

Specifications

Max. working pressure	220 bar
Weight	246 kg
Working volume	91 L
Total volume	98 L
Max. cyl. load (start tipping)	295 kN
Max. cyl. load (end of stroke) ²	135 kN
Max. cyl. load (end of stroke) ³	157 kN

Max. pump flow

With KO ¹	190 L/min
Without KO ¹	162 L/min
With KO ¹ below -20°C	133 L/min
Without KO ¹ below -20°C	113 L/min

Tipping time

With KO ¹	29 sec
Without KO ¹	34 sec
With KO ¹ below -20°C	41 sec
Without KO ¹ below -20°C	49 sec
Allowable lowering time	29 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	179	157	137	118	99			5830
Stroke* [mm]	1150	1170	1170	1170	1170			

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.

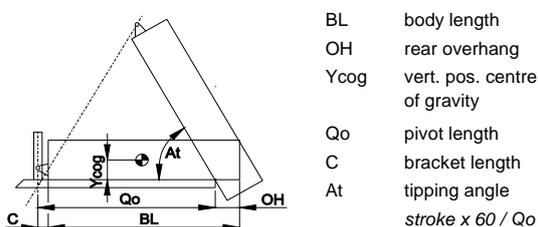
Related documentation

Bracket options: 015BRA10 & 015BRA13

Mounting instructions: CYL-0031

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

Tipping weight



BL [mm]	7700			7400			7100		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	45	48	50	48	50	52	50	52	55
Ycog [mm]									
600	47	51	56	48	53	59	50	55	62
900	50	55	62	52	58	66	55	62	
1200	54	61	69	57	64		60		

Tipping weight [ton] at maximum pressure of 220 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	70463371	PISTON MN2 S 099-1365-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	01770580 K	CIRCLIP 90 DIN 472 (95.5x3.5)	1
P06	70260215 K	O-RING PISTON BOTTOM 099	1
P07	70235400	PISTON EYE SPH. MN 099 MK2 L=075	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 DIN 472 (79.5x3.0)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2

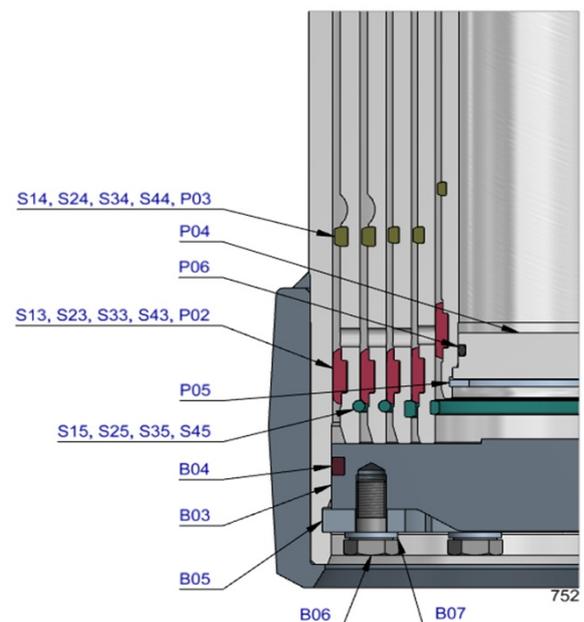
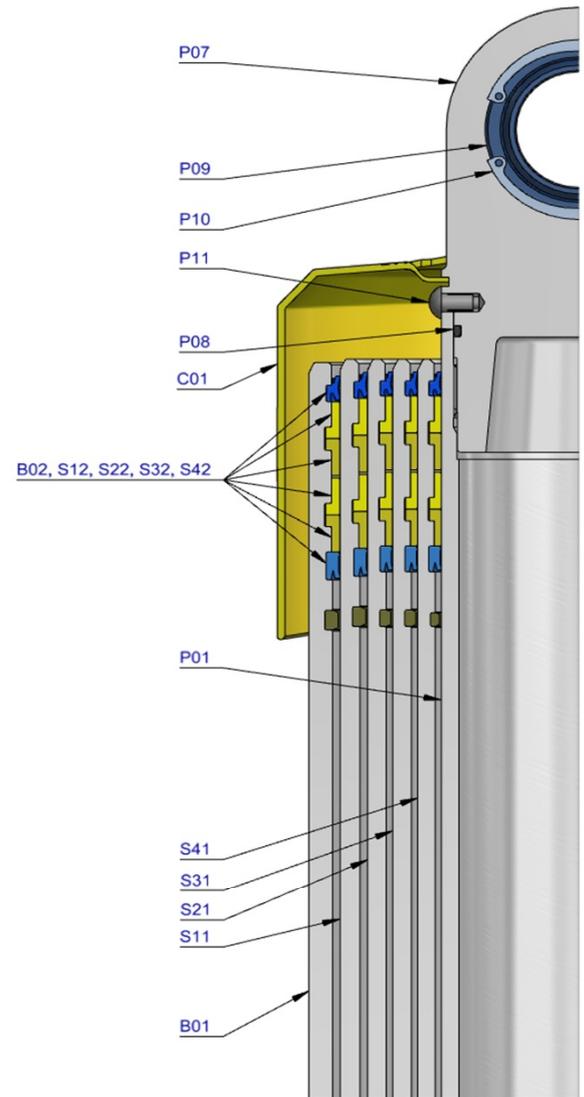
S41	70664370	STAGE MN2 118-1360	1
S42	70203118 K	PACKSET MN 118	1
S43	70209320 K	SLIDER MN 118 (2 x 1/2) A22	1
S44	70216118 K	OUTER STOPRING MN 118 A22	1
S45	70217118 K	LIFTRING MN 118 A22	1

S31	70665370	STAGE MN2 137-1360	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	70666370	STAGE MN2 157-1360	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	70667370	STAGE MN2 179-1360	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	70368370	BASE MN2 202-1411-4/4BSAE-190	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



Seal kit complete

	71907750 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.