Alpha series - Front end cylinder with single eye

HYVA®

FE A169-5-06050-019-K1564-HD	Item no.	70536490
	Tipping weight	34 - 53 ton

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

3D model is available on request

Specifications

Max. working pressure	190	bar
Weight	237	kg
Working volume	83	L
Total volume	90	L
Max. cyl. load (start tipping)	245	kN
Max. cyl. load (end of stroke)²	98	kN
Max. cyl. load (end of stroke)³	115	kN

Max. pump flow

With KO¹	195	L/min
Without KO¹	137	L/min
With KO¹ below -20°C	137	L/min
Without KO¹ below -20°C	96	L/min

Tipping time

With KO¹	26	sec
Without KO¹	36	sec
With KO¹ below -20°C	37	sec
Without KO¹ below -20°C	51	sec
Allowable lowering time	20	sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	169	149	129	110	91			
Stroke* [mm]	1185	1210	1215	1220	1220			6050

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.
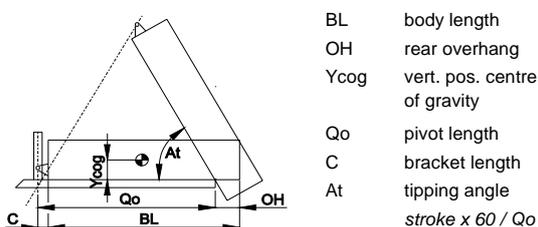
Related documentation

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

Tipping weight

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]		8000			7650			7300	
OH [mm]	200	500	800	200	500	800	200	500	800
At [°]	45	47	50	48	50	52	50	53	55
Ycog [mm]									
600	34	37	40	35	38	42	37	40	45
900	36	40	44	38	42	47	40	45	52
1200	39	43	49	41	46	53	44	50	

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

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

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Pos.	Part no.	Description	Qty.
C01	71839131	DUST COVER FE 169-5/179-5/191-6	1

Pos.	Part no.	Description	Qty.
P01	74412458	PISTON FL2 S 091-1480-HD-HC	1
P02	71807093 K	SLIDER FL 091 (2 X 1/2) A35	1
P03	71851091 K	OUTER STOPRING FL 091 A22	2
P04	71822705	BOTTOM PLATE PISTON FL 091 MK2 HD	1
P05	01745020 K	CIRCLIP 78 DIN 472 (82.5x2.5)	1
P06	71870215 K	O-RING PISTON BOTTOM 091	1
P07	71847201	PISTON EYE SPH. FL 091 MK2 L=075 GR	1
P08	01226430 K	O-RING 72.62 X 3.53 MM	1
P09	01770085 K	SPHERICAL BEARING D.50 DO GREASED	1
P10	01770560 K	CIRCLIP 75 DIN 472 (79.5x3.0)	1
P11	71875012	PIN ROUND HEAD GROOVED 8x15 mm	2
P12	56288044 K	GREASE NIPPLE M8x1 DIN 71412	1
P13	01317670 K	GREASER PROTECTION CAP	1

