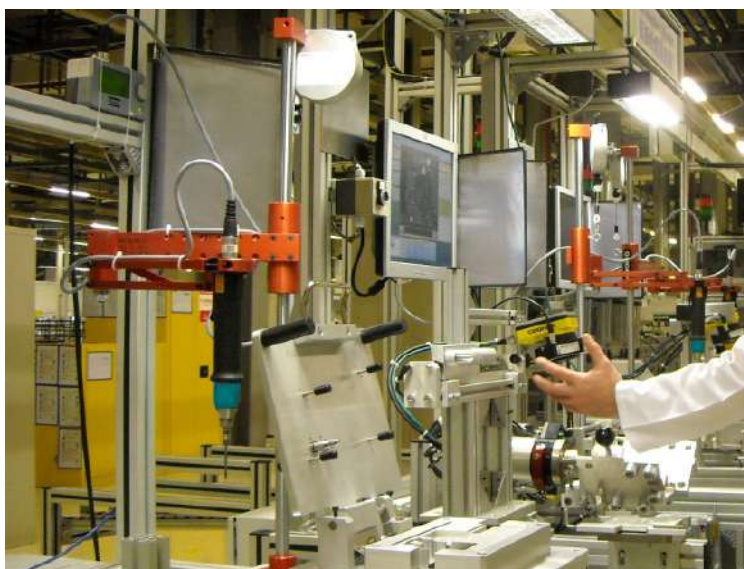




ERGONOMICS AND WORKSTATIONS



**Torque Reaction systems  
and Posi-Control systems**





## The range



### TORQUE REACTION ARMS (p.4 to 41)

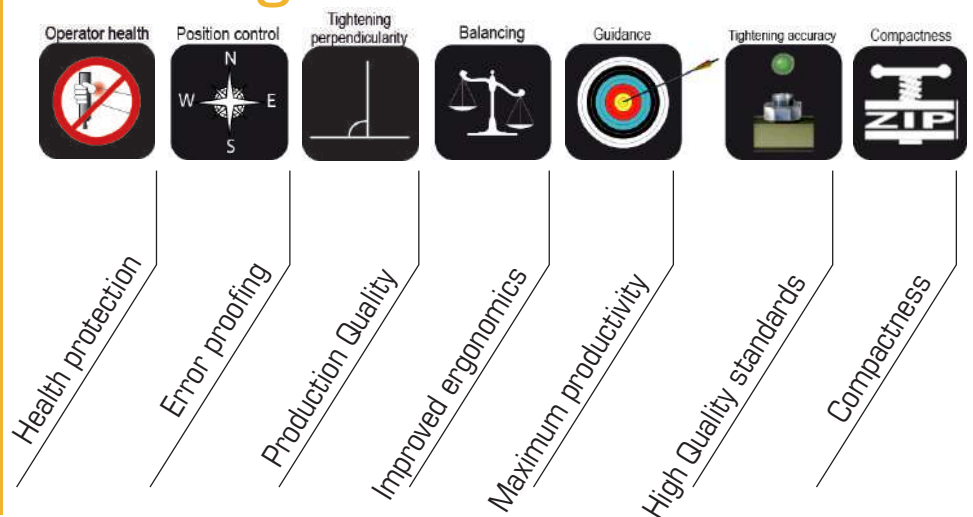
A comprehensive range of torque reaction systems to decrease employee injuries and boost productivity.



### POSI CONTROL SYSTEM (p.42 to 56)

Error proofing and sequence control for zero-fault assembly processes. Management of automation devices on the assembly line.

## Pictograms



# Torque Reaction systems

The widest range of reaction arms to meet your various demanding requirements.

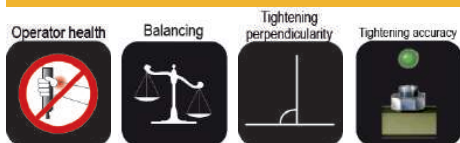
- Page 4 to 9 • Linear reaction arms BA Series
- Page 10 to 11 • Travelling arms BA...C Series
- Page 12 to 19 • Articulated reaction arms BA...R Series
- Page 20 to 21 • Articulated and air balanced pantograph arm BA...G Serie
- Page 22 to 29 • Carbon telescoping arms DMF/DMFi Series
- Page 30 to 41 • Suspended arms Sliderv
- Page 42 to 45 • Posi-Control System
- Page 46 to 47 • Linear arms BA...PC Series
- Page 48 to 49 • Articulated arms BA...RPC Series
- Page 50 to 53 • Carbon telescoping arms DMF...PC Series
- Page 54 to 56 • Suspended arms Slider BA...PC/RPC
- Page 57 to 59 • Special arms





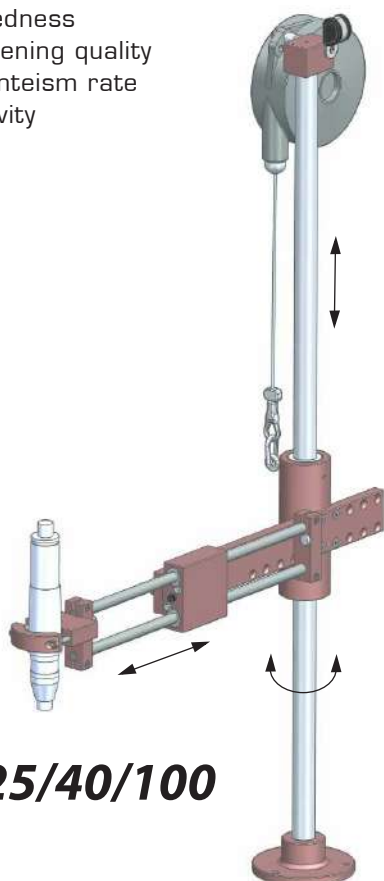
# Linear Arms

## BA Series

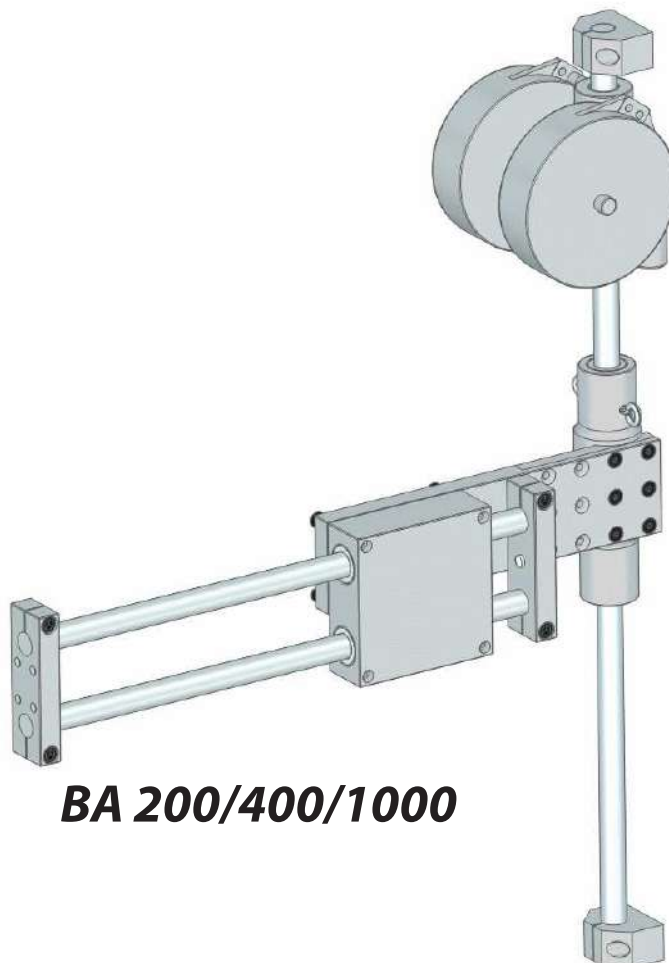


BA Series : Smooth tightening operation and perfect perpendicularity until 100 Nm.

- Erase torque reaction
- Ensure perfect perpendicularity
- Avoid illnesses
- Suppress the tiredness
- Improve the tightening quality
- Reduce the absenteeism rate
- Improve productivity



**BA 5/12/25/40/100**



**BA 200/400/1000**

| Model  | Torque max (Nm) | Tool Ø (mm) | Stroke | Load max (kg) | Code      |
|--------|-----------------|-------------|--------|---------------|-----------|
| BA 5   | 5               | 25 - 42     | 200    | 0,9           | 4-5200085 |
| BA 12  | 12              | 27 - 50     | 225    | 1,2           | 4-5201000 |
| BA 25  | 25              | 28 - 52     | 250    | 2,2           | 4-5200076 |
| BA 40  | 40              | 28 - 52     | 295    | 2,2/4*        | 4-5200067 |
| BA 100 | 100             | 28 - 52     | 325    | 3/5*          | 4-5200068 |

\* With additional balancer - **Code : 4-5200143** (see page 6)

| Model   | Torque max (Nm) | Stroke | Load max (kg) | Code       |
|---------|-----------------|--------|---------------|------------|
| BA 200  | 200             | 345    | 8             | 4-5201092  |
| BA 400  | 400             | 400    | 12            | 4-5201093  |
| BA 1000 | 1000            | 400    | 16            | On request |

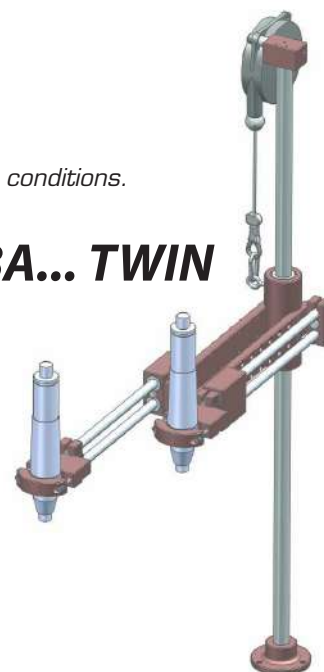
BA 200/400/1000 are delivered without clamp, floor post and non anodized.

# Linear Arms

## BA...TWIN Series

BA...TWIN model is an ideal solution when two screwdrivers are used in limited space conditions.

### BA... TWIN



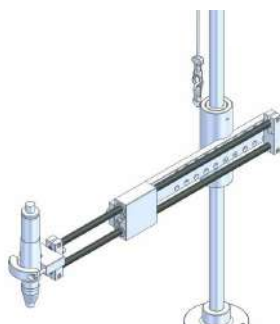
| Model    | Torque max (Nm) | Tool Ø (mm) | Stroke | Load max (kg) | Code      |
|----------|-----------------|-------------|--------|---------------|-----------|
| BA 12 T  | 12              | 27 - 42     | 225    | 2             | 4-5200823 |
| BA 25 T  | 25              | 28 - 52     | 250    | 3             | 4-5200721 |
| BA 40 T  | 40              | 28 - 52     | 295    | 4             | 4-5200825 |
| BA 100 T | 100             | 28 - 52     | 330    | 5             | 4-5283105 |

## BA Accessories



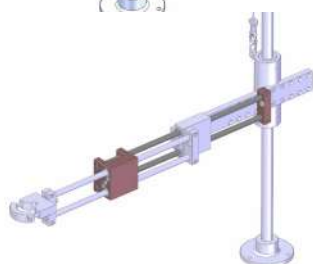
### Anti rotation clamp

| For         | Code      |
|-------------|-----------|
| BA 5        | 4-5200348 |
| BA 12 & 25  | 4-5200116 |
| BA 40 & 100 | 4-5200117 |



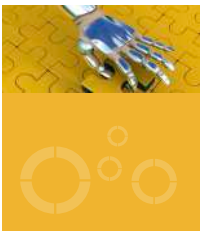
### Extended slides

| For    | Stroke | Code      |
|--------|--------|-----------|
| BA 12  | + 130  | 4-5200120 |
| BA 25  | + 130  | 4-5200720 |
| BA 40  | + 170  | 4-5200122 |
| BA 100 | + 200  | 4-5200123 |



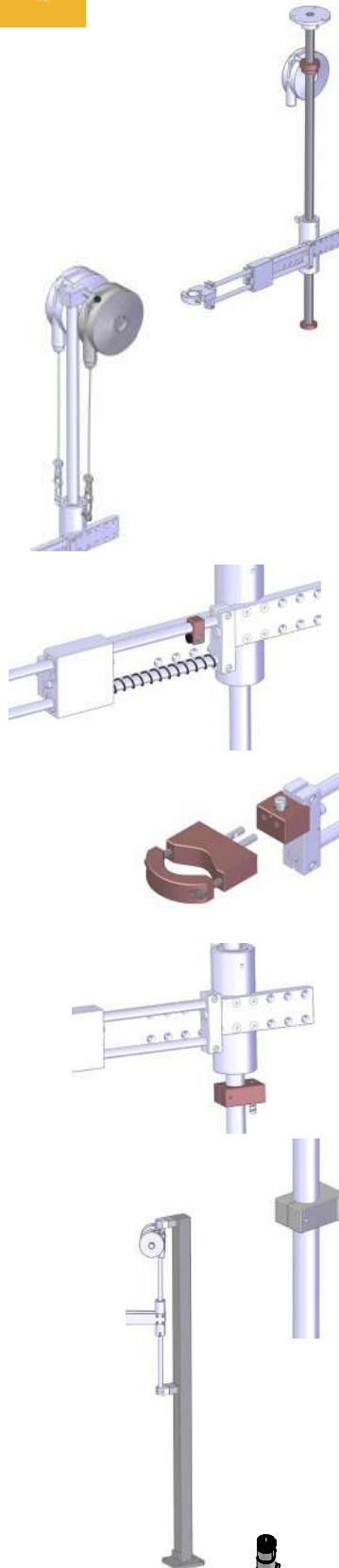
### Double slides

| For    | Stroke | Code      |
|--------|--------|-----------|
| BA 12  | + 230  | 4-5200124 |
| BA 25  | + 210  | 4-5200125 |
| BA 40  | + 295  | 4-5200126 |
| BA 100 | + 330  | 4-5200127 |



# Linear arms

## BA Accessories



### *Inverse mounting kit*

| For         | Code      |
|-------------|-----------|
| BA 5        | 4-5200385 |
| BA 12 & 25  | 4-5200128 |
| BA 40 & 100 | 4-5200129 |

### *Additional balancing kit*

| For    | Arm max load (kg) | Code      |
|--------|-------------------|-----------|
| BA 40  | 4                 | 4-5200143 |
| BA 100 | 5                 | 4-5200143 |

### *Auto rest position kit*

| For        | Code      |
|------------|-----------|
| BA 5 & 12  | 4-5200118 |
| BA 25 & 40 | 4-5200119 |

### *Quick change clamp*

| For   | Adapter code | Clamp code |
|-------|--------------|------------|
| BA 12 | 4-5201109    | 4-5201003  |
| BA 25 | 4-5201110    | 4-5200017  |
| BA 40 | 4-5201111    | 4-5200017  |

### *Height detection kit with sensor*

| For         | Code      |
|-------------|-----------|
| BA 5        | 4-5200421 |
| BA 12 & 25  | 4-5200422 |
| BA 40 & 100 | 4-5200423 |

### *Pole upper clamp*

| For         | Code      |
|-------------|-----------|
| BA 12 & 25  | 4-5200130 |
| BA 40 & 100 | 4-5200131 |

### *Floor post*

| For            | Code      |
|----------------|-----------|
| BA 100/200/400 | 4-5201096 |
| BA 1000        | 4-5201097 |

### *Tool interface BA 100/200/400*

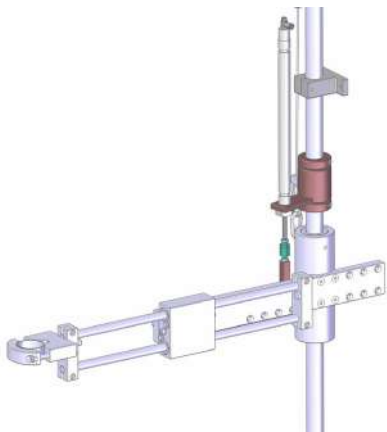
| For                             | Code      |
|---------------------------------|-----------|
| BA 200                          | 4-5201105 |
| BA 400                          | 4-5201106 |
| BA 100/E34/E44 Series (Stanley) | 4-5201124 |
| BA 200/E45/E55 Series (Stanley) | 4-5201125 |

# Linear arms

## BA Accessories

### Downward Assistance Kits

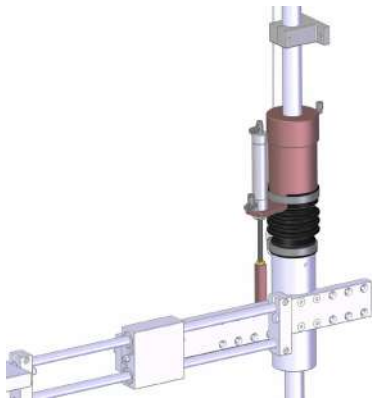
Downward Assistance Kits will provide you with Extreme Comfort and productivity increase. Ideal for self-tapping applications it requires no effort from the operator. BAPER system features a built-in collect chuck that allows the system to be used at any height. Easy Push system operates only at a preset height by using a mechanical stop that is set along the pole.



#### EASY PUSH

| Model  | For         | Pushing force (Kg) | Stroke (mm) | Type      | Code      |
|--|-------------|--------------------|-------------|-----------|-----------|
| EASY PUSH  | BA 12       | 5                  | 125         | Pneumatic | 4-5200099 |
| EASY PUSH  | BA 25       | 9                  | 160         | -         | 4-5200102 |
| EASY PUSH  | BA 40 & 100 | 9                  | 200         | -         | 4-5200103 |
| EASY PUSH  | BA 40 & 100 | 15                 | 200         | -         | 4-5200144 |
| EASY PUSH  | BA 100      | 25                 | 200         | -         | 4-5200145 |
| EASY PUSH  | BA 12       | 5                  | 125         | Electric  | 4-5200838 |
| EASY PUSH  | BA 25       | 9                  | 160         | -         | 4-5200839 |
| EASY PUSH  | BA 40 & 100 | 9                  | 200         | -         | 4-5200840 |
| EASY PUSH  | BA 40 & 100 | 15                 | 200         | -         | 4-5200841 |
| EASY PUSH  | BA 100      | 25                 | 200         | -         | 4-5200842 |
| Easy Push cable/GX (2 m) to use with U3D interface*        |             |                    |             |           | 4-5200843 |
| *U3-D Interface for GX screwdrivers                        |             |                    |             |           | 4-1041888 |
| MD Cable (1 m)   |             |                    |             |           | 4-5210010 |
| Easy Push cable/DELVO (2 m)                                |             |                    |             |           | 4-5200844 |
| Cable without connector (for 5/9 kg pushing force) (3 m)   |             |                    |             |           | 4-5200845 |
| Cable without connector (for 15/25 kg pushing force) (3 m) |             |                    |             |           | 4-5200846 |

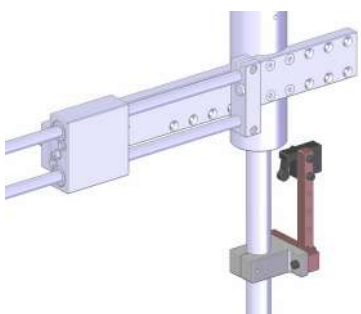
EASY PUSH kits are delivered without cable.



#### BAPER

| Model   | For         | Pushing force (Kg) | Type      | Code      |
|---|-------------|--------------------|-----------|-----------|
| BAPER   | BA 12       | 5                  | Pneumatic | 4-5200095 |
| BAPER   | BA 25       | 8                  | -         | 4-5200096 |
| BAPER   | BA 40 & 100 | 8                  | -         | 4-5200097 |
| BAPER   | BA 12       | 5                  | Electric  | 4-5200830 |
| BAPER   | BA 25       | 8                  | -         | 4-5200831 |
| BAPER   | BA 40 & 100 | 8                  | -         | 4-5200832 |
| BAPER cable/GX (2 m) to use with U3D interface* |             |                    |           | 4-5200833 |
| *U3-D interface for GX screwdrivers             |             |                    |           | 4-1041888 |
| BAPER cable/GY (24 V power supply) (2 m)        |             |                    |           | 4-5200882 |
| MD cable (1 m)                                  |             |                    |           | 4-5210010 |
| BAPER cable/DELVO (2 m)                         |             |                    |           | 4-5200834 |
| Cable without connector (3 m)                   |             |                    |           | 4-5200835 |

Electric BAPER kits are delivered without cable.



#### Safety kit

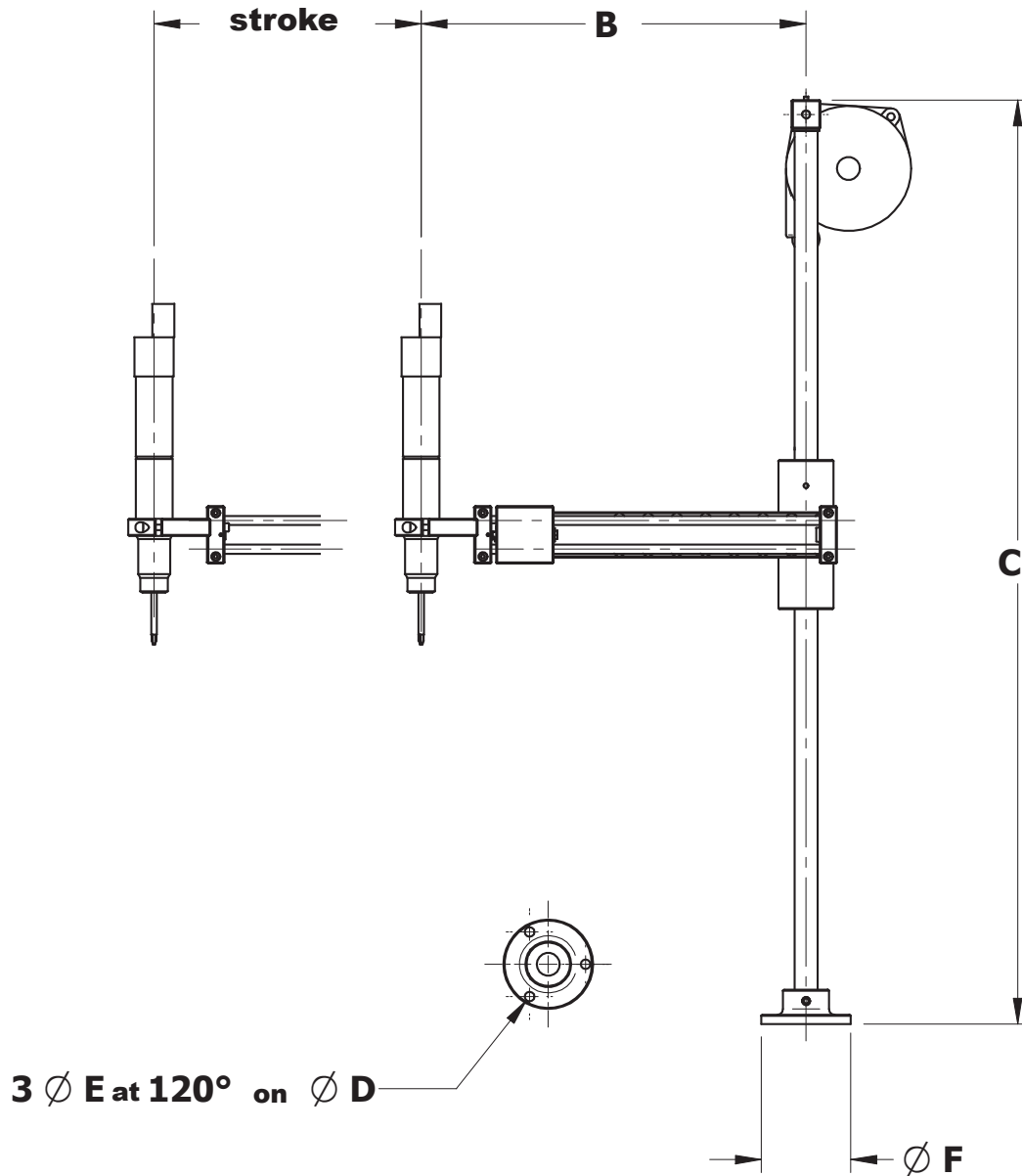
| For         | Code      |
|-------------|-----------|
| BA 12 & 25  | 4-5200134 |
| BA 40 & 100 | 4-5200135 |

The safety kit allows to avoid activation of downward assistance before powerbit gets in contact with the screw.



# Linear arms

BA 5 to 100 Dimensions



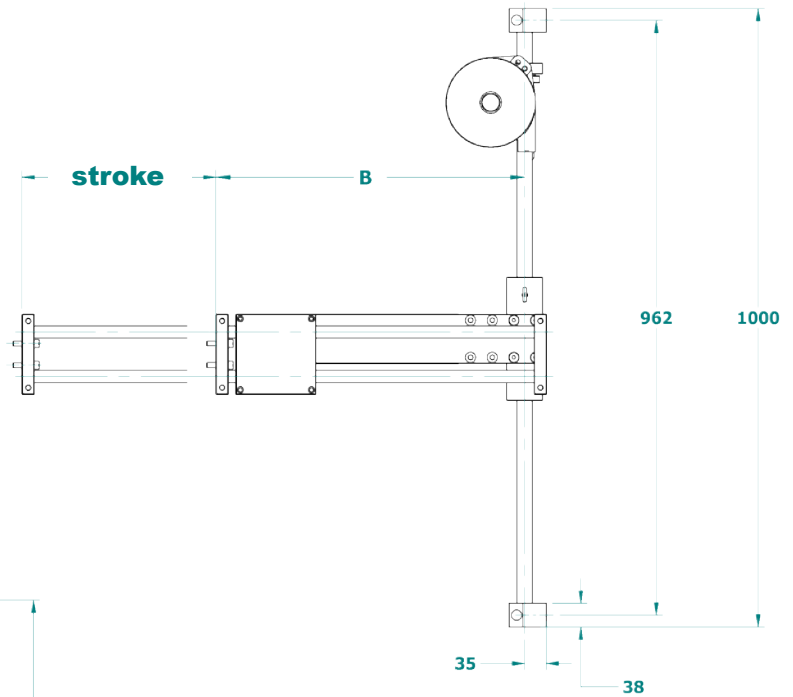
## BA Dimensions

| Model  | Stroke A | Min | B   | Max  | C   | D    | E   | F |
|--------|----------|-----|-----|------|-----|------|-----|---|
| BA 5   | 200      | 235 | 315 | 705  | 65  | 8,5  | 78  |   |
| BA 12  | 200      | 186 | 336 | 805  | 65  | 8,5  | 78  |   |
| BA 25  | 250      | 221 | 396 | 908  | 65  | 8,5  | 78  |   |
| BA 40  | 295      | 260 | 460 | 1008 | 100 | 8,5  | 118 |   |
| BA 100 | 330      | 315 | 515 | 1008 | 126 | 10,5 | 148 |   |

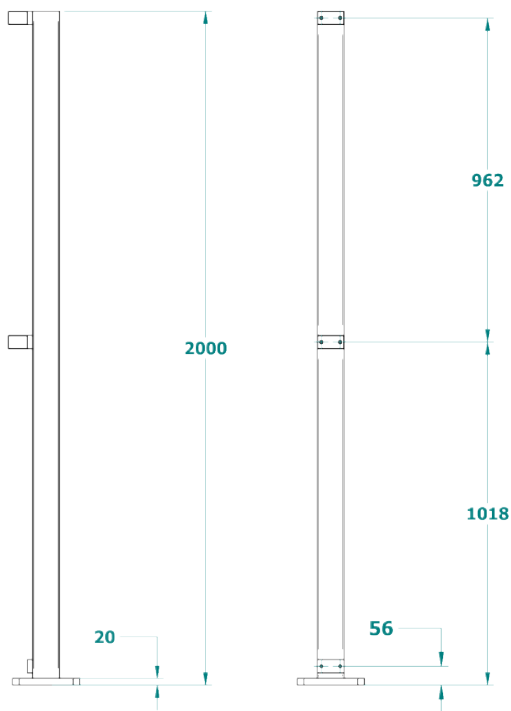


# Linear arms

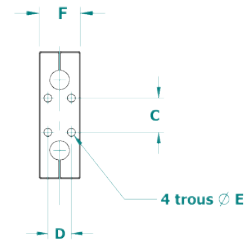
## BA 200 / 400 Dimensions



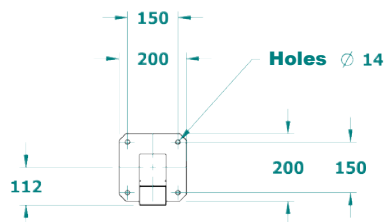
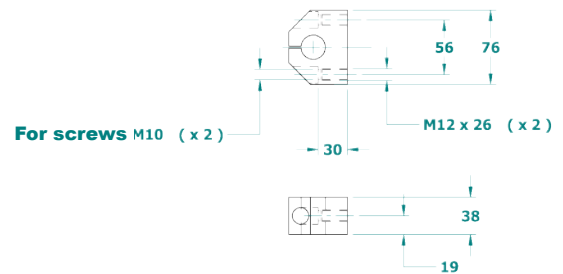
### Floor post



### Clamp Mounting Bracket



### Coupling flange

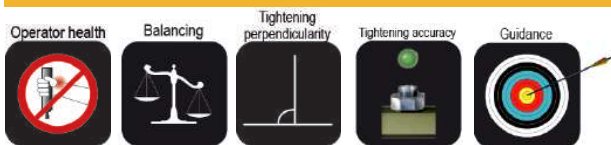


| Model  | Stroke A | B   |     | C  | D  | E    | F  |
|--------|----------|-----|-----|----|----|------|----|
|        |          | Min | Max |    |    |      |    |
| BA 200 | 350      | 430 | 500 | 35 | 24 | 8,2  | 42 |
| BA 400 | 400      | 326 | 406 | 40 | 28 | 12,2 | 52 |

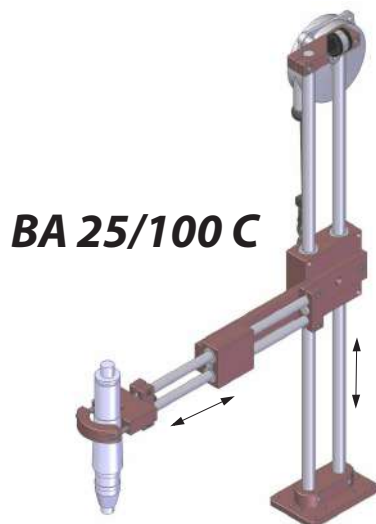


# Travelling arms

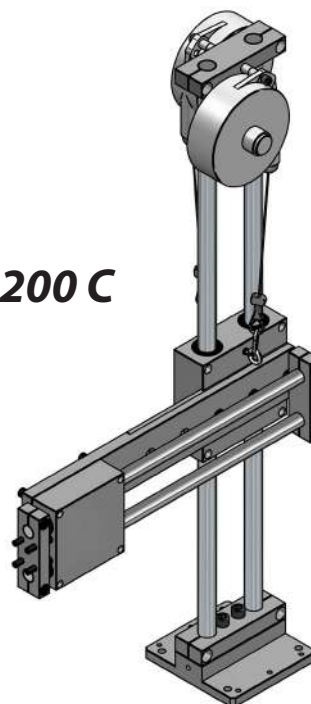
## BA...C Series



BA...C Series ideal for tightening operations on large surface or with repetitive tightening tasks.



