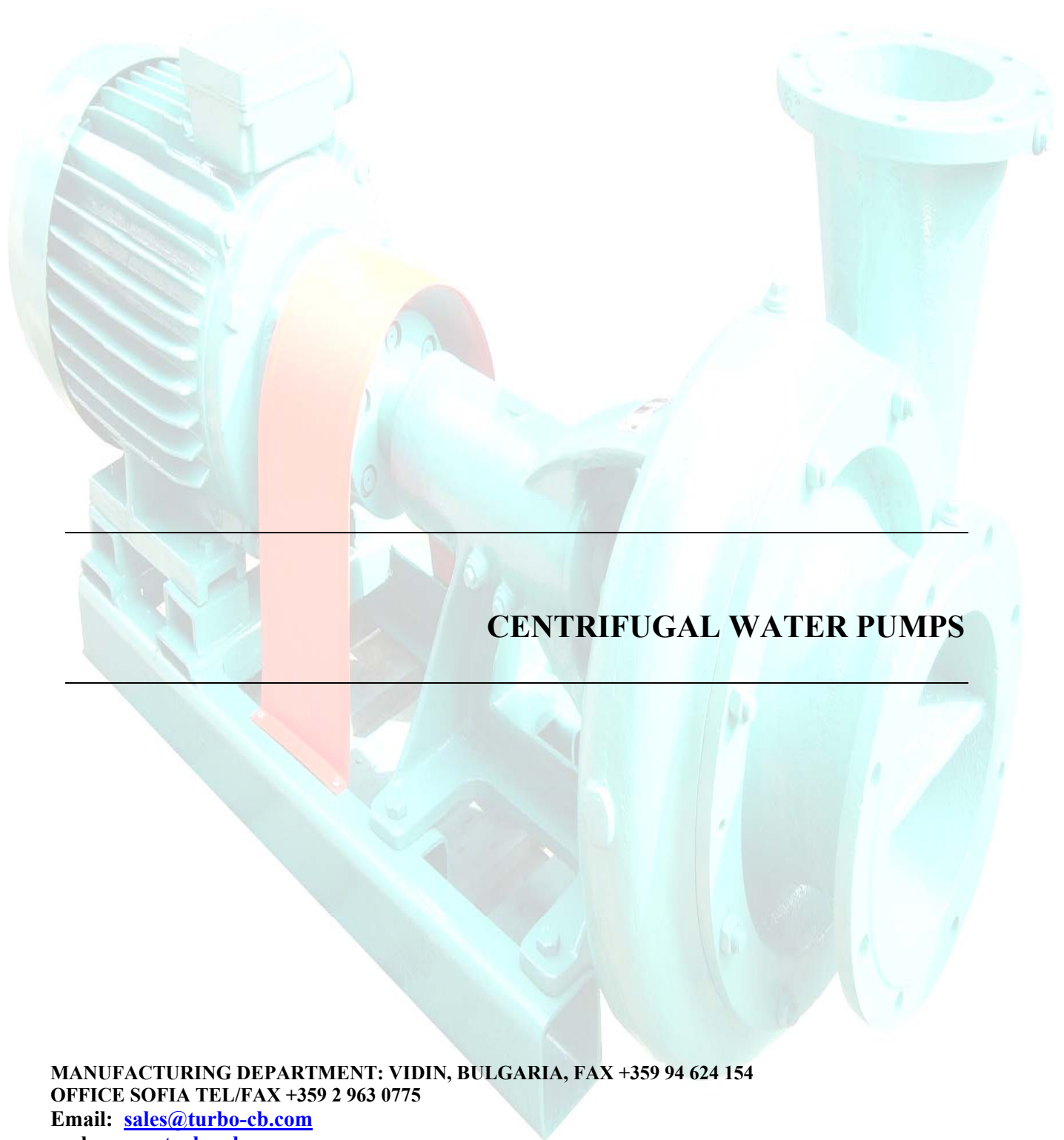


TURBO-C
BULGARIA



CENTRIFUGAL WATER PUMPS

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CENTRIFUGAL SINGLE-STAGE PUMPS FOR CLEAR WATER TYPE 'E' AND 'EM'



The horizontal single-stage centrifugal single-suction pumps types E and EM are designed for transportation of pure water and other liquids free of mechanical admixtures and with viscosity and chemical activity similar to those of water and temperature not higher than 80 C. E-M pumps are monoblock pumps assembled on the shaft of the electric motor.

Pumps are driven by three-phase induction motor, 380V, 50 Hz.

The details of the pumps are made of the following materials:

- impeller, suction body, discharge body, bearing body and coupling-cast iron;
- shaft, connecting bolts and assembling elements- stainless steel.

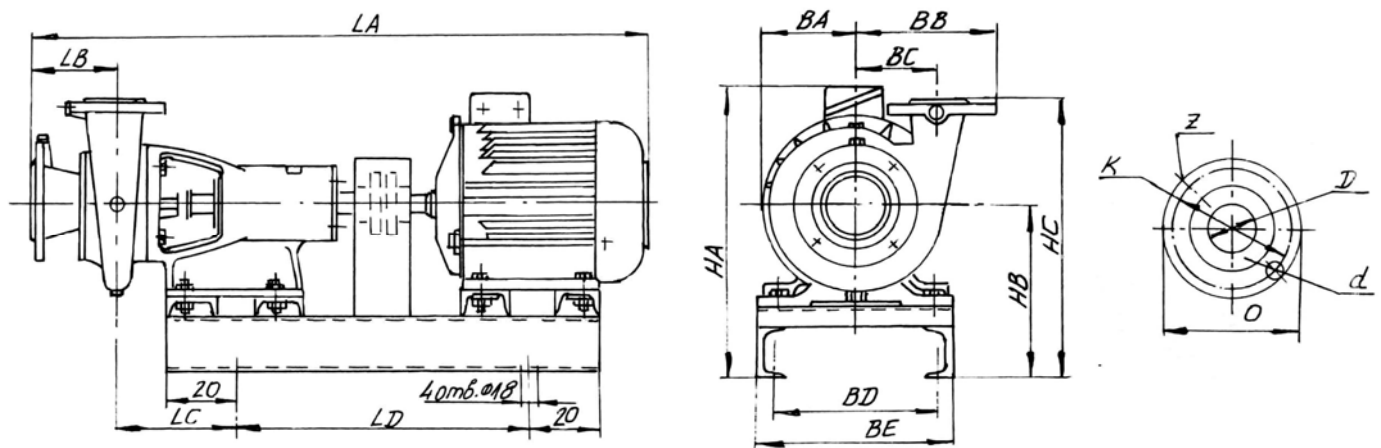
Technical data

$n=2900\text{min}^{-1}$

Pump type	Flow Q[l/s]	Head H[m]	El. motor [KW]	All.vacuum Hs,[m]	Efficiency [%]	Impeller diameter[mm]
3E20 3E20-M	2.0	21.7	1.5	7.0	50	133
	3.2	20.0		6.5	57	
	4.5	16.5		5.5	57	
3E32 3E32-M	2.0	33.5	3	7.0	44	162
	3.2	32.0		6.0	54	
	4.5	28.0		4.5	54	
3E32A	2.0	28.0	2.2	7.0	46	146
	3.2	26.0		6.0	58	
	4.5	22.0		4.5	58	
6E12 6E12-M	4.0	14.0	1.5	6.5	61	108
	6.0	12.0		6.0	68	
	8.0	8.5		4.8	59	
6E20 6E20-M	4.0	22.0	2.2	7.0	60	134
	6.0	20.2		6.5	68	
	8.5	14.5		5.0	60	
6E20A 6E20A-M	3.5	17.0	1.5	7.0	56	118
	5.5	15.0		6.7	64	
	7.5	10.5		5.7	58	
6E32 6E32-M	4.0	34.0	4	7.0	55	166
	6.0	32.0		6.5	64	
	8.5	25.5		4.5	60	
6E32A 6E32A-M	3.5	28.0	3	6.7	57	152
	5.5	26.0		6.2	64	
	7.5	21.0		5.3	61	
6E50 6E50-M	4.0	54.0	7.5	7.0	47	198
	6.0	50.0		6.5	56	
	8.5	38.0		5.5	48	
6E50A 6E50A-M	3.5	42.0	5.5	7.1	45	175
	5.5	39.0		6.6	55	
	7.5	31.0		5.9	48	

