

# 82M AND TCC

Enclosed Pneumatic Power Clamps | Heavy-Duty, Tolerance Compensation | Product Overview

## 82M Series Enclosed Power Clamp

Shown with optional U-Arms and Cylinders with Internal Hold Open Device



"B" Front Mount available for 82M and TCC size 40mm

Same mounting pattern as size 50 and 63mm



NAAMS Lateral Mounting available on 82M and TCC in addition to narrow, wide and NAAMS Clamp Arm Shafts

### 80mm

Max Holding Torque  
3000 Nm  
Max Clamping Torque  
850 Nm at 5bar

### 63mm

Max Holding Torque  
1800 Nm  
Max Clamping Torque  
420 Nm at 5bar

### 50mm

Max Holding Torque  
1300 Nm  
Max Clamping Torque  
270 Nm at 5bar

### 40mm

Max Holding Torque  
380 Nm  
Max Clamping Torque  
120 Nm at 5bar

## TCC Tolerance Compensating Power Clamp

Shown with optional U-Arms and Cylinders with Internal Hold Open Device



### 63mm

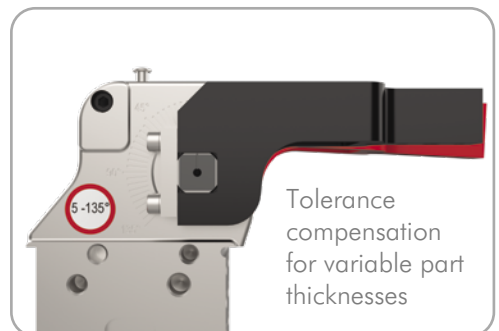
Max Holding Torque  
295 Nm  
Max Clamping Torque  
295 Nm at 5bar

### 50mm

Max Holding Torque  
175 Nm  
Max Clamping Torque  
175 Nm at 5bar

### 40mm

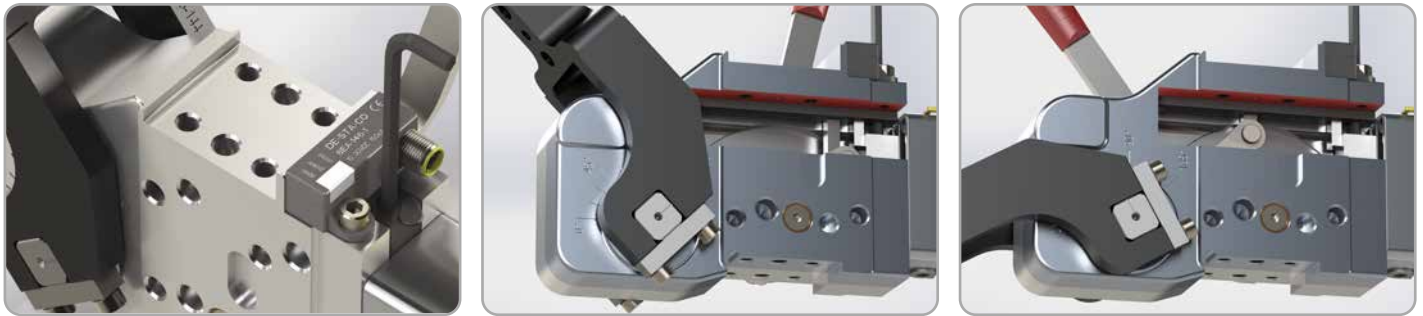
Max Holding Torque  
85 Nm  
Max Clamping Torque  
85 Nm at 5bar



Tolerance compensation for variable part thicknesses

- Tolerance compensation for variable sheet metal thicknesses within three degrees of arm movement
- There is no need for shimming

### Adjusting the Arm Opening Angle

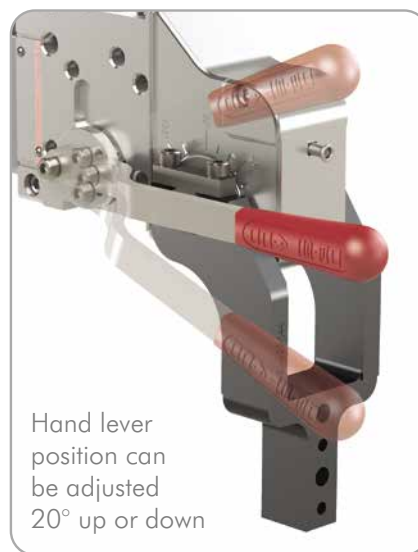


Easily adjust arm opening angle with an M5 Allen wrench.

- Move clamp arm to full open position.
- Using Allen wrench, release mechanism (leave Allen wrench in place).
- Move clamp arm to desired opening.
- Tighten to 20 Nm.

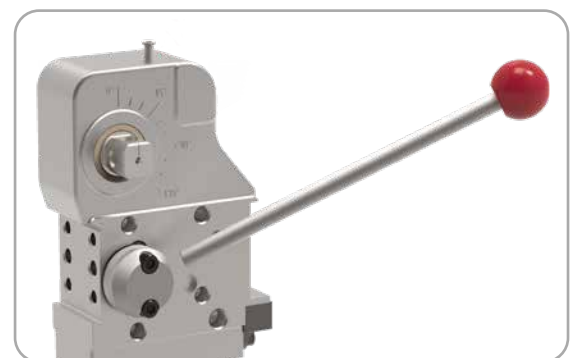
### Enclosed Power Clamp Hand Lever (82M-3E Models Only)

#### Standard Adjustable Hand Lever



- Hand lever position is adjustable for improved ergonomics
- Handle can be mounted on the left or right side

#### Weldable Hand Lever



- Hand lever can be welded into a permanent position.
- Handle can be mounted on the left or right side

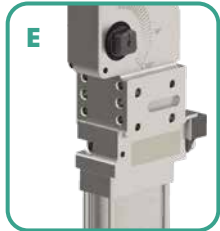
# TCC-2

## Enclosed Pneumatic Power Clamps | Heavy-Duty, Tolerance Compensation | Ordering Information

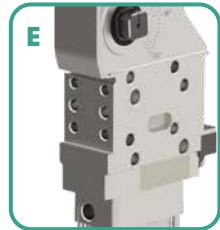
**TCC-2**   **E**   **03**   **00**   **6A**   **L8**

Mounting	Description	Clamp Arm Shaft	Description	Hand Lever	Description
<b>E</b>	Standard Mounting	<b>03</b>	for U-Arms	<b>00</b>	No Hand lever
<b>B</b>	Common Front Mount for Size 40 only (same mount pattern as size 50 & 63)	<b>23</b>	for Lateral Arms		
<b>N</b>	NAAMS Side Mounting for Size 63 only	<i>See below for further details</i>			

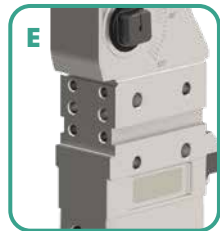
### Mounting



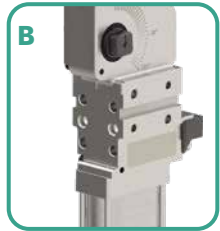
Size 40



Size 50



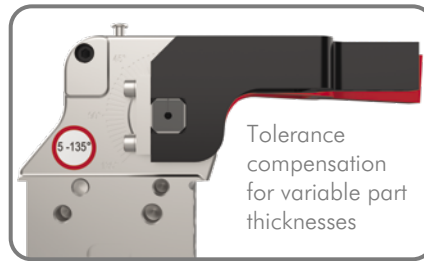
Size 63



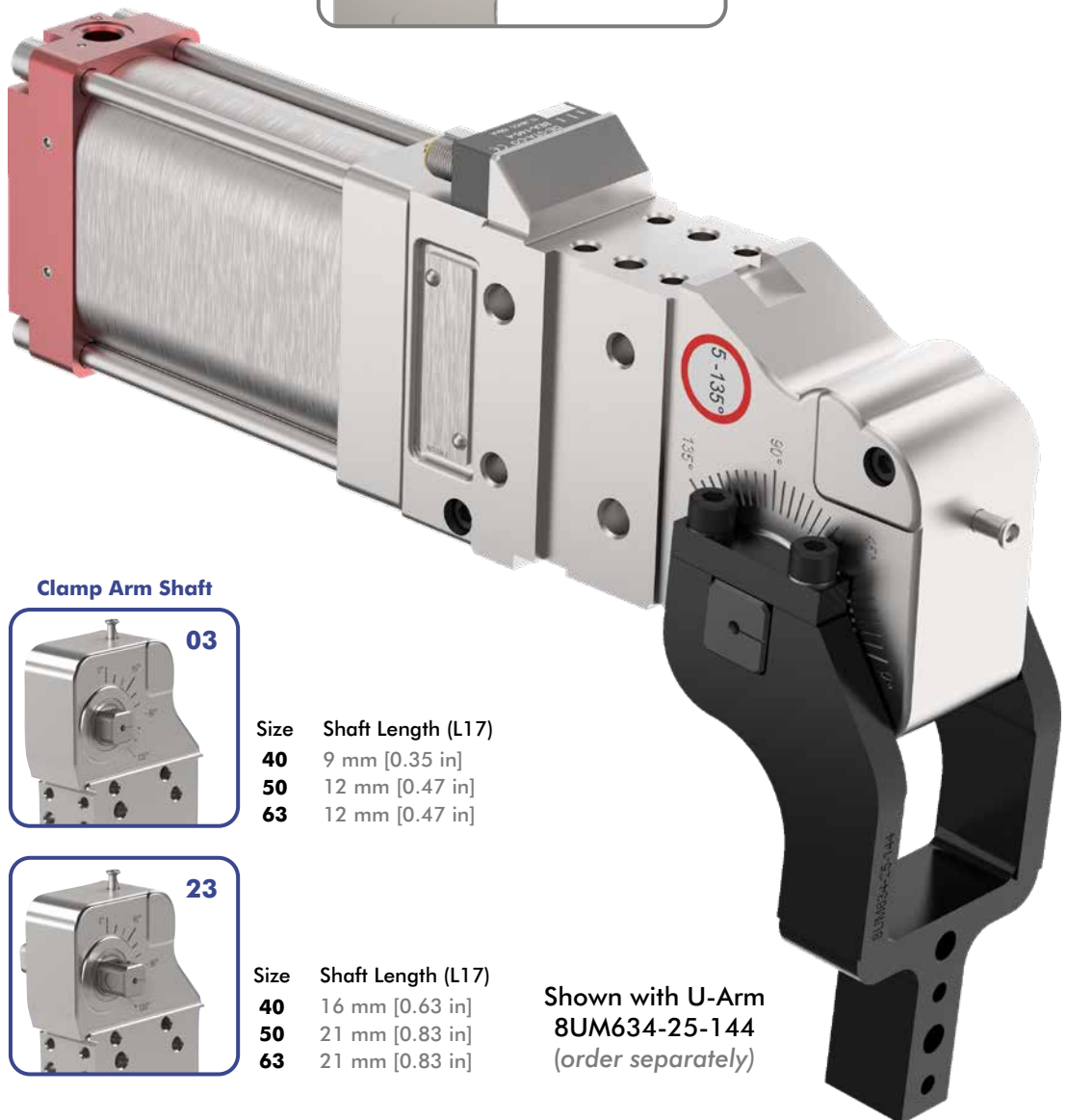
Size 40 Only



Size 63 Only



- Tolerance compensation for variable sheet metal thicknesses within three degrees of arm movement
- There is no need for shimming



### Clamp Arm Shaft



**03**

Size	Shaft Length (L17)
<b>40</b>	9 mm [0.35 in]
<b>50</b>	12 mm [0.47 in]
<b>63</b>	12 mm [0.47 in]



**23**

Size	Shaft Length (L17)
<b>40</b>	16 mm [0.63 in]
<b>50</b>	21 mm [0.83 in]
<b>63</b>	21 mm [0.83 in]

Shown with U-Arm  
8UM634-25-144  
(order separately)

## Enclosed Pneumatic Power Clamps | Heavy-Duty, Tolerance Compensation | Ordering Information

Sensor	Description
<b>00</b>	Without Sensing System
<b>L8*</b>	PNP Sensor with In-line M12x1 Connector (8EA-146-4-B)
<b>N8*</b>	NPN Sensor with In-line M12x1 Connector (8EA-154-4-B)
<b>L9</b>	PNP Sensor with 90° M12x1 Connector (8EA-147-4-B)
<b>N9</b>	NPN Sensor with 90° M12x1 Connector (8EA-155-4-B)
<b>K8</b>	PNP Sensor with M12x1 Cable Connector (8EA-158-4-B)
<b>K9</b>	NPN Sensor with M12x1 Cable Connector (8EA-167-4-B)

\*Not available for use with **4V**, **5V**, **6V** cylinder option.



### Cylinder (Standard)

- 40** 40 mm Cylinder (G1/8 Port)
- 50** 50 mm Cylinder (G1/4 Port)
- 5N** 50 mm Cylinder (1/4-18 NPT Port)
- 63** 63 mm Cylinder (G1/4 Port)
- 6N** 63 mm Cylinder (1/4-18 NPT Port)



### Cylinder with Unlockable Return Valve

- 4C** 40 mm Cylinder (G1/8 Port)
- 5C** 50 mm Cylinder (G1/4 Port)
- 5D** 50 mm Cylinder (1/4-18 NPT Port)
- 6C** 63 mm Cylinder (G1/4 Port)
- 6D** 63 mm Cylinder (1/4-18 NPT Port)



### Cylinder with Internal Hold Open Device

- 4A** 40 mm Cylinder (G1/8 Port)
- 5A** 50 mm Cylinder (G1/4 Port)
- 5B** 50 mm Cylinder (1/4-18 NPT Port)
- 6A** 63 mm Cylinder (G1/4 Port)
- 6B** 63 mm Cylinder (1/4-18 NPT Port)



### Cylinder with Piston Rod Locking Device

- 4V** 40 mm Cylinder (G1/8 Port)
- 5V** 50 mm Cylinder (G1/4 Port)
- 6V** 63 mm Cylinder (G1/4 Port)



**40**

Max Holding/  
Clamping Torque  
85 Nm [62.7 ft-lb]  
at 5 bar [72 psi]



**50**

Max Holding/  
Clamping Torque  
175 Nm [129 ft-lb]  
at 5 bar [72 psi]



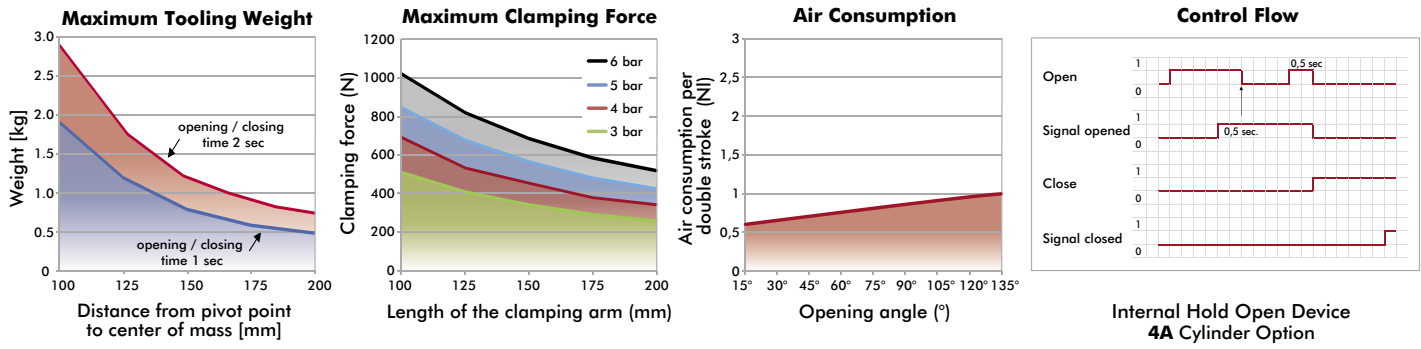
**63**

Max Holding/  
Clamping Torque  
295 Nm [217.6 ft-lb]  
at 5 bar [72 psi]

# TCC-2

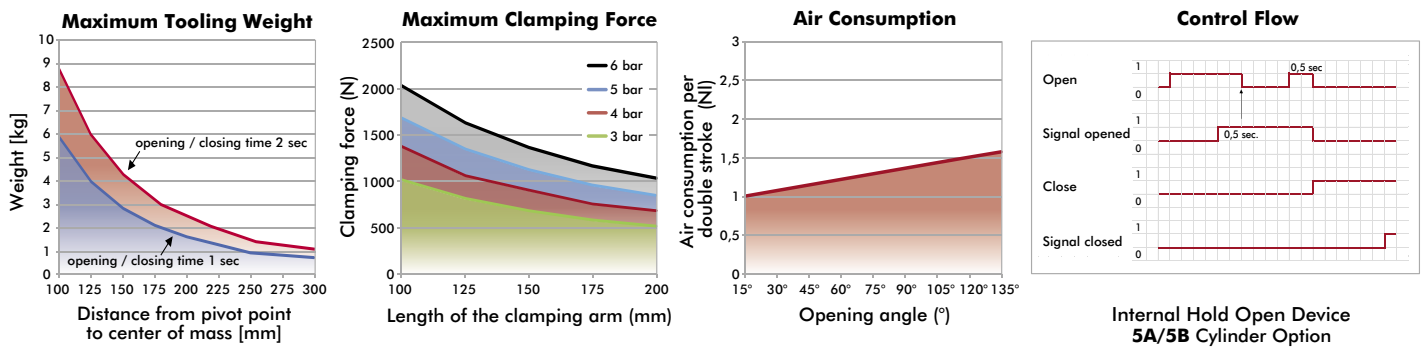
## Enclosed Pneumatic Power Clamps | Heavy-Duty, Tolerance Compensation | Technical Specifications

Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
TCC-2.....40..	85	85	40	1,6	0,9
TCC-2.....4A..					
TCC-2.....4B..					
TCC-2.....4C..					
TCC-2.....4V..					



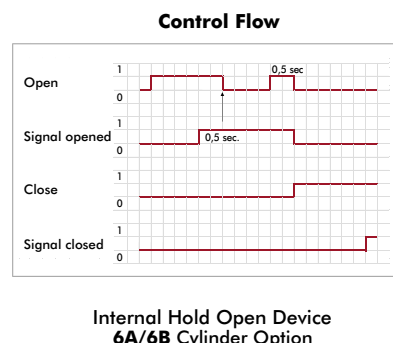
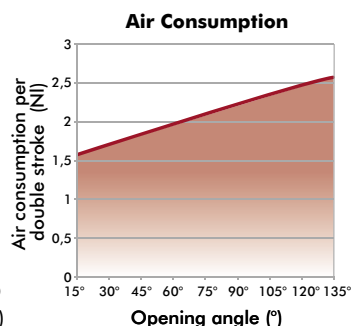
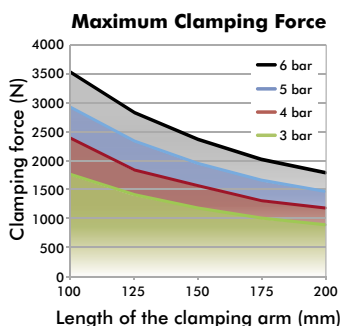
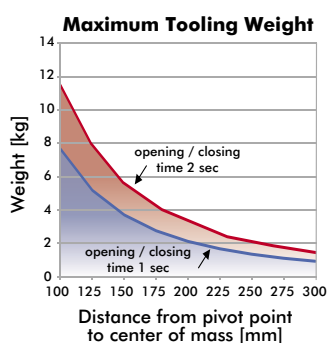
**ATTENTION:** Calculation tool available. Please consult factory.

Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
TCC-2E...50..	175	175	50	2,8	1,6
TCC-2E...5N..					
TCC-2E...5A..					
TCC-2E...5B..					
TCC-2E...5C..					
TCC-2E...5D..					
TCC-2E...5V..					



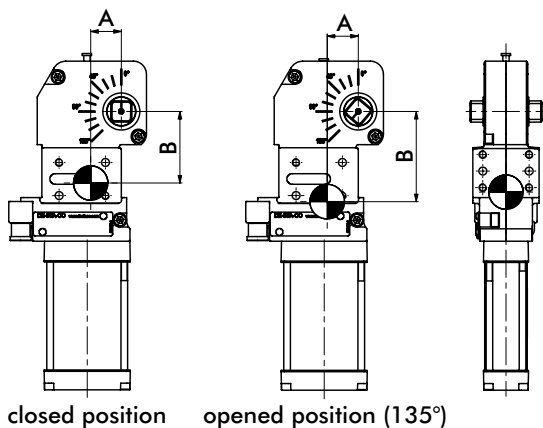
**ATTENTION:** Calculation tool available. Please consult factory.

Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
TCC-2.....63..	295	295	63	3,8	2,6
TCC-2.....6N..				4,0	
TCC-2.....6A..					
TCC-2.....6B..					
TCC-2.....6C..					
TCC-2.....6D..					
TCC-2.....6V..	4,2				



**ATTENTION:** Calculation tool available. Please consult factory.

### Center of Mass



Model	A		B		Weight
	Closed	Open	Closed	Open	
TCC-2E...40..	23	24	55	69	1,5
TCC-2B...40..	24		54	68	
TCC-2E...4A..	22		72	86	1,6
TCC-2B...4A..	23	23	72	85	
TCC-2E...4C..	25		77	89	1,7
TCC-2B...4C..	26	26	76	88	
TCC-2E...4V..	24		66	80	1,6
TCC-2B...4V..	24	24	66	79	
TCC-2E...50..			70	87	2,6
TCC-2E...5N..	24	25			
TCC-2E...5A..			83	99	2,8
TCC-2E...5B..					
TCC-2E...5C..	27	27	96	110	3,0
TCC-2E...5D..					
TCC-2E...5V..	25	26	84	99	2,9
TCC-2.....63..			89	105	
TCC-2.....6N..	27	28			3,7
TCC-2.....6A..			98	114	
TCC-2.....6B..					3,9
TCC-2.....6C..					
TCC-2.....6D..	30	30	116	130	4,4
TCC-2.....6V..	28	28	103	119	



# 82M-3

## Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Ordering Information

**82M-3**

**E**

**23**

**H0**

**50**

**L8**

Mounting	Description
<b>E</b>	Standard Mounting
<b>B</b>	Common Front Mount for Size 40 only (same mount pattern as size 50 & 63)
<b>N</b>	NAAMS Side Mounting for Size 40 & 63 only

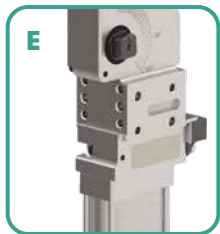
Clamp Arm Shaft	Description
<b>03</b>	for U-Arms
<b>13</b>	for U-Arms (required for 40 NAAMS <b>N</b> only)
<b>23</b>	for Lateral Arms
<b>D0</b>	for Lateral Arms (size 63 NAAMS <b>N</b> only)

Hand Lever	Description
<b>00</b>	No Hand lever
<b>H0</b>	Hand Lever
<b>HS</b>	Weldable

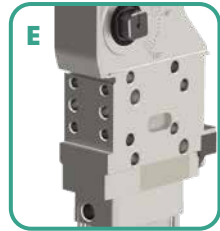
See below for further details

See below for further details

### Mounting



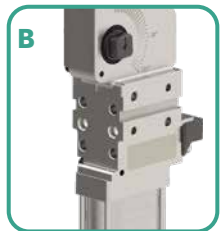
Size 40



Size 50



Size 63/80



Size 40 Only



Size 40/63 Only

### Clamp Arm Shaft



Size	Shaft Length (L17)
<b>40</b>	9 mm [0.35 in]
<b>50</b>	12 mm [0.47 in]
<b>63</b>	12 mm [0.47 in]



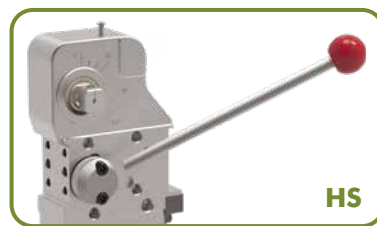
Size	Shaft Length
<b>40</b>	9 mm [0.35 in]



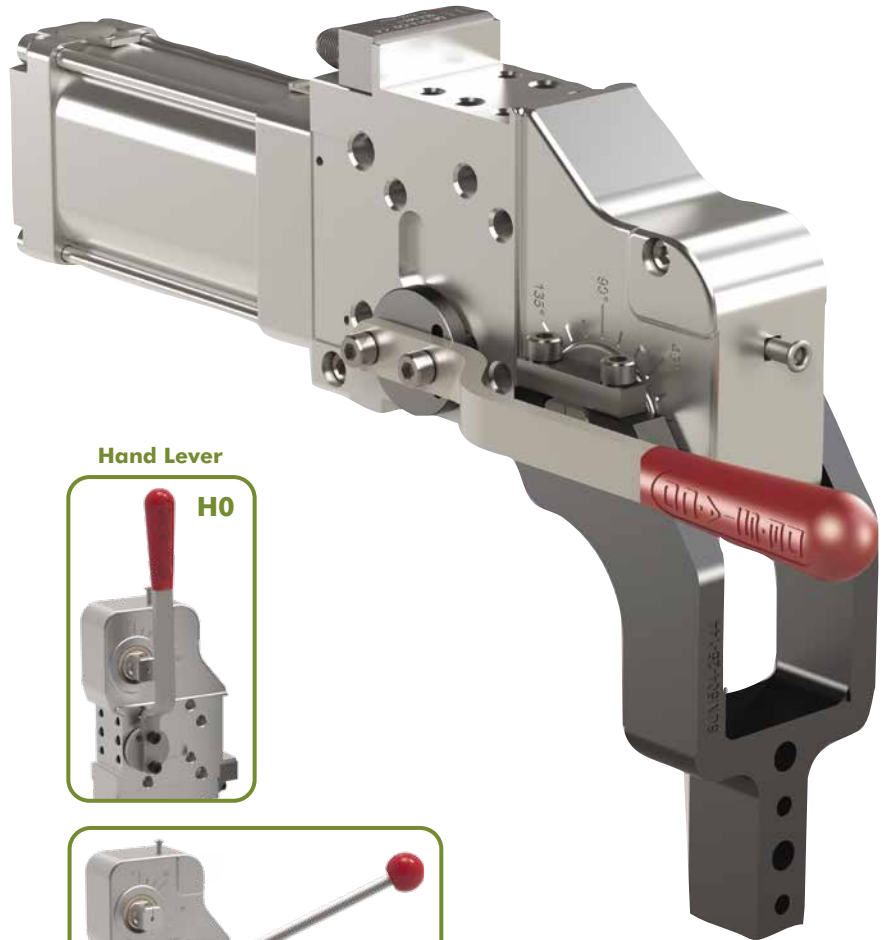
Size	Shaft Length (L17)
<b>40</b>	16 mm [0.63 in]
<b>50</b>	21 mm [0.83 in]
<b>63</b>	21 mm [0.83 in]
<b>80</b>	32 mm [1.26 in]

Size	Shaft Length (L17)
<b>63</b>	26 mm [1.02 in]

### Hand Lever



Hand Lever	Description
<b>00</b>	No Hand Lever
<b>H0</b>	Standard Hand Lever (not compatible with cylinder options <b>*A</b> , <b>*B</b> )
<b>HS</b>	Weldable Hand Lever (not compatible with cylinder options <b>*A</b> , <b>*B</b> )



Shown with U-Arm  
8UM504-25-144  
(order separately)

## Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Ordering Information

Sensor	Description
<b>00</b>	Without Sensing System
<b>L8</b>	PNP Sensor with In-line M12x1 Connector (8EA-146-4-B)
<b>N8</b>	NPN Sensor with In-line M12x1 Connector (8EA-154-4-B)
<b>L9</b>	PNP Sensor with 90° M12x1 Connector (8EA-147-4-B)
<b>N9</b>	NPN Sensor with 90° M12x1 Connector (8EA-155-4-B)
<b>K8</b>	PNP Sensor with M12x1 Cable Connector (8EA-158-4-B)
<b>K9</b>	NPN Sensor with M12x1 Cable Connector (8EA-167-4-B)



### Cylinder - Standard

- 40** 40 mm Cylinder (G1/8 Port)
- 50** 50 mm Cylinder (G1/4 Port)
- 5N** 50 mm Cylinder (1/4-18 NPT Port)
- 63** 63 mm Cylinder (G1/4 Port)
- 6N** 63 mm Cylinder (1/4-18 NPT Port)
- 80** 80 mm Cylinder (G1/4 Port)
- 8N** 80 mm Cylinder (1/4-18 NPT Port)



### Cylinder with Internal Hold Open Device

- 4A** 40 mm Cylinder (G1/8 Port)
- 5A** 50 mm Cylinder (G1/4 Port)
- 5B** 50 mm Cylinder (1/4-18 NPT Port)
- 6A** 63 mm Cylinder (G1/4 Port)
- 6B** 63 mm Cylinder (1/4-18 NPT Port)
- 8A** 80 mm Cylinder (G1/4 Port)
- 8B** 80 mm Cylinder (1/4-18 NPT Port)



**40**

Max Holding Torque  
380 Nm [280 ft-lb]  
Max Clamping Torque  
120 Nm [89 ft-lb]  
at 5 bar [72 psi]

**50**

Max Holding Torque  
1300 Nm [959 ft-lb]  
Max Clamping Torque  
270 Nm [199 ft-lb]  
at 5 bar [72 psi]

**63**

Max Holding Torque  
1800 Nm [1328 ft-lb]  
Max Clamping Torque  
420 Nm [310 ft-lb]  
at 5 bar [72 psi]

**80**

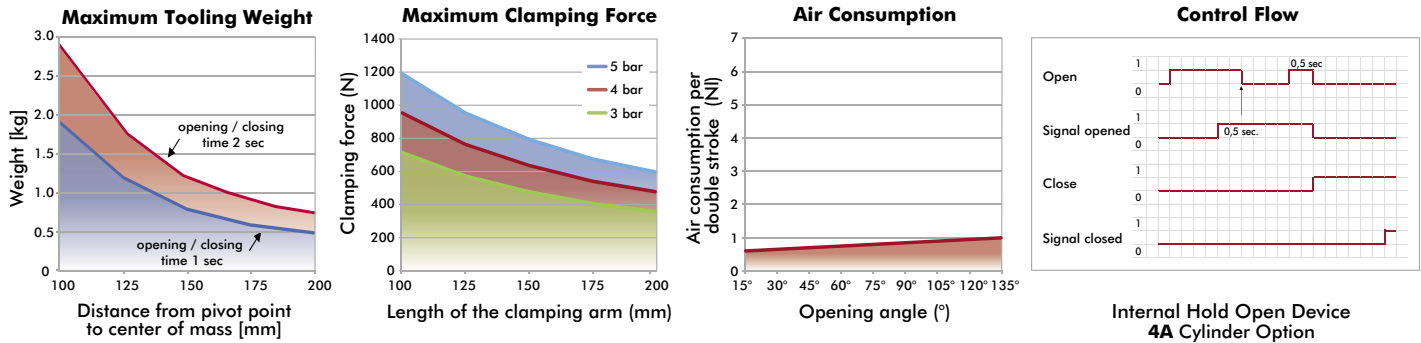
Max Holding Torque  
3000 Nm [2213 ft-lb]  
Max Clamping Torque  
850 Nm [627 ft-lb]  
at 5 bar [72 psi]



# 82M-3

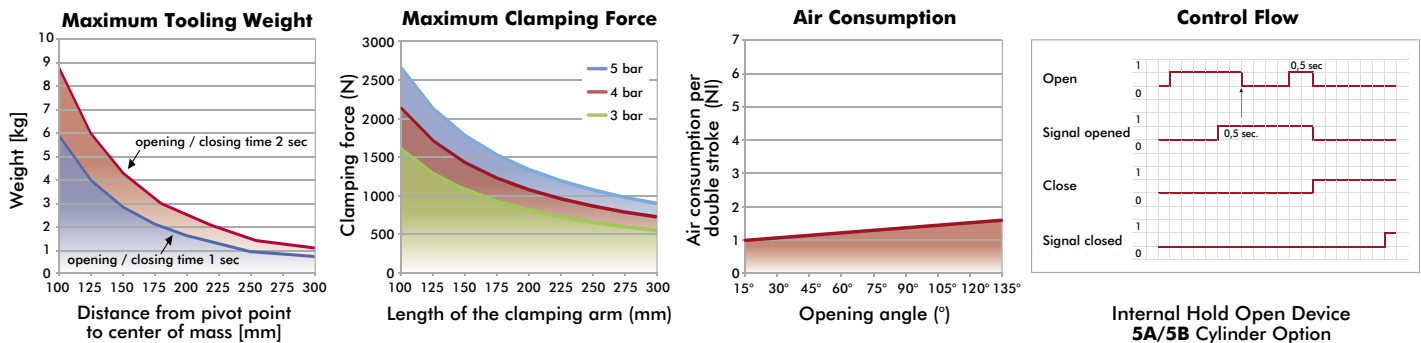
## Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Technical Specifications

Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E...4...	380	120	40	1,5	0,9
82M-3B...4...					
82M-3N...4...					



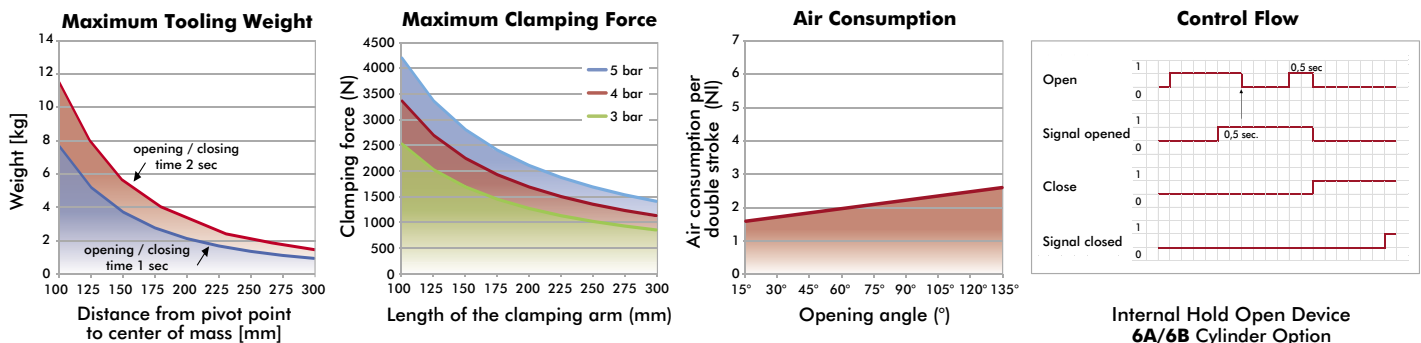
**ATTENTION:** Calculation tool available. Please consult factory.

Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E...5...	1300	270	50	2,8	1,6



**ATTENTION:** Calculation tool available. Please consult factory.

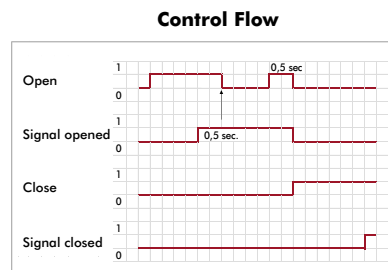
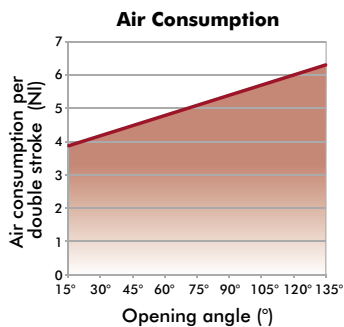
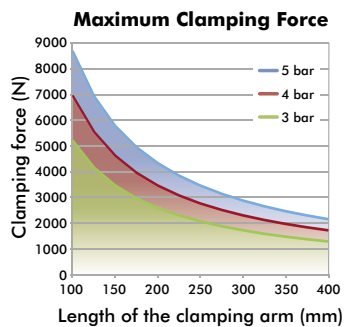
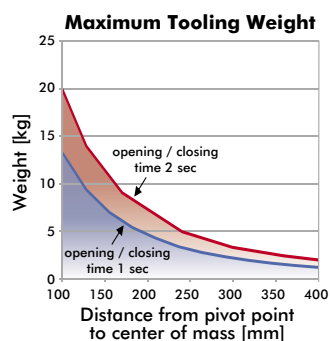
Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E...6...	1800	420	63	3,8	2,6
82M-3N...6...					



**ATTENTION:** Calculation tool available. Please consult factory.

## Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Technical Specifications

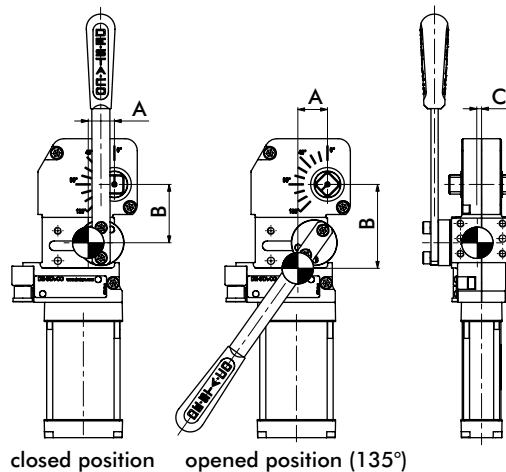
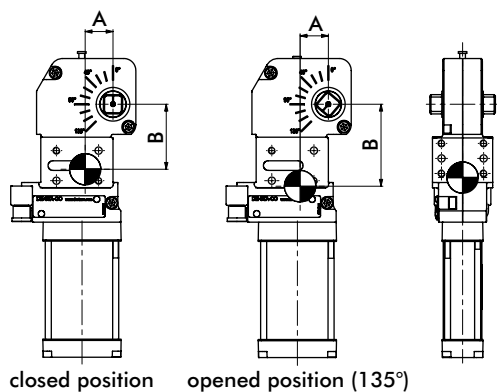
Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E...80..	3000	850	80	8,7	6,3
82M-3E...8N..				8,8	
82M-3E...8A..					
82M-3E...8B..					



