

Alpha series - Front end cylinder with double eye



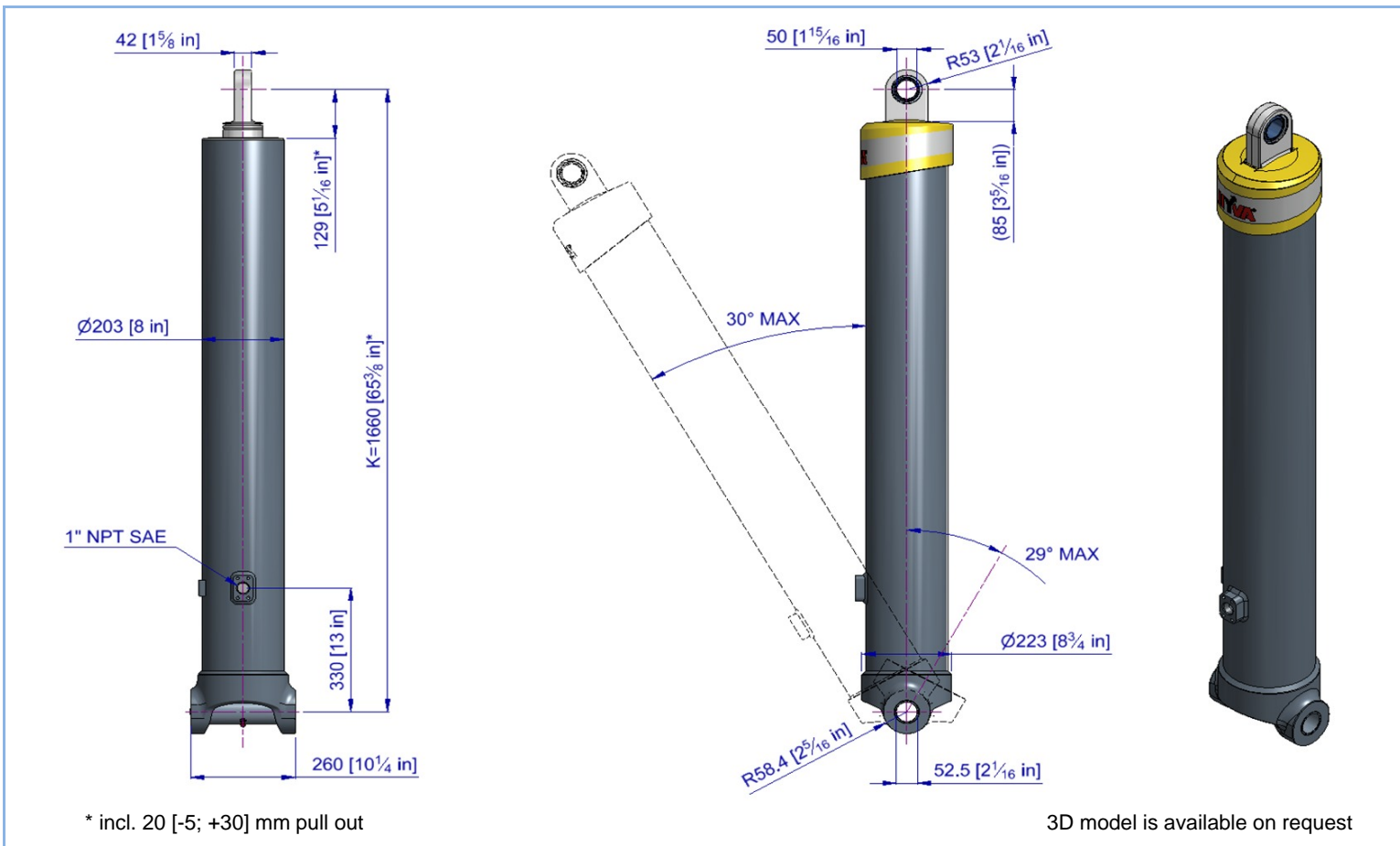
FEE A179-5-06230-229-K1660-HC

Item no.

70177481

Tipping weight

40 - 67 ton



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

3D model is available on request

Specifications

Max. working pressure	190 bar	Max. pump flow (with KO ¹)	190 L/min	Resulting tipping time (with KO ¹)	31 sec
Weight	257 kg	Max. pump flow (without KO ¹)	162 L/min	Resulting tipping time (without KO ¹)	36 sec
Working volume	97 L			Allowable lowering time	31 sec
Total volume	105 L				
Max. cyl. load (start tipping)	295 kN				
Max. cyl. load (end of stroke)	204 kN				

KO¹: Hyva pneumatic knock off

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	179	157	137	118	99			
Stroke* [mm]	1250	1250	1250	1250	1230			6230

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).

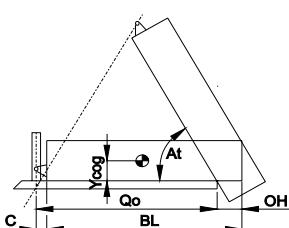
Related documentation

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] OH [mm] At [°]	8200			7900			7600		
		200	500	800	200	500	800	200	500
	46	48	50	48	50	52	50	52	55
Ycog [mm]									
600	40	43	47	41	45	49	42	46	52
900	43	47	51	44	49	54	46	51	58
1200	46	51	57	48	53	61	50	57	67

