

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 piston pump
Metering quantity per outlet	oil: 0,08–7,7 cm ³ /min 0,004–0,469 in ³ /min grease: 0,08–5,5 cm ³ /min 0,004–0,335 in ³ /min
Outlets	1 to 5
Lubricant	oil: viscosity 40–1 500 mm ² /s grease: up to NLGI 2
Operating pressure	max. 350 bar, 5 075 psi
Operating temperature	–20 to +70 °C, –4 to +158 °F
Protection class	IP55
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 ⁻¹ , oil: 35 min ⁻¹
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:

13651

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Identification code	P	205	X	-			-			-			-	
Product series	P205 pump for grease and oil													
Corrosion protection classes	X = C5-M protection period ≥ 15 years, the corrosion protection duration is not a warranty period													
Drive assembly	M = Three-phase flange-mounted motor F = Free shaft end													
Gear ratio	280 = 280:1 700 = 700:1 070 = 70:1													
Reservoir	4 = plastic, 4 l, 1.05 gal 10 = steel plate, 10 l, 2.64 gal 8 = plastic, 8 l, 2.11 gal 30 = steel plate, 30 l, 7.93 gal 5 = steel plate, 5 l, 1.32 gal													
Reservoir design	XYN = reservoir for lubrication grease and lubrication oil without level monitoring (all reservoir sizes) XYBU = reservoir for lubrication grease and lubrication oil with ultrasonic sensor for level monitoring (all reservoir sizes) XYNA = reservoir for lubrication grease and lubrication oil without level monitoring, with lockable reservoir cover (4 l and 8 l reservoirs only) XBF = reservoir for lubrication grease with follower plate and level monitoring (8 l reservoir only)													
Number of pump elements	1 = 1 pump element 2 = 2 pump elements 3 = 3 pump elements 4 = 4 pump elements 5 = 5 pump elements													
Type of pump elements	K5 = piston Ø 5 mm, output per stroke: 0,11 cm ³ , 0.0067 in ³ K6 = piston Ø 6 mm, output per stroke: 0,16 cm ³ , 0.0098 in ³ K7 = piston Ø 7 mm, output per stroke: 0,23 cm ³ , 0.014 in ³ KR = adjustable output, piston Ø 7 mm, output per stroke: 0,04-0,18 cm ³ , 0.0024-0.011 in ³													
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 290-500 = single-range motor for nominal supply voltage, 290-500 V/50 Hz 000 = pump without motor, with coupling flange													

P205 pump elements

Order number	Description	Metering quantity	
		cm ³ /stroke	in ³ /stroke
600-26875-2	pump element K5	0,11	0.0067
600-26876-2	pump element K6	0,16	0.0098
600-26877-2	pump element K7	0,23	0.014
655-28716-1	adjustable pump element KR (7)	0,04-0,18	0.0024-0.011
303-19285-1	closing screw ¹⁾		
¹⁾ 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 ¹⁾
304-17574-1	filling connector G 1/2 female ¹⁾

¹⁾ filling connector fits for vacant outlet ports