



■ Applications

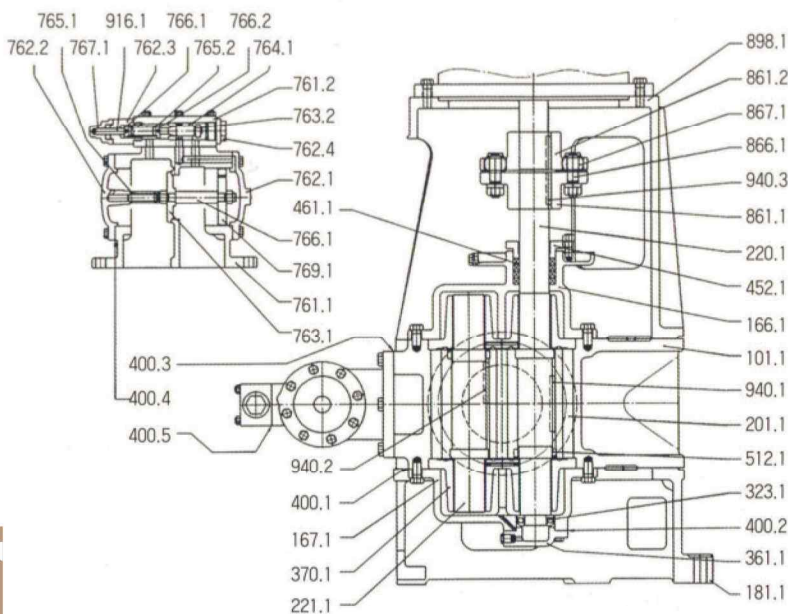
- H.F.O Trans pump
- M/E Lub Oil pump
- Others

■ Principal Particulars

Item	Model	20	30	40	50	65	80	90	100	110	120	135	150	175	200	
Rotation		Clock viewed from driver end														
Suction & Discharge bore(mm)	S	φ 80	φ 125	φ 150				φ 200			φ 250					
	D	φ 80	φ 100	φ 125				φ 150			φ 200					
Standard Capacity(m ³ /hr)	60Hz	6P	20	30	40	50	-	-	-	-	-	-	-	-	-	
		8P	-	-	-	-	65	80	90	100	110	120	135	150	175	200
	50Hz	6P	16	25	33	40	-	-	-	-	-	-	-	-	-	-
		8P	-	-	-	-	55	65	75	85	90	100	110	125	145	165
Pressure(kg/cm)		Up To 7 kg/cm ²														
Stuffing box seal		Gland Packing or Mechanical Seal														
Weight(kg)		Refer to the Outline Drawing														

