

Sanitary Centrifugal Pump

Application

MEL Sanitary Centrifugal Pump series is widely used in the transportation of liquid materials in dairy, beer, beverage, pharmaceutical and chemical industries.

Features and advantages

MEL Sanitary Centrifugal Pump series features single-stage, single suction and open-style impeller. The casing, impeller and back plate are well designed to reduce resistance, eliminate dead space and quicken the flow in the pump, thus to improve its overall performance. The open-style impeller ensures the best cleanability (CIP) and outstanding Sanitary performance. There are still other advantages such as stability, high efficiency and easy maintenance. Furthermore, Adjustable supporting legs, any angle that the outlet can be positioned, all these provide convenience of installation and operation.

Shaft Seal

MEL Sanitary Centrifugal Pump series adopts mechanical seal that provides the advantages of good sealing performance, self-lubricity, resistance to wear, high temperature and corrosion; leakage-free, easy installation and disassembly. Both single and double end face mechanical seal are available, and both with water flush. All the parts of mechanical seal are easy to be replaced and maintained, cost-effective and interchangeable to prolong the service life of the pump.

Material

Medium-contacting Parts : 304 or 316L stainless steel

Other parts: 304 stainless steel

Auxiliary seal: EPDM, VMQ, FKM, PTFE

Machinery sealed material: C-SiC

SiC-SiC

TC-TC

Surface treatment

Medium-contacting Parts: polishing, $Ra \leq 0.8\mu\text{m}$, other parts: matt or sandblasting $1.6\mu\text{m}$.

For higher cleanliness requirements, the over-liquid will be partially polished by $0.4\mu\text{m}$.

Technical parameters

Max. inlet pressure: 0.5MPa

Temperature range: $-10\text{ }^\circ\text{C} \sim +140\text{ }^\circ\text{C}$ (EPDM)

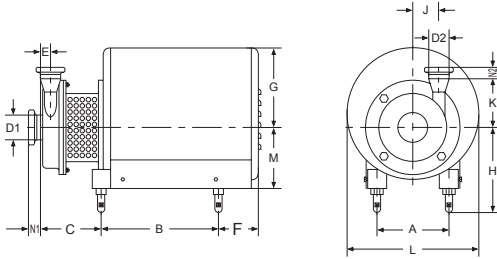
Flushable mechanical seal:

Water pressure: max 0.1MPa

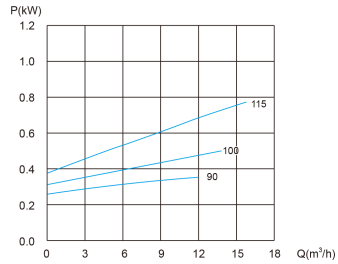
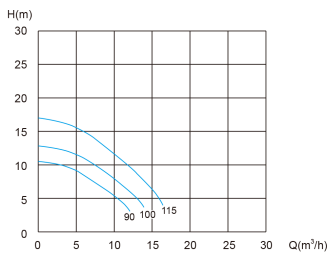
Flow rate: 0.25 ~0.5L/min

MEL-1

Sanitary Centrifugal Pump



Performance Curve



MEL-1 Dimensions

Size	Motor Power	
	0.55KW	0.75KW
A	112	125
B	210	240
C	81	96
E	23	23
F	85	90
G	114	122
H max	170	180
H min	140	150
J	51	51
K	115	115
L	240	240
M	95	108

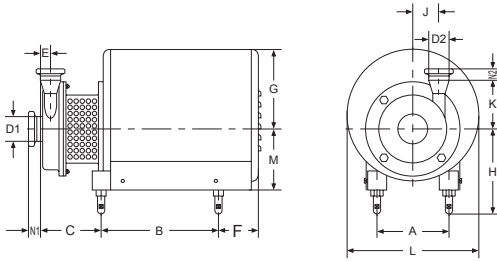
Size	ISO Clamp End	DIN Clamp End	SMS Male Part	DIN Male Part	ISO Flange	DIN Flange
D1	38.1	40	38.1	40	38.1	40
D2	25.4	25	25.4	28	25.4	28
N1	21.5	21.5	20	22	25	24
N2	21.5	21.5	15	22	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 115mm	Inlet Diameter: Φ38.1 DN40
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 90mm	Outlet Diameter: Φ25.4 DN25

