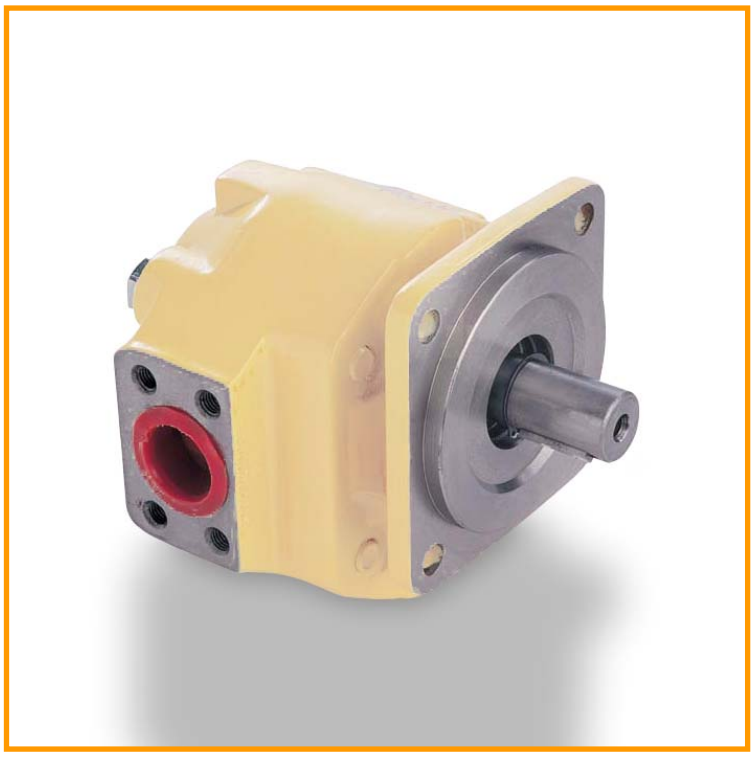
Fluidea



Series 2200

01.03

Gear pumps & motors

01.2200 - 0902

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.

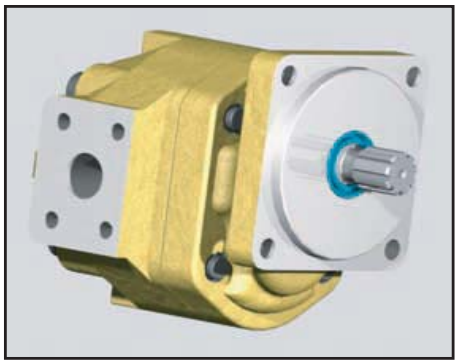
*** INLET CONDITIONS:**

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, ordering key



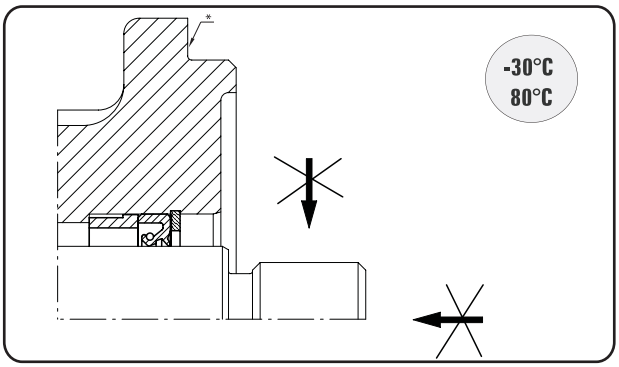
Model	2207	2208	2210	2213	2215	2216
Displacement [ccm/rev]	53,6	58,7	70,1	85,7	101,1	110,8
Rated pressure [MPa]	21	21	21	21	21	17
Max speed [rpm]	pumps 2700					
	motors 3000					
Max torque motors [Nm]	157	173	207	253	296	272

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

Ordering key

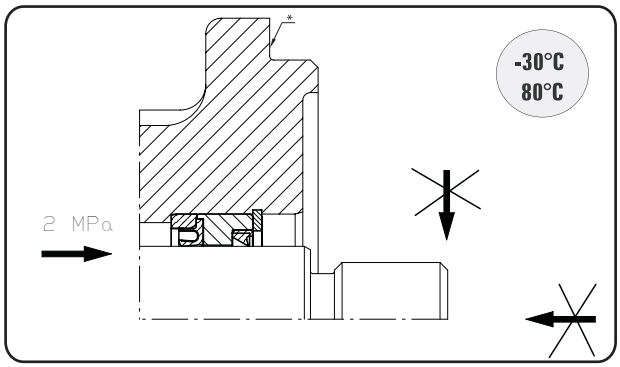
P- PUMP M- MOTOR	Design level 1- without 2 or 3	Seal design	Bearings roller - without plain - P	Size	Drive shaft	Flange	Ports	Rotation A- anticlockwise C- clockwise D- birotation
P		C		2207	C	2	B26	C
P M		A C A2P A2PV C2P C2PV E	roller	2207 2208 2210 2213 2215 2216	B C AP G Q	2 3 4 5	B25 B26	A C D

