

## APPLICATIONS

Lifting of various loads.

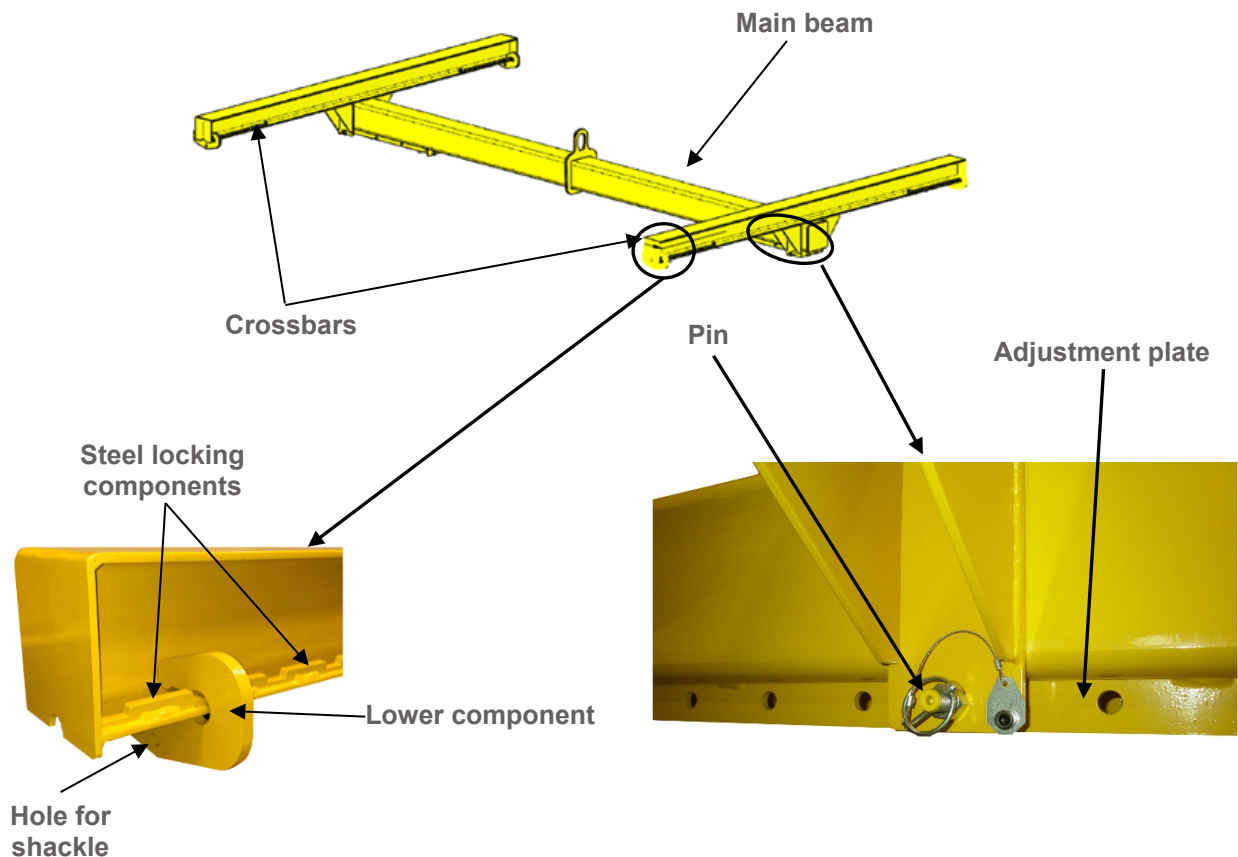
## DESCRIPTION

Range of lifting beams with adjustable load-centre distance fitted with 4 lower attachments.

Each lower attachment point can be equipped with a shackle to which lifting accessories can be fitted.

Securing of lower attachment points between two steel locking components is simple and sure.

The adjustment -with step of 50 mm- is easily made by moving the lower pieces along the beam.



## FUNCTIONING

Install necessary accessories on the lifting beam ensuring that these accessories meet the lifting beam capacity and use conditions (see page 3).

Attach the lifting beam to the lifting means.

