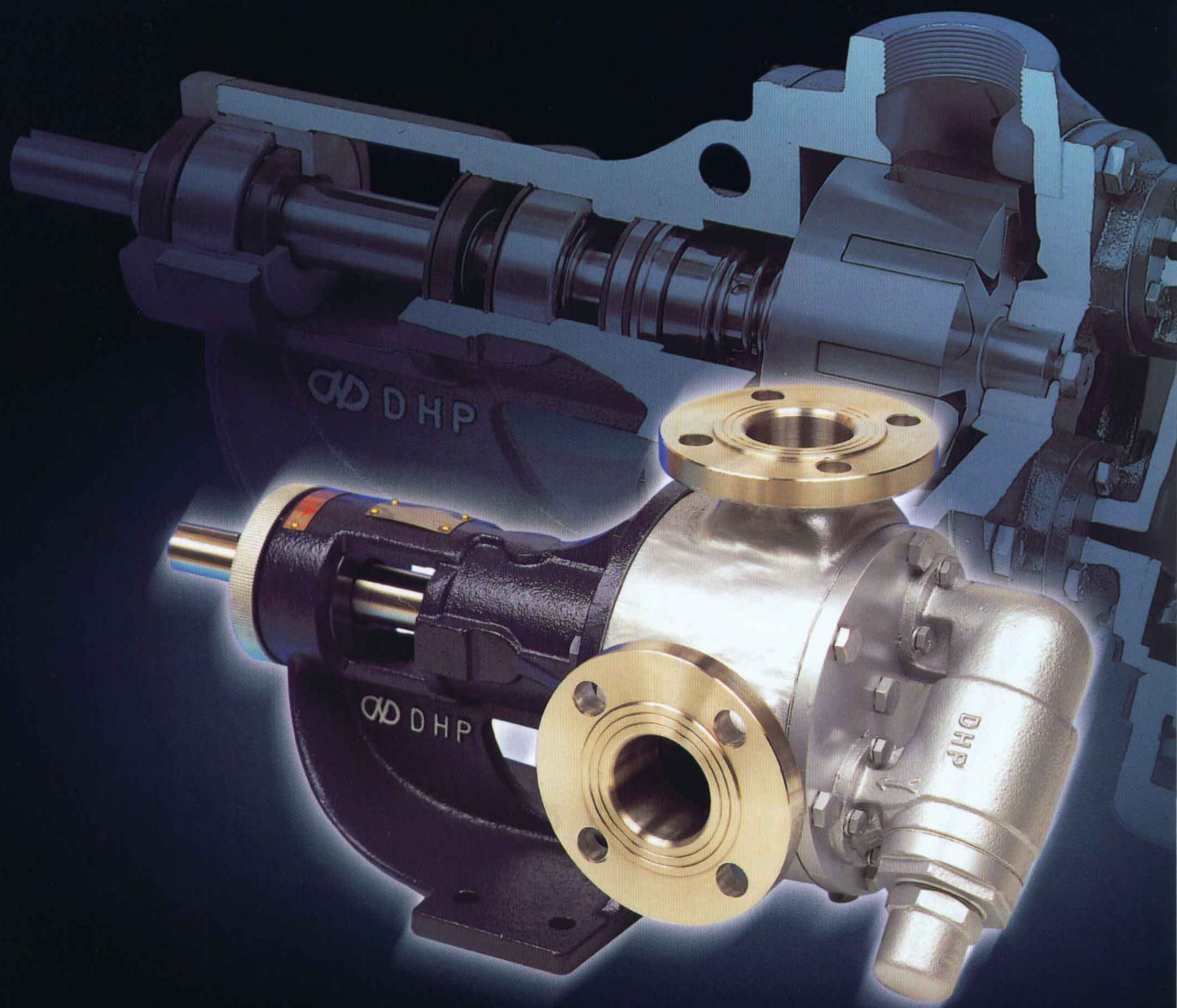
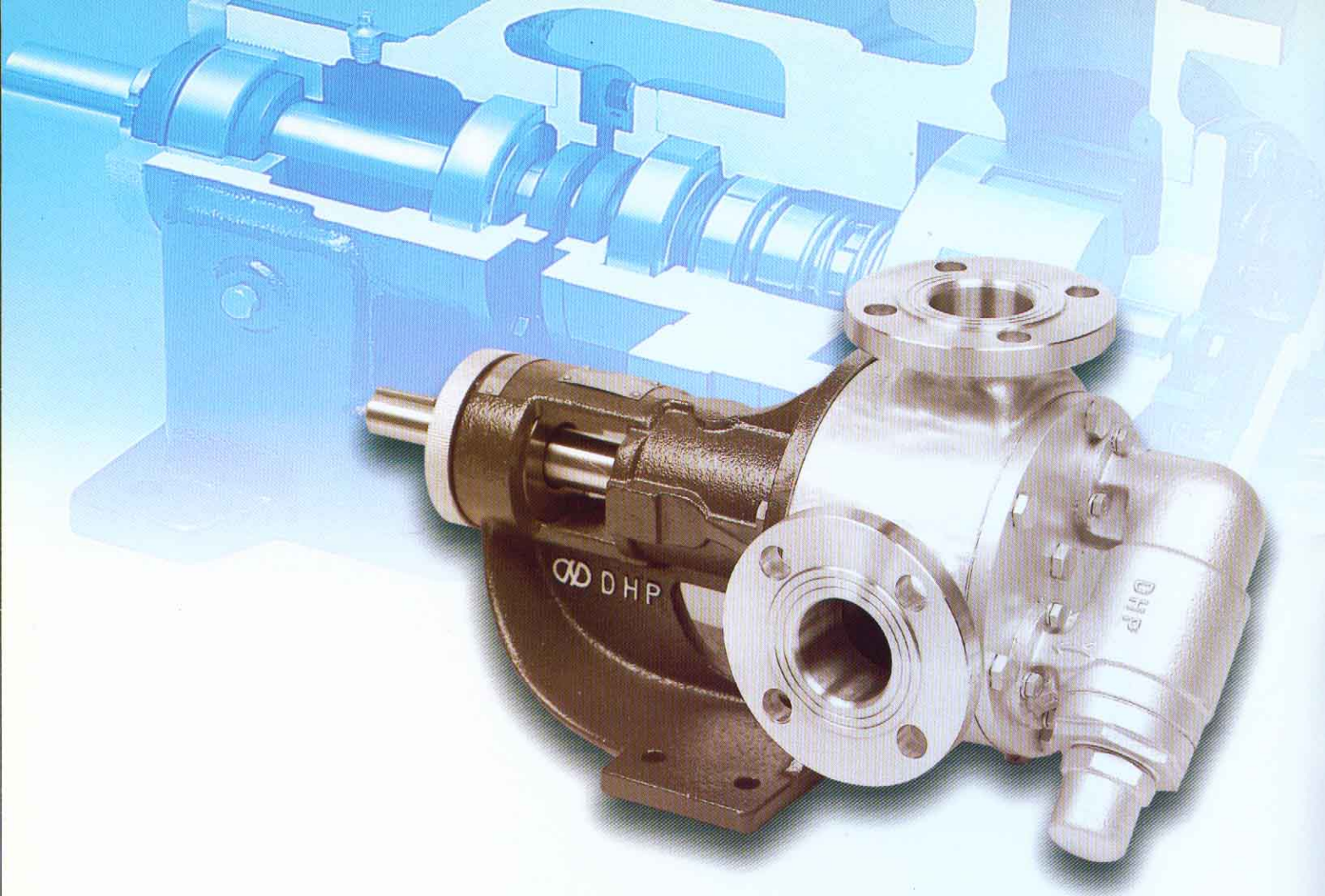


ROTARY GEAR PUMPS



 **DONG HAE PUMP INDUSTRY CO.**



PUMP, JUST ENERGY

DONG HAE which established in 1978, is manufacturing the internal rotary gear pump, anti-acid centrifugal pump, self-priming pump, high pressure cascade pump and other various pumps.

As DONG HAE is professional industrial manufacturer, which specialized in manufacturing standardized chemical process pumps.

