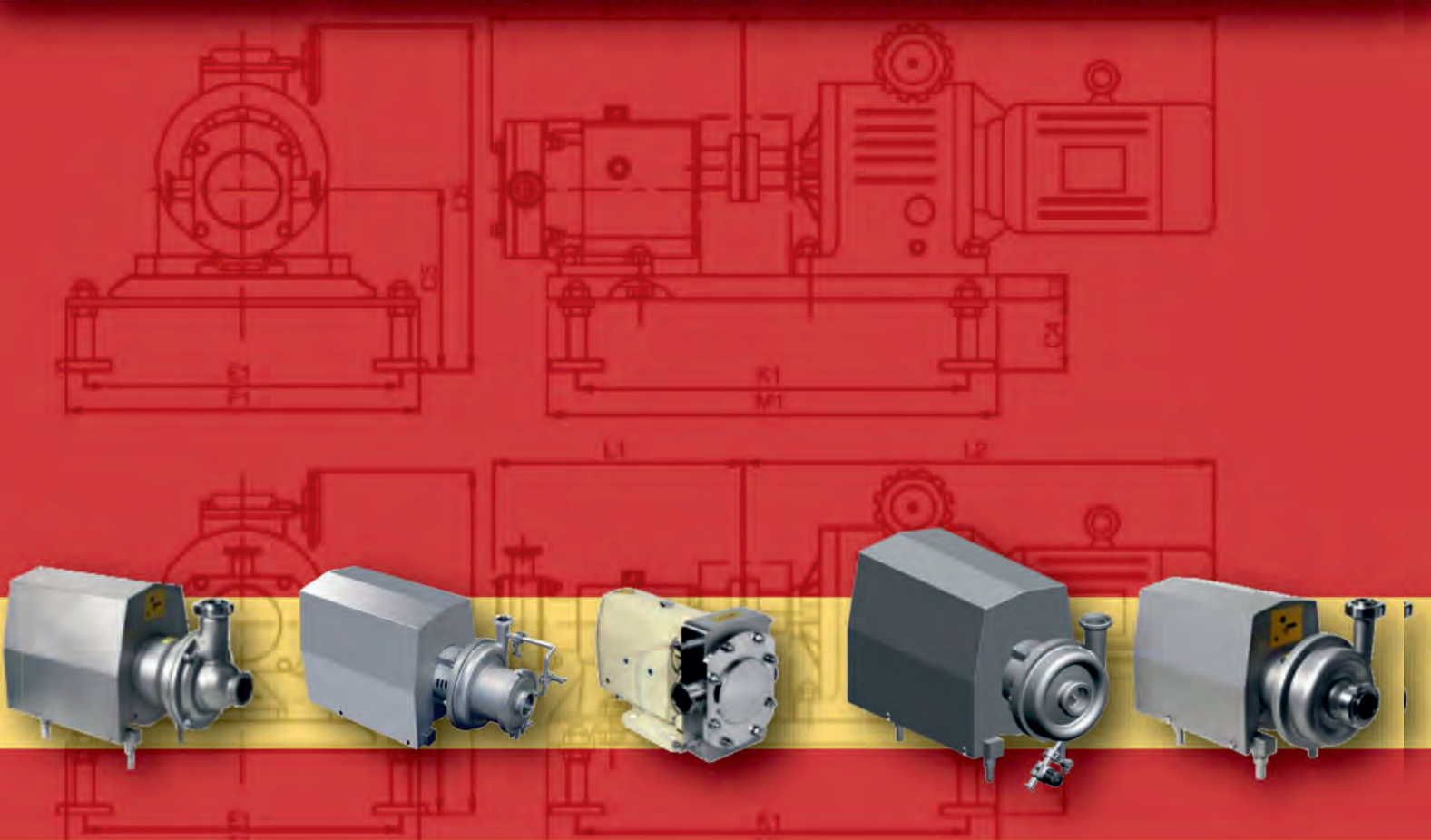


INOX FOOD PUMPS

Mineli
corp.



SELF—PRIMING PUMP (CIP PUMP)



Applications

- The pump is a sanitary lateral design self priming pump, it's suitable for food processing, pharmacy and chemical industry.
- It is specially designed for pumping materials containing air or gas, and it can also be used for negative suction with prior priming as well as with filtration equipment.
- It can be used for wine, oil, syrups, volatile products such as alcohol, acetone and other solvents, or with products at temperatures close to boiling point.
- However, the main use of this pump is for CIP recover.

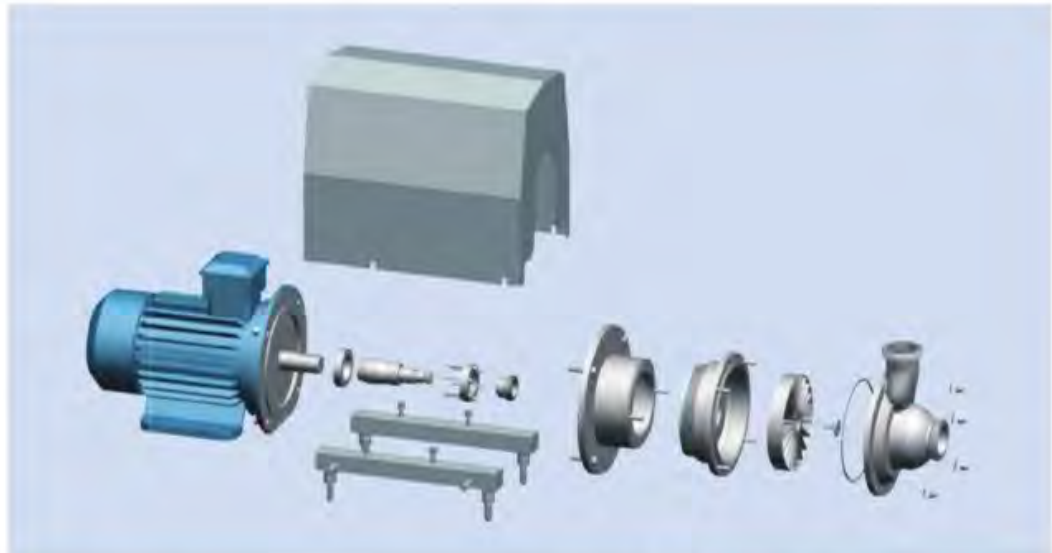
Operating principles

- The impeller is housed between the inlet body and the venturi casing and it rotates in conjunction with the pump shaft.
- The rotation of the impeller and arrangement of the side channel, creates a negative pressure inside the inlet body.
- Which generates the suction force of the pump. At the same time, the fluid recives energy in the form of kinetic energy and pressure energy, and this impels it through the impeller casing.

Design and features

- Motor cover manufactured with cold-formed plate
- Stainless steel investment casting inlet body and impeller
- Mechanical seal prevents contacting between the spring and the pumped fluid
- Stainless steel support
- Surface finish: Sandblast

SELF-PRIMING PUMP (CIP PUMP)



Technical specifications

- Max.Flow: 30m³/h/132GPM
- Max.Head: 30H(M)
- Max.pressure: 3Bar/43 PSI
- Max.operating temp: 120°C/248°F
- Max.rev: 175CMin-1
- Max.suction height: 8m/22ft

Materials

- AISI-316/304
- AISI-304
- EPDM(FDA)
- SIC/SIC/EPDM
- Parts in contact with pumped media: AISI-316/304
- Other parts: AISI-304
- Gaskets (standard): EPDM(FDA)
- Mechanical seal(standard): SIC/SIC/EPDM

Options

- C/SIC/EPDM
- FPM(Viton)NBR
- DIN, SMS, 3A, RJT
- Mechanical seal in: C/SIC/EPDM
- Gaskets in: FPM(Viton)NBR
- Inlet & Outlet connections: Clamp, Male, Flange, DIN, SMS, 3A, RJT

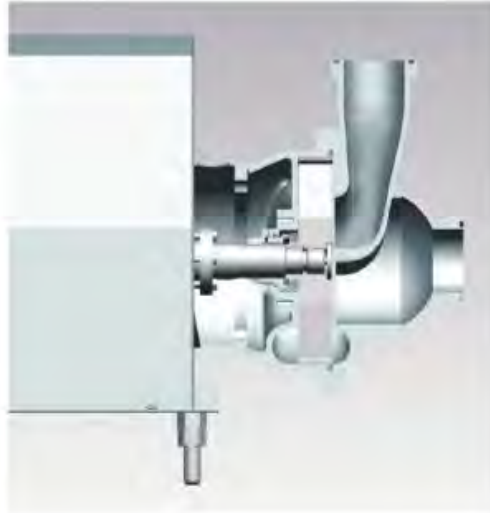
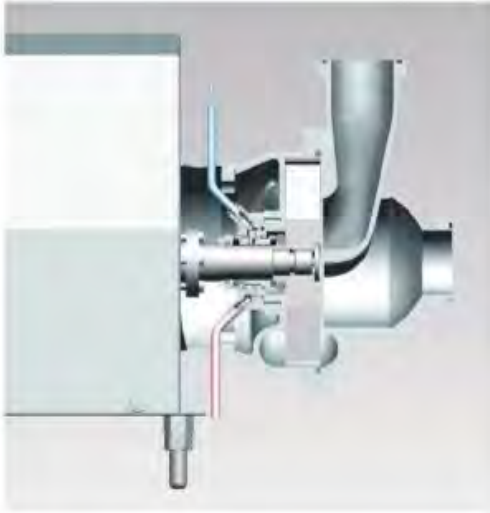
Motor the IEC EN IE2(Equivalent to China two energy efficiency), PTC thermistor

Motor Power(KW)refer to table below

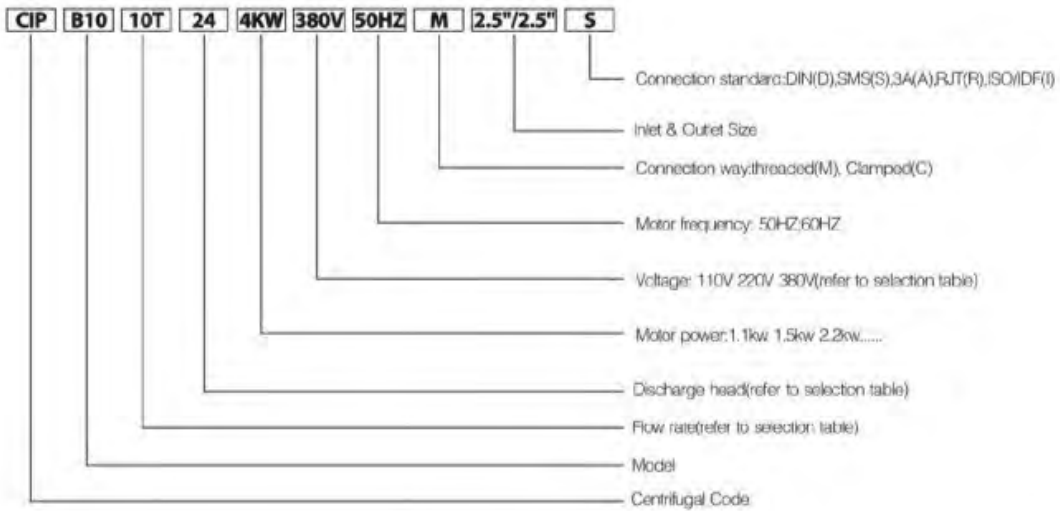
Power	Voltage	Power	Voltage
0.75	210V-230V/50HZ	4	380V-400V/50HZ
1.1	380V-400V/50HZ	4.5	600V-690V/50HZ
1.5	420V-460V/60HZ	7.5	420V-460V/60HZ
2.2		11	
3		15	



SELF-PRIMING PUMP (CIP PUMP)