Pump type	Flow Q[l/s]	Head H[m]	El. motor [KW]	All.vacuum Hs,[m]	Efficiency [%]	Impeller diameter[mm]
12E12 12E12-M	8.0 12.0 15.0	15.0 12.0 7.5	2.2	6.5 5.0 2.0	67 72 58	120
12E12A 12E12A-M	7.5 10.0 12.5	10.0 8.0 5.5	2.2	6.7 6.0 5.0	6 68 56	105
12E20 12E20-M	8.5 12.0 16.0	22.0 20.0 15.5	5.5	7.0 6.5 5.0	64 72 68	140
12E20A 12E20A-M	8.0 11.0 14.0	18.5 16.5 13.0	4.0	7.0 6.7 5.8	65 73 70	130
12E32 12E32-M	9.0 12.0 16.0	34.0 32.0 27.0	7.5	6.5 6.0 5.0	62 71 70	164
12E32A 12E32A-M	8.0 11.0 15.0	29.0 27.0 22.0	5.5	6.6 6.2 5.2	60 69 68	150
12E50 12E50-M	8.5 12.0 16.0	52.5 50.0 44.0	13	7.0 6.0 4.0	57 66 65	202
12E50A 12E50A-M	8.0 11.0 15.0	46.0 43.5 36.5	11	7.2 6.2 4.5	58 63 51	190
25E20 25E20-M	16.0 25.0 32.0	24 20 15	7.5	5.5 5.0 4.0	67 79 75	148
25E20A 25E20AM	14.0 22.0 28.0	19 15.5 11	5.5	5.5 5.3 4.7	63 75 71	135
25E32 25E32-M	16.0 25.0 32.0	36.5 32 25.5	13	6.5 6.0 5.0	62 77 72	172
25E32A 25E32-AM	14.0 23.0 30.0	32 28 21	11	6.6 6.2 5.4	62 75 72	165

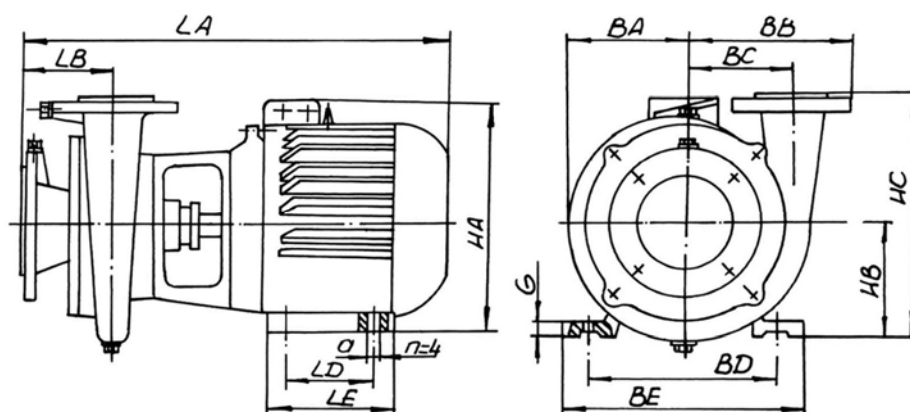
Overall dimensions of pump unit, type E, mm



Pump type	Suction flange					Discharge flange					Weight [kg]	
	Тип	D	K	O	d	Z	D	K	O	d	z	Pump
3E20	40	110	150	18	4	32	100	140	18	4	20	52
3E20A	40	110	150	18	4	32	100	140	18	4	20	50
3E20B	40	110	150	18	4	32	100	140	18	4	20	50
3E32	40	110	150	18	4	32	100	140	18	4	25	55
3E32A	40	110	150	18	4	40	100	140	18	4	25	53
6E12	40	125	165	18	4	40	110	140	18	4	19	49
6E12A	50	125	165	18	4	40	110	140	18	4	19	49
6E20	50	125	165	18	4	40	110	140	18	4	20	77
6E20A	50	125	165	18	4	40	110	140	18	4	20	74
6E32	50	125	165	18	4	40	110	140	18	4	25	78
6E32A	50	125	165	18	4	40	110	140	18	4	25	70
6E32B	50	125	165	18	4	40	110	140	18	4	25	70
6E50	65	130	160	14	4	40	100	130	14	4	38	90
6E50A	65	130	160	14	4	40	100	130	14	4	38	89
12E12	80	150	185	18	4	65	130	160	14	4	28	70
12E12A	80	150	185	18	4	65	130	160	14	4	28	70
12E20	80	150	185	18	4	65	130	160	14	4	37	125
12E20A	80	150	185	18	4	65	130	160	14	4	37	107
12E32	80	150	185	18	4	70	130	160	14	4	41	122
12E32A	80	150	185	18	4	70	130	160	14	4	41	120
12E50	80	150	185	18	4	50	110	140	18	4	68	204
12E50A	80	150	185	18	4	50	110	140	18	4	68	177
25E32	80	160	200	18	8	65	145	185	18	4	61	179
25E32A	80	160	200	18	8	65	145	185	18	4	61	163

Pump	El. motor		Overall dimensions [mm]										
	Type	kW	LA	LB	LD	BA	BB	BC	HA	HB	HC	BD	BE
3E20	4A090S-2D	1.5	711	110	465	105	153	83.5	319	205	345	165	210
3E20A	4A080B-2D	1.1	665	110	425	105	153	83.5	314	205	345	155	200
3E20B	4A080B-2D	1.1	665	110	425	105	153	83.5	314	205	345	155	200
3E32	4A0100L-2D	3	760	95	510	105	166	96	349	225	365	165	210
3E32A	4A090L-2D	2.2	695	95	490	105	166	96	321	205	345	155	210
6E12	4A090A-2D	1.5	708	120	490	81	150	75	321	205	340	165	210
6E12A	4A090S-2D	1.5	708	120	490	81	150	75	321	205	340	165	210
6E20	4A090L-2D	2.2	732	115	490	98	172	90	286	205	330	165	210
6E20A	4A090S-2D	1.5	718	115	465	98	172	90	286	205	330	165	210
6E32	4A0112M-2D	4	808	117	505	117	179	104	349	225	380	170	230
6E32A	4A0100L-2D	3	798	117	510	117	179	104	349	225	380	155	210
6E32B	4A0100L-2D	3	798	117	510	117	179	104	353	225	380	155	210
6E50	MO112M-2D	7.5	1149	89	645	120	185	120	415	237	397	235	280
6E50A	MO112MK-2D	5.5	1010	89	605	120	185	120	415	237	397	235	280
12E12	4A090L-2D	2.2	830	111	460	109	175	95	346	230	362	170	210
12E12A	4A090L-2D	2.2	830	111	460	109	175	95	346	230	362	170	210
12E20	MO0112MK-2	5.5	1081	122	605	120	182	102	408	230	370	235	280
12E20A	4A0112M-2D	4	969	122	565	105	182	102	358	230	370	200	240
12E32	MO112M-2	7.5	1024	107	705	156	182	105	395	217	387	235	280
12E32A	MO112MK-2	5.5	972	107	665	156	182	105	395	217	387	235	280
12E50	AO252-2	13	1269	125	790	156	200	130	479	280	480	320	370
12E50A	MO132M-2	11	1175	125	760	140	200	130	478	280	480	320	370
25E32	MO132ML	13	1095	129	695	140	213	120	483	280	450	260	310
25E32A	MO132M-2	11	1070	129	695	140	213	120	483	280	450	260	310

