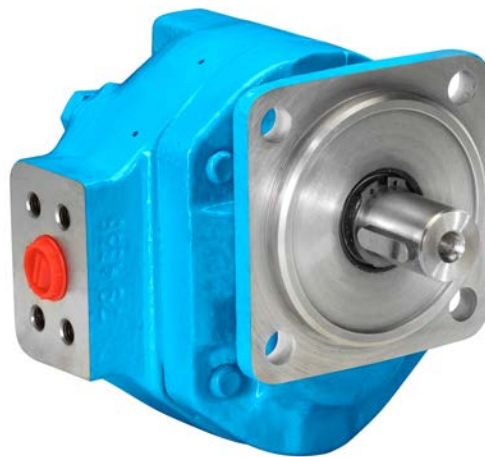


Fluidea

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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 way they can always be filled with fluid in any working conditions.

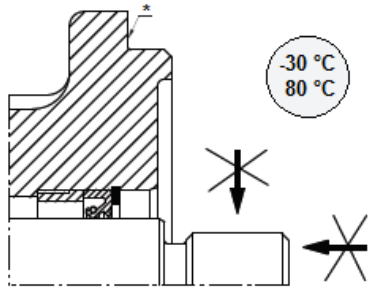
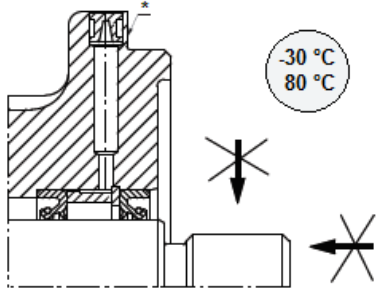
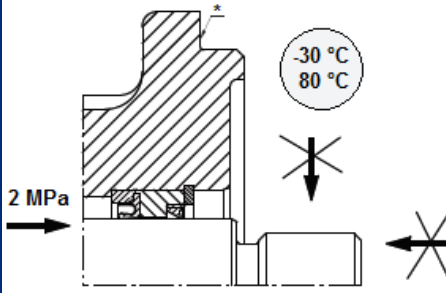
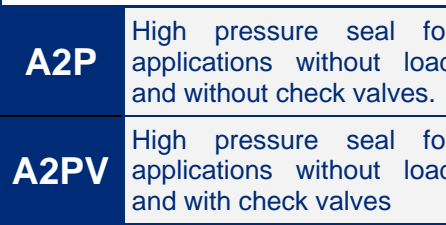
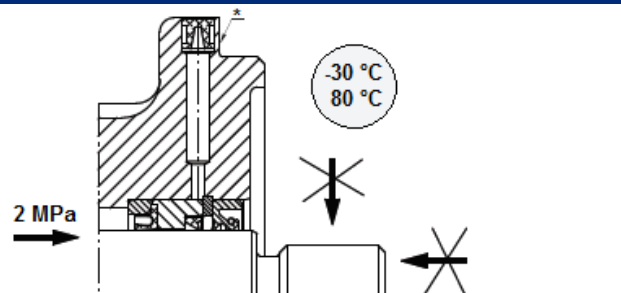
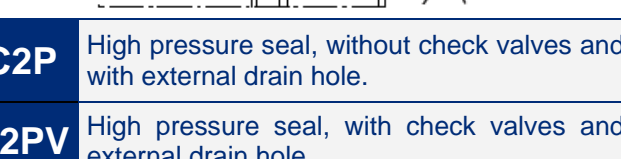
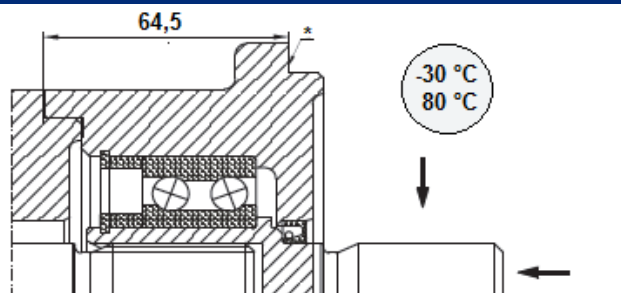
Pump inlet ports are designed to allow the complete filling, however it is recommended to observe the following advices in order to optimize pump performances and lifecycle:

- 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

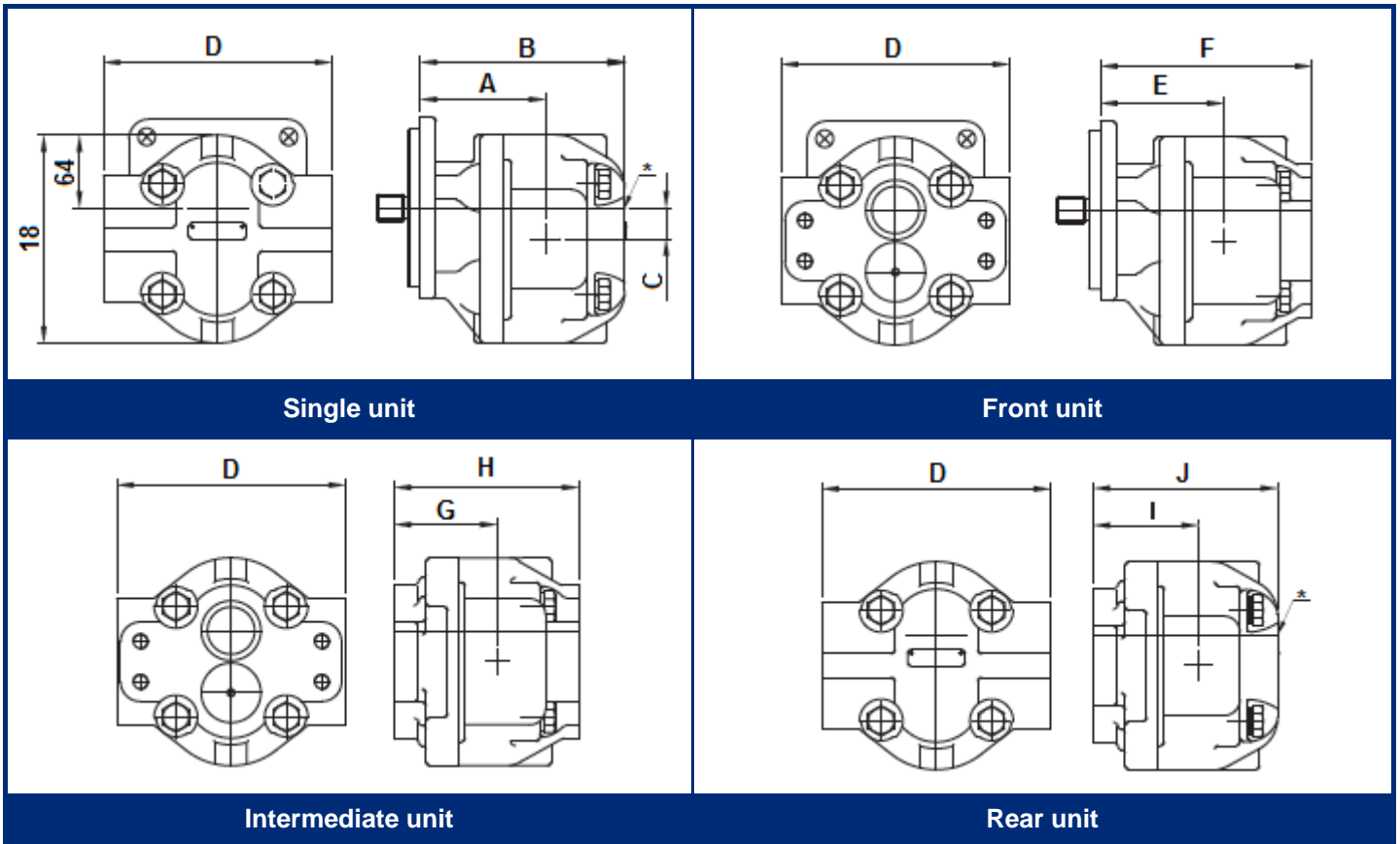
	Model	2207	2208	2210	2213	2215	2216
	Displacement (cc/rev)	53,6	58,7	70,1	85,7	101,1	110,8
	Working pressure (MPa)	21	21	21	21	21	17
	Maximum speed (RPM)	2700 pompe 3000 motori					
	Maximum torque Motor (Nm)	157	173	207	253	296	272

Seal configurations

	<p>A Standard seal for applications without load</p>
	<p>C Applications without loads, with external drain hole to prevent the mixing of the gear box lubrication oil and the hydraulic fluid</p>
	<p>A2P High pressure seal for applications without load and without check valves.</p>
	<p>A2PV High pressure seal for applications without load and with check valves</p>
	<p>C2P High pressure seal, without check valves and with external drain hole.</p>
	<p>C2PV High pressure seal, with check valves and external drain hole.</p>
	<p>E Applications with high axial load and low radial load.</p>

* Standard mounting flange surface.

