



GEAR PUMPS RECOMMENDATIONS BEFORE START-UP



Attention: The application of ABER gear pumps must follow all the instructions hereby mentioned in order to assure a long life to the product and preserve the warranty of the mark. If there should happen any malfunctioning, it is strictly forbidden the disassembly of the product except if it is being made by a qualified technician of the mark or if there is a special authorization to do that. If this specification should not be followed, all warranties might be lost.

General information:

ABER gear pumps have fixed and bidirectional flow. They are available in three ranges and cover longitudinal turnings from 16 to 200 cm³/rot., with a maximum pressure of 325bar. Their dimensions are small, and they are robust. They can be directly assembled into the PTO's.

CTI Gear pumps recommendations before start-up 0811-0

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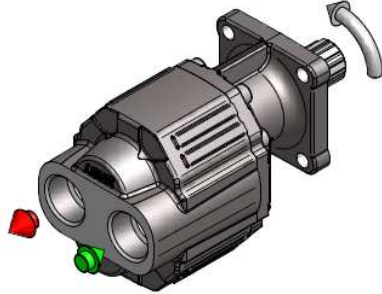
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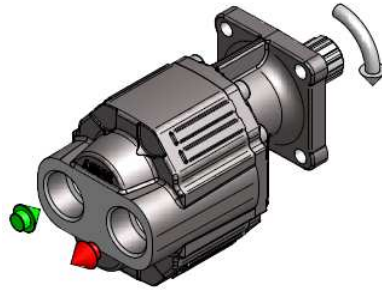
GEAR PUMPS RECOMMENDATIONS BEFORE START-UP

Installation:

- 1- Verify the rotation way of the pump, right or left hand.



Right hand



Left hand

- 2- Connect the pump to the PTO (apply 80Nm torque in the tightening nuts). It is not advisable high efforts or shocks during the assembly. The pump must be connected without making use of any type of tool that forces its assembly;

- 3- Remove all protection covers from the threaded bolts (inlet/outlet). Apply the inlet and outlet accessories into the pump. Connect the outlet and the inlet pipes to the pump (always respect the pipes and thread dimensions). Be sure that all connections are robust and well sealed.

Fluids:

For gear pumps, ABER recommends the use of high quality mineral oils type ISO HM or DIN 51524-2 HLP, with viscosities from 10 to 1000 cSt at working temperature. The working viscosity limits stay between minimum 10cSt and maximum 750 cSt. It is possible to use other oils with the same characteristics, but only after consulting and getting authorization from ABER.

When choosing the oil it is necessary to be aware of the low viscosity with the increase of the temperature and to know that the unity of the viscosity cSt (mm^2/s) is defined at the temperature of 40 °C; Therefore, we recommend you that when you want to work above that temperature, you should choose an oil with more viscosity (thicker) in order to compensate the reduction of viscosity when the temperature increases.

The oil temperatures must be maintained between -25 e 80 °C. We advise you to use an oil cooler when you verify that the system's temperature is about or higher than these values.

The oil must be replaced after 1000 working hours or at least once a year.

Filtration:

The filtration is extremely important and may influence or even determine the life of the equipment. ABER recommends the use of a return filter and an air filter with an absolute filtration degree of 10 μm , as according to the ISO 4406 class 17/14 if the work is to be done at a pressure higher than 200bar. When the work is to be done at less than 200bar the best solution is to use a return filter and an air filter with an absolute filtration degree of 25 μm , as according to the ISO 4406 class 19/16

The first filter to be applied into the system must be replaced as soon as it reaches the 50 working hours; after the first replacement, it must be replaced along with the oil or when pressures out of the common are verified in the return.

N.B.: Be sure that the whole system is perfectly cleaned before filling it with oil (a.m. recommended).

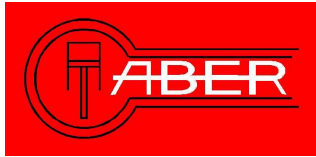
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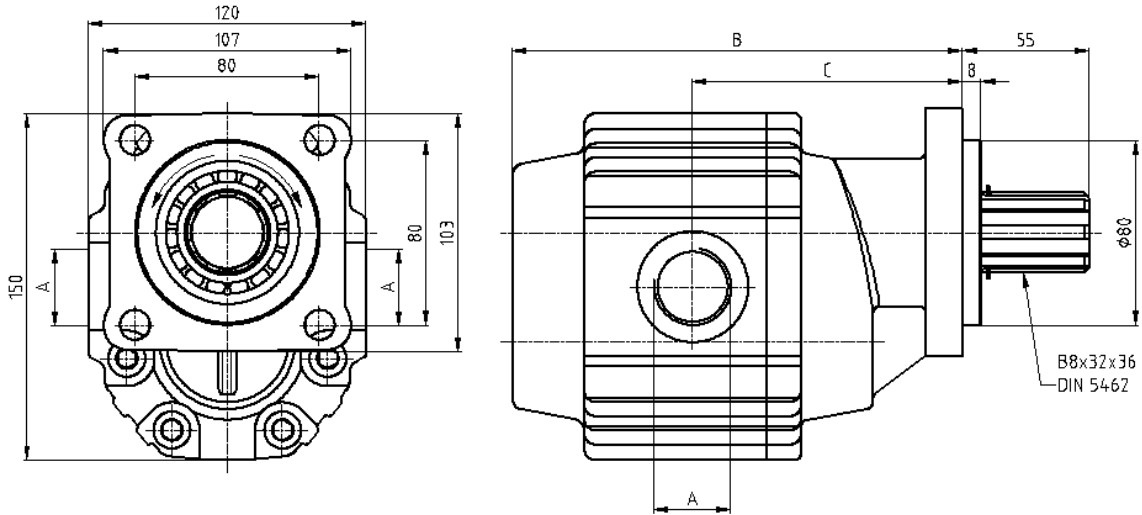
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OIL-HYDRAULIC GEAR PUMP