Seal design



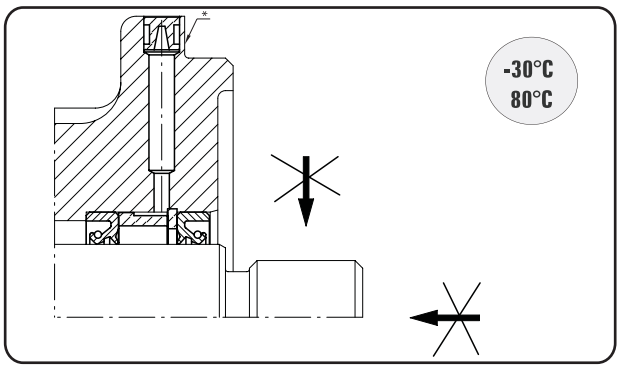
code A

Suitable for drives with limited radial load



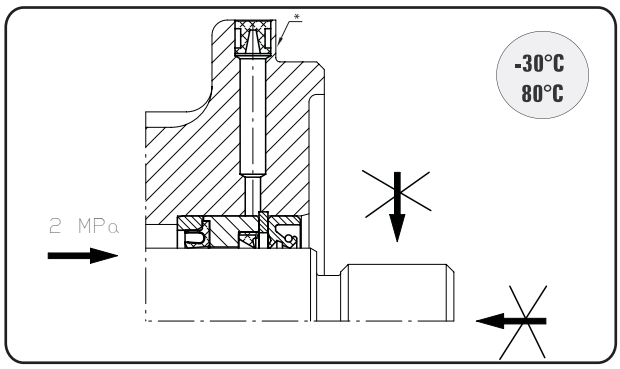
code A2P, A2PV

Options of high pressure shaft seal
suitable for drives with limited radial load



code C

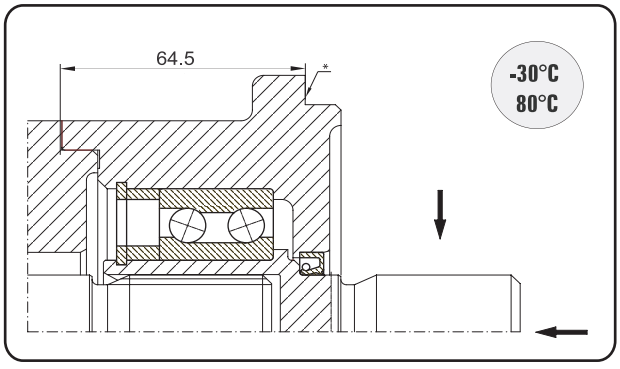
Visible-bleed drilling suitable for drives with
no load for direct mounting on torque
converters and gear boxes



code C2P, C2PV

Options of high pressure shaft seal suitable
for drives with no load visible-bleed driling

2P-bi-rotation no check valves with external drain.
2PV-bi-rotation with check valves.

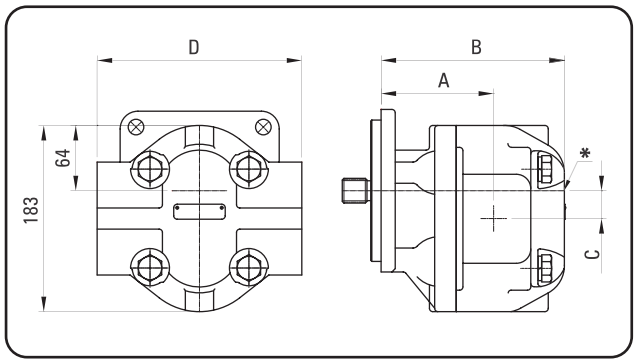


code E

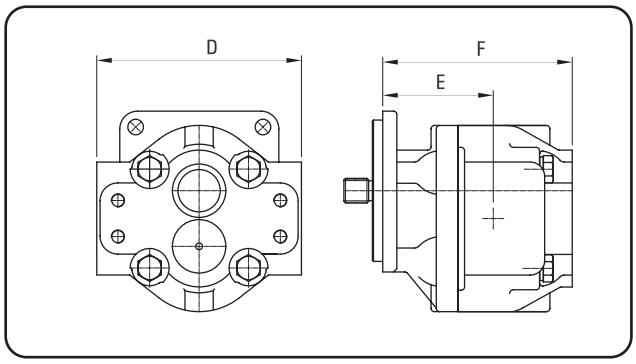
Suitable for drives with heavy axial
load and some radial on to drive shaft

