Aksijalno - klipne pumpe APF
Axial - piston pumps APF

VISOKOG PRITISKA; STALNE RADNE ZAPREMINE
HIGH PRESSURE; FIXED DISPLACEMENT

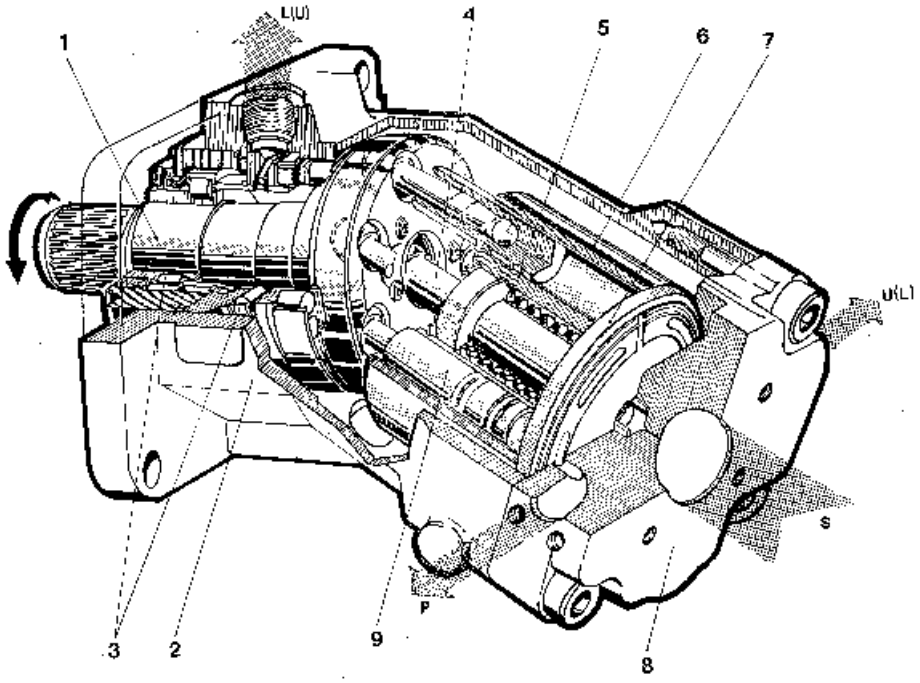
- Konstrukcija sa nagibnim blokom, za otvorene sisteme
- Pogonski mehanizam:
  - 7 klipova
  - pogonsko vratilo robusno ule`i{teno i sposobno za optere}enje radijalnim silama
  - cilindarski blok od ~elika sa kliznim ~aurama od le`i{ne legure
  - prethodno pritiskanje cilindarskog bloka na razvodnu plo~u pomo}u opruge
- - zglobna veza klipa i klipnja~e bez zazora
- Nizak nivo {uma

- Bent axis pump,with 28° filt angle,for use in open loop circuts
- Very robust and rugged rotary pump, with shaft that may be loaded with radial
- forces
- Extremely compact design, therefore, reduced installation space
- High efficiency
- 7 piston in all sizes
- Particulary quiet operation

For highest pressure range and seeds

A

PRESEK - PRINCIP RADA
SECTION - MODE OF OPERATION



1. Pogonsko vratilo
2. Ku}i{te
3. Le`aj
4. Centralna osovina
5. Opruga
6. Cilindarski blok
7. Razvodna plo~a
8. Nosa~ razvodne plo~e
9. Radni klip (7 kom.)

1. Drive shaft
2. Housing
3. Bearing
4. Middle shaft
5. Spring
6. Cylinder block
7. Division plate
8. Rider of division plate
9. Piston (7 pcs)

OZNA^AVANJE
DESIGNATION

APF * TS * * / *
1 2 3 4

1 Nazivna veli~ina ND:
Nominal size ND:
35
50
75
105

2 Smer obrtanja:
Rotation direction:
L= levi
anticlockwise
R= desni
clockwise

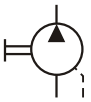
3 Priklju~ci:
Connection ports:
F = SAE prirubnica
flange to SAE standards
M = metri~ki navoj (po zahtevu)
metric thread (on request)