**BA 200 C**



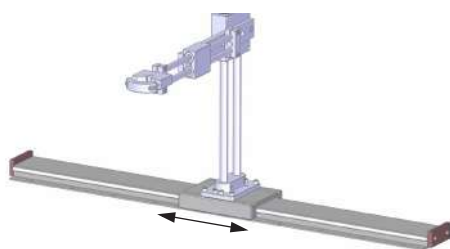
| Model      | Max torque (mm) | Tool Ø (mm) | Stroke (mm) | Load max (kg) | Code      |
|------------|-----------------|-------------|-------------|---------------|-----------|
| BA 25 C    | 25              | 28-52       | 250         | 2,2           | 4-5200722 |
| BA 100 C** | 100*            | 28-52       | 325         | 3             | 4-5200433 |
| BA 200 C   | 200             | Sans        | 350         | 8             | 4-5200723 |

Delivered without horizontal rail.

\* Max torque 50 Nm if installed on a lateral linear guide.

\*\* Compatible accessories : extended slides, double slide, automatic rest position (ARP), quick change clamp (see page 5 and 6).

### Rails BA25/BA100C



| Model        | Length (mm) | Stroke (mm) | Code      |
|--------------|-------------|-------------|-----------|
| Guiding rail | 600         | 420         | 4-5200294 |
| Guiding rail | 1000        | 820         | 4-5200295 |
| Guiding rail | 1500        | 1320        | 4-5200296 |
| Guiding rail | 2000        | 1820        | 4-5200297 |

Higher length on request

Rail for BA200C on request

### Inverse mounting kit

| For      | Code      |
|----------|-----------|
| BA 25 C  | 4-5200811 |
| BA 100 C | Standard  |

### Downward assistance kit

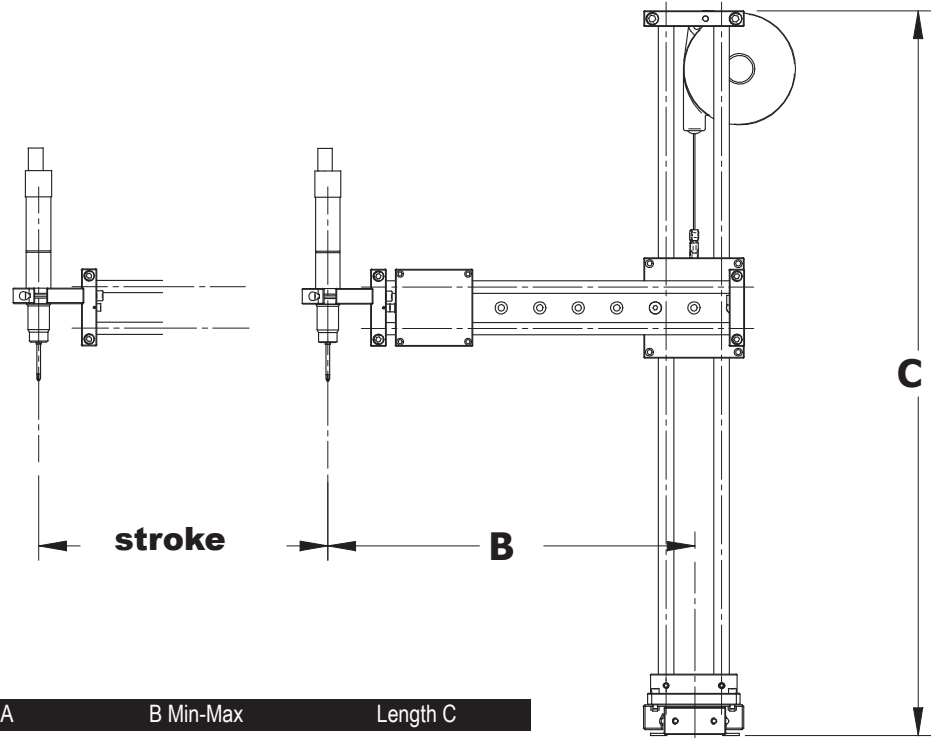
| For      | Pushing force (kg) | Stroke (mm) | Type   | Code      |
|----------|--------------------|-------------|--------|-----------|
| EP 25 P  | 9                  | 160         | Pneu.  | 4-5200452 |
| EP 25 E  | 9                  | 160         | Elect. | 4-5200454 |
| EP 100 P | 9                  | 200         | Pneu.  | 4-5200453 |
| EP 100 E | 9                  | 200         | Elect. | 4-5200455 |

### Safety kit

| For      | Code      |
|----------|-----------|
| BA 25 C  | 4-5200390 |
| BA 100 C | 4-5200391 |

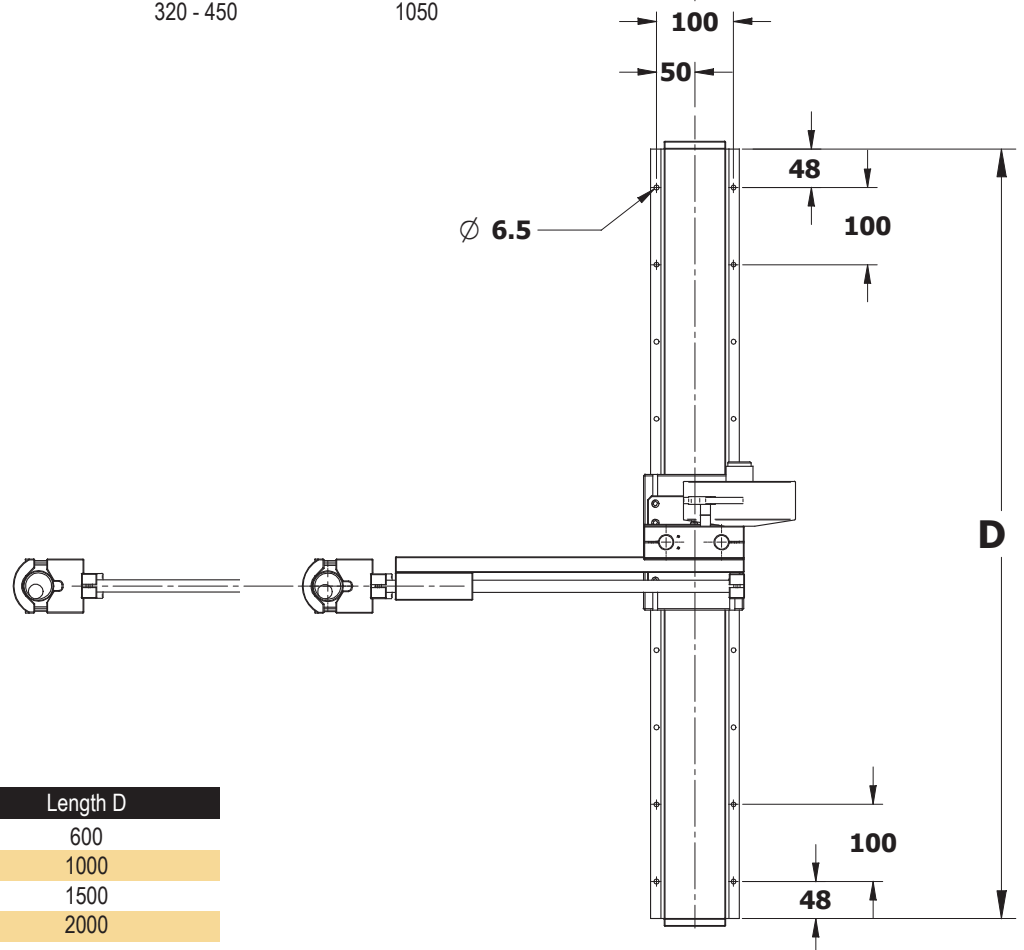
# Travelling arms

## BA...C Dimensions



### Dimensions

| Model    | Stroke A | B Min-Max | Length C |
|----------|----------|-----------|----------|
| BA 25 C  | 250      | 207 - 327 | 737      |
| BA 100 C | 325      | 259 - 483 | 940      |
| BA 200 C | 350      | 320 - 450 | 1050     |



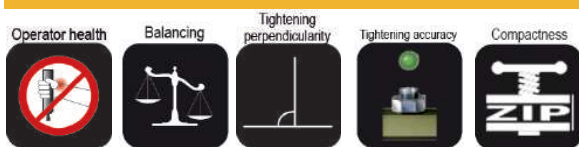
### Rails

| Stroke | Length D |
|--------|----------|
| 420    | 600      |
| 820    | 1000     |
| 1320   | 1500     |
| 1820   | 2000     |



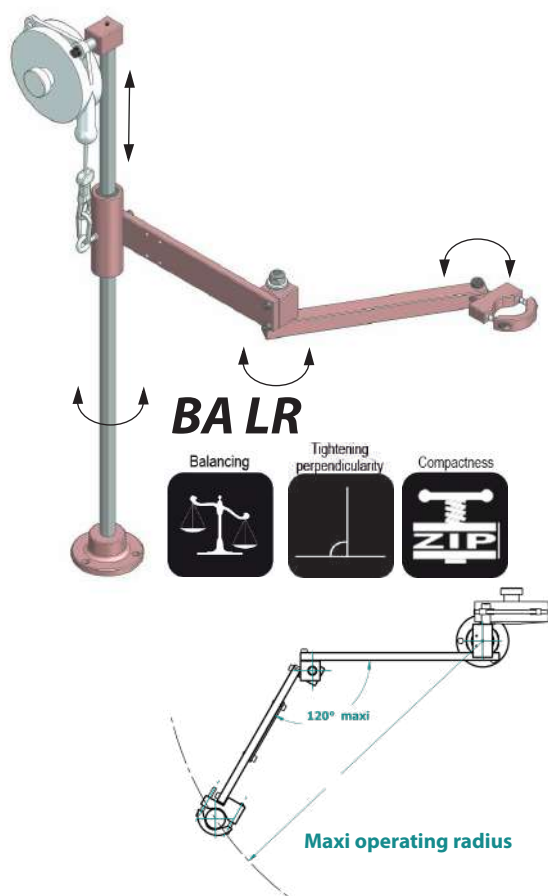
# Articulated reaction arms

## BA...R Series

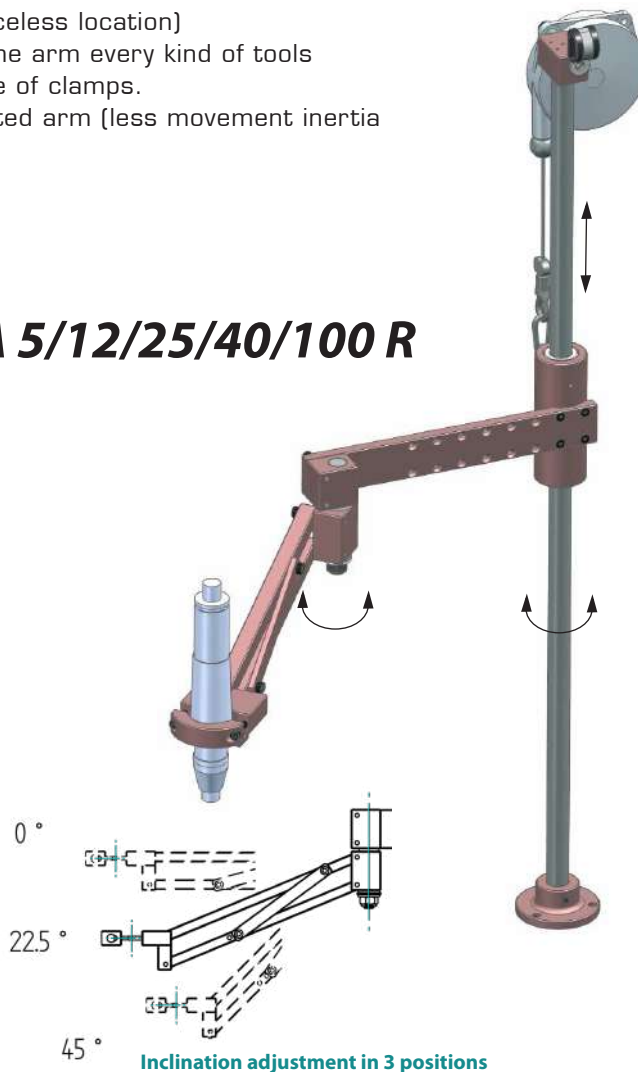


BA...R Series are equipped with a rotating articulation enabling a high working flexibility. Swivelling and folding up like a human arm, they are recommended for spaceless working places.

- Optimum ratio performance/dimensions (ideal for spaceless location)
- Economical and versatile : possibility to use on the same arm every kind of tools (straight, pistol, angle drivers) thanks to the large choice of clamps.
- Higher comfort for the operator thanks to the articulated arm (less movement inertia and better positioning accuracy).



## BA 5/12/25/40/100 R



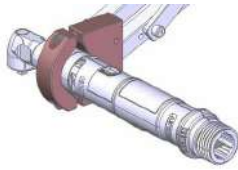
| Model         | Max torque (Nm) | Tool Ø (mm) | Max load (kg) | Max radius (mm) | Code      |
|---------------|-----------------|-------------|---------------|-----------------|-----------|
| BA LR         | -               | 25 - 42     | 0,9           | 450             | 4-5200826 |
| BA 5 R        | 5               | 25 - 42     | 0,9           | 420             | 4-5200098 |
| BA 12 R       | 12              | 27 - 50     | 1,2           | 450             | 4-5201001 |
| BA 12 R/600   | 12              | 27 - 50     | 1             | 600             | 4-5201002 |
| BA 25 R       | 25              | 28 - 52     | 2,2           | 445             | 4-5200070 |
| BA 25 R/600   | 25              | 28 - 52     | 1,9           | 600             | 4-5200274 |
| BA 25 R/800   | 25              | 28 - 52     | 1,5           | 800             | 4-5200275 |
| BA 40 R       | 40              | 28 - 52     | 2,2/4*        | 630             | 4-5200071 |
| BA 40 R/800   | 40              | 28 - 52     | 2/3,5*        | 800             | 4-5200276 |
| BA 40 R/1000  | 40              | 28 - 52     | 1,8/3*        | 1000            | 4-5200277 |
| BA 100 R      | 100             | 28 - 52     | 3/5*          | 715             | 4-5200072 |
| BA 100 R/900  | 100             | 28 - 52     | 3/5*          | 900             | 4-5200278 |
| BA 100 R/1100 | 100             | 28 - 52     | 2,5/4*        | 1100            | 4-5200279 |

\* With additional balancer - Code : 4-5200143.

Delivered with standard clamp for straight tool.

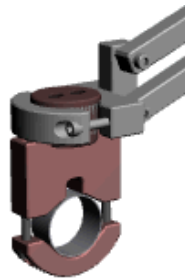
# Articulated reaction arms

## BA...R Accessories



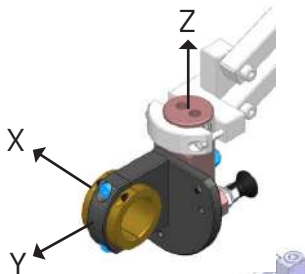
### Clamp for angle nutrunner

| For          | Tool Ø (mm) | Code      |
|--------------|-------------|-----------|
| BA 12 R      | 27 - 50     | 4-5200089 |
| BA 25 & 40 R | 28 - 52     | 4-5200090 |
| BA 100 R     | 28 - 52     | 4-5200091 |



### Swivel clamp mounting for angle nutrunner

| For  | Tool Ø (mm) | Code      |
|--|-------------|-----------|
| Clamp for BA12/12 R angle head tool        | 27 - 50     | 4-5250514 |
| Clamp for BA25/25R/40/40 R angle head tool | 28 - 52     | 4-5250515 |



### Swivel <sup>(z)</sup> / indexable <sup>(y)</sup> / rotating <sup>(x)</sup> clamp for angle nutrunner

| For                               | Code      |
|-----------------------------------|-----------|
| Clamp for BA40/40R (max. 20 Nm)   | 4-5250516 |
| Clamp for BA100/100R (max. 40 Nm) | 4-5250517 |

### Clamp for pistol tool

| For          | Tool Ø (mm) | Code      |
|--------------|-------------|-----------|
| BA 12 R      | 27 - 50     | 4-5200087 |
| BA 25 & 40 R | 28 - 52     | 4-5200088 |

### 2 axis clamp

| For          | Tool Ø (mm) | Code      |
|--------------|-------------|-----------|
| BA 12 R      | 27 - 50     | 4-5200093 |
| BA 25 & 40 R | 28 - 52     | 4-5200094 |

### Quick change clamp

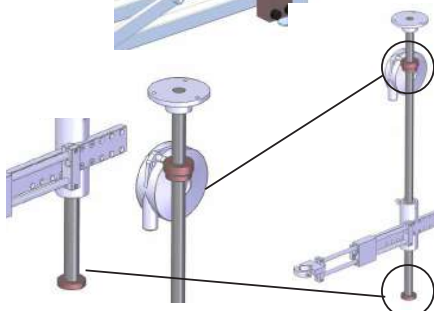
| For     | Adaptater code | Code      |
|---------|----------------|-----------|
| BA 12 R | 4-5200847      | 4-5201003 |
| BA 25 R | 4-5200848      | 4-5200017 |
| BA 40 R | 4-5200848      | 4-5200017 |

### Auto rest spring

| For       | Code      |
|-----------|-----------|
| BA 5/12 R | 4-5200849 |
| BA 25 R   | 4-5200850 |
| BA 40 R   | 4-5200851 |

### Inverse mounting kit

| For           | Code      |
|---------------|-----------|
| BA 5 R        | 4-5200385 |
| BA 12 & 25 R  | 4-5200128 |
| BA 40 & 100 R | 4-5200129 |





# Articulated reaction arms

## BA...R Accessories



### Additional balancing kit

| For      | Arm max load (kg) | Code      |
|----------|-------------------|-----------|
| BA 40 R  | 4                 | 4-5200143 |
| BA 100 R | 6                 | 4-5200143 |

### Pole upper clamp

| For           | Interface (mm)                  | Code      |
|---------------|---------------------------------|-----------|
| BA 12 & 25 R  | 2 Ø 4,3 at 45 mm from pole axis | 4-5200130 |
| BA 40 & 100 R | 2 Ø 5,3 at 60 mm from pole axis | 4-5200131 |

Downward assistance kits will provide you with extreme comfort and productivity increase. Ideal for self-tapping applications it requires no effort from the operator. BAPER system features a built-in collet check that allows the system to be used at any height. Easy push system operates only at a preset height by using a mechanical stop that is set along the pole.

### EASY PUSH downward assistance kit

| Model   | For           | Pushing force (kg) | Stroke (mm) | Type      | Code      |
|---|---------------|--------------------|-------------|-----------|-----------|
| EASY PUSH   | BA 12 R       | 5                  | 125         | Pneumatic | 4-5200099 |
| EASY PUSH   | BA 25 R       | 9                  | 160         | -         | 4-5200102 |
| EASY PUSH   | BA 40 & 100 R | 9                  | 200         | -         | 4-5200103 |
| EASY PUSH   | BA 12 R       | 5                  | 125         | Electric  | 4-5200838 |
| EASY PUSH   | BA 25 R       | 9                  | 160         | -         | 4-5200839 |
| EASY PUSH   | BA 40 & 100 R | 9                  | 200         | -         | 4-5200840 |
| Easy Push cable/GX (2 m) to use with U3D interface* |               |                    |             |           | 4-5200843 |
| *U3-D Interface for GX screwdrivers                 |               |                    |             |           | 4-1041888 |
| Easy Push cable MD (1 m)                            |               |                    |             |           | 4-5210010 |
| Easy Push Cable/DELVO (2 m)                         |               |                    |             |           | 4-5200844 |
| Cable without connector (3 m)                       |               |                    |             |           | 4-5200845 |

EASY PUSH kits are delivered without cable.

### BAPER downward assistance kit

| Model   | For           | Pushing force (kg) | Type      | Code      |           |
|---|---------------|--------------------|-----------|-----------|-----------|
| BAPER   | BA 12 R       | 5                  | Pneumatic | 4-5200095 |           |
| BAPER   | BA 25 R       | 8                  | -         | 4-5200096 |           |
| BAPER   | BA 40 & 100 R | 8                  | -         | 4-5200097 |           |
| BAPER   | BA 12 R       | 5                  | Electric  | 4-5200830 |           |
| BAPER   | BA 25 R       | 8                  | -         | 4-5200831 |           |
| BAPER   | BA 40 & 100 R | 8                  | -         | 4-5200832 |           |
| BAPER cable/GX (2 m) to use with U3D interface* |               |                    |           |           | 4-5200833 |
| *U3-D Interface for GX screwdrivers             |               |                    |           |           | 4-1041888 |
| BAPER cable/GY (24 V power supply) (2 m)        |               |                    |           |           | 4-5200882 |
| Easy Push cable MD (1 m)                        |               |                    |           |           | 4-5210010 |
| BAPER Cable/DELVO (2 m)                         |               |                    |           |           | 4-5200834 |
| Cable without connector (3 m)                   |               |                    |           |           | 4-5200835 |

Electric BAPER kits are delivered without cable.

### Safety kit for downward assistance kit

| Model      | For           | Code      |
|------------|---------------|-----------|
| Safety kit | BA 12 & 25 R  | 4-5200134 |
| Safety kit | BA 40 & 100 R | 4-5200135 |

The safety kit allows to avoid activation of downward assistance before powerbit gets in contact with the screw.

# Articulated reaction arms

## BA...R high torque



**BA 180 R**



**BA 200/500 R**



**BA 180 R**

| Model           | Max. torque (Nm) | Max load (kg) | Max radius (mm) | Code      |
|-----------------|------------------|---------------|-----------------|-----------|
| BA 180 R / 1200 | 180              | 6             | 1200            | 4-5201095 |
| BA 180 R / 1500 | 180              | 4             | 1500            | 4-5200827 |

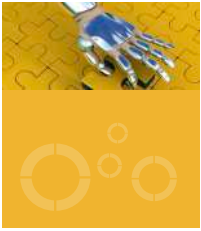
Delivered without tool clamp, floor post and not anodized.



**BA 200 R / 500 R**

| Model         | Max. torque (Nm) | Max load (kg) | Max radius (mm) | Code      |
|---------------|------------------|---------------|-----------------|-----------|
| BA 200 R      | 200              | 20            | 2000            | 4-5200828 |
| BA 500 R      | 500              | 40            | 2000            | 4-5200829 |
| BA 500 R/2500 | 500              | 30            | 2500            | 4-5283106 |
| BA 500 R/3000 | 500              | 40            | 3000            | 4-5283107 |

Delivered without tool clamp.  
Higher capacity on request.



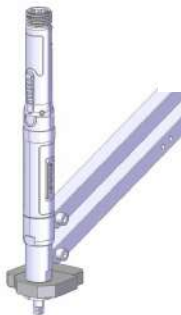
# Articulated reaction arms

BA...R high torque accessories



## **BA 180 R equipped with floor post (optional)**

The BA 180 R can be mounted directly on your structure or on an optional post to split on the floor.