Overall dimensions of pump unit, type EM, mm



Type	Type	KW	LA	LB	LD	LE	a	HA	HB	HC	BA	BB	BC	BD	BE	G	kg
6E32M	4AO112M-2D	4	545	105	140	176	12	240	112	247	105	169	104	190	231	13	50
6E32AM	4AO100L-2D	3	535	105	140	170	12	224	100	235	93	169	104	160	196	11	45
6E50M	MO112M-2	7.5	650	89	140	175	12	290	112	272	120	185	120	190	225	15	96
6E50AM	MO112Mk-2	5.5	650	89	140	175	12	290	112	272	120	185	120	190	225	15	94
12E12M	4AO90L-2D	2.2	536	111	125	159	10	206	90	220	109	175	95	140	170	13	43
12E12AM	4AO90L-2D	2.2	536	111	125	159	10	206	90	220	109	175	95	140	170	13	43
12E32M	MO112M-2	7.5	704	107	140	175	12	290	112	282	156	185	105	190	225	15	108
12E32AM	MO112Mk-2	5.5	704	107	140	175	12	290	112	282	156	185	105	190	225	15	106
12E50M	AO252-2	13	800	125	210	260	18	359	160	360	156	200	130	254	316	25	154
12E50AM	MO132M-2	11	745	125	178	220	12	330	132	332	140	200	130	216	270	20	127
25E32M	AO252-2	13	829	186	210	260	14	359	160	360	156	213	120	254	316	25	155
25E32AM	MO132M-2	11	780	186	178	220	12	330	132	332	156	213	120	216	270	20	120

CENTRIFUGAL SINGLE-STAGE PUMPS FOR HOT WATER TYPE 'EG'



Pumps type "EG" are designed for transportation of hot water at a temperature not higher than 120°C. These pumps are applied for industrial and agricultural purposes, e.g. for water circulation in green houses, in the technological processes.

They are applicable in systems with working pressure up to 0.6 MPa.

Pumps are driven by three-phase induction motor, 380V, 50 Hz.

The details of the pumps are made of the following materials:

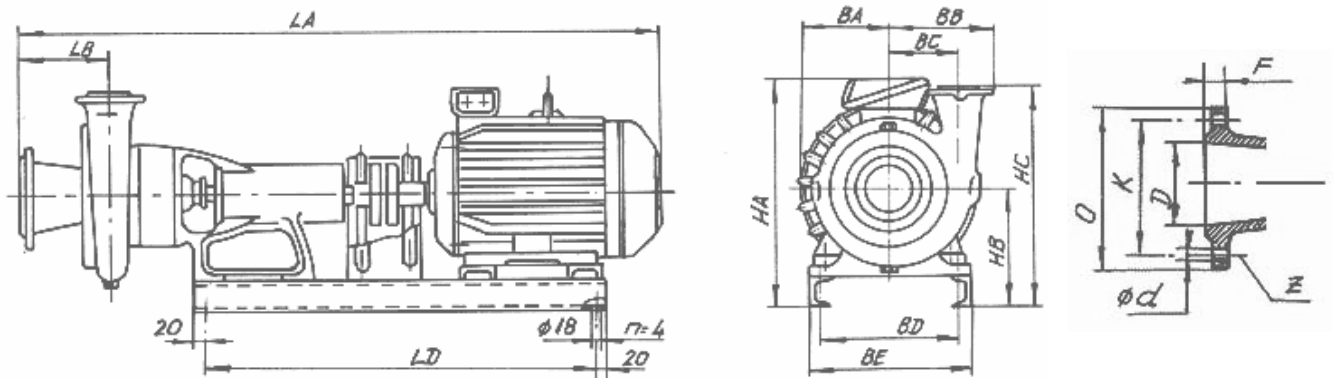
- impeller- 1 stage- bronze;
- impellers, suction body, discharge body, bearing body, intermediate body, guiding apparatus, -cast iron;
- shaft, connecting bolts and assembling elements- stainless steel.

Technical data

$n=1450\text{min}^{-1}$

Pump type	Flow Q[l/s]	Head H[m]	El. Motor [KW]	Effic. %	Impeller diameter[mm]
3EG4	1.5	5.0	0.55	43	129
	3.0	4.0		56	
	4.5	2.5		45	
12EG8	8	8.5	2.2	60	174
	12	8.0		68	
	18	6.0		66	
12EG20	8	21	5.5	58	260
	12	20		68	
	16	16		64	
25EG12	15	14	5.5	65	215
	25	12		75	
	32	8		65	
25EG20	16	21	10	62	248
	25	20		72	
	32	18		74	

Overall dimensions of pump unit, type EG, mm



Pump	El. motor	Overall dimensions [mm]												
		Type	kW	LA	LB	LD	BA	BB	BC	BD	BE	HA	HB	HC
3EG4	0.55			757	110	480	74	145	80	170	205	314	205	320
12EG8	2.2			1177	185	770	96	212	120	250	265	389	265	465
12EG20	5.5			1363	201	700	120	261	163	300	360	518	340	600
25EG12	5.5			1372	210	760	120	256	153	300	350	626	448	648
25EG20	10			1378	178	850	140	282	175	310	360	490	292	560

Pump	Suction flange						Discharge flange						Bearing body	Weight [kg]	
	Type	F	D	K	O	d	Z	D	K	O	d	z		Pump	Unit
3EG4	16	70	130	160	14	4	40	100	130	14	4	4	1	29	49
12EG8	20	125	200	235	18	8	80	150	185	18	4	4	3	79	139
12EG20	20	125	200	235	18	8	80	160	195	18	8	4	-	124	207
25EG12	22	150	225	260	18	8	100	170	205	18	4	-	-	116	199
25EG20	22	150	225	260	18	8	100	180	215	18	8	4	-	136	256

CENTRIFUGAL SINGLE-STAGE PUMPS, MONOPHASE, TYPE 'EE'

The monophase pumps designed for transportation of pure water with temperature up to 40°C. They are applied in private households and industry for water supply and irrigation..



The pumps are driven by monophase electric motors with 220V, 50Hz supply. They are manufactured either with gland or mechanical seal.

The details of the pumps are made of the following materials:

- Casing and hydraulic details- cast iron;
- Connecting elements- steel.