Ref. B34G

Main Dimensions



(Dimensions in mm)

Main Data

Pumps B34G	38	52	61	82	105	125
Cylinder capacity (cm ³ /rot.)	38.3	51.6	60.9	81.6	99.7	124.9
Rotation Máx. (r.p.m)	2800	2500	2000	1800	1800	1800
Operating pressure (bar)(up to)	280	250	230	200	180	180
Peak pressure (bar)	310	300	260	230	220	220
Weight (kg)	10.5	11.0	12.0	13.0	14.0	15.5
Sense of Rotation	Bi-directional					
A - Inlet (BSP) / Outlet (BSP)	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/4"
B	166.5	175	182	195	207	223
C	108	112.5	120	117	123	139

How to order:

Example: Pump 38L, operating pressure up to 280 bar; peak pressure 310 bar, ref.B34G → B34G38

CTI B34G 0811-2

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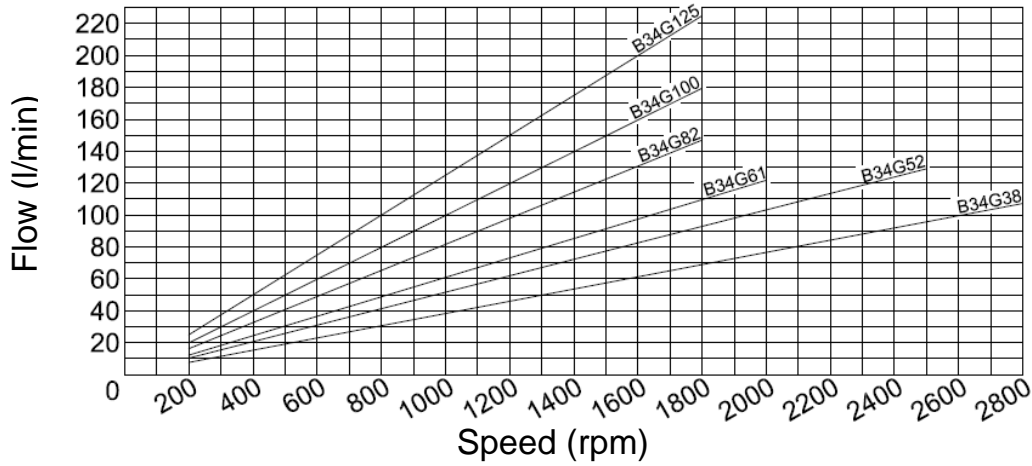
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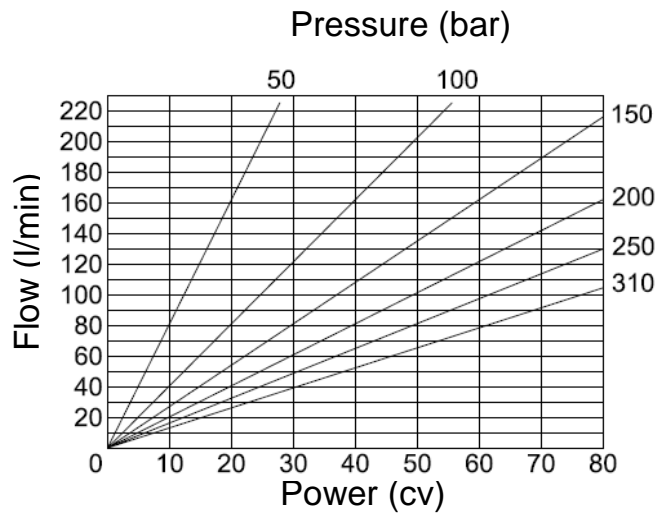
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**Diagram
Flow / Speed**



**Diagram
Input Power - Flow - Pressure amplitude**



Important notes:

- To install one of these pumps, please consult and respect the instruction "Gear pumps recommendations before start-up";
- Other axis available, please consult "Axel options".

