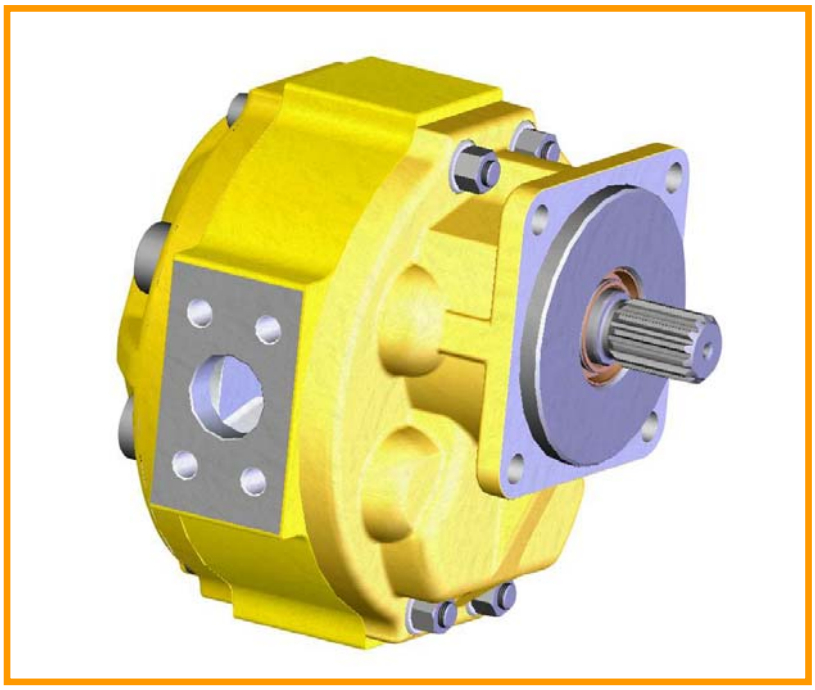
Fluidea



Series 3100

01.05

Gear pumps & motors

01.3100 - 0909

OPERATING PARAMETERS

Maximum outlet pressure:	See on the following pages
Inlet pressure:	See below*
Speed range:	See on the following pages
Fluid temperature:	Minimum at start up….....-40 °C Maximum continuous.....+80 °C Maximum intermittent .....+100 °C
Fluid viscosity:	Maximum at start up….....2000 mm2/sec Maximum continuous.....250 mm2/sec Minimum continuous.....10 mm2/sec Optimum. 15-25 mm2/sec
Fluid cleanliness class:	ISO4406.....21/16/13 NAS 1638.....9
Fluid velocity:	Maximum in inlet line….....2.5 m/sec Optimum in inlet line….....1.5 m/sec
Fluids:	Hydraulic mineral oils HL and HLP (DIN 51524)
Rotation:	Clockwise (C), anticlockwise (A) and reversibile (D) when applicable, view from shaft end

For characteristics diagrams (pressure - flow - efficiency - maximum power) and driving shaft's loads please consult the general tecnical data sheet available on our web site.

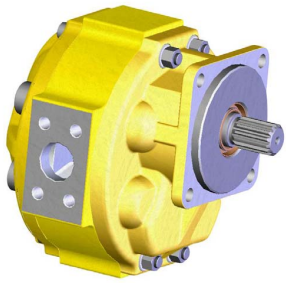
*** INLET CONDITIONS:**

It is extremely important that pumps are installed so that they can always fill with fluid in any working condition.

Pumps' inlet ports are designed to facilitate full volume fill, however it is important to obser-ve the following recommendations in order to optimize pump's performance and life:

- Use large diameter pipes and fittings and possibly avoid sharp bends and long lenghts in suction lines to minimize pressure losses; ensure that fluid velocity does not exceed above limits.
- Never run pumps dry; particolar care should be taken to open any shut-off valves.
- If necessary fill inlet line with fluid and ensure that inlet line is air tight.
- Particular care should be taken where high speeds and/or high fluid viscosities are involved. As a general rule pressure at the pump inlet port should not be less tha 0,8 bar absolute @ normal viscosity of 23 mm2/sec

Data of model 1



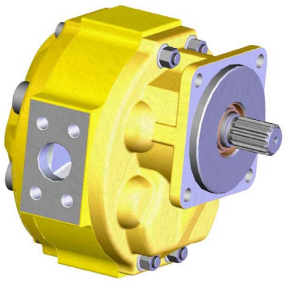
Model	3115	3120
Displacement [ccm/rev]	131,6	175,3
Rated pressure [MPa]	pumps 17,5 motors 15,5	
Max speed [rpm]	pumps 2700 motors 3000	
Max torque motors [Nm]	324	389