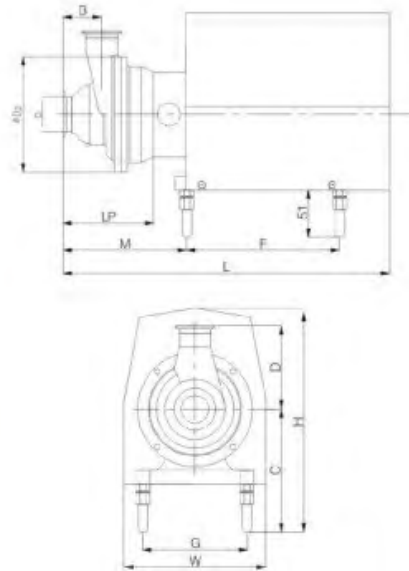
Model instruction of Self-priming pump



Sample: CIP-B10-10T-24-4Kw-380V-50HZ-M-2.5"/2.5"-S

SELF—PRIMING PUMP (CIP PUMP)

Assembly Dimension



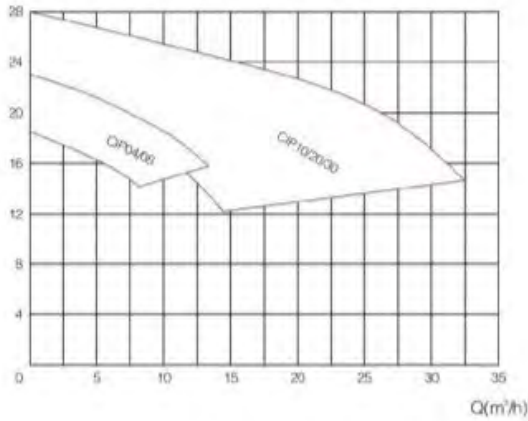
CIP	Pump Specification						Assembly Dimension										3A	
	Power (kw)	Inlet d /DN	Outlet d /DN	φDp	Lp	mechanic seal size	B	C	D	M	F	G	H	L	W	C	H	
CP-B04	2.2	2"/50	1.5"/32	192	160	φ32	71	230	142	233	300	160	430	652	260	262	462	
CP-B08	3	2"/50	2"/50	192	160	φ32	71	230	142	233	300	160	430	652	260	262	462	
CP-B10	4	2.5"/65	2"/50	248	200	φ32	83.5	210	185	254	300	190	422	642	260	242	454	
CP-B20	5.5	2.5"/65	2.5"/65	248	200	φ32	83.5	242	185	282	330	216	460	772	310	274	492	
CP-B30	7.5	3"/80	2.5"/65	248	200	φ32	83.5	242	185	282	330	216	460	772	310	274	492	

Attention: Please refer to selection table for details of next page. The size in the following form is the reference value, the actual size is subjected to actual object.

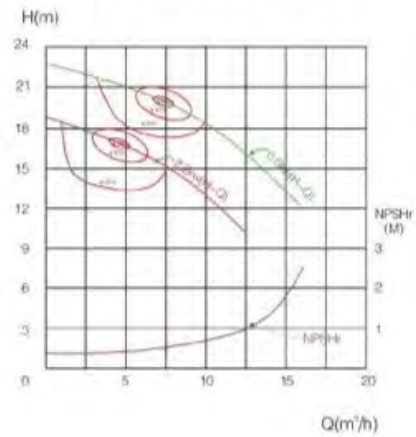


SELF-PRIMING PUMP (CIP PUMP)

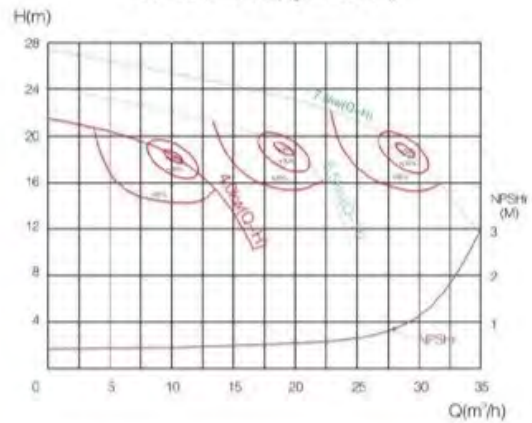
Self-Priming Pump(CIP)H-Q Curve Figure



CIP-04/08(Q-H curve)



CIP-10/20/30(Q-H curve)



Self-priming Pump selection table

Model	Flow rate(m³/h)	Discharge head(M)	Power (kw)	Inlet & Outlet
CIP-B04	4	24	2.2KW	2"1.5"
CIP-B08	7	24	3KW	2"1.2"
CIP-B10	10	24	4KW	2.5"1.5"
CIP-B20	20	24	5.5KW	2.5"2.5"
CIP-B30	30	24	7.5KW	3"2.5"

Note: Test condition is pure water, 20°C temperature, impeller speed 1450R.P.M





SELF—PRIMING PUMP (CIP PUMP)

SELF—PRIMING PUMP (CIP +)



SELF—PRIMING PUMP (CIP +)



Applications

- The pump is a sanitary lateral design self priming pump, it's suitable for food processing, pharmacy and chemical industry.
- The pump is designed a side way pipe between inlet and outlet.
- It is specially designed for pumping materials containing air or gas, and it can also be used for negative suction with prior priming as well as with filtration equipment.
- It can be used for wine, oil, syrups, volatile products such as alcohol, acetone and other solvents, or with products at temperatures close to boiling point. However, the main use of this pump is for CIP recover.

Operating principles

- The abduction impeller is designed pump inlet, can improve inlet liquid pressure, and change inlet liquid speed; increase pump NPSH capability.
- And outlet liquid through side way pipe supplement inlet, circulation work, so that pump may take into self suck.

SELF—PRIMING PUMP (CIP +)

Technical specifications

- Maximum working pressure of 16 bar
- High Efficiency
- Gentle product handling
- Low noise
- Small axial force, and therefore do not need to use the bearing flange (shaft by compressing Cooperation and is connected to the motor shaft)
- Metric and inch OD diameter
- Comply with the DIN 11851 standard threaded connector (standard)
- DIN 11864-1 standard sterile connector
- DIN 11864-2 standard aseptic flange
- Other connections meet the BS, SMS, R/T and Tri-Clamp Standard

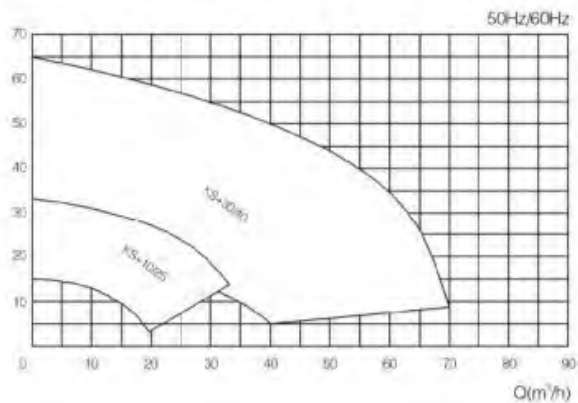


Materials

- Single mechanical seal
- Single mechanical seal with flushing function
- Double mechanical seal
- Ensure the best product isolation seal spring CIP/SIP features
- Different materials to choose from sealing surface
- Carbon/silicon carbide (standard)
- Silicon carbide/silicon carbide

CIP+

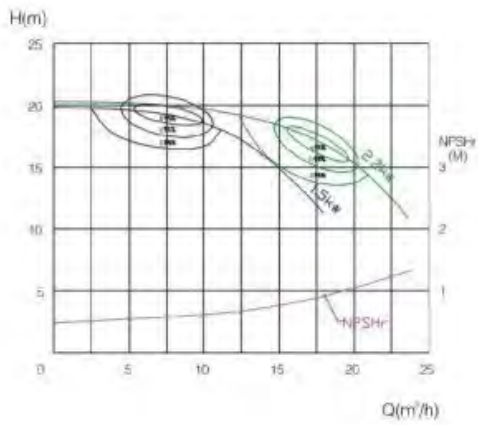
CIP+ pump performance H-Q curve figure



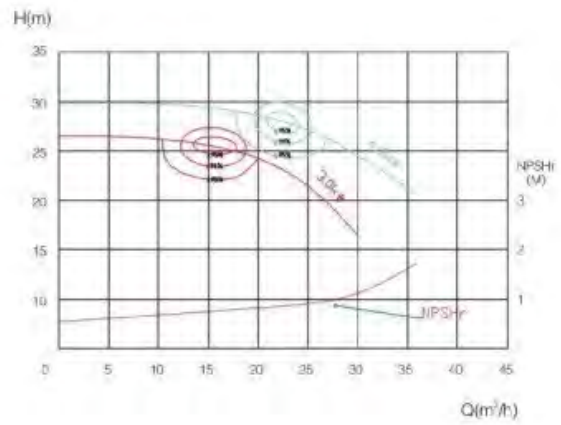
Note: The special order is special configurations on Q-H curve request.

SELF-PRIMING PUMP (CIP +)

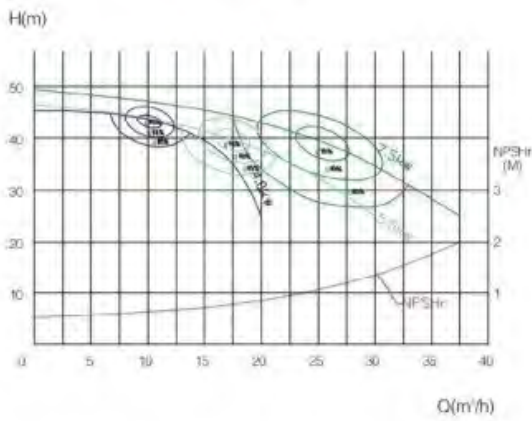
CIP+10(Q-H curve)



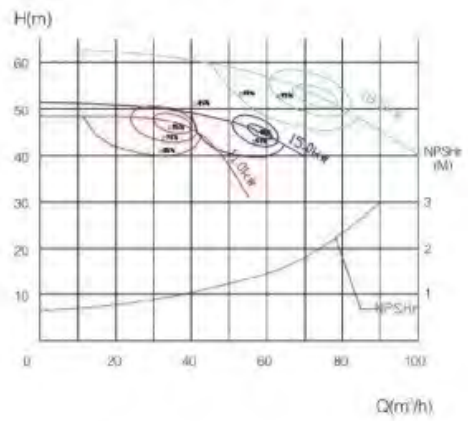
CIP+20(Q-H curve)



CIP+30(Q-H curve)

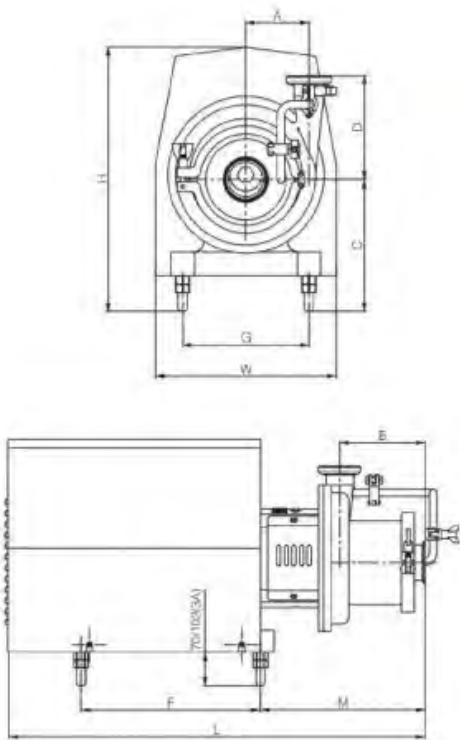


CIP+40(Q-H curve)



Note: Test condition is pure water, 20°C temperature; impeller speed 2800(R.P.M) is the same curve as motor 60Hz; impeller speed 3600(R.P.M)

SELF-PRIMING PUMP (CIP +)



