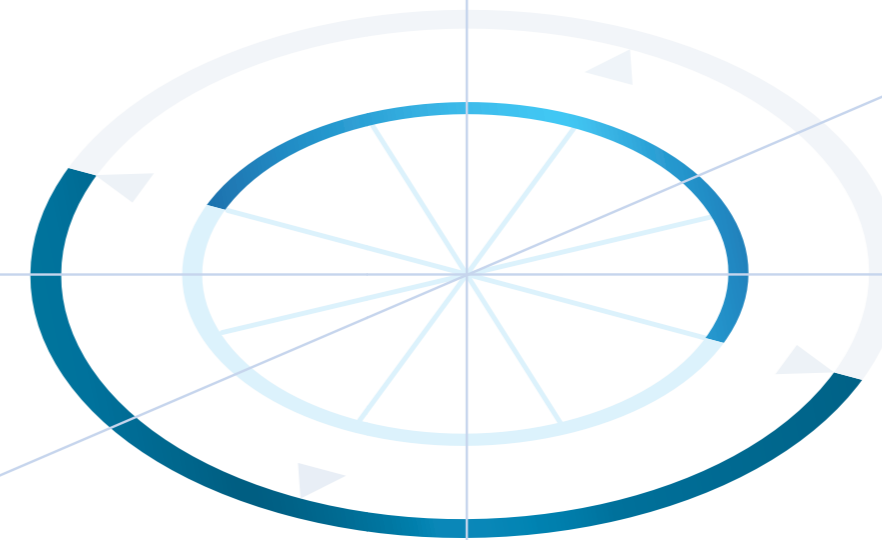


BASIC PARAMETERS OF GEAR PUMPS AND MOTORS



SERIES	BASIC MODELS WITH CW OR CCW ROTATION								OTHER OPTIONS								
	Nominal displacement range		Nominal flow range at 1500 rpm		Speed min	Speed max	Max. continuous pressure		GEAR PUMPS			GEAR MOTORS					
	[cm³/rev]	[in³/rev]	[l/min]	[gal/min]	[rpm]	[rpm]	[bar]	[psi]	Bidirectional without drainage	Bidirectional with int. drainage	Front end bearing	Multisection version	Sealed sections	Bidirectional without drainage	Bidirectional with int. drainage	Front end bearing	
ALUMINIUM SERIES																	
X		0.18 - 3.20	0.01 - 0.20	0.19 - 4.45	0.05 - 1.17	600	8000	230	3340	•	•	•	•	•	•	•	•
P23		0.80 - 11.80	0.05 - 0.72	1.07 - 16.30	0.28 - 4.30	500	5000	280	4070	•	•	•	•	•	•	•	•
J		2.00 - 15.00	0.12 - 0.92	2.68 - 20.60	0.71 - 5.44	500	4000	280	4070	•	•	•	•	•	•	•	•
T3		4.00 - 31.00	0.25 - 1.90	5.40 - 43.71	1.43 - 11.54	500	4000	280	4070	•	•	•	•	•	•	•	•
T3T		9.00 - 31.00	0.55 - 1.90	12.15 - 43.71	3.21 - 11.54	500	2500	260	3780			•	•	•			•
UD		5.00 - 39.00	0.31 - 2.44	6.60 - 54.10	1.74 - 14.28	400	3200	280	4070			•	•	•			•
Q2		10.00 - 100.00	0.62 - 6.10	14.10 - 139.50	3.72 - 36.83	350	3200	290	4210	•	•	•	•	•	•	•	•
CAST-IRON SERIES																	
QHD1		10.00 - 100.00	0.62 - 6.10	13.70 - 139.50	3.62 - 36.83	300	3200	300	4360	•	•	•			•	•	•
QHD2		43.00 - 150.00	2.66 - 9.19	64.00 - 212.50	16.90 - 56.10	250	3200	280	4070	•	•	•			•	•	•
GHD0		10.00 - 51.00	0.59 - 3.18	13.50 - 73.40	3.56 - 19.38	350	3400	300	4360	•	•	•	•	•	•	•	•
GHD1		17.00 - 82.00	1.06 - 4.99	23.50 - 115.40	6.20 - 30.47	350	3200	300	4360	•	•	•	•	•	•	•	•
GHD2		51.00 - 150.00	3.16 - 9.19	69.90 - 212.50	18.45 - 56.10	350	3200	280	4070	•	•	•	•	•	•	•	•



