

81L

Pneumatic Power Clamps | Miniature | Ordering Information

81L

12-1

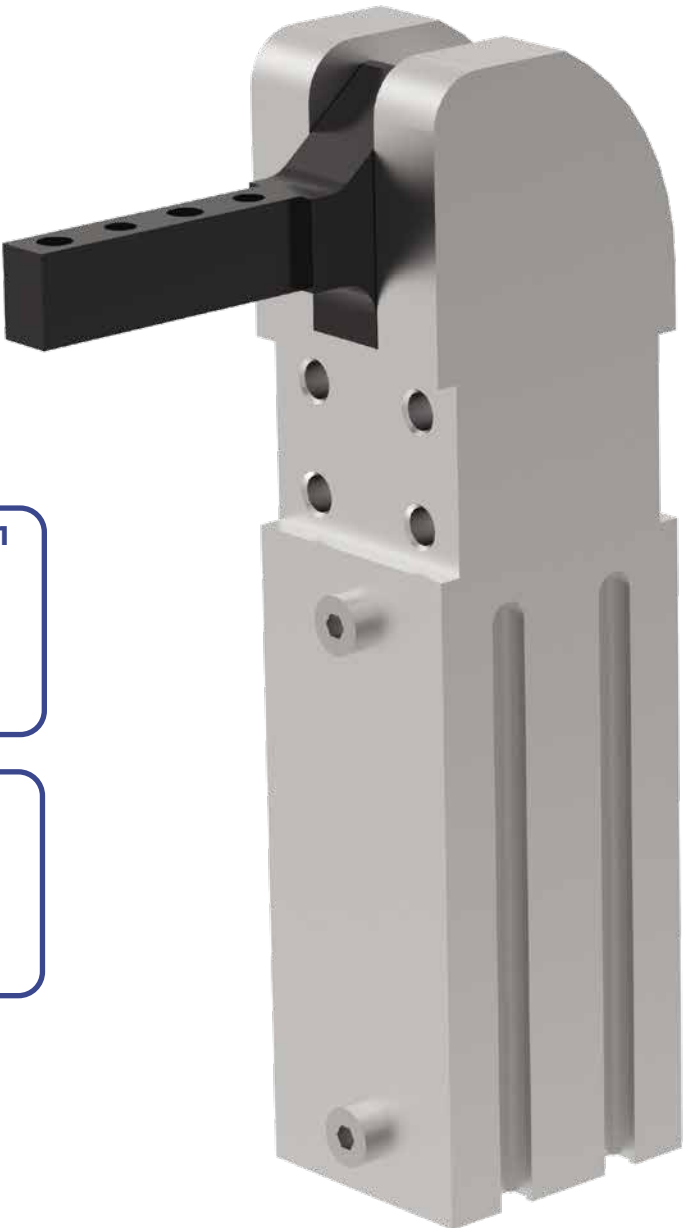
01

00

Size	Description
12-1	12 mm Cylinder (M5 Port)
16-1	16 mm Cylinder (M5 Port)
20-1	20 mm Cylinder (M5 Port)
25-1	20 mm Cylinder (M5 Port)

Arm Style	Description
01	Clamping arm, horizontal
41	Clamping arm, vertical
See below for further details	

Design	Description
00	Standard design



Arm Style



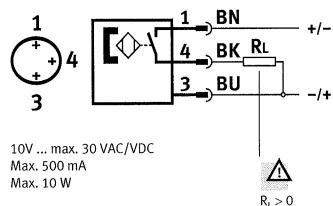
Accessories**8EA-109-1**

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 [18.4 ft-lb]
Max Clamping Torque
4,5 Nm [3.3 ft-lb]
at 5 bar [72 psi]

