

Alpha series - Front end cylinder with outer cover



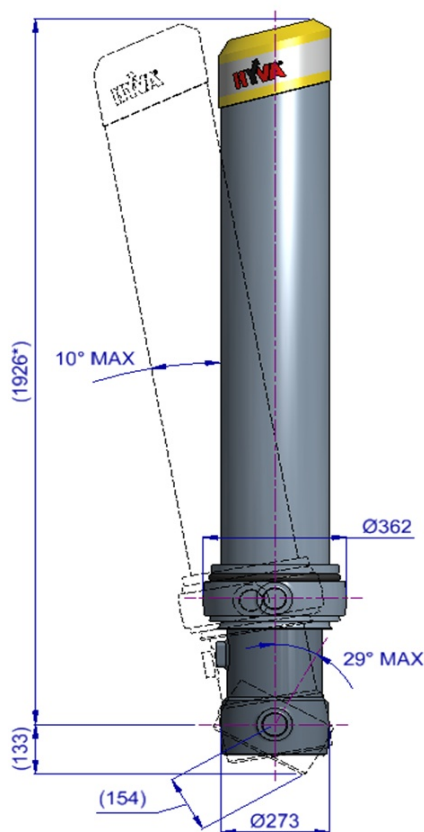
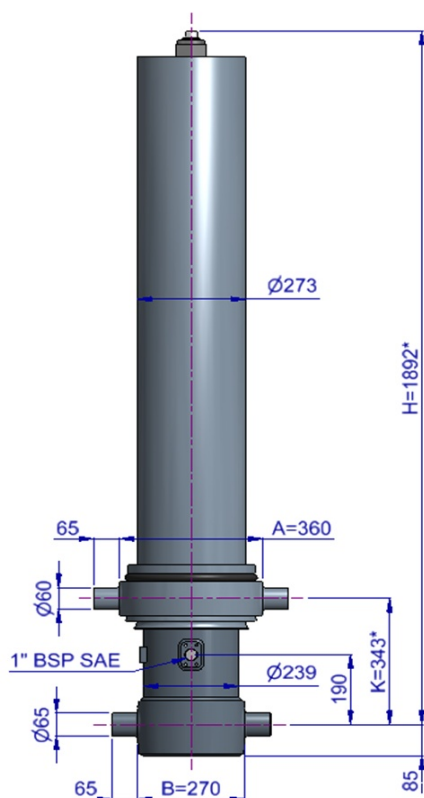
FC A214-6-09160-004-K0343

Item no.

70528878

Tipping weight

48 - 67 ton



* incl. 20 [-5; +30] mm pull out

3D model is available on request

Specifications

Max. working pressure	190 bar
Weight	540 kg
Working volume	193 L
Total volume	207 L
Max. cyl. load (start tipping)	345 kN
Max. cyl. load (end of stroke) ²	145 kN
Max. cyl. load (end of stroke) ³	169 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	61 sec
Without KO ¹	68 sec
With KO ¹ below -20°C	87 sec
Without KO ¹ below -20°C	97 sec
Allowable lowering time	61 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	214	191	169	149	129	110		
Stroke* [mm]	1510	1530	1530	1530	1530	1530		9160

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.

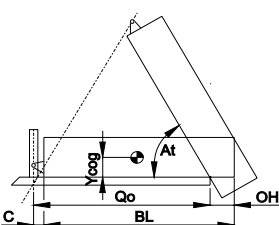
Related documentation

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]	12200			11650			11100		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	44	45	47	46	48	49	49	50	52
Ycog [mm]									
600	48	51	53	50	52	55	52	55	58
900	51	53	56	52	55	59	55	58	62
1200	53	56	59	55	58	62	58	62	67

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>

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Item no.