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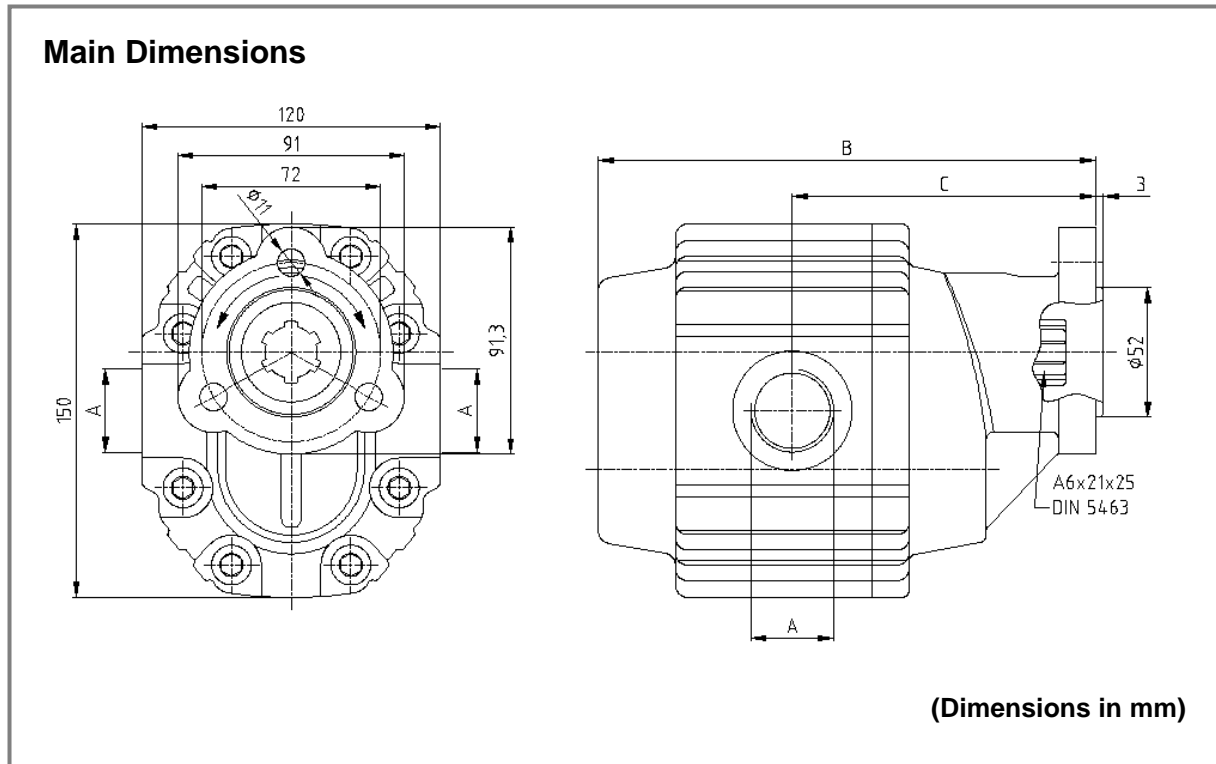
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OII-HYDRAULIC GEAR PUMP

Ref. B33G



Main Data						
Pumps B33G	38	52	61	82	105	125
Cylinder capacity (cm ³ /rot.)	38.3	51.6	60.9	81.6	99.7	124.9
Rotation Máx. (r.p.m)	2800	2500	2000	1800	1800	1800
Operating pressure (bar)(up to)	280	250	230	200	180	180
Peak pressure (bar)	310	300	260	230	220	220
Weight (kg)	10.0	10.5	11.5	12.5	13.5	15.0
Sense of Rotation	Bi-directional					
A - Inlet (BSP) / Outlet (BSP)	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/4"
B	174.5	183	190	203	215	231
C	116	120.5	128	133	131	147

How to order:

Example: Pump 38L, operating pressure up to 280 bar; peak pressure 310 bar, ref.B33G → B33G38

CTI B33G 0811-2

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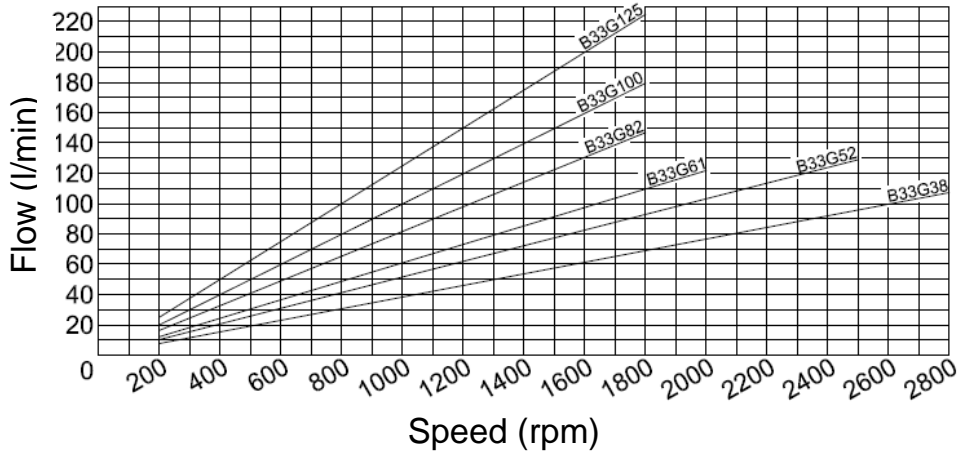
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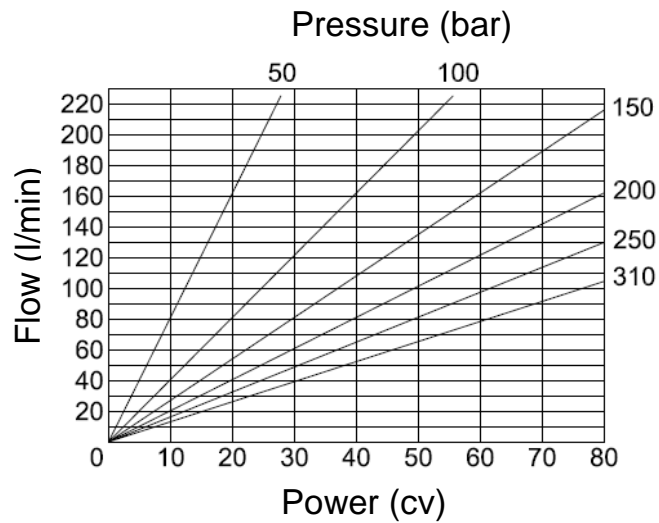
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**Diagram
Flow / Speed**