* standard flange mounting surface

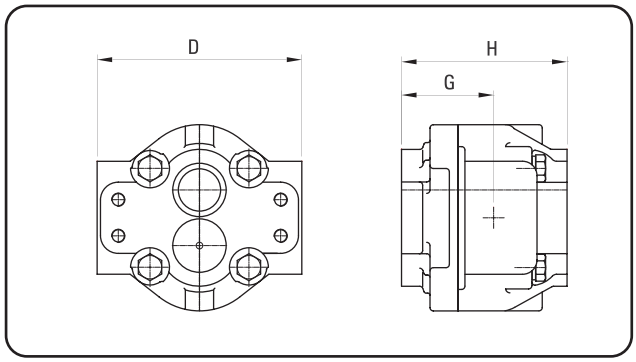
Installation dimensions



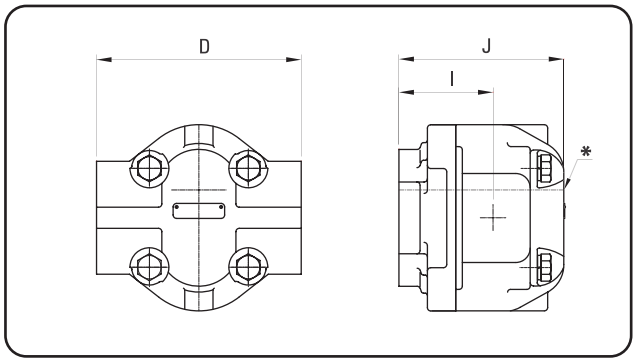
Single unit



Front unit



Intermediate unit

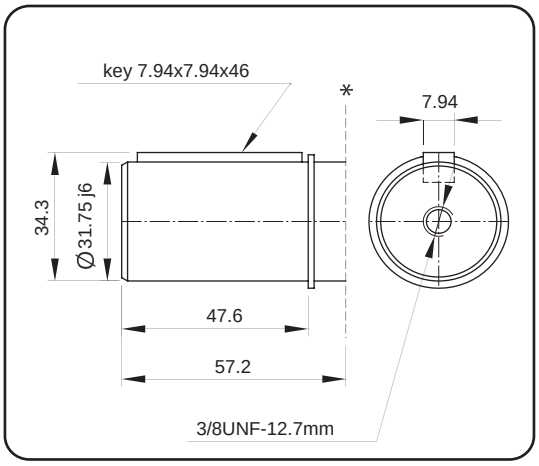


Rear unit

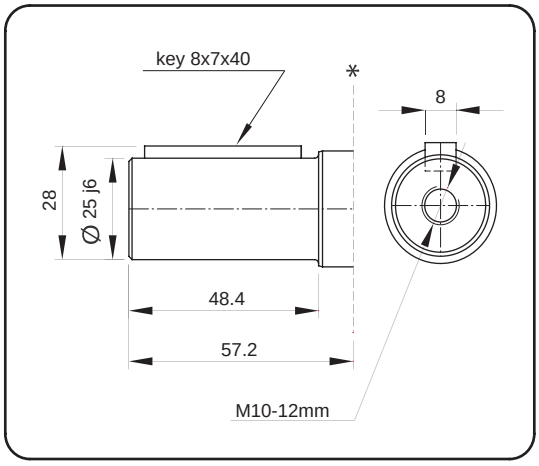
	Single unit				Front unit			Intermediate unit			Rear unit			
SIZE	A	B	C*	Weight [kg]	E	F	Weight [kg]	G	H	Weight [kg]	I	J	Weight [kg]	D
2208	109	170	27,5	22,3	109	178	23,8	97	167	22,2	97	159	20,0	187,3
2210	109	170	27,5	22,5	109	178	23,9	97	167	22,3	97	159	20,0	187,3
2213	116	176	27,5	23	116	184	24,3	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 part for motors