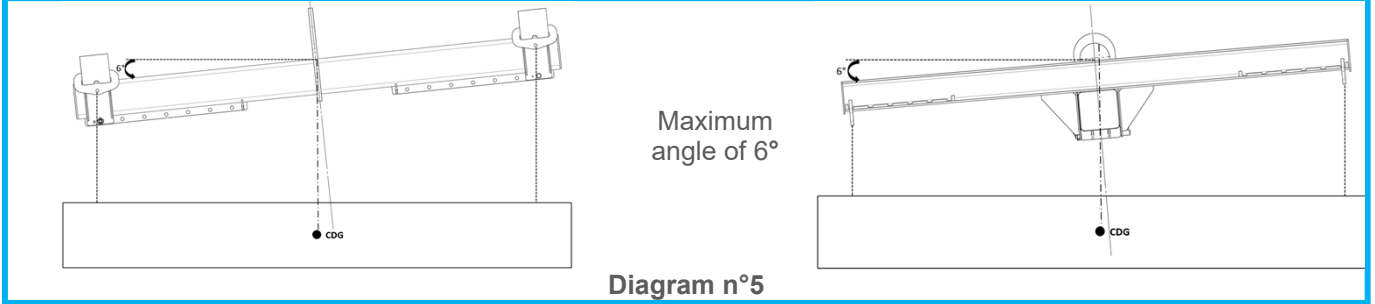
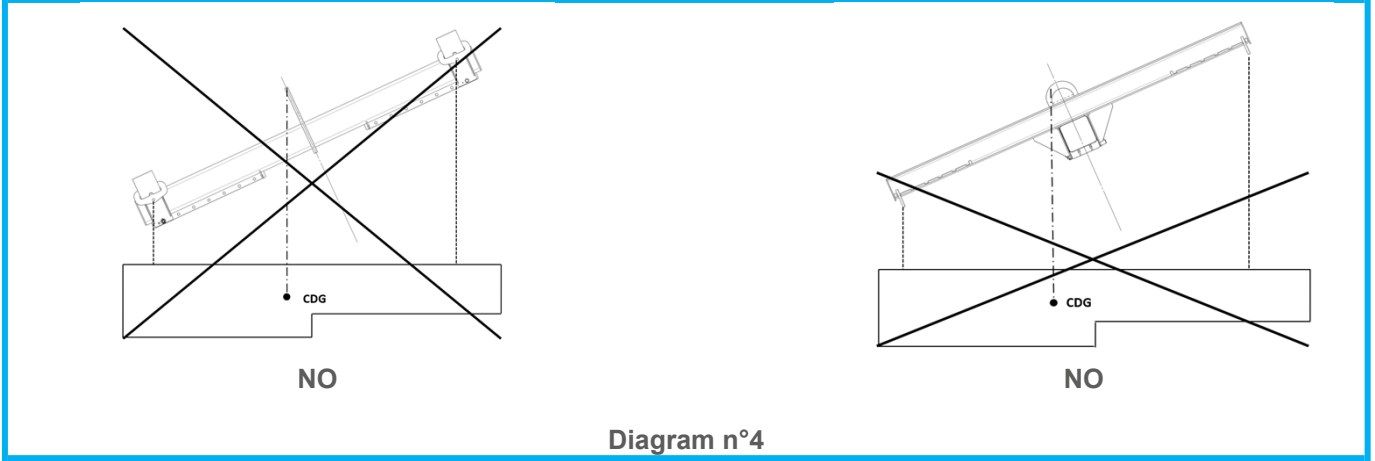
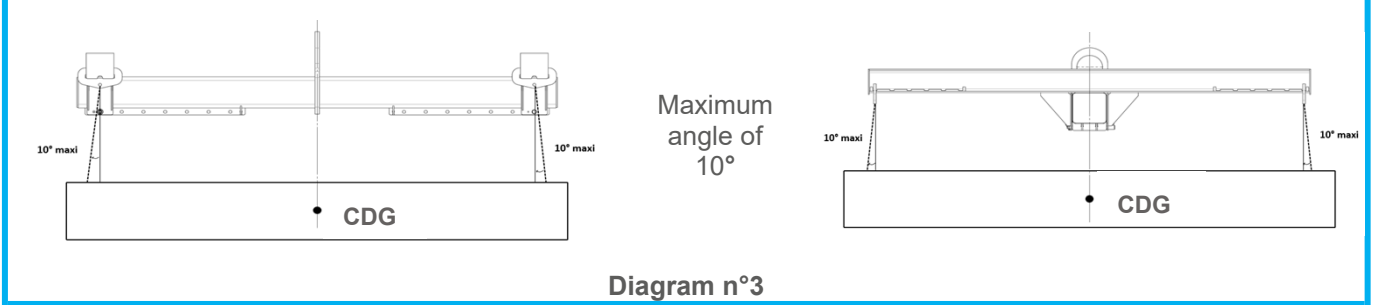
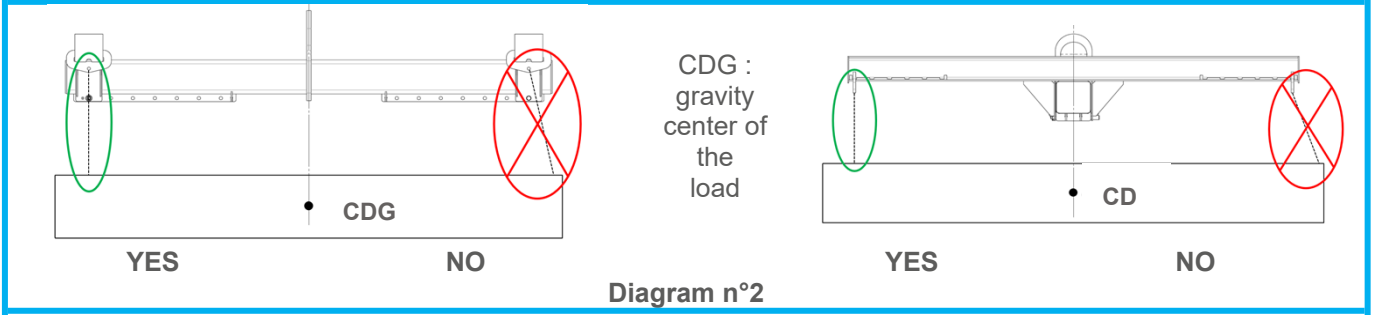
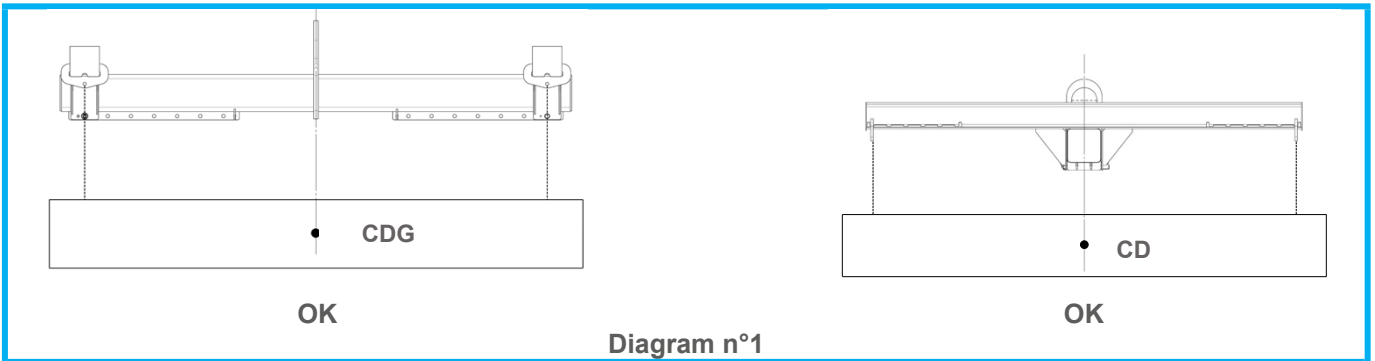
- Adjust the distance between the crossbars by sliding them along the main beam.
- Then, adjust the 4 lower points according to the geometry of the load by sliding them on the crossbar.
- Securely position the adjustable attachment points between appropriate steel locking components.

