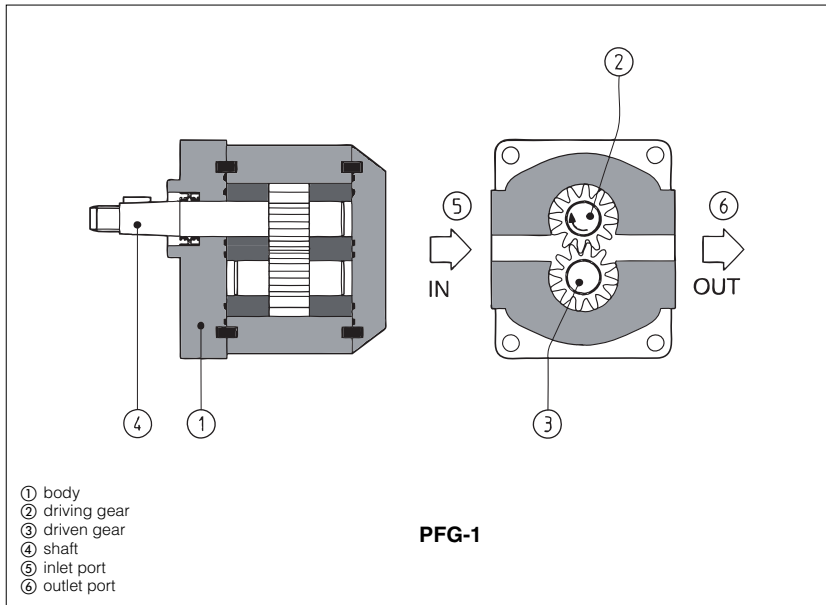


Gear pumps type PFG

external gears - fixed displacement



PFG are fixed displacement external gear pumps, axial hydraulic balancing, simple and sturdy construction, low noise level.

Suitable for hydraulic oils or synthetic fluids having similar lubricating characteristics.

Wide variety of displacements: from 1,4 up to 52 cm³/rev.

Max pressure up to 230 bar.

1 MODEL CODE

PFG

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2

14

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Fixed displacement gear pump

Additional suffix for pumps PFG-3 provided to be coupled with radial piston pumps type PFR (tab. A045), see tab. A190
Option on request

Size, see section 2: **1, 2, 3**

Displacement [cm³/rev], see section 2
for PFG 1: **14, 20, 28, 35, 42, 49, 60, 74, 87, 99**
for PFG 2: **07, 10, 11, 14, 16, 18, 21, 27**
for PFG 3: **27, 40, 54**

Options on request

Series number

Direction of rotation (as viewed at the shaft end):
- = clockwise (supplied standard if not otherwise specified)
S = counterclockwise

Note: PFG are not reversible. The direction of rotation is indicated by an arrow on the pump casing; the same arrow shows also the direction of the oil flow (from the inlet to the outlet port)

2 OPERATING CHARACTERISTICS at 1450 rpm (based on mineral oil ISO VG 46 at 50°C)

Model	Displacement cm ³ /rev	Max pressure (1)	Speed range rpm	Flow l/min (2)	Power kW
PFG-114	1,4	220 bar	800 - 6000	2	0,8
PFG-120	2,1			2,8	1,2
PFG-128	2,8			3,7	1,6
PFG-135	3,5	210 bar	800 - 5000	4,7	2,1
PFG-142	4,1			5,7	2,4
PFG-149	5,2			7,2	3
PFG-160	6,2	200 bar	800 - 3800	8,5	3,4
PFG-174	7,6	170 bar	600 - 3200	10,5	3,5
PFG-187	9,3	160 bar	600 - 2600	13	4,1
PFG-199	11	140 bar	600 - 2200	15,2	4,2
PFG-207	7,0	230 bar	800 - 4000	9,7	4,4
PFG-210	9,6	220 bar	600 - 3000	13,2	5,7
PFG-211	11,5			15,8	6,8
PFG-214	14,1			19,5	8
PFG-216	16	210 bar	600 - 4000	22	9
PFG-218	17,9	200 bar	500 - 3600	24,6	9,6
PFG-221	21	180 bar	500 - 3200	29	10,2
PFG-227	28,2	150 bar	500 - 2500	38,7	11,4
PFG-327	26	230 bar	500 - 3000	35,8	16,2
PFG-340	39	220 bar	500 - 3000	54	23,3
PFG-354	52	200 bar	400 - 2400	71,5	28

(1) For intermittent duty, 20% higher peak pressures are admitted.

(2) Flow rate and power consumption are referred to the max functioning pressure (1) and are proportional to revolution speed.