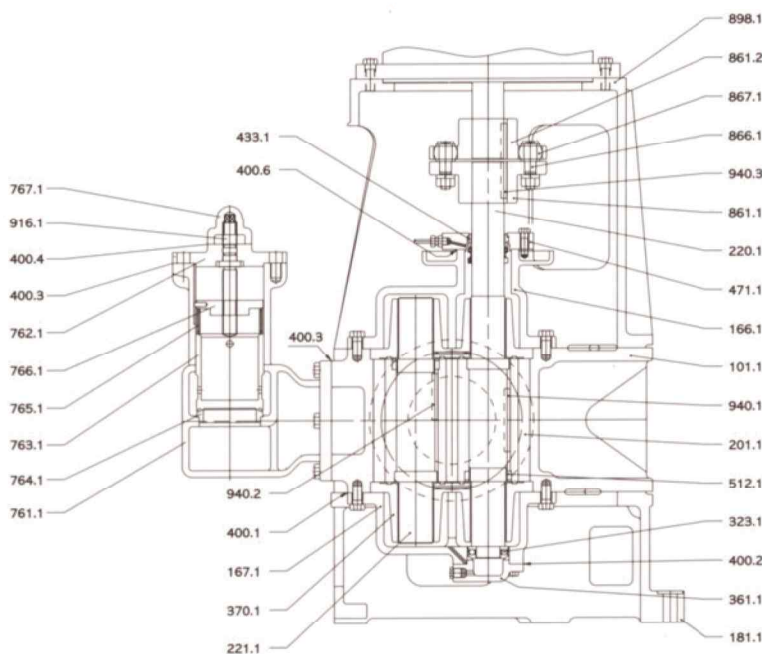
■ Standard Materials

Part No.	Name Of Part	REQ. NO. FOR 1PUMP	MATERIAL	
			Name	KS
101.1	PUMP CASING	1	CAST IRON	GC200
166.1	SIDE COVER(INNER)	1	CAST IRON	GC200
167.1	SIDE COVER(OUTER)	1	CAST IRON	GC200
181.1	PUMP STOOL	1	CAST IRON	GC200
201.1	GEAR	2	CARBON STEEL	SM45C
220.1	DRIVE SHAFT	1	CARBON STEEL	SM45C
221.1	DRIVEN SHAFT	1	CARBON STEEL	SM45C
323.1	THRUST BALL BEARING	1	BEARING STEEL	STB2
361.1	BEARING END COVER	1	CAST IRON	GC200
370.1	SLIDING BEARING	4	CAST IRON + WHITE	GC200+WM1
400.1	GASKET	2	METAL	
400.2	GASKET	1	OIL PAPER	
400.3	GASKET	1	OIL PAPER	
400.4	GASKET	2	OIL PAPER	
400.5	GASKET	1	OIL PAPER	
452.1	PACKING GLAND	1	OIL PAPER	GC200
461.1	PACKING	4	CAST IRON	
512.1	GEAR SET RING	2	NON METALLIC	SM45C
761.1	VALVE BODY	1	CARBON STEEL	GC200
761.2	VALVE BODY	1	CAST IRON	GC200
762.1	VALVE COVER	1	CAST IRON	GC200
762.2	VALVE COVER	1	CAST IRON	GC200
762.3	VALVE COVER	1	CAST IRON	GC200
762.4	VALVE COVER	1	CAST IRON	GC200
763.1	SAFETY VALVE	1	CARBON STEEL	SM45C
763.2	SAFETY VALVE	1	STAINLESS STEEL	SM45C
764.1	VALVE SEAT	1	BRONZE	BC6
765.1	VALVE SPRING	1	SPRING STEEL	SPS6
765.2	VALVE SPRING	1	SPRING STEEL	SPS6
766.1	SPRING CARRIER	1	STEEL	SS41
766.2	SPRING CARRIER	1	STEEL	SS41
767.1	VALVE CAP	1	CAST IRON	GC200
768.1	PISTON ROD	1	CARBON STEEL	SM45C
769.1	PISTON VALVE	1	CARBON STEEL	SM45C
861.1	COUPLING HALF	1	CAST IRON	GC200
916.2	ADJUSTING HALF	1	CAST IRON	GC200
866.1	COUPLING BOLT, W/UT&WASHER	1ST	STEEL	SS41
867.1	COUPLING RUBBER BUSH	1ST	NBR	
898.1	MOTOR FRAME	1	CAST IRON	GC200
916.1	ADJUSTING SCREW	1	STEEL	SS41
940.1	DRIVE SHAFT KEY	1	CARBON STEEL	SM45C
940.2	DRIVEN SHAFT KEY	1	CARBON STEEL	SM45C
940.3	COUPLING KEY	1	CARBON STEEL	SM45C

