HIDROSTATIČKI SERVOUPRAVLJAČI

OPIS

- Primenjuju se na građevinskim i poljoprivrednim mašinama, sredstvima unutrašnjeg transporta, kao i na drugim vozilima čija brzina ne prelazi 50 km/h.
- Potpuna hidraulička veza između točka upravljača i upravljanih točkova vozila, bez njihove međusobne mehaničke veze.
- U nultom (neutralnom) položaju komore cilindara su blokirane, a pogonska pumpa povezana sa rezervoarom. Pri pravoj vožnji nema povratnog dejstva upravljanih točkova na točak upravljača.
- Minimalna sila na točku upravljača i velika preciznost upravljanja.
- Kompaktna konstrukcija, kao rezultat korišćenja najsavremenijih tehnoloških rešenja.
- Vrhunski kvalitet, kao rezultat dugogodišnjeg iskustva u proizvodnji servoupravljača.

HYDROSTATIC SERVO STEERING GEARS

DESCRIPTION

- Applied to building-construction and agricultural machines, local means of transportation, as well as to other vehicles the running speed of which does not exceed 50 km/h.
- Complete hydraulic link between the steering wheel and steered wheels on a vehicle, without their mutual mechanical feedback.
- In zero (neutral) position, cylinder chambers are locked and the drive pump connected to the tank. At straight motion there is no feedback of the steered wheels to the steering wheel.
- Minimum force exerted on steering wheel and great steering accuracy.
- Compact design as a result of most advanced technological achievements being used.
- Top quality, as a result of many-year experience in the production of servo steering gears.

OPŠTE HIDRAULIČKE KARAKTERISTIKE

Moment upravljanja	pri normalnom funkcionisanju	~ 0,3 daNm
	ručno upravljanje (nedovolj. protok ulja)	~ 12 daNm
Radni fluid	mineralno ulje	
	viskozitet (mm²/s)	od 20 do 40 (pri 50°C)
	temperatura (°C)	stalna temperatura u rezervoaru do +80, (dozvoljeno, kratkotrajno, i do +100)

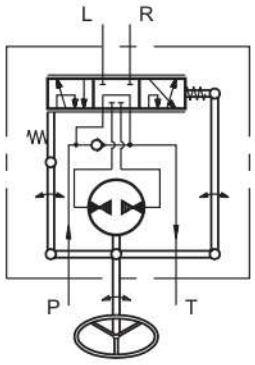
GENERAL HYDRAULIC CHARACTERISTIC

Steering torque	In normal steering situation	~ 0,3 daNm
	Manual steering at insufficient oil flow	~ 12 daNm
Working fluid	mineral oil	
	viscosity (mm²/s)	from 20 to 40 (at 50°C)
	temperature (°C)	constant temperature up to +80, (short-term up to 100 permissible)

