

\* 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>                | 11 sec |
| Weight                                      | 130 kg  | Without KO <sup>1</sup>             | 137 L/min | Without KO <sup>1</sup>             | 15 sec |
| Working volume                              | 34 L    | With KO <sup>1</sup> below -20°C    | 133 L/min | With KO <sup>1</sup> below -20°C    | 16 sec |
| Total volume                                | 37 L    | Without KO <sup>1</sup> below -20°C | 96 L/min  | Without KO <sup>1</sup> below -20°C | 21 sec |
| Max. cyl. load (start tipping)              | 245 kN  |                                     |           | Allowable lowering time             | 11 sec |
| Max. cyl. load (end of stroke) <sup>2</sup> | 160 kN  |                                     |           |                                     |        |
| Max. cyl. load (end of stroke) <sup>3</sup> | 187 kN  |                                     |           |                                     |        |

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 grey (DB7350) with a min. thickness conforming to the 480 hours neutral salt spray test as per ISO 9227. • <sup>1</sup> Hyva knock-off. • <sup>2</sup> Unsubstantial unloading (sticky load). • <sup>3</sup> Substantial unloading. • 50 mm clearance required between the headboard and the stages at end of stroke (deviation from CYL-0031).

Related documentation

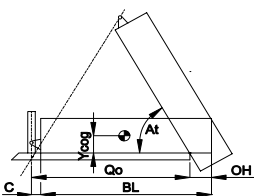
|                         |                     |
|-------------------------|---------------------|
| Bracket options:        | 015BRA10 & 015BRA13 |
| Mounting instructions:  | CYL-0031            |
| Oil specifications:     | OIL-0011            |
| Spec sheet explanation: | CYL-0041            |

Configuration

| Extension               | 1    | 2    | 3    | 4 | 5 | 6 | 7 | Total |
|-------------------------|------|------|------|---|---|---|---|-------|
| Effective diameter [mm] | 129  | 110  | 91   |   |   |   |   | 3490  |
| Stroke* [mm]            | 1150 | 1170 | 1170 |   |   |   |   |       |

Tipping weight

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

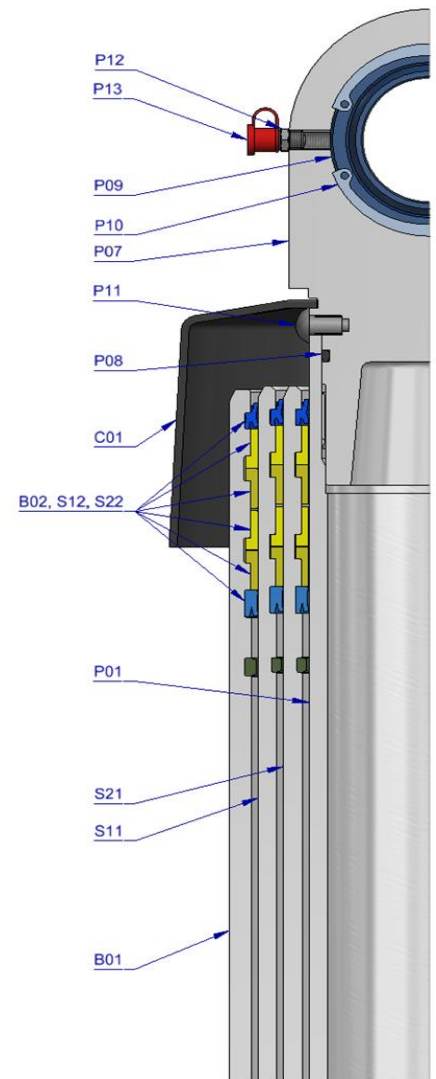


BL body length  
OH rear overhang  
Ycog vert. pos. centre of gravity  
Qo pivot length  
C bracket length  
At tipping angle  
stroke x 60 / Qo

