

# PNEUMATIC POWER CLAMPS

## Sizing and Application Chart



Series	Page MC-PPC-#	Holding Torque at 5 bar Nm					Clamping Torque at 5 bar Nm					Piston Diameter mm						
		0 to 100	100 to 500	500 to 1000	1000 to 2000	2000 to 4000	0 to 100	100 to 500	500 to 1000	1000 to 2000	2000 to 4000	Less than 25	25	32	40	50	63	80
81L	3	●					●					●						
82L-4	7	●					●					●	●					
82L-2	15	●	●				●	●				●	●	●				
82M-3E	25		●	●	●		●	●							●	●	●	●
52H-3E	47			●														
870/871	57		●				●								●			
860/861	59			●				●								●		
890/891	59			●				●									●	
1000/1001	59			●					●								●	●
82D	61	●					●	●							●		●	

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# PNEUMATIC POWER CLAMPS

## Sizing and Application Chart

Material	Weight Kg	Air Consumption per Double Stroke at 5 bar dm <sup>3</sup>	Suitable Application Areas																		
			Welding	Assembly	Dirty Environment	End Effectors	Machining	Duty Cycle	Adjustable Opening Angle	Inductive Sensors Available	Dual Arms	Locating	Manual Version Available	Center Arm	Lateral Arms	Toggle Locking					
Aluminum																					
Steel																					
	0 to 2																				
	2-4																				
	4-6																				
	6-8																				
	More than 8																				
	0 to 0.5																				
	0.50 to 1.00																				
	1.00 to 2.00																				
	More than 2.00																				

● Excellent/High 
 ○ Fair/Medium 
 ● Poor/Low 
 ⊗ Not Recommended

# 81L SERIES

## Pneumatic Power Clamps | Ordering Information

81L 12-1 01 00

### Base Model

### Size

### Description

12-1	12mm Cylinder Bore Size
16-1	16mm Cylinder Bore Size
20-1	20mm Cylinder Bore Size
25-1	25mm Cylinder Bore Size

### Arm Style

### Description

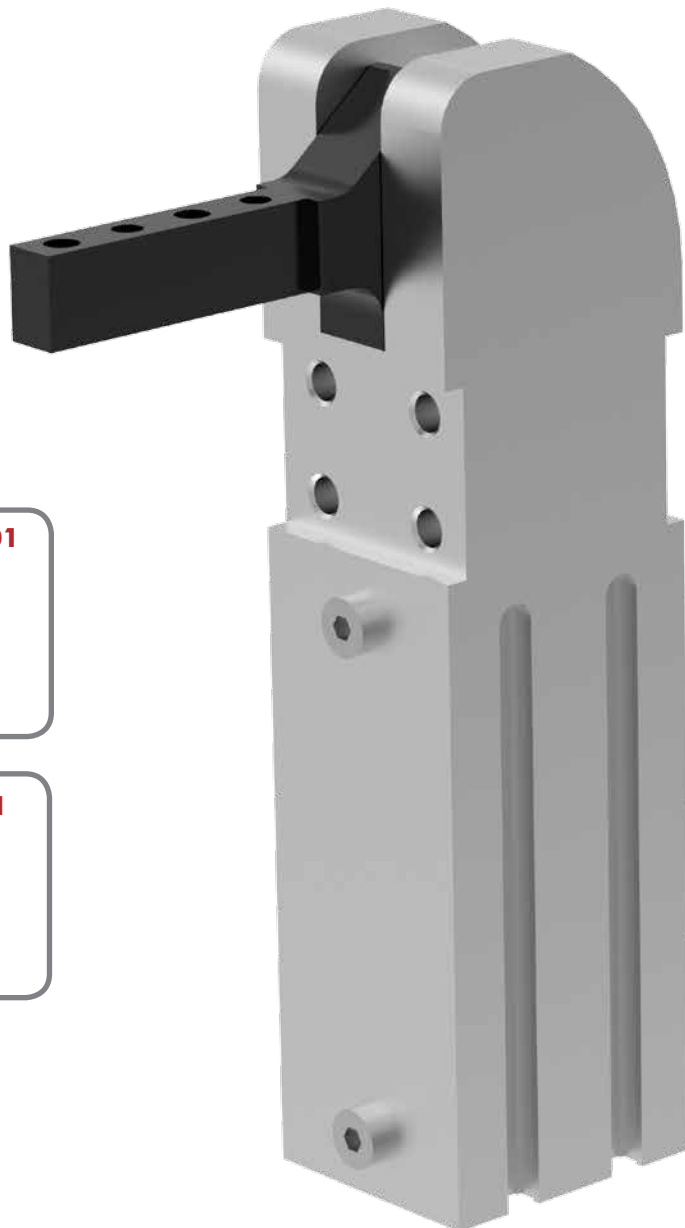
01	Clamping arm, horizontal
41	Clamping arm, vertical

See below for further details

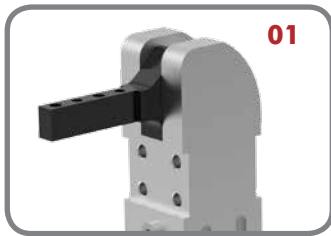
### Design

### Description

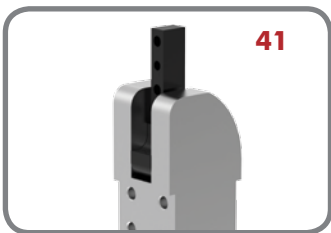
00	Standard design
----	-----------------



### Arm Style



01



41



### Accessories

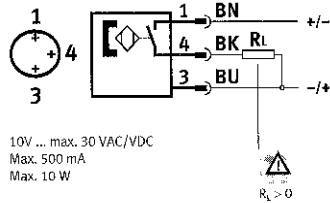
**8EA-109-1**

Description (order separately)

Sensor, 3-wire cable, M8x1 connector, 3-pin

**82ZB-004-1**

Adapter for mounting 81L20-1, 81L25-1 to 25mm dia. bar



**12**

Max Holding Torque  
25 Nm  
Max Clamping Torque  
4,5 Nm at 5bar

**16**

Max Holding Torque  
60 Nm  
Max Clamping Torque  
7,0 Nm at 5bar

**20**

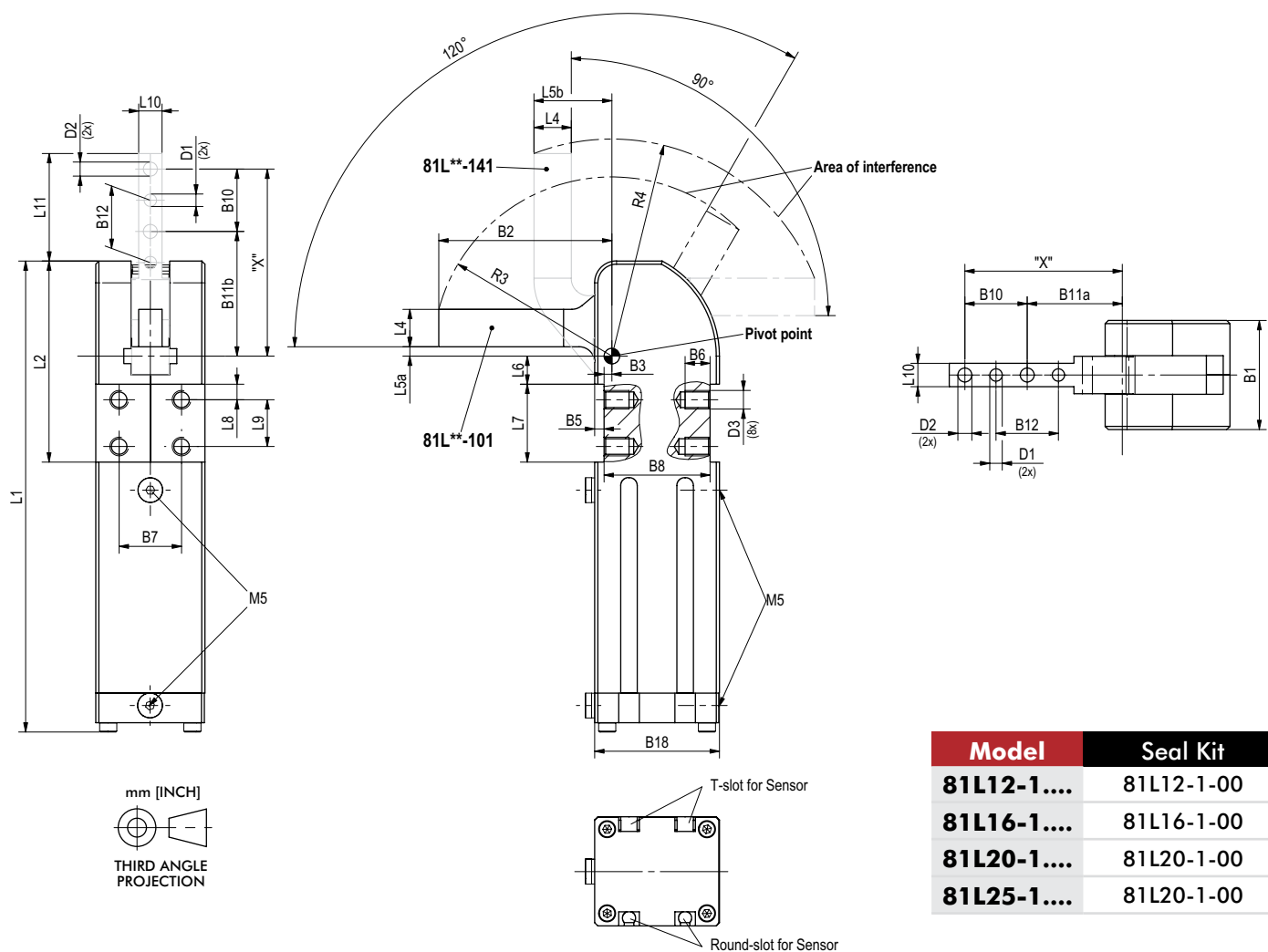
Max Holding Torque  
100 Nm  
Max Clamping Torque  
18 Nm at 5bar

**25**

Max Holding Torque  
100 Nm  
Max Clamping Torque  
18 Nm at 5bar

# 81L SERIES

## Pneumatic Power Clamps | Dimensions and Seal Kits



Power by compressed air, max. 6 bar Operation with oil-free air is permissible.

Model	D1 Ø [H7]	D2 Ø	D3 Ø	B1	B2	B3 ±0,1	B5 ±0,2	B6	B7 ±0,1	B8 ±0,1	B10 ±0,2	B11a	B11b	B12
81L12-1....	[0.12] 3	[0.13] 3,3	M4	[0.94] 24	[1.57] 40	[0.10] 2,5	[0.06] 1,5	[0.24] 6	[0.59] 15	[0.98] 25	[0.35] 9	[1.06] 27	[1.24] 31,5	[0.35] 9
81L16-1....	[0.12] 3	[0.17] 4,3	M5	[1.12] 30	[1.97] 50	[0.08] 2	[0.08] 2	[0.19] 5	[0.79] 20	[1.02] 26	[0.59] 15	[1.18] 30	[1.56] 39,5	[0.59] 15
81L20-1....	[0.16] 4	[0.18] 4,5	M6	[1.38] 35	[2.12] 55,5	[0.10] 2,5	[0.12] 3	[0.28] 7	[0.79] 20	[1.34] 34	[0.79] 20	[1.20] 30,5	[1.57] 40	[0.79] 20
81L25-1....	[0.16] 4	[0.26] 6,5	M6	[1.38] 35	[2.58] 65,5	[0.10] 2,5	[0.12] 3	[0.28] 7	[0.79] 20	[1.34] 34	[0.79] 20	[1.59] 40,5	[1.97] 50	[0.79] 20

Model	B18	L1 ~	L2	L4	L5a	L5b	L6	L7 ±0,1	L8	L9	L10	L11	R3 ~	R4 ~
81L12-1....	[1.10] 28	[4.09] 104	[1.59] 40,5	[0.28] 7	[0.10] 2,5	[0.7] 17,5	[0.18] 4,5	[0.59] 15	[0.12] 3	[0.35] 9	[0.24] 6	[0.93] 23,5	[1.61] 41	[1.89] 48
81L16-1....	[1.18] 30	[4.69] 119	[1.95] 49,5	[0.35] 9	0.09 2,25	[0.8] 20,5	[0.23] 5,75	[0.79] 20	[0.16] 4	[0.47] 12	[0.31] 8	[1.41] 35,75	[2.00] 51	[2.48] 63
81L20-1....	[1.57] 40	[5.94] 151	[2.54] 64,5	[0.47] 12	[0.12] 3	[0.98] 25	[0.35] 9	[0.98] 25	[0.19] 5	[0.59] 15	[0.29] 7,5	[1.36] 34,5	[2.26] 57,5	[2.75] 70
81L25-1....	[1.57] 40	[5.94] 151	[2.54] 64,5	[0.47] 12	[0.12] 3	[0.98] 25	[0.35] 9	[0.98] 25	[0.19] 5	[0.59] 15	[0.47] 12	[1.75] 44,5	[2.64] 67	[3.11] 79

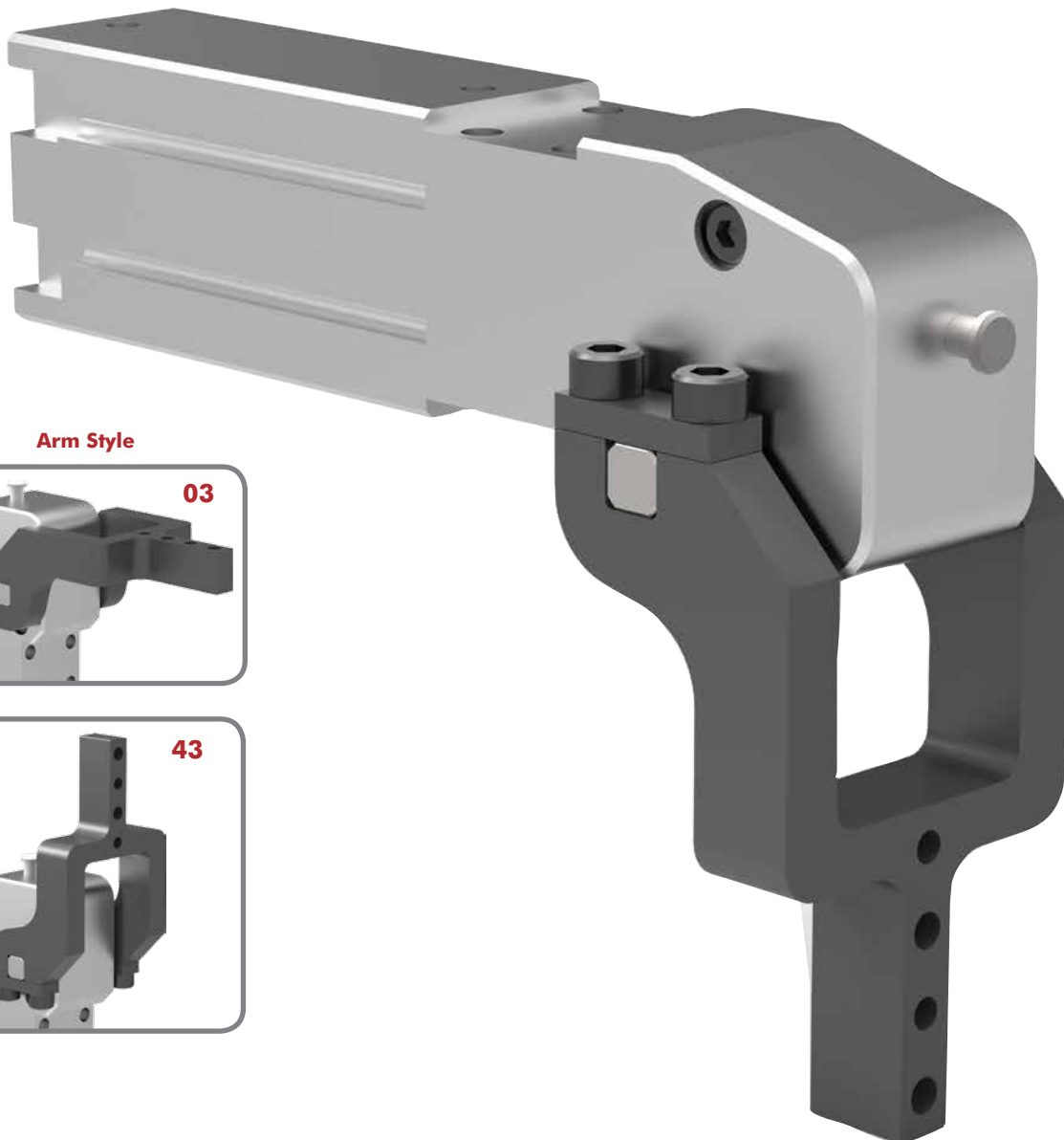
Model	Max. Holding Torque Nm [lb ft]	Max. Clamping Torque at 5 bar [72 psi] Nm [lb ft]	Weight kg [lb]	Air Consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Max. Added Load (at Position, "X") g [oz]
81L12-101..	25 [18.4]	4,5 [3.3]	0,16 [0.4]	0,25 [0.01]	50 [1.8]
81L12-141..	20 [14.8]	4,5 [3.3]	0,17 [0.4]	0,25 [0.01]	50 [1.8]
81L16-101..	60 [44]	6,5 [4.8]	0,25 [0.6]	0,27 [0.01]	80 [2.8]
81L16-141..	40 [29.5]	7,0 [5.23]	0,27 [0.6]	0,26 [0.01]	80 [2.8]
81L20-101..	100 [73.8]	18 [13.3]	0,50 [1.1]	0,40 [0.02]	90 [3.2]
81L20-141..	80 [59]	17 [12.5]	0,52 [1.2]	0,35 [0.01]	90 [3.2]
81L25-101..	100 [73.8]	18 [13.3]	0,52 [1.2]	0,40 [0.02]	100 [3.5]
81L25-141..	80 [59]	17 [12.5]	0,54 [1.25]	0,35 [0.01]	100 [3.5]

# 82L...-4... SERIES

## Pneumatic Power Clamps | Ordering Information

**82L**   **16-4**   **03**   **0**

Base Model	Size	Description	Arm Style	Description	Opening Angle	Description
	<b>12-4</b>	12mm Cylinder Bore Size	<b>00</b>	No clamping arm	<b>0</b>	105° (Standard)
	<b>16-4</b>	16mm Cylinder Bore Size	<b>03</b>	U-bar, central 90°	<b>3</b>	90°
	<b>20-4</b>	20mm Cylinder Bore Size	<b>43</b>	U-bar, central 180°	<b>4</b>	75°
	<b>25-4</b>	25mm Cylinder Bore Size	See below for further details		<b>5</b>	60°
					<b>6</b>	45°
					<b>7</b>	30°
					<b>8</b>	15°



# 82L..-4... SERIES

## Pneumatic Power Clamps | Ordering Information

### Accessories

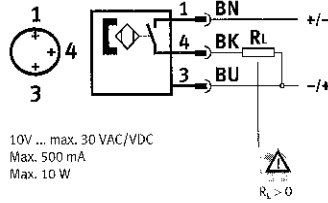
**8EA-109-1**

**82ZB-004-1**

### Description (order separately)

Sensor, 3-wire cable, M8x1 connector, 3-pin

Adapter for mounting 82L20-4, 82L25-4 to 25mm dia. bar



**12**

Max Holding Torque  
35 Nm

Max Clamping Torque

**90° version:** 10,4 Nm at 5bar

**180° version:** 8,7 Nm at 5bar

**16**

Max Holding Torque  
40 Nm

Max Clamping Torque

12,4 Nm at 5bar

11,0 Nm at 5bar

**20**

Max Holding Torque  
50 Nm

Max Clamping Torque

21,0 Nm at 5bar

19,3 Nm at 5bar

**25**

Max Holding Torque  
80 Nm

Max Clamping Torque

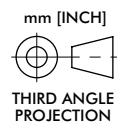
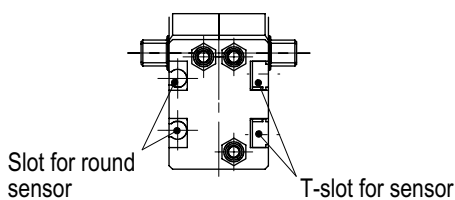
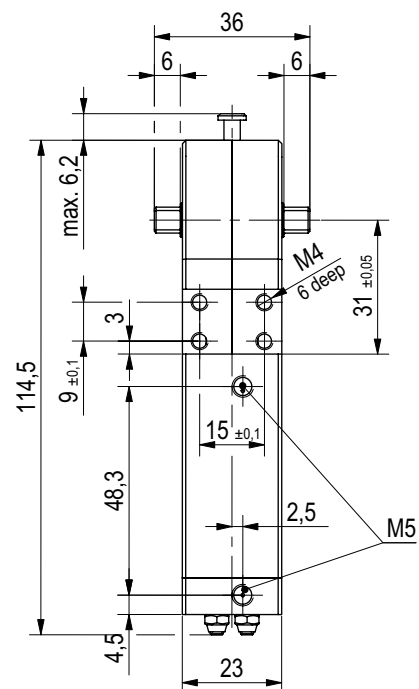
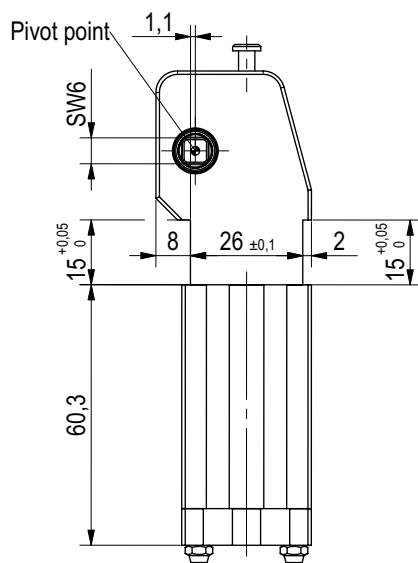
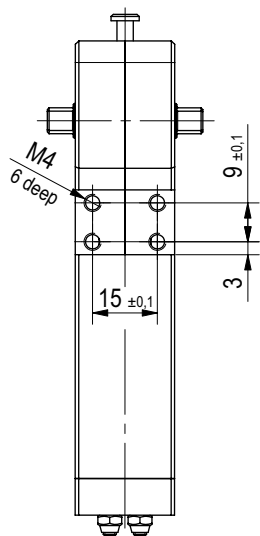
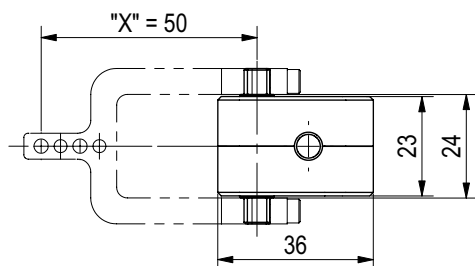
31,8 Nm at 5bar

28,5 Nm at 5bar



# 82L12-4 SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

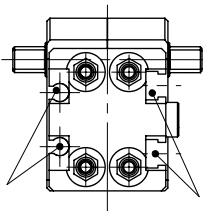
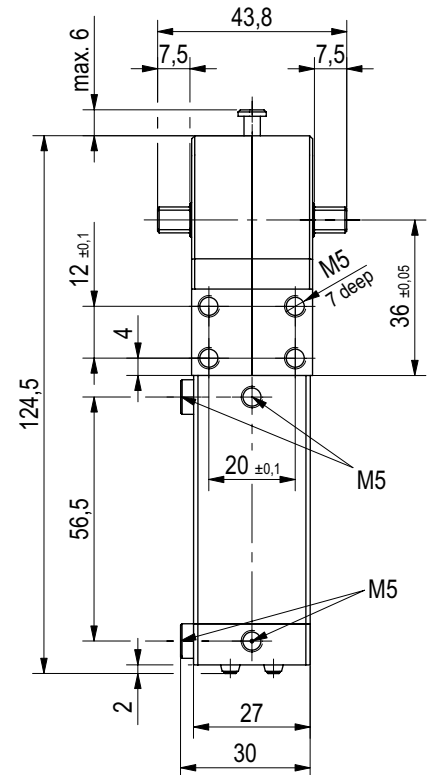
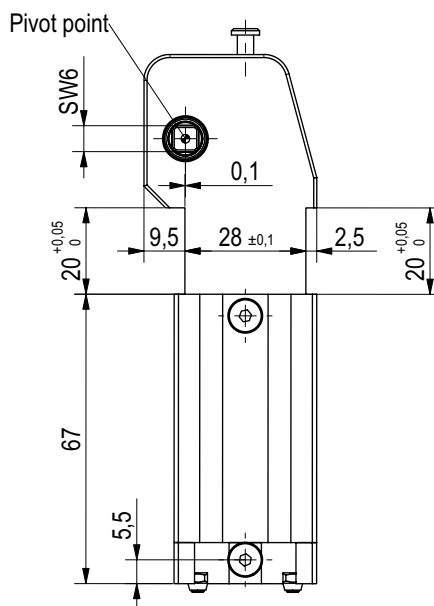
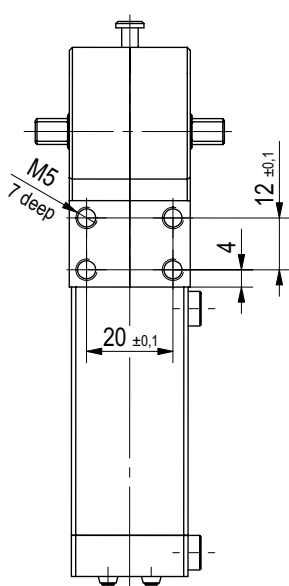
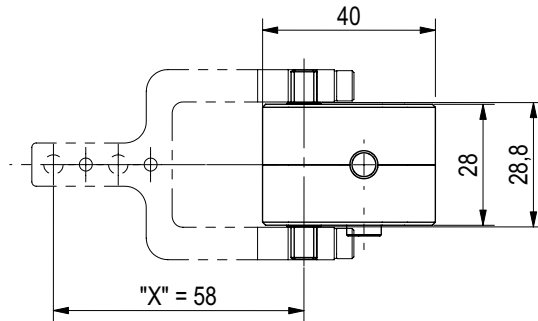


Power by compressed air, max. 6 bar Operation with oil-free air is permissible.

Model	Max. Holding Torque Nm [lb ft]	Max. Clamping Torque at 5 bar [72 psi] Nm [lb ft]	Weight [with arm] kg [lb]	Air Consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Max. Added Load (at Position "X") g [oz]
82L12-4030	35 [25.8]	10,4 [7.8]	0,23 [0.5]	0,25 [0.01]	50 [1.8]
82L12-4430	35 [25.8]	8,7 [6.4]	0,23 [0.5]	0,25 [0.01]	50 [1.8]

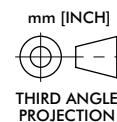
# 82L16-4 SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications



Slot for round sensor

T-slot for sensor

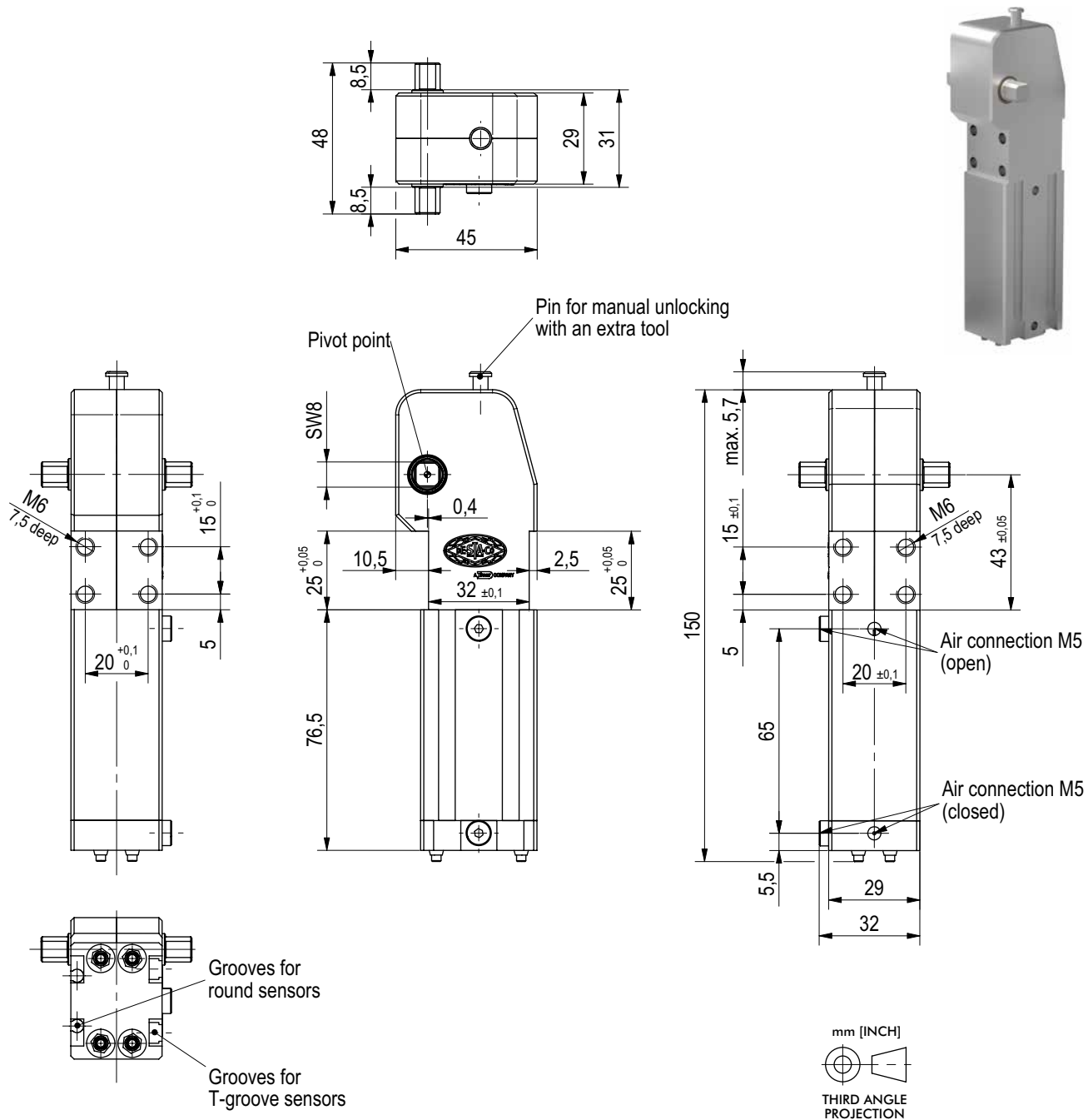


Power by compressed air, max. 6 bar Operation with oil-free air is permissible.

Model	Max. Holding Torque Nm [lb ft]	Max. Clamping Torque at 5 bar [72 psi] Nm [lb ft]	Weight [with arm] kg [lb]	Air Consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Max. Added Load (at Position "X") g [oz]
82L16-4030	40 [29.5]	12,4 [9.4]	0,33 [0.7]	0,27 [0.01]	80 [2.8]
82L16-4430	40 [29.5]	11,0 [8.1]	0,33 [0.7]	0,27 [0.01]	80 [2.8]

# 82L20-4 SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

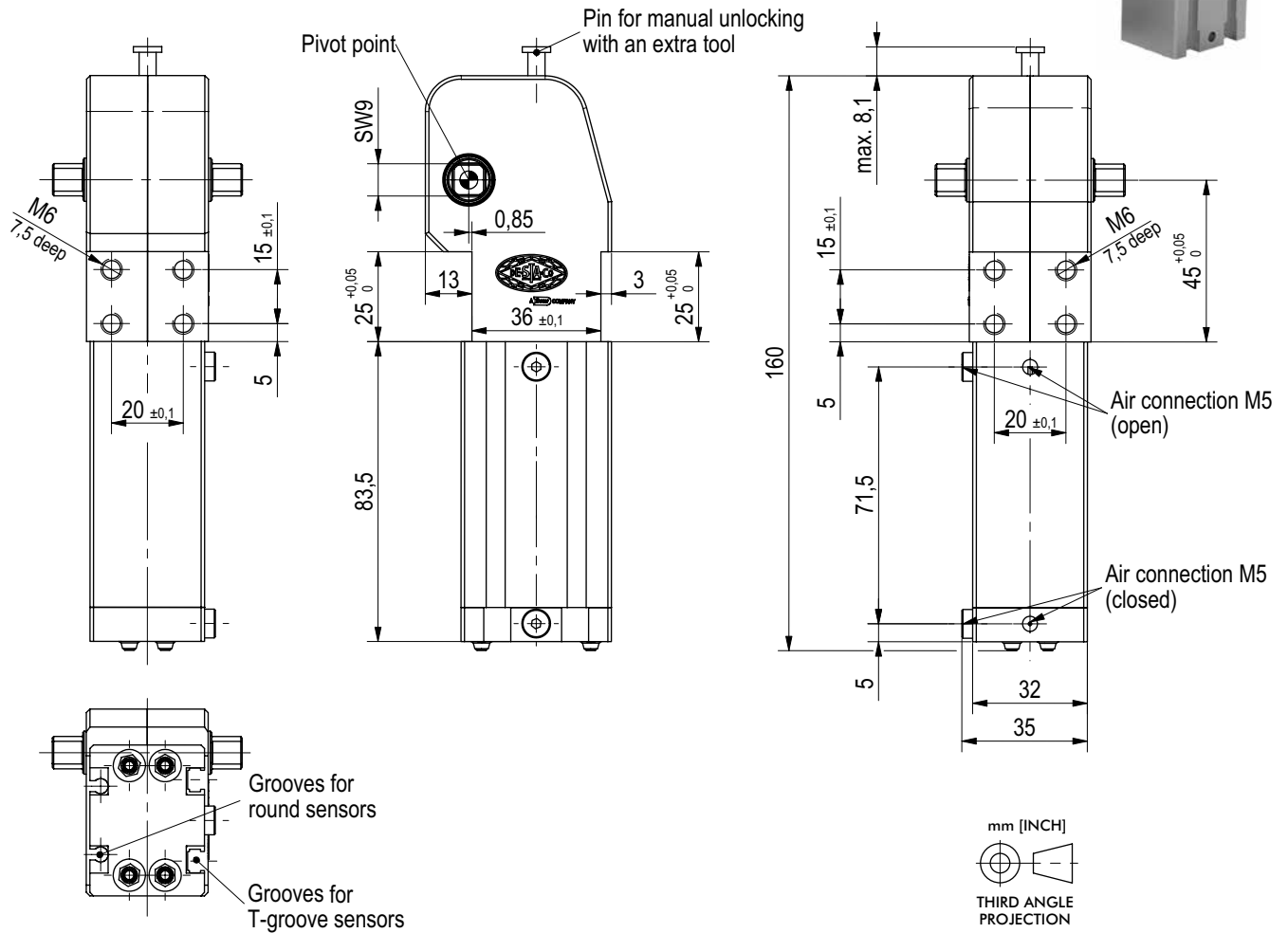
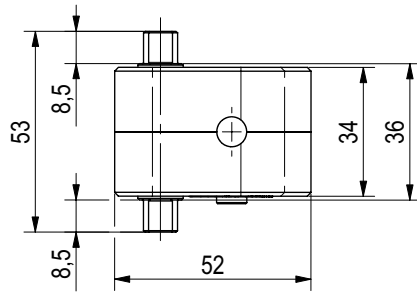


Power by compressed air, max. 6 bar Operation with oil-free air is permissible.