Technical data

$n=1450\text{min}^{-1}$

Pump type	Flow Q[l/s]	Head H[m]	All. Vac. Hs,[m]	Suction	Discharge	Effic. [%]	El. motor	
							[KW]	min^{-1}
E1,6E15	1.0	16.0	6.0	1"	1"	44	0.55	2920
	1.6	15.0	6.0			55		
	2.2	13.0	5.0			53		
E2,5E15	1.5	16.0	7.0	1 ½"	1 ¼"	50	0.75	2920
	2.5	15.0	6.0			60		
	3.5	12.0	5.5			56		
E1,5E11	0.8	12.5	7.0	1"	¾"	40	0.37	2875
	1.5	11.0	6.5			55		
	2.0	9.0	5.0			52		
E1E25	0.5	27.0	6.5	1"	1"	24	1.1	2920
	0.8	25.0	6.5			32		
	1.2	19.0	5.0			30		

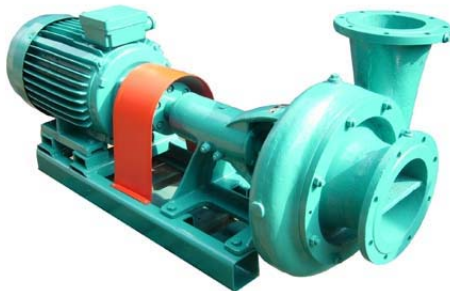
CENTRIFUGAL SINGLE-STAGE PUMPS FOR DIRTY WATER, TYPE 'SH'

The centrifugal single-stage pumps for dirty water type SH are designed for transportation of chemically neutral slime and gully-hole water with temperature up to 80 C.

Pumps are driven by three-phase induction motor, 380V, 50 Hz.

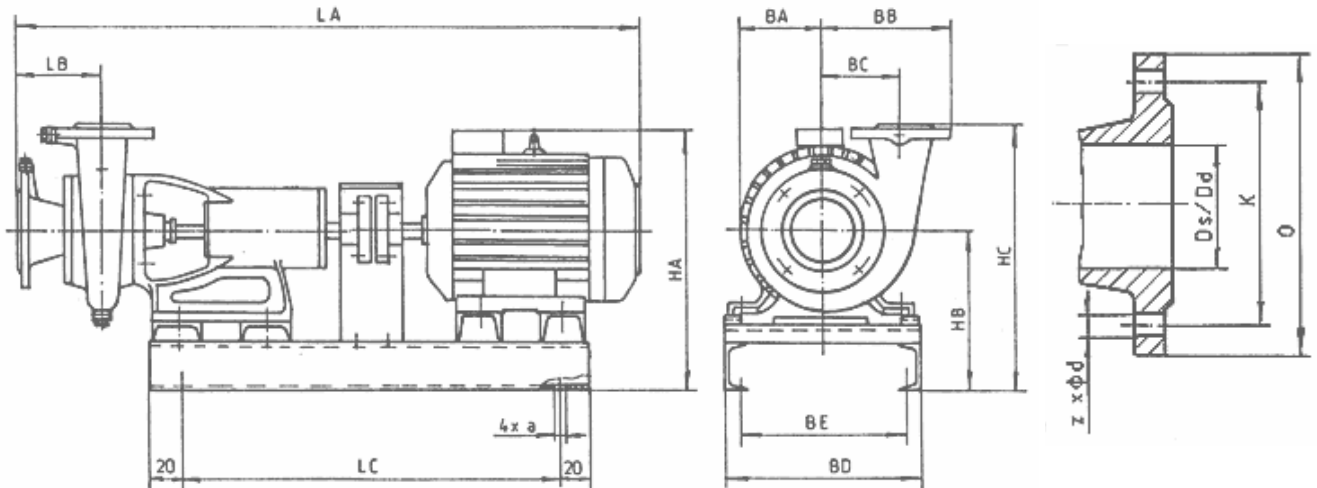
The details of the pumps are made of the following materials:

- shaft, connecting bolts and assembling elements- stainless steel;
- impeller, suction body, discharge body, coupling and protecting disc- cast iron.



Technical data

Pump type	Flow Q[l/s]	Head H[m]	El. motor [KW]	Effic. [%]	Impeller diameter[mm]	min ⁻¹
6SH35	3.5	37.5	5.5	35	175	2900
	5.5	35		49		
	7.5	29		46		
50SH40	25	44	45	45	390	1470
	50	40		61		
	65	32		57		



Pump	El. motor	Overall dimensions[mm]											
Type	kW	LA	LB	LC	BA	BB	BC	BD	BE	HA	HB	HC	a
6SH35	5.5	884	90	600	120	170	105	280	230	300	250	420	14
50SH40	45	1752	195	1195	285	323	270	455	385	735	400	680	18

Pump	Suction flange					Discharge flange					weight[kg]	
Type	Ds	K	O	d	Z	Dd	K	O	d	z	Pump	Unit
6SH35	70	130	160	14	4	40	100	130	14	4	43	142
50SH40	100	170	205	18	4	125	200	235	18	8	225	583

CENTRIFUGAL MULTI-STAGE PUMPS TYPE 'MT'



The pumps MT are designed for transportation of pure water and other liquids free of mechanical admixtures with viscosity and chemical activity similar to those of water at temperature up to 80 C. Pumps are driven by three-phase induction motor, 380V, 50 Hz.

The details of the pumps are made of the following materials:

- impeller, suction body, discharge body, bearing body, coupling, intermediate body- cast iron;
- shaft, connecting bolts and assembling elements- stainless steel.

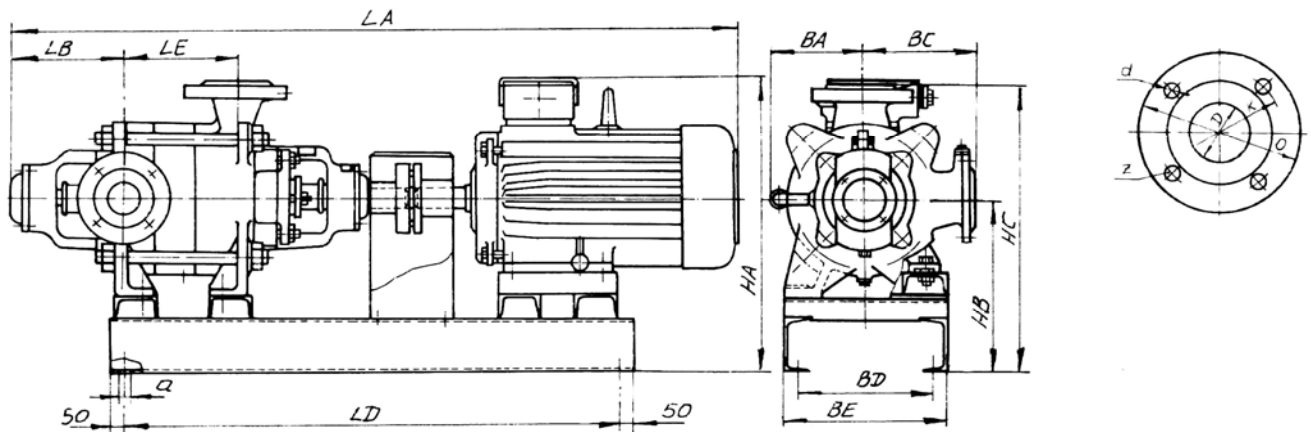
Technical data

$n=2900\text{min}^{-1}$

Pump type	Flow Q[l/s]	Head H[m]	El. Motor [kW]	All.vacuum Hs, [m]
3MT18x2	2.98	34	3	7
3MT18x3	2.98	51	4	7
3MT18x4	2.98	68	5.5	7
3MT18x5	2.98	85	7.5	7
3MT18x6	2.98	102	7.5	7
3MT18x7	2.98	119	11	7
3MT18x8	2.98	136	11	7
3MT18x9	2.98	153	11	7
3MT18x10	2.98	170	13	7
4MT25x2	4.45	50	5.5	6
4MT25x3	4.45	75	11	6
4MT25x4	4.45	100	13	6
4MT25x5	4.45	125	13	6
4MT25x6	4.45	150	18.5	6
4MT25x7	4.45	175	22	6
4MT25x8	4.45	200	22	6
4MT25x9	4.45	225	30	6
4MT25x10	4.45	250	30	6
7MT32x2	6.95	64	13	6
7MT32x3	6.95	96	18.5	6
7MT32x4	6.95	128	22	6
7MT32x5	6.95	160	30	6
7MT32x6	6.95	192	30	6
7MT32x7	6.95	224	37	6
7MT32x8	6.95	256	45	6
7MT32x9	6.95	288	55	6
7MT32x10	6.95	320	55	6/.