For the internal rotary gear pump, DONG HAE provides professional precision machining and concentrate on selecting best components

DONG HAE's basic policy is to provide free inspection with maintenance, so it makes fast, effective and smooth process on the production. All the time, the technology and engineering of DONG HAE will please to support for your company.



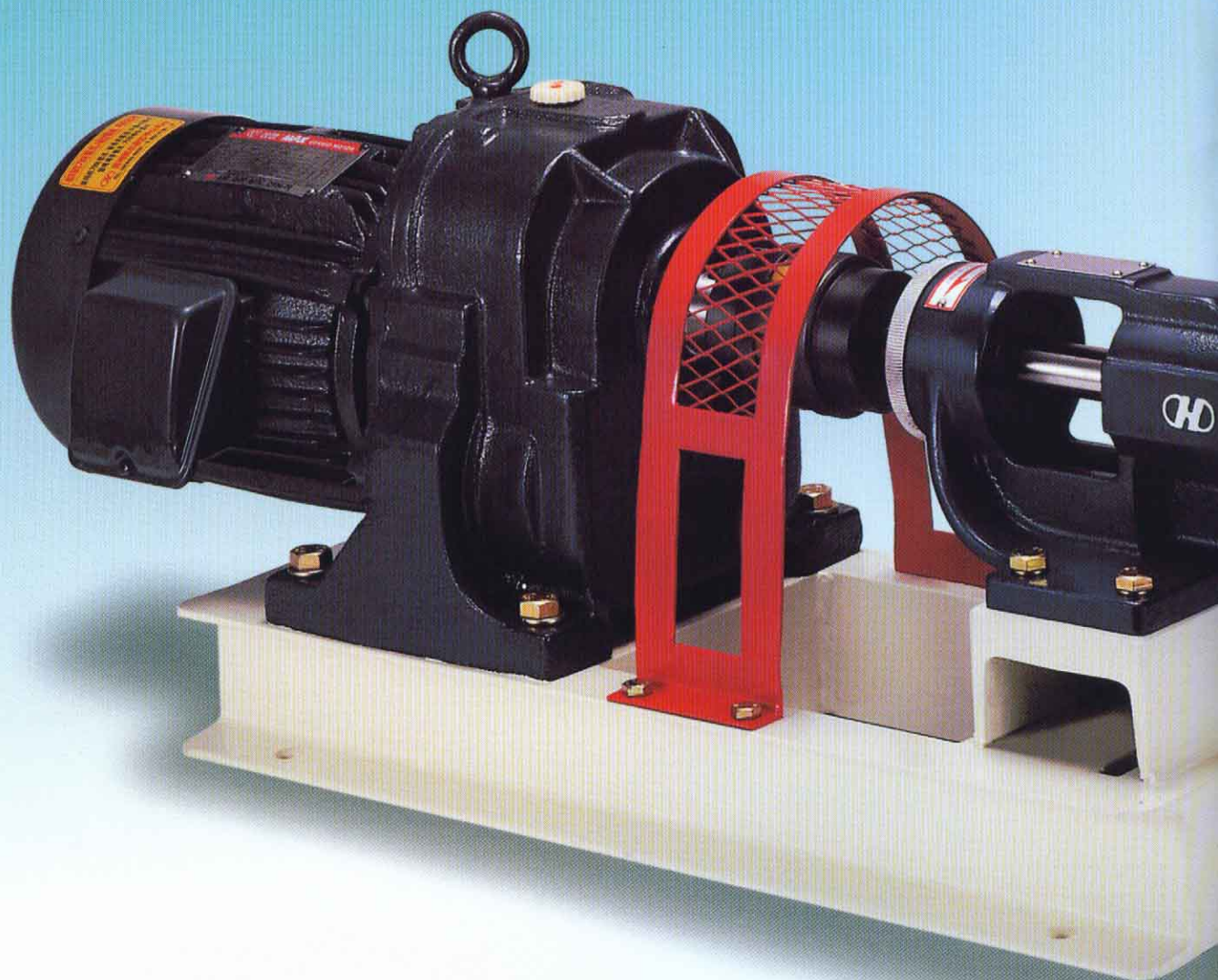
Since
1978

DONG HAE ROTARY GEAR PUMPS

History

- 
- Jul, 1978 Established DONG HAE PUMP company
 - Jul, 1988 Expanded DONG HAE factory
 - Mar, 1997 Assigned to export trading business company
 - Apr. 1997 Member of export assistance information center
 - Jul. 1998 Registered DONG HAE PUMP trademark (No. 413679)
 - Apr. 1999 Registered DONG HAE PUMP trademark (No. 0446801)

Rotary Gear Pumps, The Pride of DongHae Technology



SW

SW type rotary gear pump is a standard type and have a self-priming capability. Also certain amount of fluid can flow without any pulsation. This pump guaranteed the best operation with high efficiency and long time operation without any trouble on high pressure and any kind of viscosity. Available range of temperature is $-50^{\circ}\text{C} \sim 350^{\circ}\text{C}$ and viscosity is $0.1\text{cps} \sim \text{MAX } 500,000\text{cps}$.



●SHA SERIES



●MKA SERIES



●SWB SERIES



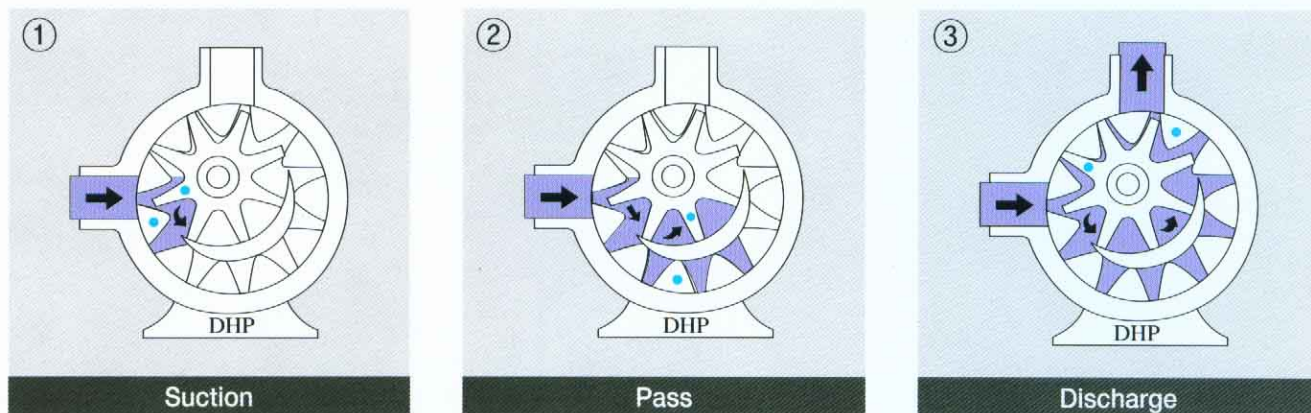
●SWD SERIES (Jacketed)



●SWA SERIES

ROTARY GEAR PUMPS

PRINCIPLE



Dong-Hae internal rotary gear pump is designed simple principle under "Gear within a gear" therefore this oval type gear pump has high efficiency and capability.

When rotate the pump shaft, the fluid enters to pump inlet and fill to gap of idler gear and rotor gear. Idler gear according to rotation of the rotor gear, the fluid is going out to pump discharge.

It appears flow the fluid from suction to discharge as fig. 1, 2 and 3

FEATURE

■ Versatility

This pump can transport liquids of any viscosity, even at high and low temperatures. At any extreme these pumps have the ability to give trouble free operation.

■ Good suction/inhalation capability

Due to their original, innovative configuration these pumps are able to create a strong vacuum. They can be used as a self vacuum pump for air and gases, and are able to provide gas mixtures without trouble.

■ Smooth liquid flow

Because the gears roll in the same direction, without closing, the flow of the liquid is uninterrupted and bubble-free.

■ Easy maintenance and parts replacement

Worn parts can be easily replaced.

APPLICATION

- Cooking oil, soybean oil, shortening, lard, butter, margarine, chocolate, malt honey, sausages, curry, jam, sugar syrup, glazing sugars.
- Paints, water paints, cation paints, varnishes, emulsion, bondings, rosins, pastes, enamels, magnetic paints.
- Plastics, oil soap liquid, phenol resin, formalin, polycarbonated resin, acrylics, liquid calcium, inks, latex compounds, high viscosity adhesives, cleansers, hot melt, epoxy resin.
- LPG, benzene, gasoline, alcohol, liquid freon, heavy oils, coal tar, pitches, greases, phthal acid pitch.
- SK oil, downsome oil, heating oils.