Seal design **Dimensions data** **Drive shaft** **Mounting flange** **Ports**

Ordering key model 1

P- PUMP M- MOTOR	Design level 1- without 2 or 3	Seal design	Bearings roller - without	Size	Drive shaft	Flange	Ports	Rotation A- anticlockwise C- clockwise D- birotation
P		C		3115	C	5	B26	C
P M		A C	roller	3115 3120	C G L	5	B25 B26	A C

Data of model 3



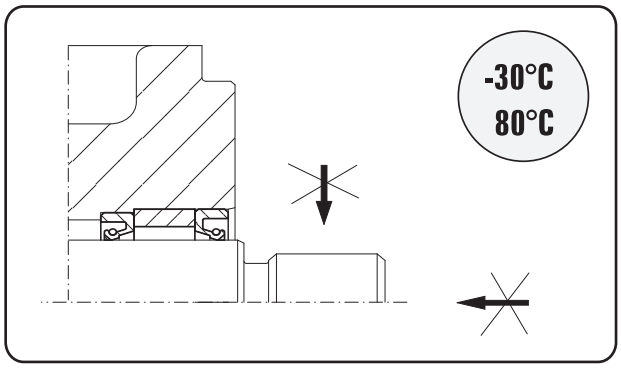
Model		3125	3130	3135
Displacement [ccm/rev]	175,3	217,9	263,8	306,4
Rated pressure [MPa]	pumps 17,5 motors 15,5			
Max speed [rpm]				
Max torque motors [Nm]	389	480	540	560

Seal design **Dimensions data** **Drive shaft** **Mounting flange** **Ports**

Ordering key model 3

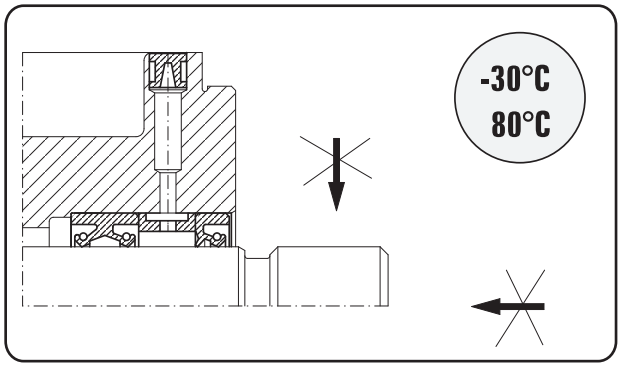
P- PUMP M- MOTOR	Design level 1- without 2 or 3	Seal design	Bearings roller - without	Size	Drive shaft	Flange	Ports	Rotation A- anticlockwise C- clockwise D- birotation
P	3	C	P	3115	C	5	B26	C
P M	1,3 3 3 3	A C	roller	3120 3125 3130 3135	C G L	5	B25 B26	A C D

Seal design



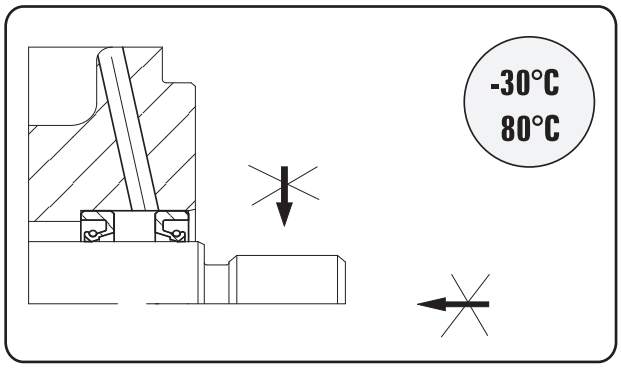
code A — 3100 Model 1,3

Suitable for drives with limited radial load



code C — 3100 Model 1

Visible-bleed drilling
Suitable for drives with no load for direct mounting on torque converters and gear boxes

