

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

3D model is available on request or www.hyva.com

Specifications		Max. pump flow		Tipping time	
Max. working pressure	170 bar	With KO ¹	190 L/min	With KO ¹	44 sec
Weight	481 kg	Without KO ¹	162 L/min	Without KO ¹	52 sec
Working volume	140 L	With KO ¹ below -20°C	133 L/min	With KO ¹ below -20°C	63 sec
Total volume	152 L	Without KO ¹ below -20°C	113 L/min	Without KO ¹ below -20°C	74 sec
Max. cyl. load (start tipping)	295 kN			Allowable lowering time	44 sec
Max. cyl. load (end of stroke) ²	93 kN				
Max. cyl. load (end of stroke) ³	109 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.
- ¹ Hyva knock-off.
- ² Unsubstantial unloading (sticky load).
- ³ Substantial unloading.

Related documentation

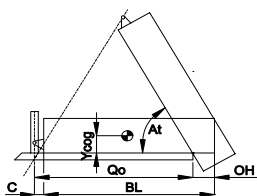
Bracket options:	015BRA10 & 015BRA12
Mounting instructions:	CYL-0030
Oil specifications:	OIL-0011
Spec sheet explanation:	CYL-0041

Configuration

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	179	157	137	118	99			9030
Stroke* [mm]	1790	1810	1810	1810	1810			

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 x 60 / Qo

BL [mm] OH [mm] At [°]	12000			11500			11000		
	200	500	800	200	500	800	200	500	800
Ycog [mm]	44	45	47	46	48	49	48	50	52
C	35	36	38	35	37	39	37	39	41
At	900	36	38	40	37	39	41	38	41
	1200	38	40	42	39	41	44	41	43

Tipping weight [ton] at maximum pressure of 170 bar for a vertically mounted cylinder and C is 229 mm

Pos.	Part no.	Description	Qty.
C01	71839050	DUST COVER FC LOW 15-273	1
C02	71737935	COVER 273-1895 PIN60 A360 SPH LOCK	1
C03	01702956K	WASHER M48 DIN 125B ZP	1
C04	01702907K	TOPNUT NYLOC M48x3 DIN 985 ZP	1
C05	01791953	O-RING COVER D.273	1
C06	15014550K	BOLT HSHC M12X30X1.75 Q8.8 DIN 912 ZP	1
P01	70433871	PISTON MN3 S 099-2095-HC	1
P02	70209310K	SLIDER MN 099 (2 x 1/2) A22	1
P03	70216099K	OUTER STOPRING MN 099 A22	1
P04	70224099	BOTTOM PLATE PISTON MN 099	1
P05	01770580K	CIRCLIP 90 DIN 472 (95.5x3.5)	1
P06	70260215K	O-RING PISTON BOTTOM 099	1
P07	70232400	PISTON HEAD MN3 099	1
P08	70260115K	O-RING 82.14 X 3.53 MM	1

S41	70664871	STAGE MN2 118-2090-HC	1
S42	70203118K	PACKSET MN 118	1
S43	70209320K	SLIDER MN 118 (2 x 1/2) A22	1
S44	70216118K	OUTER STOPRING MN 118 A22	1
S45	70217118K	LIFTRING MN 118 A22	1

S31	70665871	STAGE MN2 137-2090-HC	1
S32	70203137K	PACKSET MN 137	1
S33	70207137K	SLIDER MN 137 A35	1
S34	70216137K	OUTER STOPRING MN 137 A22	1
S35	70217137K	LIFTRING MN 137 A22	1

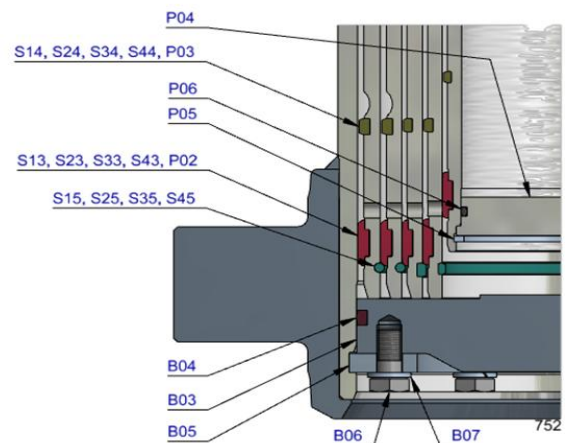
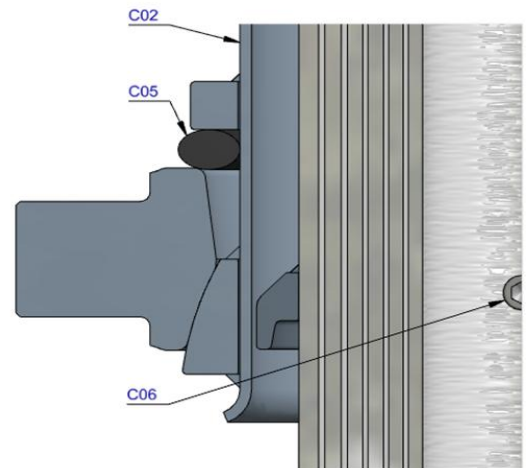
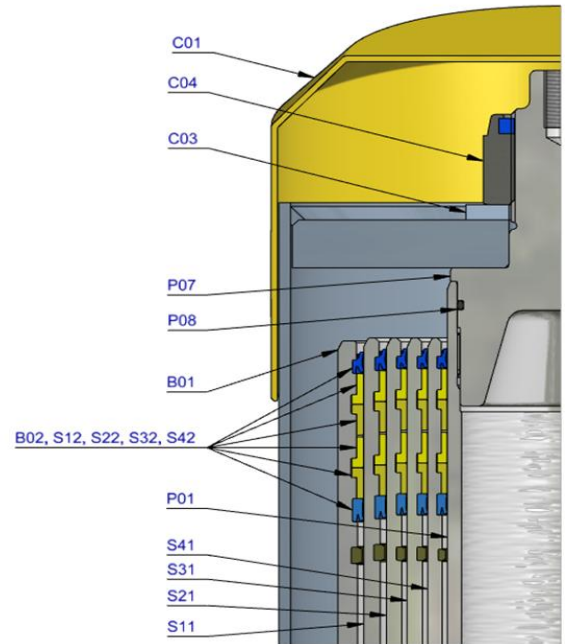
S21	70666871	STAGE MN2 157-2090-HC	1
S22	70203157K	PACKSET MN 157	1
S23	70207157K	SLIDER MN 157 A35	1
S24	70216157K	OUTER STOPRING MN 157 A22	1
S25	70213157K	LIFTRING MN 157x5 MK2	1

S11	70667871	STAGE MN2 179-2090-HC	1
S12	70203179K	PACKSET MN 179	1
S13	70207179K	SLIDER MN 179 A35	1
S14	70216179K	OUTER STOPRING MN 179 A22	1
S15	70213179K	LIFTRING MN 179x5 MK2	1

B01	70368871R1795	BASE MN2 202-2141-4/4BSAE-190-C273	1
B02	70203202K	PACKSET MN 202	1
B03	70225365	BOTTOM PLATE MN2 202	1
B04	70270202K	SEAL BOTTOM PLATE MN 202	1
B05	70220205	LOCKING PLATE MN2 202	3
B06	01732020K	BOLT HEX M12X25X1.25 SET 6 PCS	1
B07	01732523K	WASHER SPRING M12 SET 6 PCS	1

Seal kit complete

71907750K	Consists of all packsets with packset grease and O-rings
-----------	--



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.