

Alpha series - Front end cylinder with single eye



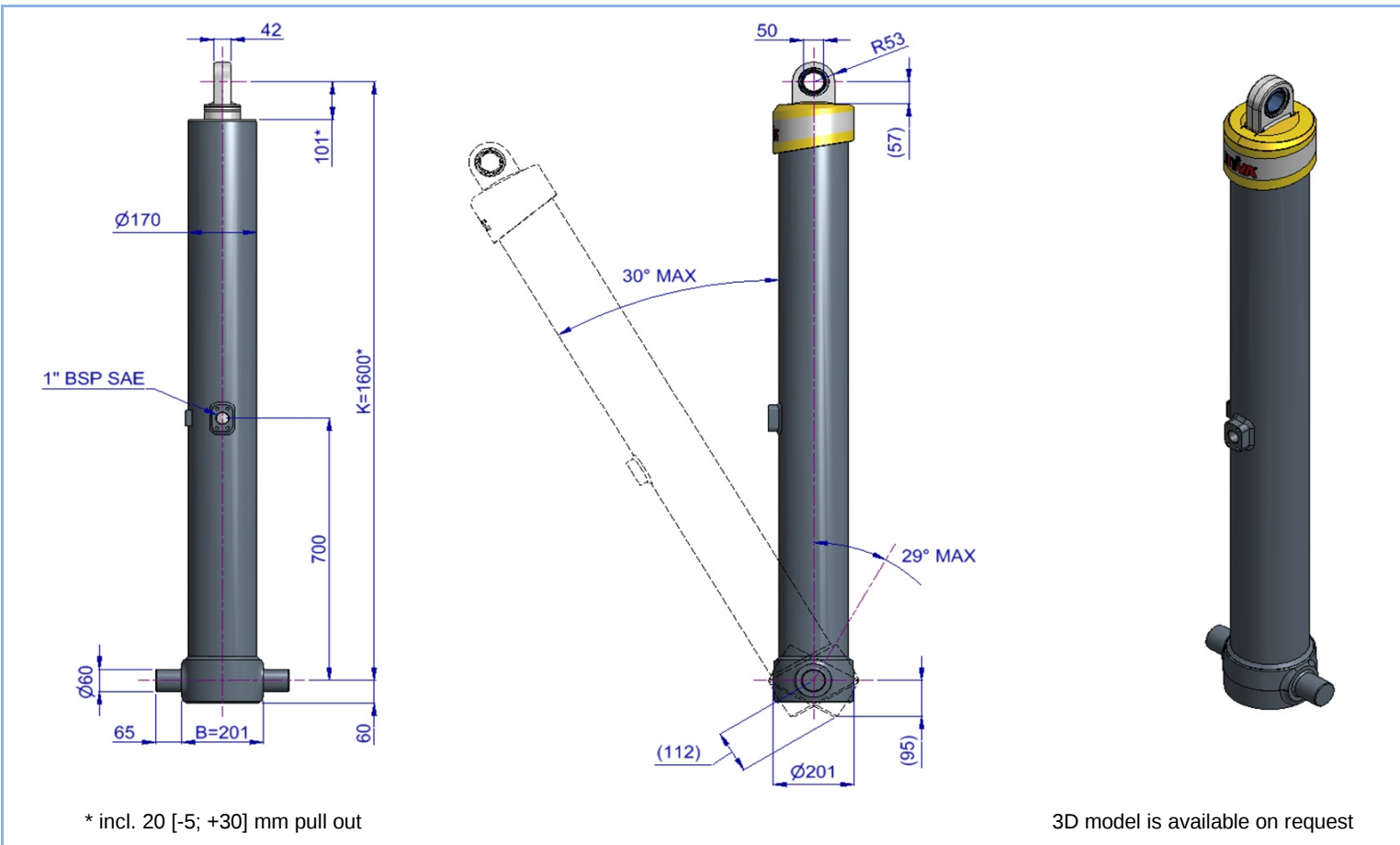
FE A149-4-05180-011-K1600

Item no.

70545374

Tipping weight

39 - 57 ton



Specifications

Max. working pressure	220 bar
Weight	187 kg
Working volume	60 L
Total volume	65 L
Max. cyl. load (start tipping)	245 kN
Max. cyl. load (end of stroke) ²	103 kN
Max. cyl. load (end of stroke) ³	121 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	19 sec
Without KO ¹	26 sec
With KO ¹ below -20°C	27 sec
Without KO ¹ below -20°C	37 sec
Allowable lowering time	19 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	149	129	110	91				5180
Stroke* [mm]	1280	1300	1300	1300				

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.