MODEL SYSTEM

SW A — 40 S — M G V T T — C T — R — L
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

SW

① Series

• SW : Side x Top • MK : Side x Side • SH : Top x Top

A

② Material Jacketed

A } Stainless Steel
C } Steel

B } Cast Iron
D }

E } Carbon Steel
F }

A } No Jacketed
B }
E }
C } Jacketed
D }
F }

40S

③ Ports Size

• 12 (8cc/rev)
• 40S (72cc/rev)
• 50L (520cc/rev)
• 80L (1500cc/rev)
• 150 (5460cc/rev)

• 25M (25cc/rev)
• 40L (100cc/rev)
• 65 (800cc/rev)
• 100 (2490cc/rev)
• 200 (12000cc/rev)

• 25 (36cc/rev)
• 50S (400cc/rev)
• 80S (1100cc/rev)
• 125 (4150cc/rev)
• 250 (24000cc/rev)

④ Capacity

MVTT

⑤ Seal

• M: Mechanical Seal • DM: Double Mechanical Seal • G: Gland Packing

⑥ O - Ring
G - Packing

• V: Viton • T: Teflon • N: NBR • NP: Neoprene • K: Kalrez • F: FEP
• T: Teflon • A: Asbestos • Z: Z-Pac

⑦ Seal Face Material

• T: TC • S: SIC • A: Carbon • C: Ceramic

C

⑧ Bush Material

• T: Tungsten Carbide(TC) • C: Ceramic • B: Brass • A: Carbon • S: Special Steel

T

⑨ Pin Material

• T: TC Coating • TC: Tungsten Carbide(solid) • S: Special Steel

R

⑩ Safety Relief Valve

• R: Relief Valve (In-Line)

• RT: Relief Valve (Return to Tank)

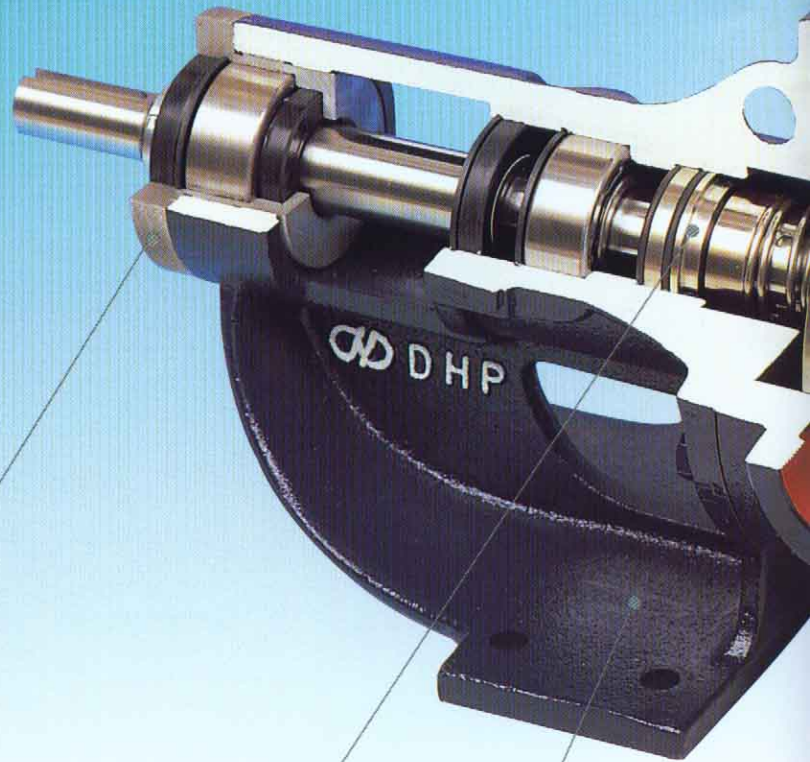
• Blank - No Relief Valve

L

⑪ Class

• S: Standard • L: Long Life • 2L: 2 Long Life • 3L: 3 Long Life

High Quality Product



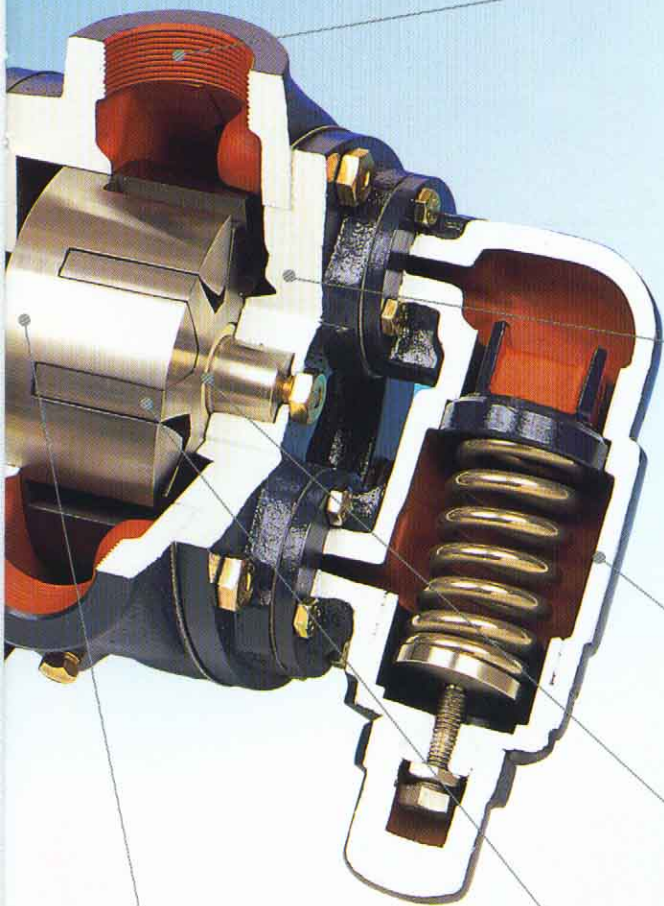
BEARING & HOUSING



MECHANICAL SEAL



BRACKET



CASING



CASING COVER & PIN



SAFETY RELIEF VALVE



ROTOR GEAR & SHAFT



IDLER GEAR

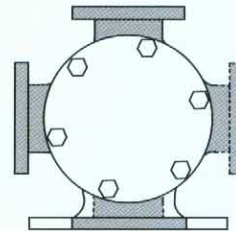


IDLER BUSH

SW SERIES

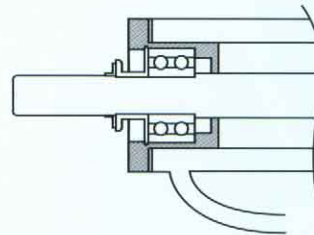
REVOLVABLE PUMP CASING

SW type rotary gear pump case is able to turn left or right to adjust suction and discharge direction according to plant condition. In case of bottom direction for suction, please observe the suction flow.



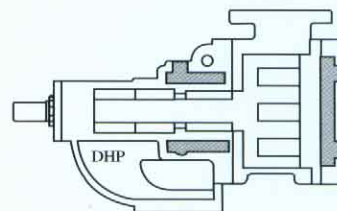
CLEARANCE CONTROL

According to fluid viscosity and temperature, the pump clearance will be changed between idler gear, rotor gear and casing cover. Adjusting the clearance can be done through turning by indicated line on case of bearing housing. Clockwise direction makes clearance nearly.



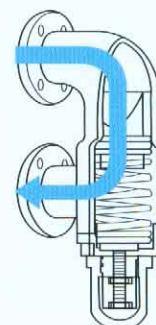
JACKETED

Following fluid will be some time condensation or solidification by the ambient temperature. In this case, steam or hot water and cooling water must be tracing to suction and discharge line, then fluid in the pump will be melting status and can be operated smoothly.