16

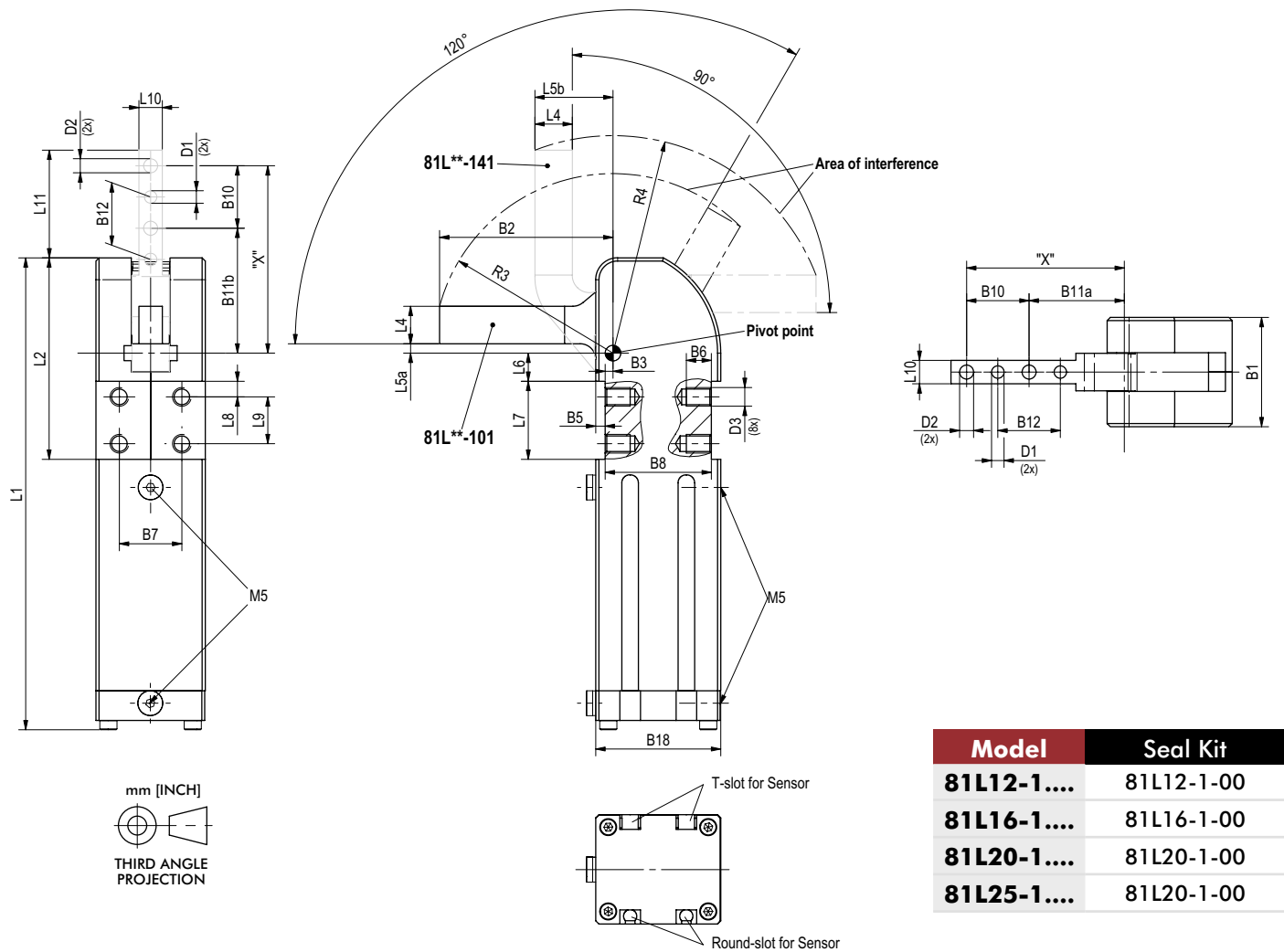
Max Holding Torque
60 Nm [44.3 ft-lb]
Max Clamping Torque
7 Nm [5.2 ft-lb]
at 5 bar [72 psi]

20

Max Holding Torque
100 Nm [73.8 ft-lb]
Max Clamping Torque
18 Nm [13.3 ft-lb]
at 5 bar [72 psi]

25

Max Holding Torque
100 Nm [73.8 ft-lb]
Max Clamping Torque
18 Nm [13.3 ft-lb]
at 5 bar [72 psi]



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

Pneumatic Power Clamps | Miniature | Technical Specifications

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 ³ [ft ³]	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]

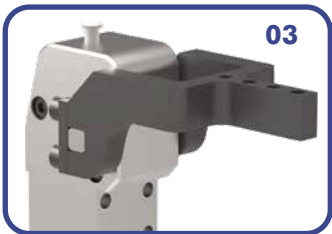
82L...-4...