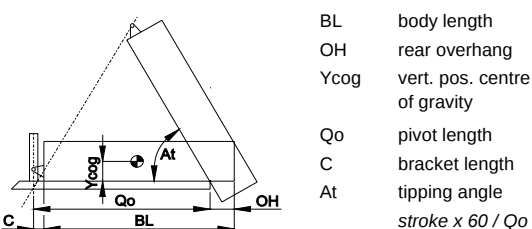
Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

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

Tipping weight



BL [mm]	200	500	800	200	500	800	200	500	800
OH [mm]	46	48	51	48	50	53	49	52	55
At [°]									
Ycog [mm]									
600	39	43	48	40	44	50	41	46	52
900	42	47	54	44	49	57	45	51	
1200	46	52		48	55		50		

Tipping weight [ton] at maximum pressure of 220 bar for a vertically mounted cylinder and C is 158 mm

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

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Pos.	Part no.	Description	Qty.
C01	71839121	DUST COVER FE 149-4/157-4	1
P01	74402511	PISTON FL2 S 091-1515-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	71847200	PISTON EYE SPH. FL 091 MK2 L=075	1
P08	01226430 K	O-RING 72.62 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

S31	74603510	STAGE FL2 110-1510	1
S32	71802110 K	PACKSET FL 110	1
S33	71853110 K	SLIDER FL 110 (2 X 1/2) A22	1
S34	71851110 K	OUTER STOPRING FL 110 A22	1
S35	71852110 K	LIFTRING FL 110 A22	1

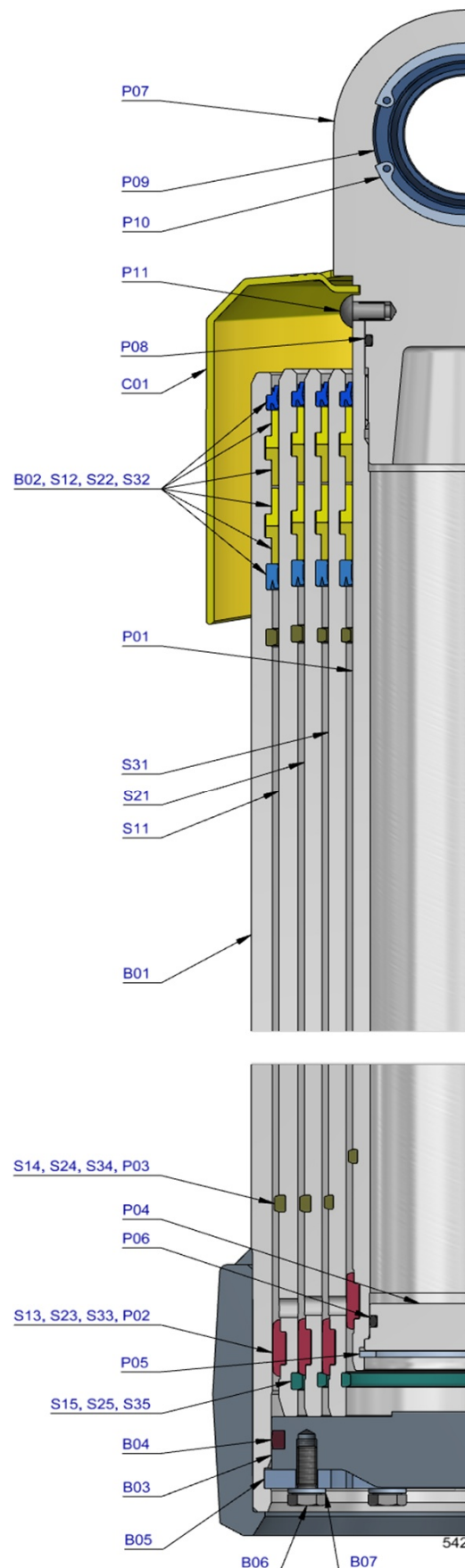
S21	74604510	STAGE FL2 129-1510	1
S22	71802129 K	PACKSET FL 129/HP 129	1
S23	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S24	71851129 K	OUTER STOPRING FL 129 A22	1
S25	71852129 K	LIFTRING FL 129 A22	1

S11	74605510	STAGE FL2 149-1510	1
S12	71802149 K	PACKSET FL 149/HP 150	1
S13	71807151 K	SLIDER FL 149 A35	1
S14	71851149 K	OUTER STOPRING FL 149 A22	1
S15	71852149 K	LIFTRING FL 149 A22	1

B01	74506518	BASE FL2 169-1549-4/4BSAE-700	1
B02	71802169 K	PACKSET FL 169	1
B03	71825425	BOTTOM PLATE FL2 169	1
B04	71870035 K	SEAL BOTTOM PLATE FL 169	1
B05	71820169	LOCKING PLATE FL 169	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

	71908540 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.