Internal Hold Open Device  
8A/8B Cylinder Option

**ATTENTION:** Calculation tool available. Please consult factory.

### Center of Mass



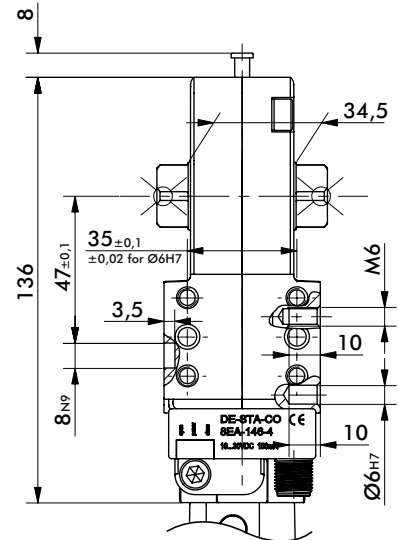
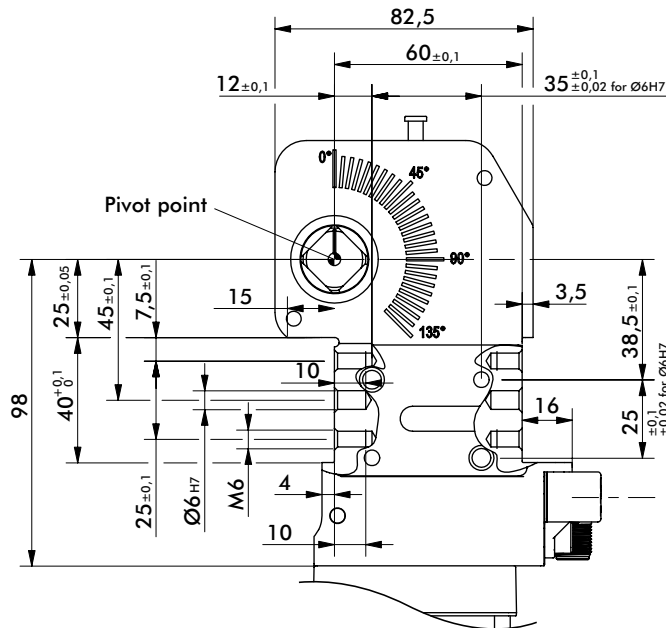
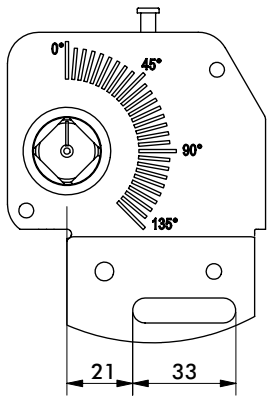
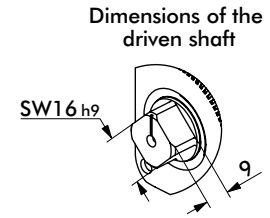
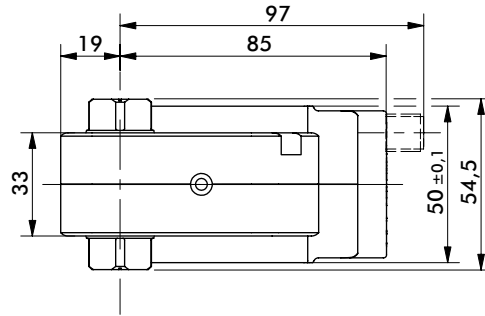
Model	Without Handle				Weight			
	A		B					
	Closed	Open	Closed	Open				
82M-3E...40..	23	24	55	69	1,5			
82M-3N...40..			54	68				
82M-3E...4A..	22	23	72	86	1,6			
82M-3B...4A..	23		85					
82M-3E...50..	24	25	70	87	2,8			
82M-3E...5N..			83	99				
82M-3E...5A..			88	103				
82M-3E...5B..			98	114				
82M-3E...80..	36	37	98	123	8,7			
82M-3E...8N..			104	129				
82M-3E...8A..			98	114				
82M-3E...8B..			104	129				
82M-3E...63..			26	30		80	102	3
82M-3E...6N..						88	103	

Model	With Handle				C	Weight
	A		B			
	Closed	Open	Closed	Open		
82M-3E...40..	22	25	49	70	4	1,6
82M-3B...40..	24	27	46	67		
82M-3E...50..	23	30	62	85	3	3,1
82M-3E...5N..	26	30	80	102		
82M-3E...80..	35	38	93	122	2	9,2

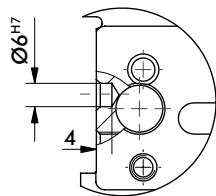
# 82M-3N13, 40MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions

82M-3N13..40..



mm [INCH]  
THIRD ANGLE  
PROJECTION



with Handle Option  
82M-3N13H\*40\*\*

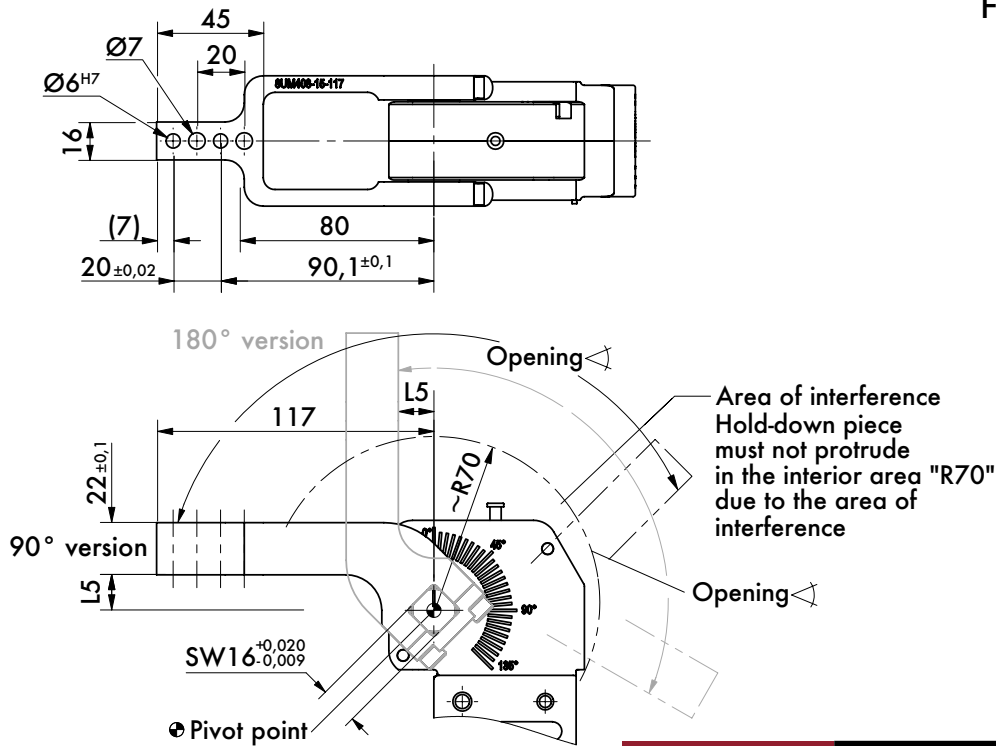
See page PC-PPC-40 for  
cylinder options **40** and **4A**.

Power by compressed air, max. 6 bar operation with oil-free air is permissible.  
The connector socket and the cable are not supplied with the unit.

# 82M-3N13, 40MM ACCESSORIES

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 40mm NAAMS\*  
U-Arm (Steel)



90° Right



180° Right



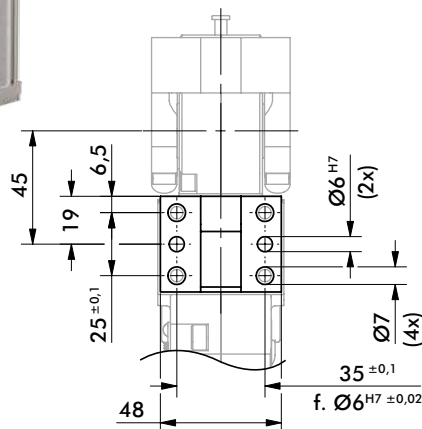
8UM408-00-117  
8UM408-15-117  
8UM408-25-117  
8UM408-45-107

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	L5
8UM408-00-117		105°	0,46	0
8UM408-15-117	135°	120°	0,51	15
8UM408-25-117		135°	0,52	25
8UM408-45-107	130°		0,58	45

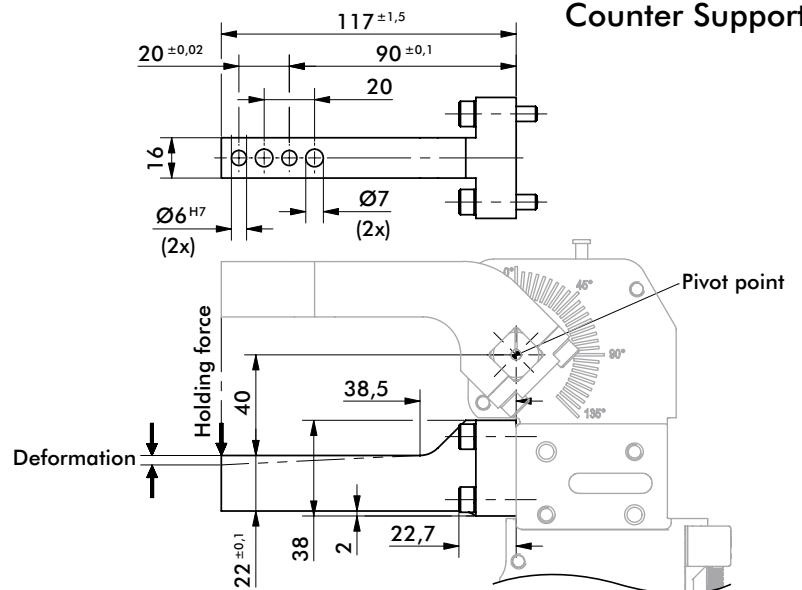
\*Compatible with NAAMS Clamp Arm Shaft option 13 only.



View:  
Counter support  
without screws and pins



## Counter Support



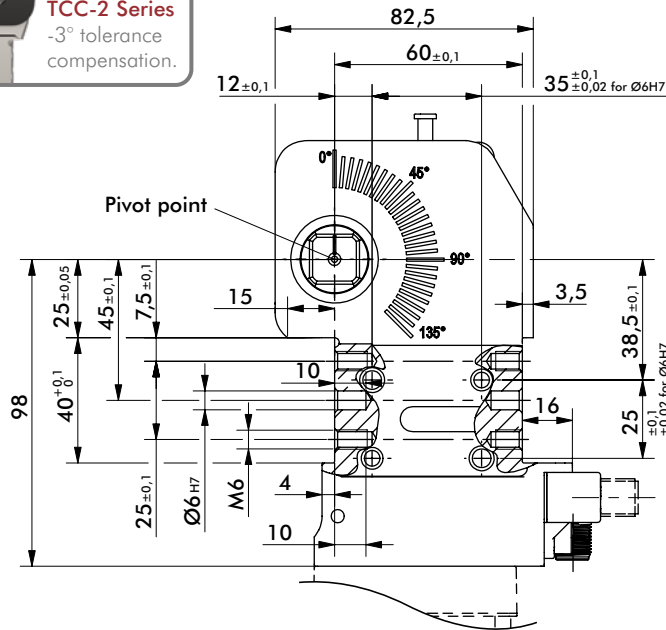
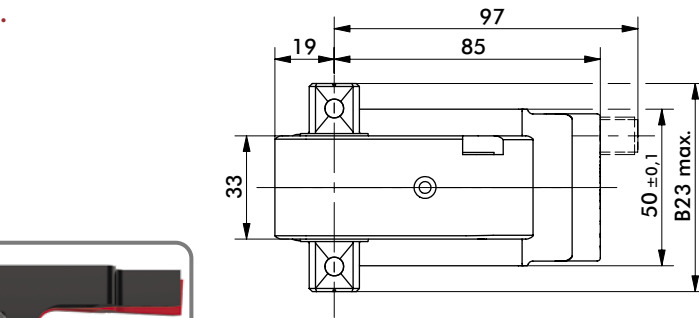
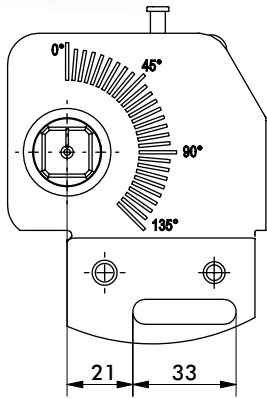
Arm Model No.	Holding Force (N)	Deformation (mm)	Weight (kg)
82ZB-190-1	2000	0,4	0,22

For Handle and Anti-Ramming device Accessories see pages PC-PPC-47 & 48.

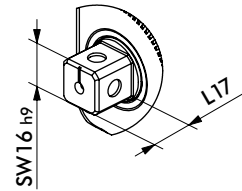
# 82M-3./TCC-2, 40MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions

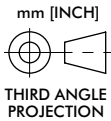
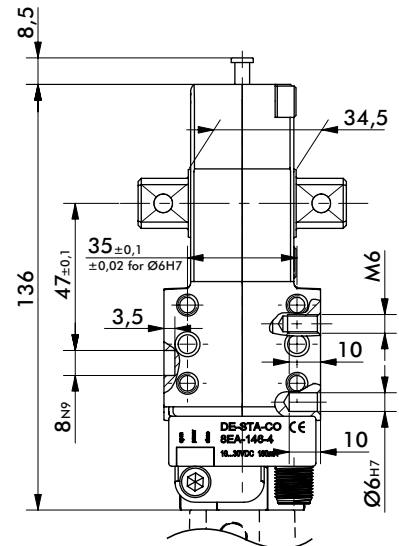
## 82M-3E/TCC-2E...4.



Dimensions of the driven shaft



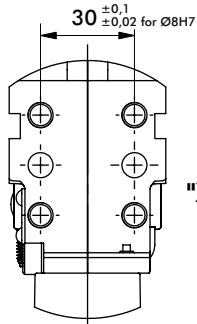
Model	B23 Max.	L17
82M-3.03/TCC-2.03..4...	54,5	9
82M-3.23/TCC-2.23..4...	66,5	16



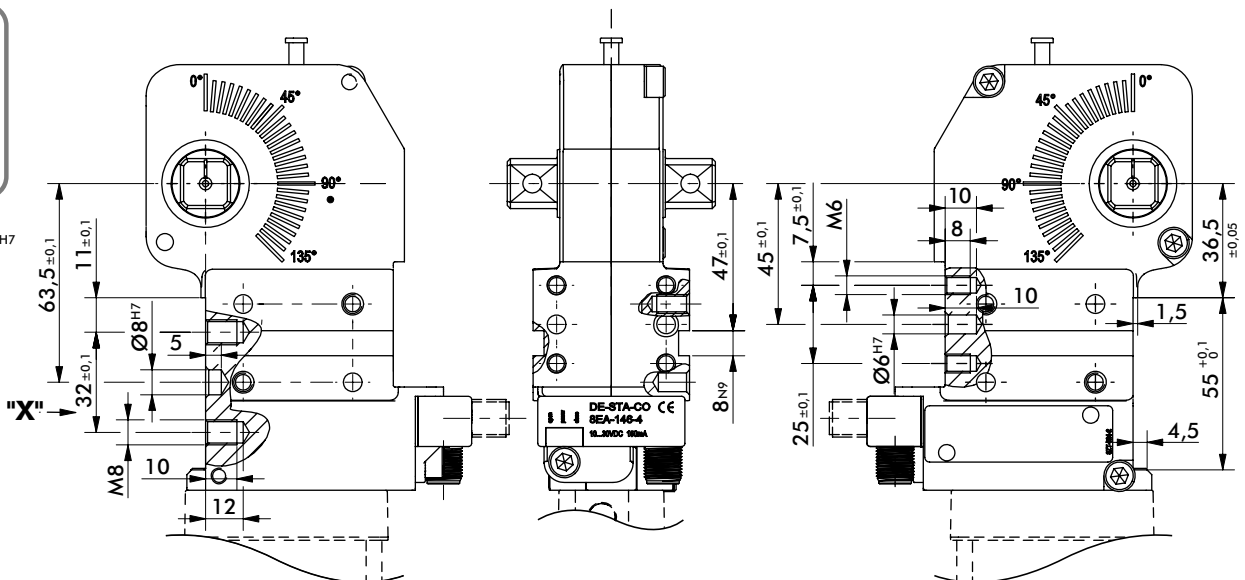
Power by compressed air, max. 6 bar operation with oil-free air is permissible. The connector socket and the cable are not supplied with the unit. Safe "holding/clamping" only under pressurization (for TCC models only).

## 82M-3B/TCC-2B...4.

Dimensions below for "B" mounting surfaces. See above for additional base unit dimensions.



View "X"



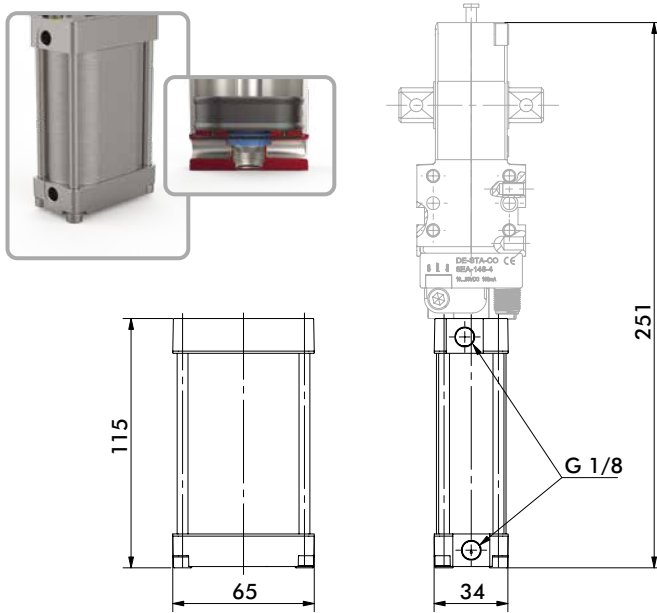


# 82M-3./TCC-2, 40MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Cylinder Options Dimensions

## 82M-3/TCC-2.....40

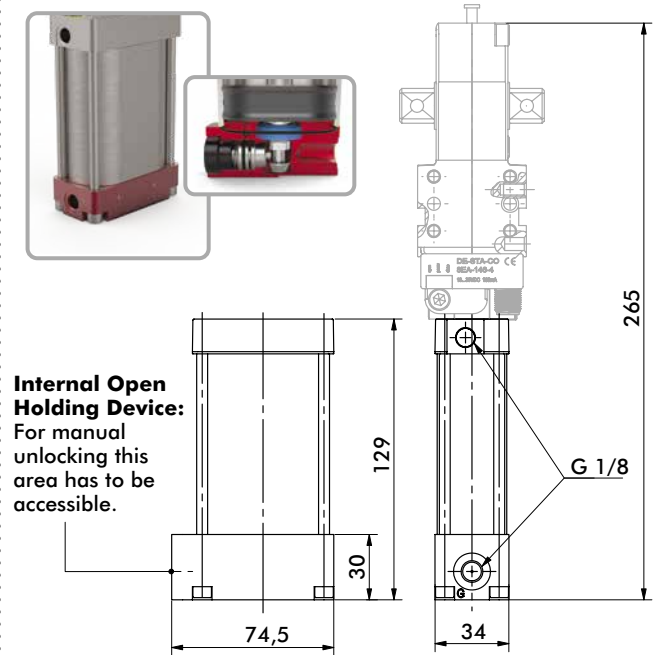
Standard Cylinder



## 82M-3/TCC-2.....4A

Cylinder with Internal Hold Open Device

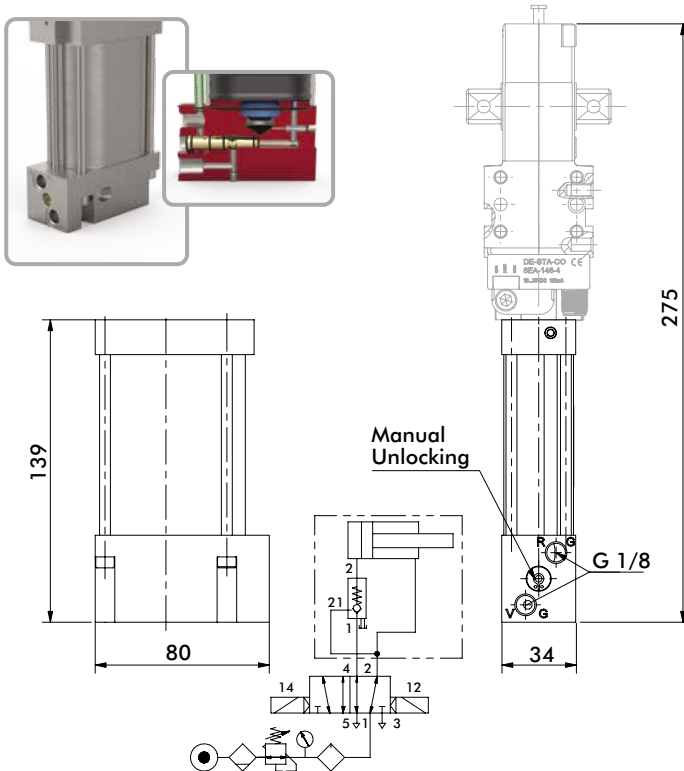
Securely holds clamp in the open position.



