

# Alpha series - Front end cylinder with double eye



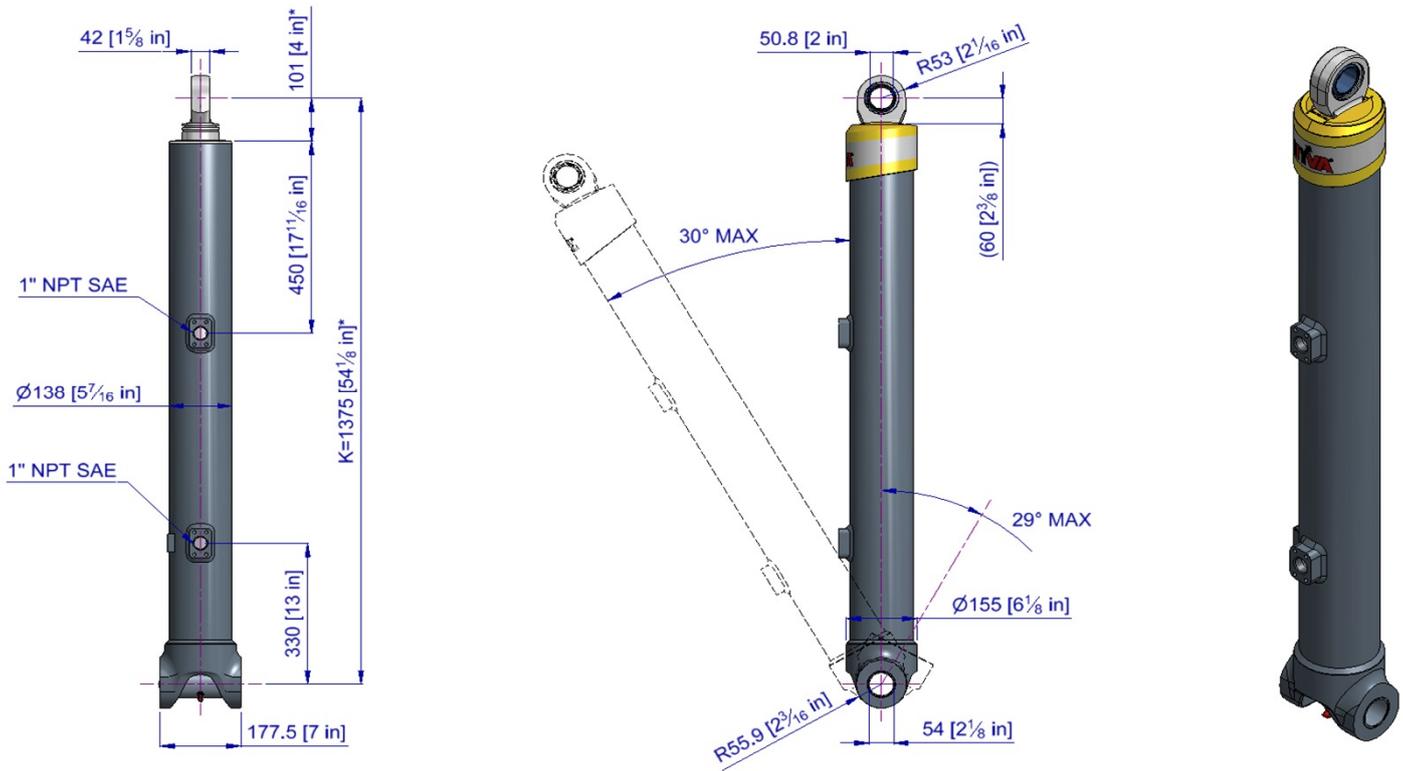
FEE A118-3-03010-243-K1375

Item no.

70174150

Tipping weight

35 - 60 ton



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

3D model is available on request

## Specifications

Max. working pressure	250 bar	Max. pump flow (with KO <sup>1</sup> )	151 L/min	Resulting tipping time (with KO <sup>1</sup> )	10 sec
Weight	101 kg	Max. pump flow (without KO <sup>1</sup> )	106 L/min	Resulting tipping time (without KO <sup>1</sup> )	14 sec
Working volume	24 L			Allowable lowering time	10 sec
Total volume	26 L				
Max. cyl. load (start tipping)	245 kN				

KO<sup>1</sup>: Hyva pneumatic knock off

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	118	99	80					3010
Stroke* [mm]	990	1010	1010					

## 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. • When the cylinder is mounted at an angle, the maximum tipping weight could be reduced. • Maximum backwards angle of rotation during operation is 29 deg.
- Working pressure depends on the application, but must never exceed the maximum working pressure stated. • 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 thickness conforming to the 480 hours neutral salt spray test as per ISO 9227 (ISO10289, rating 9).

