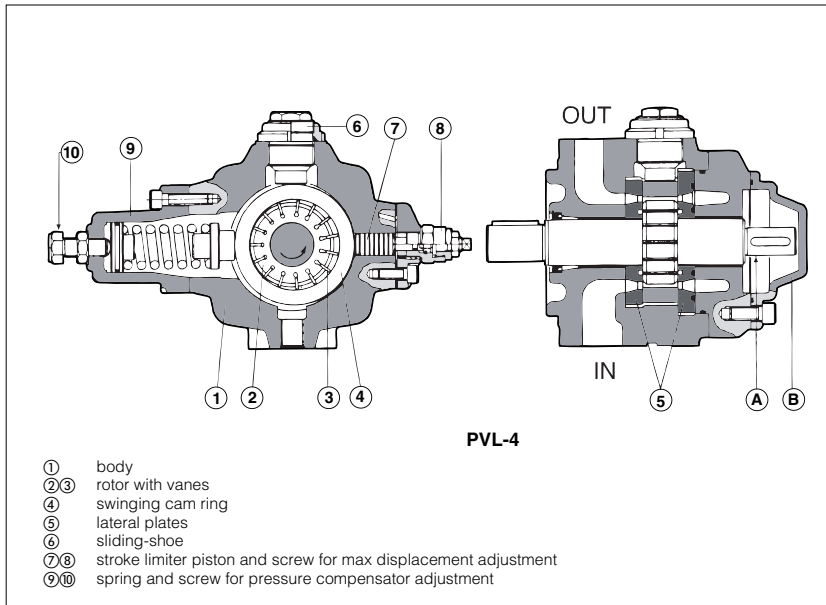


# Vane pumps type PVL

variable displacement with mechanical compensator



PVL are variable displacement vane pumps equipped with mechanical compensator ⑩ for outlet pressure and max displacement adjustment ⑦, ⑧. These low-noise pumps are available in 3 different size, have flange ports according to ISO 3019/2 and are designed to operate with anti-wear oil according to DIN 51524...535 and fire-resistant fluids with same lubricating characteristics. Wide variety of displacements: from 6,8 up to 43 cm<sup>3</sup>/rev. Max pressure up to 150 bar.

## 1 MODEL CODE

**PVL      -      3      16      /      50      -      \*\***

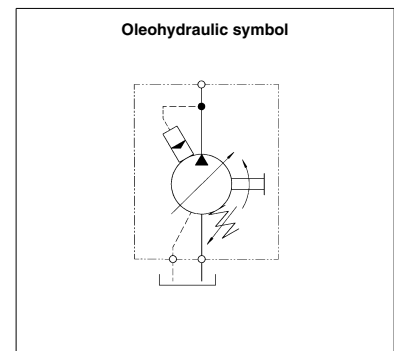
variable displacement vane pump

Conventional dimension:  
**2**  
**3**  
**4**

Conventional displacement according to ISO 3662  
**06** (dimension 2)  
**10** (dimension 2)  
**16** (dimension 3)  
**20** (dimension 3)  
**40** (dimension 4)