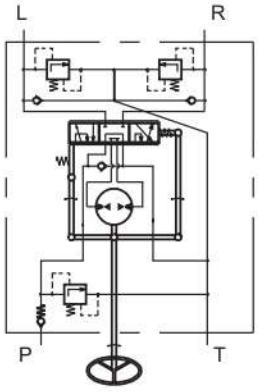
SERVOSTEERING

SIMBOL SYMBOL

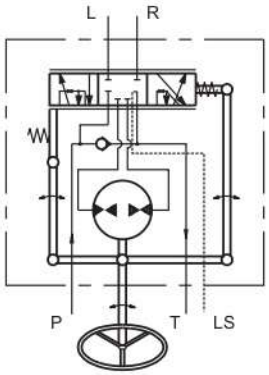
Tip Type 1



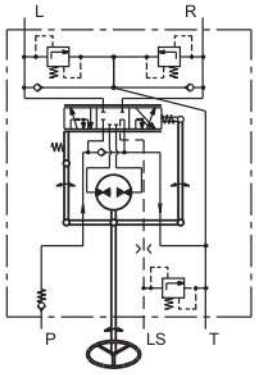
Tip Type 2



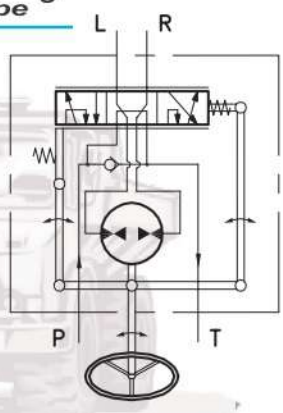
Tip Type 3



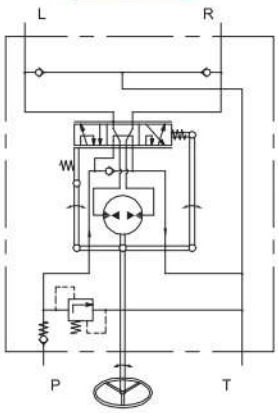
Tip Type 4



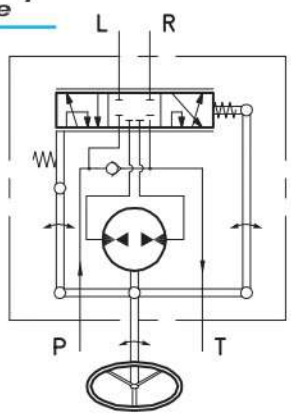
Tip Type 5



Tip Type 6

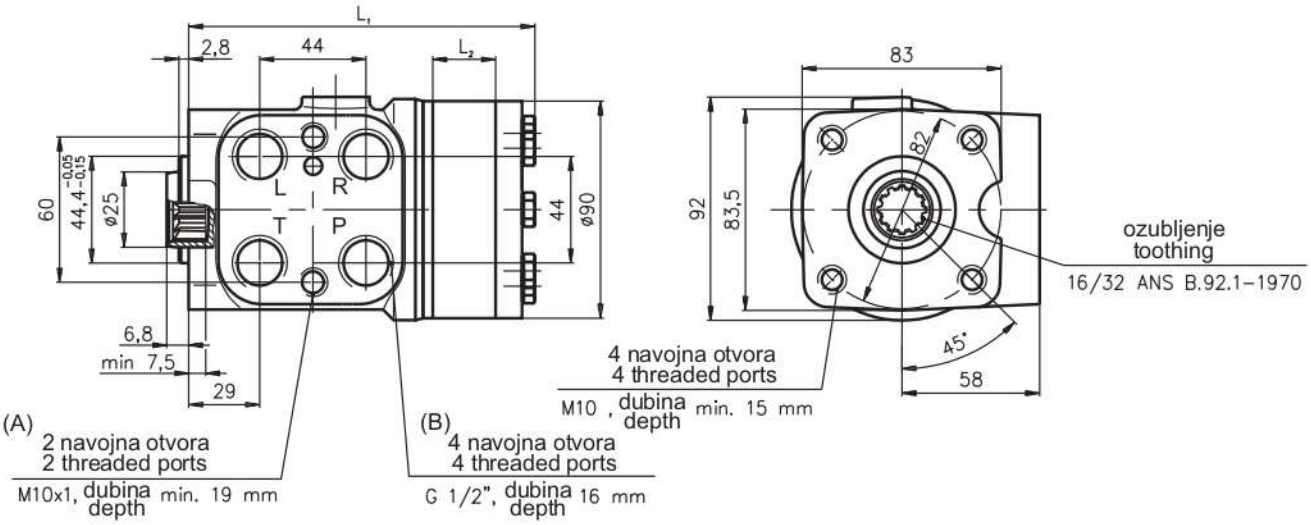


Tip Type 7



Tip Type 1

UGRADNI CRTEŽ
MOUNTING DIMENSIONS



Specifini protok Specific flow (cm^3/o) (cm^3/rev)	Potreban protok servopumpe Required flow of servo pump (l/min)	L_1 (mm)	L_2 (mm)	Max. pritisak Max. pressure (bar) P vod line	Max. pritisak Max. pressure (bar) T vod line	Masa Mass (kg)
50	5	125	6,5	140	20	5,2
63	6,3	127	8,2			5,2
80	8	129	10,4			5,3
100	10	132	13,0			5,4
125	12,5	135	16,3			5,5
160	16	139	20,8			5,6
200	20	145	26,0			5,8
250	25	152	32,5			6,0
315	31,5	159	40,9			6,2
400	40	171	52,0			7,0
500	50	184	65,0			7,6
630	63	201	82,0			7,9
800	80	223	104,0			8,3

NARUČIVANJE
ORDERING

Hidrostatički servoupravljači se naručuju prema oznakama iz tabele.
Hydrostatic servo steering gears to be ordered according designations from the table.