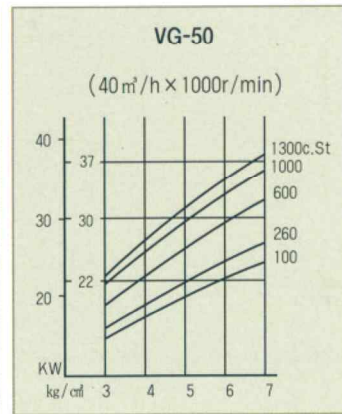
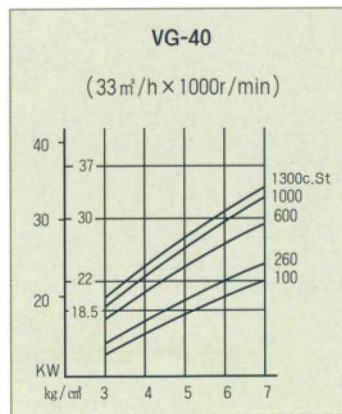
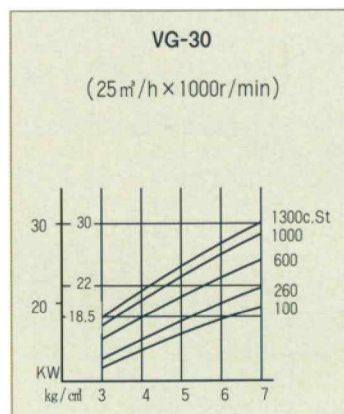
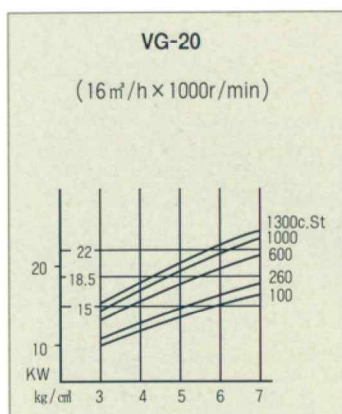


■ Standard Materials

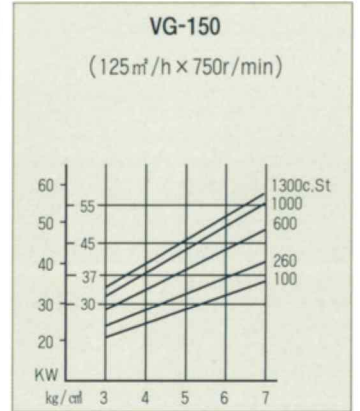
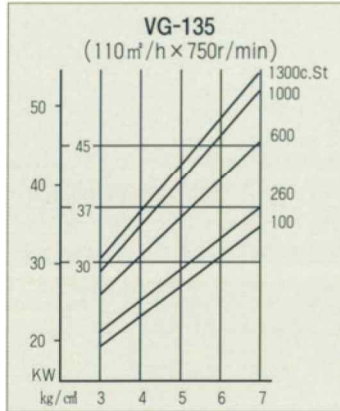
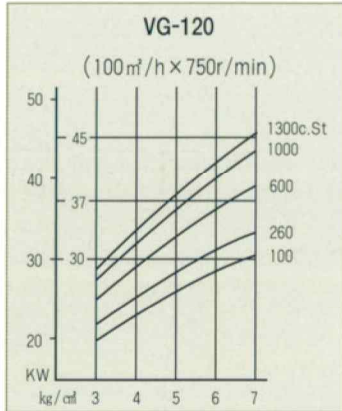
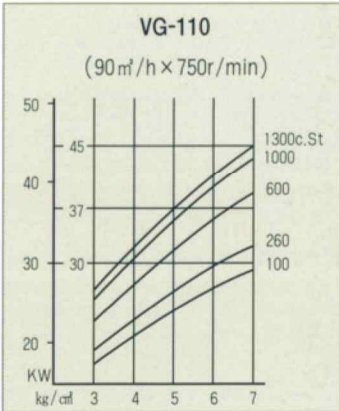
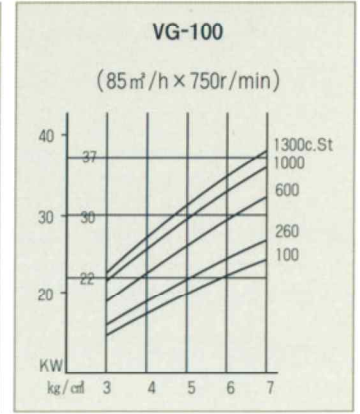
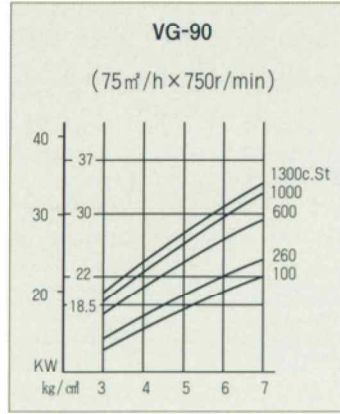
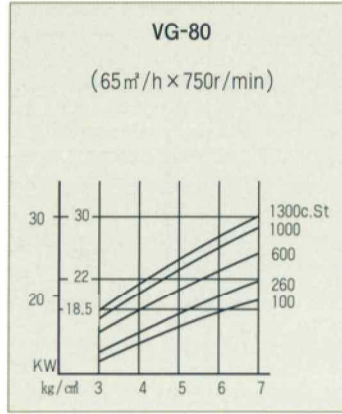
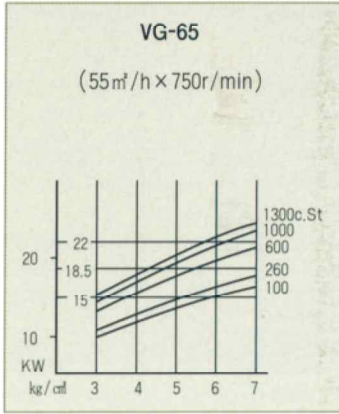
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370.1	SLIDING BEARING	4	CAST IRON + WHITE	GC200 + WM1
400.1	GASKET	2	METAL	
400.2	GASKET	1	OIL PAPER	
400.3	GASKET	1	OIL PAPER	
400.4	GASKET	2	OIL PAPER	
400.6	GASKET			
433.1	MECHANICAL SEAL	1		
471.1	SEAL COVER	1	STAINLESS STEEL	STS304
512.1	GEAR SET RING	2	CARBON STEEL	SM45C
761.1	VALVE BODY	1	CAST IRON	GC200
762.1	VALVE COVER	1	CAST IRON	GC200
950.1	DIL SEAL		NBR	
951.1	DILER		GLASS	
763.1	SAFETY VALVE	1	CARBON STEEL	SM45C
764.1	VALVE SEAT	1	BRONZE	BC6
765.1	VALVE SPRING	1	SPRING STEEL	SPS6
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940.3	COUPLING KEY	1	CARBON STEEL	SM45C