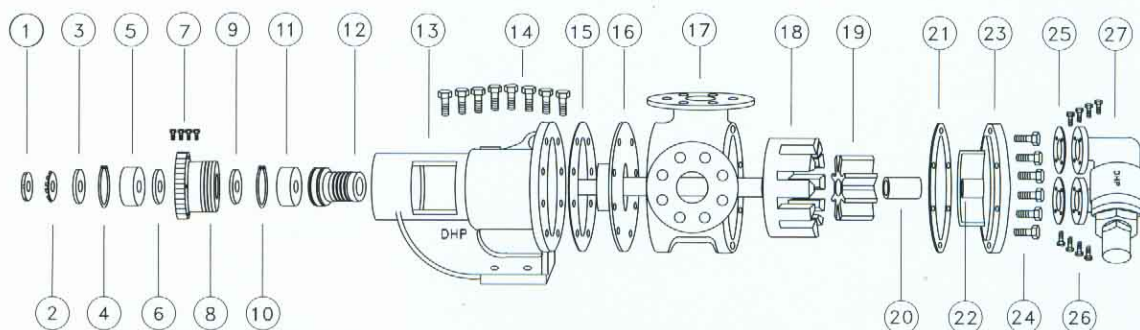


SAFETY RELIEF VALVE

Safety relief valve makes circulate smoothly to flow-fluid in the pump and protect the pump from over pressure to be safety state. However poppet type valve has a pressure checking only, so cannot use to control pressure and flow.

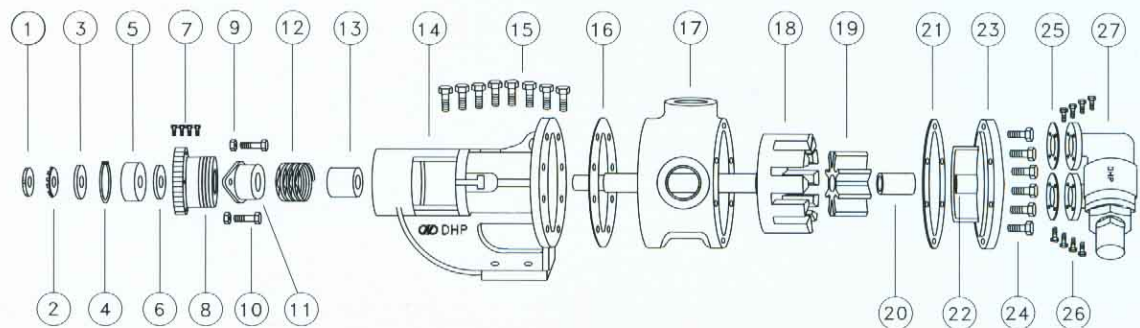


EXPLODED VIEW



No.	NAME of PARTS	No.	NAME of PARTS	No.	NAME of PARTS
1	LOCK NUT	10	SNAP RING	19	IDLER GEAR
2	LOCK WASHER	11	BEARING	20	IDLER BUSHING
3	HOUSING OUTNER LIPSEAL	12	MECHANICAL SEAL	21	COVER GASKET
4	SNAP RING	13	BRACKET	22	IDLER PIN
5	BEARING	14	BRACKET BOLT	23	CASING COVER
6	HOUSING INNER LIPSEAL	15	BRACKET GASKET	24	CASING COVER BOLT
7	BEARING HOUSING BOLT	16	SEAL HOUSING	25	RELIEF VALVE GASKET
8	BEARING HOUSING	17	CASING	26	RELIEF VALVE BOLT
9	BRACKET LIPSEAL	18	ROTOR GEAR & SHAFT	27	RELIEF VALVE

Mechanical Seal Type



No.	NAME of PARTS	No.	NAME of PARTS	No.	NAME of PARTS
1	LOCK NUT	10	PACKING GLAND BOLT	19	IDLER GEAR
2	LOCK WASHER	11	PACKING GLAND	20	IDLER BUSHING
3	HOUSING OUTNER LIPSEAL	12	PACKING	21	COVER GASKET
4	SNAP RING	13	BRACKET BUSHING	22	IDLER PIN
5	BEARING	14	BRACKET	23	CASING COVER
6	HOUSING INNER LIPSEAL	15	BRACKET BOLT	24	CASING COVER BOLT
7	BEARING HOUSING BOLT	16	BRACKET GASKET	25	RELIEF VALVE GASKET
8	BEARING HOUSING	17	CASING	26	RELIEF VALVE BOLT
9	PACKING GLAND NUT	18	ROTOR GEAR & SHAFT	27	RELIEF VALVE

Gland Packing Type

SW SERIES

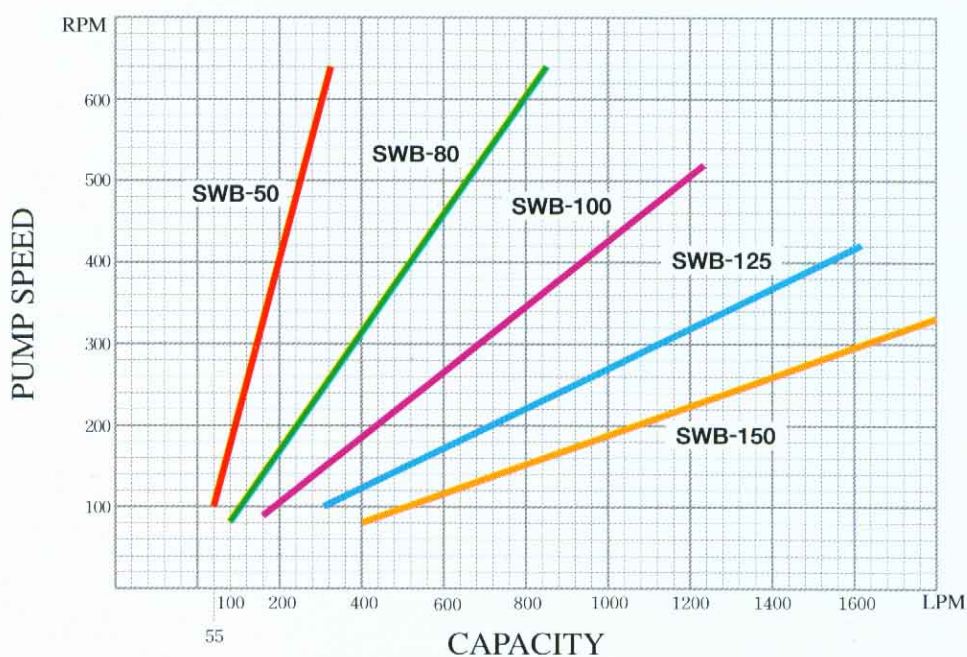
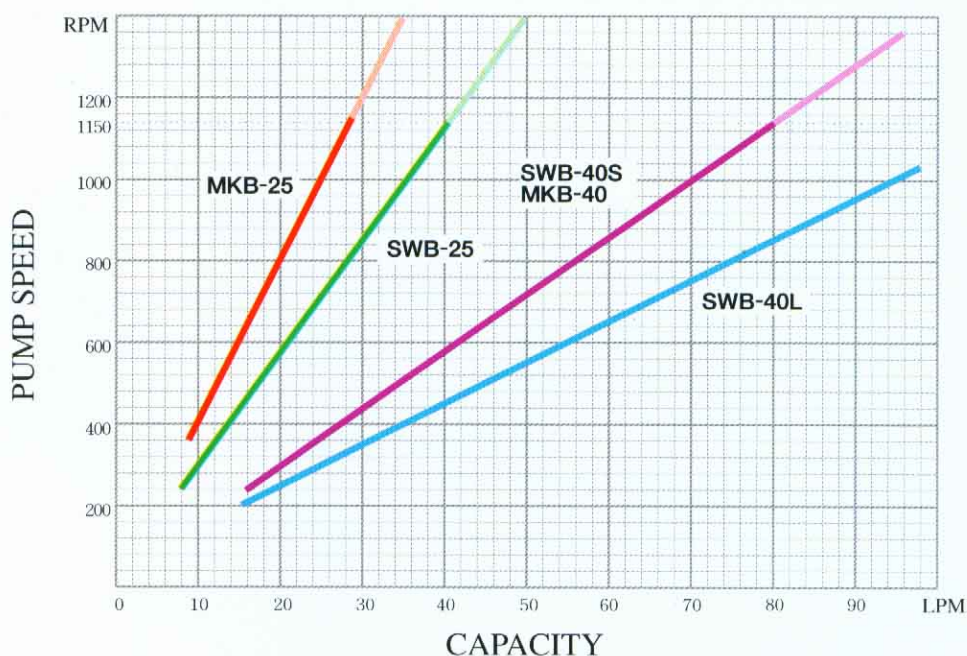
STANDARD TECHNICAL DATA