Enclosed Pneumatic Power Clamps | Miniature | Ordering Information

82L		16-4		03	0
Size	Description	Arm Style	Description	Opening Angle	Description
12-4	12 mm Cylinder (M5 Port)	00	No clamping arm	0	105° (Standard)
16-4	16 mm Cylinder (M5 Port)	03	U-bar, central 90°	3	90°
20-4	20 mm Cylinder (M5 Port)	43	U-bar, central 180°	4	75°
25-4	25 mm Cylinder (M5 Port)	See below for further details		5	60°
				6	45°
				7	30°
				8	15°



Arm Style



Accessories

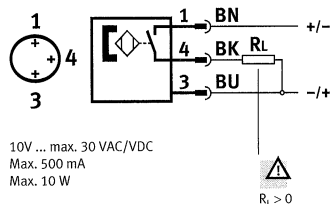
8EA-109-1

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 [25.8 ft-lb]
Max Clamping Torque

90° version: 10,4 Nm [7.7 ft-lb]
180° version: 8,7 Nm [6.4 ft-lb]
at 5 bar [72 psi]



16

Max Holding Torque
40 Nm [29.5 ft-lb]
Max Clamping Torque

12,4 Nm [9.1 ft-lb]
11 Nm [8.1 ft-lb]
at 5 bar [72 psi]