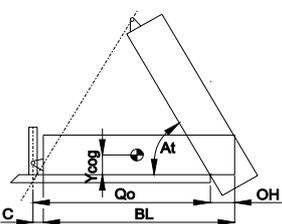
## Related documentation

Bracket options: 015BRA13

Mounting instructions: CYL-0032

Oil specifications: OIL-0011

## Tipping weight



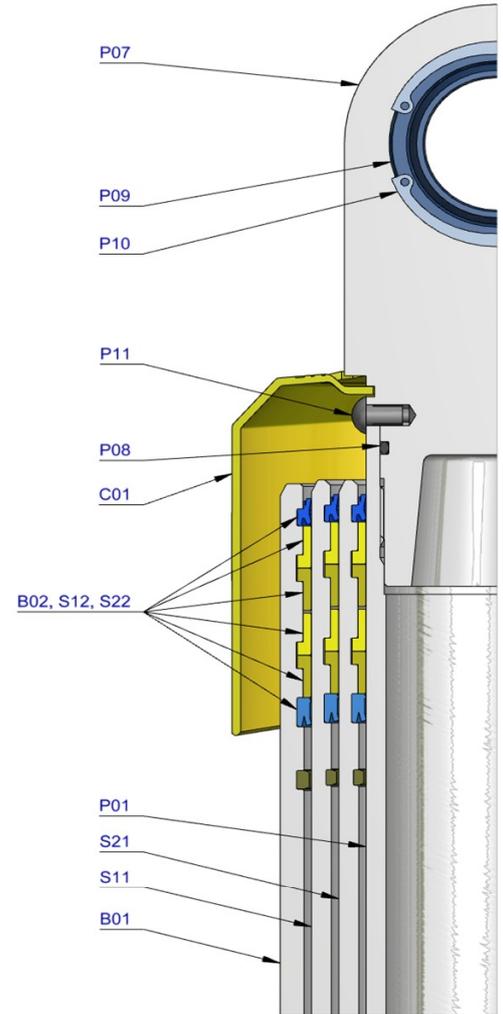
BL	body length
OH	rear overhang
Ycog	vert. pos. centre of gravity
Qo	pivot length
C	bracket length
At	tipping angle
	stroke x 60 / Qo

BL [mm]	4000			3900			3800		
OH [mm]	200	400	600	200	400	600	200	400	600
At [°]	46	49	52	47	50	54	49	52	55
Ycog [mm]									
400	35	39	44	35	39	46	36	40	47
700	39	45	53	40	46	56	41	48	60
1000	44	53		46	56		48		

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>

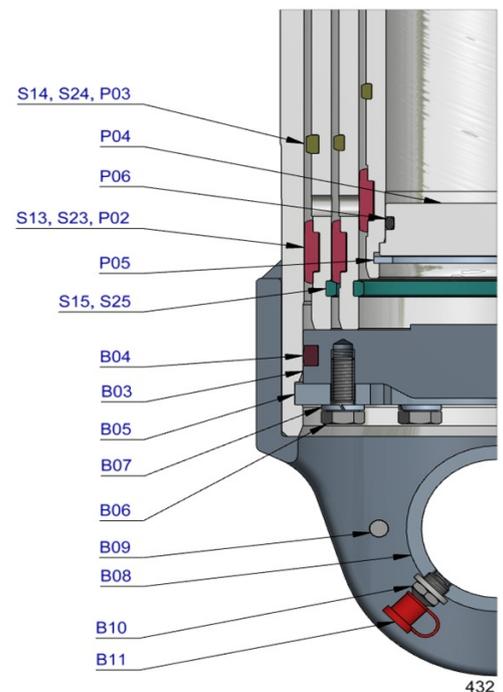
Pos.	Part no.	Description	Qty.
C01	71839100	DUST COVER FE 110-3/118-3	1
P01	70462251	PISTON MN2 S 080-1205-HC	1
P02	70209300 K	SLIDER MN 080 (2 x 1/2) A22	1
P03	70216080 K	OUTER STOPRING MN 080 A22	1
P04	70224080	BOTTOM PLATE PISTON MN 080	1
P05	01745035 K	CIRCLIP 70 DIN 472 (74.5x2.5)	1
P06	70260210 K	O-RING PISTON BOTTOM 080	1
P07	70235300	PISTON EYE SPH. MN 080 MK2 L=075	1
P08	70260110 K	O-RING 63.09 X 3.53 MM	1
P09	71875455 K	SPHERICAL BEARING D.50.8 MAINT. FREE	1
P10	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2



S21	70663250	STAGE MN2 099-1200	1
S22	70203099 K	PACKSET MN 099	1
S23	70209310 K	SLIDER MN 099 (2 x 1/2) A22	1
S24	70216099 K	OUTER STOPRING MN 099 A22	1
S25	70217099 K	LIFTRING MN 099 A22	1

S11	70664250	STAGE MN2 118-1200	1
S12	70203118 K	PACKSET MN 118	1
S13	70209320 K	SLIDER MN 118 (2 x 1/2) A22	1
S14	70216118 K	OUTER STOPRING MN 118 A22	1
S15	70217118 K	LIFTRING MN 118 A22	1

B01	70365264	BASE E 137-1239-4/4NSAE-330/450-O177.5	1
B02	70203137 K	PACKSET MN 137	1
B03	70225350	BOTTOM PLATE MN2 137	1
B04	70270137 K	SEAL BOTTOM PLATE MN 137	1
B05	70220137	LOCKING PLATE MN 137	3
B06	01732055 K	BOLT HEX M8X20X1.25 SET 6 PCS	1
B07	01732559 K	WASHER SPRING M8 SET 6 PCS	1
B08	01793033	EYE TRUNNION TUBE (63-54) L=177.5	1
B09	01746121 K	BOLT LOCKING M8x25 DIN 7991	1
B10	56288044 K	GREASE NIPPLE M8x1 DIN 71412	2
B11	01317670 K	GREASER PROTECTION CAP	2



432

### Seal kit complete

	71907430 K	Consists of all packsets with packset grease and O-rings	
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### Notes

The inner, outer stoprings and liftrings are pre-mounted in the grooves on spare stages and pistons. Therefore, when ordering new tubes, it is not required to order stoprings separately.