

BA...RPC arms series



INSTRUCTIONS MANUAL



IMPORTANT



The tool delivered with this manual may have been modified for specific needs.

In that case, please give us the tool code number written on our shipping note or the approximate tool delivery date when you place an order for a new similar tool or for spare parts.

In that way, you will be sure to get the required tool and/or spare part.

WARNING



This information has to be kept in a location known by all users.



Each operator has to read carefully this manual before installing, using, and mending the product.

Be sure that the operator has understood using recommendations and the meaning of signs put on the product.

Most accidents could be avoided respecting this Manual Instructions. As a matter of fact, they were created according to European laws and norms regarding products.

In each case, please respect and follow safety national norms. Do not take off nor damage the stickers or advise put on the product and above all the details imposed by the law.

I. FEATURES

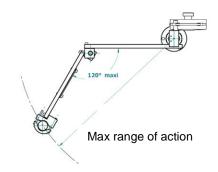
Articulated arms with 2 absolute encoders

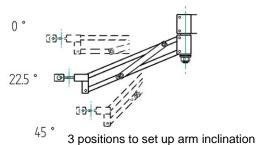
Direct link to POSI-CONTROL DPC TOUCH

- Torque up to 100Nm
- Range of action up to 1100 mm
- Equipped with an absolute encoder 12 bits (precision 0,1°)
- Superior capacity on request
- Controlled movement

BA 12/25/40/100 RPC







| Туре | max torque | Tool diameter (mm) | Range of action at 22,5° | Max load | Article code |
|-----------------|------------|--------------------|--------------------------|----------|--------------------|
| BA 12 RPC | 12 | 27 - 50 | 450 | 1,2 | 4-5201010 |
| BA 25 RPC | 25 | 28 - 52 | 460 | 2,2 | 4-5200472 |
| BA 25 RPC/600 | 25 | 28 - 52 | 600 | 2,2 | 4- 5 200475 |
| BA 40 RPC | 40 | 28 - 52 | 650 | 3 | 4-5200473 |
| BA 40 RPC/800 | 40 | 28 - 52 | 800 | 3 | 4-5200476 |
| BA 100 RPC | 100 | 28 - 52 | 730 | 4 | 4-5200474 |
| BA 100 RPC/900 | 100 | 28 - 52 | 900 | 4 | 4-5200477 |
| BA 100 RPC/1100 | 100 | 28 - 52 | 1100 | 4 | 4-5200478 |



Option

Z encoder option/BA RPC. Code: 4-5283125 Cable /Z encoder Code 4-5200725

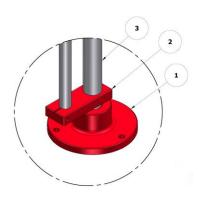
1. APPLICATION

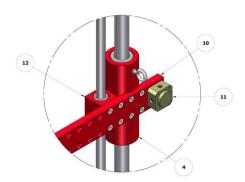
The BA...RPC torque reaction arms are used to ensure 4 supplementary functions:

- **A)** To ease the torque reaction effect of air and electric powered hand tools like screwdrivers, drills, and tappers. Our arms protect the operator against injuries of the hand and wrists, stress syndroms and cumulative trauma disorder.
- B) To control the position of the tool
- C) To hold and balance the powered hand tools.
- **D)** To hold tools in vertical position.

2. INSTALLATION

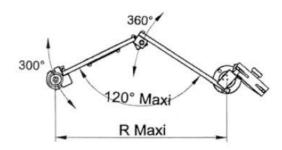
2.1 Fasten the washer faced perfectly horizontal on the work bench with 3 screws





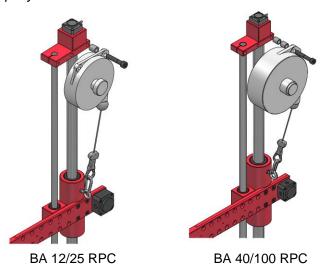
- Screw the plate 10 on the sleeve 4 and the sleeve holder 12.
- Make sure the axial travel of the arm is possible without any interference or danger for the operators with angle inferior to 120° at the articulation level.





