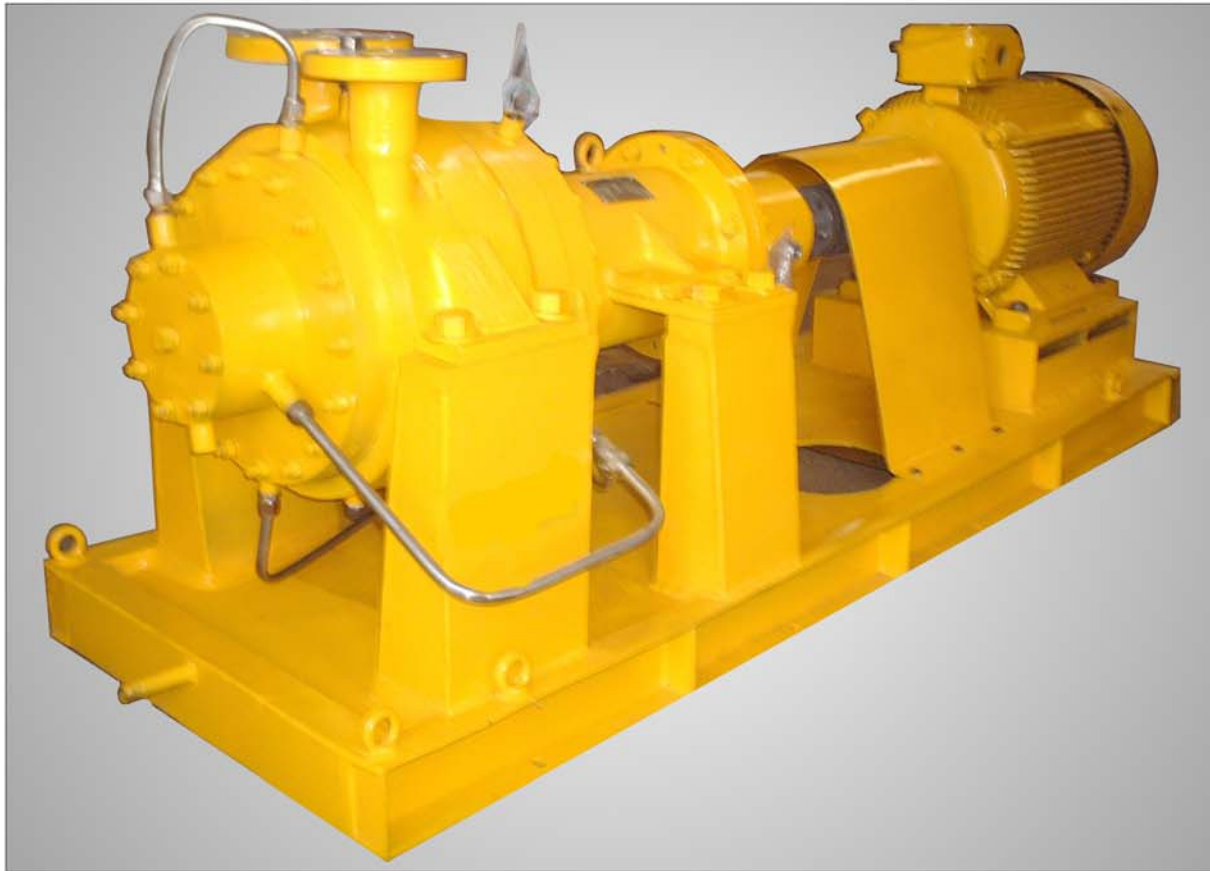


Magnetic Drive Sealless Pumps - Centrifugal (API 685)



PRODUCT OVERVIEW

The Pumps offered are for refineries and the petrochemical industry designed & developed with a range of Synchronous Magnetic Drives without shaft seals rated to match motor performance.

The construction of the pumps with Magnetic Drives eliminating the shaft seal guarantees that the pump is absolutely leak free and maintenance free in operation compared to the mechanical seal version.

The API Series covers the complete performance range of single-stage centrifugal pump. Multistage pumps and pumps constructed for high pressure operation are also available as special designs.