**Diagram
Input Power - Flow - Pressure amplitude**



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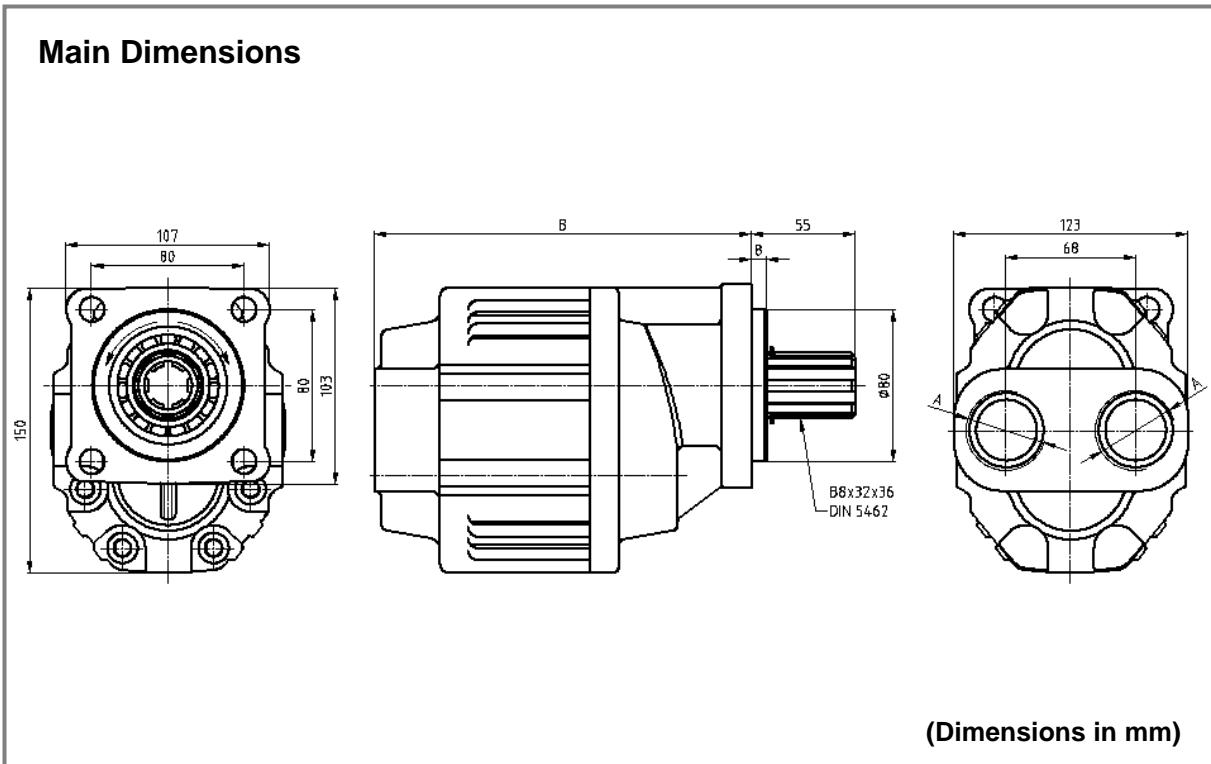




OII-HYDRAULIC GEAR PUMP

Ref. B34T

Main Dimensions



(Dimensions in mm)

Main Data

Pumps B34T	38	52	61	82	105	125
Cylinder capacity (cm ³ /rot.)	38.3	51.6	60.9	81.6	99.7	124.9
Rotation Máx. (r.p.m)	2800	2500	2000	1800	1800	1800
Operating pressure (bar)(up to)	280	250	230	200	180	180
Peak pressure (bar)	310	300	260	230	220	220
Weight (kg)	11.5	12.0	13.0	14.0	15.0	16.5
Sense of Rotation	Bi-directional					
A - Inlet (BSP) / Outlet (BSP)	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/4"
B	169.5	178	185	198	210	226

How to order:

Example: Pump 38L, operating pressure up to 280 bar; peak pressure 310 bar, ref.B34T → B34T38

CTI B34T 0811-1

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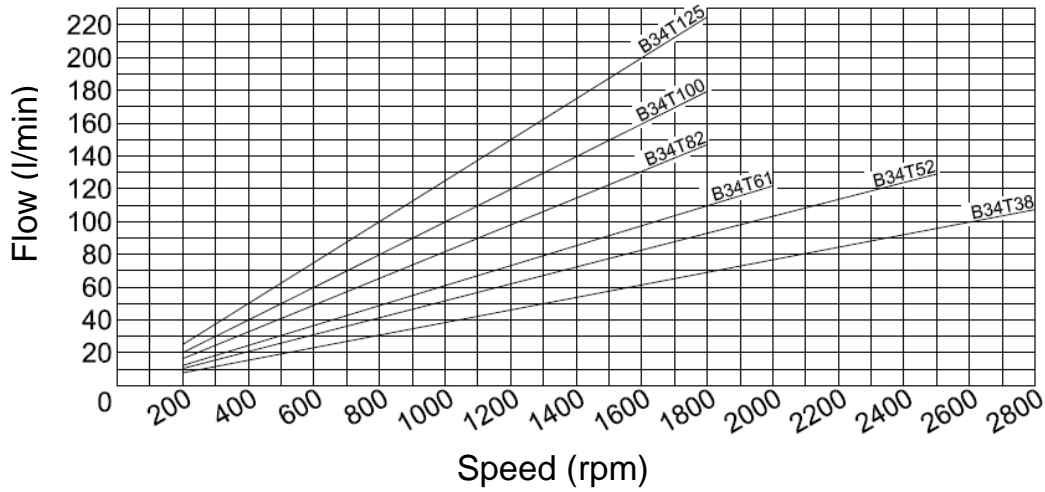
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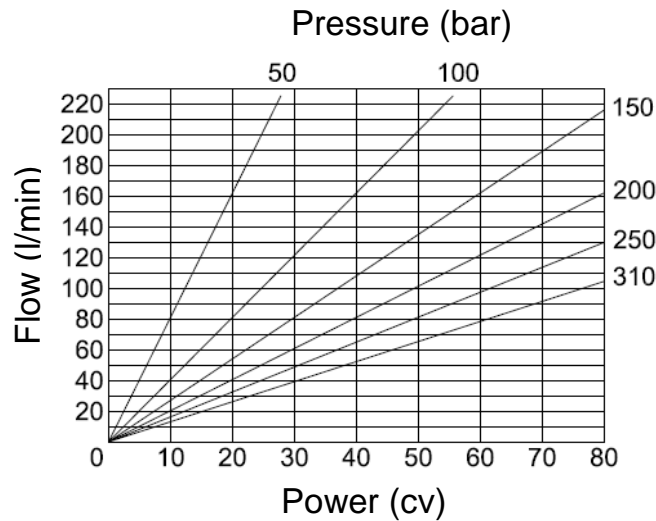
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**Diagram
Flow / Speed**



