

Specifications

Max. working pressure	190 bar
Weight	237 kg
Working volume	86 L
Total volume	93 L
Max. cyl. load (start tipping)	245 kN
Max. cyl. load (end of stroke) ²	94 kN
Max. cyl. load (end of stroke) ³	110 kN

Max. pump flow

With KO ¹	190 L/min
Without KO ¹	137 L/min
With KO ¹ below -20°C	133 L/min
Without KO ¹ below -20°C	96 L/min

Tipping time

With KO ¹	27 sec
Without KO ¹	38 sec
With KO ¹ below -20°C	39 sec
Without KO ¹ below -20°C	54 sec
Allowable lowering time	27 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	169	149	129	110	91			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.

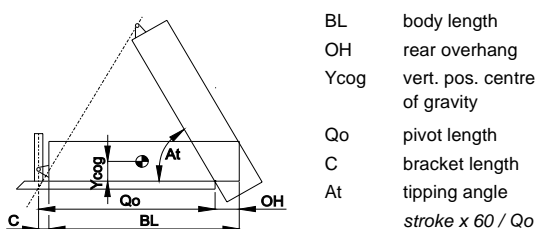
Related documentation

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	34	37	40	35	38	42	36	40	45
900	36	39	44	38	41	47	40	44	51
1200	39	43	48	41	46	52	43	49	

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	74402471	PISTON FL2 S 091-1475-HC	1
P02	71853091 K	SLIDER FL 091 (2 X 1/2) A22	1
P03	71851091 K	OUTER STOPRING FL 091 A22	1
P04	71822091	BOTTOM PLATE PISTON FL 091	1
P05	01745012 K	CIRCLIP 82 DIN 472 (87.5x2.5)	1
P06	71870215 K	O-RING PISTON BOTTOM 091	1
P07	71847200	PISTON EYE SPH. FL 091 MK2 L=075	1
P08	01226430 K	O-RING 72.62 X 3.53 MM	1
P09	71875450 K	SPHERICAL BEARING D.50 MAINT. FREE	1
P10	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2

S41	74603440	STAGE FL2 110-1440	1
S42	71802110 K	PACKSET FL 110	1
S43	71853110 K	SLIDER FL 110 (2 X 1/2) A22	1
S44	71851110 K	OUTER STOPRING FL 110 A22	1
S45	71852110 K	LIFTRING FL 110 A22	1

S31	74604440	STAGE FL2 129-1440	1
S32	71802129 K	PACKSET FL 129/HP 129	1
S33	71853129 K	SLIDER FL 129 (2 X 1/2) A22	1
S34	71851129 K	OUTER STOPRING FL 129 A22	1
S35	71852129 K	LIFTRING FL 129 A22	1

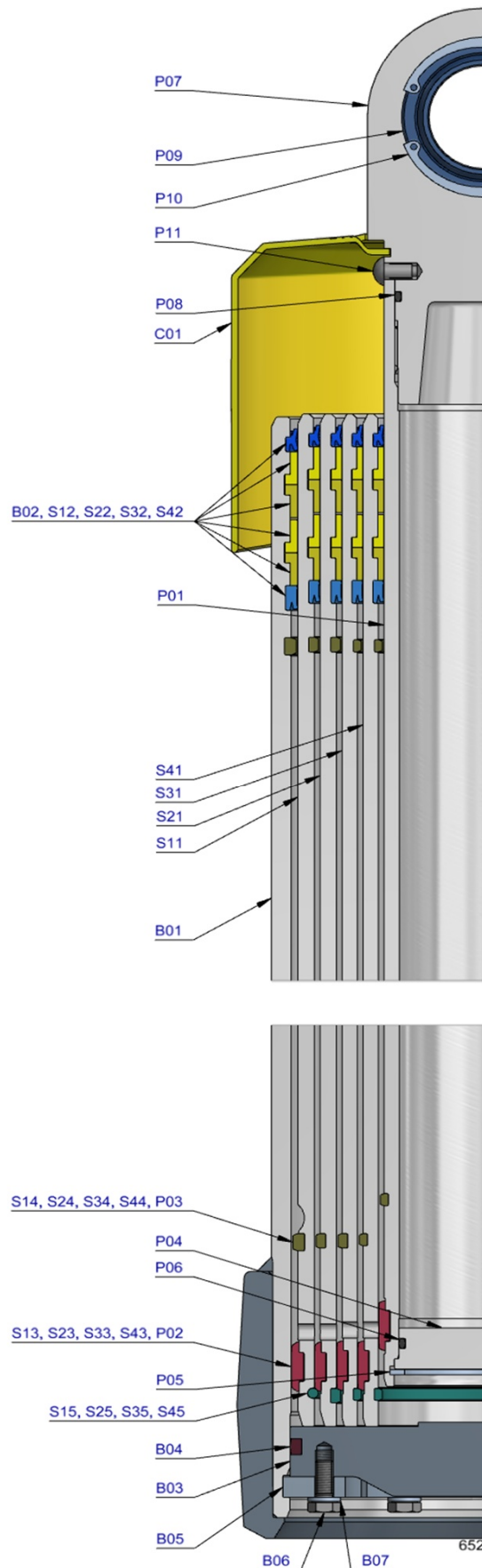
S21	74605440	STAGE FL2 149-1440	1
S22	71802149 K	PACKSET FL 149/HP 150	1
S23	71807151 K	SLIDER FL 149 A35	1
S24	71851149 K	OUTER STOPRING FL 149 A22	1
S25	71852149 K	LIFTRING FL 149 A22	1

S11	74606440	STAGE FL2 169-1440	1
S12	71802169 K	PACKSET FL 169	1
S13	71807171 K	SLIDER FL 169 A35	1
S14	71851169 K	OUTER STOPRING FL 169 A22	1
S15	71813169 K	LIFTRING FL 169x5	1

B01	74507442	BASE FL2 191-1483-4/4BSAE-190-90	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

	71908650 K	Consists of all packsets with packset grease and O-rings	
--	------------	--	--



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.