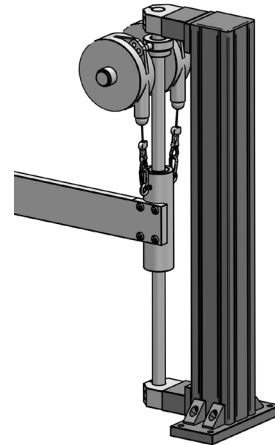
## **Arm/power tools interface for straight tools and for angular tool with BA180R**

**Code : 4-5201108.**

*Note : please precise the screwdriver type.*

## **Table mount post BA200/BA180R**

**Code : 4-5201098.**



## **BA200/400 and 180R Floor Post**

**Code : 4-5201096.**

## **Pneumatic break with rotating clamp (option)**



## **BA 200R/500R**

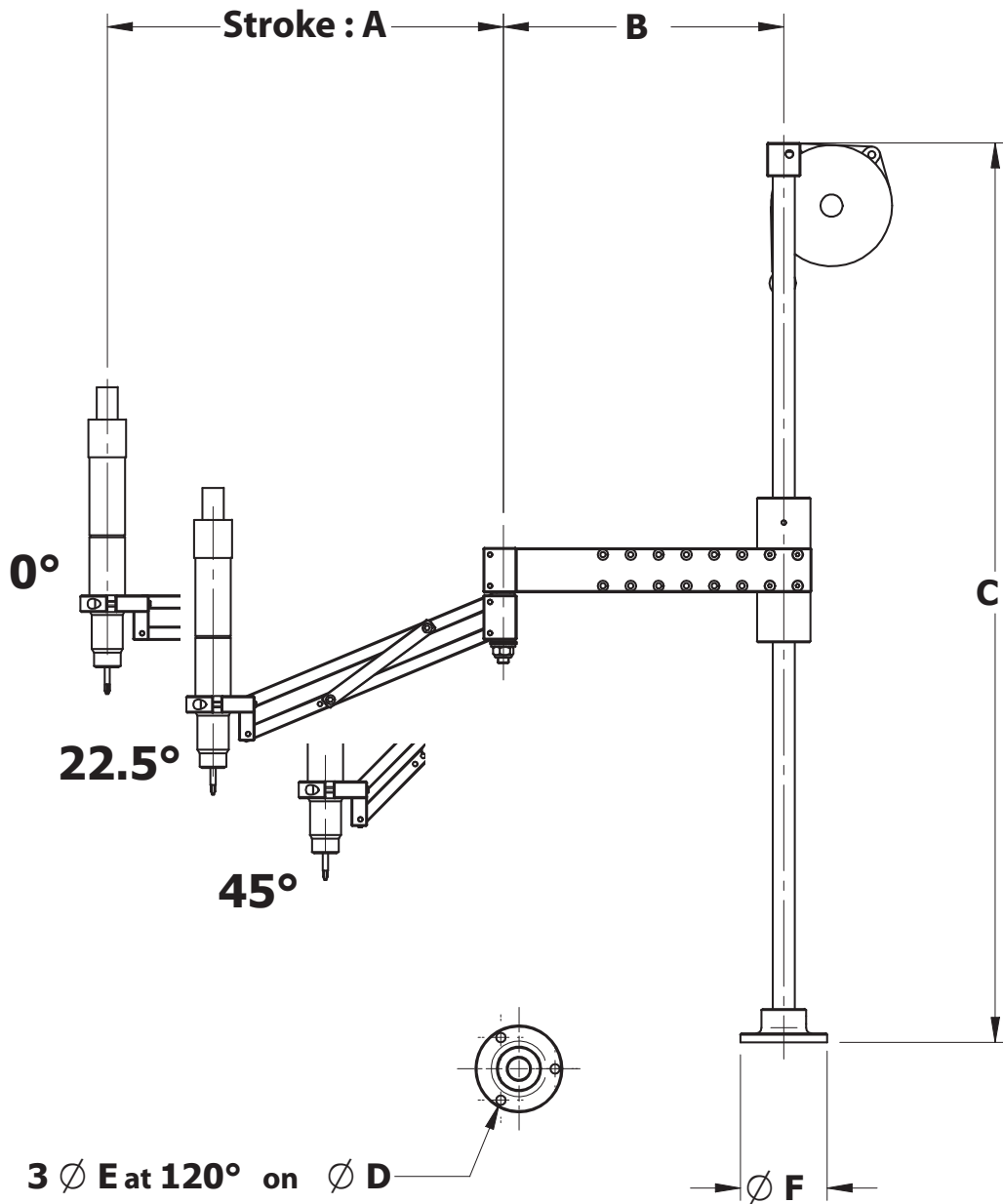
Numerous options are available to meet your process requirement :

- pneumatic break
- rotating clamp
- controller base plate
- remote start handle



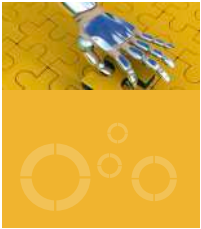
# Articulated reaction arms

## BA...R 5 to 100 Dimensions



### BA...R dimensions

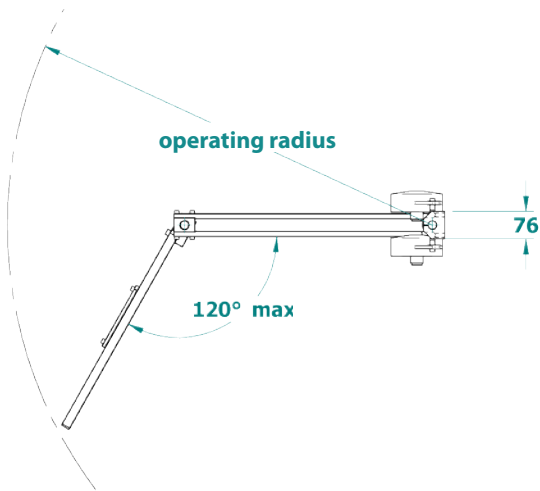
| Model           | A 0°<br>(mm) | A 22,5°<br>(mm) | A 45°<br>(mm) | Min | B<br>Max (mm) | C<br>(mm) | Operating radius<br>at 22,5° (mm) |
|-----------------|--------------|-----------------|---------------|-----|---------------|-----------|-----------------------------------|
| BA 5 R          | 259          | 243             | 192           | 132 | 212           | 705       | 420                               |
| BA 12 R         | 279          | 261             | 209           | 102 | 252           | 808       | 450                               |
| BA 12 R / 600   | 332          | 310             | 247           | 332 | 357           | 808       | 600                               |
| BA 25 R         | 296          | 278             | 227           | 95  | 245           | 908       | 460                               |
| BA 25 R / 600   | 358          | 336             | 271           | 305 | 330           | 908       | 600                               |
| BA 25 R / 800   | 483          | 452             | 360           | 417 | 442           | 908       | 800                               |
| BA 40 R         | 414          | 387,5           | 310,5         | 150 | 350           | 1008      | 650                               |
| BA 40 R / 800   | 503          | 470             | 374           | 415 | 415           | 1008      | 800                               |
| BA 40 R / 1000  | 640          | 597             | 471           | 520 | 520           | 1008      | 1000                              |
| BA 100 R        | 462          | 433             | 351           | 205 | 405           | 1008      | 730                               |
| BA 100 R / 900  | 564          | 528             | 425           | 470 | 520           | 1008      | 900                               |
| BA 100 R / 1100 | 694          | 648             | 517           | 585 | 635           | 1008      | 1100                              |



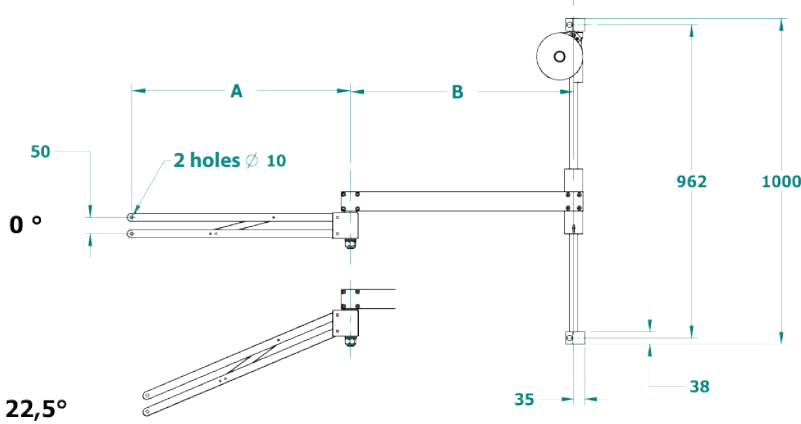
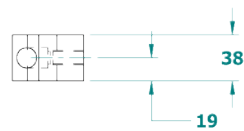
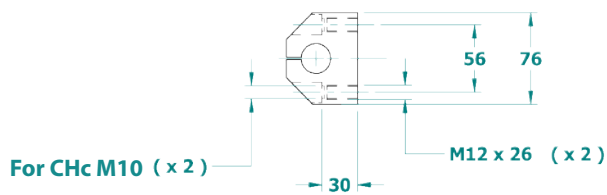
# Articulated reaction arms

## BA 180 R Dimensions

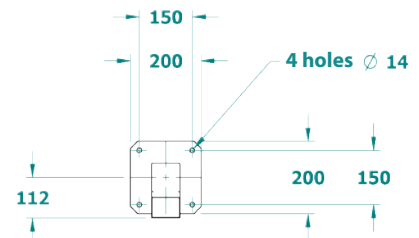
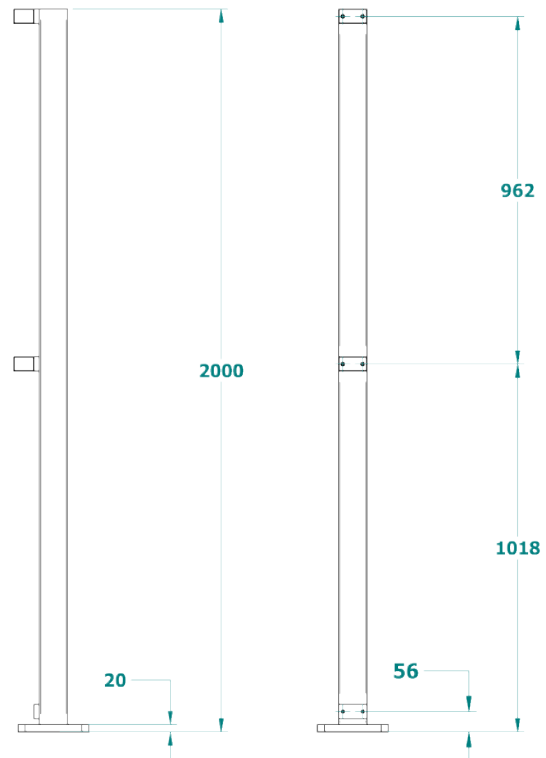
### BA 180 R



### Coupling flange



### Floor post

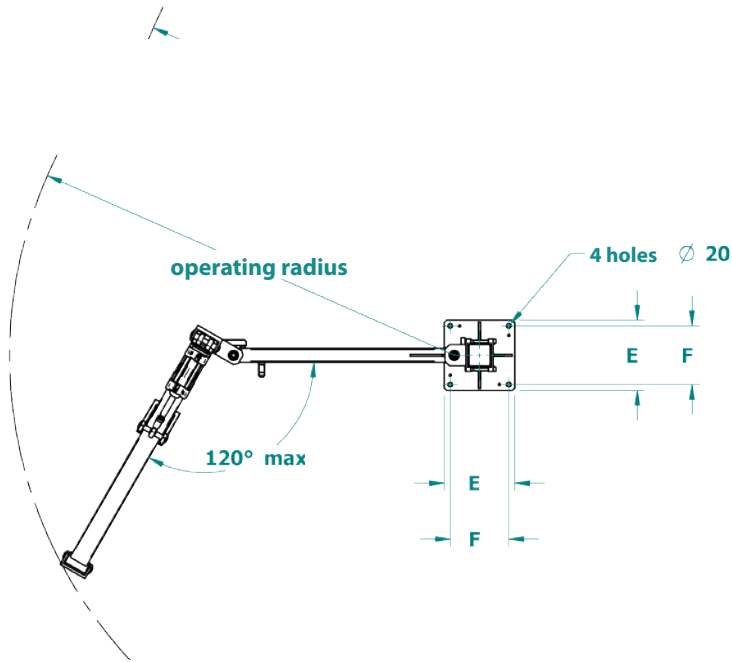
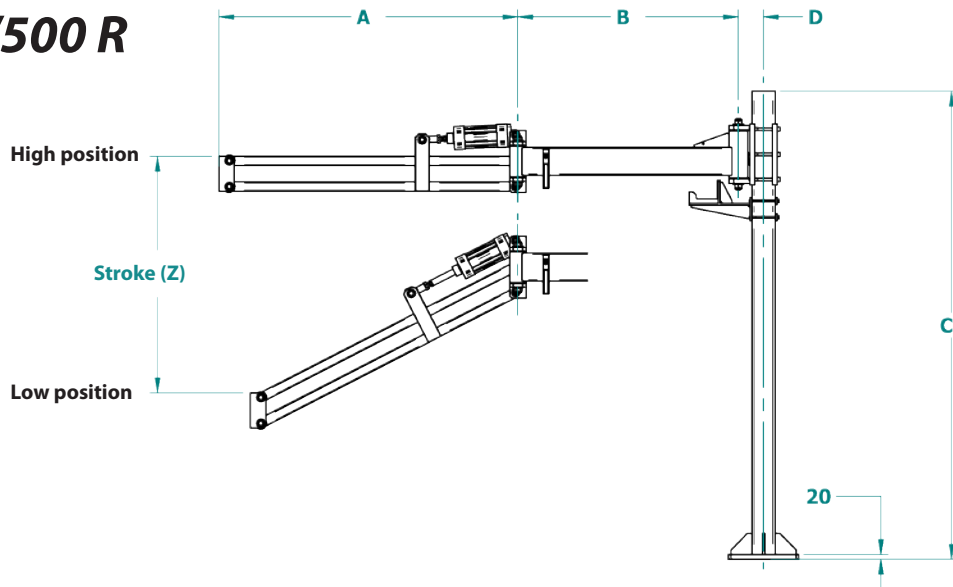


| Type          | A (0°) | A (22,5°) | B   | C    | Operating radius |
|---------------|--------|-----------|-----|------|------------------|
| BA 180 R/1200 | 686    | 637       | 700 | 2000 | 1200             |
| BA 180 R/1500 | 820    | 760       | 855 | 2000 | 1500             |

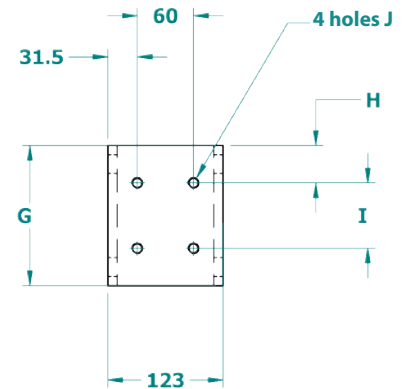
# Articulated reaction arms

## BA 200 & 500 R Dimensions

### BA 200/500 R



### Tool clamp mounting bracket

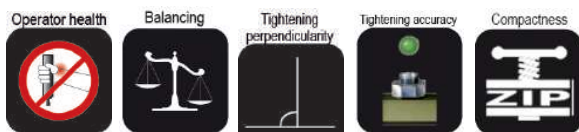


| Model         | A (high position) | Z (Stroke) | B    | C    | D   | E   | F   | G   | H  | I   | J   | K   | Operating radius |
|---------------|-------------------|------------|------|------|-----|-----|-----|-----|----|-----|-----|-----|------------------|
| BA 200 R      | 1278              | 559        | 943  | 2000 | 108 | 300 | 250 | 150 | 40 | 70  | M12 | 108 | 1900             |
| BA 500 R      | 1278              | 559        | 943  | 2000 | 118 | 400 | 350 | 170 | 45 | 80  | M16 | 118 | 1900             |
| BA 500 R/2500 | 1478              | 650        | 1293 | 2000 | 118 | 400 | 350 | 170 | 45 | 80  | M16 | 118 | 2400             |
| BA 500 R/3000 | 1978              | 1100       | 1560 | 2000 | 118 | 500 | 450 | 170 | 45 | 100 | M16 | 118 | 2900             |



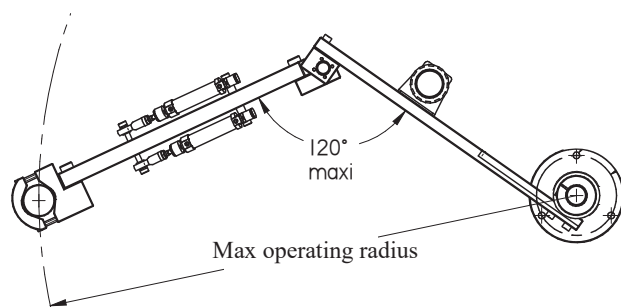
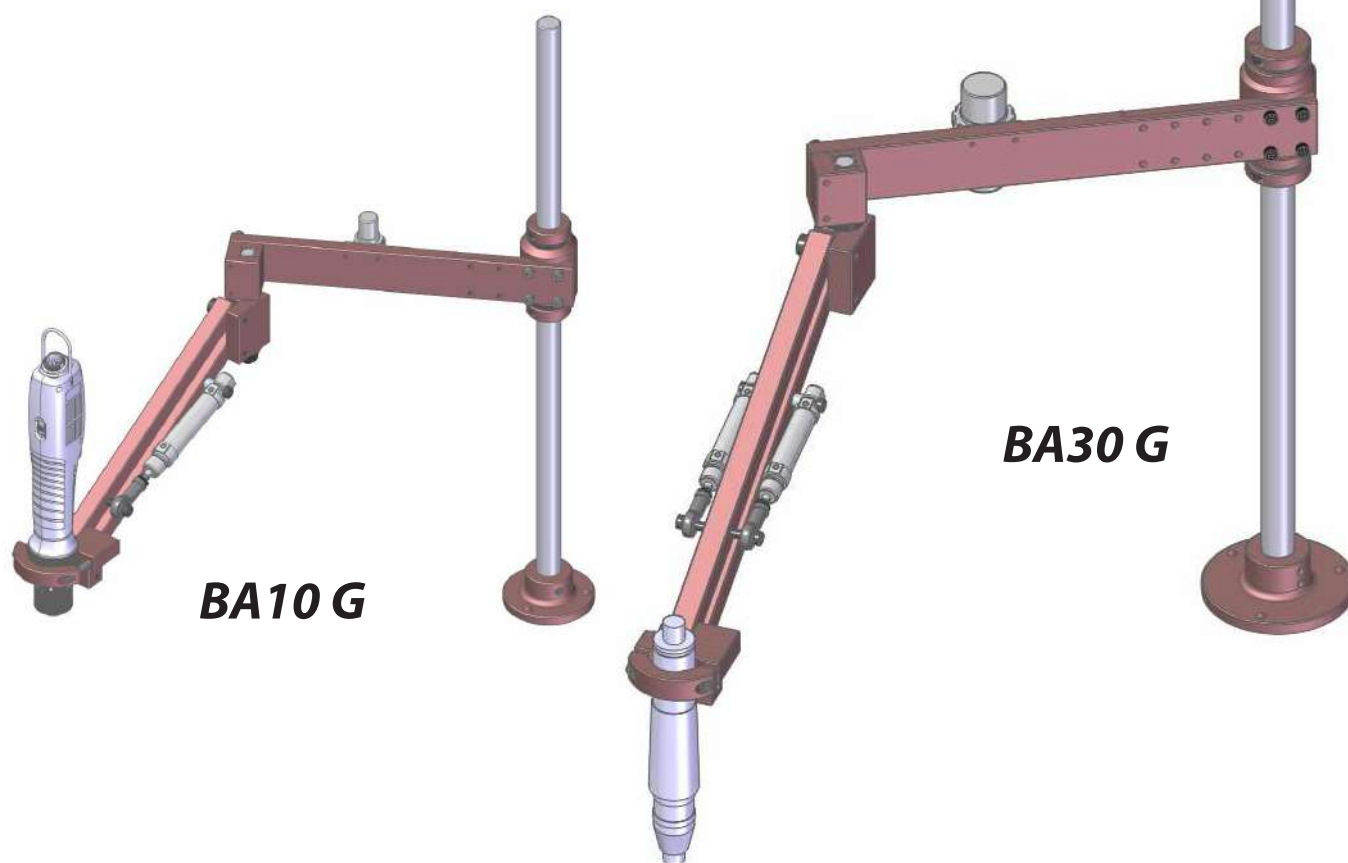
# Articulated and air balanced pantograph

## BA...G Series



Inspired from the BA...R Series, the BA...G Series provides you even more flexibility and confort thanks to the air balanced design.

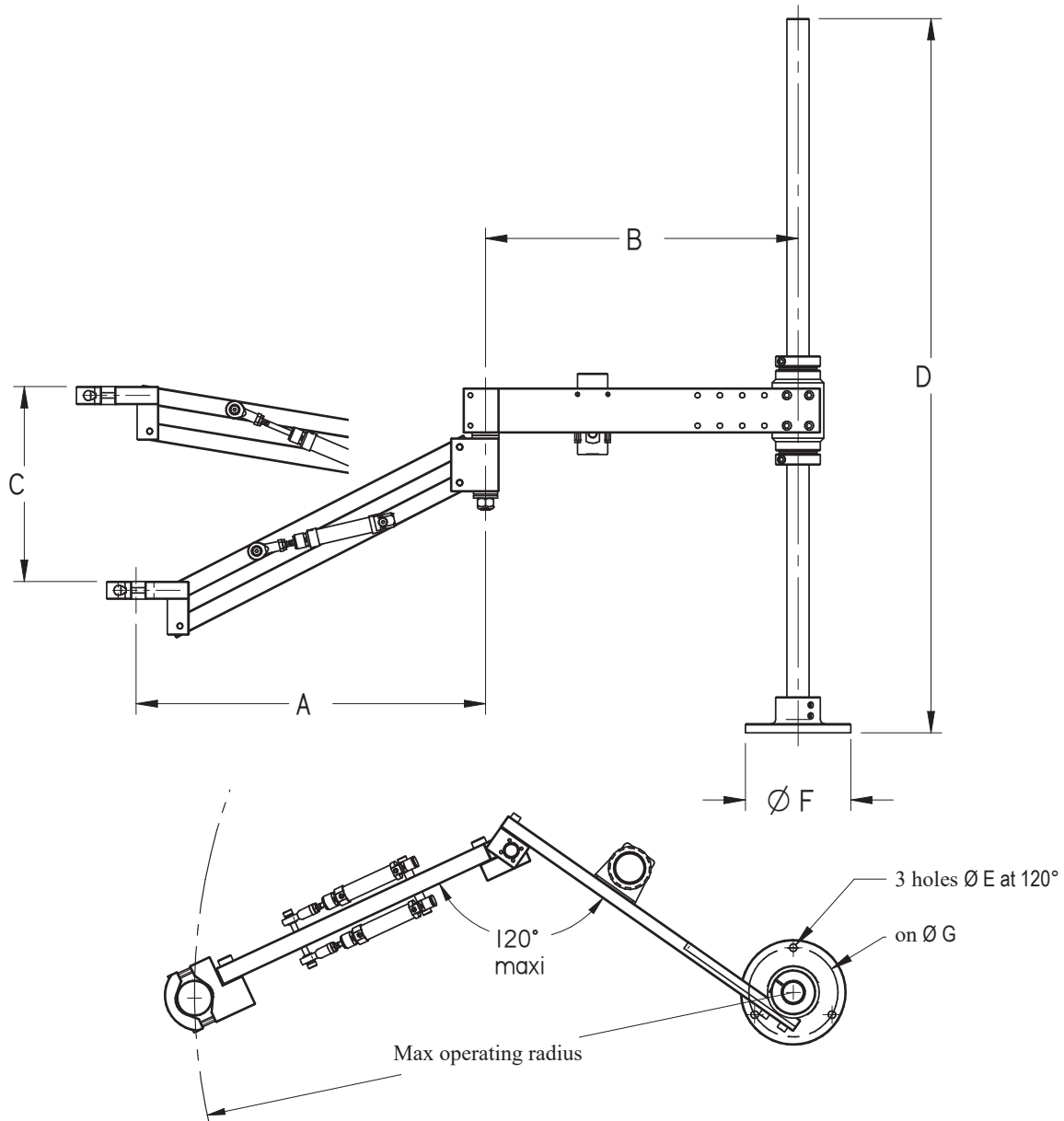
- Softly air balanced !
- Quick and quiet !



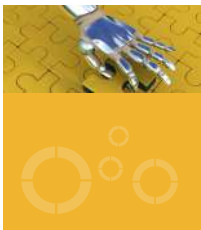
| Model      | Torque Max (Nm) | Tool Ø (mm) | Vertical Stroke (mm) | Maxi load (Kg) | Max radius (mm) | Code      |
|------------|-----------------|-------------|----------------------|----------------|-----------------|-----------|
| BA10 G     | 10              | 27 - 50     | 170                  | 1              | 470             | 4-5201013 |
| BA10 G/600 | 10              | 27 - 50     | 170                  | 1              | 600             | 4-5201014 |
| BA30 G     | 30              | 28 - 52     | 220                  | 2              | 670             | 4-5201015 |
| BA30 G/800 | 30              | 28 - 52     | 220                  | 2              | 800             | 4-5201016 |

# Articulated and air balanced pantograph

## BA...G Series



| Model      | A (down position) | B mini | B maxi | C Vertical Stroke | D   | Dim. E | Dim. F | Dim. G | Max radius (mm) |
|------------|-------------------|--------|--------|-------------------|-----|--------|--------|--------|-----------------|
| BA10 G     | 260               | 202    | 252    | 170               | 600 | 8,5    | 78     | 65     | 470             |
| BA10 G/600 | 260               | 357    | 407    | 170               | 600 | 8,5    | 78     | 65     | 600             |
| BA30 G     | 391               | 250    | 350    | 218               | 800 | 8,5    | 118    | 100    | 670             |
| BA30 G/800 | 391               | 405    | 505    | 218               | 800 | 8,5    | 118    | 100    | 800             |



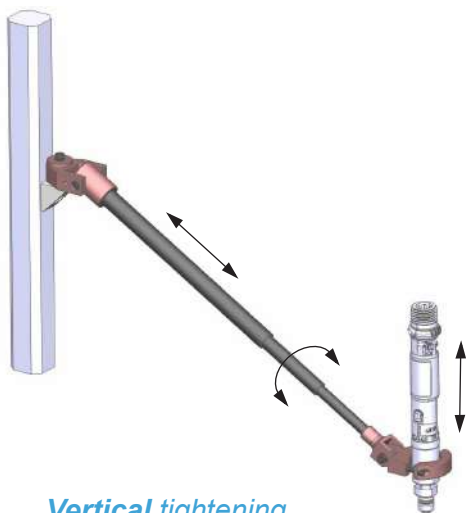
# Carbon telescoping arms

## DMF/DMFI Series



*DMF Series : Erase your torque reaction until 300 Nm.*

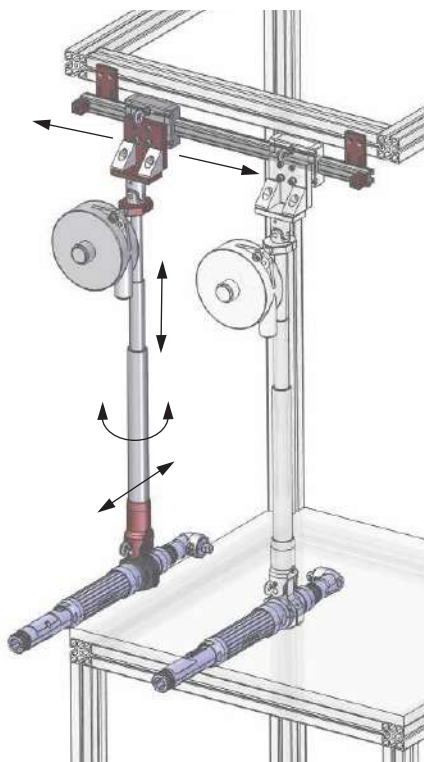
- Comfort : Easy to install on moving assembly line (mountable on existing standard rail). Require little space and doesn't disrupt flow production. Erase torque reaction of power tools.
- Economy : Maintenance free thanks to the carbon fiber (no greasing). Long last of living thanks to the durable carbon fiber.
- Productivity : Easy and quick operator handling thanks to the light weight carbon fiber.



