

* 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 | 220 bar | With KO ¹ | 190 L/min | With KO ¹ | 20 sec |
| Weight | 195 kg | Without KO ¹ | 137 L/min | Without KO ¹ | 28 sec |
| Working volume | 63 L | With KO ¹ below -20°C | 133 L/min | With KO ¹ below -20°C | 29 sec |
| Total volume | 69 L | Without KO ¹ below -20°C | 96 L/min | Without KO ¹ below -20°C | 40 sec |
| Max. cyl. load (start tipping) | 245 kN | | | Allowable lowering time | 20 sec |
| Max. cyl. load (end of stroke) ² | 95 kN | | | | |
| Max. cyl. load (end of stroke) ³ | 111 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

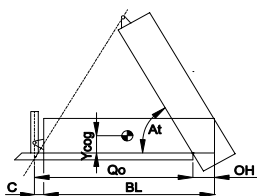
- Bracket options: 015BRA10 & 015BRA13
- Mounting instructions: CYL-0031
- Oil specifications: OIL-0011
- Spec sheet explanation: CYL-0041

Configuration

| Extension | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
|-------------------------|------|------|------|------|---|---|---|-------|
| Effective diameter [mm] | 149 | 129 | 110 | 91 | | | | 5460 |
| Stroke* [mm] | 1350 | 1370 | 1370 | 1370 | | | | |

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] | 7200 | | | 6950 | | | 6700 | | |
|-----------|------|-----|-----|------|-----|-----|------|-----|-----|
| OH [mm] | 200 | 500 | 800 | 200 | 500 | 800 | 200 | 500 | 800 |
| At [°] | 46 | 48 | 50 | 48 | 50 | 53 | 50 | 52 | 55 |
| Ycog [mm] | 600 | | | 490 | | | 450 | | |
| | 39 | 42 | 47 | 40 | 44 | 49 | 41 | 45 | 51 |
| | 42 | 46 | 52 | 43 | 48 | 55 | 45 | 50 | 58 |
| | 45 | 50 | 58 | 47 | 53 | | 49 | | |

Tipping weight [ton] at maximum pressure of 220 bar for a vertically mounted cylinder and C is 158 mm

| Pos. | Part no. | Description | Qty. |
|------|-----------|--------------------------------------|------|
| C01 | 71839121 | DUST COVER FE 149-4/157-4 | 1 |
| P01 | 74462581 | PISTON FL3 S 091-1585-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 | 71847200 | PISTON EYE SPH. FL3 091 L=075 | 1 |
| P08 | 01226430K | O-RING 72.62 X 3.53 MM | 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 | 74603580 | STAGE FL2 110-1580 | 1 |
| S32 | 71802110K | PACKSET FL 110 | 1 |
| S33 | 71853110K | SLIDER FL 110 (2 X 1/2) A22 | 1 |
| S34 | 71851110K | OUTER STOPRING FL 110 A22 | 1 |
| S35 | 71852110K | LIFTRING FL 110 A22 | 1 |

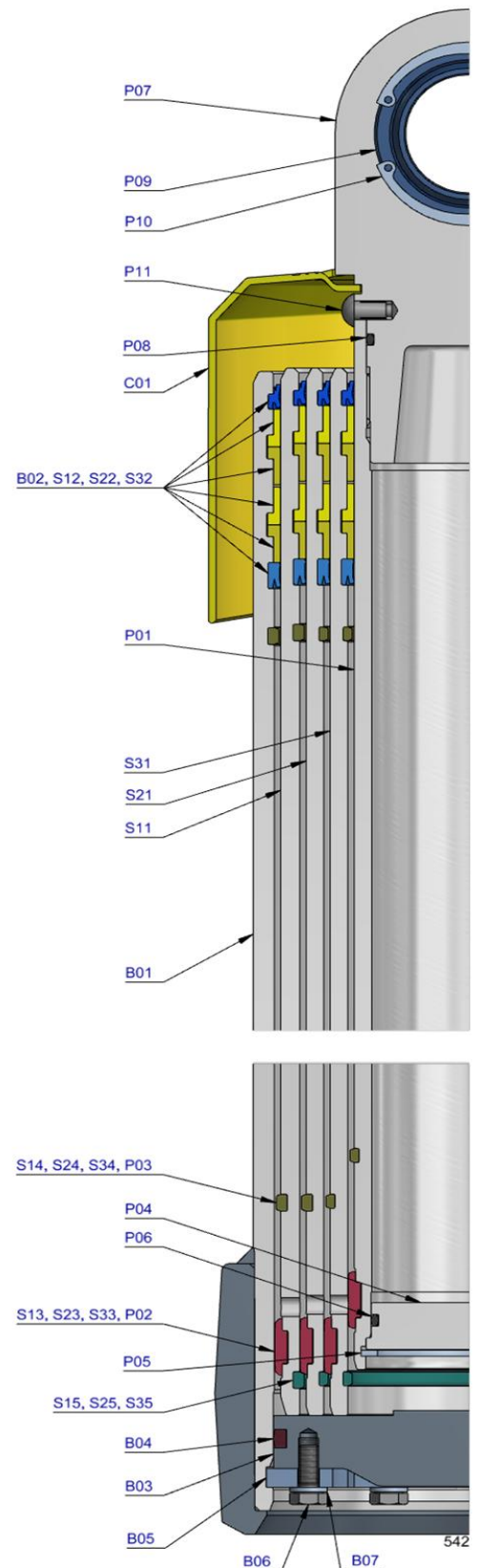
| | | | |
|-----|-----------|-----------------------------|---|
| S21 | 74604580 | STAGE FL2 129-1580 | 1 |
| S22 | 71802129K | PACKSET FL 129/HP 129 | 1 |
| S23 | 71853129K | SLIDER FL 129 (2 X 1/2) A22 | 1 |
| S24 | 71851129K | OUTER STOPRING FL 129 A22 | 1 |
| S25 | 71852129K | LIFTRING FL 129 A22 | 1 |

| | | | |
|-----|-----------|---------------------------|---|
| S11 | 74605580 | STAGE FL2 149-1580 | 1 |
| S12 | 71802149K | PACKSET FL 149/HP 150 | 1 |
| S13 | 71807151K | SLIDER FL 149 A35 | 1 |
| S14 | 71851149K | OUTER STOPRING FL 149 A22 | 1 |
| S15 | 71852149K | LIFTRING FL 149 A22 | 1 |

| | | | |
|-----|-----------|-------------------------------|---|
| B01 | 74506580 | BASE FL2 169-1619-4/4BSAE-190 | 1 |
| B02 | 71802169K | PACKSET FL 169 | 1 |
| B03 | 71825425 | BOTTOM PLATE FL2 169 | 1 |
| B04 | 71870035K | SEAL BOTTOM PLATE FL 169 | 1 |
| B05 | 71820169 | LOCKING PLATE FL 169 | 3 |
| B06 | 01732055K | BOLT HEX M8X20X1.25 SET 6 PCS | 1 |
| B07 | 01732559K | WASHER SPRING M8 SET 6 PCS | 1 |

Seal kit complete

| | |
|-----------|--|
| 71908540K | 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.