20

Max Holding Torque
50 Nm [36.9 ft-lb]
Max Clamping Torque

21 Nm [15.5 ft-lb]
19,3 Nm [14.2 ft-lb]
at 5 bar [72 psi]



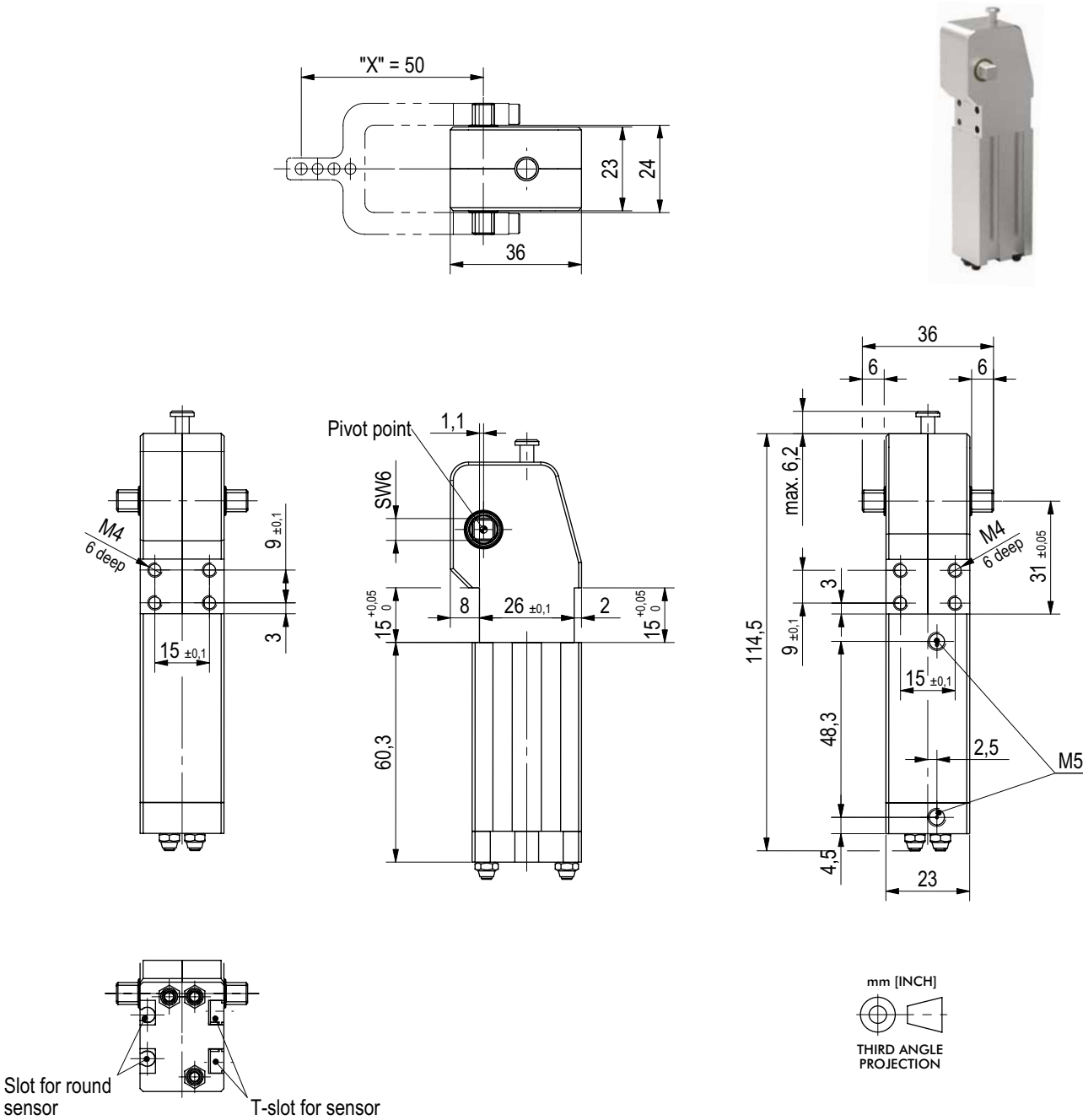
25

Max Holding Torque
80 Nm [59.0 ft-lb]
Max Clamping Torque

31,8 Nm [23.4 ft-lb]
28,5 Nm [21.0 ft-lb]
at 5 bar [72 psi]

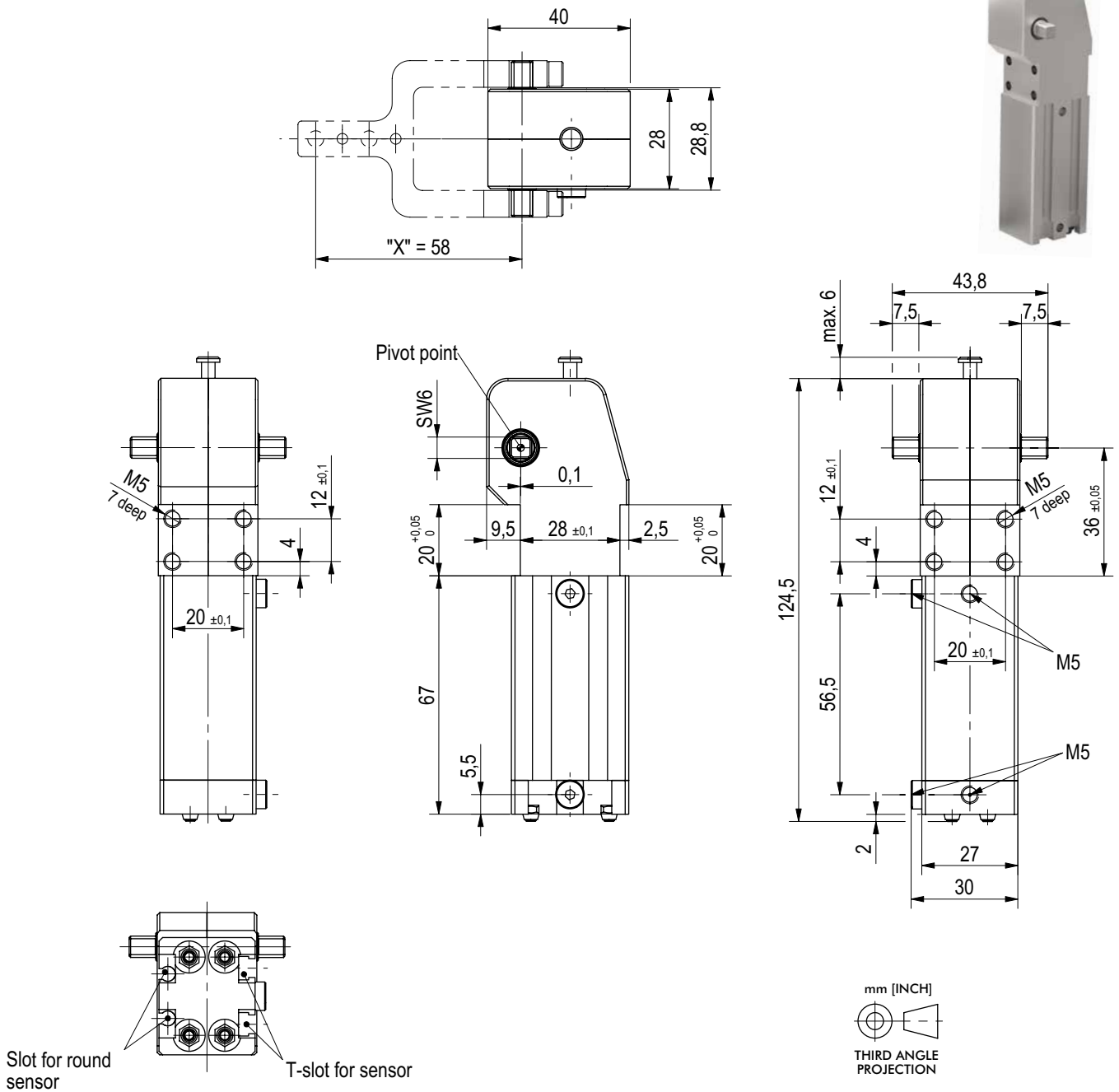
82L12-4

Enclosed Pneumatic Power Clamps | Miniature | Dimensions and 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 ³ [ft ³]	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]