The six screws enable the setting of the inclination and must be properly fastened

2.2 Balancer setting



3. BALANCER SETTING

Set the tension of the balancer according to the tool weight.

The balancer is properly set when the operator can handle the arm without any effort.

To increase the balancer tension force, turn the balancer wheel clockwise.

To decrease the balancer tension force, turn the balancer wheel counterclockwise.

IMPORTANT: Don't forget to set the cable stroke with the black ball located on it.

4. ADVISINGS

- Do not overcome the maxi load and maxi torque mentioned on the arm.
- Necessary maintenance: after 150.000 cycles.
- Take into account the workstation coverage dimensions before installation.
- Tighten the base properly and make sure that the work station is stable.

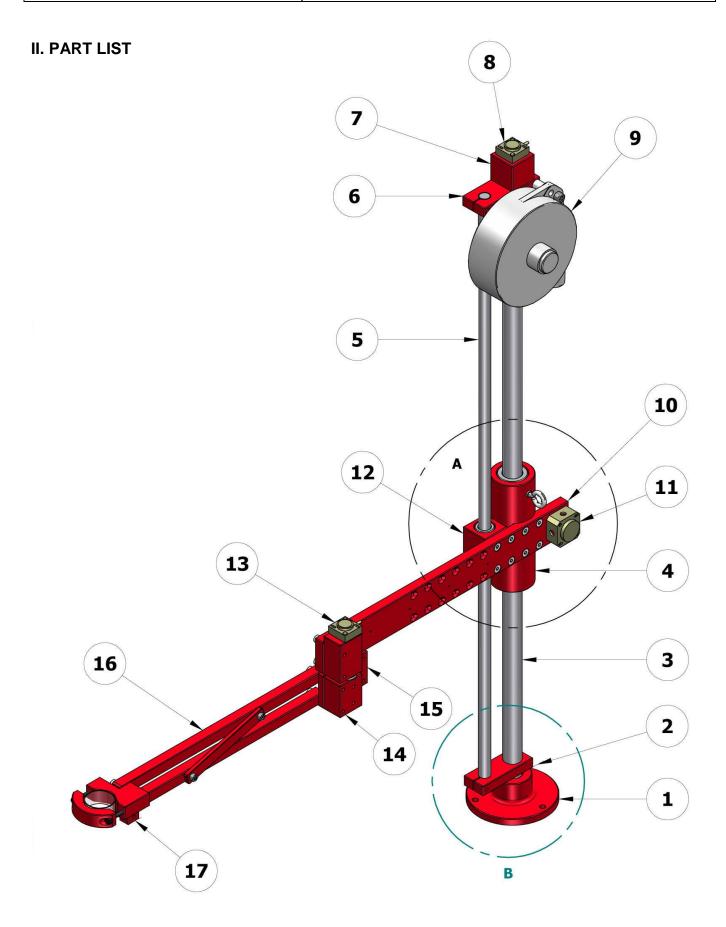
5. SERVICING

After 150.000 cycles:

- a) Dismount the sliding bush and the two chromed slides.
- b) Clean the parts with a spray gun.
- c) Clean the main pole and the two chrome slides with a dry rag.
- d) Mount the arm again checking the right alignment of the two chromed slide and the proper tightening of the clamp.

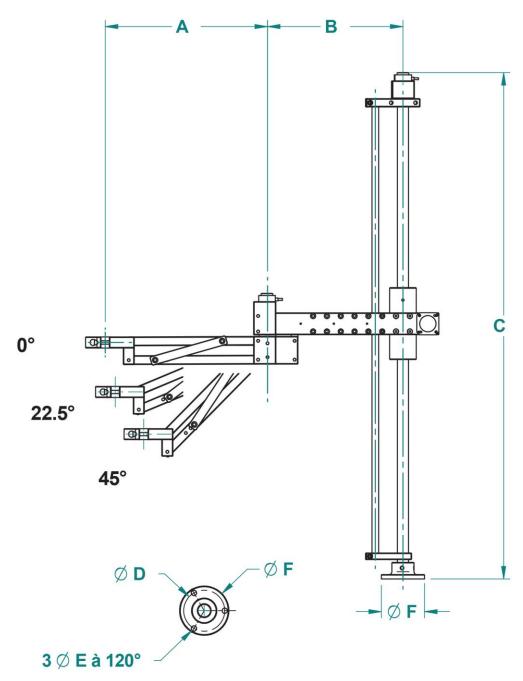
6. MAINTENANCE

Must be achieved either by DOGA or the DOGA official distributor in your country.