Model		Port Size	Nominal Pump Rating		Motor HP Required At Rated Speed Pumping (20cp)		Maximum Recommended Discharge Pressure Handling 20cp Liquid at Nominal Rated Speeds	Maximum Recommended Temperature	
Mech.Seal	Gland Packing	mm ϕ	RPM	LPM	3.0 kg/cm ²	7.0 kg/cm ²		M/Seal	G/Pack
					HP		kg/cm ²	°C	
SW-25-M	SW-25-G	25	1150	40	1.0	2.0	17.0	180	350
SW-40S-M	SW-40S-G	40	1150	80	2.0	3.0	17.0	180	350
SW-40L-M	SW-40L-G	40	1150	115	2.0	3.0	17.0	180	350
SW-50S-M	SW-50S-G	50	700	280	5.0	7.5	14.0	180	350
SW-50L-M	SW-50L-G	50	700	350	5.0	10.0	14.0	180	350
SW-65-M	SW-65-G	65	700	560	10.0	15.0	14.0	180	350
SW-80S-M	SW-80S-G	80	640	700	10.0	20.0	14.0	180	350
SW-80L-M	SW-80L-G	80	640	960	15.0	20.0	10.0	180	350
SW-100-M	SW-100-G	100	520	1260	20.0	40.0	10.0	180	350
SW-125-M	SW-125-G	125	420	1680	25.0	40.0	10.0	180	350
SW-150-M	SW-150-G	150	350	1855	40.0	60.0	10.0	180	350
SW-200-M	SW-200-G	200	280	33600	75.0	100.0	7.0	180	350
SW-250-M	SW-250-G	250	250	60000	100.0	200.0	7.0	180	350

Caution

1. Above technical data is estimate the valve based on 20cps viscosity.
2. In case of operate in over the discharge pressure 7kg/cm² or 50,000cp then please contact Dong Hae.
3. Highest temperature is available from -50°C ~ 350°C depends on pump material.
4. Due to fluid's viscosity, temperature and density, the maximum discharge pressure and RPM can be changed. In this case, please contact Dong Hae.

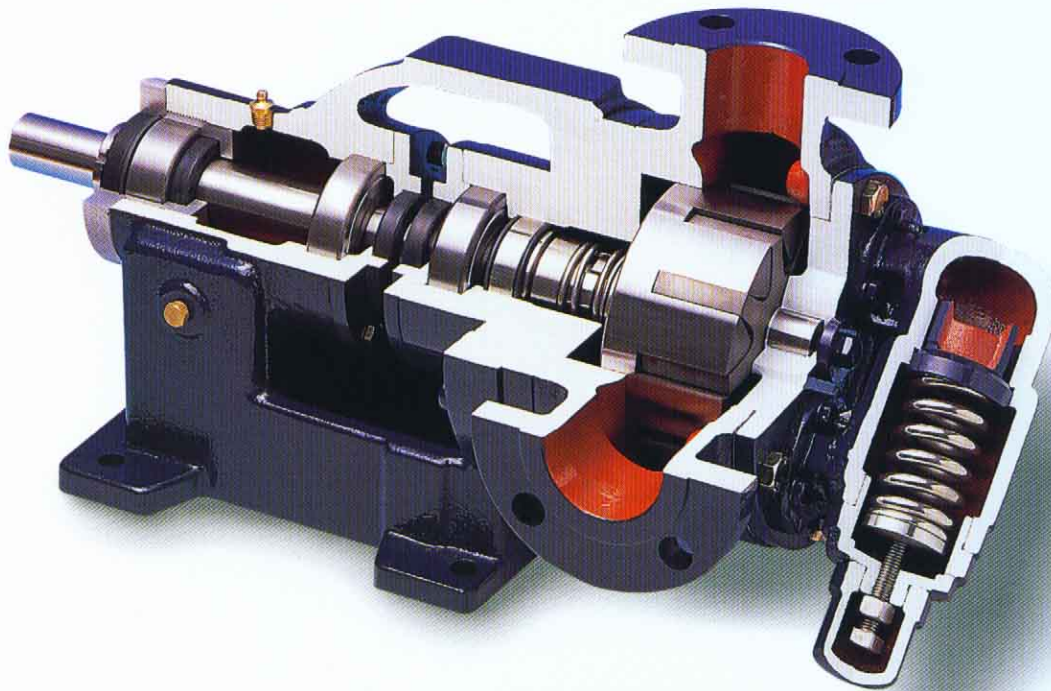
PERFORMANCE CURVES



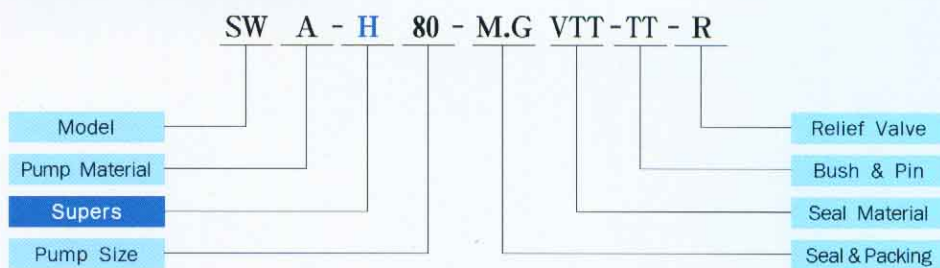
1. Above data are based on pressure 5kg/cm² and viscosity 500cp, so it can be changed by viscosity, temperature and density.

2. Curves data of viscosity 10, 20, 150, 500, 1500, 5000, 15000, 50000cp, please contact Dong Hae.

SUPER SERIES



MODEL



FEATURE

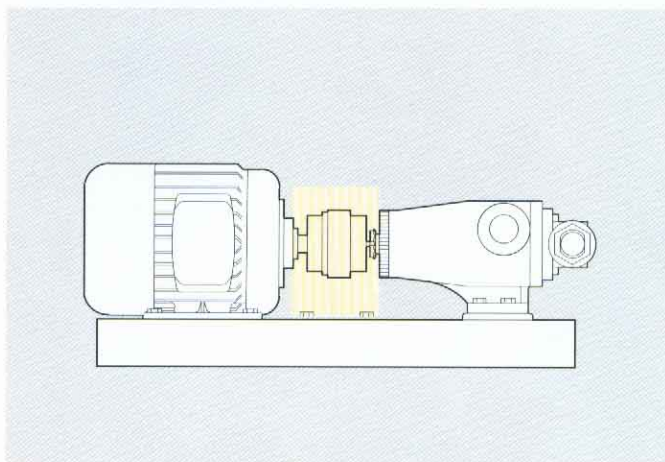
This pump is designed to suitable for high viscosity and high temperature. Also, all parts of pump built the satisfy according to variable fluid.

Available range

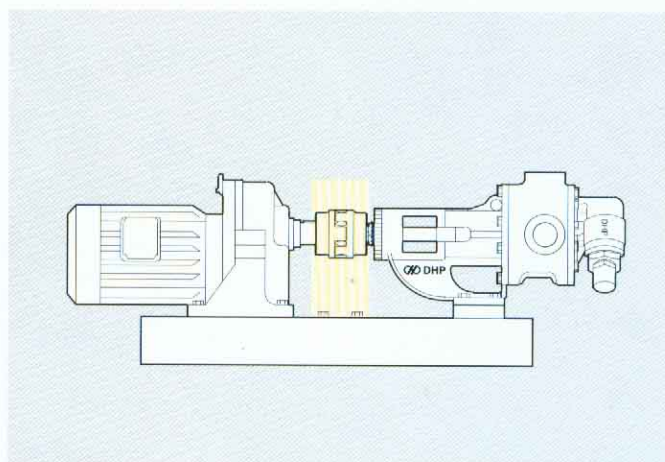
- High pressure operation: Max. 40kg/cm²
- High temperature operation: Max. 450°C
- High viscosity operation: Max. 2,500,000cp.