Model	Max. Holding Torque Nm [lb ft]	Max. Clamping Torque at 5 bar [72 psi] Nm [lb ft]	Weight [with arm] kg [lb]	Air Consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Max. Added Load (at Position "X") g [oz]
82L20-4030	50 [36.9]	21,0 [15.5]	0,42 [0.9]	0,35 [0.01]	90 [3.2]
82L20-4430	50 [36.9]	19,3 [14.3]	0,42 [0.9]	0,35 [0.01]	90 [3.2]

# 82L25-4 SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

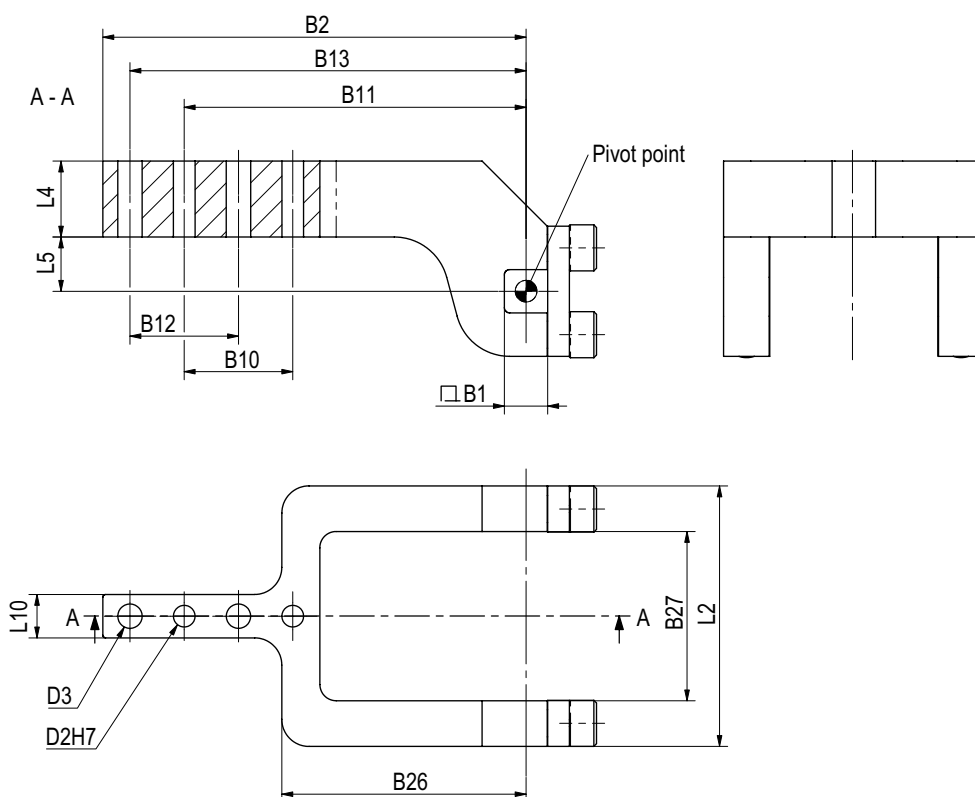


Power by compressed air, max. 6 bar Operation with oil-free air is permissible.

Model	Max. Holding Torque Nm [lb ft]	Max. Clamping Torque at 5 bar [72 psi] Nm [lb ft]	Weight [with arm] kg [lb]	Air Consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Max. Added Load (at Position "X") g [oz]
<b>82L25-4030</b>	80 [59]	31,8 [23.5]	0,66 [1.5]	0,40 [0.01]	100 [3.5]
<b>82L25-4430</b>	80 [59]	28,5 [12.5]	0,66 [1.5]	0,40 [0.01]	100 [3.5]

# 82L...-4... SERIES

## Pneumatic Power Clamps | Clamp Arm Dimensions



Model	Order no. for Arm	Max. Opening angle	B1	B2	B10 ±0,02	B11 ±0,02	B12 ±0,1	B13 ±0,1	B26	B27	D2 H7	D3	L2	L4	L5	L10
82L12-4...	8JG-401-1-01	105°	6	54	9	45.5	9	50	38,5	24	3	3.3	36	7	10	6
82L16-4...	8JG-402-1-01	105°	6	63	15	50.5	15	58	36,5	29	3	4.5	44	9.5	10	10
82L20-4...	8JG-403-1-01	105°	8	78	20	63	20	73	45	31,2	4	4.5	48	14	10	8
82L25-4...	8JG-404-1-01	105°	9	81	20	66	20	76	48	36	4	6.4	53	16	10	12



# 82L...-2... SERIES

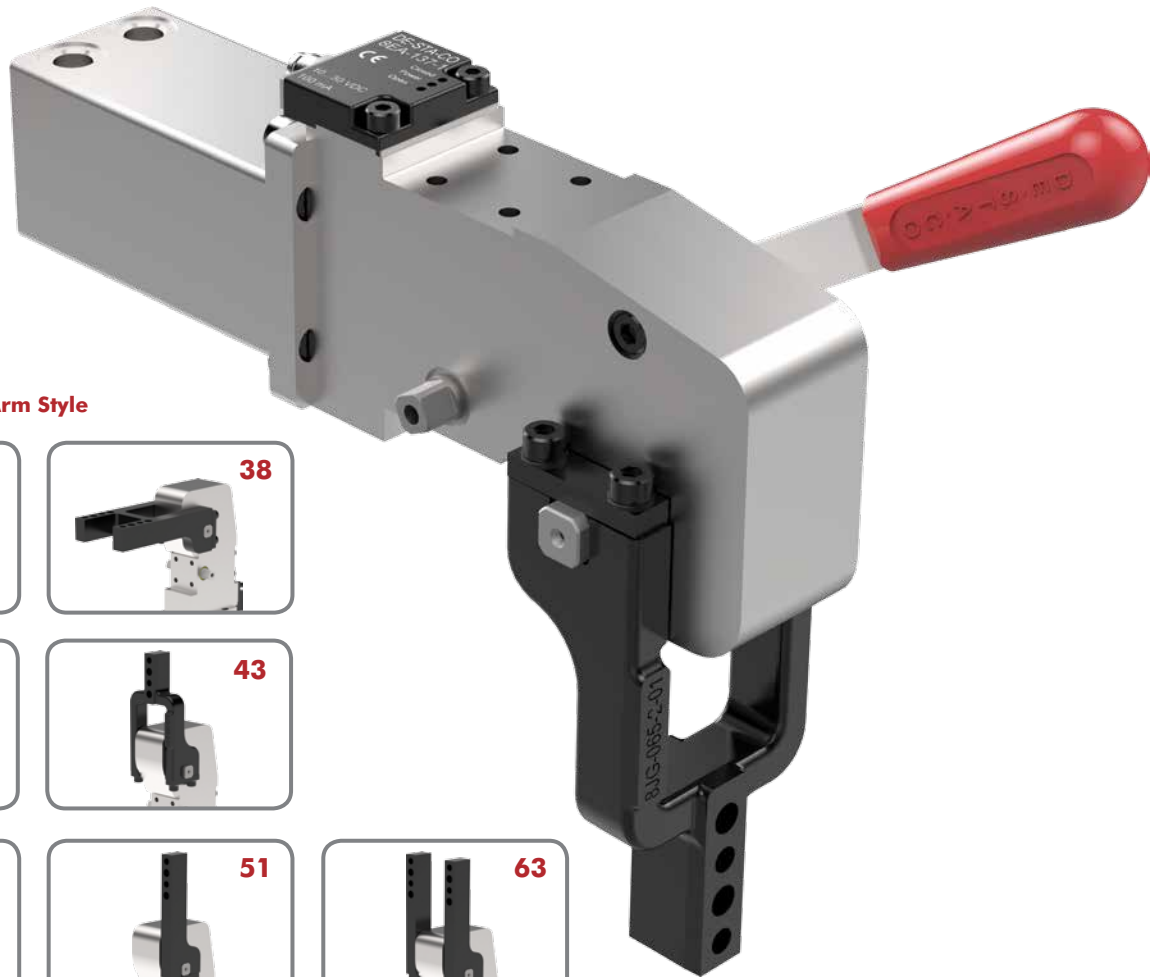
## Pneumatic Power Clamps | Ordering Information

**82L** **2G** **-2** **03** **B8** **H** **0** **B**

Base Model	Size	Description
	<b>2G</b>	Ø25 (G1/8) Cylinder Bore Size
	<b>3G</b>	Ø32 (G1/8) Cylinder Bore Size
	<b>3N</b>	Ø32 (1/8-18 NPT) Cylinder Bore Size
	<b>4G</b>	Ø40 (G1/4) Cylinder Bore Size
	<b>4N</b>	Ø40 (1/4-18 NPT) Cylinder Bore Size

Arm Style	Description
<b>03</b>	U-clamp arm, central 90°
<b>11</b>	Lateral clamp arm, left 90°
<b>12</b>	Lateral clamp arm, right 90°
<b>23</b>	2x lateral clamp arm 90°
<b>38</b>	H-clamp arm 90°
<b>43</b>	U-clamp arm, central 180°
<b>51</b>	Lateral clamp arm, left 180°
<b>52</b>	Lateral clamp arm, right 180°
<b>63</b>	2x lateral clamp arm 180°
<b>78</b>	H-clamp arm 180°

See below for further details



### Arm Style



# 82L..-2... SERIES

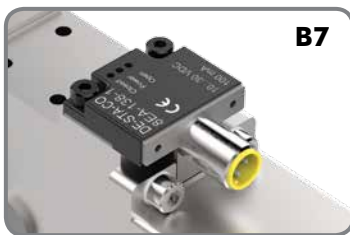
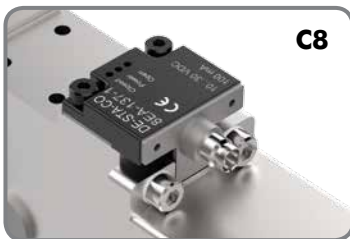
## Pneumatic Power Clamps | Ordering Information

Hand Lever	Description
<b>0</b>	No Hand Lever
<b>H</b>	With Hand Lever

Base Model	Description
<b>B</b>	Power clamp without clamping arm. To be marked with an additional "B". Only with clamping arm "03"

Opening Angle	Description
<b>0</b>	105° (Standard)
<b>3</b>	90°
<b>4</b>	75°
<b>5</b>	60°
<b>6</b>	45°
<b>7</b>	30°
<b>8</b>	15°

Sensing	Description
<b>00</b>	No Sensing
<b>C8</b>	8EA-137-1 (M8x1)
<b>B7</b>	8EA-138-1 (M12x1)
<b>B8</b>	8EA-139-1 (M12x1)



**2G**

Max Holding Torque  
75 Nm  
Max Clamping Torque  
25 Nm at 5bar

**3G/N**

Max Holding Torque  
180 Nm  
Max Clamping Torque  
55 Nm at 5bar

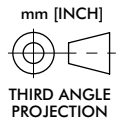
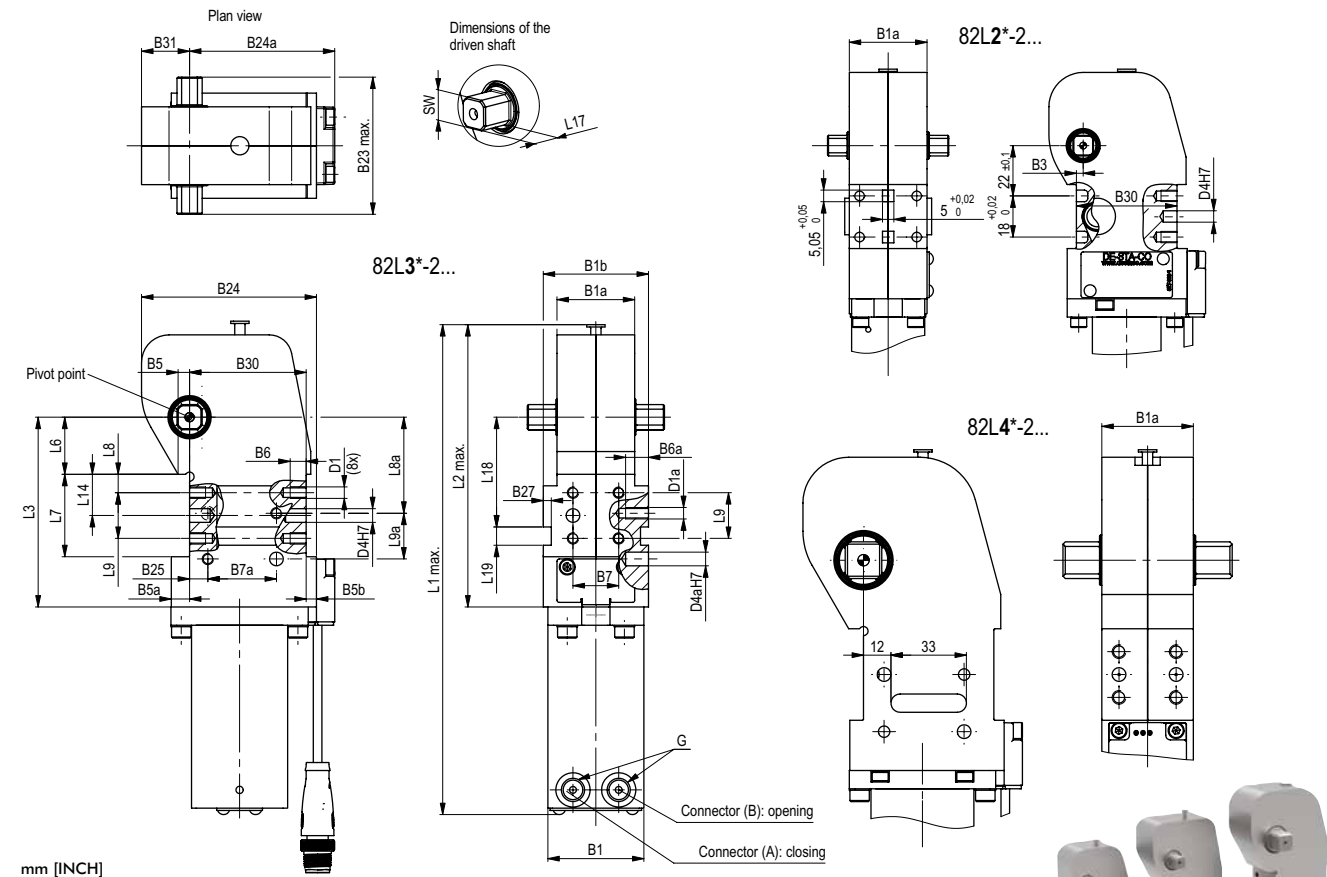
**4G/N**

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



# 82L...-2... SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications



Power by compressed air, max. 6 bar  
Operation with oil-free air is permissible.

### Technical Information | Model without Hand Lever

Model	Max. holding torque Nm [lb ft]	Clamping torque at 5 bar [72 psi] Nm [lb ft]	Piston Ø mm	Weight kg [lbs]	Air consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Connection G
82L2G-2...	75 [55]	25 [18]	25	1,0 [2.20]	0,4 [0.01]	G1/8
82L3G-2... 82L3N-2...	180 [133]	55 [41]	32	1,3 [2.86]	0,8 [0.03]	G1/8 1/8-18 NPT
82L4G-2... 82L4N-2...	380 [280]	120 [89]	40	1,9 [4.18]	1,2 [0.04]	G1/4 1/4-18 NPT

Model	B1	B1a	B1b	B3	B5	B5a	B5b	B6	B6a	B7	B7a**	B23	B24	B24a	B25	B27	B30	B31
										± 0,1	± 0,1	max.			± 0,1		± 0,1	
82L2G-2...	32	34	-	3	4	4	4,5	7	-	25	-	53	60,5	53,5	-	-	44	15
82L3.-2...	42	34	46	-	5	8	4,5	7	10	20	30	60	76,5	63,5	8	3,5	51	21
82L4.-2...	45	40	-	-	6,5	6	4,5	10	10	25	35	74	88	69,5	9	3,5	57	26,5

Model	D1	D1a	D4	D4a	L1	L2	L3	L6	L7	L8	L8a	L9	L9a**	L14	L17	L18	L19	SW
			H7	H7	max.	max.		± 0,05	+ 0,1	± 0,1	± 0,1	± 0,1	± 0,1	± 0,1	± 0,1		N9	h9
82L2G-2...	M5	M5	5	-	183,5	104,5	67	17	28	5	-	18	-	14	8,5	-	-	9
82L3.-2...	M5	M5	6	6	215	124	83	25	36	8	42	20	20	18	12,5	48	8	11
82L4.-2...	M6	M6	6	6	245	141	92	30	40	10	50	20	25	20	16	58,5	8	16

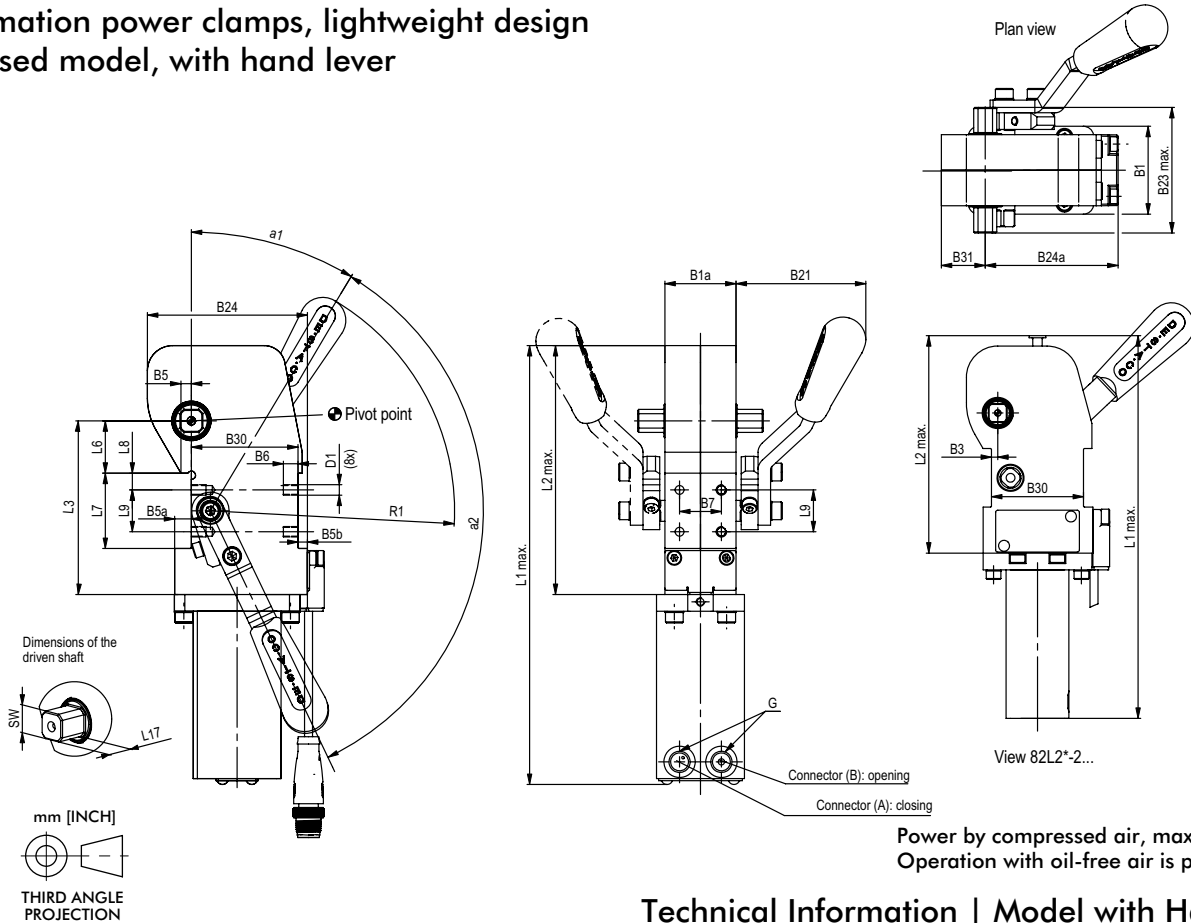
\*\*Tolerance for distance to dowel hole ±0,02



# 82L..-2... SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

Automation power clamps, lightweight design  
enclosed model, with hand lever



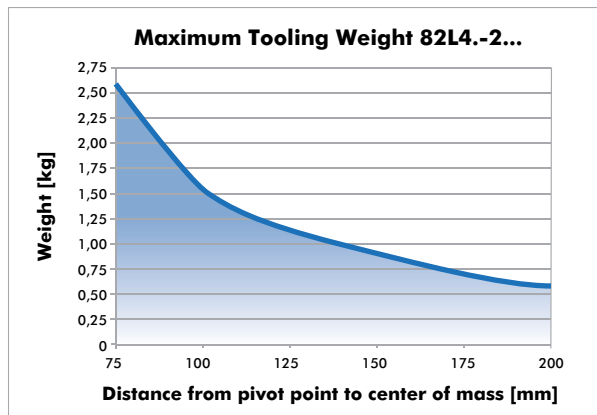
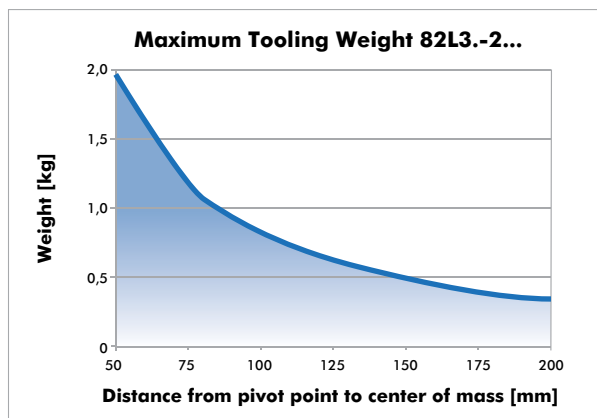
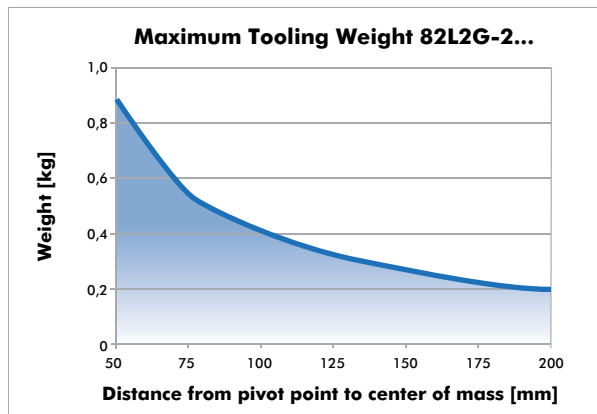
### Technical Information | Model with Hand Lever

Model	Max. holding torque Nm [lb ft]	Clamping torque at 5 bar [72 psi] Nm [lb ft]	Piston Ø mm	Weight kg [lbs]	Opening angle	Air consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Connection G	B1	B1a	B3	B5	B5a
82L2G-2...	75 [55]	25 [18]	25	1,1 [2.42]	105°	0,4 [0.01]	G1/8	32	34	3	4	4
82L3G-2... 82L3N-2...	180 [133]	55 [41]	32	1,5 [3.30]		0,8 [0.03]	G1/8 1/8-18NPT	42	34	-	5	8
82L4G-2... 82L4N-2...	380 [280]	120 [89]	40	2,1 [4.62]		1,2 [0.04]	G1/4 1/4-18NPT	45	40	-	6,5	6

Model	B5b	B6	B7	B21	B23	B24	B24a	B30	B31	D1	L1	L2	L3	L6	L7	L8	L9	L17	SW	α1	α2	R1
			±0,1	~	max			±0,1			max.	max.		±0,05	+0,1	±0,1	±0,1		h9	~	~	~
82L2G-2...	4,5	7	25	62	53	60,5	53,5	44	15	M5	183,5	104,5	67	17	28	5	18	8,5	9	36°	131°	117
82L3G-2... 82L3N-2...	4,5	7	20	62	60	76,5	63,5	51	21	M5	210	119	83	25	36	8	20	12,5	11	31°	124°	117
82L4G-2... 82L4N-2...	4,5	10	25	62	74	88	69,5	57	26,5	M6	241	137	92	30	40	10	20	16	16	31°	131°	117

# 82L2G-2, 82L3.-2, 82L4.-2 SERIES

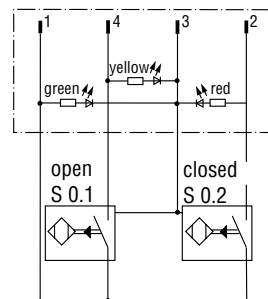
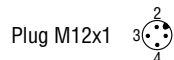
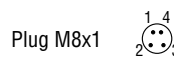
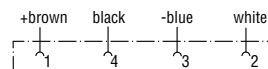
## Pneumatic Power Clamps | Technical Specifications



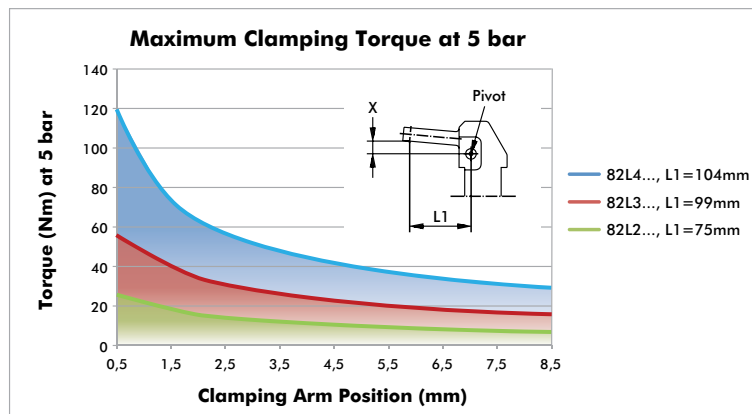
**Wiring diagram of electrical sensing system**  
Sensing system immune to interference from d.c. arc welding and a.c. arc welding

Inductive version: B8, B7, C8

### Pin Assignment



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



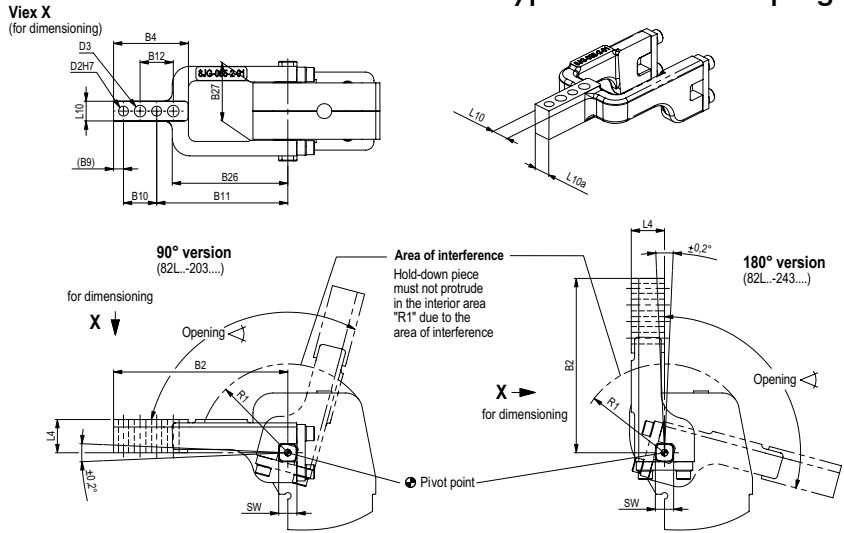
All data refers to a pneumatic pressure of 6 bar and to a opening and closing time of 1 second, as well as to the center of gravity of the complete construction directly attached to the clamp arm related to the fixed fulcrum.