Pump type	Flow Q[l/s]	Head H[m]	El. Motor [kW]	All.vacuum Hs _s [m]
11MT32x2	11.1	64	15	5
11MT32x3	11.1	96	22	5
11MT32x4	11.1	128	30	5
11MT32x5	11.1	160	37	5
11MT32x6	11.1	192	45	5
11MT32x7	11.1	224	55	5
11MT32x8	11.1	256	55	5
11MT32x9	11.1	288	75	5
11MT32x10	11.1	320	75	5
18MT32x2	17.5	64	22	6
18MT32x3	17.5	96	37	6
18MT32x4	17.5	128	55	6
18MT32x5	17.5	160	55	6
18MT32x6	17.5	192	75	6
18MT32x7	17.5	224	75	6
18MT32x8	17.5	256	110	6
18MT32x9	17.5	288	110	6
18MT32x10	17.5	320	110	6

Overall dimensions of pump unit, type MT, mm



Pump	El. motor	Overall dimensions [mm]											
		Type	kW	LA	LB	LD	LE	BA	BC	HA	HB	HC	BE
3MT18x2	4AO-100L-2D	3	966	189	640	151	96	150	319	217	367	260	220
3MT18x3	4AO-112M-2D	4	1038	189	700	203	105	150	378	217	367	260	220
3MT18x4	MO112Mk-2	5.5	1212	189	790	254	114	150	400	217	367	290	250
3MT18x5	MO112M-2	7.5	1254	189	840	306	114	150	400	217	367	290	250
3MT18x6	MO112M-2	7.5	1305	189	890	357	114	150	400	217	367	290	250
3MT18x7	MO132M-2	11	1362	189	890	409	140	150	434	217	363	290	250
3MT18x8	MO132M-2	11	1424	189	1040	460	140	150	434	217	367	290	250
3MT18x9	MO132M-2	11	1474	189	1095	512	140	150	434	217	367	290	250
3MT18x10	AO252-2	13	1581	183	1195	563	156	188	479	280	430	330	290
4MT25x2	MO112Mk-2	5.5	1130	184	695	153	172	175	347	252	427	260	220
4MT25x3	MO132M-2	11	1195	184	815	153	172	175	455	252	427	330	285
4MT25x4	AO252-2	13	1309	184	910	288	172	175	413	266	441	330	285
4MT25x5	AO252-2	13	1369	184	970	348	172	175	413	266	441	330	285
4MT25x6	MO160M-2	18.5	1489	184	1120	408	172	175	536	266	441	325	280
4MT25x7	MO180S-2	22	1579	184	1190	468	172	175	555	260	435	360	315
4MT25x8	MO180S-2	22	1639	184	1250	528	172	175	555	260	435	360	315
4MT25x9	MO180M-2	30	1736	184	1345	588	172	175	555	260	435	360	315
4MT25x10	MO180M-2	30	1796	184	1405	648	172	175	555	260	435	360	315

Type	Type	kW	LA	LB	LD	LE	BA	BC	HA	HB	HC	BE	BD
7MT32x2	AO252-2	13	1261	229	890	172	156	200	479	280	480	360	305
7MT32x3	MO160M-2	18.5	1388	229	1000	240	180	200	570	300	500	360	310
7MT32x4	MO180S-2	22	1486	229	1070	308	205	200	615	320	520	370	320
7MT32x5	MO180M-2	30	1591	229	1175	376	205	200	615	320	520	370	320
7MT32x6	MO180M-2	30	1659	229	1245	444	205	200	615	320	520	370	320
7MT32x7	MO200M-2	37	1798	229	1375	512	223	200	630	320	520	410	360
7MT32x8	MO200L-2	45	1924	229	1480	580	223	200	630	320	520	410	360
7MT32x9	MO225M-2	55	2032	229	1570	648	250	200	695	325	525	450	400
7MT32x10	MO225M-2	55	2100	229	1635	716	250	200	695	325	525	450	400
11MT32x2	MO160S-2	15	1318	206	920	213	180	225	596	326	551	360	310
11MT32x3	MO180S-2	22	1455	206	1045	286	205	225	621	326	551	370	320
11MT32x4	MO180M-2	30	1565	206	1145	359	205	225	621	326	551	370	320
11MT32x5	MO200M-2	37	1709	206	1280	432	223	225	636	326	551	410	360
11MT32x6	MO200L-2	45	1820	206	1390	505	223	225	636	326	551	410	360
11MT32x7	MO225M-2	55	1953	206	1485	578	250	225	695	325	550	450	400
11MT32x8	MO225M-2	55	2026	206	1560	651	250	225	695	325	550	450	400
11MT32x9	MO250S-2	75	2169	206	1685	724	272	225	735	350	575	500	450
11MT32x10	MO250S-2	75	2242	206	1760	794	272	225	735	350	575	500	450
18MT32x2	MO180S-2	22	1443	239	1040	241	205	220	621	326	546	370	320
18MT32x3	MO200M-2	37	1644	239	1230	334	223	220	636	326	546	410	360
18MT32x4	MO225M-2	55	1835	239	1380	427	250	220	695	325	545	450	400
18MT32x5	MO225M-2	55	1928	239	1473	520	250	220	695	325	545	450	400
18MT32x6	MO250S-2	75	2091	239	1620	613	272	220	735	350	570	500	450
18MT32x7	MO250S-2	75	2184	239	1715	706	272	220	735	350	570	500	450
18MT32x8	MO280S-2	110	2397	239	1880	799	315	220	840	450	620	560	505
18MT32x9	MO280S-2	110	2490	239	1975	892	315	220	840	450	620	560	505
18MT32x10	MO280S-2	110	2583	239	2068	985	315	220	840	450	620	560	505

