

## Specifications

Max. working pressure	220 bar
Weight	332 kg
Working volume	146 L
Total volume	156 L
Max. cyl. load (start tipping)	440 kN
Max. cyl. load (end of stroke) <sup>2</sup>	245 kN
Max. cyl. load (end of stroke) <sup>3</sup>	286 kN

## Max. pump flow

With KO <sup>1</sup>	190 L/min
Without KO <sup>1</sup>	170 L/min
With KO <sup>1</sup> below -20°C	133 L/min
Without KO <sup>1</sup> below -20°C	119 L/min

## Tipping time

With KO <sup>1</sup>	46 sec
Without KO <sup>1</sup>	52 sec
With KO <sup>1</sup> below -20°C	66 sec
Without KO <sup>1</sup> below -20°C	74 sec
Allowable lowering time	46 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	214	191	169	149	129			6230
Stroke* [mm]	1230	1250	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.

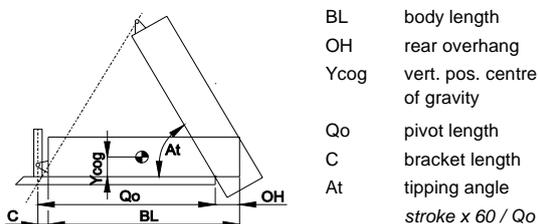
## Related documentation

Bracket options: 015BRA13

Mounting instructions: CYL-0032

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

## Tipping weight



BL [mm]	8200			7900			7600			
OH [mm]	200	500	800	200	500	800	200	500	800	
At [°]	46	48	50	48	50	52	50	52	55	
Ycog [mm]										
Qo	600	79	85	92	81	88	97	84	91	102
C	900	84	92	101	87	96		91		
At	1200	90								

Tipping weight [ton] at maximum pressure of 220 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	71839150	DUST COVER FE 202-5/214-5	1
P01	74404441	PISTON FL2 S 129-1445-HC	1
P02	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
P03	71851129 K	OUTER STOPRING FL 129 A22	1
P04	71822129	BOTTOM PLATE PISTON FL 129	1
P05	01745052 K	CIRCLIP 120 DIN 472 (127.0x4.0)	1
P06	71870225 K	O-RING PISTON BOTTOM 129	1
P07	71847400	PISTON EYE SPH. FL 129 MK2 L=075	1
P08	71870125 K	O-RING 110.72 X 3.53 MM	1
P09	71875460 K	SPHERICAL BEARING D.60 MAINT. FREE	1
P10	01770580 K	CIRCLIP 90 DIN 472 (95.5x3.5)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2

S41	74605440	STAGE FL2 149-1440	1
S42	71802149 K	PACKSET FL 149/HP 150	1
S43	71807151 K	SLIDER FL 149 A35	1
S44	71851149 K	OUTER STOPRING FL 149 A22	1
S45	71852149 K	LIFTRING FL 149 A22	1

S31	74606440	STAGE FL2 169-1440	1
S32	71802169 K	PACKSET FL 169	1
S33	71807171 K	SLIDER FL 169 A35	1
S34	71851169 K	OUTER STOPRING FL 169 A22	1
S35	71813169 K	LIFTRING FL 169x5	1

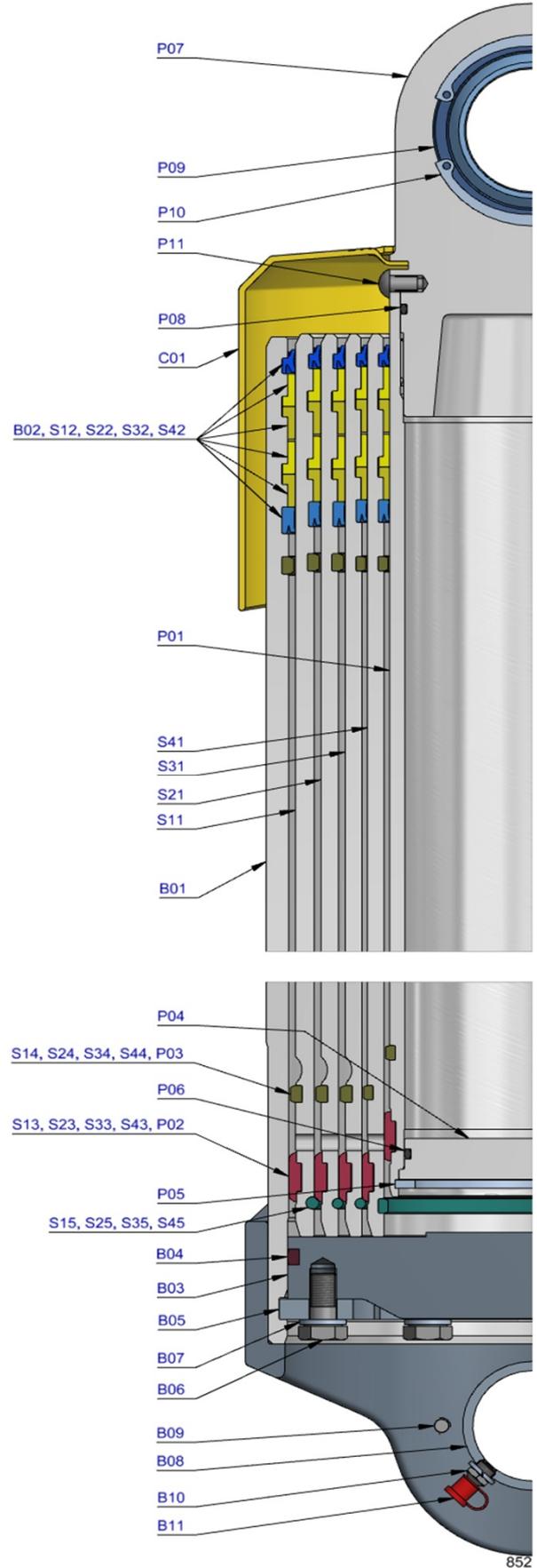
S21	74607440	STAGE FL2 191-1440	1
S22	71802191 K	PACKSET FL 191	1
S23	71807193 K	SLIDER FL 191 A35	1
S24	71851191 K	OUTER STOPRING FL 191 A22	1
S25	71813191 K	LIFTRING FL 191x5	1

S11	74608440	STAGE FL2 214-1440	1
S12	71802214 K	PACKSET FL 214	1
S13	71807216 K	SLIDER FL 214 A35	1
S14	71851214 K	OUTER STOPRING FL 214 A22	1
S15	71813214 K	LIFTRING FL 214x6	1

B01	74509450	BASE FL2 E 238-1491-4/4BSAE-385-O270	1
B02	71802238 K	PACKSET FL 238	1
B03	71825440	BOTTOM PLATE FL2 238	1
B04	71870050 K	SEAL BOTTOM PLATE FL 238	1
B05	71820238	LOCKING PLATE FL 238	3
B06	01732020 K	BOLT HEX M12X25X1.25 SET 6 PCS	1
B07	01732523 K	WASHER SPRING M12 SET 6 PCS	1
B08	01793091	EYE TRUNNION TUBE (63-52.5) L=270	1
B09	01746121 K	BOLT LOCKING M8x25 DIN 7991	1
B10	56288044 K	GREASE NIPPLE M8x1 DIN 71412	2
B11	01317670 K	GREASER PROTECTION CAP	2

### Seal kit complete

	71908850 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.