## TCC-2.....4C

Cylinder with Unlock-able Return Valve

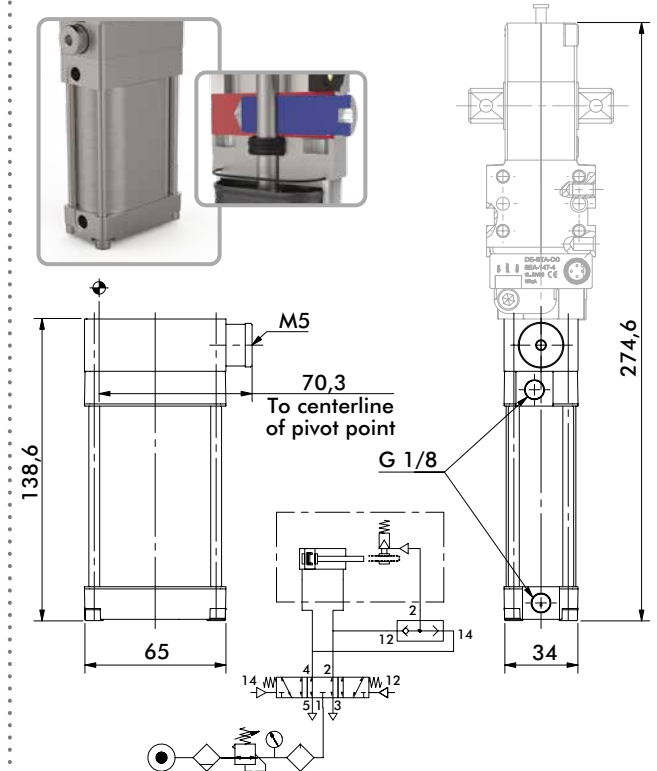
Pneumatically holds clamp arm in the closed position when air is released.



## TCC-2.....4V

Cylinder with Rod Locking Device

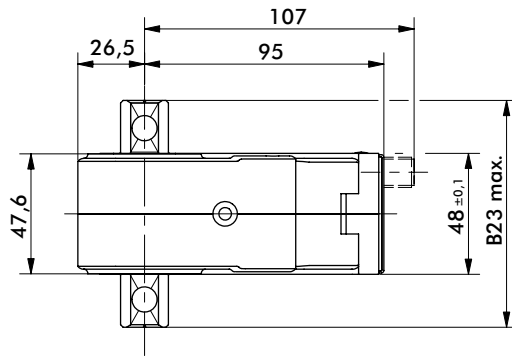
Uses friction to clamp rod at any point between open and closed positions.



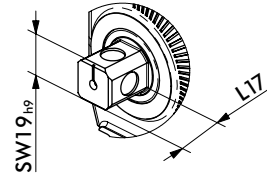
# 82M-3/TCC-2, 50MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions

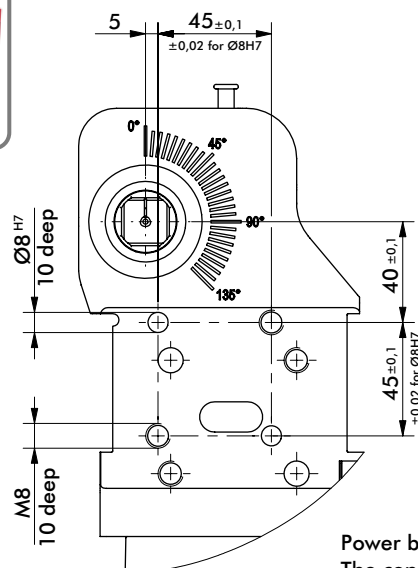
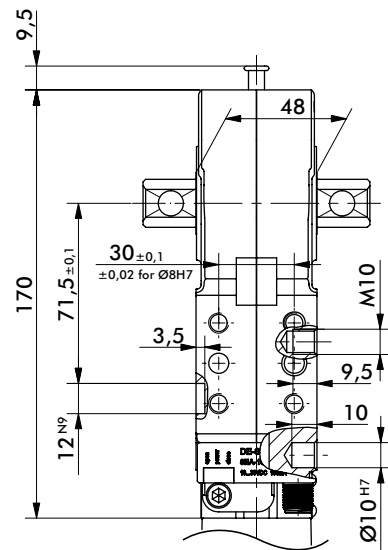
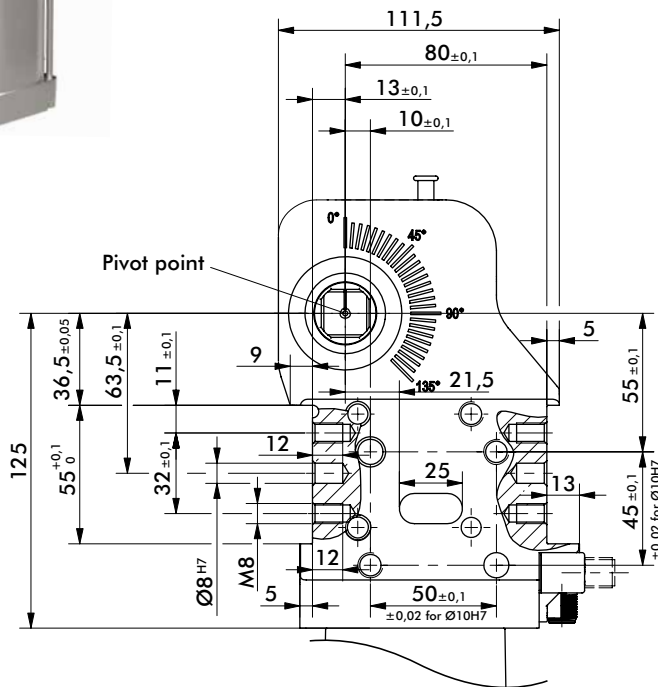
82M-3E/TCC-2E...5.



Dimensions of the driven shaft



Model	B23 Max.	L17
82M-3E03/TCC-2E03..5...	72	12
82M-3E23/TCC-2E23..5...	90	21



mm [INCH]  
THIRD ANGLE PROJECTION

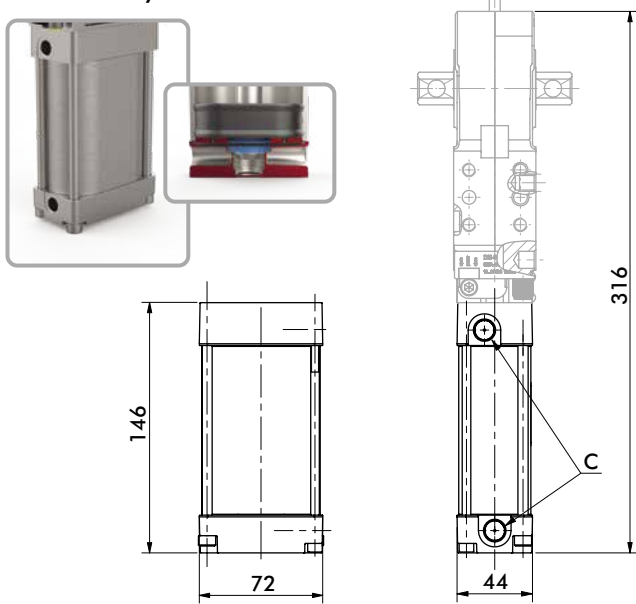
Power by compressed air, max. 6 bar operation with oil-free air is permissible. The connector socket and the cable are not supplied with the unit. Safe "holding/clamping" only under pressurization (for TCC models only).

# 82M-3/TCC-2, 50MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Cylinder Options Dimension

## 82M-3E/TCC-2E...50/5N

Standard Cylinder



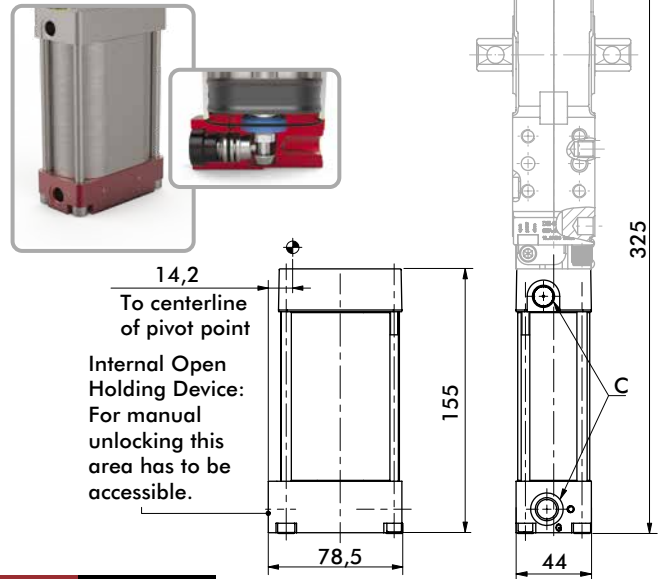
Ports	C
50	G1/4
5N	1/4-18 NPT

**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.

## 82M-3E/TCC-2E...5A/5B

Cylinder with Internal Hold Open Device

Securely holds clamp in the open position.



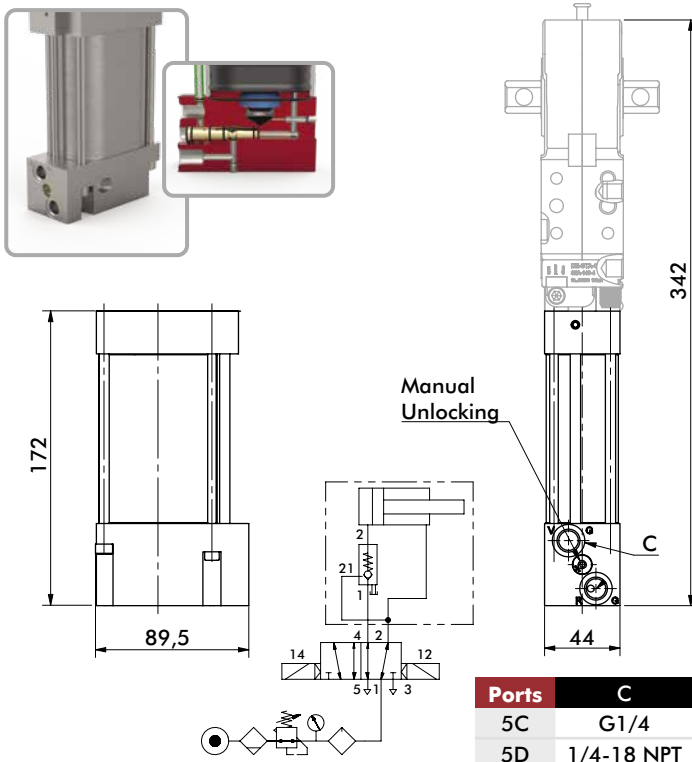
Ports	C
5A	G1/4
5B	1/4-18 NPT

**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.

## TCC-2E...5C/5D

Cylinder with Unlock-able Return Valve

Pneumatically holds clamp arm in the closed position when air is released.

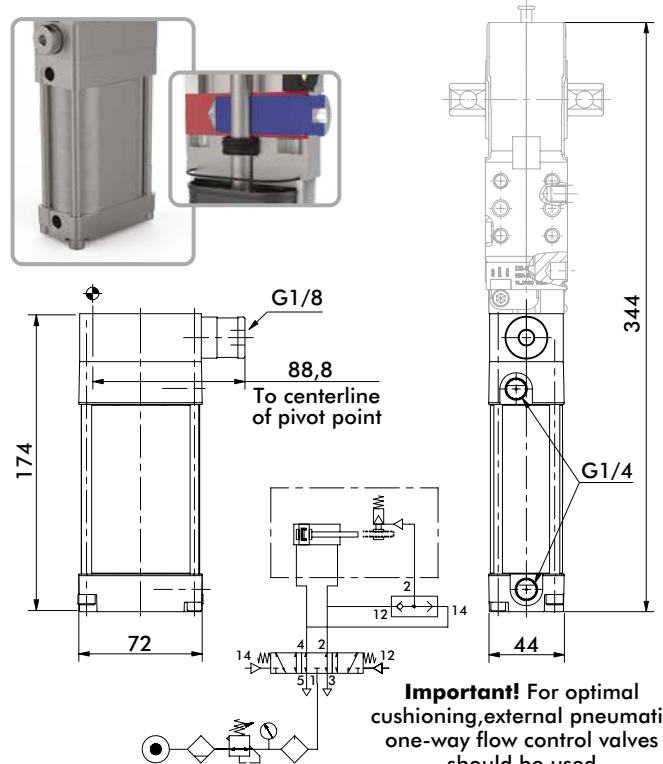


Ports	C
5C	G1/4
5D	1/4-18 NPT

## TCC-2E...5V

Cylinder with Rod Locking Device

Uses friction to clamp rod at any point between open and closed positions.

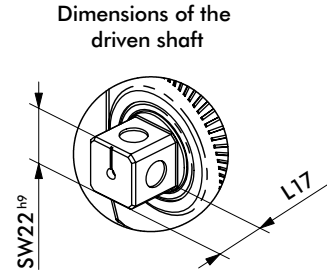
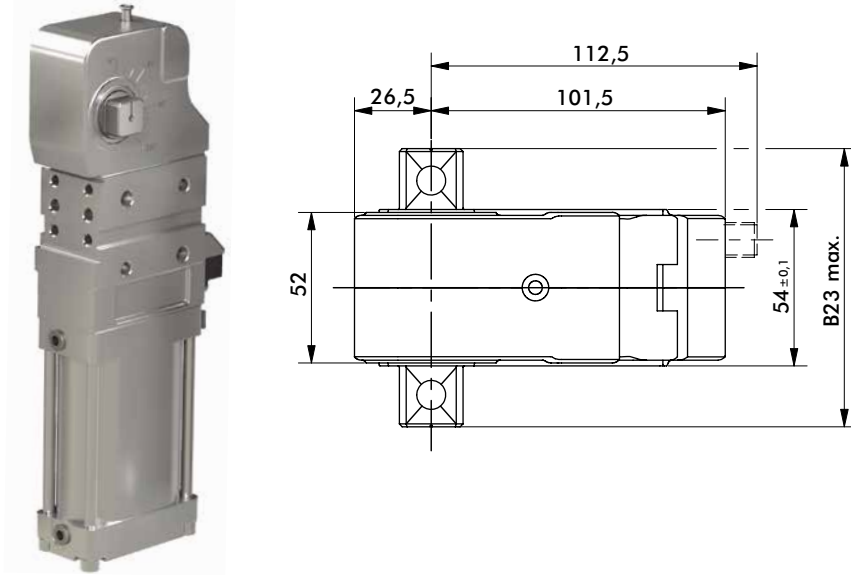


**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.

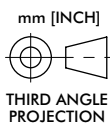
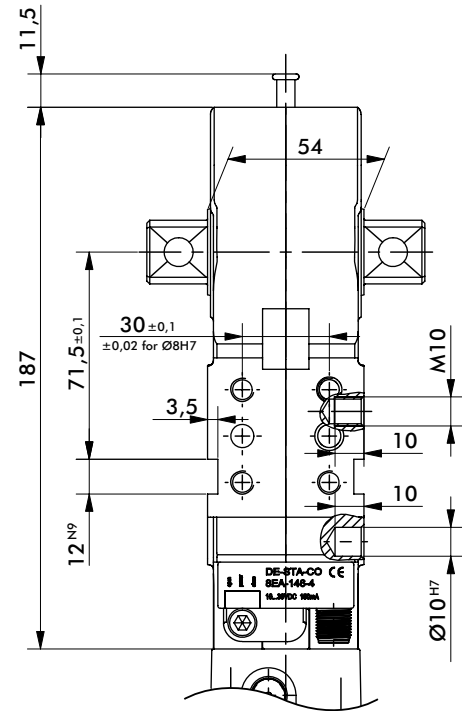
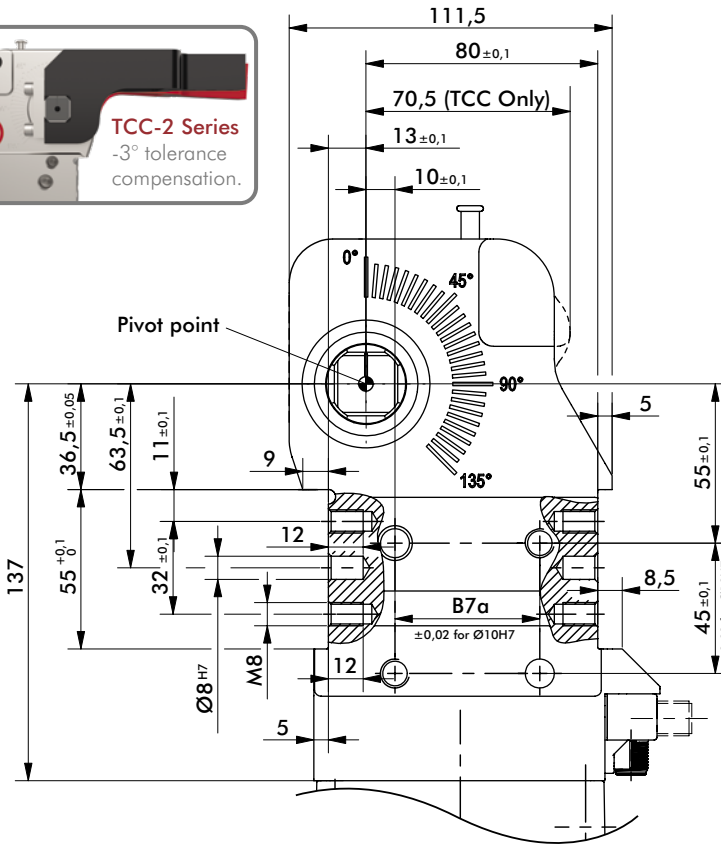
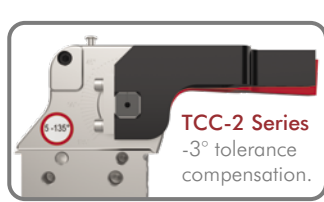
# 82M-3./TCC-2, 63MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions

82M-3/TCC-2.....6.