CIP+Self-priming Pump selection table

Model	Power	(m ³)	(M)	Input	Output
CIP+10	1.5KW	5	20	1.5/40	1.5/40
	1.5KW	10	16	1.5/40	1.5/40
	2.2KW	10	22	1.5/40	1.5/40
	2.2KW	15	20	1.5/40	1.5/40
CIP+20	2.2KW	18	16	1.5/40	1.5/40
		10	30	2/50	2/50
	3.0KW	15	26	2/50	2/50
		20	24	2/50	2/50
	4.0KW	15	32	2/50	2/50
		20	30	2/50	2/50
25		28	2/50	2/50	
30		20	2/50	2/50	
CIP+30	4.0KW	10	40	2/50	1.5/40
		10	50	2.5/50	2/50
	5.5KW	15	45	2.5/50	2/50
		20	40	2.5/50	2/50
	7.5KW	15	50	2.5/50	2/50
		20	45	2.5/55	2/50
		25	40	2.5/65	2/50
		35	35	2.5/65	2/50
CIP+40	11KW	30	55	2.5/65	2.5/65
		40	48	3/80	2.5/65
	15KW	40	55	3/80	2.5/65
		50	50	3/80	2.5/65
	18.5KW	50	70	3/80	2.5/65
		60	60	3/80	2.5/65
		80	50	3/80	2.5/65

CIP+Series installation dimension table(the date is based on SMS thread union)

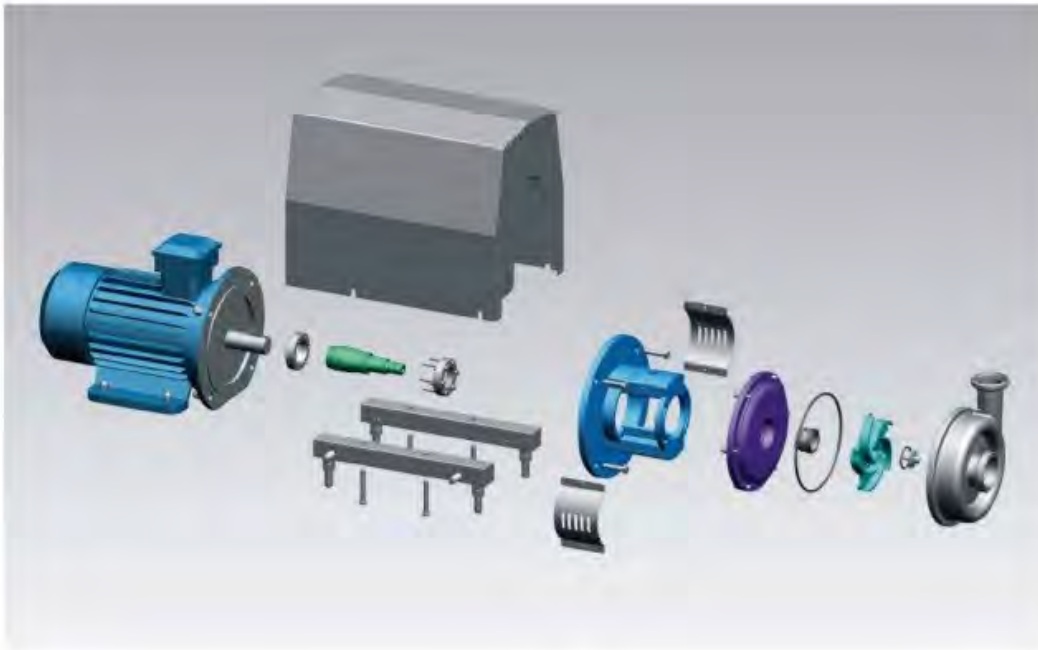
CIP+	Pump Dimension			Assembly Dimension										3A	
	Power (kw)	Inlet d /DN	Outlet d /DN	A	B	C	D	M	F	G	H	L	W	C	H
CIP+10	1.5	1.5/40	1.5/40	85	156.5	182	144	261	240	140	360	592	210	218	392
	2.2	1.5/40	1.5/40			182		262	240	140	360	592	210	218	392
CIP+20	3	2/50	2/50	90.2	145	222	163	271	300	160	430	692	260	254	462
	4	2/50	2/50			214		279	300	190	430	698	260	246	462
CIP+30	4	2/50	2/40	108	160	214	186	281	300	190	430	692	260	246	462
	5.5	2.5/50	2/50			234		296	330	216	460	751	310	266	492
	7.5	2.5/50	2/50			234		299	330	216	460	751	310	266	492
CIP+40	11	2.5/50	2.5/65	105	183.5	279	236	325	450	254	575	966	375	310	607
	15	3/80	2.5/65			279		326	450	254	575	966	375	310	607
	18.5	3/80	2.5/65			278		334	450	254	575	1021	375	310	607

Note: The date is only reference, for the detail, please contact Donjoy

CENTRIFUGAL PUMPS (KS SERIES)



CENTRIFUGAL PUMPS (KS SERIES)



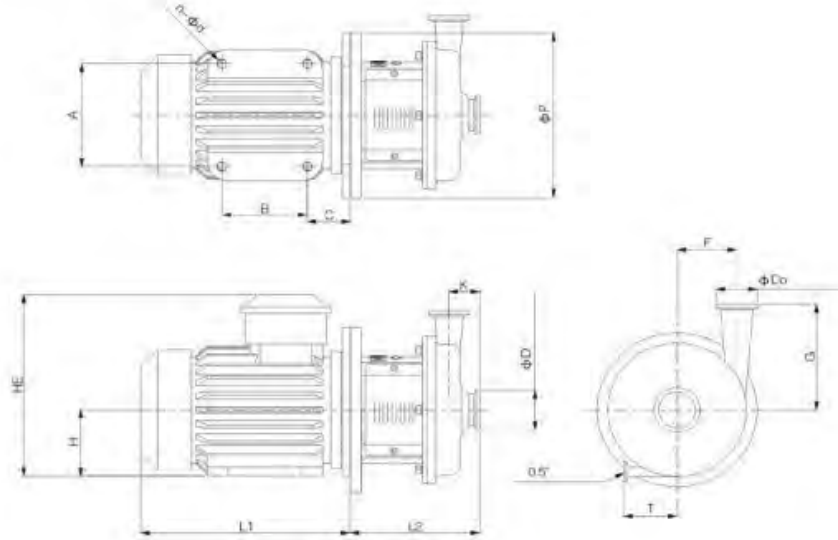
KS Series

- The centrifugal pump is manufactured in stainless steel and with a shrouded motor.
- Sanitary and cost-efficient design makes it perfect for the dairies, beverages, food-processing, pharmaceutical and fine chemicals industries.

Operating principles

- Housed inside the casing, the impeller rotates in conjunction with the pump shaft. With this arrangement, the impeller blades convey energy to the fluid in the form of kinetic energy and pressure energy.
- This pump can't reversible by simple reversal of the direction of rotation. The direction of rotation is clockwise when the pump is viewed from the rear side of the motor.

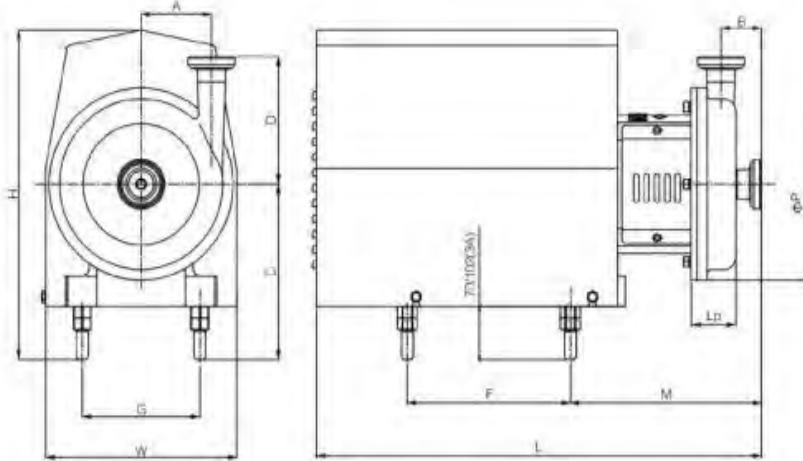
CENTRIFUGAL PUMPS (KS SERIES)



KS pump series installation table (no motor cover)

	(kw)	A	B	C	H	HE	L1	P	n x d	K	F	G	T	L2	Di	Do
KS-5	0.75	125	100	50	80	200	245	200	4 x 10	50	63	130	62	173	1.5"	1.5"
	0.75	125	100	50	80	200	245	200	4 x 10	50	63	130	62	173	1.5"	1.5"
KS-10	1.1	125	100	50	80	200	245	200	4 x 10	50	63	130	62	177	1.5"	1.5"
	1.5	140	125	56	90	200	260	200	4 x 10	50	63	130	62	177	1.5"	1.5"
KS-15	2.2	140	125	56	90	200	285	200	4 x 10	50	63	130	62	178	1.5"	1.5"
	1.5	140	125	56	90	200	260	200	4 x 10	38	95.6	148	75	200	2"	1.5"
KS-20	2.2	140	125	56	90	200	285	200	4 x 10	38	95.6	148	75	200	2"	1.5"
	3.0	160	140	63	100	270	320	250	4 x 12	38	95.6	148	75	202	2"	1.5"
KS-25	3.0	160	140	63	100	270	320	250	4 x 12	39	90.2	148	75	205	2"	2"
	4.0	190	140	70	112	278	335	250	4 x 12	39	90.2	148	75	207	2"	2"
KS-30	5.5	216	140	89	132	320	405	300	4 x 12	39	90.2	148	75	216	2"	2"
	3.0	160	140	63	100	270	320	250	4 x 12	54	108	151	80	216	2"	1.5"
KS-35	4.0	190	140	70	112	278	335	250	4 x 12	54	108	151	80	218	2"	1.5"
	5.5	216	140	89	132	320	405	300	4 x 12	54	108	151	80	218	2.5"	2"
KS-40	7.5	216	178	89	132	320	425	300	4 x 12	54	108	151	80	220	2.5"	2"
	7.5	216	178	89	132	320	425	300	4 x 12	65	131	218	80	230	2.5"	1.5"
KS-45	11	254	210	108	160	400	480	350	4 x 15	65	131	218	80	266	2.5"	1.5"
	15	254	210	108	160	400	480	350	4 x 15	65	131	218	80	272	2.5"	1.5"
KS-50	11	254	210	108	160	400	480	350	4 x 15	73	105	202	80	266	2.5"	2.5"
	15	254	210	108	160	400	480	350	4 x 15	73	105	202	80	268	3"	2.5"
KS-60	18.5	254	254	108	160	400	535	350	4 x 15	73	105	202	80	265	3"	2.5"
	22	279	241	121	180	420	560	350	4 x 15	73	105	202	80	270	3"	2.5"

CENTRIFUGAL PUMPS (KS SERIES)



