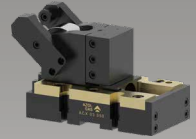
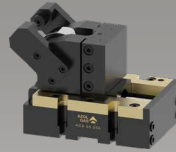
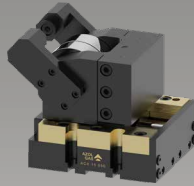
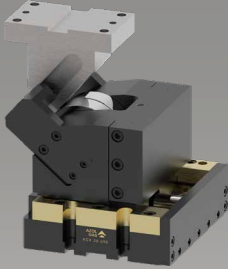


ROLLER CAMS & PUNCHING UNITS



SERIES ACX - FCX - JCX- NXR - NXS - NXC - NXD

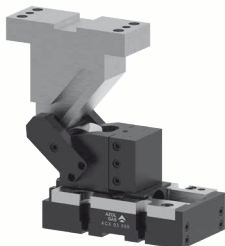
- High precision guiding allows off-centered forces
- Superior performance and longevity
- Wide variety of drivers
- Safety use by optional positive return
- Easy access to gas springs
- Separate head cam slider with lateral fitting

Cam units are suitable for a wide variety of metal forming operations: **cutting, flanging, piercing.**

Try AZOLGAS and trust on the experience of the unique supplier of the **WHOLE set of cams technologies:**

- Roller Cams
- Punching Units
- Cam Units
- Hydraulic Cams

ROLLER CAMS



Pushed by higher productivity requirements on metal bending and punching operations?

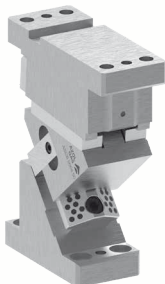
The new generation of AZOLGAS CX Roller Cams MEETS your expectations.

PUNCHING CAMS



Use AZOLGAS NX punching units for metal cutting and piercing operating when smaller size-force-stroke is required.

CAM UNITS



Cam units are appropriate for piercing and flanging on request of higher forces.

HYDRAULIC CAMS



What about punching-piercing-flanging operations with space restrictions in the tool and difficult angle position?

AZOLGAS Hydraulic Cams can be easily installed and operated at any angle or orientation.

| FORCE (Tn) | 03 | 05 | 07 | 15 | 16 | 20 |
|--------------------|-----------------|-----------------|----------|-----------------|-----------------|-----------------|
| ROLLER CAMS | STROKES | | | | | |
| ACX | 50 80 100 | 50 80 100 | | 50 80 100 | | 50 80 100 |
| FCX | | | 50 80 | 50 80 100 | | |
| JCX | | | 50 80 | 50 80 100 | 50 80 100 | |

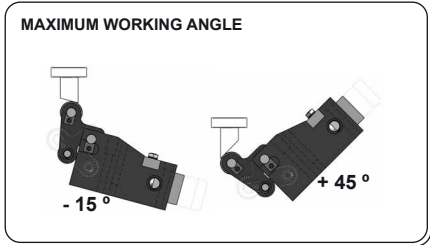
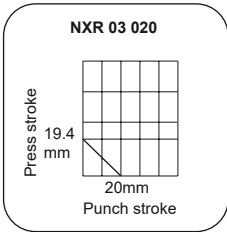
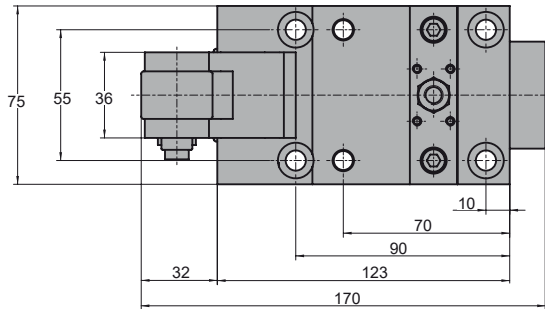
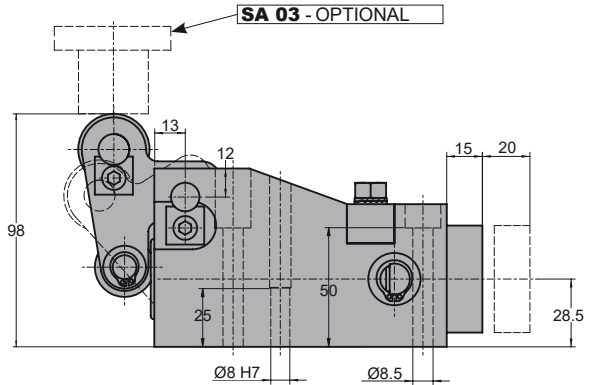
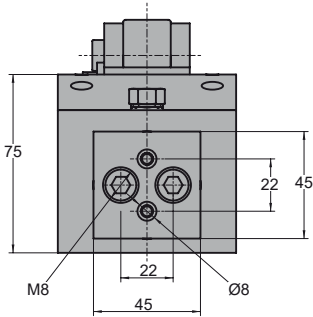
| FORCE (Tn) | 03 | 05 | 07 | 10 |
|----------------------|----------------|----|----|----|
| PUNCHING CAMS | STROKES | | | |
| NXR | 20 | 30 | 40 | 50 |
| NXS | 20 | 30 | 40 | 50 |
| NXC | 20 | 30 | 40 | 50 |
| NXD | 20 | 30 | 40 | 50 |

NXR

Punching Unit



NXR 03 020



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|-----|---------------|---------------------|----------------------------|-------------------|
| NXR 03 020 | 4.8 | 20 | 3000 | 215 | CW 320 032 V1 150 |

Order:

Model **Force** (Tons) **Stroke** (mm)

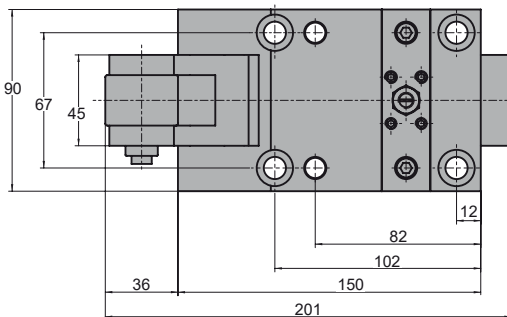
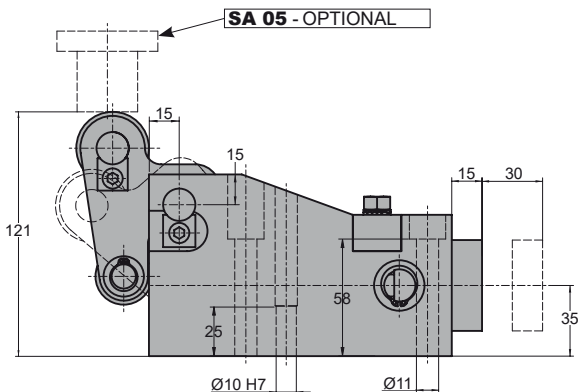
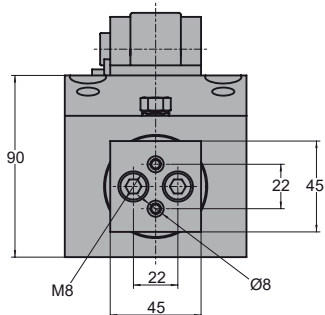
NXR 03 020

Order Options:

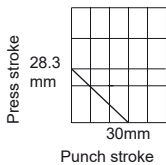
Driver

SA 03

NXR 05 030

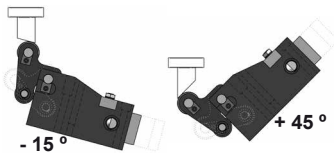


NXR 05 030



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|-------------------|-----|------------------|---------------------------|----------------------------------|-------------------|
| NXR 05 030 | 8.1 | 30 | 5000 | 323 | CW 320 038 V1 200 |

MAXIMUM WORKING ANGLE



Order:

Model **Force** **Stroke**
 (Tons) (mm)

NXR 05 030

Order Options:

Driver

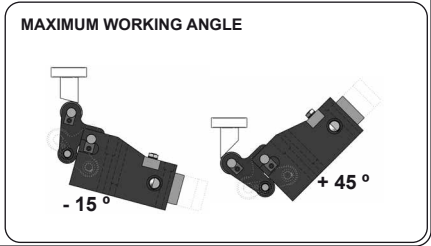
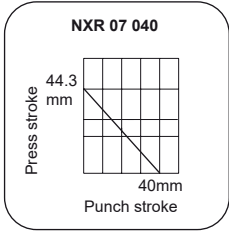
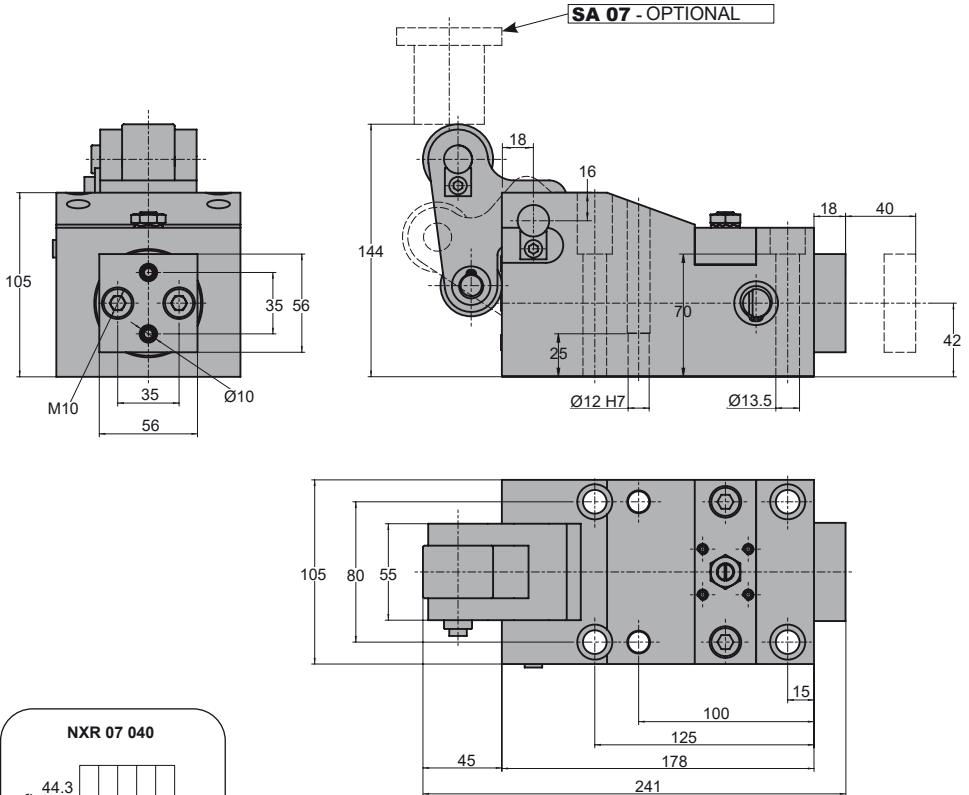
SA 05

NXR

Punching Unit

AZOL GAS

NXR 07 040



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|-------------------|------|---------------|---------------------|----------------------------|-------------------|
| NXR 07 040 | 13.5 | 40 | 7000 | 355 | CW 350 050 V1 250 |

Order:

Model **Force** **Stroke**
 (Tons) (mm)

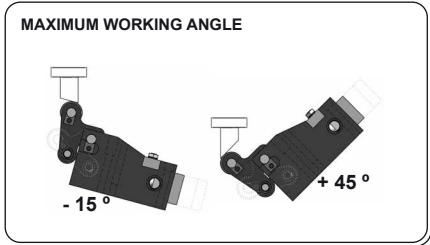
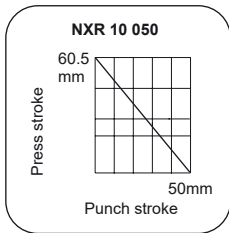
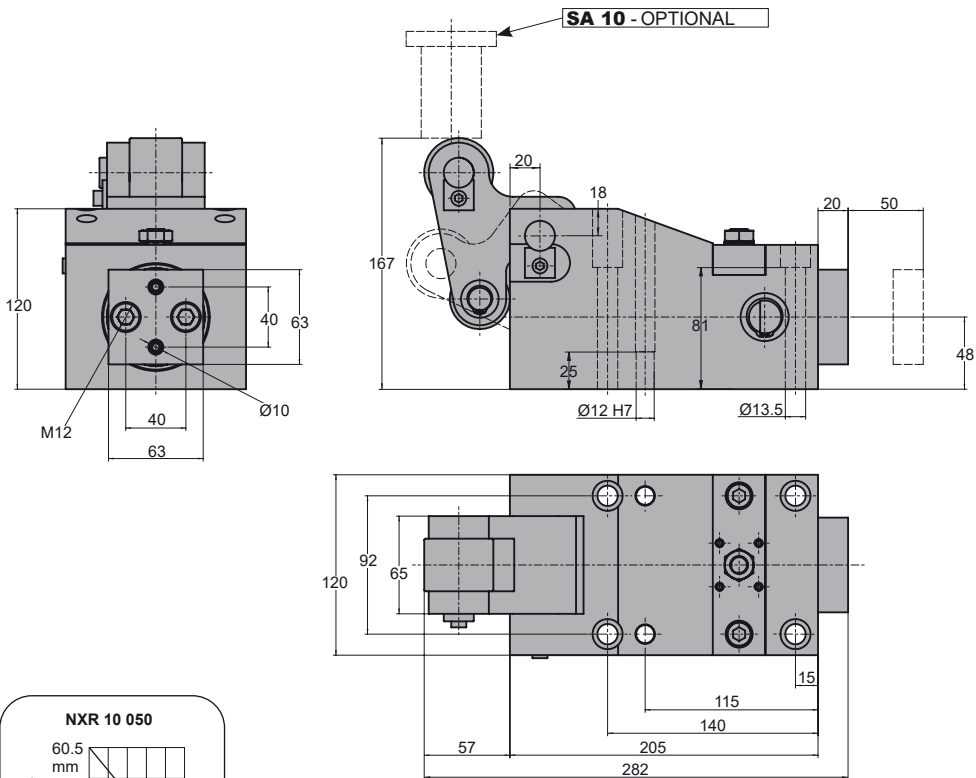
NXR 07 040

Order Options:

Driver

SA 07

NXR 10 050



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|------|---------------|---------------------|----------------------------|-------------------|
| NXR 10 050 | 20.6 | 50 | 10000 | 820 | CW 750 050 V1 500 |

Order:

Model Force (Tons) Stroke (mm)

NXR 10 050

Order Options:

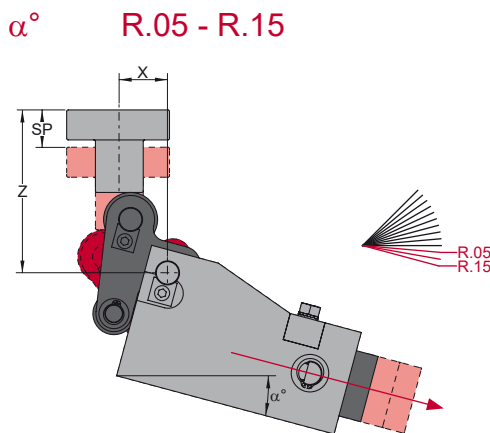
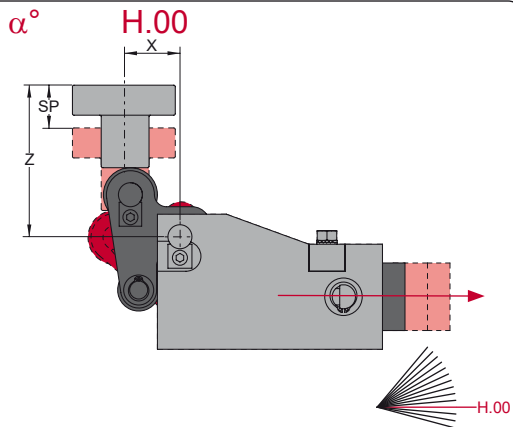
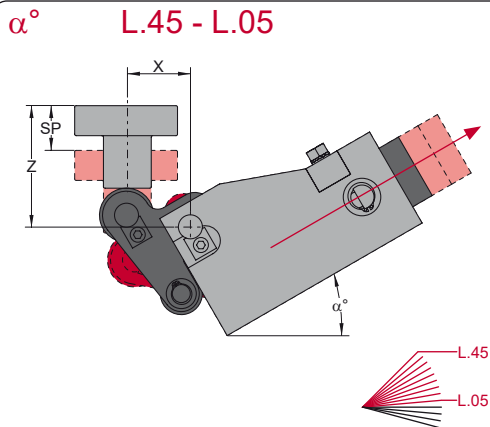
Driver

SA 10

NXR DRIVER POSITIONING

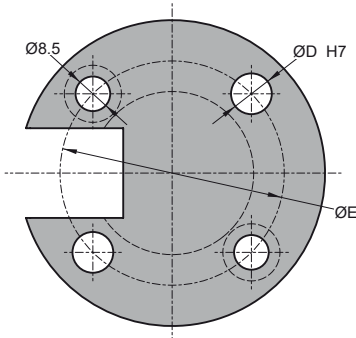
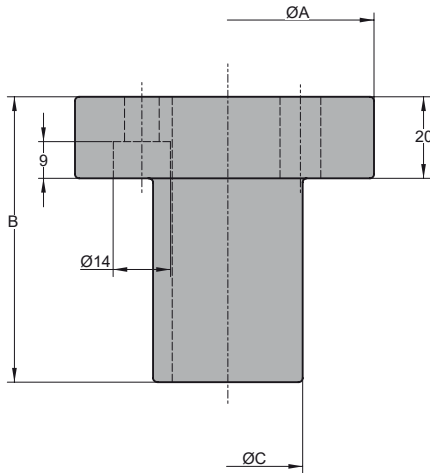


