

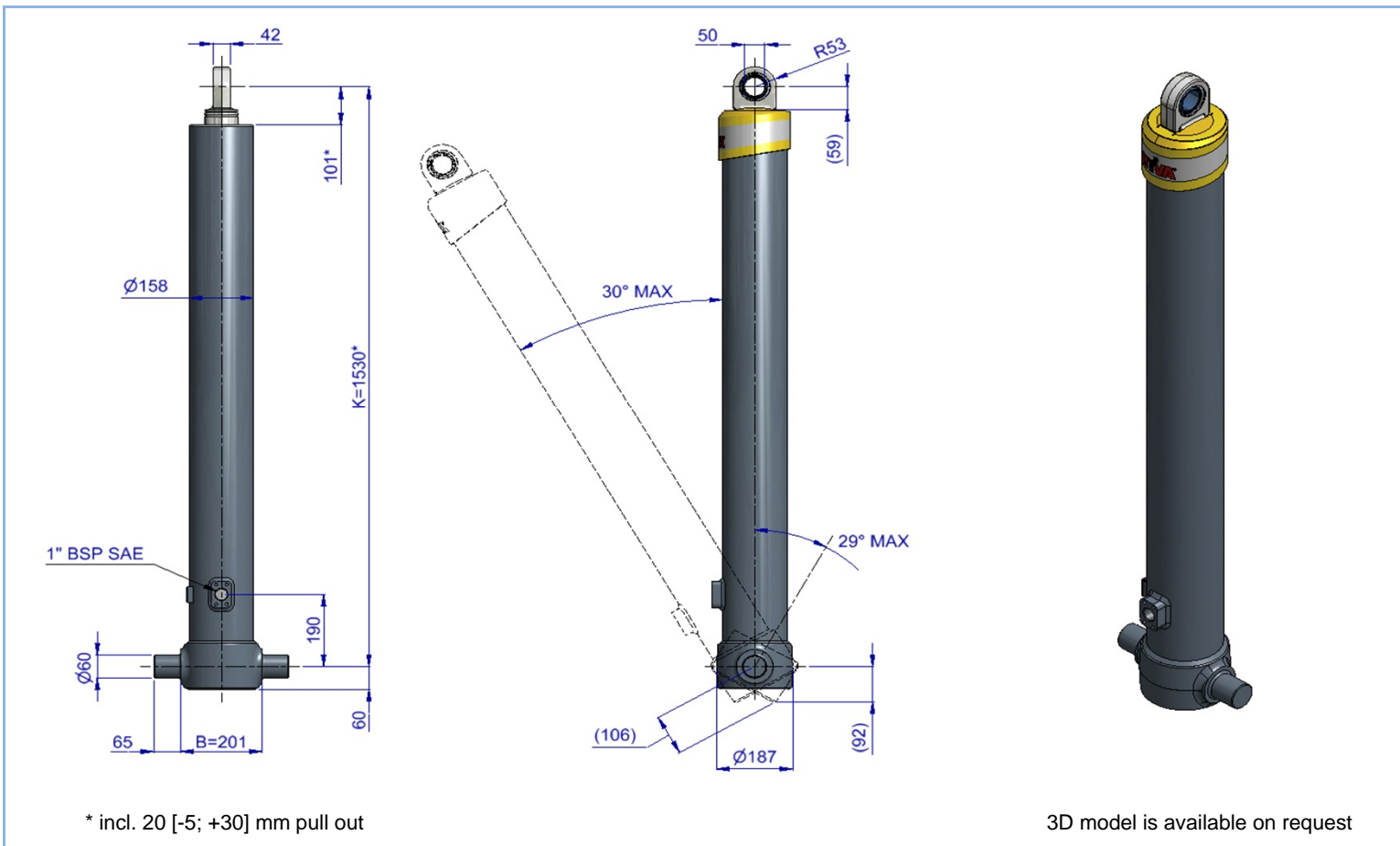
# Alpha series - Front end cylinder with single eye



FE A137-4-04980-001-K1530

Item no.  
Tipping weight

70145360  
31 - 52 ton



## Specifications

Max. working pressure	220 bar	Max. pump flow (with KO)	151 L/min	Resulting tipping time (with KO)	19 sec
Weight	161 kg	Max. pump flow (without KO)	106 L/min	Resulting tipping time (without KO)	27 sec
Working volume	48 L			Allowable lowering time	19 sec
Total volume	52 L				
Max. cyl. load (start tipping)	220 kN				
Max. cyl. load (end of stroke)	141 kN				

KO: Hyva pneumatic knock off

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	137	118	99	80				
Stroke* [mm]	1230	1250	1250	1250				4980

## 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.
- Maximum duration of extension is 0.5 hours (excluding hard chromed stages).
- Cylinder is painted black (RAL9005) with a thickness conforming to the 480 hours neutral salt spray test as per ISO 9227 (ISO 10289, rating 9).

