

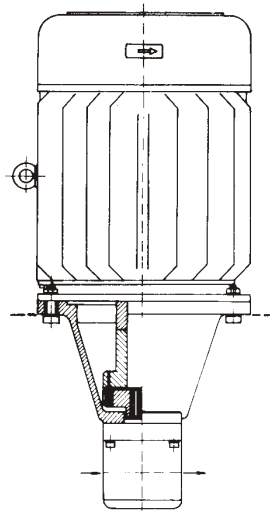
**prva desetletka**  
HYDRAULICS

# Pumpni agregati 1PA

## Pump units 1PA

SKLOP MOTOR/ZUPČASTA PUMPA, VISOKOG PRITISKA, VERTIKALNI  
MOTOR/GEAR PUMP ASSEMBLY, HIGH PRESSURE, VERTICAL VERSION

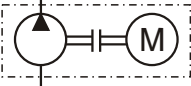
- Pumpni agregat čini sklop pumpe, spojnice i el. motora
- Obezbeđuje pritisak i protok ulja za napajanje hidrauličkog sistema
- Kod ugradnje voditi računa o sledećem:
  - brzina proticanja ulja u usisnom vodu - 2 m/s
  - max pritisak u usisnom vodu ne sme prelaziti 0,5 bar
  - na povratnom vodu ugraditi filter, na usisnom nije potreban
- Dve varijante:
  1. Agregati sa nosećom pločom
  2. Agregati bez noseće ploče



- The pump unit is assembly of the pump, coupling and el. motor  
The unit supplies oil flow and pressure for hydraulic system
- When installing the pump units, care should be taken about the following:
  - velocity of the fluid flow in suction line must be up to 2 m/s
  - pressure in suction line must not be higher than 0,5 bar
  - a filter should be fitted on return line, while no filter is required on suction line
- Two variants:
  1. Pump units with mounting plate
  2. Pump units without mounting plate

### TEHNIČKE KARAKTERISTIKE

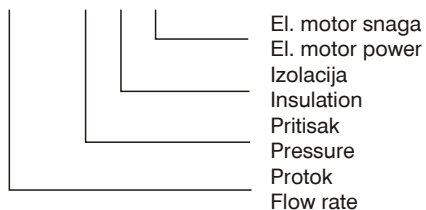
### TECHNICAL DATA

Simbol Symbol		
Pumpa (zupčasta) Pump (gear)	protok flow rate (l/min)	1 ... 160
	broj obtaja speed (min <sup>-1</sup> ) (r.p.m.)	1500
	nazivni pritisak nominal pressure (bar)	63; 100; 160
	smer obrtanja rotation direction	levi anticlockwise
El. motor	snaga power (kW)	0,37 ... 45
	broj obtaja speed (min <sup>-1</sup> ) (r.p.m.)	1500
	napon voltage (V); 50 Hz	220 / 380
	izolacija - zaštita insulation - protection	class E - IP44
Radna tečnost Working fluid	mineralno ulje mineral oil	
	viskozitet viscosity (mm <sup>2</sup> /s)	16 ... 510
	temperatura temperature (°C)	-20 ... +70
Masa Mass (kg)		videti ugradni crtež see mounting drawing