Model	B7a ±0,1	B23 Max.	L17
82M-3E03/TCC-2E03..6...	50	78	12
82M-3N03/TCC-2N03..6...	55	78	12
82M-3E23/TCC-2E23..6...	50	96	21
82M-3N23/TCC-2N23..6...	55	96	21
82M-3ND0..6...	55	106	26



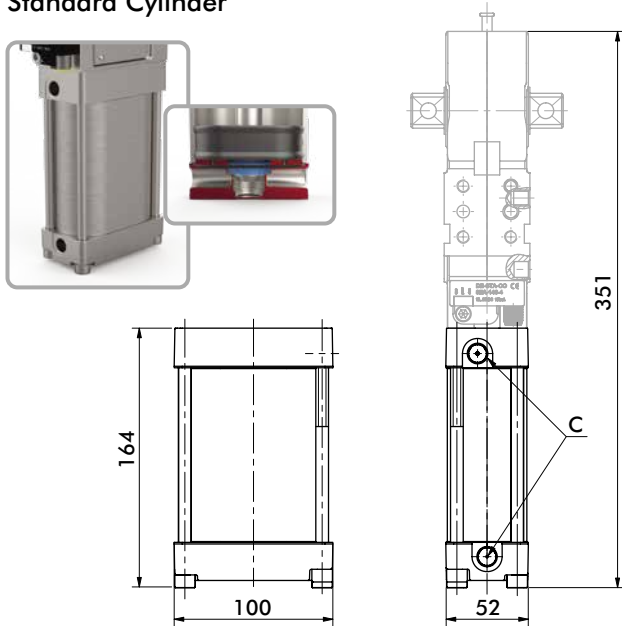
Power by compressed air, max. 6 bar operation with oil-free air is permissible. The connector socket and the cable are not supplied with the unit. Safe "holding/clamping" only under pressurization (for TCC models only).

# 82M-3./TCC-2, 63MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Cylinder Options Dimension

## 82M-3/TCC-2.....63/6N

Standard Cylinder



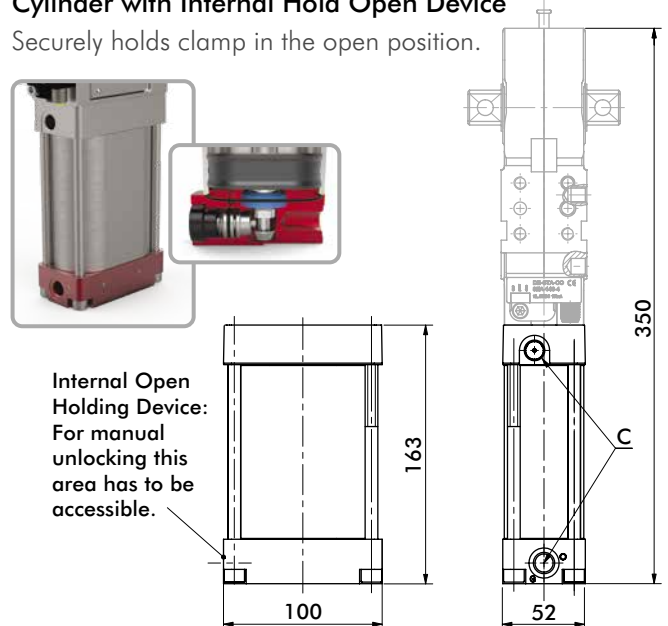
Ports	C
63	G1/4
6N	1/4-18 NPT

**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.

## 82M-3/TCC-2.....6A/6B

Cylinder with Internal Hold Open Device

Securely holds clamp in the open position.



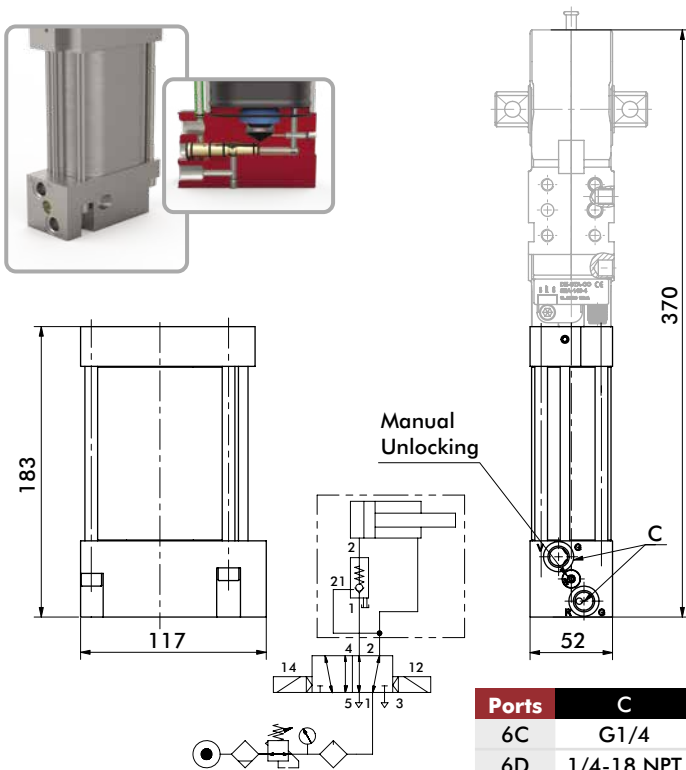
Ports	C
6A	G1/4
6B	1/4-18 NPT

**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.

## TCC-2.....6C/6D

Cylinder with Unlock-able Return Valve

Pneumatically holds clamp arm in the closed position when air is released.

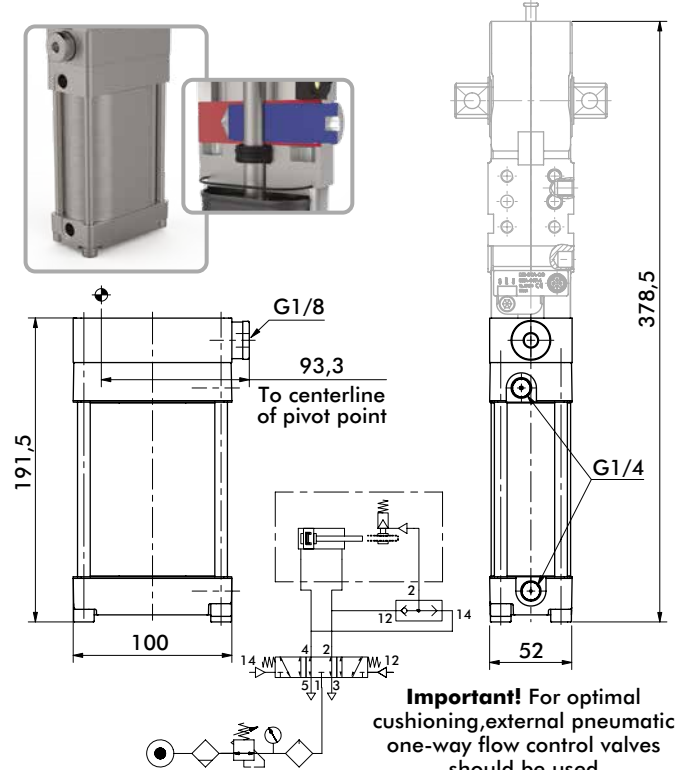


Ports	C
6C	G1/4
6D	1/4-18 NPT

## TCC-2.....6V

Cylinder with Rod Locking Device

Uses friction to clamp rod at any point between open and closed positions.



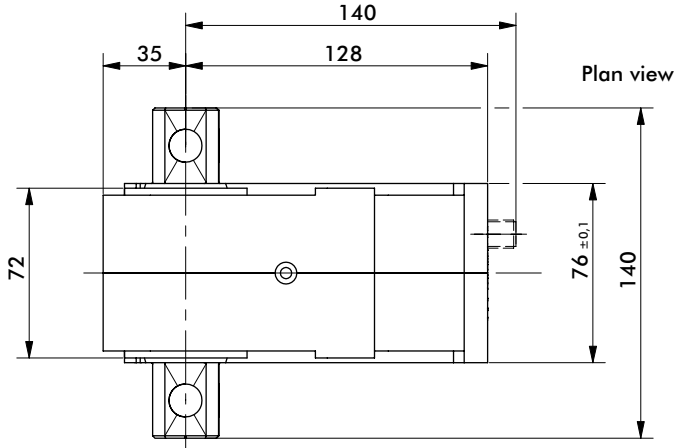
**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.



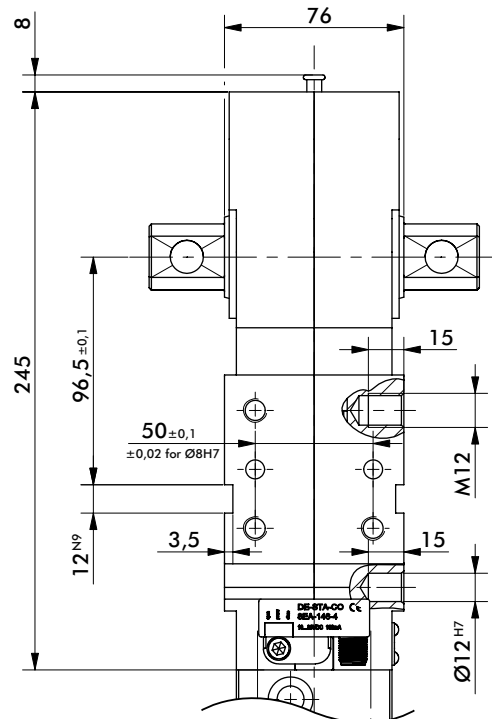
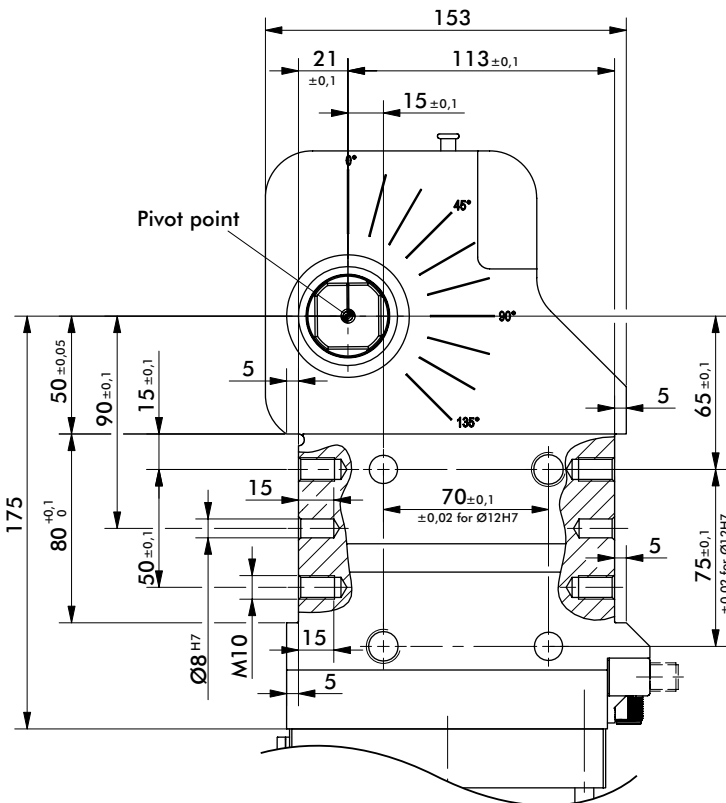
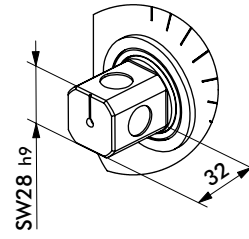
# 82M-3., 80MM

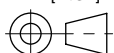
## Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions

82M-3E...8.



Dimensions of the driven shaft



mm [INCH]  
  
 THIRD ANGLE  
 PROJECTION

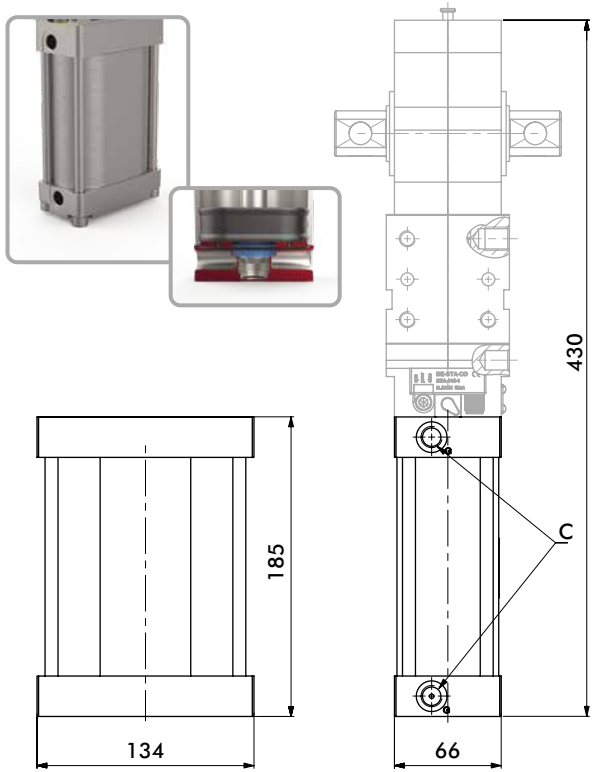
Power by compressed air, max. 6 bar operation with oil-free air is permissible.  
 The connector socket and the cable are not supplied with the unit.

# 82M-3., 80MM

## Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Cylinder Options Dimension

### 82M-3E...80/8N

Standard Cylinder



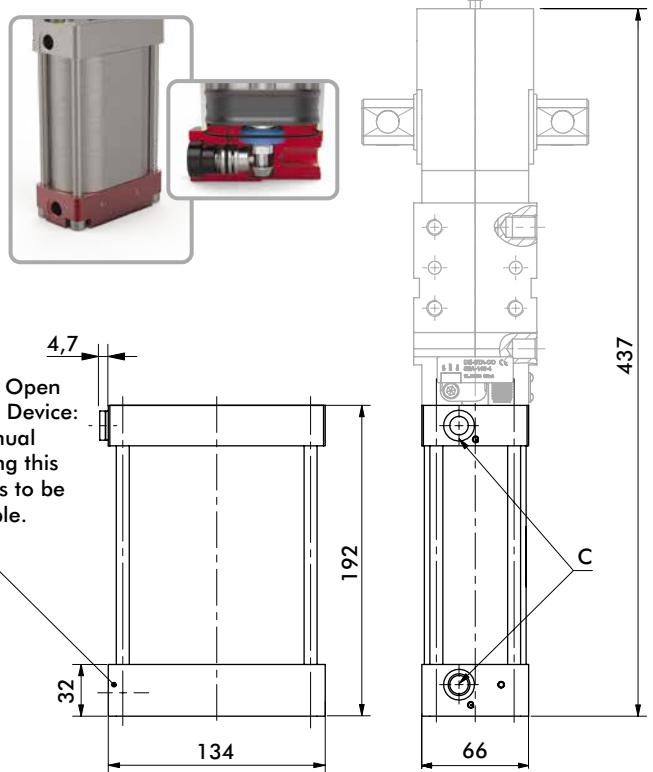
Ports	C
80	G1/4
8N	1/4-18 NPT

**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.

### 82M-3E...8A/8B

Cylinder with Internal Hold Open Device

Securely holds clamp in the open position.



Ports	C
8A	G1/4
8B	1/4-18 NPT

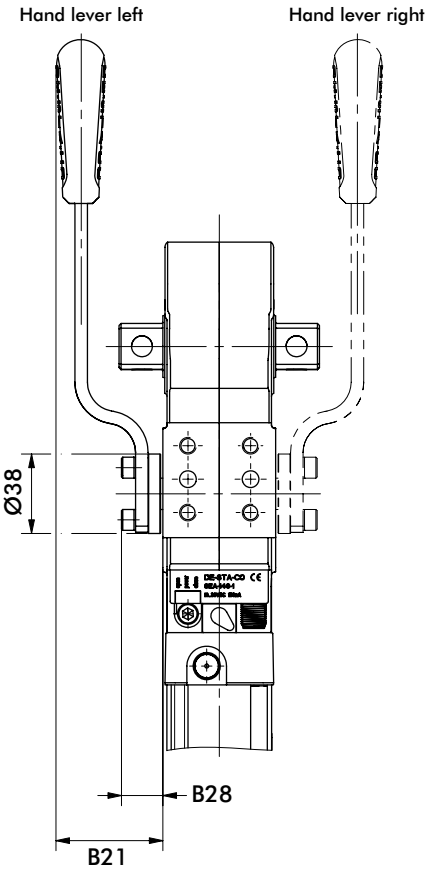
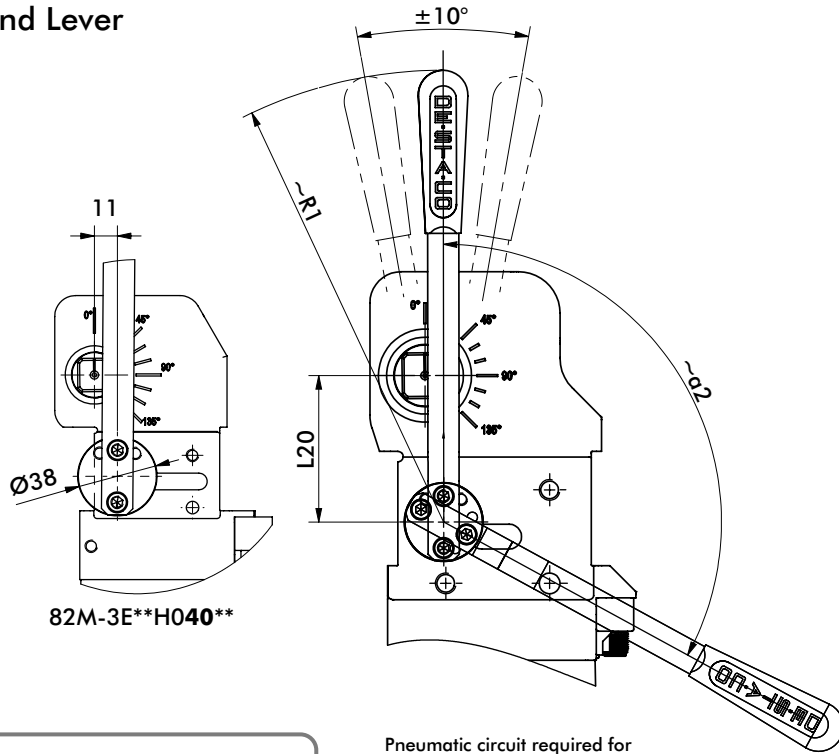
**Important!** For optimal cushioning, external pneumatic one-way flow control valves should be used.