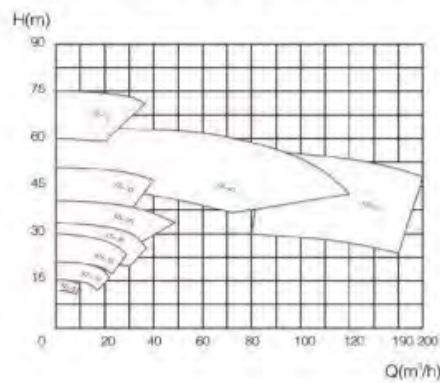
Centrifugal Pump Open Impeller Series

Model	Pump Dimension						Assembly Dimension										3A				
	Power (kw)	Inlet d / DN	Outlet d / DN	g P	Lp	Mechanical seal size	A	B	C	D	M	F	G	H	L	W	C	H			
KS-5	0.75	1.5/32	1.5/32	188	50	φ32	83	56.5	200	136	189	203	125	370	452	210	232	402			
	0.75	1.5/32	1.5/32	188	50	φ32					173	203	125	370	452	210	232	402			
KS-10	1.1	1.5/32	1.5/32	188	50	φ32	83	56.5	200	136	175	203	125	370	452	210	232	402			
	1.5	1.5/40	1.5/40	188	50	φ32					161	240	140	360	432	210	222	392			
	2.2	1.5/40	1.5/40	188	50	φ32					162	240	140	360	492	210	222	392			
KS-15	1.5	2/50	1.5/40	250	61	φ32	95.6	44	190	155	187	240	140	360	525	210	222	392			
	2.2	2/50	1.5/40	250	61	φ32					187	240	140	360	525	210	222	392			
	3	2/50	1.5/40	250	61	φ32					171	300	160	430	593	260	262	462			
KS-20	3	2/50	2/50	250	74.5	φ32	90.2	45	230	155	171	300	160	430	592	260	262	462			
	4	2/50	2/50	250	74.5	φ32					179	300	190	430	598	260	254	462			
	5.5	2.5/65	2/50	250	74.5	φ32					197	330	216	460	653	310	274	492			
KS-25	3	2/50	1.5/40	268	57	φ32	108	60	230	158	173	300	160	430	500	260	262	462			
	4	2/50	1.5/40	268	57	φ32					181	300	160	430	590	260	254	462			
	5.5	2.5/50	2/50	268	57	φ32					196	330	216	460	651	310	274	492			
KS-30	7.5	2.5/65	2/50	268	57	φ32	108	60	242	158	199	330	216	460	651	310	274	492			
	7.5	2.5/65	1.5/40	350	86.5	φ36					216	330	216	460	721	310	274	492			
	11	2.5/65	1.5/40	350	86.5	φ36					234	450	254	575	871	375	322	607			
KS-35	15	2.5/65	2/50	350	86.5	φ36	131	76	290	229	240	450	254	575	871	375	322	607			
	11	2.5/65	2.5/65	300	90	φ36					235	450	254	575	866	375	322	607			
	15	2.5/65	2/50	350	86.5	φ36					290										
KS-40	18.5	3/80	2.5/50	300	90	φ36	105	83.5	290	214	236	450	254	575	866	375	322	607			
	15	3/80	2.5/65	300	90	φ36					234	450	254	575	921	375	322	607			
	11	2.5/65	2.5/65	300	90	φ36					290										
	22	3/80	2.5/65	300	90	φ36					310				234	515	279	625	946	400	342

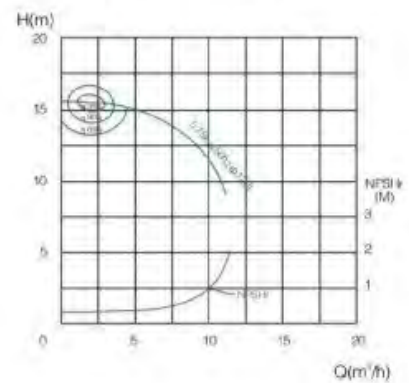
CENTRIFUGAL PUMPS (KS SERIES)

KS Series pump performance curve figure

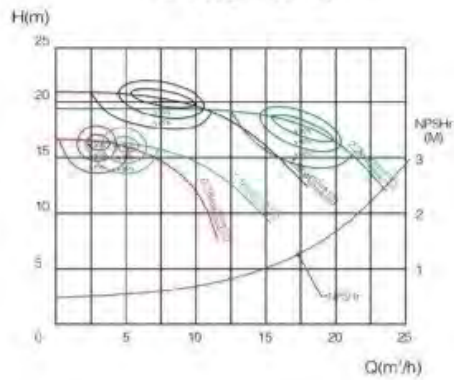
KS series Q-H curve figure



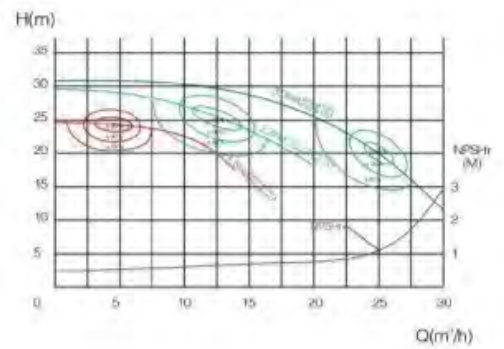
KS-5(Q-H curve)



KS-10(Q-H curve)

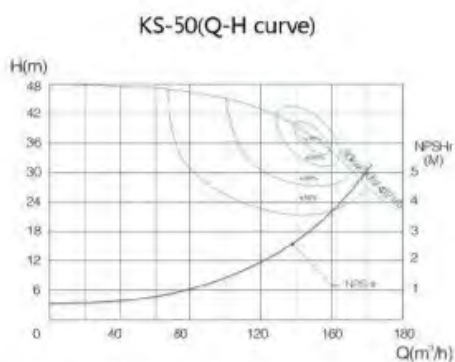
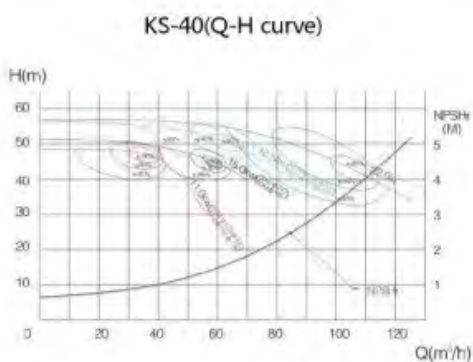
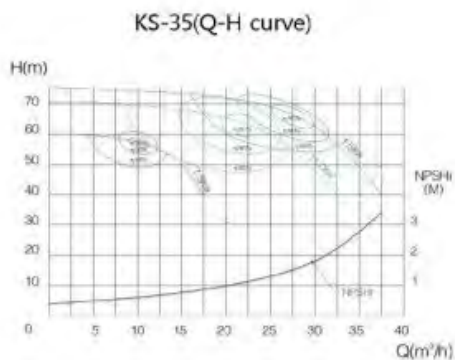
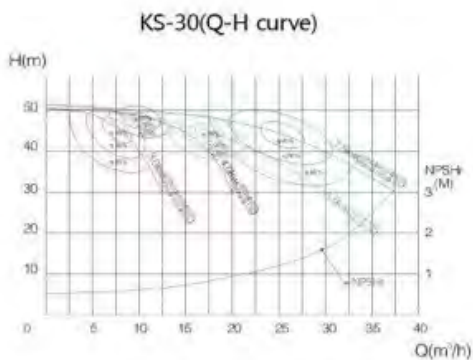
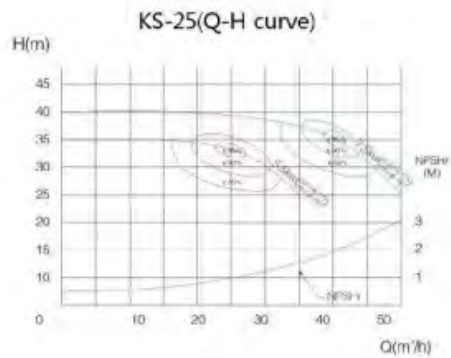
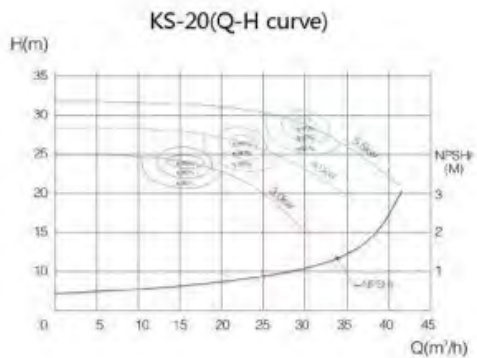


KS-15(Q-H curve)



Note: Test condition is pure water, 20°C temperature, impeller speed 2900R.P.M (it is the same curve as motor 60Hz, impeller speed 3000R.P.M)

CENTRIFUGAL PUMPS (KS SERIES)



Note: Test condition is pure water, 20°C temperature. Impeller speed 2800R.P.M (it is the same curve as motor 60Hz, impeller speed 3600R.P.M)

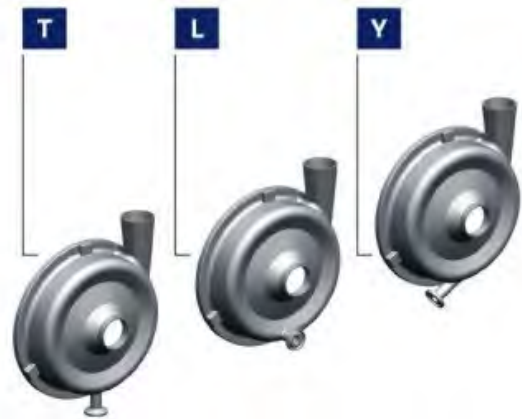
CENTRIFUGAL PUMPS (KS SERIES)

KS Series performance selection table

Model	Flow rate(m ³ /h)	Discharge head(M)	Power (kw)	Inlet & Outlet Size
KS-5	3	16	0.75kw	1.5"/1.5"
	5	15	1.1kw	1.5"/1.5"
	6	22	1.5kw	1.5"/1.5"
KS-10	10	20	1.5kw	1.5"/1.5"
	15	18	2.2kw	1.5"/1.5"
	20	16	2.2kw	1.5"/1.5"
	3	24	1.5kw	2"/1.5"
KS-15	5	24	1.5kw	2"/1.5"
	10	23	2.2kw	2"/1.5"
	15	20	2.2kw	2"/1.5"
	25	20	3.0kw	2"/1.5"
	5	30	2.2kw	2"/1.5"
KS-20	10	25	2.2kw	2"/1.5"
	20	25	4.0kw	2"/2"
	30	25	5.5kw	2.5"/2"
	20	35	5.5kw	2"/2"
KS-25	30	32	5.5kw	2.5"/2"
	40	30	7.5kw	2.5"/2"
	5	50	3.0kw	2"/1.5"
KS-30	10	40	3.0kw	2"/1.5"
	10	50	4.0kw	2"/1.5"
	15	45	5.5kw	2"/1.5"
	20	40	5.5kw	2.5"/2"
	20	48	7.5kw	2.5"/2"
KS-35	25	36	7.5kw	2.5"/2"
	30	36	7.5kw	2.5"/2"
	10	36	7.5kw	2.5"/1.5"
	10	60	11kw	2.5"/1.5"
	20	75	11kw	2.5"/1.5"
	25	60	11kw	2.5"/2"
	30	60	15kw	2.5"/2"
	30	65	15kw	2.5"/2"
KS-40	20	73	15kw	2.5"/2"
	25	70	15kw	2.5"/2"
	30	68	15kw	2.5"/2"
	50	25	11kw	2.5"/2"
	30	45	11kw	2.5"/2.5"
	40	45	11kw	2.5"/2.5"
	60	40	15kw	3"/2.5"
	40	55	18.5kw	3"/2.5"
	60	50	18.5kw	3"/2.5"
	80	40	18.5kw	3"/2.5"
KS-40	80	50	22kw	3"/2.5"
	100	40	22kw	3"/2.5"
	120	40	22kw	3"/2.5"



KS series pump drainage pipe picture



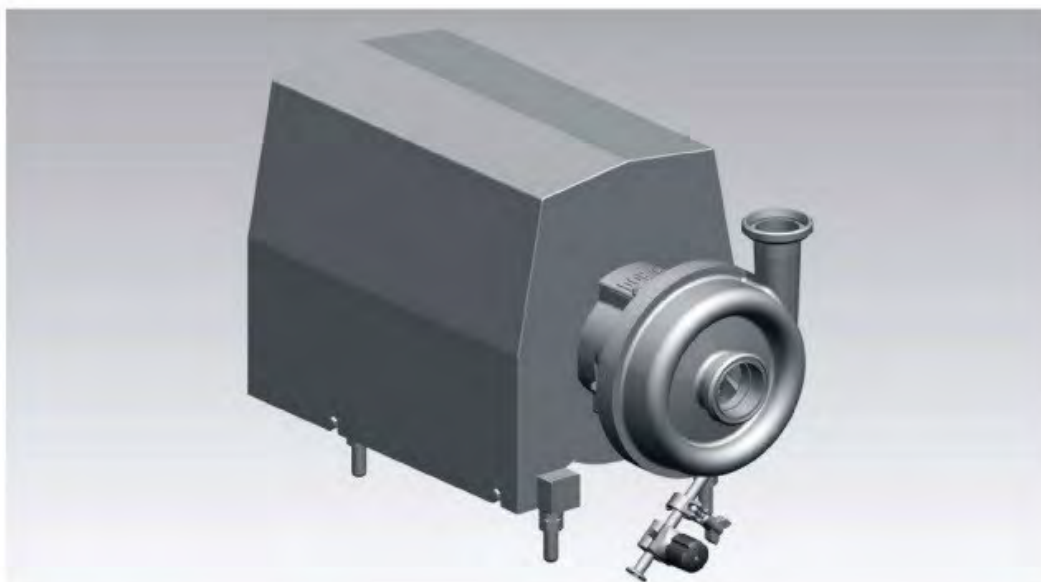
Vertical

Horizontal
(To end)