**Diagram
Input Power - Flow - Pressure amplitude**



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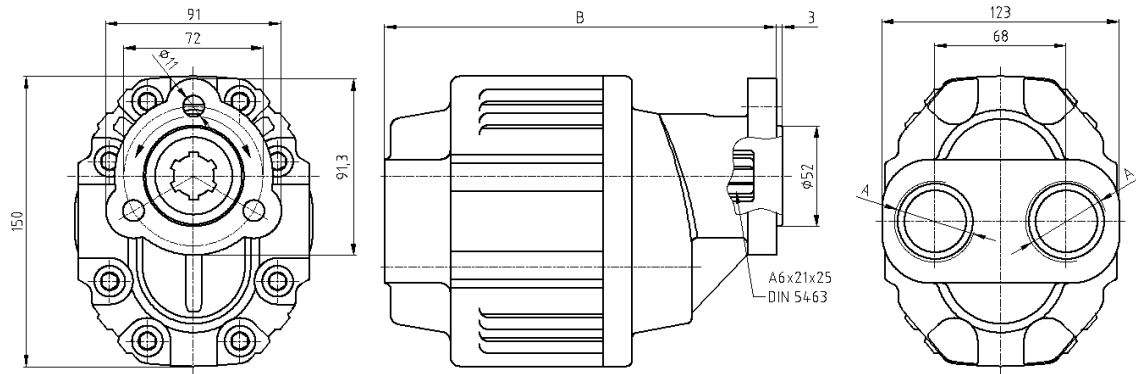
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OII-HYDRAULIC GEAR PUMP

Ref. B33T

Main Dimensions



(Dimensions in mm)

Main Data

Pumps B33T	38	52	61	82	105	125
Cylinder capacity (cm ³ /rot.)	38.3	51.6	60.9	81.6	99.7	124.9
Rotation Máx. (r.p.m)	2800	2500	2000	1800	1800	1800
Operating pressure (bar)(up to)	280	250	230	200	180	180
Peak pressure (bar)	310	300	260	230	220	220
Weight (kg)	11.0	11.5	12.5	13.5	14.5	16.0
Sense of Rotation	Bi-directional					
A - Inlet (BSP) / Outlet (BSP)	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/4"
B	177.5	186	193	206	218	234

How to order:

Example: Pump 38L, operating pressure up to 280 bar; peak pressure 310 bar, ref.B33T → B33T38

CTI B33T 0811-1

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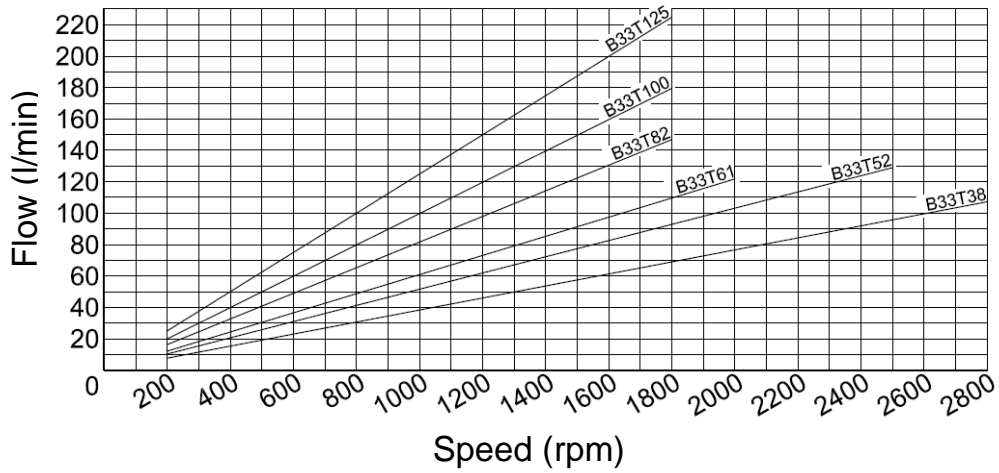
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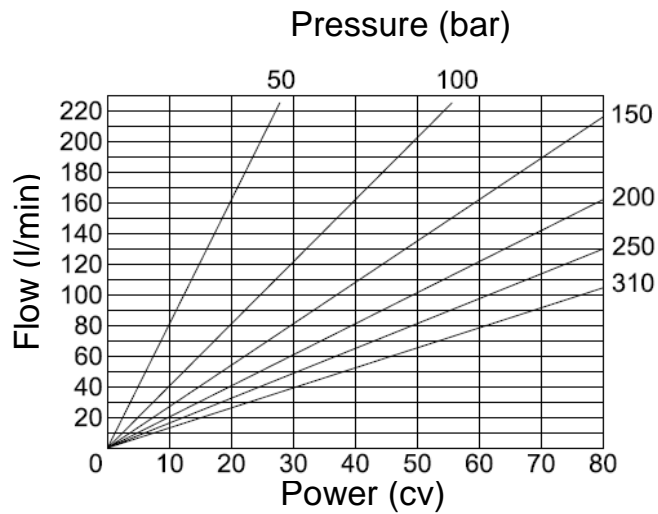
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**Diagram
Flow / Speed**



