

## Specifications

Max. working pressure	250 bar
Weight	430 kg
Working volume	133 L
Total volume	143 L
Max. cyl. load (start tipping)	345 kN
Max. cyl. load (end of stroke) <sup>2</sup>	182 kN
Max. cyl. load (end of stroke) <sup>3</sup>	213 kN

## Max. pump flow

With KO <sup>1</sup>	220 L/min
Without KO <sup>1</sup>	190 L/min
With KO <sup>1</sup> below -20°C	154 L/min
Without KO <sup>1</sup> below -20°C	133 L/min

## Tipping time

With KO <sup>1</sup>	36 sec
Without KO <sup>1</sup>	42 sec
With KO <sup>1</sup> below -20°C	51 sec
Without KO <sup>1</sup> below -20°C	60 sec
Allowable lowering time	29 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	191	169	149	129	110			7325
Stroke* [mm]	1440	1465	1470	1475	1475			

## 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.

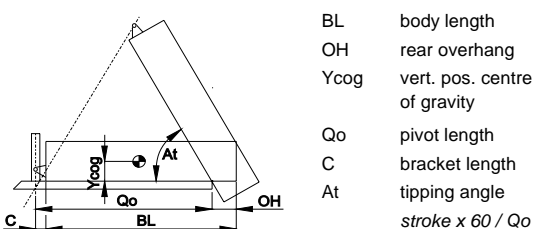
## Related documentation

Bracket options: 015BRA10 & 015BRA12

Mounting instructions: CYL-0030

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

## Tipping weight

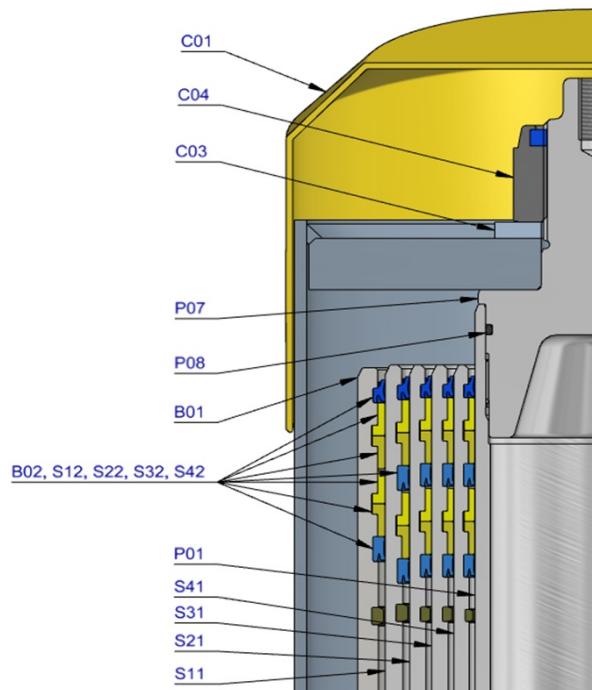


BL [mm]	9800			9400			9000		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	44	45	47	46	47	49	48	50	52
Ycog [mm]									
600	64	68	72	66	70	75	68	73	79
900	68	72	77	70	75		72		
1200	71								

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>

Pos.	Part no.	Description	Qty.
C01	71839050	DUST COVER FC LOW 15-273	1
C02	71737664	COVER 273-1505 PIN60 A360 SPH LOCK	1
C03	01702956 K	WASHER M48 DIN 125B ZP	1
C04	01702907 K	TOPNUT NYLOC M48x3 DIN 985 ZP	1
C05	01791953	O-RING COVER D.273	1
C06	15014550 K	BOLT HSHC M12X30X1.75 Q8.8 DIN 912 ZP	1
P01	74413701	PISTON FL2 S 110-1705-HD-HC	1
P02	71807112 K	SLIDER FL 110 (2 X 1/2) A35	1
P03	71851110 K	OUTER STOPRING FL 110 A22	2
P04	71822710	BOTTOM PLATE PISTON FL 110 MK2 HD	1
P05	01745021 K	CIRCLIP 97 DIN 472 (102.5x3.0)	1
P06	71870220 K	O-RING PISTON BOTTOM 110	1
P07	71848300	PISTON HEAD FL 110 MK2	1
P08	01226538 K	O-RING 91.67 X 3.53 MM NBR	1