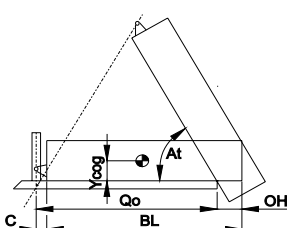
## Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

Oil specifications: OIL-0011

## Tipping weight



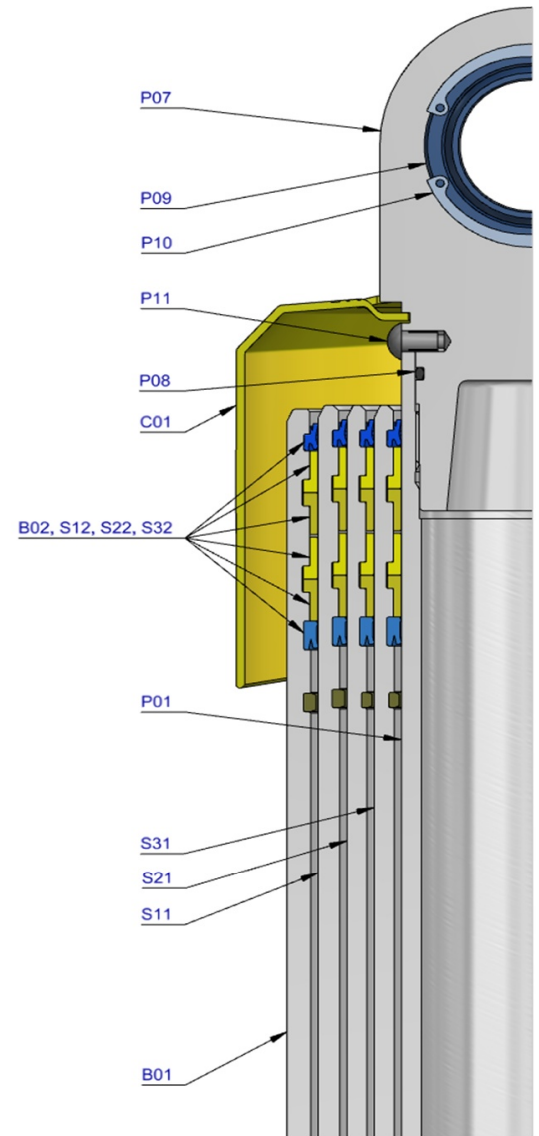
BL	body length
OH	rear overhang
Ycog	vert. pos. centre of gravity
Qo	pivot length
C	bracket length
At	tipping angle stroke x 60 / Qo

	BL	6600			6400			6200		
OH	200	500	800	200	500	800	200	500	800	
At	45	48	51	47	50	53	49	52	55	
Ycog										
600	31	34	38	31	35	39	32	36	41	
900	33	37	42	34	38	45	35	40	48	
1200	36	41	48	37	43	52	39	46		

Tipping weight 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>

Pos.	Part no.	Description	Qty.
C01	71839111	DUST COVER FE 129-4/137-4	1
P01	70462441	PISTON MN2 S 080-1445-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	71875450 K	SPHERICAL BEARING D.50 MAINT. FREE	1
P10	01770560 K	CIRCLIP 75 GE 50 DO DIN 472	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2

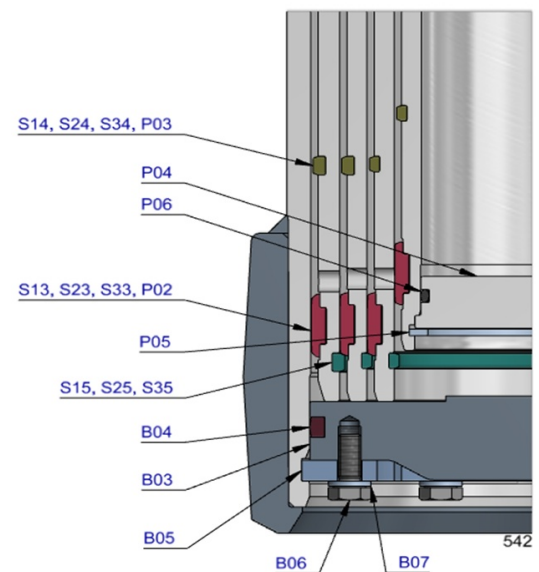


S31	70663440	STAGE MN2 099-1440	1
S32	70203099 K	PACKSET MN 099	1
S33	70209310 K	SLIDER MN 099 (2 x 1/2) A22	1
S34	70216099 K	OUTER STOPRING MN 099 A22	1
S35	70217099 K	LIFTRING MN 099 A22	1

S21	70664440	STAGE MN2 118-1440	1
S22	70203118 K	PACKSET MN 118	1
S23	70209320 K	SLIDER MN 118 (2 x 1/2) A22	1
S24	70216118 K	OUTER STOPRING MN 118 A22	1
S25	70217118 K	LIFTRING MN 118 A22	1

S11	70665440	STAGE MN2 137-1440	1
S12	70203137 K	PACKSET MN 137	1
S13	70207137 K	SLIDER MN 137 A35	1
S14	70216137 K	OUTER STOPRING MN 137 A22	1
S15	70217137 K	LIFTRING MN 137 A22	1

B01	70366440	BASE MN2 157-1479-4/4BSAE-190	1
B02	70203157 K	PACKSET MN 157	1
B03	70225355	BOTTOM PLATE MN2 157	1
B04	70270157 K	SEAL BOTTOM PLATE MN 157	1
B05	70220157	LOCKING PLATE MN 157	3
B06	01732055 K	BOLT HEX M8X20X1.25 SET 6PCS	1
B07	01732559 K	WASHER SPRING M8 SET 6PCS	1



### Seal kit complete

	71907540 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.

For repair instructions see: CYL-0041. Serial no. is located on type plate and below type plate support.