*Vertical tightening*

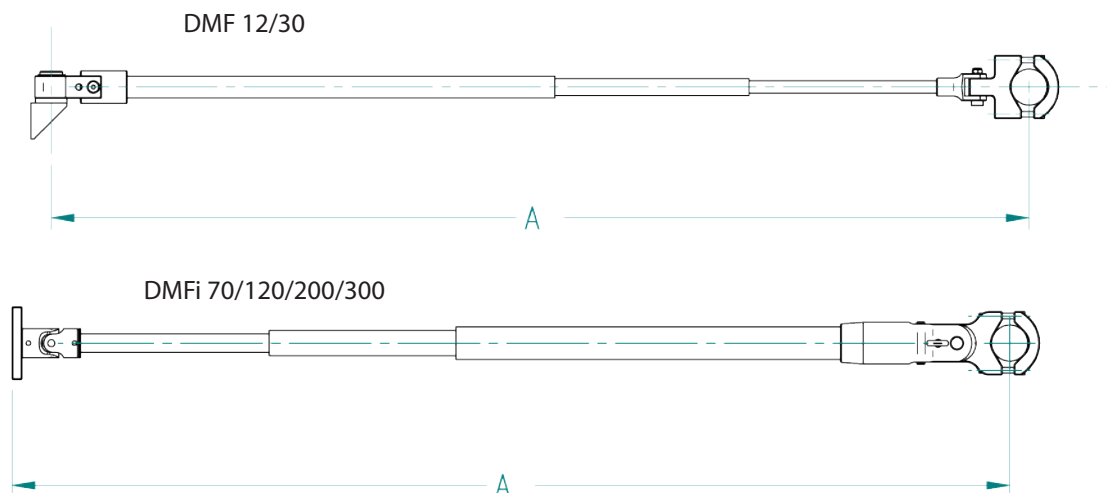


*Frontal tightening*



*Side tightening*

# Carbon telescoping arms



## Standard stroke

| Model         | Max torque (Nm) | Standard clamp | Tool Ø (mm) | A min (mm) | A max (mm) | Code          |            |
|---------------|-----------------|----------------|-------------|------------|------------|---------------|------------|
|               |                 |                |             |            |            | Without clamp | With clamp |
| DMF 5/950     | 5               | P1             | 25 - 42     | 460        | 950        |               | 4-5300445  |
| DMF 12/950    | 12              | P1             | 27 - 50     | 460        | 950        |               | 4-5301004  |
| DMF 12/1500   | 12              | P1             | 27 - 50     | 650        | 1500       |               | 4-5301005  |
| DMF 12/2000   | 12              | P1             | 27 - 50     | 820        | 2000       |               | 4-5301006  |
| DMF 30/960    | 30              | P1             | 28 - 52     | 475        | 960        | 4-5344000     | 4-5300074  |
| DMF 30/1500   | 30              | P1             | 28 - 52     | 656        | 1500       | 4-5344001     | 4-5300282  |
| DMF 30/2000   | 30              | P1             | 28 - 52     | 823        | 2000       | 4-5344002     | 4-5300283  |
| DMF 30/2500   | 30              | P1             | 28 - 52     | 993        | 2500       | 4-5344003     | 4-5300284  |
| DMFi 70/1500  | 70              | P2             | 35 - 52     | 667        | 1500       | 4-5344004     | 4-5344020  |
| DMFi 70/2000  | 70              | P2             | 35 - 52     | 833        | 2000       | 4-5344005     | 4-5344021  |
| DMFi 70/2500  | 70              | P2             | 35 - 52     | 1000       | 2500       | 4-5344006     | 4-5344022  |
| DMFi 70/3000  | 70              | P2             | 35 - 52     | 1330       | 3000       | 4-5300814     | 4-5300819  |
| DMFi 120/1500 | 120             | P2             | 35 - 52     | 691        | 1500       | 4-5344007     | 4-5344023  |
| DMFi 120/2000 | 120             | P2             | 35 - 52     | 857        | 2000       | 4-5344008     | 4-5344024  |
| DMFi 120/2500 | 120             | P2             | 35 - 52     | 1023       | 2500       | 4-5344009     | 4-5344025  |
| DMFi 120/3000 | 120             | P2             | 35 - 52     | 1347       | 3000       | 4-5300815     | 4-5300820  |
| DMFi 200/1500 | 200             | P2             | Maxi 63     | 920        | 1500       | 4-5344050     | 4-5344026  |
| DMFi 200/2000 | 200             | P2             | Maxi 63     | 1170       | 2000       | 4-5344051     | 4-5344027  |
| DMFi 200/2500 | 200             | P2             | Maxi 63     | 1420       | 2500       | 4-5344052     | 4-5344028  |
| DMFi 200/3000 | 200             | P2             | Maxi 63     | 1720       | 3000       | 4-5300816     | 4-5300821  |
| DMFi 300/1500 | 300             | P2             | Maxi 73     | 970        | 1500       | 4-5344053     | 4-5344029  |
| DMFi 300/2000 | 300             | P2             | Maxi 73     | 1220       | 2000       | 4-5344054     | 4-5344030  |
| DMFi 300/2500 | 300             | P2             | Maxi 73     | 1470       | 2500       | 4-5344055     | 4-5344031  |
| DMFi 300/3000 | 300             | P2             | Maxi 73     | 1720       | 3000       | 4-5300817     | 4-5300822  |

Other dimensions on request (max length 4 meters).

Torque up to 600 Nm is available on request.

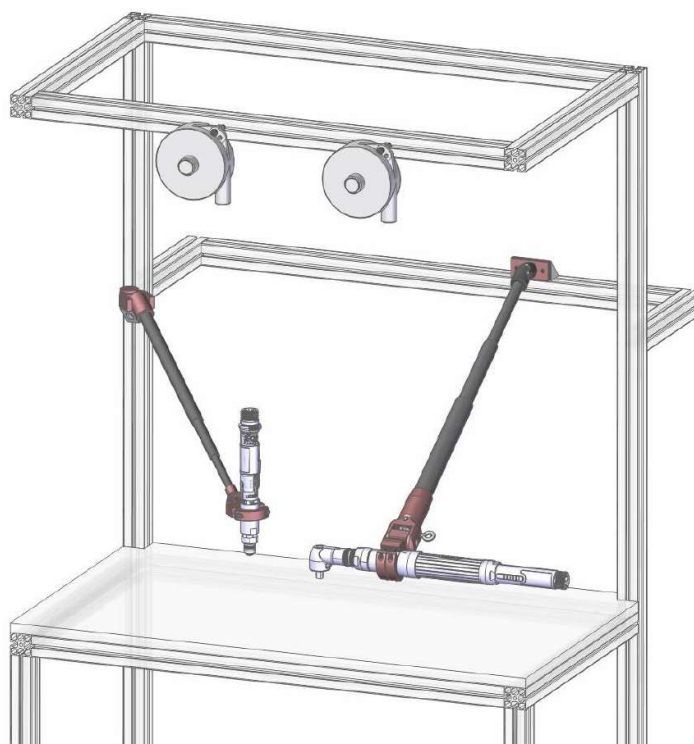
## Long stroke (LS)

| Model            | Max torque (Nm) | Standard clamp | Tool Ø (mm) | A min (mm) | A max (mm) | Code          |            |
|------------------|-----------------|----------------|-------------|------------|------------|---------------|------------|
|                  |                 |                |             |            |            | Without clamp | With clamp |
| DMF 30/1500 LS   | 30              | P1             | 28 - 52     | 555        | 1500       | 4-5300852     | 4-5300855  |
| DMF 30/2000 LS   | 30              | P1             | 28 - 52     | 680        | 2000       | 4-5300853     | 4-5300856  |
| DMF 30/2500 LS   | 30              | P1             | 28 - 52     | 805        | 2500       | 4-5300854     | 4-5300857  |
| DMFi 100/1500 LS | 100             | P2             | 35 - 52     | 592        | 1500       | 4-5301213     | 4-5301221  |
| DMFi 100/2000 LS | 100             | P2             | 35 - 52     | 717        | 2000       | 4-5301214     | 4-5301222  |
| DMFi 100/2500 LS | 100             | P2             | 35 - 52     | 842        | 2500       | 4-5301215     | 4-5301223  |
| DMFi 200/1500 LS | 200             | P2             | Maxi 63     | 728        | 1500       | 4-5301216     | 4-5301224  |
| DMFi 200/2000 LS | 200             | P2             | Maxi 63     | 894        | 2000       | 4-5301217     | 4-5301225  |
| DMFi 200/2500 LS | 200             | P2             | Maxi 63     | 1060       | 2500       | 4-5301220     | 4-5301226  |
| DMFi 300/1500 LS | 300             | P2             | Maxi 73     | 778        | 1500       | 4-5300001     | 4-5300004  |
| DMFi 300/2000 LS | 300             | P2             | Maxi 73     | 944        | 2000       | 4-5300002     | 4-5300005  |
| DMFi 300/2500 LS | 300             | P2             | Maxi 73     | 1110       | 2500       | 4-5300003     | 4-5300006  |

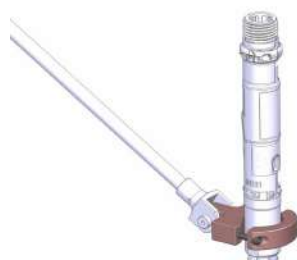


# Vertical tightening

## DMF/DMFI Series



### P1 clamp



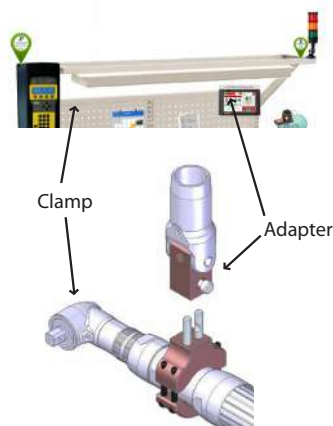
| For      | Clamping (mm)            | Code      |
|----------|--------------------------|-----------|
| DMF12    | Clamp 27/50              | Standard  |
| DMF30    | Clamp 28/52              | Standard  |
| DMFi 70  | Mounting plate interface | 4-5344032 |
| DMFi 120 | Mounting plate interface | 4-5244033 |
| DMFi 200 | Mounting plate interface | 4-5344061 |

### P2 clamp



| For     | Capacity (mm) | Code               |
|---------|---------------|--------------------|
| DMF30   | 28/52         | 4-5200300          |
| DMFi70  | 35/52         | Standard 4-5344011 |
| DMFi120 | 35/52         | Standard           |
| DMFi200 | 63            | Standard           |
| DMF300  | 73            | Standard           |

### Quick release clamp



| For                      | Type | Code      |
|--------------------------|------|-----------|
| DMF12                    | P1   | 4-5201003 |
| DMF30                    | P1   | 4-5200017 |
| DMFi 70                  | P2   | 4-5283102 |
| DMFi 120                 | P2   | 4-5283103 |
| DMFi 200 (tool Ø max 52) | P2   | 4-5344062 |

### Quick release interface

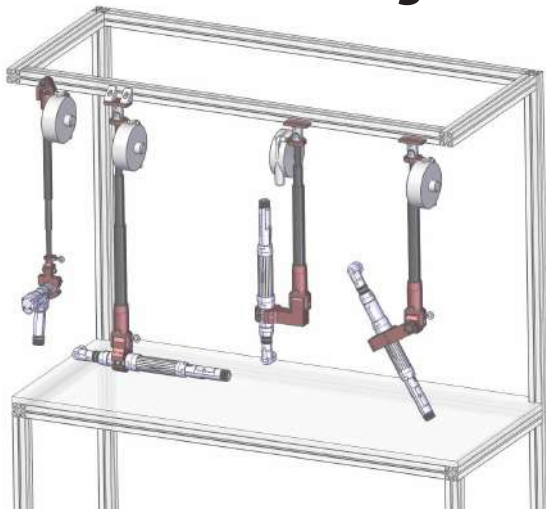
| For     | Code      |
|---------|-----------|
| DMF12   | 4-5200470 |
| DMF30   | 4-5200471 |
| DMFi70  | 4-5383100 |
| DMFi120 | 4-5283101 |
| DMFi200 | 4-5344063 |



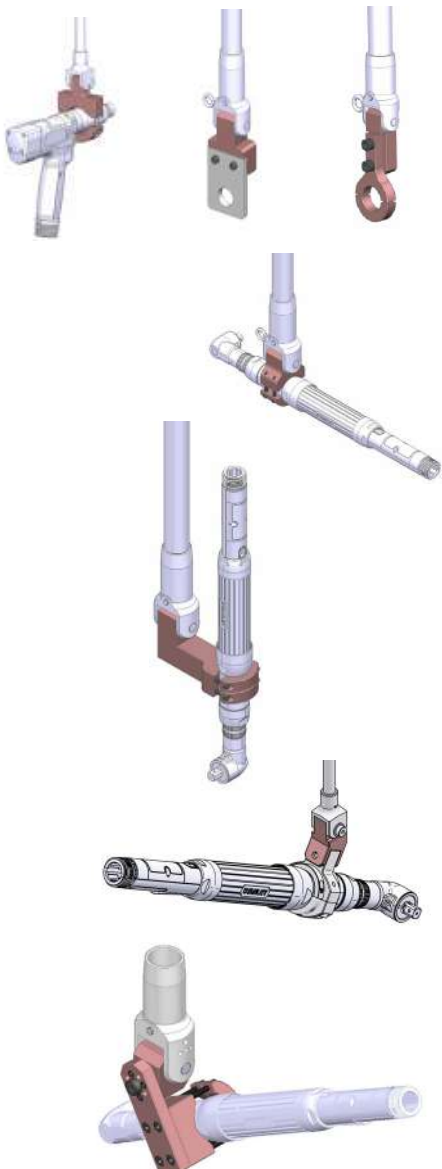
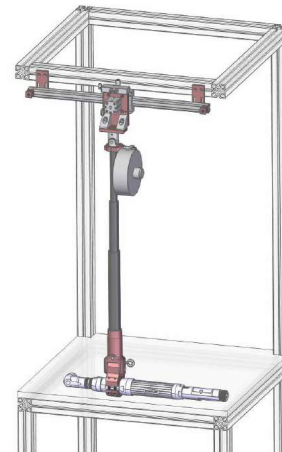
# Frontal tightening

## DMF/DMFI Series

### Fixed mounting



### Mounting on rail with locker



### P1 clamp

| For     | Clamping (mm)            | Code       |
|---------|--------------------------|------------|
| DMF12   | Clamp 27/50              | Standard   |
| DMF30   | Clamp 28/52              | Standard   |
| DMFi70  | Mounting plate interface | 4-5344032  |
| DMFi120 | Mounting plate interface | 4-5244033  |
| DMFi200 | Mounting plate interface | 4-5344061  |
| DMF300  | Mounting plate interface | On request |

### P2 clamp

| For     | Tool Ø | Code      |
|---------|--------|-----------|
| DMF30   | 28/52  | 4-5200300 |
| DMFi70  | 35/52  | Standard  |
| DMFi120 | 35/52  | Standard  |
| DMFi200 | Max 63 | Standard  |
| DMF300  | Max 73 | Standard  |

### P4 clamp

| For     | Tool Ø | Code      |
|---------|--------|-----------|
| DMF30   | 28/52  | 4-5200302 |
| DMFi70  | 35/52  | 4-5344015 |
| DMFi120 | 35/52  | 4-5244016 |
| DMFi120 | 52/63  | 4-5244058 |
| DMFi200 | Max 63 | 4-5344058 |
| DMF300  | Max 73 | 4-5244059 |

### Tilt interface

| For                                   | Tool Ø | Code                           |
|---------------------------------------|--------|--------------------------------|
| Interface/DMF30 (for all clamp types) | -      | 15° 30°<br>4-5283168 4-5283169 |

### Swivel clamp

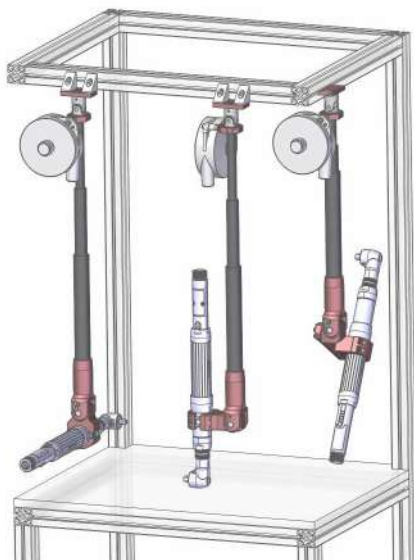
| For           | Tool Ø | Code       |
|---------------|--------|------------|
| DMFi70 P2/P4  | 35/52  | 4-5301137  |
| DMFi120 P2/P4 | 35/52  | 4-5201138  |
| DMFi200 P2/P4 | Max 63 | 4-5301139  |
| DMF300        | Max 73 | On request |



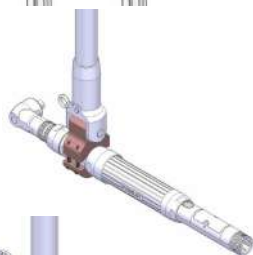
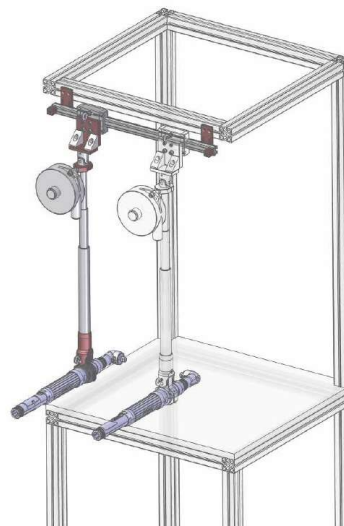
# Side tightening

## DMF/DMFI Series

### Fixed mounting



### Mounting on rail



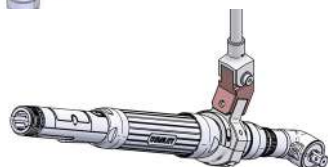
### P2 Clamp

| For     | Tool Ø | Code      |
|---------|--------|-----------|
| DMF30   | 28/52  | 4-5200300 |
| DMFi70  | 35/52  | 4-5344011 |
| DMFi120 | 35/52  | 4-5244012 |
| DMFi200 | Max 63 | Standard  |
| DMF300  | Max 73 | Standard  |



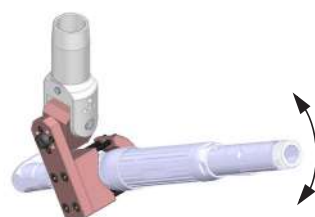
### P3 Clamp

| For     | Tool Ø | Code      |
|---------|--------|-----------|
| DMF30   | 28/52  | 4-5200301 |
| DMFi70  | 35/52  | 4-5344013 |
| DMFi120 | 35/52  | 4-5244014 |
| DMFi200 | 35/52  | 4-5344066 |
| DMFi200 | Max 63 | 4-5244056 |
| DMF300  | Max 73 | 4-5244057 |



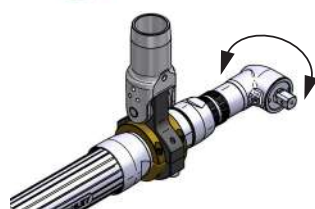
### Tilt interface

| For               | Tool Ø | Angle | Code      |
|-------------------|--------|-------|-----------|
| Interface / DMF30 | -      | 15°   | 4-5283168 |
|                   |        | 30°   | 4-5283169 |



### Swivel clamp

| For     | Tool Ø | Code       |
|---------|--------|------------|
| DMFi70  | 35/52  | 4-5301137  |
| DMFi120 | 35/52  | 4-5201138  |
| DMFi200 | Max 63 | 4-5301139  |
| DMF300  | Max 73 | On request |

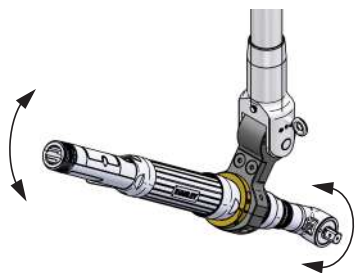


### Rotating clamp

| For           | Tool Ø | Code      |
|---------------|--------|-----------|
| DMF30         | Max 43 | 4-5201134 |
| DMFi70        | Max 45 | 4-5344068 |
| DMFi70        | 45/50  | 4-5344034 |
| DMFi120/100LS | Max 45 | 4-5344067 |
| DMFi120/100LS | 45/50  | 4-5244035 |
| DMFi200/200LS | Max 58 | 4-5344060 |
| DMF300        | Max 70 | 4-5201136 |

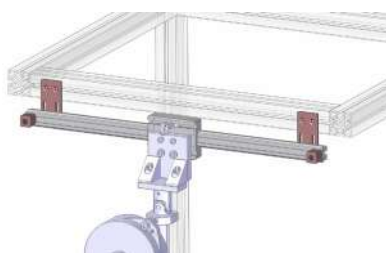
# DMF/DMFi

## Mounting on rail



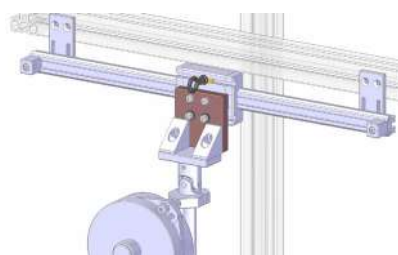
### Tilting and rotating clamp

| For         | Tool Ø | Tilt angle increment | Code      |
|-------------|--------|----------------------|-----------|
| DMFi70      | 50     | 18°                  | 4-5301205 |
| DMFi100/120 | 50     | -                    | 4-5201206 |
| DMFi200     | 58     | -                    | 4-5301218 |



### Rails

| Length | Stroke (mm) | Number of flanges | Code      |
|--------|-------------|-------------------|-----------|
| 600    | 450         | 2                 | 4-5200132 |
| 800    | 650         | 2                 | 4-5200160 |
| 1000   | 850         | 2                 | 4-5200161 |
| 1200   | 1050        | 3                 | 4-5200162 |
| 1500   | 1350        | 3                 | 4-5200163 |
| 2000   | 1850        | 4                 | 4-5200164 |

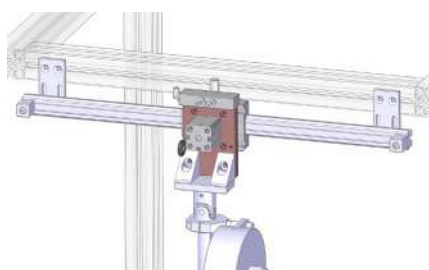


### Rail interface

Allows installation of DMF on rail, delivered with one trolley.

| For            | Code      |
|----------------|-----------|
| DMF12/30       | 4-5200341 |
| DMFi70/120/200 | 4-5200708 |
| DMFi300        | 4-5300342 |

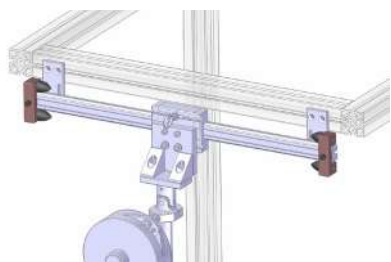
NOTE : delivered without safety hook (Code 4-5200309)



### Pneumatic locker

| For        | Type      | Code      |
|------------|-----------|-----------|
| DMF12/30   | Pneumatic | 4-5200442 |
| DMF12/30   | Electric  | 4-5200869 |
| DMFi70/120 | Pneumatic | 4-5200706 |
| DMFi70/120 | Electric  | 4-5200707 |
| DMFi200    | Electric  | 4-5201150 |
| DMFi300    | Electric  | 4-5301142 |

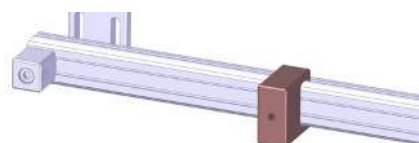
The power tool has to be equipped with a motor run signal.



### Absorbing stop

Recommended in case of repeatable side shocks.

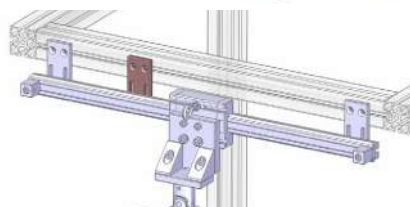
Code 4-5201121 Set of 2



### Adjustable stop

To limit the slide of the arm on the rail.

Code 4-5200167



### Additional flange

To reinforce the rail installation for high torque applications.

Code 4-5200873



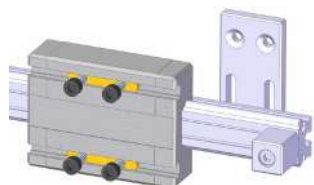
# Accessories DMF/DMFi



## Rail link

To link two rails together.

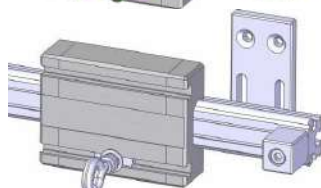
Code 4-5200307



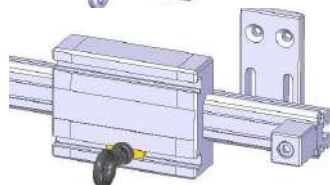
## Single trolley

To mount additional tools on the same rail.

- Single trolley Code 4-5200165



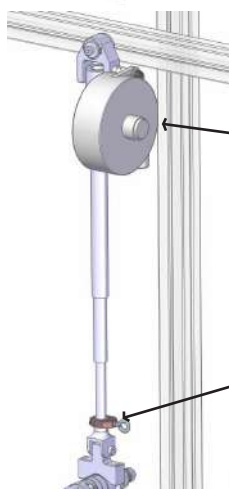
- Trolley for additional balancer Code 4-5200166



## Additional safety hook

To secure balancer.

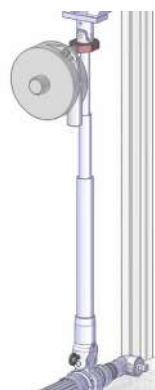
Code 4-5200309



## Balancing kit for DMF 12/30

| For   | Tool (Kg) | Code      |
|-------|-----------|-----------|
| DMF12 | 1 to 2    | 4-5200303 |
| DMF30 | 1 to 2,5  | 4-5200304 |
| DMF30 | 2 to 4    | 4-5200305 |

Balancer attachment kit for DMF30 Code 4-5201143



## Balancing kit for DMFi 70/120/200/300

| For             | Capacity (Kg) | Code      |
|-----------------|---------------|-----------|
| DMFi 70/120/200 | 2 - 4         | 4-5200701 |
| DMFi 70/120/200 | 4 - 6         | 4-5200702 |
| DMFi 70/120/200 | 6 - 8         | 4-5200703 |
| DMFi 300        | 4 - 8         | 4-5344064 |
| DMFi 300        | 6 - 10        | 4-5344065 |

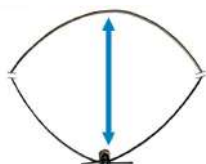
Delivered with balancer attachment kit.

## Cable extension for balancer for DMFi max 3000

| For       | Length | Code      |
|-----------|--------|-----------|
| Extension | 0,5 m  | 4-1212220 |
| Extension | 1,0 m  | 4-1222205 |

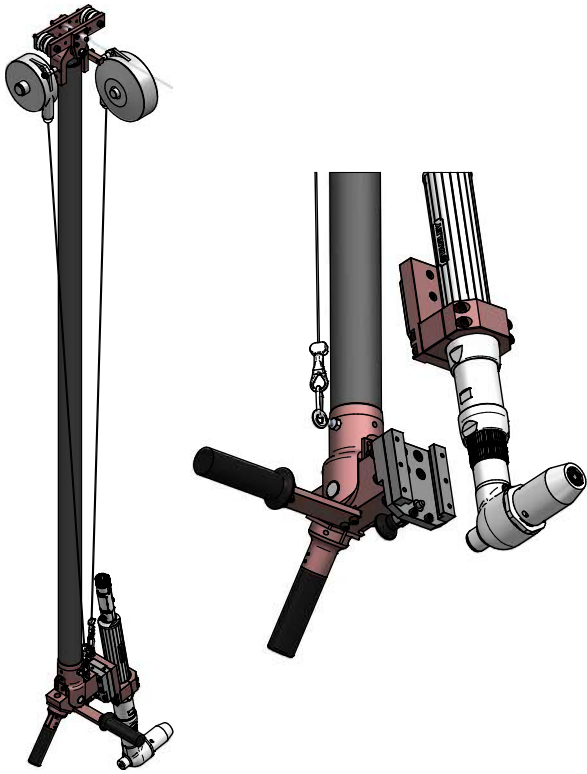
## Extended safety cable

| For | Length (loop) | Code      |
|-----|---------------|-----------|
| All | 0,45 m        | 4-1201574 |

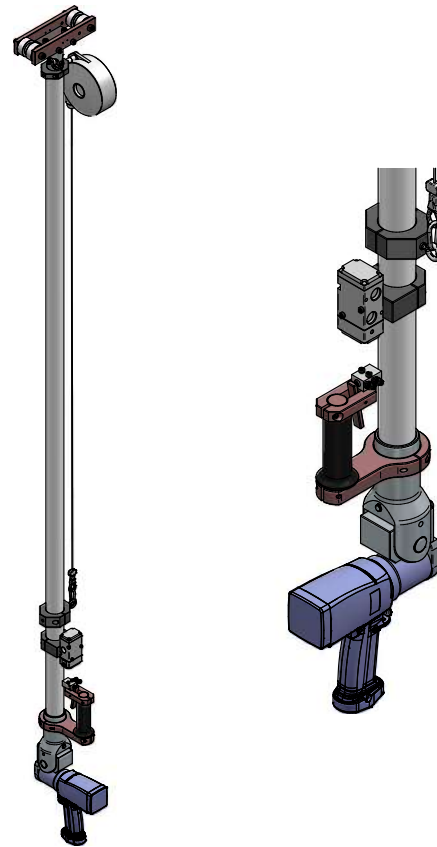


# Special arms on request

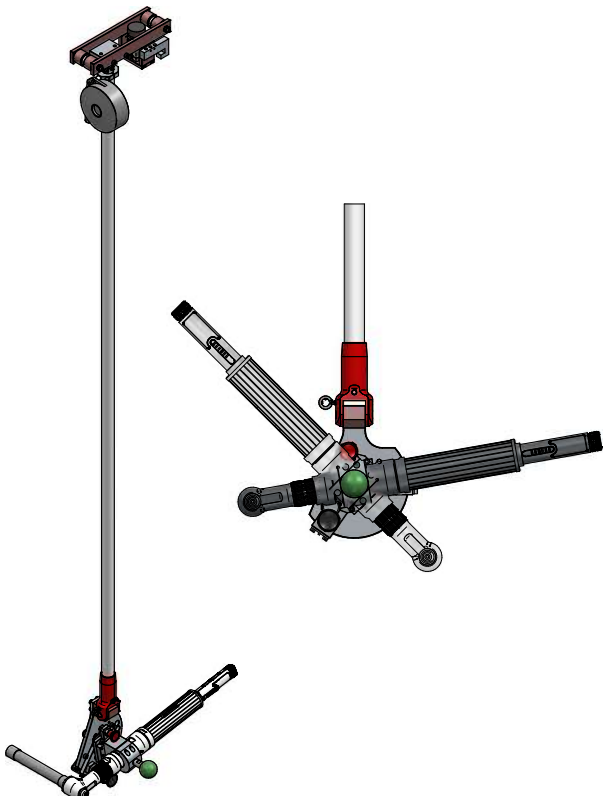
## Special applications



DMF 400 with quick release tool clamp



DMF 300 with air pistol tool+remote start lever



DMFi 200 with swivel and indexable tool clamp



DMFi 600 with air locker + special tool holder for pistol tools



# Suspended arms

## Slider



*SLIDER Series : Erase your torque reaction until 300 Nm.*

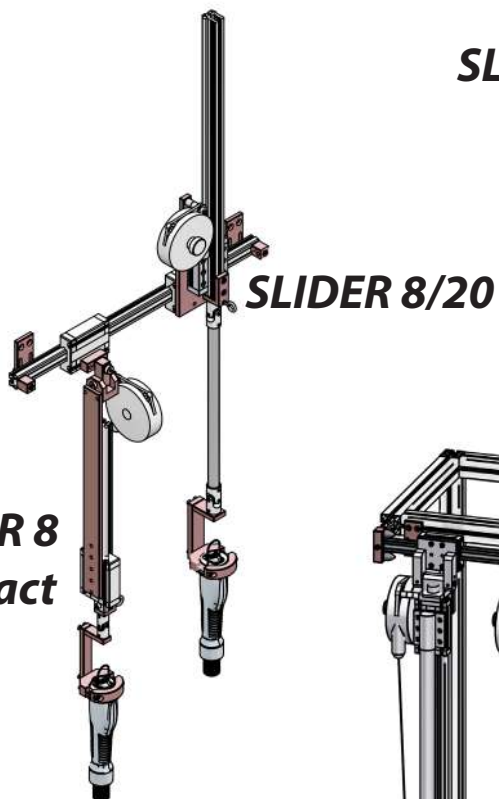
- **IMPROVE YOUR COMFORT AND PRODUCTIVITY**

Easy to install and smart-sized the SLIDER arms improve the comfort of the operator and the productivity clearing the work area.