Tip Type 2

UGRADNI CRTEŽ
MOUNTING DIMENSIONS

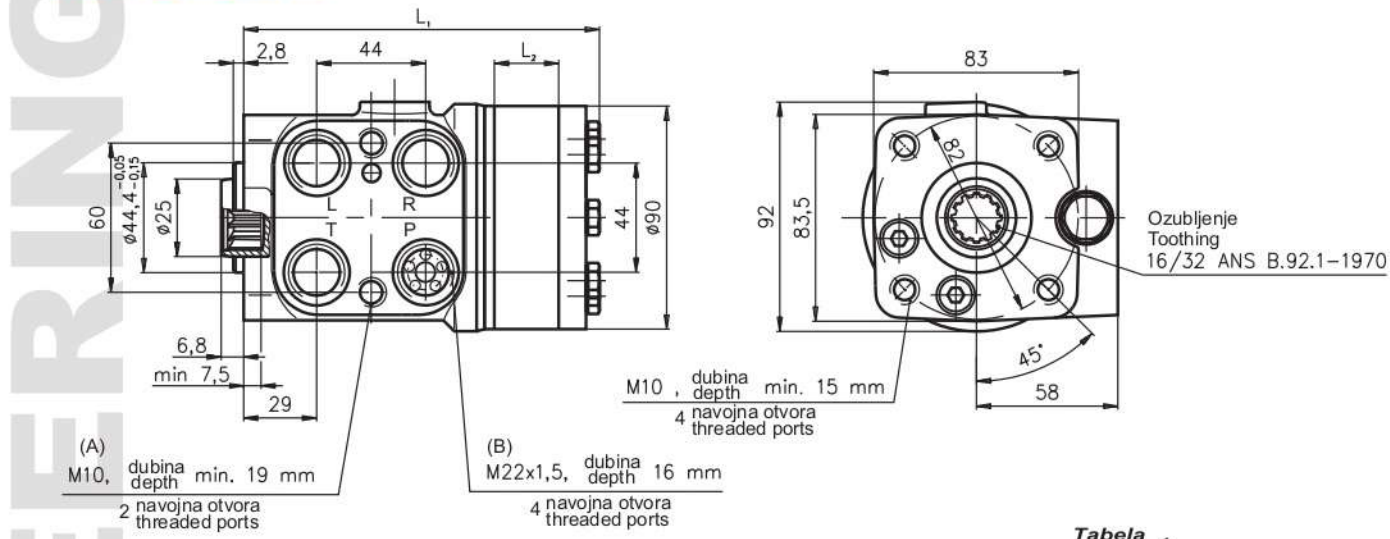


Tabela Table 1

Specifični protok Specific flow (cm^3/o)	Potreban protok servopumpe Required flow of servo pump (l/min)	L_1 (mm)	L_2 (mm)	Maksimalni pritisak Max. pressure (bar)		Masa Mass (kg)
				P vod line	T vod line	
50	5	125	6,5	videti tabelu 2 see table 2	20	
63	6,3	127	8,2			
80	8	129	10,4			
100	10	132	13,0			
125	12,5	135	16,3			
160	16	139	20,8			
200	20	145	26,0			
250	25	152	32,5			
315	31,5	159	40,9			
400	40	171	52,0			
500	50	184	65,0			