Series number

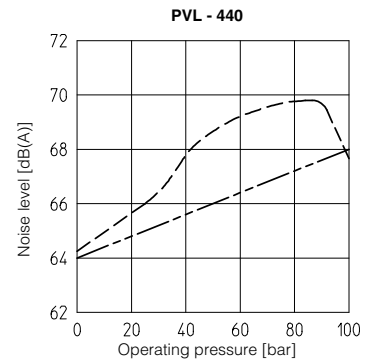
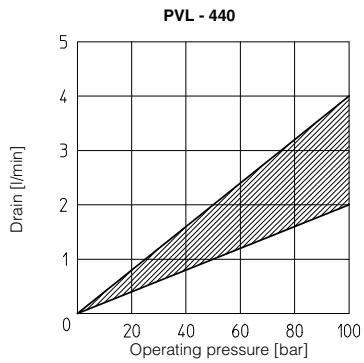
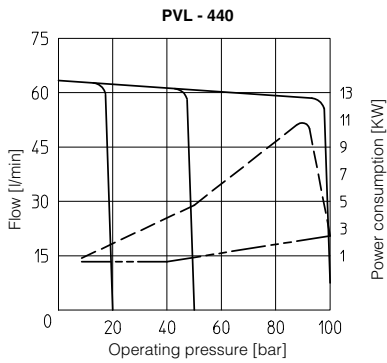
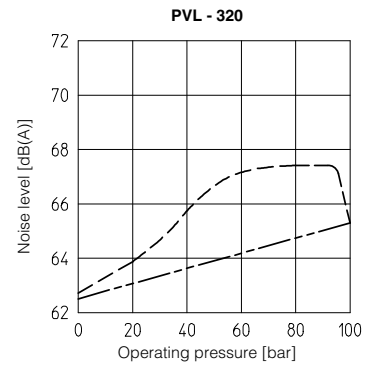
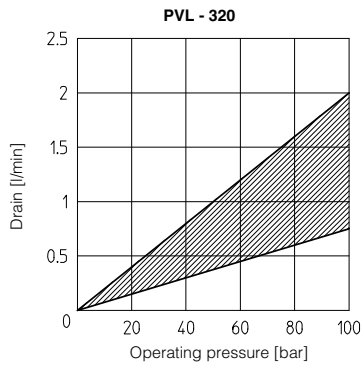
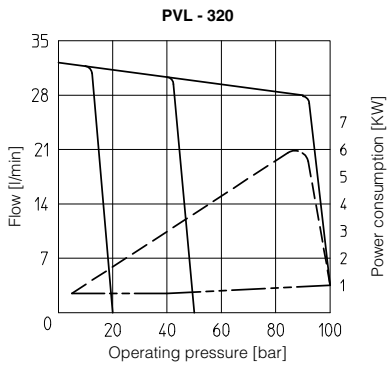
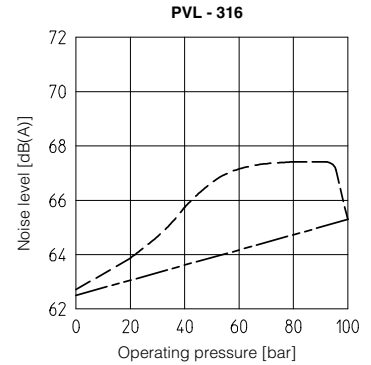
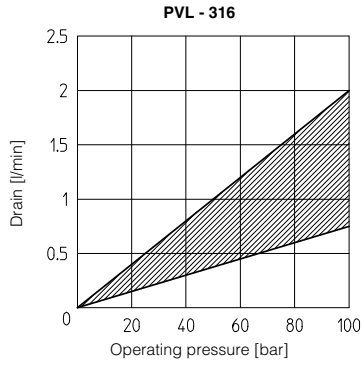
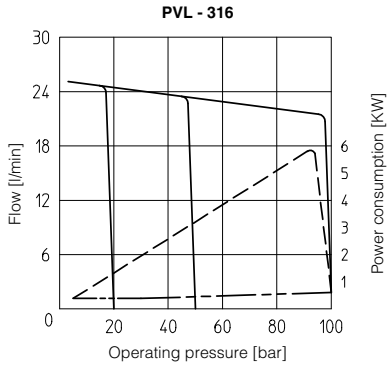
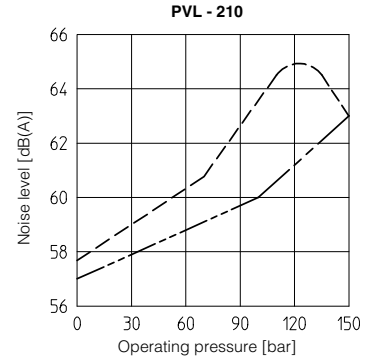
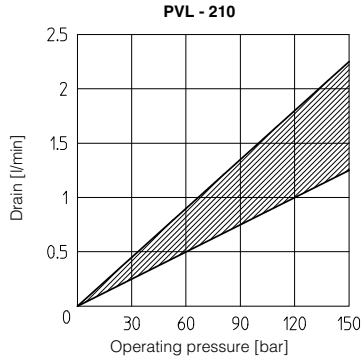
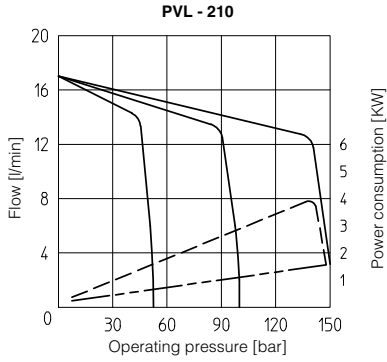
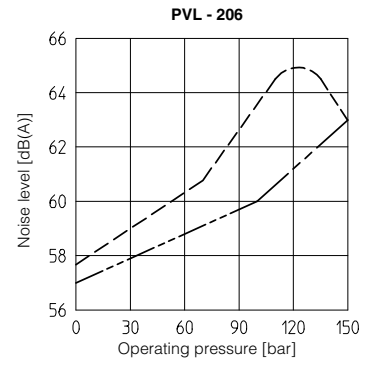
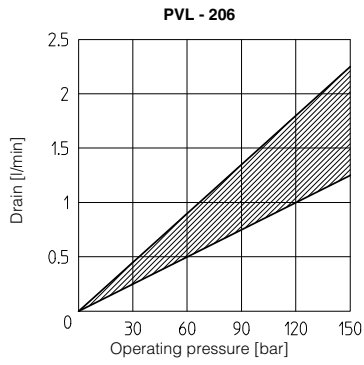
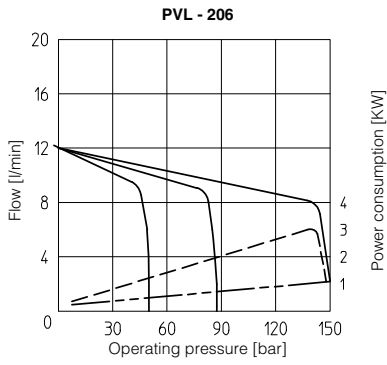
Pressure compensator calibration range:  
 - = 30 ÷ 100 bar  
**50** = 15 ÷ 50 bar  
**150** = 80 ÷ 150 bar (for PVL - 206 and PVL - 210 only)