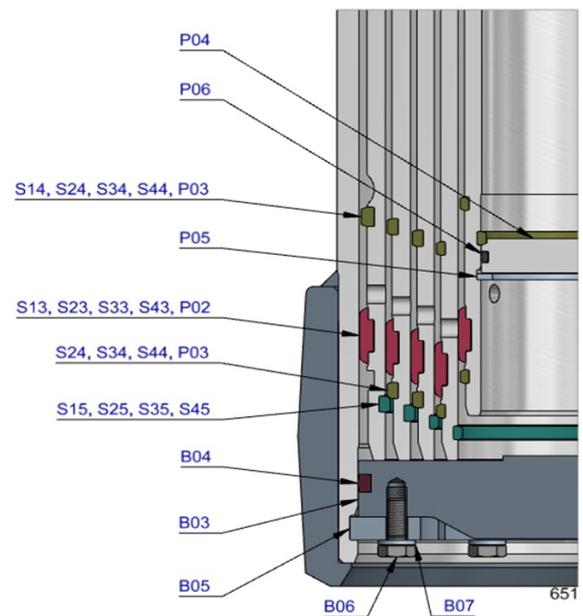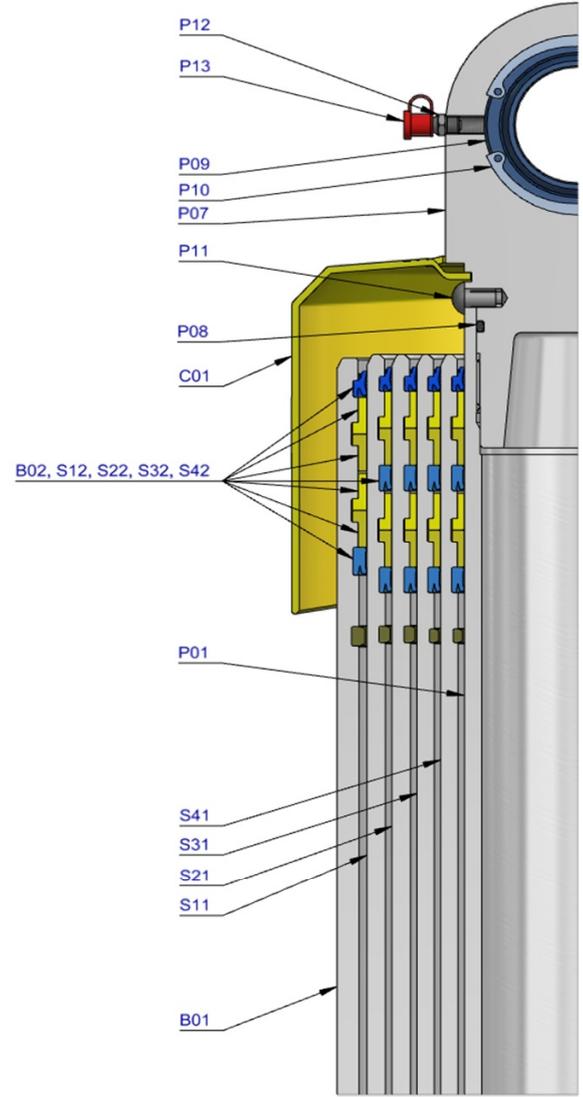| Pos.	Part no.	Description	Qty.
S41	74613440	STAGE FL2 110-1440-HD	1
S42	71808110 K	PACKSET FL 110/HP 110 TANDEM SEAL	1
S43	71807112 K	SLIDER FL 110 (2 X 1/2) A35	1
S44	71851110 K	OUTER STOPRING FL 110 A22	2
S45	71852110 K	LIFTRING FL 110 A22	1

Pos.	Part no.	Description	Qty.
S31	74614440	STAGE FL2 129-1440-HD	1
S32	71808129 K	PACKSET FL 129/HP 129 TANDEM SEAL	1
S33	71807131 K	SLIDER FL 129 (2 X 1/2) A35	1
S34	71851129 K	OUTER STOPRING FL 129 A22	2
S35	71852129 K	LIFTRING FL 129 A22	1

Pos.	Part no.	Description	Qty.
S21	74615440	STAGE FL2 149-1440-HD	1
S22	71808149 K	PACKSET FL 149/HP 150 TANDEM SEAL	1
S23	71807151 K	SLIDER FL 149 A35	1
S24	71851149 K	OUTER STOPRING FL 149 A22	2
S25	71852149 K	LIFTRING FL 149 A22	1

Pos.	Part no.	Description	Qty.
S11	74616440	STAGE FL2 169-1440-HD	1
S12	71808169 K	PACKSET FL 169 TANDEM SEAL	1
S13	71807171 K	SLIDER FL 169 A35	1
S14	71851169 K	OUTER STOPRING FL 169 A22	1
S15	71852169 K	LIFTRING FL 169 A22	1

Pos.	Part no.	Description	Qty.
B01	74517444	BASE FL2 191-1483-4/4BSAE-290-HD	1
B02	71802191 K	PACKSET FL 191	1
B03	71825430	BOTTOM PLATE FL2 191	1
B04	71870040 K	SEAL BOTTOM PLATE FL 191	1
B05	71820195	LOCKING PLATE FL2 191	3
B06	01732055 K	BOLT HEX M8X20X1.25 SET 6 PCS	1
B07	01732559 K	WASHER SPRING M8 SET 6 PCS	1

Seal kit complete

	71908651 K	Consists of all packsets with packset grease and O-rings	

Notes

The inner stopring is pre-mounted in the grooves on spare bases and stages.Therefore, when ordering new tubes, it is not required to order inner stoprings separately.

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