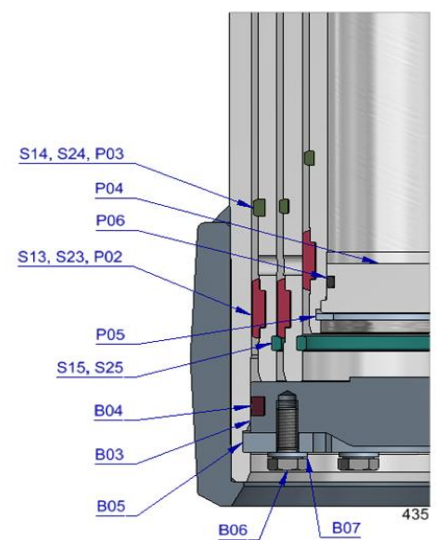
| BL [mm]   | 200 | 4600 | 600 | 200 | 4450 | 600 | 200 | 4300 | 600 |
|-----------|-----|------|-----|-----|------|-----|-----|------|-----|
| OH [mm]   | 46  | 49   | 51  | 48  | 50   | 53  | 50  | 53   | 56  |
| Ycog [mm] | 44  | 48   | 53  | 44  | 49   | 55  | 45  | 50   | 57  |
| C         | 44  | 48   | 53  | 44  | 49   | 55  | 45  | 50   | 57  |
| At        | 48  | 53   | 61  | 50  | 56   | 55  | 51  | 50   | 57  |
|           | 54  |      |     |     |      |     |     |      |     |

Tipping weight [ton] at maximum pressure of 250 bar for a vertically mounted cylinder and C is 158 mm

| Pos. | Part no.  | Description                         | Qty. |
|------|-----------|-------------------------------------|------|
| C01  | 71838900  | DUST COVER FES 149-4                | 1    |
| P01  | 74462371  | PISTON FL3 S 091-1365-HC            | 1    |
| P02  | 71853091K | SLIDER FL 091 (2 X 1/2) A22         | 1    |
| P03  | 71851091K | OUTER STOPRING FL 091 A22           | 1    |
| P04  | 71822091  | BOTTOM PLATE PISTON FL 091          | 1    |
| P05  | 01745012K | CIRCLIP 82 DIN 472 (87.5x2.5)       | 1    |
| P06  | 71870215K | O-RING PISTON BOTTOM 091            | 1    |
| P07  | 71847201  | PISTON EYE SPH. FL3 091 L=075 GR    | 1    |
| P08  | 01226430K | O-RING 72.62 X 3.53 MM              | 1    |
| P09  | 01770085K | SPHERICAL BEARING D.50.3 DO GREASED | 1    |
| P10  | 01770560K | CIRCLIP 75 DIN 472 (79.5x2.5)       | 1    |
| P11  | 71875012  | PIN ROUND HEAD GROOVED 8x15 mm      | 2    |
| P12  | 56288044K | GREASE NIPPLE M8x1 DIN 71412        | 1    |
| P13  | 01317670K | GREASER PROTECTION CAP              | 1    |



|     |           |                                  |   |
|-----|-----------|----------------------------------|---|
| S21 | 74603370  | STAGE FL2 110-1360               | 1 |
| S22 | 71802110K | PACKSET FL 110                   | 1 |
| S23 | 71853110K | SLIDER FL 110 (2 X 1/2) A22      | 1 |
| S24 | 71851110K | OUTER STOPRING FL 110 A22        | 1 |
| S25 | 71852110K | LIFTRING FL 110 A22              | 1 |
| S11 | 74604370  | STAGE FL2 129-1360               | 1 |
| S12 | 71802129K | PACKSET FL 129/HP 129            | 1 |
| S13 | 71853129K | SLIDER FL 129 (2 X 1/2) A22      | 1 |
| S14 | 71851129K | OUTER STOPRING FL 129 A22        | 1 |
| S15 | 71852129K | LIFTRING FL 129 A22              | 1 |
| B01 | 74505372  | BASE FL2 149-1399-4/4BSAE-190-90 | 1 |
| B02 | 71802149K | PACKSET FL 149/HP 150            | 1 |
| B03 | 71825420  | BOTTOM PLATE FL2 149             | 1 |
| B04 | 71870030K | SEAL BOTTOM PLATE FL 149         | 1 |
| B05 | 71820149  | LOCKING PLATE FL 149             | 3 |
| B06 | 01732055K | BOLT HEX M8X20X1.25 SET 6 PCS    | 1 |
| B07 | 01732559K | WASHER SPRING M8 SET 6 PCS       | 1 |



### Seal kit complete

|           |  |
|-----------|--|
| 71908430K | 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.