



Technical Catalogue



KCB Series
Gear Pump

KCB SERIES GEAR PUMP

1. Application

It applies to delivering non-corrosive lubricating-oil or equivalent liquid without solid particles and fibres at temperature below 80°C and with the viscosity of $5 \times 10^{-6} \sim 1.5 \times 10^{-3} \text{ m}^2/\text{s}$ (5-1500cSt).

2. Application Scope

It can give performance as transfer pump or booster pump in oil delivery system. It can be also applied as a fuel pump for delivery system, pressurization and injection in fuel supply system and in all industry fields as lubricating pump.



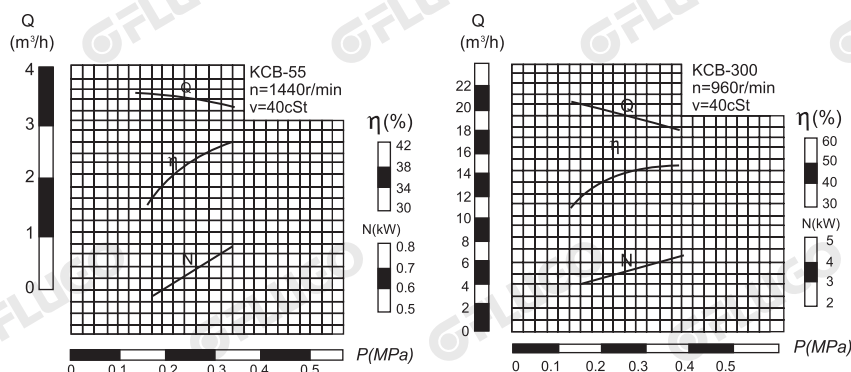
3. Structure Features

- KCB Series gear pumps are mainly composed of gears, axles, pump body, pump, cap safety valve and axle-end seals etc. The heat-treated gears have the advantage of higher hardness and intensity, and rotate with the axles inside the replaceable bearing sleeves. All of pump's part can be lubricated by delivered medium when working.
- The pump is properly designed with leakage and return chute, which lets the gears bear the least torque force and reduces load and wear on bearings in order to raise pump's efficiency.
- It is also designed with safety valve for protection against overload, The full return flow Pressure of the safety valve is 1.5 times higher than the rated exhaust pressure of the pump, It can be also adjusted within the allowance of exhaust pressure range according to circumstances. But please note the safety valve can't be applied as pressure reducing valve for long time. You may install pressure-reducing valve separately on pipe-line if needed

DIAGRAM OF PERFORMANCE CURVE

Performance data of all gear pump have been defined on basis of the viscosity of $4 \times 10^{-3} \text{ m}^2/\text{s}$ (40cSt). The data indicated in the performance diagram is suitable to medium viscosity of $1 \times 10^{-5} \sim 8 \times 10^{-5} \text{ m}^2/\text{s}$ (10~80cSt). Of which exceeds the above viscosity, the data will be re-defined according to client's demands.