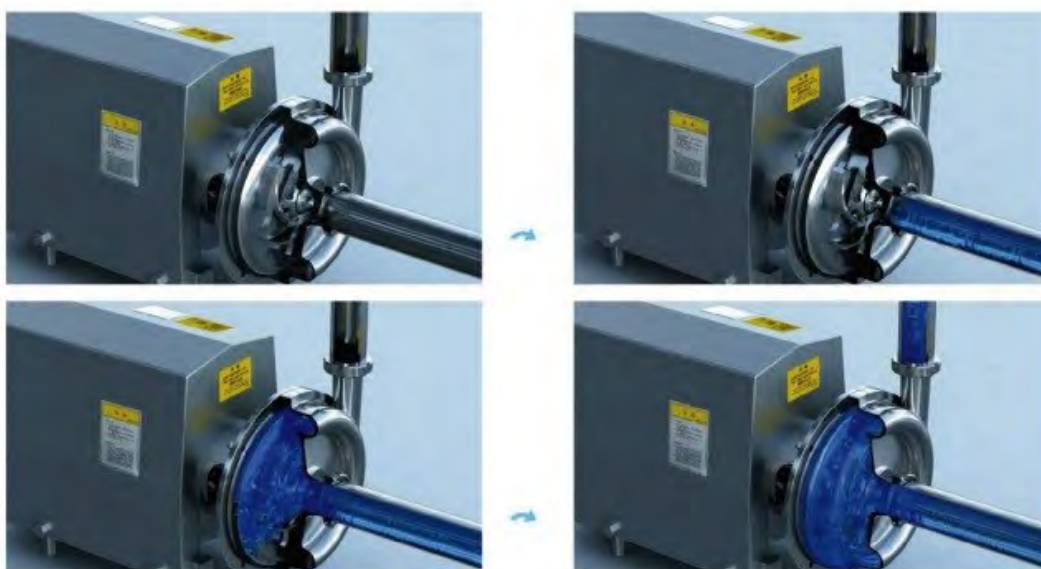
Incline



CENTRIFUGAL PUMPS (KS SERIES)



Centrifugal pump process picture

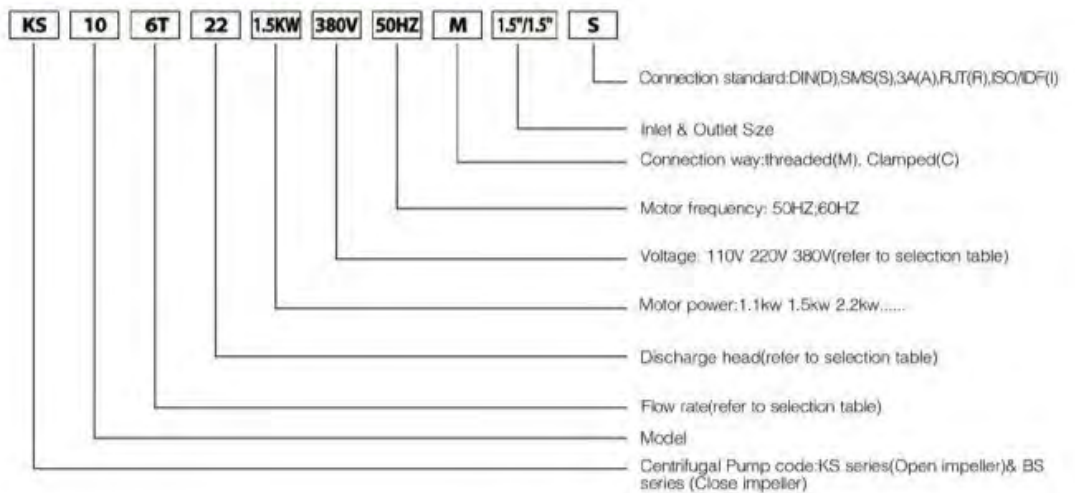


CENTRIFUGAL PUMPS (KS SERIES)

Centrifugal pump



Model instruction of Centrifugal Pump



Sample: KS-10-6T-22-1.5Kw-380V-50HZ-M-2.5"/2.5"-S

HYGENIC LOBE ROTOR PUMPS



HYGENIC LOBE ROTOR PUMPS



Applications

- The pump is a positive displacement lobe rotor pump designed according to USA 3A standard.
- The equipment is processed with USA 3A and very strict hygienic.
- The pump is ideal for the transfer of viscous as well as low-viscous media in the food-processing, Cosmetics and pharmaceutical industries.

Operating principles

- The pump basically consists of two lobe rotors which rotate inside the casing without touching each other.
- As the rotors rotate, the space between the lobes and the casing is successively filled with the product which is driven the discharge nozzle displacing a fixed amount of product.
- The pumped product forms a continuous stream due to the adjusted space of the lobes and the pump casing thus ensuring an efficient pumping.



Horizontal TUL Series



Vertical TUR Series



Different rotor shapes

HYGENIC LOBE ROTOR PUMPS

Drawing of operating principles

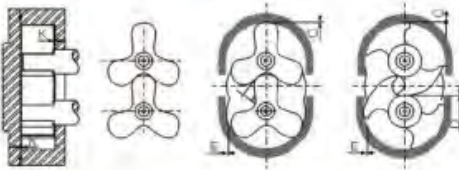


A. As the lobes rotate, the space on the suction side increases as one lobe is distanced from another, thus creating a partial vacuum which draws the fluid into the pump chamber.

B. As they are rotated by the shafts, each lobe is consecutively filled and the fluid is displaced to the delivery side. The small gaps between the lobes and between the lobes and the walls of the pump body ensure that the spaces are duly filled.

C. The pump housing is completely filled and the fluid escapes through the teeth of the lobes and is forced against the walls of the spaces, which contributes to the pump action.

Rotor gap tolerance



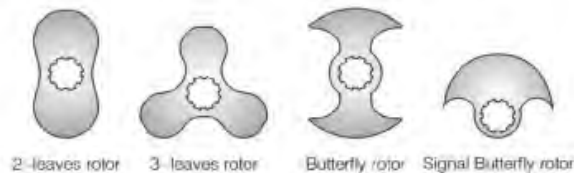
Materials

- Investment casting body: AISI 316L(1.4404)/AISI 304(1.4301)
- Gaskets (standard): EPDM according to FDA 177.2600
- Mechanical seal (Standard): SIC/SIC/EPDM
- Internal surface finish: Ra ≤ 0.6 μm
- External surface finish: mirror polish

Lobe Assembling Clearance Recommend Table

Size	C(mm)	D(mm)	E(mm)	K(mm)	Size	C(mm)	D(mm)	E(mm)	K(mm)
TUL/TUR 20	0.25 ± 0.05	0.20 ± 0.05	0.20 ± 0.05	0.20 ± 0.03	TUL/TUR 60	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05	0.40 ± 0.05
TUL/TUR 23	0.25 ± 0.05	0.20 ± 0.05	0.20 ± 0.05	0.25 ± 0.03	TUL/TUR 70	0.40 ± 0.05	0.40 ± 0.05	0.50 ± 0.05	0.50 ± 0.05
TUL/TUR 25	0.25 ± 0.05	0.20 ± 0.05	0.20 ± 0.05	0.25 ± 0.03	TUL/TUR 80	0.40 ± 0.05	0.40 ± 0.05	0.50 ± 0.05	0.50 ± 0.05
TUL/TUR 30	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05	TUL/TUR 100	0.40 ± 0.05	0.40 ± 0.05	0.50 ± 0.05	0.50 ± 0.05
TUL/TUR 35	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05	TUL/TUR 125	0.40 ± 0.05	0.40 ± 0.05	0.50 ± 0.05	0.50 ± 0.05
TUL/TUR 55	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05					

Lobe pump with flange connection



HYGENIC LOBE ROTOR PUMPS



Design and features

- Horizontal TUL
Vertical TUR
- Bare-shaft construction
- Butterfly rotor(standard)
- Hygienic design of the attachment of the rotors
- Sanitary mechanical seal, internal assembly
- Easy cleaning and maintenance
- Connections: Clamp(standard)
- Applied to CIP cleaning and SIP sterilization

Options

- Mechanical seal: SIC/SIC/EPDM/TC/TC/EPDM
- Flushed single or double mechanical seal
- Gasket: FPM(Viton),NBR,EPDM
- Relief valve at the front cover or external by-pass
- Built-in safety valve
- End-face heat jacket
- Complete heat jacket
- Vertical TUR series or Horizontal TUL series
- Different drives and fixes:
 - (1)Manual Continuously Variable Transmission
 - (2)Frequency converter adjust motor gear box
 - (3)Fixed speed output transmission
- Assembly on a stainless steel baseplate
- Connections:Clamp(DIN32676,3A,ISO),Thread(DIN,SMS,RJT, IDF)butt weld, flange
- Material certificates(3.1),roughness certificate
- Motor type B5.Motor frequency 50HZ,60HZ
- Voltage(V)220-240,360-400,420-460,630-690

Technical specifications

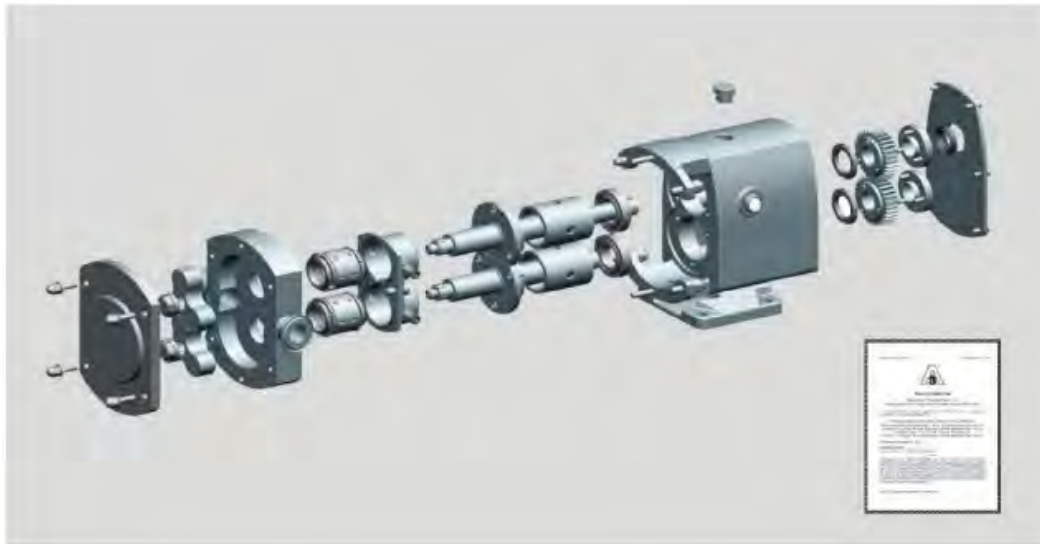
- Max flow: 90m³/h/395 GPM
- Max.pressure: 12bar/174 PSI
- Max working temperature: 150°C/302°F
- Max.rev: 1450 rpm

Motor the IEC EN IE2(Equivalent to China two energy efficiency), PTC thermistor

Wide input range motor

Power	Voltage	(kw) Power	Voltage
0.75		4	
1.1	210V-230V/50HZ	4.5	360V-400V/50HZ
1.5	260V-400V/50HZ	7.5	630V-690V/50HZ
2.2	420V-460V/50HZ	11	420V-460V/50HZ
3		15	

HYGENIC LOBE ROTOR PUMPS



Lobe pump with heat jacket

Lobe pump with heat jacket is widely used in transportation of chocolate, candy, gum, etc. Which materials will freeze at room temperature or perishable materials at high temperatures; according to process requirements, with the front cover or around the heat insulation structure.