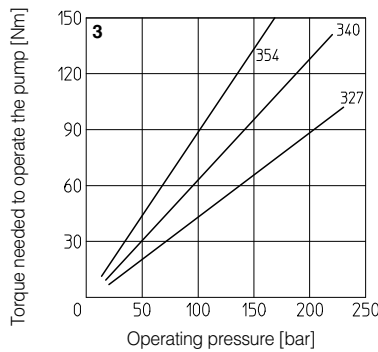
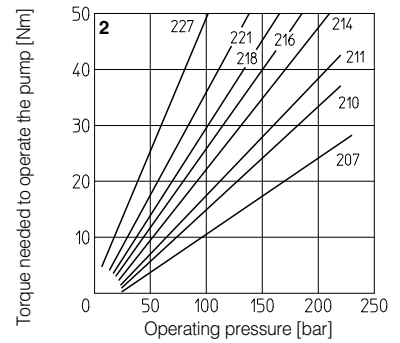
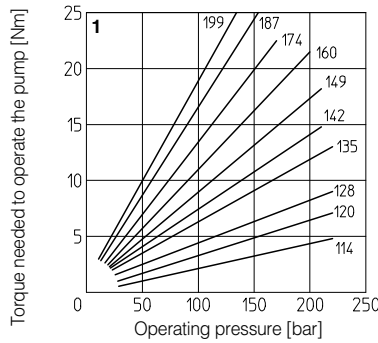
3 MAIN CHARACTERISTICS OF GEAR PUMPS TYPE PFG

Installation position	Any position.		
Loads on the shaft	Axial and radial loads are not allowed on the shaft. The coupling should be sized to absorb the power peak.		
Ambient temperature	from -20°C to +70°C		
Fluid	Hydraulic oil as per DIN 51524...535; for other fluids, consult our technical office		
Recommended viscosity	max at cold start 800 mm ² /s max at full power 100 mm ² /s during operation 24 mm ² /s min at full power 10 mm ² /s		
Fluid contamination class	ISO 19/16 (filters at 25 μm value with β ₂₅ ≥ 75 recommended)		
Fluid temperature	-20°C +60°C	-20°C +50°C (/WG seals)	-20°C +80°C (/PE seals)

4 DIAGRAMS (based on mineral oil ISO VG 46 at 50°C)

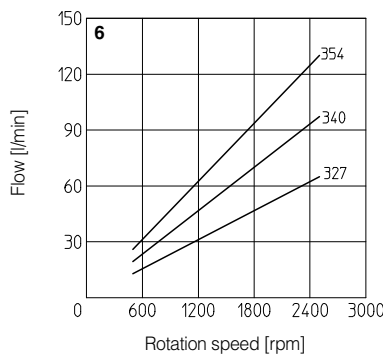
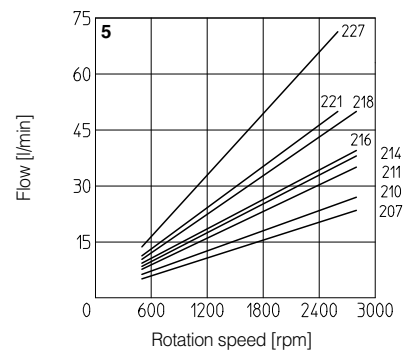
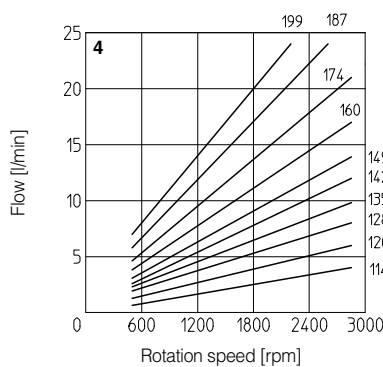
4.1 = Torque versus pressure diagram