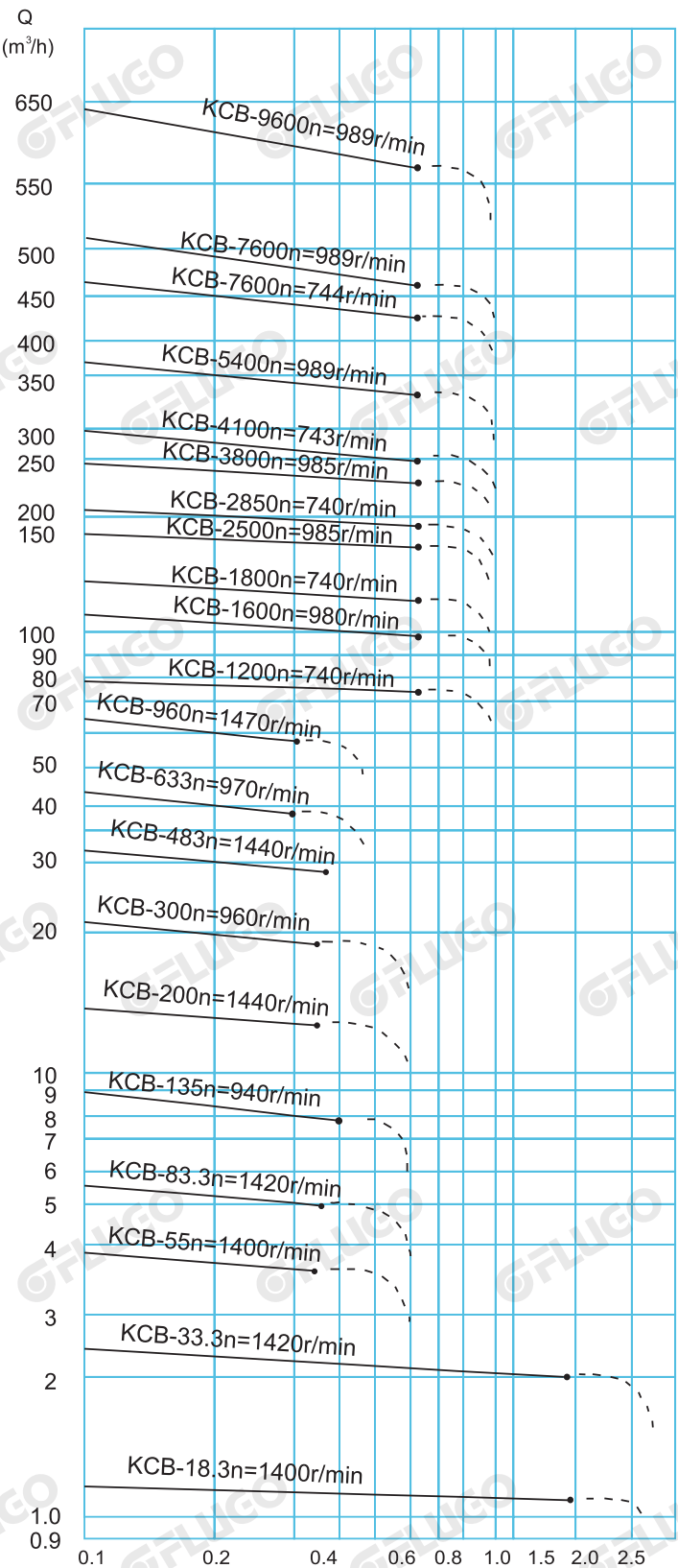
The given exhausting pressure of all gear pumps is the highest working pressure, and pumps can perform normally within range of the rated working pressure, which can be found in diagram No.1



KCB-55
Diagram of performance Curve of
Model KCB-55 Gear pump

KCB-300
Diagram of performance Curve of
Model KCB-300 Gear pump

WORKING SCOPE(DIAGRAM NO.1)

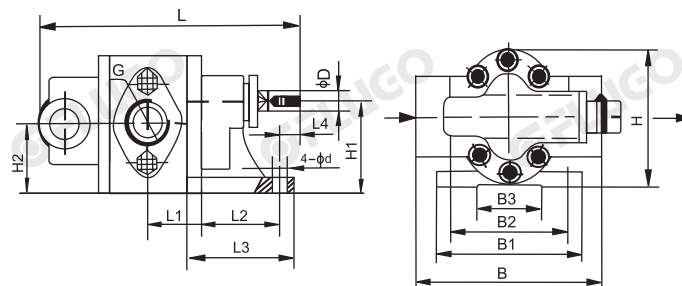


Working Scope Non-Working Scope The Full Return Flow of Safety Value P MPa Designed Value

