

HYVA CYLINDER



FRONT-END CYLINDER WITH OUTER COVER

Hyva

type:

FC 183 - 5 - 07190 - 000

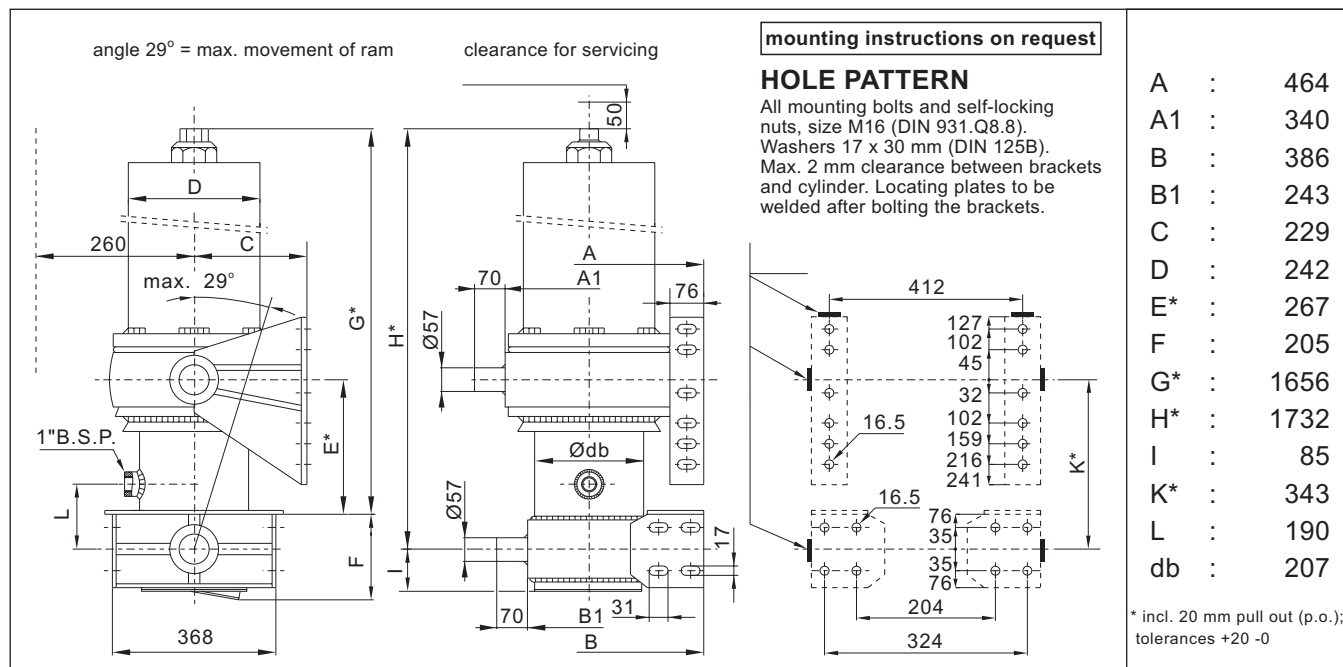
part number cylinder only:

015 02 220

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tipping weight¹⁾:

50 tons



specification

type number	:	FC 183 - 5 - 07190 - 000
number of extensions	:	5
total stroke	:	7190 mm
weight incl. brackets	:	439 kg
weight cylinder only	:	389 kg
total volume	:	126 L
working volume	:	116 L
operating pressure	:	190 bar (max.)
oil	:	see oil specification sheet

brackets

(not included)

chassis bracket	:	015 06 043
lifting bracket left hand	:	015 06 705
lifting bracket right hand	:	015 06 717

¹⁾tipping weight = net weight body + payload.

This Hyva cylinder is designed as a lifting device only. It must not be used as a structural member or be subject to side loads and/or abnormal conditions. Pump flow in consultation with Hyva engineering department

stage	1	2	3	4	5	total
effective diameter (mm)	183	162	141	120	99	
stroke (mm)	1404	1424	1454	1454	1454	7190
oil displacement (L)	37	29	23	16	11	116

calculation of the tipping weight

The calculation as shown is based on the following data:

working pressure : 190 bar (max.)

body length (BL) : 9000 mm

vertical distance between
centre of gravity
body and payload
and rear hinge of
body (X)

: 850 mm

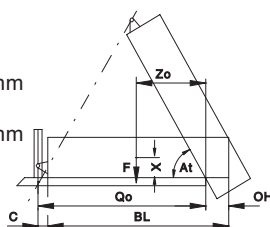
rear overhang (OH)

: 750 mm

$Z_o = BL / 2 - OH$

$Q_o = BL + C - OH$ (pivot)

$At = \frac{\text{stroke} \times 60}{Q_o}$



Tipping weight

This table shows the relationship between body length, rear overhang and tipping weight¹⁾ (tons) and also gives the final angle of tip. Calculation based on working pressure of 190 bar.