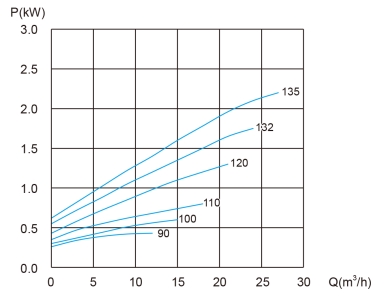
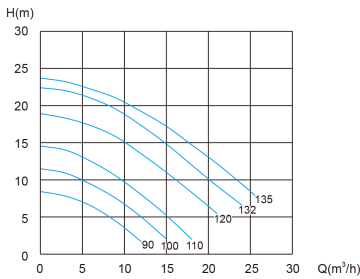
Safety tolerance should be reserved when selecting motor power

MEL-5

Sanitary Centrifugal Pump



Performance Curve



MEL-5 Dimensions

Size	Motor Power				
	0.55KW	0.75KW	1.1KW	1.5KW	2.2KW
A	112	125	125	140	140
B	230	240	230	260	260
C	113	130	130	117	117
E	21	21	21	21	21
F	85	90	90	109	109
G	140	122	122	165	165
H max	170	180	180	190	190
H min	140	150	150	160	160
J	80	80	80	80	80
K	102	102	102	102	102
L	240	240	240	278	278
M	95	108	108	120	120

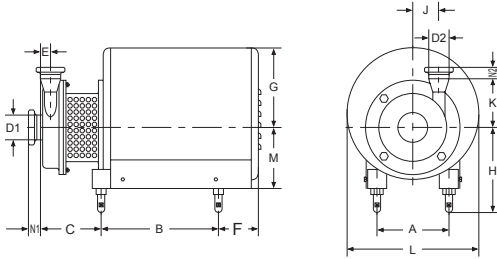
Size	Clamp End		Male Part		Flange	
	ISO	DIN	SMS	DIN	ISO	DIN
D1	50.8	52	50.8	52	50.8	52
D2	38.1	40	38.1	40	38.1	40
N1	21.5	21.5	20	23	25	24
N2	21.5	21.5	20	22	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 135mm	Inlet Diameter: Φ50.8 DN50
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 90mm	Outlet Diameter: Φ38.1 DN40

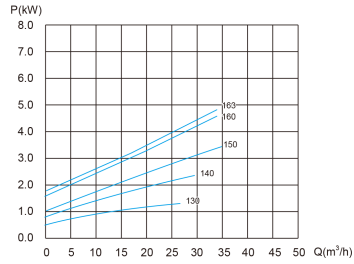
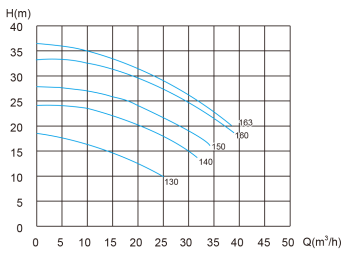
Safety tolerance should be reserved when selecting motor power

MEL-10

Sanitary Centrifugal Pump



Performance Curve



MEL-10 Dimensions

Size	Motor Power				
	1.5KW	2.2KW	3KW	4KW	5.5KW
A	140	140	170	190	218
B	260	260	280	290	340
C	91	91	107	114	165
E	26	26	26	26	26
F	109	109	142	125	166
G	165	165	210	210	215
H max	190	190	200	210	220
H min	160	160	170	180	190
J	81	81	81	81	81
K	156	156	156	156	156
L	278	278	348	348	378
M	120	120	148	145	175

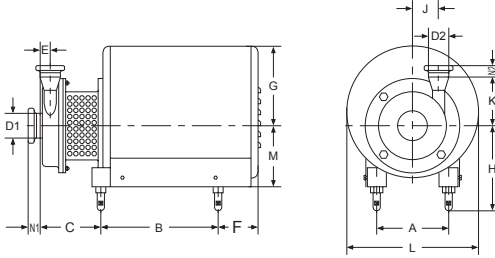
Size	Clamp End					
	ISO	DIN	SMS	DIN	ISO	DIN
D1	63.5	70	63.5	70	63.5	70
D2	50.8	52	50.8	52	50.8	52
N1	21.5	21.5	24	25	25	24
N2	21.5	21.5	20	23	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 163mm	Inlet Diameter: Φ63.5 DN65
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 130mm	Outlet Diameter: Φ50.8 DN50

