

Specifications

Max. working pressure	190 bar
Weight	268 kg
Working volume	93 L
Total volume	97 L
Max. cyl. load (start tipping)	245 kN
Max. cyl. load (end of stroke) ²	84 kN
Max. cyl. load (end of stroke) ³	98 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.

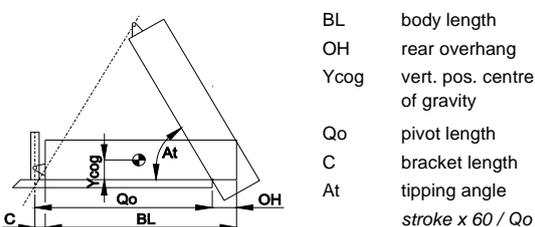
Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

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

Tipping weight



BL [mm]	9000			8600			8200		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	46	47	49	48	50	52	50	53	55
Ycog [mm]									
600	29	31	33	30	32	35	31	34	37
900	31	33	36	32	35	38	34	37	41
1200	33	36	39	34	38	42	37	41	47

Tipping weight [ton] at maximum pressure of 190 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	71839131	DUST COVER FE 169-5/179-5/191-6	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	71847150	PISTON EYE SPH. FL 085 MK2 L=075	1
P08	01225807 K	O-RING 66.27 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

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

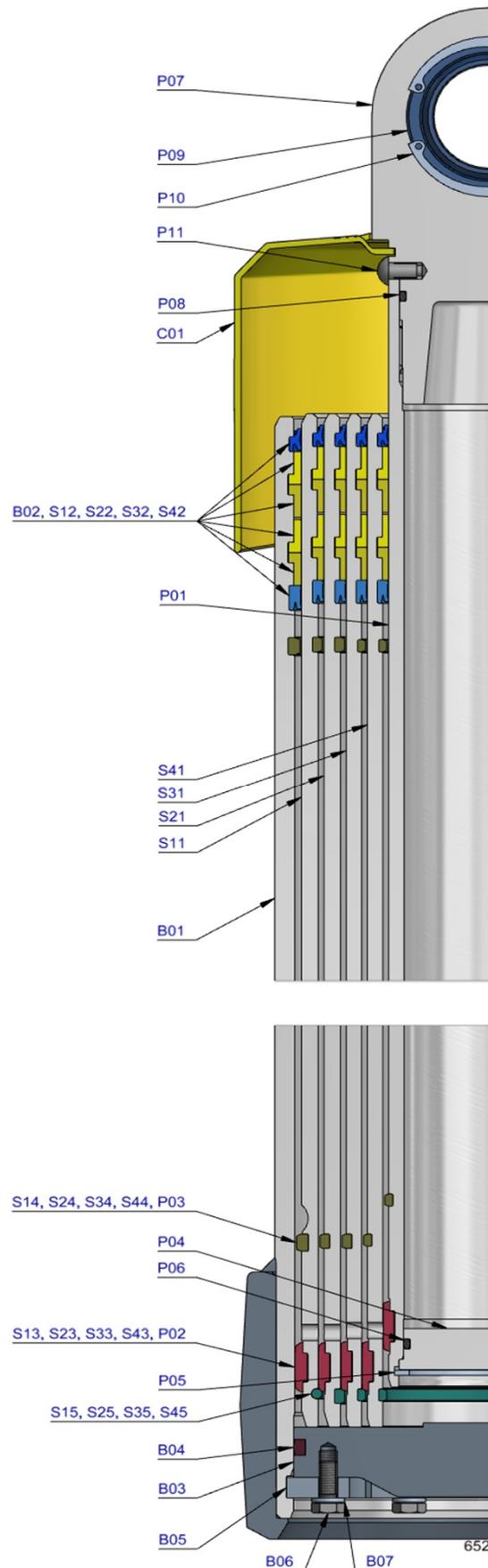
S21	74605580	STAGE FL2 149-1580	1
S22	71802149 K	PACKSET FL 149/HP 150	1
S23	71807151 K	SLIDER FL 149 A35	1
S24	71851149 K	OUTER STOPRING FL 149 A22	1
S25	71852149 K	LIFTRING FL 149 A22	1

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	74507588	BASE FL2 191-1623-4/4BSAE-700	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.