Internal Open Holding Device:  
For manual unlocking this area has to be accessible.

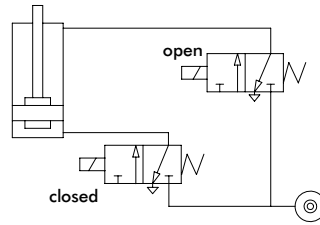
# 82M-3. ACCESSORIES

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

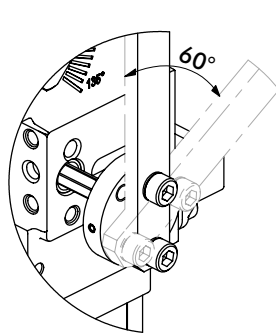
## Hand Lever



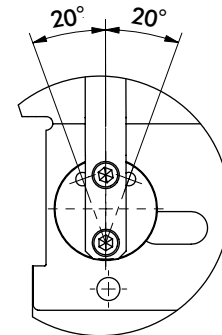
Pneumatic circuit required for manual and pneumatic actuation.



**Note:** Hand lever is supplied unassembled. Allows for easy, custom left hand or right hand mounting for desired position.



Mounting of the hand lever: rotatable in 60° increments.



Hand lever can be mounted in 3 positions.

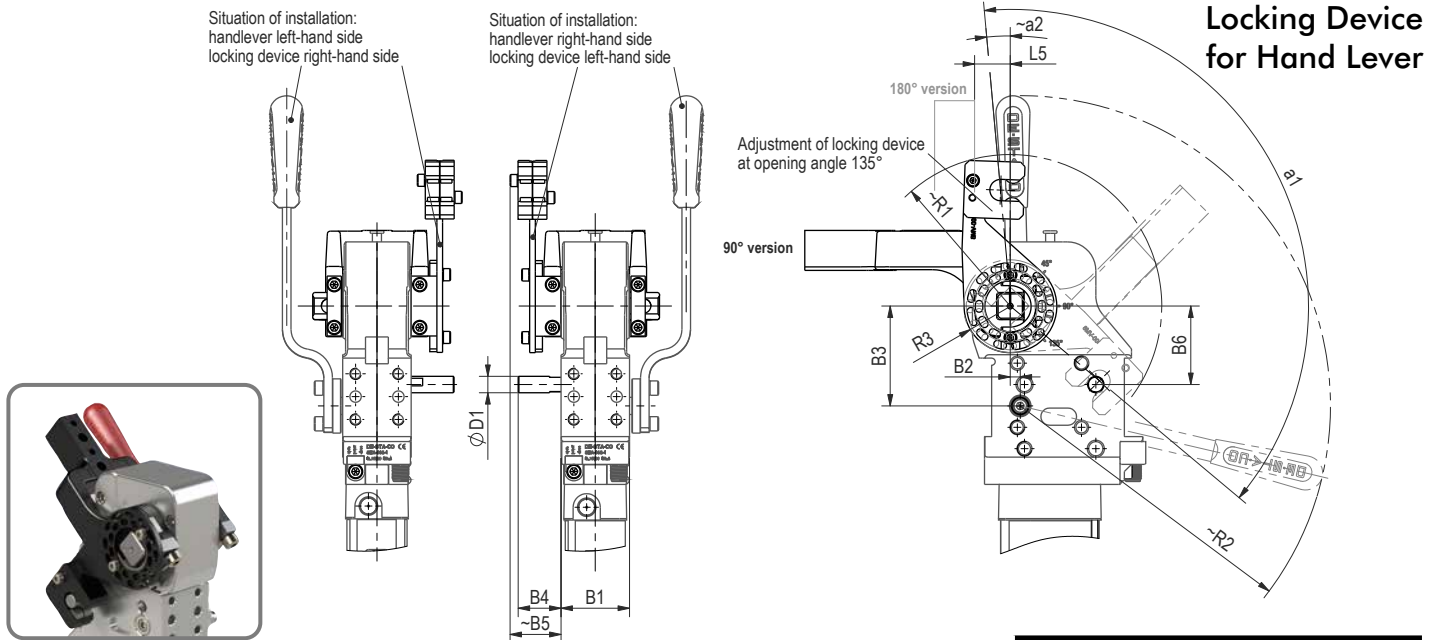


Hand lever position is adjustable to ±20 degrees for improved ergonomics.

Model No.	B21	B28	L20	~R1	Swivel Angle α2 (with reference to opening angle of clamp arm)									
					0°	15°	30°	45°	60°	75°	90°	105°	120°	135°
82M-3...H040..	27	24	48,5	160	0°	31°	41°	49°	58°	69°	88°	113°	134°	144°
82M-3...H05...	52	20	70	218	-1°	30°	39°	46°	53°	61°	70°	81°	92°	103°
82M-3...H06..	52	20	70,5	218	0°	30°	39°	47°	56°	66°	79°	94°	108°	119°
82M-3...H08..	56	24	82	268	-1°	28°	37°	45°	53°	63°	75°	92°	107°	117°

# 82M-3. ACCESSORIES

## Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications



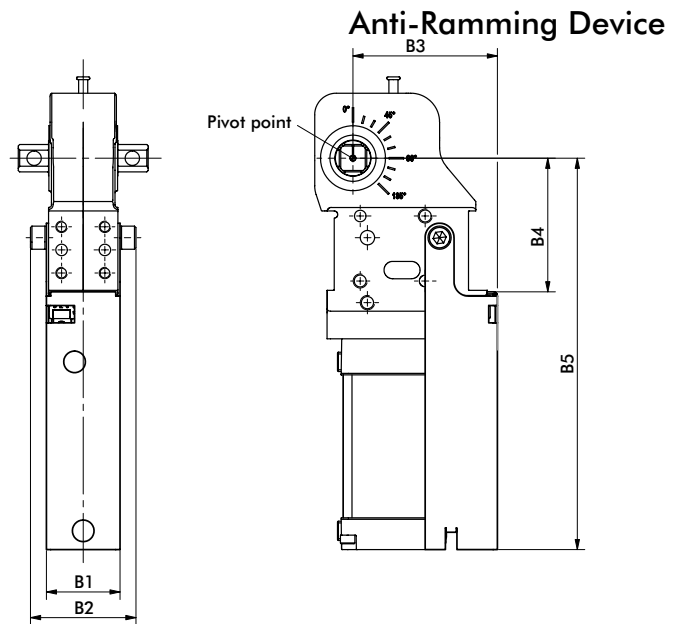
Order No.	For Model	B1	B2	B3	B4	B5	B6	ØD1	R1	R2	R3	α2	Limited Setting Options					
													Height of the clamping arm: L5 max.					
													90° version			180° version		
82ZB-162-1	82M-3...H040..*	50	11	48,5	25	31	38,5	10,5	81	160	27	6	120°	-	105°	120°	120°	120°
82ZB-084-1	82M-3...H05...	48	7	70	30	36	55	11,5	107	218	32,5	6	120°	-	-	105°	120°	-
82ZB-039-1	82M-3...H06...	54	9	70,5	30	36	55	11,5	107	210	32,5	6	110°	105°	-	105°	120°	-

\*Not compatible with Size 40 Option N NAAMS Side Mounting.

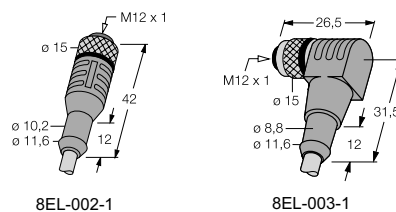


Anti-ramming device is only available for standard cylinder with 82M-3...00..00 and 82M-3...00..L8

Order No.	For Model	B1	B2	B3	B4	B5
8AB-151-1	82M-3.....40..	53	66,5	89,5	65,5	210,5
8AB-152-1	82M-3.....5...	51	73	100	92,5	271
8AB-153-1	82M-3.....6...	57	79	120	104,5	296
8AB-154-1	82M-3.....8...	79	105,5	148	142,5	360



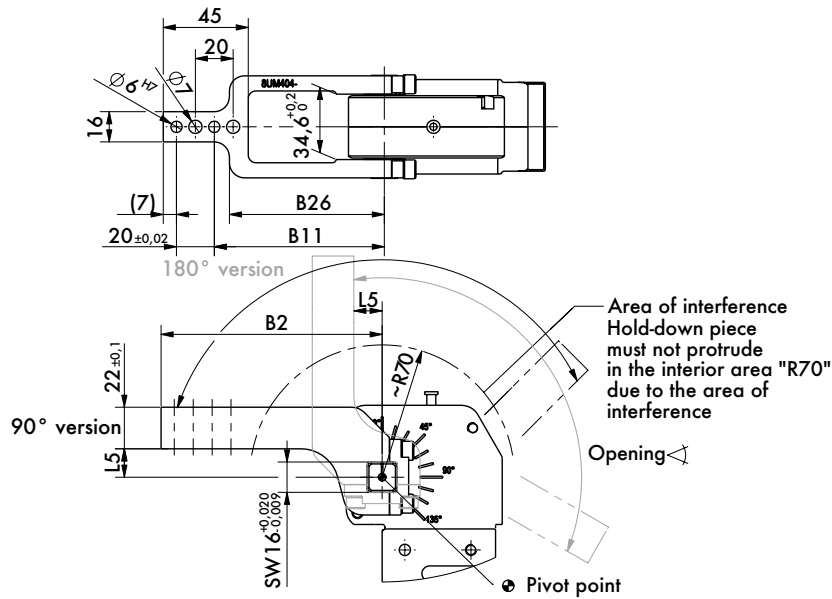
Order No.	Description
8EL-002-1	M12x1, Straight, 5-pin Connector with 5m Cable
8EL-003-1	M12x1, Angular, 4-pin Connector with 5m Cable



# U-ARMS CENTER (ALUMINUM)

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 40mm\*

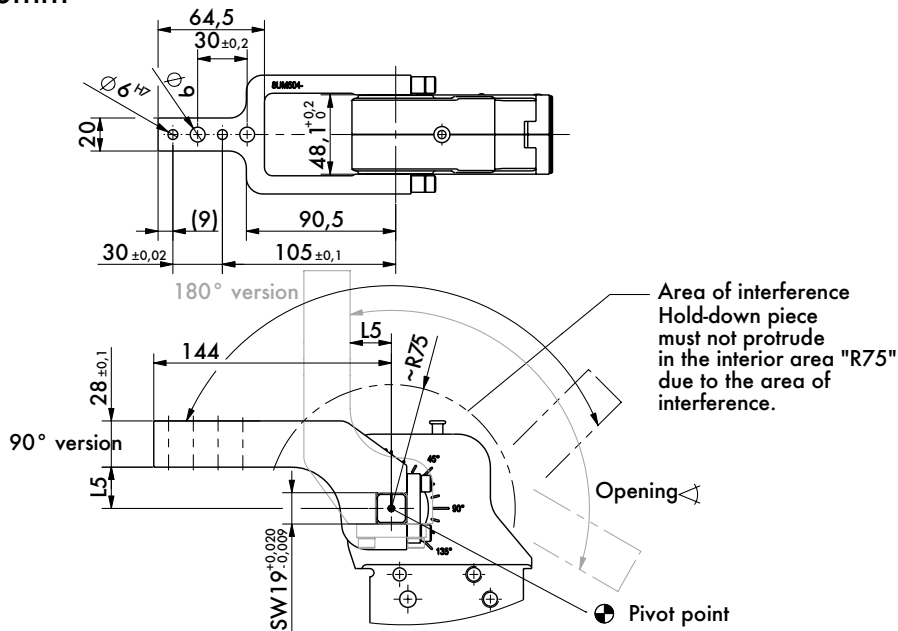


8UM404-00-117  
8UM404-15-117  
8UM404-25-117  
8UM404-45-107

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B11 ±0,1	B26	L5
8UM404-00-117		105°	0,23				0
8UM404-15-117	135°	120°	0,24	117	90	82	15
8UM404-25-117			0,25				25
8UM404-45-107	130°	135°	0,24	107	80	72	45

\*Not compatible with NAAMS Clamp Arm Shaft option 13.

For Size 50mm



8UM504-15-144  
8UM504-25-144  
8UM504-45-144

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	L5
8UM504-15-144		105°	0,44	15
8UM504-25-144	135°	120°	0,45	25
8UM504-45-144		135°	0,48	45

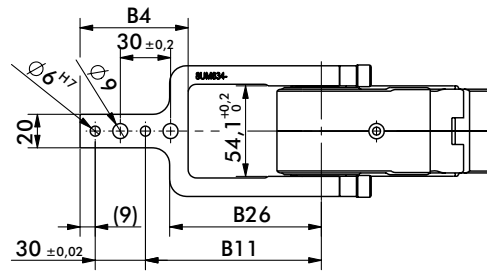


# U-ARMS CENTER (ALUMINUM)

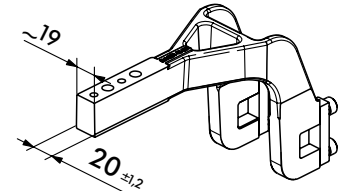
Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications



90°



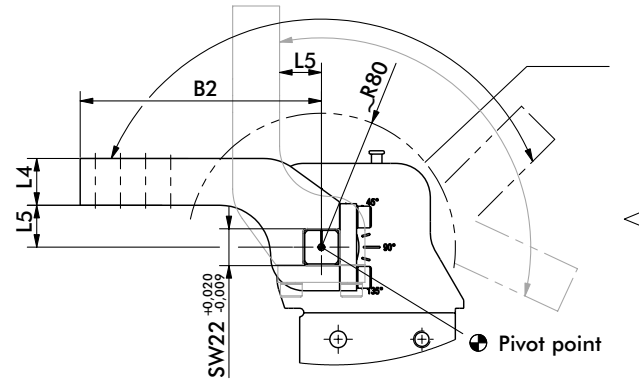
For Size 63mm



Dimensions are only for



180°



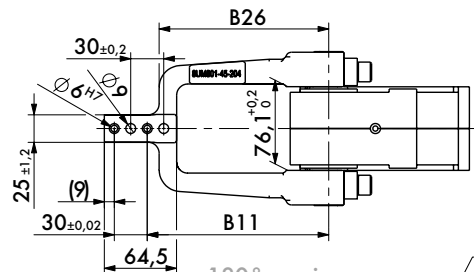
8UM634-15-144  
8UM634-25-144  
8UM634-45-144  
8UM631-75-204\*

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	B11 ±0,1	B26	L4 ±0,1	L5
8UM634-15-144	135°	105°	0,50						15
8UM634-25-144		120°	0,53	144	64,5	105	90,5	28	25
8UM634-45-144		135°	0,56						45
8UM631-75-204*		1,7	204	82	165	107	30	75	

\*only steel version available.



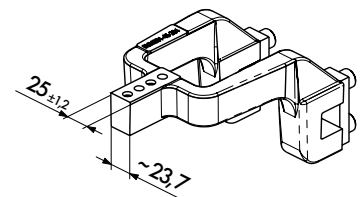
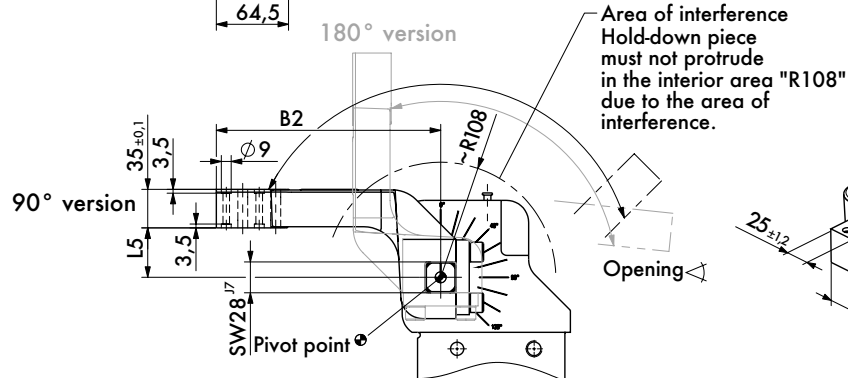
90°



For Size 80mm



180°



8JG-169-2-01  
8UM801-45-204

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B11 ±0,1	B26	L5** ±0,2
8JG-169-2-01	135°	105°	3,5	179	140	129	20
8UM801-45-204*		135°	4,1	204	165	154	45

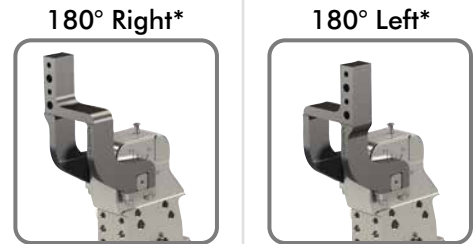
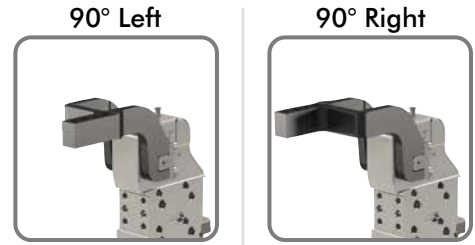
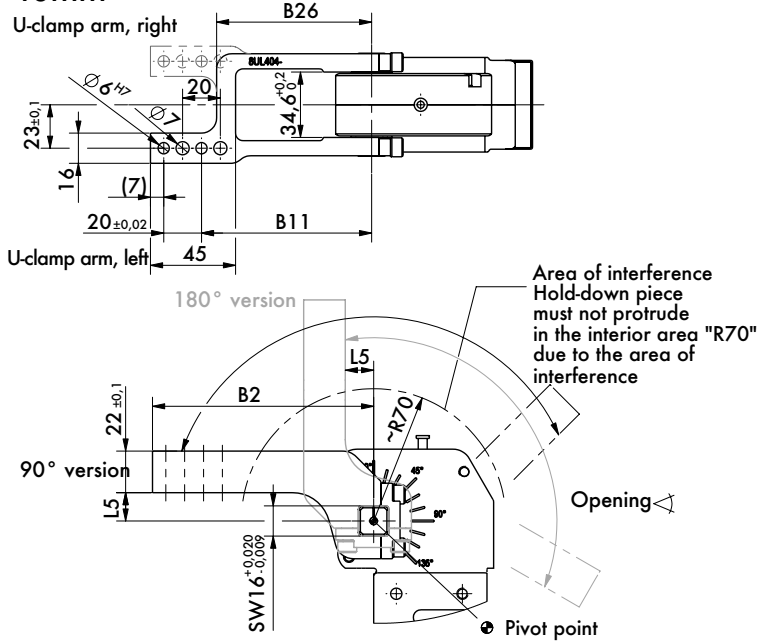
\*only steel version available.

\*\* Tolerance measured 80mm from pivot point.