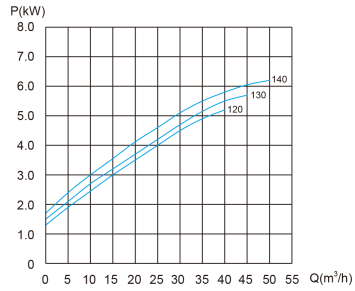
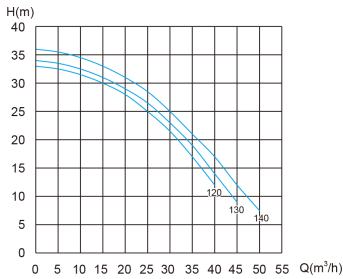
Safety tolerance should be reserved when selecting motor power

MEL-15

Sanitary Centrifugal Pump



Performance Curve



MEL-15 Dimensions

Size	Motor Power		
	3KW	4KW	5.5KW
A	170	190	216
B	269	269	328
C	148	155	176
E	43	43	43
F	116	116	160
G	210	210	215
H max	240	240	260
H min	210	210	230
J	88	88	88
K	145	145	145
L	348	348	378
M	140	152	182

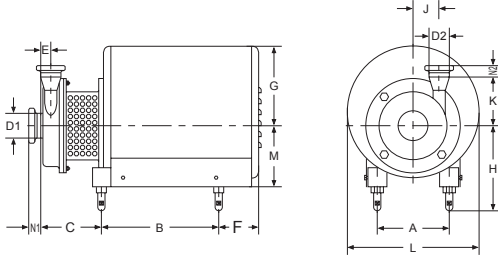
Size	ISO Clamp End	DIN Clamp End	SMS Male Part	DIN Male Part	ISO Flange	DIN Flange
D1	101.6	104	101.6	104	101.6	104
D2	76.1	85	76.1	85	76.1	85
N1	28	28	35	30	25	24
N2	21.5	21.5	24	30	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 140mm	Inlet Diameter: Φ101.6 DN100
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 120mm	Outlet Diameter: Φ76.1 DN80

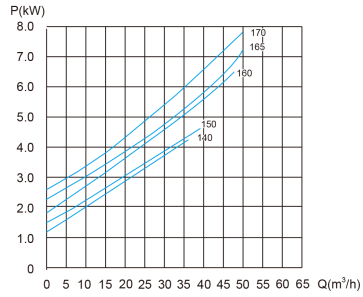
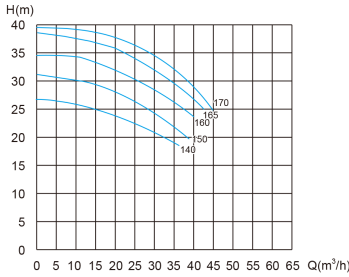
Safety tolerance should be reserved when selecting motor power

MEL-20

Sanitary Centrifugal Pump



Performance Curve



MEL-20 Dimensions

Size	Motor Power			
	3KW	4KW	5.5KW	7.5KW
A	170	190	218	218
B	280	290	340	340
C	112	119	170	170
E	26	26	26	26
F	142	109	166	166
G	210	210	215	215
H max	200	200	220	220
H min	170	170	190	190
J	82	82	82	82
K	158	158	158	158
L	348	348	378	378
M	148	145	175	175

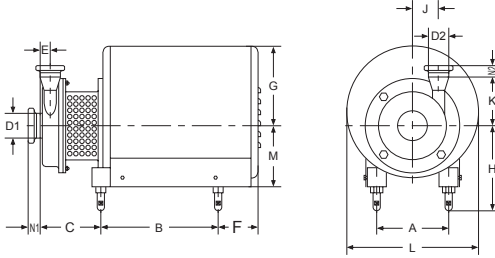
Size	ISO		DIN		SMS	
	Clamp End	Clamp End	Clamp End	Clamp End	Male Part	Male Part
D1	63.5	70.0	63.5	70	63.5	70
D2	50.8	52.0	50.8	52	50.8	52
N1	21.5	21.5	24.0	25	25	24
N2	21.5	21.5	20.0	23	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 170mm	Inlet Diameter: Φ63.5 DN65
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 140mm	Outlet Diameter: Φ50.8 DN50

