

## Specifications

Max. working pressure	250 bar
Weight	176 kg
Working volume	58 L
Total volume	63 L
Max. cyl. load (start tipping)	245 kN
Max. cyl. load (end of stroke) <sup>2</sup>	112 kN
Max. cyl. load (end of stroke) <sup>3</sup>	131 kN

## Max. pump flow

With KO <sup>1</sup>	190 L/min
Without KO <sup>1</sup>	137 L/min
With KO <sup>1</sup> below -20°C	133 L/min
Without KO <sup>1</sup> below -20°C	96 L/min

## Tipping time

With KO <sup>1</sup>	18 sec
Without KO <sup>1</sup>	25 sec
With KO <sup>1</sup> below -20°C	26 sec
Without KO <sup>1</sup> below -20°C	36 sec
Allowable lowering time	18 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	149	129	110	91				4980
Stroke* [mm]	1230	1250	1250	1250				

## 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. • <sup>2</sup> Unsubstantial unloading (sticky load).
- <sup>3</sup> Substantial unloading.

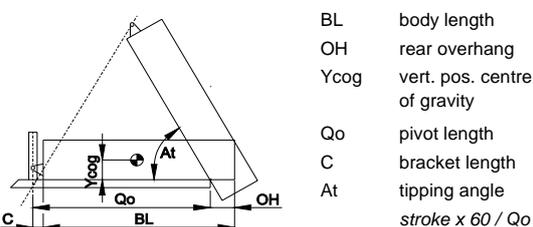
## Related documentation

Bracket options: 015BRA11 & 015BRA13

Mounting instructions: CYL-0033

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

## Tipping weight

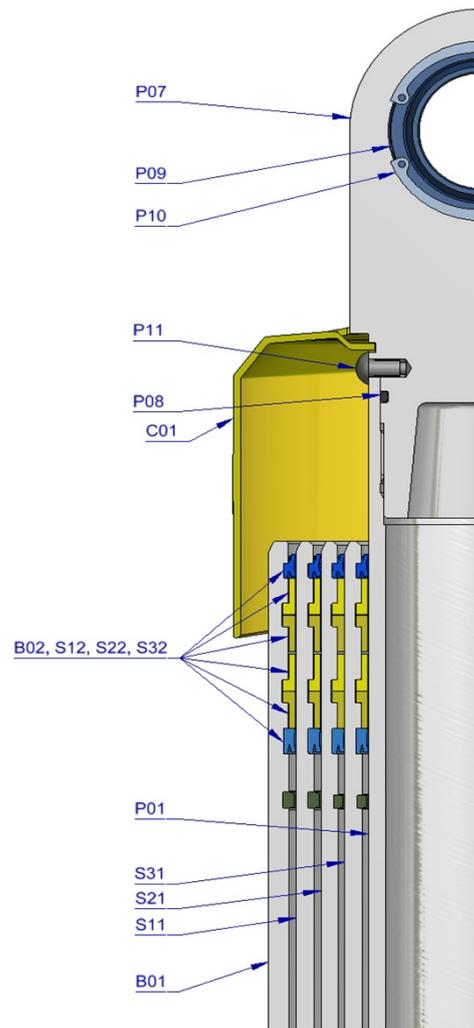


BL [mm]	6600			6400			6200		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	46	48	51	47	50	53	49	52	55
Ycog [mm]									
600	45	49	55	46	51	58	47	52	60
900	48	54		50			51		
1200	53								

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	71839121	DUST COVER FE 149-4/157-4	1
P01	74402441	PISTON FL2 S 091-1445-HC	1
P02	71853091 K	SLIDER FL 091 (2 X 1/2) A22	1
P03	71851091 K	OUTER STOPRING FL 091 A22	1
P04	71822091	BOTTOM PLATE PISTON FL 091	1
P05	01745012 K	CIRCLIP 82 DIN 472 (87.5x2.5)	1
P06	71870215 K	O-RING PISTON BOTTOM 091	1
P07	71847200	PISTON EYE SPH. FL 091 MK2 L=075	1
P08	01226430 K	O-RING 72.62 X 3.53 MM	1
P09	71875450 K	SPHERICAL BEARING D.50 MAINT. FREE	1
P10	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2

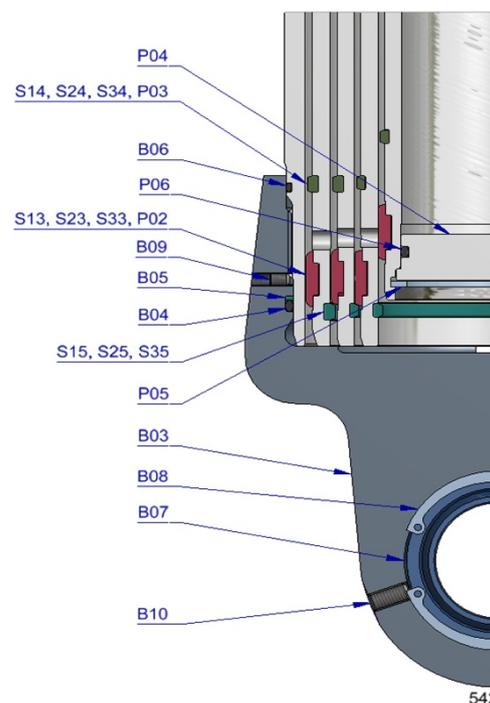


S31	74603440	STAGE FL2 110-1440	1
S32	71802110 K	PACKSET FL 110	1
S33	71853110 K	SLIDER FL 110 (2 X 1/2) A22	1
S34	71851110 K	OUTER STOPRING FL 110 A22	1
S35	71852110 K	LIFTRING FL 110 A22	1

S21	74604440	STAGE FL2 129-1440	1
S22	71802129 K	PACKSET FL 129/HP 129	1
S23	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S24	71851129 K	OUTER STOPRING FL 129 A22	1
S25	71852129 K	LIFTRING FL 129 A22	1

S11	74605440	STAGE FL2 149-1440	1
S12	71802149 K	PACKSET FL 149/HP 150	1
S13	71807151 K	SLIDER FL 149 A35	1
S14	71851149 K	OUTER STOPRING FL 149 A22	1
S15	71852149 K	LIFTRING FL 149 A22	1

B01	74506470	BASE FL2 S 169-1440	1
B02	71802169 K	PACKSET FL 169	1
B03	71849030	THREADED BOTTOM FL2 169-4/4SAE-90	1
B04	01226709 K	O-RING 165 X 4 NBR 70 SHORE A	1
B05	71849230 K	BACK-UP RING PTFE STMS 170.1 X 163.5 X 2	1
B06	01225562 K	O-RING 163 X 3 NBR 70 SHORE A	1
B07	71875450 K	SPHERICAL BEARING D.50 MAINT. FREE	1
B08	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	1
B09	01792569 K	LOCKING SCREW M6X8 INT. HEX. DIN 916	1
B10	15013720 K	BOLT HSHC M8X16X1 Q8.8 DIN 916 ZP	2



### Seal kit complete

	71908545 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.