

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

3D model is available on request or [www.hyva.com](http://www.hyva.com)

Specifications		Max. pump flow		Tipping time	
Max. working pressure	150 bar	With KO <sup>1</sup>	151 L/min	With KO <sup>1</sup>	31 sec
Weight	233 kg	Without KO <sup>1</sup>	106 L/min	Without KO <sup>1</sup>	45 sec
Working volume	79 L	With KO <sup>1</sup> below -20°C	106 L/min	With KO <sup>1</sup> below -20°C	44 sec
Total volume	86 L	Without KO <sup>1</sup> below -20°C	74 L/min	Without KO <sup>1</sup> below -20°C	64 sec
Max. cyl. load (start tipping)	205 kN			Allowable lowering time	31 sec
Max. cyl. load (end of stroke) <sup>2</sup>	58 kN				
Max. cyl. load (end of stroke) <sup>3</sup>	67 kN				

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.
- <sup>1</sup> Hyva knock-off.
- <sup>2</sup> Unsubstantial unloading (sticky load).
- <sup>3</sup> Substantial unloading.

Related documentation

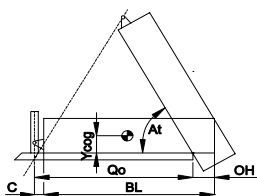
- Bracket options: 015BRA10 & 015BRA13
- Mounting instructions: CYL-0031
- Oil specifications: OIL-0011
- Spec sheet explanation: CYL-0041

Configuration

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	157	137	118	99	80			6830
Stroke* [mm]	1350	1370	1370	1370	1370			

Tipping weight

For detailed tipping calculations please refer to: <https://tipper.hyva.com>



- BL body length
  - OH rear overhang
  - Ycog vert. pos. centre of gravity
  - Qo pivot length
  - C bracket length
  - At tipping angle
- $stroke \times 60 / Qo$

BL [mm]	9000			8600			8200		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	46	47	49	48	50	52	50	53	55
Ycog [mm]									
600	20	22	23	21	23	25	22	24	26
900	22	23	25	22	24	27	24	26	29
1200	23	25	27	24	26	30	26	29	33

Tipping weight [ton] at maximum pressure of 150 bar for a vertically mounted cylinder and C is 158 mm

Pos.	Part no.	Description	Qty.
C01	71839122	DUST COVER FE 149-5/157-5	1
P01	70432581	PISTON MN3 S 080-1585-HC	1
P02	70209300K	SLIDER MN 080 (2 x 1/2) A22	1
P03	70216080K	OUTER STOPRING MN 080 A22	1
P04	70224080	BOTTOM PLATE PISTON MN 080	1
P05	01745035K	CIRCLIP 70 DIN 472 (74.5x2.5)	1
P06	70260210K	O-RING PISTON BOTTOM 080	1
P07	70235310	PISTON EYE SPH. MN3 080 L=075	1
P08	70260110K	O-RING 63.09 X 3.53 MM	1
P09	71875450K	SPHERICAL BEARING D.50.3 MAINT. FREE	1
P10	01770560K	CIRCLIP 75 DIN 472 (79.5x2.5)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2

S41	70663580	STAGE MN2 099-1580	1
S42	70203099K	PACKSET MN 099	1
S43	70209310K	SLIDER MN 099 (2 x 1/2) A22	1
S44	70216099K	OUTER STOPRING MN 099 A22	1
S45	70217099K	LIFTRING MN 099 A22	1

S31	70664580	STAGE MN2 118-1580	1
S32	70203118K	PACKSET MN 118	1
S33	70209320K	SLIDER MN 118 (2 x 1/2) A22	1
S34	70216118K	OUTER STOPRING MN 118 A22	1
S35	70217118K	LIFTRING MN 118 A22	1

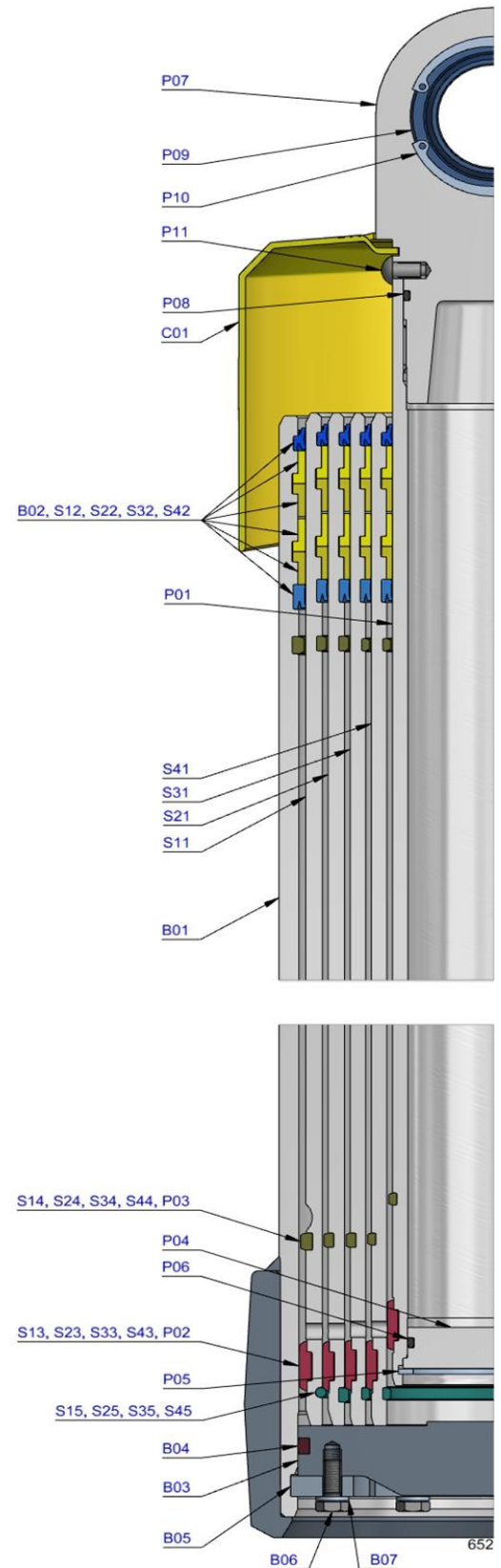
S21	70665580	STAGE MN2 137-1580	1
S22	70203137K	PACKSET MN 137	1
S23	70207137K	SLIDER MN 137 A35	1
S24	70216137K	OUTER STOPRING MN 137 A22	1
S25	70217137K	LIFTRING MN 137 A22	1

S11	70666580	STAGE MN2 157-1580	1
S12	70203157K	PACKSET MN 157	1
S13	70207157K	SLIDER MN 157 A35	1
S14	70216157K	OUTER STOPRING MN 157 A22	1
S15	70213157K	LIFTRING MN 157x5 MK2	1

B01	70367588	BASE MN2 179-1623-4/4BSAE-700	1
B02	70203179K	PACKSET MN 179	1
B03	70225360	BOTTOM PLATE MN2 179	1
B04	70270179K	SEAL BOTTOM PLATE MN 179	1
B05	70220185	LOCKING PLATE MN2 179	3
B06	01732055K	BOLT HEX M8X20X1.25 SET 6 PCS	1
B07	01732559K	WASHER SPRING M8 SET 6 PCS	1

### Seal kit complete

71907650K	Consists of all packsets with packset grease and O-rings
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### Notes

The inner stopring and piston bottom are pre-mounted on spare bases, stage and pistons. Therefore, when ordering new tubes, it is not required to order these parts separately.

For repair instructions see: CYL-0040. Serial no. is located on type plate and near type plate support.