

## Specifications

Max. working pressure	250 bar
Weight	79 kg
Working volume	14 L
Total volume	16 L
Max. cyl. load (start tipping)	235 kN

## Max. pump flow

With KO <sup>1</sup>	195 L/min
Without KO <sup>1</sup>	137 L/min
With KO <sup>1</sup> below -20°C	137 L/min
Without KO <sup>1</sup> below -20°C	96 L/min

## Tipping time

With KO <sup>1</sup>	4 sec
Without KO <sup>1</sup>	6 sec
With KO <sup>1</sup> below -20°C	6 sec
Without KO <sup>1</sup> below -20°C	9 sec
Allowable lowering time	3 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	110	91						1790
Stroke* [mm]	885	905						

## 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.

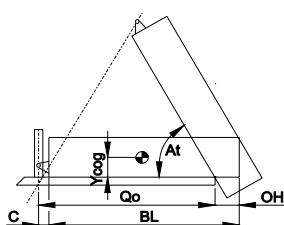
## Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

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

## Tipping weight



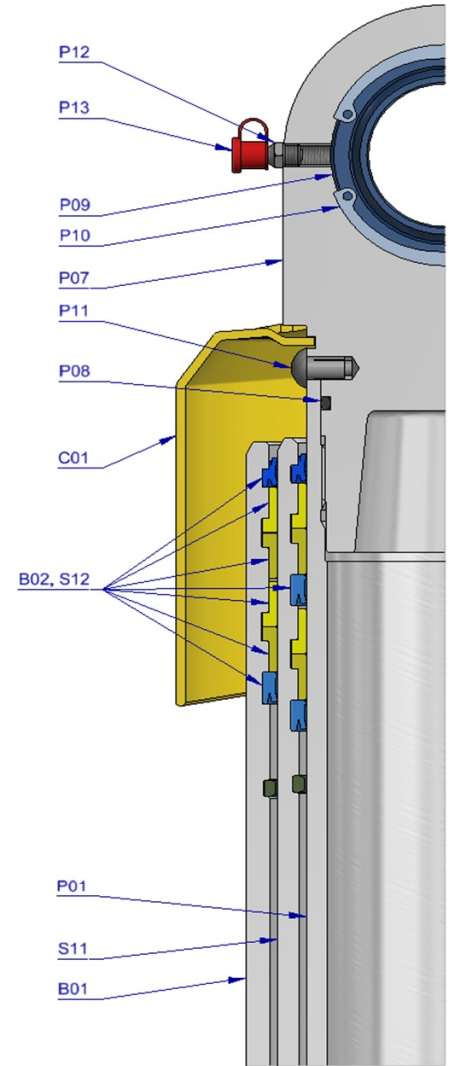
BL	body length
OH	rear overhang
Ycog	vert. pos. centre of gravity
Qo	pivot length
C	bracket length
At	tipping angle
	stroke x 60 / Qo

BL [mm]	2400			2350			2300		
OH [mm]	200	300	400	200	300	400	200	300	400
At [°]	46	49	51	47	50	53	49	51	54
Ycog [mm]	48	53	60	49	54	62	50	55	63

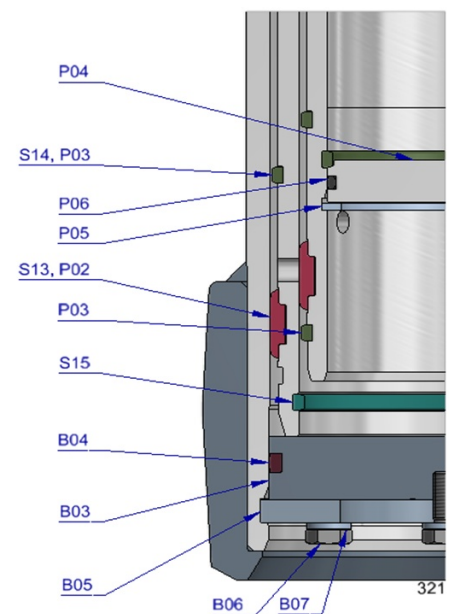
Tipping weight [ton] at maximum pressure of 250 bar for a vertically mounted cylinder and C is 158 mm

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

Pos.	Part no.	Description	Qty.
C01	71839110	DUST COVER FE 129-3/137-3	1
P01	74412201	PISTON FL2 S 091-1130-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	71847201	PISTON EYE SPH. FL 091 MK2 L=075 GR	1
P08	01226430 K	O-RING 72.62 X 3.53 MM	1
P09	01770085 K	SPHERICAL BEARING D.50 DO GREASED	1
P10	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2
P12	56288044 K	GREASE NIPPLE M8x1 DIN 71412	1
P13	01317670 K	GREASER PROTECTION CAP	1



S11	74613200	STAGE FL2 110-1125-HD	1
S12	71808110 K	PACKSET FL 110/HP 110 TANDEM SEAL	1
S13	71807112 K	SLIDER FL 110 (2 X 1/2) A35	1
S14	71851110 K	OUTER STOPRING FL 110 A22	1
S15	71852110 K	LIFTRING FL 110 A22	1
B01	74514200	BASE FL2 129-1164-4/4BSAE-190-HD	1
B02	71802129 K	PACKSET FL 129/HP 129	1
B03	71825415	BOTTOM PLATE FL2 129	1
B04	71870025 K	O-RING BOTTOM PLATE FL 129	1
B05	71820129	LOCKING PLATE FL 129	3
B06	01732055 K	BOLT HEX M8X20X1.25 SET 3 PCS	1
B07	01732559 K	WASHER SPRING M8 SET 3 PCS	1



### Seal kit complete

	71908321 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.