Parallel keyed shafts

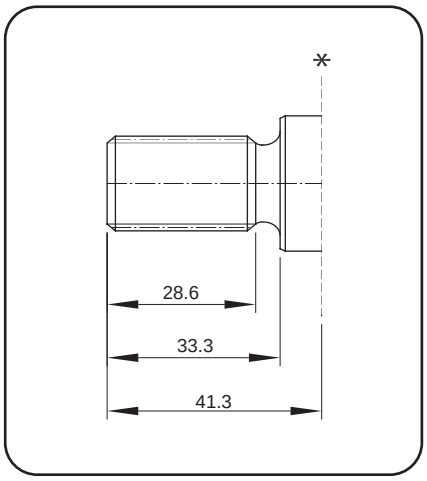


code G

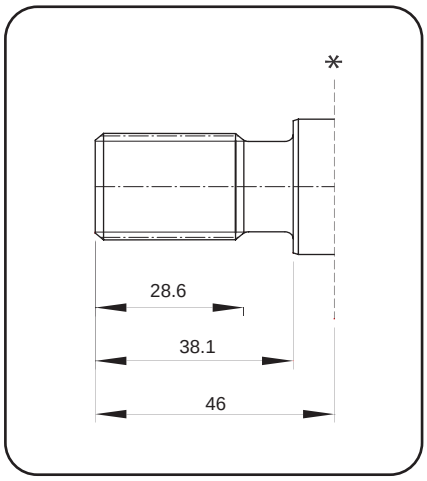


code AP

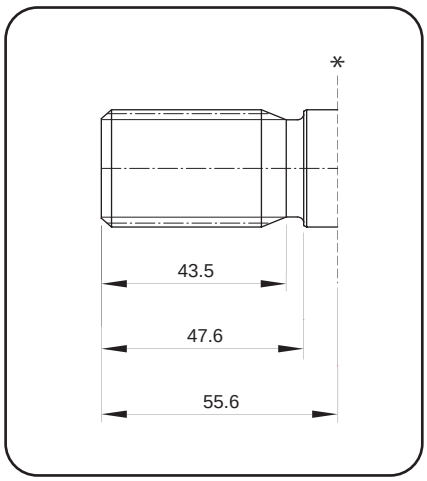
Involute splined shafts



code B



code Q



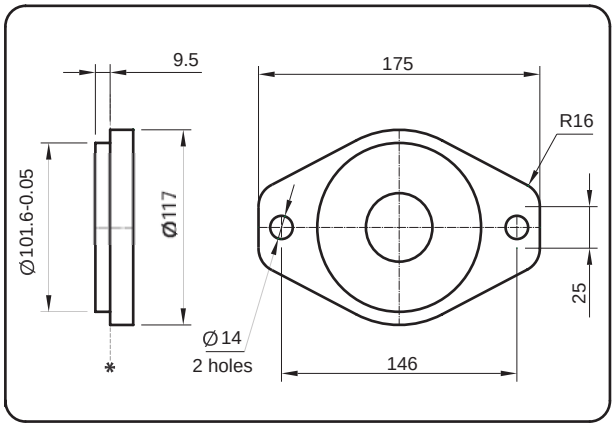
code C

* standard flange mounting surface

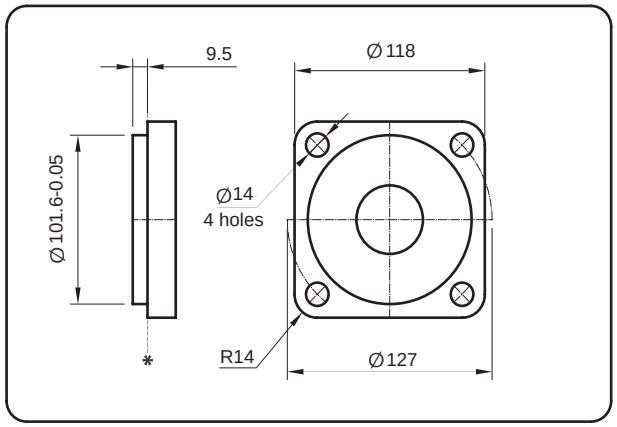
	size	side fit	diametral pitch	pressure angle	number of teeth	major diameter
code C	SAE C 1 1/4"	flat root	12/24	30 °	14	31,20/ 31,12
code Q	SAE BB 1"	flat root	16/32	30 °	15	24,97/ 24,87
code B	SAE B 7/8"	flat root	16/32	30 °	13	21,79/ 21,66