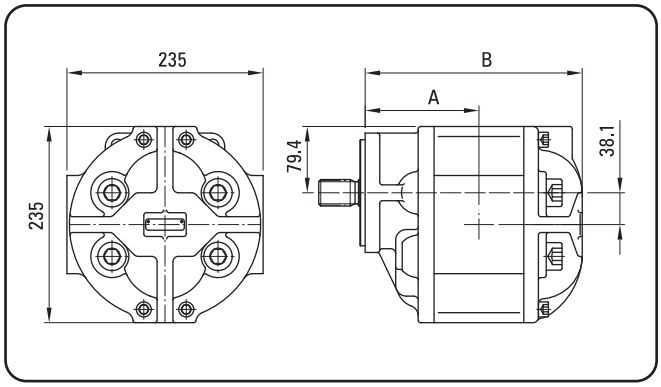


code C — 3100 Model 3

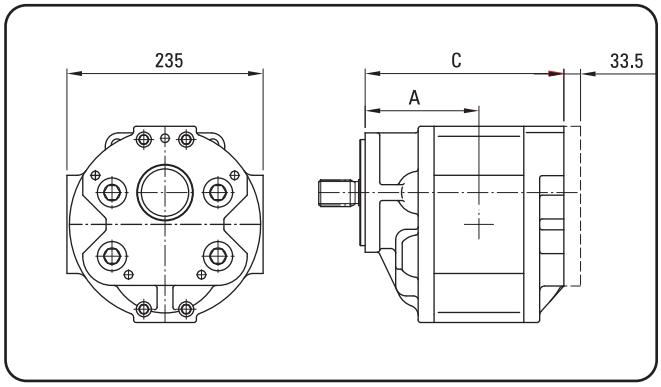
Visible-bleed drilling
Suitable for drives with no load for direct mounting on torque converters and gear boxes