## OZNAČAVANJE DESIGNATION

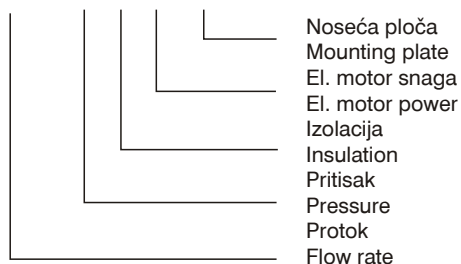
AGREGATI BEZ NOSEĆE PLOČE  
PUMP UNITS WITHOUT MOUNTING PLATE

**1PA. 00\* . \* E \***

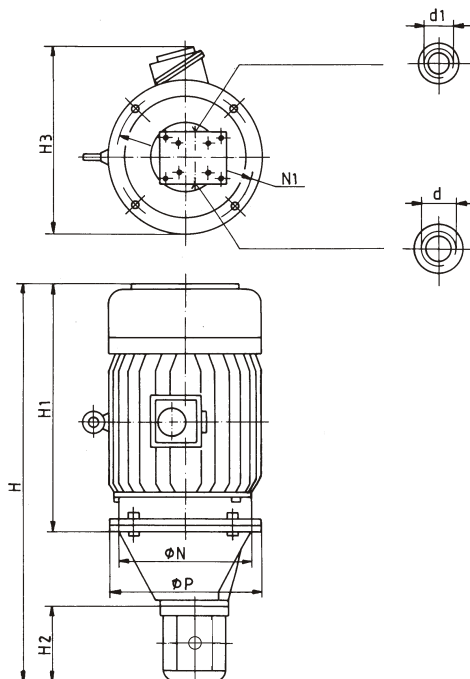


AGREGATI SA NOSEĆOM PLOČOM  
PUMP UNITS WITH MOUNTING PLATE

**1PA. 00\* . \* E \* - P**



**UGRADNI CRTEŽ** (mere u mm)  
**MOUNTING DRAWING** (dimensions in mm)  
AGREGATI BEZ NOSEĆE PLOČE  
PUMP UNITS WITHOUT MOUNTING PLATE



### Pritisak / Pressure = 63 bar

Oznaka Designation	Protok Flow (l/min)	Snaga Power (kW)	H	H1	H2	H3	N	N1	P	Usisni otvor Inlet port	Potisni otvor Outlet port	Masa Mass (kg)
										d	d1	
1 PA.00.1,6.63.E0,25	1,6	0,25	340	216	63	171	102	115	140	M14x1,5	M12x1,5	8,5

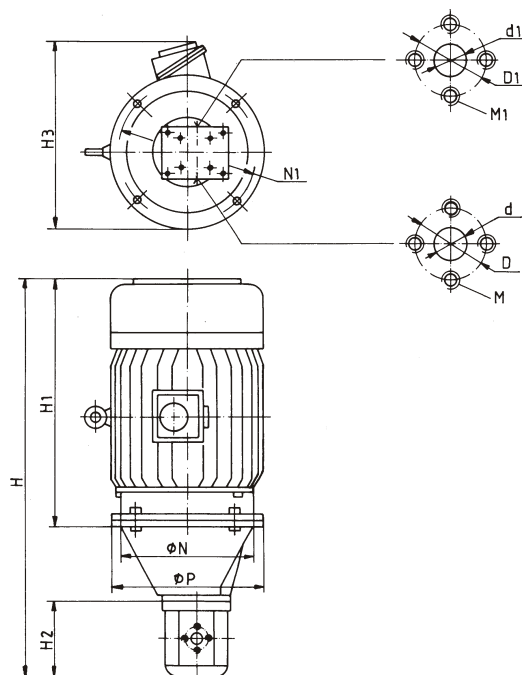
### Pritisak / Pressure = 100 bar

1 PA.00.1.100.E0,25	1	0,25	337	216	60	171	102	115	140	M14x1,5	M12x1,5	8,5
1 PA.00.1,6.100.E0,37	1,6	0,37	340	216	63	171	102	115	140	M14x1,5	M12x1,5	9,5

### Pritisak / Pressure = 160 bar

1 PA.00.1.160.E0,37	1	0,37	337	216	60	171	102	115	140	M14x1,5	M12x1,5	9,5
1 PA.00.1,6.160.E0,55	1,6	0,55	376	240	63	189	110	130	160	M14x1,5	M12x1,5	11,5

