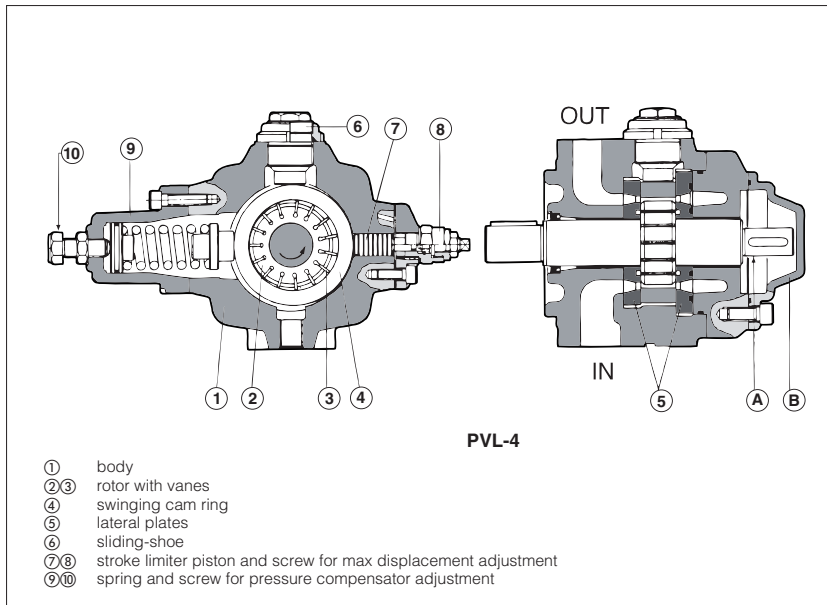


# Vane pumps type PVL

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).

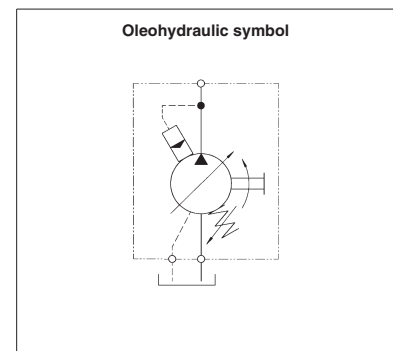
These low-noise pumps are available in 3 different size, have flange ports according to ISO 3019/2 and are designed to operate with anti-wear oil according to DIN 51524...535 and fire-resistant fluids with same lubricating characteristics.

Wide variety of displacements: from 6,8 up to 43 cm<sup>3</sup>/rev.

Max pressure up to 150 bar.

