



Technical Catalogue



YCB Series
Gear Pump



YCB 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). It applies to hydraulic system, too.

2. Application Scope

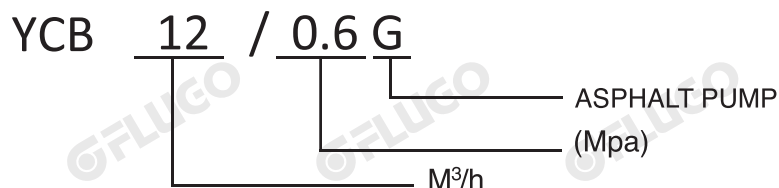
It can give performance as transfer pump or booster pump in oil delivery system, and a fuel pump for delivery, pressurization and injection in fuel supply system. It can be also applied as hydraulic pump supplying hydraulic power in hydraulic system and in all industry fields as lubricating pump.

3. Structure Features

- 2CY series gear pumps are mainly composed of gears, axles, pump body, pump cap, bearing sleeves and axle-end seals, etc. The gears are adopted double circular teeth shape, which makes the gears less wear on gear surface. stable revolution, low noise, long service life and high efficiency, due to no sliding on the teeth during gear falling-in. This kind of pump has got rid of traditional design and come into a new decade in designing and application.
- The pump is designed with safety valve for protection against overload. The full return flow pressure is 1.5 times higher than the rates exhaust pressure of the pump. It can be adjusted within the allowance of exhaust pressure range according to Circumstance. 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.
- There are two kinds of axle-end seals, mechanical seal and packing seal, which can be chosen according to the clients' requirements of application circumstance.

YCB-G ASPHALT PUMP

1. MODEL EXPLANATIONS



2. PERFORMANCE DATA

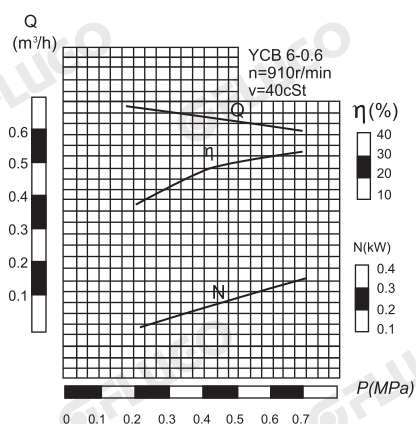
Model	mm	M ³ /h	Mpa	(NPSH) _r m	r/min
YCB 6/0.6G	40	6	0.6	6	960
YCB 10/0.6G	65	10	0.6	6	320
YCB 12/0.6G	65	12	0.6	6	383
YCB 25/0.6G	80	25	0.6	6	252
YCB 40/0.6G	80	40	0.6	6	417



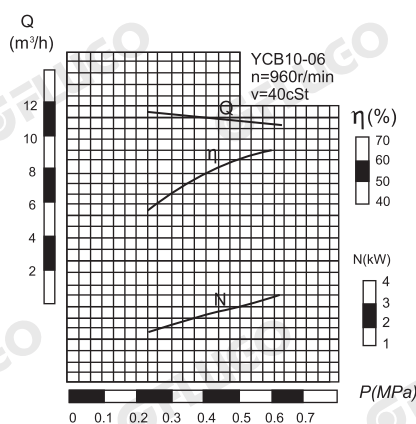
DIAGRAM OF PERFORMANCE CURVE

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.

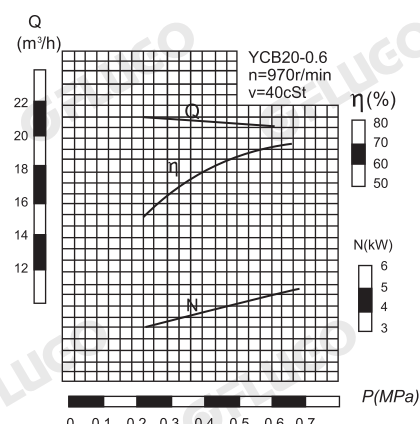
The given exhausting pressure of all gear pumps is the highest working pressure, and pumps can perform normally within range of the rated working pressure, which can be found in diagram No.1