Tabela Table 2

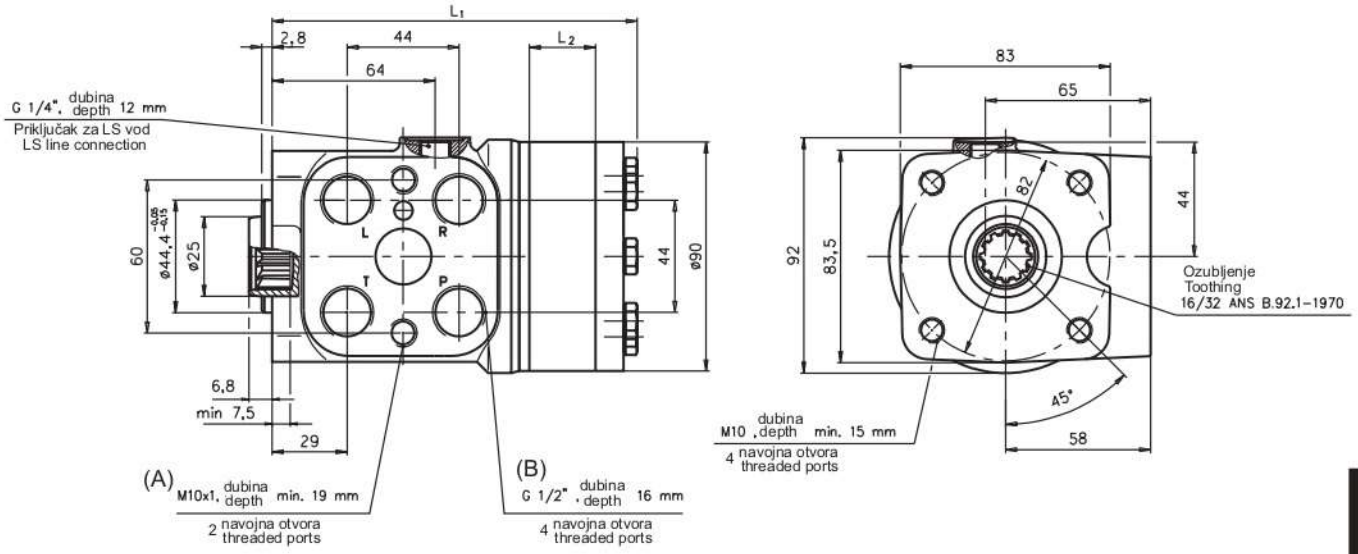
	Podešeni pritisci ventila Set pressure of valves (bar)											
	p_1=150 p_2= 90	p_1=200 p_2=140	p_1=240 p_2=175	p_1=160 p_2=120	P_1= 160 bez vent. sig. no saf. valve	p_1= 120 p_2= 80	p_1= 200 p_2= 120	p_1= 200 p_2= 160	p_1= 180 p_2= 140	P_1= 140 bez vent. sig. no saf. valve	p_1=160 p_2=100	p_1=140 p_2=100
X	A	B	C	D	E	F	G	H	I	J	K	L

p_1=podešen pritisak udarnih ventila — p_1= set pressure at shock valve

p_2=podešen pritisak ventila sigurnosti — p_2= set pressure at safety valve

Tip Type 3

UGRADNI CRTEŽ
MOUNTING DIMENSIONS



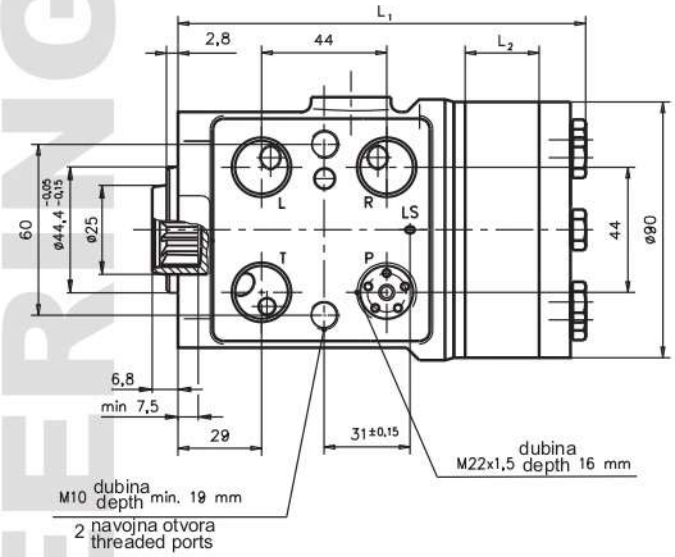
Specifični protok Specific flow (cm^3/o) (cm^3/rev)	Potreban protok servopumpe Required flow of servo pump (l/min)	L_1 (mm)	L_2 (mm)	Maksimalni pritisak Max. pressure (bar)		Masa Mass (kg)
				P vod line	T vod line	
315	31,5	159	40,9	175	15	
400	40,0	171	52,0			
500	50,0	184	65,0			
630	63,0	201	82,0			
800	80,0	223	104,0			

NARUČIVANJE
ORDERING

Hidrostatički servoupravljači se naručuju prema oznakama iz tabele.
Hydrostatic servo steering gears to be ordered according designations from the table.