# 82L2G-2, 82L3.-2, 82L4.-2 SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

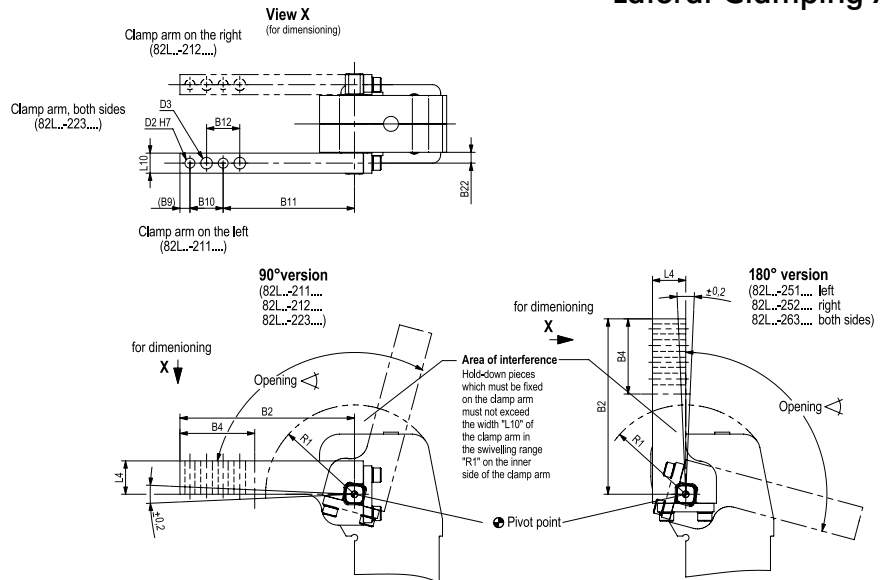
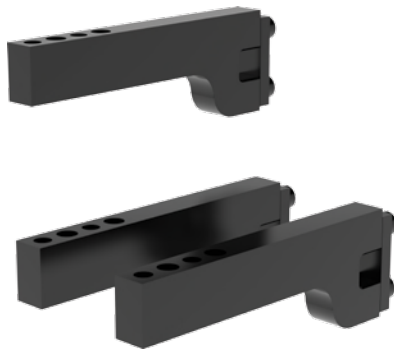


### U-Type Central Clamping Arms



Model	Order no. for set of U-type central clamping arms	Opening angle for 90° Version	Opening angle for 180° Version	Weight [kg]	B2	B4	B9	B10	B11	B12	B26	B27	D2	D3	L4	L10	L10α	R1	SW J7
		max.	max.												H7		±0,1	*±1,1	~
82L2G-2...	8JG-075-3-01	105°	105°	0,3	93	45	8	20	65	20	58	36	4	6,5	20	12	-	45	9
82L3.-2...	8JG-065-2-01	105°	105°	0,37	105	45	6	20	79	20	69	35,1	6	7	20	12*	11,4	55	11
82L4.-2...	8JG-067-2-01	105°	105°	0,5	110	45	6	20	84	20	78	42,1	6	7	22	15*	14,3	58	16

### Lateral Clamping Arms

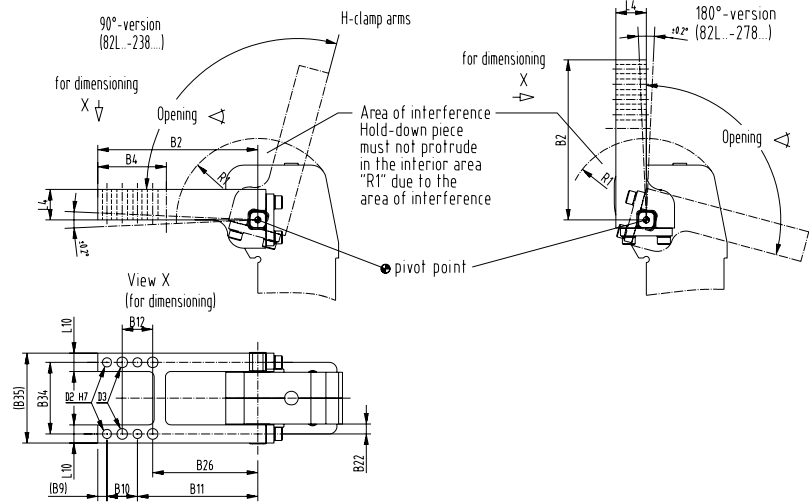
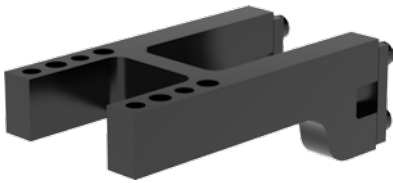


Model	Order no. for set of Lateral clamping arms	Opening angle for 90° - Version	Opening angle for 180° - Version	Weight [kg]	B2	B4	B9	B10	B11	B12	B22	D2	D3	L4	L10	R1
		max.	max.											H7		±0,1
82L3.-2...	8JG-066-1-01	105°	105°	0,25	105	45	6	20	79	20	6,5	6	7	20	12	55
82L4.-2...	8JG-068-1-01	105°	105°	0,3	92	45	6	20	66	20	8,5	6	7	22	15	58

# 82L2G-2, 82L3.-2, 82L4.-2 SERIES

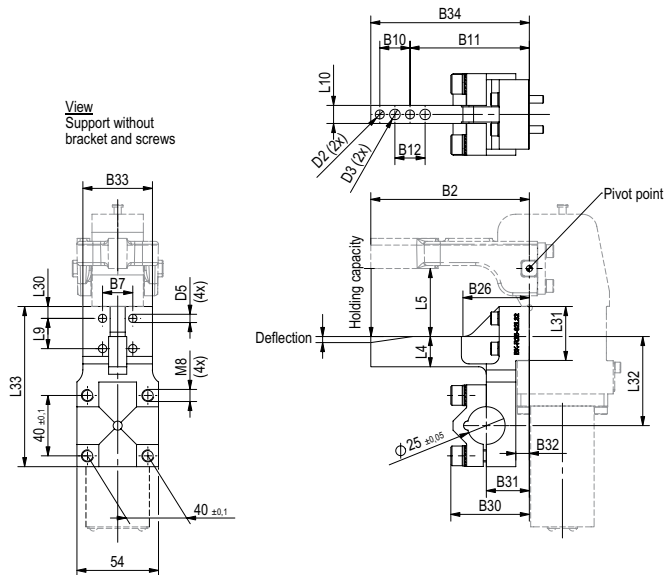
## Pneumatic Power Clamps | Dimensions | Technical Specifications

### H- Clamping Arms



Model	Order no. for set of H-clamping arms	Opening angle for 90° - Version	Opening angle for 180° - Version	Weight [kg]	B2	B4	B9	B10	B11	B12	B26	B34	B35	D2	D3	L4	L10	R1
		max.	max.		±0,02			±0,1	±0,2	±0,1		H7	±0,1					
82L3.-2.8...	8JG-363-1-01	105°	105°	0,52	105	45	6	20	79	20	69	47,1	59,1	6	7	20	12	55
82L4.-2.8...	8JG-364-1-01	105°	105°	0,77	110	45	6	20	84	20	78	57,1	72,1	6	7	22	15	58

### Counter-Support



\* = Tolerance for distance to dowel holes ±0,02  
 \*\* = distance from pivot point

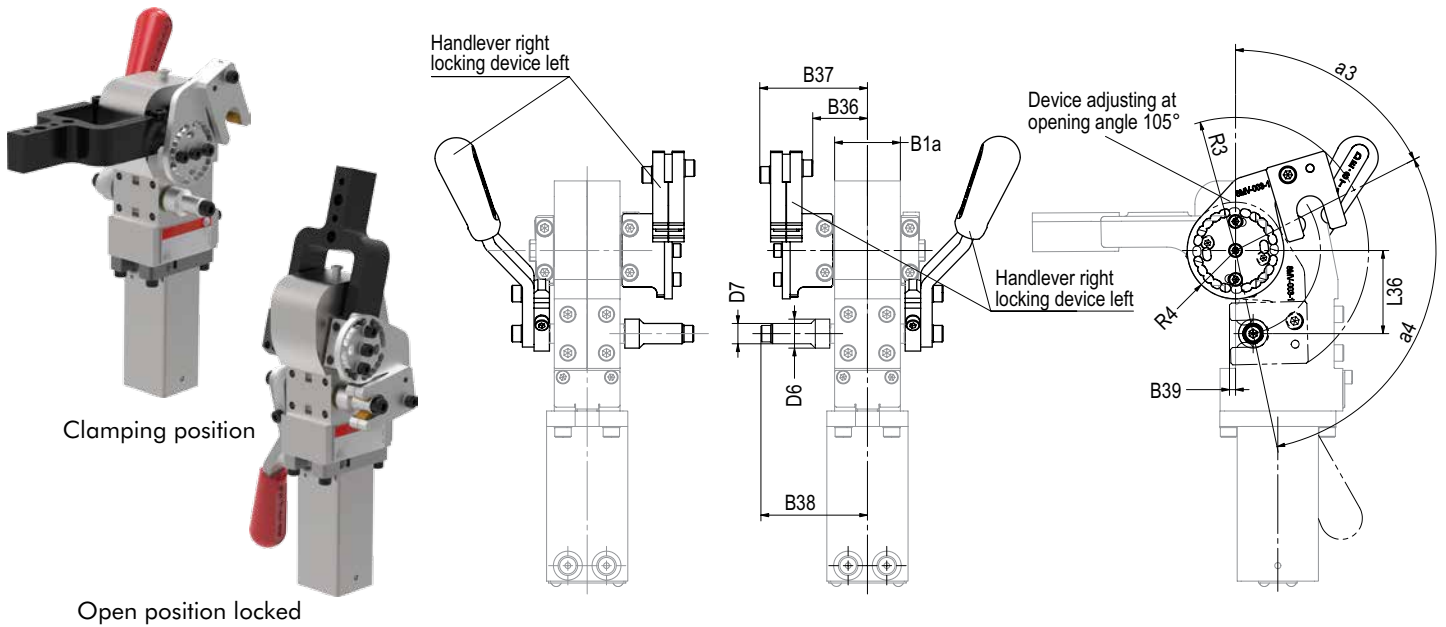
Model	Fit for Model	Holding Capacity max.	Deflection [mm]	Weight [kg]	B2	B7*	B10	B11	B12	B26**	B30**	B31**	B32**
		[N]			±0,1		±0,02	~					
BK-R25-82L25-1	82L2_	914	0,2	0,4	93	25	20	62	20	42	55	31,5	11
BK-R25-82L32-1	82L3_	660	0,16	0,5	105	20	20	79	20	44	52	28,5	9
BK-R25-82L40-1	82L4_	2000	0,37	0,56	110	25	20	84	20	41	52	28,5	7,5

Model	B33	B34	D2	D3	D5	L4	L5	L9	L10	L30	L31	L32	L33
			∅ H7	∅	∅	±0,1		±0,1		-0,1			
BK-R25-82L25-1	35	90	4	6,5	5,5	20	45	18	12	4,95	27,9	50,9	106
BK-R25-82L32-1	46	105	6	7	5,5	20	45	20	12	7,85	35,7	59	106
BK-R25-82L40-1	40	110	6	7	6,6	22	45	20	15	9,85	39,7	66	108

# 82L2G-2, 82L3.-2, 82L4.-2 SERIES

Pneumatic Power Clamps | Dimensions | Technical Specifications

Hold Open Device




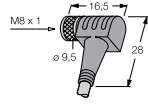

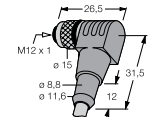
Model	Fit for Model	B1 $\alpha$	B36	B37	B38	B39	D6	D7	L36	R3	R4	$\alpha$ 3	$\alpha$ 4
82ZB-036-1	82L2.-2....H..	34	25	47	47	3	15	10	31	53	18,5	63°	105°
82ZB-037-1	82L3.-2....H..	34	28	56	56	4	15	10,5	43	69	25	63°	105°
82ZB-038-1	82L4.-2....H..	40	30	58	58	3	15	10,5	50	76	27	63°	105°


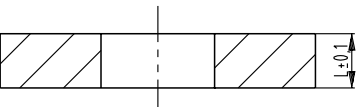
# 82L2G-2, 82L3.-2, 82L4.-2 ACCESSORIES

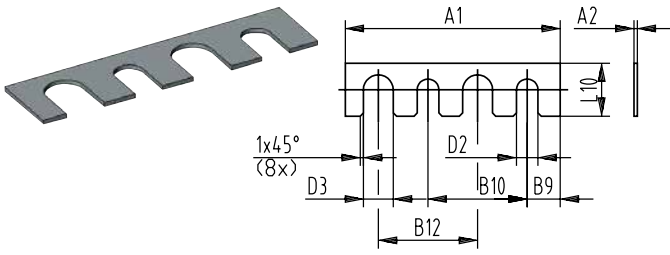
Pneumatic Power Clamps | For Use With or Without Hand Lever

Clamping Arms	Order No. for set 82L2G-2....0../ 82L2G-2....H..	Order No. for set 82L3.-2....0../ 82L3.-2....H..	Order No. for set 82L4.-2....0../ 82L4.-2....H..
U-central	8JG-075-3-01	8JG-065-2-01	8JG-067-2-01
Lateral	--	8JG-066-1-01	8JG-068-1-01
H-Shape	--	8JG-363-1-01	8JG-364-1-01

## Connector cable (1 connector socket & 5 m cable)

Connector socket M8x1 straight 4-pin		8EL-009-1	8EL-009-1	8EL-009-1
Connector socket M8x1 angular 4-pin		8EL-007-1	8EL-007-1	8EL-007-1
Connector socket M12x1 straight 5-pin		8EL-002-1	8EL-002-1	8EL-002-1
Connector socket M12x1 angular 4-pin		8EL-003-1	8EL-003-1	8EL-003-1

Opening angle limitation	Opening Angle	82L2G-2		82L3.-2		82L4.-2	
		Order No.	L ± 0,1	Order No.	L ± 0,1	Order No.	L ± 0,1
 	15°	8CE-282-1	28,6	8CE-296-1	33,3	8CE-310-1	38,4
	30°	8CE-284-1	22	8CE-298-1	26,9	8CE-312-1	31
	45°	8CE-286-1	18,5	8CE-300-1	21,5	8CE-314-1	24,7
	60°	8CE-288-1	14	8CE-302-1	16,3	8CE-316-1	18,6
	75°	8CE-290-1	7,9	8CE-304-1	11	8CE-318-1	11
	90°	8CE-292-1	4,7	8CE-306-1	5,5	8CE-320-1	6,2

Shim for clamping arm	Order No.	A1	A2	D2	D3	B9	B10	B12	L10
	82ZB-SH4001		0,1						
	82ZB-SH4002		0,2						
	82ZB-SH4005	42	0,5	6,5	7	6	20	20	11,8
	82ZB-SH4010		1,0						
	82ZB-SH4020		2,0						
	82ZB-SH4050		5,0						

Spare Parts	Order No. for set		Order No. for set		Order No. for set	
	82L2G-2....0..	82L2G-2....H..	82L3.-2....0..	82L3.-2....H..	82L4.-2....0..	82L4.-2....H..
Cylinder	8PW-095-2		82L3G-2 (G port): 8PW-096-2 82L3N-2 (NPT port): 8PW-102-2		82L4G-2 (G port): 8PW-097-2 82L4N-2 (NPT port): 8PW-103-2	

Sensor Kit	Order No.
B8 Connector plug, M12x1, cable	8EA-139-1
B7 Connector plug, M12x1, parallel with cylinder	8EA-138-1
C8 Connector plug, M8x1, parallel with cylinder	8EA-137-1
Hand Lever	--   8KB-031-1   --   8KB-031-1   --   8KB-032-1





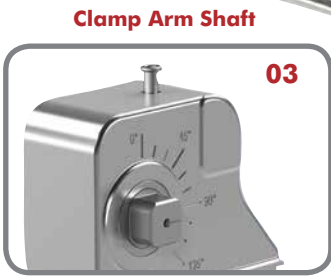
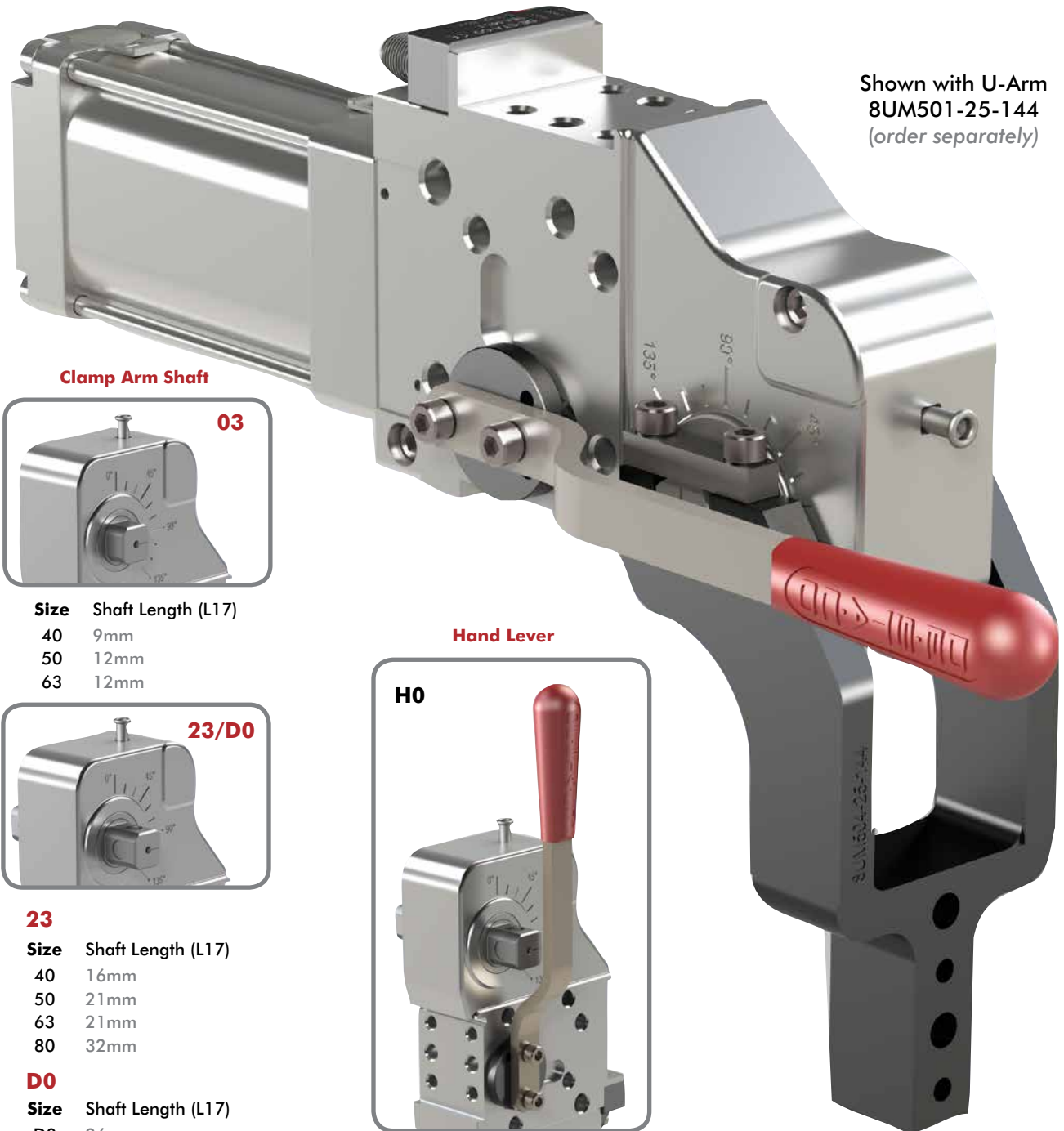
# 82M-3E SERIES

## Pneumatic Power Clamps | Ordering Information

**82M-3** **E** **23** **H0** **50** **L8**

Base Model	Mounting	Description	Clamp Arm Shaft	Description	Handle	Description
	<b>E</b>	Standard	<b>03</b>	for U-Arms	<b>00</b>	No Hand lever
	<b>N</b>	NAAMS (Size 63 only)	<b>23</b>	for Lateral Arms	<b>H0</b>	Hand Lever
			<b>D0</b>	for Lateral Arms (size 63 only)		

See below for further details



Size	Shaft Length (L17)
40	9mm
50	12mm
63	12mm



Size	Shaft Length (L17)
40	16mm
50	21mm
63	21mm
80	32mm

Size	Shaft Length (L17)
D0	26mm



# 82M-3E SERIES

## Pneumatic Power Clamps | Ordering Information

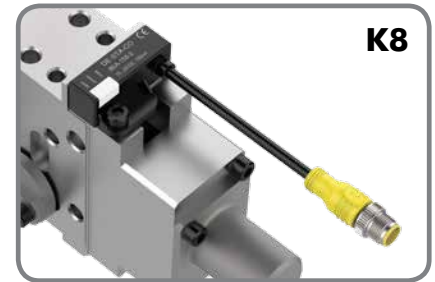
Sensor	Description
<b>00</b>	No sensor
<b>L8</b>	Sensor with In-line Connector (Replacement Order No.: 8EA-146-4)
<b>L9</b>	Sensor with 90 deg Connection (Replacement Order No.: 8EA-147-4)
<b>K8</b>	Sensor with Cable Connection (Replacement Order No.: 8EA-158-4)



**L8**



**L9**



**K8**

Size	Description
<b>40</b>	40mm Cylinder Bore Size with G Port
<b>50</b>	50mm Cylinder Bore Size with G Port
<b>5N</b>	50mm Cylinder Bore Size with NPT
<b>63</b>	63mm Cylinder Bore Size with G Port
<b>6N</b>	63mm Cylinder Bore Size with NPT
<b>80</b>	80mm Cylinder Bore Size with G Port
<b>8N</b>	80mm Cylinder Bore Size with NPT



**40**

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



**50**

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



**63**

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



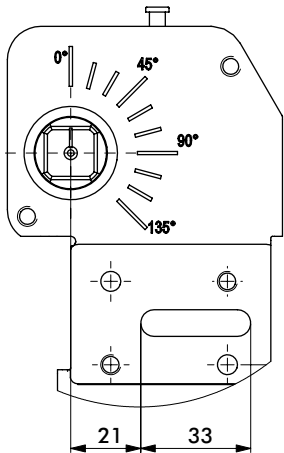
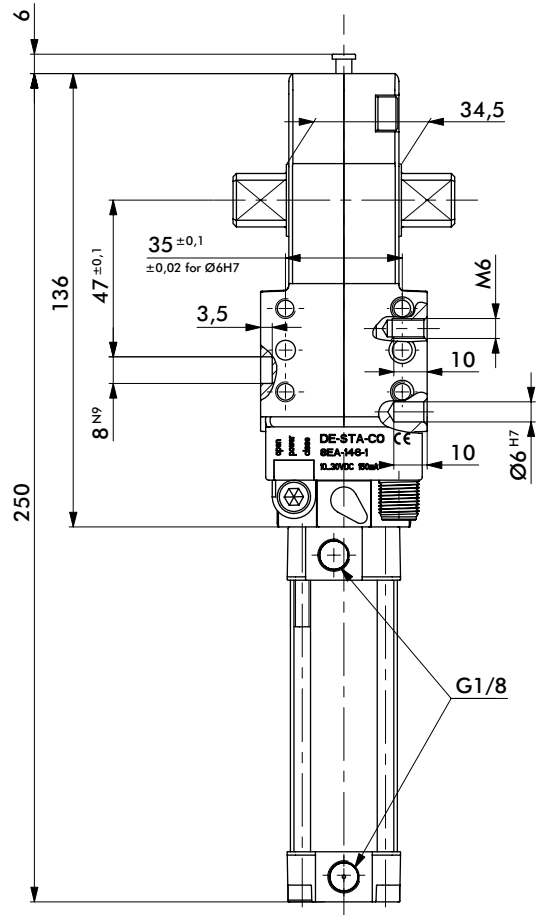
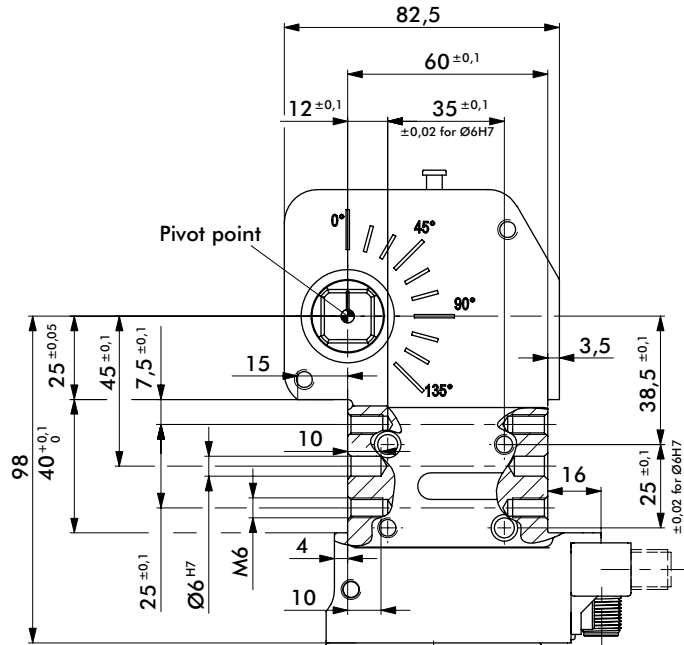
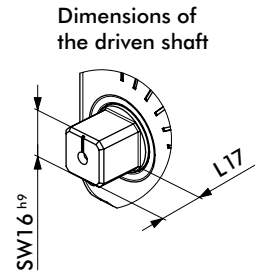
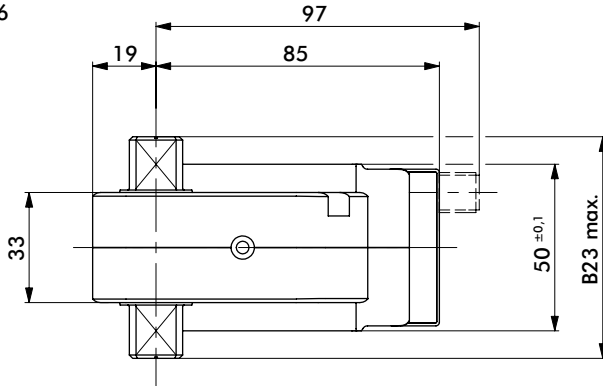
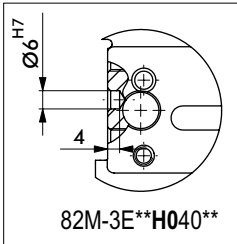
**80**

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

# 82M-3E....40 SERIES

## Pneumatic Power Clamps | Dimensions

Model	B23 Max.	L17
82M-3E03..40..	54,5	9
82M-3E23..40..	66,5	16



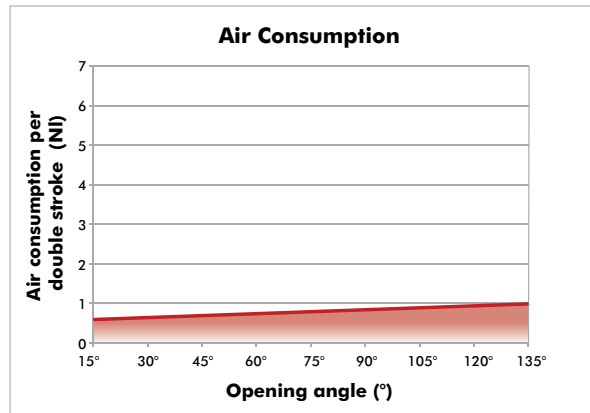
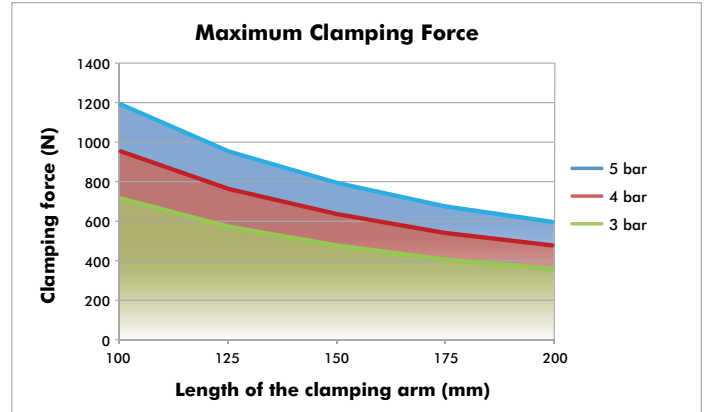
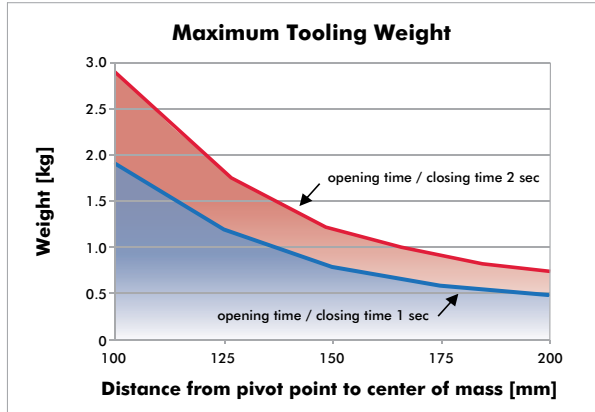
Power by compressed air, max. 6 bar operation with oil-free air is permissible.  
The connector socket and the cable are not supplied with the unit.

mm [INCH]  
THIRD ANGLE PROJECTION

# 82M-3E....40 SERIES

## Pneumatic Power Clamps | Technical Specifications

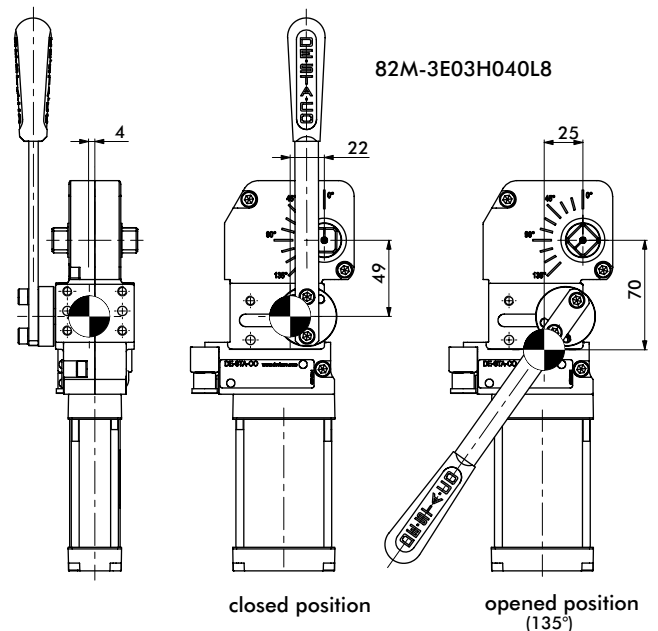
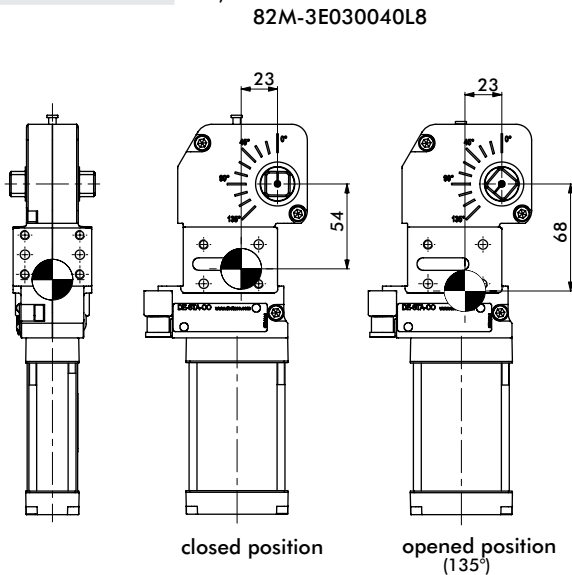
Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E....40..	380	120	40	1,5	0,9



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

### Center of Mass

Model	Weight (kg)
82M-3E030040L.	1,5
82M-3E03H040L.	1,6

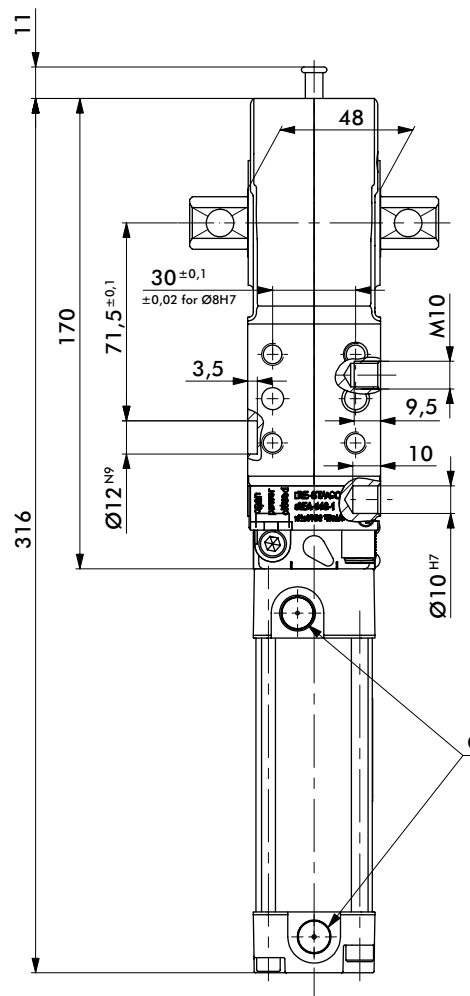
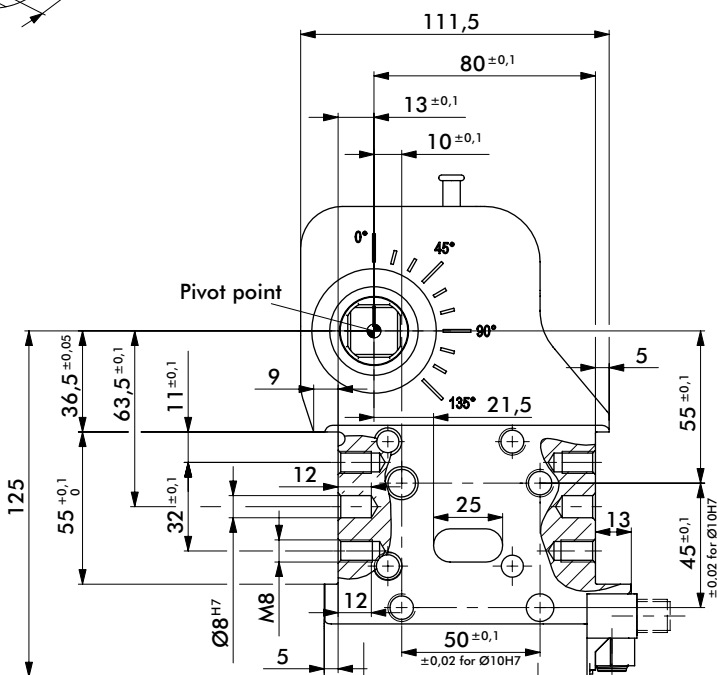
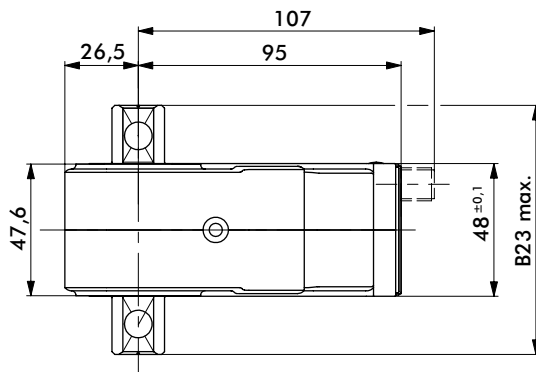
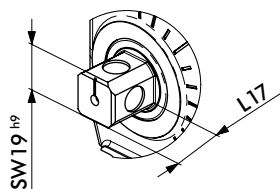


# 82M-3E...5. SERIES

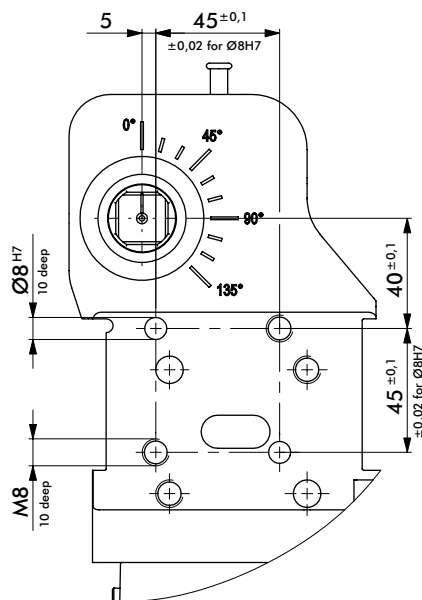
## Pneumatic Power Clamps | Dimensions

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

Dimensions of the driven shaft



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



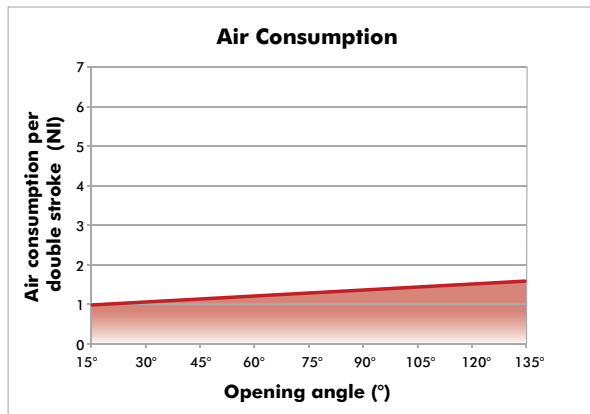
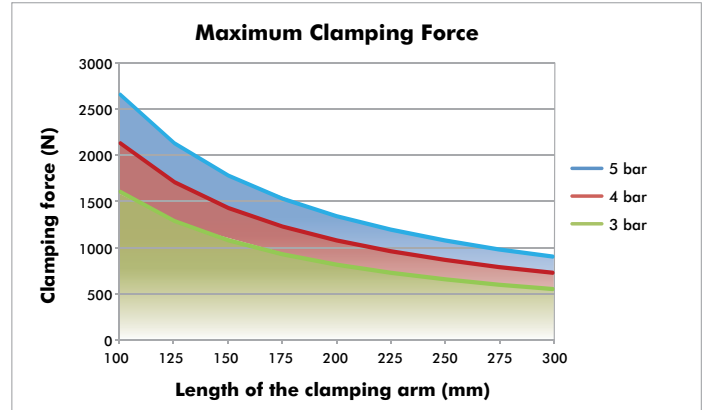
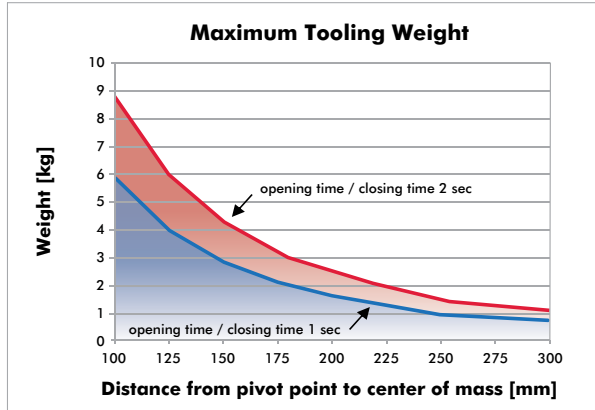
Power by compressed air, max. 6 bar operation with oil-free air is permissible.  
The connector socket and the cable are not supplied with the unit.

