

Specifications

| | |
|---|---------|
| Max. working pressure | 170 bar |
| Weight | 413 kg |
| Working volume | 137 L |
| Total volume | 148 L |
| Max. cyl. load (start tipping) | 245 kN |
| Max. cyl. load (end of stroke) ² | 87 kN |
| Max. cyl. load (end of stroke) ³ | 101 kN |

Max. pump flow

| | |
|-------------------------------------|-----------|
| With KO ¹ | 195 L/min |
| Without KO ¹ | 137 L/min |
| With KO ¹ below -20°C | 137 L/min |
| Without KO ¹ below -20°C | 96 L/min |

Tipping time

| | |
|-------------------------------------|--------|
| With KO ¹ | 42 sec |
| Without KO ¹ | 60 sec |
| With KO ¹ below -20°C | 60 sec |
| Without KO ¹ below -20°C | 86 sec |
| Allowable lowering time | 34 sec |

| Extension | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
|-------------------------|------|------|------|------|------|------|---|-------|
| Effective diameter [mm] | 191 | 169 | 149 | 129 | 110 | 91 | | 8450 |
| Stroke* [mm] | 1380 | 1405 | 1410 | 1415 | 1420 | 1420 | | |

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.

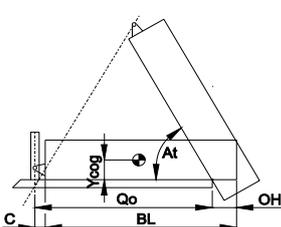
Related documentation

Bracket options: 015BRA10 & 015BRA12

Mounting instructions: CYL-0030

Oil specifications: OIL-0011
Spec sheet explanation: CYL-0041

Tipping weight



| | |
|------|------------------------------|
| 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] OH [mm] At [°] | 11200 | | | 10800 | | | 10400 | | |
|------------------------------|-------|-----|-----|-------|-----|-----|-------|-----|-----|
| | 200 | 500 | 800 | 200 | 500 | 800 | 200 | 500 | 800 |
| Ycog [mm] | 45 | 46 | 47 | 46 | 48 | 49 | 48 | 50 | 52 |
| 600 | 30 | 31 | 33 | 31 | 32 | 34 | 31 | 33 | 36 |
| 900 | 31 | 33 | 35 | 32 | 34 | 37 | 33 | 36 | 38 |
| 1200 | 33 | 35 | 37 | 34 | 36 | 39 | 35 | 38 | 41 |

Tipping weight [ton] at maximum pressure of 170 bar for a vertically mounted cylinder and C is 229 mm

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

| Pos. | Part no. | Description | Qty. |
|------|------------|---------------------------------------|------|
| C01 | 71839050 | DUST COVER FC LOW 15-273 | 1 |
| C02 | 71737201 | COVER 273-0735 PIN60 A360 SPH LOCK | 1 |
| C03 | 01702956 K | WASHER M48 DIN 125B ZP | 1 |
| C04 | 01702907 K | TOPNUT NYLOC M48x3 DIN 985 ZP | 1 |
| C05 | 01791953 | O-RING COVER D.273 | 1 |
| C06 | 15014550 K | BOLT HSHC M12X30X1.75 Q8.8 DIN 912 ZP | 1 |
| P01 | 74412651 | PISTON FL2 S 091-1645-HD-HC | 1 |
| P02 | 71807093 K | SLIDER FL 091 (2 X 1/2) A35 | 1 |
| P03 | 71851091 K | OUTER STOPRING FL 091 A22 | 2 |
| P04 | 71822705 | BOTTOM PLATE PISTON FL 091 MK2 HD | 1 |
| P05 | 01745020 K | CIRCLIP 78 DIN 472 (82.5x2.5) | 1 |
| P06 | 71870215 K | O-RING PISTON BOTTOM 091 | 1 |
| P07 | 71848200 | PISTON HEAD FL 091 MK2 | 1 |
| P08 | 01226430 K | O-RING 72.62 X 3.53 MM | 1 |

| | | | |
|-----|------------|-----------------------------------|---|
| S51 | 74613650 | STAGE FL2 110-1640-HD | 1 |
| S52 | 71808110 K | PACKSET FL 110/HP 110 TANDEM SEAL | 1 |
| S53 | 71807112 K | SLIDER FL 110 (2 X 1/2) A35 | 1 |
| S54 | 71851110 K | OUTER STOPRING FL 110 A22 | 2 |
| S55 | 71852110 K | LIFTRING FL 110 A22 | 1 |

| | | | |
|-----|------------|-----------------------------------|---|
| S41 | 74614650 | STAGE FL2 129-1640-HD | 1 |
| S42 | 71808129 K | PACKSET FL 129/HP 129 TANDEM SEAL | 1 |
| S43 | 71807131 K | SLIDER FL 129 (2 X 1/2) A35 | 1 |
| S44 | 71851129 K | OUTER STOPRING FL 129 A22 | 2 |
| S45 | 71852129 K | LIFTRING FL 129 A22 | 1 |

| | | | |
|-----|------------|-----------------------------------|---|
| S31 | 74615640 | STAGE FL2 149-1640-HD | 1 |
| S32 | 71808149 K | PACKSET FL 149/HP 150 TANDEM SEAL | 1 |
| S33 | 71807151 K | SLIDER FL 149 A35 | 1 |
| S34 | 71851149 K | OUTER STOPRING FL 149 A22 | 2 |
| S35 | 71852149 K | LIFTRING FL 149 A22 | 1 |