**Diagram
Input Power - Flow - Pressure amplitude**

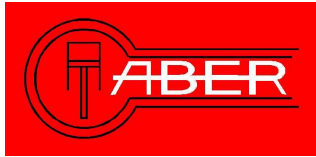


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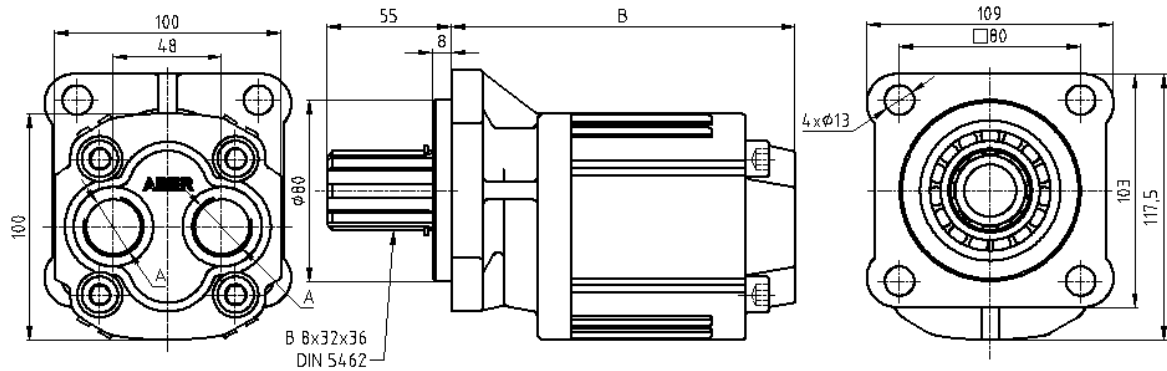




OII-HYDRAULIC GEAR PUMP

Ref. B24T

Main Dimensions



(Dimensions in mm)

Main Data

Pumps B24T	16	20	25	32	40
Cylinder capacity (cm ³ /rot.)	16.6	20.8	26	32.6	39.8
Rotation Máx. (r.p.m)	2000	2000	2000	1800	1800
Operating pressure (bar)(up to)	280	260	220	190	170
Peak pressure (bar)	325	290	260	220	200
Weight (kg)	5.8	6.3	6.6	7.1	7.3
Sense of Rotation	Bi-directional				
A - Inlet (BSP) / Outlet (BSP) (option)	3/4"	3/4"	3/4"	3/4"	3/4"
B	116.5	123	131	141	152

How to order:

Example: Pump 16L, operating pressure up to 280 bar; peak pressure 325 bar, ref.B24T → B24T16

CTI B24T 0811-1

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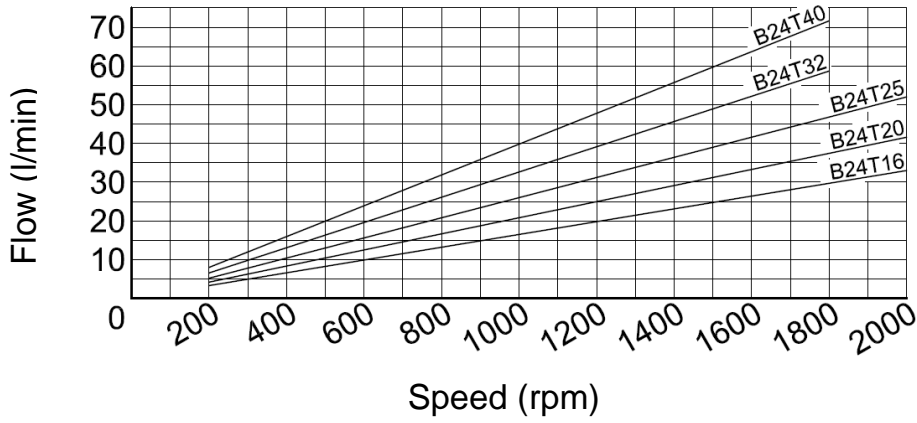
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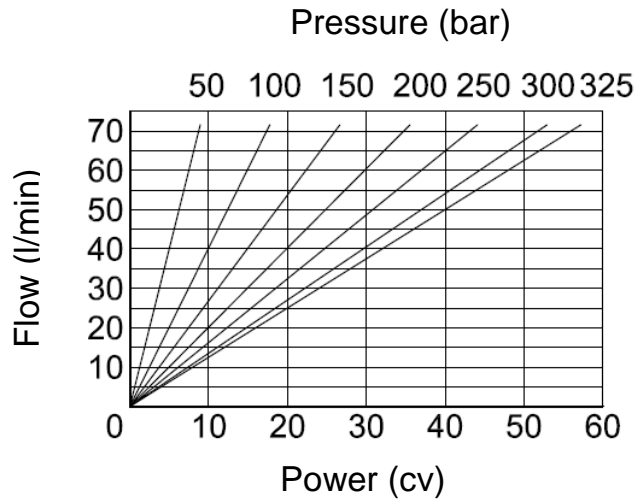
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**Diagram
Flow / Speed**