4 Pogonsko vratilo:
Drive shaft:
- = DIN 5482
1 = DIN 5480
2 = cilindri~no
cylindrical

Napomena: Spojnica se isporu~uje na zahtev (vidi str. 6)
Note: Coupling - on the request only (see page 6)

TEHNI^KE KARAKTERISTIKE
TEHNICAL DATA

OP[TE / GENERAL

ND	35	50	75	105
Simbol Symbol				
Smer obrtanja Rotation direction	desni i levi clockwise and anticlockwise			
Polo`aj ugradnje Mounting position	proizvoljan, drena` na najvi{em nivou optional, with drain hole up			
Mass (kg)	16	19	29	33

HIDRAULI^KE / HYDRAULIC

Pritisak Pressure (bar)				
- max (kratkotrajno)* - peek (short time)*	500			
- max radni - max working	420			
- trajni** - continuous**	250			
- ulazni dozvoljeni podpritisak - input permisible pressuration	0,027			
- ulazni dozvoljeni nadpritisak - input permisible depression	2,5			
- u ku}i{tu dozvoljeni nadpritisak - inhousing (back pressure permitted)	1,5			
Radna zapremina Displacement (cm^3/o)	34,7	50,2	74,9	104,9
Broj obrtaja (min-1) Speed (r.p.m.)				
- max — za otvoreni rezervoar (podpritisak 0,027 bar) without tank pressuration (0,027 bar)	2400	2200	2000	1800
- max — za otvoreni rezervoar (pritisak 0,6 bar) with tank pressuration (0,6 bar)	2800	2400	2200	2000
- min	neograni~en unlimited			

Radna te~nost - mineralno hidrauli~ko ulje
Working fluid - mineral hydraulic oil

PREPORUKA
RECOMMENDATION

viskozitet viscosity (mm^2/s)	10...80
optimalni viskozitet optimal viscosity range (mm^2/s)	15...20
max viskozitet - kratko pri startu max viscosity - intermittent for starting (mm^2/s)	1000
temperatura temperature (°C)	-20...+90

Radna temperatura ulja Oil working temperature	Viskozitet Viscosity
30...40°C	22 mm^2/s - 40°C
60...70°C	68 mm^2/s - 40°C
80...90°C	100 mm^2/s - 40°C

FILTRIRANJE: Preporu~uje se fino}a filtriranja 10 mm. Mo`e se primeniti i grublje 25 - 40 mm, ali se pove}ava istro{enje delova
FILTRATION: The fineness of filtering of10 mm is recommended. Filtering of 25 to 40 mm can be also applied. But wearing of the unit parts will be increased.

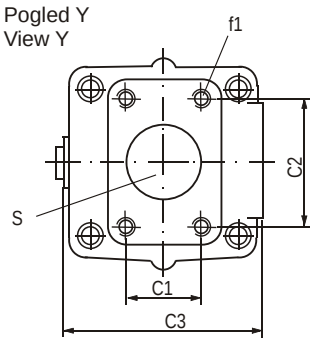
*Kratkotrajni pritisak iznad max radnog (=nazivni pritisak) pri kome je pumpa funkcionalno sposobna
Translent pressure over the max working pressure at which the unit will still function.

**Pritisak pri kome su svi delovi pumpe izdr`ljivi.
Continuous pressure at which all parts of the unit are able to endure.

A

UGRADNI CRTE@ (mere u mm)
MOUNTING DRAWING (dimensions in mm)