mm [INCH]  
THIRD ANGLE PROJECTION

# 82M-3E....5. SERIES

## Pneumatic Power Clamps | Technical Specifications

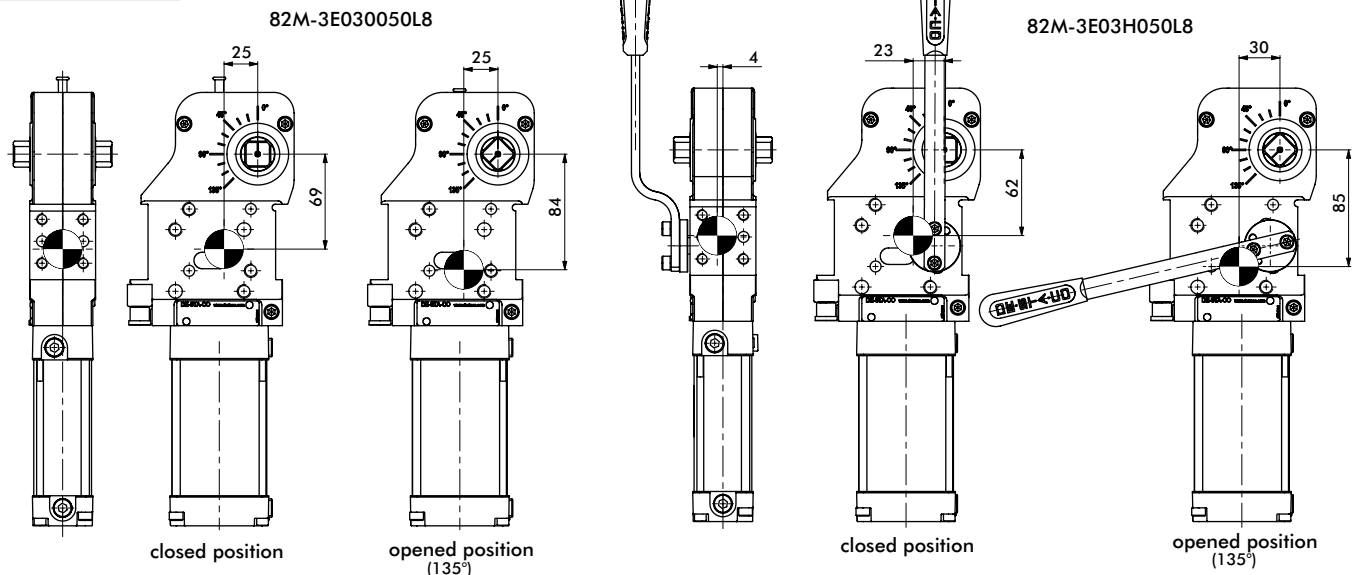
Model	Connection (C)	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E....50..	G 1/4	1300	270	50	2,8	1,6
82M-3E....5N..	1/4-18 NPT					



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

### Center of Mass

Model	Weight (kg)
82M-3E030050L.	2,8
82M-3E03H050L.	3,1

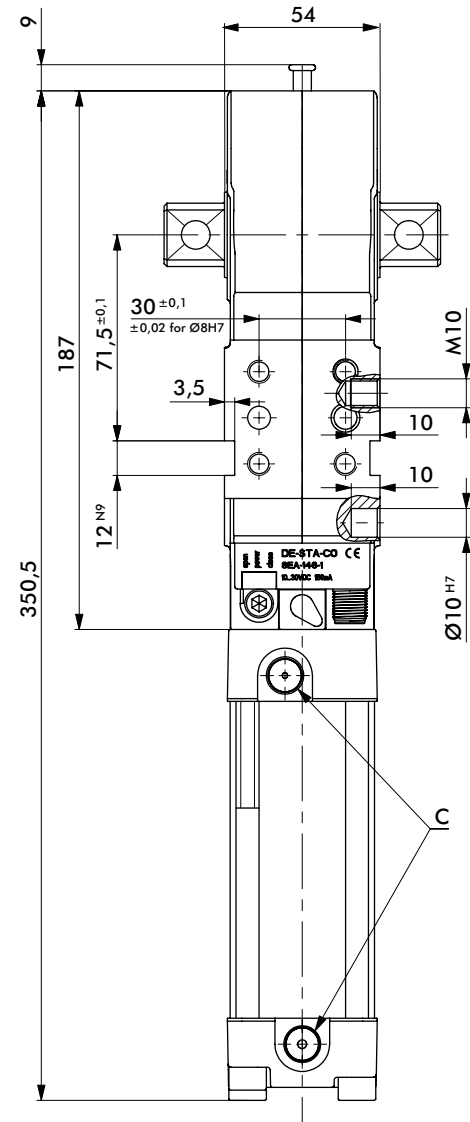
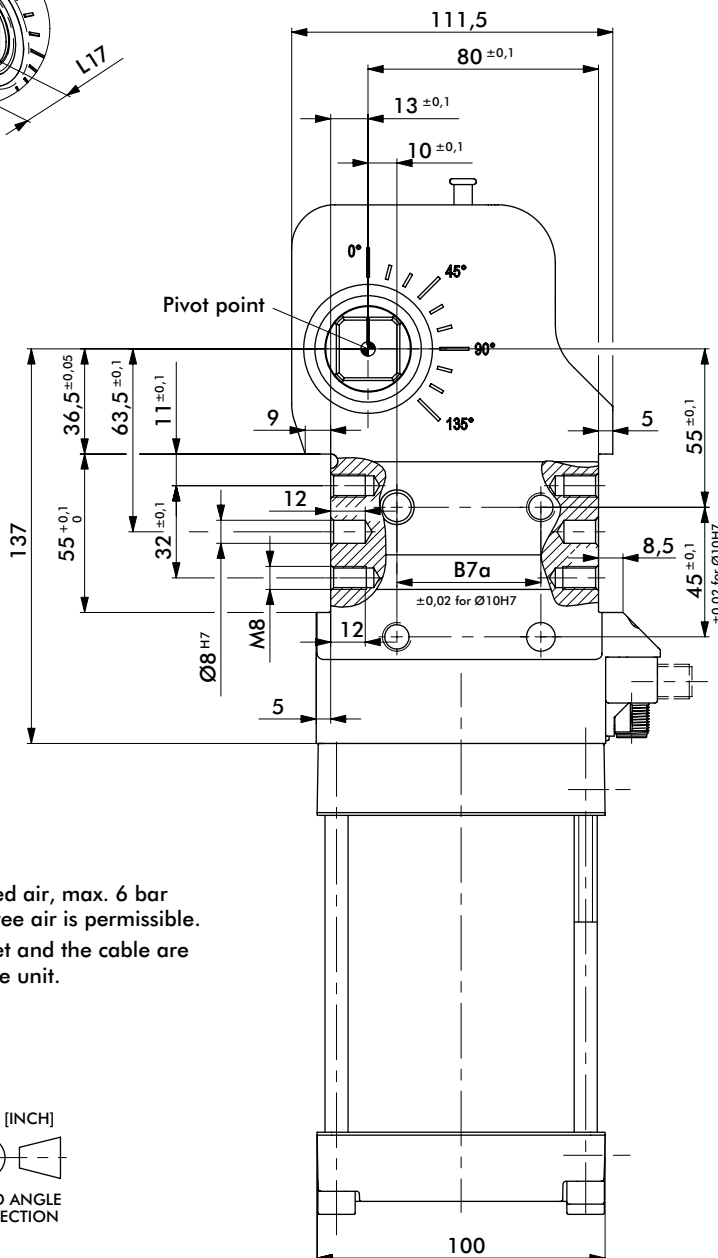
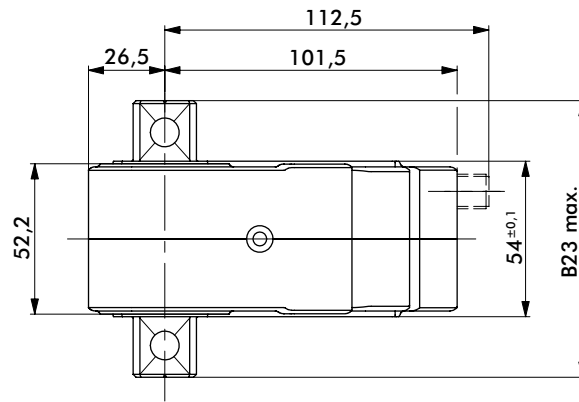
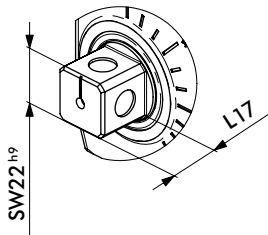


# 82M-3.....6. SERIES

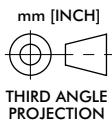
## Pneumatic Power Clamps | Dimensions

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

Dimensions of the driven shaft



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.

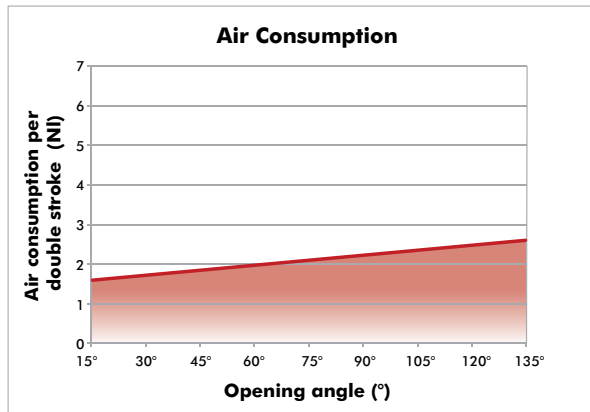
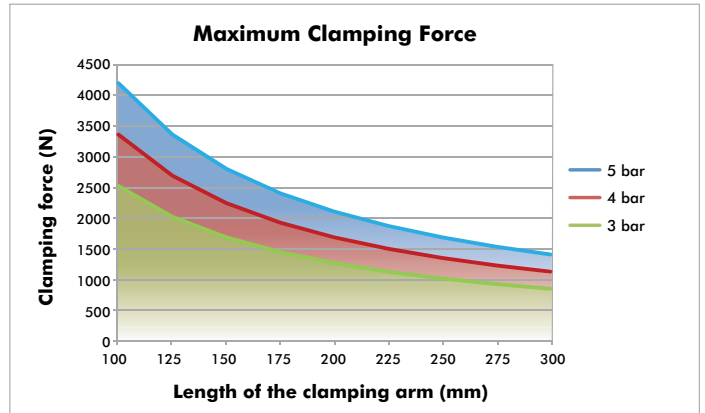
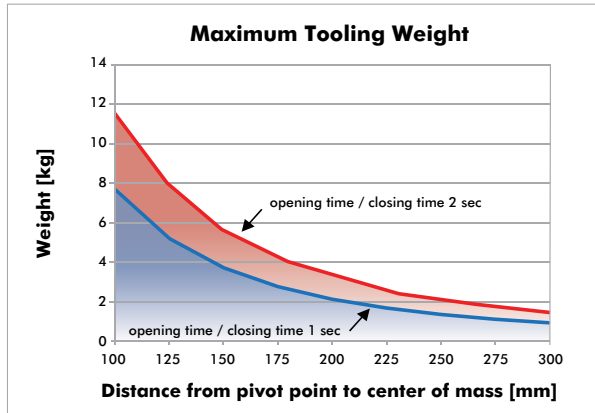


**Important !**  
For optimal cushioning external pneumatic one-way, flow control valves should be used.

# 82M-3.....6. SERIES

## Pneumatic Power Clamps | Technical Specifications

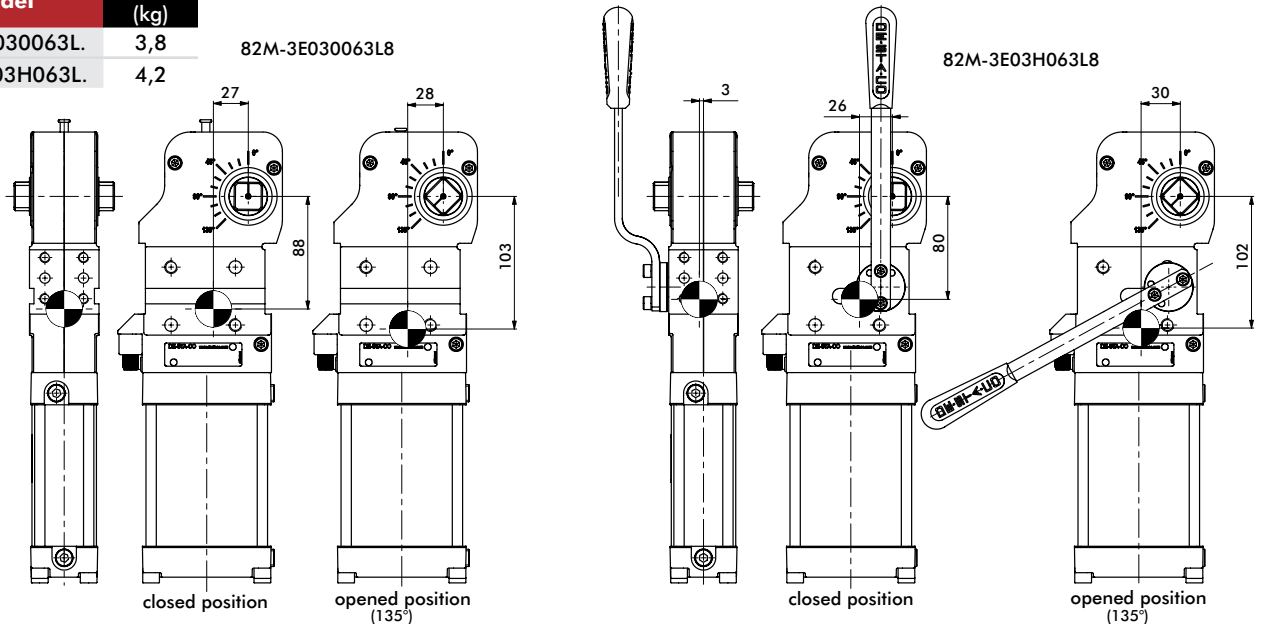
Model	Connection (C)	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E....63..	G 1/4	1800	420	63	3,8	2,6
82M-3N....63..						
82M-3E....6N..	1/4-18 NPT	1800	420	63	3,8	2,6
82M-3N....6N..						



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

### Center of Mass

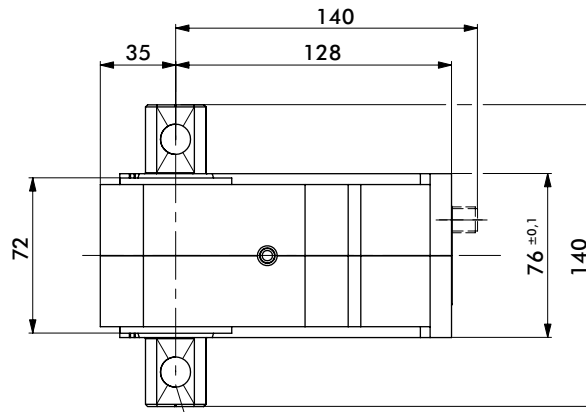
Model	Weight (kg)
82M-3E030063L.	3,8
82M-3E03H063L.	4,2



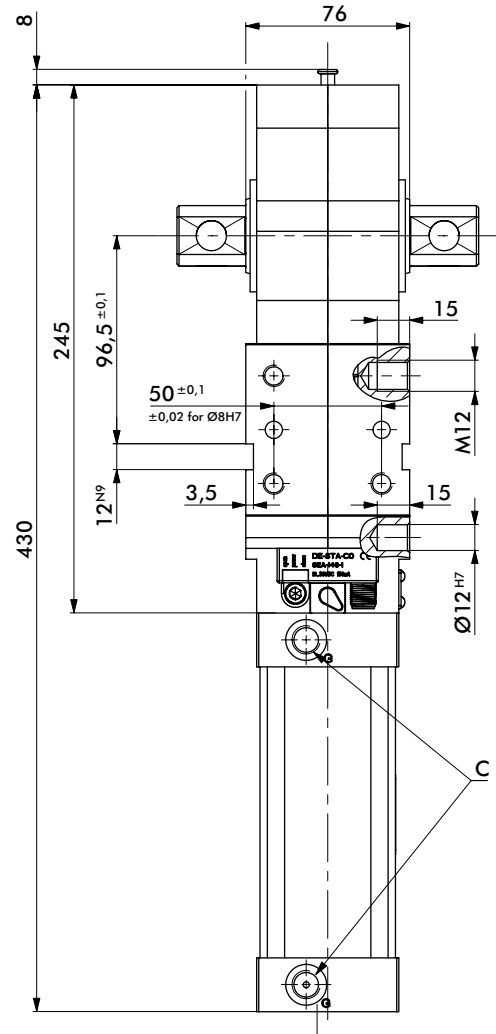
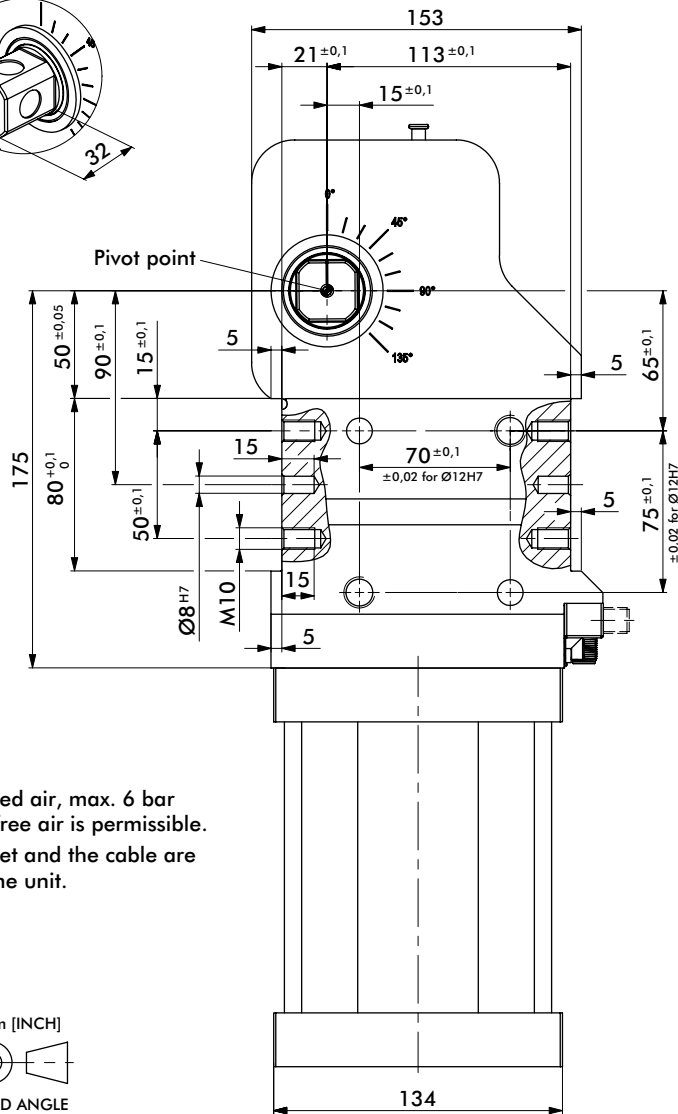
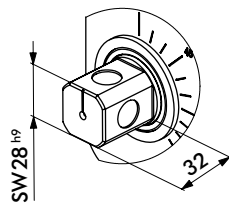


# 82M-3E....8. SERIES

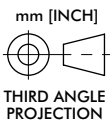
## Pneumatic Power Clamps | Dimensions



Dimensions of the driven shaft



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.

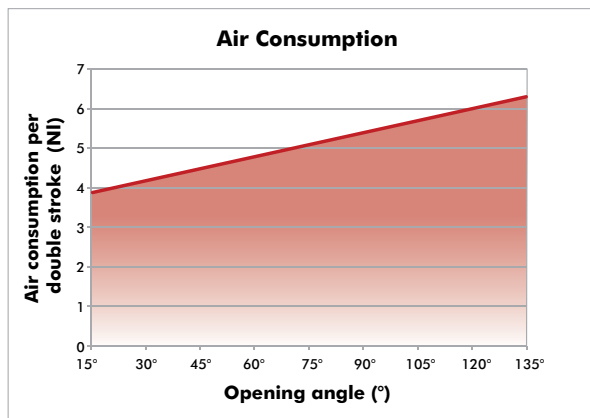
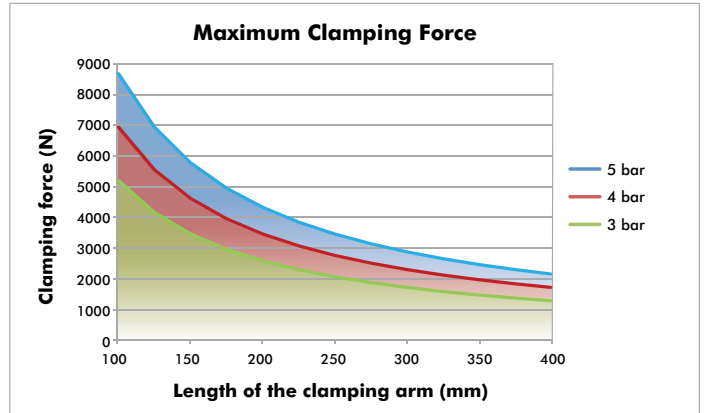
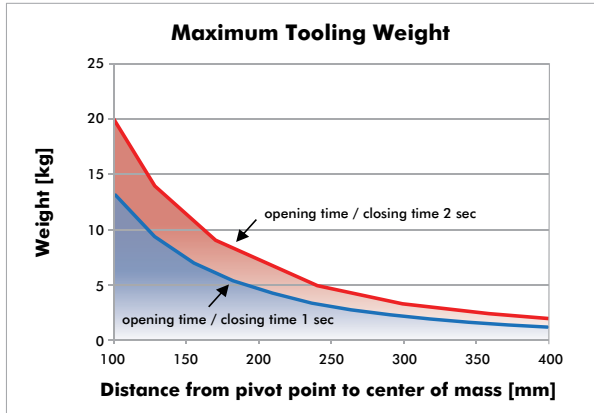


**Important !**  
For optimal cushioning external pneumatic one-way, flow control valves should be used.

# 82M-3E....8. SERIES

## Pneumatic Power Clamps | Technical Specifications

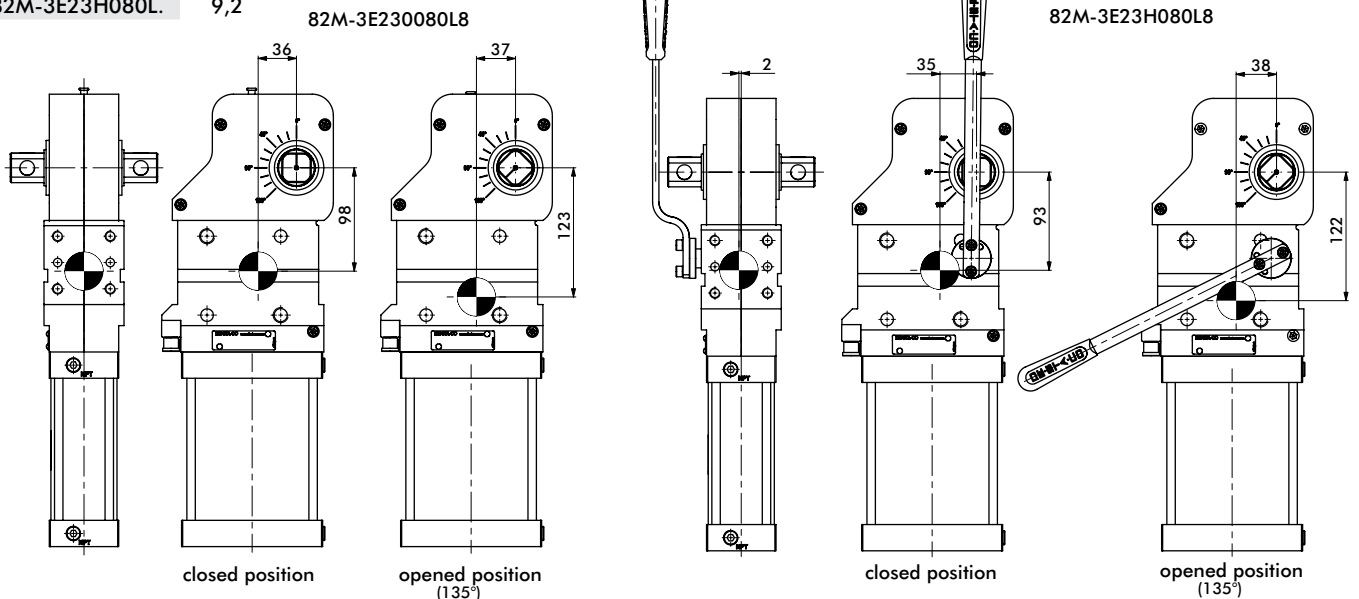
Model	Connection (C)	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E....80..	G 1/4	3000	850	80	8,7	6,3
82M-3E....8N..	1/4-18 NPT					



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

### Center of Mass

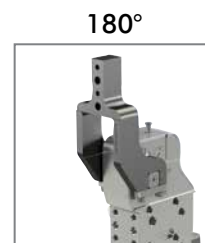
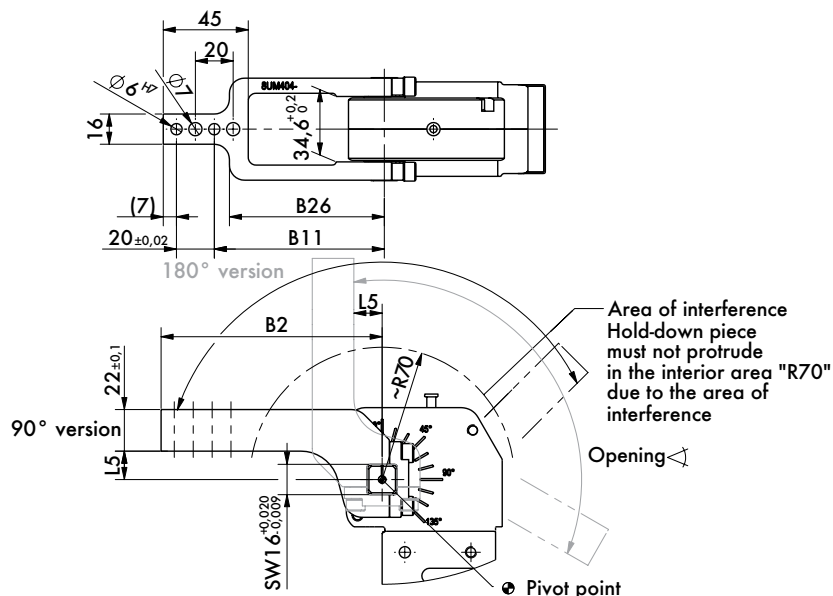
Model	Weight (kg)
82M-3E230080L.	8,7
82M-3E23H080L.	9,2



# U-ARMS CENTER (ALUMINUM)

Pneumatic Power Clamps | Dimensions | Technical Specifications

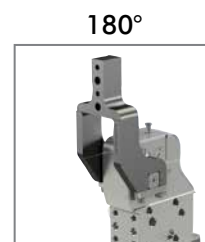
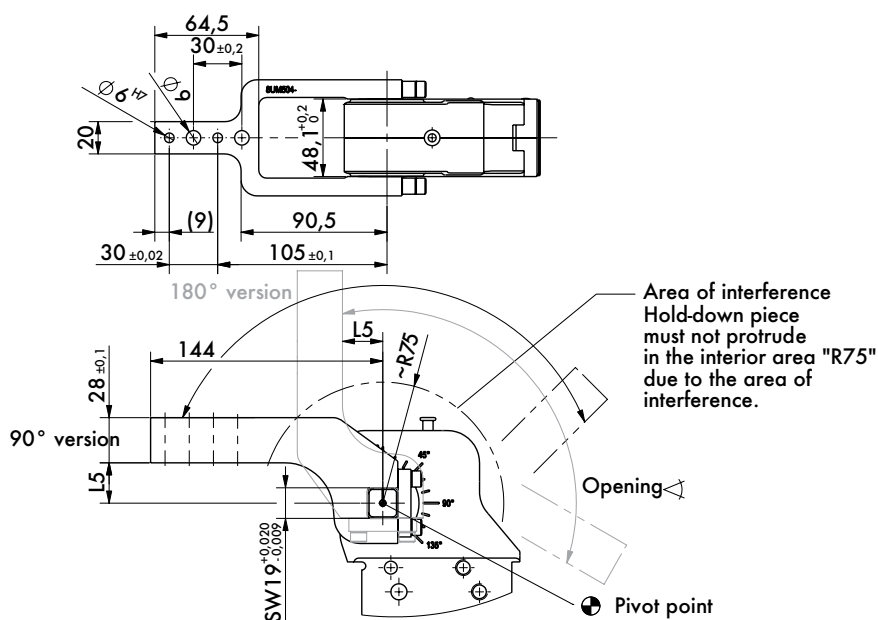
## 82M-3E....40..



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

## 82M-3E....5...



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

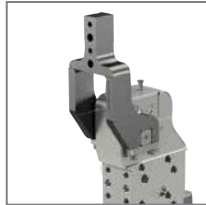
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	L5
8UM504-15-144		105°	0,44	15
8UM504-25-144	135°	120°	0,45	25
8UM504-45-144		135°	0,48	45

# U-ARMS CENTER (ALUMINUM)

Pneumatic Power Clamps | Dimensions | Technical Specifications



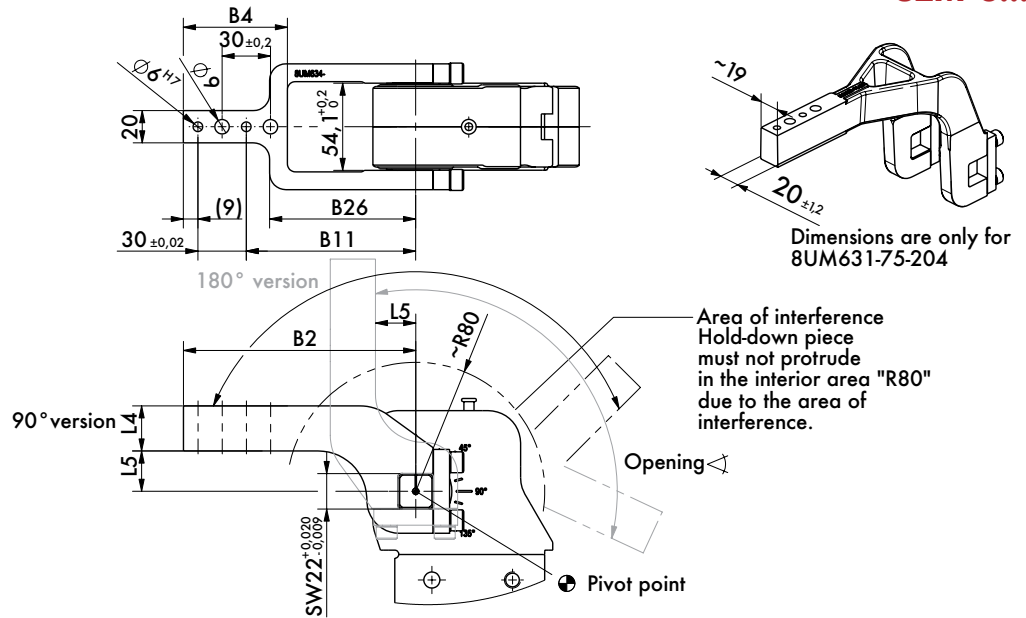
90°



180°

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

82M-3...6...

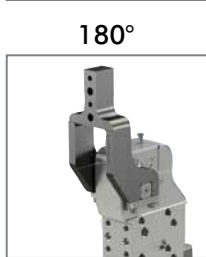


Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	B11 ±0,1	B26	L4 ±0,1	L5
8UM634-15-144	135°	105°	0,50						15
8UM634-25-144		120°	0,53	144	64,5	105	90,5	28	25
8UM634-45-144		135°	0,56						45
8UM631-75-204*		135°	1,7	204	82	165	107	30	75

\* only steel version available.



