CQB-FB series Teflon lined magnetic pump

APPLICATION

- Chemical and petrochemical
- industries
- Acids &lyes
- Metal Pickling
- Rare-earth separation
- Agricultural chemicals
- Nonferrous smelting process
- Dyes
- Pharmaceutical
- Pulp & Paper
- Electroplating industry
- Radio Industry

PUMPING LIQUID

- Acid and caustic liquid
- Oxidizer corrosive liquids
- Difficult-to-seal liquids
- Sulfuric acid
- Hydroelectric acid
- nitric acid
- Acid and lye
- nitromuriatic acid

Design Features

Leak-proof design.
Seal-less Teflon lined magnetic drive pump, driven by magnetic coupling indirectly, motor shaft and pump chamber is completely sealed, avoid pump leakage problem and use site pollution.

Anti-Corrosive .
Wetted part material is PTFE fused with FEP, can transfer low and high concentration acid, alkali, strong oxidizer etc corrosive liquid.

Robust pump casing. The part contacting with liquid material is fluoro-plastic, pump casing material is cast iron, and pump casing can bear part of piping and mechanical impact.
The structure is tightly, safety, and energy-saving.
Cost-intensive wearing parts are canceled by the seal-less method of construction, therefore, reduced maintenance costs and long service life.

Advantages

1.The Pump Housing

Virgin Fluoroplastic
- Considerably easier and more reliable quality control
- No reduction in the permeation resistance.
- Pure pharmaceutical and fine chemical media: no contamination

2. With ductile cast iron casing absorbs all the hydraulic and pipe work-forces. According to DIN/ISO5199/Europump 1979 standard. Comparing to plastic pumps, no expansion joints are required.Flangewith service-minded through holes to DIN;ANSI,BS;JIS. For flushing system and monitoring device as required, the draining nozzle will be offered.

3. Spacer sleeve made of Carbon-fiber-reinforced plastic [CFRP]

The metal-free system does not induce any eddy currents and thus avoids unnecessary heat generation. Efficiency and operational reliability benefit from this .Even low flow rates or media near their boiling point can therefore be conveyed without the introduction of heat.

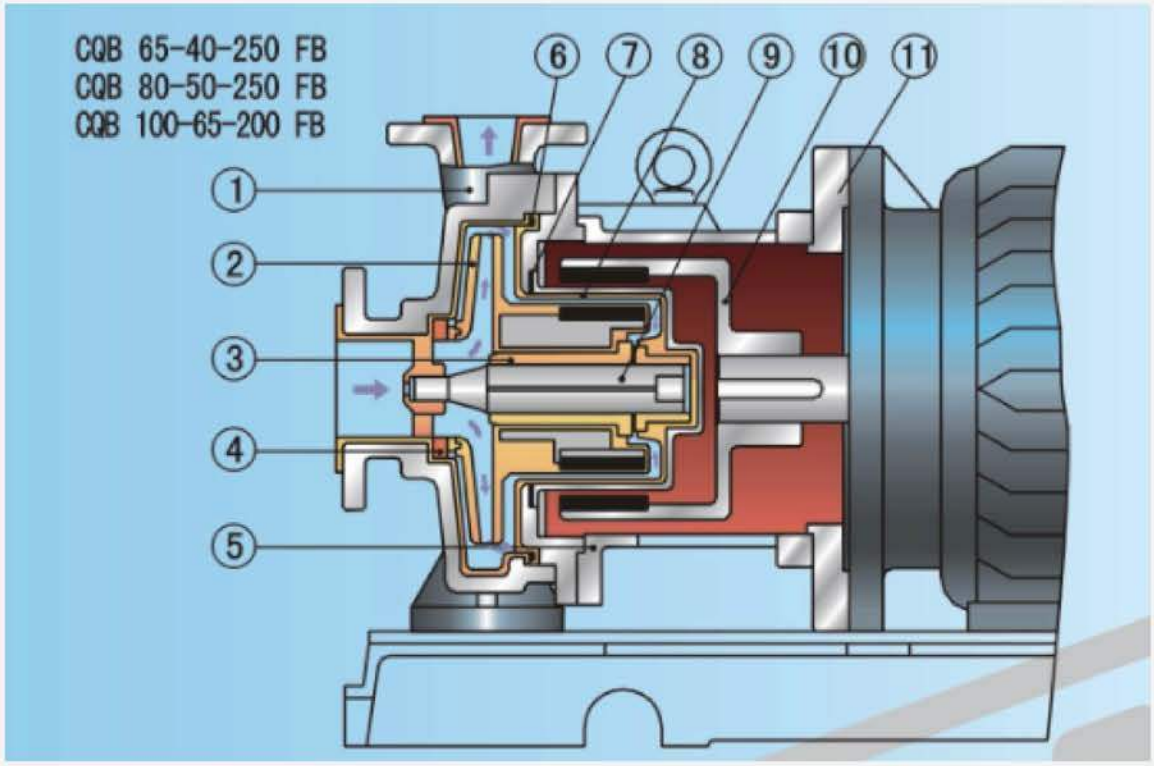
4. Close Impeller

Closed impeller with flow-optimized vane channels: for high efficiency and low NPSH values. The metal core is protected by a thick-walled seamless plastic lining, the large metal core and increase the mechanical strength considerably even at elevated temperature and high flow rates .Secured screw connection to the shaft to against loosening if the pump is started up in the wrong direction of rotation or in the case of back-flowing media

5. Bearings and shafts

Bearings and shafts for corrosion resistance and product integrity, utilizing the best materials SIC, its thermal deformation is much lower than the Filled PTFE. Fixed axis can effectively reduce the mechanical loss of pump operation. Efficient, energy saving is CQB-FB products most important characteristics.