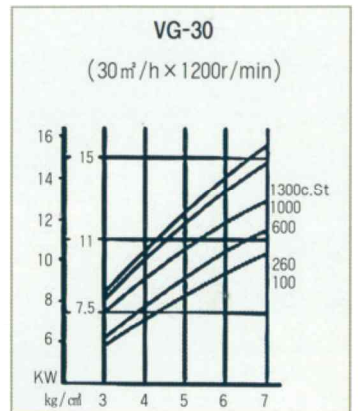
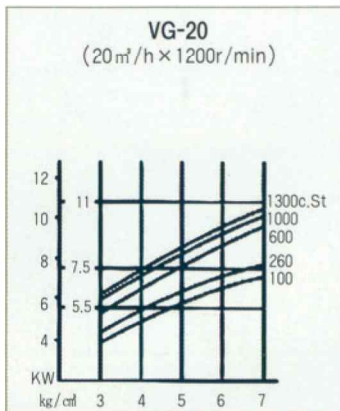
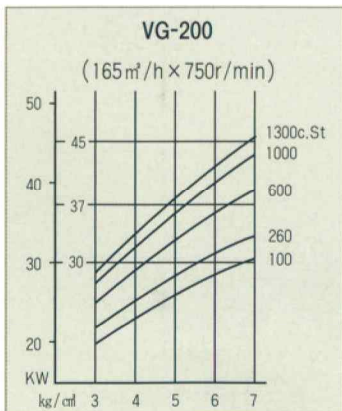
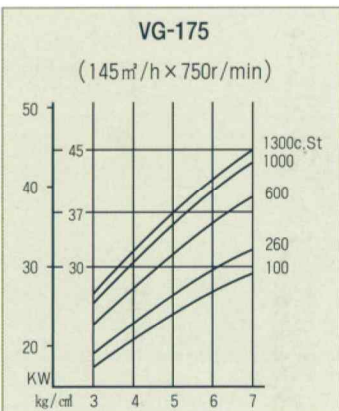
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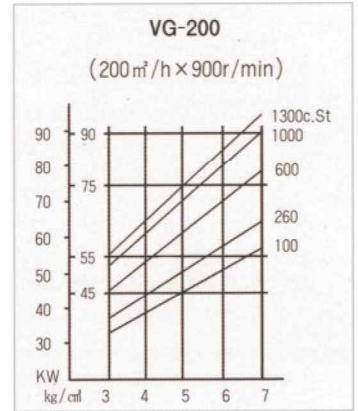
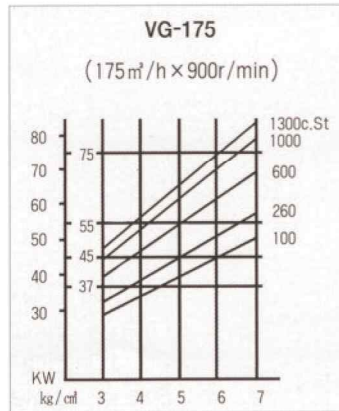
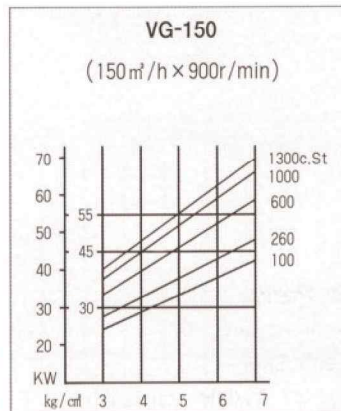
