

\* 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	250 bar	With KO <sup>1</sup>	195 L/min	With KO <sup>1</sup>	16 sec
Weight	171 kg	Without KO <sup>1</sup>	137 L/min	Without KO <sup>1</sup>	22 sec
Working volume	51 L	With KO <sup>1</sup> below -20°C	137 L/min	With KO <sup>1</sup> below -20°C	23 sec
Total volume	56 L	Without KO <sup>1</sup> below -20°C	96 L/min	Without KO <sup>1</sup> below -20°C	31 sec
Max. cyl. load (start tipping)	245 kN			Allowable lowering time	13 sec
Max. cyl. load (end of stroke) <sup>2</sup>	153 kN				
Max. cyl. load (end of stroke) <sup>3</sup>	178 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. • 50 mm clearance required between the headboard and the stages at end of stroke (deviation from CYL-0031).

Related documentation

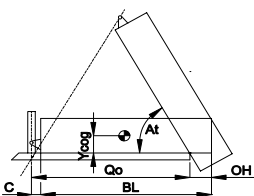
Bracket options:	015BRA10 & 015BRA13
Mounting instructions:	CYL-0031
Oil specifications:	OIL-0011
Spec sheet explanation:	CYL-0041

Configuration

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	149	129	110	91				4370
Stroke* [mm]	1110	1135	1140	985				

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]	200	5800	800	200	5650	800	200	5500	800
OH [mm]	46	500	800	47	500	800	48	500	800
At [°]	46	48	51	47	50	53	48	51	55
Ycog [mm]	46	52	60	47	53		48	55	

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	71838900	DUST COVER FES 149-4	1
P01	74472373	PISTON FL3 S 091-1365-HD-HC (SR=155)	1
P02	71807093K	SLIDER FL 091 (2 X 1/2) A35	1
P03	71851091K	OUTER STOPRING FL 091 A22	2
P04	71822705	BOTTOM PLATE PISTON FL 091 MK2 HD	1
P05	01745020K	CIRCLIP 78 DIN 472 (82.5x2.5)	1
P06	71870215K	O-RING PISTON BOTTOM 091	1
P07	71847201	PISTON EYE SPH. FL3 091 L=075 GR	1
P08	01226430K	O-RING 72.62 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

S31	74613370	STAGE FL2 110-1360-HD	1
S32	71808110K	PACKSET FL 110/HP 110 TANDEM SEAL	1
S33	71807112K	SLIDER FL 110 (2 X 1/2) A35	1
S34	71851110K	OUTER STOPRING FL 110 A22	2
S35	71852110K	LIFTRING FL 110 A22	1

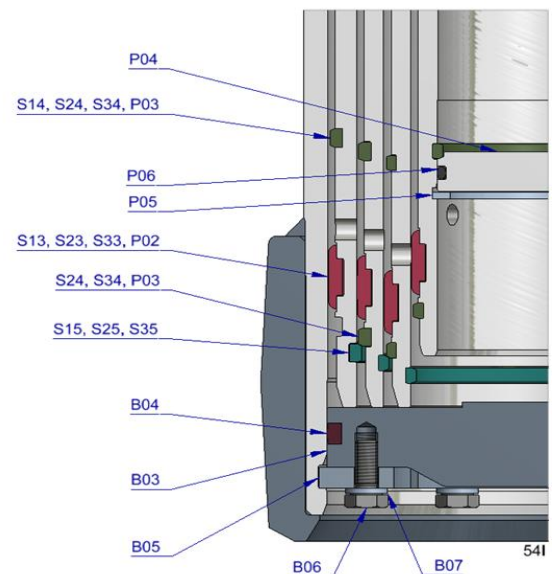
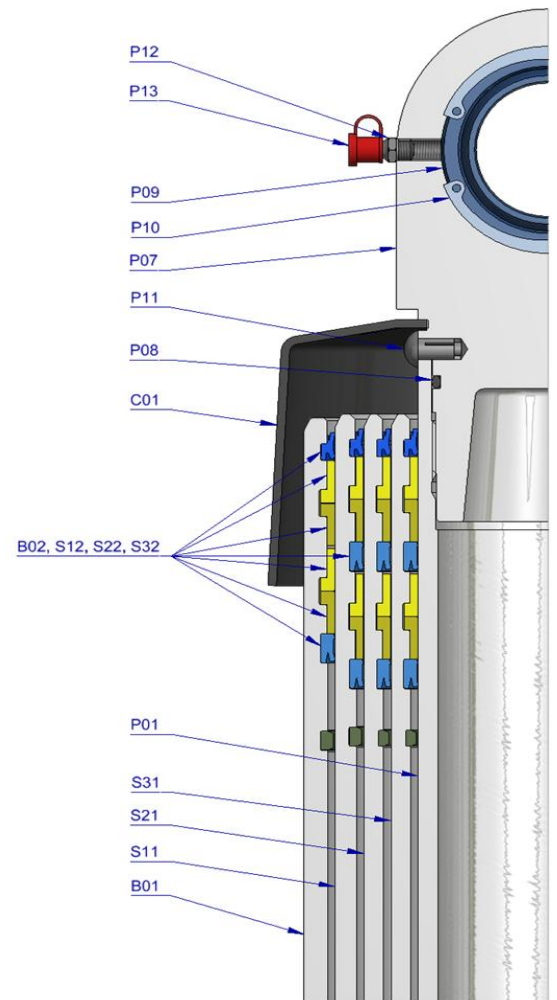
S21	74614370	STAGE FL2 129-1360-HD	1
S22	71808129K	PACKSET FL 129/HP 129 TANDEM SEAL	1
S23	71807131K	SLIDER FL 129 (2 X 1/2) A35	1
S24	71851129K	OUTER STOPRING FL 129 A22	2
S25	71852129K	LIFTRING FL 129 A22	1

S11	74615370	STAGE FL2 149-1360-HD	1
S12	71808149K	PACKSET FL 149/HP 150 TANDEM SEAL	1
S13	71807151K	SLIDER FL 149 A35	1
S14	71851149K	OUTER STOPRING FL 149 A22	1
S15	71852149K	LIFTRING FL 149 A22	1

B01	74516372	BASE FL2 169-1399-4/4BSAE-190-90-HD	1
B02	71802169K	PACKSET FL 169	1
B03	71825425	BOTTOM PLATE FL2 169	1
B04	71870035K	SEAL BOTTOM PLATE FL 169	1
B05	71820169	LOCKING PLATE FL 169	3
B06	01732055K	BOLT HEX M8X20X1.25 SET 6 PCS	1
B07	01732559K	WASHER SPRING M8 SET 6 PCS	1

Seal kit complete

71908541K	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.