PUMPE SA POGONSKIM VRATILOM - DIN standard
PUMPS WITH DRIVE SHAFT - DIN standard



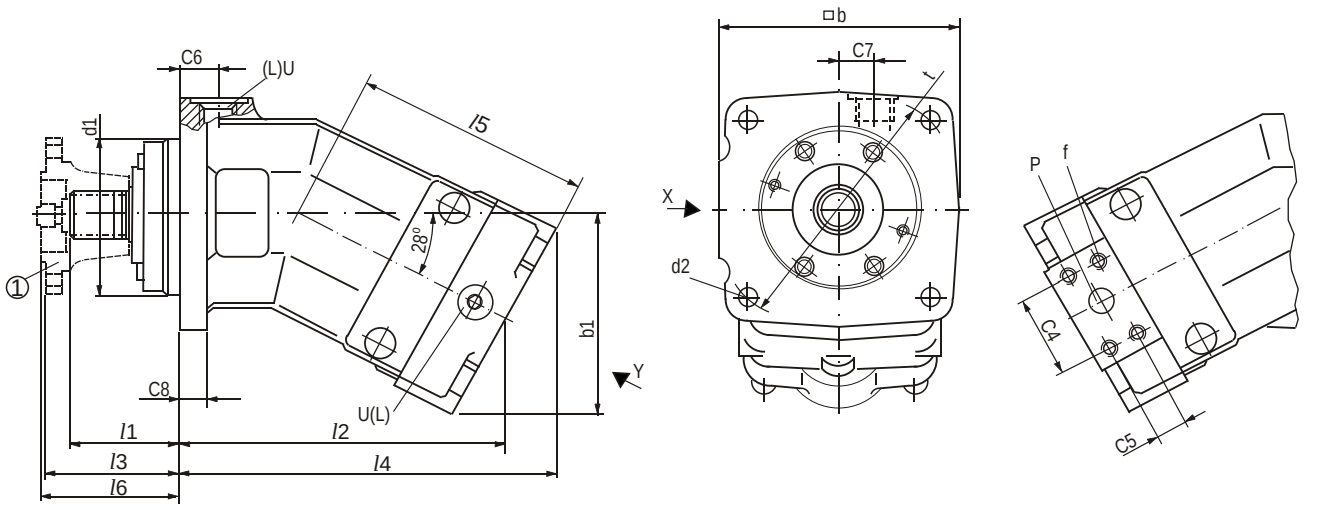
S =usisni otvor/ outlet port: prirubnica / flange SAE 2" (ND 35, 50)
prirubnica / flange SAE 2. 1/4" (ND 75, 105)

P = potisni otvor/ inlet port: prirubnica / flange SAE 3/4" (ND 35, 50)
prirubnica / flange SAE 1" (ND 75, 105)

L = drena`ni otvor/ drain port M 22x1,5

U = otvor za ispiranje/ flushing port M 22x1,5

① = spojnica/ coupling

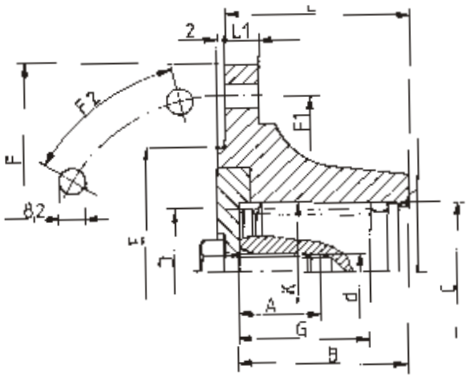


ND	□b	b1	l1	l2	l3	l4	l5	l6	∅d1	∅d2	C1	C2	C3	C4	C5	C6	C7	C8	t	f	f1
35	148	125	60,5	200	67,5	230	145	73	100	12	42,9	77,8	124	50,8	23,8	24	22	20	160	M10/16	M12/16
50	150	124	74	215	81,5	235	158,5	85,5	100	12			125					18	160		
75	170	143,5	77,5	245,5	87,5	275,5	180	92,5	115	14	50,8	88,9	147	57,2	27,8	31,5	22	18	180	M12/16	
105	184	144	86,5	265	95,5	291	193	103,5	125	18			149				30	20	200		

Napomena: Crte`om je prikazana pumpa levog smera (gledano sa ~ela pogonskog vratila). Kod pumpe desnog smera potisni otvor menja mesto - nalazi se na suprotnoj strani.

Note: Anticlockwise pumps are shown on this drawing. With clockwise pump suction and pressure ports interchange places.