## 1 MODEL CODE

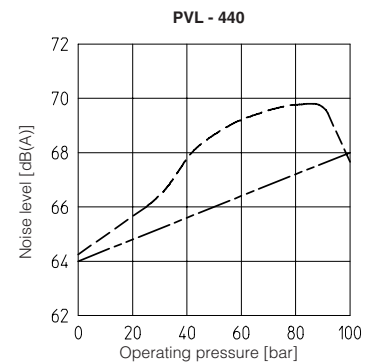
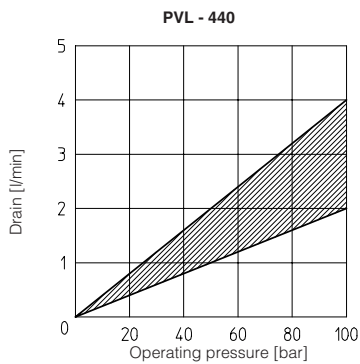
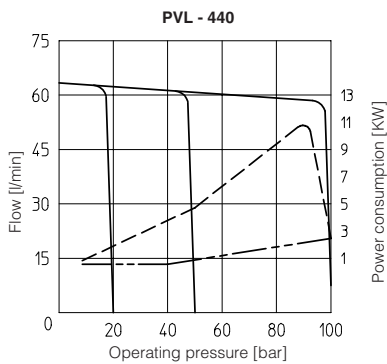
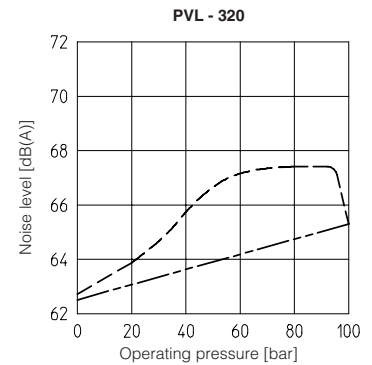
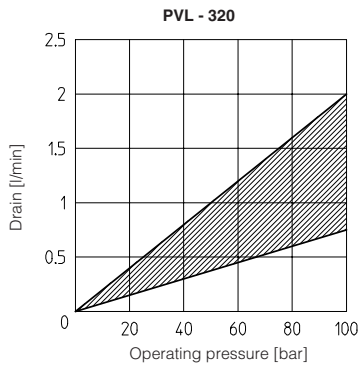
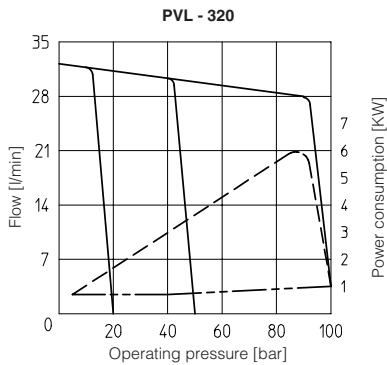
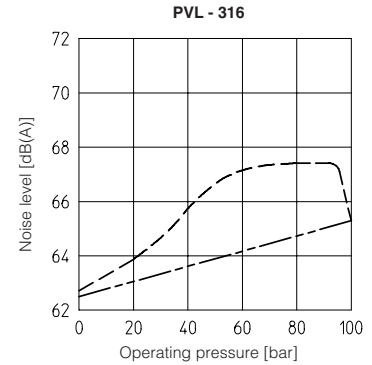
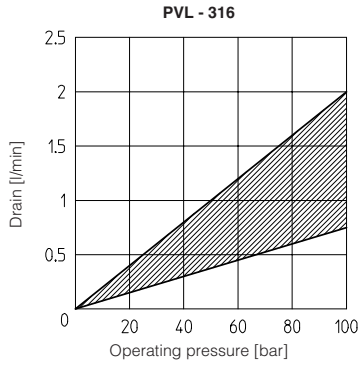
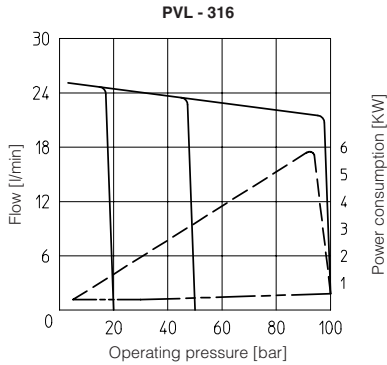
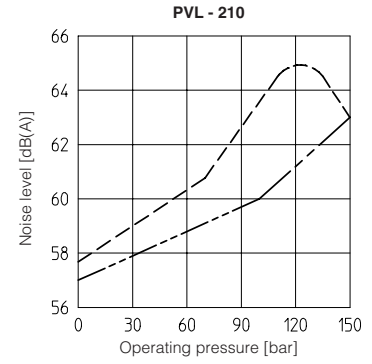
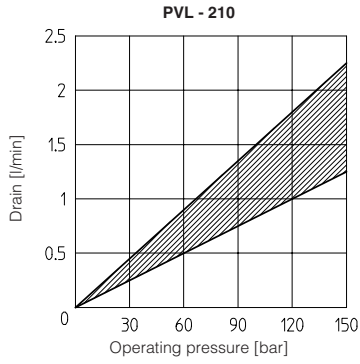
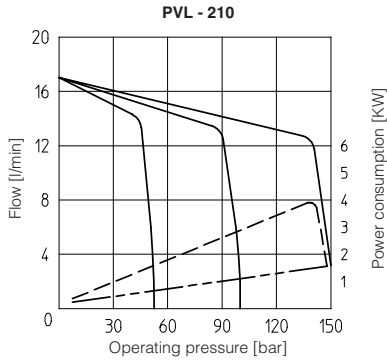
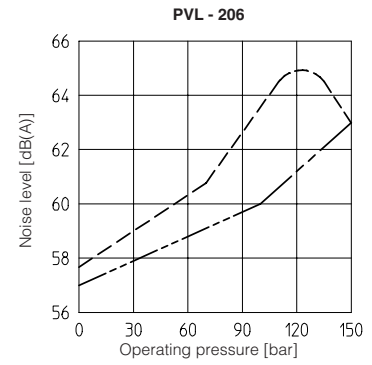
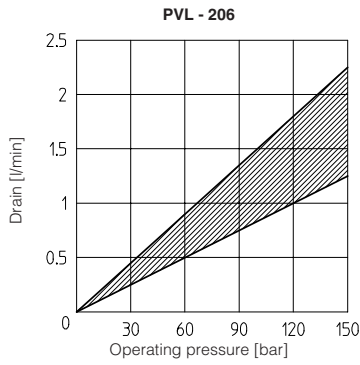
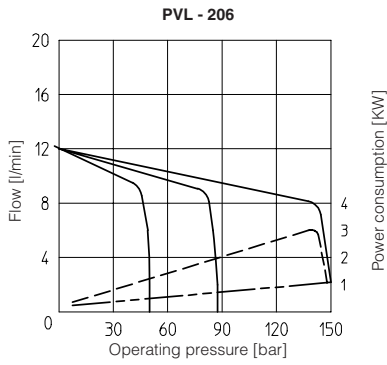
<b>PVL</b>	-	<b>3</b>	<b>16</b>	/	<b>50</b>	-	<b>**</b>
variable displacement vane pump						Series number	
Conventional dimension: <b>2</b> <b>3</b> <b>4</b>						Pressure compensator calibration range: - = 30 ÷ 100 bar <b>50</b> = 15 ÷ 50 bar <b>150</b> = 80 ÷ 150 bar (for PVL - 206 and PVL - 210 only)	
Conventional displacement according to ISO 3662 <b>06</b> (dimension 2) <b>10</b> (dimension 2) <b>16</b> (dimension 3) <b>20</b> (dimension 3) <b>40</b> (dimension 4)							