Overall dimensions



Model	Single unit				Front		Intermediate			Rear			D	
	A	B	C*	Weight [kg]	E	F	Weight [kg]	G	H	Weight [kg]	I	J		Weight [kg]
2208	109	170	27,5	22,3	109	178	23,8	97	167	22,2	97	159	20,0	187,3
2210	109	170	27,5	22,5	109	178	23,9	97	167	22,3	97	159	20,0	187,3
2213	116	176	27,5	23	116	184	24,3	105	173	22,4	105	165	21,0	187,3
2215	116	186	27,5	23,1	116	194	25,0	105	183	23,0	105	175	21,4	187,3
2216	116	186	27,5	23,4	116	194	25,0	105	183	23,1	105	175	21,5	187,3

* drain port (for motors)

Shafts

<p>Spline SAE B 7/8" L=33,3 mm</p> <p style="text-align: right;">B</p>	<p>Spline SAE BB 1" L=38,1 mm</p> <p style="text-align: right;">Q</p>	<p>Spline SAE C 1-1/4" L=47,6 mm</p> <p style="text-align: right;">C</p>
<p>Solid Ø25 with key</p> <p style="text-align: right;">AP</p>	<p>Solid Ø1-1/4" with key</p> <p style="text-align: right;">G</p>	

* Standard mounting flange surface.

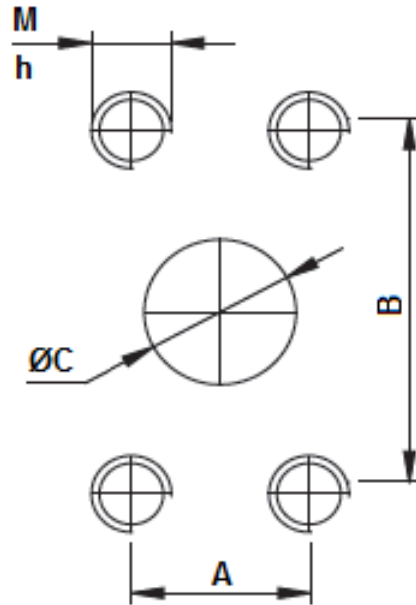
OPTION	SIZE	SIDE FIT	DIAMETRAL PITCH	ANGLE OF PRESSURE	NUMBER OF TEETH	EXTERNAL DIAMETER
C	SAE C 1-1/4"	Flat root	12/24	30°	14	31,20/31,12
Q	SAE BB 1"	Flat root	16/32	30°	15	24,97/24,87
B	SAE A 7/8"	Flat root	16/32	30°	13	21,79/21,66

Mounting flanges

<p>SAE B 2 HOLES</p>	<p>2</p>	<p>SAE B 4 HOLES</p>	<p>3</p>
<p>SAE C 2 HOLES</p>	<p>4</p>	<p>SAE C 4 HOLES</p>	<p>5</p>

* Standard mounting flange surface.

Ports



MOTORS							MODELLO	PUMPS																
INLET/OUTLET								INLET					OUTLET											
B2		B2/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			
3/8"-16 UNC	28,6	26,2	52,4	25	M10	25	2208	1/2"-13 UNC	28,6	35,7	69,8	38	M12	25	7/16"-14 UNC	28,6	30,2	58,7	31	M10	25			
7/16"-14 UNC		30,2	58,7	31			2210															2213	2215	2216
1/2"-13 UNC		35,7	69,8	38			M12															42,9	77,8	50

Model coding

P	C	2207	B	2	B25	C
<p>Rotation</p> <ul style="list-style-type: none"> - A = Counter-clockwise - C = Clockwise - D = Bidirectional 						
<p>Ports (page 8):</p> <ul style="list-style-type: none"> - B25 = Motor - B26 = Pump 						
<p>Mounting flanges (page 7):</p> <ul style="list-style-type: none"> - 2 = "SAE B" 2 holes - 3 = "SAE B" 4 holes - 4 = "SAE C" 2 holes - 5 = "SAE C" 4 holes 						
<p>Shaft (page 6):</p> <ul style="list-style-type: none"> - B = Spline SAE BB 1"L=33,3 mm - Q = Spline SAE B 7/8"L=38,1 mm - C = Spline SAE C 1-1/4"L=47,6 mm - AP = Solid Ø25 with key - G = Solid Ø1-1/4" with key 						
<p>Models (page 5):</p> <p>2207 - 2208 - 2210 - 2213 - 2215 - 2216</p>						
<p>Seals (page 4):</p> <ul style="list-style-type: none"> - A = Standard seal for applications without load - C = Applications without loads, with external drain hole to prevent the mixing of the gear box lubrication oil and the hydraulic fluid - E = Applications with high axial load and low radial load. - A2P = High pressure seal for applications without load and without check valves. - A2PV = High pressure seal for applications without load and with check valves - C2P = High pressure seal, without check valves and with external drain hole. - C2PV = High pressure seal, with check valves and external drain hole. 						
<p>Series:</p>						
<p>Pump/Motor:</p> <ul style="list-style-type: none"> - 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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