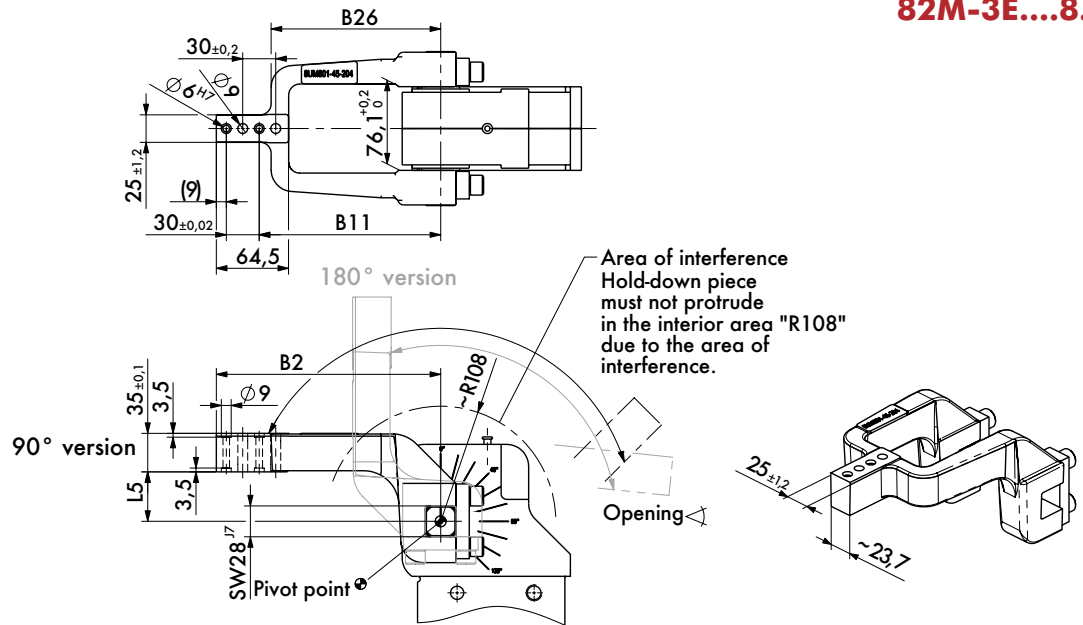
90°



180°

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

82M-3E...8...



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

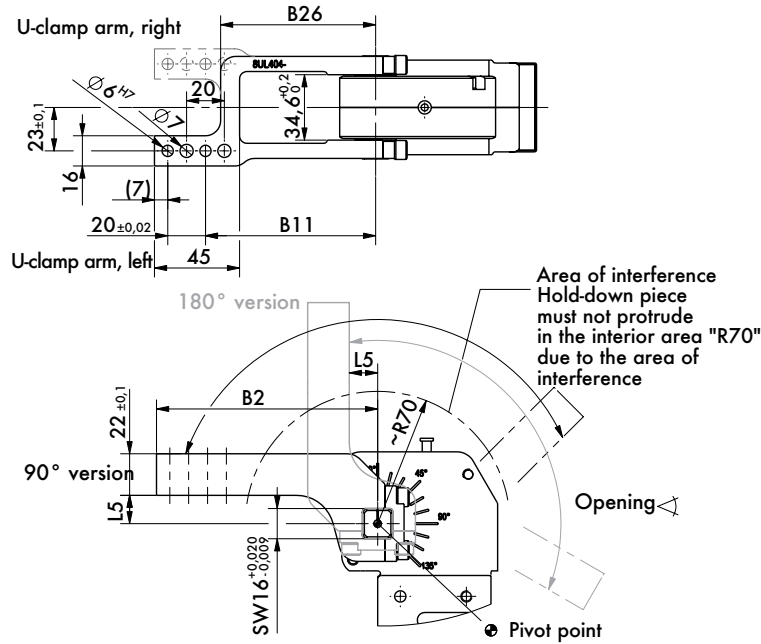
\*only steel version available.

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

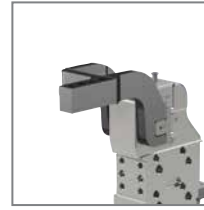
# U-ARMS OFFSET (ALUMINUM)

Pneumatic Power Clamps | Dimensions | Technical Specifications

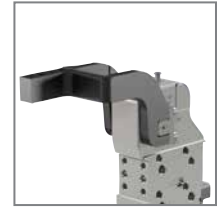
## 82M-3E...40..



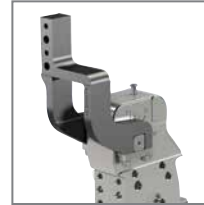
90° Left



90° Right



180° Right\*



180° Left\*



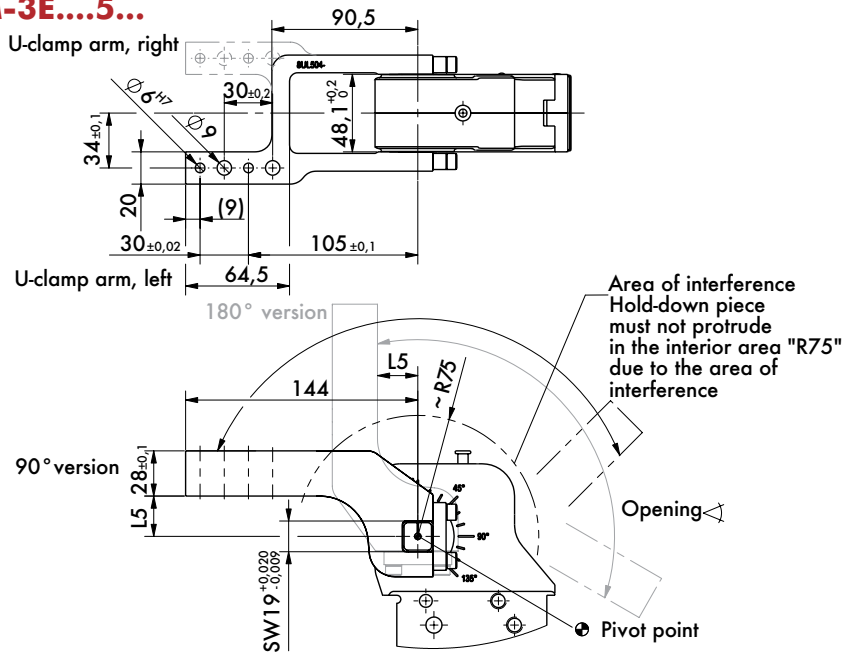
8UL404-00-117  
8UL404-15-117  
8UL404-25-117  
8UL404-45-107

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	130°		0,25	107	80	72	45

## 82M-3E...5...



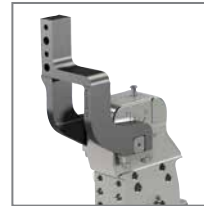
90° Left



90° Right



180° Right\*



180° Left\*



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

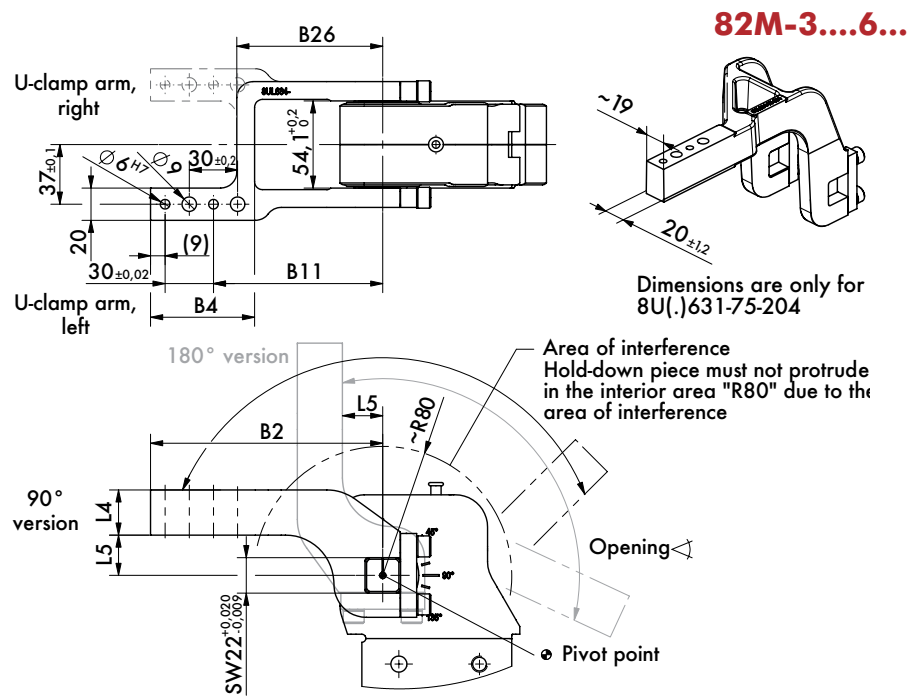
# U-ARMS OFFSET (ALUMINUM)

Pneumatic Power Clamps | Dimensions | Technical Specifications



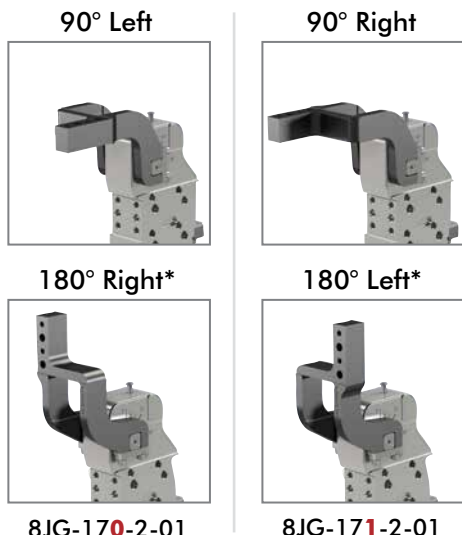
**8UL634-15-144**      **8UR634-15-144**  
**8UL634-25-144**      **8UR634-25-144**  
**8UL634-45-144**      **8UR634-45-144**  
**8UL631-75-204\*\***    **\*\*8UR631-75-204**

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



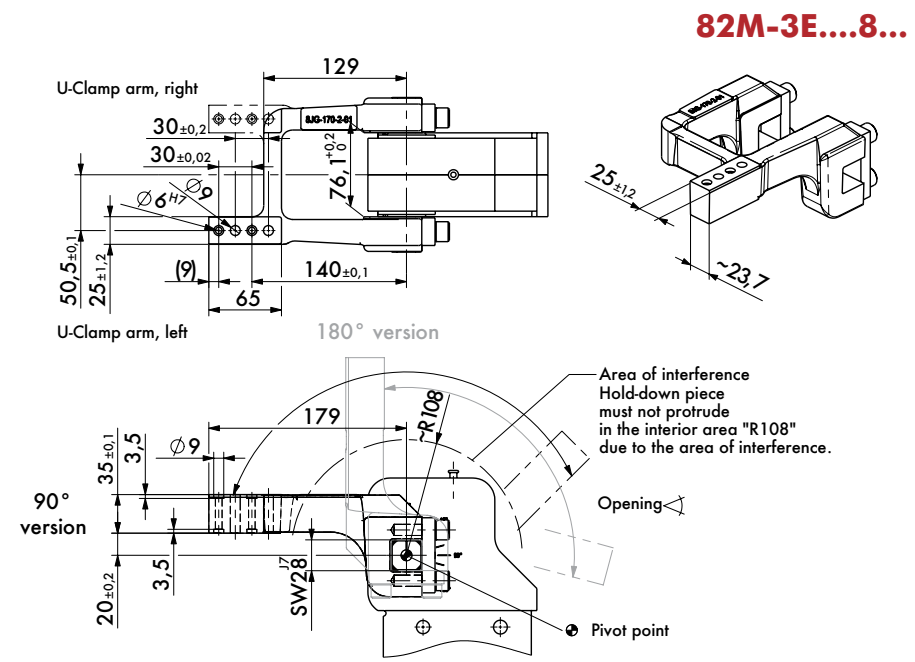
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	B11 ±0,1	B26	L4 ±0,1	L5
8U(.)634-15-144	135°	105°	0,52	144	64,5	105	90,5	28	15
8U(.)634-25-144		120°	0,54						25
8U(.)634-45-144		135°	0,58						45
8U(.)631-75-204**			1,9						204

\*\* only steel version available.



**8JG-170-2-01**      **8JG-171-2-01**

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



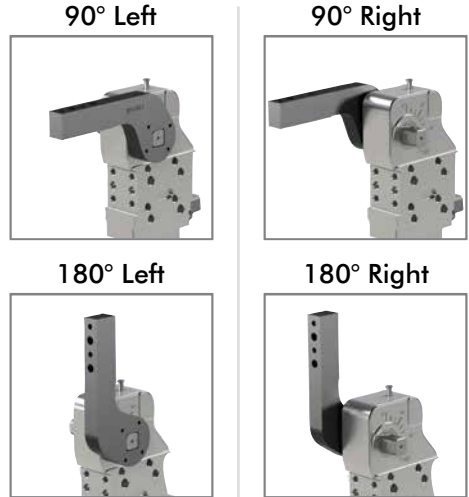
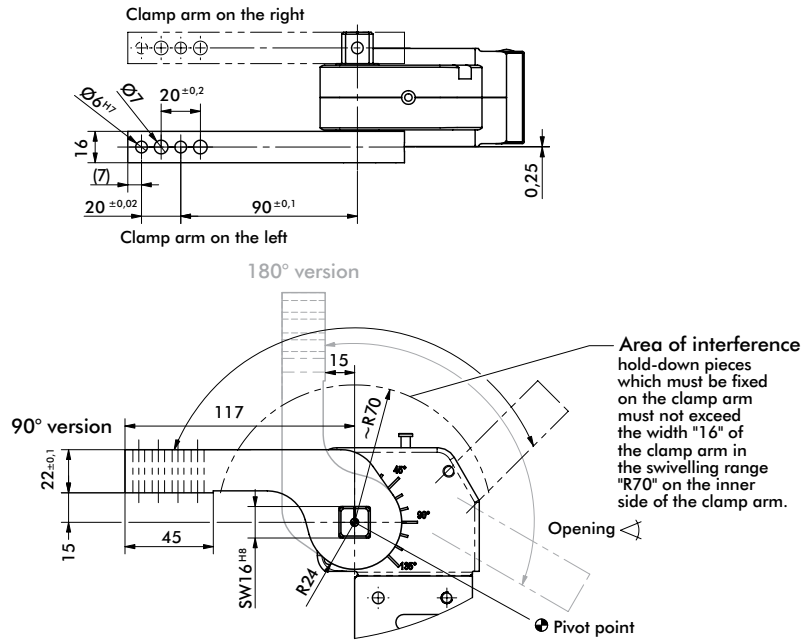
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)
8JG-17(.)2-01**	135°	105°	3,5

\*\*only steel version available.

# LATERAL (SIDE) ARMS

## Pneumatic Power Clamps | Dimensions | Technical Specifications

### 82M-3E....40..

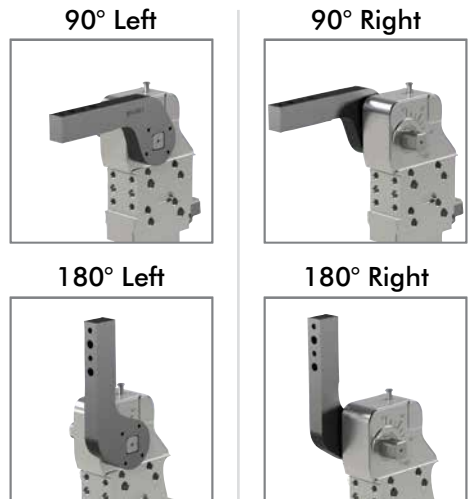
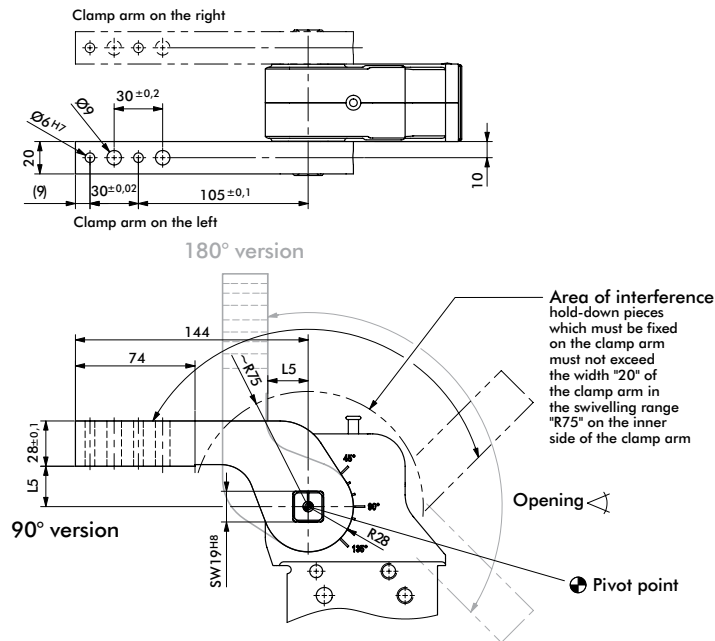


8S401-15-117

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

Models with 2 lateral clamp arms requires 2 clamp arm sets.

### 82M-3E....5...



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

Models with 2 lateral clamp arms requires 2 clamp arm sets.

# LATERAL (SIDE) ARMS

## Pneumatic Power Clamps | Dimensions | Technical Specifications

82M-3...6...

90° Left



90° Right



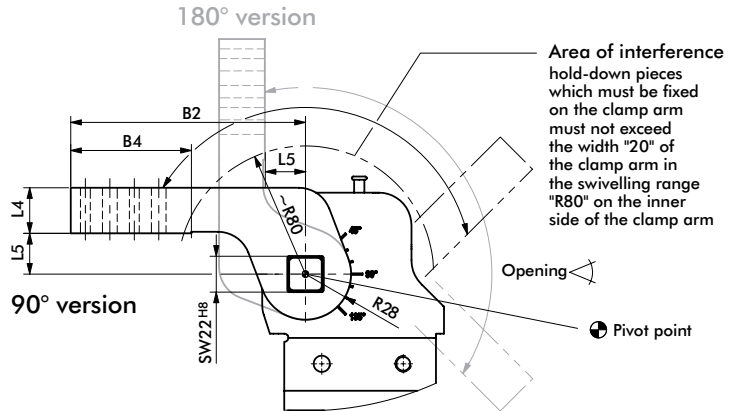
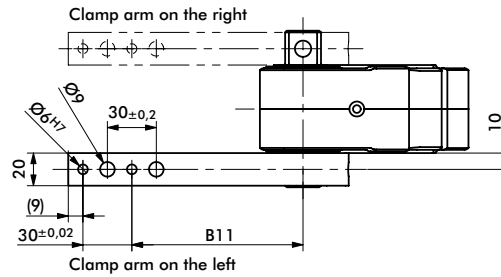
180° Left



180° Right



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

Models with 2 lateral clamp arms requires 2 clamp arm sets.

82M-3E...8...

90° Left



90° Right



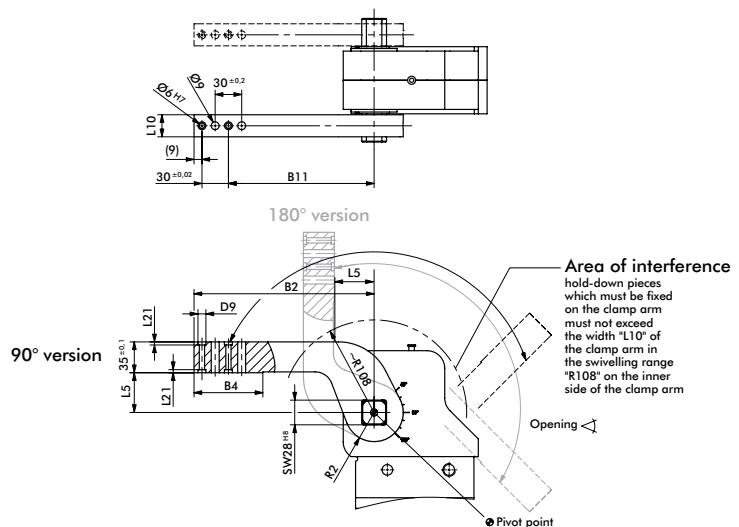
180° Left



180° Right



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

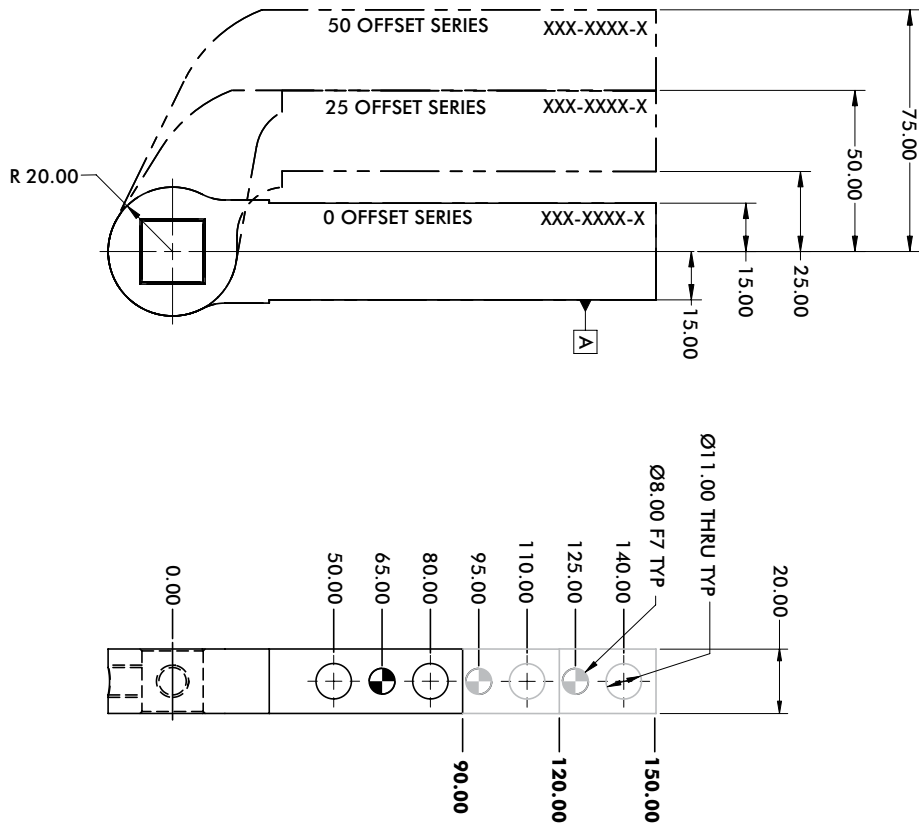
Models with 2 lateral clamp arms requires 2 clamp arm sets.



# LATERAL (SIDE) ARMS, NAAMS-STYLE

Pneumatic Power Clamps | Dimensions | Technical Specifications

## 82M-3E 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

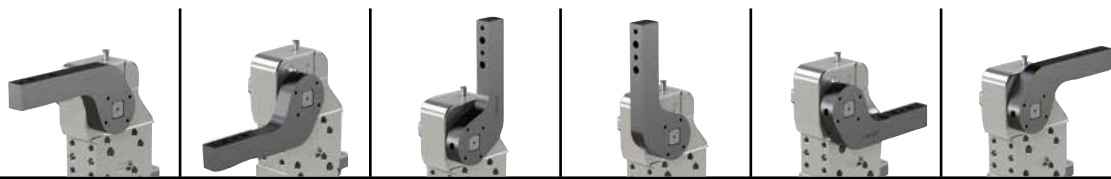
### 11mm Thru Hole (8.00 F7 Dowel)

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)

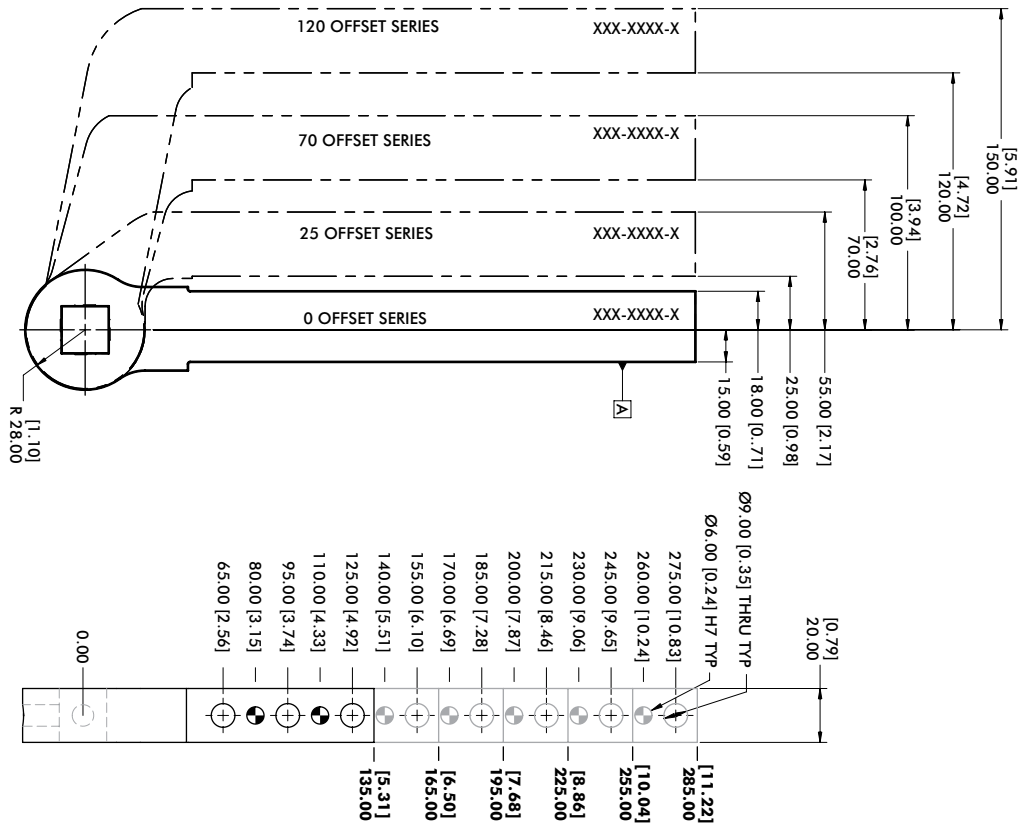


Arm Styles	1206-1208/3236-3238	1216-1218/3246-3248	1226-1228/3256-3258	1206-1207	1207-1208	1216-1217	1217-1218	1226-1227	1227-1228	1236-1237	1237-1238
1206-1208/3236-3238	135°	135°	100°	100°	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1216-1218/3246-3248	135°	N/A	50°	125°	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1226-1228/3256-3258	125°	N/A	35°	135°	N/A	N/A	N/A	N/A	N/A	N/A	N/A

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Pneumatic Power Clamps | Dimensions | Technical Specifications

## 82M-3. 63mm for 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

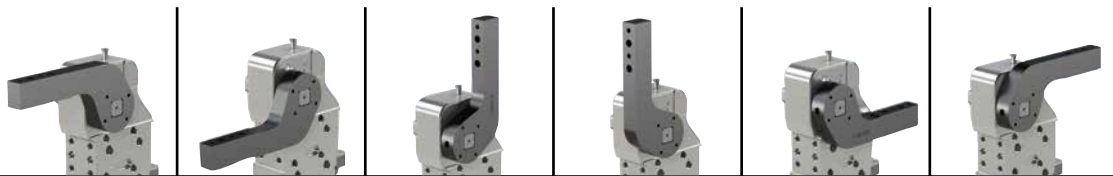
Series	Arm Style	Model
120 Offset	▲ 1548	B8JG-1548-1
70 Offset	▲ 1536	B8JG-1536-1
25 Offset	▲ 1524	B8JG-1524-1
0 Offset	▲ 1512	B8JG-1512-1

▲ Common in North America

(•) STANDARD ARM OFFERING

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

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

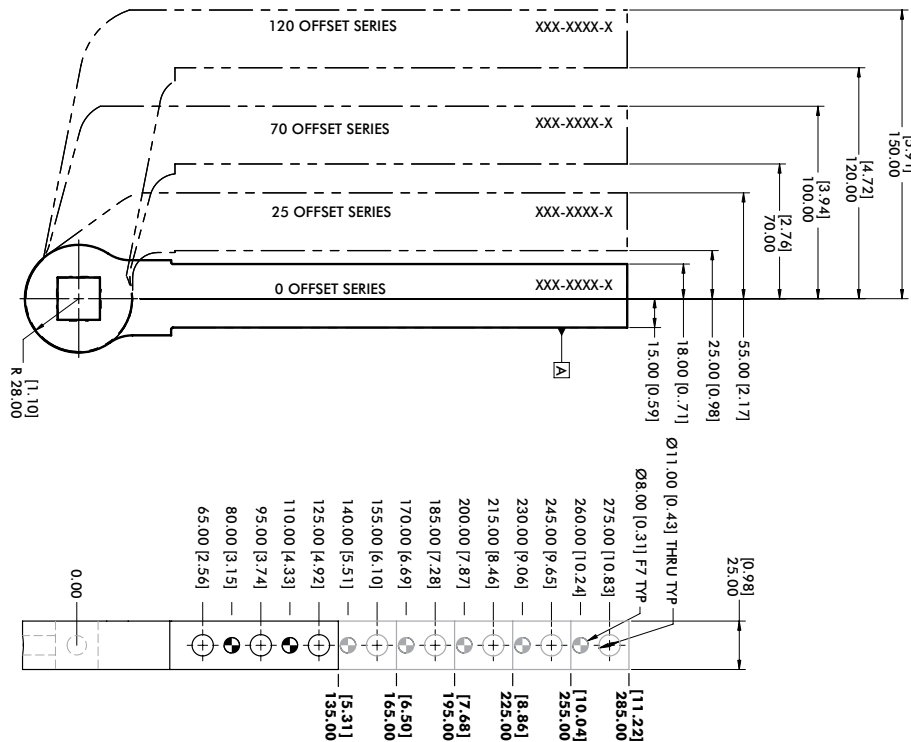


Arm Styles	135°	135°	100°	100°	N/A	N/A
1510-1512/1507-1509	135°	135°	100°	100°	N/A	N/A
1522-1524/1519-1521	135°	N/A	50°	130°	N/A	40°
1534-1536/1531-1533	115°	N/A	25°	135°	N/A	75°
1546-1548/1543-1545	110°	N/A	20°	135°	N/A	85°

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Pneumatic Power Clamps | Dimensions | Technical Specifications

## 82M-3. 63mm for 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

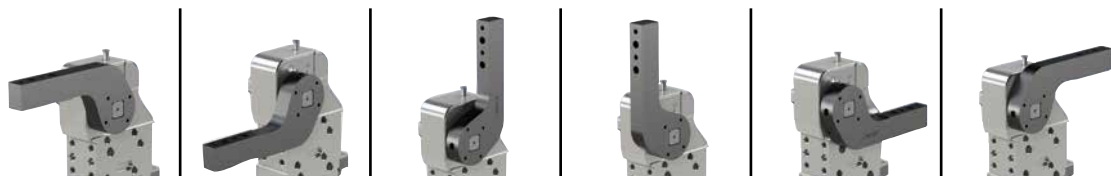
Series	Arm Style	Model
120 Offset	▲ ⓘ 1048	B8JG-1048-1
70 Offset	▲ ⓘ 1036	B8JG-1036-1
25 Offset	▲ ⓘ 1024	B8JG-1024-1
0 Offset	▲ ⓘ 1012	B8JG-1012-1

▲ Common in North America

(•) STANDARD ARM OFFERING

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

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

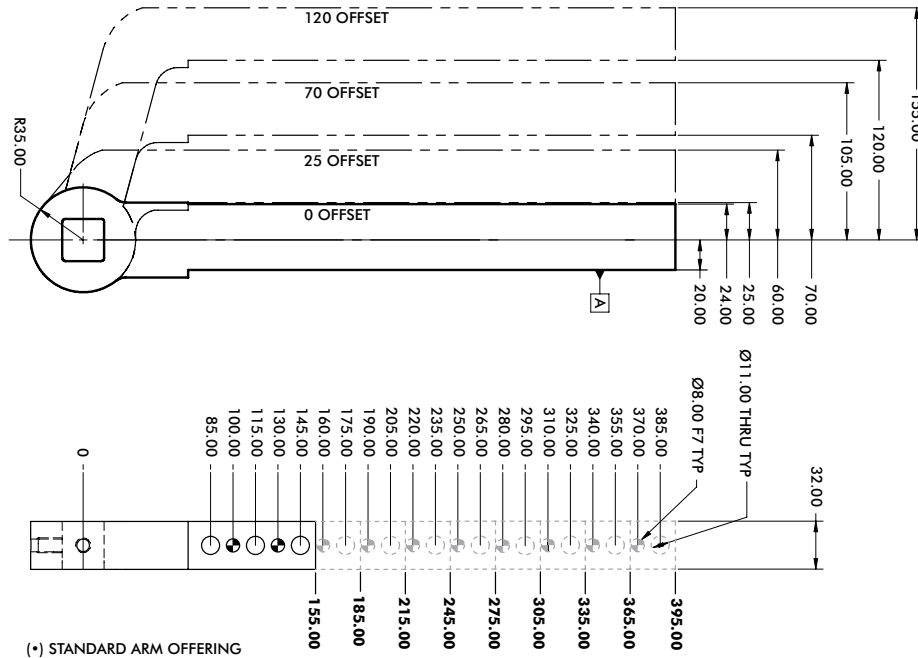


Arm Styles	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
1010-1012/1007-1009	135°	135°	100°	100°	N/A	N/A
1022-1024/1019-1021	135°	N/A	50°	130°	N/A	40°
1034-1036/1031-1033	115°	N/A	25°	135°	N/A	75°
1046-1048/1043-1045	110°	N/A	20°	135°	N/A	85°