Water-cooled mechanical seal Lobe pump

Lobe pump with water-cooled mechanical seal is used for high temperature, high viscosity, continue working long hours, it is perfect choice for working condition with intermission of liquid. Be sure to keep cooling water circulation!



Cooling fluid circulation import and export

HYGENIC LOBE ROTOR PUMPS

Various Configurations Of Rotor Pump



Lobe pump with explosion-proof motor

- It is with manual adjustable gearbox, the speed can be manually adjusted by handwheel in the gearbox according to working condition.
- Pump is 3A approval, 3A certificate No. is 1579, gaskets comply with FDA 177.2600.



Mobile lobe pump

- Mobile lobe pump can move at any time to containers and pump products inside.
- Standard configuration is with console, lockable mobile plate, mechanical variable gearbox.
- Option: Console with built-in converter, frequency conversion motor (For more information, Please refer to lobe pump catalogue which you will find under this products)



Lobe pump with protected cover

- The pump is designed with full protection, reducing dead angle due to irregular pump drive. Protective cover can also keep personal safety from motor.



Lobe pump with frequency converter

- With inclined gearbox and frequency converter motor, the rotary speed can be adjusted by connecting converter and motor, it also automatic controls by PLC programming realization.

HYGENIC LOBE ROTOR PUMPS

Various Configurations Of Rotor Pump



Lobe pump with flange hopper

- There are two type flange hoppers: Square flange hopper and circular flange hopper. Lobe pump with flange hopper can effectively solve transportation of uneasy flowing liquid.



Lobe pump with built-in safety valve

- Lobe pump with built-in safety valve effectively reduced the possibility of pump breakdown due to other equipment's failure causes pipeline pressure exoessing than the safety valve during transportation.
- Features: Relief valve automatically opens when the pressure exceeds the set safety pressure, it can also be pneumatic opened.
- Options: air/air, spring/air, pressure from 1bar-6bar



Lobe pump with heat jacket

- There are three type: periphery heat jacket, surface heat jacket and complete heat jacket. It will avoid freezing, deterioration caused by temperation deference.

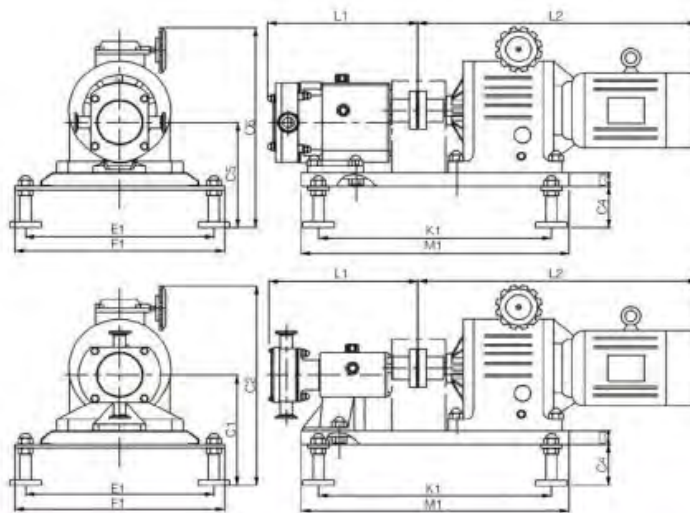


Lobe pump with external safety valve

- This pump can solve the problem due to congestion of pump outlet or other equipment and facilities which causes too high pressure. The device guarantees the case of no loss of material to keep pressure of pipeline stable and safe.
- Note: this device is applicable to the liquidity good materials.

HYGENIC LOBE ROTOR PUMPS

Assembly Dimension Drawing with Motor



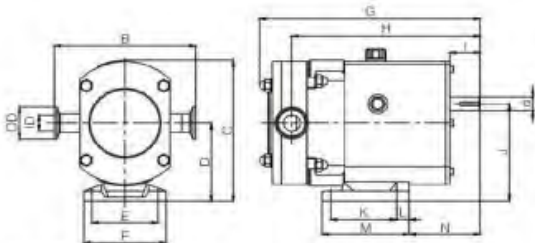
Series	L1	L2	C1	C2	C3	C4	C5	C6	K1	M1	E1	F1
TUJ/TUR-20	332	536	294	470	50	102	302	467	550	700	445	496
TUJ/TUR-23	346	636	294	499	50	102	302	507	550	700	445	496
TUJ/TUR-35	356	636	294	499	50	102	302	507	550	700	445	496
TUJ/TUR-30	467	744	331.5	558	50	102	338.5	565	670	820	520	570
TUJ/TUR-35	465	744	331.5	558	50	102	338.5	565	670	820	520	570
TUJ/TUR-35	474	784	331.5	558	50	102	338.5	565	670	820	520	570
TUJ/TUR-60	476	784	331.5	558	50	102	338.5	565	670	820	520	570
TUJ/TUR-70	587	960	418	665	50	102	443	690	750	900	600	650
TUJ/TUR-80	587	960	418	665	50	102	443	690	750	900	600	650
TUJ/TUR-100	609	960	418	665	50	102	443	690	750	900	600	650
TUJ/TUR-125	633	1090	418	665	50	102	443	690	750	900	600	650

Only for tabular data parameters.

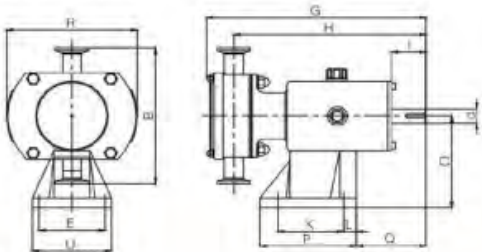


HYGENIC LOBE ROTOR PUMPS

Assembly Dimension Drawing without Motor



Horizontal (TUL) lobe pump



Vertical (TUR) lobe pump



TUL



TUR

Series	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	U	OD	ID	d
TUL/TUR-20	183	229	123	100	125	332	291	52	153	100	19	132	107	146	146	105	198	120	50.5	25	22
TUL/TUR-23	183	229	123	100	125	346	291	52	153	100	19	132	107	146	146	105	198	120	50.5	35	22
TUL/TUR-25	183	229	123	100	125	356	291	52	153	100	19	132	107	146	146	105	198	130	64	47.5	22
TUL/TUR-30	214	273	149	125	155	457	381	60	186.5	125	30	181	147	179.5	210	146	234	155	64	47.5	28
TUL/TUR-35	214	273	149	125	155	465	381	60	186.5	125	30	181	147	179.5	210	146	234	155	77.5	59.5	28
TUL/TUR-55	214	273	149	125	155	474	381	60	186.5	125	30	181	147	179.5	210	146	234	155	91	66	28
TUL/TUR-60	214	273	149	125	155	476	381	60	186.5	125	30	181	147	179.5	210	146	234	155	91	72.2	28
TUL/TUR-70	276	397	221	193	233.5	587	480	80	281	207	32.8	275	161	256	275	119	342	233.5	91	72.2	42
TUL/TUR-80	276	397	221	193	233.5	587	480	80	281	207	32.8	275	161	256	275	119	342	233.5	108	81	42
TUL/TUR-100	276	397	221	193	233.5	606	400	80	281	207	32.8	275	161	256	275	119	342	233.5	118	97.4	42
TUL/TUR-125	276	397	221	193	233.5	633	505	80	281	207	32.8	275	161	256	275	119	342	233.5	144.5	125	42

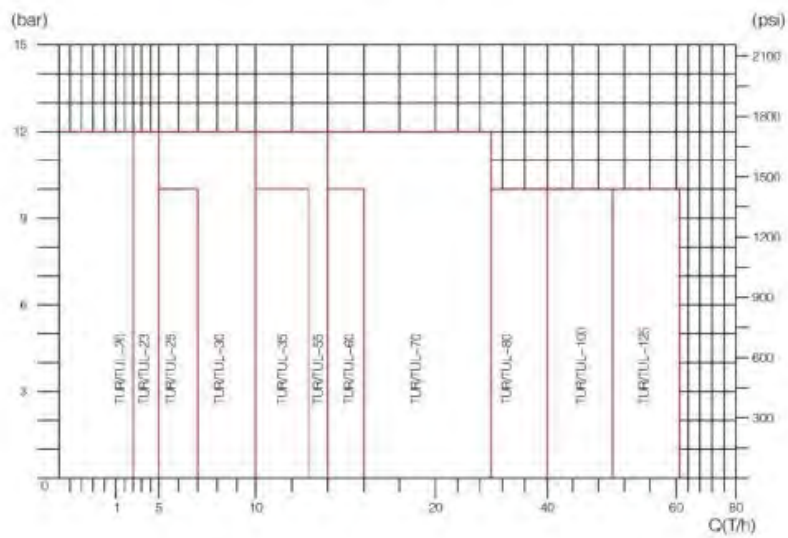
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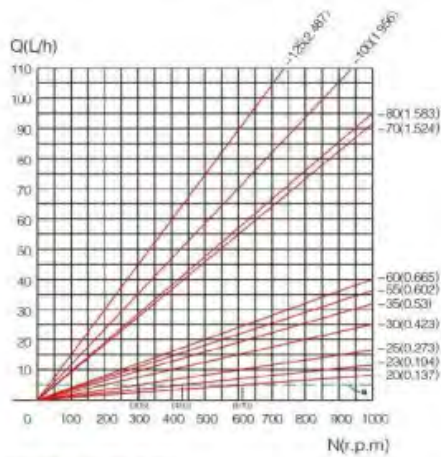
HYGENIC LOBE ROTOR PUMPS

Hygienic lobe pump performance curve

TUR/TUL pump Q(T/h) - speed(bar)



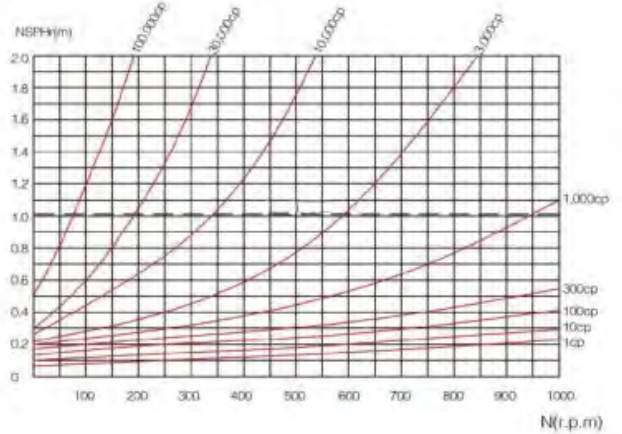
TUR/TUL flow rate Q(T/h)-speed(r.p.m) cure figure (DWG.01)



$$Q = 0.06K \cdot N \quad Q_1 \text{ (T/h)}, K_1 \text{ (L)},$$

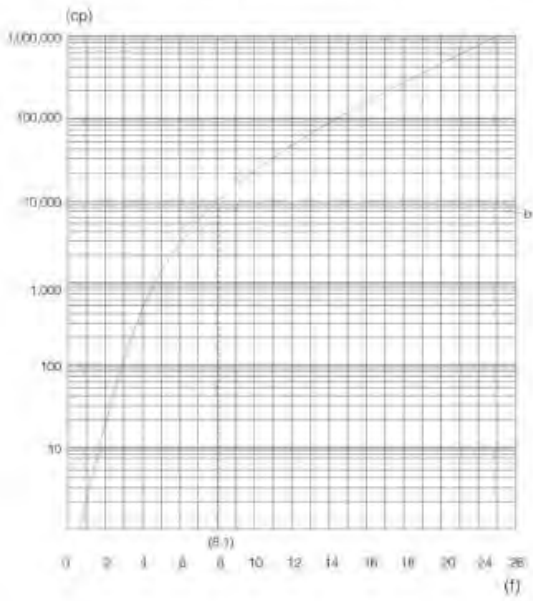
$$N_1 = 200 - 1000 \text{ (r.p.m)}$$

TUR/TUL pump NPSHr(M)/-speed(r.p.m) cure figure (DWG.02)