KCB FUNCTIONAL DATA OF KCB SERIES GEAR PUMPS

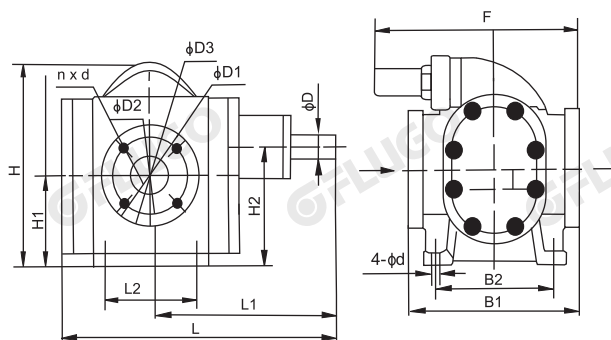
Model	Capacity Q		Speed n r/min	Exhaust Pressure P MPa	(NPSH) _r m	Efficiency η %	Motor	
	m ³ /h	L/min					kW Power	Model
KCB-18.3	1.1	18.3	1400	1.45	5	44	1.5	Y90L-4
KCB-33.3	2	33.3	1420	1.45	5	44	2.2	Y100L1-4
KCB-55	3.3	55	1400	0.33	7	41	1.5	Y90L-4
KCB-83.3	5	83.3	1420	0.33	7	43	2.2	Y100L1-4
KCB-135	8	135	940	0.33	5	46	2.2	Y112M-6
KCB-200	12	200	1440	0.33	5	46	4	Y112M-4
KCB-300	18	300	960	0.36	5	42	5.5	Y132M2-6
KCB-483.3	29	483.3	1440	0.36	5.5	42	11	Y160M-4
KCB-633	38	633	970	0.28	6	43	11	Y160L-6
KCB-960	58	960	1470	0.28	6.5	43	18.5	Y180M-4
KCB-1200	72	1200	740	0.6	7	43	37	Y280S-8
KCB-1600	95	1600	980				45	Y280S-6
KCB-1800	112	1800	740	0.6	7.5	43	55	Y315S-8
KCB-2500	150	2500	987				75	Y315S-6
KCB-2850	170	2850	740	0.6	8	44	90	Y315L1-8
KCB-3800	230	3800	989				110	Y315L1-6
KCB-4100	245	4100	743	0.6	8	44	132	Y355M1-8
KCB-5400	325	5400	989				160	Y355M1-6
KCB-5600	330	5600	744	0.6	8	44	160	Y355M2-8
KCB-7600	460	7600	989				200	Y355M3-6
KCB-7000	420	7000	744	0.6	8	44	185	Y355L1-8
KCB-9600	570	9600	989				250	Y355L2-6

KCB 18.3 ~ 83.3 GEAR PUMP APPERANCE & INSTALLATION DIMENSION

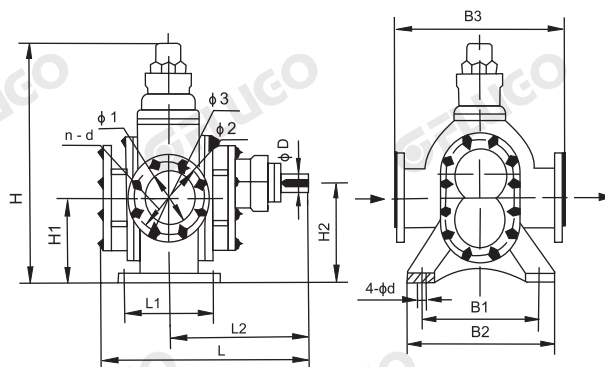


Model	L	L1	L2	L3	L4	B	B1	B2	B3	H	H1	H2	ØD	G	4-ØD
KCB-18.3	217.5	35	80	115	16	192	150	120	66	136	90	69	20	G 3/4"	16
KCB-33.3	231	42.5	80	115	16	192	150	120	66	136	90	69	20	G 3/4"	16
KCB-55	246	50	80	115	16	192	150	120	66	136	90	69	20	G 1"	16
KCB-83.3	271	62	80	115	16	192	150	120	66	136	90	69	20	G 1 1/2"	16

KCB 200 ~ 960 GEAR PUMP APPERANCE & INSTALLATION DIMENSION

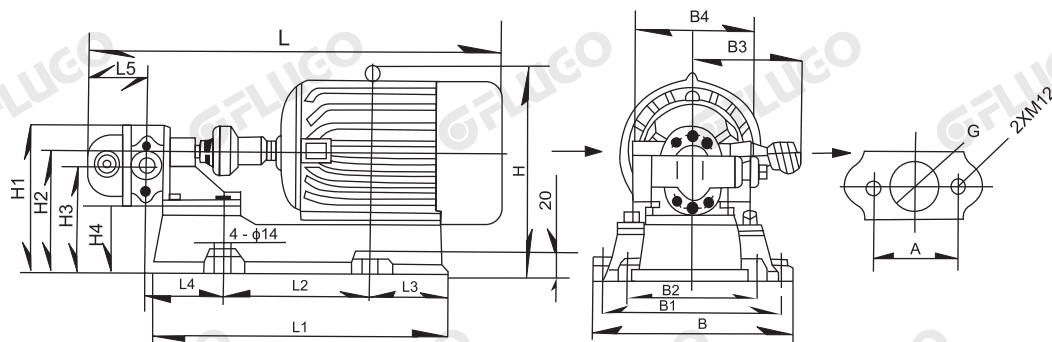


Model	L	L1	L2	BI	B2	H	H1	H2	F	ØD1	ØD2	ØD3	nxd	ØD	4-ØD
KCB-200	290	200	66	214	160	263.5	118	152.5	300	140	110	50	4-M12	28	13
KCB-300	354	230	90	225	180	308	128	170	318	155	123	70	6-M14	32	16
KCB-483.3	354	230	90	225	180	308	128	170	318	155	123	70	6-M14	32	16
KCB-633	415	270	120	280	175	385	188	205	380	190	158	100	8-M14	38	18
KCB-960	415	270	120	280	175	385	188	205	380	190	158	100	8-M14	38	18