Attach the load to the lifting beam with the accessories.

Before lifting, make sure the load is properly loaded:

- The lifting beam must be horizontal during the lifting (see diagram n°1)
- Efforts in the axis of the lower points (see diagram n°2 and diagram n°3)
- The gravity center of the load must be aligned with the axis of the lifting eye of the lifting beam (see diagram n°4) ;

If this is not the case, stop the lifting and adjust the position of the load, the lifting beam and the accessories.



## GENERAL CHARACTERISTICS

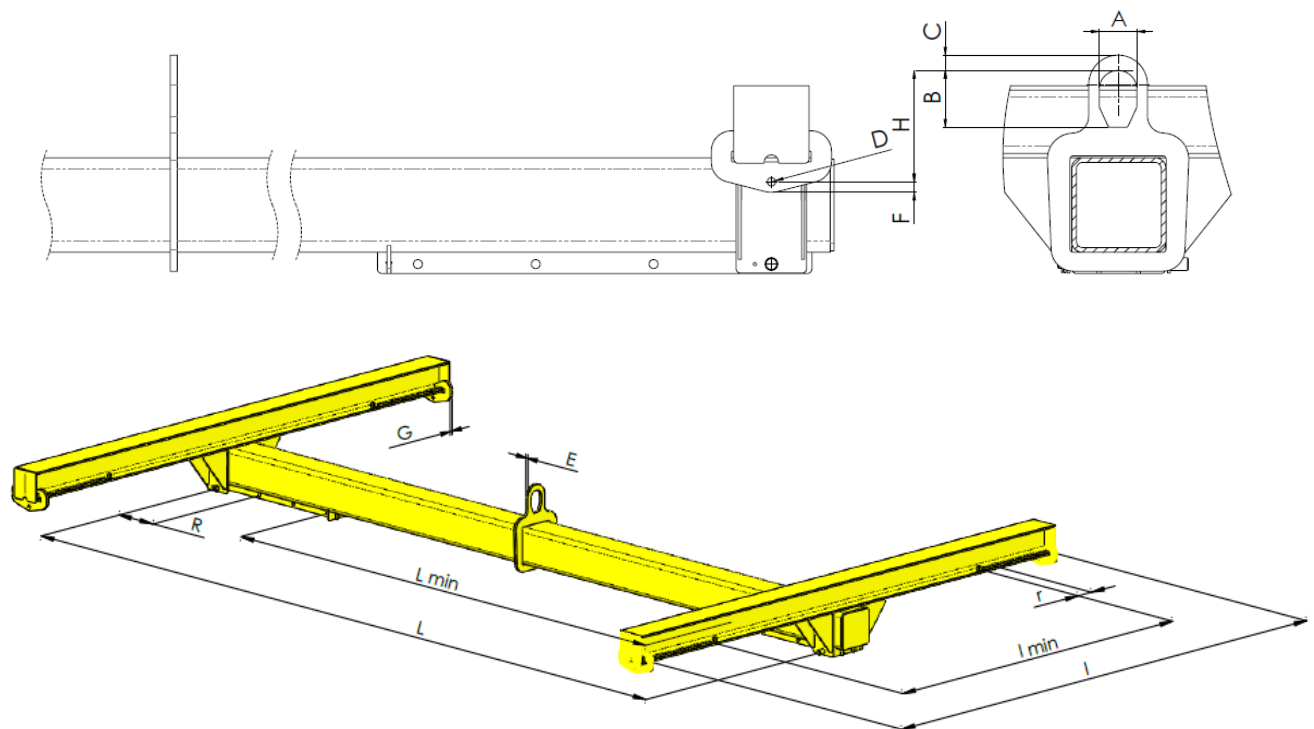
- Manufactured without load bearing welds.
- Hot epoxy coating.
- Designed and manufactured in accordance with the EN 13155.2020 norm.
- Product with EC marking and delivered with a declaration of conformity, instructions for use and ID plate.