Tip Type 4

UGRADNI CRTEŽ
MOUNTING DIMENSIONS



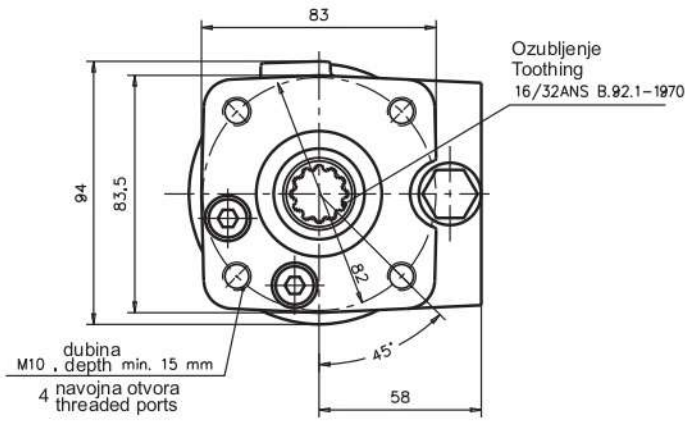


Tabela 1 / Table 1

Specifični protok Specific flow (cm^3/o) (cm^3/rev)	Potreban protok servopumpe Required flow of servo pump (l/min)	L_1 (mm)	L_2 (mm)	Maksimalni pritisak Max. pressure (bar)		Masa Mass (kg)
				P vod line	T vod line	
50	5	125	6,5	videti tabelu 2 see table 2	15	
63	6,3	127	8,2			
80	8	129	10,4			
100	10	132	13,0			
125	12,5	135	16,3			
160	16	139	20,8			
200	20	145	26,0			
250	25	152	32,5			
315	31,5	159	40,9			
400	40	171	52,0			
500	50	184	65,0			

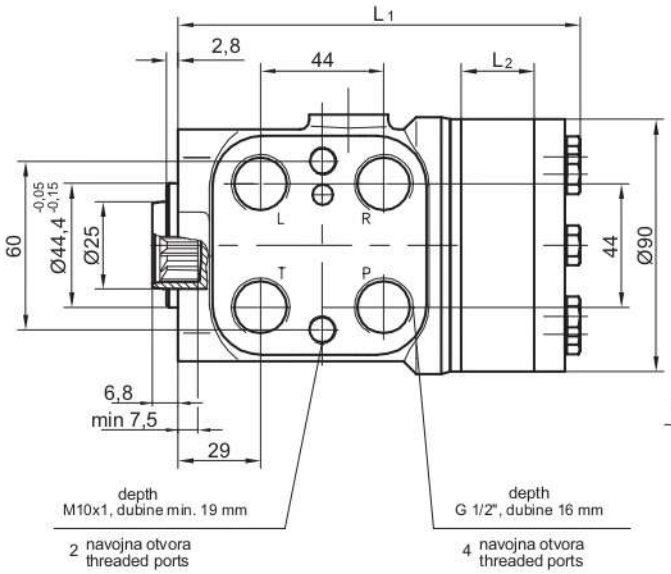
Tabela 2 / Table 2

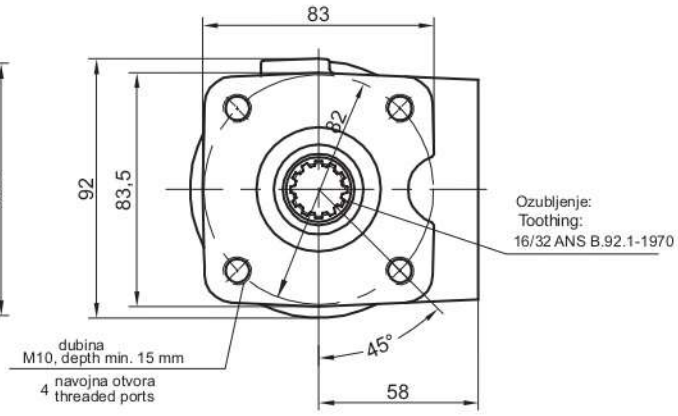
	Podešeni pritisci ventila Set pressure of valves (bar)											
	p_1=150 p_2= 90	p_1=200 p_2=140	p_1=240 p_2=175	p_1=160 p_2=120	P_1= 160 bez vent. sig. no saf. valve	p_1= 120 p_2= 80	p_1= 200 p_2= 120	p_1= 200 p_2= 160	p_1= 180 p_2= 140	P_1= 140 bez vent. sig. no saf. valve	p_1=160 p_2=100	p_1=140 p_2=100
X	A	B	C	D	E	F	G	H	I	J	K	L

p_1=podešen pritisak udarnih ventila — p_1= set pressure at shock valve
p_2=podešen pritisak ventila sigurnosti — p_2= set pressure at safety valve

