

\* incl. 20 [-5; +30] mm pull out

3D model is available on request or [www.hyva.com](http://www.hyva.com)

| Specifications                 | Max. pump flow |                                     | Tipping time |                                     |        |
|--------------------------------|----------------|-------------------------------------|--------------|-------------------------------------|--------|
| Max. working pressure          | 250 bar        | With KO <sup>1</sup>                | 190 L/min    | With KO <sup>1</sup>                | 21 sec |
| Weight                         | 269 kg         | Without KO <sup>1</sup>             | 170 L/min    | Without KO <sup>1</sup>             | 24 sec |
| Working volume                 | 67 L           | With KO <sup>1</sup> below -20°C    | 133 L/min    | With KO <sup>1</sup> below -20°C    | 30 sec |
| Total volume                   | 73 L           | Without KO <sup>1</sup> below -20°C | 119 L/min    | Without KO <sup>1</sup> below -20°C | 34 sec |
| Max. cyl. load (start tipping) | 345 kN         |                                     |              | Allowable lowering time             | 21 sec |

### 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. • <sup>1</sup> Hyva knock-off.

### Related documentation

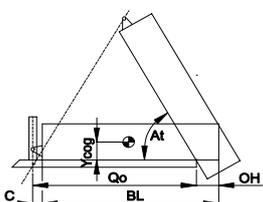
|                         |                     |
|-------------------------|---------------------|
| Bracket options:        | 015BRA10 & 015BRA12 |
| Mounting instructions:  | CYL-0030            |
| Oil specifications:     | OIL-0011            |
| Spec sheet explanation: | CYL-0041            |

### Configuration

| Extension               | 1    | 2    | 3    | 4    | 5 | 6 | 7 | Total |
|-------------------------|------|------|------|------|---|---|---|-------|
| Effective diameter [mm] | 169  | 149  | 129  | 110  |   |   |   | 4320  |
| Stroke* [mm]            | 1065 | 1085 | 1085 | 1085 |   |   |   |       |

### Tipping weight

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

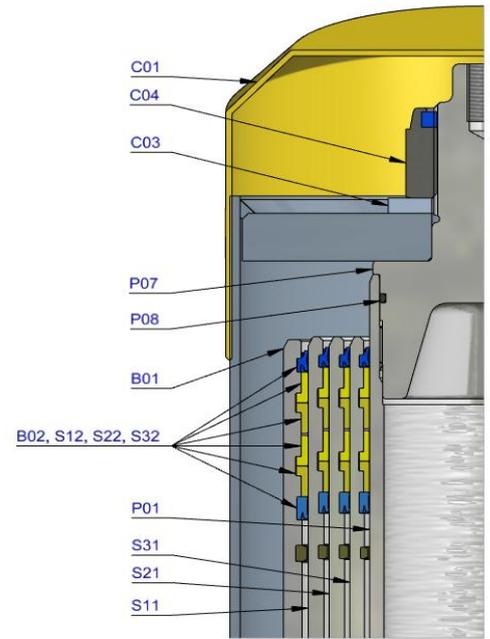


|      |                              |
|------|------------------------------|
| BL   | body length                  |
| OH   | rear overhang                |
| Ycog | vert. pos. centre of gravity |
| Qo   | pivot length                 |
| C    | bracket length               |
| At   | tipping angle                |
|      | stroke x 60 / Qo             |

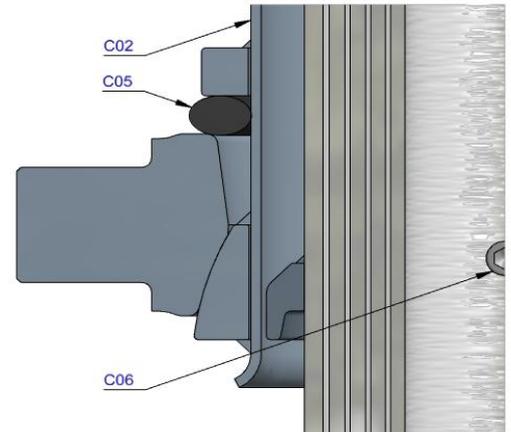
| BL [mm]   | 5700 | 800 | 5500 | 5300 |
|-----------|------|-----|------|------|
| OH [mm]   | 200  | 500 | 200  | 200  |
| At [°]    | 45   | 47  | 46   | 48   |
| Ycog [mm] | 70   | 78  | 72   | 74   |