Pump	Suction flange					Discharge flange					Weight [kg]	
	Type	D	K	O	d	Z	D	K	O	d	z	Pump
3MT18x2	50	125	160	18	4	50	125	160	18	4	60	103
3MT18x3	50	125	160	18	4	50	125	160	18	4	68	120
3MT18x4	50	125	160	18	4	50	125	160	18	4	76	156
3MT18x5	50	125	160	18	4	50	125	160	18	4	85	165
3MT18x6	50	125	160	18	4	50	125	160	18	4	93	174
3MT18x7	50	125	160	18	4	50	125	160	18	4	102	207
3MT18x8	50	125	160	18	4	50	125	160	18	4	110	216
3MT18x9	50	125	160	18	4	50	125	160	18	4	118	224
3MT18x10	50	125	160	18	4	50	125	160	18	4	126	242
4MT25x2	50	110	140	14	4	50	125	160	18	4	70	152
4MT25x3	50	110	140	14	4	50	125	160	18	4	83	189
4MT25x4	50	110	140	14	4	50	125	160	18	4	96	232
4MT25x5	50	110	140	14	4	50	125	160	18	4	109	245
4MT25x6	50	110	140	14	4	50	125	160	18	4	122	301
4MT25x7	50	110	140	14	4	50	125	160	18	4	135	329
4MT25x8	50	110	140	14	4	50	125	160	18	4	146	346
4MT25x9	50	110	140	14	4	50	125	160	18	4	161	398
4MT25x10	50	110	140	14	4	50	125	160	18	4	174	411
7MT32x2	50	110	140	14	4	50	125	160	18	4	106	243
7MT32x3	50	110	140	14	4	50	125	160	18	4	121	312
7MT32x4	50	110	140	14	4	50	125	160	18	4	137	340
7MT32x5	50	110	140	14	4	50	125	160	18	4	152	397
7MT32x6	50	110	140	14	4	50	125	160	18	4	168	414
7MT32x7	50	110	140	14	4	50	125	160	18	4	183	511
7MT32x8	50	110	140	14	4	50	125	160	18	4	199	558
7MT32x9	50	110	140	14	4	50	125	160	18	4	214	617
7MT32x10	50	110	140	14	4	50	125	160	18	4	230	634
11MT32x2	80	150	185	18	4	80	160	195	18	8	115	280
11MT32x3	80	150	185	18	4	80	160	195	18	8	135	344
11MT32x4	80	150	185	18	4	80	160	195	18	8	155	405
11MT32x5	80	150	185	18	4	80	160	195	18	8	175	504
11MT32x6	80	150	185	18	4	80	160	195	18	8	195	556
11MT32x7	80	150	185	18	4	80	160	195	18	8	215	619
11MT32x8	80	150	185	18	4	80	160	195	18	8	235	640
11MT32x9	80	150	185	18	4	80	160	195	18	8	255	771
11MT32x10	80	150	185	18	4	80	160	195	18	8	275	792

Type	D	K	O	d	Z	D	K	O	d	z	Pump	Unit
18MT32x2	100	170	205	18	4	100	190	230	23	8	143	327
18MT32x3	100	170	205	18	4	100	190	230	23	8	169	501
18MT32x4	100	170	205	18	4	100	190	230	23	8	194	602
18MT32x5	100	170	205	18	4	100	190	230	23	8	218	634
18MT32x6	100	170	205	18	4	100	190	230	23	8	243	765
18MT32x7	100	170	205	18	4	100	190	230	23	8	268	729
18MT32x8	100	170	205	18	4	100	190	230	23	8	292	1079
18MT32x9	100	170	205	18	4	100	190	230	23	8	318	1105
18MT32x10	100	170	205	18	4	100	190	230	23	8	343	1208

CENTRIFUGAL MULTI-STAGE PUMPS TYPE 'MC'



The MC pumps are horizontal, multi-stage, sectional type, having one-sided flow of the liquid into the impeller. They are a version of the MT pumps. The only difference is the additional built-in self-priming stage operating on the principle of water ring. The details of the pumps are made of the following materials:

- impeller, suction body, discharge body, bearing body, coupling, intermediate body- cast iron;
- shaft, connecting bolts and assembling elements- stainless steel.
- vacuum impeller- bronze;

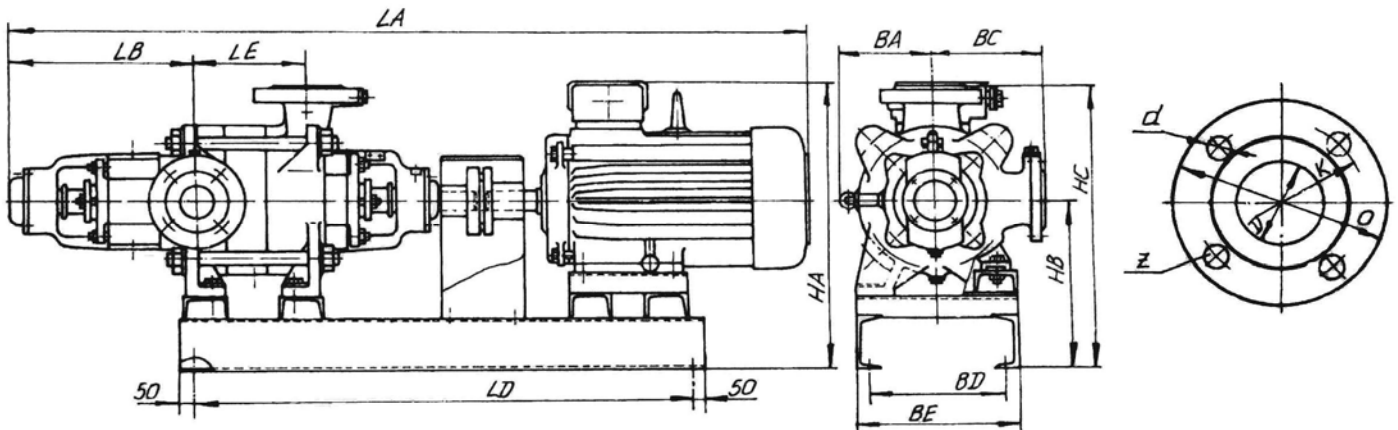
Technical data

$n=2900\text{min}^{-1}$

Pump type	Flow Q[l/s]	Head H[m]	El. Motor [kW]	All.vacuum Hs, [m]
4MC25x2	4.45	50	5.5	6
4MC25x3	4.45	75	11	6
4MC25x4	4.45	100	13	6
4MC25x5	4.45	125	13	6
4MC25x6	4.45	150	18.5	6
4MC25x7	4.45	175	22	6
4MC25x8	4.45	200	22	6
4MC25x9	4.45	225	30	6
4MC25x10	4.45	250	30	6
7MC132x2	6.95	64	13	6
7MC132x3	6.95	96	18.5	6
7MC132x4	6.95	128	22	6
7MC132x5	6.95	160	30	6
7MC132x6	6.95	192	30	6
7MC132x7	6.95	224	37	6
7MC132x8	6.95	256	45	6
7MC132x9	6.95	288	55	6
7MC132x10	6.95	320	55	6
11MC32x2	11.1	64	15	5
11MC32x3	11.1	96	22	5
11MC32x4	11.1	128	30	5
11MC32x5	11.1	160	37	5
11MC32x6	11.1	192	45	5
11MC32x7	11.1	224	55	5
11MC32x8	11.1	256	55	5
11MC32x9	11.1	288	75	5
11MC32x10	11.1	320	75	5

Pump type	Flow Q[l/s]	Head H[m]	El. Motor [kW]	All.vacuum Hs, [m]
18MC32x2	17.5	64	22	6
18MC32x3	17.5	96	37	6
18MC32x4	17.5	128	55	6
18MC32x5	17.5	160	55	6
18MC32x6	17.5	192	75	6
18MC32x7	17.5	224	75	6
18MC32x8	17.5	256	110	6
18MC32x9	17.5	288	110	6
18MC32x10	17.5	320	110	6