HYGENIC LOBE ROTOR PUMPS

TUR/TUL lobe pump viscosity(cp)and viscosity factor f cure figure (DWG.03)



Motor power in the following formula:
 $P=(Q*H/18.5+f+s)*N$

Impeller drive torque in the following formula:
 $M=P/9.56/N$
 P=power (W)
 Outlet pressure (Bar)
 f=Viscosity power coefficient
 (Check chart DWG.03)
 S=Mechanical seal power coefficient
 (Check chart Tab.01)
 N=Impeller speed(r.p.m)
 M= torsion (N.M)

Type lift column:

Maximum flow 5 l outlet pressure 10bar, viscosity 10.000 cp, how to choose rotor pump Choose steps are as follows:

1.The primary speed, figure DWG01, draw 5 l – dotted line a and lasth at the intersection of speed for:

- N-20=610 R.P.M
- N-23=430 R.P.M
- N-25=305 R.P.M

2.Determine the coefficient of viscosity, figure DWG03, drawing viscosity 10,000cp——dotted line b and curve phase Pay.coefficient of viscosity for:

f=8.1

3.Determine mechanical seal power coefficient single seal, seal material SIC/SIC

s=0.5

4.Computing power

According to the formula $P=(Q*H/18.5+f+s)*N$ must:

$P-20=(5*10/18.5+8.1+0.5) *610=6.894kw$
 $P-23=(5*10/18.5+8.1+0.5) *430=4.860kw$
 $P-25=(5*10/18.5+8.1+0.5) *305=3.447kw$

5.Sure model

According to the manual type table:
 TUL/TUR = 25 3 to 7T 1bar/4.0kw can meet requirements parameters

HYGENIC LOBE ROTOR PUMPS

Mechanical Continuously Variable Transmission Lobe Pump



Description:
Continuously variable transmission, the structure is equipped with the most commonly used form of mechanical friction stepless adjuster, the use of manual adjustment in the form of realization of the output speed stepless adjustment, to regulate flow of stepless effects.

TUR-TUL Series selection table

50Hz/60Hz N-200-1000Min

Model	Flow rate(m ³ /h)	(BAR) Pressure	(kw) Motor Power	(Min-1) Recommend rotate speed	Flow per Rotate	Flow per 100 Rotate	Inlet & Outlet Size	
TUR-20	TUL-20	1-3	12	1.5kw	200-450	0.137	13.7	1"-DN25
		1-3	9	1.3kw				
		1-3	5	0.75kw				
TUR-23	TUL-23	2-5	12	3.0kw	200-450	0.194	19.4	1.5"-DN40
		2-5	9	2.2kw				
		2-5	5	1.5kw				
TUR-25	TUL-25	3-7	10	4.0kw	200-450	0.273	27.3	2"-DN50
		3-7	7	3.0kw				
		3-7	4	2.2kw				
TUR-30	TUL-30	5-10	12	5.5kw	200-400	0.423	42.3	2"-DN50
		5-10	8	4.0kw				
		5-10	4	3.0kw				
TUR-35	TUL-35	6.5-13	10	5.5kw	200-400	0.53	53	2.5"
		6.5-13	7	4.0kw				
		6.5-13	3	3.0kw				
TUR-55	TUL-55	7-14	12	7.5kw	200-400	0.602	60.2	DN65
		7-14	9	5.5kw				
		7-14	6	4.0kw				
TUR-60	TUL-60	7-14	3	3.0kw	200-400	0.665	66.5	3"
		8-16	10	7.5kw				
		8-16	7	5.5kw				
TUR-70	TUL-70	8-16	5	4.0kw	200-400	1.524	152.4	3"
		8-16	3	3.0kw				
		15-31	9	7.5kw				
TUR-80	TUL-80	15-31	5	5.5kw	200-400	1.583	158.3	DN80
		20-40	7	7.5kw				
		20-40	4	5.5kw				
TUR-100	TUL-100	25-50	6	7.5kw	200-400	1.056	105.6	4"-D100
		25-50	3	5.5kw				

Note: Flow rate is according to 3-leaves rotor, for flow rate of other rotor, please contact Donjoy for details.

HYGENIC LOBE ROTOR PUMPS

Continuously Variable Transmission Lobe Pump



Description:
Continuously motor frequency adjustment rotor pump which is equipped with variable frequency motor, using the frequency converter to adjust the motor to change the motor output speed, to regulate flow of stepless effects, its regulation and flow are intuitive and precise.

TUR-TUL Series selection table

50Hz/60Hz N-200-1000Min

Model	Flow rate(m ³ /h)	(BAR) Pressure	(kw) Motor Power	(Min-1) Recommend rotate speed	Flow per Rotate	Flow per 100 Rotate	Inlet & Outlet Size
TUR-20	0.6-3	12	1.5kw	100-450	0.137	13.7	1"-DN25
	0.6-3	9	1.1kw				
	0.6-3	5	0.75kw				
TUR-23	1.1-5	12	3.0kw	100-450	0.194	19.4	1.5"-DN40
	1.1-5	9	2.2kw				
	1.1-5	5	1.5kw				
TUR-25	1.5-7	10	4.0kw	100-450	0.273	27.3	2"-DN50
	1.5-7	7	3.0kw				
	1.5-7	4	2.2kw				
TUR-30	2.6-10	12	5.5kw	100-400	0.423	42.3	2"-DN50
	2.6-10	6	4.0kw				
	2.6-10	4	3.0kw				
TUR-35	3.25-13	10	5.5kw	100-400	0.53	53	2.5"
	3.25-13	7	4.0kw				
	3.25-13	3	3.0kw				
TUR-55	3.5-14	12	7.5kw	100-400	0.602	60.2	DN65
	3.5-14	9	5.5kw				
	3.5-14	6	4.0kw				
TUR-60	4-16	10	7.5kw	100-400	0.665	66.5	3"
	4-16	7	5.5kw				
	4-16	5	4.0kw				
TUR-70	4-16	3	3.0kw	100-400	1.524	152.4	3"
	7.5-31	12	11kw				
	7.5-31	9	7.5kw				
TUR-80	7.5-31	5	5.5kw	100-400	1.583	158.3	DN80
	10-40	10	11kw				
	10-40	7	7.5kw				
TUR-100	10-40	4	5.5kw	100-400	1.956	195.6	4"-DN100
	12.5-50	10	11kw				
	12.5-50	6	7.5kw				
TUR-125	12.5-50	3	5.5kw	100-400	2.487	248.7	5"-DN125
	15.5-62	10	15kw				
	15.5-62	7	11kw				
	15.5-61	4	7.5kw				

Note: Flow rate is according to 3-leaves rotor, for flow rate of other rotor, please contact Dorjoy for details.

HYGENIC LOBE ROTOR PUMPS

Fixed Speed Output Reducer Lobe Pump



Description:

Fixed speed output reducer:the structure of the rotor pump is equipped with a fixed speed output transmission, its speed is not regulated, the output flow rate is certain, also can not be adjusted. Its structural characteristics is high torque,perfect for transfer of viscous material.

Series selection table

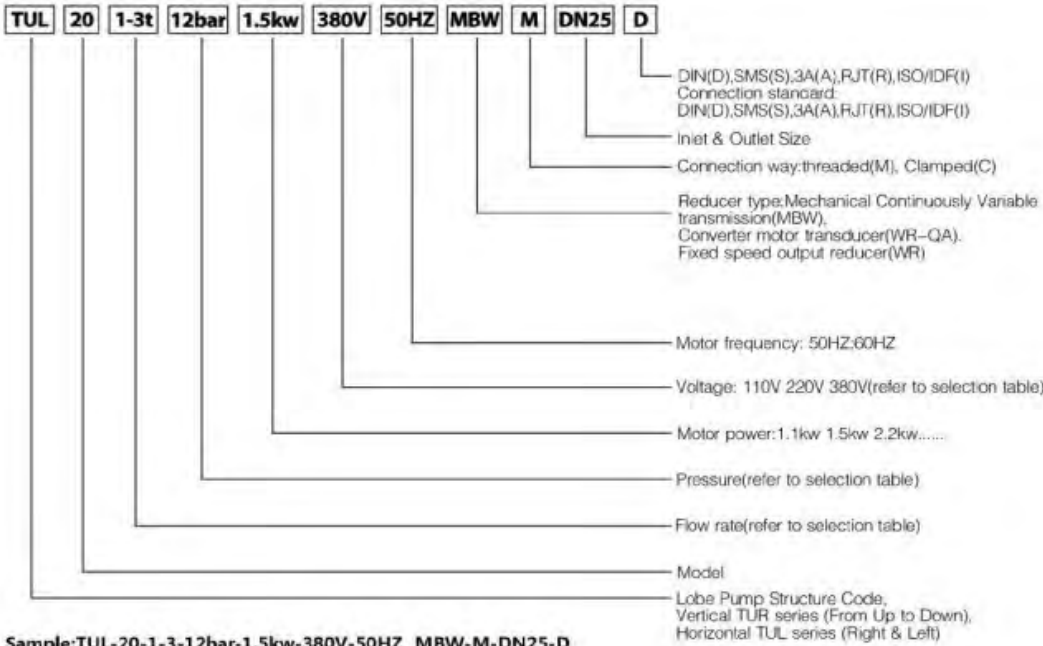
50Hz/60Hz N-50-800Min

Model	Flow rate(m ³ /h)	(BAR) Pressure	(kw) Motor Power	(Min-1) Recommend rotate speed	Flow per Rotate	Flow per 100 Rotate	Inlet & Outlet Size	
TUR-20	TUL-20	1.5	12	1.5kw	250	0.137	13.7	1"-DN25
		1.5	9	1.1kw				
		1.5	5	0.75kw				
TUR-23	TUL-23	2.8	12	3.0kw	250	0.194	19.4	1.5"-DN40
		2.8	9	2.2kw				
		2.8	5	1.5kw				
TUR-25	TUL-25	3.8	10	4.0kw	250	0.273	27.3	2"-DN50
		3.8	7	3.0kw				
		3.8	4	2.2kw				
TUR-30	TUL-30	6.5	12	5.5kw	250	0.423	42.3	2"-DN50
		6.5	9	4.0kw				
		6.5	4	3.0kw				
TUR-35	TUL-35	8.2	10	5.5kw	250	0.53	53	2.5"
		8.2	7	4.0kw				
		8.2	3	3.0kw				
TUR-55	TUL-55	8.9	12	7.5kw	250	0.602	60.2	DN65
		8.9	9	5.5kw				
		8.9	6	4.0kw				
TUR-60	TUL-60	9.8	10	7.5kw	250	0.665	66.5	3"
		9.8	7	5.5kw				
		9.8	5	4.0kw				
TUR-70	TUL-70	9.8	3	3.0kw	200	1.524	152.4	3"
		16.0	12	11kw				
		16.0	9	7.5kw				
TUR-80	TUL-80	20.0	10	11kw	200	1.956	195.6	DN80
		20.0	7	7.5kw				
		20.0	4	5.5kw				
TUR-100	TUL-100	25.0	10	11kw	200	1.956	195.6	4"-D100
		25.0	6	7.5kw				
		25.0	3	5.5kw				
TUR-125	TUL-125	32.0	10	15kw	200	2.487	248.7	5"-D125
		32.0	7	11kw				
		32.0	4	7.5kw				

Note: Flow rate is according to 3-leaves rotor,for flow rate of other rotor,Please contact Donjoy for details.

HYGENIC LOBE ROTOR PUMPS

Model Instruction Of Lobe Pump



Sample: TUL-20-1-3-12bar-1.5kw-380V-50HZ MBW-M-DN25-D





CENTRIFUGAL PUMPS (BS SERIES)



CENTRIFUGAL PUMPS (BS SERIES)



BS Series Centrifugal pump

- BS Series centrifugal pump is designed with close impeller, widely used in dairies, beverage, food-processing industry.
- The correct direction of rotation of this pump is clockwise, it is not allowed to turn reverse rotation.
- The direction of rotation can be viewed from motor.