| Rep. | Désignation | BA | BA | BA aspectore | BA | BA | BA | BA 100RPC | BA |
|------|-----------------------|--------------------|--------------------|------------------------|--------------------|------------------------|---------------------|-------------------|--------------------------|
| 1 | Pole foot | 12RPC 4-5200225 | 25RPC 4-5200246 | 25RPC/600 4-5200246 | 40RPC 4-5200255 | 40RPC/800 4-5200255 | 100RPC 4-5200264 | /900 4-5200264 | 100RPC/1100 4-5200264 |
| 2 | Lower flange | 4-3200223 | 4-3200240 | 4-3200240 | 4-3200233 | 4-3200233 | 4-3200204 | 4-3200204 | 4-3200204 |
| 3 | Pole | | | | | | | | |
| 4 | Sliding bush | 4-5200227 | 4-5200248 | 4-5200248 | 4-5200257 | 4-5200257 | 4-5200266 | 4-5200266 | 4-5200266 |
| 5 | Rotating axel | . 0200227 | 1 0200210 | 1 0200210 | 1 0200201 | 1 0200201 | . 0200200 | 1 0200200 | 1 0200200 |
| 6 | Upper flange | | | | | | | | |
| 7 | Encoder support | | | | | | | | |
| 8 | Encoder | 4-5200484 | 4-5200484 | 4-5200484 | 4-5200484 | 4-5200484 | 4-5200484 | 4-5200484 | 4-5200484 |
| 9 | Balancer | 4-5200229 | 4-5200250 | 4-5200250 | 4-5200259 | 4-5200259 | 4-5200268 | 4-5200268 | 4-5200268 |
| 10 | Primary part | | | | | | | | |
| 11 | Junction box | 4-5200488 | 4-5200488 | 4-5200488 | 4-5200488 | 4-5200488 | 4-5200488 | 4-5200488 | 4-5200488 |
| 12 | Rotating sleeve | | | | | | | | |
| 13 | Articulation encoder | 4-5200485 | 4-5200485 | 4-5200486 | 4-5200560 | 4-5200561 | 4-5200487 | 4-5200562 | 4-5200563 |
| 14 | Complete articulation | | | | | | | | |
| 15 | Angular stop | | | | | | | | |
| 16 | Secondary part | 4-5200244 | 4-5200253 | 4-5200262 | 4-5200262 | 4-5200262 | 4-5200271 | 4-5200271 | 4-5200271 |
| 17 | Clamp | 4-5200245 | 4-5200254 | 4-5200054 | 4-5200263 | 4-5200263 | 4-5200272 | 4-5200272 | 4-5200272 |

III. OVER ALL DIMENSIONS



| | A0° | A 22,5° | A 45° | B min | B max | c | range of action |
|-----------------|-----|---------|-------|-------|-------|------|-----------------|
| BA 12 RPC | 279 | 261 | 209 | 145 | 245 | 816 | 450 |
| BA 25 RPC | 296 | 278 | 227 | 145 | 245 | 916 | 460 |
| BA 25 RPC/600 | 358 | 336 | 271 | 330 | 330 | 916 | 600 |
| BA 40 RPC | 414 | 387,5 | 310,5 | 200 | 350 | 1016 | 650 |
| BA 40 RPC/800 | 503 | 470 | 374 | 415 | 415 | 1016 | 800 |
| BA 100 RPC | 462 | 433 | 351 | 255 | 405 | 1016 | 730 |
| BA 100 RPC/900 | 564 | 528 | 425 | 520 | 520 | 1016 | 900 |
| BA 100 RPC/1100 | 694 | 648 | 517 | 635 | 635 | 1016 | 1100 |





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