YCB 0.6-0.6
Diagram of performance Curve of Model YCB 0.6-0.6 Gear pump

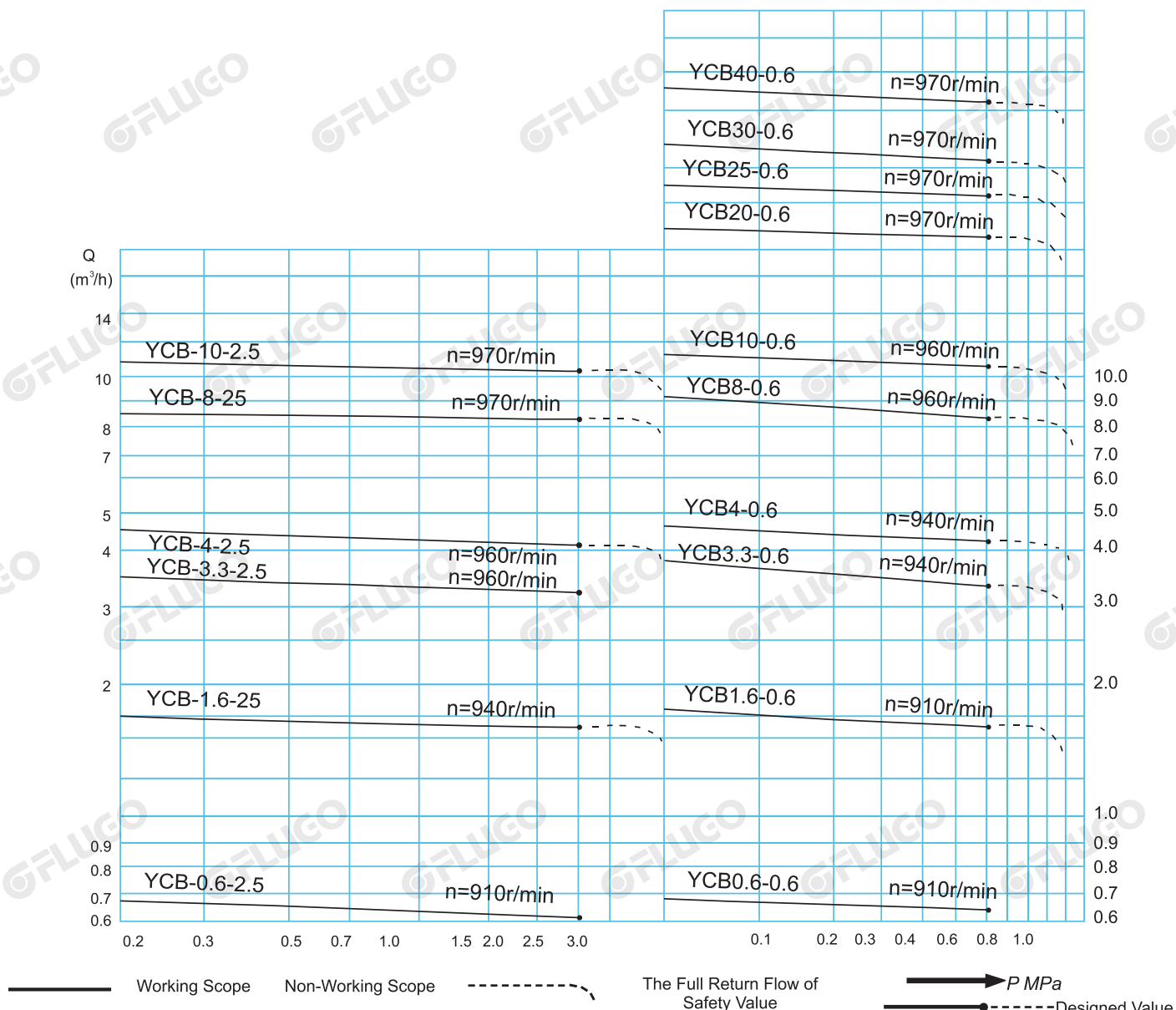


YCB 10-0.6
Diagram of performance Curve of Model YCB 10-0.6 Gear pump



YCB 20-0.6
Diagram of performance Curve of Model YCB 20-0.6 Gear pump

WORKING SCOPE(DIAGRAM NO.1)