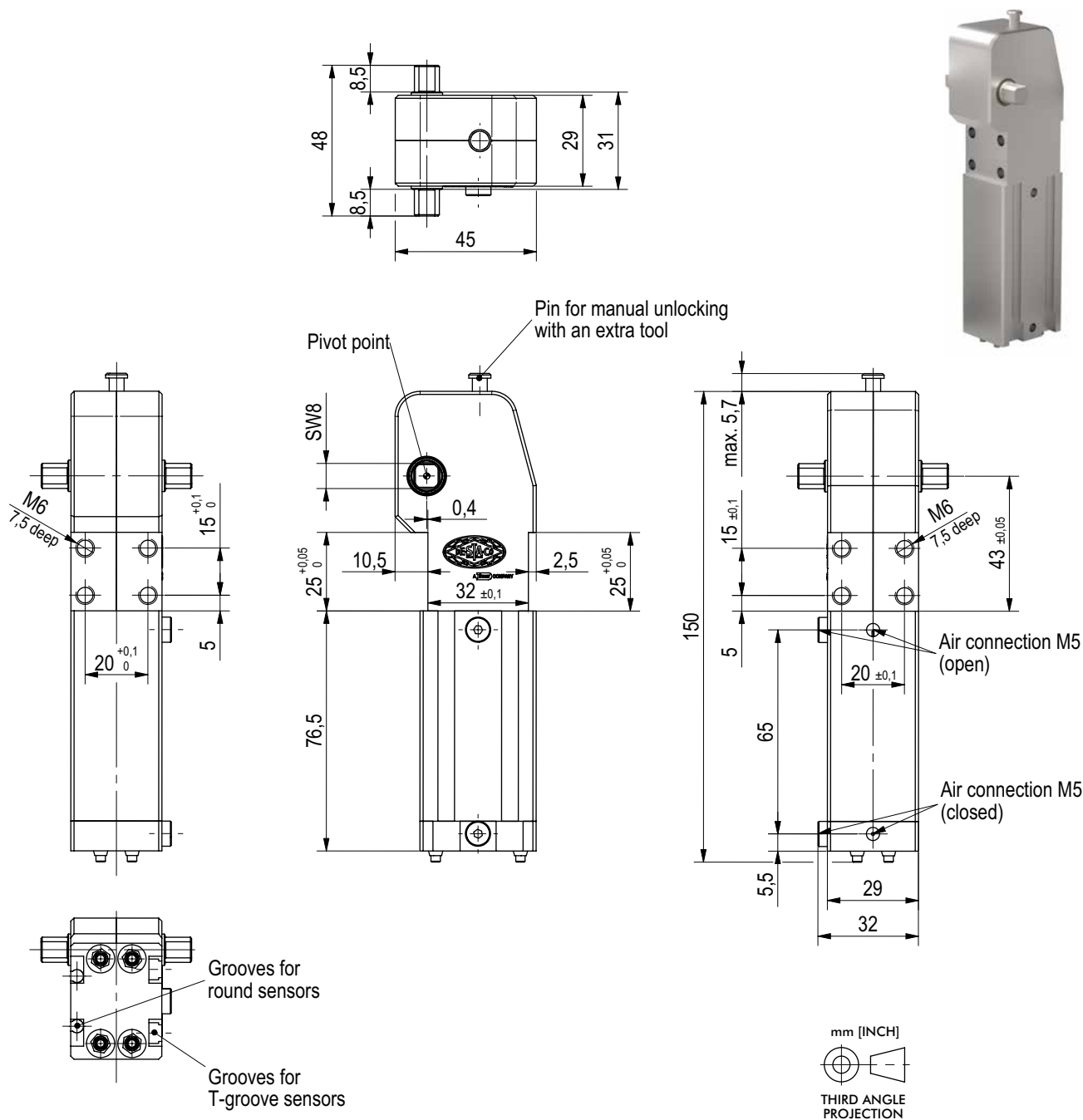


Power by compressed air, max. 6 bar Operation with oil-free air is permissible.