AGREGATI BEZ NOSEĆE PLOČE  
PUMP UNITS WITHOUT MOUNTING PLATE



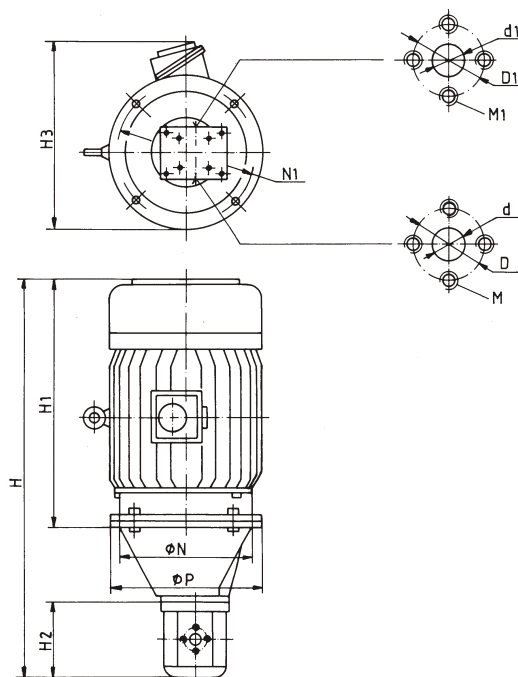
**Pritisak / Pressure = 63 bar**

Oznaka Designation	Protok Flow (l/min)	Snaga Power (kW)	H	H1	H2	H3	N	N1	P	Usisni otvor Inlet port			Potisni otvor Outlet port			Masa Mass (kg)
										Ød	ØD	M	Ød1	ØD1	M1	
1PA.00.2.5.63.E0,37	2,5	0,37	368	219	75,5	140	114	130	160	7	26	M6/10	4	26	M6/10	10
1PA.00.4.63.E0,55	4	0,55	396	244	78,5	157				8	26	M6/10	5	26	M6/10	12,5
1PA.00.6.3.63.E0,75	6,3	0,75	391	244	73	157				10	28	M6/10	7	26	M6/10	14
1PA.00.10.63.E1,1	10	1,1	466	268	108	180	144	165	200	12	30	M6/16	8	26	M6/16	21
1PA.00.16.63.E2,2	16	2,2	527	323	114	200				16	36	M8/16	10	28	M6/16	29
1PA.00.20.63.E2,2	20	2,2	531	323	118	200				20	40	M8/16	12	30	M6/16	29
1PA.00.25.63.E3	25	3	536	323	123	200				20	40	M8/16	12	30	M6/16	34
1PA.00.40.63.E5,5	40	5,5	644	380	142	314	192	215	250	25	50	M10/18	16	36	M8/16	80
1PA.00.50.63.E7,5	50	7,5	687	418	147	314				25	50	M10/18	16	36	M8/16	95
1PA.00.63.63.E7,5	63	7,5	717	417	164	314				25	50	M10/18	16	36	M8/16	100
1PA.00.80.63.E11	80	11	824	494	170	411	271	300	350	32	62	M10/18	20	40	M8/16	135
1PA.00.100.63.E11	100	11	831	494	177	411				32	62	M10/18	20	40	M8/16	136
1PA.00.125.63.E15	125	15	895	547	195	411				40	72	M12/20	25	50	M10/18	185
1PA.00.160.63.E18,5	160	18,5	932	576	203	431				40	72	M12/20	25	50	M10/18	200

**Pritisak / Pressure = 100 bar**

1PA.00.2.5.100.E0,55	2,5	0,55	393	244	75,5	157	114	130	160	7	26	M6/10	4	26	M6/10	12,5
1PA.00.4.100.E0,75	4	0,75	396	244	78,5	157				8	26	M6/10	5	26	M6/10	14,5
1PA.00.6.3.100.E1,1	6,3	1,1	419	262	73	180				10	28	M6/10	7	26	M6/10	16,5
1PA.00.10.100.E2,2	10	2,2	521	323	108	200	144	165	200	12	30	M6/16	8	26	M6/16	28
1PA.00.16.100.E3	16	3	527	323	114	200				16	36	M8/16	10	28	M6/16	32
1PA.00.20.100.E4	20	4	551	343	118	220				20	40	M8/16	12	30	M6/16	39
1PA.00.25.100.E5,5	25	5,5	604	375	123	314				20	40	M8/16	12	30	M6/16	71
1PA.00.40.100.E7,5	40	7,5	682	418	152	314	192	215	250	25	50	M10/18	16	36	M8/16	93
1PA.00.50.100.E11	50	11	789	502	147	411				25	50	M10/18	16	36	M8/16	130
1PA.00.63.100.E11	63	11	818	494	164	411				25	50	M10/18	16	36	M8/16	135
1PA.00.80.100.E15	80	15	868	538	170	411	271	300	350	32	62	M10/18	20	40	M8/16	159
1PA.00.100.100.E18,5	100	18,5	904	567	177	431				32	62	M10/18	20	40	M8/16	175
1PA.00.125.100.E22	125	22	962	614	195	431				40	72	M12/20	25	50	M10/18	230
1PA.00.160.100.E30	160	30	1033	676	203	530				40	72	M12/20	25	50	M10/18	315