Tip Type 5

UGRADNI CRTEŽ
MOUNTING DIMENSIONS





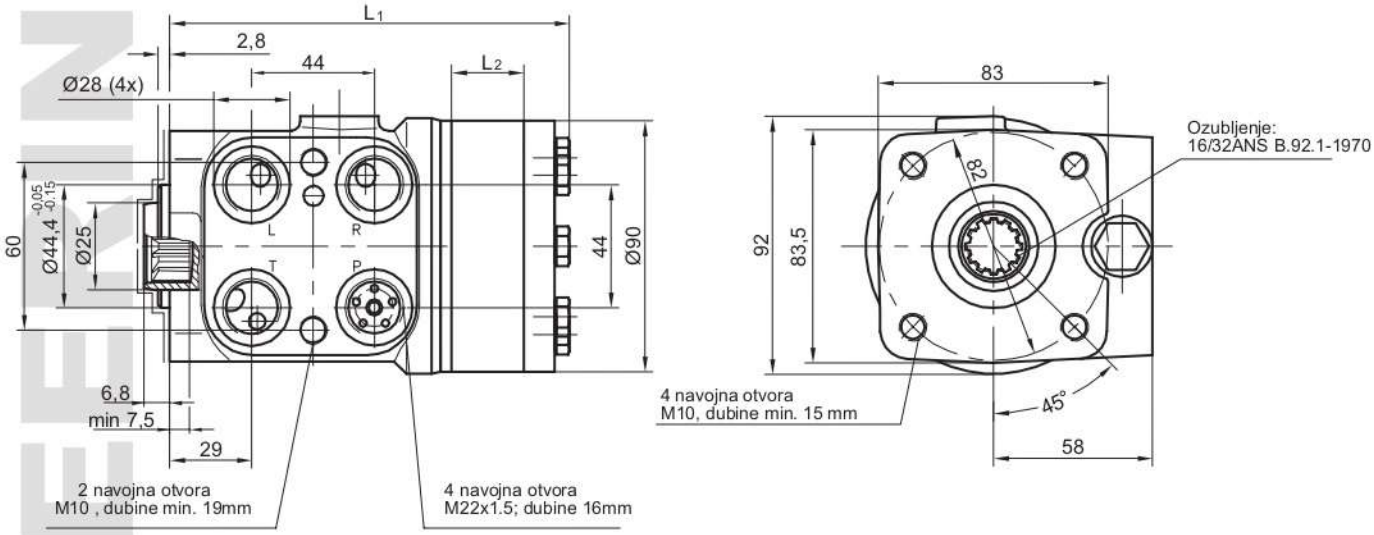
Specifini protok Specific flow (cm^3/o) (cm^3/rev)	Potreban protok servopumpe Required flow of servo pump (l/min)	L_1 (mm)	L_2 (mm)	Max. pritisak Max. pressure (bar)		Masa Mass (kg)
				P vod line	T vod line	
50	5	125	6,5	140	20	5,2
63	6,3	127	8,2			5,2
80	8	129	10,4			5,3
100	10	132	13,0			5,4
125	12,5	135	16,3			5,5
160	16	139	20,8			5,6
200	20	145	26,0			5,8
250	25	152	32,5			6,0
315	31,5	159	40,9			6,2
400	40	171	52,0			7,0
500	50	184	65,0			7,6

NARUČIVANJE
ORDERING

Hidrostatički servoupravljači se naručuju prema oznakama iz tabele.
Hydrostatic servo steering gears to be ordered according designations from the table.