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Pos.	Part no.	Description	Qty.
C01	71839050	DUST COVER FC LOW 15-273	1
C02	71737716	COVER 273-1565 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	74403721	PISTON FL2 S 110-1785-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	71848300	PISTON HEAD FL 110 MK2	1
P08	01226538 K	O-RING 91.67 X 3.53 MM NBR	1

S51	74604720	STAGE FL2 129-1780	1
S52	71802129 K	PACKSET FL 129/HP 129	1
S53	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S54	71851129 K	OUTER STOPRING FL 129 A22	1
S55	71852129 K	LIFTRING FL 129 A22	1

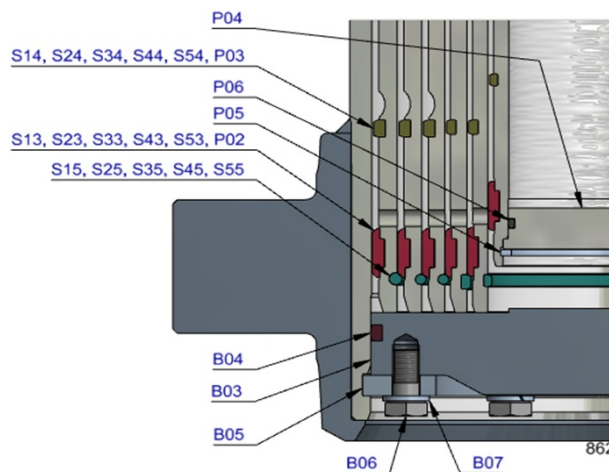
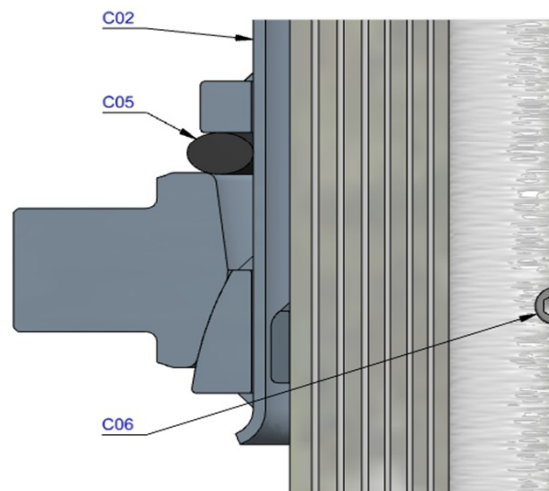
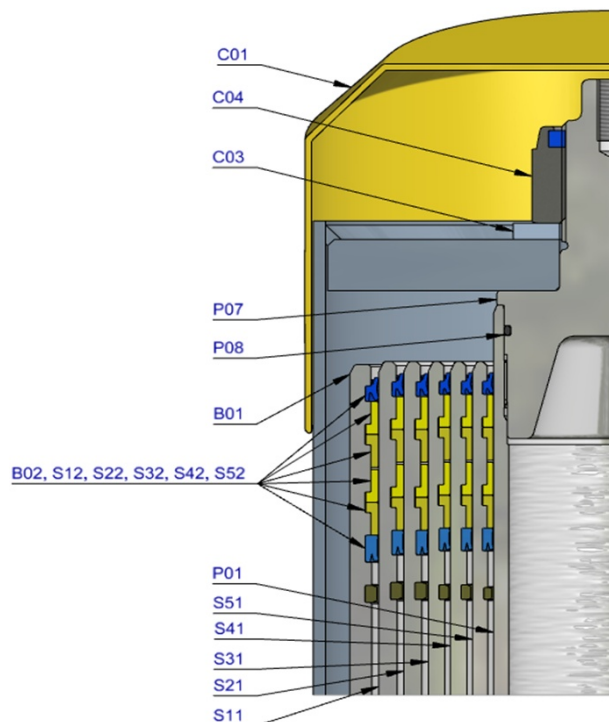
S41	74605720	STAGE FL2 149-1780	1
S42	71802149 K	PACKSET FL 149/HP 150	1
S43	71807151 K	SLIDER FL 149 A35	1
S44	71851149 K	OUTER STOPRING FL 149 A22	1
S45	71852149 K	LIFTRING FL 149 A22	1

S31	74606720	STAGE FL2 169-1780	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	74607720	STAGE FL2 191-1780	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	74608720	STAGE FL2 214-1780	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	74509720R1465	BASE FL2 238-1831-4/4BSAE-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

	71908860 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.