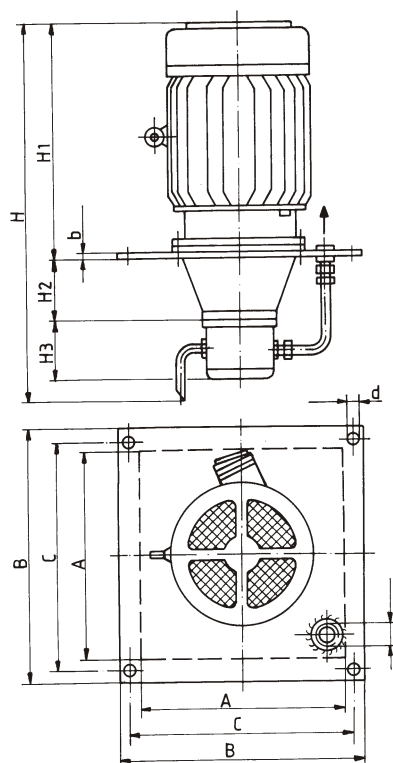
AGREGATI BEZ NOSEĆE PLOČE  
PUMP UNITS WITHOUT MOUNTING PLATE



Pritisak / Pressure = 160 bar

Oznaka Designation	Protok Flow (l/min)	Snaga Power (kW)	H	H1	H2	H3	N	N1	P	Usisni otvor Inlet port			Potisni otvor Outlet port			Masa Mass (kg)
										Ød	ØD	M	Ød1	ØD1	M1	
1PA.00.2.5.160.E0,75	2,5	0,75	393	244	75,5	157	114	130	160	7	26	M6/10	4	26	M6/10	13,5
1PA.00.4.160.E1,1	4	1,1	425	262	78,5	180	144	165	200	8	26	M6/10	5	26	M6/10	16,5
1PA.00.6.3.160.E2,2	6,3	2,2	474	317	73	200				10	28	M6/10	7	26	M6/10	24
1PA.00.10.160.E3	10	3	521	323	108	200				12	30	M6/16	8	26	M6/16	32
1PA.00.16.160.E4	16	4	547	343	114	220				16	36	M8/16	10	28	M6/16	39
1PA.00.20.160.E5,5	20	5,5	599	375	118	314	192	215	250	20	40	M8/16	12	30	M6/16	70
1PA.00.25.160.E7,5	25	7,5	624	413	123	314				20	40	M8/16	12	30	M6/16	85
1PA.00.40.160.E11	40	11	784	502	142	411	271	300	350	25	50	M10/18	16	36	M8/16	130
1PA.00.50.160.E15	50	15	833	546	147	411				25	50	M10/18	16	36	M8/16	153
1PA.00.63.160.E18,5	63	18,5	891	567	164	431				25	50	M10/18	16	36	M8/16	175
1PA.00.80.160.E22	80	22	935	605	170	431				32	62	M10/18	20	40	M8/16	205
1PA.00.100.160.E30	100	30	1005	673	177	530				32	62	M10/18	20	40	M8/16	318
1PA.00.125.160.E37	125	37	1074	697	195	575	345	400	450	40	72	M12/20	25	50	M10/18	377
1PA.00.160.160.E45	160	45	1107	722	203	575				40	72	M12/20	25	50	M10/18	422