Punching Unit

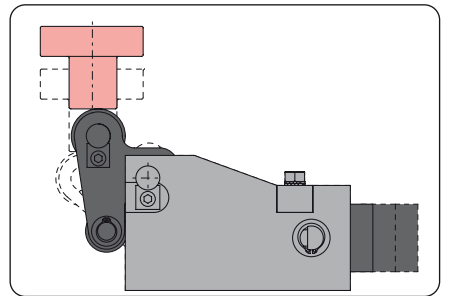


| | | α° | | | | | | | | | | | | |
|-------------------|----|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L.45 | L.40 | L.35 | L.30 | L.25 | L.20 | L.15 | L.10 | L.05 | H.00 | R.05 | R.10 | R.15 |
| NXR 03 020 | X | 36.5 | 36.5 | 36.5 | 36.5 | 36.5 | 36.5 | 36.5 | 39.0 | 38.0 | 36.5 | 35.0 | 33.0 | 31.5 |
| | Z | 62,93 | 66,04 | 69,17 | 72,32 | 75,44 | 78,53 | 81,55 | 84,48 | 87,3 | 90,00 | 92,53 | 94,90 | 97,08 |
| | SP | 17,99 | 18,74 | 19,35 | 19,82 | 20,13 | 20,29 | 20,30 | 20,15 | 19,85 | 19,39 | 18,79 | 18,05 | 17,17 |
| NXR 05 030 | X | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 | 42.0 | 48.5 | 47.0 | 45.0 | 43.0 | 40.0 | 40.0 | 39.0 |
| | Z | 69,46 | 73,23 | 77,00 | 80,74 | 84,43 | 88,02 | 91,50 | 94,84 | 98,01 | 101,00 | 103,76 | 106,30 | 108,58 |
| | SP | 27,40 | 28,42 | 29,22 | 29,80 | 30,15 | 30,28 | 30,17 | 29,83 | 29,27 | 28,48 | 27,47 | 26,26 | 24,85 |
| NXR 07 040 | X | 49.0 | 51.0 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 | 53.5 | 51.0 | 49.0 | 47.0 | 46.0 | 45.0 |
| | Z | 99,34 | 104,17 | 109,00 | 113,81 | 118,54 | 123,18 | 127,67 | 132,00 | 136,11 | 140,00 | 143,61 | 146,93 | 149,93 |
| | SP | 39,59 | 41,46 | 43,00 | 44,23 | 45,11 | 45,65 | 45,85 | 45,69 | 45,19 | 44,34 | 43,16 | 41,65 | 39,82 |
| NXR 10 050 | X | 52.0 | 54.0 | 56.0 | 58.0 | 60.0 | 62.0 | 64.0 | 65.0 | 65.5 | 62.0 | 61.0 | 61.0 | 61.0 |
| | Z | 99,51 | 105,46 | 111,43 | 117,37 | 123,24 | 129,00 | 134,59 | 139,98 | 145,13 | 150,00 | 154,55 | 158,74 | 162,55 |
| | SP | 51,15 | 53,95 | 56,34 | 58,30 | 59,81 | 60,88 | 61,47 | 61,60 | 61,27 | 60,46 | 59,20 | 57,48 | 55,33 |

SA



| TYPE | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | NXR MODELS |
|-------|--------|--------|--------|--------|--------|------------|
| SA 03 | 70 | 55 | 35 | 8 | 50 | NXR 03 020 |
| SA 05 | 70 | 55 | 35 | 8 | 50 | NXR 05 030 |
| SA 07 | 75 | 85 | 44 | 10 | 60 | NXR 07 040 |
| SA 10 | 75 | 85 | 44 | 10 | 60 | NXR 10 050 |

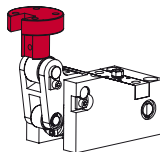


Order Options:



Driver

SA 05

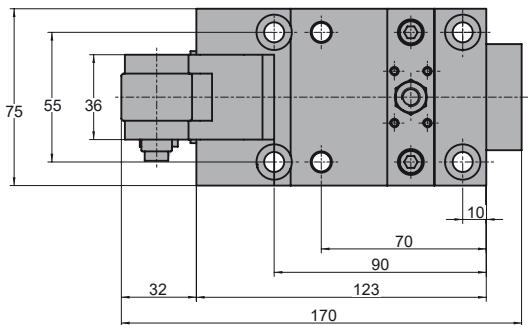
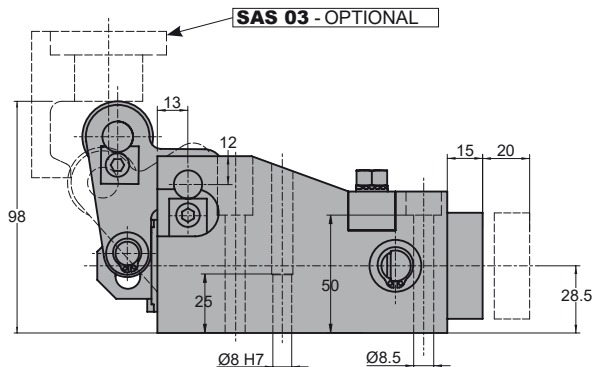
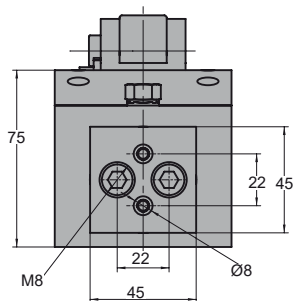


NXS

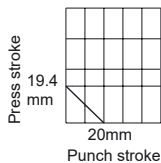
Punching Unit


AZOL GAS

NXS 03 020

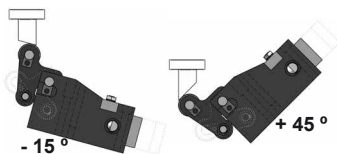


NXS 03 020



| MODEL |  Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|---|---------------|---------------------|----------------------------|-------------------|
| NXS 03 020 | 4.8 | 20 | 3000 | 215 | CW 320 032 V1 150 |

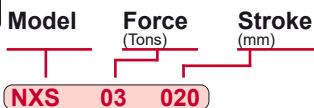
MAXIMUM WORKING ANGLE *



* - It cannot be used in all the angles range



Order:

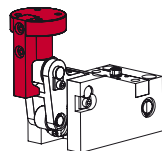


Order Options:

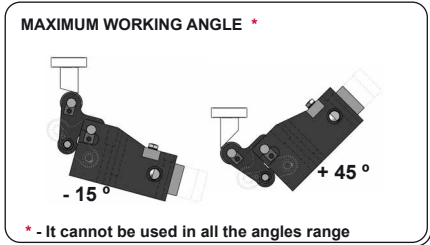
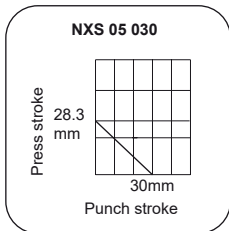
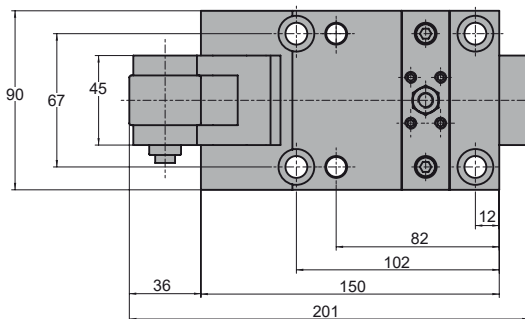
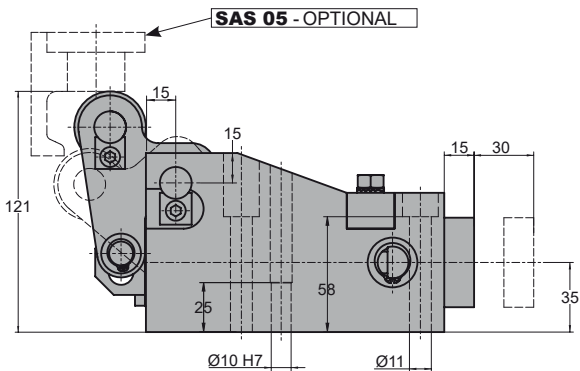
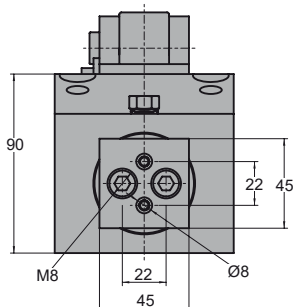


Driver

SAS 03



NXS 05 030



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|-----|---------------|---------------------|----------------------------|-------------------|
| NXS 05 030 | 8.1 | 30 | 5000 | 323 | CW 320 038 V1 200 |

Order:

Model **Force** (Tons) **Stroke** (mm)

└───┬───┬───┘

NXS 05 030

Order Options:

Driver

└───┘

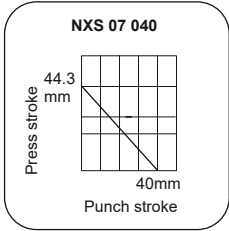
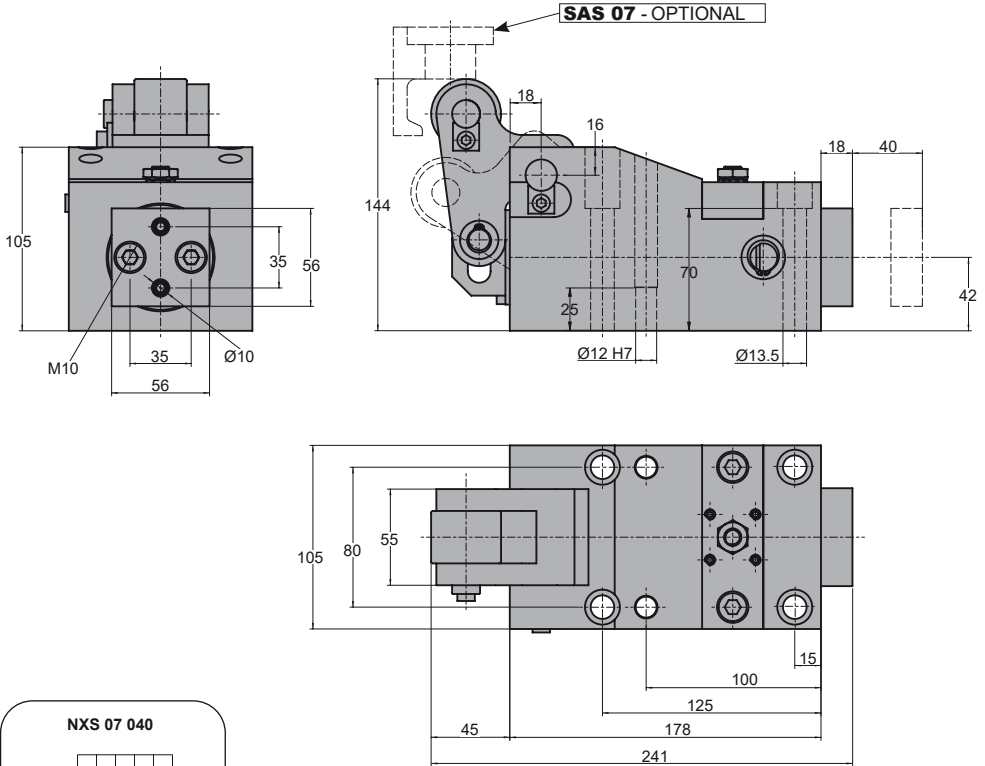
SAS 05