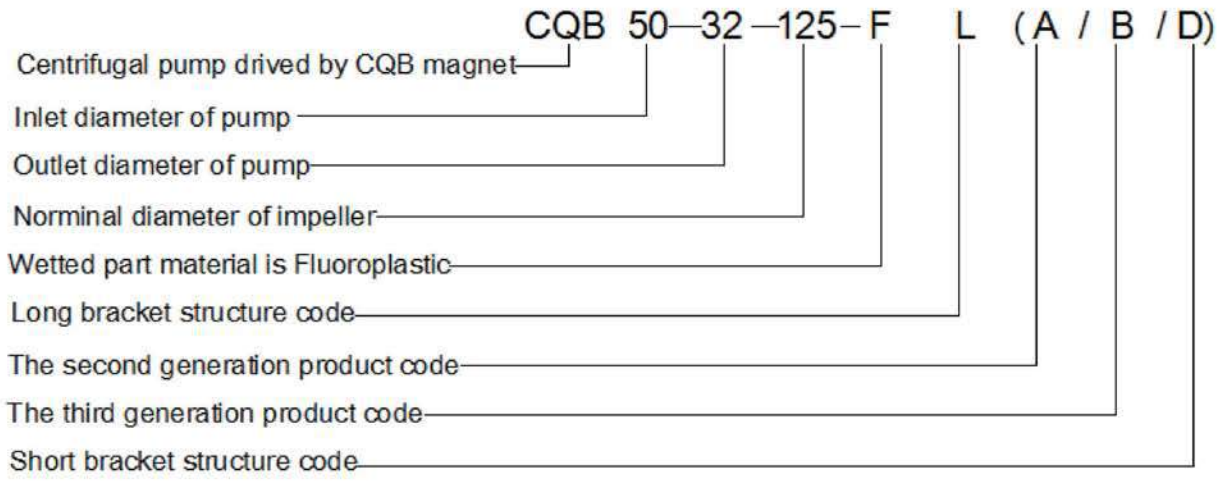
Parts and Materials



Item	Designation	Material
1	Pump housing	Cast iron HT200 lined with FEP
2	Impeller	FEP and PTFE
3	Impeller cap	PTFE
4	Mouth ring	Alumina or Silicon nitride
5	Seal ring	Fluororubber /PTFE
6	Pump cover	Cast iron HT200 lined with FEP
7	Can	FEP/Carbon-fiber reinforced plastic
8	Rotor assembly	FEP/NdFeB
9	Pump shaft	Silicon carbide
10	Drive magnet assembly	Cast iron HT200,NdFeB
11	Bracket	Cast iron HT200

Model and Parameter

Model Identification

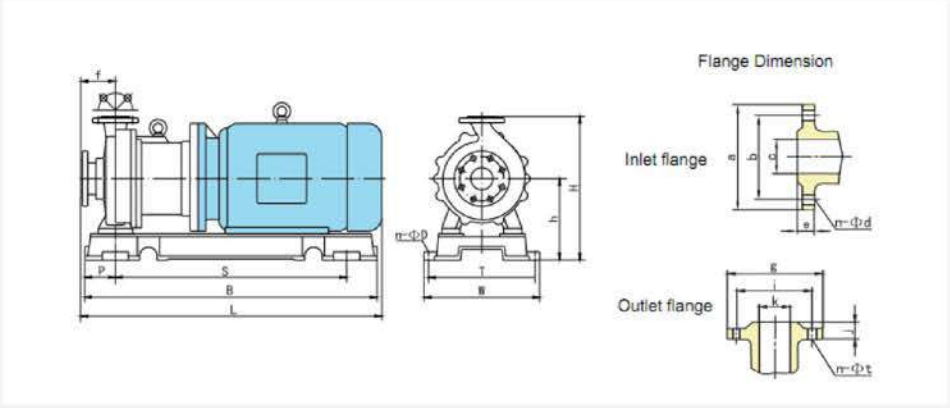


Model and parameters

Design Pressure: 1.6MPa

Item	Model	Flow (m3/h)	Head (m)	Effic-iency (%)	NPSHa (m)	Inlet x outlet (mm)	Speed (RPM)	Power (KW)	Pump and motor weight (kg)
1	CQB65-40-250FB	15 *25 30	82 80 75	35 41 44	4	65*40	2900	18.5	315
2	CQB80-50-250FB	35 *50 60	82 80 75	45 51 53	5	80*50	2900	30	390
3	CQB100-65-200FB	70 *100 120	52 50 46	55 61 64	4.5	100*65	2900	30	390

Installation Drawing



Installation Dimension

Item	Model	L	B	S	P	f	W	T	H	h	D
1	CQB65-40-250FB	960	950	740	105	100	490	440	485	260	24
2	CQB80-50-250FB	1090	1090	870	110	125	525	475	520	295	24
3	CQB100-65-200FB	1090	1090	870	110	125	525	475	520	295	24

Flange dimension

Item	Model	Inlet flange dimension					Outlet flange dimension				
		c	a	b	e	n-∮d	k	g	i	18	n-∮t
1	CQB65-40-250FB	65	185	145	20	4-M16	40	150	110	20	4-M16
2	CQB80-50-250FB	80	200	160	20	8-∮18	50	165	125	20	4-M16
3	CQB100-65-200FB	100	220	180	22	8-M16	65	185	145	20	4-M16

Performance curve