

\* 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 <sup>4</sup>	250 bar	With KO <sup>1</sup>	170 L/min	With KO <sup>1</sup>	31 sec
Weight	258 kg	Without KO <sup>1</sup>	119 L/min	Without KO <sup>1</sup>	44 sec
Working volume	87 L	With KO <sup>1</sup> below -20°C	119 L/min	With KO <sup>1</sup> below -20°C	44 sec
Total volume	92 L	Without KO <sup>1</sup> below -20°C	83 L/min	Without KO <sup>1</sup> below -20°C	63 sec
Max. cyl. load (start tipping)	245 kN			Allowable lowering time	31 sec
Max. cyl. load (end of stroke) <sup>2</sup>	99 kN				
Max. cyl. load (end of stroke) <sup>3</sup>	115 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 grey (DB7350) 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. • <sup>4</sup> Max. working pressure does not relate to max. cyl. load (end of stroke); substantial unloading required before tipping to end of stroke. • 50 mm clearance required between the headboard and the stages at end of stroke (deviation from CYL-0031).

Related documentation

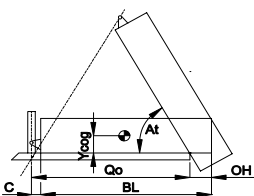
- Bracket options: 015BRA10 & 015BRA13
- Mounting instructions: CYL-0031
- Oil specifications: OIL-0011
- Spec sheet explanation: CYL-0041

Configuration

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	169	149	129	110	85			6380
Stroke* [mm]	1280	1300	1300	1300	1200			

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]	8400			8050			7700		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	46	47	50	48	50	52	50	53	55
Ycog [mm]	600			800			700		
	39	42	45	40	43	47	41	45	50
	41	45	49	43	47	52	45	50	57
	44	49	54	46	52		49		

Tipping weight [ton] at maximum pressure of 250 bar for a vertically mounted cylinder and C is 158 mm

Pos.	Part no.	Description	Qty.
C01	71838901	DUST COVER FES 169-5	1
P01	74482533	PISTON FL3 S 085-1528-HC (SR=100)	1
P02	71853085K	SLIDER FL 085 (2 X 1/2) A22	1
P03	71851085K	OUTER STOPRING FL 085 A22	1
P04	75322085	BOTTOM PLATE PISTON 085	1
P05	01770560K	CIRCLIP 75 DIN 472 (79.5x2.5)	1
P06	75372085K	O-RING PISTON BOTTOM HP 085	1
P07	71847151	PISTON EYE SPH. FL3 085 L=075 GR	1
P08	01225807K	O-RING 66.27 X 3.53 MM	1
P09	01770085K	SPHERICAL BEARING D.50.3 DO GREASED	1
P10	01770560K	CIRCLIP 75 DIN 472 (79.5x2.5)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2
P12	56288044K	GREASE NIPPLE M8x1 DIN 71412	1
P13	01317670K	GREASER PROTECTION CAP	1

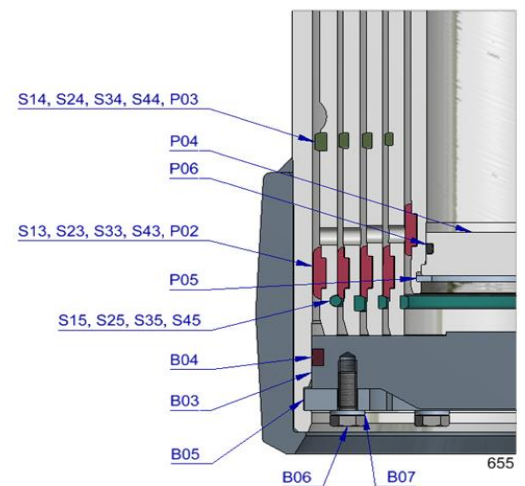
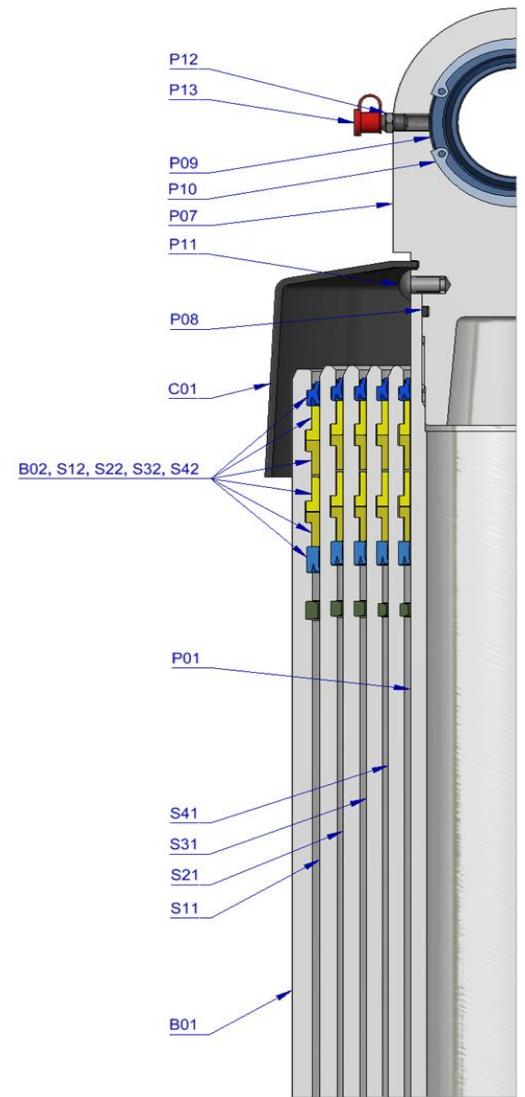
S41	74633511	STAGE FL2 110-1510 ID90-HC	1
S42	75302110K	PACKSET HP 110	1
S43	71853110K	SLIDER FL 110 (2 X 1/2) A22	1
S44	71851110K	OUTER STOPRING FL 110 A22	1
S45	71850111K	INNER STOPRING/LIFTRING FL 110 ID 90 A22	1

S31	74604511	STAGE FL2 129-1510-HC	1
S32	71802129K	PACKSET FL 129/HP 129	1
S33	71853129K	SLIDER FL 129 (2 X 1/2) A22	1
S34	71851129K	OUTER STOPRING FL 129 A22	1
S35	71852129K	LIFTRING FL 129 A22	1

S21	74605511	STAGE FL2 149-1510-HC	1
S22	71802149K	PACKSET FL 149/HP 150	1
S23	71807151K	SLIDER FL 149 A35	1
S24	71851149K	OUTER STOPRING FL 149 A22	1
S25	71852149K	LIFTRING FL 149 A22	1

S11	74606511	STAGE FL2 169-1510-HC	1
S12	71802169K	PACKSET FL 169	1
S13	71807171K	SLIDER FL 169 A35	1
S14	71851169K	OUTER STOPRING FL 169 A22	1
S15	71813169K	LIFTRING FL 169x5	1

B01	74507530	BASE FL2 191-1553-4/4BSAE-190-TP290	1
B02	71802191K	PACKSET FL 191	1
B03	71825430	BOTTOM PLATE FL2 191	1
B04	71870040K	SEAL BOTTOM PLATE FL 191	1
B05	71820195	LOCKING PLATE FL2 191	3
B06	01732055K	BOLT HEX M8X20X1.25 SET 6 PCS	1
B07	01732559K	WASHER SPRING M8 SET 6 PCS	1



Seal kit complete

71908652K	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.