NXS

Punching Unit

AZOL GAS

NXS 07 040



MAXIMUM WORKING ANGLE *

- 15° + 45°

* - It cannot be used in all the angles range

| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|------|---------------|---------------------|----------------------------|-------------------|
| NXS 07 040 | 13.5 | 40 | 7000 | 355 | CW 350 050 V1 250 |

Order:

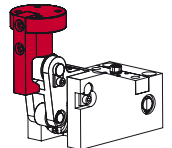
Model Force (Tons) Stroke (mm)

NXS 07 040

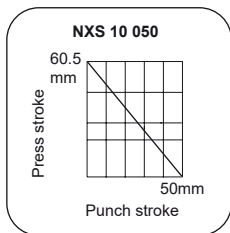
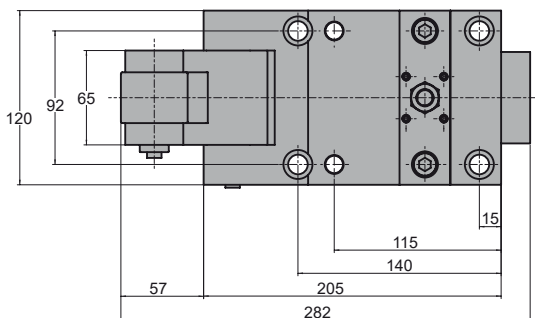
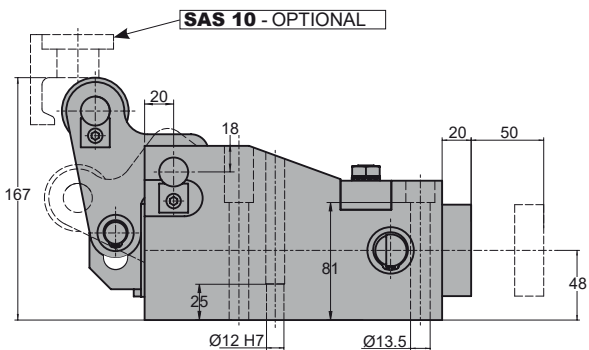
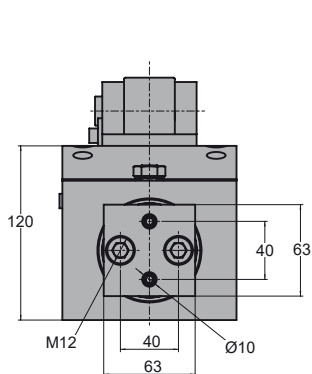
Order Options:

Driver

SAS 07



NXS 10 050



MAXIMUM WORKING ANGLE *

- 15° + 45°

* - It cannot be used in all the angles range

| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|-------------------|------|---------------|---------------------|----------------------------|-------------------|
| NXS 10 050 | 20.7 | 50 | 10000 | 820 | CW 750 050 V1 500 |

Order:

Model **Force (Tons)** **Stroke (mm)**

NXS 10 050

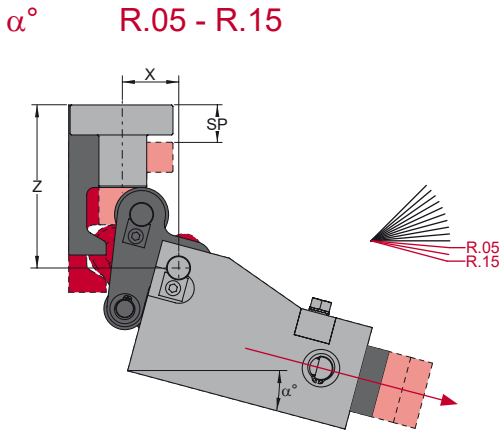
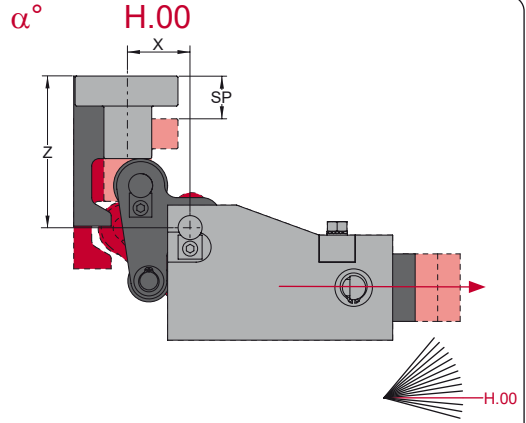
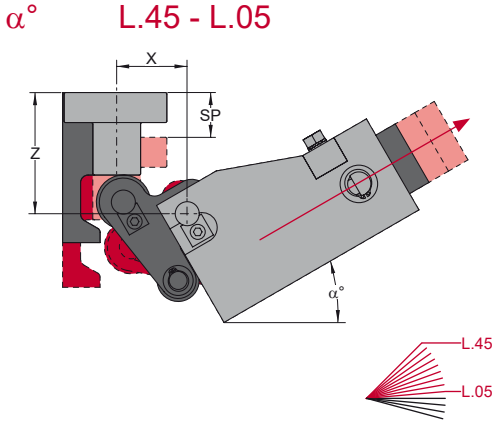
Order Options:

Driver

SAS 10

NXS DRIVER POSITIONING

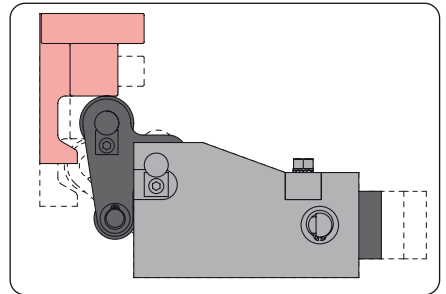
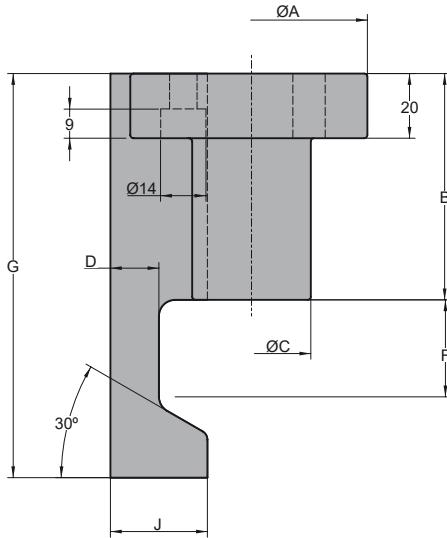
Punching Unit



| | | α° | | | | | | | | | | | | |
|-------------------|----|----------------|------|------|------|------|------|-------|--------|--------|--------|--------|--------|--------|
| | | L.45 | L.40 | L.35 | L.30 | L.25 | L.20 | L.15 | L.10 | L.05 | H.00 | R.05 | R.10 | R.15 |
| NXS 03 020 | X | - | - | - | - | - | - | - | 39.0 | 38.0 | 36.5 | 35.0 | 33.0 | 31.5 |
| | Z | - | - | - | - | - | - | - | 84.48 | 87.30 | 90.00 | 92.53 | 94.90 | 97.08 |
| | SP | - | - | - | - | - | - | - | 20.15 | 19.85 | 19.39 | 18.79 | 18.05 | 17.17 |
| NXS 05 030 | X | - | - | - | - | - | - | 48.5 | 47.0 | 45.0 | 43.0 | 40.0 | 40.0 | 39.0 |
| | Z | - | - | - | - | - | - | 91.50 | 94.84 | 98.01 | 101.00 | 103.76 | 106.30 | 108.58 |
| | SP | - | - | - | - | - | - | 30.17 | 29.83 | 29.27 | 28.48 | 27.47 | 26.26 | 24.85 |
| NXS 07 040 | X | - | - | - | - | - | - | - | 53.5 | 51.0 | 49.0 | 47.0 | 46.0 | 45.0 |
| | Z | - | - | - | - | - | - | - | 132.00 | 136.11 | 140.00 | 143.61 | 146.93 | 149.93 |
| | SP | - | - | - | - | - | - | - | 45.69 | 45.19 | 44.34 | 43.16 | 41.65 | 39.82 |
| NXS 10 050 | X | - | - | - | - | - | - | - | - | 65.5 | 62.0 | 61.0 | 61.0 | 61.0 |
| | Z | - | - | - | - | - | - | - | - | 145.13 | 150.00 | 154.54 | 158.73 | 162.54 |
| | SP | - | - | - | - | - | - | - | - | 61.26 | 60.46 | 59.19 | 57.48 | 55.32 |

- En los ángulos sin datos (-) no es posible accionar el retorno positivo.

