

Specifications

Max. working pressure	170 bar
Weight	265 kg
Working volume	96 L
Total volume	104 L
Max. cyl. load (start tipping)	245 kN
Max. cyl. load (end of stroke) ²	78 kN
Max. cyl. load (end of stroke) ³	91 kN

Max. pump flow

With KO ¹	195 L/min
Without KO ¹	137 L/min
With KO ¹ below -20°C	137 L/min
Without KO ¹ below -20°C	96 L/min

Tipping time

With KO ¹	30 sec
Without KO ¹	42 sec
With KO ¹ below -20°C	43 sec
Without KO ¹ below -20°C	60 sec
Allowable lowering time	24 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	169	149	129	110	91			6950
Stroke* [mm]	1385	1410	1415	1420	1320			

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.

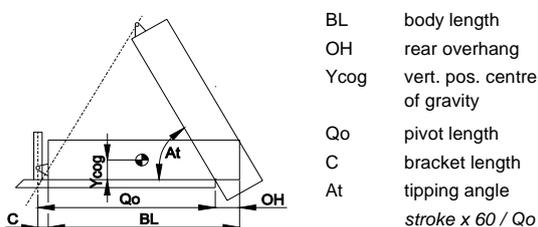
Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

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

Tipping weight



BL [mm]	9200			8750			8300		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	45	47	49	48	50	52	51	53	55
Ycog [mm]									
600	30	32	34	31	33	36	32	35	38
900	31	34	37	33	36	39	35	38	42
1200	33	36	40	35	38	43	37	42	48

Tipping weight [ton] at maximum pressure of 170 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 A169-5-06950-019-K1729-HD

Item no.

70536574

Pos.	Part no.	Description	Qty.
C01	71839131	DUST COVER FE 169-5/179-5/191-6	1
P01	74412653	PISTON FL2 S 091-1645-HD-HC (SR=100)	1
P02	71807093 K	SLIDER FL 091 (2 X 1/2) A35	1
P03	71851091 K	OUTER STOPRING FL 091 A22	2
P04	71822705	BOTTOM PLATE PISTON FL 091 MK2 HD	1
P05	01745020 K	CIRCLIP 78 DIN 472 (82.5x2.5)	1
P06	71870215 K	O-RING PISTON BOTTOM 091	1
P07	71847201	PISTON EYE SPH. FL 091 MK2 L=075 GR	1
P08	01226430 K	O-RING 72.62 X 3.53 MM	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	74613650	STAGE FL2 110-1640-HD	1
S42	71808110 K	PACKSET FL 110/HP 110 TANDEM SEAL	1
S43	71807112 K	SLIDER FL 110 (2 X 1/2) A35	1
S44	71851110 K	OUTER STOPRING FL 110 A22	2
S45	71852110 K	LIFTRING FL 110 A22	1

S31	74614650	STAGE FL2 129-1640-HD	1
S32	71808129 K	PACKSET FL 129/HP 129 TANDEM SEAL	1
S33	71807131 K	SLIDER FL 129 (2 X 1/2) A35	1
S34	71851129 K	OUTER STOPRING FL 129 A22	2
S35	71852129 K	LIFTRING FL 129 A22	1

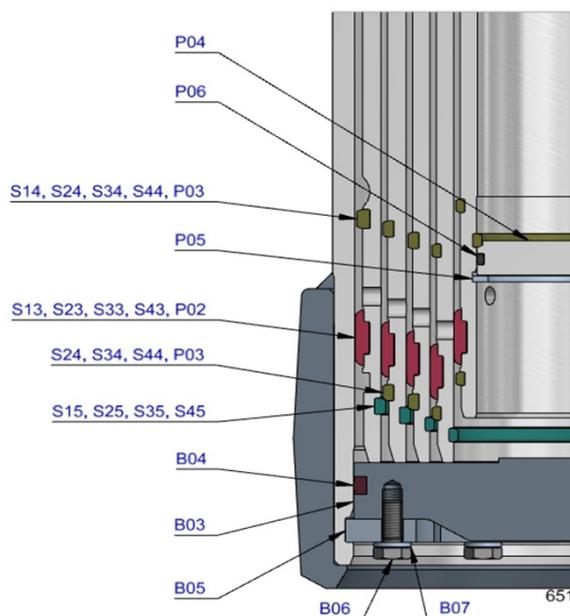
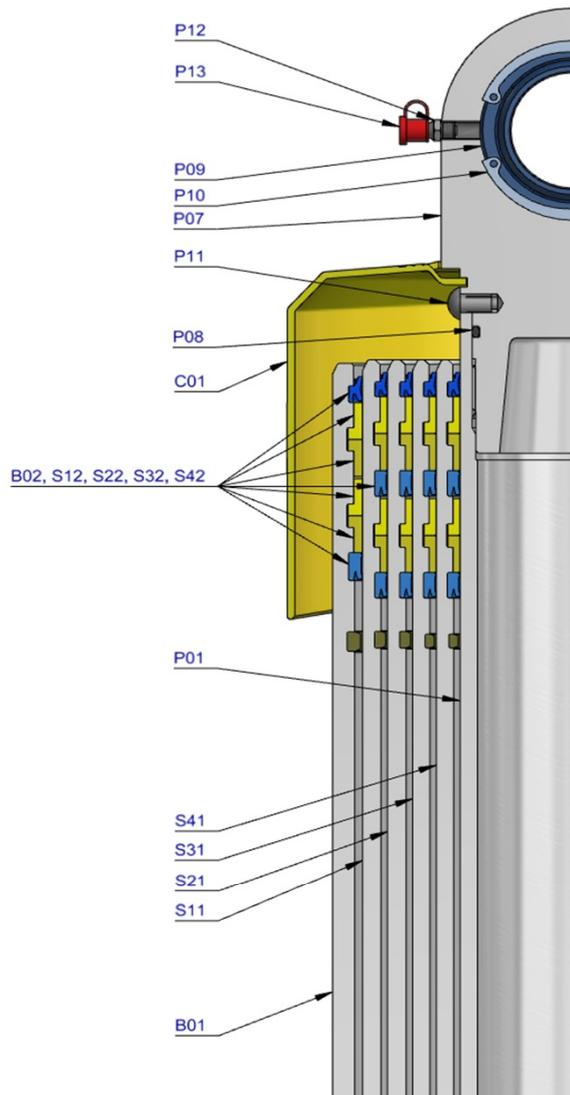
S21	74615640	STAGE FL2 149-1640-HD	1
S22	71808149 K	PACKSET FL 149/HP 150 TANDEM SEAL	1
S23	71807151 K	SLIDER FL 149 A35	1
S24	71851149 K	OUTER STOPRING FL 149 A22	2
S25	71852149 K	LIFTRING FL 149 A22	1

S11	74616640	STAGE FL2 169-1640-HD	1
S12	71808169 K	PACKSET FL 169 TANDEM SEAL	1
S13	71807171 K	SLIDER FL 169 A35	1
S14	71851169 K	OUTER STOPRING FL 169 A22	1
S15	71852169 K	LIFTRING FL 169 A22	1

B01	74517644	BASE FL2 191-1683-4/4BSAE-290-HD	1
B02	71802191 K	PACKSET FL 191	1
B03	71825430	BOTTOM PLATE FL2 191	1
B04	71870040 K	SEAL BOTTOM PLATE FL 191	1
B05	71820195	LOCKING PLATE FL2 191	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

	71908651 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.