Overall dimensions of pump unit, type MC, mm



Pump	El. motor	Overall dimensions [mm]											
		Type	kW	LA	LB	LD	LE	BA	BC	HA	HB	HC	BE
4MC25x2	MO112MK-2	5.5	1214	268	755	168	170	175	347	295	347	260	220
4MC25x3	MO132M-2	11	1280	268	875	228	170	175	455	295	455	330	285
4MC25x4	AO252-2	13	1393	268	970	288	156	175	487	266	455	330	285
4MC25x5	AO252-2	13	1453	268	1030	348	156	175	487	266	455	330	285
4MC25x6	MO160M-2	18.5	1573	268	1120	408	180	175	536	266	441	280	360
4MC25x7	MO180S-2	22	1663	268	1190	468	205	175	555	260	435	315	360
4MC25x8	MO180S-2	22	1723	268	1250	528	205	175	555	260	435	315	360
4MC25x9	MO180M-2	30	1820	268	1345	588	205	175	555	260	435	315	360
4MC25x10	MO180M-2	30	1880	268	1405	648	205	175	555	260	435	315	360
7MC32x2	AO252-2	13	1343	311	890	172	156	200	479	280	480	360	305
7MC32x3	MO160M-2	18.5	1472	311	1000	240	180	200	570	300	500	360	310
7MC32x4	MO180-2	22	1570	311	1070	308	205	200	615	320	520	370	320
7MC32x5	MO180M-2	30	1675	311	1175	376	205	200	615	320	520	370	320
7MC32x6	MO180M-2	30	1743	311	1245	444	205	200	615	320	520	370	320
7MC32x7	MO200M-2	37	1882	311	1375	512	223	200	630	320	520	410	360
7MC32x8	MO200L-2	45	2008	311	1485	580	223	200	630	320	520	410	360
7MC32x9	MO225M-2	55	2116	311	1570	648	250	200	695	325	525	450	400
7MC32x10	MO225M-2	55	2184	311	1635	716	250	200	695	325	525	450	400
11MC32x2	MO160S-2	15	1411	299	920	213	180	225	596	326	551	360	310
11MC32x3	MO180S-2	22	1548	299	1035	284	205	225	621	326	551	370	320
11MC32x4	MO180M-2	30	1658	299	1145	359	205	225	621	326	551	370	320
11MC32x5	MO200M-2	37	1802	299	1250	432	223	225	636	326	551	410	360
11MC32x6	MO200L-2	45	1913	299	1390	505	223	222	636	326	551	410	360
11MC32x7	MO225M-2	55	2046	299	1485	578	250	225	695	325	550	450	400
11MC32x8	MO225M-2	55	2120	299	1560	651	250	225	695	325	550	450	400
11MC32x9	MO250S-2	75	2262	299	1685	724	273	225	735	350	575	500	450
11MC32x10	MO250S-2	75	2335	299	1760	797	273	225	735	350	575	500	450

Type	Type	kW	LA	LB	LD	LE	BA	BC	HA	HB	HC	BE	BD
18MC32x2	MO180S-2	22	1536	332	1040	241	205	220	621	326	546	370	320
18MC32x3	MO200M-2	37	1737	332	1230	334	223	220	636	326	546	410	360
18MC32x4	MO225M-2	55	1928	332	1380	427	250	220	695	325	545	45	400
18MC32x5	MO225M-2	55	2021	332	1473	520	250	220	695	325	545	450	400
18MC32x6	MO250S-2	75	2184	332	1620	613	272	220	735	350	570	500	450
18MC32x7	MO250S-2	75	2277	332	1715	706	272	220	735	350	570	500	450
18MC32x8	MO280S-2	110	2490	332	1880	799	315	220	840	400	620	560	505
18MC32x9	MO280S-2	110	2583	332	1975	892	315	220	840	400	620	560	505
18MC32x10	MO280S-2	110	2676	332	2068	985	315	220	840	400	620	560	505

Pump	Suction flange					Discharge flange					Weight [kg]	
	Type	D	K	O	d	Z	D	K	O	d	z	Pump
4MC25x2	50	110	140	14	4	50	110	140	14	4	79	161
4MC25x3	50	110	140	14	4	50	110	140	14	4	92	196
4MC25x4	50	110	140	14	4	50	110	140	14	4	105	241
4MC25x5	50	110	140	14	4	50	110	140	14	4	118	254
4MC25x6	50	110	140	14	4	50	110	140	14	4	130	310
4MC25x7	50	110	140	14	4	50	110	140	14	4	143	337
4MC25x8	50	110	140	14	4	50	110	140	14	4	158	355
4MC25x9	50	110	140	14	4	50	110	140	14	4	169	407
4MC25x10	50	110	140	14	4	50	110	140	14	4	182	420
7MC32x2	50	110	140	14	4	50	125	160	18	4	117	258
7MC32x3	50	110	140	14	4	50	125	160	18	4	132	323
7MC32x4	50	110	140	14	4	50	125	160	18	4	149	352
7MC32x5	50	110	140	14	4	50	125	160	18	4	167	411
7MC32x6	50	110	140	14	4	50	125	160	18	4	184	431
7MC32x7	50	110	140	14	4	50	125	160	18	4	201	529
7MC32x8	50	110	140	14	4	50	125	160	18	4	218	577
7MC32x9	50	110	140	14	4	50	125	160	18	4	235	638
7MC32x10	50	110	140	14	4	50	125	160	18	4	252	656
11MC32x2	80	150	185	18	4	80	160	195	18	8	140	300
11MC32x3	80	150	185	18	4	80	160	195	18	8	153	362
11MC32x4	80	150	185	18	4	80	160	195	18	8	172	423
11MC32x5	80	150	185	18	4	80	160	195	18	8	192	522
11MC32x6	80	150	185	18	4	80	160	195	18	8	212	573
11MC32x7	80	150	185	18	4	80	160	195	18	8	232	638
11MC32x8	80	150	185	18	4	80	160	195	18	8	252	659
11MC32x9	80	150	185	18	4	80	160	195	18	8	271	790
11MC32x10	80	150	185	18	4	80	160	195	18	8	291	811
18MC32x2	100	170	205	18	4	100	190	230	23	8	154	337
18MC32x3	100	170	205	18	4	100	190	230	23	8	179	511
18MC32x4	100	170	205	18	4	100	190	230	23	8	204	612
18MC32x5	100	170	205	18	4	100	190	230	23	8	229	645
18MC32x6	100	170	205	18	4	100	190	230	23	8	254	776
18MC32x7	100	170	205	18	4	100	190	230	23	8	279	812
18MC32x8	100	170	205	18	4	100	190	230	23	8	304	1090
18MC32x9	100	170	205	18	4	100	190	230	23	8	328	1115
18MC32x10	100	170	205	18	4	100	190	230	23	8	353	1218

CENTRIFUGAL MULTI-STAGE PUMPS TYPE 'MP'

The centrifugal multi-stage feeding pumps type MP are designed to transport water and other liquids, free of mechanical admixtures and with a viscosity and chemical activity similar to those of water, with a temperature not higher than 120 C and a pressure at the suction flange of 0.35MPa (3.5kg/cm).

The details of the pumps are made of the following materials:

- suction body, discharge body, bearing body, coupling, intermediate body- cast iron;
- impeller-bronze,
- shaft, connecting bolts and assembling elements- stainless steel.