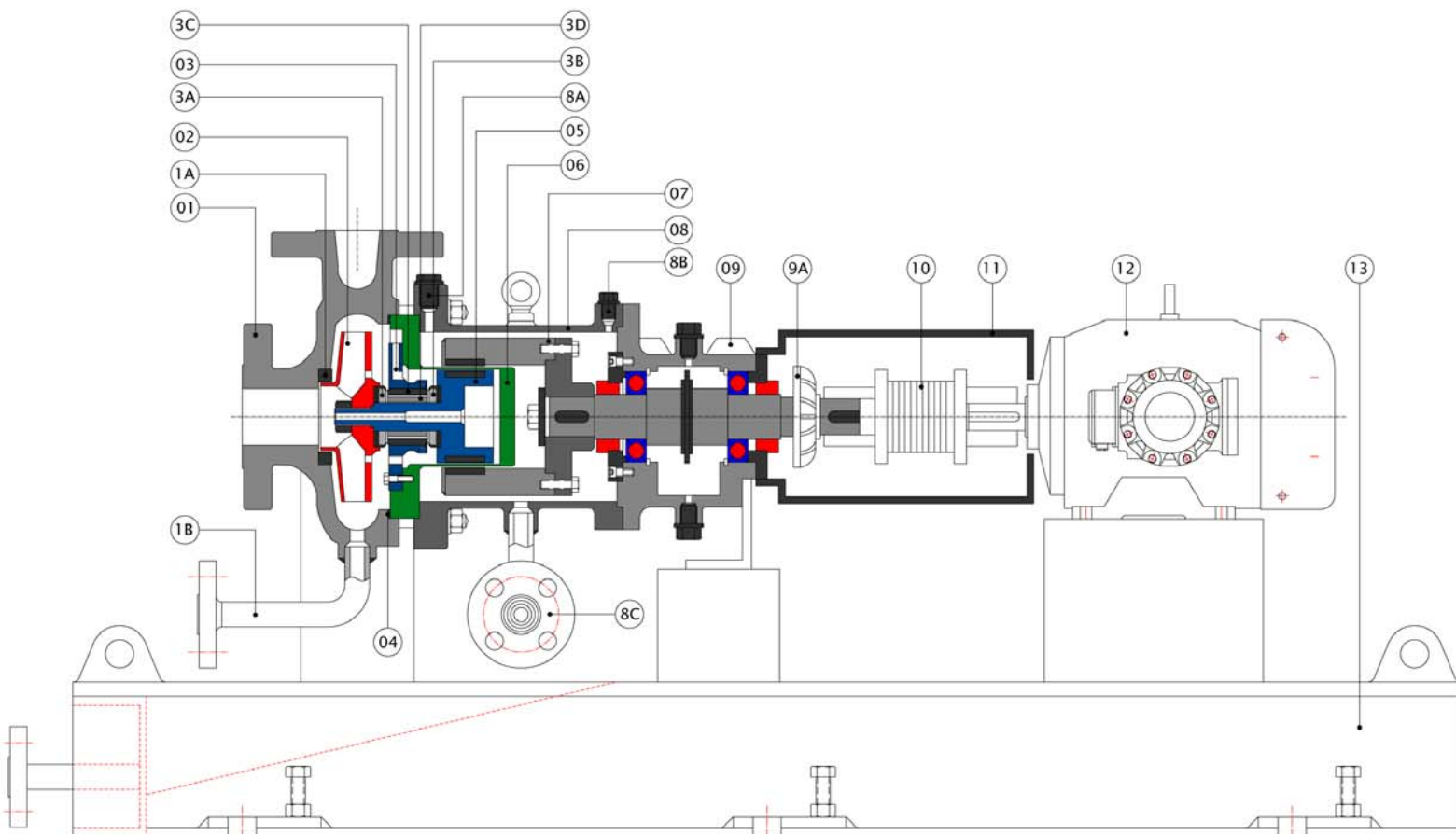
Pumps are constructed with single fully trapped gasket sealing.