SAS



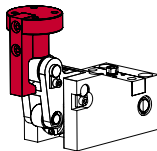
| TYPE | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) | H (mm) | I (mm) | J (mm) | K (mm) | NXS MODELS |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------|
| SAS 03 | 70 | 55 | 35 | 12 | 20 | 22 | 95 | 50 | 8 | 25 | 34.5 | NXS 03 020 |
| SAS 05 | 70 | 55 | 35 | 12 | 20 | 26 | 100 | 50 | 8 | 25 | 34.5 | NXS 05 030 |
| SAS 07 | 75 | 85 | 44 | 15 | 22 | 30 | 140 | 60 | 10 | 30 | 46 | NXS 07 040 |
| SAS 10 | 75 | 85 | 44 | 15 | 22 | 35 | 145 | 60 | 10 | 30 | 46 | NXS 10 050 |

Order Options:



Driver

SAS 05

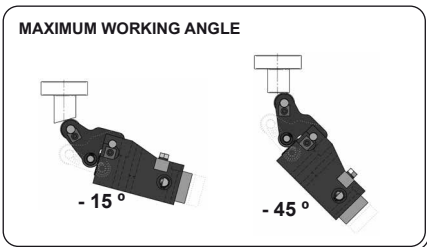
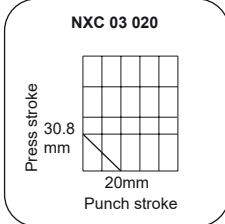
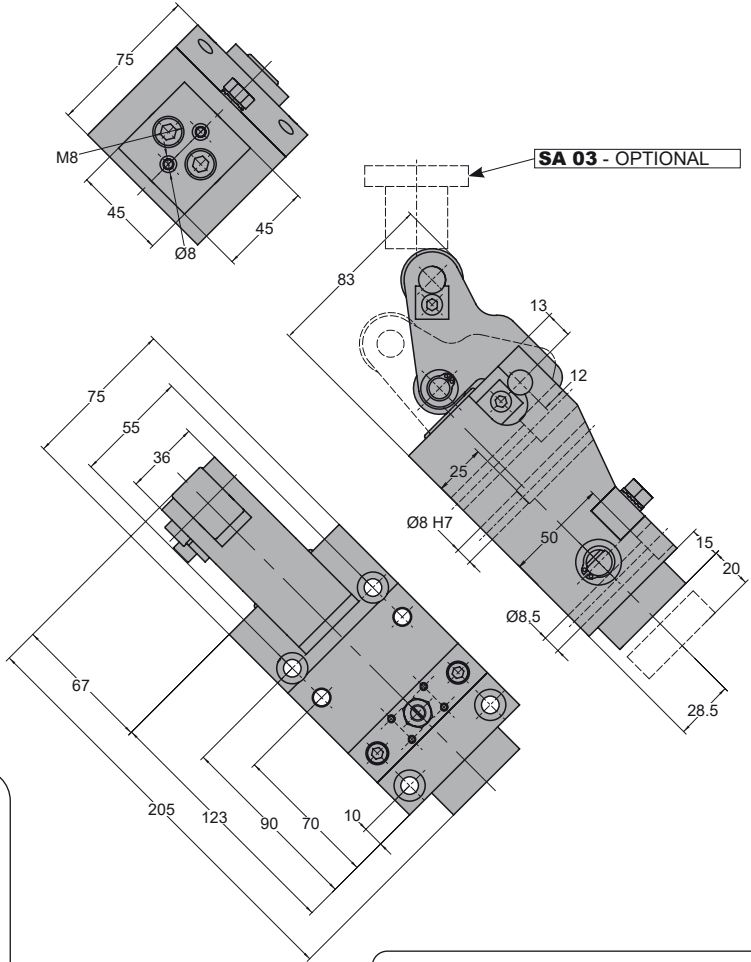




Punching Unit



NXC 03 020



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|-----|---------------|---------------------|----------------------------|-------------------|
| NXC 03 020 | 5.1 | 20 | 3000 | 215 | CW 320 032 V1 150 |

Order:

Model **Force** (Tons) **Stroke** (mm)

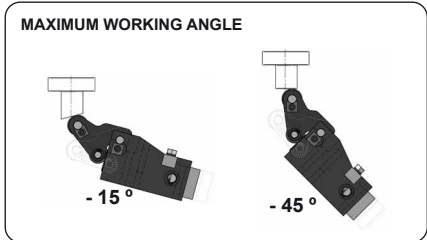
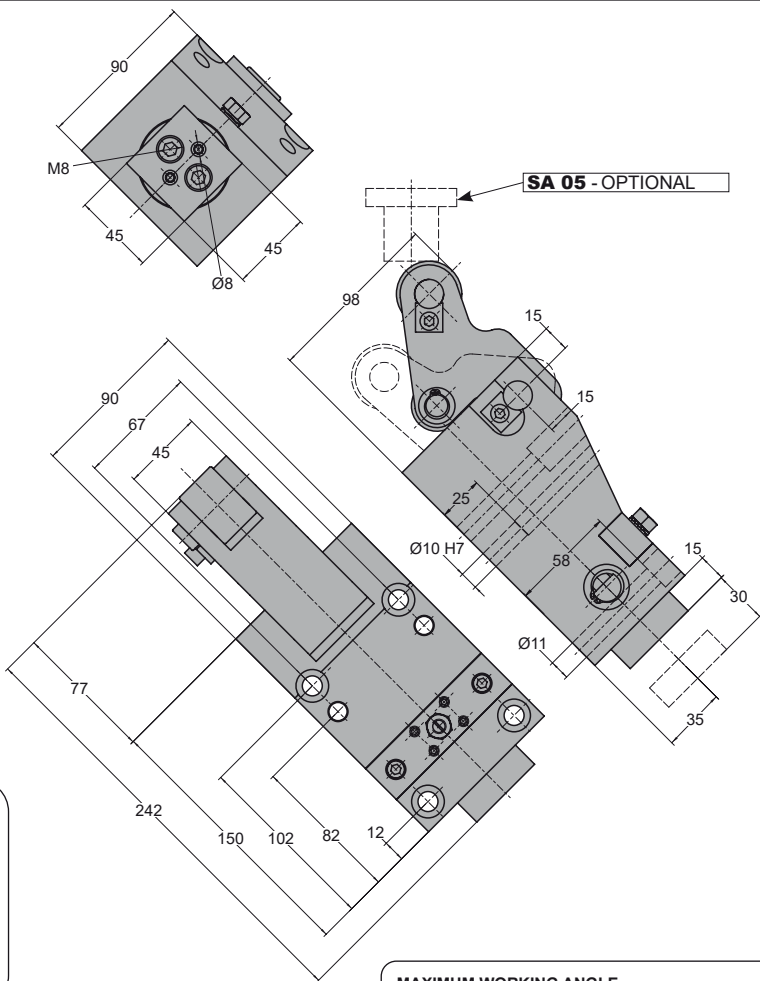
NXC 03 020

Order Options:

Driver

SA 03

NXC 05 030



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|-----|---------------|---------------------|----------------------------|-------------------|
| NXC 05 030 | 8.5 | 30 | 5000 | 323 | CW 320 038 V1 200 |

Order:

Model **Force (Tons)** **Stroke (mm)**

NXC 05 030

Order Options:

Driver

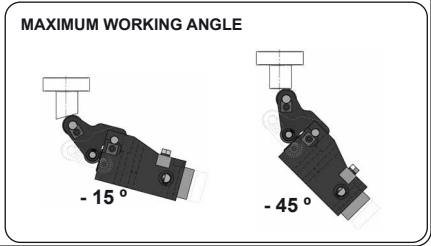
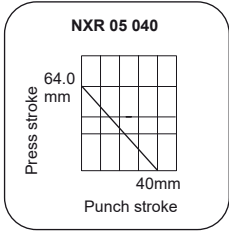
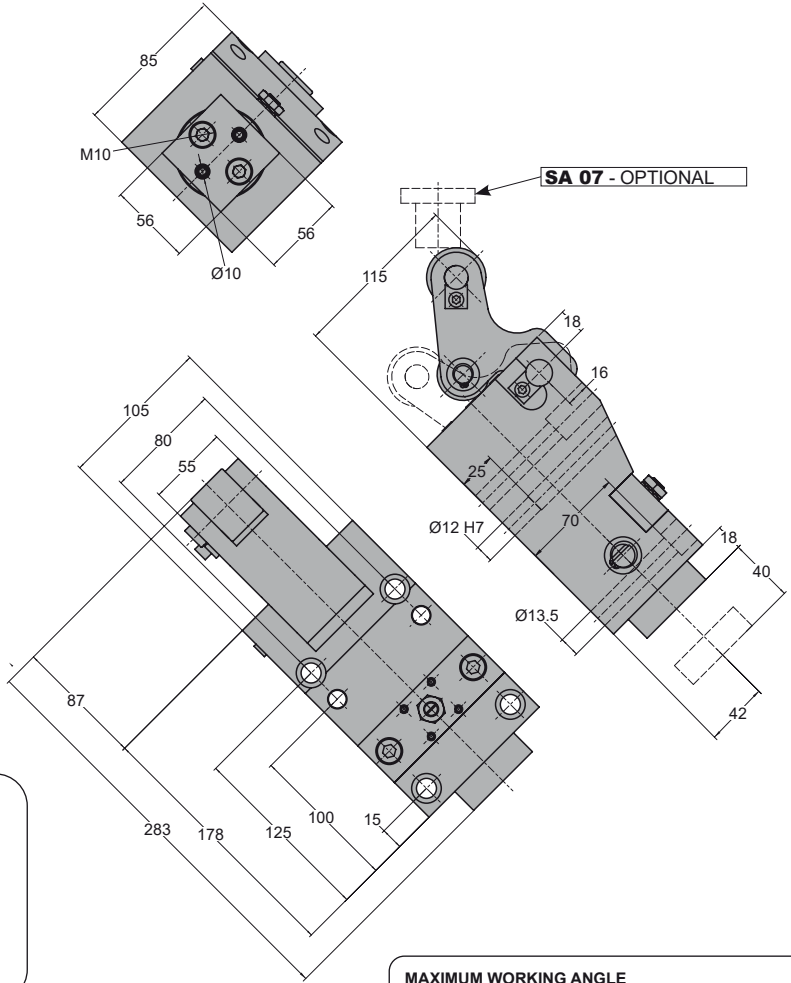
SA 05