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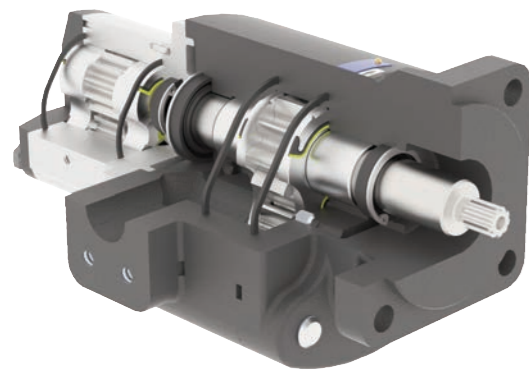
www.jihostroj.com



GPS 48°49'51.748"N 14°27'40.770"E

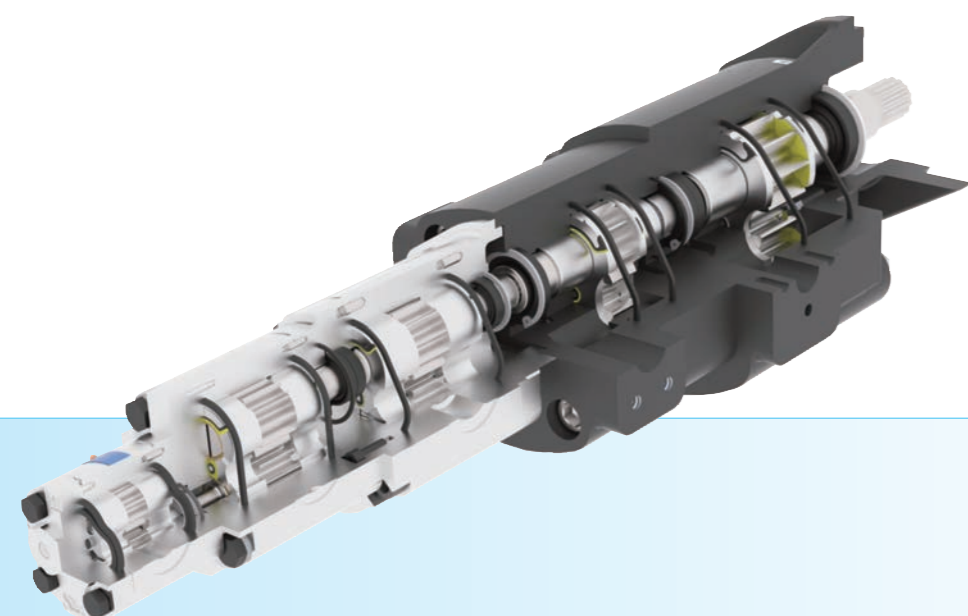
HYDRAULIC GEAR PUMPS AND GEAR MOTORS

HYDRAULIC GEAR PUMPS AND GEAR MOTORS



The gear pumps from Jihostroj a.s. are modern high pressure hydraulic pumps with variable connecting dimensions and styles according to international standards. They have continuous working pressure up to 300 bar (4360 psi). The hydraulic gear pumps are produced in twelve interrelated series (X, P23, J, T3, UD, Q2, and heavy duty pumps: QHD1, QHD2, GHD0, GHD1 and GHD2, and low noise gear pumps T3S) which have displacement from 0.18 to 150 ccm/rev (from 0.01 to 9.15 in³/rev). We offer all the pumps of series

P23, J, T3, UD and Q2 in reverse models or as hydraulic motors, they can have special shaft sealing resistant to 10 bar (145 psi). The hydraulic gear pumps are produced in a wide range of modifications for various usage in hydraulic power packs, mobile machines with power circuits or power steering. They can be used in construction, agricultural machines, in fork lifts, excavators, etc. The hydraulic pumps can be equipped with front-end bearing absorbing radial and axial forces of the drive. The hydraulic gear pumps from Jihostroj can be used also as tandem pumps, all the series can be combined in a double or triple (in special cases in four or five pumps systems) modifications. They are applied especially in complicated hydraulic circuits of vehicles and manipulation machines, where they have an advantage of saving space and a number of drives of the pumps.