**Diagram
Input Power - Flow - Pressure amplitude**



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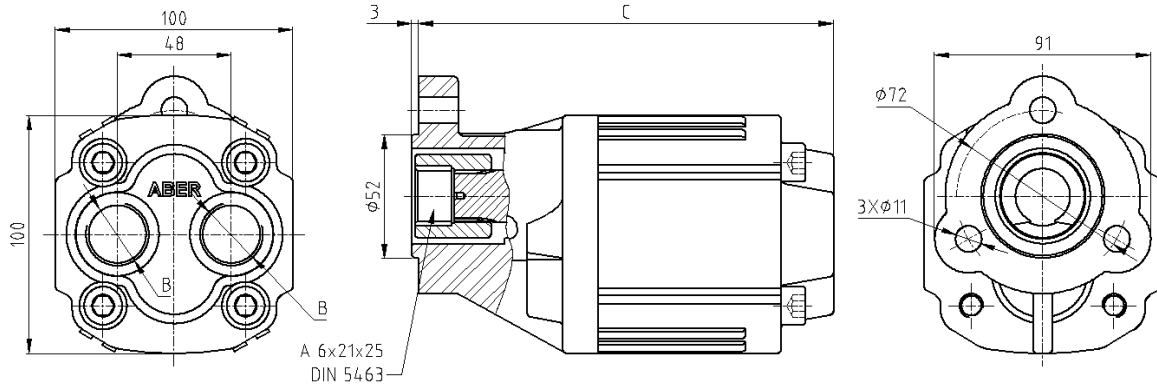
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OII-HYDRAULIC GEAR PUMP

Ref. B23T

Main Dimensions



(Dimensions in mm)

Main Data

Pumps B23T	16	20	25	32	40
Cylinder capacity (cm ³ /rot.)	16.6	20.8	26	32.6	39.8
Rotation Máx. (r.p.m)	2000	2000	2000	1800	1800
Operating pressure (bar)(up to)	280	260	220	190	170
Peak pressure (bar)	325	290	260	220	200
Weight (kg)	5.3	5.8	6.1	6.6	6.8
Sense of Rotation	Bi-directional				
A - Inlet (BSP) / Outlet (BSP) (option)	3/4"	3/4"	3/4"	3/4"	3/4"
B - Inlet (BSP) / Outlet (BSP)	3/4"	3/4"	3/4"	3/4"	3/4"
C	139	145.5	153.5	163.5	174.5

How to order:

Example: Pump 16L, operating pressure up to 280 bar; peak pressure 325 bar, ref.B23T → B23T16

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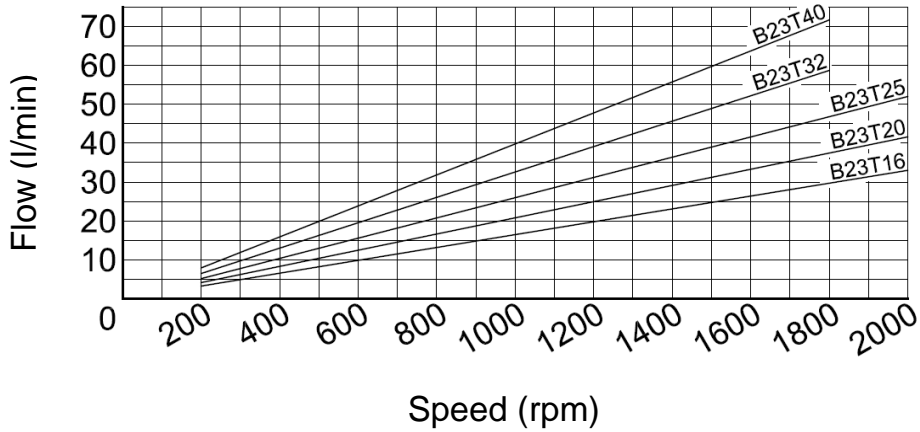
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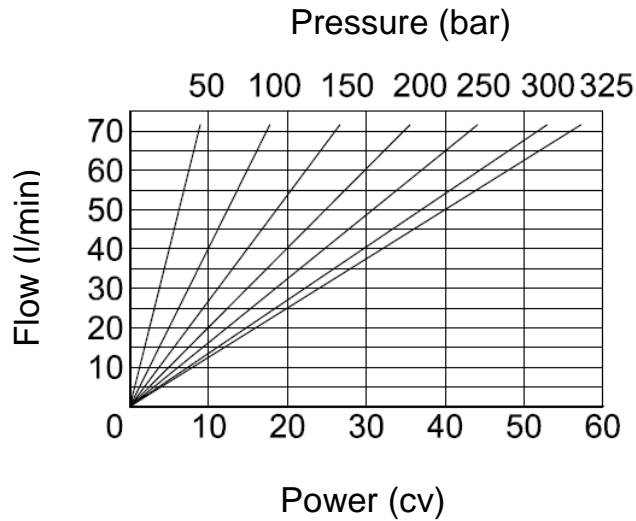
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**Diagram
Flow / Speed**