NXC

Punching Unit

AZOL GAS

NXC 07 040



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|------|---------------|---------------------|----------------------------|-------------------|
| NXC 07 040 | 13.7 | 40 | 7000 | 355 | CW 350 050 V1 250 |

Order:

Model **Force (Tons)** **Stroke (mm)**

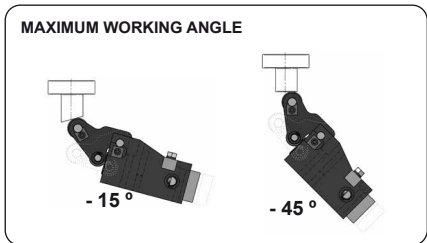
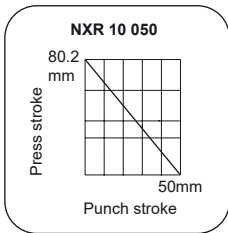
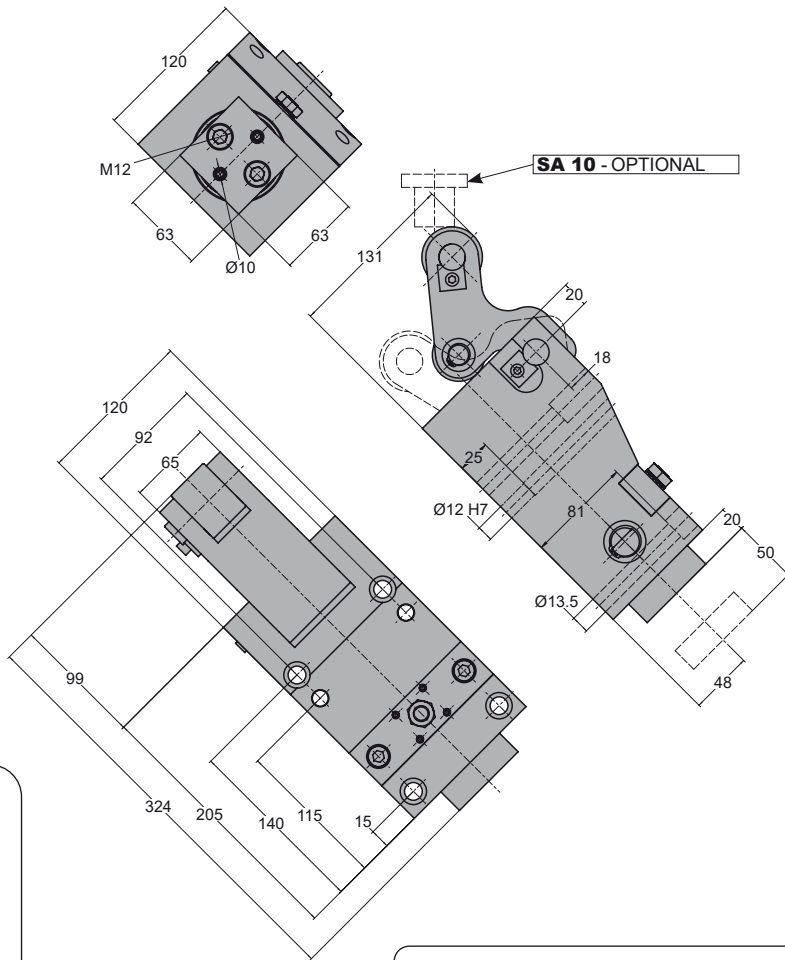
NXC 07 040

Order Options:

Driver

SA 07

NXC 10 050



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|------|---------------|---------------------|----------------------------|-------------------|
| NXC 10 050 | 20.8 | 50 | 10000 | 820 | CW 750 050 V1 500 |

Order:

Model **Force (Tons)** **Stroke (mm)**

NXC 10 050

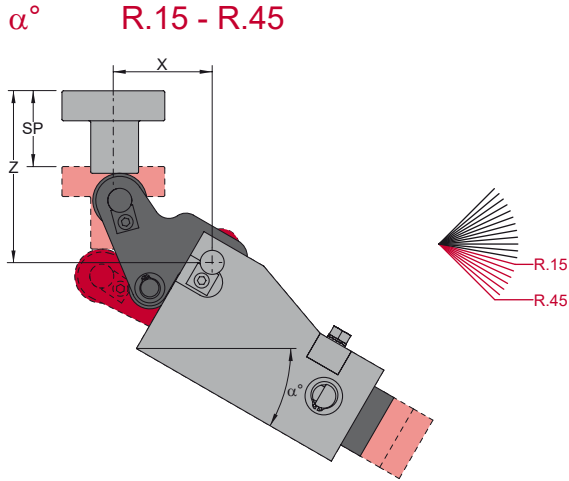
Order Options:

Driver

SA 10

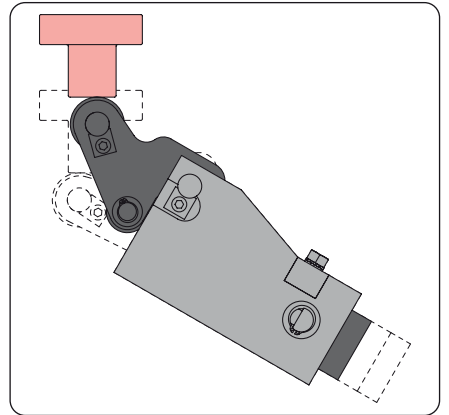
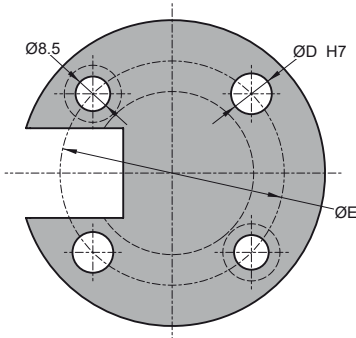
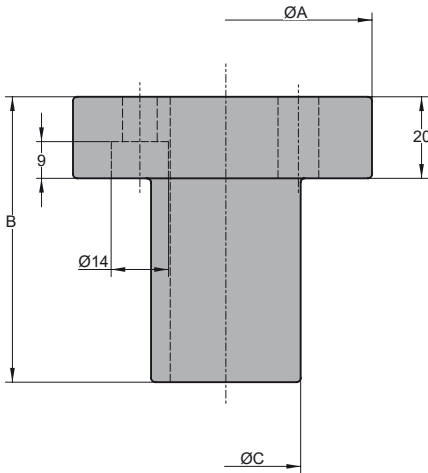
NXC DRIVER POSITIONING

Punching Unit



| | | α° | | | | | | |
|-------------------|----|----------------|--------|--------|--------|--------|--------|--------|
| | | R.15 | R.20 | R.25 | R.30 | R.35 | R.40 | R.45 |
| NXC 03 020 | X | 65.5 | 65.5 | 63.0 | 61.0 | 58.0 | 58.0 | 56.0 |
| | Z | 91.65 | 96.92 | 102.00 | 106.83 | 111.37 | 115.61 | 119.49 |
| | SP | 36.68 | 36.37 | 35.79 | 34.93 | 33.80 | 32.42 | 30.79 |
| NXC 05 030 | X | 72.0 | 77.5 | 74.0 | 71.0 | 71.0 | 65.0 | 64.0 |
| | Z | 96.98 | 103.00 | 108.80 | 114.33 | 119.54 | 124.39 | 128.86 |
| | SP | 51.87 | 51.80 | 51.33 | 50.48 | 49.24 | 47.62 | 45.65 |
| NXC 07 040 | X | 80.0 | 80.0 | 77.5 | 76.0 | 76.0 | 75.5 | 75.0 |
| | Z | 132.79 | 139.70 | 146.36 | 152.69 | 158.66 | 164.23 | 169.34 |
| | SP | 70.15 | 70.46 | 70.24 | 69.48 | 68.18 | 66.38 | 64.06 |
| NXC 10 050 | X | 88.0 | 90.0 | 92.0 | 89.5 | 89.5 | 89.5 | 81.0 |
| | Z | 138.64 | 146.47 | 154.00 | 161.20 | 167.97 | 174.30 | 180.12 |
| | SP | 84.64 | 85.33 | 85.37 | 84.76 | 83.50 | 81.61 | 79.09 |

