## Pump unit

# QLS 311 SSV






## Description

The QLS 311 pump is a monitored lubrication system with low-level control for a maximum of 18 lubrication points. Designed for use with standard high-pressure plastic tubing, the QLS family includes pumps with or without mounted SSV metering devices. An optional integrated controller for pause and lubrication times is available.

## Features and benefits

- Internal lubricant return possible
- Integrated pressure-relief valves
- External programming via keypad
- System monitoring with display of faults
- Standard low-level control
- Suitable for V AC and V DC versions
- Protection: IP 6K9K, NEMA 4

## Applications

- Machine tools
- Metal processing
- Chain lubrication
- Material handling
- Automotive industry
- Food processing
- Printing industry
- Farm machinery

**Technical data**

| | |
|---|---|
| Function principle | electrically operated piston pump |
| Operating temperature | –25 to +70 °C;<br>*–13 to +158 °F* |
| Operating pressure | 80 bar; *1 200 psi* |
| Lubricant | oil: 40–1 500 $mm^2/s$ |
| Outlets | up to 18 |
| Metering quantity | 1,0 $cm^3$/min;<br>*0.06 $in^3$/min* |
| Reservoir | 1, 2 l; *0.26; 0.53 gal* |
| Connection main line | |
| via SSV: | see information for SSV |
| via connection block: | G 1/8 |
| | 12/24 V DC; 120 and 230 V AC (± 10%) |
| Protection class | IP 6K9K |
| Dimensions | min. 237 × 215 × 230 mm<br>*min. 9.33 × 8.46 × 9.05 in*<br>max. 237 × 235 × 353 mm<br>*max. 9.33 × 9.25 × 13.89 in* |
| Mounting position | upright |

**NOTE**
Further technical information, technical drawings, accessories, spare parts or product function descriptions are available on SKF.com/lubrication.

## Pump unit and accessories

# QLS 311 SSV

**Identification code**

| P | 3 | 1 | 1 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Product design**

**SSV Metering devices**

**0** = external SSV 6, SSV 8 [1]
**1** = external SSV 12, SSV 18 [1]
**3** = SSV 6, rear-mounted
**4** = SSV 8, bottom only
**6** = SSV 12
**9** = SSV 18

**SSV metering device position**

**0** = without external metering device
**1** = back, vertical order of lines
**2** = bottom, horizontal order of lines [2]

**Operating voltage**

**2** = 12 V DC
**4** = 24 V DC
**6** = 120 V AC, only with control P.C.B.
**8** = 230 V AC, only with control P.C.B.

**Reservoir with low level control**

**1** = 1 l; *0.26 gal*
**2** = 2 l; *0.53 gal*

**Connections**

**0** = 1A – 1 connector, square-type plug, left, power supply
**1** = 2A – 2 connectors, square-type plug, 1 connector left, power supply, 1 connector right, fault indication
**2** = 1A – 1 connector, bayonet, left, power supply, fault indication, only for V DC application

**Connection socket design**

**1** = square plug, design. For industrial applications [3]
**5** = bayonet plug 4-pole design, only V DC application. For vehicles [4]

**Electrical connector types**

**1** = with socket, without cable [3]
**5** = with socket, with cable (10 m, *33 ft*) [3]
**7** = with bayonet socket, with cable (10 m, *33 ft*), only for V DC application [4]

**Control printed circuit board (P.C.B.)**

**0** = none, only terminal board without time control, only for V DC application
**4** = control P.C.B. S4:
NC contact or NO contact, programmable: 1-5 cycles, only for V DC application
**4** = control P.C.B. S4:
NC contact or NO contact, programmable: 1 cycle with SSV 12, SSV 18; 1 to 3 cycles with SSV 6, SSV 8, only for V AC application

1) For external metering devices application only use the specific metering devices SSV...KNQLS
2) Do not use QLS 301 with SSV metering device in bottom-mounting position for mobile applications. Do not install the pump in areas exposed to shock.
3) Connection types 1, 5, 6 can be combined with square plug version (1) only
4) Connection types 7, 8 can be combined with bayonet plug version (5) only

**Pump element and outlet accessories**

| Order number | Description |
|---|---|
| **650-28856-1** | pump element K6 |
| **226-14091-4** | outlet push-in fitting with clamping ring; check valve for hose with stud for ∅ 6 mm tube |
| **504-30344-4** | outlet check valve assembly for ∅ 6 mm tube |
| **303-17499-3** | outlet closure plug with sealing edge |

**Accessories**

| Order number | Description |
|---|---|
| **664-36078-7** | cable kit, square plug black, cable (10 m, *33 ft*); 4-core, grounding on pos. 180 |
| **664-36078-9** | cable kit, square plug black, cable (10 m, *33 ft*) ; 4-core, grounding on pos. 0 |
| **664-34045-1** | cable kit, bayonet plug, cable (10 m, *33 ft*) 4-core |