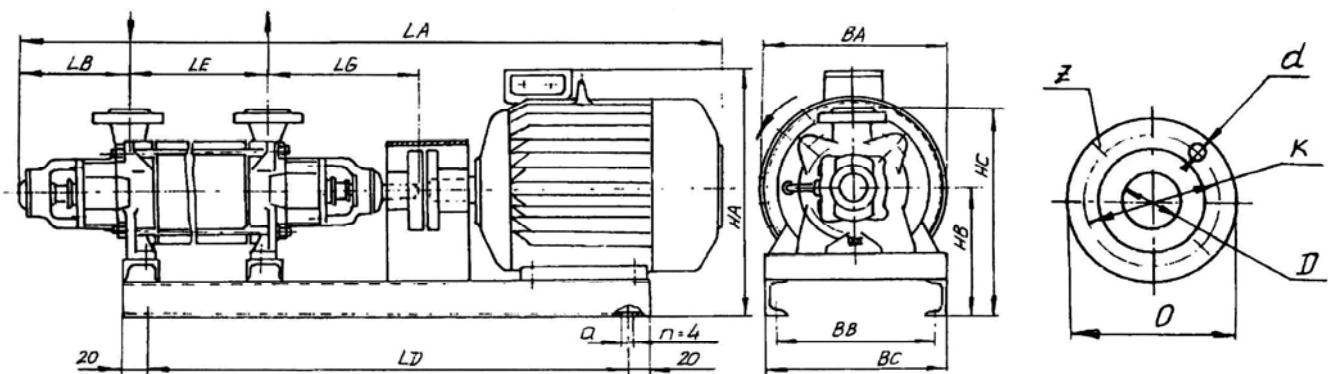
Technical data

$n=2900\text{min}^{-1}$

Pump type	Flow Q[l/s]	Head H[m]	El. Motor [kW]	All. vacuum Hs, m
2MP18x9	1.75	165	10	7
3MP18x10	2.78	170	13	7
4MP25x7	4.45	168	22	7
4MP25x9	4.45	216	30	7

Overall dimensions of pump unit, type MP, mm

Pump	El. motor	Overall dimensions [mm]											
		Type	Type	kW	LA	LB	LD	LE	LG	BA	BB	BC	HA
2MP18x9	MO112M-2	11	1643	248	1450	513	320	280	240	280	455	260	410
3MP18x10	AO252-2	3	16	189	700	203	105	150	378	217	367	260	220
4MP25x7	MO180S-2	2	1212	189	790	254	114	150	400	217	367	290	250
4MP25x9	MO180M-2	30	1254	189	840	306	114	150	400	217	367	290	250



Pump	Suction flange					Weight [kg]	
	D	K	O	d	Z	Pump	Unit
2MP18x9	50	125	160	18	4	142	226
3MP18x10	50	125	160	18	4	151	293
4MP25x7	50	125	160	18	4	176	402
4MP25x9	50	125	160	18	4	203	473

VACUUM PUMPS TYPE 'VP'



Pumps of type 'VP' are designed for sucking up the air, if necessary, from the casing and air pipe line of pumps prior to their starting as well as creating and maintenance of present vacuum in different apparatus and installations. Transported gases and gas-liquid mixtures have to be unflammable, not reactive chemically and should not contain any mechanical admixtures.

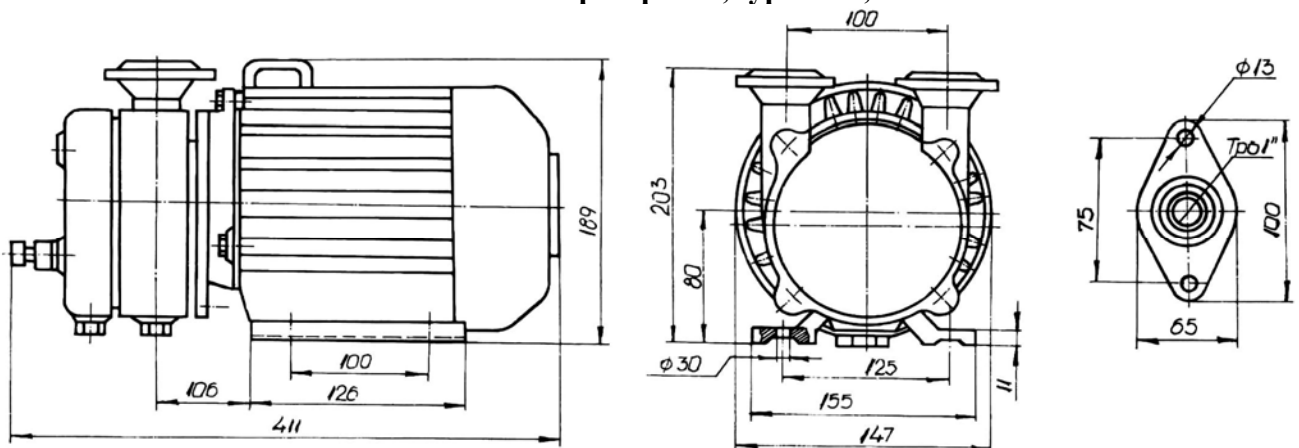
The details of the pumps are made of the following materials:

- pump case-cast iron;
- impeller-bronze,
- shaft, connecting bolts and assembling elements- stainless steel.

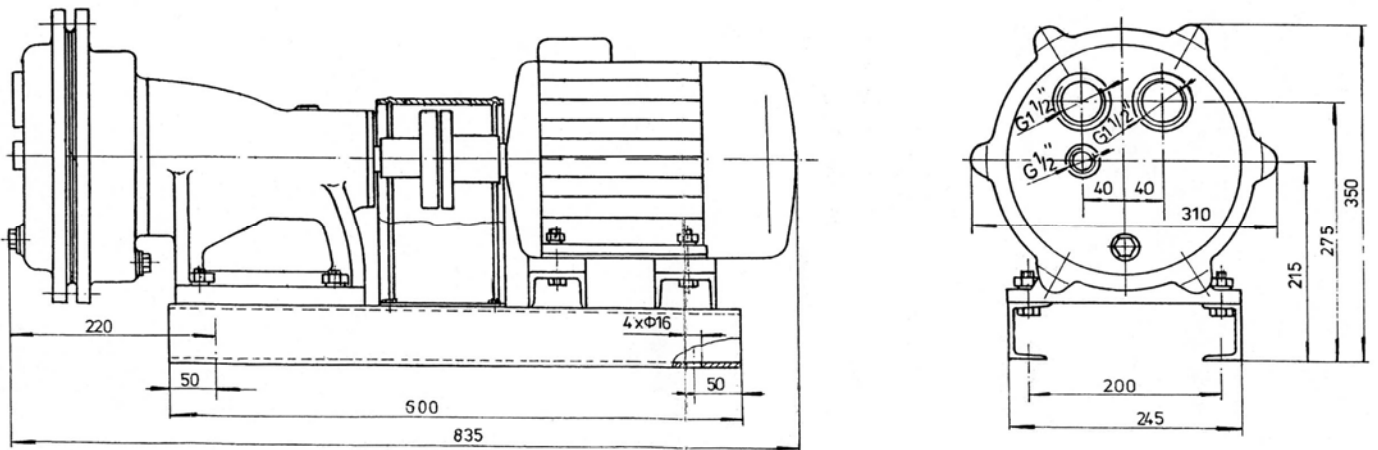
Technical data

Vacuum pump type	Q [l/sec]	Hv [m]	Hv max vacuum Q=0, [m]	El. motor [kW]	min ⁻¹
6VP	6.5	6.8	9.5	1.1	2920
12VP	12	6.8	9.0	3	1450
40VP	40	6.8	9.4	5.5	1450
60VP Two-staged	60	6.8	9.4	13	1450

Overall dimensions of pump unit, type 6VP, mm



Overall dimensions of pump unit, type 12VP, mm



Overall dimensions of pump unit, type 40VP, mm

