

### Order code:

| S   | - | 2 | A  | 1           | 2           | - | 0      | 4      | 5      | R      |
|---|---|---|--|-------------|-------------|---|--------|--------|--------|--------|
| <b>Axial piston pump</b><br><b>SVP Series 2</b>   |   |   |  |             |             |   |        |        |        |        |
| <b>Ports:</b><br>side, metric thread<br>side, UNC thread<br>rear, metric thread<br>rear, UNC thread<br>Tandem, Flange SAE A, Coupling SAE A, metric<br>Tandem, Flange SAE A, Coupling SAE A, UNC<br>Tandem, Flange SAE A, Coupling SAE A-B, metric<br>Tandem, Flange SAE A, Coupling SAE A-B, UNC<br>Tandem, Flange SAE B, Coupling SAE B, metric<br>Tandem, Flange SAE B, Coupling SAE B, UNC<br>Tandem, Flange SAE B, Coupling SAE B-B, metric<br>Tandem, Flange SAE B, Coupling SAE B-B, UNC<br>Tandem, Flange SAE B, Coupling SAE C, metric<br>Tandem, Flange SAE B, Coupling SAE C, UNC<br>Tandem, Flange SAE C, Coupling SAE C, metric<br>Tandem, Flange SAE C, Coupling SAE C, UNC |   |   | A<br>B<br>C<br>D<br>E<br>F<br>G<br>H<br>I<br>K<br>L<br>M<br>N<br>O<br>P<br>R |             |             |   |        |        |        |        |
| <b>Shaft:</b><br>Spline, SAE standard<br>Spline, SAE option<br>Straight   |   |   |  | 1<br>3<br>9 |             |   |        |        |        |        |
| <b>Control:</b><br>Pressure control<br>Pressure flow control (Load-sensing)<br>Torque limiter   |   |   |  |             | 1<br>2<br>3 |   |        |        |        |        |
| <b>Size:</b><br>45 ccm<br>74 ccm  |   |   |  |             |             |   | 0<br>0 | 4<br>7 | 5<br>4 |        |
| <b>Rotation:</b><br>right<br>left   |   |   |  |             |             |   |        |        |        | R<br>L |

### Order example:

- Axial piston pump, size 45 cm<sup>3</sup>, side ported, metric thread, pressure control, right-hand rotation, shaft spline 1"  
**S-2A11-045R**
- Axial piston pump, size 74 cm<sup>3</sup>, rear ports, UNC thread, pressure flow control (Load-sensing), left-hand rotation, shaft spline 1 ¼"  
**S-2D12-074L**

The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract. 07/2003

### Hydraulic axial piston pump- swash plate design

## SVP Series 2

- For mobile application
- Open circuit
- Working pressure 280 bar
- Mounting flanges according SAE



| Displacement                         | 45 | 74 |
|--------------------------------------|----|----|
| <b>Rotation</b>                      |    |    |
| Right-hand                           | •  | •  |
| Left-hand                            | •  | •  |
| <b>Control</b>                       |    |    |
| Pressure control                     | •  | •  |
| Pressure flow control (Load-sensing) | •  | •  |
| Torque limiter                       | ○  | •  |
| <b>Shaft</b>                         |    |    |
| SAE 7/8"                             | ○  |    |
| SAE 1"                               | •  |    |
| SAE 1 ¼ "                            |    | •  |
| SAE 1 ½ "                            |    | ○  |
| Straight                             | ○  | ○  |
| <b>Port orientation</b>              |    |    |
| Side, metric thread                  | •  | •  |
| Side, UNC thread                     | •  | •  |
| Rear, metric thread                  | ○  | •  |
| Rear, UNC thread                     | ○  | •  |
| Tandem, metric thread                | ○  | ○  |
| Tandem, UNC thread                   | ○  | ○  |

## Technical Data:

| Size  |                       |                    | 45                                     | 74   |
|---|-----------------------|--------------------|--|------|
| Max. Displacement (theor.)                          | $V_{g \max}$          | cm <sup>3</sup>    | 45                                     | 74   |
| Max. outlet pressure, cont.                         | $p_n$                 | bar                | 280                                    |      |
| Max. outlet pressure, peak                          | $p_{\max}$            | bar                | 350                                    |      |
| Max. speed @ $V_{g \max}$ , 1 bar abs               | $n_{0 \max}$          | $1/\min$           | 2600                                   | 2200 |
| Max. speed @ $V_{g \max}$ , 1,5 bar abs             | $n_{1,5 \max}$        | $1/\min$           | 3000                                   | 2600 |
| Max. flow @ $n_{0 \max}$                            | $Q_{0 \max}$          | $l/\min$           | 117                                    | 162  |
| Max. flow @ 1500 $1/\min$                           | $Q_{1500}$            | $l/\min$           | 67                                     | 111  |
| Max. power ( $\Delta p = 280$ bar), @ $n_{0 \max}$  | $P_{0 \max}$          | kW                 | 55                                     | 76   |
| Max. power ( $\Delta p = 280$ bar), @ 1500 $1/\min$ | $P_{E \max}$          | kW                 | 32                                     | 52   |
| Weight (approx., without oil)                       |                       | kg                 | < 23                                   | < 34 |
| Min. inlet pressure (abs.)                          | $p_{\text{abs, min}}$ | bar                | 0,85                                   |      |
| Max. inlet pressure (abs.)                          | $p_{\text{abs, max}}$ | bar                | 5                                      |      |
| Max. drain line pressure (abs.)                     | $p_{\text{Leck}}$     | bar                | 2                                      |      |
| Operating temperature                               | T                     | °C                 | -10 ... +90                            |      |
| Operating viscosity                                 | $v_{\text{opt}}$      | mm <sup>2</sup> /s | 16 – 32                                |      |
| Viscosity limits, short-time                        | $v_{\text{min/max}}$  | mm <sup>2</sup> /s | 10 – 1000                              |      |
| Contamination class                                 |                       |                    | 18/15 to ISO/DIS 4406<br>9 to NAS 1638 |      |

(theoretical values, without considering  $\eta_{mh}$  and  $\eta_v$ ; approximate values)

## Description:

The SVP series hydraulic pumps made by Spitznas, are axial piston pumps of the swash plate type.

Flow is proportional to speed and displacement, which can be adjusted continuously.

Wide range of applications with use of different control systems.

Other features:

- Short response time
- Long lifetime
- Wide speed range
- Low noise

## Dimensions:

| Size   | 45                           | 74    |
|--|------------------------------|-------|
| <b>Shaft</b>                                 |                              |       |
| SAE, standard                                | 1"                           | 1 ¼"  |
| SAE, option                                  | 7/8"                         | 1 ½"  |
| Keyed parallel shaft DIN 6885                | ∅ 25                         | ∅ 32  |
| <b>Mounting flange</b>                       |                              |       |
| SAE 2-hole                                   | 101-2                        | 127-2 |
| <b>Ports</b>                                 |                              |       |
| Inlet<br>metric thread<br>UNC thread         | SAE 1 ½"<br>M12<br>½-13      |       |
| Outlet<br>metric thread<br>UNC thread        | SAE 1"<br>M10<br>¾-16        |       |
| Leakage<br>metric thread<br>UNC thread       | M22 x 1,5<br>7/8"-14 UNF-2B  |       |
| Control valve<br>metric thread<br>UNC thread | M14 x 1,5<br>7/16"-20 UNF-2B |       |
| Gauge  | 7/16"-20 UNF-2B              |       |

Sealing (standard) : Viton, other material on request

Control settings (standard) : Pressure 280 bar

Flow  $\Delta p = 14$  bar

Different settings on request.