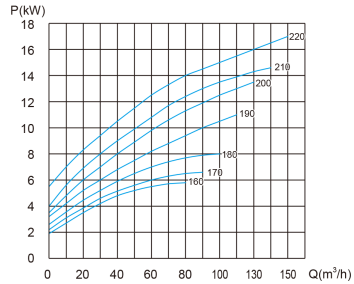
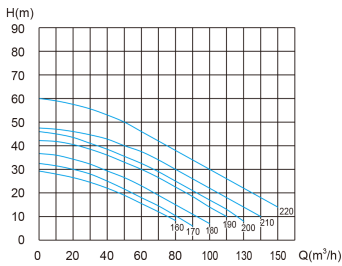
Safety tolerance should be reserved when selecting motor power

MEL-25

Sanitary Centrifugal Pump



Performance Curve



MEL-25 Dimensions

Size	Motor Power				
	4KW	5.5KW	7.5KW	11KW	15KW
A	190	218	218	254	254
B	290	340	340	410	410
C	114	165	165	253	253
E	14.5	14.5	14.5	14.5	14.5
F	109	166	166	158	158
G	210	215	215	270	270
H max	200	220	220	280	280
H min	170	190	190	250	250
J	106	106	106	106	106
K	182	182	182	182	182
L	348	378	378	453	453
M	145	175	175	210	210

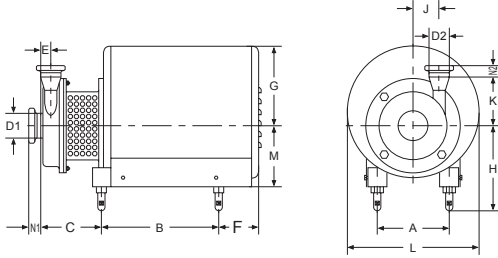
Size	ISO	DIN	SMS	DIN	ISO	DIN
	Clamp End	Clamp End	Male Part	Male Part	Flange	Flange
D1	76.1	85.0	76.1	85	76.1	85
D2	63.5	70.0	63.5	70	63.5	70
N1	21.5	21.5	24.0	26	25	24
N2	21.5	21.5	24.0	26	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 220mm	Inlet Diameter: Φ76.1 DN80
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 160mm	Outlet Diameter: Φ63.5 DN65

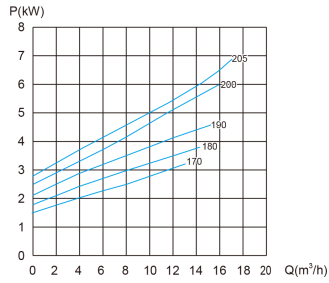
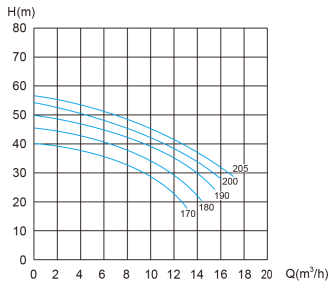
Safety tolerance should be reserved when selecting motor power

MEL-30

Sanitary Centrifugal Pump



Performance Curve



MEL-30 Dimensions

Size	Motor Power				
	2.2KW	3KW	4KW	5.5KW	7.5KW
A	140	170	190	216	216
B	260	280	290	340	340
C	97.5	113.5	120.5	171.5	171.5
E	25	25	25	25	25
F	109	142	125	166	166
G	165	210	210	215	215
H max	190	200	220	220	220
H min	160	170	170	190	190
J	97	97	97	97	97
K	141	141	141	141	141
L	278	348	348	378	378
M	120	140	152	182	182

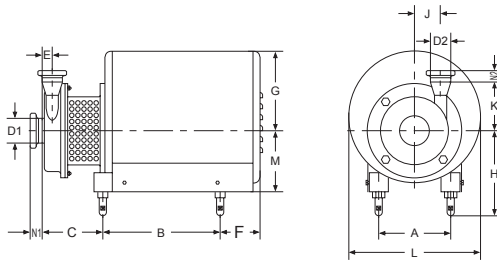
Size	ISO Clamp End	DIN Clamp End	SMS Male Part	DIN Male Part	ISO Flange	DIN Flange
D1	38.1	40	38.1	40	38.1	40
D2	25.4	28	25.4	28	25.4	28
N1	21.5	21.5	20	22	25	24
N2	21.5	21.5	15	22	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 220mm	Inlet Diameter: Φ38.1 DN40
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 170mm	Outlet Diameter: Φ25.4 DN25