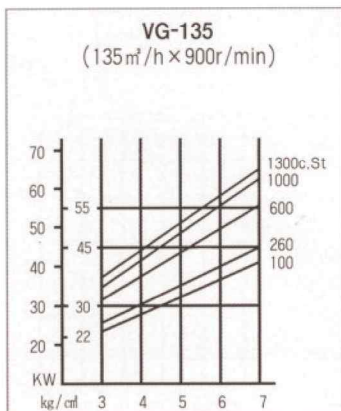
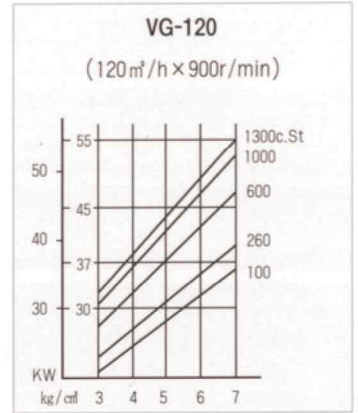
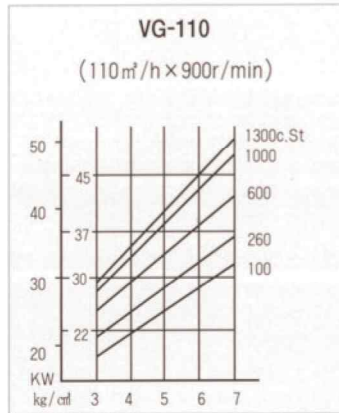
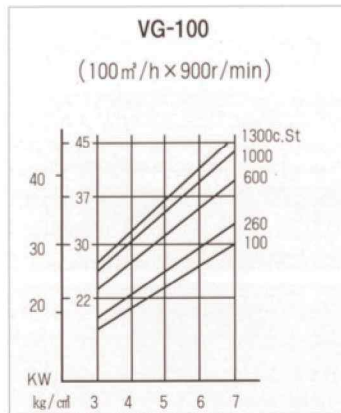
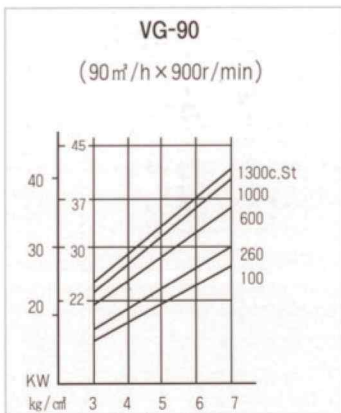
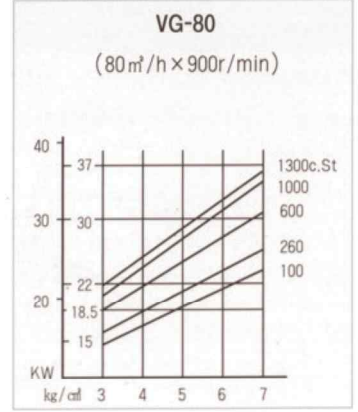
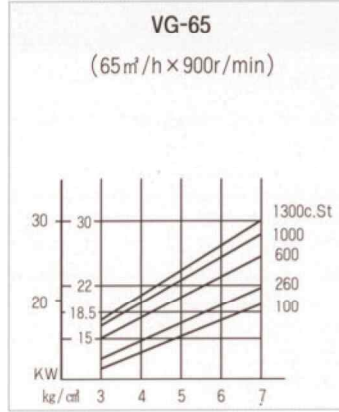
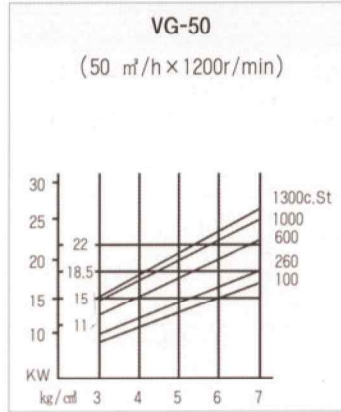
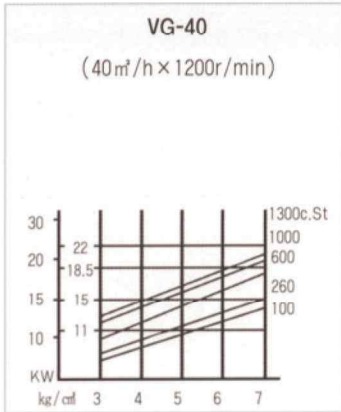