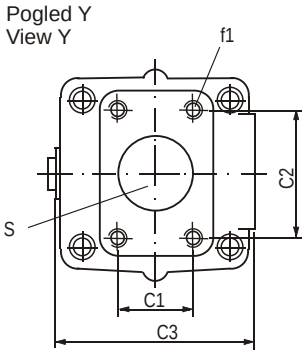
POGONSKO VRATILO SA SPOJNICOM - DIN standard (mere u mm)
DRIVE SHAFT WITH COUPLING - DIN standard (dimensions in mm)



ND	K		A	B	C	D	d	E	F	F1	F2	G	L	L1
	DIN 5480g9	DIN 5482e9												
35	W25x1,25	B25x122	16	38,5	∅25g6	∅20g6	M8	∅57h8	∅ 99,5	∅ 84	6x60°	29	45,5	10
50	W30x2	B30x27	21	42,5	∅30,5g6	∅25g6	M8	∅57h8	∅ 99,5	∅ 84	6x60°	33	50	10
75	W35x2	B35x31	23	45,5	∅35,5g6	∅ 30g6	M10	∅ 75h8	∅114,5	∅101,5	8x45°	36	55,5	12
105	W40x2	B40x36	26,5	50	∅40,5g6	∅ 35g6	M12	∅ 75h8	∅114,5	∅101,5	8x45°	40	59	12

UGRADNI CRTE@ (mere u mm)
MOUNTING DRAWING (dimensions in mm)

PUMPE SA POGONSKIM VRATILOM - cilindri~ni tip
PUMPS WITH DRIVE SHAFT - cylindrical type



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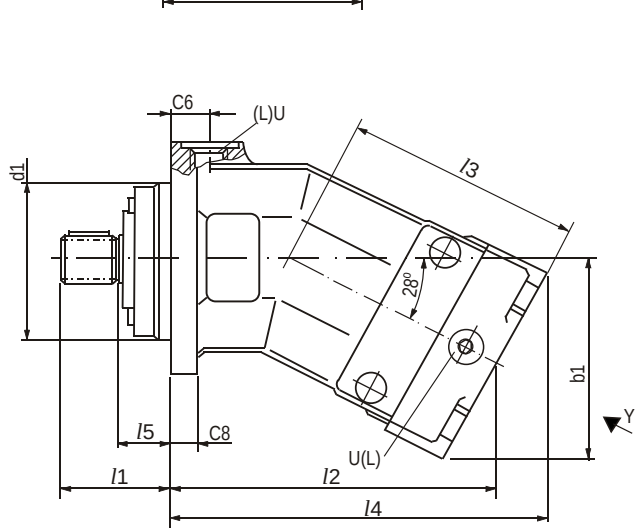
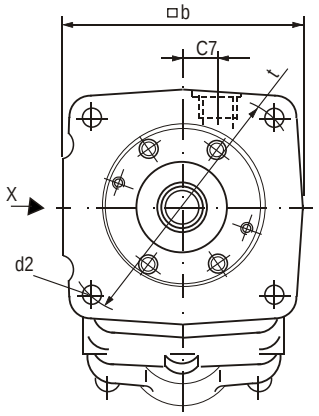
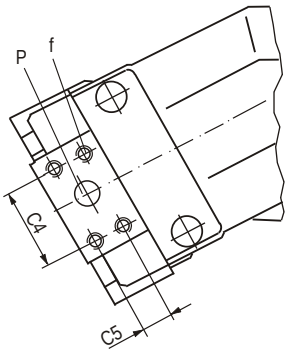




Pogled X
View X



ND	□b	b1	l1	l2	l3	l4	l5	∅d1	∅d2	C1	C2	C3	C4	C5	C6	C7	C8	t	f	f1
35	148	125	100	200	145	230	50	100	12	42,9	77,8	124	50,8	23,8	24	22	20	160	M10/16	M12/16
50	150	124	92	215	158,5	235	32	125	12			125					18	160		
75	170	143,5	102	245,5	180	275,5	32	140	14	50,8	88,9	147	57,2	27,8	31,5	22	18	180	M12/16	
105	184	144	120	265	193	291	40	160	18			149				30	20	200		

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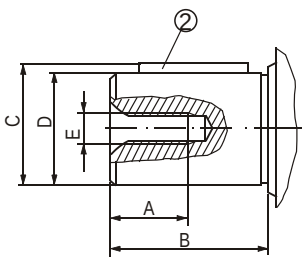
DRIVE SHAFT - cylindrical type



ND	A	B	C	D	E	② klin/ key DIN 6885
35	19	50	28	∅25k6	M8	AS 8x7x40
50	28	60	33	∅30k6	M12	AS 8x7x50
75	28	70	38	∅35k6	M12	AS 10x8x56
105	28	80	43	∅40k6	M12	AS 12x8x63