## 2 MAIN CHARACTERISTICS OF THE PVL VANE PUMP

Modell		PVL-206	PVL-210	PVL-316	PVL-320	PVL-440
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 1/2" 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" max pressure: 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** (based on mineral oil ISO VG 46 at 50°C)



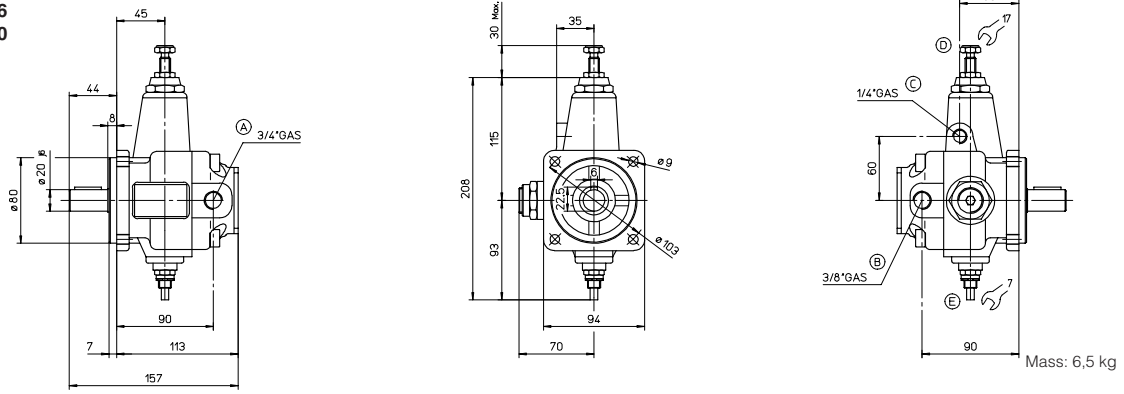
——— Pressure versus flow diagram  
 - - - - - Power consumption at max flow rate  
 - . . . . Power consumption at null flow rate