## 2 MAIN CHARACTERISTICS OF THE PVL VANE PUMP

Modell		<b>PVL-206</b>	<b>PVL-210</b>	<b>PVL-316</b>	<b>PVL-320</b>	<b>PVL-440</b>
Max displacement	[cm <sup>3</sup> /rev]	6,8	11	18	22	43
Flow rate at 1450 rpm and 7 bar	[l/min]	9,6	15,4	25,2	31	60
Max operating pressure	[bar]	150	150	100	100	100
Max available torque on first shaft	[Nm]	110	110	197	197	400
Inlet port		G 3/4"	G 3/4"	G 1"	G 1"	flange 1 1/2" SAE 3000
Outlet port		G 3/8"	G 3/8"	G 3/4"	G 3/4"	flange 1" SAE 3000
Drain port		G 1/4"	G 1/4"	G 3/8"	G 3/8"	1/2" GAS
Recommended pressure on inlet port	[bar]	-0,2 ÷ +0,5				
Max pressure at drain port	[bar]	1				
Min/max shaft speed	[rpm]	800/1800				
Direction of rotation		Clockwise rotation				
Loads on the shaft		Radial or axial loads on shaft not allowed				
Recommended viscosity		23÷45 mm <sup>2</sup> /s at 40°C (ISO VG22-46). For cold start-up and "0" pressure max: 400 mm <sup>2</sup> /s				
Fluid contamination class		ISO 19/16 (filters of 25 µm absolute and β <sub>25</sub> ≥ 75)				
Fluid temperature		+70°C				
Drain	[l/min]	from 1 to 4 - continuous -				
Installation position		Any				

**3 DIAGRAMS**



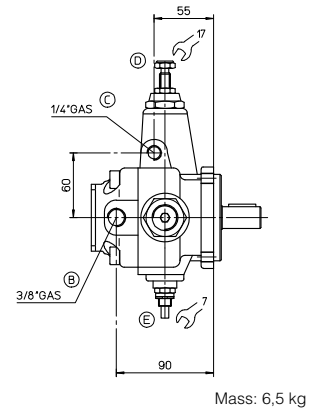
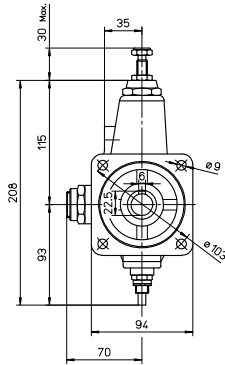
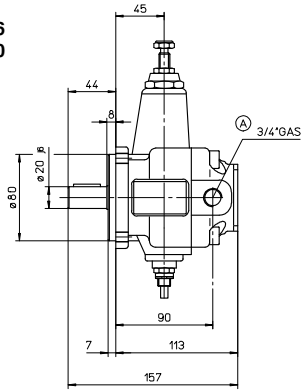
——— Pressure versus flow diagram  
 - - - - - Power consumption at max flow rate  
 - . . . . Power consumption at null flow rate