VG



60HZ





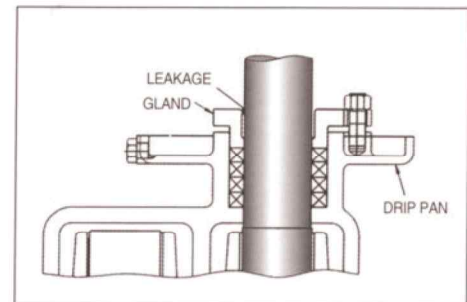
VG

■ Stuffing Box Seal

As standard, gland packing are used, but by the order, a mechanical seal can be used only changing a gland case.

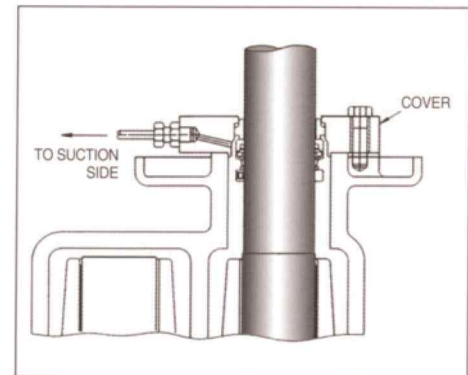
Fitted with gland packing

The leakage passing through the gland packing is drained to drip pan.



Fitted with mechanical seal

The reducing pipe is led to the suction side in casing from seal cover.



■ Lubrication of Bearing

The metal bearing is internally set in casing which is lubricated by the pumping liquid.

■ Relief Valve

1. Relief valve is set together with casing body.
2. Capacity of relief valve

Discharge pressure maximum arising value is designed to be less than 132% of designed total pressure, even if the discharge valve is full shutted.(But when designed total pressure is less than 5kgf/cm², the pressure-arising value should be less than 1.6kgf/cm².)