YCB FUNCTIONAL DATA OF YCB SERIES CIRCULAR TEETH GEAR PUMPS

Model	Capacity Q m ³ /h	Speed n r/min	Exhaust Pressure P MPa	(NPSH) _r m	Efficiency η %	Motor		
						Hz	kW Power	Model
YCB0.6-0.6	0.6	910	0.6	5.5	32	50	0.75	Y90S-6
	1.0	1390				50	0.75	Y80L2-4
	0.7	1130				60	0.75	Y90S-6
	1.2	1710				60	0.75	Y80L2-4
YCB0.6-1.6	0.6	910	1.6	7.0	70	50	1.1	Y90L-6
	1.0	1400				50	1.5	Y90L-4
	0.7	1130				60	1.1	Y90L-6
	1.2	1710				60	1.1	Y90S-4
YCB1.6-0.6	1.6	910	0.6	5.5	42	50	0.75	Y90S-6
	2.5	1400				50	1.1	Y90S-4
	1.9	1130				60	1.1	Y90L-6
	3.0	1710				60	1.5	Y90L-4
YCB1.6-1.6	1.6	940	1.6	7.0	71	50	2.2	Y112M-6
	2.5	1440				50	4	Y112M-4
	1.9	1150				60	2.2	Y112M-6
	3.0	1750				60	4	Y112M-4
YCB3.3-0.6	3.3	940	0.6	5.0	60	50	1.5	Y100L-6
	5.0	1420				50	22	Y100L1-4
	4.0	1150				60	1.5	Y100L-6
	6.0	1730				60	2.2	Y100L1-4
YCB3.3-1.6	3.3	960	1.6	7.0	72	50	5.5	Y132M2-6
	5.0	1440				50	7.5	Y132M-4
	4.0	1170				60	4	Y132M1-6
	6.0	1750				60	7.5	Y132M-4
YCB4-0.6	4.0	940	0.6	5.0	60	50	1.5	Y100L-6
	6.0	1420				50	2.2	Y100L1-4
	4.8	1150				60	2.2	Y112M-6
	7.2	1730				60	3	Y100L2-4
YCB4-1.6	4.0	960	1.6	7.0	72	50	5.5	Y132M2-6
	6.0	1440				50	7.5	Y132M-4
	4.8	1170				60	5.5	Y132M-6
	7.2	1750				60	7.5	Y132M-4
YCB8-0.6	8.0	960	0.6	5.0	61	50	3	Y132S-6
	12.0	1440				50	5.5	Y132S-4
	9.6	1170				60	4	Y132M1-6
	14.4	1750				60	5.5	Y132S-4
YCB8-1.6	8.0	970	1.6	7.0	75	50	11	Y160L-6
	12.0	1460				50	15	Y160L-4
	9.6	1170				60	11	Y160L-6
	14.4	1760				60	15	Y160L-4
YCB10-0.6	10.0	960	0.6	5.0	62	50	4	Y132M1-6
	15.0	1440				50	5.5	Y132S-4
	12.0	1170				60	5.5	Y132M2-6
	18.0	1750				60	7.5	Y132M-4
YCB10-1.6	10.0	970	1.6	7.0	76	50	11	Y160L-6
	15.0	1470				50	15	Y160L-4
	12.0	1170				60	11	Y160L-6
	18.0	1770				60	18.5	Y180M-4
YCB20-0.6	20.0	970	0.6	5.0	68	50	7.5	Y160M-6
	24.0	1170				60	7.5	Y160M-6
YCB25-0.6	25.0	970	0.6	5.5	69	50	11	Y160L-6
	30.0	1170				60	11	Y160L-6
YCB30-0.6	30.0	970	0.6	5.5	70	50	11	Y160L-6
	36.0	1170				60	11	Y160L-6
YCB40-0.6	40.0	970	0.6	5.5	72	50	15	Y180L-6
	48.0	1180				60	15	Y180L-6
YCB50-0.6	50.0	970	0.6	5.5	72	50	22	Y200L2-6
	60.0	1180				60	22	Y200L2-6



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Authorized Distributor