## DIMENSIONS

WLL t	L m	Lmin m	l m	lmin m	Group code	Dimensions in mm								Overall dimensions L x w x h	Weig ht kg	Accessories (WLL & references)		
						A	B	C	D	E	F	G	H			HR Shackles	Hooks	
1	1	0.4	1	0.4	219728									1184 x 1077 x 340	75			
	2	1	1	0.4	219738									2184 x 1077 x 340	92			
			2	1	219748									2184 x 2077 x 340	128			
	3	1,6	1	0.4	219758									3184 x 1077 x 360	121			
			2	1	219768	100	150	25	10	12	13	8	195	3184 x 2077 x 390	178	0.5t C034H 289989	0.8t C120E 104979	
			1	0.4	219778										4184 x 1077 x 390	165		
			2	1	219788										4184 x 2077 x 390	204		
	5	2	1	0.4	219798									5184 x 1077 x 390	216			
			2	1	219808									5184 x 2077 x 390	254			
	2	1	0.4	1	0.4	219818									1184 x 1077 x 346	79		
2		1	1	0.4	219828									2184 x 1077 x 396	118			
			2	1	219838									2204 x 2077 x 396	170			
3		1,6	1	0.4	219848									3184 x 1077 x 446	158			
			2	1	219858	100	150	31	13	15	16	12	202	3204 x 2077 x 446	219	1t C036H 105599	1t C121E 104989	
			1	0.4	219868										4184 x 1077 x 426	211		
			2	1	219878										4204 x 2077 x 426	270		
5		2	1	0.4	219888									5184 x 1077 x 446	270			
			2	1	219898									5204 x 2077x 446	335			
3		1	0.4	1	0.4	219908									1184 x 1077 x 383	89		
	2	1	1	0.4	219918									2184 x 1077 x 463	134			
			2	1	219928									2244 x 2077 x 463	248			
	3	1,6	1	0.4	219938									3184 x 1077 x 463	194			
			2	1	219948	100	165	33.5	14,2	20	20,5	15	217,5	3244 x 2077 x 463	313	1,5t C037H 105609	1,5t C125E 104999	
			1	0.4	219958										4184 x 1077 x 513	280		
			2	1	219968										4244 x 2077 x 513	409		
	5	2	1	0.4	219978									5184 x 1077 x 513	332			
			2	1	219988									5244 x 2077 x 513	461			
	4	1	0.4	1	0.4	219998									1204 x 1077 x 457	109		
2		1	1	0.4	220008									2184 x 1077 x 487	148			
			2	1	220018									2244 x 2077 x 487	262			
3		1,6	1	0.4	220028									3204 x 1077 x 560	244			
			2	1	220038	120	200	42.5	18	25	27	15	261	3244 x 2077 x 560	364	2t C049H 289999	2.5t C126E 105009	
			1	0.4	220048										4184 x 1077 x 560	284		
			2	1	220058										4244 x 2077 x 560	413		
5		2	1	0.5	220068									5204 x 1077 x 612	400			
			2	1	220078									5244 x 2077 x 612	526			
5		1	0.4	1	0.4	220088									1204 x 1077 x 462	117		
	2	1	1	0.4	220098									2204 x 1077 x 512	175			
			2	1	220108									2244 x 2077 x 512	285			
	3	1,6	1	0.4	220118									3204 x 1077 x 565	252			
			2	1	220128	120	200	42.5	22	25	30,5	20	262,5	3244 x 2077 x 565	372	3.25t C039H 105589	3,2t C127E 105019	
			1	0.5	220138										4204 x 1077 x 617	348		
			2	1	220148										4244 x 2077 x 617	473		
	5	2	1	0.4	220158									5204 x 1077 x 712	408			
			2	1	220168									5244 x 2077 x 712	534			

<sup>1</sup> WLL = Working Load Limit.

WLL t	L m	Lmin m	l m	lmin m	Group code	Dimensions in mm								Overall dimensions L x w x h	Weigh ht kg	Accessories (WLL & references)	
						A	B	C	D	E	F	G	H			HR Shackles	Hooks
6	1	0.4	1	0.4	220178									1244 x 1077 x 519	161		
	2	1	1	0.4	220188									2204 x 1077 x 569	185		
			2	1	220198									2264 x 2077 x 572	355		
	3	1,6	1	0.4	220208									3244 x 1077 x 622	288		
			2	1	220218	120	200	47.5	22	30	30,5	20	267,5	3264 x 2077 x 622	409	3.25t C039H 105589	3.2t C127E 105019
	4	2	1	0.5	220228									4204 x 1077 x 627	352		
2			1	220238									4264 x 2077 x 627	506			
5	2	1	0.5	220248									5244 x 1077 x 627	539			
		2	1	220258									5264 x 2077 x 627	660			
8	1	0.4	1	0.4	220268									1244 x 1077 x 510	185		
	2	1	1	0.5	220278									2244 x 1077 x 585	262		
			2	1	220288									2264 x 2077 x 585	380		
	3	1,6	1	0.5	220298									3244 x 1077 x 640	349		
			2	1	220308	120	200	52.5	25	30	36	25	272	3284 x 2077 x 640	499	4,75t C040H 105619	5,4t C128E 105029
	4	2	1	0.5	220318									4244 x 1077 x 640	483		
2			1	220328									4264 x 2077 x 640	607			
5	2	1	0.4	220338									5244 x 1077 x 732	654			
		2	1	220348									5284 x 2077 x 732	805			
10	1	0.4	1	0.4	220358									1244 x 1077 x 540	207		
	2	1	1	0.5	220368									2244 x 1077 x 652	303		
			2	1	220378									2284 x 2077 x 652	467		
	3	1,6	1	0.5	220388									3244 x 1077 x 652	419		
			2	1	220398	120	200	57.5	28	30	37,5	30	280,5	3304 x 2077 x 652	629	6,5t C041H 192269	5,4t C128E 105029
	4	2	1	0.4	220408									4244 x 1077 x 742	569		
2			1	220418									4284 x 2077 x 742	734			
5	2	1	0.4	220428									5244 x 1077 x 742	758			
		2	1	220438									5284 x 2077 x 742	924			