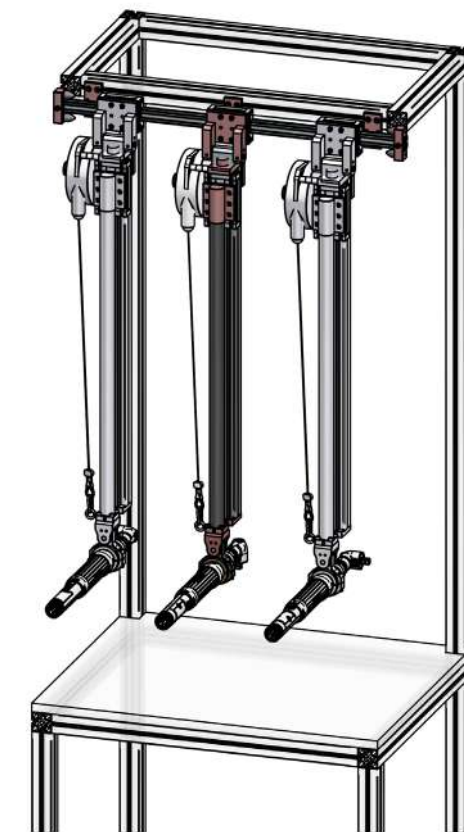
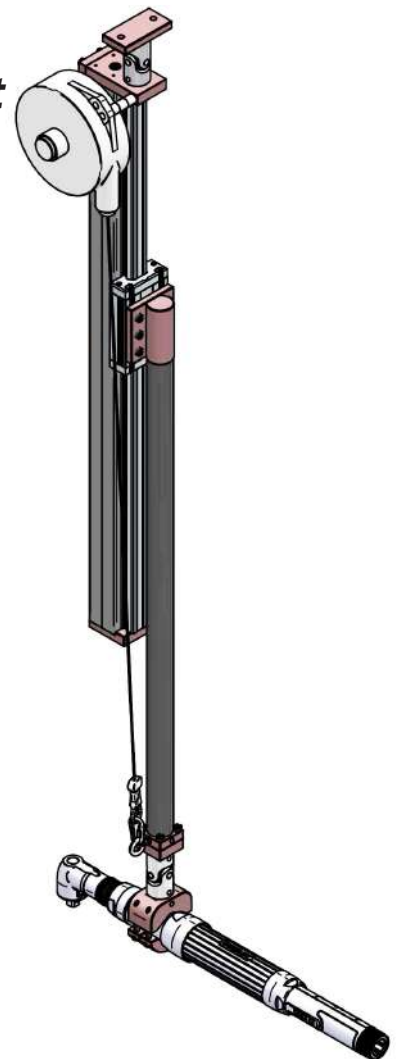
- **IMPROVE YOUR ERGONOMY**

Mounted with horizontal stroke the SLIDER becomes the ideal ergonomical solution on conveyor line.

**SLIDER 8 compact**



**SLIDER 50 compact**

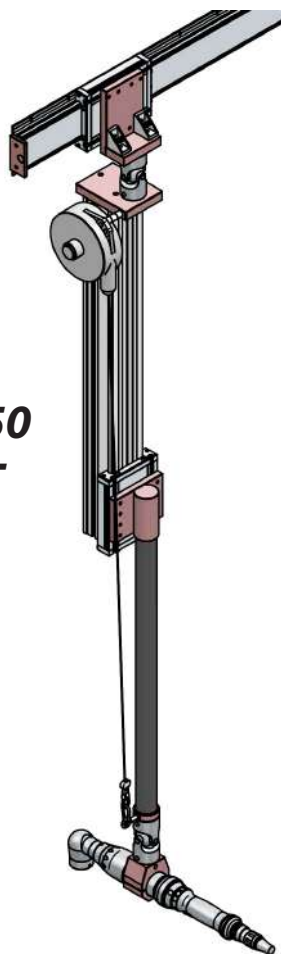


**SLIDER 50 COMPACT**  
**Vertical/horizontal tightening**

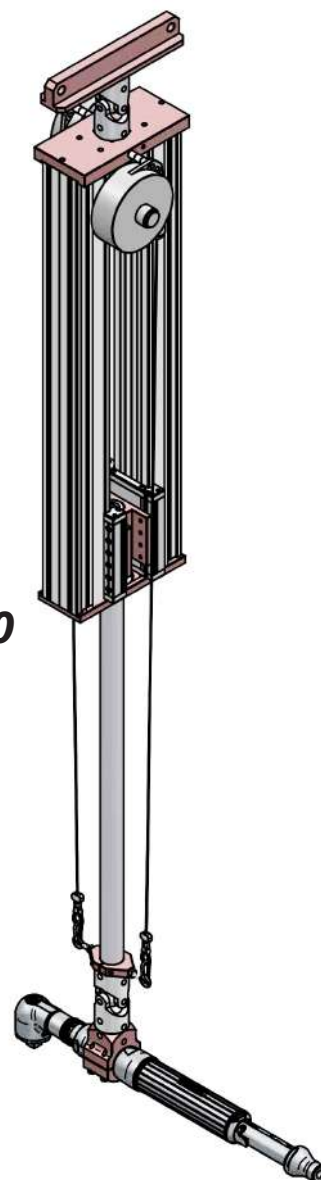
# Suspended arms

## Slider

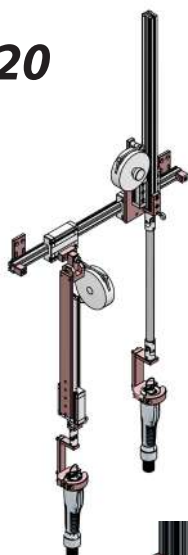
**SLIDER 150  
COMPACT**



**SLIDER 300  
COMPACT**



**SLIDER 8/20**



### **SLIDER with clamp for electric tool**

| Désignation          | Max torque (Nm) | Max load (kg) | Clamp (ø) | Stroke Z | Code      |
|----------------------|-----------------|---------------|-----------|----------|-----------|
| Slider 8             | 8               | 1,2           | 28/52     | 450      | 4-5283148 |
| Slider 20            | 20              | 2,2           | 28/52     | 450      | 4-5283149 |
| Slider 8 Compact/270 | 8               | 1,2           | 28/52     | 270      | 4-5283150 |
| Slider 8 Compact/470 | 8               | 1,2           | 28/52     | 470      | 4-5283151 |

### **Interface for air tool**

| Model                                | Code      |
|--------------------------------------|-----------|
| Interface 1/4" SLIDER 8 et 8 COMPACT | 4-5283171 |
| Interface 1/4" SLIDER 20             | 4-5283172 |



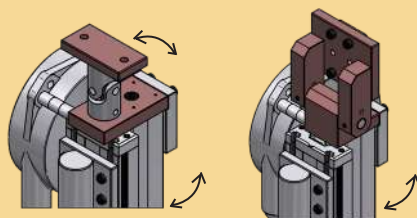


# Suspended arms

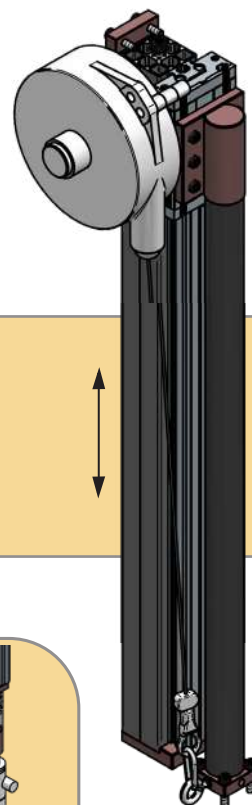
## Slider

### ► Modular system SLIDER 20/50 Compact

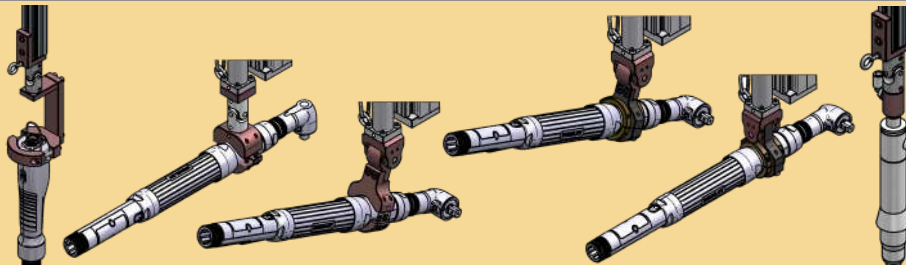
**Upper Interface**



**Vertical guide**



**Tool clamps**



### Vertical guide

| Model                 | Max torque (Nm) | Vertical stroke (mm) | Charge maxi (kg) | Code      |
|-----------------------|-----------------|----------------------|------------------|-----------|
| SLIDER 20 Compact/270 | 20              | 270                  | 2,2              | 4-5283152 |
| SLIDER 20 Compact/470 | 20              | 470                  | 2,2              | 4-5283153 |
| SLIDER 50 Compact/470 | 50              | 470                  | 3                | 4-5283154 |
| SLIDER 50 Compact/670 | 50              | 670                  | 3                | 4-5283155 |
| SLIDER 50 Compact/870 | 50              | 870                  | 3                | 4-5283156 |

### Upper 2 axes interface

| Model     | Code      |
|-----------|-----------|
| SLIDER 20 | 4-5283159 |
| SLIDER 50 | 4-5283160 |

### Upper 1 axis interface

| Model     | Code      |
|-----------|-----------|
| SLIDER 20 | 4-5283157 |
| SLIDER 50 | 4-5283158 |



# Suspended arms

## Options SLIDER 8/20/50



### Clamp for electric screwdrivers/Slider 20 compact

| Model                                      | Capacity (mm) | Code      |
|--|---------------|-----------|
| Clamp SLIDER 20                            | 28/52         | 4-5283161 |
| Camp SLIDER 20 Extension kit for MD series |               | 4-5250518 |

### Cardan clamp for angle nutrunners

| Model     | Capacity (mm) | Code      |
|-----------|---------------|-----------|
| SLIDER 20 | 28/52         | 4-5283162 |
| SLIDER 50 | 32/52         | 4-5283163 |



### Fixed clamp

| Model     | Capacity (mm) | Code      |
|-----------|---------------|-----------|
| SLIDER 20 | 28/52         | 4-5283164 |



### Tilt interface

| Model         | Code      |
|---------------|-----------|
| 15° SLIDER 20 | 4-5283168 |
| 30° SLIDER 20 | 4-5283169 |



### Tilting clamp

| Model     | Capacity (mm) | Increment | Code      |
|-----------|---------------|-----------|-----------|
| SLIDER 50 | 32/52         | 18°       | 4-5283165 |



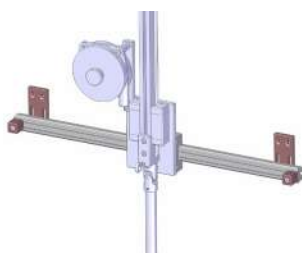
### Rotating clamp

| Model     | Max capacity (mm) | Code      |
|-----------|-------------------|-----------|
| SLIDER 20 | 43                | 4-5283166 |
| SLIDER 50 | 50                | 4-5283167 |



### Tilting and rotating clamp

| Model    | Max capacity (mm) | Increment | Code      |
|----------|-------------------|-----------|-----------|
| SLIDER50 | 50                | 18°       | 4-5283170 |



### Rails SLIDER 8/20/50

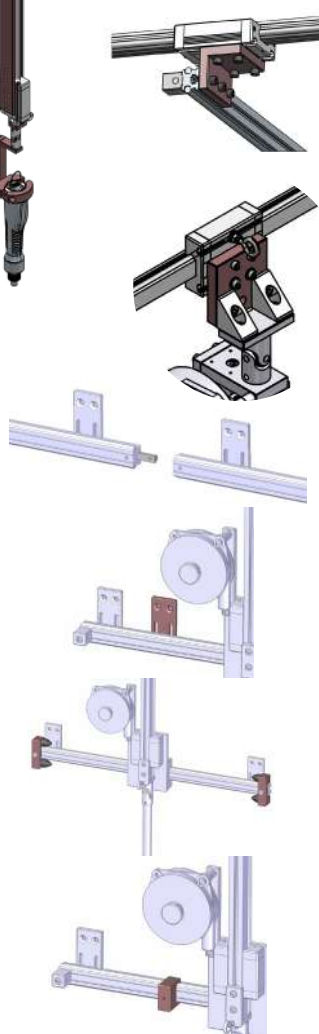
| Length | Stroke | Bracket number | Code      |
|--------|--------|----------------|-----------|
| 600    | 450    | 2              | 4-5200132 |
| 800    | 650    | 2              | 4-5200160 |
| 1000   | 850    | 2              | 4-5200161 |
| 1200   | 1050   | 3              | 4-5200162 |
| 1500   | 1350   | 3              | 4-5200163 |
| 2000   | 1850   | 4              | 4-5200164 |

Delivered with one trolley.



# Suspended arms

## Options SLIDER 8/20/50



### Cross-rails Slider 8 et 20 compact (delivered with rail interface)

Select your cross-rails choosing p.33 :  
 - 2 Rails en X  
 - 1 Rails en Y  
 (Y max length : 1000 mm)



| Model             | Code      |
|-------------------|-----------|
| Set of 2 brackets | 4-5283173 |

### Interface Slider 50

| Model     | Code      |
|-----------|-----------|
| Interface | 4-5200708 |

### Rail link

To link two rails together. **Code : 4-5200307.**

### Additional bracket

To reinforce the rail structure. **Code : 4-5200873.**

### Set of 2 absorbing stops

Recommended in case of repeatable side shocks. **Code : 4-5201121.**

### Adjustable stops

To limit the slide of the arm on the rail.  
 For slider 8/20/50 rail **Code : 4-5200167**  
 For slider 150/300 rail **Code : 4-5283201**

### Additional trolley

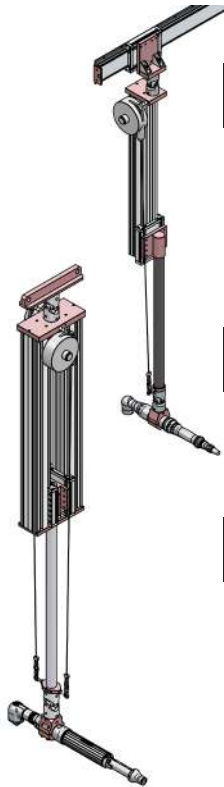
To mount additional tools on the same rail.  
 - Single trolley **Code : 4-5200165.**  
 - Trolley for additional balancer **Code : 4-5200166.**

### Additional safety hook

To secure the balancer. **Code : 4-5200309.**

# Suspended arms

## SLIDER 150/300 COMPACT



| Model                   | Max torque (Nm) | Ø Clamping (mm) | Vertical stroke (mm) | Mini | Maxi | Load (kg) | Code      |
|-------------------------|-----------------|-----------------|----------------------|------|------|-----------|-----------|
| SLIDER 150 COMPACT 600  | 150             | Max 63          | 600                  | 1100 | 1700 | 5         | 4-5283113 |
| SLIDER 150 COMPACT 800  | 150             | Max 63          | 800                  | 1300 | 2100 | 5         | 4-5283114 |
| SLIDER 150 COMPACT 1000 | 150             | Max 63          | 1000                 | 1500 | 2500 | 5         | 4-5283115 |

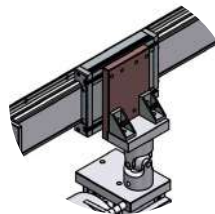
### Rotating clamp

| Model      | Ø Clamping (mm) | Code      |
|------------|-----------------|-----------|
| SLIDER 150 | Max 63          | 4-5283117 |
| SLIDER 300 | On demand       | NC        |

| Model              | Max torque (Nm) | Ø Clamping (mm) | Vertical stroke (mm) | Load (kg) | Code      |
|--------------------|-----------------|-----------------|----------------------|-----------|-----------|
| SLIDER 300 COMPACT | 300             | On demand       | On demand            | On demand | On demand |

### SLIDER 150 rail

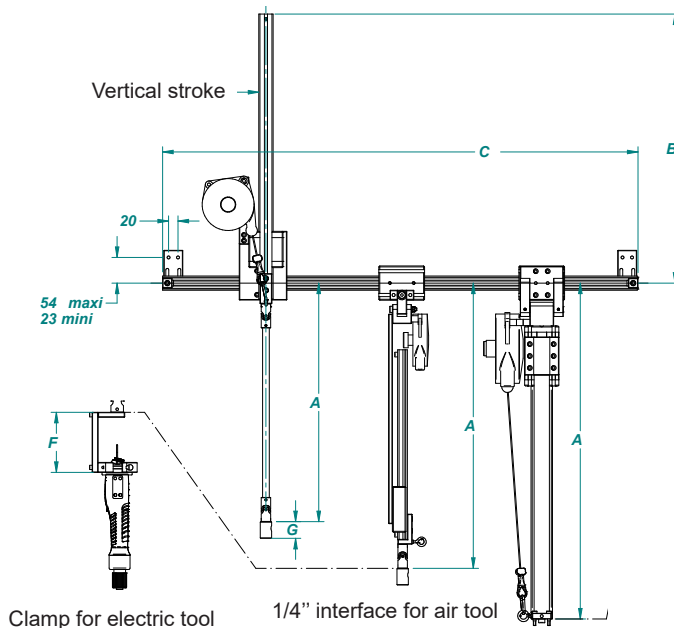
| Length (mm) | Stroke (mm) | Code      |
|-------------|-------------|-----------|
| 600         | 420         | 4-5200294 |
| 1000        | 820         | 4-5200295 |
| 1500        | 1320        | 4-5200296 |
| 2000        | 1820        | 4-5200297 |



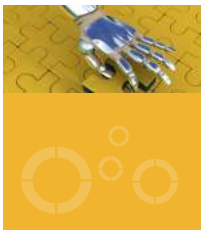
### SLIDER 150 rail

| For       | Code      |
|-----------|-----------|
| Interface | 4-5200009 |

## Dimensions SLIDER 8/20/50



| Model                 | A         | B   | D   | F   |
|-----------------------|-----------|-----|-----|-----|
| SLIDER 8              | 500       | 565 | 450 | 120 |
| SLIDER 20             | 599       | 599 | 450 | 120 |
| SLIDER 8 COMPACT 270  | 550 à 600 |     | 270 | 120 |
| SLIDER 8 COMPACT 470  | 750 à 800 |     | 470 | 120 |
| SLIDER 20 COMPACT 270 | 488 à 538 |     | 270 |     |
| SLIDER 20 COMPACT 470 | 688 à 738 |     | 470 |     |
| SLIDER 50 COMPACT 470 | 705       |     | 470 |     |
| SLIDER 50 COMPACT 670 | 905       |     | 670 |     |
| SLIDER 50 COMPACT 870 | 1005      |     | 870 |     |

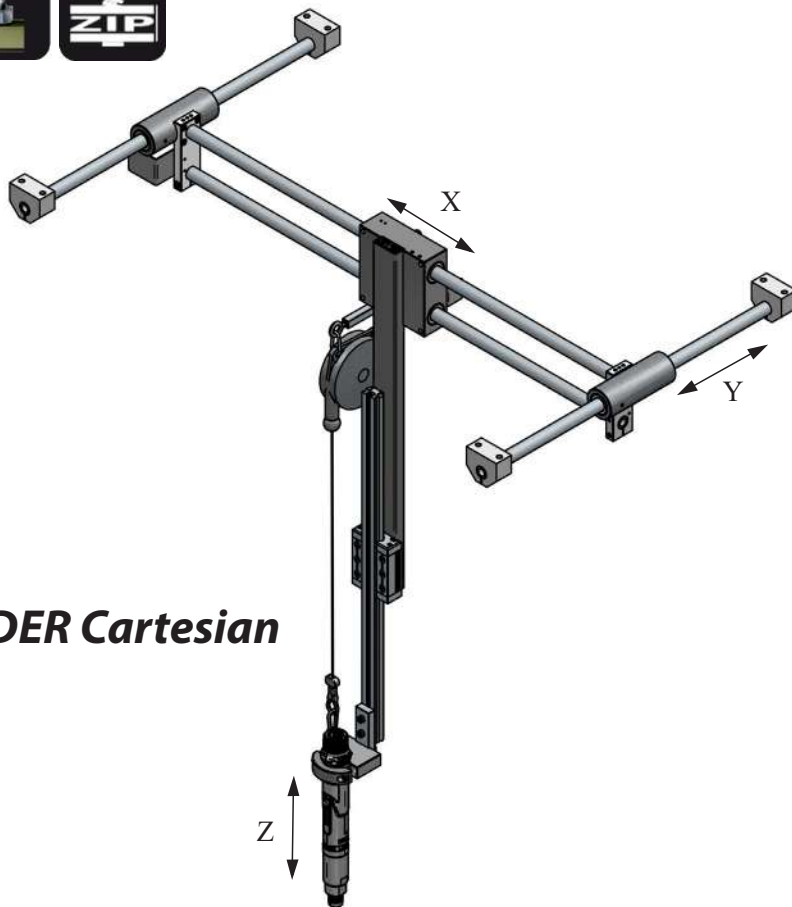


# Suspended arms

## SLIDER Cartesian

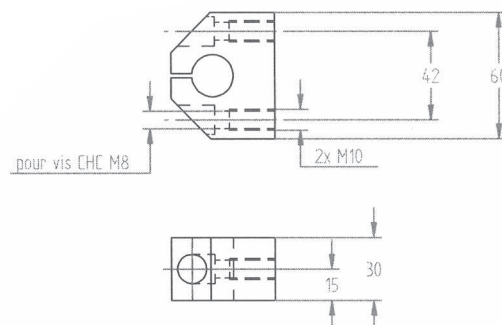
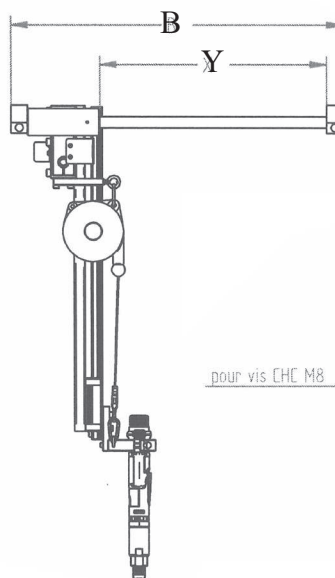
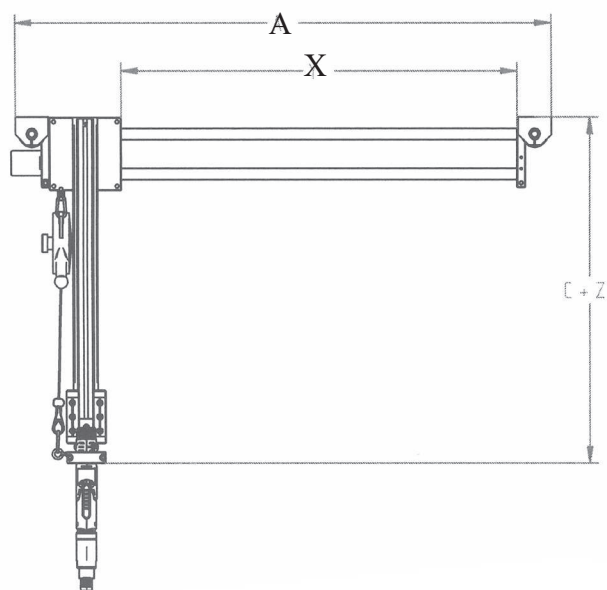


- Cartesian arm to fix on your structure
- Free your workstation



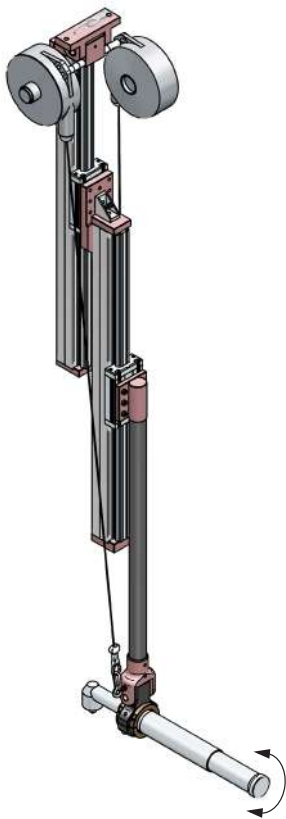
### SLIDER Cartesian

| Model              | Max torque (Nm) | X   | Y   | Z   | A   | B   | C   | Clamp Ø | Max load | Code      |
|--------------------|-----------------|-----|-----|-----|-----|-----|-----|---------|----------|-----------|
| SLIDER 15 CART 300 | 15              | 300 | 400 | 472 | 573 | 600 | 621 | 28/52   | 2 kg     | 4-5283198 |
| SLIDER 15 CART 500 | -               | 500 | 400 | 472 | 773 | 600 | 621 | -       | -        | 4-5283199 |
| SLIDER 15 CART 700 | -               | 700 | 400 | 472 | 973 | 600 | 621 | -       | -        | 4-5283200 |



