

Specifications

Max. working pressure ⁴	190 bar
Weight	282 kg
Working volume	113 L
Total volume	122 L
Max. cyl. load (start tipping)	345 kN
Max. cyl. load (end of stroke) ²	158 kN
Max. cyl. load (end of stroke) ³	185 kN

Max. pump flow

With KO ¹	190 L/min
Without KO ¹	170 L/min
With KO ¹ below -20°C	133 L/min
Without KO ¹ below -20°C	119 L/min

Tipping time

With KO ¹	36 sec
Without KO ¹	40 sec
With KO ¹ below -20°C	51 sec
Without KO ¹ below -20°C	57 sec
Allowable lowering time	36 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	191	169	149	129	110			6230
Stroke* [mm]	1230	1250	1250	1250	1250			

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. • ⁴ Max. working pressure does not relate to max. cyl. load (end of stroke); substantial unloading required before tipping to end of stroke.

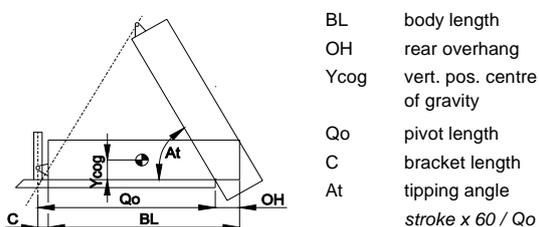
Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

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

Tipping weight



BL [mm]	8200			7850			7500		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	46	48	50	48	50	52	50	53	55
Ycog [mm]									
600	50	53	58	51	56	61	53	58	65
900	53	58	64	55	61	68	58	65	74
1200	57	63	70	60	67	77	63	72	

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>

Alpha series - Front end cylinder with single eye



FE A191-5-06230-016-K1532*390

Item no.

70547528

Pos.	Part no.	Description	Qty.
C01	71839130	DUST COVER FE 169-4/191-5	1
P01	74403441	PISTON FL2 S 110-1445-HC	1
P02	71853110 K	SLIDER FL 110 (2 X 1/2) A22	1
P03	71851110 K	OUTER STOPRING FL 110 A22	1
P04	71822110	BOTTOM PLATE PISTON FL 110	1
P05	01745050 K	CIRCLIP 100 DIN 472 (105.5x3.0)	1
P06	71870220 K	O-RING PISTON BOTTOM 110	1
P07	71847301	PISTON EYE SPH. FL 110 MK2 L=075 GR	1
P08	01226538 K	O-RING 91.67 X 3.53 MM NBR	1
P09	01770085 K	SPHERICAL BEARING D.50 DO GREASED	1
P10	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	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

S41	74604440	STAGE FL2 129-1440	1
S42	71802129 K	PACKSET FL 129/HP 129	1
S43	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S44	71851129 K	OUTER STOPRING FL 129 A22	1
S45	71852129 K	LIFTRING FL 129 A22	1

S31	74605440	STAGE FL2 149-1440	1
S32	71802149 K	PACKSET FL 149/HP 150	1
S33	71807151 K	SLIDER FL 149 A35	1
S34	71851149 K	OUTER STOPRING FL 149 A22	1
S35	71852149 K	LIFTRING FL 149 A22	1