RANGE

Head M	Flow M ³ /hr	Temp. °C	Sys. Pressure Bar	Mounting
From 15 - 200	From 2 - 300	-80 to +350	Up to 150	Separate Mounted



Construction



Casing and intermediate lantern

- 01 **(API-§ 6.3.8)**
Centrelined Design
- 01A **Wear rings (API-§ 6.7)**
Replaceable on the impeller and in the casing
- 01B **Casing drain (API-§ 6.4.3)**
With flange
- 02 **Impeller**
- 03 **Bush Bearing Holder**
Thrust bearing (API-§ 6.10)
- 03A & B Thrust bearing made of silicon carbide (SSiC);
Hydraulic measures reduce axial thrust
- 03C **Bush bearing (API-§ 6.10)**
Bush bearing made of silicon carbide (SSiC);
- 03D **Journal bearing (API-§ 6.10)**
Journal bearing made of silicon carbide (SSiC);
- 04 **Gasket (API-§ 6.3.5)**
On the Casing & Drive Housing placed in shunt
- 05 **Inner magnet carrier (API-§ 9.1.3.3)**
Isolation Shell (API-§ 3.66/3.64)
- 06 Single isolation shell with leakage monitoring
and drain
- 07 **Outer Magnetic Carrier (API-§ 9.1.3.3)**

Drive Housing (API-§ 3.66/3.64)

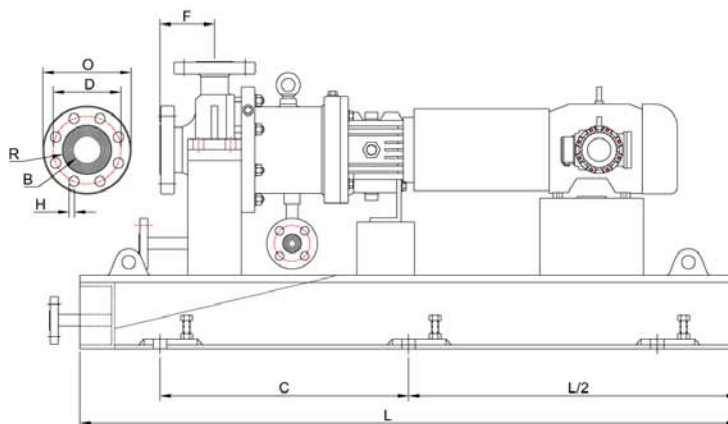
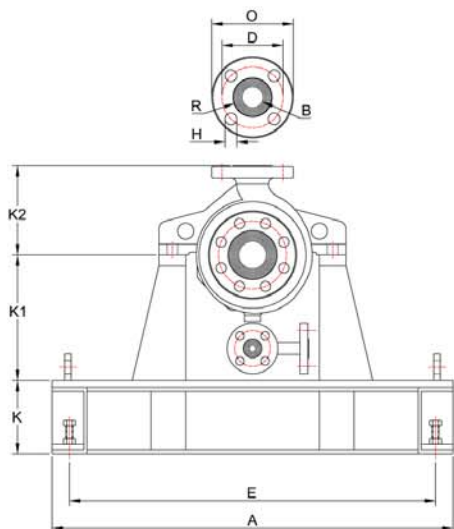
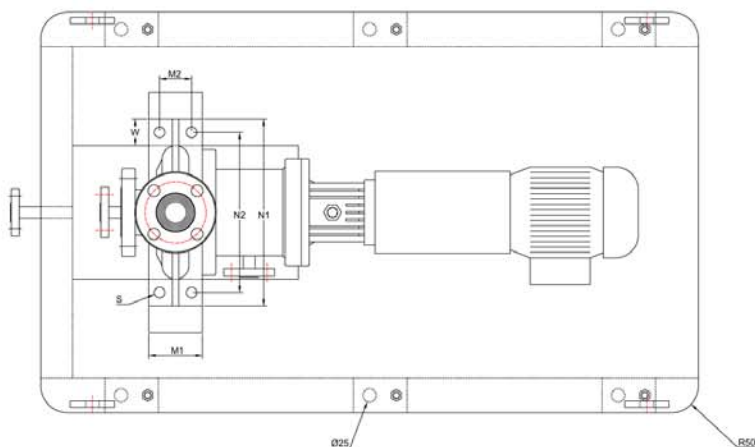
- 08, A, B, C Secondary sealing with leakage monitoring,
drain and Temperature Sensing Provision
- 09, A **Bearing support (API-§ 9.1.4)**
Oil lubrication with labyrinth sealing & Air cooled
- 10 **Coupling**
Metaflex - with flexible metal membrane
- 11 **Coupling Guard**
- 12 **Motor**
Standard
- 13 **Base Plate**
Asper API 610

