Alpha series - Front end cylinder with single eye

HYVA®

FE A226-5-06970-011-K1723-HD

Item no.	70139630
Tipping weight	75 - 108 ton

52
101*
Ø253
K=1723*
1" BSP SAE
390
Ø70
70   B=320   85

60   R62
(58)
30° MAX
29° MAX
(161)   Ø289   (137)

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

3D model is available on request

Specifications

Max. working pressure[4]	190 bar
Weight	430 kg
Working volume	182 L
Total volume	195 L
Max. cyl. load (start tipping)	490 kN
Max. cyl. load (end of stroke)[2]	241 kN
Max. cyl. load (end of stroke)[3]	281 kN

Max. pump flow

With KO[1]	220 L/min
Without KO[1]	190 L/min
With KO[1] below -20°C	154 L/min
Without KO[1] below -20°C	133 L/min

Tipping time

With KO[1]	50 sec
Without KO[1]	57 sec
With KO[1] below -20°C	71 sec
Without KO[1] below -20°C	81 sec
Allowable lowering time	40 sec

Extension	1	2	3	4	5	6	7	Total
Effective diameter [mm]	226	202	179	157	137			
Stroke* [mm]	1370	1390	1400	1405	1405			6970

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. ● [4] Max. working pressure does not relate to max. cyl. load (end of stroke); substantial unloading required before tipping to end of stroke.
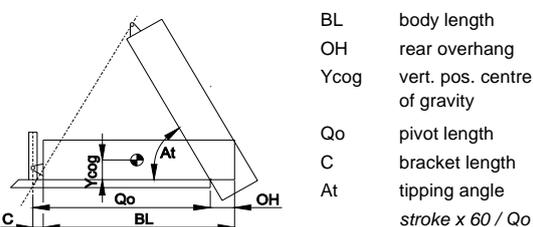
Related documentation

Bracket options: 015BRA15 & 015BRA13	Mounting instructions: CYL-0031	Oil specifications: OIL-0011
		Spec sheet explanation: CYL-0041

Tipping weight

			BL [mm]		9200			8800			8400	
BL	body length		OH [mm]	200	500	800	200	500	800	200	500	800
OH	rear overhang		At [°]	45	47	49	48	50	52	50	52	55
Ycog	vert. pos. centre of gravity											
Qo	pivot length		Ycog [mm]									
C	bracket length	600		75	80	86	78	83	90	80	87	95
At	tipping angle	900		80	86	93	83	90	98	87	95	106
	stroke x 60 / Qo	1200		85	92	101	89	97	108	94	104	

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

Pos.	Part no.	Description	Qty.
C01	71839160	DUST COVER FE 226-5/238-5	1
P01	70475641	PISTON MN2 S 137-1645-HD-HC	1
P02	70207137 K	SLIDER MN 137 A35	1
P03	70216137 K	OUTER STOPRING MN 137 A22	2
P04	70230137	BOTTOM PLATE PISTON MN 137 MK2 HD	1
P05	01745055 K	CIRCLIP 125 DIN 472 (132.0x4.0)	1
P06	70260225 K	O-RING PISTON BOTTOM 137	1
P07	70235601	PISTON EYE SPH. MN 137 MK2 L=075 GR	1
P08	70260125 K	O-RING 120.24 X 3.53 MM	1
P09	01770090 K	SPHERICAL BEARING D.60 DO GREASED	1
P10	01770580 K	CIRCLIP 90 DIN 472 (95.5x3.5)	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
S41	70676640	STAGE MN2 157-1640-HD	1
S42	70202157 K	PACKSET MN 157 TANDEM SEAL	1
S43	70207157 K	SLIDER MN 157 A35	1
S44	70216157 K	OUTER STOPRING MN 157 A22	2
S45	70217157 K	LIFTRING MN 157 A22	1
S31	70677640	STAGE MN2 179-1640-HD	1
S32	70202179 K	PACKSET MN 179 TANDEM SEAL	1
S33	70207179 K	SLIDER MN 179 A35	1
S34	70216179 K	OUTER STOPRING MN 179 A22	1
S35	70217179 K	LIFTRING MN 179 A22	1
S21	70678640	STAGE MN2 202-1640-HD	1
S22	70202202 K	PACKSET MN 202 TANDEM SEAL	1
S23	70207202 K	SLIDER MN 202 A35	1
S24	70216202 K	OUTER STOPRING MN 202 A22	1
S25	70213202 K	LIFTRING MN 202x6 MK2	1
S11	70679640	STAGE MN2 226-1640-HD	1
S12	70202226 K	PACKSET MN 226 TANDEM SEAL	1
S13	70207226 K	SLIDER MN 226 A35	1
S14	70216226 K	OUTER STOPRING MN 226 A22	1
S15	70213226 K	LIFTRING MN 226x6 MK2	1
B01	70370654	BASE MN2 252-1697-4/4BSAE-390-HD	1
B02	70203252 K	PACKSET MN 252	1
B03	70225375	BOTTOM PLATE MN2 252	1
B04	70270252 K	SEAL BOTTOM PLATE MN 252	1
B05	70220252	LOCKING PLATE MN2 252	3
B06	01732020 K	BOLT HEX M12X25X1.25 SET 6 PCS	1
B07	01732523 K	WASHER SPRING M12 SET 6 PCS	1