Drain in pressure compensation

Ambient noise levels measured in compliance with ISO 4412-1 oleohydraulics -Test procedure to define the ambient noise level - Pumps  
 - - - - - max. flow  
 - . . . . null flow

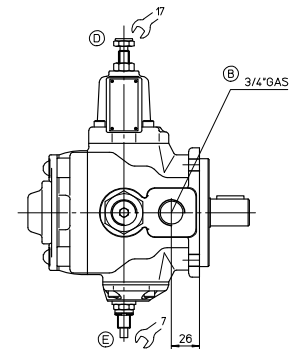
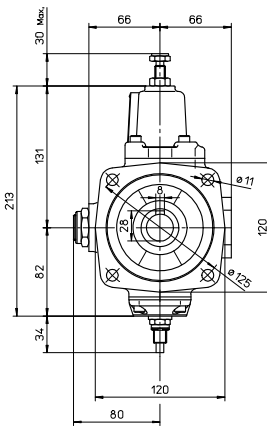
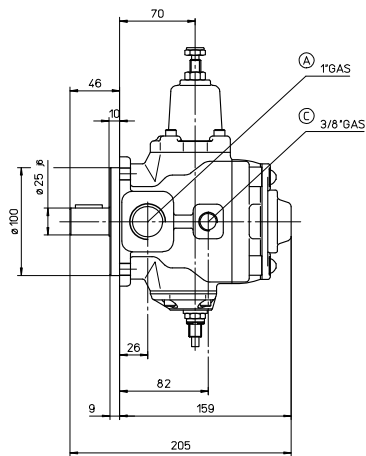
4 INSTALLATION DIMENSIONS [mm]

PVL-206  
PVL-210



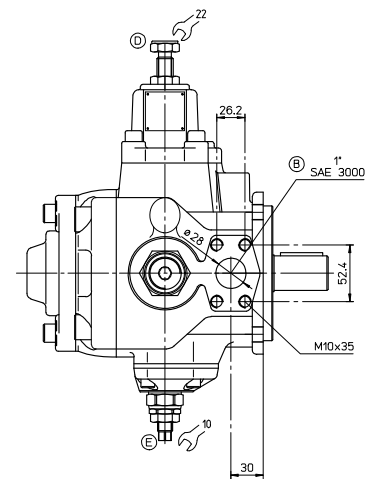
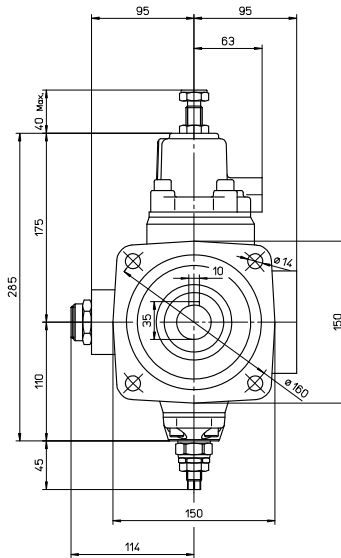
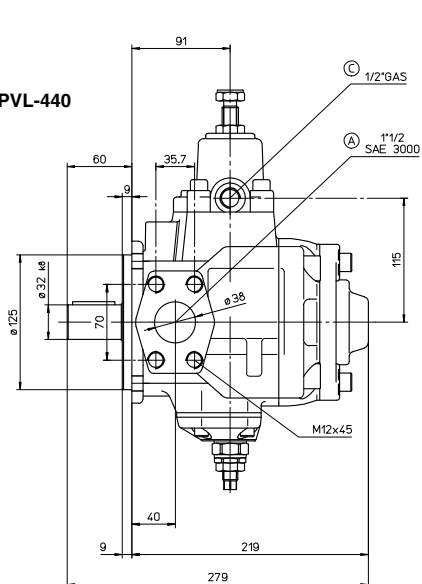
Mass: 6,5 kg

PVL-316  
PVL-320



Mass: 12 kg

PVL-440



Mass: 32 kg

- (A) inlet port
- (B) outlet port
- (C) drain port
- (D) screw for pressure compensator adjustment
- (E) screw for max displacement adjustment

SAE flanges are available for inlet and outlet ports of pumps PVL-440, see [www.scoda.it](http://www.scoda.it), tab. SK155.