**Diagram
Input Power - Flow - Pressure amplitude**



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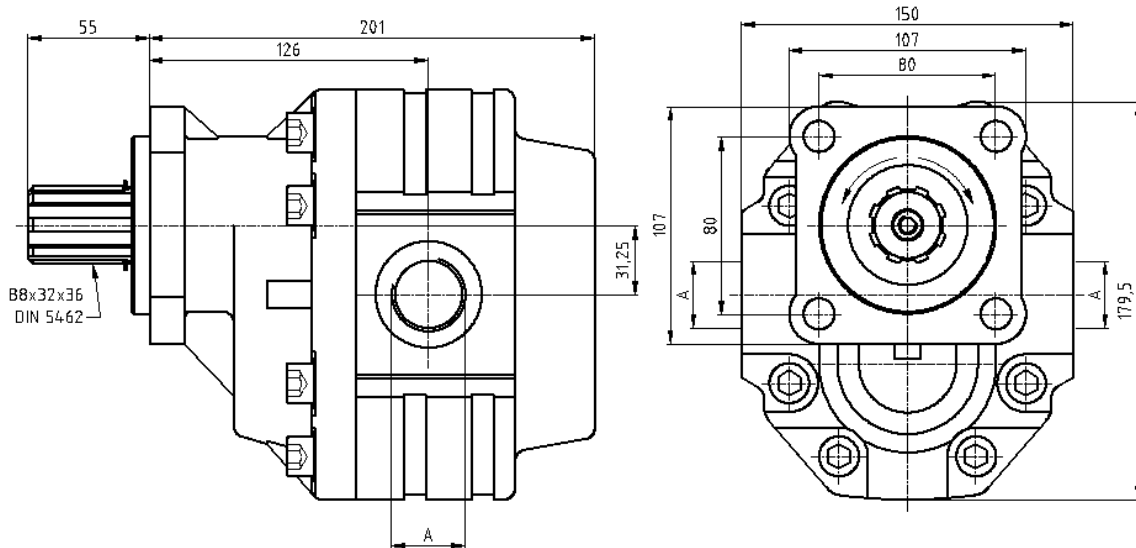
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Main Dimensions



(Dimensions in mm)

Main Data

Pumps B44G	65	87	109	133	152	200
Cylinder capacity (cm ³ /rot.)	65	87	109	133	152	200
Rotation Máx. (r.p.m)	1800	1800	1800	1600	1600	1500
Operating pressure (bar)(up to)	240	240	240	220	200	190
Peak pressure (bar)	280	280	280	260	240	230
Weight (kg)	16	17	19	20	22	30
Sense of Rotation	Bi-directional					
A – Inlet / Outlet (BSP)	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"

How to order:

Example: Pump 65L, operating pressure up to 240 bar; peak pressure 280 bar, ref.B44G → B44G65

CTI B44G 0811-2

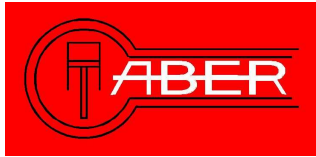
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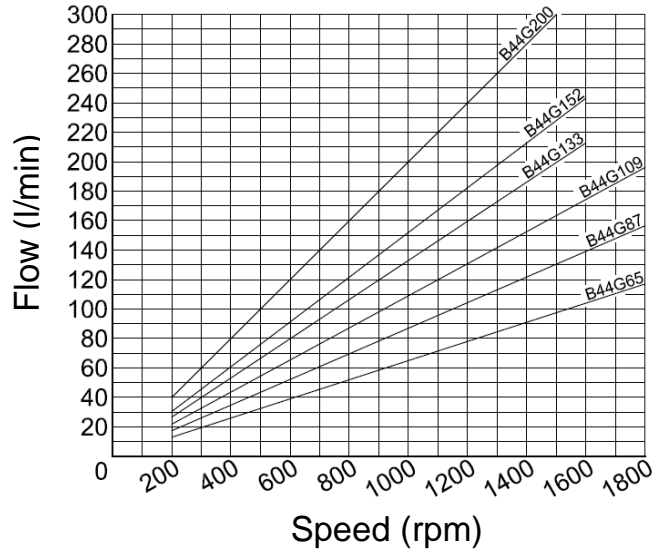
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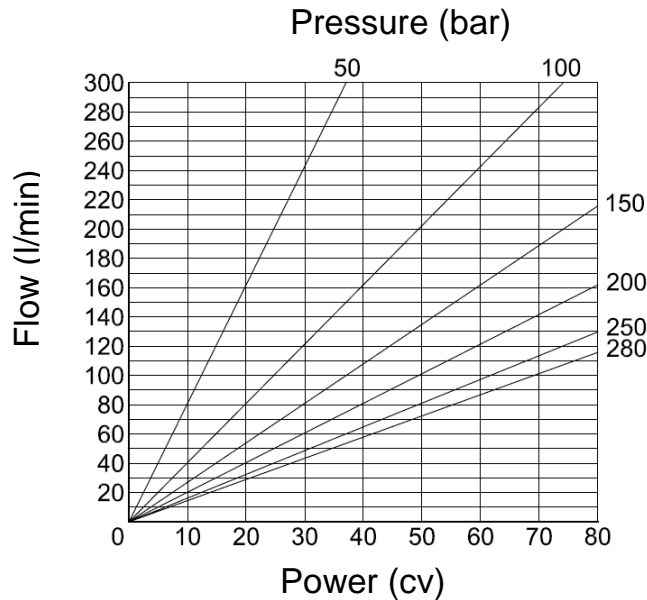
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**Diagram
Flow / Speed**



**Diagram
Input Power - Flow - Pressure amplitude**



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