

# Alpha series - Front end cylinder with single eye



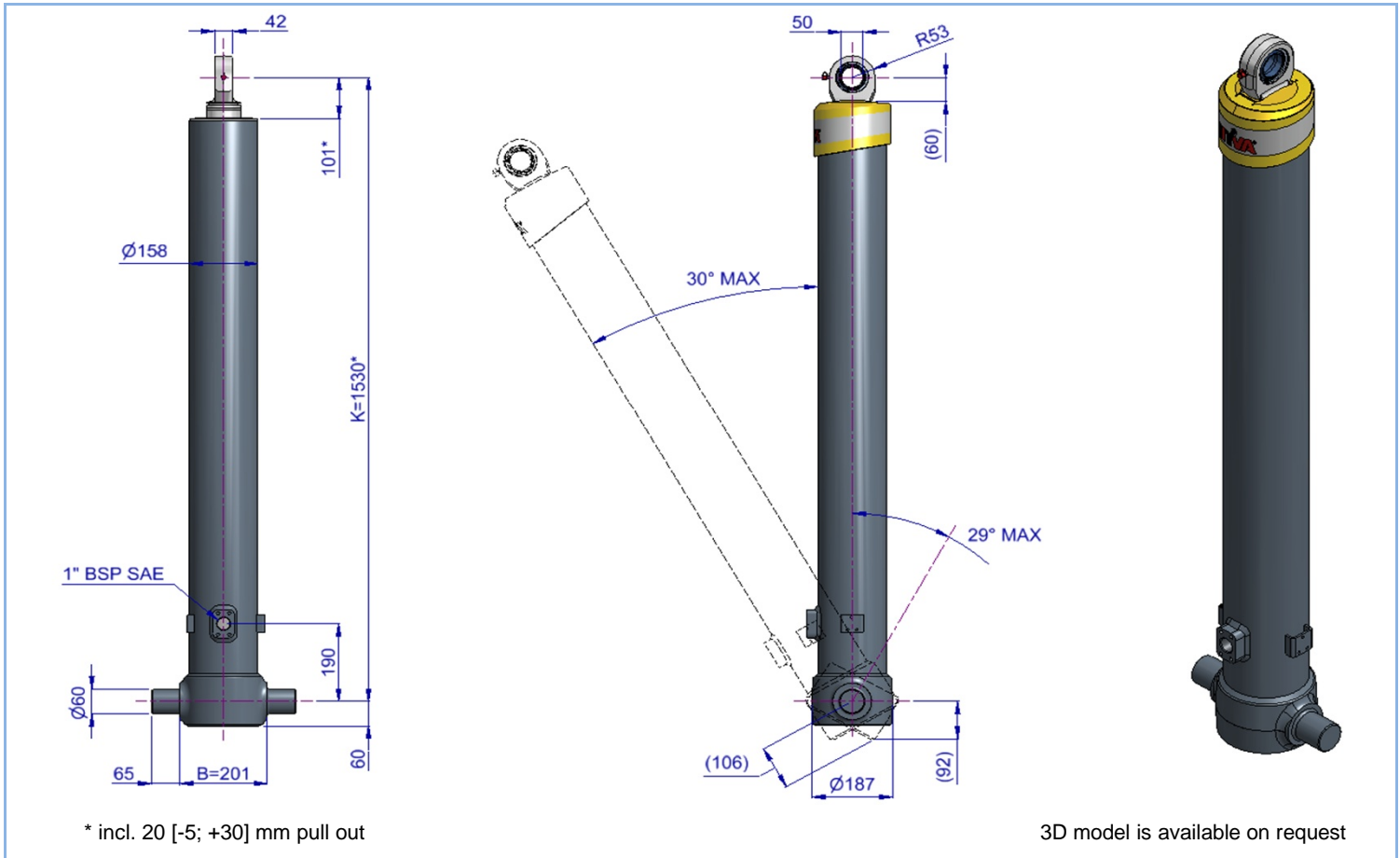
FE A137-4-04845-001-K1530-HD

Item no.

70135360

Tipping weight

35 - 53 ton



## 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> )	18 sec
Weight	161 kg	Max. pump flow (without KO <sup>1</sup> )	106 L/min	Resulting tipping time (without KO <sup>1</sup> )	26 sec
Working volume	46 L			Allowable lowering time	15 sec
Total volume	51 L				
Max. cyl. load (start tipping)	220 kN				

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

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	137	118	99	80				4845
Stroke* [mm]	1190	1215	1220	1220				

## 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).

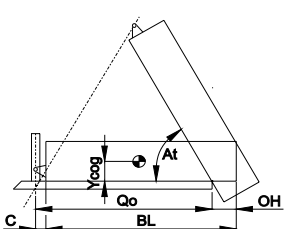
## Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