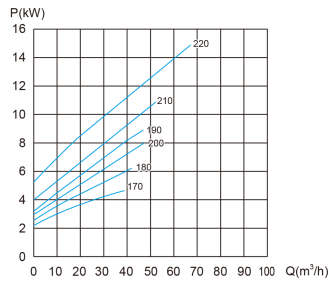
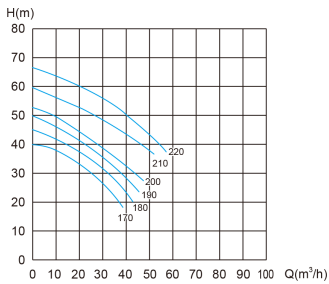
Safety tolerance should be reserved when selecting motor power

MEL-35

Sanitary Centrifugal Pump



Performance Curve



MEL-35 Dimensions

Size	Motor Power				
	4KW	5.5KW	7.5KW	11KW	15KW
A	190	218	218	254	254
B	290	340	340	410	410
C	109	160	160	248	248
E	26	26	26	26	26
F	109	166	166	158	158
G	210	215	215	270	270
H max	200	220	220	280	280
H min	170	190	190	250	250
J	111	111	111	111	111
K	182	182	182	182	182
L	348	378	378	453	453
M	145	175	175	210	210

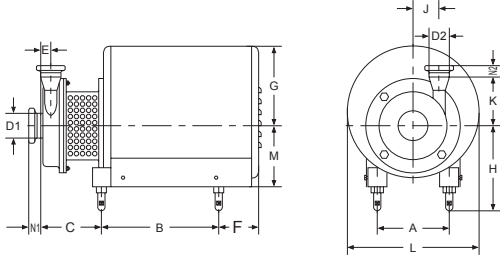
Size	Clamp End		Male Part		Flange	
	ISO	DIN	SMS	DIN	ISO	DIN
D1	63.5	70	63.5	70	63.5	70
D2	50.8	52	50.8	52	50.8	52
N1	21.5	21.5	24	25	25	24
N2	21.5	21.5	20	23	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 220mm	Inlet Diameter: Φ63.5 DN65
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 170mm	Outlet Diameter: Φ50.8 DN50

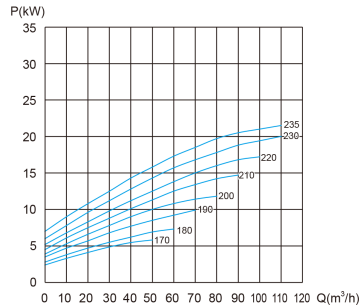
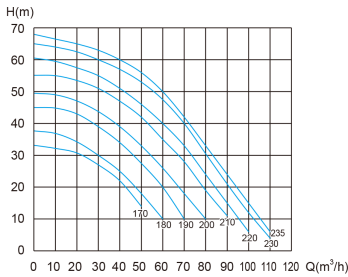
Safety tolerance should be reserved when selecting motor power

MEL-40

Sanitary Centrifugal Pump



Performance Curve



MEL-40 Dimensions

Size	Motor Power				
	7.5KW	11KW	15KW	18.5KW	22KW
A	218	254	254	254	279
B	340	410	410	410	410
C	169	256	256	256	256
E	26.5	26.5	26.5	26.5	26.5
F	166	158	158	158	199
G	215	270	270	270	285
H max	220	280	280	280	300
H min	190	250	250	250	270
J	116.5	116.5	116.5	116.5	116.5
K	203.5	203.5	203.5	203.5	203.5
L	378	453	453	453	470
M	182	210	210	210	230

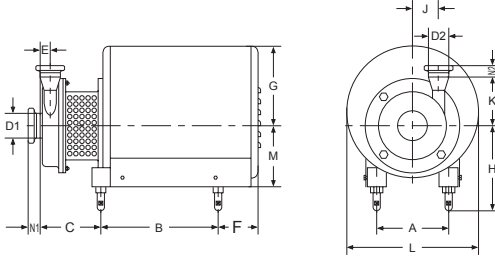
Size	Clamp End		Male Part		Flange	
	ISO	DIN	SMS	DIN	ISO	DIN
D1	76.1	85.0	76.1	85	76.1	85
D2	63.5	70.0	63.5	70	63.5	70
N1	21.5	21.5	24.0	30	25	24
N2	21.5	21.5	24.0	25	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 235mm	Inlet Diameter: Φ76.1 DN80
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 170mm	Outlet Diameter: Φ63.5 DN65

