

## Pump unit

# P 205



## Product description

The P 205 high-pressure, multi-line pump can supply lubricant directly to lubrication points or can be used as a centralized lubrication pump in large-sized progressive systems. It can drive up to five elements, which are available in varying sizes for optimum adjustability. The pump's drive and eccentric shaft design, high-efficiency worm gear, minimal number of parts and multi-range motor provide several advantages. P 205 pumps are available with a three-phase flange mount and multi-range motor or with a free shaft end for use with other motors. Various gear ratios and reservoir sizes with or without level control are offered.

## Features and benefits

- Durable, versatile and reliable pump series
- Suitable for grease or oil
- Designed for continual lubrication of machines and systems operating in harsh environments
- Broad range of output options
- Modular design and easy maintenance

## Applications

- Stationary machines with a high lubricant consumption
- Turbines in hydro-electric power plants
- Needling machines
- Screens and crushers in quarries
- Material handling equipment

## Technical data

Function principle	electrically operated, multi-piston pump
Metering quantity per stroke	0,04–0,23 cm <sup>3</sup> 0.002–0.014 in <sup>3</sup>
Output per outlet	0,08–4,20 cm <sup>3</sup> /min, 0.005–0.256 in <sup>3</sup> /min
Outlets	1 to 5
Lubricant	oil: viscosity from 40 mm <sup>2</sup> /s grease: up to NLGI 2
Operating pressure	max. 350 bar, 5 075 psi
Operating temperature	–20 to +40 °C, –4 to +104 °F
Protection class	IP 55
Materials	steel plate or plastic, depending on reservoir
Reservoir 1)	plastic: 4 and 8 kg, 8.8 and 17.6 lb steel: 5, 10 and 30 kg, 11; 22 and 66 lb
Line connection	G 1/4
Drive speed main shaft	grease: < 25 min <sup>-1</sup> , oil: < 25 min <sup>-1</sup>
Electrical connections	380–420 V AC/50 Hz, 440–480 V AC/60 Hz 500 V AC/50Hz
Dimensions	depending on the model min. 406 × 280 × 230 mm max. 507 × 365 × 300 mm min. 160 × 110 × 91 in max. 200 × 144 × 118 in
Mounting position	vertical
Options	several different level switches; ATEX versions

1) valid for  $\rho=1 \text{ kg/dm}^3$



## NOTE

For further technical information, technical drawings, accessories, spare parts or product function descriptions, see the following publication available on [SKF.com/lubrication](http://SKF.com/lubrication):

**13651 EN**

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Identification code	P	205	-		-		-		-	
Product series										
Drive										
M = AC flange gear motor F = free shaft end										
Gear ratio										
280 = 280:1 700 = 700:1 070 = 70:1										
Reservoir										
4 = plastic, 4 l, 1.05 gal 8 = plastic, 8 l, 2.11 gal 5 = steel plate, 5 l, 1.32 gal 10 = steel plate, 10 l, 2.64 gal 30 = steel plate, 30 l, 7.93 gal										
Reservoir design										
N = without level control XY = for grease and oil XL = for grease with low level control BU = with level control (ultrasonic sensor for two switching points, low- and high-level)										
Pump elements; define max. 5 elements (f.i. 4 elements K6 = 4K6, ...)										
K 5 = piston Ø 5 mm, output per stroke: 0,11 cm <sup>3</sup> , 0.006 in <sup>3</sup> K 6 = piston Ø 6 mm, output per stroke: 0,16 cm <sup>3</sup> , 0.009 in <sup>3</sup> K 7 = piston Ø 6 mm, output per stroke: 0,23 cm <sup>3</sup> , 0.014 in <sup>3</sup> KR = adjustable output, piston Ø 7 mm, output per stroke: 0,04-0,18 cm <sup>3</sup> , 0.002-0.010 in <sup>3</sup>										
Supplements to motor designation										
320 - 420, 440 - 480 = multi-range motor for nominal supply voltage, 380-420 V AC/50 Hz, 440-480 V AC/60 Hz 500 = single-range motor for nominal supply voltage, 500 V/50 Hz 000 = pump without motor, with coupling flange										

### P205 pump elements

Order number	Description	Metering quantity per stroke	
		cm <sup>3</sup>	in <sup>3</sup>
600-26875-2	pump element piston K 5	0,11	0.006
600-26876-2	pump element piston K 6	0,16	0.009
600-26877-2	pump element piston K 7	0,23	0.014
655-28716-1	pump element adjustable KR (7)	0,04-0,18	0.002-0.010
303-19285-1	closing screw <sup>1)</sup>	-	-

<sup>1)</sup> for outlet port instead of a pump element

### Pressure-relief valve and filling connectors

Order number	Description
624-29056-1	pressure-relief valve, 350 bar, G 1/4 D 6 for tube Ø 6 mm OD
624-29054-1	pressure-relief valve, 350 bar, G 1/4 D 8 for tube Ø 8 mm OD
304-17571-1	filling connector G 1/4 female <sup>1)</sup>
304-17574-1	filling connector G 1/2 female <sup>1)</sup>

<sup>1)</sup> filling connector fits for vacant outlet ports