

## ...we know how!



Gear pumps & motors 3100 1.01.05



#### Index:

Operating parameters:	Page 3
Technical features and seal configuration	Page 4
Overall dimensions:	Page 5
Shafts:	Page 6
Mounting flanges and ports	Page 7
Model coding	Page 8



#### **Operating parameters**

Maximum outlet pressure:	See following pages
Inlet pressure:	See below*
Speed:	See following pages
Fluid temperature:	Minimum at start up -40°C
	Maximum continuous +80°C
	Maximum intermittent +100°C
Fluid viscosity:	Minimum at start up 2000 cSt
	Maximum continuous 250 cSt
	Minimum continuous 10 cSt
	Optimum 15-25 cSt
Contamination class:	ISO 4406 21/16/13
	NAS 1638 9
Fluid speed:	Maximum (inlet) 2.5 m/sec
	Optimum (inlet) 1.5 m/sec
Fluids:	Hydraulic mineral oils HL e HLP (DIN 51524)
Rotation:	Clockwise (C), Counter-clockwise (A) and reversible (D),
	when available, view from shaft end

For characteristic diagrams (pressure - flow - efficiency - maximum power) and driving shaft loads, please consult the general technical data sheet available on our website.

#### \* INLET CONDITIONS:

It's extremely important that pumps are installed in a wat they can always be filled with fluid in any working conditions.

Pump inlet ports are designed to allow the complete filling, however is recommended to observe the following advices in order to optimize pump performances and lifecycle:

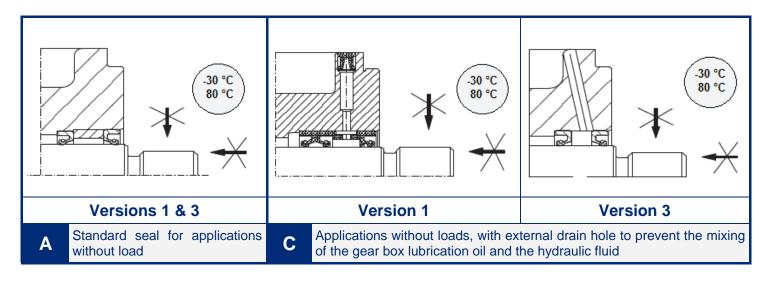
- In suction lines, use large diameter pipes and fittings avoiding bending and long sections to minimize pressure losses; ensure that fluid speed doesn't exceed the values shown above.
- Never run pumps dry; ensure that all the valves on the inlet ports are opened.
- If needed, fill the inlet line with fluid and ensure that there are no bubbles.
- Special care is needed for fluids with high speed or high viscosity. As general rule, pressure at the inlet line should not be less than 0,8 bar absolute with viscosity of 23 cSt

#### **Technical features**

	Model					
Version 1	3115	3120				
Displacement (cc/rev)	131,6 175,3					
Working pressure (MPa)	ure 17,5 pumps 15,5 motors					
Maximum speed (RPM)	2700 pompe 3000 motori					
Maximum torque Motor (Nm)	324	389				

	Model						
Version 3	3120	3125	3130	3135			
Displacement (cc/rev)	175,3	217,9	263,8	306,4			
Working pressure (MPa)		17,5 p 15,5 m					
Maximum speed (RPM)	2700 pompe 3000 motori						
Maximum torque Motor (Nm)	389	480	540	560			