Tipping weight [ton] at maximum pressure of 190 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	71839131	DUST COVER FE 169-5/179-5/191-6	1
P01	70463441	PISTON MN2 S 099-1445-HC	1
P02	70209310 K	SLIDER MN 099 (2 x 1/2) A22	1
P03	70216099 K	OUTER STOPRING MN 099 A22	1
P04	70224099	BOTTOM PLATE PISTON MN 099	1
P05	01745014 K	CIRCLIP 90 DIN 472 (95.5x3.5)	1
P06	70260215 K	O-RING PISTON BOTTOM 099	1
P07	70235403	PISTON EYE SPH. MN 099 MK2 L=103	1
P08	70260115 K	O-RING 82.14 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

S41	70664441	STAGE MN2 118-1440-HC	1
S42	70203118 K	PACKSET MN 118	1
S43	70209320 K	SLIDER MN 118 (2 x 1/2) A22	1
S44	70216118 K	OUTER STOPRING MN 118 A22	1
S45	70217118 K	LIFTRING MN 118 A22	1

S31	70665441	STAGE MN2 137-1440-HC	1
S32	70203137 K	PACKSET MN 137	1
S33	70207137 K	SLIDER MN 137 A35	1
S34	70216137 K	OUTER STOPRING MN 137 A22	1
S35	70217137 K	LIFTRING MN 137 A22	1

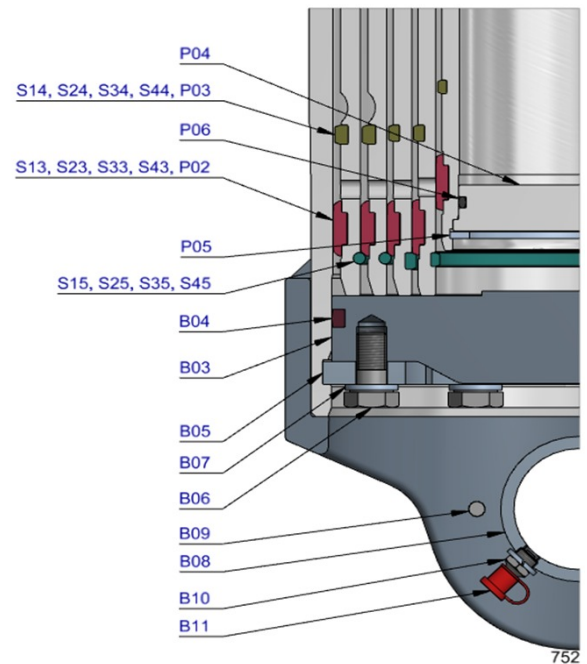
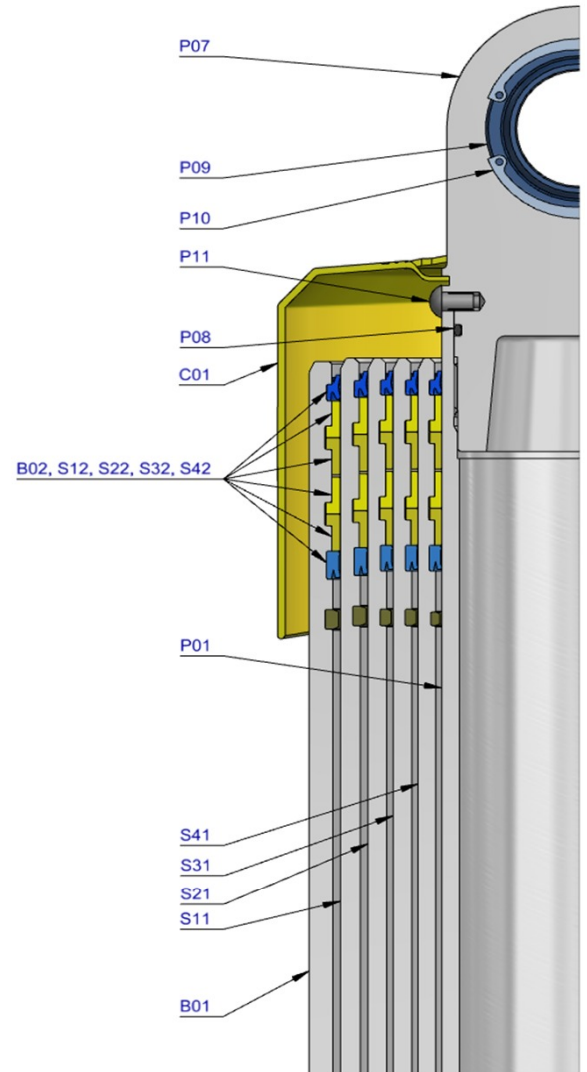
S21	70666441	STAGE MN2 157-1440-HC	1
S22	70203157 K	PACKSET MN 157	1
S23	70207157 K	SLIDER MN 157 A35	1
S24	70216157 K	OUTER STOPRING MN 157 A22	1
S25	70213157 K	LIFTRING MN 157x5 MK2	1

S11	70667441	STAGE MN2 179-1440-HC	1
S12	70203179 K	PACKSET MN 179	1
S13	70207179 K	SLIDER MN 179 A35	1
S14	70216179 K	OUTER STOPRING MN 179 A22	1
S15	70213179 K	LIFTRING MN 179x5 MK2	1

B01	70368450	BASE MN2 E 202-1491-4/4NSAE-330-O260	1
B02	70203202 K	PACKSET MN 202	1
B03	70225365	BOTTOM PLATE MN2 202	1
B04	70270202 K	SEAL BOTTOM PLATE MN 202	1
B05	70220205	LOCKING PLATE MN2 202	3
B06	01732020 K	BOLT HEX M12X25X1.25 SET 6 PCS	1
B07	01732523 K	WASHER SPRING M12 SET 6 PCS	1
B08	01793081	EYE TRUNNION TUBE (63-52.5) L=260	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

Seal kit complete

	71907750 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.