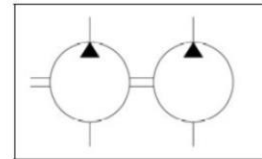




Catalogue of double gear hydroelectric generator

HP 32/32, HP 32/32 L, HP 32/32 07, HP 32/32 L 07
 HP 40/32, HP 40/32 L
 HP 40/40, HP 40/40 L
 HP 50/32, HP 50/32 L
 HP 50/40, HP 50/40 L
 HP 50/50, HP 50/50 L



Technical conditions:

Pressure on outlet of hydroel. generator: - nominal 16 MPa
 - maximum * 19 MPa

* stated maximum pressure is only pressure peak of hydraulic circuit
 and it is not possible to consider this peak like working pressure.
 Maximum time allowed for this overpressure are 3 seconds.

Pressure on input: - maximum 0,05 MPa
 - minimum - 0,03 MPa

Surroundings temperature -30 to +60°C
 Liquid temperature -30 to +80°C
 Liquid - mineral oil for hydrostatic drives f.e.:
 MOGUL OLN 22 TO 46
 Shell Tellus 32
 Shell Tellus 46
 Madit OHHM 46

Operating range of hydraulic oil kinematic viscosity during 40°C 20 - 60 mm² s⁻¹
 Maximum kinematic viscosity (during start up) 1200 . mm² s⁻¹
 Filtration efficiency of filter insert 10 - 25 µm
 β_{25} 75

Working position arbitrary

Technical specifications

Signification of gear hydroelectric generator	Nominal geometric capacity cm ³ / rot.	Rotations 1/min			Nominal pressure MPa	During nominal rotations and nominal pressure	
		Min. *	Max. *	Nominal		input kW	overflow dm ³ /min
HP 32/32	32/32	600	2500	1500	16	27	43,2/43,2
HP 40/32	40/32	600	2500	1500	16	30	57/43,2
HP 40/40	40/40	600	2500	1500	16	34	54/54
HP 50/32	50/32	600	2500	1500	16	35	67,5/43,2
HP 50/40	50/40	600	2500	1500	16	39	67,5/54
HP 50/50	50/50	600	2500	1500	16	44	67,5/67,5

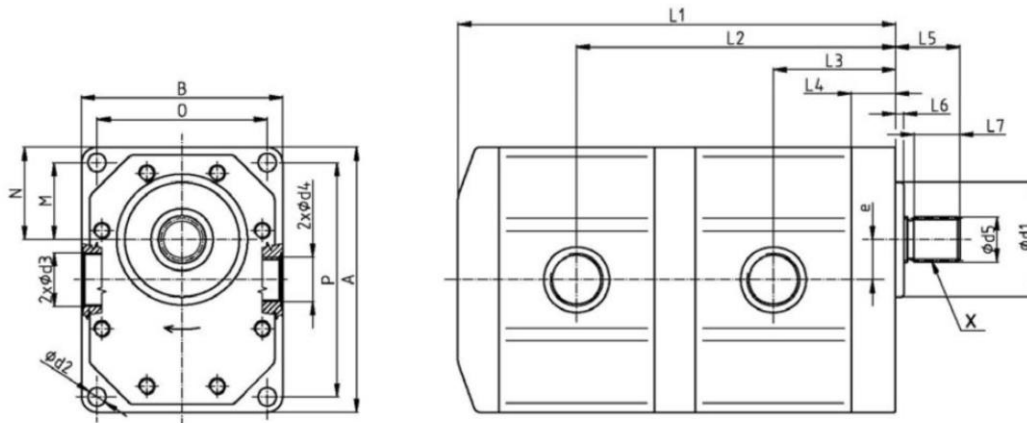
* Permanent operation on nominal pressure 16 MPa is allowed only in rotations range from 600 to 1 800 min⁻¹. Out of this rotations range is allowed max. pressure 12 MPa.

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 tel.: ++421 43 4281 707-9, fax: ++421 43 4281 706, www.marting.sk
 E-mail: marting@marting.sk



Main built-up measurements - involute shaft, side connection

Pump types: HP 32/10, HP 40/40, HP 40/32, HP 50/32, HP 50/40, HP 50/50
 HP 32/32 L, HP 40/32 L, HP 40/40 L, HP 50/32 L, HP 50/40 L, HP 50/50 L
 (showed dextrorotary pump)



Pump: HP 32/32, HP 40/32, HP 40/40, HP 50/32, HP 50/40, HP 50/50
 HP 32/32 L, HP 40/32 L, HP 40/40 L, HP 50/32 L, HP 50/40 L, HP 50/50 L

(measurements in mm)

Nominal geometric capacity	L1	L5	L4	L6	L7	e	B	A	M	N
32/32	250	54	27	5	40	24,5	123	162	47	56,5
40/32	256									
40/40	262									
50/32	264									
50/40	270									
50/50	277									

Nominal geometric capacity	L3	L2	O	P	d5	d1	d2
32/32	72	180,7	104	143	Involute splines 38 x 1,5 tolerance of counterpart - H9	70 f8	11
40/32	75	183,7					
40/40	75	186,7					
50/32	78	193,8					
50/40	78	196,8					
50/50	78	201					

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Main built-up measurements - involute shaft, side connection

Pumps suction and displacement:

HP 32/32, HP 32/32 L
HP 40/32, HP 40/32 L
HP 40/40, HP 40/40 L
HP 50/32, HP 50/32 L
HP 50/40, HP 50/40 L
HP 50/50, HP 50/50 L

	Thread	Depth of thread	Lightness Js
Suction d3	M 33 x 2	18	32 required
Displacement d4	M 27 x 2	16	20 recommended

Pumps signification

HP	32/32	L
Hydrogenerator	Nominal geometric capacity	Counter-clockwise (without signification = dextrorotary)

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