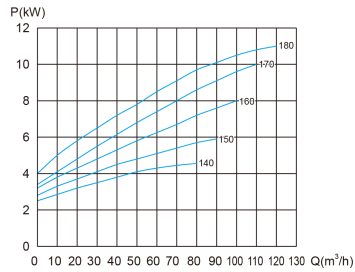
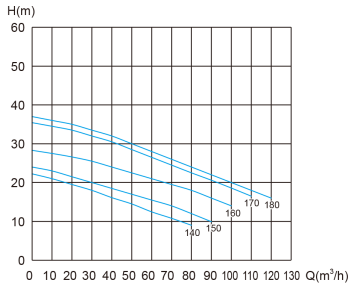
Safety tolerance should be reserved when selecting motor power

MEL-45

Sanitary Centrifugal Pump



Performance Curve



MEL-45 Dimensions

Size	Motor Power		
	4KW	5.5/7.5KW	11/15/18.5KW
A	190	216	254
B	269	330	440
C	155	183	215
E	41	41	41
F	116	160	175
G	210	263	310
H max	240	282	310
H min	210	232	260
J	88	117	117
K	145	194	194
L	348	360	410
M	152	182	210

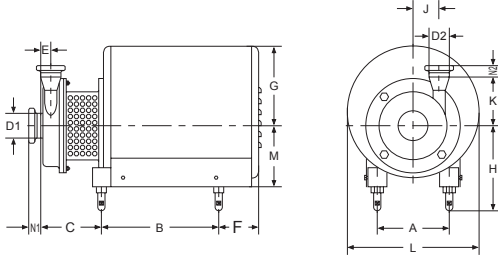
Size	ISO Clamp End	DIN Clamp End	SMS Male Part	DIN Male Part	ISO Flange	DIN Flange
D1	101.6	104.0	101.6	104	101.6	104
D2	76.1	85.0	76.1	85	76.1	85
N1	21.5	28.0	35.0	30	25	24
N2	21.5	21.5	24.0	30	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 180mm	Inlet Diameter: Φ101.6 DN100
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 140mm	Outlet Diameter: Φ76.1 DN80

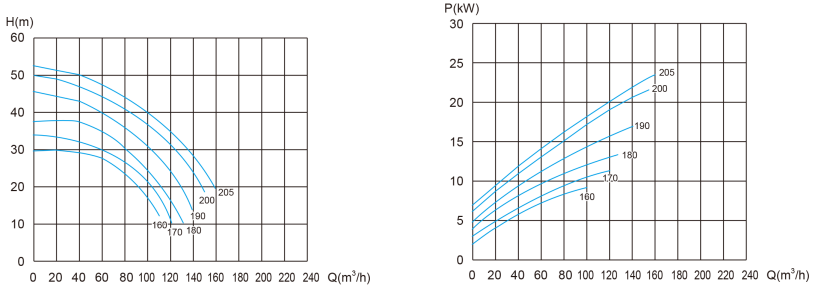
Safety tolerance should be reserved when selecting motor power

MEL-50

Sanitary Centrifugal Pump



Performance Curve



MEL-50 Dimensions

Size	Motor Power		
	5.5/7.5KW	11/15/18.5KW	22KW
A	218	254	279
B	340	410	390
C	168	255	245
E	16.5	16.5	16.5
F	166	158	199
G	215	270	285
H max	220	280	300
H min	190	250	270
J	117.5	117.5	117.5
K	177	177	177
L	378	453	470
M	182	210	230

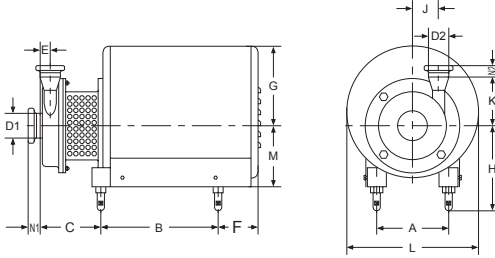
Size	ISO Clamp End	DIN Clamp End	SMS Male Part	DIN Male Part	ISO Flange	DIN Flange
D1	101.6	104	101.6	104	101.6	104
D2	76.1	85	76.1	85	76.1	85
N1	28	28	35	30	25	24
N2	21.5	21.5	24	30	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 205mm	Inlet Diameter: Φ101.6 DN100
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 160mm	Outlet Diameter: Φ76.1 DN80