Tip Type 6

UGRADNI CRTEŽ
MOUNTING DIMENSIONS



2

Tabela Table 1

Specifični protok Specific flow (cm^3/o) (cm^3/rev)	Potreban protok servopumpe Required flow of servo pump (l/min)	L_1 (mm)	L_2 (mm)	Maksimalni pritisak Max. pressure (bar)		Masa Mass (kg)
				P vod line	T vod line	
50	5	125	6,5	videti tabelu 2 see table 2	20	
63	6,3	127	8,2			
80	8	129	10,4			
100	10	132	13,0			
125	12,5	135	16,3			
160	16	139	20,8			
200	20	145	26,0			
250	25	152	32,5			
315	31,5	159	40,9			
400	40	171	52,0			
500	50	184	65,0			

Tabela Table 2

	Podešeni pritisci ventila Set pressure of valves (bar)							
	p_1=150 p_2= 90	p_1=200 p_2=140	p_1=240 p_2=175	p_1=160 p_2=120	P_1 = 160 bez vent. sig. no saf. valve	p_1= 120 p_2= 80	p_1= 200 p_2= 160	p_1=160 p_2=100
X	A	B	C	D	E	F	H	K

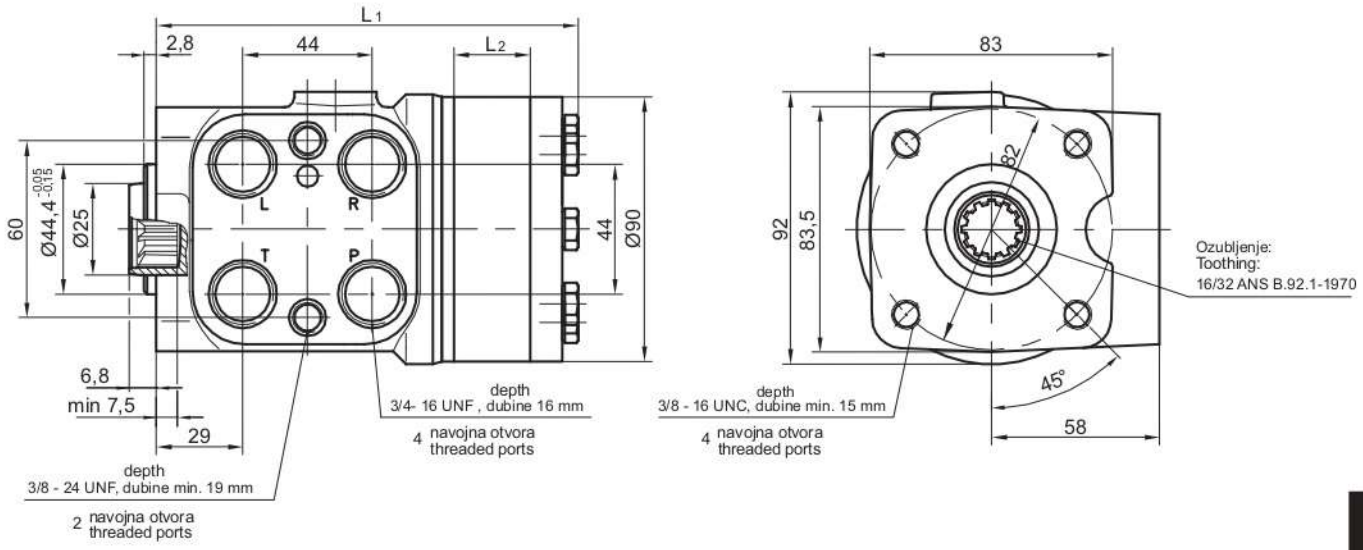
p_1=podešen pritisak udarnih ventila — p_1= set pressure at shock valve
p_2=podešen pritisak ventila sigurnosti — p_2= set pressure at safety valve

NARUČIVANJE
ORDERING

Hydrostatic servo steering gears to be ordered according designations from the table.

Tip
Type 7

UGRADNI CRTEŽ
MOUNTING DIMENSIONS



Specifini protok Specific flow (cm^3/o) (cm^3/rev)	Potreban protok servopumpe Required flow of servo pump (l/min)	L_1 (mm)	L_2 (mm)	Max. pritisak Max. pressure (bar)		Masa Mass (kg)
				P vod line	T vod line	
50	5	125	6,5	140	20	5,2
63	6,3	127	8,2			5,2
80	8	129	10,4			5,3
100	10	132	13,0			5,4
125	12,5	135	16,3			5,5
160	16	139	20,8			5,6
200	20	145	26,0			5,8
250	25	152	32,5			6,0
315	31,5	159	40,9			6,2
400	40	171	52,0			7,0

I