SA



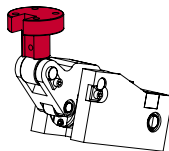
| TYPE | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | NXC MODELS |
|-------|--------|--------|--------|--------|--------|------------|
| SA 03 | 70 | 55 | 35 | 8 | 50 | NXC 03 020 |
| SA 05 | 70 | 55 | 35 | 8 | 50 | NXC 05 030 |
| SA 07 | 75 | 85 | 44 | 10 | 60 | NXC 07 040 |
| SA 10 | 75 | 85 | 44 | 10 | 60 | NXC 10 050 |

Order Options:



Driver

SA 05

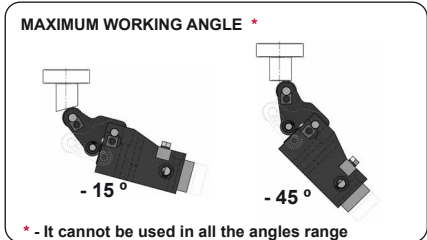
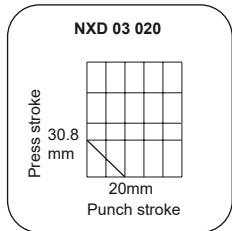
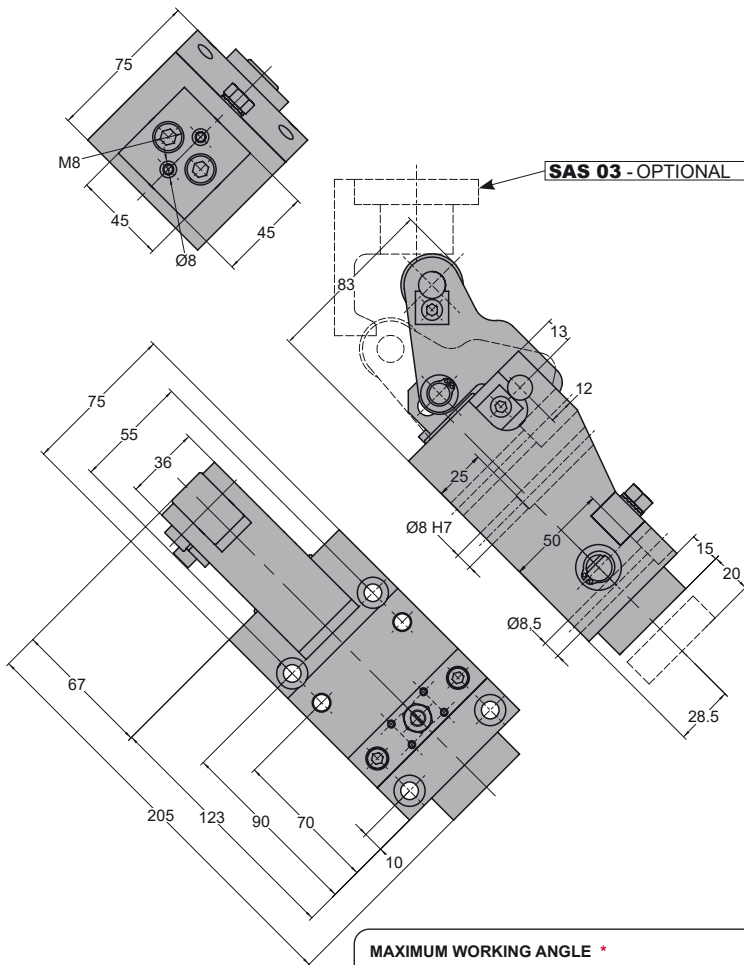


NXD

Punching Unit

AZOL GAS

NXD 03 020



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|-----|---------------|---------------------|----------------------------|-------------------|
| NXD 03 020 | 5.1 | 20 | 3000 | 215 | CW 320 032 V1 150 |

* - It cannot be used in all the angles range

Order:

Model Force (Tons) Stroke (mm)

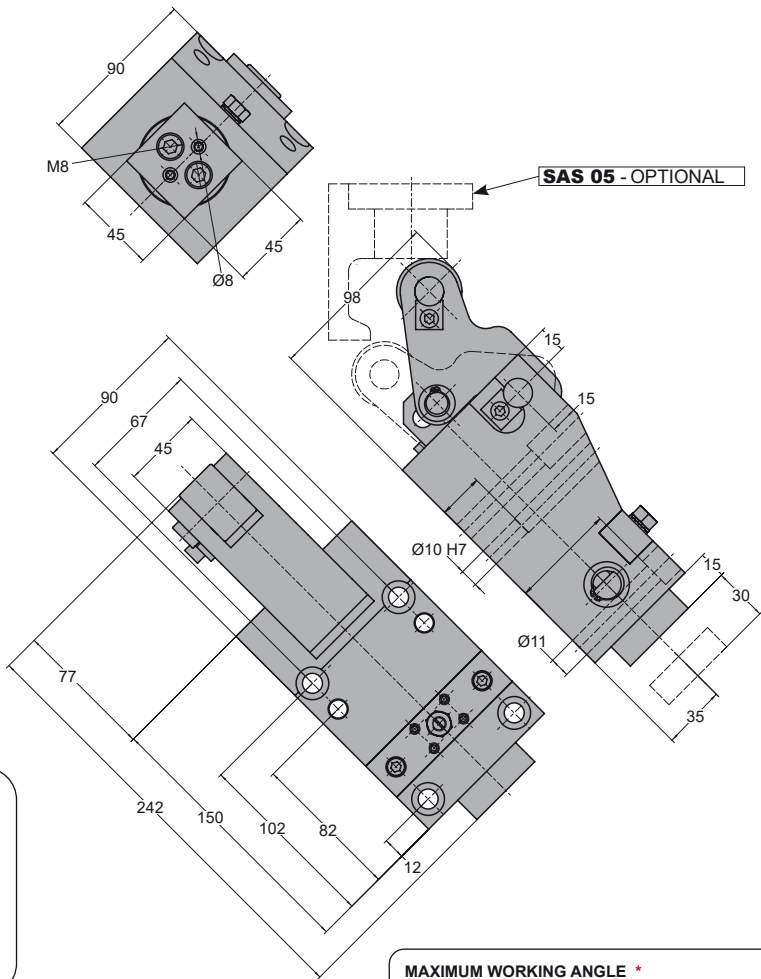
NXD 03 020

Order Options:

Driver

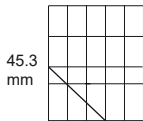
SAS 03

NXD 05 030



NXD 05 030

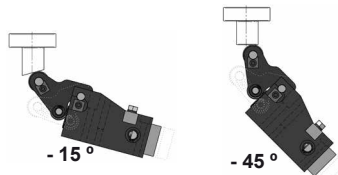
Press stroke



45.3 mm
30mm
Punch stroke

| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|-------------------|-----|---------------|---------------------|----------------------------|-------------------|
| NXD 05 030 | 8.5 | 30 | 5000 | 323 | CW 320 038 V1 200 |

MAXIMUM WORKING ANGLE *



* - It cannot be used in all the angles range



Order:

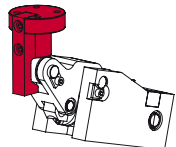


Order Options:



Driver

SAS 05

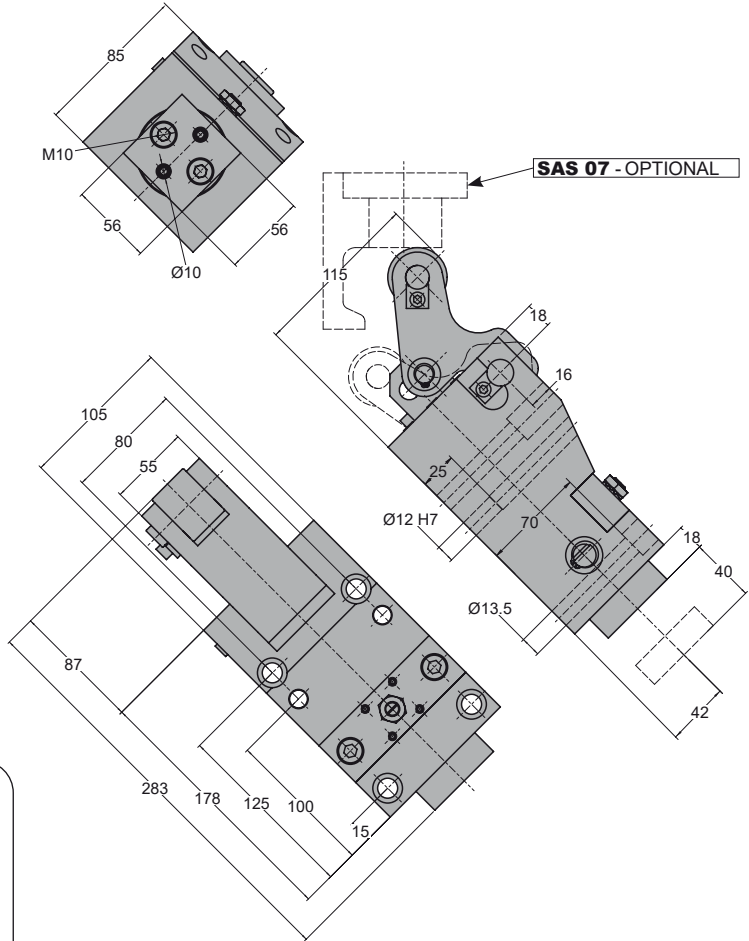


NXD

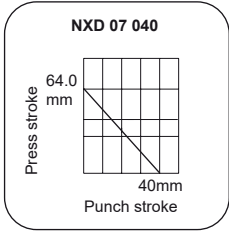
Punching Unit



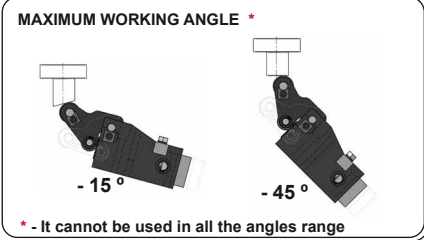
NXD 07 040



SAS 07 - OPTIONAL



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|------------|------|---------------|---------------------|----------------------------|-------------------|
| NXD 07 040 | 13.7 | 40 | 7000 | 355 | CW 350 050 V1 250 |