Dimensional Details

FLANGES AS PER ANSI B-16.5 CLASS - 300							
SIZE (NB)	O	R	D	H	no. of H	T(min.)	B
1.00"	4.88	2.0	3.50	0.75	4	0.69	1.00
1.25"	5.25	2.5	3.88	0.75	4	0.75	1.25
1.50"	6.12	2.88	4.50	0.88	4	0.81	1.50
2.00"	6.50	3.62	5.00	0.75	8	0.88	2.00
3.00"	8.25	5.00	6.62	0.88	8	1.12	3.00
4.00"	10.0	6.19	7.25	0.88	8	1.25	4.00
6.00"	12.5	8.50	10.62	0.88	12	1.44	6.00

NOTE : * DIMENSIONS ARE IN INCHES

* 1.5 MM RAISED FLANGED FOR ALL FLANGES



PUMP TYPE	CONNECTION FLANGES (ANSI-300)		BASE PLATE NO. REF. TABLE M-1 API - 610	PUMP DIMENSIONS IN MM															
	SUCTION	DISCHARGE		K	K1	K2	F	N1	N2	M1	M2	W	S	A	E	L	L/2	C	
1.5" x 1.0" x 6"	1.5"	1.0"	0.5	135	235	165	102	350	300	100	60	50	20	750	685	1230	615	465	
2.0" x 1.5" x 6"	2.0"	1.5"	0.5	135	235	165	102	350	300	100	60	50	20	750	685	1230	615	465	
3.0" x 2.0" x 6"	3.0"	2.0"	1.0	135	250	205	125	400	350	100	60	50	20	750	685	1530	765	615	
1.5" x 1.0" x 8"	1.5"	1.0"	1.0	135	250	205	102	400	350	100	60	50	20	750	685	1530	765	615	
3.0" x 1.5" x 8"	3.0"	1.5"	1.0	135	250	205	125	400	350	100	60	50	20	750	685	1530	765	615	
3.0" x 2.0" x 8"	3.0"	2.0"	1.5	165	250	205	125	400	350	100	60	50	20	750	685	1840	920	770	
3" x 1.5" x 10"	3.0"	1.5"	1.5	165	300	225	125	475	425	125	85	50	20	750	685	1840	920	770	
3" x 2.0" x 10"	3.0"	2.0"	1.5	165	300	225	125	490	440	125	85	50	20	750	685	1840	920	770	
4" x 3.0" x 8"	4.0"	3.0"	2.0	165	250	250	125	470	410	125	85	60	20	750	685	2150	1075	920	
4" x 3.0" x 10"	4.0"	3.0"	2.0	165	300	250	125	470	410	125	85	60	20	750	685	2150	1075	920	

Typical Applications

Specifying the best pump for any application requires a detailed technical understanding of the process involved

SANDO has always operated on the basis of an intensive and continuing dialogue with our customers, we regard the free flow of information in both direction to be of paramount importance

Typical liquids pumped:

Acids, Alcohols, Alkalies, Halogenides, Heat Transfer fluids, Hydrocarbons, Salts, Solvents, Oils etc.

Other Sando Products

SANDO with presence in all the sectors of the Pharmaceutical, Bulk Drug & Chemical has learned that most of the clients require a partner for their success rather than a good supplier. Hence, SANDO has invested a great deal of their effort, time and experience to be a partner in the endeavors of its clients by supplying equipments for Aseptic & High Purity Processes, Bulk Drug Processes, Chemical & petrochemical processes.

SANDO PRODUCT RANGE

BAGI Mixers	<i>Magnetic Drive Bottom Mounted Mixers</i>
BAGI Mixers (CM)	<i>Magnetic Drive Bottom Centre Mounted Mixers</i>
BAGI Homogenizers	<i>Magnetic Drive Bottom Mounted Homogenizers</i>
MDTA Agitator Drives	<i>Top Mounted Magnetic Agitator Drives - Process Scale</i>
MDLA Mixers	<i>Magnetic Drive Mixers for Lab Reactors</i>
Inline Homogenizers	<i>Magnetic Drive In Line Homogenizers</i>
Pumps	<i>Magnetic Drive Pumps</i>
Pressure Reactor System	<i>Pressure Reactors with Magnetic Mixers</i>