Seal kit complete

	71907951 K	Consists of all packsets with packset grease and O-rings	
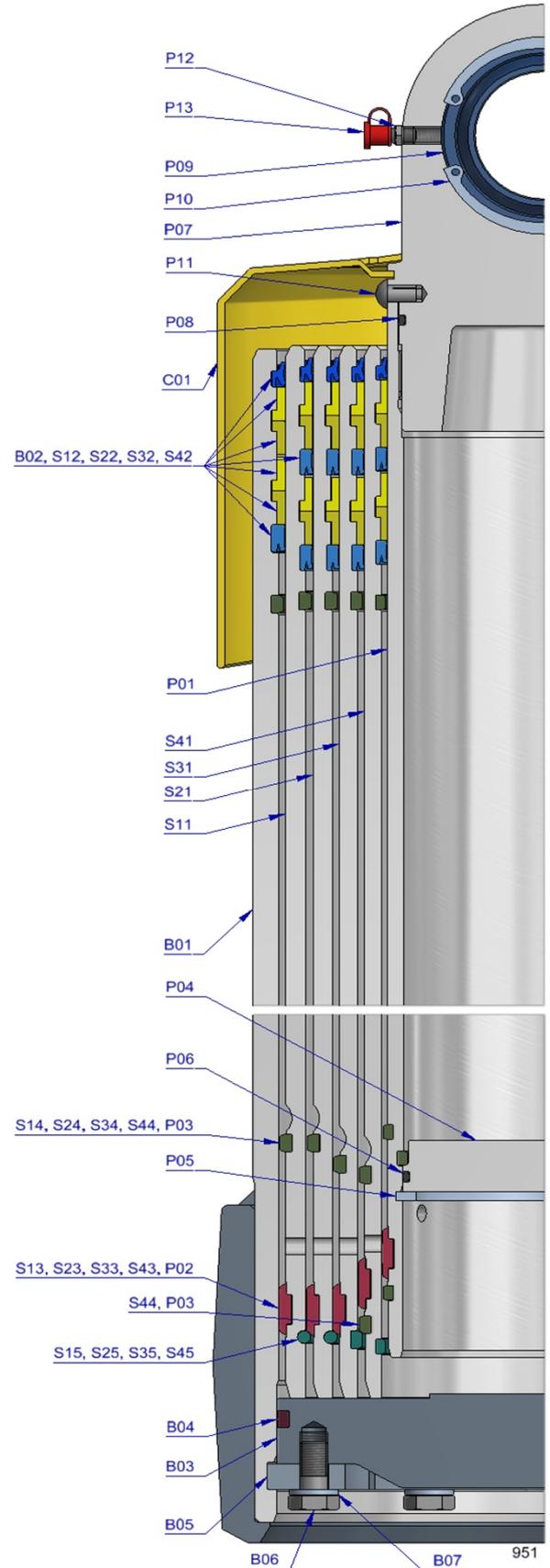
Notes

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.