# Suspended arms

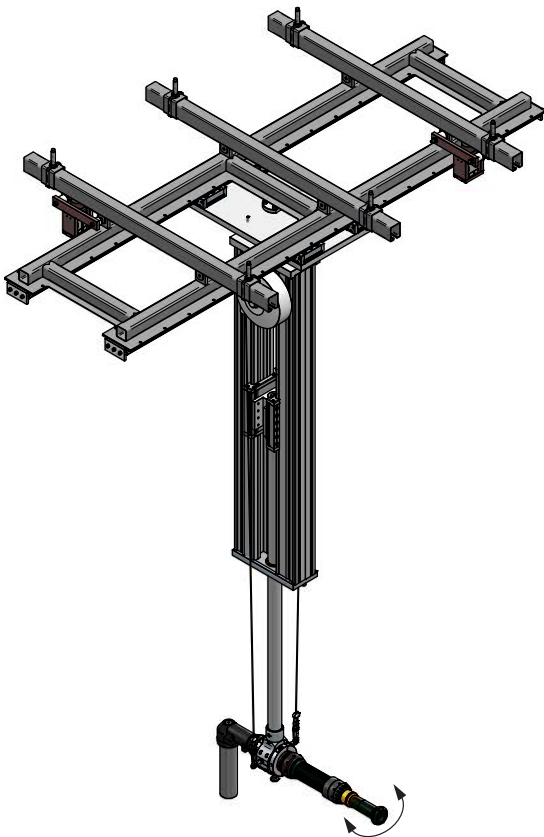
## Special applications



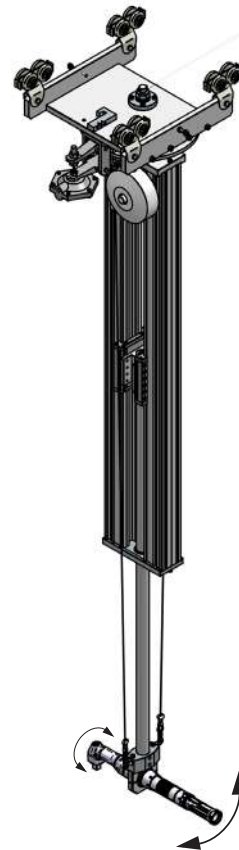
SLIDER 50 double stroke with rotating clamp



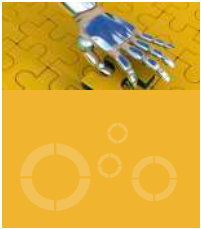
SLIDER 50 compact PC with inclinometer + lazer coders on horizontal rail



SLIDER 300 on cross rails with rotating clamp

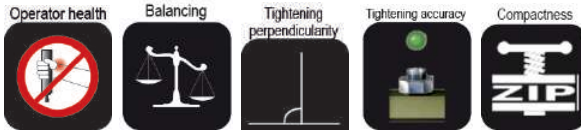


SLIDER 300 rotating on vertical axis with brake + rotating clamp

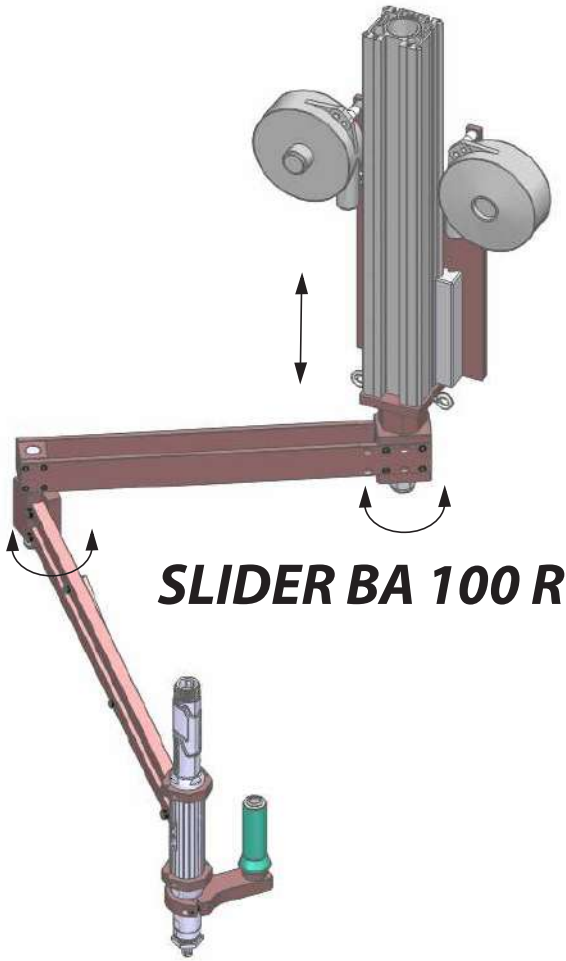


# Suspended arms

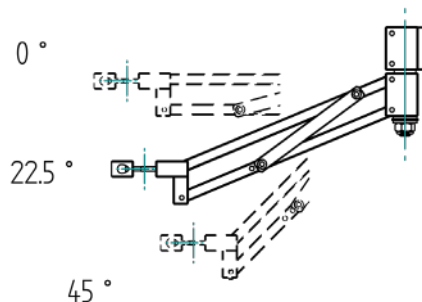
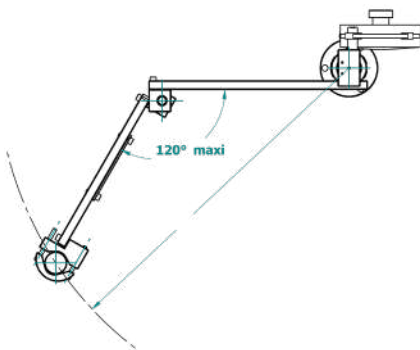
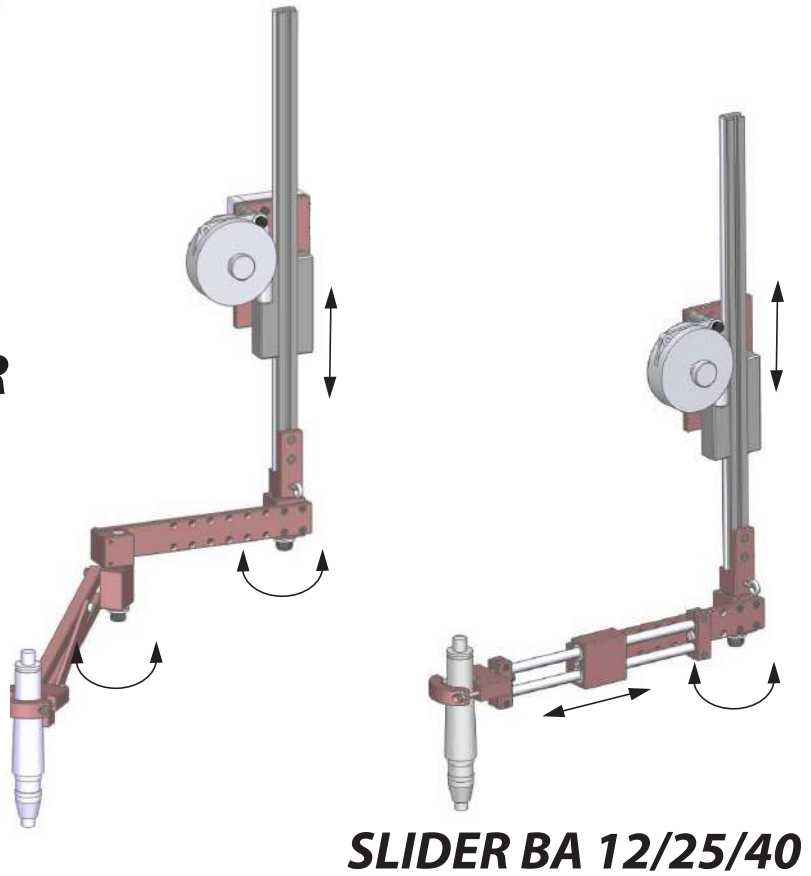
## SLIDER BA / SLIDER BA...R



Mounted on the top, the working area remains free. The SLIDER Series can be installed on rail. Then a pneumatic locker is necessary to counter react.

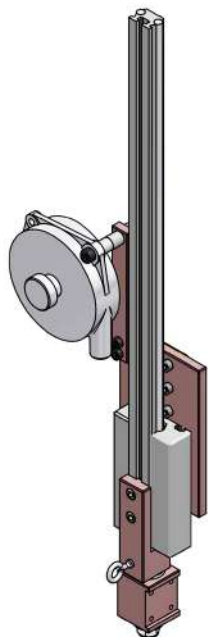


### SLIDER BA 12/25/40 R



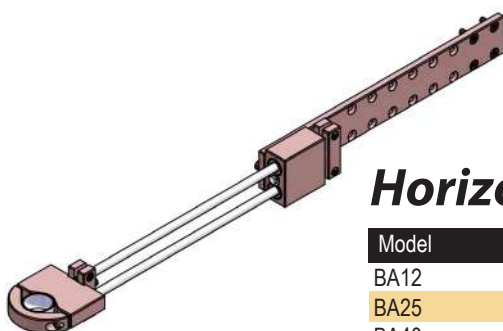
# Suspended arms

## SLIDER BA / SLIDER BA...R



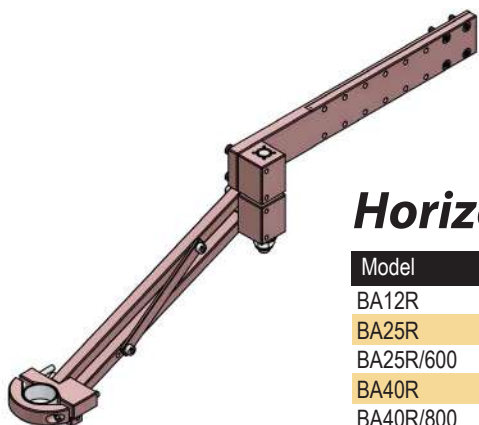
### Vertical slide

| Model                 | Vertical stroke (mm) | Max load (kg) | Code      |
|-----------------------|----------------------|---------------|-----------|
| BA12/12R stroke 440   | 440                  | 1,2           | 4-5283124 |
| BA12/12R stroke 640   | 640                  | 1,2           | 4-5283126 |
| BA12/12R stroke 840   | 840                  | 1,2           | 4-5283127 |
| BA25/25R stroke 440   | 440                  | 2,2           | 4-5283128 |
| BA25/25R stroke 640   | 640                  | 2,2           | 4-5283129 |
| BA25/25R stroke 840   | 840                  | 2,2           | 4-5283130 |
| BA40/40R stroke 440   | 440                  | 3             | 4-5283131 |
| BA40/40R stroke 640   | 640                  | 3             | 4-5283132 |
| BA40/40R stroke 840   | 840                  | 3             | 4-5283133 |
| BA100/100R stroke 420 | 420                  | 5             | 4-5283134 |
| BA100/100R stroke 620 | 620                  | 5             | 4-5283135 |
| BA100/100R stroke 820 | 820                  | 5             | 4-5283136 |



### Horizontal linear slides

| Model | Stroke (mm) | Clamp Ø | Code      |
|-------|-------------|---------|-----------|
| BA12  | 225         | 27/50   | 4-5283137 |
| BA25  | 250         | 28/52   | 4-5283138 |
| BA40  | 295         | 28/52   | 4-5283139 |
| BA100 | 330         | 28/52   | 4-5283140 |



### Horizontal articulation

| Model      | Max radius (mm) | Clamp Ø | Code      |
|------------|-----------------|---------|-----------|
| BA12R      | 450             | 27/50   | 4-5283141 |
| BA25R      | 460             | 28/52   | 4-5283142 |
| BA25R/600  | 600             | 28/52   | 4-5283143 |
| BA40R      | 650             | 28/52   | 4-5283144 |
| BA40R/800  | 800             | 28/52   | 4-5283145 |
| BA100R     | 730             | 28/52   | 4-5283146 |
| BA100R/900 | 900             | 28/52   | 4-5283147 |



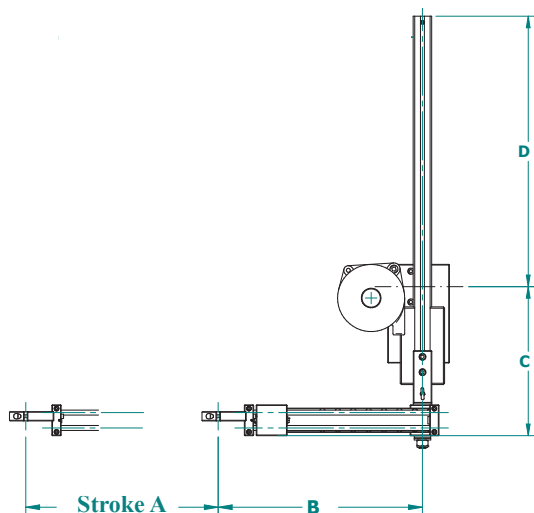
# Suspended arms

## SLIDER BA / SLIDER BA...R

### SLIDER BA...

Vertical stroke : 440/640/840 (BA 12/25/40)

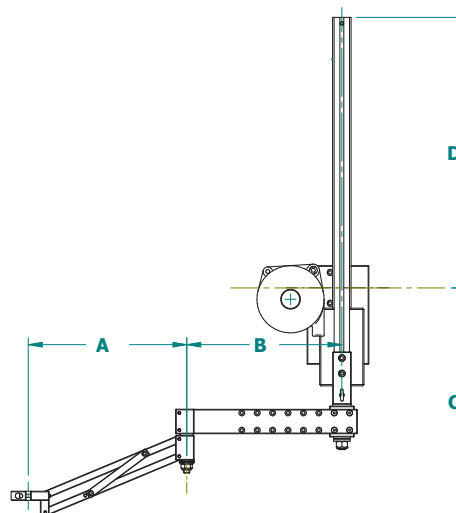
Vertical stroke : 420/620/820 (BA 100)



### SLIDER BA...R

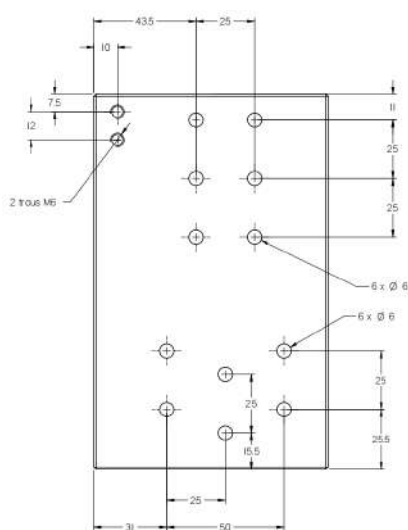
Vertical stroke : 440/640/840 (BA 12/25/40 R)

Vertical stroke : 420/620/820 (BA 100 R)

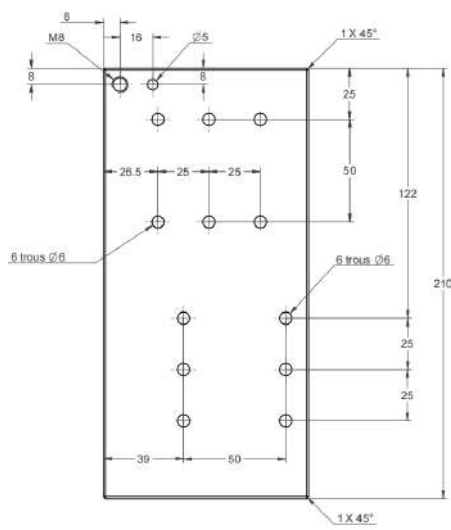


|                     | A   | B mini | B maxi | Operating radius at 120° | C   | D   |
|---------------------|-----|--------|--------|--------------------------|-----|-----|
| SLIDER BA 12        | 225 | 186    | 336    | -                        | 242 | 409 |
| SLIDER BA 25        | 250 | 221    | 396    | -                        | 247 | 409 |
| SLIDER BA 40        | 295 | 260    | 460    | -                        | 310 | 423 |
| SLIDER BA 100       | 330 | 315    | 515    | -                        | 394 | 976 |
| SLIDER BA 12 R      | 261 | 102    | 252    | 450                      | 370 | 439 |
| SLIDER BA 25 R      | 278 | 95     | 245    | 460                      | 379 | 439 |
| SLIDER BA 25 R/600  | 336 | 305    | 330    | 600                      | 403 | 439 |
| SLIDER BA 40 R      | 387 | 150    | 350    | 650                      | 482 | 423 |
| SLIDER BA 40 R/800  | 470 | 415    | 415    | 800                      | 516 | 423 |
| SLIDER BA 100 R     | 433 | 205    | 405    | 730                      | 597 | 376 |
| SLIDER BA 100 R/900 | 528 | 470    | 520    | 900                      | 634 | 376 |

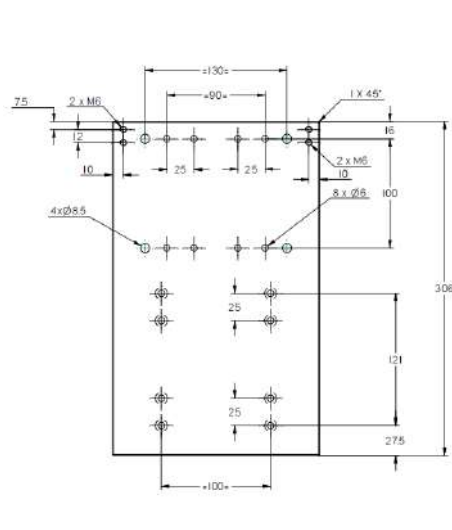
SLIDER BA 12 - 25



SLIDER BA 40



SLIDER BA 100

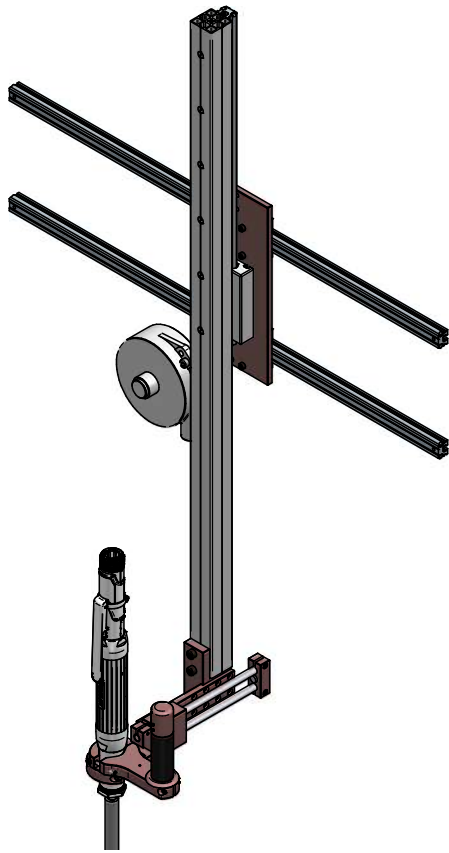


MOUNTING PLATE DETAILS

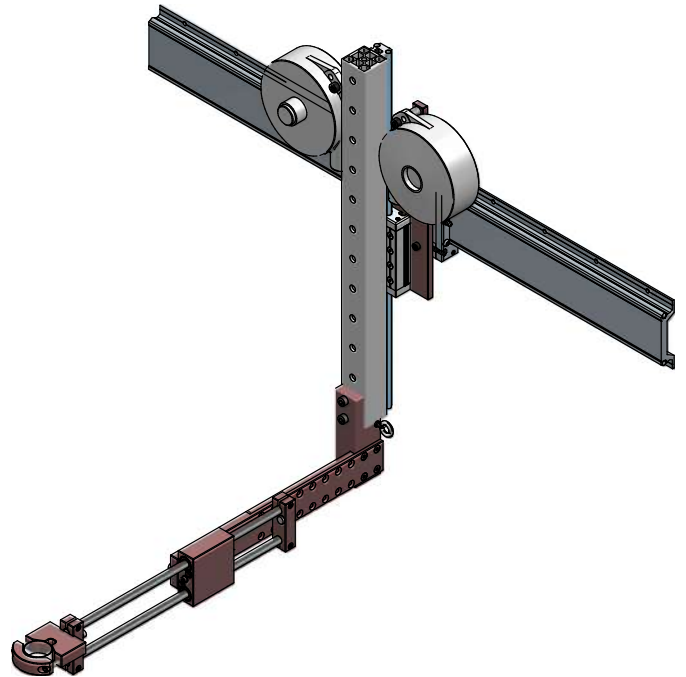


# Suspended arms

## Special applications



SLIDER BA25C on double rail



SLIDER 40C on large rail



SLIDER BA12C on large rail

# Position control system

Improve your manufacturing quality with zero fault process. DOGA Posi Control system is the ideal Sequencing, Error proofing and positioning unit. Compatible with your air, electric and DC tools, your assembly process remains under control regardless operator's qualification.

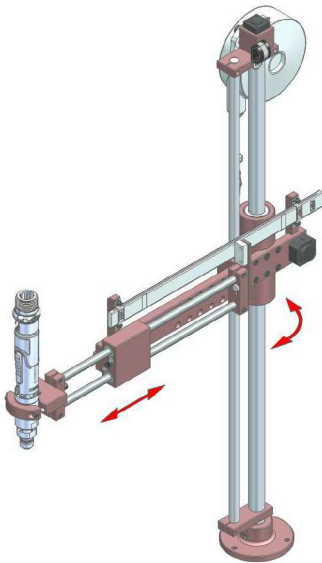
- Page 43 • Posi-control arms
- Page 44 to 45 • Controller DPC-Touch V2
- Page 46 to 47 • Linear arms BA...PC series
- Page 48 to 49 • Articulated arms BA...RPC, BA...GPC
- Page 50 to 53 • Telescoping carbon arms
- Page 54 to 56 • Suspended arms



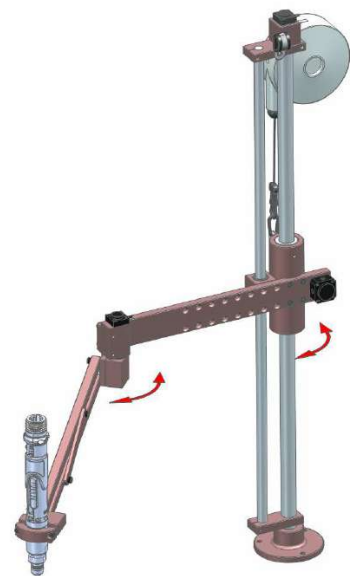
*DPC-Touch Controller V2*

# POSI-CONTROL System

Position control



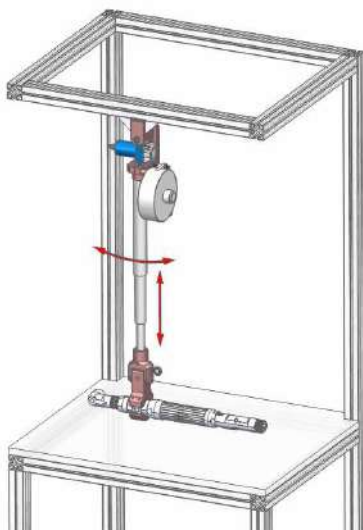
Linear arms BA...PC series



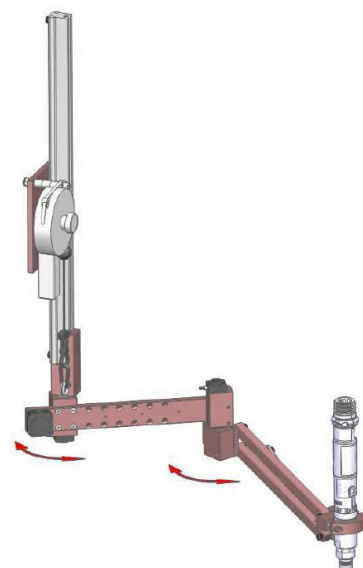
Articulated arms BA...RPC series



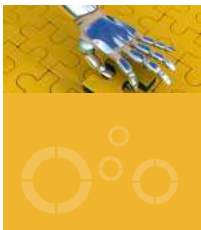
- Zero fault process
- Error proofing
- Sequencing
- Suitable with air and electric tools
- Automation device management



Telescoping arms DMF...PC series

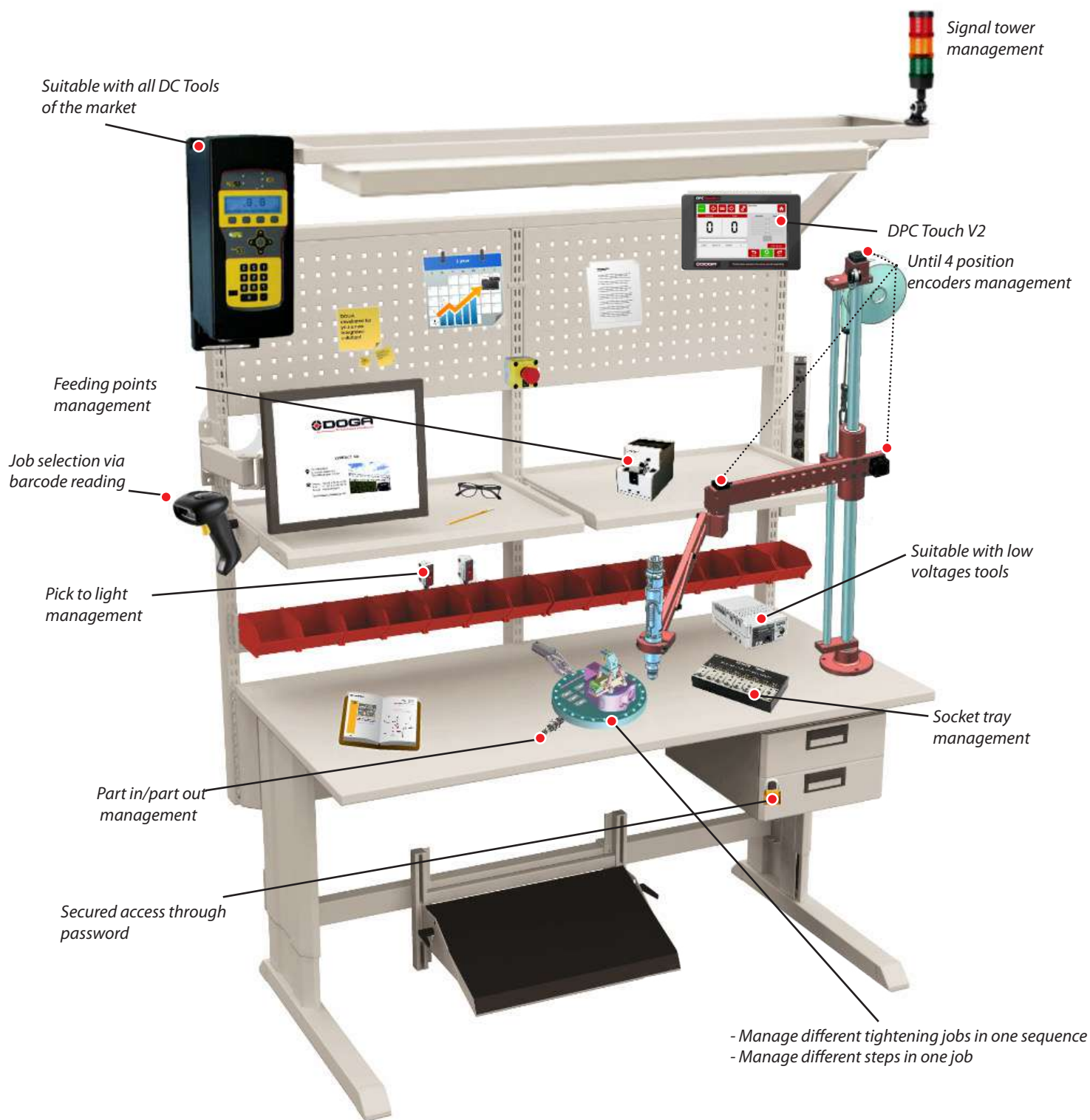


Suspended arms Slider BA...RPC series



# POSI-CONTROL System

- Open job structure allows set up of customized logical sequences of fastenings, messages and I/O's.



- More than a sequencing and Poka-Yoke controller the DPC Touch may easily manage the automation devices of your workstation on assembly line.