Dimensions data

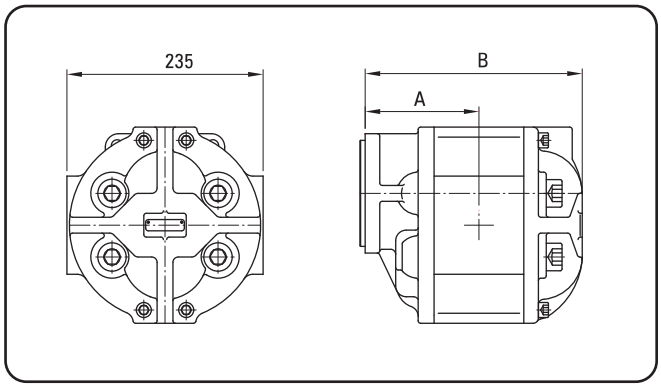
Model 1



Single unit



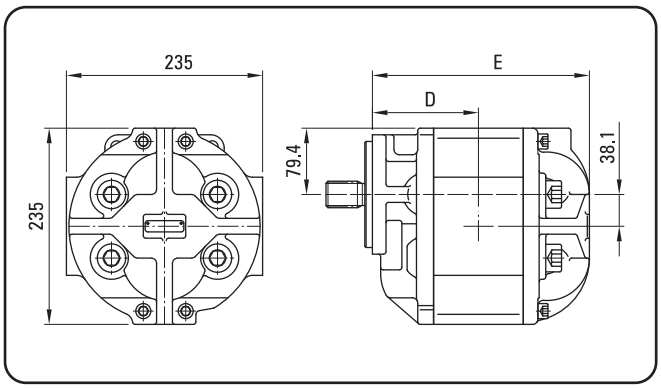
Front unit



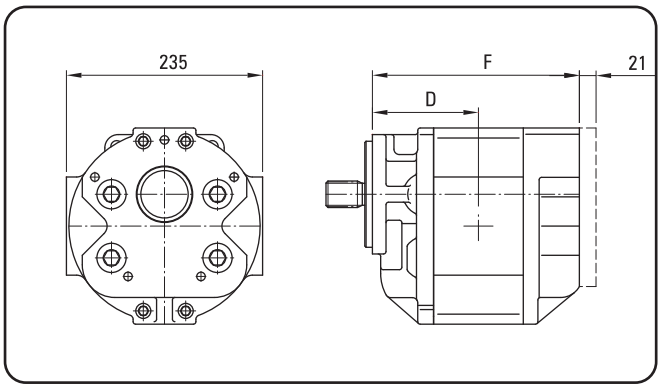
Rear unit

SIZE	A	B	C	WEIGHT [kg]
3115	111	210	188	41,8
3120	118	222	200	45,0

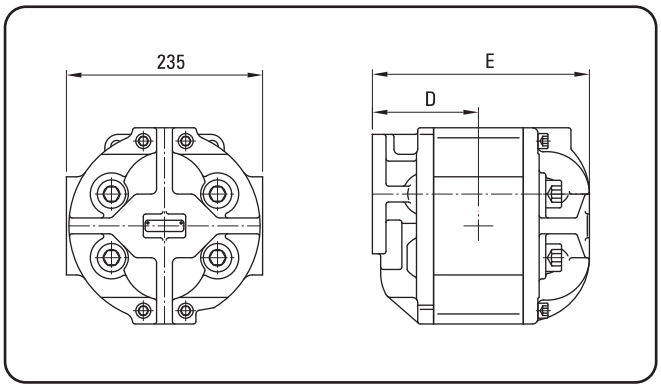
Model 3



Single unit



Front unit

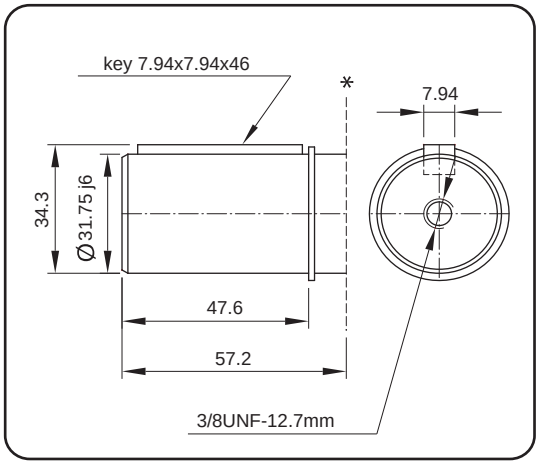


Rear unit

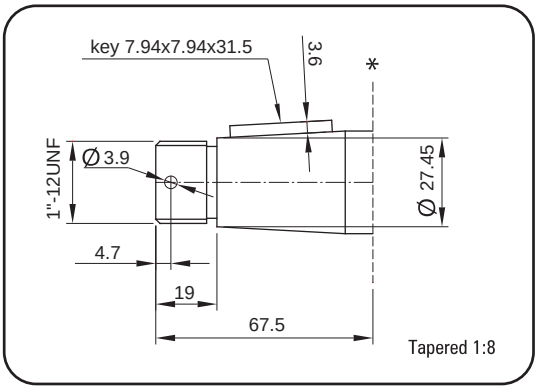
SIZE	D	E	F	WEIGHT [kg]
3120	117,5	241	229	54,5
3125	124	254	242	58,1
3130	130,5	267	255	61,7
3135	136,5	279	267	64,3

Drive shafts (model 3)