rear overhang	body length (BL)						
	OH (mm)	8250	8500	8750	9000	9250	9500
150	52° 46	50° 45	49° 44	47° 42			
300	53° 48	51° 47	50° 46	48° 44	47° 44		
450	54° 51	52° 49	51° 47	49° 46	48° 45		
600		53° 51	52° 49	50° 48	48° 46	47° 45	
750			54° 55	53° 51	51° 50	49° 48	48° 47
900				54° 55	52° 53	50° 50	49° 49

subject to change without notice

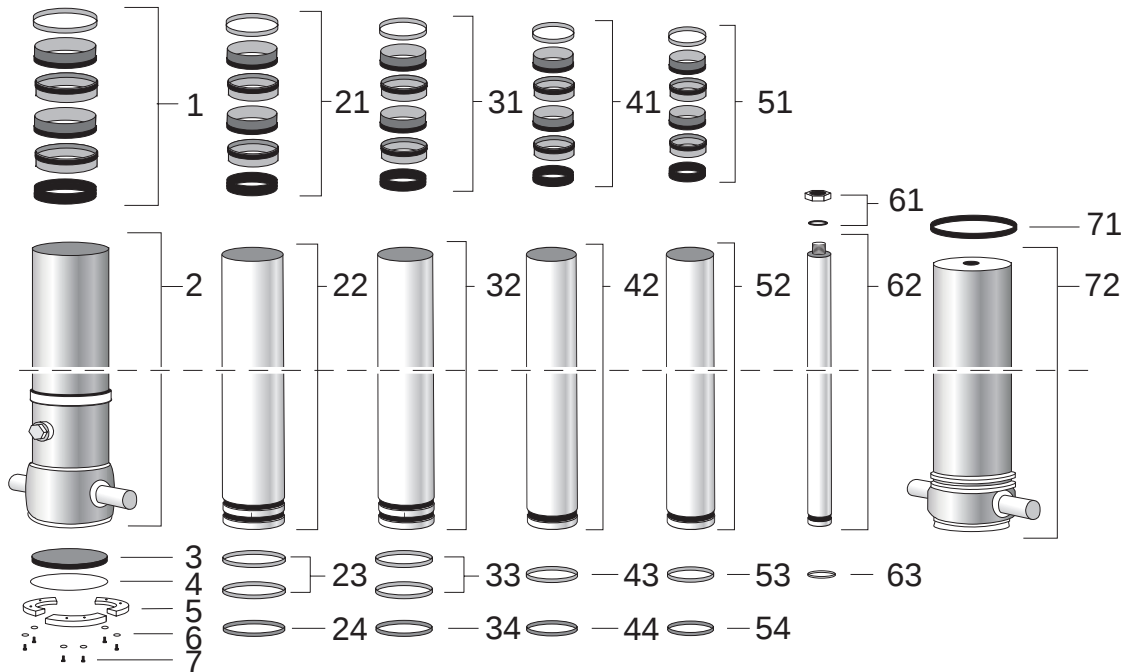
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page # 2 / 2	part number cylinder only:	015 02 220
	tipping weight ¹⁾ :	50 tons



spare part list for cylinder 015 02 220

pos.	code no.	description	qty.
1	017 60 026 K	packset Ø207	1
2	025 21 410	B 207 - 1690 - 4/4 - 190 - MP	1
3	017 30 022	bottom plate Ø207	1
4	017 33 023 K	O-ring base Ø207	1
5	017 31 026	locking plate Ø207	3
6	017 32 547	washer for bolt	6
7	017 32 043	bolt	6
21	017 60 038 K	packset Ø187/183	1
22	017 13 838	S 183 - 1646 - SHP	1
23	017 50 045 K	slider Ø183	2
24	017 40 416 K	snap ring Ø183	1
31	017 60 040 K	packset Ø162	1
32	017 14 338	S 162 - 1646 - SHP	1
33	017 50 057 K	slider Ø162	2

pos.	code no.	description	qty.
34	017 40 428 K	snap ring Ø162	1
41	017 60 051 K	packset Ø141	1
42	017 14 855	S 141 - 1646 - MHP	1
43	017 50 069 K	slider Ø141	1
44	017 40 430 K	snap ring Ø141	1
51	017 60 063 K	packset Ø120	1
52	026 75 000	S 120 - 1646	1
53	017 50 070 K	slider Ø120	1
54	017 40 441 K	snap ring Ø120	1
61	017 02 890 K	top nut and washer	1
62	017 26 821	P 099 - 1648	1
63	017 50 082 K	slider Ø099	1
71	017 91 941	O-ring for outer cover Ø242	1
72	017 02 191	outer cover Ø242 l.1403	1

repair kit

code no.	description
017 62 114 K	complete cylinder packset consists of all packsets with packset grease and O-ring base

for specification see page # 1