KCB 1200 ~ 9600 GEAR PUMP APPERANCE & INSTALLATION DIMENSION


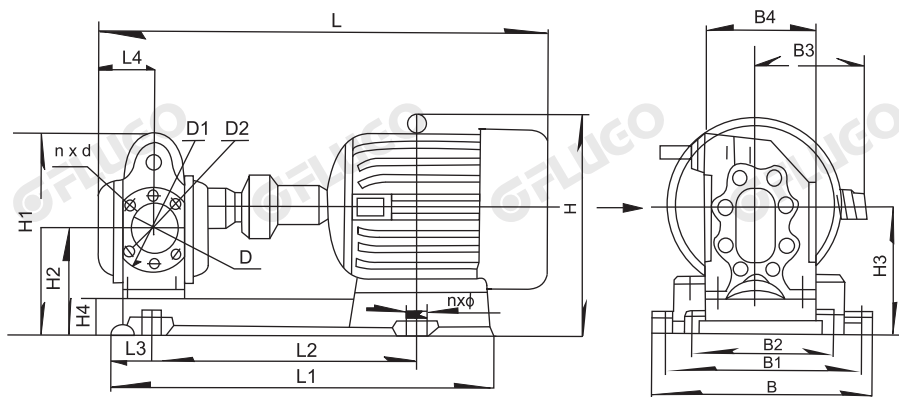
Model	L	L1	L2	B1	B2	B3	H	H1	H2	ØD1	ØD2	ØD3	nx d	ØD	4-ØD
KCB-1200	715	300	480	415	463	510	708	220	300	150	225	260	8-Ø18	56	25
KCB-1600															
KCB-1800															
KCB-2500	830	340	547	460	585	684	876	262	350	200	280	320	8-Ø18	76	25
KCB-2850															
KCB-3800															
KCB-4100	948	380	625	520	584	640	915	299	400	250	335	370	12-Ø18	86	25
KCB-5600															
KCB-7000															
KCB-7600	1085	345	700	500	600	740	1155	386	500	350	445	490	12-Ø23	95	32
KCB-9600															

KCB-18.3 ~ KCB-83.3 GEAR PUMP APPERANCE & INSTALLATION DIMENSION AND WEIGHT

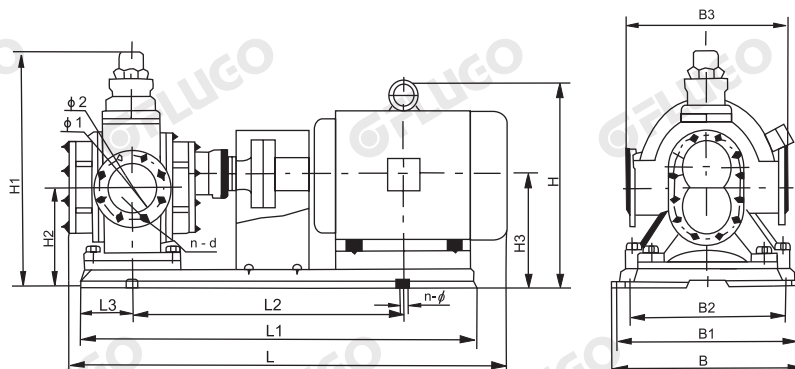


Model	L	L1	L2	L3	L4	L5	H	H1	H2	H3	H4	B	B1	B2	B3	B4	A	G	Weight(kg)
KCB-18.3	566	391	239	86	75	86	230	176	130	109	40	259	225	190	155	192	52	G3/4"	62.15
KCB-33.3	618	416	256	86	82	93	285	186	140	119	50	279	245	190	180	192	52	G3/4"	66.8
KCB-55	595	391	239	86	89.5	100.5	230	176	130	109	40	259	225	190	155	192	70	G1"	64.15
KCB-83.3	652	416	256	94	102	113	285	186	140	119	50	279	245	190	180	192	78	G13/2"	70.15