# POSI-CONTROL DPC-Touch

Powerful - user friendly - versatile



• **TECHNICAL FEATURES :**

Dimensions : 202 x 127 x 38 mm  
 Weight : 550 gr  
 I/O's : 12 inputs, 12 outputs, 24 Volts  
 LCD screen : 7" touch screen (800 x 480 m/m)  
 Encoders : until 4 encoders, [0 - 5 V]



12 inputs/12 outputs (assignable)

Encoders port

RS232 port (firmware upgrade and bar code reading/Job selection)

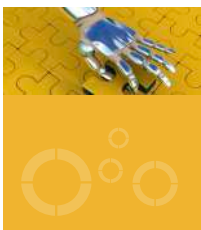
Power supply

Port Ethernet (Modbus)

2 ports for low voltage DOGA screwdrivers

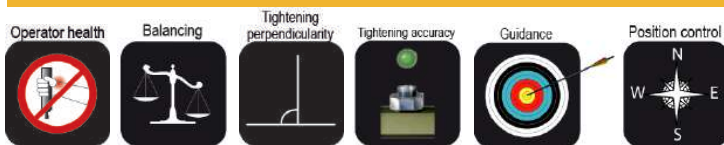
- Fast and powerful :
  - In house operating system
  - Until 255 programable jobs !
  - Until 80 steps per jobs !
  - Until 50 positions per step !
  - Until 4 position encoders
- User friendly :
  - Embedded soft
  - Touch screen
  - Self teaching sequencing
  - Smart tolerance detection
  - Process and sequencing visualization - operator instructions guidance
- Versatile :
  - Suitable with all DC Tools - low voltage and air tools
  - Poka-Yoke or/and sequencing controller
  - Assignable I/O's
  - Suitable with screwfeeders pick up
  - Opened job structure enables customized logical sequences
  - Management of your automation devices
  - Dynamic display of fastening position and simple programming
  - Offline creation and modification of the jobs

| Model   | Code      |
|---|-----------|
| DPC Touch                                       | 4-1290026 |
| DPC Touch / GX, GY, DO, GA cable                | 4-1290008 |
| DPC Touch / DOGA HD, SD cable                   | 4-1290013 |
| DPC Touch / Stanley KAPPA ALPHA IV cable        | 4-5241050 |
| DPC Touch / Stanley ALPHA V cable               | 4-5241051 |
| DB9 3m/free wires (4 outputs/3 inputs) cable    | 4-5200542 |
| DB25 3m/free wires (9 outputs/12 inputs) cable  | 4-5200770 |
| DB44 3m/free wires (12 outputs/12 inputs) cable | 4-1290009 |
| Air kit for pneumatic tool / DPC Touch          | 4-5200771 |
| DPC Touch cable/2 arms                          | 4-5200012 |
| DPC Touch cable/MDC/PLC                         | 4-1252006 |
| Adapter cable I/O44P/25P+9P (included)          | 4-1290007 |



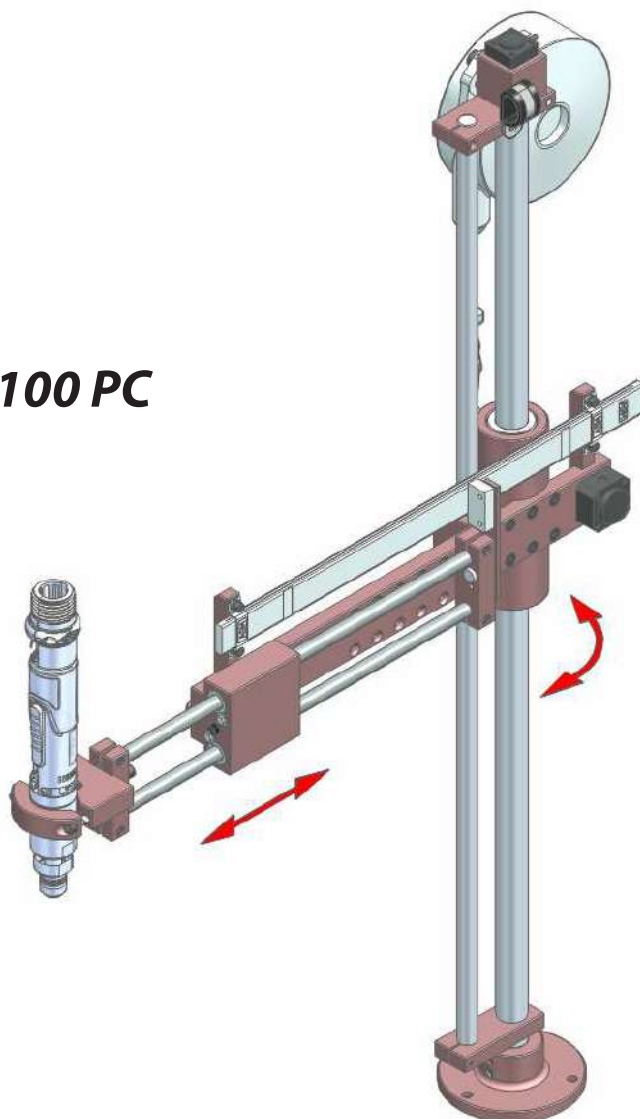
# Linear arms

## BA...PC Series



- Torque up to 100 Nm
- Equipped with absolute angle encoders (12 bits)
- Higher torque is available on request

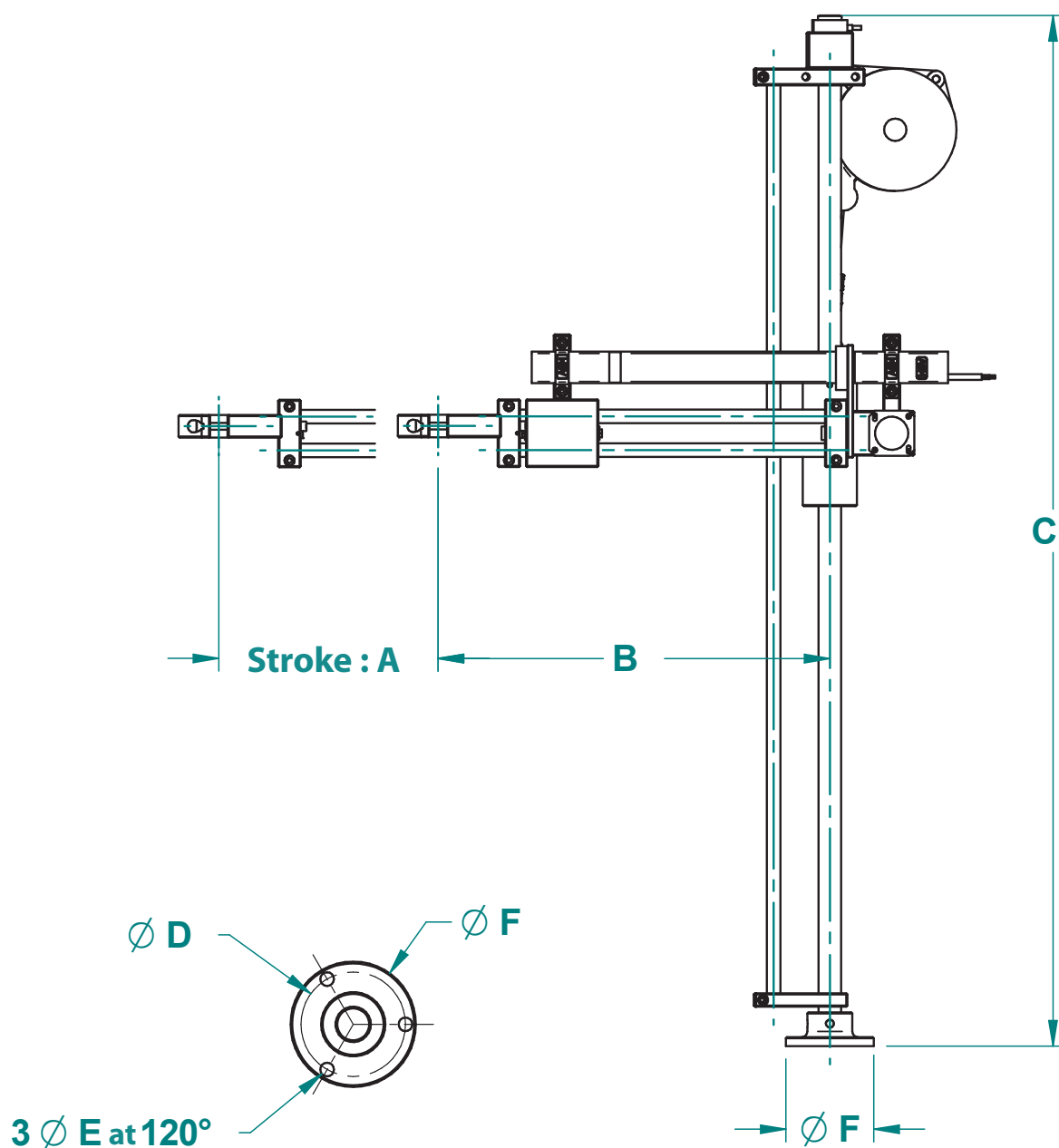
### BA 12/25/40/100 PC



| Model         | Max torque (Nm) | Tool Ø (mm) | Stroke (mm) | Max load (Kg) | Code      |
|---------------|-----------------|-------------|-------------|---------------|-----------|
| BA 12 PC      | 12              | 27 - 50     | 195         | 1,2           | 4-5201009 |
| BA 25 PC      | 25              | 28 - 52     | 195         | 2,2           | 4-5201086 |
| BA 40 PC      | 40              | 28 - 52     | 295         | 2,2           | 4-5201087 |
| BA 40 PC/400  | 40              | 28 - 52     | 395         | 2,2           | 4-5201088 |
| BA 100 PC     | 100             | 28 - 52     | 295         | 4             | 4-5201089 |
| BA 100 PC/400 | 100             | 28 - 52     | 395         | 4             | 4-5201091 |

# Linear arms

## BA...PC Dimensions

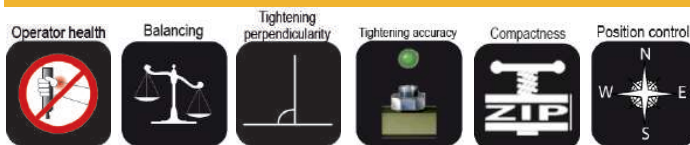


| Model         | Stroke A | B mini | B maxi | C    | D   | E    | F   |
|---------------|----------|--------|--------|------|-----|------|-----|
| BA 12 PC      | 195      | 186    | 336    | 816  | 65  | 8,5  | 78  |
| BA 25 PC      | 195      | 201    | 351    | 916  | 65  | 8,5  | 78  |
| BA 40 PC/300  | 295      | 320    | 470    | 1016 | 100 | 8,5  | 118 |
| BA 40 PC/400  | 395      | 420    | 570    | 1016 | 100 | 8,5  | 118 |
| BA 100 PC/300 | 295      | 335    | 485    | 1016 | 126 | 10,5 | 148 |
| BA 100 PC/400 | 395      | 435    | 585    | 1016 | 126 | 10,5 | 148 |



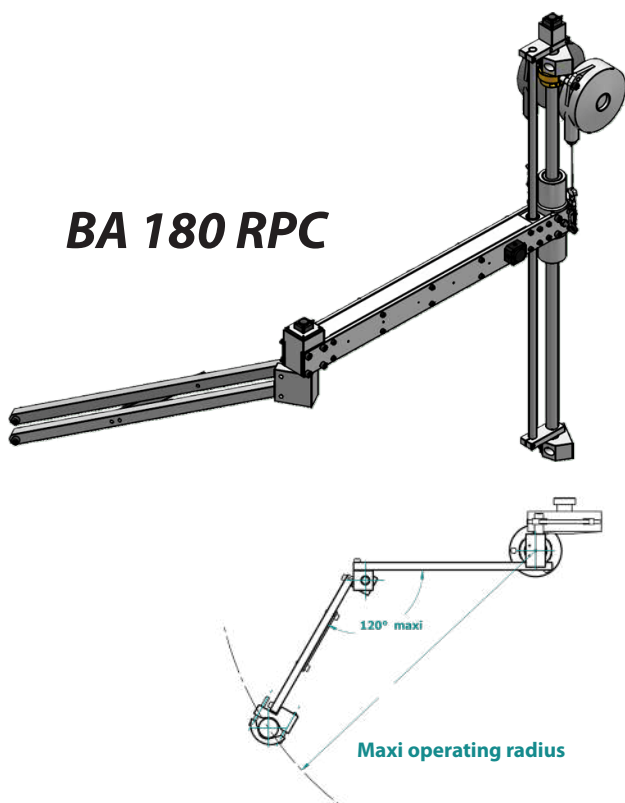
# Articulated arms

## BA...RPC Series

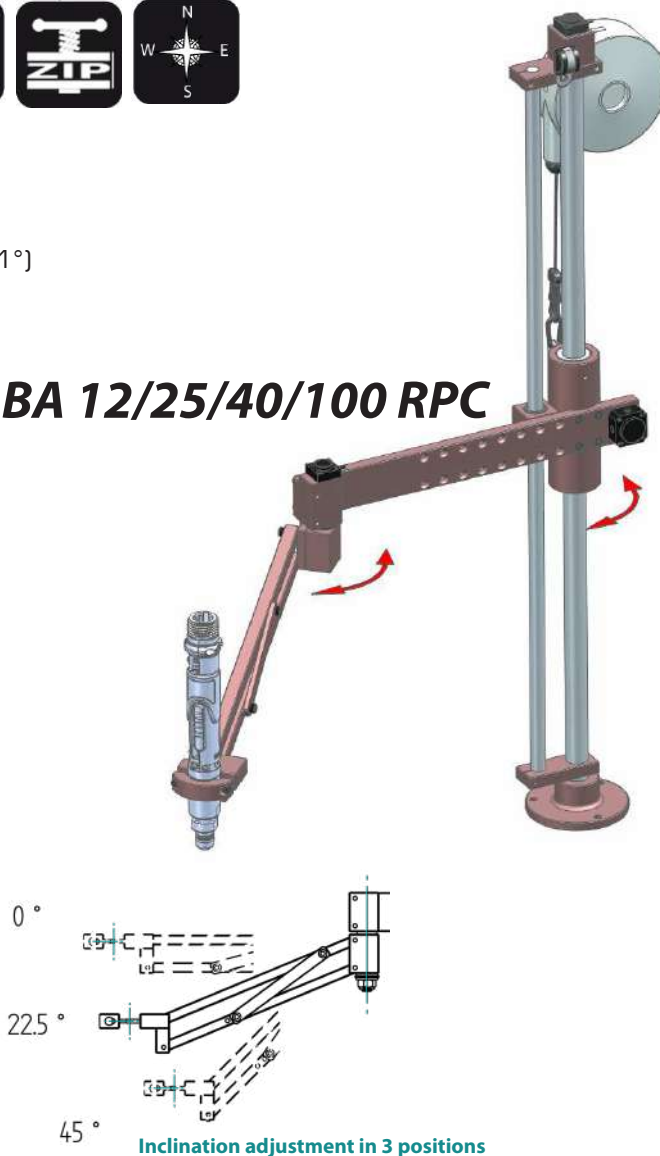


- Torque up to 100 Nm
- Operating range up to 1100 mm
- Equipped with two absolute angle encoders 12 bits (0,1°)
- Higher torque is available on request

### BA 180 RPC



### BA 12/25/40/100 RPC



| Model           | Max torque (Nm) | Tool Ø (mm) | Operating range (mm) | Max load (Kg) | 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                  | 1,9           | 4-5200475 |
| 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                  | 3             | 4-5200477 |
| BA 100 RPC/1100 | 100             | 28 - 52     | 1100                 | 2,5           | 4-5200478 |
| BA 180 RPC/1200 | 180             | sur demande | 1200                 | 6             | 4-5200008 |
| BA 180 RPC/1500 | 180             | sur demande | 1500                 | 4             | 4-5200016 |



### Option

Z encoder / BA RPC. **Code : 4-5283125.**  
Encoder cable Z. **Code 4-5200725.**



# Articulated arms

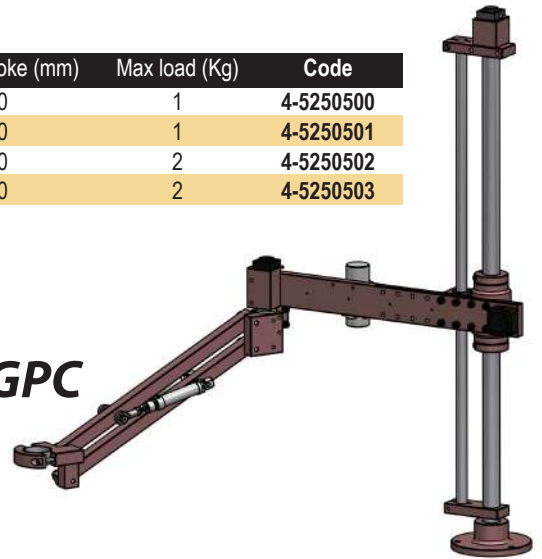
## BA...RPC Series

### Softly air balanced

| For           | Stroke max (Nm) | Tool Ø (mm) | Operating radius (mm) | Vertical stroke (mm) | Max load (Kg) | Code      |
|---------------|-----------------|-------------|-----------------------|----------------------|---------------|-----------|
| BA 10 GPC     | 10              | 27/50       | 470                   | 170                  | 1             | 4-5250500 |
| BA 10 GPC/600 | 10              | 27/50       | 600                   | 170                  | 1             | 4-5250501 |
| BA 30 GPC     | 30              | 28/52       | 670                   | 220                  | 2             | 4-5250502 |
| BA 30 GPC/800 | 30              | 28/52       | 800                   | 220                  | 2             | 4-5250503 |

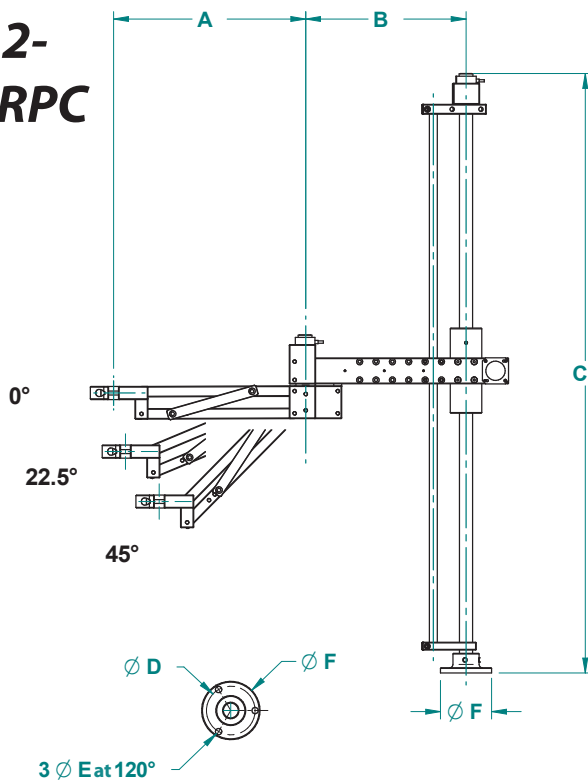
Drawing : see page 21.

### BA 10/30 GPC

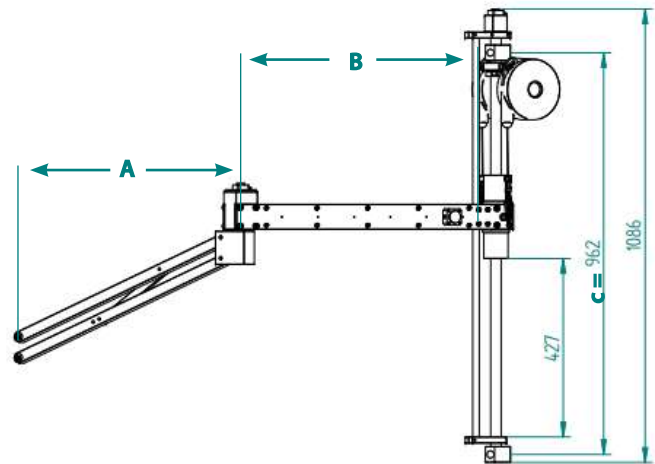


## Dimensions BA...RPC

### BA 12-100 RPC



### BA 180 RPC



| Model           | At 0° | At 22,5° | At 45° | B min | B max | C    | Operating radius at 22,5° |
|-----------------|-------|----------|--------|-------|-------|------|---------------------------|
| 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                      |
| BA 180 RPC/1500 | 686   | 637      | -      | 700   | 700   | 962  | 1200                      |
| BA 180 RPC/2000 | 820   | 760      | -      | 855   | 855   | 962  | 1500                      |

D, E, F similar to BA...R

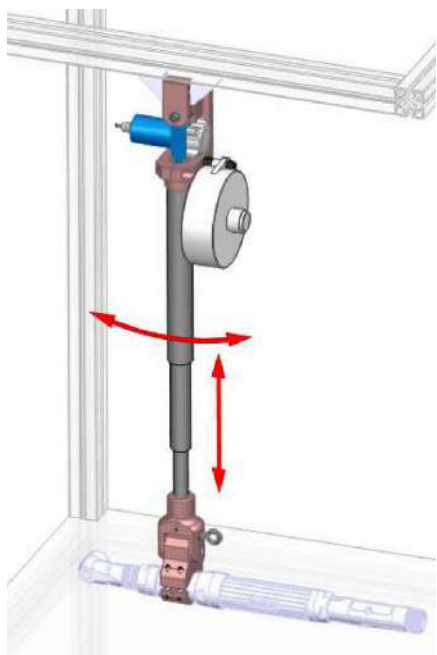


# Carbon telescoping arms

## DMF...PC Series

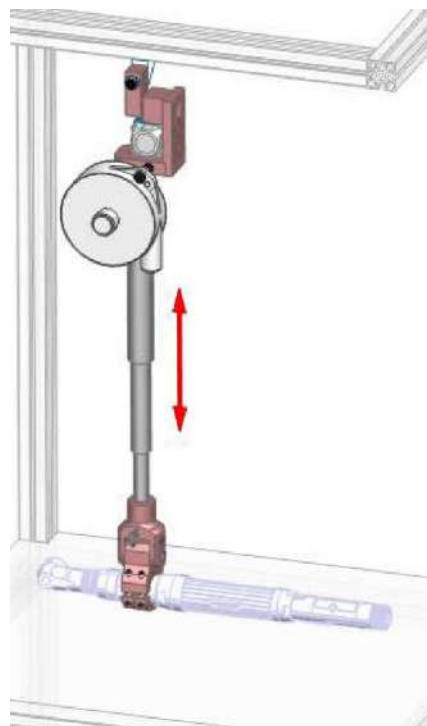


- Torque up to 300 Nm
  - Equipped with absolute angle encoders 12 bits (0,1°)
- ↔ Monitored movement



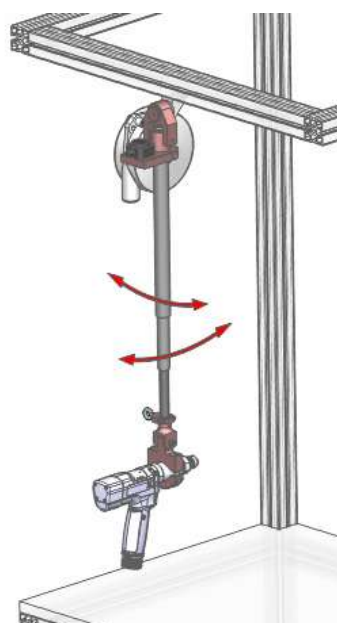
**DMF LAPC**

To monitor the angle and the length of the arm.



**DMF LPC**

To monitor the length of the arm.



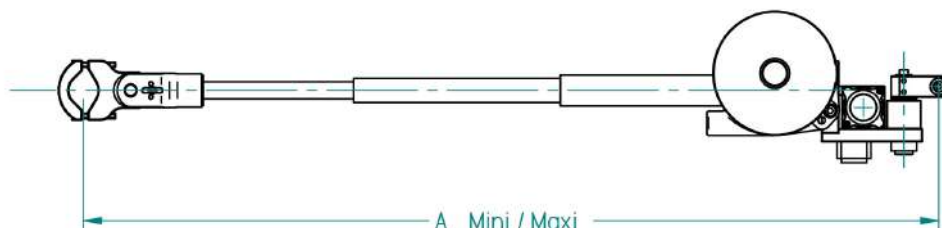
**DMF AAPC**

To monitor the inclination (angle) of the arm in both directions.

# Carbon telescoping arms

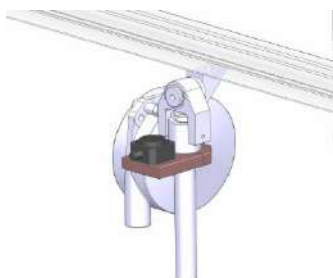
## DMF...PC Series

### DMF LPC/LAPC



| Model             | Torque (Nm) | Clamp | Tool Ø  | Min  | Max  | Code without clamp | Code with clamp |
|-------------------|-------------|-------|---------|------|------|--------------------|-----------------|
| DMF 30 LPC/960    | 30          | P1    | 28-52   | 560  | 960  | 4-5300588          | 4-5300581       |
| DMF 30 LPC/1500   | 30          | P1    | -       | 727  | 1500 | 4-5300589          | 4-5300582       |
| DMF 30 LPC/2000   | 30          | P1    | -       | 894  | 2000 | 4-5300590          | 4-5300583       |
| DMF 80 LPC/1500   | 80          | P2    | 35-52   | 780  | 1500 | 4-5300591          | 4-5300584       |
| DMF 80 LPC/2000   | 80          | P2    | -       | 947  | 2000 | 4-5300592          | 4-5300585       |
| DMF 140 LPC/1500  | 140         | P2    | -       | 991  | 1500 | 4-5300593          | 4-5300586       |
| DMF 140 LPC/2000  | 140         | P2    | -       | 1241 | 2000 | 4-5300594          | 4-5300587       |
| DMF 300 LPC/1500  | 300         | P2    | Maxi 73 | 1055 | 1500 | 4-5300860          | 4-5300862       |
| DMF 300 LPC/2000  | 300         | P2    | Maxi 73 | 1305 | 2000 | 4-5300861          | 4-5300863       |
| DMF 30 LAPC/960   | 30          | P1    | 28-52   | 560  | 960  | 4-5300662          | 4-5300595       |
| DMF 30 LAPC/1500  | 30          | P1    | -       | 727  | 1500 | 4-5300663          | 4-5300596       |
| DMF 30 LAPC/2000  | 30          | P1    | -       | 894  | 2000 | 4-5300664          | 4-5300597       |
| DMF 80 LAPC/1500  | 80          | P2    | 35-52   | 780  | 1500 | 4-5300665          | 4-5300598       |
| DMF 80 LAPC/2000  | 80          | P2    | -       | 947  | 2000 | 4-5300666          | 4-5300599       |
| DMF 140 LAPC/1500 | 140         | P2    | -       | 991  | 1500 | 4-5300667          | 4-5300660       |
| DMF 140 LAPC/2000 | 140         | P2    | -       | 1241 | 2000 | 4-5300668          | 4-5300661       |
| DMF 300 LAPC/1500 | 300         | P2    | Max 73  | 1055 | 1500 | 4-5300864          | 4-5300866       |
| DMF 300 LAPC/2000 | 300         | P2    | -       | 1305 | 2000 | 4-5300865          | 4-5300867       |

### AAPC Option



*Inclinometer may be installed on standard DMF arms (DMF30, DMFi 70/120/200) to monitor angular position.*

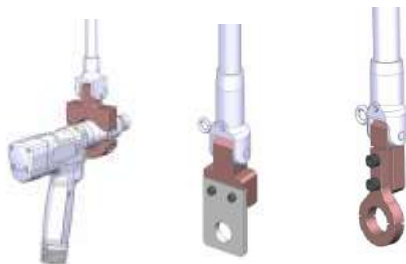
| For             | Code      |
|-----------------|-----------|
| DMF 30          | 4-5200809 |
| DMFi 70/120/200 | 4-5200810 |

Delivered with DPC Touch cable.