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Pneumatic Power Clamps | Dimensions | Technical Specifications

82M-3E 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

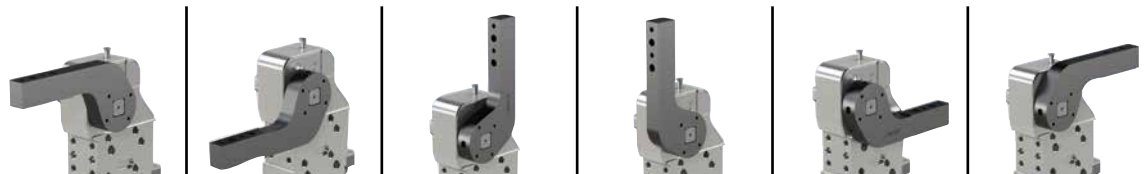
Series	Arm Style	Model
120 Offset	▲ ⓘ 1178	B8JG-1178-1
70 Offset	▲ • 1158	B8JG-1158-1
25 Offset	▲ ⓘ 1138	B8JG-1138-1
0 Offset	▲ • 1118	B8JG-1118-1

▲ Common in North America

(\*) STANDARD ARM OFFERING

ⓘ NON-STANDARD ARM OFFERING (extended leadtimes apply)

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

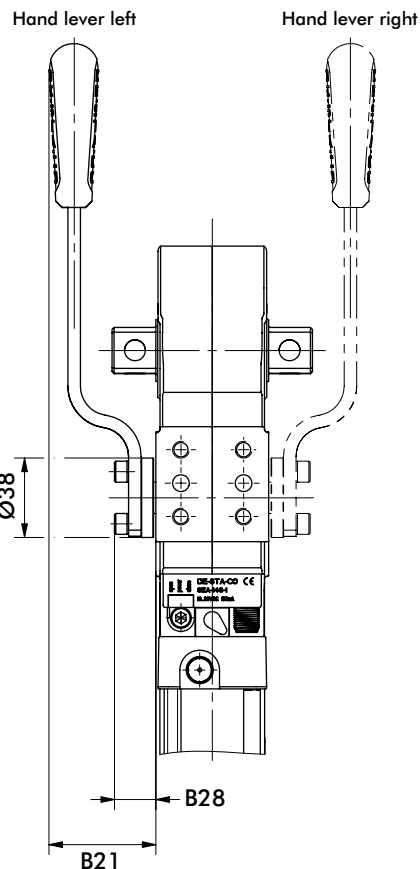
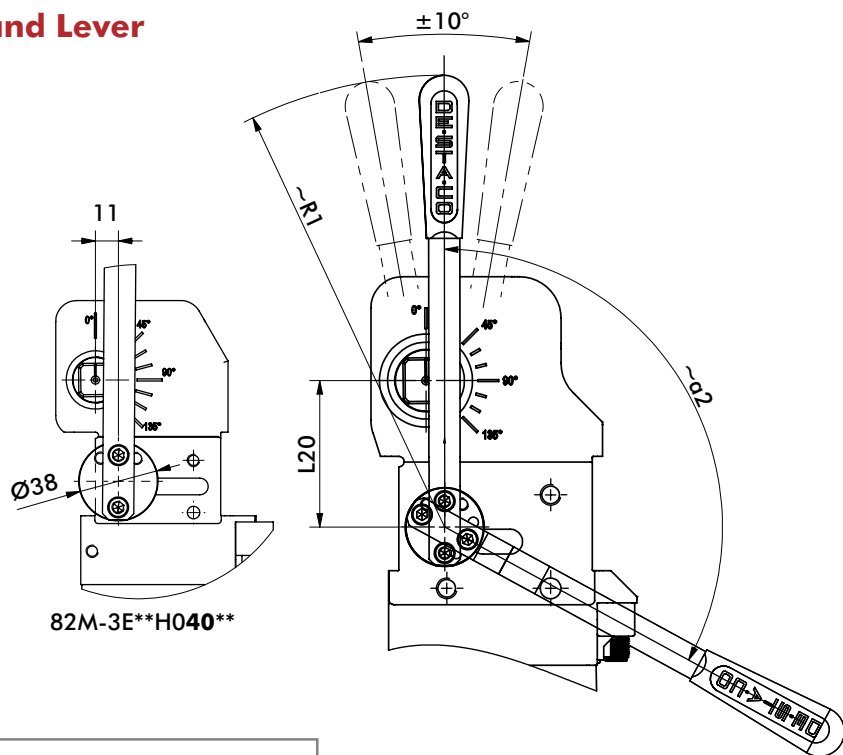


Arm Styles	1110 - 1118	1130 - 1138	1150 - 1158	1170 - 1178	1190 - 1198	1210 - 1218
1110 - 1118	135°	135°	100°	100°	N/A	N/A
1130 - 1138	135°	N/A	60°	120°	N/A	30°
1150 - 1158	125°	N/A	35°	135°	N/A	55°
1170 - 1178	115°	N/A	25°	135°	N/A	80°

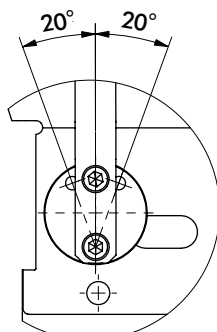
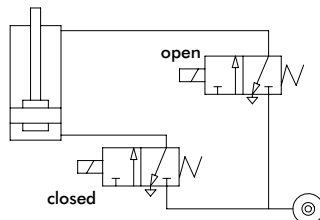
# 82M-3E ACCESSORIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

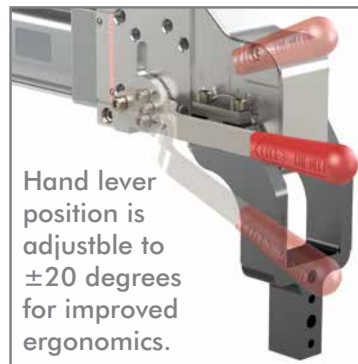
### Hand Lever



Pneumatic circuit required for manual and pneumatic actuation.



Hand lever can be mounted in 3 positions



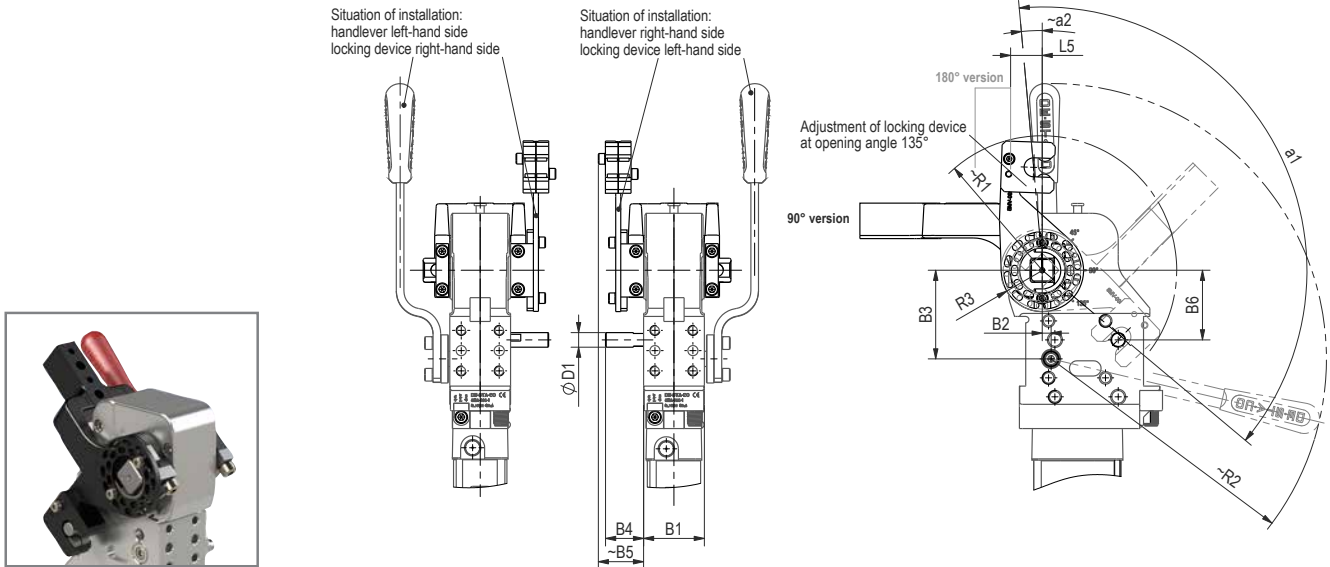
Hand lever position is adjustable to  $\pm 20$  degrees for improved ergonomics.

Model No.	Swivel Angle $\alpha 2$ (with reference to opening angle of clamp arm)													
	B21	B28	L20	~R1	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°
82M-3E..H040..	27	24	48,5	190	0°	31°	41°	49°	58°	69°	88°	113°	134°	144°
82M-3E..H05...	52	20	70	218	1°	32°	40°	48°	55°	63°	72°	83°	95°	105°
82M-3E..H06..	52	20	70,5	218	0°	30°	39°	47°	56°	66°	79°	94°	108°	119°
82M-3E..H08..	56	24	82	268	-1°	28°	37°	45°	53°	63°	75°	92°	107°	117°

# 82M-3E ACCESSORIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

### Locking Device for Hand Lever

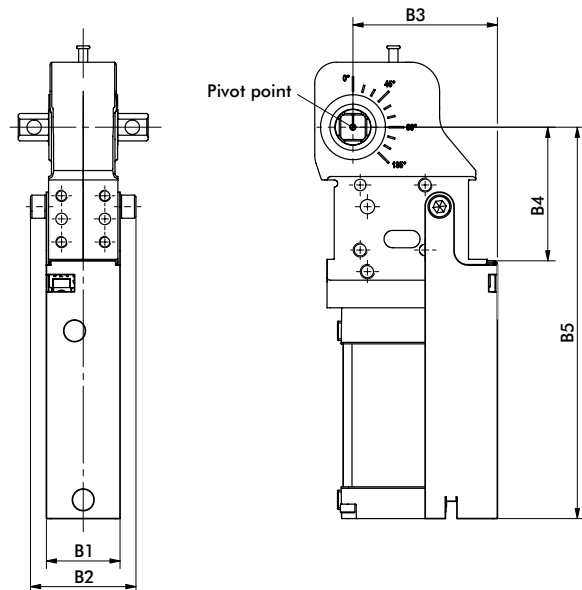


Order No.	For Model	B1	B2	B3	B4	B5	B6	ØD1	R1	R2	R3	a1 max.	a2	Limited setting options at 180° version! Height of the clamping arm: L5		
														00	15	25
82ZB-162-1	82M-3E..H040..	50	11	48,5	25	31	38,5	10,5	81	160	27		6	max.105°	max.120°	max.120°
82ZB-084-1	82M-3E..H05...	48	7	70	30	36	55	11,5	107	218	32,5	135°	6	-	max.105°	max.120°
82ZB-039-1	82M-3E..H06...	54	9	70,5	30	36	55	11,5	107	210	32,5		6	-	max.105°	max.120°



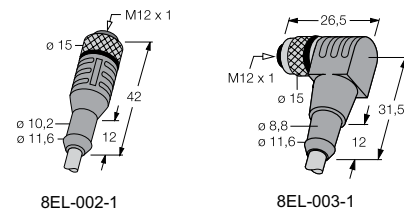
Using of the anti-ramming device is only possible with 82M-3E.....00 and 82M-3E.....L8

### Anti-Ramming Device



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

### Cable and Connector



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

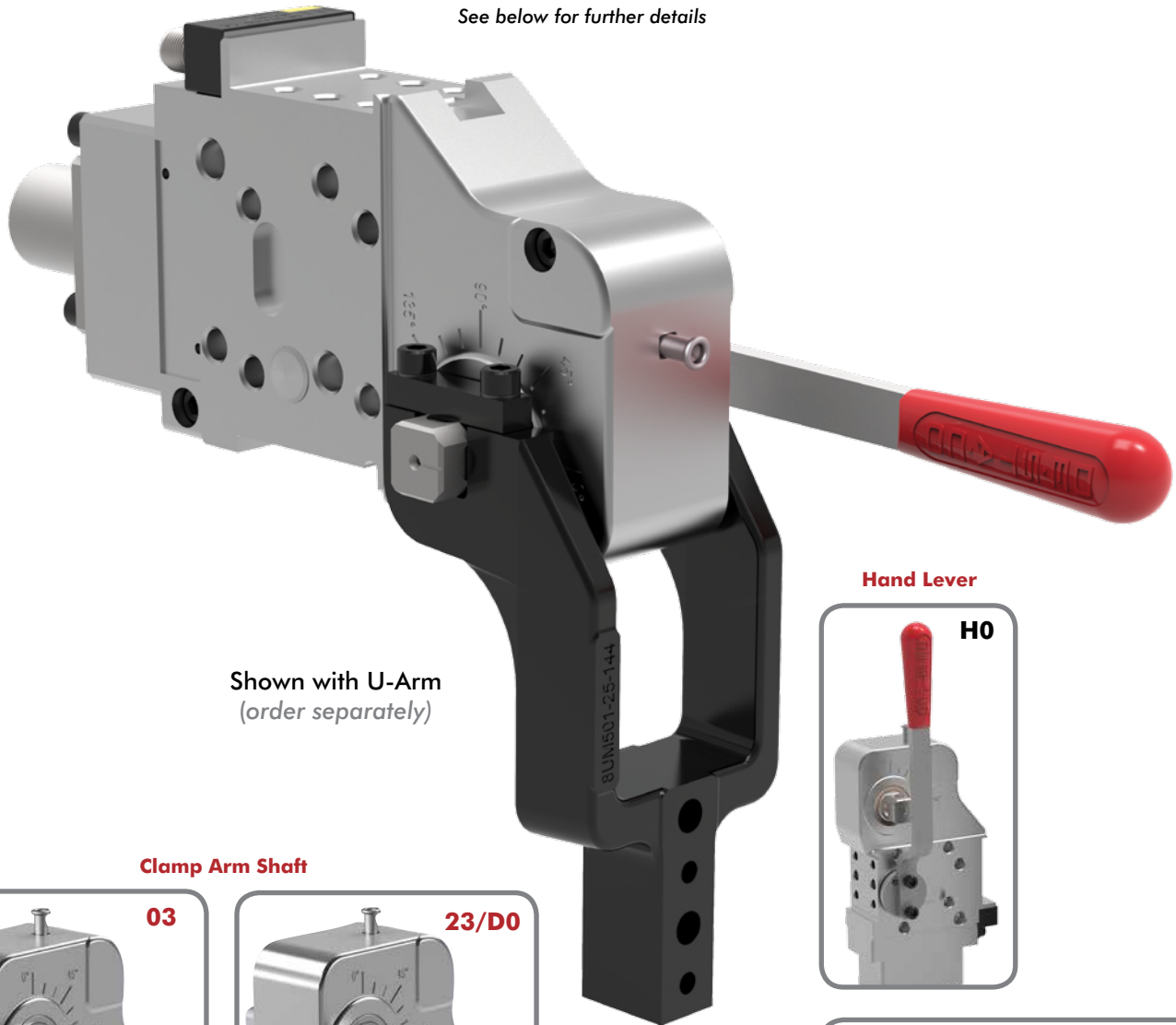
# 52H-3E SERIES

## Pneumatic Power Clamps | Ordering Information

**52H-3** **E** **23** **H0** **50** **L8**

Base Model	Mounting	Description	Clamp Arm Shaft	Description	Handle	Description
	<b>E</b>	Standard	<b>03</b>	for U-Arms	<b>H0</b>	Hand lever
	<b>N</b>	NAAMS (Size 63 only)	<b>23</b>	for Lateral Arms	<b>HS</b>	Hand Lever (Weldable)
			<b>D0</b>	for Lateral Arms (size 63 only)		

See below for further details

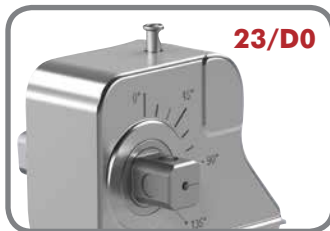


Shown with U-Arm  
(order separately)

### Clamp Arm Shaft

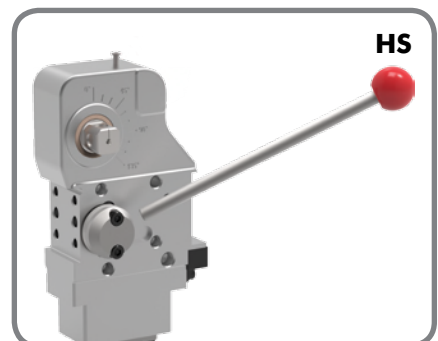


**Size** Shaft Length (L17)  
50 12mm  
63 12mm



**23**  
**Size** Shaft Length (L17)  
50 21mm  
63 21mm  
**D0**  
**Size** Shaft Length (L17)  
D0 26mm

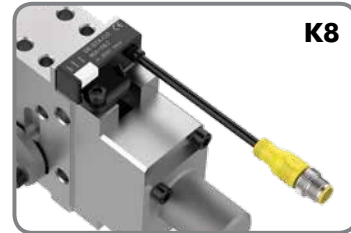
### Hand Lever



# 52H-3E SERIES

## Pneumatic Power Clamps | Ordering Information

Sensor	Description
00	No sensor
L8	Sensor with In-line Connector (Replacement Order No.: 8EA-146-2)
L9	Sensor with 90 deg Connection (Replacement Order No.: 8EA-147-2)
K8	Sensor with Cable Connection (Replacement Order No.: 8EA-158-2)



Size	Description
50	Size 50mm
63	Size 63mm



50

Max Holding Torque  
1300 Nm



63

Max Holding Torque  
1800 Nm

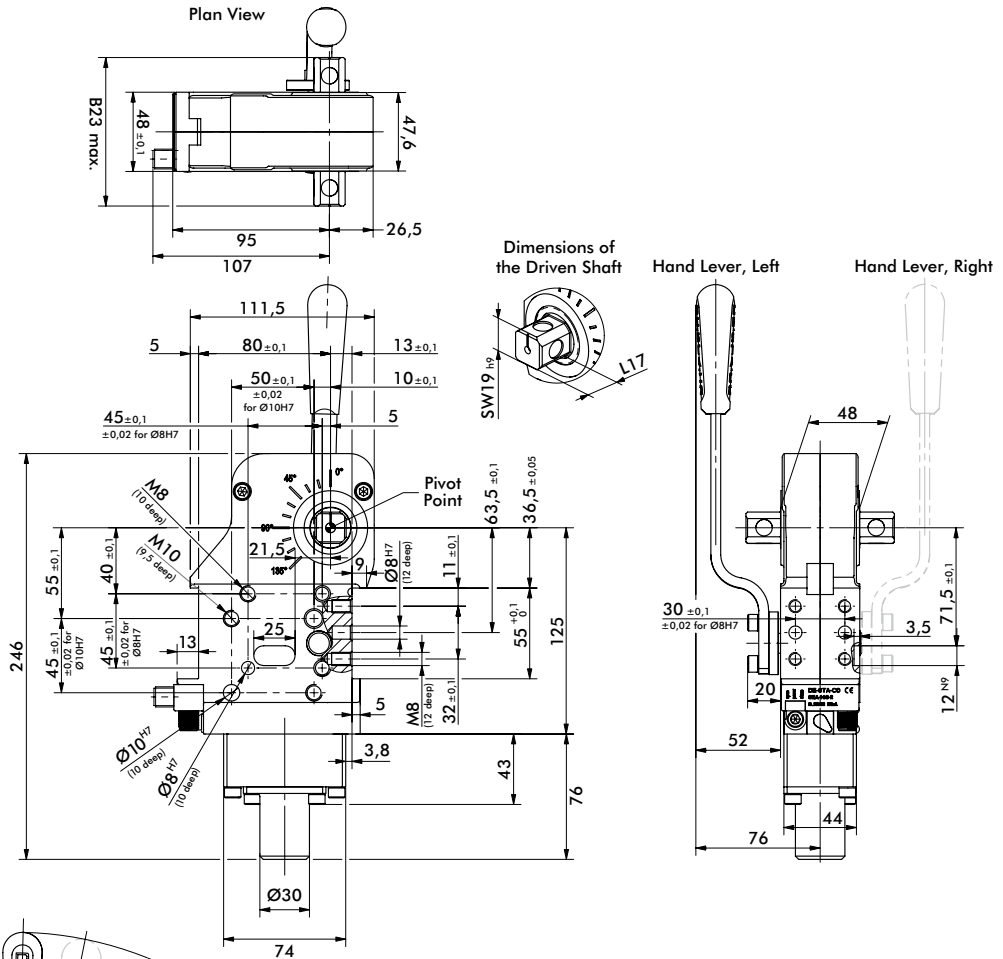
**52H-3E..H.50/63**  
Modular manual  
clamp, interchangeable  
with 82M-3E...50/63



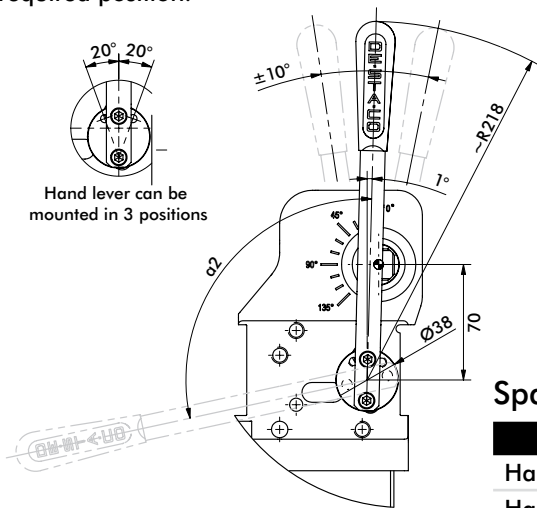
# 52H-3E...50 SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

Model	Max. Holding Torque (Nm)	Weight (kg)	B23 max.	L17	Swivel Angle $\alpha 2$ (with reference to opening angle of clamping arm)									
					0°	15°	30°	45°	60°	75°	90°	105°	120°	135°
52H-3E03H050..	1300	2,75	72	12	-1°	30°	39°	46°	53°	61°	70°	81°	92°	103°
52H-3E23H050..		2,79	90	21										

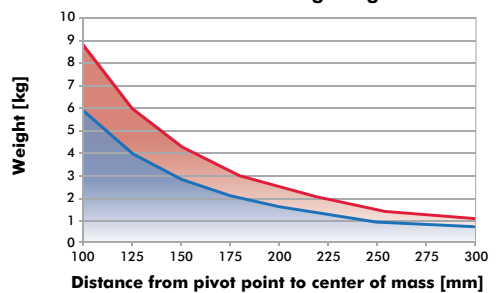


**Notice!**  
The hand lever is supplied loose enclosed. Easy custom left hand or right hand mounting in required position.



Hand lever can be mounted in 3 positions

Maximum Tooling Weight



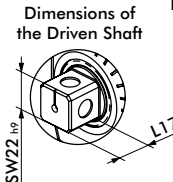
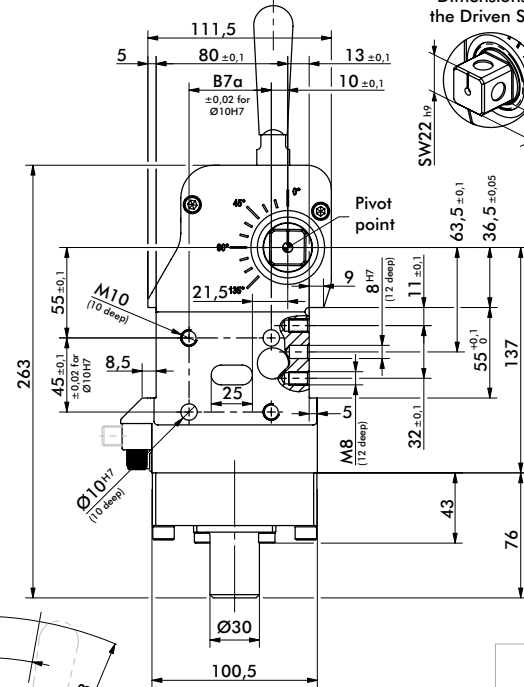
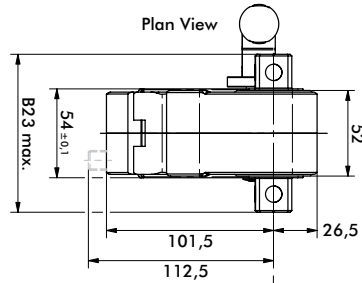
### Spare parts

Specification	Base component	Order no.	Comment
Hand lever set	52H-3E...50	8KB-098-1	
Hand lever set (weldable)		8KB-102-1	
Sensor box	8EA-146-2 (L8)	Connector 180°	
	8EA-147-2 (L9)	Connector 90°	
	8EA-158-2 (K8)	Cable Connection	

# 52H-3E...63 SERIES

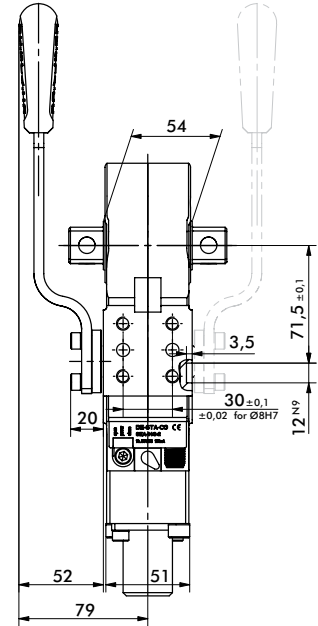
## Pneumatic Power Clamps | Dimensions | Technical Specifications

Model	Max. Holding Torque (Nm)	Weight (kg)	B7a	B23 max.	L17	Swivel Angle $\alpha_2$ (with reference to opening angle of clamping arm)									
						0°	15°	30°	45°	60°	75°	90°	105°	120°	135°
52H-3E03H06...	1800	3,5	50	78	12	0°	30°	39°	47°	56°	66°	79°	94°	108°	119°
52H-3N03H06...			55		21										
52H-3E23H06...		3,6	50	12											
52H-3N23H06...	55		21												

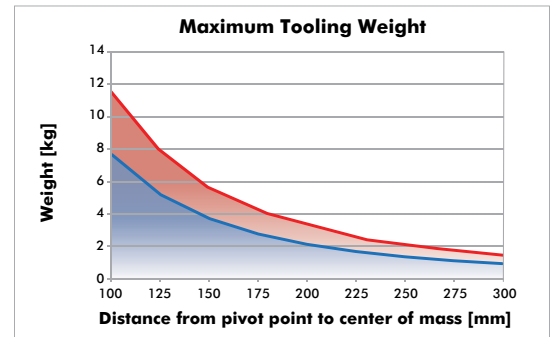
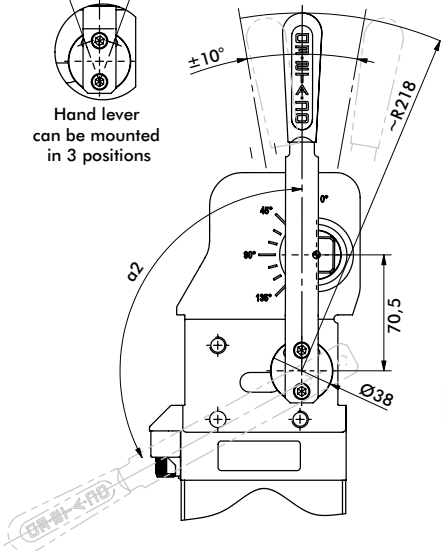


Hand lever, Left

Hand lever, Right



**Notice!**  
The hand lever is supplied loose enclosed. Easy custom left hand or right hand mounting in required position.



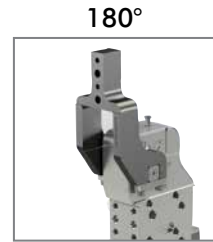
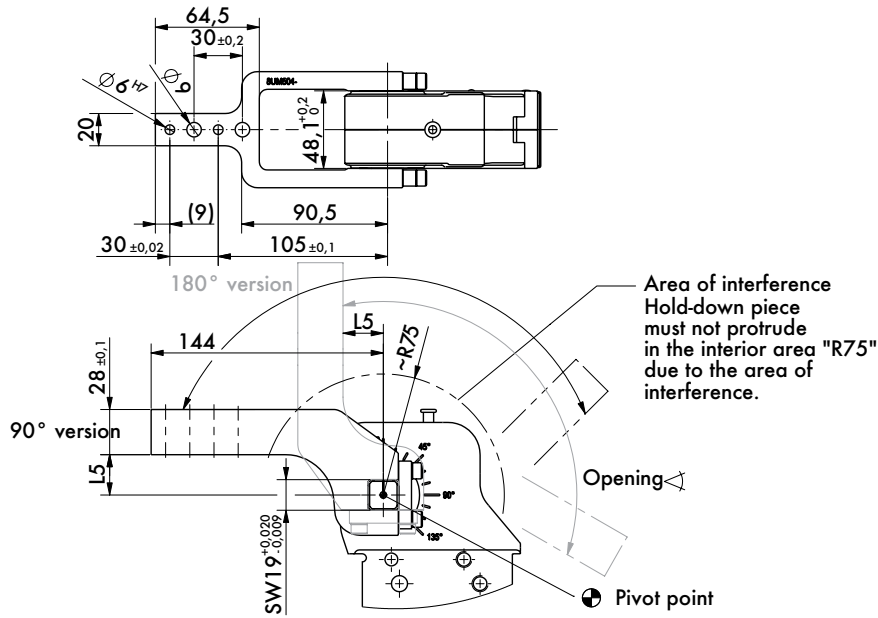
### Spare parts

Specification	Base component	Order no.	Comment
Hand lever set	52H-3E...63	8KB-099-1	
Hand lever set (weldable)		8KB-103-1	
Sensor box		8EA-146-2 (L8) 8EA-147-2 (L9) 8EA-158-2 (K8)	Connector 180° Connector 90° Cable Connection

# U-ARMS CENTER (ALUMINUM)

Pneumatic Power Clamps | Dimensions | Technical Specifications

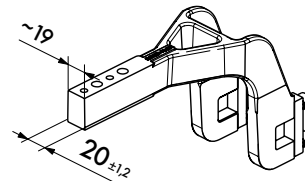
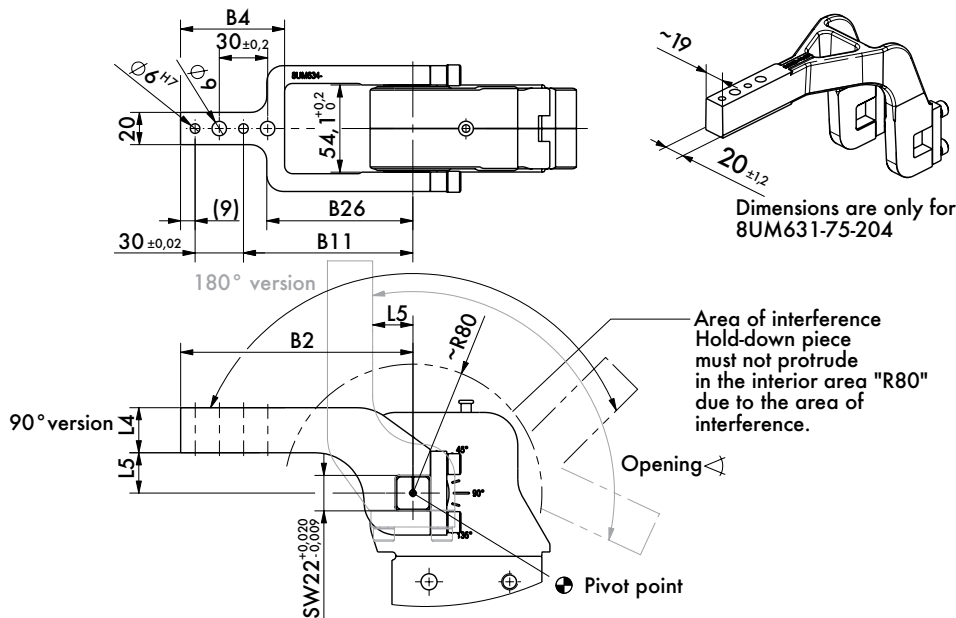
## 52H-3E...5... U-Arms Center (Steel)



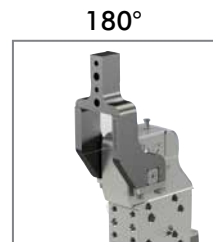
8UM504-15-144  
8UM504-25-144  
8UM504-45-144

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

## 52H-3...6... U-Arms Center (Steel)



Dimensions are only for 8UM631-75-204



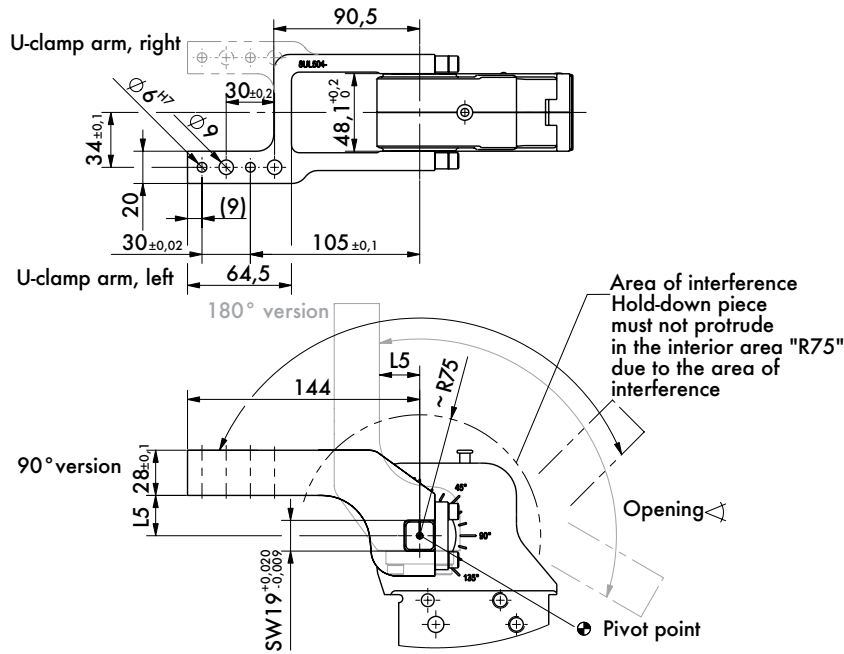
8UM634-15-144  
8UM634-25-144  
8UM634-45-144  
8UM631-75-204\*\*

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight	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.

