

Specifications

Max. working pressure	170 bar
Weight	618 kg
Working volume	224 L
Total volume	239 L
Max. cyl. load (start tipping)	440 kN
Max. cyl. load (end of stroke) ²	170 kN
Max. cyl. load (end of stroke) ³	198 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	71 sec
Without KO ¹	79 sec
With KO ¹ below -20°C	101 sec
Without KO ¹ below -20°C	113 sec
Allowable lowering time	71 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	214	191	169	149	129			9530
Stroke* [mm]	1890	1910	1910	1910	1910			

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 & 015BRA12

Mounting instructions: CYL-0030

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] OH [mm] At [°]	12700			12150			11600		
	200	500	800	200	500	800	200	500	800
Ycog [mm]	44	45	46	46	47	49	49	50	51
600	58	61	63	60	63	66	62	65	68
900	60	63	66	62	65	69	65	68	72
1200	63	66	70	65	69	73	68	72	77

Tipping weight [ton] at maximum pressure of 170 bar for a vertically mounted cylinder and C is 229 mm

For detailed tipping calculations please refer to: <https://tipper.hyva.com>

Alpha series - Front end cylinder with outer cover

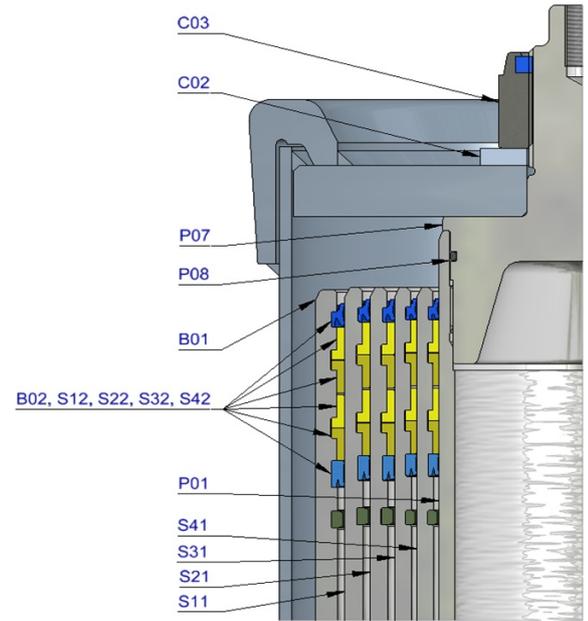


FC A214-5-09530-004-K0343

Item no.

70528920

Pos.	Part no.	Description	Qty.
C01	71737960	COVER 273-1975 PIN60 A360 SPH REINF GR	1
C02	01702956 K	WASHER M48 DIN 125B ZP	1
C03	01702907 K	TOPNUT NYLOC M48x3 DIN 985 ZP	1
C04	01791953	O-RING COVER D.273	1
C05	56288044 K	GREASE NIPPLE M8x1 DIN 71412	1
C06	01317670 K	GREASER PROTECTION CAP	1
P01	74404921	PISTON FL2 S 129-2195-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	71848400	PISTON HEAD FL 129 MK2	1
P08	71870125 K	O-RING 110.72 X 3.53 MM	1



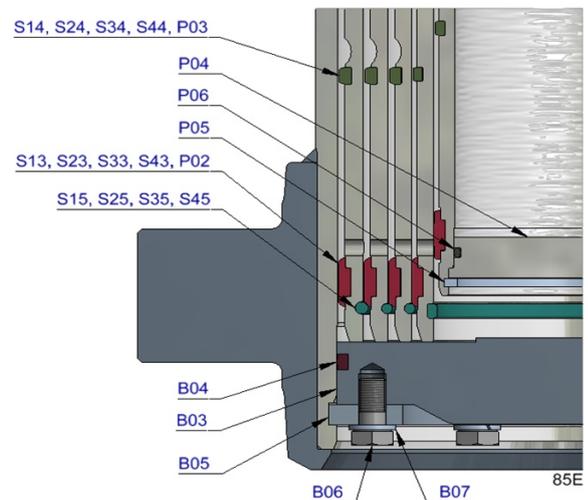
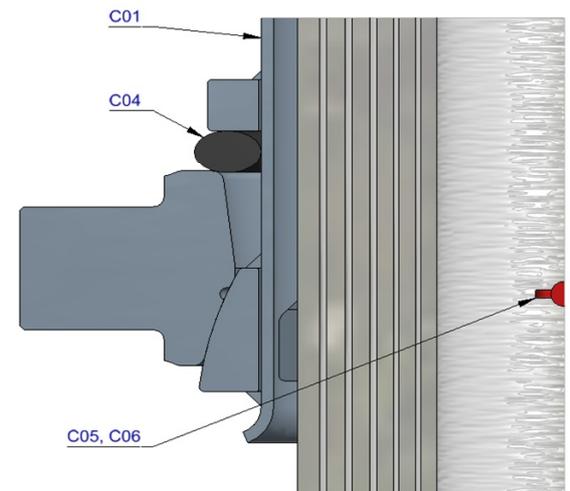
S41	74605920	STAGE FL2 149-2190	1
S42	71802149 K	PACKSET FL 149/HP 150	1
S43	71807151 K	SLIDER FL 149 A35	1
S44	71851149 K	OUTER STOPRING FL 149 A22	1
S45	71852149 K	LIFTRING FL 149 A22	1

S31	74606920	STAGE FL2 169-2190	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	74607920	STAGE FL2 191-2190	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	74608920	STAGE FL2 214-2190	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	74509920R1875	BASE FL2 238-2241-4/4BSAE-190-C273	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



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.

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