

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

3D model is available on request or www.hyva.com

| Specifications | | Max. pump flow | | Tipping time | |
|---|---------|-------------------------------------|-----------|-------------------------------------|--------|
| Max. working pressure | 250 bar | With KO ¹ | 190 L/min | With KO ¹ | 21 sec |
| Weight | 196 kg | Without KO ¹ | 170 L/min | Without KO ¹ | 24 sec |
| Working volume | 67 L | With KO ¹ below -20°C | 133 L/min | With KO ¹ below -20°C | 30 sec |
| Total volume | 73 L | Without KO ¹ below -20°C | 119 L/min | Without KO ¹ below -20°C | 34 sec |
| Max. cyl. load (start tipping) | 345 kN | | | Allowable lowering time | 21 sec |
| Max. cyl. load (end of stroke) ² | 247 kN | | | | |
| Max. cyl. load (end of stroke) ³ | 288 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 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

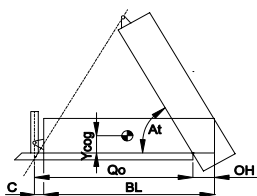
- Bracket options: 015BRA10 & 015BRA13
- Mounting instructions: CYL-0031
- Oil specifications: OIL-0011
- Spec sheet explanation: CYL-0041

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>

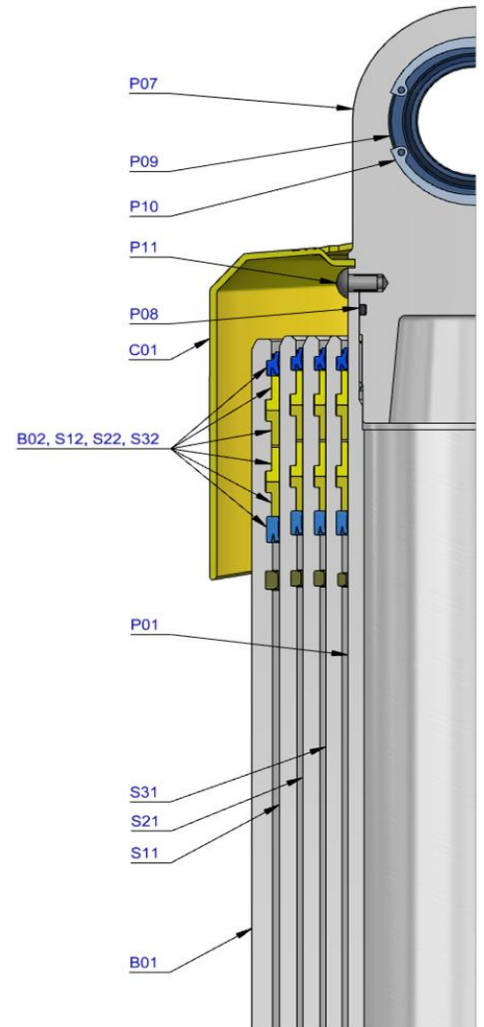


- BL body length
 - OH rear overhang
 - Ycog vert. pos. centre of gravity
 - Qo pivot length
 - C bracket length
 - At tipping angle
- $stroke \times 60 / Qo$

| BL [mm] | OH [mm] | At [°] | Ycog [mm] | 200 | 500 | 800 | 200 | 500 | 800 | 200 | 500 | 800 |
|---------|---------|--------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 5700 | 500 | 800 | 5550 | 46 | 49 | 52 | 47 | 50 | 54 | 49 | 52 | 56 |
| 600 | 68 | 75 | 600 | | | | 69 | 79 | | 71 | | |

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 | 71839130 | DUST COVER FE 169-4/191-5 | 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 | 71847300 | PISTON EYE SPH. FL3 110 L=075 | 1 |
| P08 | 01226538K | O-RING 91.67 X 3.53 MM NBR | 1 |
| P09 | 71875450K | SPHERICAL BEARING D.50.3 MAINT. FREE | 1 |
| P10 | 01770560K | CIRCLIP 75 DIN 472 (79.5x2.5) | 1 |
| P11 | 71875012 | PIN ROUND HEAD GROOVED 8x15 mm | 2 |

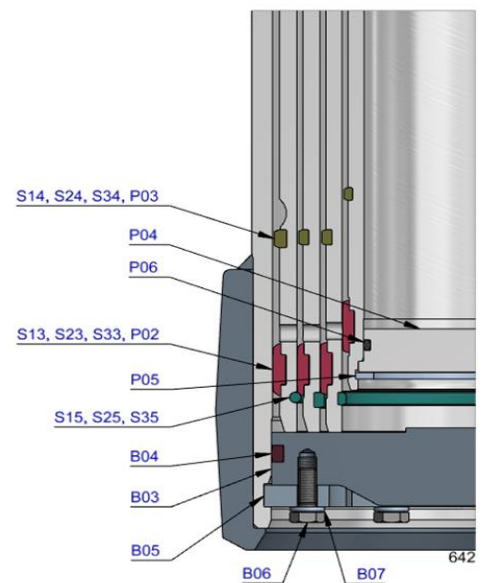


| | | | |
|-----|-----------|-----------------------------|---|
| S31 | 74604300 | STAGE FL2 129-1275 | 1 |
| S32 | 71802129K | PACKSET FL 129/HP 129 | 1 |
| S33 | 71853129K | SLIDER FL 129 (2 X 1/2) A22 | 1 |
| S34 | 71851129K | OUTER STOPRING FL 129 A22 | 1 |
| S35 | 71852129K | LIFTRING FL 129 A22 | 1 |

| | | | |
|-----|-----------|---------------------------|---|
| S21 | 74605300 | STAGE FL2 149-1275 | 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 | 74606300 | STAGE FL2 169-1275 | 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 | 74507304 | BASE FL2 191-1318-4/4BSAE-290 | 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.