

Specifications

| | |
|---|---------|
| Max. working pressure | 250 bar |
| Weight | 279 kg |
| Working volume | 69 L |
| Total volume | 76 L |
| Max. cyl. load (start tipping) | 205 kN |
| Max. cyl. load (end of stroke) ² | 94 kN |
| Max. cyl. load (end of stroke) ³ | 110 kN |

Max. pump flow

| | |
|-------------------------------------|-----------|
| With KO ¹ | 151 L/min |
| Without KO ¹ | 106 L/min |
| With KO ¹ below -20°C | 106 L/min |
| Without KO ¹ below -20°C | 74 L/min |

Tipping time

| | |
|-------------------------------------|--------|
| With KO ¹ | 27 sec |
| Without KO ¹ | 39 sec |
| With KO ¹ below -20°C | 39 sec |
| Without KO ¹ below -20°C | 56 sec |
| Allowable lowering time | 22 sec |

| Extension | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
|-------------------------|------|------|------|------|------|---|---|-------|
| Effective diameter [mm] | 157 | 137 | 118 | 99 | 80 | | | 6050 |
| Stroke* [mm] | 1185 | 1210 | 1215 | 1220 | 1220 | | | |

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.

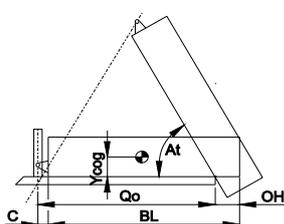
Related documentation

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] | 8000 | | | 7600 | | | 7200 | | |
|-----------|------|-----|-----|------|-----|-----|------|-----|-----|
| OH [mm] | 200 | 500 | 800 | 200 | 500 | 800 | 200 | 500 | 800 |
| At [°] | 45 | 47 | 49 | 47 | 49 | 52 | 50 | 53 | 55 |
| Ycog [mm] | | | | | | | | | |
| 600 | 35 | 38 | 41 | 36 | 40 | 44 | 38 | 42 | 47 |
| 900 | 37 | 41 | 45 | 39 | 43 | 49 | 42 | | |
| 1200 | 40 | 44 | | 42 | | | | | |

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

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

Alpha series - Front end cylinder with outer cover

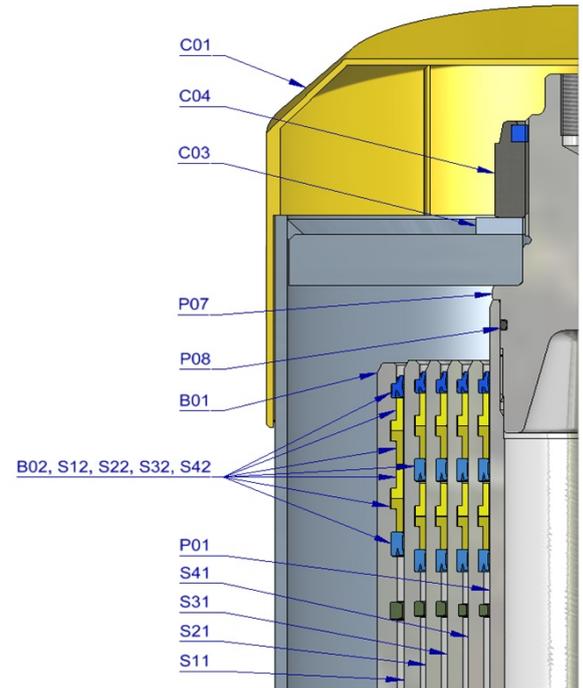


FC A157-5-06050-004-K1050-HD

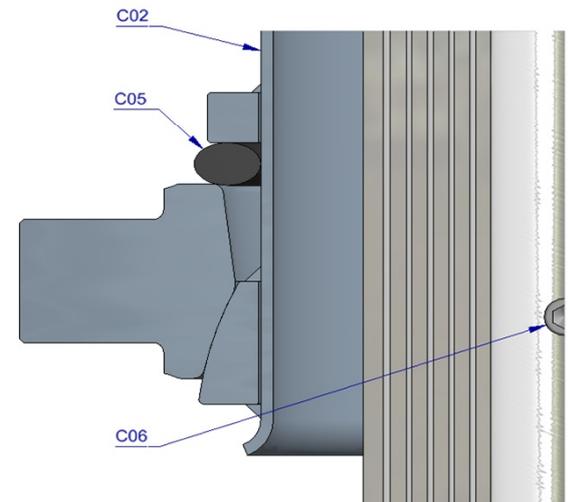
Item no.