Pressure set for the relief valve

VG type Designed total pressure + 0.2kgf/cm²
 (Highest-7.2kgf/cm² Lowest-2.2kgf/cm²)

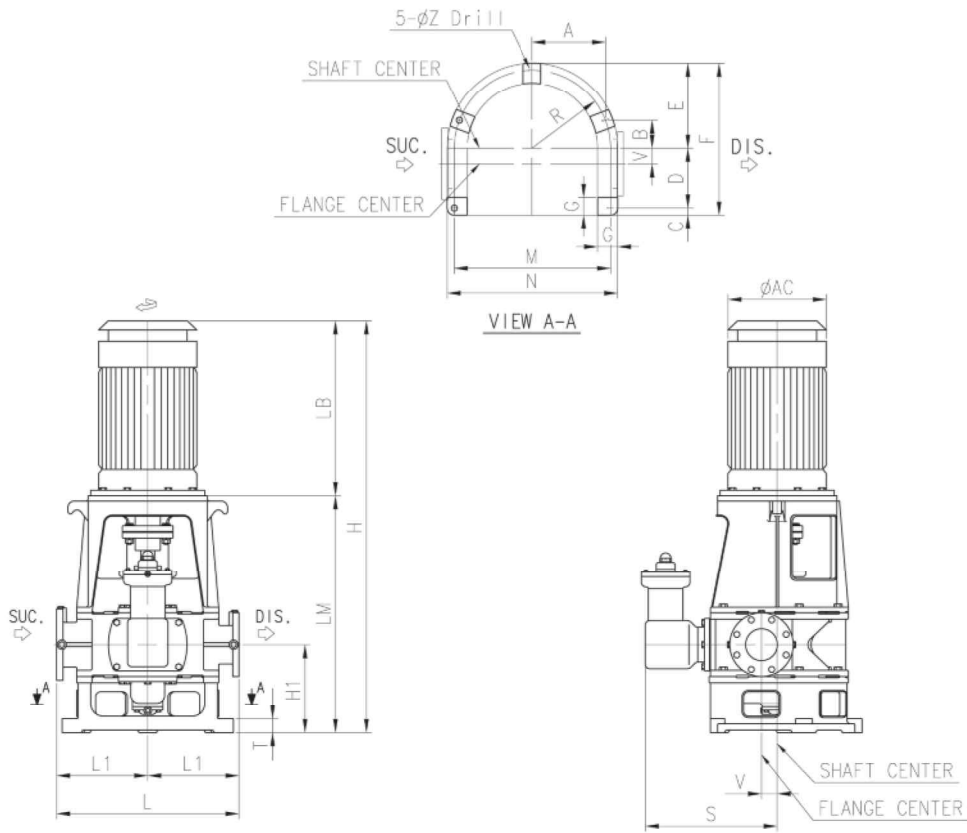
■ Standard Accessories

Flexible coupling.....	1
Safety cover.....	1
Suction gauge.....	1
Discharge gauge.....	1
Common base.....	1