Oil specifications: OIL-0011

## Tipping weight



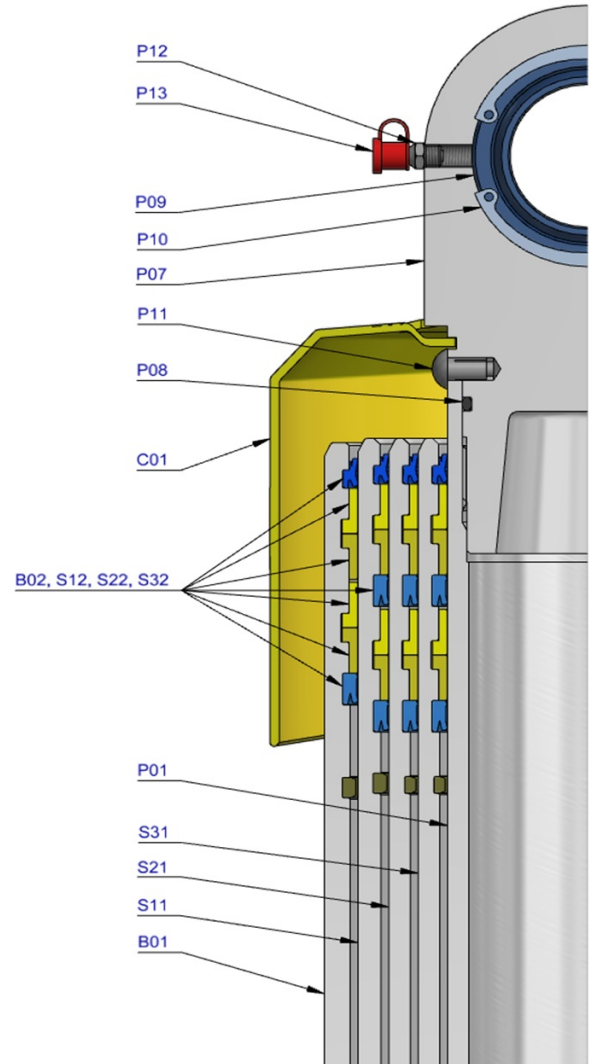
BL	body length
OH	rear overhang
Ycog	vert. pos. centre of gravity
Qo	pivot length
C	bracket length
At	tipping angle
	stroke x 60 / Qo

BL [mm]	6400			6200			6000		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	46	48	51	47	50	53	49	52	55
Ycog [mm]									
600	35	39	44	36	40	46	37	41	48
900	38	43	49	39	44	53	40	47	
1200	41	48		43	50		45		

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	71839111	DUST COVER FE 129-4/137-4	1
P01	70472441	PISTON MN2 S 080-1445-HD-HC	1
P02	70207080 K	SLIDER MN 080 (2 x 1/2) A35	1
P03	70216080 K	OUTER STOPRING MN 080 A22	2
P04	70230080	BOTTOM PLATE PISTON MN 080 MK2 HD	1
P05	01745030 K	CIRCLIP 67 DIN 472 (71.5x2.5)	1
P06	70260210 K	O-RING PISTON BOTTOM 080	1
P07	70235301	PISTON EYE SPH. MN 080 MK2 L=075 GR	1
P08	70260110 K	O-RING 63.09 X 3.53 MM	1
P09	01770085 K	SPHERICAL BEARING D.50 DO GREASED	1
P10	01770560 K	CIRCLIP 75 GE 50 DO DIN 472	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2
P12	56288044 K	GREASE NIPPLE M8x1 DIN 71412	1
P13	01317670 K	GREASER PROTECTION CAP	1

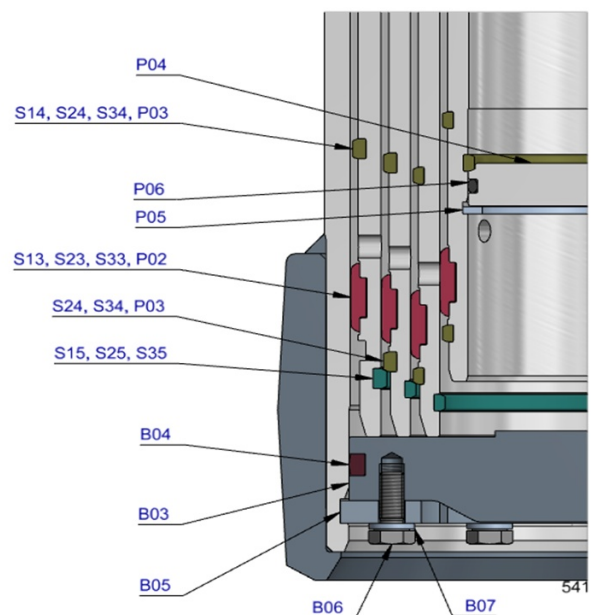


S31	70673440	STAGE MN2 099-1440-HD	1
S32	70202099 K	PACKSET MN 099 TANDEM SEAL	1
S33	70207099 K	SLIDER MN 099 (2 x 1/2) A35	1
S34	70216099 K	OUTER STOPRING MN 099 A22	2
S35	70217099 K	LIFTRING MN 099 A22	1

S21	70674440	STAGE MN2 118-1440-HD	1
S22	70202118 K	PACKSET MN 118 TANDEM SEAL	1
S23	70207118 K	SLIDER MN 118 (2 x 1/2) A35	1
S24	70216118 K	OUTER STOPRING MN 118 A22	2
S25	70217118 K	LIFTRING MN 118 A22	1

S11	70675440	STAGE MN2 137-1440-HD	1
S12	70202137 K	PACKSET MN 137 TANDEM SEAL	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	70376440	BASE MN2 157-1479-4/4BSAE-190-HD	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 6 PCS	1
B07	01732559 K	WASHER SPRING M8 SET 6 PCS	1



### Seal kit complete

	71907541 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.