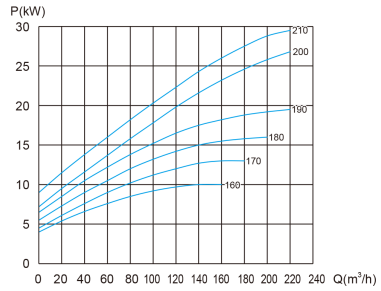
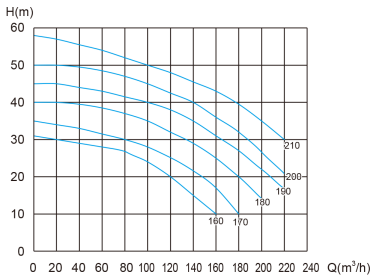
Safety tolerance should be reserved when selecting motor power

MEL-60

Sanitary Centrifugal Pump



Performance Curve



MEL-60 Dimensions

Size	Motor Power			
	5.5/7.5KW	11/15/18.5KW	22KW	30KW
A	218	254	279	318
B	340	410	390	500
C	175	260	245	243
E	20.5	20.5	20.5	20.5
F	166	158	199	215
G	263	310	285	350
H max	220	280	300	330
H min	190	250	270	290
J	101	101	101	101
K	256	256	256	256
L	378	453	470	560
M	182	210	230	260

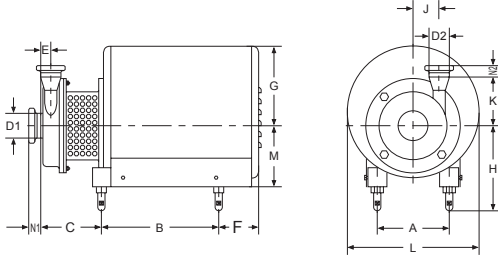
Size	Motor Power					
	ISO Clamp End	DIN Clamp End	SMS Male Part	DIN Male Part	ISO Flange	DIN Flange
D1	101.6	104	101.6	104	101.6	104
D2	101.6	104	101.6	104	101.6	104
N1	28	28	35	40	25	24
N2	28	28	35	30	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 210mm	Inlet Diameter: Φ101.6 DN100
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 160mm	Outlet Diameter: Φ101.6 DN100

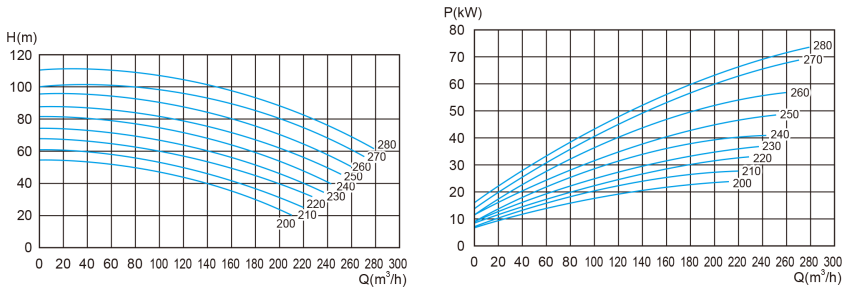
Safety tolerance should be reserved when selecting motor power

MEL-70

Sanitary Centrifugal Pump



Performance Curve



MEL-70 Dimensions

Size	Motor Power				
	18.5KW	22KW	30KW	45KW	55KW
A	254	279	318	356	406
B	410	390	500	510	570
C	232	250	250	300	290
E	15.5	19.5	15.5	15.5	15.5
F	158	199	215	300	300
G	270	285	350	364	405
H max	280	300	330	400	400
H min	250	270	290	360	360
J	139	139	139	139	139
K	268	268	268	268	268
L	453	470	560	600	690
M	210	230	260	285	310

Size	Clamp End		Male Part		Flange	
	ISO	DIN	SMS	DIN	ISO	DIN
D1	101.6	104.0	101.6	104	101.6	104
D2	76.1	85.0	76.1	85	76.1	85
N1	28	28.0	35.0	30	25	24
N2	21.5	21.5	24.0	30	25	24

Medium: 20° clean water	Rotating Speed: 2900r/min	Impeller: Max.Dia.: 280mm	Inlet Diameter: Φ101.6 DN100
Error:±5%	Frequency: 50Hz	Impeller Min.Dia.: 200mm	Outlet Diameter: Φ76.1 DN80

Safety tolerance should be reserved when selecting motor power