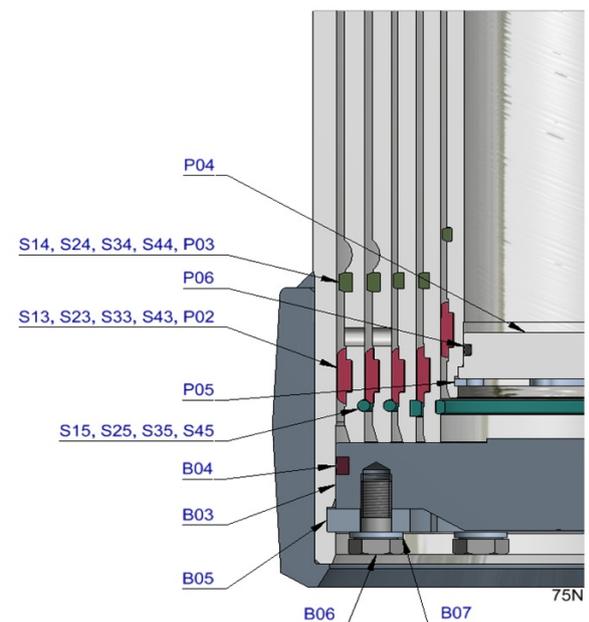
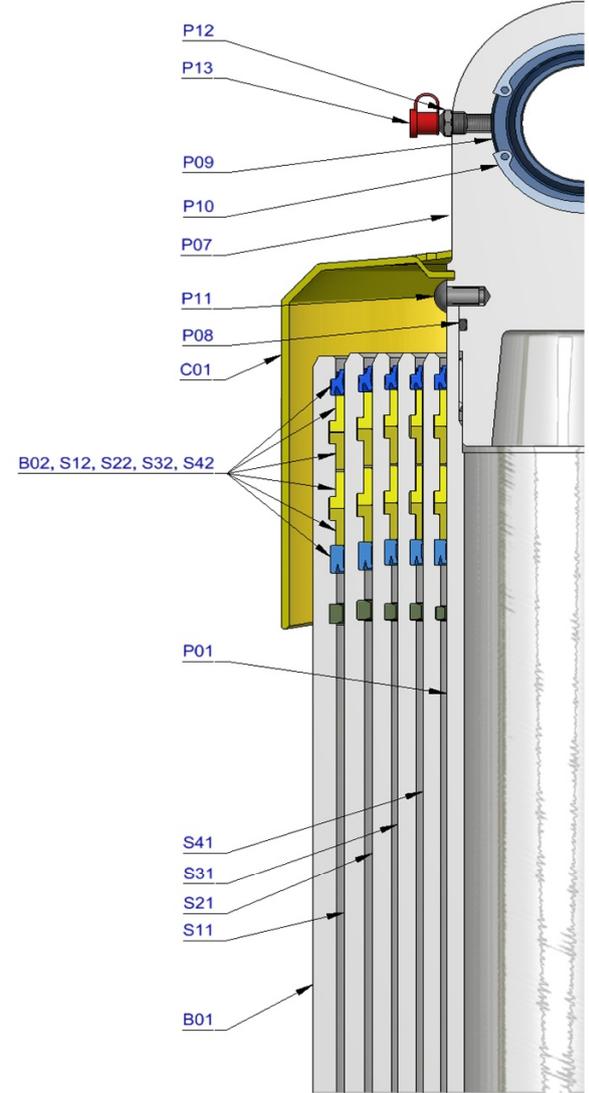
S21	74606440	STAGE FL2 169-1440	1
S22	71802169 K	PACKSET FL 169	1
S23	71807171 K	SLIDER FL 169 A35	1
S24	71851169 K	OUTER STOPRING FL 169 A22	1
S25	71813169 K	LIFTRING FL 169x5	1

S11	74607440	STAGE FL2 191-1440	1
S12	71802191 K	PACKSET FL 191	1
S13	71807193 K	SLIDER FL 191 A35	1
S14	71851191 K	OUTER STOPRING FL 191 A22	1
S15	71813191 K	LIFTRING FL 191x5	1

B01	74508447	BASE FL2 214-1491-4/4BSAE-390	1
B02	71802214 K	PACKSET FL 214	1
B03	71825435	BOTTOM PLATE FL2 214	1
B04	71870045 K	SEAL BOTTOM PLATE FL 214	1
B05	71820214	LOCKING PLATE FL 214	3
B06	01732020 K	BOLT HEX M12X25X1.25 SET 6 PCS	1
B07	01732523 K	WASHER SPRING M12 SET 6 PCS	1

Seal kit complete

	71908750 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.