70116508

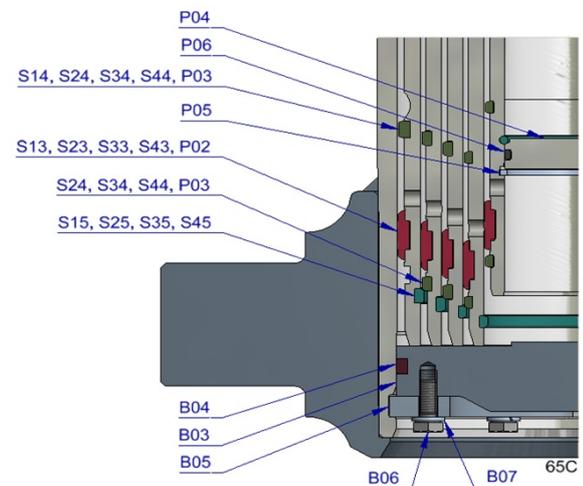
| Pos. | Part no. | Description | Qty. |
|------|------------|---------------------------------------|------|
| C01 | 71839050 | DUST COVER FC LOW 15-273 | 1 |
| C02 | 71737126 | COVER 273-0535 PIN60 A360 SPH LOCK | 1 |
| C03 | 01702956 K | WASHER M48 DIN 125B ZP | 1 |
| C04 | 01702907 K | TOPNUT NYLOC 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 | 70471441 | PISTON MN3 S 080-1445-HD-HC | 1 |
| P02 | 70207080 K | SLIDER MN 080 (2 x 1/2) A35 | 1 |
| P03 | 70216080 K | OUTER STOPRING MN 080 A22 | 2 |
| P04 | 70230080 | BOTTOM PLATE PISTON MN 080 MK2 HD | 1 |
| P05 | 01745030 K | CIRCLIP 67 DIN 472 (71.5x2.5) | 1 |
| P06 | 70260210 K | O-RING PISTON BOTTOM 080 | 1 |
| P07 | 70232305 | PISTON HEAD 080 MN3 SOLID | 1 |
| P08 | 70260110 K | O-RING 63.09 X 3.53 MM | 1 |



| | | | |
|-----|------------|-----------------------------|---|
| S41 | 70673440 | STAGE MN2 099-1440-HD | 1 |
| S42 | 70202099 K | PACKSET MN 099 TANDEM SEAL | 1 |
| S43 | 70207099 K | SLIDER MN 099 (2 x 1/2) A35 | 1 |
| S44 | 70216099 K | OUTER STOPRING MN 099 A22 | 2 |
| S45 | 70217099 K | LIFTRING MN 099 A22 | 1 |



| | | | |
|-----|------------|-----------------------------|---|
| S31 | 70674440 | STAGE MN2 118-1440-HD | 1 |
| S32 | 70202118 K | PACKSET MN 118 TANDEM SEAL | 1 |
| S33 | 70207118 K | SLIDER MN 118 (2 x 1/2) A35 | 1 |
| S34 | 70216118 K | OUTER STOPRING MN 118 A22 | 2 |
| S35 | 70217118 K | LIFTRING MN 118 A22 | 1 |



| | | | |
|-----|------------|----------------------------|---|
| S21 | 70675440 | STAGE MN2 137-1440-HD | 1 |
| S22 | 70202137 K | PACKSET MN 137 TANDEM SEAL | 1 |
| S23 | 70207137 K | SLIDER MN 137 A35 | 1 |
| S24 | 70216137 K | OUTER STOPRING MN 137 A22 | 2 |
| S25 | 70217137 K | LIFTRING MN 137 A22 | 1 |

| | | | |
|-----|------------|----------------------------|---|
| S11 | 70676440 | STAGE MN2 157-1440-HD | 1 |
| S12 | 70202157 K | PACKSET MN 157 TANDEM SEAL | 1 |
| S13 | 70207157 K | SLIDER MN 157 A35 | 1 |
| S14 | 70216157 K | OUTER STOPRING MN 157 A22 | 1 |
| S15 | 70217157 K | LIFTRING MN 157 A22 | 1 |

| | | | |
|-----|------------|----------------------------------|---|
| B01 | 70377440 | BASE MN2 179-1483-4/4BSAE-190-HD | 1 |
| B02 | 70203179 K | PACKSET MN 179 | 1 |
| B03 | 70225360 | BOTTOM PLATE MN2 179 | 1 |
| B04 | 70270179 K | SEAL BOTTOM PLATE MN 179 | 1 |
| B05 | 70220185 | LOCKING PLATE MN2 179 | 3 |
| B06 | 01732055 K | BOLT HEX M8X20X1.25 SET 6 PCS | 1 |
| B07 | 01732559 K | WASHER SPRING M8 SET 6 PCS | 1 |

Seal kit complete

| | | | |
|--|------------|--|--|
| | 71907651 K | Consists of all packsets with packset grease and O-rings | |
|--|------------|--|--|

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.

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