# U-ARMS OFFSET (ALUMINUM)

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 40mm\*



8UL404-00-117  
8UL404-15-117  
8UL404-25-117  
8UL404-45-107

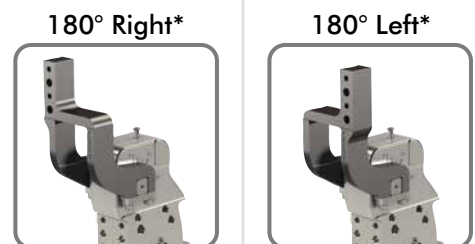
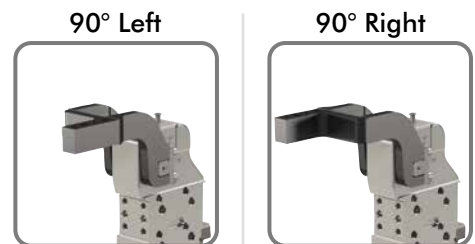
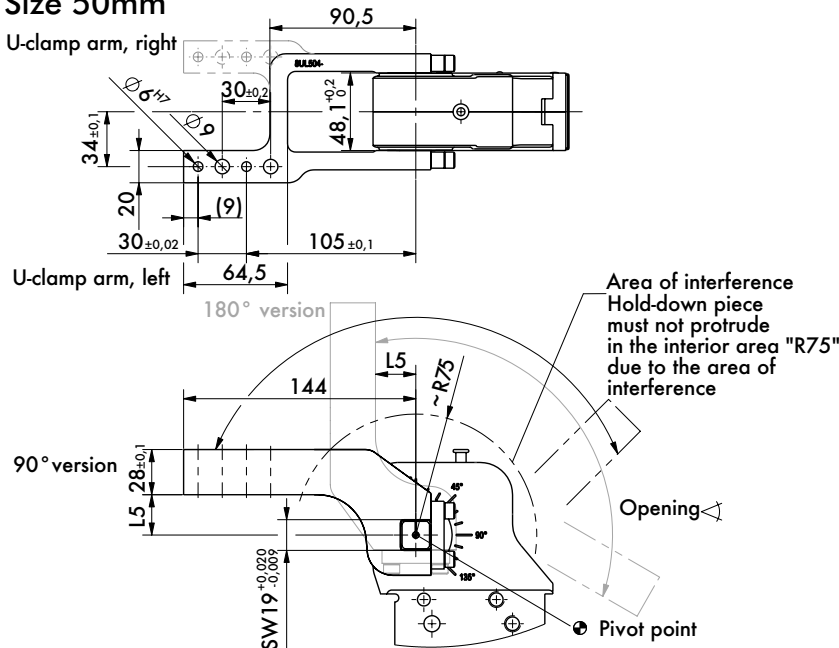
8UR404-00-117  
8UR404-15-117  
8UR404-25-117  
8UR404-45-107

\*90° left/180° right uses same clamp arm.  
90° right/180° left uses same clamp arm.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B11 ±0,1	B26	L5
8U(•)404-00-117		105°	0,23				0
8U(•)404-15-117	135°	120°	0,24	117	90	82	15
8U(•)404-25-117		135°	0,25				25
8U(•)404-45-107			0,25	107	80	72	45

\*Not compatible with NAAMS Clamp Arm Shaft option 13.

For Size 50mm



8UL504-15-144  
8UL504-25-144  
8UL504-45-144

8UR504-15-144  
8UR504-25-144  
8UR504-45-144


\*90° left/180° right uses same clamp arm.  
90° right/180° left uses same clamp arm.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	L5
8U(•)504-15-144		105°	0,45	15
8U(•)504-25-144	135°	120°	0,46	25
8U(•)504-45-144		135°	0,49	45


# U-ARMS OFFSET (ALUMINUM)

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications


90° Left




90° Right



180° Right\*



180° Left\*

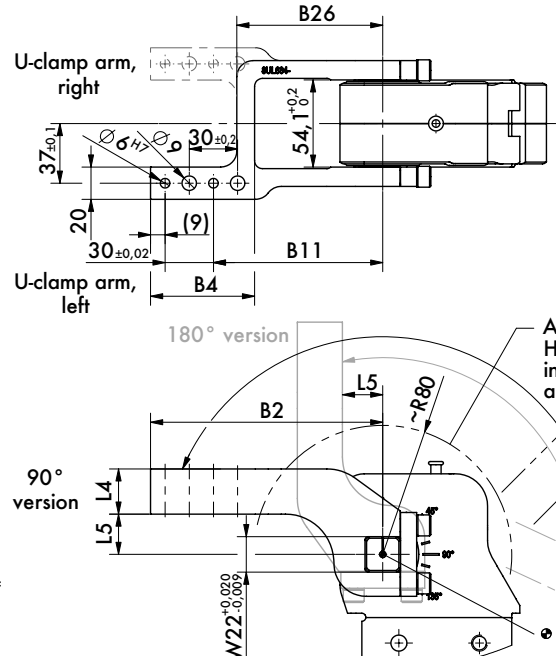


8UL634-15-144  
8UL634-25-144  
8UL634-45-144  
8UL631-75-204\*\*

8UR634-15-144  
8UR634-25-144  
8UR634-45-144  
8UR631-75-204\*\*

\*90° left/180° right uses same clamp arm.  
90° right/180° left uses same clamp arm.

**For Size 63mm**




Dimensions are only for 8U(.)631-75-204


Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	B11 ±0,1	B26	L4 ±0,1	L5
8U(.)634-15-144	135°	105°	0,52	144	64,5	105	90,5	28	15
8U(.)634-25-144		120°	0,54						25
8U(.)634-45-144		135°	0,58						45
8U(.)631-75-204**			1,9						204

\*\*only steel version available.


90° Left




90° Right



180° Right\*



180° Left\*

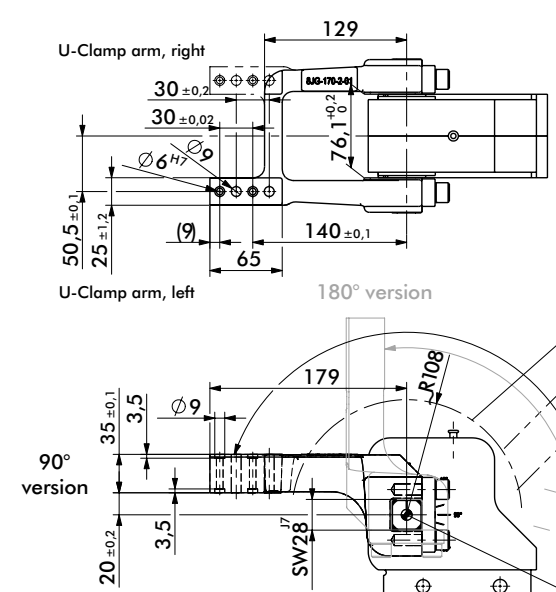


8JG-170-2-01

8JG-171-2-01

\*90° left/180° right uses same clamp arm.  
90° right/180° left uses same clamp arm.

**For Size 80mm**



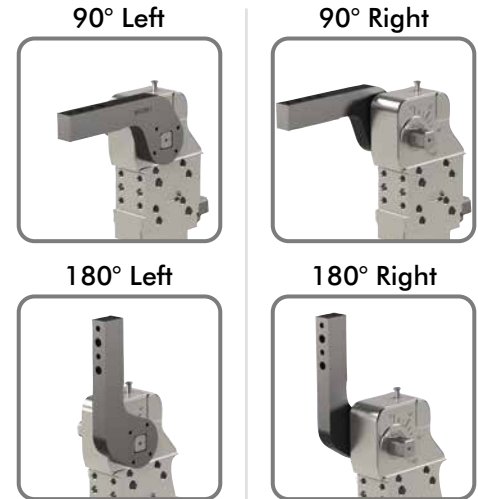
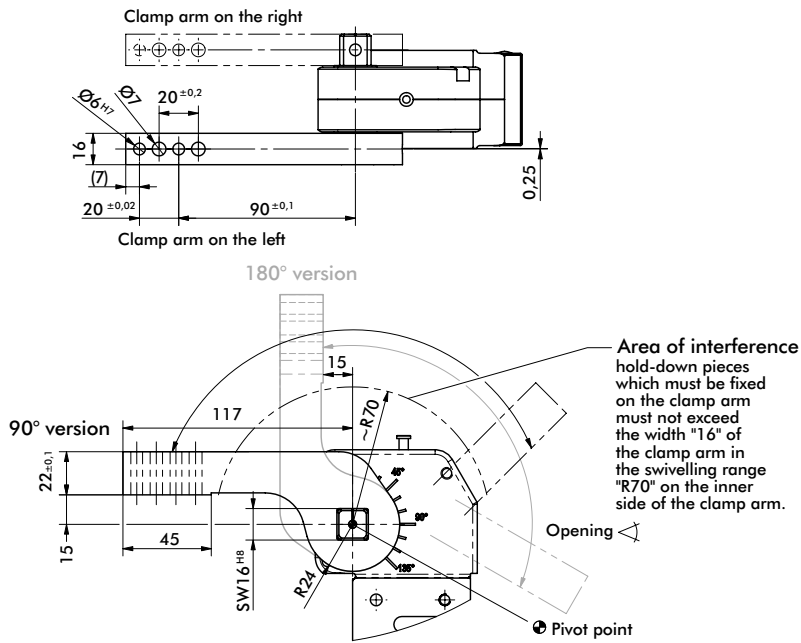
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)
8JG-17(.)2-01**	135°	105°	3,5

\*\*only steel version available.

# LATERAL (SIDE) ARMS

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 40mm\*

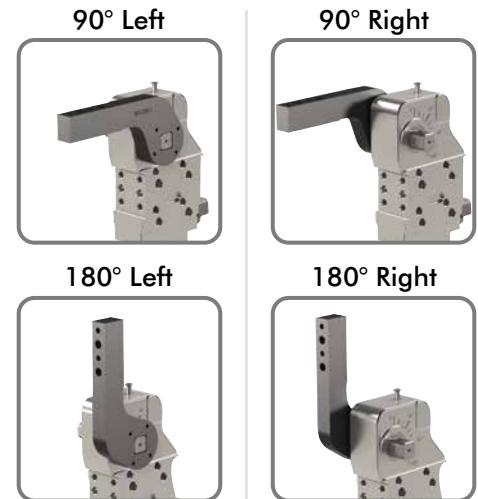
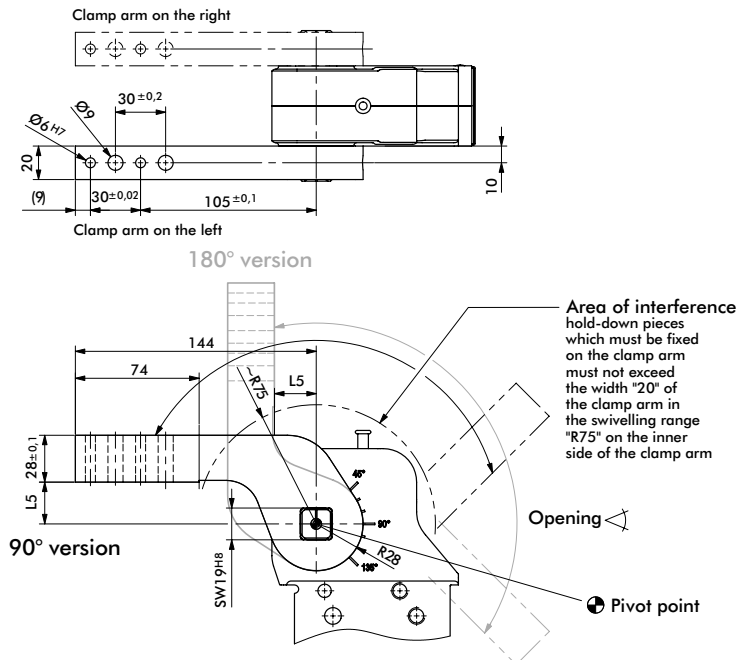


8S401-15-117

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)
8S401-15-117	135°	120°	0,5

1 clamp arm per set. Models with 2 lateral clamp arms requires 2 clamp arm sets.  
\*Not compatible with NAAMS Clamp Arm Shaft option 13.

For Size 50mm



8JG-070-1-01  
8S501-25-144

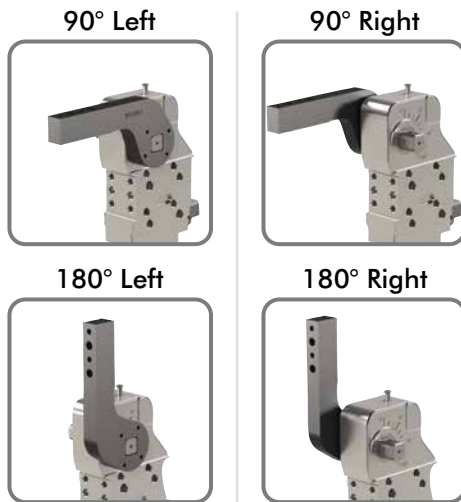
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	L5
8JG-070-1-01	135°	135°	0,9	15
8S501-25-144			1,0	25

1 clamp arm per set. Models with 2 lateral clamp arms requires 2 clamp arm sets.

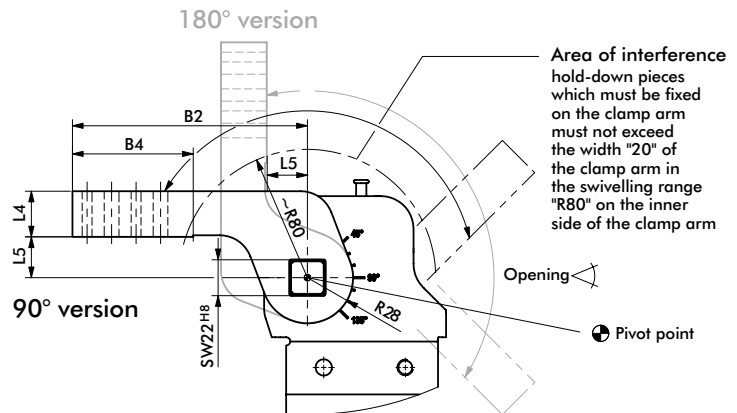
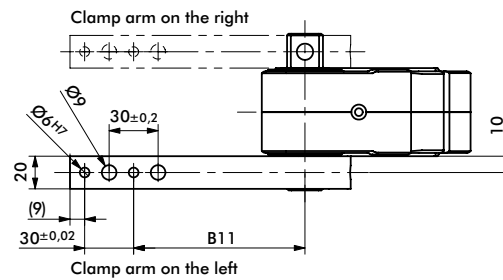
# LATERAL (SIDE) ARMS

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 63mm



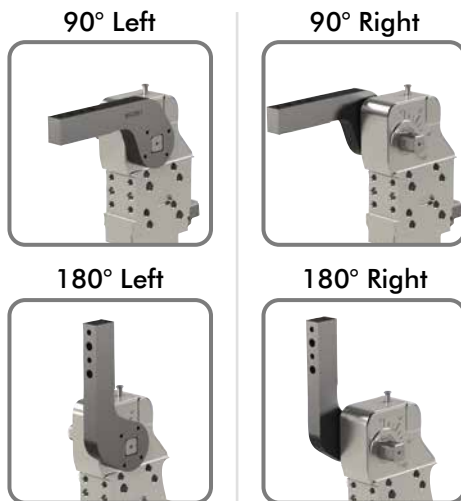
8JG-080-1-01  
8S631-25-144  
8S631-45-144  
8S631-75-204



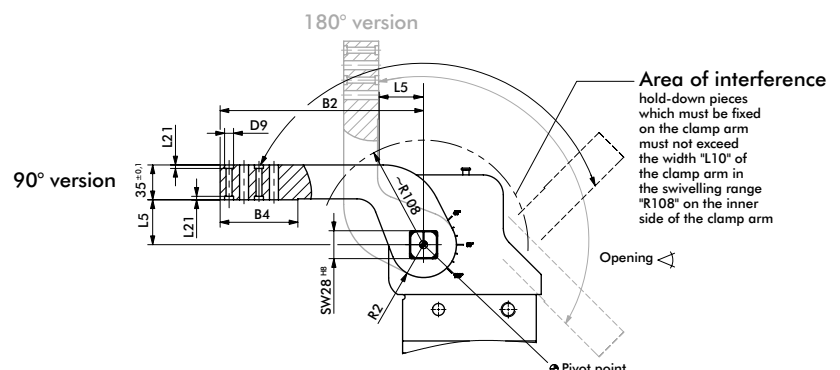
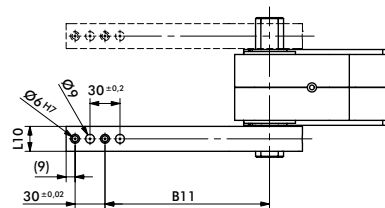
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	B11 ±0,1	L4 ±0,1	L5
8JG-080-1-01	135°	135°	0,9	144	74	105	28	15
8S631-25-144			1,0					25
8S631-45-144			1,1					45
8S631-75-204			1,5					75

1 clamp arm per set. Models with 2 lateral clamp arms requires 2 clamp arm sets.

For Size 80mm



8JG-1179-1-01  
8S801-45-204



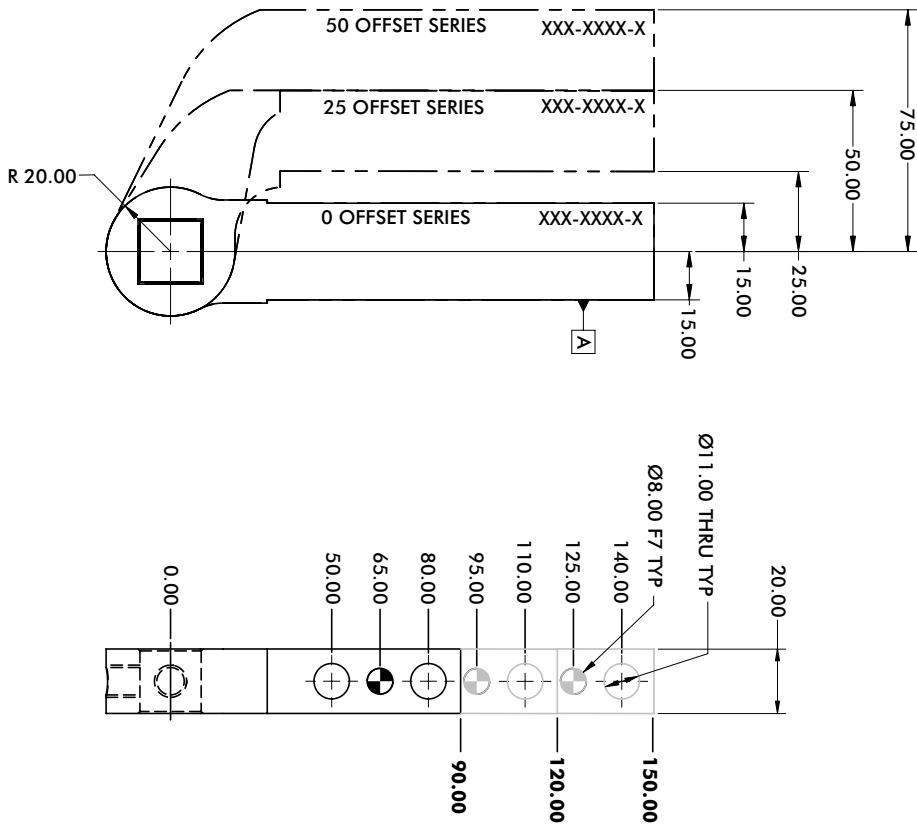
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	D9	B11 ±0,1	L5	L10	L21	R2
8JG-1179-1-01	135°	135°	2,1	179	74	-	140	20	30	-	35
8S801-45-204				204	78	9	165	45	25	3,5	33

1 clamp arm per set. Models with 2 lateral clamp arms requires 2 clamp arm sets.