# U-ARMS OFFSET (ALUMINUM)

Pneumatic Power Clamps | Dimensions | Technical Specifications



## 52H-3E...5... U-Arms Offset (Steel)

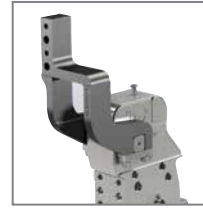
90° Left



90° Right



180° Right\*



180° Left\*

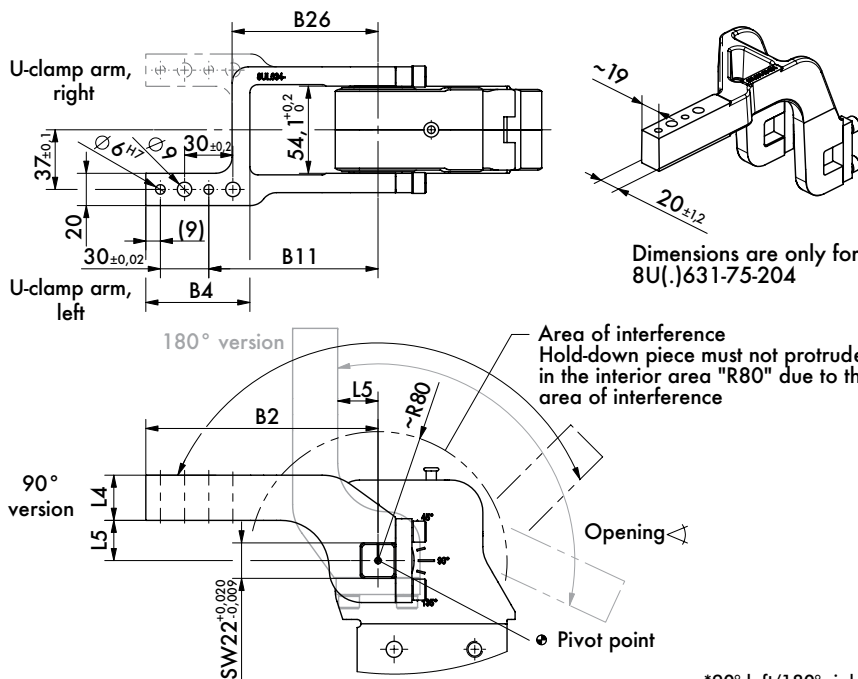


8UL504-15-144  
8UL504-25-144  
8UL504-45-144

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	L5
8U(.)504-15-144	135°	105°	0,45	15
8U(.)504-25-144		120°	0,46	25
8U(.)504-45-144		135°	0,49	45



## 52H-3E...6... U-Arms Offset (Steel)

90° Left



90° Right



180° Right\*



180° Left\*



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

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

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

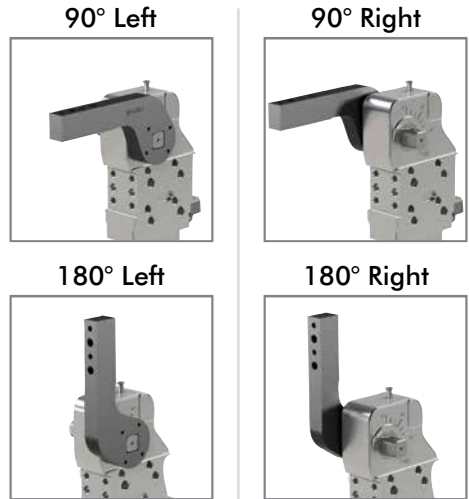
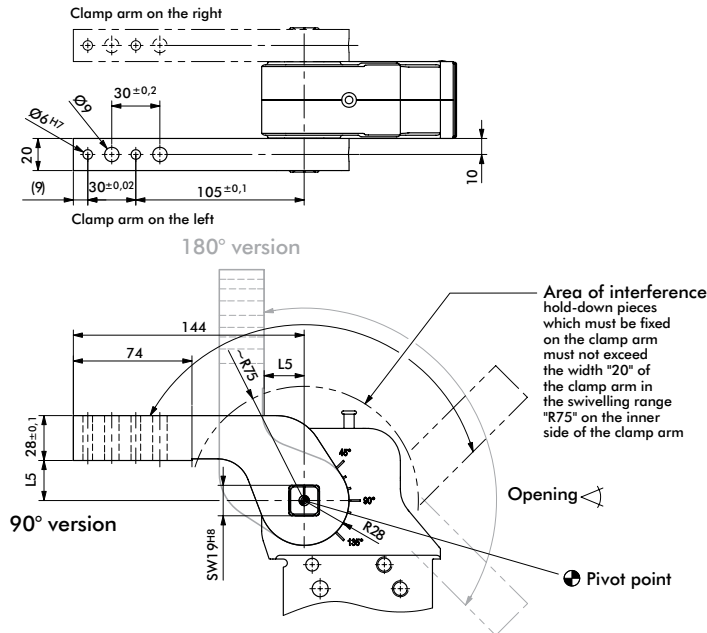
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight	B2	B4	B11 ±0,1	B26	L4 ±0,1	L5
8U(.)634-15-144	135°	105°	0,52						15
8U(.)634-25-144		120°	0,54	144	64,5	105	90,5	28	25
8U(.)634-45-144		135°	0,58						45
8U(.)631-75-204**		1,9	204	82	165	119	30	75	

\*\* only steel version available.

# LATERAL (SIDE) ARMS

## Pneumatic Power Clamps | Dimensions | Technical Specifications

### 52H-3E...5...

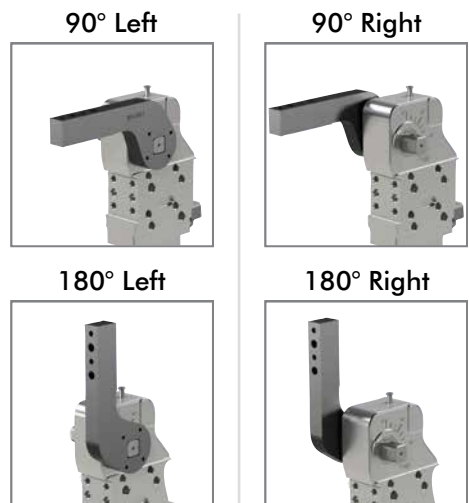
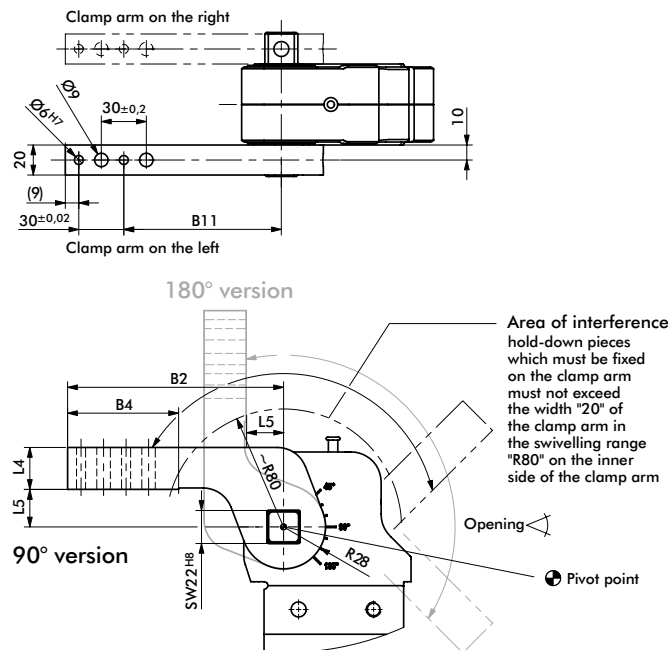


8JG-070-1-01  
8S501-25-144

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

Models with 2 lateral clamp arms requires 2 clamp arm sets.

### 52H-3E...6...



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

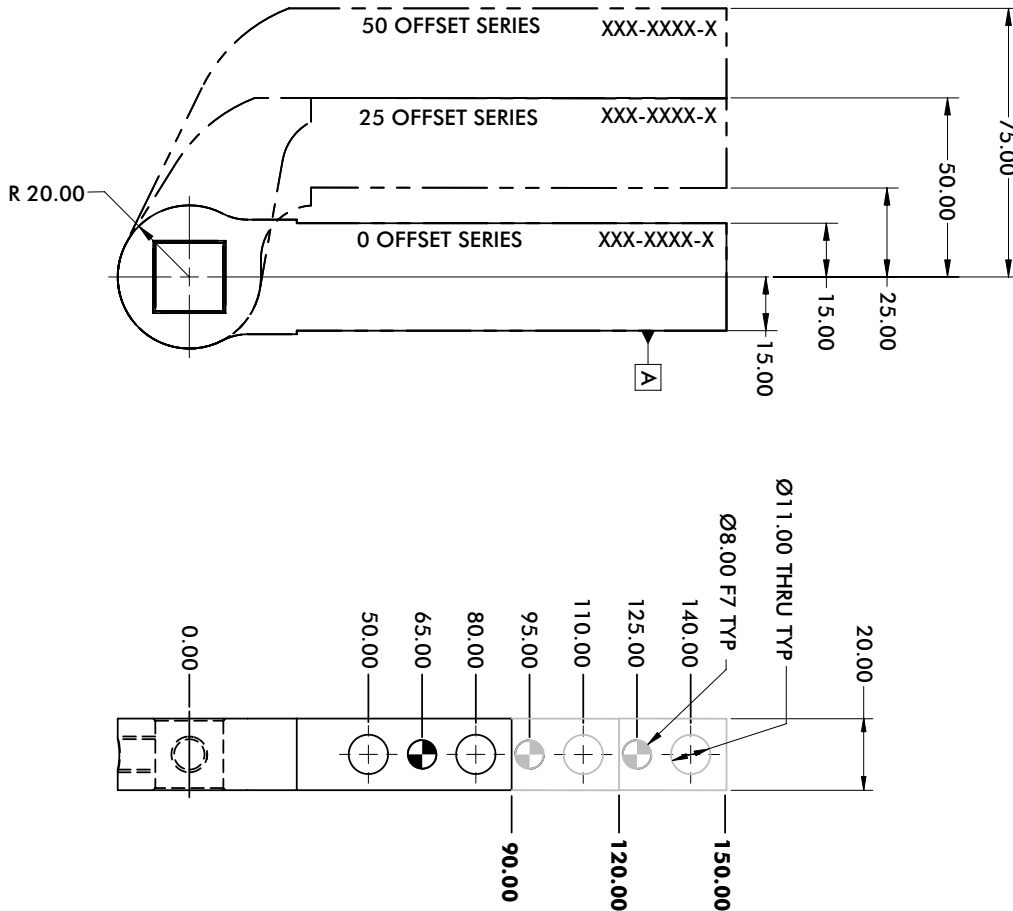
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	B11 ±0,1	L4 ±0,1	L5
8JG-080-1-01	135°	135°	0,9	144	74	105	28	15
8S631-25-144			1,0					25
8S631-45-144			1,1					45
8S631-75-204			1,5					75

Models with 2 lateral clamp arms requires 2 clamp arm sets.

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Pneumatic Power Clamps | Dimensions | Technical Specifications

**52H-3E. 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

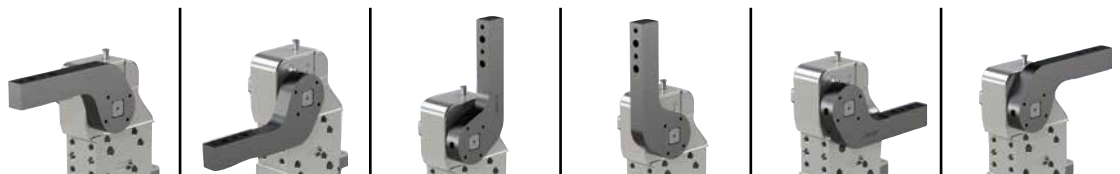
## 11mm Thru Hole (8.00 F7 Dowel)

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)

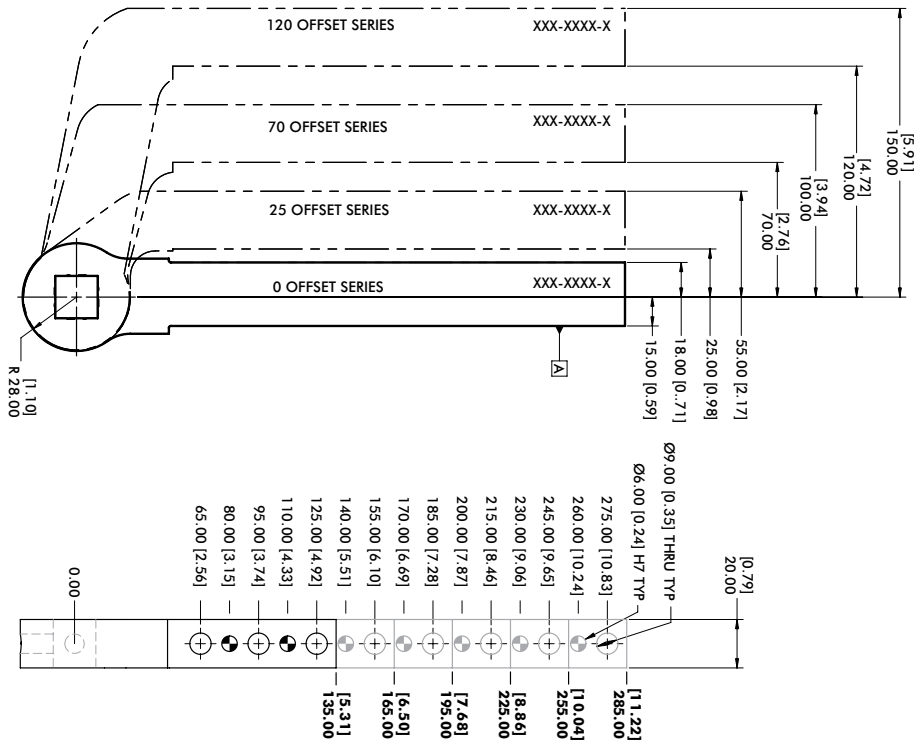


Arm Styles	135°	135°	100°	100°	N/A	N/A
1206-1208/3236-3238	135°	135°	100°	100°	N/A	N/A
1216-1218/3246-3248	135°	N/A	50°	125°	N/A	30°
1226-1228/3256-3258	125°	N/A	35°	135°	N/A	50°

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Pneumatic Power Clamps | Dimensions | Technical Specifications

## 52H-3E. 63mm for 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

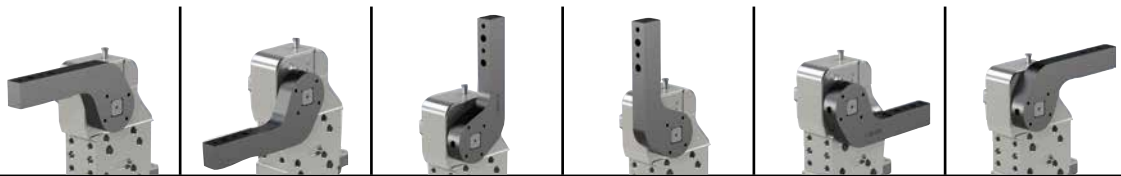
Series	Arm Style	Model
120 Offset	▲ 1548	B8JG-1548-1
70 Offset	▲ 1536	B8JG-1536-1
25 Offset	▲ 1524	B8JG-1524-1
0 Offset	▲ 1512	B8JG-1512-1

▲ Common in North America

(•) STANDARD ARM OFFERING

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

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

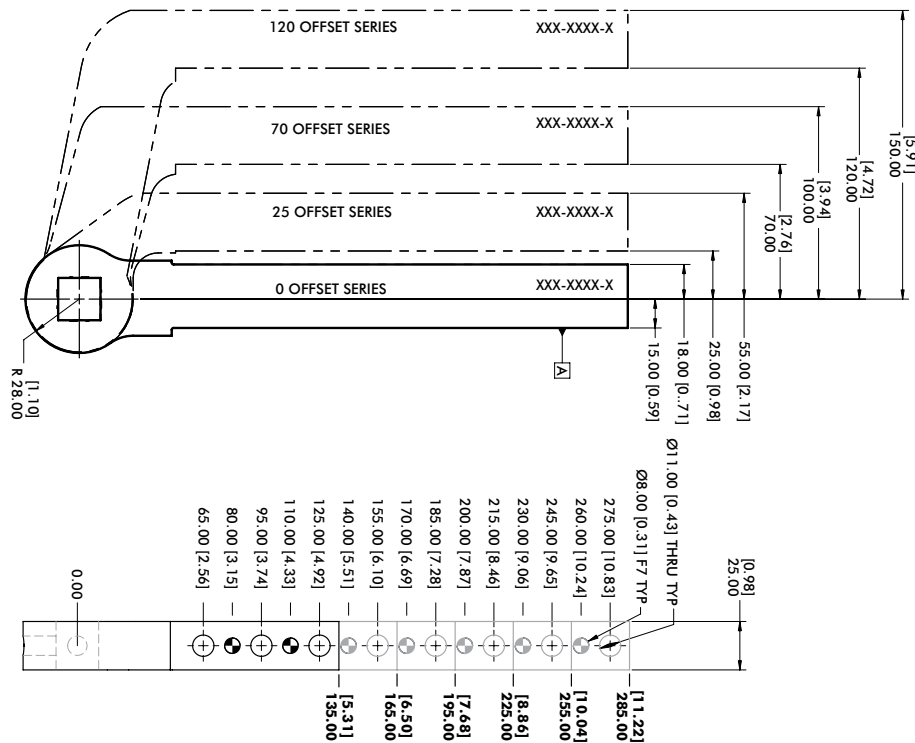


Arm Styles	135°	135°	100°	100°	N/A	N/A
1510-1512/1507-1509	135°	135°	100°	100°	N/A	N/A
1522-1524/1519-1521	135°	N/A	50°	130°	N/A	40°
1534-1536/1531-1533	115°	N/A	25°	135°	N/A	75°
1546-1548/1543-1545	110°	N/A	20°	135°	N/A	85°

# LATERAL (SIDE) ARMS, NAAMS-STYLE

Pneumatic Power Clamps | Dimensions | Technical Specifications

## 52H-3E. 63mm for 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	▲ ① 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	▲ ① 1045	B8JG-1045-1
70 Offset	▲ • 1033	B8JG-1033-1
25 Offset	▲ ① 1021	B8JG-1021-1
0 Offset	▲ • 1009	B8JG-1009-1

### 225mm [8.86"] Arm Length

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

### 255mm [10.04"] Arm Length

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

### 285mm [11.22"] Arm Length

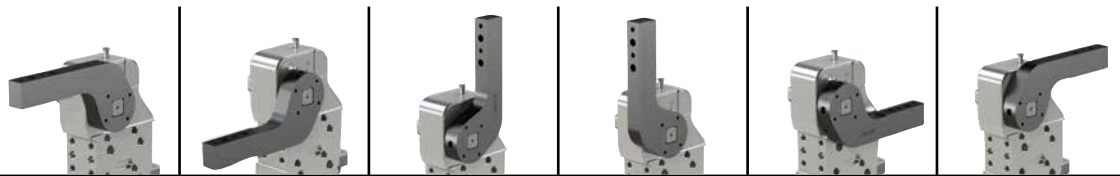
Series	Arm Style	Model
120 Offset	▲ ① 1048	B8JG-1048-1
70 Offset	▲ ① 1036	B8JG-1036-1
25 Offset	▲ ① 1024	B8JG-1024-1
0 Offset	▲ ① 1012	B8JG-1012-1

▲ Common in North America

(•) STANDARD ARM OFFERING

① NON-STANDARD ARM OFFERING (extended leadtimes apply)

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



Arm Styles	135°	135°	100°	100°	N/A	N/A
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°



# 870-2, 871-2 SERIES

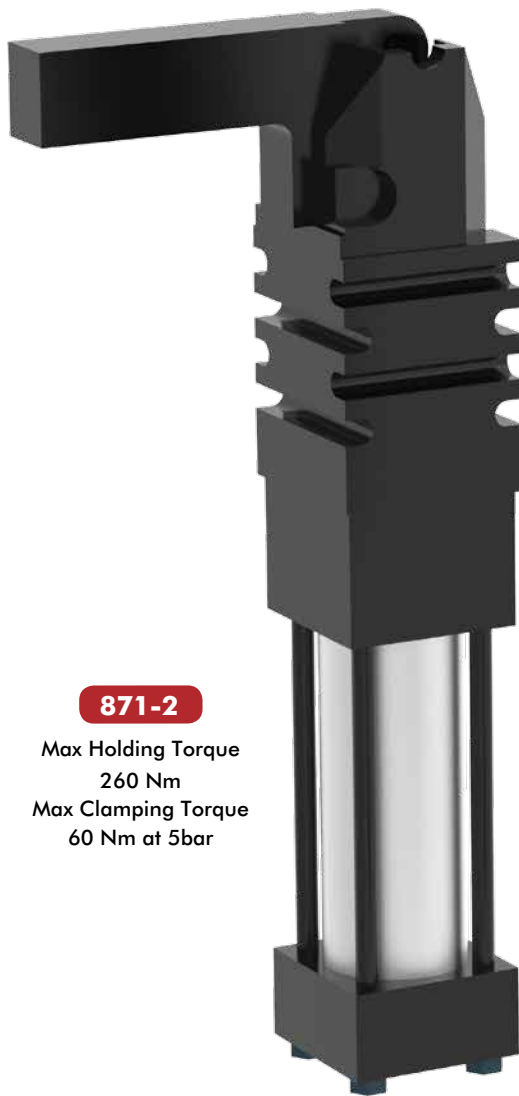
## Pneumatic Power Clamps | Ordering Information

### 870-2

Base Model	Description
<b>870-2</b>	With Clamping Arm in Vertical Position
<b>871-2</b>	With Clamping Arm in Horizontal Position

Sensors	Description (order separately)
<b>BIM-IKE-AP</b>	Magnetic Sensor, 2 pieces required
<b>810151</b>	Magnetic Sensor, 2 pieces required
<b>810153</b>	Magnetic Sensor, 2 pieces required
<b>810155</b>	Magnetic Sensor, 2 pieces required
<b>810157</b>	Magnetic Sensor, 2 pieces required

See page PC-PPC-58 for sensor specifications.



### 871-2

Max Holding Torque  
260 Nm  
Max Clamping Torque  
60 Nm at 5bar



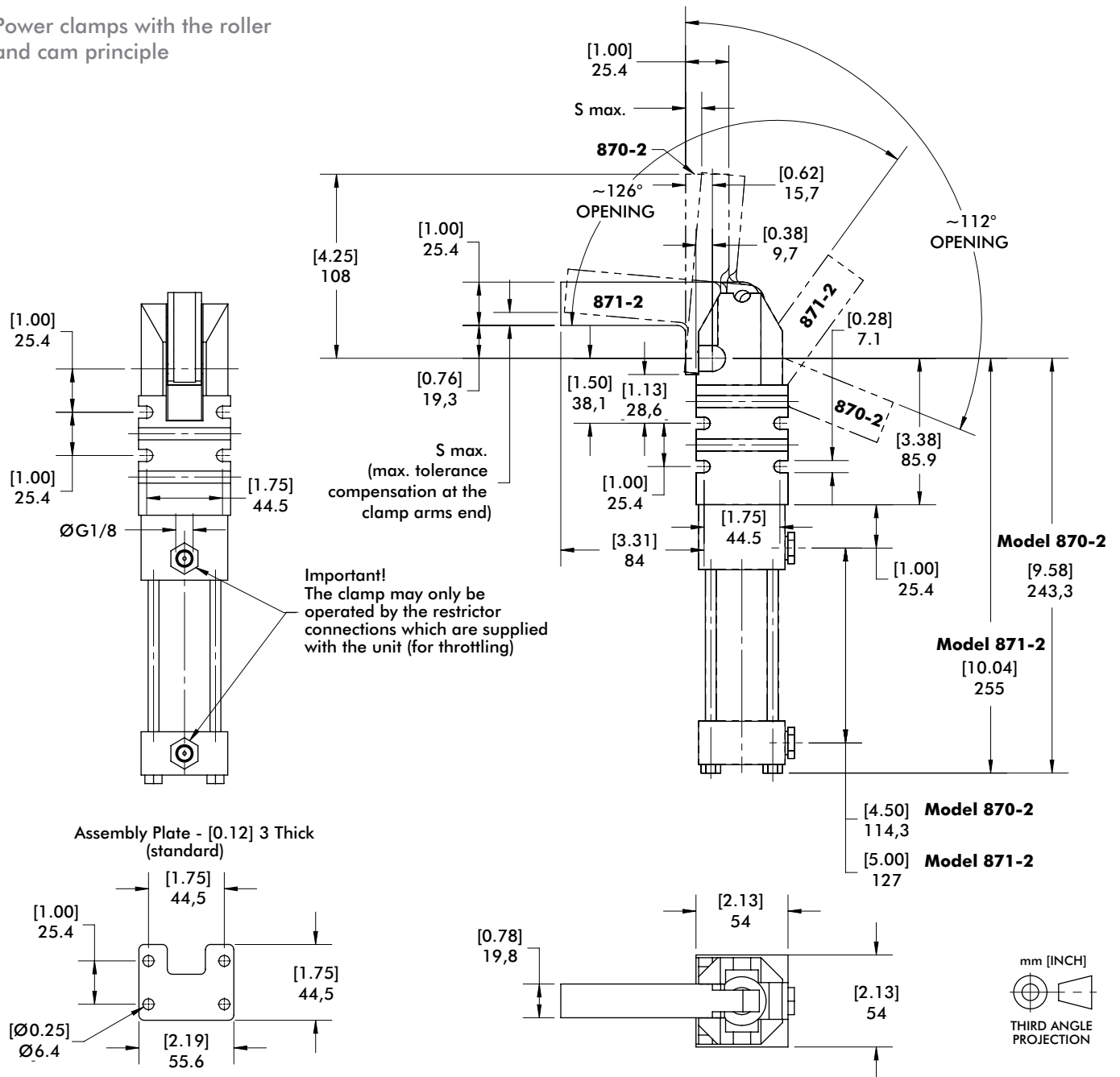
### 870-2

Max Holding Torque  
260 Nm  
Max Clamping Torque  
60 Nm at 5bar

# 870-2, 871-2 SERIES

## Pneumatic Power Clamps | Dimensions | Technical Specifications

Power clamps with the roller and cam principle



Model	Connection	S Max. Max. Tolerance Compensation at the Clamp Arms End [ft lb] Nm	Max. Operating Pressure [psi] bar	Cylinder Ø [in.] mm	Opening Angle	Weight [lbs] kg	Air Consumption per double stroke at 5 bar dm <sup>3</sup> [ft <sup>3</sup> ]
870-2	G 1/8	[3] 4,5	[145]	[1.50]	112°	[6.60]	0,95 [0.03]
871-2		[3] 3,5	10	38,1	118°	3	

Sensor Options	Mount Style	Connector	Length	Function	Voltage	Max. Switching Current	Voltage Drop
BIM-IKE-AP	Tie Rod	No connector cord	2m [6.6 ft.]	PNP	10-30V DC	200mA	2.3V
810151				Reed	5-120V AC/DC	500mA	3.5V
810153			Reed	24-240V AC	4A	1.0V	
810155			PNP	6-24V DC	500mA	1.0V	
810157			NPN	6-24V DC	500mA	1.0V	

# 860, 861, 890, 891, 1000, 1001 SERIES

## Pneumatic Power Clamps | Ordering Information

860

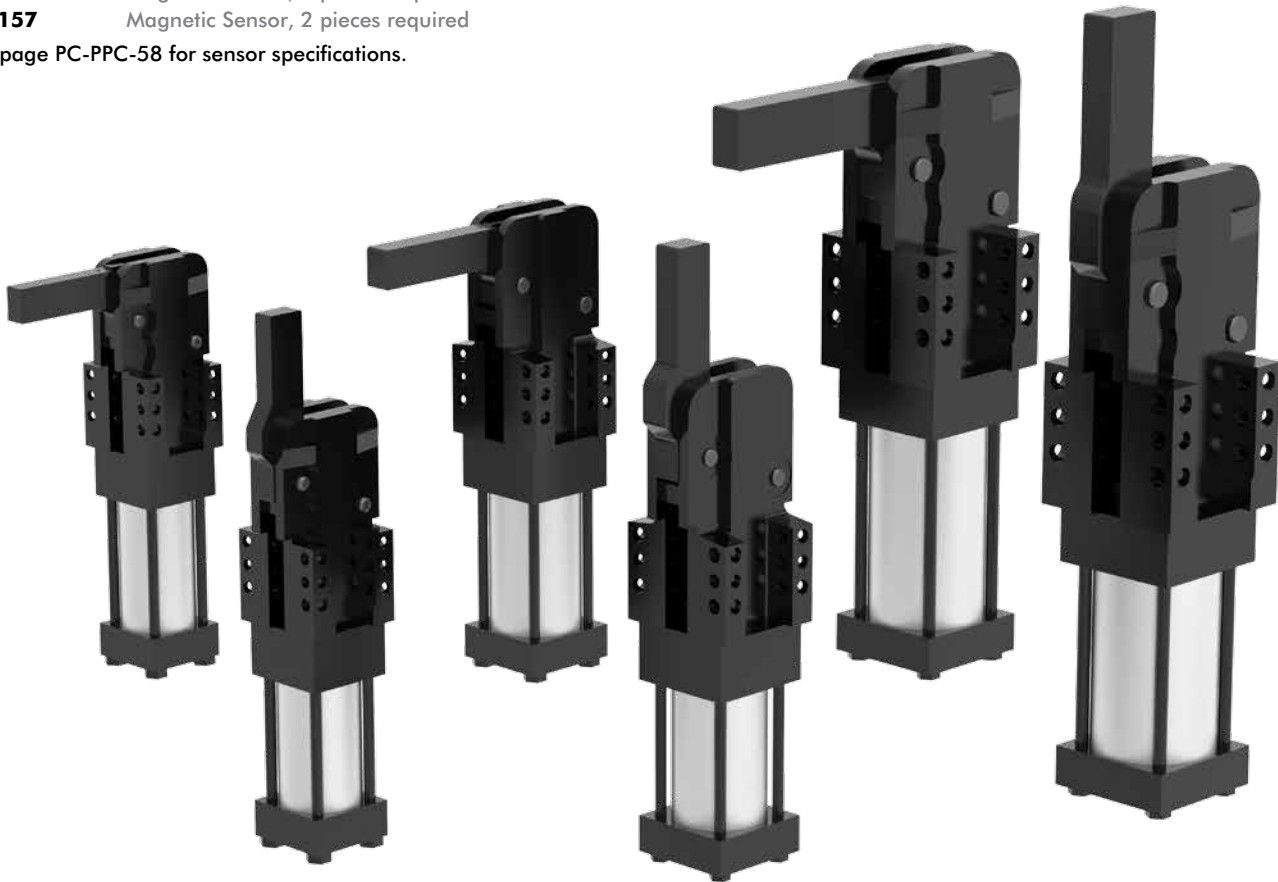
Base Model	Description
860	2 in. Cylinder Bore Size with Vertical Clamp Arm
861	2 in. Cylinder Bore Size with Horizontal Clamp Arm
890	2.5 in. mm Cylinder Bore Size with Vertical Clamp Arm
891	2.5 in. Cylinder Bore Size with Horizontal Clamp Arm
1000	3.25 in. Cylinder Bore Size with Vertical Clamp Arm
1001	3.25 in. Cylinder Bore Size with Horizontal Clamp Arm

Sensors	Description (order separately)
BIM-IKE-AP	Magnetic Sensor, 2 pieces required
810151	Magnetic Sensor, 2 pieces required
810153	Magnetic Sensor, 2 pieces required
810155	Magnetic Sensor, 2 pieces required
810157	Magnetic Sensor, 2 pieces required

See page PC-PPC-58 for sensor specifications.