※ API PLAN 610

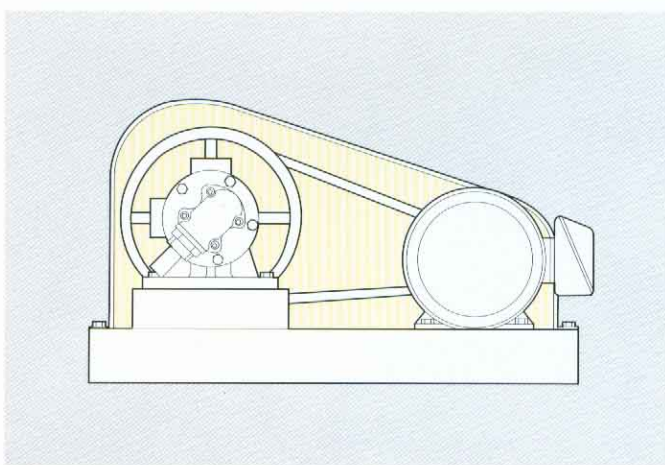
DRIVE TYPE



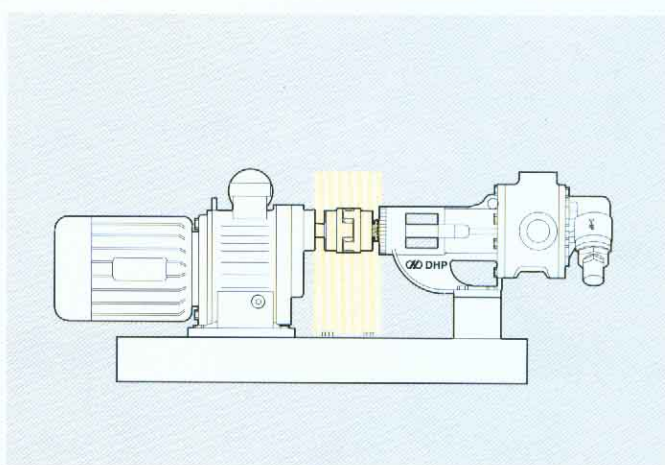
Motor Drive



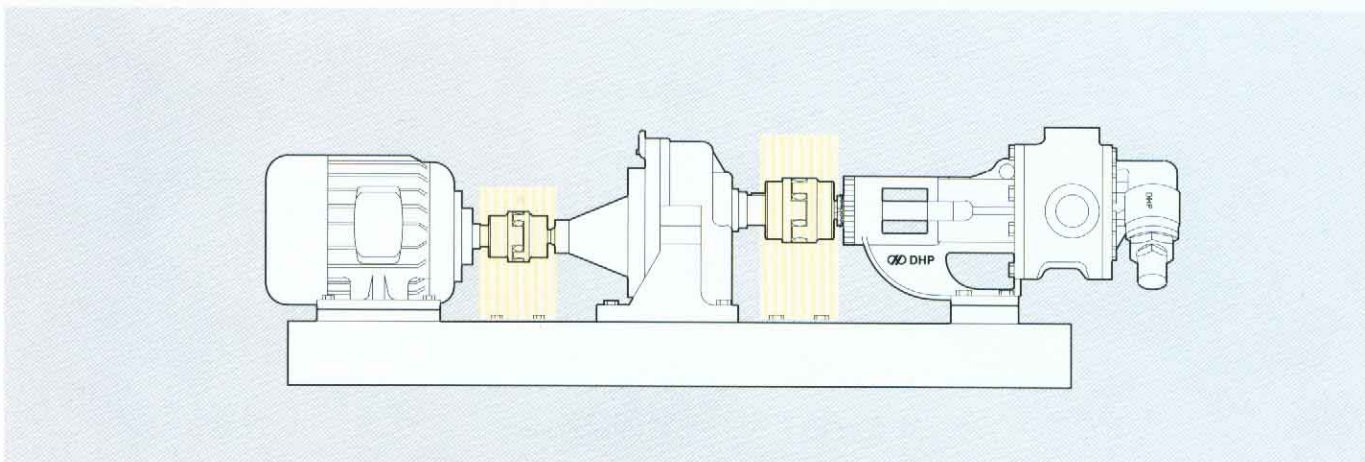
Geared Motor



Belt Drive



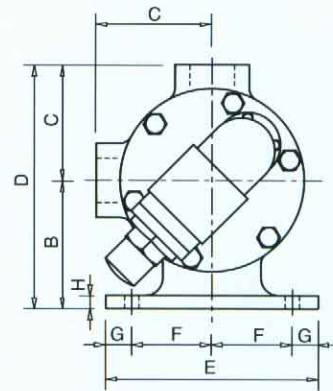
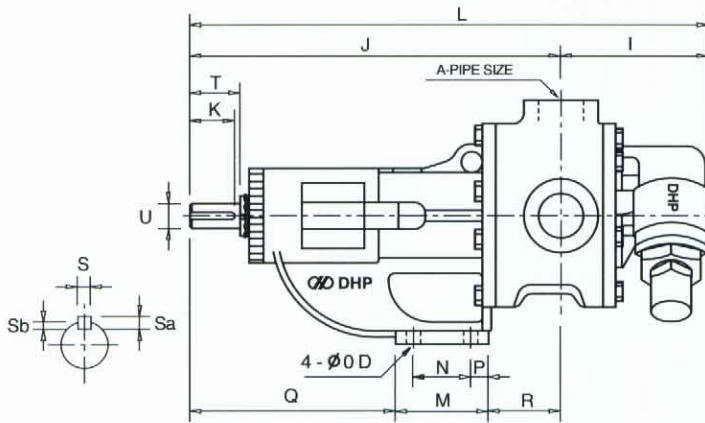
Variable Speed Motor



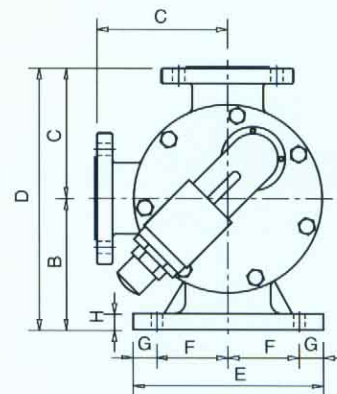
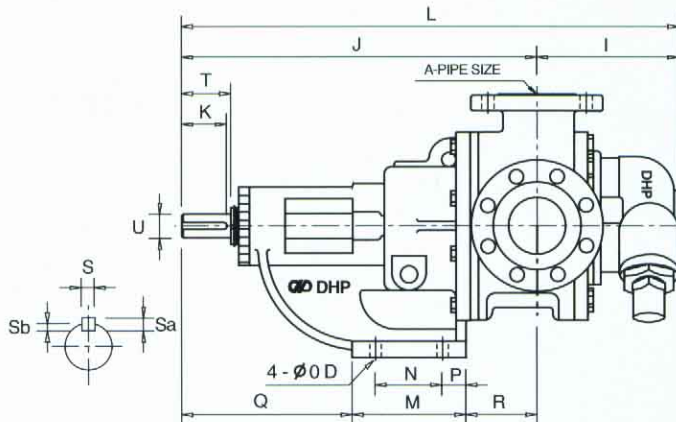
Motor and Gear box

DIMENSIONS

SW SERIES

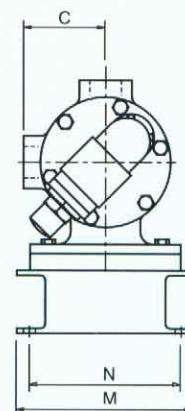
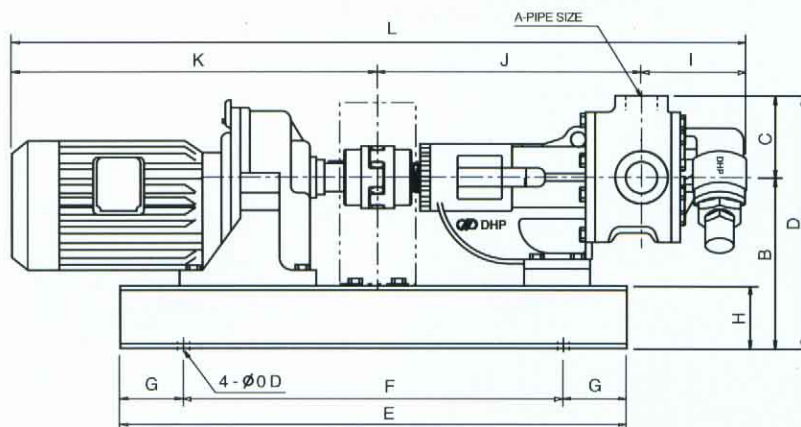


