Alpha series - Front end cylinder with single eye

FE A169-5-06230-011-K1529*700

Item no. 70546530
Tipping weight 34 - 52 ton

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Max. working pressure</th>
<th>Weight</th>
<th>Working volume</th>
<th>Total volume</th>
<th>Max. cyl. load (start tipping)</th>
<th>Max. cyl. load (end of stroke)²</th>
<th>Max. cyl. load (end of stroke)³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. working pressure</td>
<td>190 bar</td>
<td>236 kg</td>
<td>86 L</td>
<td>93 L</td>
<td>245 kN</td>
<td>95 kN</td>
<td>111 kN</td>
</tr>
<tr>
<td>With KO¹</td>
<td>With KO¹</td>
<td>Without KO¹</td>
<td>With KO¹ below -20°C</td>
<td>With KO¹ below -20°C</td>
<td>96 L/min</td>
<td>86 L/min</td>
<td>111 kN</td>
</tr>
</tbody>
</table>

Max. pump flow

<table>
<thead>
<tr>
<th>Specification</th>
<th>With KO¹</th>
<th>Without KO¹</th>
<th>With KO¹ below -20°C</th>
<th>Without KO¹ below -20°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. pump flow (With KO¹)</td>
<td>190 L/min</td>
<td>137 L/min</td>
<td>133 L/min</td>
<td>96 L/min</td>
</tr>
<tr>
<td>Max. pump flow (Without KO¹)</td>
<td>137 L/min</td>
<td>86 L/min</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tipping time

<table>
<thead>
<tr>
<th>Specification</th>
<th>With KO¹</th>
<th>Without KO¹</th>
<th>With KO¹ below -20°C</th>
<th>Without KO¹ below -20°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tipping time (With KO¹)</td>
<td>27 sec</td>
<td>38 sec</td>
<td>39 sec</td>
<td>54 sec</td>
</tr>
<tr>
<td>Allowable lowering time</td>
<td>27 sec</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Technical notes

- This cylinder is a lifting device only. It should not be used as a structural member and should not be subjected to side loads.
- Tipping valve must have a pressure relief at the cylinder port set not higher than max. working pressure.
- Verify max. cyl. load. Working temperature range is between -40°C and +80°C.
- Max. duration of extension is 0.5 hours (excluded hard chromed stages).
- Cylinder is painted black (RAL9005) with a min. thickness conforming to the 480 hours neutral salt spray test as per ISO 9227.
- ¹ Hyva knock-off.
- ² Unsubstantial unloading (sticky load).
- ³ Substantial unloading.

Related documentation

Bracket options: 015BRA10 & 015BRA13
Mounting instructions: CYL-0031
Oil specifications: OIL-0011
Spec sheet explanation: CYL-0041

Tipping weight

| BL [mm] | OH [mm] | Ycog [mm] | Qo [mm] | C [mm] | At [°] | 200 | 46 | 500 | 800 | 800 | 200 | 48 | 500 | 800 | 800 | 200 | 500 | 53 | 800 | 55 |
|---------|---------|-----------|---------|--------|-------|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|----|-----|----|-----|----|
| 169     | 149     | 129       | 110     | 91     | 6230  | 1200|    | 34  | 37  | 40  | 35  | 38  | 42  | 36  | 40  | 45  | 40  | 44  | 51  |

Tipping weight [ton] at maximum pressure of 190 bar for a vertically mounted cylinder and C is 158 mm

For detailed tipping calculations please refer to: https://tipper.hyva.com

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## Alpha series - Front end cylinder with single eye

### FE A169-5-06230-011-K1529*700

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Part no.</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C01</td>
<td>71839131</td>
<td>DUST COVER FE 169-5/179-5/191-6</td>
<td>1</td>
</tr>
<tr>
<td>P01</td>
<td>74402441</td>
<td>PISTON FL2 S 091-1445-HC</td>
<td>1</td>
</tr>
<tr>
<td>P02</td>
<td>71853091</td>
<td>SLIDER FL 091 (2 X 1/2) A22</td>
<td>1</td>
</tr>
<tr>
<td>P03</td>
<td>71851091</td>
<td>OUTER STOPRING FL 091 A22</td>
<td>1</td>
</tr>
<tr>
<td>P04</td>
<td>71822091</td>
<td>BOTTOM PLATE PISTON FL 091</td>
<td>1</td>
</tr>
<tr>
<td>P05</td>
<td>01745012</td>
<td>CIRCLIP 82 DIN 472 (87.5x2.5)</td>
<td>1</td>
</tr>
<tr>
<td>P06</td>
<td>71870215</td>
<td>O-RING PISTON BOTTOM 091</td>
<td>1</td>
</tr>
<tr>
<td>P07</td>
<td>71847200</td>
<td>PISTON EYE SPH. FL 091 MK2 L=075</td>
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</tr>
<tr>
<td>P08</td>
<td>01226430</td>
<td>O-RING 72.62 X 3.53 MM</td>
<td>1</td>
</tr>
<tr>
<td>P09</td>
<td>71875450</td>
<td>SPHERICAL BEARING D.50 MAINT. FREE</td>
<td>1</td>
</tr>
<tr>
<td>P10</td>
<td>01770560</td>
<td>CIRCLIP 75 DIN 472 (79.5x3.0)</td>
<td>1</td>
</tr>
<tr>
<td>P11</td>
<td>71875012</td>
<td>PIN ROUND HEAD GROOVED 8x15 mm</td>
<td>2</td>
</tr>
</tbody>
</table>

### Seal kit complete

- Consists of all packsets with packset grease and O-rings

### Notes

- The inner stopring is pre-mounted in the grooves on spare bases and stages. Therefore, when ordering new tubes, it is not required to order inner stoprings separately.

For repair instructions see: CYL-0040. Serial no. is located on type plate and near type plate support.