

Specifications

Max. working pressure	190 bar
Weight	470 kg
Working volume	149 L
Total volume	160 L
Max. cyl. load (start tipping)	245 kN
Max. cyl. load (end of stroke) ²	91 kN
Max. cyl. load (end of stroke) ³	106 kN

Max. pump flow

With KO ¹	190 L/min
Without KO ¹	137 L/min
With KO ¹ below -20°C	133 L/min
Without KO ¹ below -20°C	96 L/min

Tipping time

With KO ¹	47 sec
Without KO ¹	65 sec
With KO ¹ below -20°C	67 sec
Without KO ¹ below -20°C	93 sec
Allowable lowering time	47 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	191	169	149	129	110	91		9160
Stroke* [mm]	1510	1530	1530	1530	1530	1530		

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.

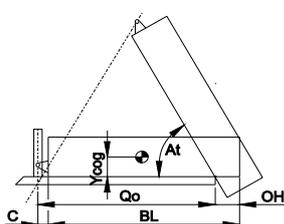
Related documentation

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 [°]	12200			11650			11100		
	200	500	800	200	500	800	200	500	800
Ycog [mm]	44	45	47	46	48	49	49	50	52
600	33	35	36	34	36	38	35	37	40
900	35	36	38	36	38	40	37	40	43
1200	36	38	40	38	40	43	40	42	46

Tipping weight [ton] at maximum pressure of 190 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

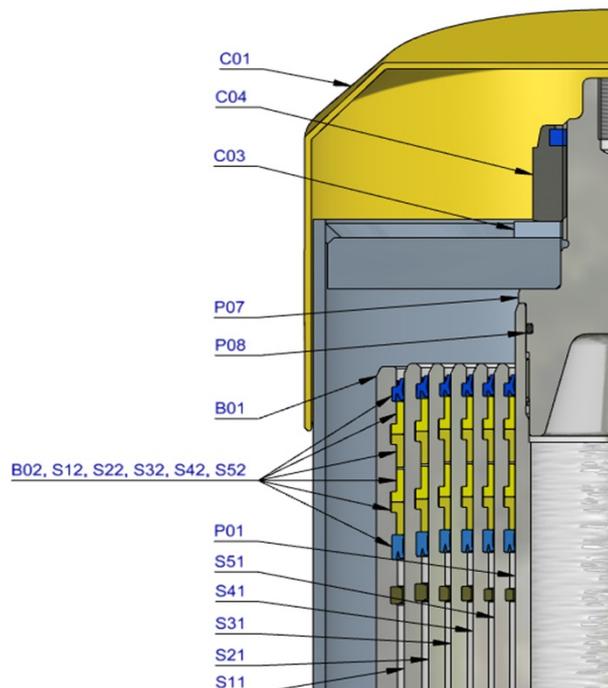


FC A191-6-09160-004-K0343

Item no.

70527892

Pos.	Part no.	Description	Qty.
C01	71839050	DUST COVER FC LOW 15-273	1
C02	71737724	COVER 273-1585 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	74402721	PISTON FL2 S 091-1785-HC	1
P02	71853091 K	SLIDER FL 091 (2 X 1/2) A22	1
P03	71851091 K	OUTER STOPRING FL 091 A22	1
P04	71822091	BOTTOM PLATE PISTON FL 091	1
P05	01745012 K	CIRCLIP 82 DIN 472 (87.5x2.5)	1
P06	71870215 K	O-RING PISTON BOTTOM 091	1
P07	71848200	PISTON HEAD FL 091 MK2	1
P08	01226430 K	O-RING 72.62 X 3.53 MM	1



S51	74603720	STAGE FL2 110-1780	1
S52	71802110 K	PACKSET FL 110	1
S53	71853110 K	SLIDER FL 110 (2 X 1/2) A22	1
S54	71851110 K	OUTER STOPRING FL 110 A22	1
S55	71852110 K	LIFTRING FL 110 A22	1

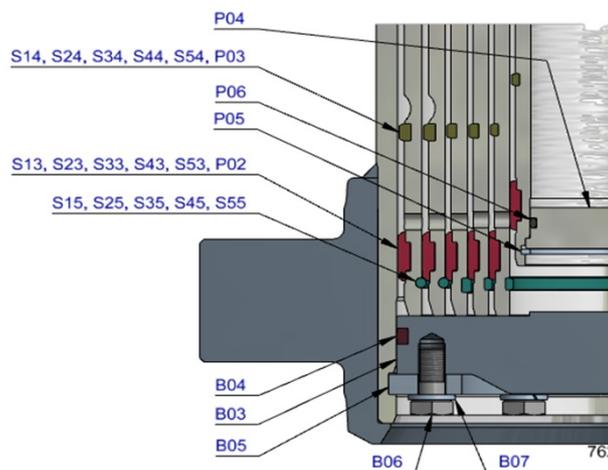
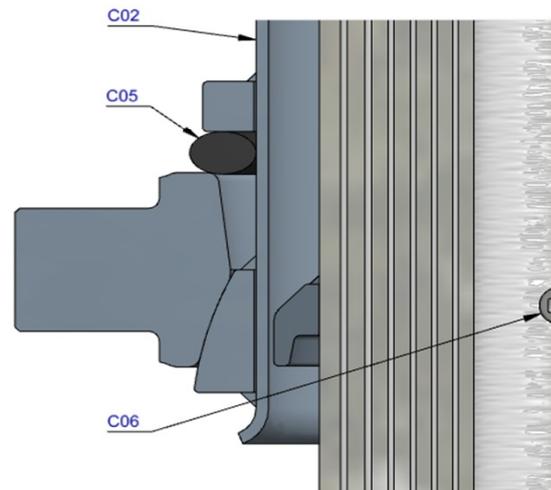
S41	74604720	STAGE FL2 129-1780	1
S42	71802129 K	PACKSET FL 129/HP 129	1
S43	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S44	71851129 K	OUTER STOPRING FL 129 A22	1
S45	71852129 K	LIFTRING FL 129 A22	1

S31	74605720	STAGE FL2 149-1780	1
S32	71802149 K	PACKSET FL 149/HP 150	1
S33	71807151 K	SLIDER FL 149 A35	1
S34	71851149 K	OUTER STOPRING FL 149 A22	1
S35	71852149 K	LIFTRING FL 149 A22	1

S21	74606720	STAGE FL2 169-1780	1
S22	71802169 K	PACKSET FL 169	1
S23	71807171 K	SLIDER FL 169 A35	1
S24	71851169 K	OUTER STOPRING FL 169 A22	1
S25	71813169 K	LIFTRING FL 169x5	1

S11	74607720	STAGE FL2 191-1780	1
S12	71802191 K	PACKSET FL 191	1
S13	71807193 K	SLIDER FL 191 A35	1
S14	71851191 K	OUTER STOPRING FL 191 A22	1
S15	71813191 K	LIFTRING FL 191x5	1

B01	74508720R1485	BASE FL2 214-1831-4/4BSAE-190-C273	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

	71908760 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.