

Specifications

Max. working pressure	250 bar
Weight	208 kg
Working volume	73 L
Total volume	78 L
Max. cyl. load (start tipping)	345 kN
Max. cyl. load (end of stroke) ²	207 kN
Max. cyl. load (end of stroke) ³	242 kN

Max. pump flow

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

Tipping time

With KO ¹	23 sec
Without KO ¹	26 sec
With KO ¹ below -20°C	33 sec
Without KO ¹ below -20°C	37 sec
Allowable lowering time	23 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	169	149	129	110				4660
Stroke* [mm]	1150	1170	1170	1170				

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.

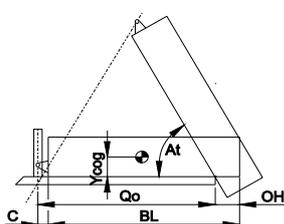
Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

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

Tipping weight



BL	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]	6200			6000			5800		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	45	48	51	47	50	53	49	52	55
Ycog [mm]									
C	66	74	84	68	76		70	79	
At	72			74					
	1200								

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>

Alpha series - Front end cylinder with single eye

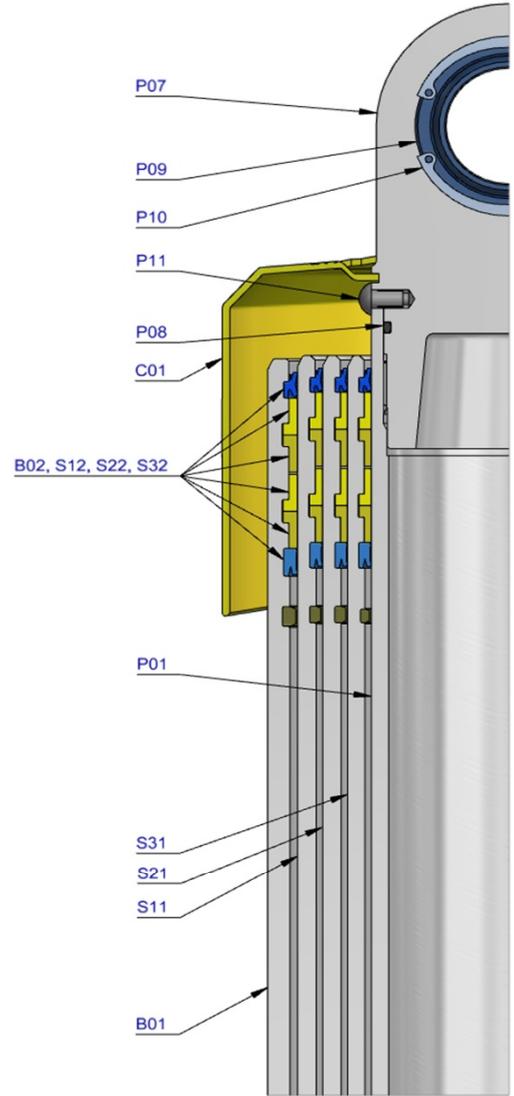


FE A169-4-04660-019-K1484*290

Item no.

70546296

Pos.	Part no.	Description	Qty.
C01	71839130	DUST COVER FE 169-4/191-5	1
P01	74403401	PISTON FL2 S 110-1400-HC	1
P02	71853110 K	SLIDER FL 110 (2 X 1/2) A22	1
P03	71851110 K	OUTER STOPRING FL 110 A22	1
P04	71822110	BOTTOM PLATE PISTON FL 110	1
P05	01745050 K	CIRCLIP 100 DIN 472 (105.5x3.0)	1
P06	71870220 K	O-RING PISTON BOTTOM 110	1
P07	71847300	PISTON EYE SPH. FL 110 MK2 L=075	1
P08	01226538 K	O-RING 91.67 X 3.53 MM NBR	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

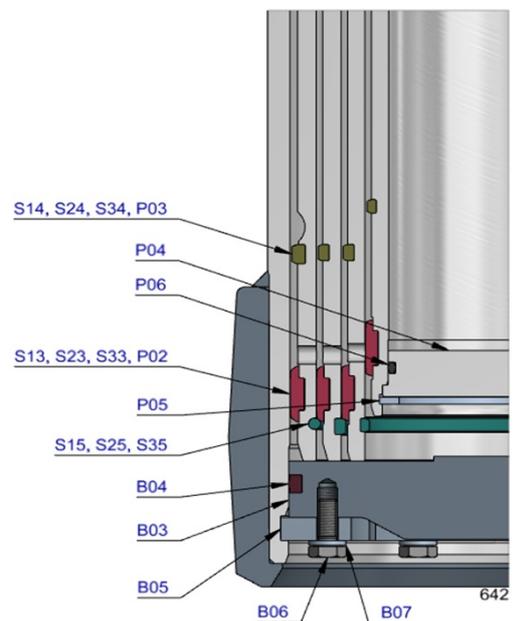


S31	74604370	STAGE FL2 129-1360	1
S32	71802129 K	PACKSET FL 129/HP 129	1
S33	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S34	71851129 K	OUTER STOPRING FL 129 A22	1
S35	71852129 K	LIFTRING FL 129 A22	1

S21	74605370	STAGE FL2 149-1360	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	74606370	STAGE FL2 169-1360	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	74507374	BASE FL2 191-1403-4/4BSAE-290	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

	71908640 K	Consists of all packsets with packset grease and O-rings	
--	------------	--	--

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.

For repair instructions see: CYL-0040. Serial no. is located on type plate and near type plate support.