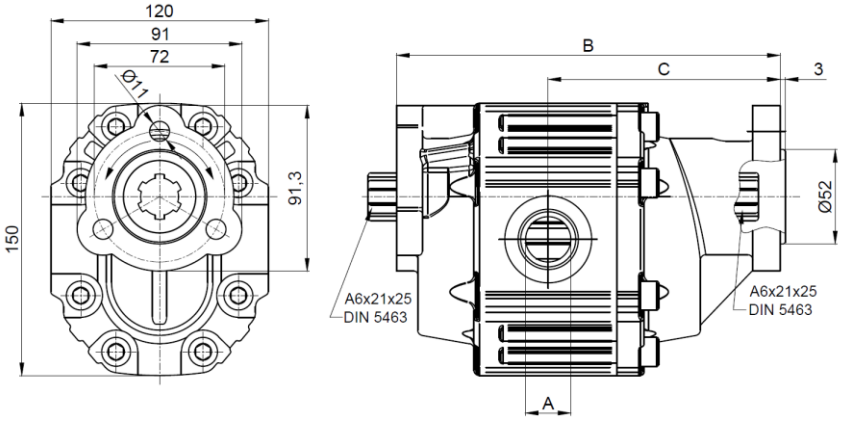
OIL-HYDRAULIC TANDEM GEAR PUMP

Ref. B33D

Main Dimensions



Right hand

Left hand

(Dimensions in mm)

Main Data										
Pumps B33D	**38**	**52**	**61**	**70**	**82**	**90**	**105**	**115**	**125**	**150**
Displacement (cm^3/rot.)	38	52	61	70	82	91	102	116	125	150
Rotation Máx. (rpm)	2800	2500	2000	2000	1800	1800	1800	1800	1800	1600
Operating pressure (bar)(up to)	280	280	260	250	250	250	250	250	240	210
Peak pressure (bar)	310	310	300	290	290	290	290	290	280	250
Weight (kg)	10.5	11.0	12.0	12.5	13.0	13.5	14.0	15.0	15.5	16.4
Sense of rotation	Bi-directional									
A - Inlet (BSP) / Outlet (BSP)	3/4''	1''			1 1/4''					1 1/2''
B	194	203	209	214	222	230	237	243	250	266
C	120	126	132	135	138	142	145	147	150	158

How to order:

Example: Pump 38cm^3/rot, operating pressure up to 280 bar; peak pressure 310 bar, ref.B33D➔ B33D38

Fluids	mineral oils type ISO HM or DIN 51524-2 HLP	
Operating viscosity range	10 to 100 cSt (mm2/s) at working temperature	
Máx operating limits viscosity	750 cSt	
Filtration	>200bar = 10µm	<200bar = 25 µm
In the application of any of these pumps; the use of these data does not exempt the reading of the instruction ''Gear pumps recommendations before start-up''.		

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Diagram
Flow - Speed

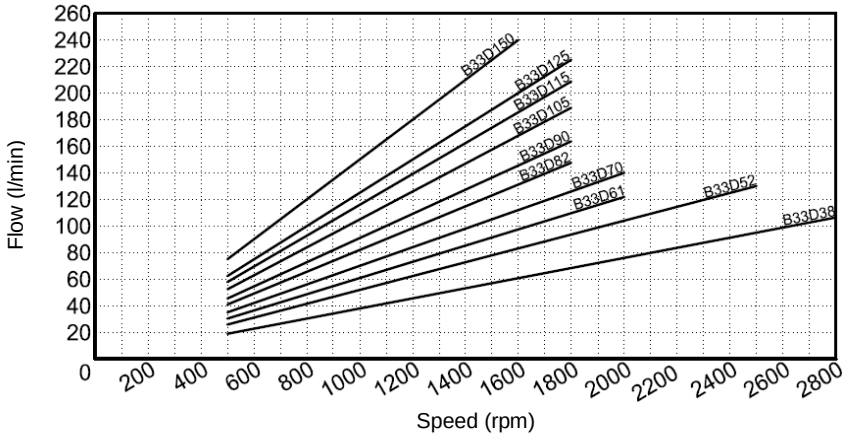
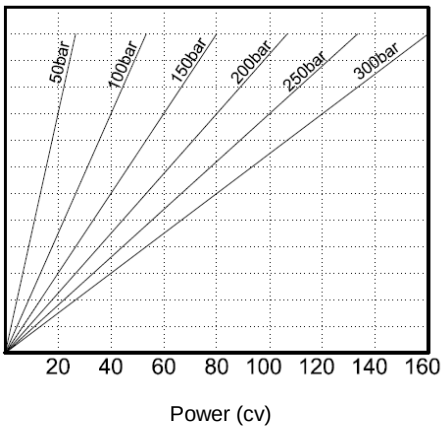


Diagram
Input Power - Flow – Pressure



Hose dimensions

Inlet Hose	
Flow (l/min)	**Internal pipe diameter (inch)**
30-40	1"1/4
50-60	1"1/2
70-90	1"3/4
100-120	2"
130-150	2"1/4
160-190	2"1/2
200-230	2"3/4
240-270	3"