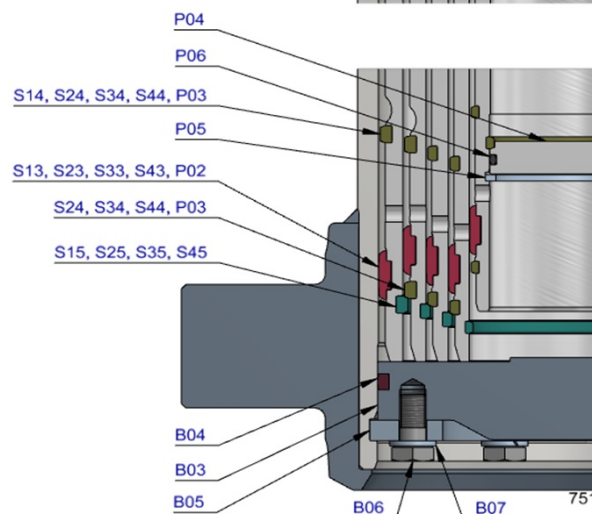
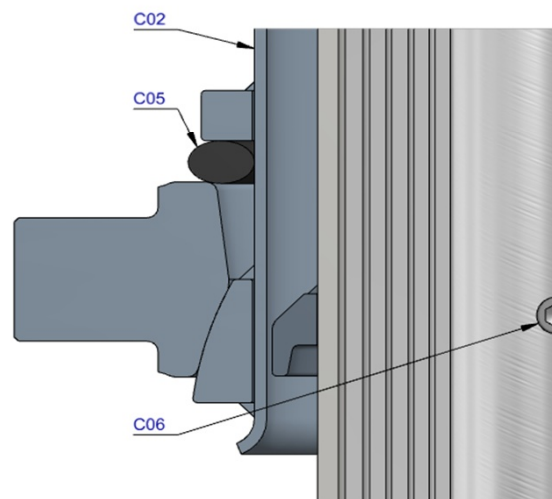
S41	74614700	STAGE FL2 129-1700-HD	1
S42	71808129 K	PACKSET FL 129/HP 129 TANDEM SEAL	1
S43	71807131 K	SLIDER FL 129 (2 X 1/2) A35	1
S44	71851129 K	OUTER STOPRING FL 129 A22	2
S45	71852129 K	LIFTRING FL 129 A22	1

S31	74615700	STAGE FL2 149-1700-HD	1
S32	71808149 K	PACKSET FL 149/HP 150 TANDEM SEAL	1
S33	71807151 K	SLIDER FL 149 A35	1
S34	71851149 K	OUTER STOPRING FL 149 A22	2
S35	71852149 K	LIFTRING FL 149 A22	1

S21	74616700	STAGE FL2 169-1700-HD	1
S22	71808169 K	PACKSET FL 169 TANDEM SEAL	1
S23	71807171 K	SLIDER FL 169 A35	1
S24	71851169 K	OUTER STOPRING FL 169 A22	2
S25	71852169 K	LIFTRING FL 169 A22	1

S11	74617700	STAGE FL2 191-1700-HD	1
S12	71808191 K	PACKSET FL 191 TANDEM SEAL	1
S13	71807193 K	SLIDER FL 191 A35	1
S14	71851191 K	OUTER STOPRING FL 191 A22	1
S15	71852191 K	LIFTRING FL 191 A22	1

B01	74518690R1405	BASE FL2 214-1751-4/4BSAE-190-C273-HD	1
B02	71802214 K	PACKSET FL 214	1
B03	71825435	BOTTOM PLATE FL2 214	1
B04	71870045 K	SEAL BOTTOM PLATE FL 214	1
B05	71820214	LOCKING PLATE FL 214	3
B06	01732020 K	BOLT HEX M12X25X1.25 SET 6 PCS	1
B07	01732523 K	WASHER SPRING M12 SET 6 PCS	1



### Seal kit complete

	71908751 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.