Tipping weight [ton] at maximum pressure of 250 bar for a vertically mounted cylinder and C is 229 mm

| Pos. | Part no.  | Description                           | Qty. |
|------|-----------|---------------------------------------|------|
| C01  | 71839040  | DUST COVER FC LOW 15-244              | 1    |
| C02  | 71736354  | COVER 242-1075 PIN60 A340 SPH LOCK    | 1    |
| C03  | 01702956K | WASHER M48 DIN 125B ZP                | 1    |
| C04  | 01702907K | TOPNUT NYLOC M48x3 DIN 985 ZP         | 1    |
| C05  | 01791941  | O-RING COVER D.242                    | 1    |
| C06  | 15014550K | BOLT HSHC M12X30X1.75 Q8.8 DIN 912 ZP | 1    |
| P01  | 74463301  | PISTON FL3 S 110-1280-HC              | 1    |
| P02  | 71853110K | SLIDER FL 110 (2 X 1/2) A22           | 1    |
| P03  | 71851110K | OUTER STOPRING FL 110 A22             | 1    |
| P04  | 71822110  | BOTTOM PLATE PISTON FL 110            | 1    |
| P05  | 01745050K | CIRCLIP 100 DIN 472 (105.5x3.0)       | 1    |
| P06  | 71870220K | O-RING PISTON BOTTOM 110              | 1    |
| P07  | 71848300  | PISTON HEAD FL3 110                   | 1    |
| P08  | 01226538K | O-RING 91.67 X 3.53 MM NBR            | 1    |



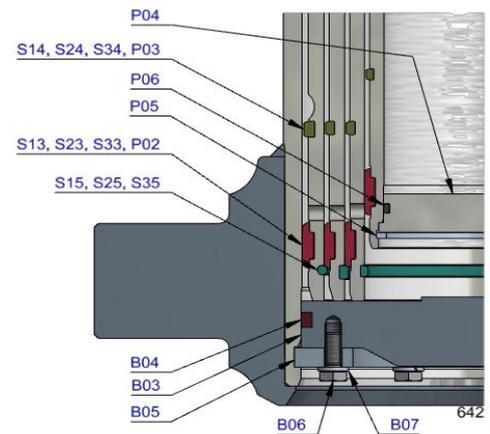
|     |           |                             |   |
|-----|-----------|-----------------------------|---|
| S31 | 74604301  | STAGE FL2 129-1275-HC       | 1 |
| S32 | 71802129K | PACKSET FL 129/HP 129       | 1 |
| S33 | 71853129K | SLIDER FL 129 (2 X 1/2) A22 | 1 |
| S34 | 71851129K | OUTER STOPRING FL 129 A22   | 1 |
| S35 | 71852129K | LIFTRING FL 129 A22         | 1 |



|     |           |                           |   |
|-----|-----------|---------------------------|---|
| S21 | 74605301  | STAGE FL2 149-1275-HC     | 1 |
| S22 | 71802149K | PACKSET FL 149/HP 150     | 1 |
| S23 | 71807151K | SLIDER FL 149 A35         | 1 |
| S24 | 71851149K | OUTER STOPRING FL 149 A22 | 1 |
| S25 | 71852149K | LIFTRING FL 149 A22       | 1 |

|     |           |                           |   |
|-----|-----------|---------------------------|---|
| S11 | 74606301  | STAGE FL2 169-1275-HC     | 1 |
| S12 | 71802169K | PACKSET FL 169            | 1 |
| S13 | 71807171K | SLIDER FL 169 A35         | 1 |
| S14 | 71851169K | OUTER STOPRING FL 169 A22 | 1 |
| S15 | 71813169K | LIFTRING FL 169x5         | 1 |

|     |               |                                    |   |
|-----|---------------|------------------------------------|---|
| B01 | 74507300R0975 | BASE FL2 191-1318-4/4BSAE-190-C242 | 1 |
| B02 | 71802191K     | PACKSET FL 191                     | 1 |
| B03 | 71825430      | BOTTOM PLATE FL2 191               | 1 |
| B04 | 71870040K     | SEAL BOTTOM PLATE FL 191           | 1 |
| B05 | 71820195      | LOCKING PLATE FL2 191              | 3 |
| B06 | 01732055K     | BOLT HEX M8X20X1.25 SET 6 PCS      | 1 |
| B07 | 01732559K     | WASHER SPRING M8 SET 6 PCS         | 1 |



Seal kit complete

|           |  |
|-----------|--|
| 71908640K | Consists of all packsets with packset grease and O-rings |
|-----------|--|

Notes

The inner stopring and piston bottom are pre-mounted on spare bases, stage and pistons. Therefore, when ordering new tubes, it is not required to order these parts separately.

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