Outlet Hose				
Flow (l/min)	**Internal pipe diameter (inch)**			
30	1/2"	1/2"	1/2"	1/2"
40	5/8"	1/2"	1/2"	1/2"
50	5/8"	5/8"	5/8"	1/2"
60	3/4"	5/8"	5/8"	5/8"
70	1"	3/4"	3/4"	5/8"
80	1"	3/4"	3/4"	3/4"
90	1"	1"	1"	3/4"
100	1"	1"	1"	1"
110	1"	1"	1"	1"
120	1"	1"	1"	1"
130	1"	1"	1"	1"
140	1"1/4	1"	1"	1"
150	1"1/4	1"	1"	1"
160	1"1/4	1"1/4	1"	1"
170	1"1/4	1"1/4	1"	1"
180	1"1/4	1"1/4	1"1/4	1"
190	1"1/4	1"1/4	1"1/4	1"
200	1"1/2	1"1/4	1"1/4	1"1/4
210	1"1/2	1"1/4	1"1/4	1"1/4
220	1"1/2	1"1/4	1"1/4	1"1/4
230	1"1/2	1"1/2	1"1/4	1"1/4
240	1"1/2	1"1/2	1"1/4	1"1/4
	50-100	100-150	150-200	200-300
	P (bar)			

Important notes:
- Other axis available, please consult “Axel options”.
- Aber recommends that the 1st pump has more displacement than the 2nd pump.

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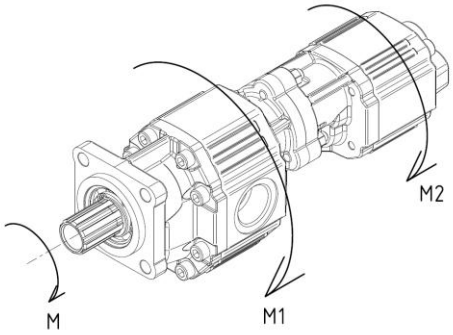
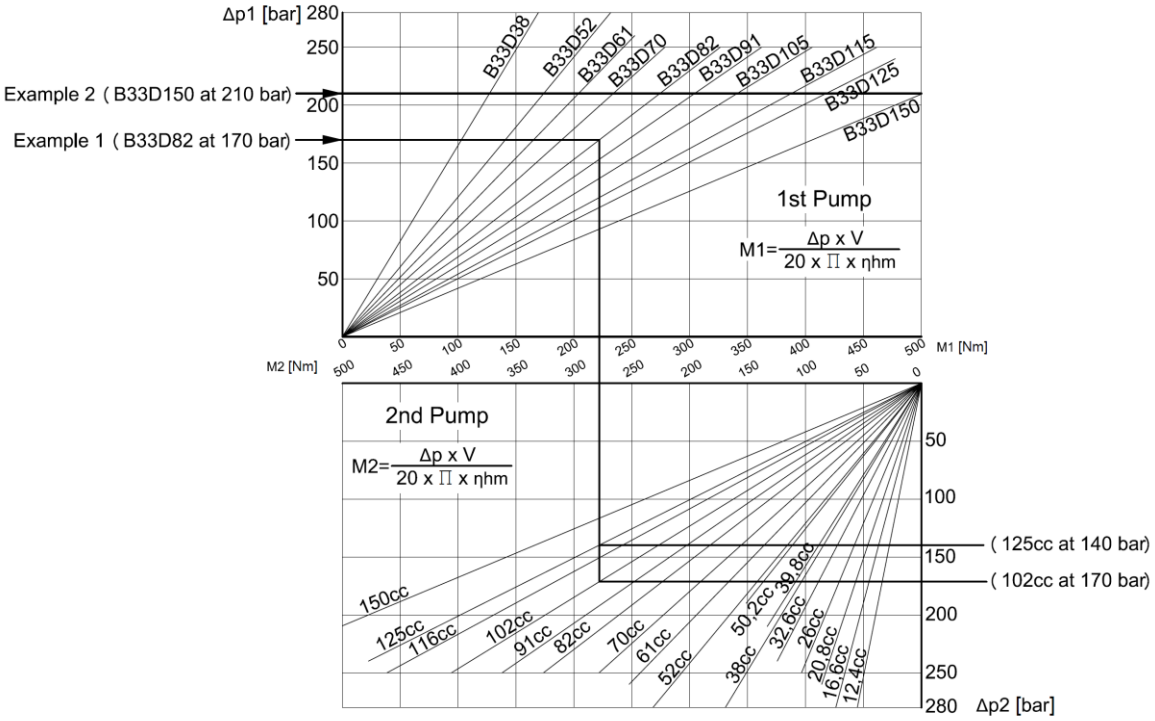
How to select 1st and 2nd pump:



Mmáx = 500Nm = M1 + M2

Diagram
Pressure – Drive Torque



Example 1:
- 1st pump (B33D82) working at 170 bar, the 2nd pump can be all the combinations on the right side of the vertical line. For example: 125cc at 140 bar, 102cc at 170 bar, etc.

If the vertical line does not intersect the displacement line of the 2nd pump, it means that the maximum operating pressure of the 2nd pump is defined by the maximum operating pressure shown in the respective technical sheet. For example: 12.4cc at 280 bar, 61cc at 260 bar, etc.

Example 2:
- 1st pump (B33D150) working at 210 bar, the operating pressure in the 2nd pump must be null. In this case the pumps can't operate with pressure at the same time. This means, the 2nd pump can have 150cc working at 210 bar when the pressure in the 1st pump is null.

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