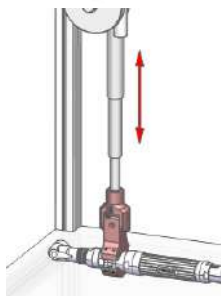
# Carbon telescoping arms

## Clamps for DMF...PC



### P1 clamp

| For        | P1                       | Tool Ø     |
|------------|--------------------------|------------|
| DMF 30     | Standard                 | 28/52      |
| DMF 80/140 | Mounting plate interface | On request |
| DMF 300    | Mounting plate interface | On request |



### P2 clamp

| For        | Tool Ø | Code       |
|------------|--------|------------|
| DMF 30     | 28/52  | 4-5200300  |
| DMF 80/140 | 35/52  | Standard   |
| DMF 300    |        | On request |



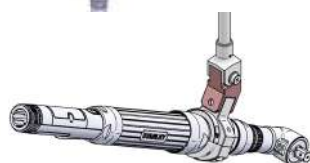
### P3 clamp

| For        | Tool Ø | Code      |
|------------|--------|-----------|
| DMF 30     | 28/52  | 4-5200301 |
| DMF 80/140 | 35/52  | Standard  |
| DMF 300    | Max 73 | 4-5244057 |



### P4 clamp

| For        | Tool Ø | Code      |
|------------|--------|-----------|
| DMF 30     | 28/52  | 4-5200302 |
| DMF 80/140 | 35/52  | 4-5244016 |
| DMF 300    | Max 73 | 4-5244059 |



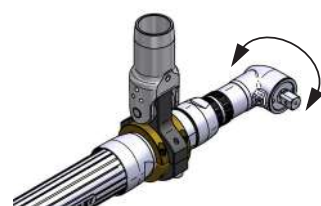
### Tilting interface DMF30

| For | Code      |
|-----|-----------|
| 15° | 4-5283168 |
| 30° | 4-5283169 |



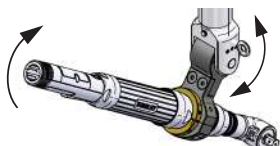
### Tilting clamp

| For        | Tool Ø | Increment | Code        |
|------------|--------|-----------|-------------|
| DMF 80/140 | 35-52  | 15°       | Sur demande |



### P2 Rotating clamp

| For        | Tool Ø | Code      |
|------------|--------|-----------|
| DMF 30     | 43     | 4-5201134 |
| DMF 80/140 | 50     | 4-5244035 |
| DMF 300    | 70     | 4-5201136 |

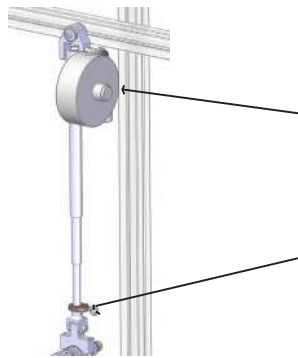


### Tilting and rotating clamp

| For        | Tool Ø | Increment | Code      |
|------------|--------|-----------|-----------|
| DMF 80/140 | 50     | 18°       | 4-5201206 |

# Carbon telescoping arms

## DMF...PC Accessories

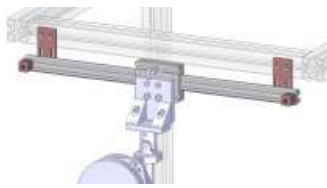


### Balancing kit for DMF...PC

| Max load tool (kg) | For        | Code      |
|--------------------|------------|-----------|
| 1/2,5              | DMF 30     | 4-5200304 |
| 2/4                | DMF 30     | 4-5200305 |
| 2/4                | DMF 80/140 | 4-5201578 |
| 4/6                | DMF 80/140 | 4-5200306 |
| 4/8                | DMF 300    | 4-5200704 |
| 6/10               | DMF 300    | 4-5200705 |

Balancer attachment kit for DMF30 **Code 4-5201143.**

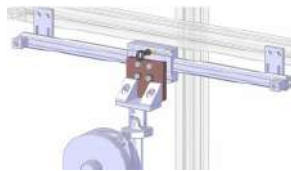
### Rails



| Length | Stroke (mm) | Number of flanges | Code      |
|--------|-------------|-------------------|-----------|
| 600    | 450         | 2                 | 4-5200132 |
| 800    | 650         | 2                 | 4-5200160 |
| 1000   | 850         | 2                 | 4-5200161 |
| 1200   | 1050        | 3                 | 4-5200162 |
| 1500   | 1350        | 3                 | 4-5200163 |
| 2000   | 1850        | 4                 | 4-5200164 |

### Rail interface

Allows installation of DMF on rail.



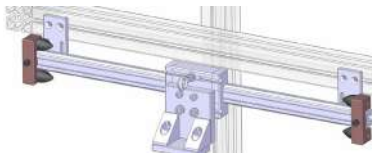
| For           | Code      |
|---------------|-----------|
| DMF 30/80/140 | 4-5200341 |
| DMF 300       | 4-5200342 |

NOTE : delivered without safety hook (Code 4-5200309)

### Absorbing stop

Recommended in case of repeatable side shocks.

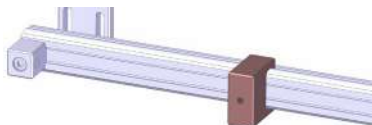
**Code 4-5201121** Set of 2



### Adjustable stop

To limit the slide of the arm on the rail.

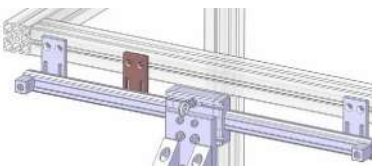
**Code 4-5200167**



### Additional flange

To reinforce the rail installation for high torque applications.

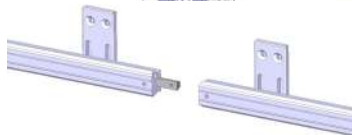
**Code 4-5200873**



### Rail link

To link two rails together.

**Code 4-5200307**



### Laser encoder

| Model                  | Code      |
|------------------------|-----------|
| Laser encoders on rail | 4-5250506 |
| DPC Touch Y cable      | 4-5283174 |



### Cable chain

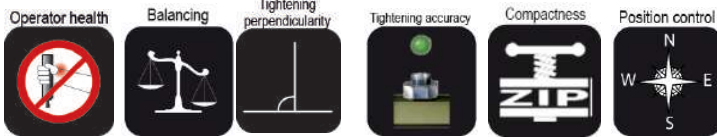
| Model              | Code      |
|--------------------|-----------|
| Max stroke 1200 mm | 4-5250504 |
| Max stroke 2000 mm | 4-5250505 |



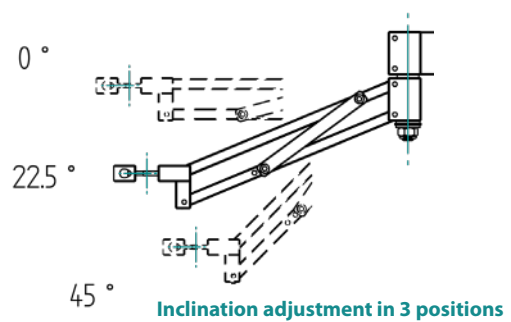
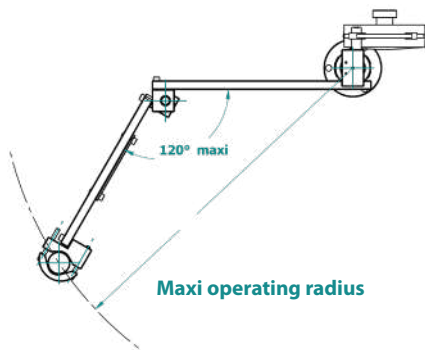
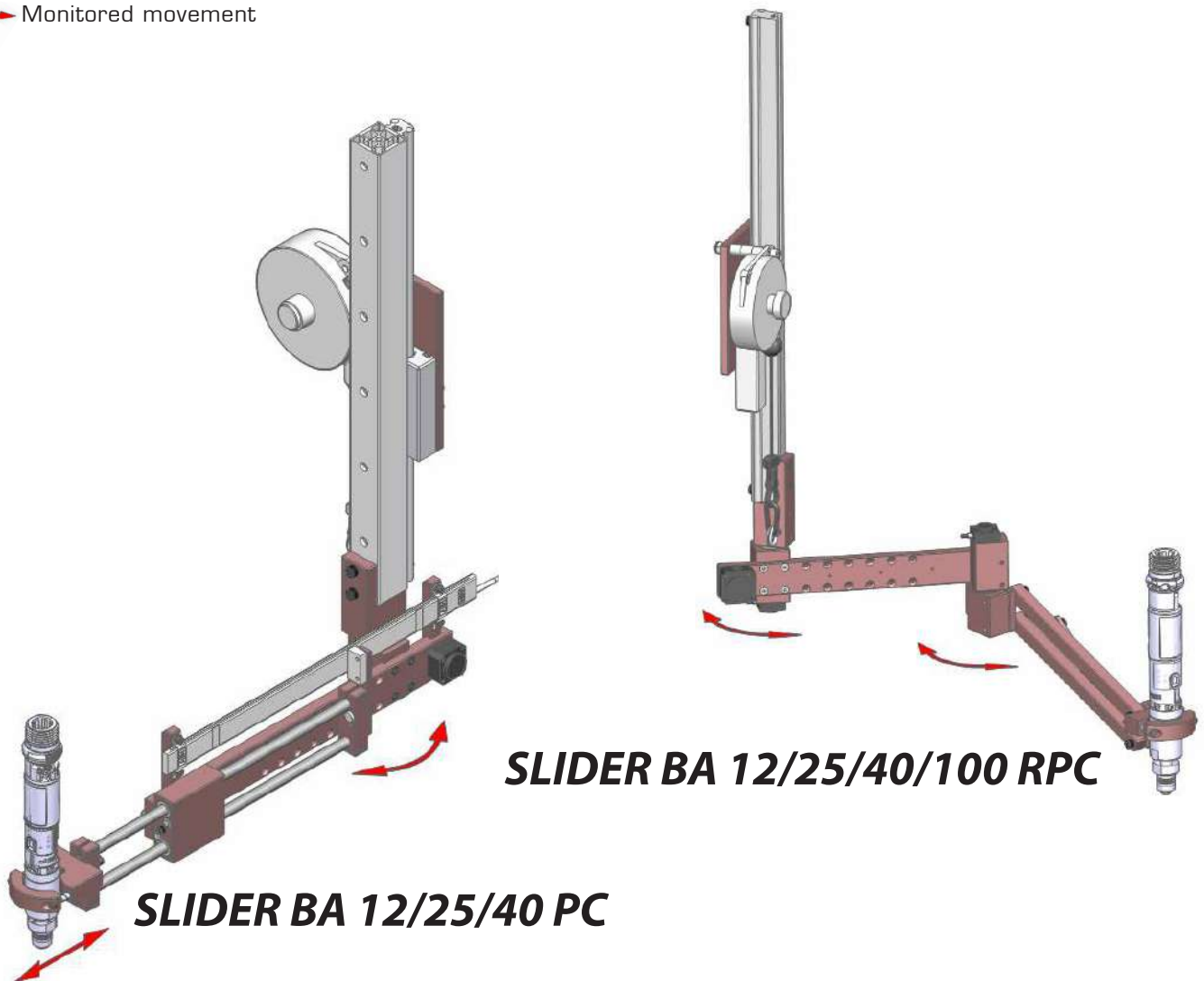


# Suspended arms

## SLIDER BA...PC/RPC



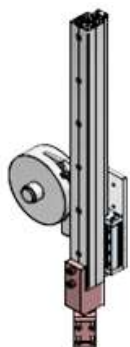
- Torque up to 100 Nm
  - Operating range up to 900 mm
  - Equipped with 2 absolute encoders 12 bits (0,1°)
  - Higher torque available on request
- ↔ Monitored movement



# Suspended arms

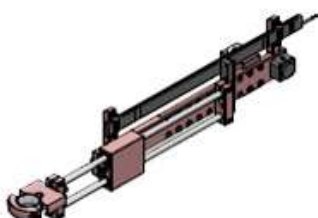
## SLIDER BA...PC/RPC

### Vertical slide



| Model        | Vertical stroke (mm) | Max load (Kg) | Code      |
|--------------|----------------------|---------------|-----------|
| BA12PC/12RPC | 440                  | 1,2           | 4-5283175 |
| BA12PC/12RPC | 640                  | 1,2           | 4-5283176 |
| BA12PC/12RPC | 840                  | 1,2           | 4-5283177 |
| BA25PC/25RPC | 440                  | 2,2           | 4-5283178 |
| BA25PC/25RPC | 640                  | 2,2           | 4-5283179 |
| BA25PC/25RPC | 840                  | 2,2           | 4-5283180 |
| BA40PC/40RPC | 440                  | 3/*2,5/**2,2  | 4-5283181 |
| BA40PC/40RPC | 640                  | 3/*2,5/**2,2  | 4-5283182 |
| BA40PC/40RPC | 840                  | 3/*2,5/**2,2  | 4-5283183 |
| BA100RPC     | 420                  | 5             | 4-5283184 |
| BA100RPC     | 620                  | 5             | 4-5283185 |
| BA100RPC     | 820                  | 5             | 4-5283186 |

### Horizontal linear slides



| Model  | Stroke (mm) | Tool Ø (mm) | Code      |
|--------|-------------|-------------|-----------|
| BA12PC | 195         | 27/50       | 4-5283187 |
| BA25PC | 195         | 28/52       | 4-5283188 |
| BA40PC | 295         | 28/52       | 4-5283189 |

### Horizontal articulation

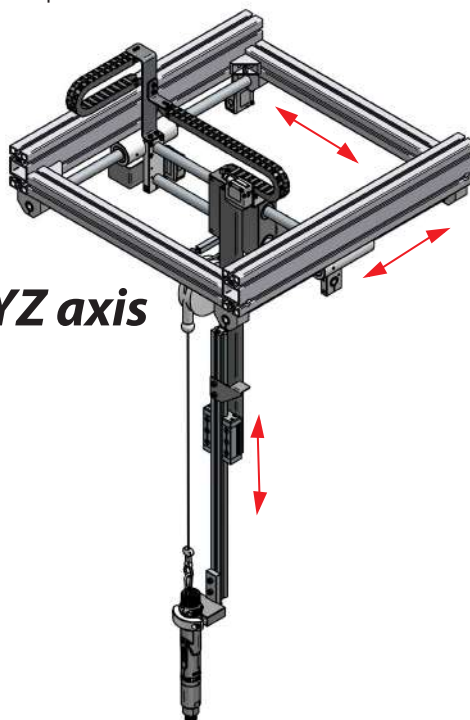


| Model         | Stroke (mm) | Tool Ø (mm) | Code      |
|---------------|-------------|-------------|-----------|
| BA12RPC       | 450         | 27/50       | 4-5283191 |
| BA25RPC       | 460         | 28/52       | 4-5283192 |
| BA25RPC/600   | 600         | 28/52       | 4-5283193 |
| BA40RPC*      | 650         | 28/52       | 4-5283194 |
| BA40RPC/800** | 800         | 28/52       | 4-5283195 |
| BA100RPC      | 730         | 28/52       | 4-5283196 |
| BA100RPC/900  | 900         | 28/52       | 4-5283197 |

## SLIDER CARTESIAN PC

Our cartesian slider may be equipped with position encoders on X, Y, Z axis.  
Dimensions on request

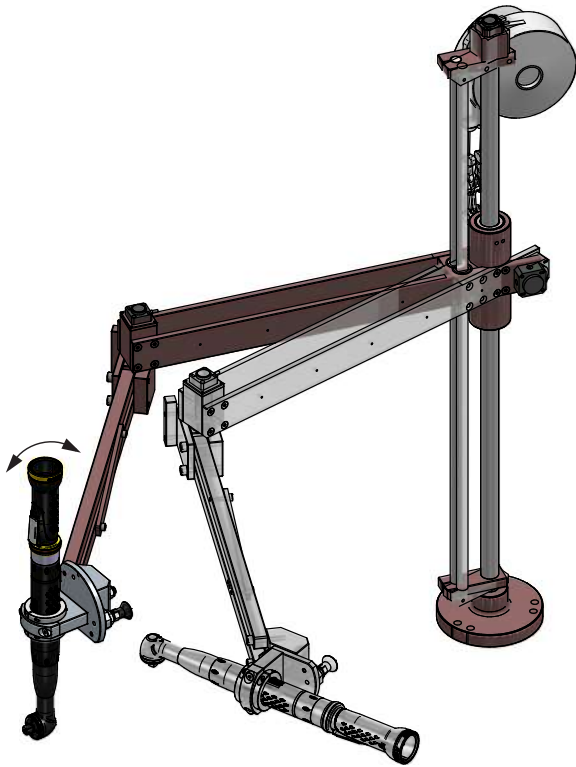
### Laser encoders on XYZ axis



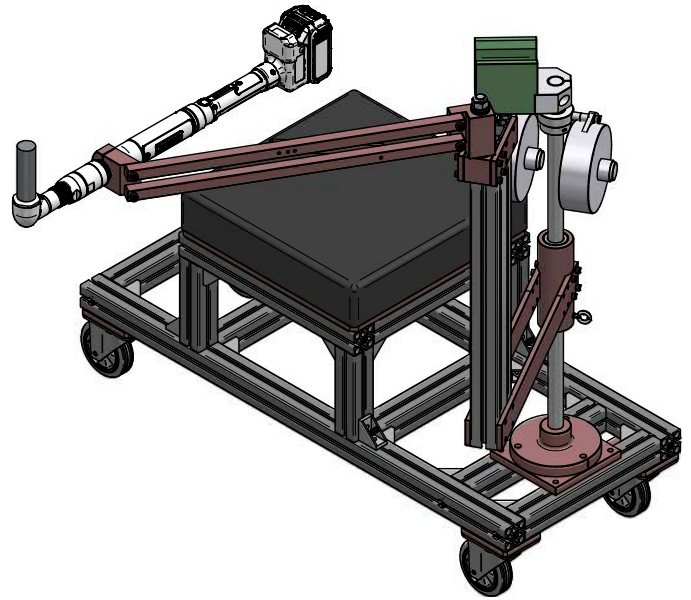




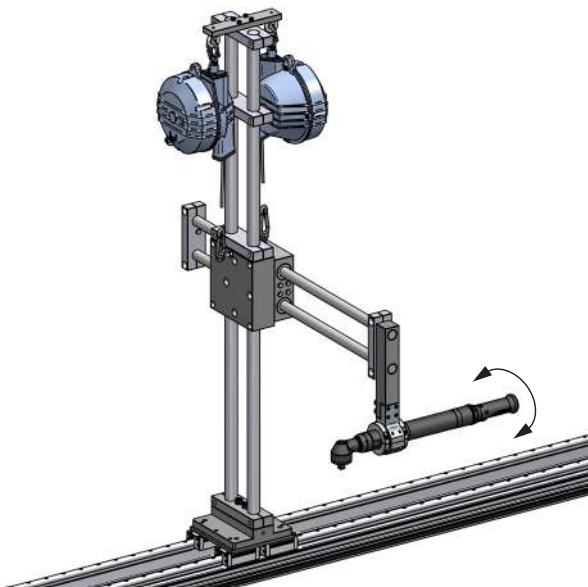
# Special arms



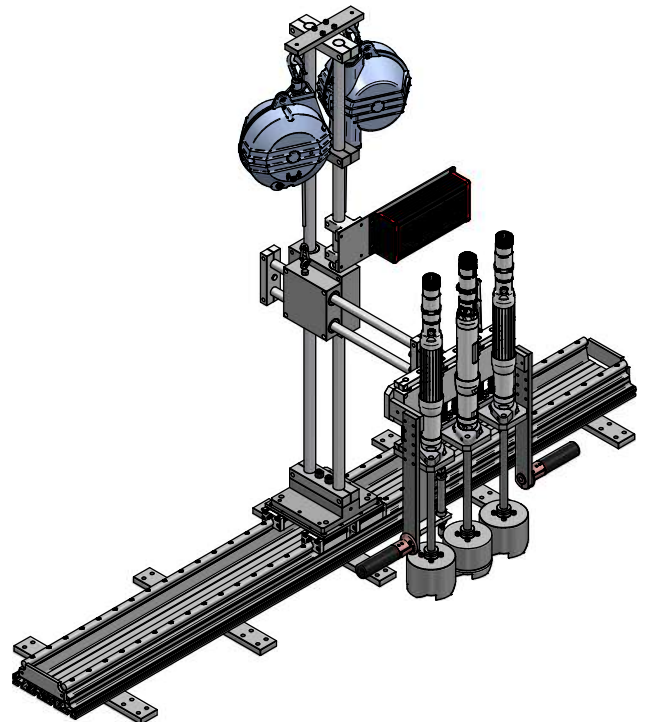
BA 100 RPC with tiltable rotating clamp



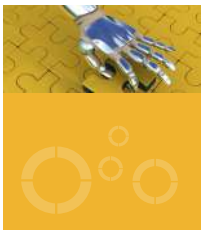
BA 100 R on roller carriage (under body tightening)



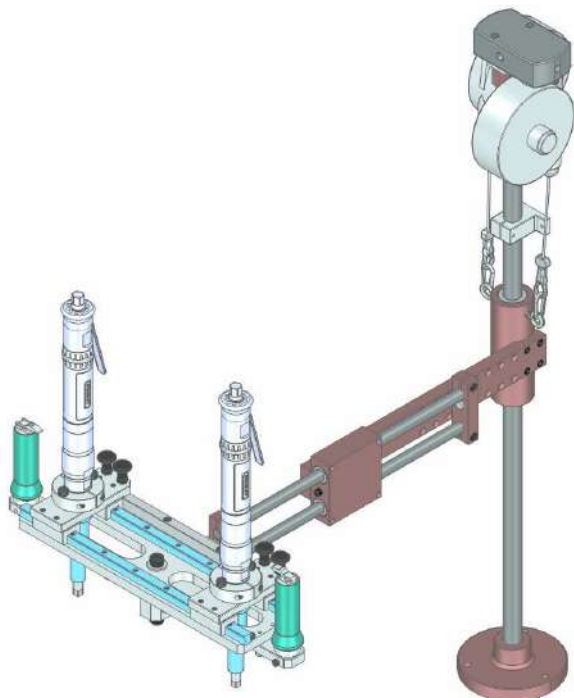
BA 200 C on rail with rotary clamp



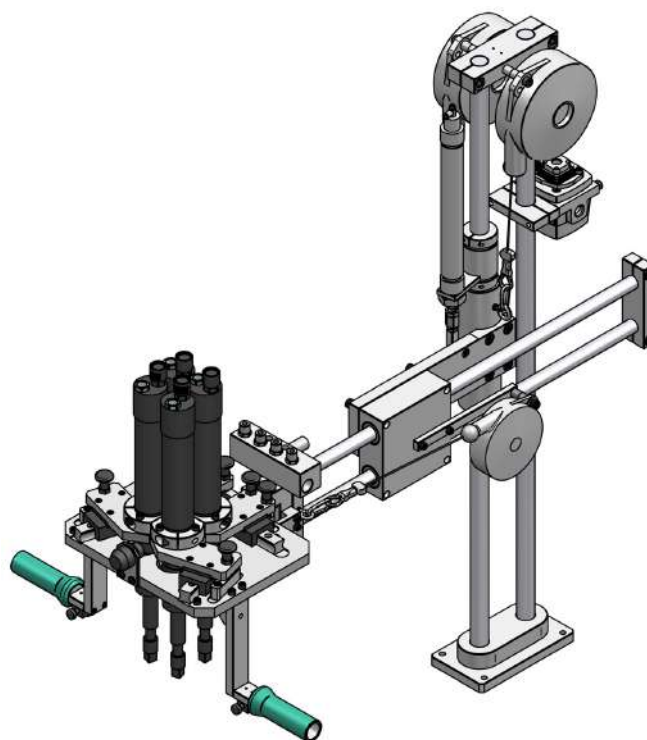
BA 200 C tri spindles on rail



# Special arms



BA for double spindle with variable pitch

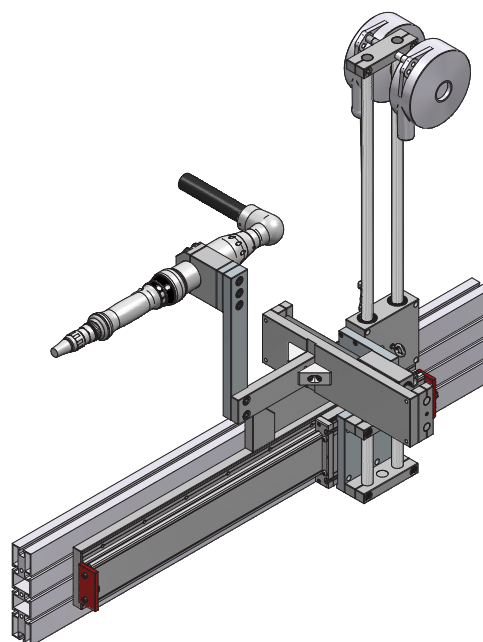


BA 200 with 4 spindles + easy push kit



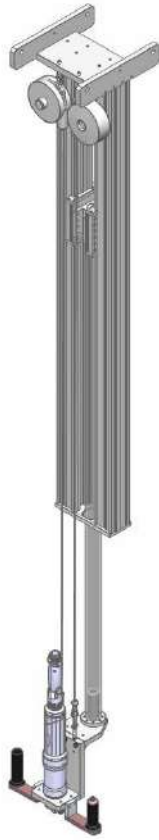
## SLIDER 50 COMPACT :

- With rail
- With air locker
- With rotative clamp

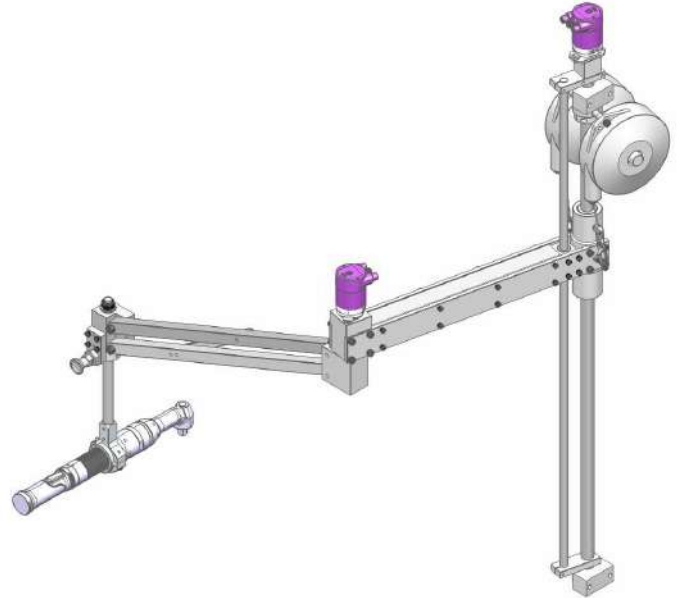


Cartesian arm, 3 axes

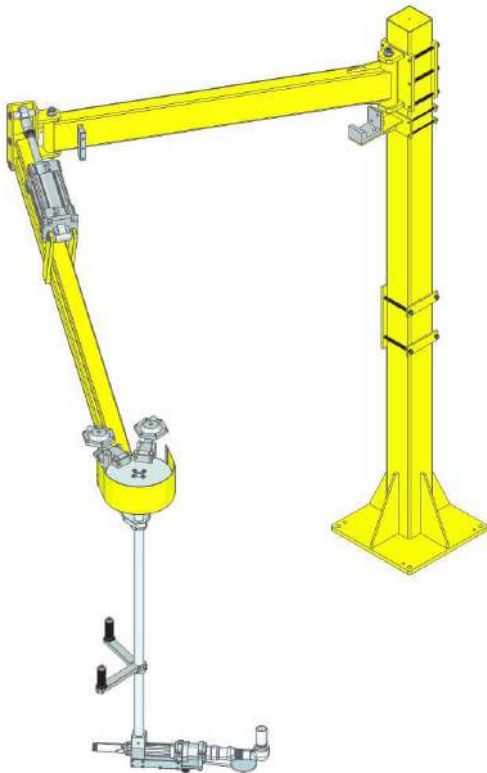
# Special arms



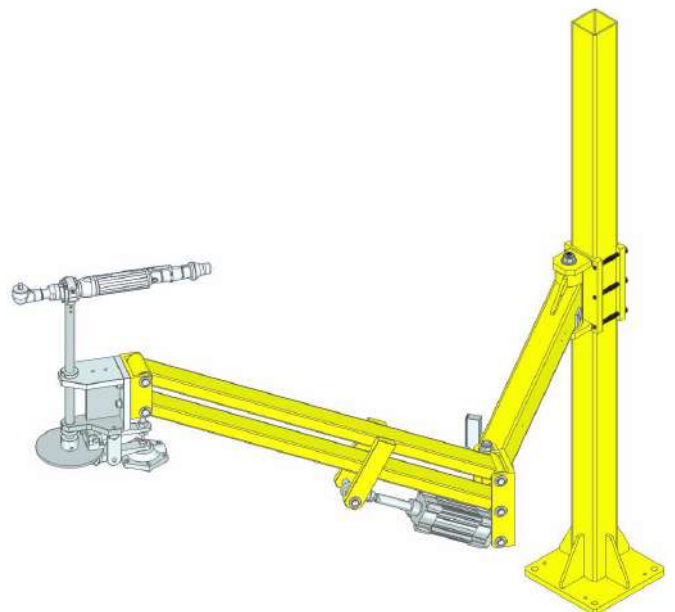
**SLIDER 300 COMPACT for straight nutrunner**



**BA 180 R with :**  
- Profinet coders  
- Rotative and swivelling clamp



**BA 500R/3000 with :**  
- Disk break  
- Rotative clamp



**BA 200 R for under body tightening :**  
- With disk break  
- Rotative clamp



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