MODEL	φ A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Sa	Sb	T	φ U
SWA-25	25	90	76	166	170	70	15	15	93	318	40	411	90	60	12	15	143	85	6	6	3	45	19
SWB-25	25	90	76	166	170	70	15	15	93	309	40	402	90	60	12	15	143	76	6	6	3	45	19
SWA-40S	40	90	76	166	173	70	16.5	15	100	324	40	424	90	60	12	15	139	95	6	6	3	45	19
SWB-40S	40	90	76	166	173	70	16.5	15	100	317	40	417	90	60	12	15	139	88	6	6	3	45	19
SWA-40L	40	96	83	179	160	60	20	15	100	311	40	411	90	50	12	20	166	55	6	6	3	45	19
SWB-40L	40	96	83	179	160	60	20	15	100	311	40	411	90	50	12	20	166	55	6	6	3	45	19
SWA-50	50	145	130	275	238	90	29	15	165	420	55	585	104	64	15	20	230	81	8	8	4	58	28
SWB-50	50	145	130	275	238	90	29	15	165	420	55	585	104	64	15	20	230	81	8	8	4	60	28

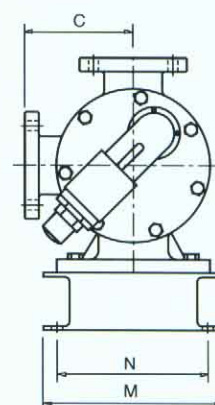
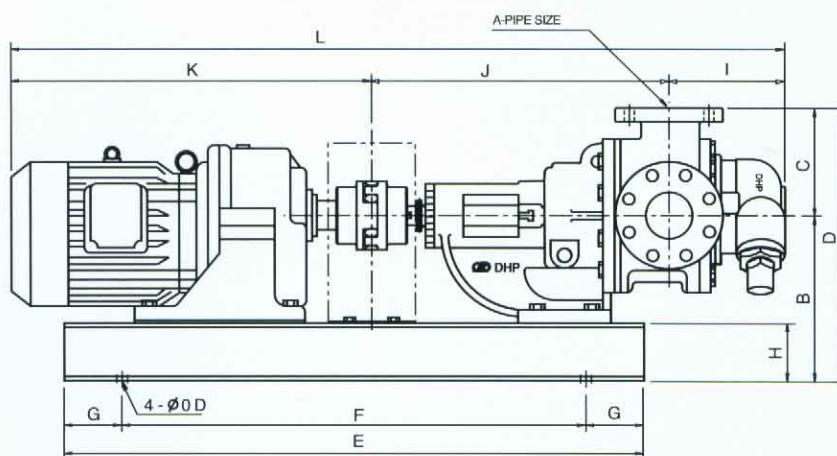


MODEL	φ A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Sa	Sb	T	φ U
SWA-50	50	145	150	295	238	90	29	15	165	420	55	585	104	64	15	20	230	81	8	8	4	58	28
SWB-50	50	145	155	300	238	90	29	15	165	420	55	585	104	64	15	20	230	81	8	8	4	60	28
SWA-80	80	185	183	368	267	100	33.5	25	200	503	55	703	156	95	16	27.5	235	112	10	8	5	60	33
SWB-80	80	185	183	368	267	100	33.5	25	200	493	55	693	156	95	16	27.5	235	102	10	8	5	60	33
SWA-100	100	225	240	465	250	95	30	24	272	609	70	881	298	200	21	60	199	112	12	8	5	90	50
SWB-100	100	225	240	465	250	95	30	24	272	596	70	868	298	200	21	60	199	99	12	8	5	90	50
SWA-125	125	255	293	548	350	126	30	25	306	609	70	915	298	200	21	60	199	112	12	8	5	90	50
SWB-125	125	255	293	548	350	126	30	25	306	596	70	902	298	200	21	60	199	99	12	8	5	90	50
SWA-150	150	255	293	548	350	126	30	30	324	627	70	951	298	200	21	60	200	129	12	8	5	90	50
SWB-150	150	255	293	548	350	126	30	30	324	609	70	933	298	200	21	60	200	111	12	8	5	90	50

SW SERIES (COUPLING DRIVE)



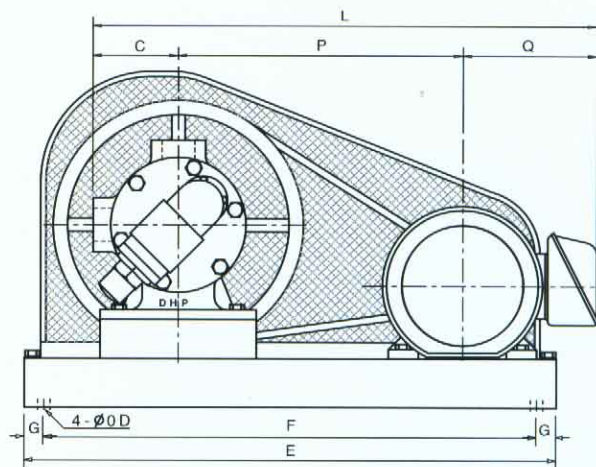
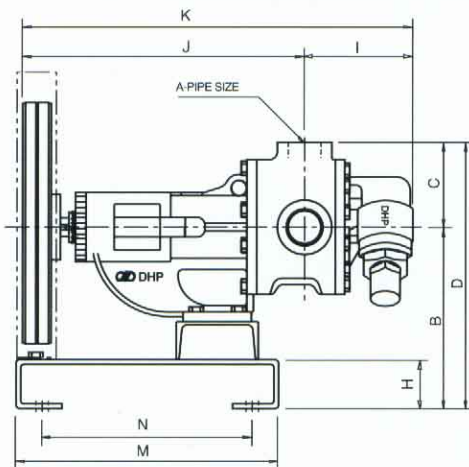
MODEL	φ A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	HP
SWA-25	25	175	76	251	600	570	15	40	93	326	390	809	230	170	15	1
SWB-25	25	175	76	251	600	570	15	40	93	317	390	800	230	170	15	1
SWA-40S	40	193	76	269	650	620	15	40	100	332	472	904	260	200	15	2
SWB-40S	40	193	76	269	650	620	15	40	100	325	472	897	260	200	15	2
SWA-40L	40	193	83	276	650	620	15	40	100	319	563	982	260	200	15	2
SWB-40L	40	193	83	276	650	620	15	40	100	319	563	982	260	200	15	2
SWA-50	50	272	130	402	750	550	100	100	165	429	584	1178	280	230	19	5
SWB-50	50	272	130	402	750	550	100	100	165	429	584	1178	280	230	19	5