Parallel keyed shafts

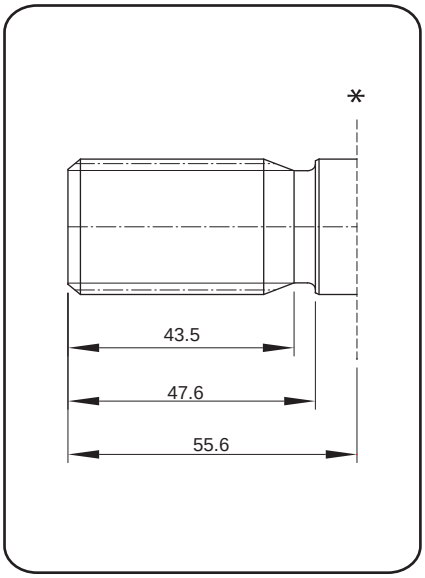


code G



code L

Involute splined shafts



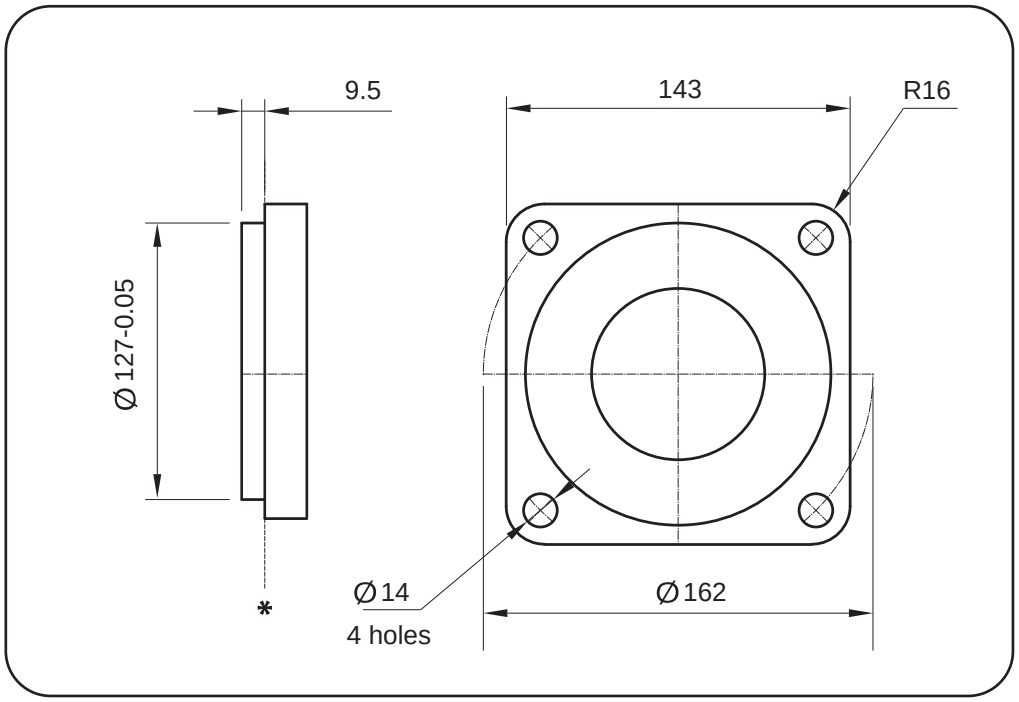
code C

* standard flange mounting surface

	size	side fit	diametral pitch	pressure angle	number of teeth	major diameter
code C	SAE C 1 1/4"	flat root	12/24	30 º	14	31,20/ 31,12

Mounting flanges (models 1-3)

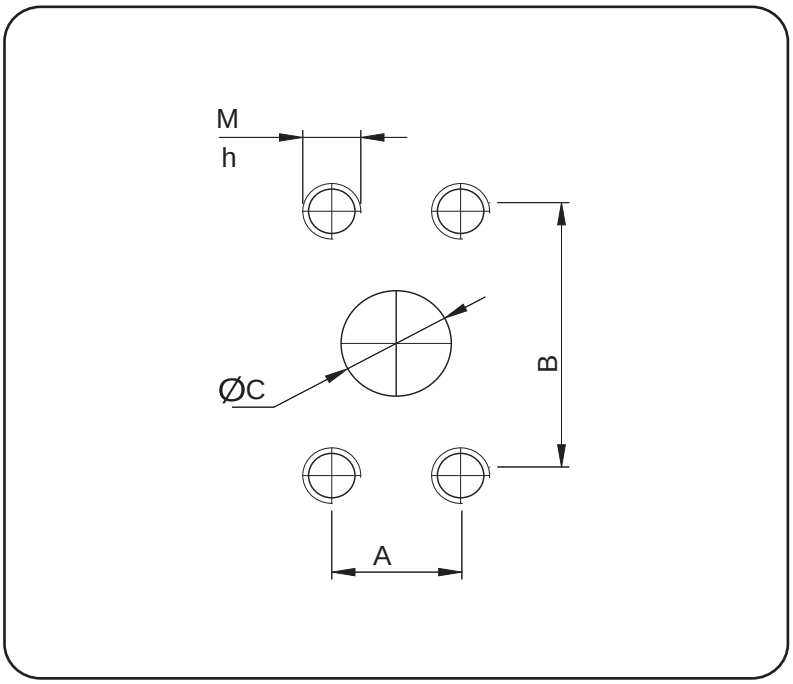
SAE C



code 5

* standard flange mounting surface

Ports (models 1-3)



MOTORS							TYPE	PUMPS													
INLET/OUTLET								INLET							OUTLET						
B1		B1/B25			B25			B2		B2/B26			B26		B2		B2/B26			B26	
M	h	A	B	C	M	h		M	h	A	B	C	M	h	M	h	A	B	C	M	h
1/2-13UNC	21	30,2	58,7	31	M12	20	3115	1/2-13UNC	21	35,7	69,8	38	M12	20	7/16-14UNC	19	30,2	58,7	31	M12	20
		35,7	69,8	38			3120			42,9	77,8	50			1/2-13UNC	21	35,7	69,8	38		
		42,9	77,8	50			3125			50,8	88,9	63,5					42,9	77,8	50		
							3130														
							3135														

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