AGREGATI SA NOSEĆOM PLOČOM  
PUMP UNITS WITH MOUNTING PLATE



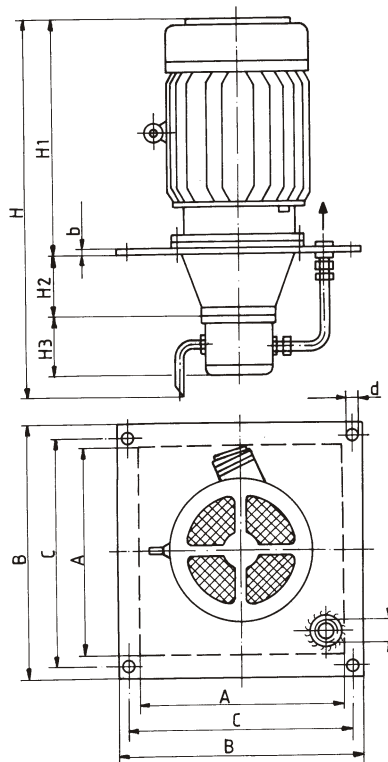
**Pritisak / Pressure = 63 bar**

Oznaka Designation	Protok Flow (l/min)	Snaga Power (kW)	A	B	C	H	H1	H2	H3	b	d	P	Masa Mass (kg)
1PA.00.2.5.63.E0,37-P	2,5	0,37	270	320	288	395	229	64	75,5	10	13	M18x1,5	18
1PA.00.4.63.E0,55-P	4	0,55				422	254	64	78,5			M18x1,5	20
1PA.00.6.3.63.E0,75-P	6,3	0,75				423	254	64	73			M18x1,5	22
1PA.00.10.63.E1,1-P	10	1,1				499	278	80	108			M18x1,5	29
1PA.00.16.63.E2,2-P	16	2,2				555	333	80	114			M20x1,5	37
1PA.00.20.63.E2,2-P	20	2,2				584	333	80	118			M22x1,5	37
1PA.00.25.63.E3-P	25	3				587	333	80	123			M22x1,5	42
1PA.00.40.63.E5,5-P	40	5,5				711	390	112	142			M27x2	88
1PA.00.50.63.E7,5-P	50	7,5				751	428	112	147			M27x2	103
1PA.00.63.63.E7,5-P	63	7,5				773	427	126	164			M27x2	108
1PA.00.80.63.E11-P	80	11	370	420	390	901	504	150	170	10	13	M33x2	147
1PA.00.100.63.E11-P	100	11				904	504	150	177			M33x2	148
1PA.00.125.63.E15-P	125	15				1007	567	144	195			M42x2	197
1PA.00.160.63.E18,5-P	160	18,5				1040	596	144	203			M42x2	212

**Pritisak / Pressure = 100 bar**

1PA.00.2.5.100.E0,55-P	2,5	0,55	270	320	288	420	254	64	75,5	10	13	M18x1,5	20
1PA.00.4.100.E0,75-P	4	0,75				422	254	64	78,5			M18x1,5	22
1PA.00.6.3.100.E1,1-P	6,3	1,1				451	272	74	73			M18x1,5	24
1PA.00.10.100.E2,2-P	10	2,2				554	333	80	108			M18x1,5	36
1PA.00.16.100.E3-P	16	3				555	333	80	114			M20x1,5	40
1PA.00.20.100.E4-P	20	4				604	353	80	118			M22x1,5	47
1PA.00.25.100.E5,5-P	25	5,5				655	385	96	123			M22x1,5	79
1PA.00.40.100.E7,5-P	40	7,5				749	428	112	142			M27x2	101
1PA.00.50.100.E11-P	50	11				853	512	130	147			M27x2	142
1PA.00.63.100.E11-P	63	11				874	504	150	164			M27x2	147
1PA.00.80.100.E15-P	80	15	370	420	390	945	548	150	170	10	13	M33x2	171
1PA.00.100.100.E18,5-P	100	18,5				977	577	150	177			M33x2	187
1PA.00.125.100.E22-P	125	22				1074	634	144	195			M42x2	242
1PA.00.160.100.E30-P	160	30				1151	691	139	203			M42x2	342

AGREGATI SA NOSEĆOM PLOČOM  
PUMP UNITS WITH MOUNTING PLATE



Pritisak / Pressure = 160 bar

Oznaka Designation	Protok Flow (l/min)	Snaga Power (kW)	A	B	C	H	H1	H2	H3	b	d	P	Masa Mass (kg)
1PA.00.2,5.160.E0,75-P	2,5	0,75	270	320	288	420	254	64	75,5	10	13	M18x1,5	21
1PA.00.4.160.E1,1-P	4	1,1				450	272	74	78,5			M18x1,5	24
1PA.00.6,3.160.E2,2-P	6,3	2,2				506	327	74	73			M18x1,5	32
1PA.00.10.160.E3-P	10	3				554	433	80	108			M18x1,5	40
1PA.00.16.160.E4-P	16	4				575	353	80	114			M20x1,5	47
1PA.00.20.160.E5,5-P	20	5,5				652	385	96	118			M22x1,5	78
1PA.00.25.160.E7,5-P	25	7,5	370	420	390	693	423	96	123	15	13	M22x1,5	93
1PA.00.40.160.E11-P	40	11				851	512	130	142			M27x2	142
1PA.00.50.160.E15-P	50	15				897	556	130	147			M27x2	165
1PA.00.63.160.E18,5-P	63	18,5				947	577	150	164			M27x2	187
1PA.00.80.160.E22-P	80	22				1012	615	150	170			M33x2	217
1PA.00.100.160.E30-P	100	30				1078	685	140	177			M33x2	345
1PA.00.125.160.E37-P	125	37	450	500	470	1106	707	172	195	15	13	M42x2	400
1PA.00.160.160.E45-P	160	45				1225	732	172	203			M42x2	445