

Specifications

Max. working pressure	250 bar
Weight	307 kg
Working volume	93 L
Total volume	97 L
Max. cyl. load (start tipping)	245 kN
Max. cyl. load (end of stroke) ²	102 kN
Max. cyl. load (end of stroke) ³	119 kN

Max. pump flow

With KO ¹	170 L/min
Without KO ¹	119 L/min
With KO ¹ below -20°C	119 L/min
Without KO ¹ below -20°C	83 L/min

Tipping time

With KO ¹	33 sec
Without KO ¹	47 sec
With KO ¹ below -20°C	47 sec
Without KO ¹ below -20°C	67 sec
Allowable lowering time	33 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	169	149	129	110	85			6830
Stroke* [mm]	1350	1370	1370	1370	1370			

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.

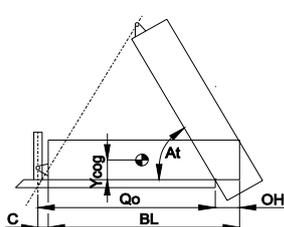
Related documentation

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]	9000			8550			8100		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	45	47	49	48	49	52	51	53	55
Ycog [mm]									
600	39	41	44	40	43	47	42	45	50
900	41	44	48	43	46	51	45	50	56
1200	43	47	52	46	50	57	49	55	

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

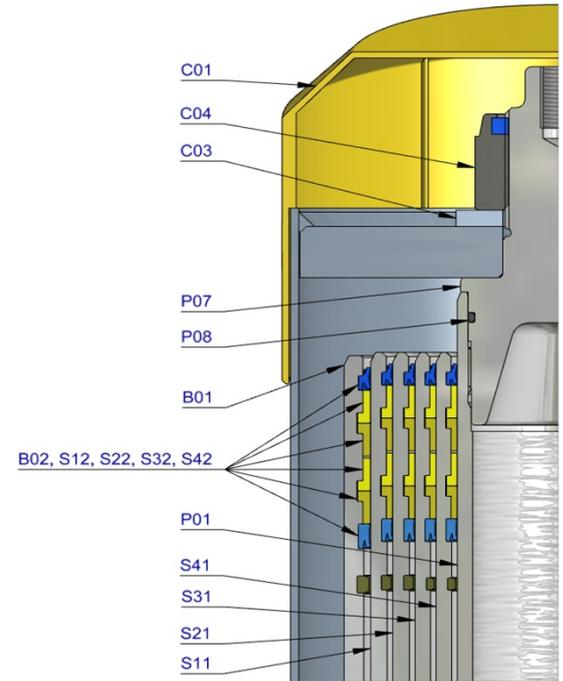


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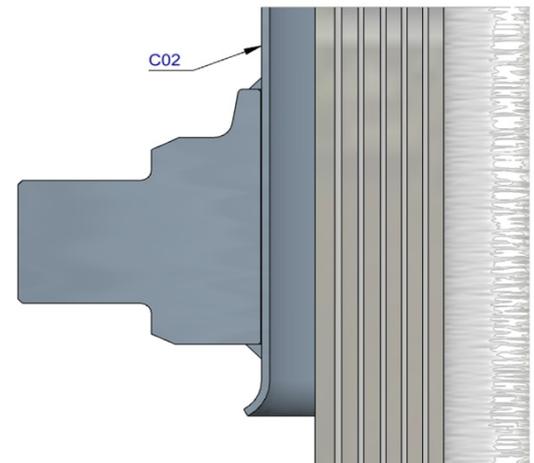
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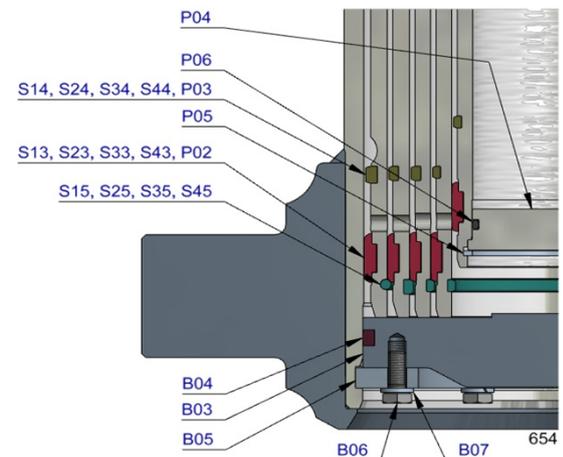
Pos.	Part no.	Description	Qty.
C01	71839030	DUST COVER FC LOW 15-241	1
C02	71709087	COVER 241-0425 PIN60 A340 FIX	1
C03	01702956 K	WASHER M48 DIN 125B ZP	1
C04	01702907 K	TOPNUT NYLOC M48x3 DIN 985 ZP	1
P01	74432581	PISTON FL2 S 085-1585-HC	1
P02	71853085 K	SLIDER FL 085 (2 X 1/2) A22	1
P03	71851085 K	OUTER STOPRING FL 085 A22	1
P04	75322085	BOTTOM PLATE PISTON 085	1
P05	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	1
P06	75372085 K	O-RING PISTON BOTTOM HP 085	1
P07	71848150	PISTON HEAD FL 085 MK2	1
P08	01225807 K	O-RING 66.27 X 3.53 MM	1



S41	74633580	STAGE FL2 110-1580 ID90	1
S42	75302110 K	PACKSET HP 110	1
S43	71853110 K	SLIDER FL 110 (2 X 1/2) A22	1
S44	71851110 K	OUTER STOPRING FL 110 A22	1
S45	71850111 K	INNER STOPRING/LIFTRING FL 110 ID 90 A22	1
S31	74604580	STAGE FL2 129-1580	1
S32	71802129 K	PACKSET FL 129/HP 129	1
S33	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S34	71851129 K	OUTER STOPRING FL 129 A22	1
S35	71852129 K	LIFTRING FL 129 A22	1
S21	74605580	STAGE FL2 149-1580	1
S22	71802149 K	PACKSET FL 149/HP 150	1
S23	71807151 K	SLIDER FL 149 A35	1
S24	71851149 K	OUTER STOPRING FL 149 A22	1
S25	71852149 K	LIFTRING FL 149 A22	1



S11	74606580	STAGE FL2 169-1580	1
S12	71802169 K	PACKSET FL 169	1
S13	71807171 K	SLIDER FL 169 A35	1
S14	71851169 K	OUTER STOPRING FL 169 A22	1
S15	71813169 K	LIFTRING FL 169x5	1
B01	74507584	BASE FL2 191-1623-4/4BSAE-290	1
B02	71802191 K	PACKSET FL 191	1
B03	71825430	BOTTOM PLATE FL2 191	1
B04	71870040 K	SEAL BOTTOM PLATE FL 191	1
B05	71820195	LOCKING PLATE FL2 191	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

	71908652 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.