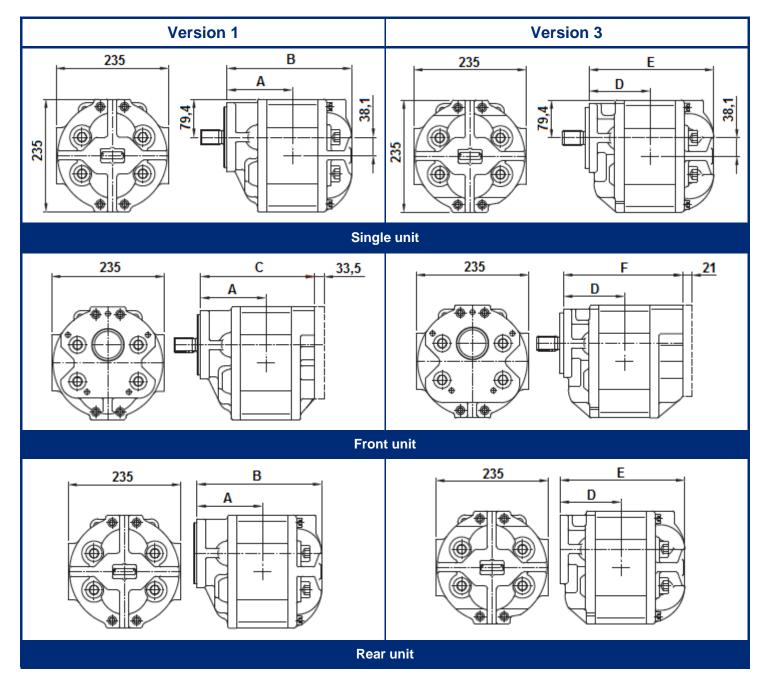
#### Seal configurations





#### GEAR PUMPS AND MOTORS SERIES 3100

#### **Overall dimensions**



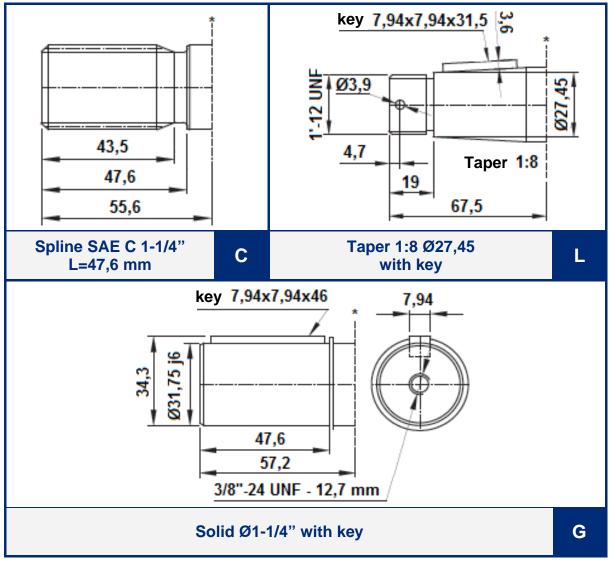
Version 1	Α	В	С	Weight [kg]		
3115	111	210	188	41,8		
3120	118	222	200	45,0		

Version 3	D	Е	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



#### GEAR PUMPS AND MOTORS SERIES 3100

Shafts



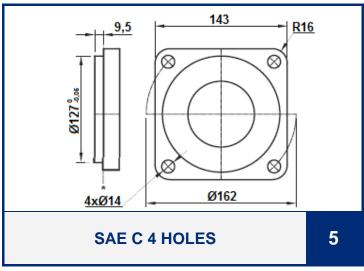
\* Standard mounting flange surface.

OPTION	SIZE	SIDE FIT	DIAMETRAL PITCH	ANGLE OF PRESSURE	NUMBER OF TEETH	EXTERNAL DIAMETER
С	SAE C 1-1/4"	Flat root	12/24	30°	14	31,20/31,12



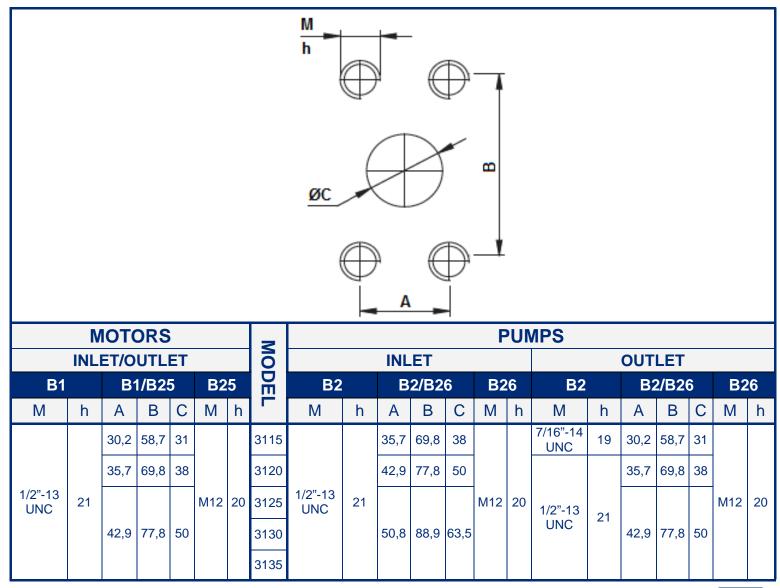
#### GEAR PUMPS AND MOTORS SERIES 3100

#### Mounting flanges



\* Standard mounting flange surface.

#### Ports





#### Model coding

Ρ	1	С	311	5	В	2	B	25	С	
										Rotation         - A = Counter-clockwise         - C = Clockwise         - D = Bidirectional (only version 3)         Ports (page 7):         - B25 = Motor         - B26 = Pump         Mounting flanges (page 7):         - 5 = "SAE C" 4 holes         Shaft (page 6):
										- <b>C</b> = Spline SAE C 1-1/4"L=47,6 mm - <b>L</b> = Taper 1:8 Ø27,45 with key - <b>G</b> = Solid Ø1-1/4" with key
			L							<b>Models (page5):</b> 3115 - 3120 - 3125 - 3130 - 3135
										<ul> <li>Seals (page 4):</li> <li>A = Standard seal for applications without load</li> <li>C = Applications without loads, with external drain hole to prevent the mixing of the gear box lubrication oil and the hydraulic fluid</li> </ul>
										<b>Version:</b> - <b>1</b> = Version 1 - <b>3</b> = Version 3
										Pump/Motor: - P = Pump - M = Motor

# Design and production of remote control components & systems

### The comprehensive range includes the following manufactured and marketed equipment:

- Hydraulic pumps and motors
- Directional control valves
- Proportional pressure reducing valves
- Hydraulic, pneumatic and electric joysticks
- Radio controls and electronic controllers
- Control pads, dashboards and armrests
- Ergonomic, cylindrical and palm grips
- Electro-hydraulics pilot blocks
- Hydraulic filters
- heat exchangers and cooling systems
- Fluid monitoring and diagnostic equipment
- Bell housings, driving flanges & elastic couplings



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