Seal Kit	Description (order separately)
8610100	Seal Kit for Model 860, 861
8910100	Seal Kit for Model 890, 891
10010100	Seal Kit for Model 1000, 1001

Cylinder	Description (order separately)
865133-MR	Replacement Cylinder for Model 860
865132-MR	Replacement Cylinder for Model 861
895133-MR	Replacement Cylinder for Model 890
895132-MR	Replacement Cylinder for Model 891
1005134-MR	Replacement Cylinder for Model 1000
1005133-MR	Replacement Cylinder for Model 1001



861

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

891

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

1001

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

860

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

890

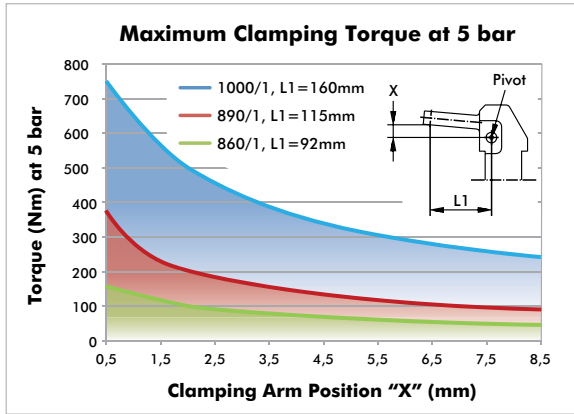
Max Holding Torque  
1300 Nm  
Max Clamping Torque  
270 Nm at 5bar

1000

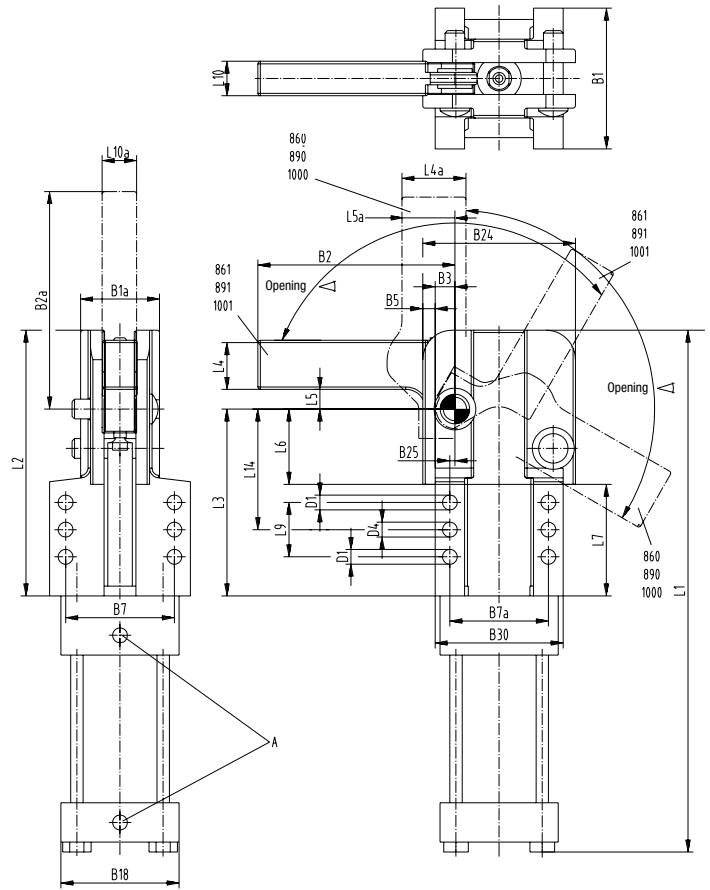
Max Holding Torque  
1800 Nm  
Max Clamping Torque  
420 Nm at 5bar

# 860, 861, 890, 891, 1000, 1001 SERIES

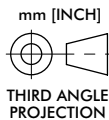
Pneumatic Power Clamps | Dimensions | Technical Specifications



Model	Cylinder Ø mm [in]	Opening Angle	Weight kg [lbs]
860	[2.00]	96°	[8.58]
861	50,8	119°	3,9
890	[2.50]	96°	[16.06]
891	63,5	119°	7,3
1000	[3.25]	96°	[29.70]
1001	82,5	119°	13,5



Power by compressed air, max. 6 bar  
Operation with oil-free air is permissible.



Information vor machining of clamp arm: Steel 1.0726

Model	A	B1	B1A	B2	B2A	B3	B5	B7	B7A	B18	B24	B25	B30
860	G1/8	[2.94] 74,7	[1.75] 44,5	-	[5.44] 138,2	[0.41] 10,4	[0.25] 6,4	[2.31] 58,7	[2.19] 55,6	[2.5] 63,5	[3.31] 84,1	[0.09] 2,3	[2.81] 71,4
861				[4] 101,6	-								
890	G1/8	[3.56] 90,4	[2] 50,8	-	[6.57] 166,9	[0.5] 12,7	[0.31] 7,9	[2.76] 70,1	[2.5] 63,5	[3] 76,2	[3.87] 98,3	[0.13] 3,3	[3.25] 82,6
891				5.06 128,5	-								
1000	G1/8	[4.5] 114,3	[2.62] 66,5	-	[9] 228,6	[0.63] 16	[0.44] 11,2	[3.5] 88,9	[3.5] 88,9	[3.75] 95,3	[5.38] 136,7	[0.13] 3,3	[4.5] 114,3
1001				7 177,8	-								

Model	ØD1	ØD4	L1	L2	L3	L4	L4A	L5	L5a	L6	L7	L9	L10	L10a	L14
860	[0.34] 8,6	[0.31] 7,9	[12.44] 316	[5.75] 146,1	[4.06] 103,1	-	[1.12] 28,4	--	[0.69] 17,4	[1.44] 36,6	[2.5] 63,5	[1.25] 31,8	[0.62] 15,7	[0.62] 15,7	[2.5] 63,5
861						[1.13] 28,7	-	[0.4] 10,2	--						
890	[0.41] 10,4	[0.38] 9,7	[13.37] 339,6	[6.75] 171,5	[4.75] 120,7	-	[1.25] 31,8	-	[0.84] 21,4	[1.75] 44,5	[2.65] 67,3	[1.38] 35,1	[0.81] 20,6	[0.81] 20,6	[3.06] 77,7
891						[1.25] 31,8	-	[0.5] 12,7	--						
1000	[0.53] 13,5	[0.5] 12,7	[17.51] 444,8	[9.25] 235	[6.25] 158,8	-	[1.75] 44,5	-	[1.37] 34,8	[2.25] 57,2	[3.96] 100,6	[2] 50,8	[1] 25,4	[1] 25,4	[3.75] 95,3
1001						[1.75] 44,5	-	[0.88] 22,4	--						

# 82D40-2/82D63-5 SERIES

## Pneumatic Power Clamps | Features and Benefits | Technical Information

### Features:

- Compact, enclosed design
- Narrow design
- Adapts to various holding arm variants
- High accuracy of positioning due to internal holding arm stopper
- 2 lateral and 1 front mounting areas
- Low weight (aluminium body)
- Integrated inductive sensing module with LED display
- Cylinder diameter 40 mm or 64 mm

### Application:

- Clamping, holding, gripping and positioning of metal sheets and other parts, mainly in jigs and handling systems.

### Key areas of application:

- Automotive manufacturing, sheet processing industry, jig and general mechanical engineering.



- Automation power clamps, enclosed and narrow design for 2 clamping arms

Models: **82D40-2...**  
**82D63-5...**

**82D40-223C900**  
Base model with  
2 U-clamping arms

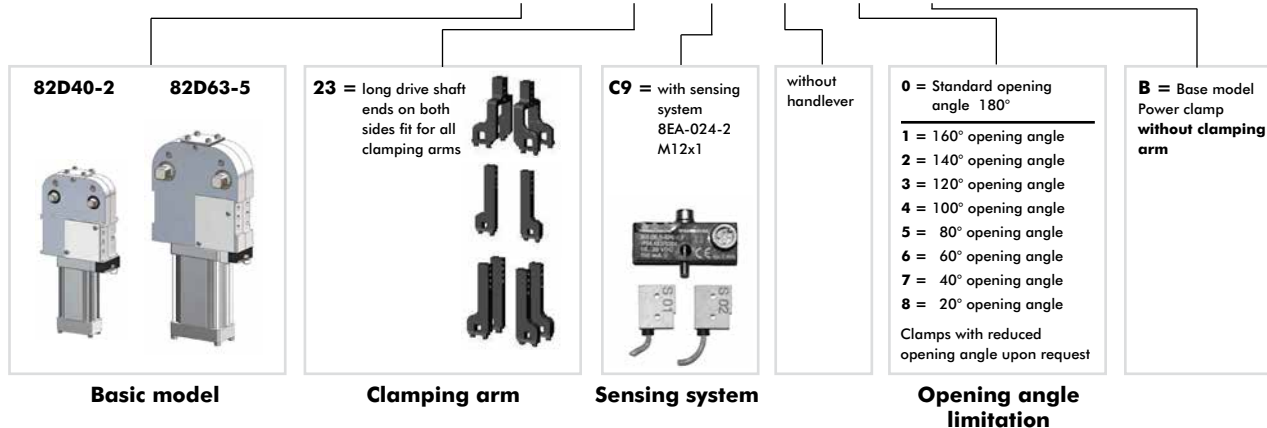
## Technical Information

Model	Clamping position	Standard opening angle	Driveshaft	Max. holding torque Nm [lb ft]	Clamping torque at 5 bar Nm [lb ft]	Cylinder Ø mm [in]	Air consumption per double stroke at 5 bar dm <sup>3</sup> [ft <sup>3</sup> ]	Weight ~ kg [lbs]
<b>82D40-223C900B</b>	vertical	180°	lateral, both sides U-type clamping arms	55 [40]	55 [40]	40 [1.57]	1,2 [0.04]	2,5 [5.50]
<b>82D63-523C900B</b>	vertical	180°	lateral, both sides U-type clamping arms	120 [88]	120 [88]	63 [2.48]	3,8 [0.13]	4,5 [9.90]

Model	B1	B2	B3	L1	SW	G
<b>82D40-223C900B</b>	30	30	60	12,5	11	1/4
<b>82D63-523C900B</b>	47	47	94	21	19	1/4

## How To Order

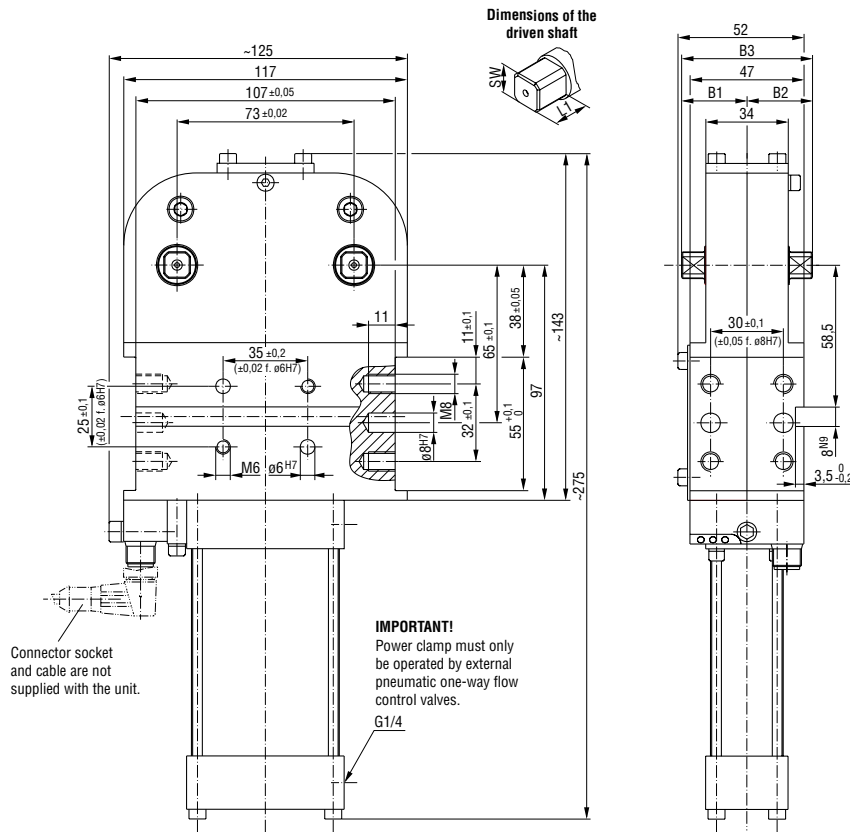
**82D63-5 23 C9 0 0 B**



# 82D40-2/82D63-5 SERIES

Pneumatic Power Clamps | Dimensions

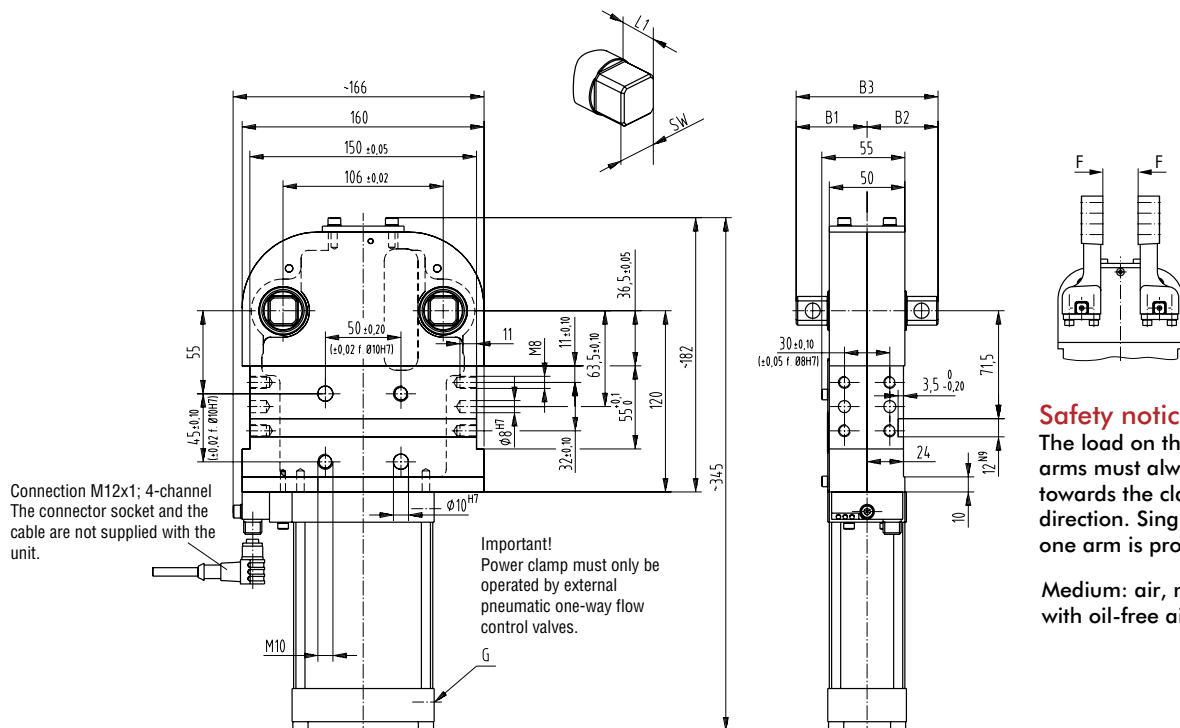
## 82D40-223C900B



**Safety notice:**  
The load on the clamping arms must always point towards the clamping direction. Single load of one arm is prohibited

Medium: air, max. 6 bar, operation with oil-free air is permissible

## 82D63-523C900B



**Safety notice:**  
The load on the clamping arms must always point towards the clamping direction. Single load of one arm is prohibited

Medium: air, max. 6 bar, operation with oil-free air is permissible

# U-ARMS CENTER (STEEL)

Pneumatic Power Clamps | Dimensions | Technical Specifications

- Clamping arm variants for **82D40-2**

Clamping arm variant U-type central clamping arm

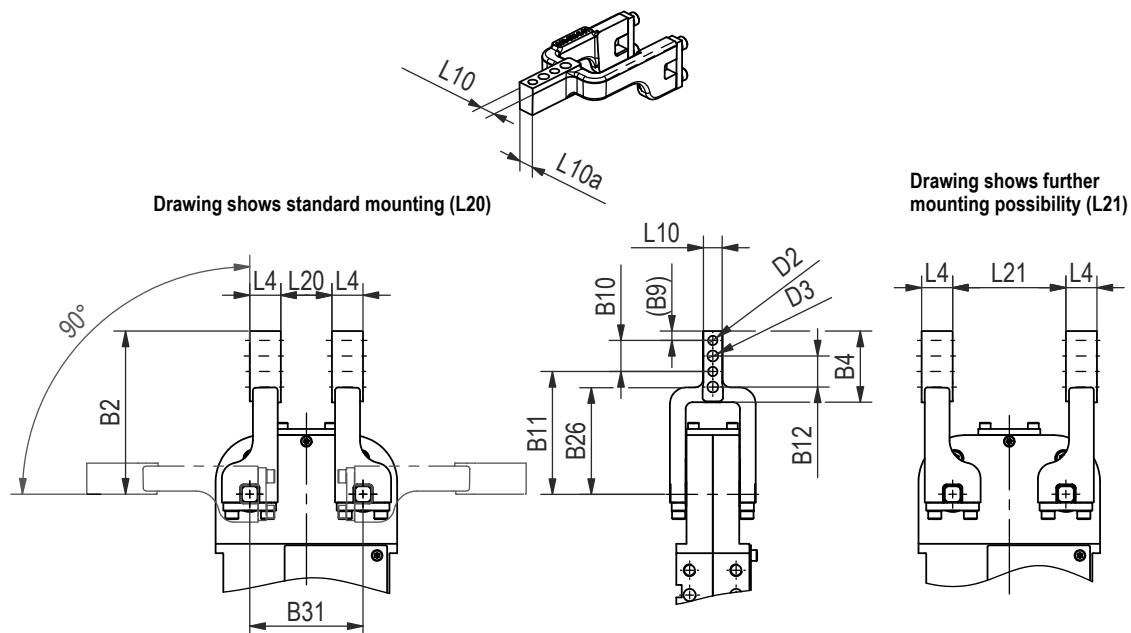


Base model with 2 U-type clamping arms, small gap between clamping arms

## U-type central clamping arm | Technical Information

Model	Order no. for U-type clamping arm set (1 clamping arm)	Clamping position	Standard opening angle	B2	B4	B9	B10	B11	B12	B26			
82D40-223C900B	8JG-065-2-01	vertical	180°	105	45,3	6	±0,02	+0,1	±0,2	20	79	20	68,2

Model	Order no. for U-type clamping arm set (1 clamping arm)	B31	D2	D3	L4	L10	L10a	L20	L21					
82D40-223C900B	8JG-065-2-01	±0,02	H7 ø	ø	±1,1	~	73	6	7	20	12	11,3	33	73



# U-ARMS CENTER (STEEL)

Pneumatic Power Clamps | Dimensions | Technical Specifications

- Clamping arm variants for **82D63-5**

Clamping arm variant U-type central clamping arm

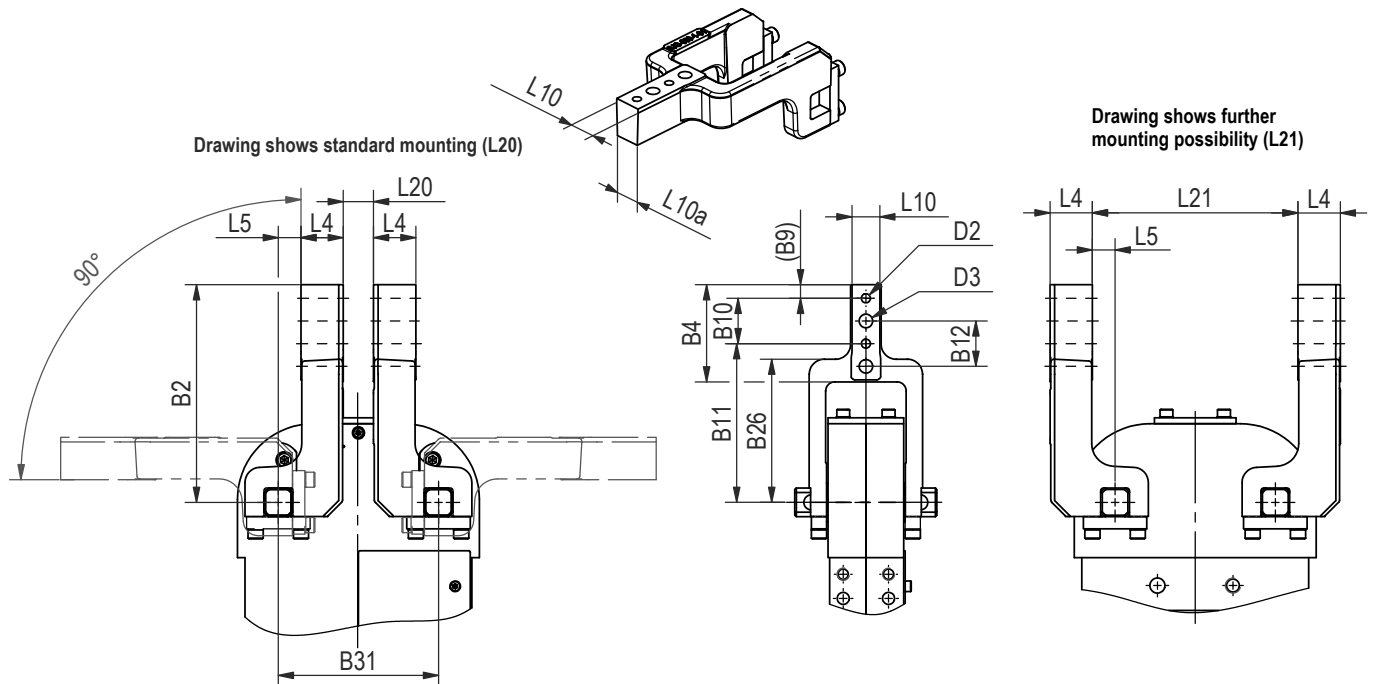


Base model with 2 U-type clamping arms, small gap between clamping arms

## U-type central clamping arms | Technical Information

Model	Order no. for U-type clamping arm set (1 clamping arm)	Clamping position	Standard opening angle	B2	B4	B9	B10	B11	B12	B26
82D63-523C900B	8JG-069-1-01	vertical	180°	144	64,3	9	±0,02	+0,1	±0,2	95

Model	Order no. for U-type clamping arm set (1 clamping arm)	B31	D2	D3	L4	L5	L10	L10a	L20	L21
82D63-523C900B	8JG-069-1-01	±0,02	H7 ∅	∅	28	15	±1,2	~	20	136





# LATERAL (SIDE) ARMS

## Pneumatic Power Clamps | Dimensions | Technical Specifications

- Clamping arm variants for **82D40-2**

### Clamping arm variant

- Lateral clamping arm left
- Lateral clamping arm right
- Lateral clamping arm both sides



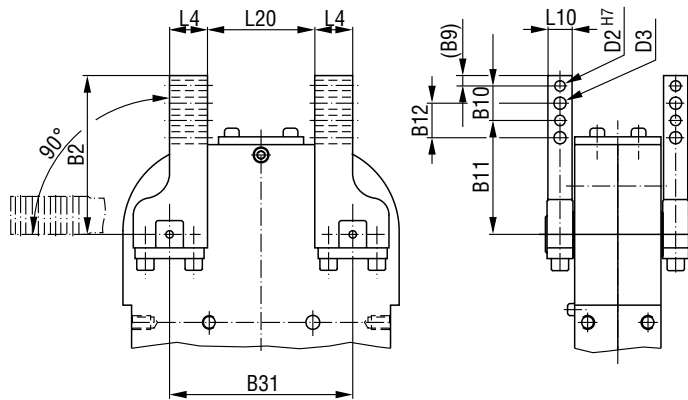
Base model with 4 lateral clamping arms, large gap between clamping arms

### Lateral clamping arm | Technical Information

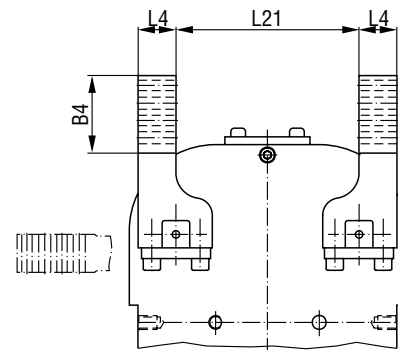
Model	Clamping arm variant	Order no. for 1 set of lateral clamping arms (1 clamping arm)	Clamping position	Standard opening angle	B2	B4	B9	B10	B11	B12
82D40-223C900B	lateral, left lateral, right lateral, both sides	8JG-066-1-01	vertical	180°	105	45	6	±0,02	+0,1	±0,2

Model	Clamping arm variant	Order no. for 1 set of lateral clamping arms (1 clamping arm)	B31	D2	D3	L4	L10	L20	L21
82D40-223C900B	lateral, left lateral, right lateral, both sides	8JG-066-1-01	±0,02	H7 ∅	∅		-0,1		
82D40-223C900B	lateral, left lateral, right lateral, both sides	8JG-066-1-01	73	6	7	20	12	33	73

Drawing shows standard mounting (L20) with four lateral clamp arms



Drawing shows further mounting possibility (L21)



# LATERAL (SIDE) ARMS

## Pneumatic Power Clamps | Dimensions | Technical Specifications

- Clamping arm variants for **82D63-5**

### Clamping arm variant

- Lateral clamping arm left
- Lateral clamping arm right
- Lateral clamping arm both sides



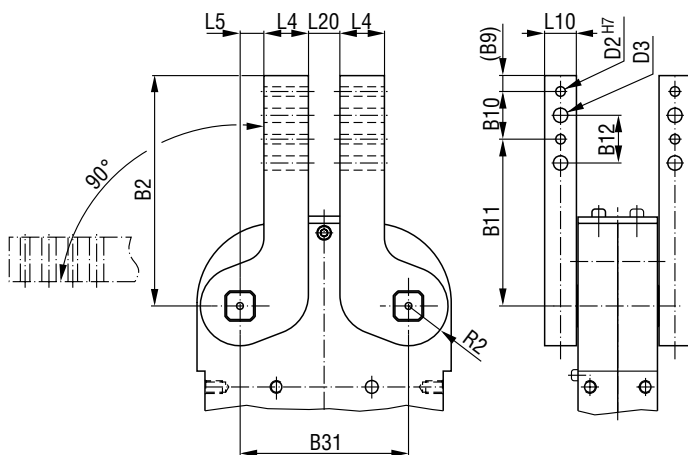
Base model with 4 lateral clamping arms, large gap between clamping arms

### Lateral clamping arms | Technical Information

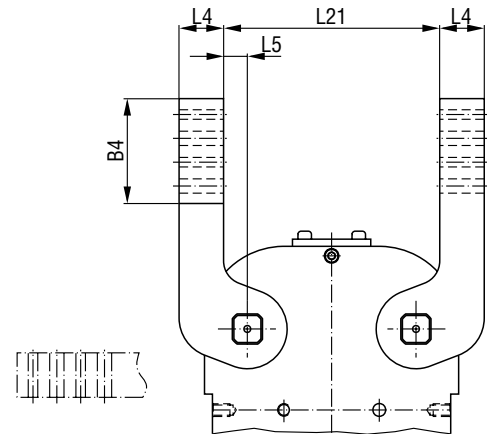
Model	Clamping arm variant	Order no. for 1 set of lateral clamping arms (1 clamping arm)	Clamping position	Standard opening angle	B2	B4	B9	B10	B11	B12	
<b>82D63-523C900B</b>	lateral, left lateral, right lateral, both sides	<b>8JG-070-1-01</b>	vertical	180°	144	74	9	30	±0,02	+0,1	±0,2

Model	Clamping arm variant	Order no. for 1 set of lateral clamping arms (1 clamping arm)	B31	D2	D3	L4	L5	L10	L20	L21	R2
<b>82D63-523C900B</b>	lateral, left lateral, right lateral, both sides	<b>8JG-070-1-01</b>	±0,02	H7 ∅	∅	28	15	-0,1	20	136	28

Drawing shows standard mounting (L20) with four lateral clamp arms



Drawing shows further mounting possibility (L21)

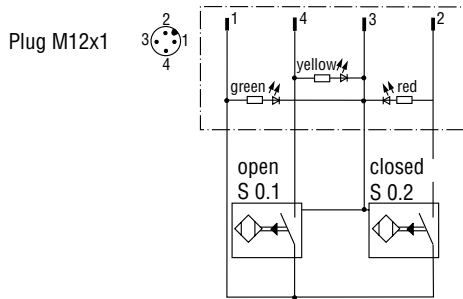
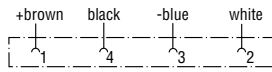


# 82D40-2/82D63-5 SERIES

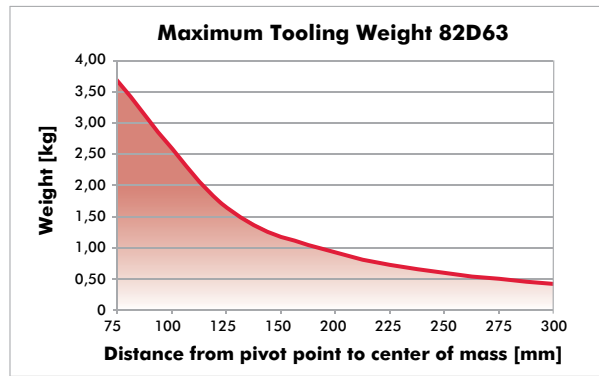
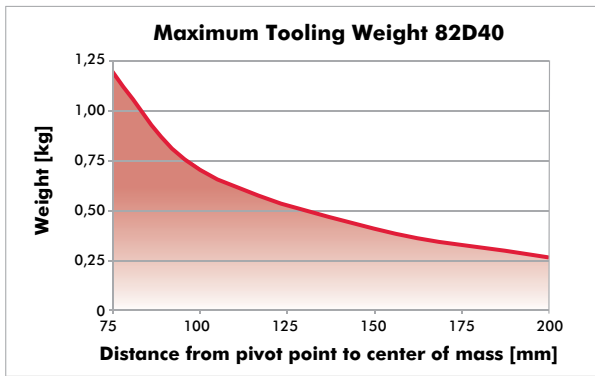
## Pneumatic Power Clamps | Technical Specifications

### Wiring diagram of electrical sensing system

Sensing system immune to interference from d.c. arc welding and a.c. arc welding

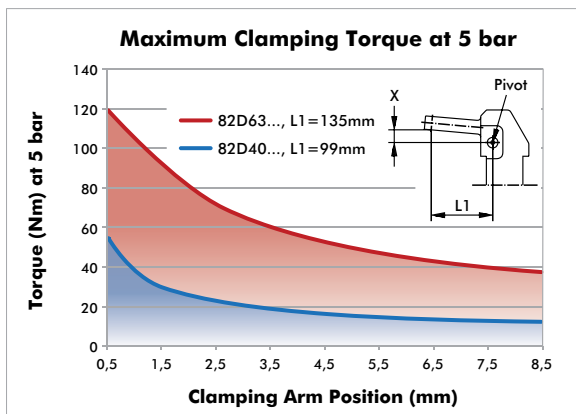


### Concept guideline (with reference to axis of clamping arm rotation)



All details apply under an air pressure of 6 bar and opening and closure times of 1 second each

### Diagram of clamping torque



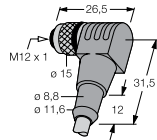
# 82D40-2/82D63-5 ACCESSORIES

## Pneumatic Power Clamps | Technical Specifications

Clamping Arms		Order no. for Structural component		Comment
Clamping are variant	Clamping position	82D40-223C900B	82D63-523C900B	
U-central	vertical	<b>8JG-065-1-01</b>	<b>8JG-069-1-01</b>	sets of U-type clamping arms consist of clamping arm, links and screws
lateral right/left	vertical	<b>8JG-066-1-01<sup>1)</sup></b>	<b>8JG-070-1-01<sup>2)</sup></b>	sets of lateral clamping arms consist of 1) clamping arm, links and screws 2) clamping arm and set screws you need 2 sets of clamping arms
lateral both sides	vertical	<b>8JG-066-1-01<sup>1)</sup></b>	<b>8JG-070-1-01<sup>2)</sup></b>	you need 4 sets of clamping arms



Connector socket  
M12x1 straight, 5-pin



Connector socket  
M12x1 angular, 4-pin

Connector Cable (includes 1 connector socket & 5 m cable)	Order no. for Structural component	
	82D40-223C900	82D63-523C900
Connector socket M12x1 straight, 5-pin	<b>8EL-002-1</b>	<b>8EL-002-1</b>
Connector socket M12x1 angular, 4-pin	<b>8EL-003-1</b>	<b>8EL-003-1</b>

Opening Angle Limiter	Order no. for Structural component			
	82D40-223C900		82D63-523C900	
Angle	Length	Order No.	Length	Order No.
180° (Standard)	11,4mm	<b>8CE-342-1</b>	14,4mm	<b>8CE-362-1</b>
160°	15,1mm	<b>8CE-340-1</b>	20,0mm	<b>8CE-360-1</b>
140°	18,5mm	<b>8CE-338-1</b>	24,8mm	<b>8CE-358-1</b>
120°	22,2mm	<b>8CE-336-1</b>	29,6mm	<b>8CE-356-1</b>
100°	25,8mm	<b>8CE-334-1</b>	34,3mm	<b>8CE-354-1</b>
80°	28,0mm	<b>8CE-332-1</b>	39,0mm	<b>8CE-352-1</b>
60°	33,0mm	<b>8CE-330-1</b>	43,8mm	<b>8CE-350-1</b>
40°	37,0mm	<b>8CE-328-1</b>	49,1mm	<b>8CE-348-1</b>
20°	41,8mm	<b>8CE-326-1</b>	56,2mm	<b>8CE-346-1</b>

Shim Plates (for clamping arm)	Fit for model 82D40-2								Fit for model 82D63-5									
	Model	A1	A2	D2	D3	B9	B10	B12	L10	Model	A1	A2	D2	D3	B9	B10	B12	L10
	<b>82ZB-SH4001</b>		0,1							<b>82ZB-SH5001</b>		0,1						
	<b>82ZB-SH4002</b>		0,2							<b>82ZB-SH5002</b>		0,2						
	<b>82ZB-SH4005</b>	42	0,5	6,5	7	6	20	20	12	<b>82ZB-SH5005</b>	65	0,5	6,5	9	10	30	30	16
	<b>82ZB-SH4010</b>		1,0							<b>82ZB-SH5010</b>		1,0						
	<b>82ZB-SH4020</b>		2,0							<b>82ZB-SH5020</b>		2,0						
	<b>82ZB-SH4050</b>		5,0							<b>82ZB-SH5050</b>		5,0						

Spare Parts	Order no. for Structural component	
	82D40-2	82D63-5
Cylinder	<b>8PW-016-1</b>	<b>8PW-024-2</b>
Integrated sensing system C9 Connector plug M12x1	<b>8EA-024-2</b>	<b>8EA-024-2</b>