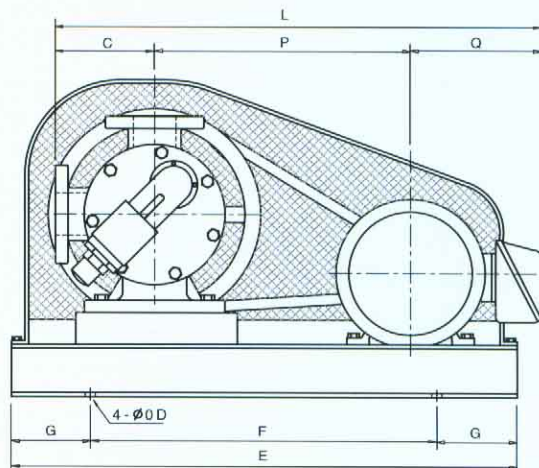
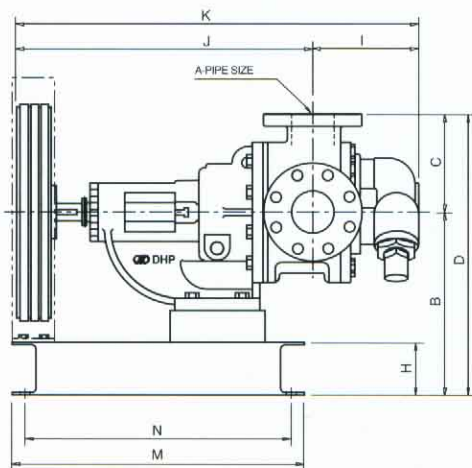
MODEL	φ A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	HP
SWA-80	80	297	183	480	1000	800	100	100	200	515	677	1392	310	260	19	10
SWB-80	80	297	183	480	1000	800	100	100	200	505	677	1382	310	260	19	10
SWA-100	100	375	240	615	1100	800	150	150	272	623	733	1628	400	340	24	15
SWB-100	100	375	240	615	1100	800	150	150	272	610	733	1615	400	340	24	15
SWA-125	125	420	293	713	1200	800	200	150	306	623	840	1769	400	340	24	20
SWA-125	125	420	293	713	1200	800	200	150	306	610	840	1756	400	340	24	20
SWA-150	150	420	293	713	1200	800	200	150	324	641	840	1805	400	340	24	20
SWA-150	150	420	293	713	1200	800	200	150	324	623	840	1787	400	340	24	20

DIMENSIONS

SW SERIES (V-BELT DRIVE)

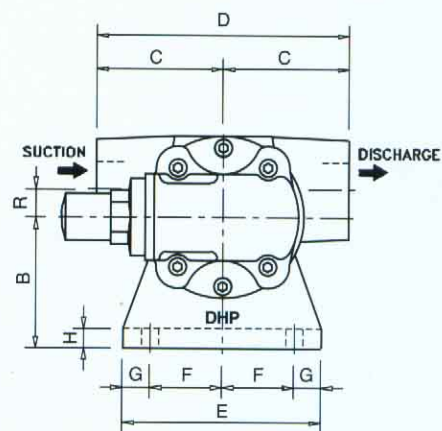
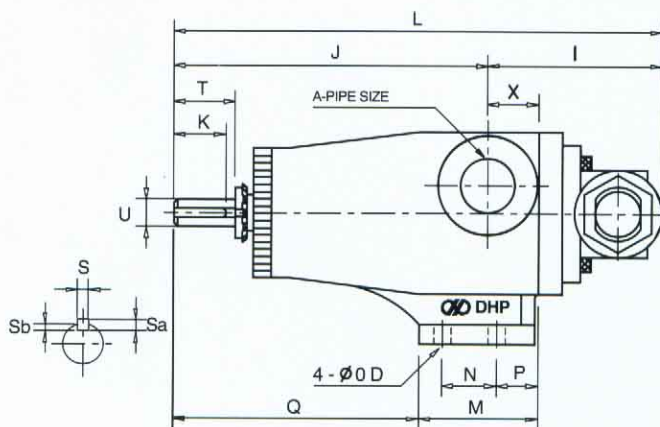


MODEL	φ A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	HP
SWA-25	25	210	76	286	610	550	30	70	93	333	426	548	320	270	15	330	142	1
SWB-25	25	210	76	286	610	550	30	70	93	324	417	548	320	270	15	330	142	1
SWA-40S	40	210	76	286	610	550	30	70	100	339	439	564	320	270	15	330	158	2
SWB-40S	40	210	76	286	610	550	30	70	100	332	432	564	320	270	15	330	158	2
SWA-40L	40	216	83	299	610	550	30	70	100	326	426	571	320	270	15	330	158	2
SWB-40L	40	216	83	299	610	550	30	70	100	326	426	571	320	270	15	330	158	2
SWA-50	50	310	130	440	810	750	30	100	165	435	600	818	450	370	19	455	233	5
SWB-50	50	310	130	440	810	750	30	100	165	435	600	818	450	370	19	455	233	5



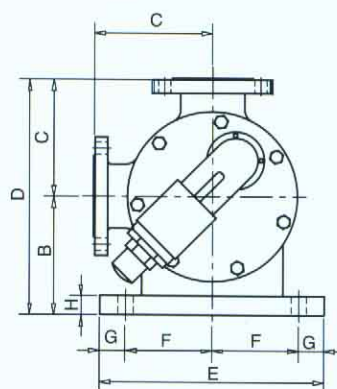
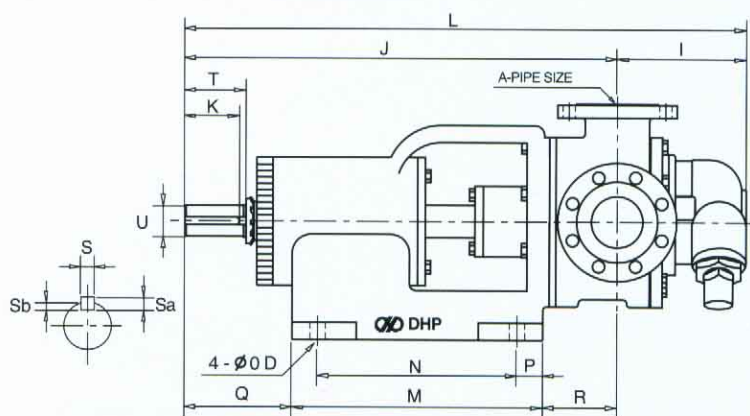
MODEL	φ A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	HP
SWA-80	80	345	183	528	950	650	150	100	200	527	727	888	550	500	19	482	223	10
SWB-80	80	345	183	528	950	650	150	100	200	517	717	888	550	500	19	482	223	10
SWA-100	100	500	240	740	1300	900	200	150	272	629	901	1237	650	590	24	720	277	20
SWB-100	100	500	240	740	1300	900	200	150	272	616	888	1237	650	590	24	720	277	20
SWA-125	125	500	293	793	1300	900	200	150	306	629	935	1301	650	590	24	720	288	30
SWB-125	125	500	293	793	1300	900	200	150	306	616	922	1301	650	590	24	720	288	30
SWA-150	150	500	293	793	1300	900	200	150	324	647	971	1301	650	590	24	720	288	40
SWB-150	150	500	293	793	1300	900	200	150	324	629	953	1301	650	590	24	720	288	40

MK SERIES



MODEL	Ø A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Sa	Sb	T	ØU	X
MK-25	25	72	70	140	110	40	15	11	97	179	35	276	66	30	9.5	23	143	15.5	5	5	3	40	15	30
MK-40	40	107	95	190	134	47	20	13	109	233	45	342	90	50	12	59	184	16	6	6	3	49	22	41

SUPER SERIES



MODEL	Ø A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Sa	Sb	T	ØU
SWA-H50	50	152	150	302	218	90	19	17	165	460	50	625	270	230	16	20	92	98	10	8	5	60	33
SWB-H50	50	152	155	307	218	90	19	17	165	460	50	625	270	230	16	20	92	98	10	8	5	60	33
SWA-H80	80	185	183	368	350	135	40	30	200	672	75	872	390	310	24	40	167	115	12	8	5	85	48
SWB-H80	80	185	183	368	350	135	40	30	200	672	75	872	390	310	24	40	167	115	12	8	5	85	48

※ Dimensions between Ø 100 ~ Ø 250 are produced by orderer's request.

※ Dimensions subject to change without notice.

Stainless Steel



Centrifugal Pump



Direct Pump



Self priming Pump



Cascade Pump

Distributor

INFINITY PUMPS AND SYSTEMS PVT. LTD.

B-12, DSIDC, Patparganj Industrial Area, Delhi - 110092, India

Tel. No. +91-11-22166530 / 531 Fax No. +91-11-430158398

Email ID: sales@infinitypumps.com

Website : www.infinitypumps.com

 **DONGHAE PUMP INDUSTRY CO.**

(Head Office & Factory)

#966, Shiheung3-Dong, Guemcheon-Gu Seoul, Korea

TEL : 82-2-804-7122, 893-4135~6, 894-6938~9

FAX : 82-2-806-9933

<http://www.donghaepump.co.kr>

E-mail: dhp@donghaepump.co.kr