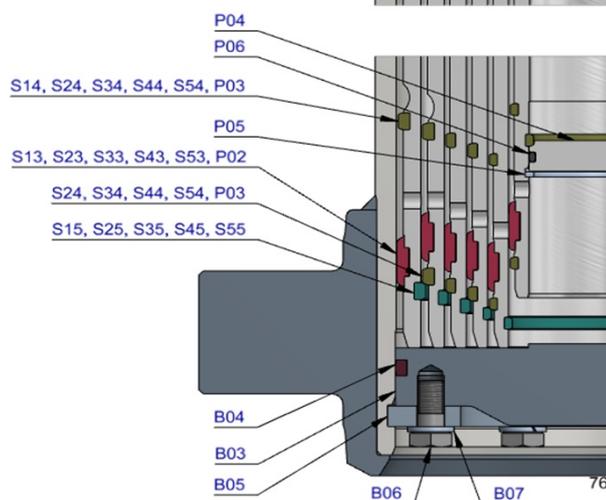
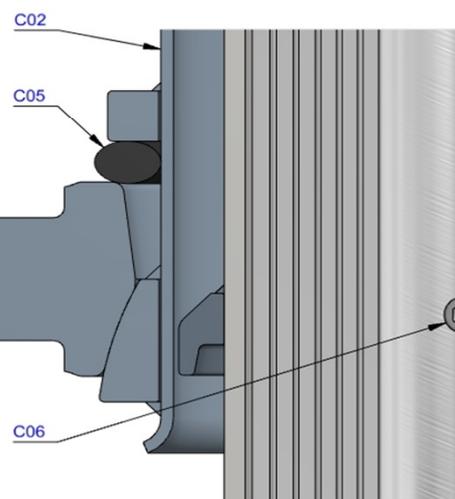
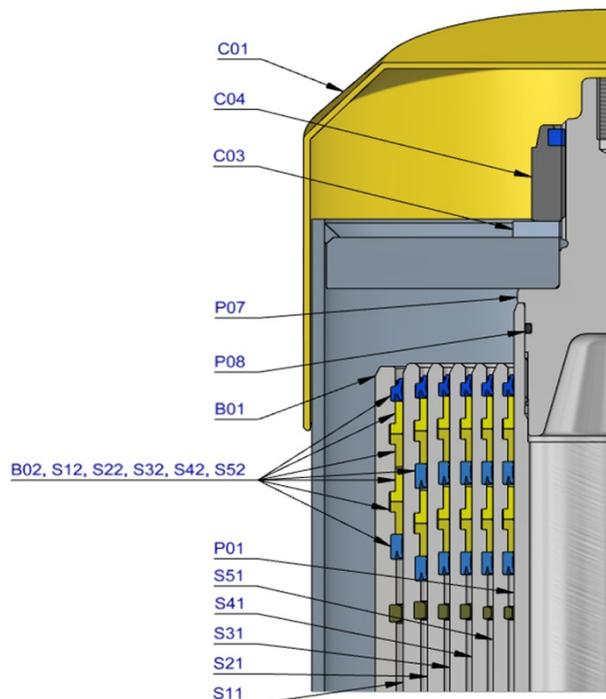
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|-----|------------|----------------------------|---|
| S21 | 74616640 | STAGE FL2 169-1640-HD | 1 |
| S22 | 71808169 K | PACKSET FL 169 TANDEM SEAL | 1 |
| S23 | 71807171 K | SLIDER FL 169 A35 | 1 |
| S24 | 71851169 K | OUTER STOPRING FL 169 A22 | 2 |
| S25 | 71852169 K | LIFTRING FL 169 A22 | 1 |

| | | | |
|-----|------------|----------------------------|---|
| S11 | 74617640 | STAGE FL2 191-1640-HD | 1 |
| S12 | 71808191 K | PACKSET FL 191 TANDEM SEAL | 1 |
| S13 | 71807193 K | SLIDER FL 191 A35 | 1 |
| S14 | 71851191 K | OUTER STOPRING FL 191 A22 | 1 |
| S15 | 71852191 K | LIFTRING FL 191 A22 | 1 |

| | | | |
|-----|---------------|---------------------------------------|---|
| B01 | 74518654R0635 | BASE FL2 214-1691-4/4BSAE-290-C273-HD | 1 |
| B02 | 71802214 K | PACKSET FL 214 | 1 |
| B03 | 71825435 | BOTTOM PLATE FL2 214 | 1 |
| B04 | 71870045 K | SEAL BOTTOM PLATE FL 214 | 1 |
| B05 | 71820214 | LOCKING PLATE FL 214 | 3 |
| B06 | 01732020 K | BOLT HEX M12X25X1.25 SET 6 PCS | 1 |
| B07 | 01732523 K | WASHER SPRING M12 SET 6 PCS | 1 |

Seal kit complete

| | | | |
|--|------------|--|--|
| | 71908761 K | Consists of all packsets with packset grease and O-rings | |
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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.