

* 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	190 bar	With KO ¹	190 L/min	With KO ¹	53 sec
Weight	379 kg	Without KO ¹	170 L/min	Without KO ¹	59 sec
Working volume	167 L	With KO ¹ below -20°C	133 L/min	With KO ¹ below -20°C	76 sec
Total volume	179 L	Without KO ¹ below -20°C	119 L/min	Without KO ¹ below -20°C	84 sec
Max. cyl. load (start tipping)	440 kN			Allowable lowering time	53 sec
Max. cyl. load (end of stroke) ²	193 kN				
Max. cyl. load (end of stroke) ³	225 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

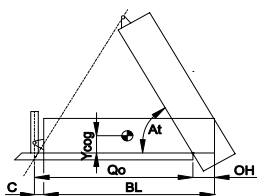
Bracket options:	015BRA10 & 015BRA13
Mounting instructions:	CYL-0031
Oil specifications:	OIL-0011
Spec sheet explanation:	CYL-0041

Configuration

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	214	191	169	149	129			7130
Stroke* [mm]	1410	1430	1430	1430	1430			

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]	9400			9200			9000		
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	46	47	49	47	48	50	48	50	52
Ycog [mm]									
600	67	71	76	68	72	77	69	73	79
900	70	75	82	72	77	84	73	79	86
1200	75	81	88	76	83	91	78	85	94

Tipping weight [ton] at maximum pressure of 190 bar for a vertically mounted cylinder and C is 158 mm

Pos.	Part no.	Description	Qty.
C01	71839150	DUST COVER FE 202-5/214-5	1
P01	74464651	PISTON FL3 S 129-1645-HC	1
P02	71853129K	SLIDER FL 129 (2 X 1/2) A22	1
P03	71851129K	OUTER STOPRING FL 129 A22	1
P04	71822129	BOTTOM PLATE PISTON FL 129	1
P05	01745052K	CIRCLIP 120 DIN 472 (127.0x4.0)	1
P06	71870225K	O-RING PISTON BOTTOM 129	1
P07	71847400	PISTON EYE SPH. FL3 129 L=075 B=60	1
P08	71870125K	O-RING 110.72 X 3.53 MM	1
P09	71875460K	SPHERICAL BEARING D.60.3 MAINT. FREE	1
P10	01770580K	CIRCLIP 90 DIN 472 (95.5x3.5)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2

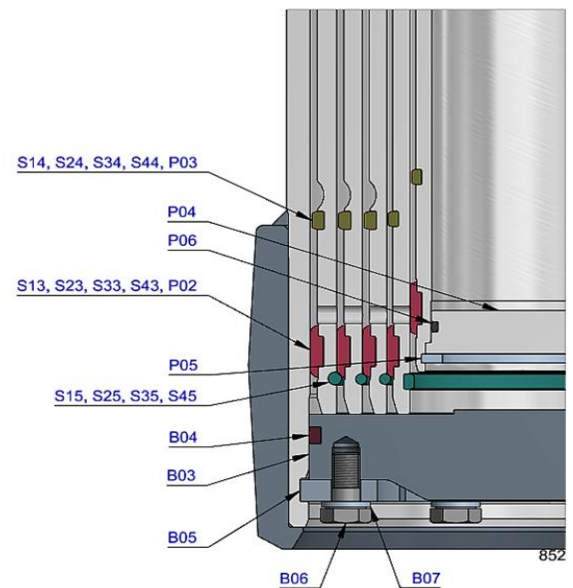
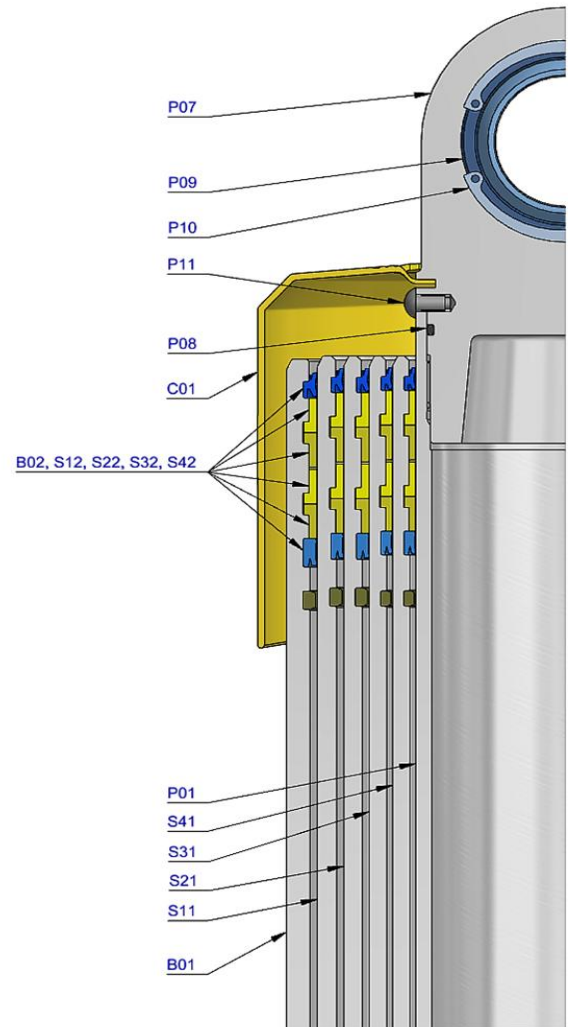
S41	74605651	STAGE FL2 149-1640-HC	1
S42	71802149K	PACKSET FL 149/HP 150	1
S43	71807151K	SLIDER FL 149 A35	1
S44	71851149K	OUTER STOPRING FL 149 A22	1
S45	71852149K	LIFTRING FL 149 A22	1

S31	74606651	STAGE FL2 169-1640-HC	1
S32	71802169K	PACKSET FL 169	1
S33	71807171K	SLIDER FL 169 A35	1
S34	71851169K	OUTER STOPRING FL 169 A22	1
S35	71813169K	LIFTRING FL 169x5	1

S21	74607651	STAGE FL2 191-1640-HC	1
S22	71802191K	PACKSET FL 191	1
S23	71807193K	SLIDER FL 191 A35	1
S24	71851191K	OUTER STOPRING FL 191 A22	1
S25	71813191K	LIFTRING FL 191x5	1

S11	74608651	STAGE FL2 214-1640-HC	1
S12	71802214K	PACKSET FL 214	1
S13	71807216K	SLIDER FL 214 A35	1
S14	71851214K	OUTER STOPRING FL 214 A22	1
S15	71813214K	LIFTRING FL 214x6	1

B01	74509657	BASE FL2 238-1691-4/4BSAE-390	1
B02	71802238K	PACKSET FL 238	1
B03	71825440	BOTTOM PLATE FL2 238	1
B04	71870050K	SEAL BOTTOM PLATE FL 238	1
B05	71820238	LOCKING PLATE FL 238	3
B06	01732020K	BOLT HEX M12X25X1.25 SET 6 PCS	1
B07	01732523K	WASHER SPRING M12 SET 6 PCS	1



Seal kit complete

71908850K	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.