* - It cannot be used in all the angles range

Order:

Model **Force (Tons)** **Stroke (mm)**

_____ | _____ | _____

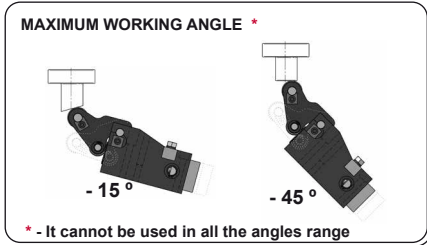
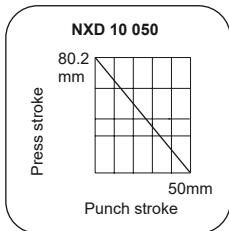
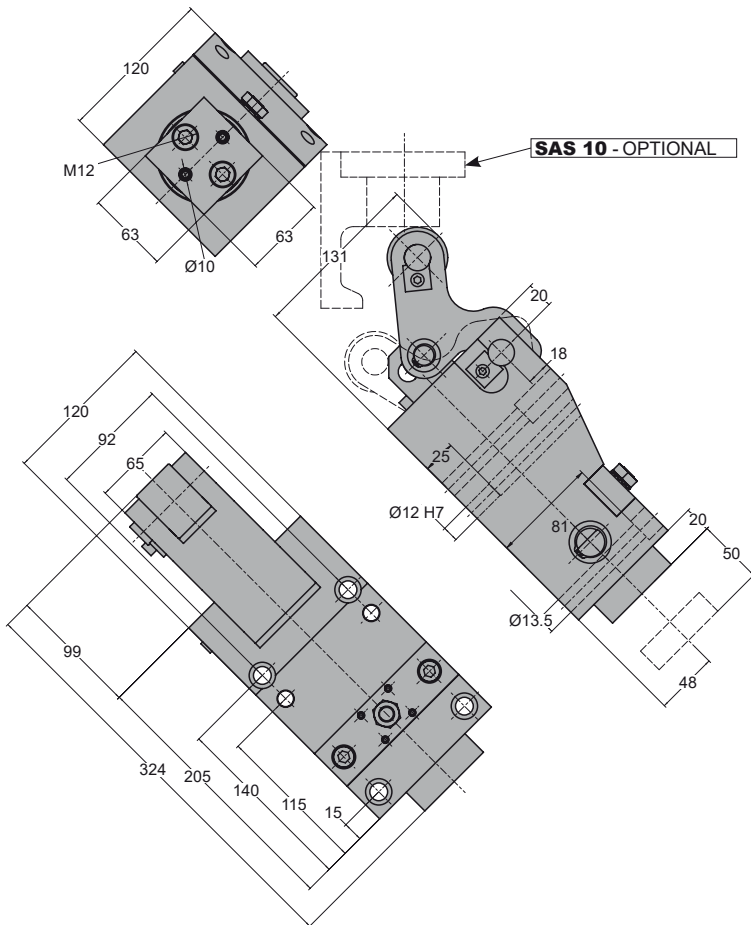
NXD 07 040

Order Options:

Driver

SAS 07

NXD 10 050



| MODEL | Kg. | STROKE S (mm) | WORKING FORCE (daN) | RETURN FORCE Initial (daN) | GAS SPRING |
|-------------------|------|---------------|---------------------|----------------------------|-------------------|
| NXD 10 050 | 20.9 | 50 | 10000 | 820 | CW 750 050 V1 500 |

* - It cannot be used in all the angles range

Order:

Model **Force** (Tons) **Stroke** (mm)

NXD 10 050

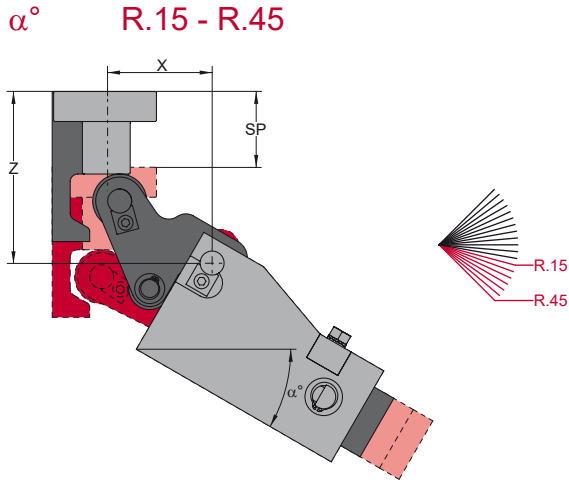
Order Options:

Driver

SAS 10

NXD DRIVER POSITIONING

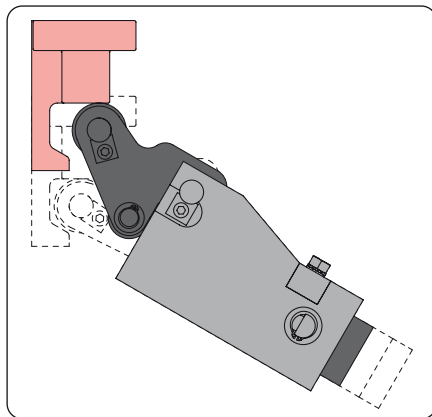
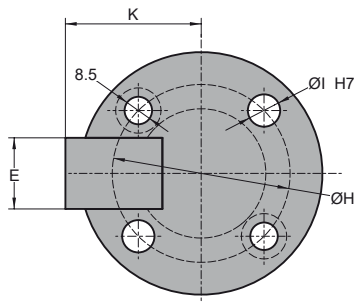
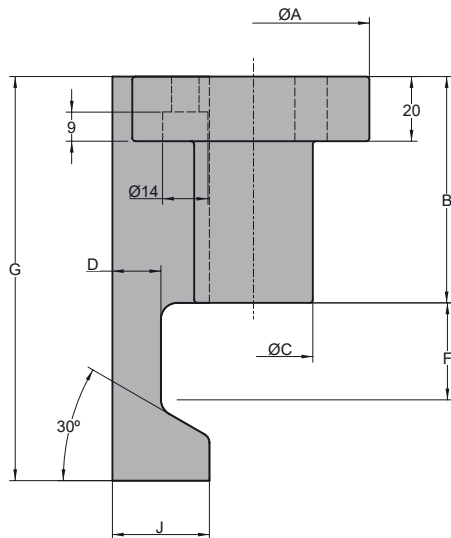
Punching Unit



| | | α° | | | | | | |
|-------------------|----|----------------|--------|--------|--------|--------|--------|--------|
| | | R.15 | R.20 | R.25 | R.30 | R.35 | R.40 | R.45 |
| NXD 03 020 | X | - | 65.5 | 63.0 | 61.0 | 58.0 | 58.0 | 56.0 |
| | Z | - | 96.92 | 102.00 | 106.83 | 111.37 | 115.61 | 119.49 |
| | SP | - | 36.37 | 35.79 | 34.93 | 33.80 | 32.42 | 30.79 |
| NXD 05 030 | X | - | 77.5 | 74.0 | 71.0 | 71.0 | - | - |
| | Z | - | 103.00 | 108.80 | 114.33 | 119.54 | - | - |
| | SP | - | 51.80 | 51.33 | 50.48 | 49.24 | - | - |
| NXD 07 040 | X | - | - | 77.5 | 76.0 | 76.0 | 75.5 | 75.0 |
| | Z | - | - | 146.36 | 152.69 | 158.66 | 164.23 | 169.34 |
| | SP | - | - | 70.24 | 69.48 | 68.18 | 66.38 | 64.06 |
| NXD 10 050 | X | - | - | 92.0 | 89.5 | 89.5 | 89.5 | - |
| | Z | - | - | 154.00 | 161.20 | 167.97 | 174.30 | - |
| | SP | - | - | 85.37 | 84.76 | 83.50 | 81.61 | - |

- In angles without data (-) cannot be used the positive return.

SAS



| TYPE | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) | H (mm) | I (mm) | J (mm) | K (mm) | NXD MODELS |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------|
| SAS 03 | 70 | 55 | 35 | 12 | 20 | 22 | 95 | 50 | 8 | 25 | 34.5 | NXD 03 020 |
| SAS 05 | 70 | 55 | 35 | 12 | 20 | 26 | 100 | 50 | 8 | 25 | 34.5 | NXD 05 030 |
| SAS 07 | 75 | 85 | 44 | 15 | 22 | 30 | 140 | 60 | 10 | 30 | 46 | NXD 07 040 |
| SAS 10 | 75 | 85 | 44 | 15 | 22 | 35 | 145 | 60 | 10 | 30 | 46 | NXD 10 050 |

Order Options:



Driver

SAS 05