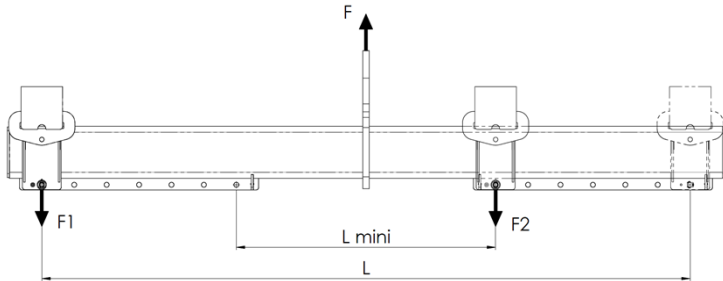


Adjustable by step R et r = 50 mm.  
Other adjustable steps on request.

## CHOICE OF ACCESSORIES

Accessories like shackles, hooks, slings, etc. must be adapted to all lifting operations.

For adjustable lifting beams, following example is the most critical:

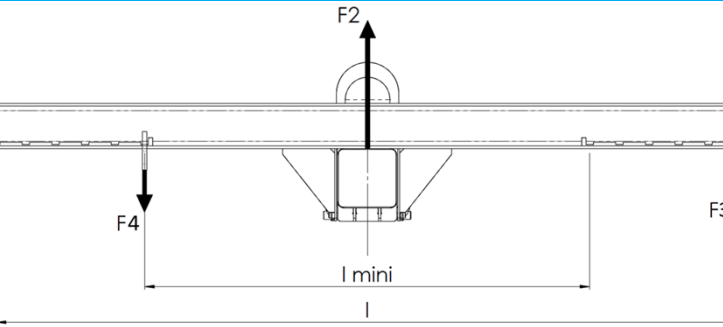


$F1 = F * L \text{ min} / (L + L \text{ min})$   
 $F2 = F * L / (L + L \text{ min})$

Example: for a lifting beam with capacity of 3 t, adjustable centre distance from 1 to 2 m :

- L min = 1, L = 2 et F = 3 t
- $F1 = 3 * 1 / (2 + 1) = 1 \text{ t}$
- $F2 = 3 * 2 / (2 + 1) = 2 \text{ t}$

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$F3 = F * l \text{ min} / (l + l \text{ min})$   
 $F4 = F * l / (l + l \text{ min})$

Example: for a lifting beam with capacity of 3 t, adjustable centre distance from 1 à 2 m :

- l min = 1, l = 2 et F2 = 2t
- $F3 = 2 * 1 / (1 + 2) = 0.67 \text{ t}$
- $F4 = 2 * 2 / (1 + 2) = 1.33 \text{ t}$

**Installed accessories must be designed for a minimum capacity of 1.33t.**

## CODIFICATION

- PHMc-LLLL / IIII
  - c = WLL in t
  - LLLL = length (main beam) in mm
  - IIII = width (crossbar) in mm
- PHM2-2000 / 1000
  - An adjustable H lifting beam, WLL 2t, 2m long, 1m wide

## OTHER CHARACTERISTICS

- Operating temperature: -20° to +100°C.
- Epoxy paint Yellow RAL 1004