ALUMINIUM HYDRAULIC GEAR PUMPS

- Displacement from 0.18 to 100 ccm/rev (0.01 to 6.10 in³/rev)
- Intermittent Pressure up to 310 bar (4500 psi)
- Continuous Pressure up to 290 bar (4210 psi)
- Revolutions up to 8000 RPM
- Popular drives and ports
- Integral relief valves
- Straight or helical gears
- Full aluminium construction
- Combination aluminium - cast iron construction
- Multiple pumps on one shaft design
- High efficiency



Pumps with external gears are applicable for their simple design, compact dimensions and wide range of types and modifications. They are used in modern hydraulic systems, handling technologies and mobile hydraulics. Basic design is composed from standardized parts. The body of the pump is produced from cast iron or aluminium alloy. All flanges, inlets and outlets (located on the side - in the body, or axial - in the cover) comply with world standards. Gear wheels are optimized to achieve a low noise level, they are made of high-strength steel. Wheel journals with high quality surface are in bearings, which are constantly lubricated and cooled by working liquid.

HEAVY DUTY PUMPS

- Displacement from 10 to 150 ccm/rev (from 0.61 to 9.15 in³/rev)
- Intermittent Pressure up to 320 bar (4640 psi)
- Continuous Pressure up to 300 bar (4360 psi)
- Revolutions from 250 up to 3400 RPM
- Full cast iron construction
- Multiple pumps on one shaft design
- Popular drives and ports
- Integral relief valves
- High efficiency in heavy field conditions



These pumps are characterized by a two-part or three-part all-cast-iron design. The pumps are characterized by simple construction with hydraulic pressure balance, compact dimensions and a wide range of connection types. Liners supporting gear journals are pressed into the flange and also in the cover. Gear wheels, which are optimized to achieve a low noise level, are made of high-strength steel. The flange dimensions enable a design with a shaft bearing for a higher radial or axial load of the drive.

FAN DRIVE MOTORS

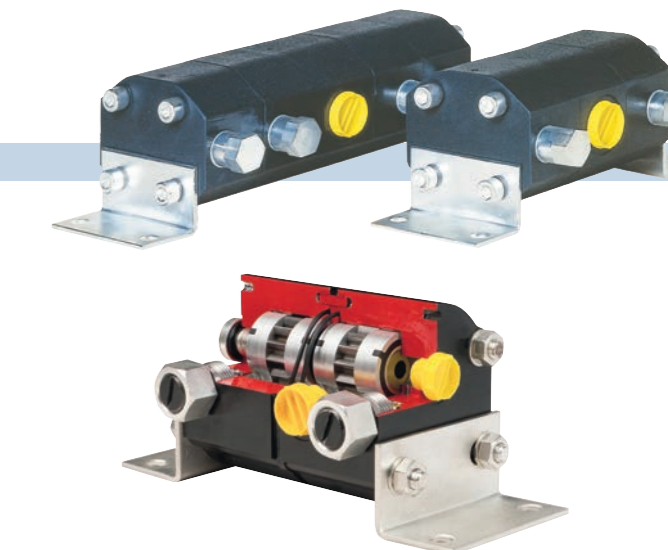
- Noise reduction
- Emission reduction
- Fuel costs saving
- Power saving
- Wear-out reduction

Traditional direct - drive engine mounted fan systems consume more power than is necessary for the engine cooling. From that reason Jihostroj developed gear motors equipped with electrohydraulic proportional relief valves and electronically match fan speed with a cooling demand. This system allows variable fan speed independent of the engine speed.



FLOW DIVIDERS

- Rotary gear flow dividers
- From 2 up to 6 sections
- Sections from 0.8 up to 31 ccm (from 0.05 to 1.89 in³/rev)
- Balanced, unbalanced
- Cast iron or aluminium body
- High accuracy
- Proven quality in field conditions



Flow dividers are robust gear type products of cast iron or aluminium body, with or without hydraulic balancing with a fixed axial play. Their application is in solutions where it is necessary to split the flow with a sufficient accuracy regardless of the pressure ratio in the individual branches. The output branches can be fitted with the relief valves which are adjusted to the customer's specifications. The flow dividers can be manufactured with the option of two to six sections. They can be used in construction and agricultural machines, fork lifts, excavators, etc.