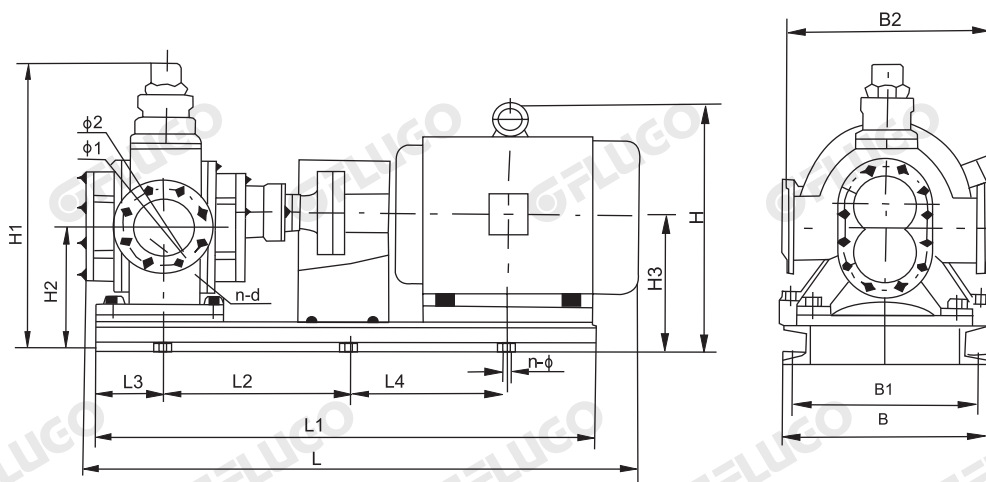
KCB-200 ~ KCB-960 GEAR PUMP APPERANCE & INSTALLATION DIMENSION AND WEIGHT



Model	L	L1	L2	L3	L4	nxØ	H	H1	H2	H3	H4	B	B1	B2	B3	B4	D	D1	D2	nxØ	Weight(kg)
KCB-200	709	577	419	58	90	4xØ16	355	314	168	202	50	326	290	240	190	214	Ø50	Ø110	Ø140	4XM12	135
KCB-300	883	715	502	80	124	4xØ22	423	378	198	240	70	390	340	280	210	228	Ø70	Ø123	Ø155	6xM14	175
KCB-483.3	972	795	565	80	124	4xØ22	465	378	198	240	70	450	400	290	255	228	Ø70	Ø123	Ø155	6xM14	213
KCB-633	1074	901	629	100	145	4xØ22	500	455	258	275	70	450	400	285	255	280	Ø100	Ø158	Ø190	8xM14	274.5
KCB-960	1099	900	635	100	145	4xØ22	525	455	258	275	70	470	420	285	285	280	Ø100	Ø158	Ø190	8xM14	304.5

KCB-1200 ~ KCB-9600
KCB-1200 ~ KCB-1200 GEAR PUMP APPERANCE & INSTALLATION DIMENSION


Model	L	L1	L2	L3	H	H1	H2	H3	B	B1	B2	B3	Ø1	Ø2	nxd	nxØ
KCB1200/0.6	1771	1470	990	194	780	828	340	420	683	631	621	510	Ø150	Ø225	8-Ø18	4-Ø25
KCB1600/0.6	2036	1740	1142	230	1020	996	382	470	772	720	720	684	Ø200	Ø280	8-Ø18	4-Ø25
KCB1800/0.6	2294	1930	1250	270	1070	1035	419	520	810	750	750	640	Ø250	Ø335	12-Ø18	4-Ø30
KCB2500/0.6	2524	2008	1340	270	1200	1035	419	520	1163	906	750	640	Ø250	Ø335	12-Ø18	4-Ø30



Model	L	L1	L2	L3	L4	H	H1	H2	H3	B	B1	B2	ØD1	ØD2	nxd	nxØ
KCB5600	2632	2090	723	245	723	1465	1440	671	785	760	690	740	Ø350	Ø445	12-Ø23	6-Ø32
KCB7000	2662	2090	723	245	723	1465	1440	671	785	760	690	740	Ø350	Ø445	12-Ø23	6-Ø32
KCB7600	2632	2090	723	245	723	1465	1440	671	785	760	690	740	Ø350	Ø445	12-Ø23	6-Ø32
KCB9600	2662	2090	723	245	723	1465	1440	671	785	760	690	740	Ø350	Ø445	12-Ø23	6-Ø32



KCB Series - Gear Pump

Authorized Distributor