- 1 = PFG-1
- 2 = PFG-2
- 3 = PFG-3

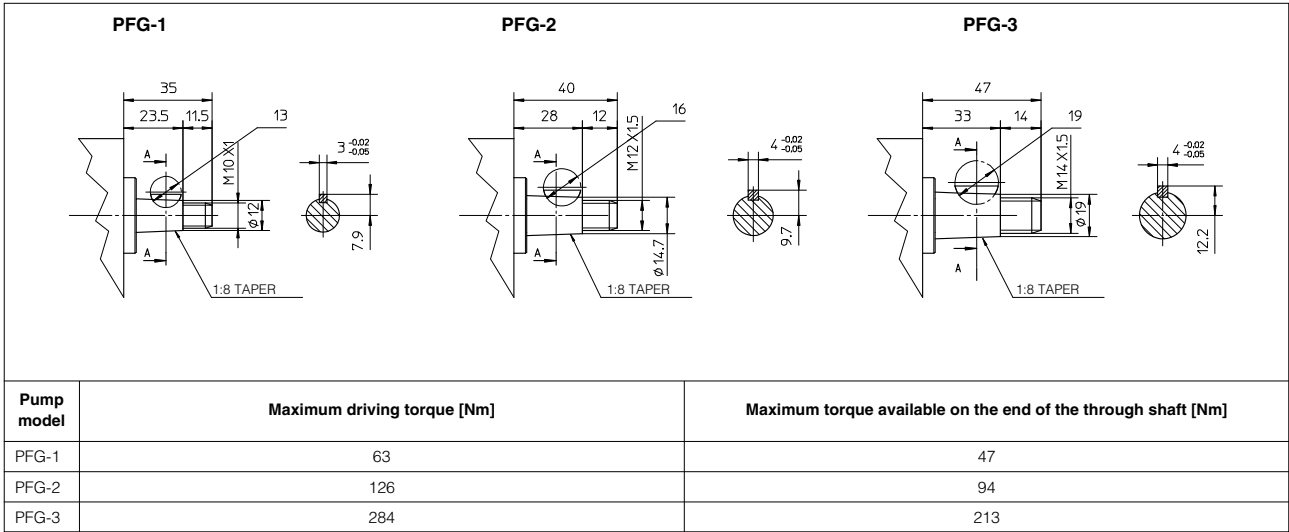


4.2 = Flow versus speed diagram stated at 7 bar

- 4 = PFG-1
- 5 = PFG-2
- 6 = PFG-3

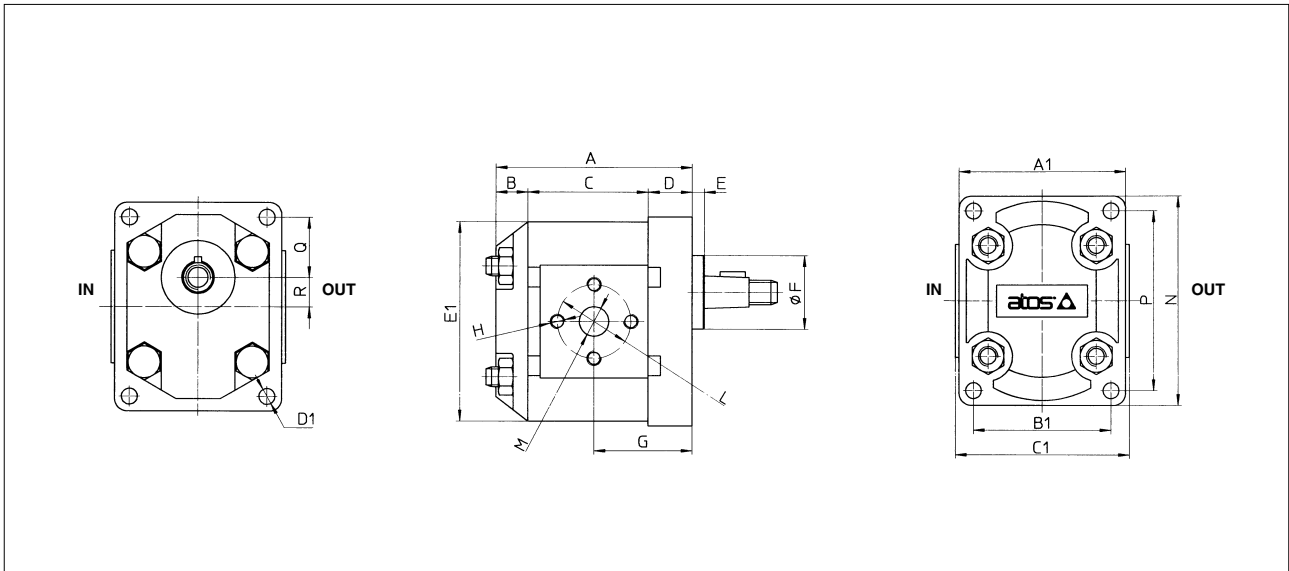


5 DRIVE SHAFT AND LIMITS OF TORQUE



The values of torque needed to operate the pumps are shown for each type of the "torque versus pressure diagram" at section 4.

6 DIMENSIONS [mm]



Elbow adaptors can be supplied with the pump, see www.scoda.it, tab. SK155

Pump model	A	B	C	D	E	ØF	G	H	ØL	ØM	In	Out	N	P	Q	R	A1	B1	C1	ØD1	E1	Mass Kg						
PFG-114	80,5	18	45	17,5	5,5	30 f8	40	M6	30	13	13	86	73	24,5	12	67,5	56	71	6,5	84,5		1,25						
PFG-120	82,5		47				41															1,28						
PFG-128	84,5		49				42															1,32						
PFG-135	86,5		51				43															1,40						
PFG-142	88,5		53				44															1,45						
PFG-149	91,5		56				45,5															1,5						
PFG-160	94,5		59				47															1,58						
PFG-174	98,5		63				49															1,66						
PFG-187	103,5		68				51,5															1,73						
PFG-199	108,5		73				54															1,9						
PFG-207	97,5	21	58	18,5	5	36,5 f8	47,5	M8	40	13	13	112,5	96	32,49	15,5	88	71,5	90	8,5	102		2,6						
PFG-210	101,5		62				49,5															2,69						
PFG-211	104,5		65				51															2,75						
PFG-214	108,5		69				53															2,86						
PFG-216	111,5		72				54,5															2,95						
PFG-218	114,5		75				56			3																		
PFG-221	119,5		80				58,5			3,16																		
PFG-227	132		88				64			3,51																		
PFG-327	133,5		25				85			23,5	5	50,8 f8	66	M10	56	27	19	27	151,5	128	43	22	120,5	98,5	120	11	148	6,35
PFG-340	142,5						94						70,5															6,85
PFG-354	151,5	103		75	7,3																							