Drain in pressure compensation

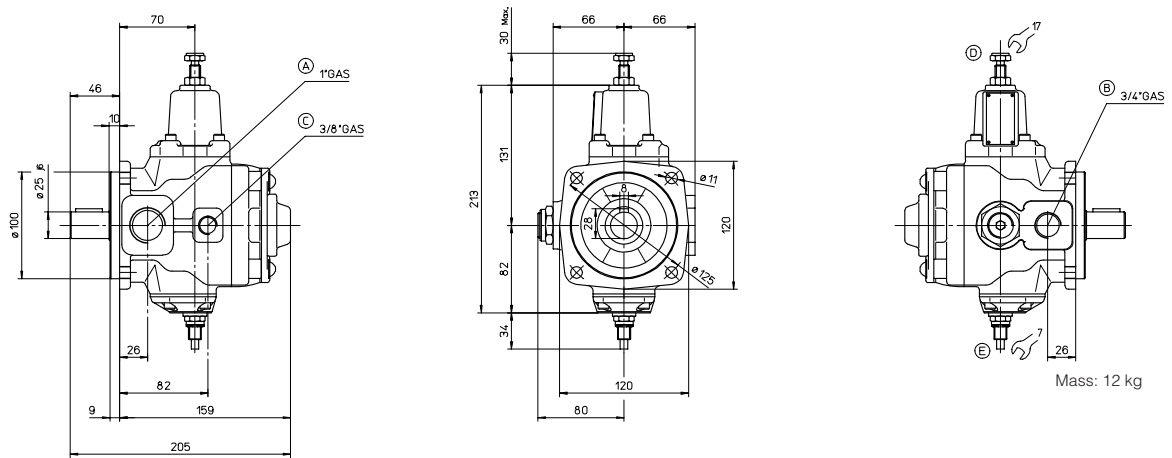
Ambient noise levels measured in compliance with ISO 4412-1 oleohydraulics - Test procedure to define the ambient noise level - Pumps  
 - - - - - max. flow  
 - . . . . null flow

4 INSTALLATION DIMENSIONS [mm]

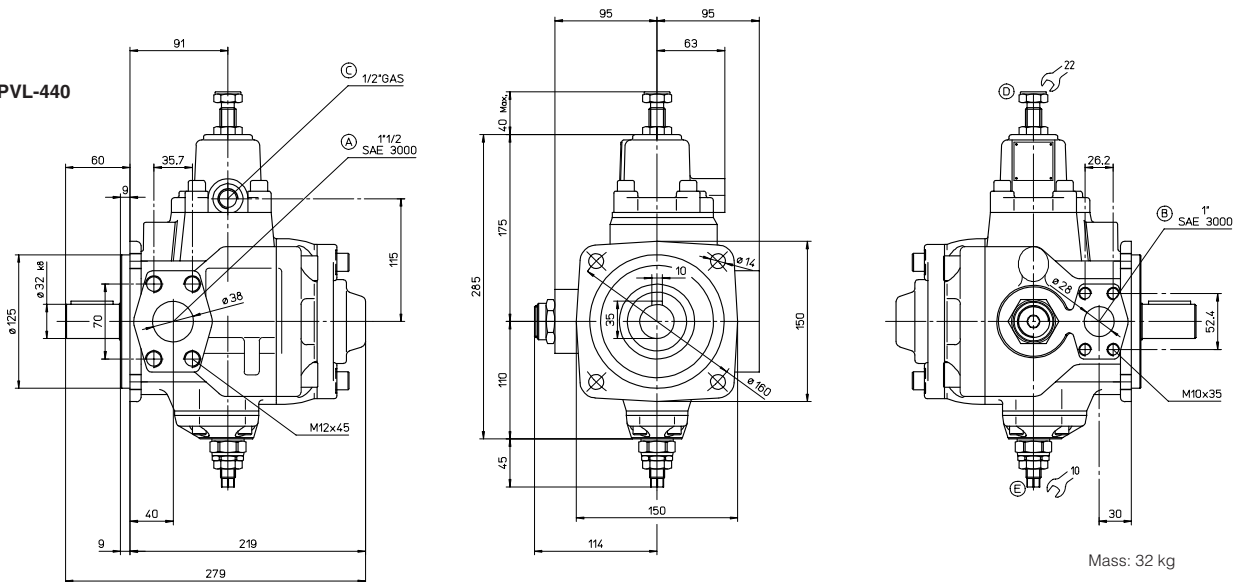
PVL-206  
PVL-210



PVL-316  
PVL-320



PVL-440



- (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.