Technical specifications

- Max.Flow: 40m³/h
- Max.Head: 36HM)
- Max.Rev: 3600Min-1
- Max.working temperature: 120°C/248°F((CIP/SIP)
- Material in contacting with products: SS304/316
- Other parts: SS304
- Mechanical seal: SIC/SIC/EPDM(standard)
- Surface finish: Mirror or satin polish
- Inlet & Outlet: Connection Clamp (Standard)

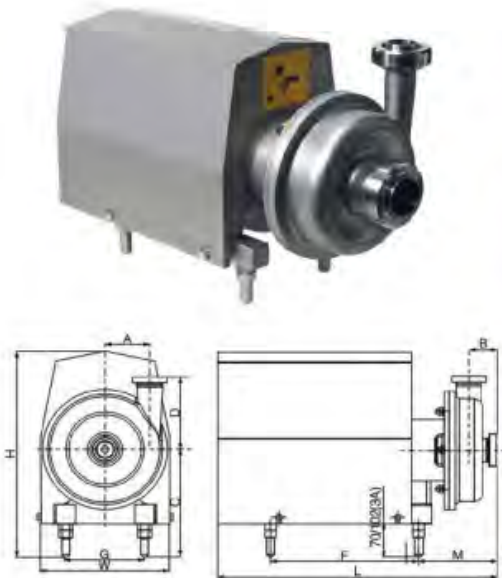
Motor the IEC EN IE2(Equivalent to China two energy efficiency), PTC thermistor

Wide input range motor

(kw) Power	Voltage	(kw) Power	Voltage
0.55		4	
0.75		5.5	
1.1	210V-230V/50HZ	7.5	380V-400V/50HZ
1.5	380V-400V/50HZ	11	630V-690V/50HZ
2.2	420V-480V/60HZ	15	420V-480V/60HZ
3		18.5	
		30	

Please contact Donjoy for any other voltage or frequency of motor.

CENTRIFUGAL PUMPS (BS SERIES)



Centrifugal pump BS Series selection table

Model	Flow rate(m ³ /h)	Discharge head(M)	Power (kw)	Inlet & Outlet Size
BS-2	3	16	0.75kw	1.5/1.5"
	5	18	1.1kw	1.5/1.5"
BS-4	3	24	1.5kw	1.5/1.5"
	6	20	1.5kw	2/1.5"
	5	24	1.5kw	2/1.5"
	10	19	1.5kw	2/1.5"
	10	20	1.5kw	2/1.5"
	10	24	2.2kw	2/1.5"
	15	18	2.2kw	2/1.5"
BS-6	15	20	2.2kw	2/1.5"
	20	16	2.2kw	2/1.5"
	3	30	2.2kw	2/1.5"
	5	30	2.2kw	2/1.5"
	10	30	2.2kw	2/1.5"
BS-8	10	36	3.0kw	2/1.5"
	15	24	3.0kw	2/2"
BS-10	20	24	3.0kw	2/2"
	15	30	4.0kw	2/2"
BS-12	15	36	4.0kw	2/1.5"
	20	30	4.0kw	2/1.5"
	20	36	5.5kw	2/1.5"
BS-12	30	24	5.5kw	2/1.5"
	30	30	5.5kw	2/1.5"
	30	36	7.5kw	2.5/2"
	40	24	7.5kw	2.5/2"

Attention: Please refer to selection table for details of next page, the size in the following form is the reference value, the actual size is subjected to actual object.

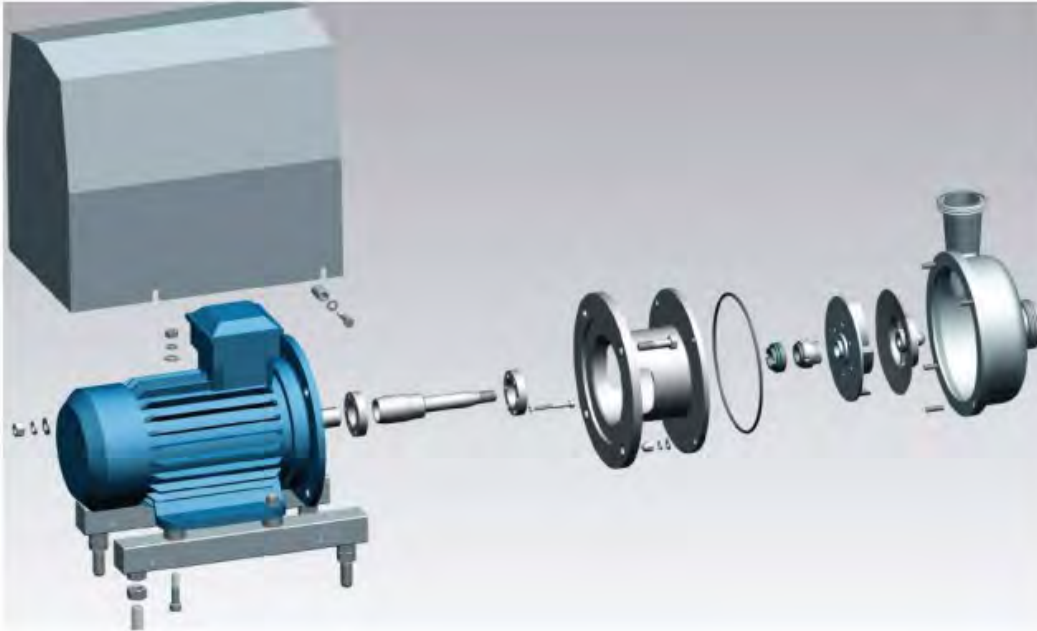
BS Series pump installation dimension drawing

Model	Pump Dimension						Assembly Dimension										3A	
	Power (kw)	Inlet d /DN	Outlet d /DN	±P	Lp	Mechanical seal size	A	B	C	D	M	F	G	H	L	W	C	H
BS-2	0.75	1.5/32	1.5/32	174	68	22	56	51	200	136	162	203	125	370	448	210	212	402
	1.1	1.5/32	1.5/32	174	68	22	56	51	200	136	162	203	125	370	448	210	212	402
BS-4	1.5	1.5/32	1.5/40	215	75	22	76	59	190	151	174	240	140	360	514	210	222	392
	2.2	2/50	1.5/40	215	75	22	76	59	190	142	174	300	140	380	514	210	222	392
BS-6	2.2	2/50	1.5/40	234	83	22	86	70	190	173	188	300	160	420	528	260	242	452
	3	2/50	1.5/40	234	83	22	86	70	230	173	180	300	160	420	578	260	242	452
BS-8	3	2/50	2/50	243	85	22	86	70	230	173	180	300	180	430	578	260	244	462
	4	2/50	2/50	243	85	22	86	70	222	173	187	300	190	430	606	260	244	462
BS-12	5.5	2/50	2/50	243	85	22	86	70	242	167	216	330	216	460	680	310	274	492
	7.5	2.5/65	2/50	243	85	22	86	70	24	167	216	330	216	460	680	310	274	492

Options

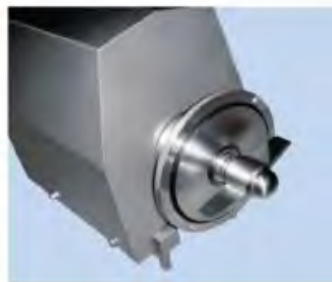
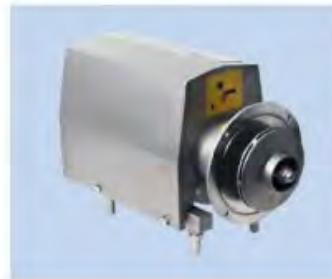
- Low discharge in the pump head:
Diaphragm valve/ball valve/butterfly valve
- Mechanical seal: C/SIC/EPDM
- Connection way of Inlet & Outlet: Thread, Weld, Flange

CENTRIFUGAL PUMPS (BS SERIES)

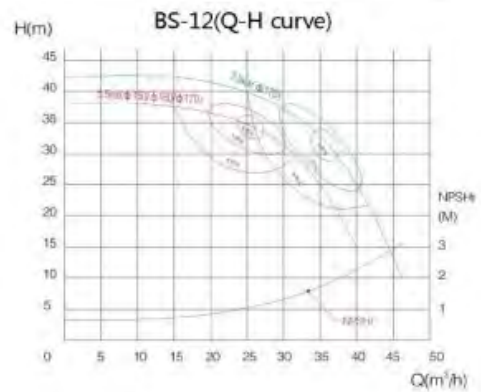
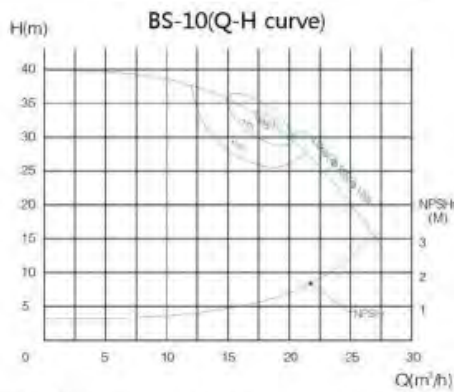
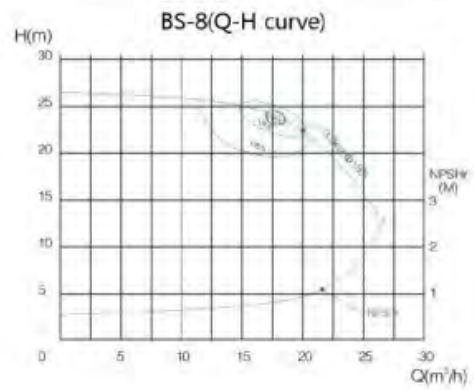
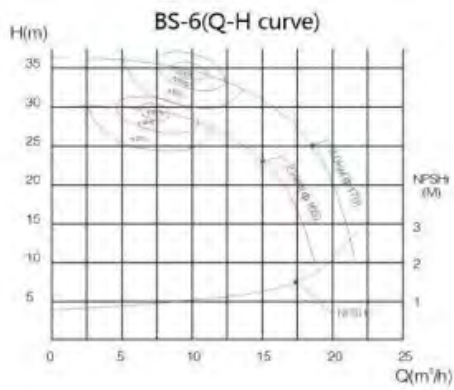
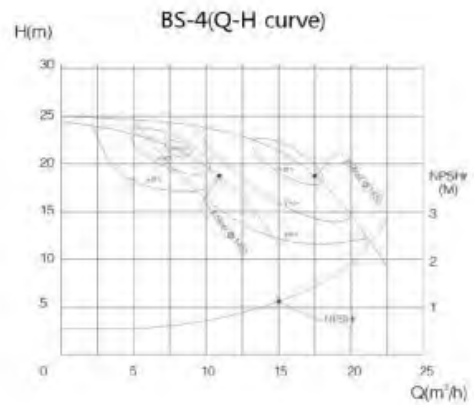
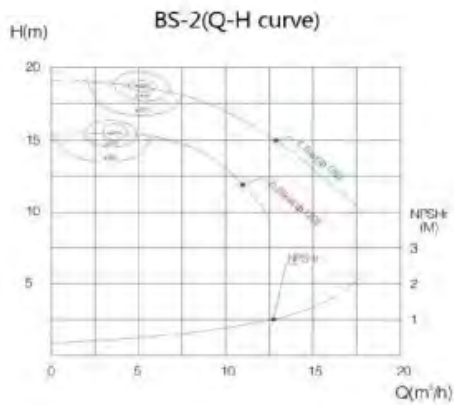


Design and features

- Casing manufactured with cold-formed plate. Open impeller and close impeller manufactured with stainless steel investment casting.
- Mechanical seal according to DIN 2946L1K.
- Adjustable stainless steel legs. Pump designed according to 3A sanitary standards. ICE B34 motors, Ip55, F-class insulation, 50HZ.



CENTRIFUGAL PUMPS (BS SERIES)



Note: Test condition is pure water, 20°C temperature, impeller speed 2900R.P.M.



ΕΠΙΣΗΜΟΣ ΑΝΤΙΠΡΟΣΩΠΟΣ ΘΕΣΣΑΛΙΑΣ:



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