

## Specifications

Max. working pressure	250 bar
Weight	231 kg
Working volume	50 L
Total volume	54 L
Max. cyl. load (start tipping)	220 kN

## Max. pump flow

With KO <sup>1</sup>	151 L/min
Without KO <sup>1</sup>	106 L/min
With KO <sup>1</sup> below -20°C	106 L/min
Without KO <sup>1</sup> below -20°C	74 L/min

## Tipping time

With KO <sup>1</sup>	20 sec
Without KO <sup>1</sup>	28 sec
With KO <sup>1</sup> below -20°C	29 sec
Without KO <sup>1</sup> below -20°C	40 sec
Allowable lowering time	20 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	137	118	99	80				5180
Stroke* [mm]	1280	1300	1300	1300				

## 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.
- <sup>1</sup> Hyva knock-off.

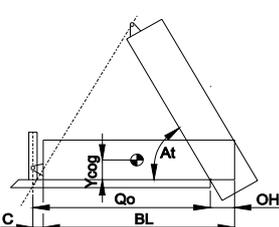
## Related documentation

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]	6900			6550			6200		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	44	46	49	47	49	52	49	52	55
Ycog [mm]									
600	35	38	43	36	40	45	38	43	49
900	38	42	47	39	44	51	42	48	
1200	41	46	53	43	50		46		

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

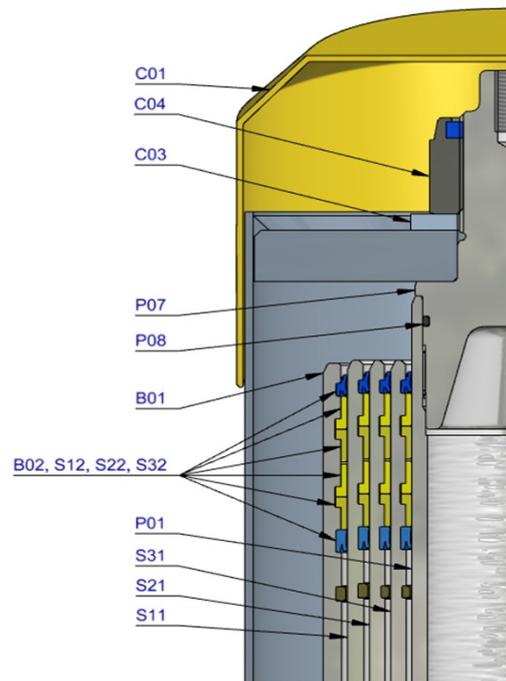


FC A137-4-05180-000-K0343

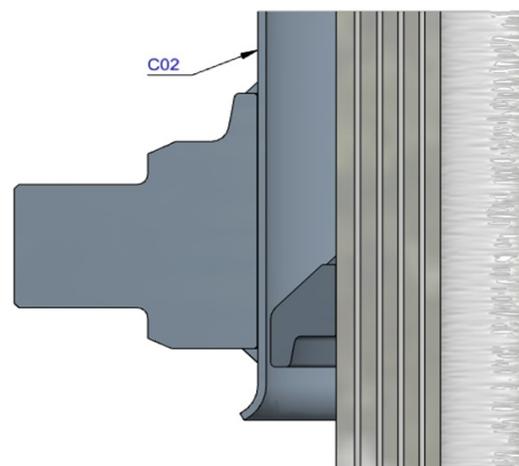
Item no.

70125410

Pos.	Part no.	Description	Qty.
C01	71839030	DUST COVER FC LOW 15-241	1
C02	71709538	COVER 241-1315 PIN60 A340 FIX	1
C03	01702956 K	WASHER M48 DIN 125B ZP	1
C04	01702907 K	TOPNUT NYLOC M48x3 DIN 985 ZP	1
P01	70461511	PISTON MN3 S 080-1515-HC	1
P02	70209300 K	SLIDER MN 080 (2 x 1/2) A22	1
P03	70216080 K	OUTER STOPRING MN 080 A22	1
P04	70224080	BOTTOM PLATE PISTON MN 080	1
P05	01745035 K	CIRCLIP 70 DIN 472 (74.5x2.5)	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

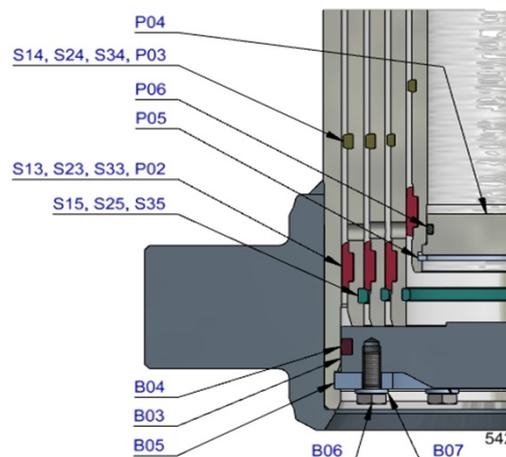


S31	70663510	STAGE MN2 099-1510	1
S32	70203099 K	PACKSET MN 099	1
S33	70209310 K	SLIDER MN 099 (2 x 1/2) A22	1
S34	70216099 K	OUTER STOPRING MN 099 A22	1
S35	70217099 K	LIFTRING MN 099 A22	1



S21	70664510	STAGE MN2 118-1510	1
S22	70203118 K	PACKSET MN 118	1
S23	70209320 K	SLIDER MN 118 (2 x 1/2) A22	1
S24	70216118 K	OUTER STOPRING MN 118 A22	1
S25	70217118 K	LIFTRING MN 118 A22	1

S11	70665510	STAGE MN2 137-1510	1
S12	70203137 K	PACKSET MN 137	1
S13	70207137 K	SLIDER MN 137 A35	1
S14	70216137 K	OUTER STOPRING MN 137 A22	1
S15	70217137 K	LIFTRING MN 137 A22	1



B01	70366510R1215	BASE MN2 157-1549-4/4BSAE-190-C242	1
B02	70203157 K	PACKSET MN 157	1
B03	70225355	BOTTOM PLATE MN2 157	1
B04	70270157 K	SEAL BOTTOM PLATE MN 157	1
B05	70220157	LOCKING PLATE MN 157	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

	71907540 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.

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