Mounting flanges

SAE B

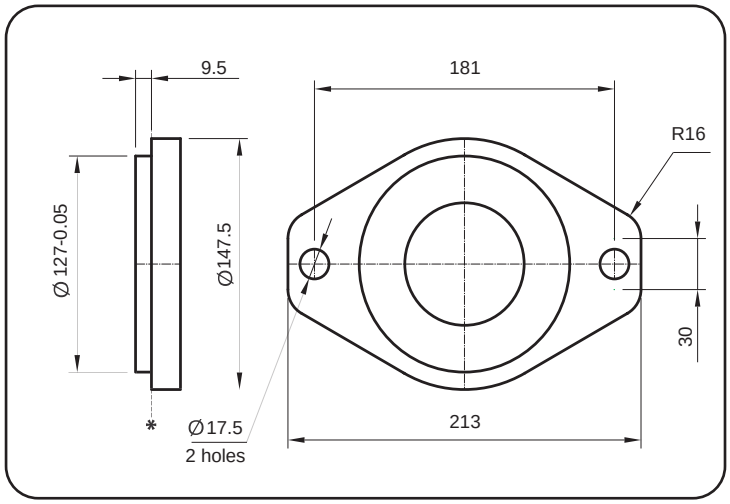


code 2

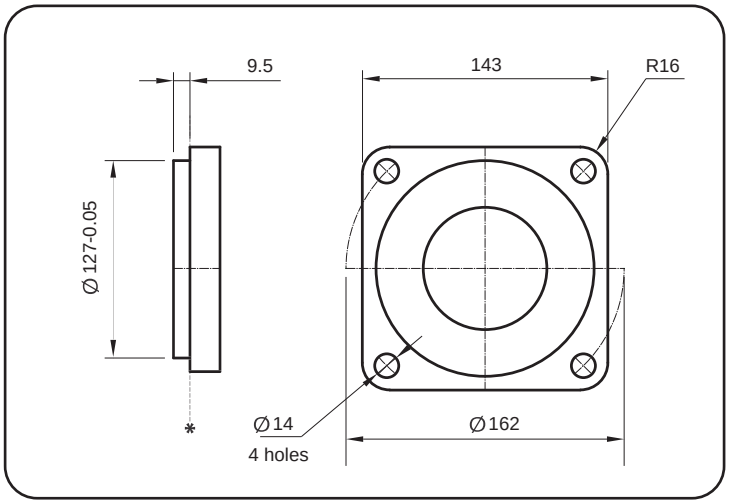


code 3

SAE C



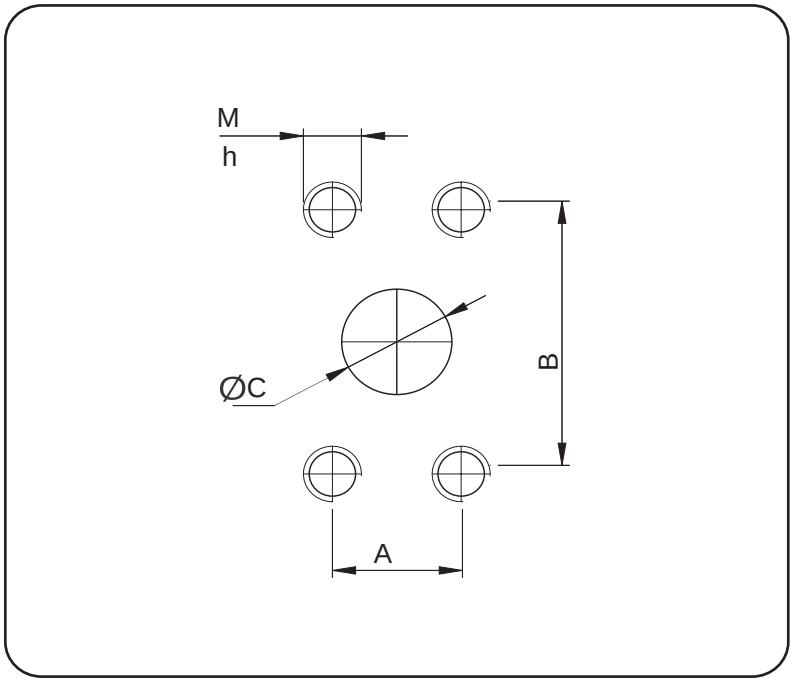
code 4



code 5

* standard flange mounting surface

Ports



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

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