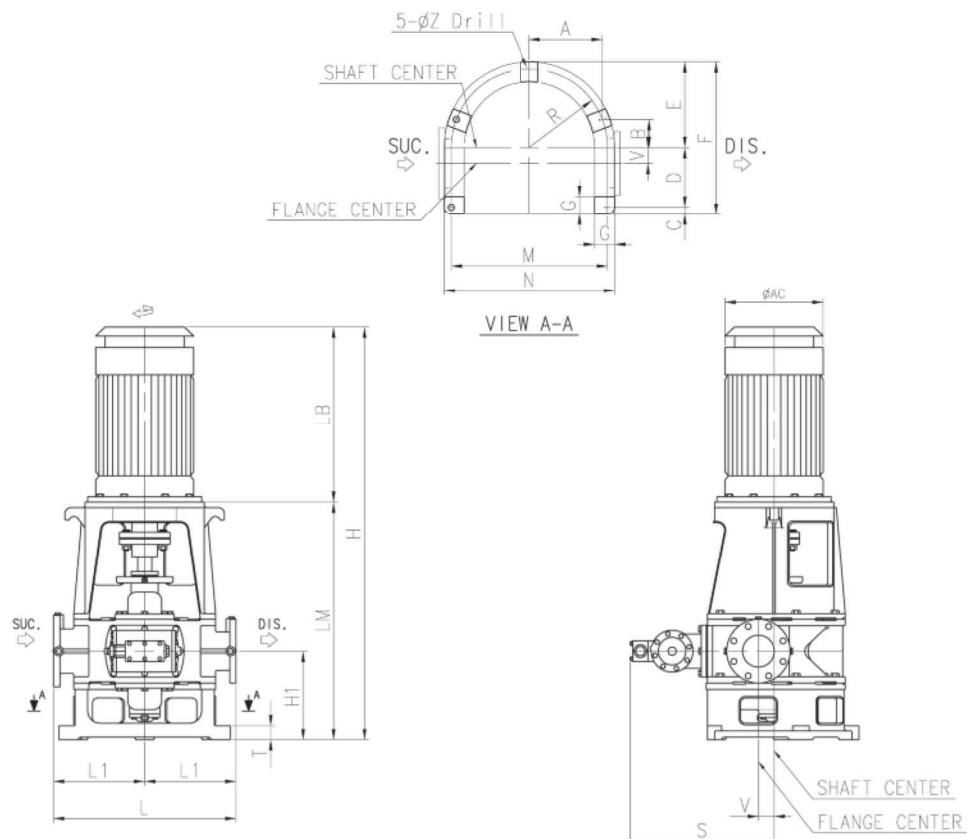
■ Standard Spare Parts

Sliding bearing.....	Each1
Gland Packing /Mech Seal.....	1
Bolt, Nut & Washer for flexible coupling.....	1 set

(Fig. A)



(Fig. B)



VG

GEAR PUMP

Vertical in-line gear pump

MODEL	MOTOR		Bore		Fig	Dimension(mm)																	Weight(kg)						
	KW	P	SUC.	DIS		L1	L	T	H1	LM	LB	H	AC	S	V	A	B	C	D	E	F	G	R	M	N	Z	Body	Motor	Total
VG20	7.5	6	80	80	A	250	500	40	253	711	595	1306	347	355	35	186	75	25	150	225	400	50	200	400	450	24	230	139	369
VG30	11	6	80	80		250	500	40	265	723	639	1362	347	355	35	186	75	25	150	225	400	50	200	400	450	24	230	163	393
VG40	18.5	6	150	125		255	620	50	300	834	692	1526	387	508	53	237	95	25	200	280	505	70	255	510	560	24	340	230	570
	22	6				255	620	50	290	824	692	1516	387	508	53	237	95	25	200	280	505	70	255	510	560	24	350	230	580
VG50	18.5	6	150	125		255	620	50	290	824	692	1516	387	508	53	237	95	25	200	280	505	70	255	510	560	24	350	230	580
	22	6				255	620	50	290	824	692	1516	387	508	53	237	95	25	200	280	505	70	255	510	560	24	350	230	580
VG65	18.5	8	150	125		360	720	55	330	870	692	1562	387	557	62	290	110	30	235	335	600	70	310	620	670	24	500	230	730
	22	8				360	720	55	330	870	720	1590	404	557	62	290	110	30	235	335	600	70	310	620	670	24	500	335	835
	30	8				360	720	55	330	870	720	1590	404	557	62	290	110	30	235	335	600	70	310	620	670	24	500	335	835
VG80	22	8	150	125		360	720	55	350	910	720	1630	404	557	62	290	110	30	235	335	600	70	310	620	670	24	500	335	835
	30	8				360	720	55	350	940	789	1729	462	557	62	290	110	30	235	335	600	70	310	620	670	24	500	400	900
	37	8				360	720	55	350	940	891	1831	512	557	62	290	110	30	235	335	600	70	310	620	670	24	500	490	990
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VG90	22	8	150	125	360	720	55	350	910	720	1630	404	557	62	290	110	30	235	335	600	70	310	620	670	24	500	335	835	
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VG100	30	8	200	150	390	780	60	417	1077	789	1866	462	595	70	316	125	30	250	370	650	80	340	680	740	28	750	400	1150	
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VG150	37	8	250	200	390	780	60	435	1130	891	2021	512	615	70	316	125	30	250	370	650	80	340	680	740	28	850	490	1340	
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VG200	37	8	250	200	390	780	60	465	1160	891	2051	512	615	76	316	125	30	250	370	650	80	340	680	740	28	850	490	1340	
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