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 50mm



## 9mm Thru Hole (6.00 H7 Dowel)

90mm [3.54"] Arm Length			120mm [4.72"] Arm Length			150mm [5.90"] Arm Length		
Series	Arm Style	Model	Series	Arm Style	Model	Series	Arm Style	Model
50 Offset	▲ • 3256	B8JG-3256-1	50 Offset	▲ • 3257	B8JG-3257-1	50 Offset	▲ • 3258	B8JG-3258-1
25 Offset	▲ • 3246	B8JG-3246-1	25 Offset	▲ • 3247	B8JG-3247-1	25 Offset	▲ • 3248	B8JG-3248-1
0 Offset	▲ • 3236	B8JG-3236-1	0 Offset	▲ • 3237	B8JG-3237-1	0 Offset	▲ • 3238	B8JG-3238-1

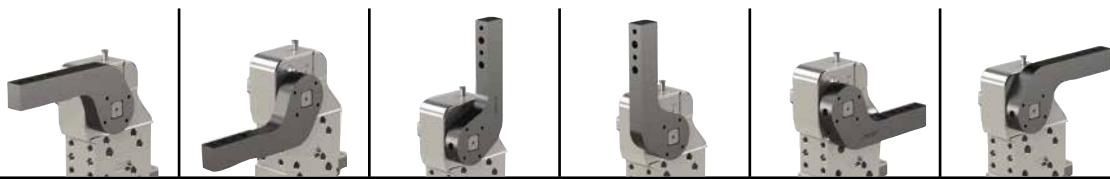
## 11mm Thru Hole (8.00 F7 Dowel)

90mm [3.54"] Arm Length			120mm [4.72"] Arm Length			150mm [5.90"] Arm Length		
Series	Arm Style	Model	Series	Arm Style	Model	Series	Arm Style	Model
50 Offset	▲ • 1226	B8JG-1226-1	50 Offset	▲ • 1227	B8JG-1227-1	50 Offset	▲ • 1228	B8JG-1228-1
25 Offset	▲ • 1216	B8JG-1216-1	25 Offset	▲ • 1217	B8JG-1217-1	25 Offset	▲ • 1218	B8JG-1218-1
0 Offset	▲ • 1206	B8JG-1206-1	0 Offset	▲ • 1207	B8JG-1207-1	0 Offset	▲ • 1208	B8JG-1208-1

▲ Common in North America

(•) STANDARD ARM OFFERING

## Maximum Opening Angle (shown in locked position)

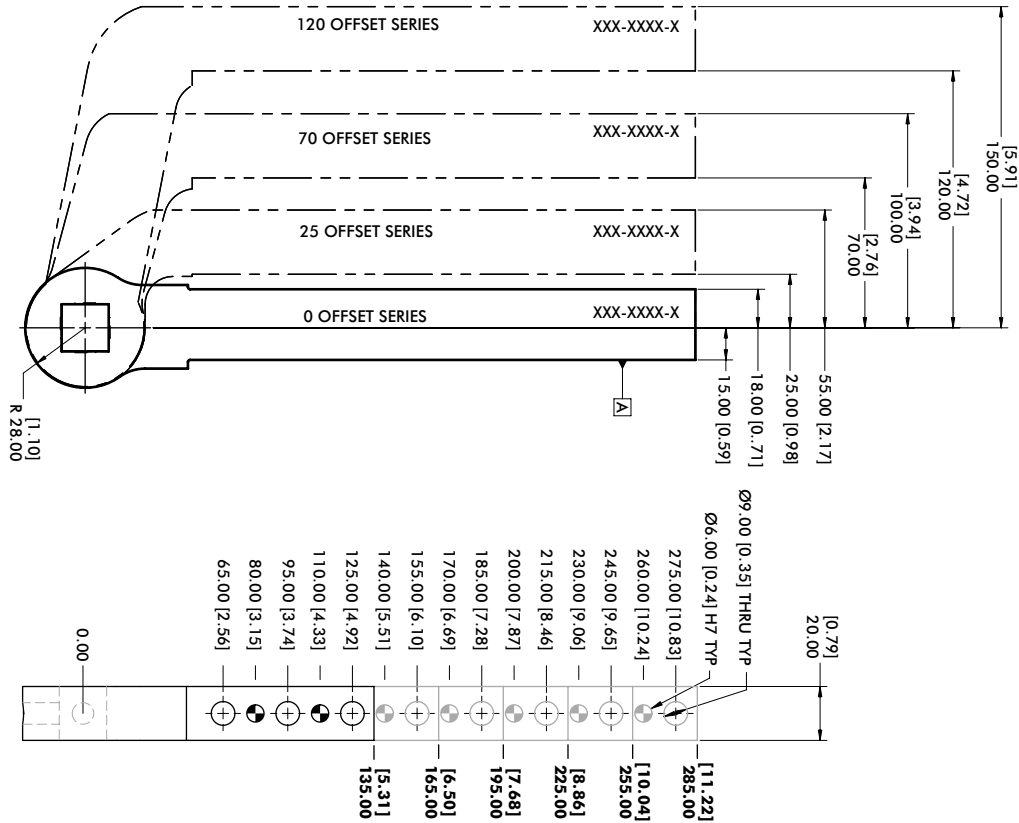


Arm Styles	135°	135°	100°	100°	N/A	N/A
1206-1208/3236-3238	135°	135°	100°	100°	N/A	N/A
1216-1218/3246-3248	135°	N/A	50°	125°	N/A	30°
1226-1228/3256-3258	125°	N/A	35°	135°	N/A	50°

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 63mm with 23 Clamp Arm Shaft Option



### 135mm [5.31"] Arm Length

Series	Arm Style	Model
120 Offset	▲ 1543	B8JG-1543-1
70 Offset	▲ 1531	B8JG-1531-1
25 Offset	▲ 1519	B8JG-1519-1
0 Offset	▲ 1507	B8JG-1507-1

### 165mm [6.50"] Arm Length

Series	Arm Style	Model
120 Offset	▲ 1544	B8JG-1544-1
70 Offset	▲ 1532	B8JG-1532-1
25 Offset	▲ 1520	B8JG-1520-1
0 Offset	▲ 1508	B8JG-1508-1

### 195mm [7.68"] Arm Length

Series	Arm Style	Model
120 Offset	▲ 1545	B8JG-1545-1
70 Offset	▲ 1533	B8JG-1533-1
25 Offset	▲ 1521	B8JG-1521-1
0 Offset	▲ 1509	B8JG-1509-1

### 225mm [8.86"] Arm Length

Series	Arm Style	Model
120 Offset	▲ 1546	B8JG-1546-1
70 Offset	▲ 1534	B8JG-1534-1
25 Offset	▲ 1522	B8JG-1522-1
0 Offset	▲ 1510	B8JG-1510-1

### 255mm [10.04"] Arm Length

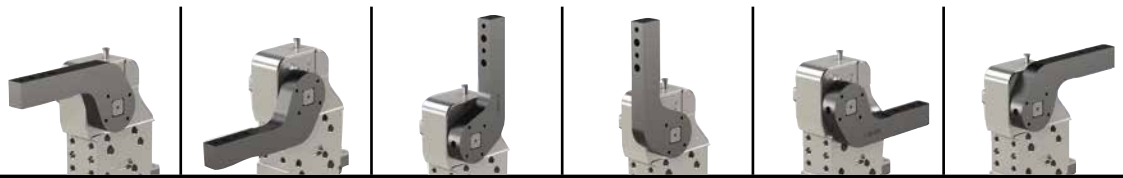
Series	Arm Style	Model
120 Offset	▲ 1547	B8JG-1547-1
70 Offset	▲ 1535	B8JG-1535-1
25 Offset	▲ 1523	B8JG-1523-1
0 Offset	▲ 1511	B8JG-1511-1

### 285mm [11.22"] Arm Length

Series	Arm Style	Model
120 Offset	▲ 1548	B8JG-1548-1
70 Offset	▲ 1536	B8JG-1536-1
25 Offset	▲ 1524	B8JG-1524-1
0 Offset	▲ 1512	B8JG-1512-1

▲ Common in North America

### Maximum Opening Angle (shown in locked position)



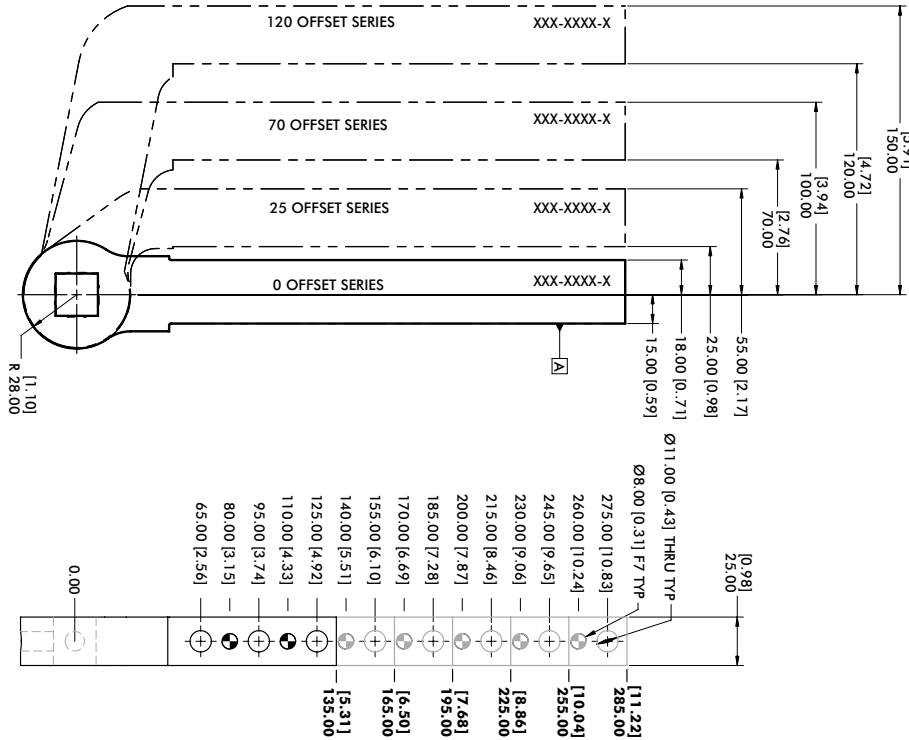
Arm Styles	1	2	3	4	5	6
1510-1512/1507-1509	135°	135°	100°	100°	N/A	N/A
1522-1524/1519-1521	135°	N/A	50°	130°	N/A	40°
1534-1536/1531-1533	115°	N/A	25°	135°	N/A	75°
1546-1548/1543-1545	110°	N/A	20°	135°	N/A	85°



# LATERAL (SIDE) ARMS, NAAMS-STYLE

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 63mm with D0 Clamp Arm Shaft Option



### 135mm [5.31"] Arm Length

Series	Arm Style	Model
120 Offset	▲ • 1043	B8JG-1043-1
70 Offset	▲ • 1031	B8JG-1031-1
25 Offset	▲ • 1019	B8JG-1019-1
0 Offset	▲ • 1007	B8JG-1007-1

### 165mm [6.50"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1044	B8JG-1044-1
70 Offset	▲ • 1032	B8JG-1032-1
25 Offset	▲ • 1020	B8JG-1020-1
0 Offset	▲ • 1008	B8JG-1008-1

### 195mm [7.68"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1045	B8JG-1045-1
70 Offset	▲ • 1033	B8JG-1033-1
25 Offset	▲ ⓘ 1021	B8JG-1021-1
0 Offset	▲ • 1009	B8JG-1009-1

### 225mm [8.86"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1046	B8JG-1046-1
70 Offset	▲ • 1034	B8JG-1034-1
25 Offset	▲ ⓘ 1022	B8JG-1022-1
0 Offset	▲ ⓘ 1010	B8JG-1010-1

### 255mm [10.04"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1047	B8JG-1047-1
70 Offset	▲ • 1035	B8JG-1035-1
25 Offset	▲ ⓘ 1023	B8JG-1023-1
0 Offset	▲ ⓘ 1011	B8JG-1011-1

### 285mm [11.22"] Arm Length

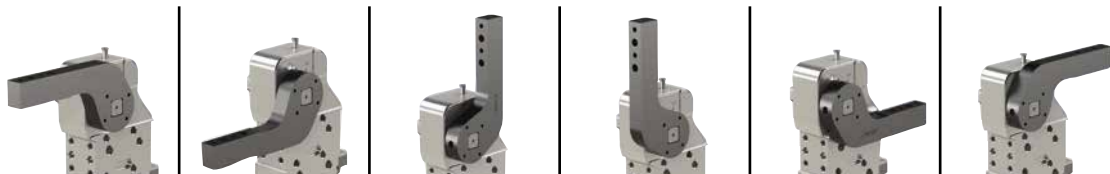
Series	Arm Style	Model
120 Offset	▲ ⓘ 1048	B8JG-1048-1
70 Offset	▲ ⓘ 1036	B8JG-1036-1
25 Offset	▲ ⓘ 1024	B8JG-1024-1
0 Offset	▲ ⓘ 1012	B8JG-1012-1

▲ Common in North America

(•) STANDARD ARM OFFERING

(ⓘ) NON-STANDARD ARM OFFERING (extended leadtimes apply)

### Maximum Opening Angle (shown in locked position)

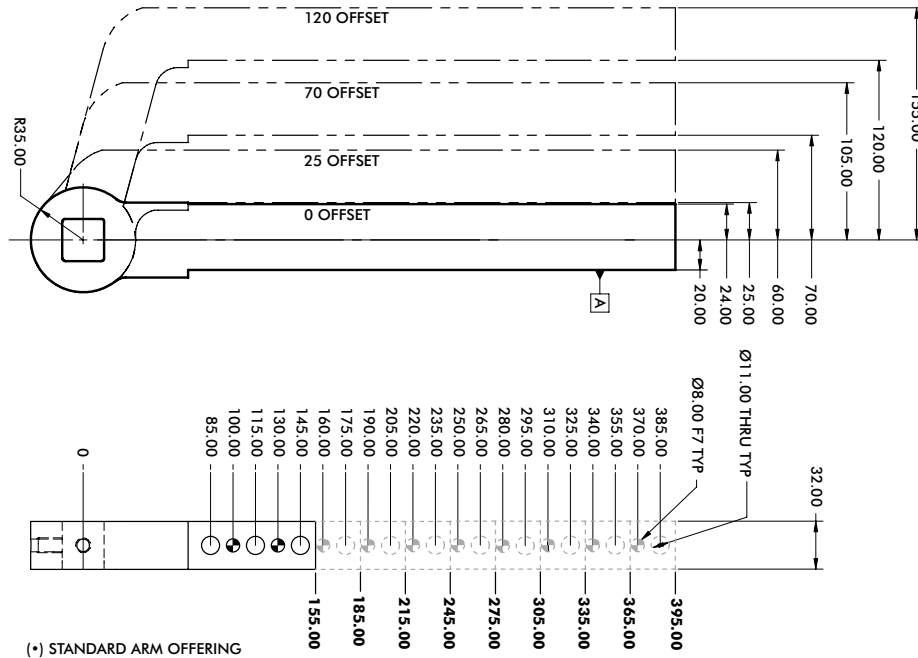


Arm Styles	1	2	3	4	5	6
1010-1012/1007-1009	135°	135°	100°	100°	N/A	N/A
1022-1024/1019-1021	135°	N/A	50°	130°	N/A	40°
1034-1036/1031-1033	115°	N/A	25°	135°	N/A	75°
1046-1048/1043-1045	110°	N/A	20°	135°	N/A	85°

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions and Technical Specifications

For Size 80mm



### 155mm [4.53"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1170	B8JG-1170-1
70 Offset	▲ • 1150	B8JG-1150-1
25 Offset	▲ ⓘ 1130	B8JG-1130-1
0 Offset	▲ ⓘ 1110	B8JG-1110-1

### 185mm [7.28"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1171	B8JG-1171-1
70 Offset	▲ ⓘ 1151	B8JG-1151-1
25 Offset	▲ ⓘ 1131	B8JG-1131-1
0 Offset	▲ ⓘ 1111	B8JG-1111-1

### 215mm [8.46"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1172	B8JG-1172-1
70 Offset	▲ ⓘ 1152	B8JG-1152-1
25 Offset	▲ ⓘ 1132	B8JG-1132-1
0 Offset	▲ • 1112	B8JG-1112-1

### 245mm [9.65"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1173	B8JG-1173-1
70 Offset	▲ ⓘ 1153	B8JG-1153-1
25 Offset	▲ ⓘ 1133	B8JG-1133-1
0 Offset	▲ ⓘ 1113	B8JG-1113-1

### 275mm [10.83"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1174	B8JG-1174-1
70 Offset	▲ ⓘ 1154	B8JG-1154-1
25 Offset	▲ • 1134	B8JG-1134-1
0 Offset	▲ ⓘ 1114	B8JG-1114-1

### 305mm [12.00"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1175	B8JG-1175-1
70 Offset	▲ • 1155	B8JG-1155-1
25 Offset	▲ ⓘ 1135	B8JG-1135-1
0 Offset	▲ ⓘ 1115	B8JG-1115-1

### 335mm [13.19"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1176	B8JG-1176-1
70 Offset	▲ ⓘ 1156	B8JG-1156-1
25 Offset	▲ ⓘ 1136	B8JG-1136-1
0 Offset	▲ ⓘ 1116	B8JG-1116-1

### 365mm [14.37"] Arm Length

Series	Arm Style	Model
120 Offset	▲ ⓘ 1177	B8JG-1177-1
70 Offset	▲ ⓘ 1157	B8JG-1157-1
25 Offset	▲ ⓘ 1137	B8JG-1137-1
0 Offset	▲ ⓘ 1117	B8JG-1117-1

### 395mm [15.55"] Arm Length

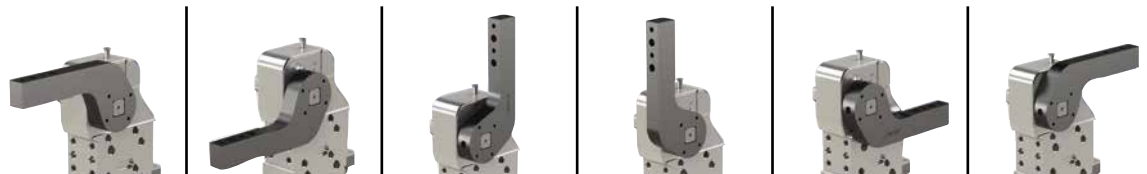
Series	Arm Style	Model
120 Offset	▲ ⓘ 1178	B8JG-1178-1
70 Offset	▲ • 1158	B8JG-1158-1
25 Offset	▲ ⓘ 1138	B8JG-1138-1
0 Offset	▲ • 1118	B8JG-1118-1

▲ Common in North America

(\*) STANDARD ARM OFFERING

ⓘ NON-STANDARD ARM OFFERING (extended leadtimes apply)

### Maximum Opening Angle (shown in locked position)



Arm Styles	1110 - 1118	1130 - 1138	1150 - 1158	1170 - 1178
120 Offset	135°	135°	100°	100°
70 Offset	135°	N/A	60°	120°
25 Offset	125°	N/A	35°	135°
0 Offset	115°	N/A	25°	135°
1150 - 1158	N/A	N/A	N/A	N/A
1170 - 1178	N/A	N/A	N/A	N/A