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 ³ [ft ³]	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

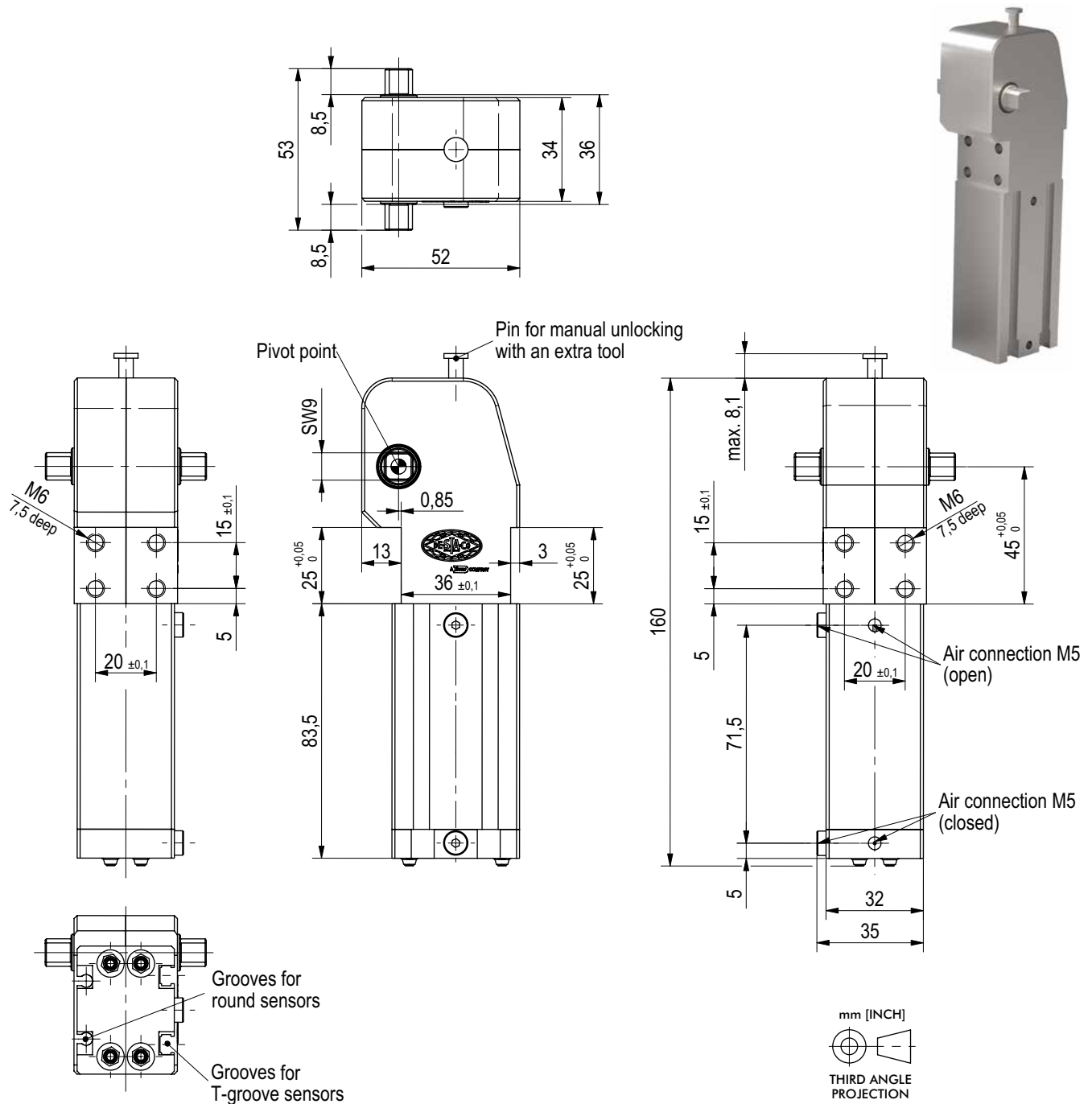
Enclosed Pneumatic Power Clamps | Miniature | Dimensions and Technical Specifications



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 ³ [ft ³]	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]

Enclosed Pneumatic Power Clamps | Miniature | Dimensions and Technical Specifications

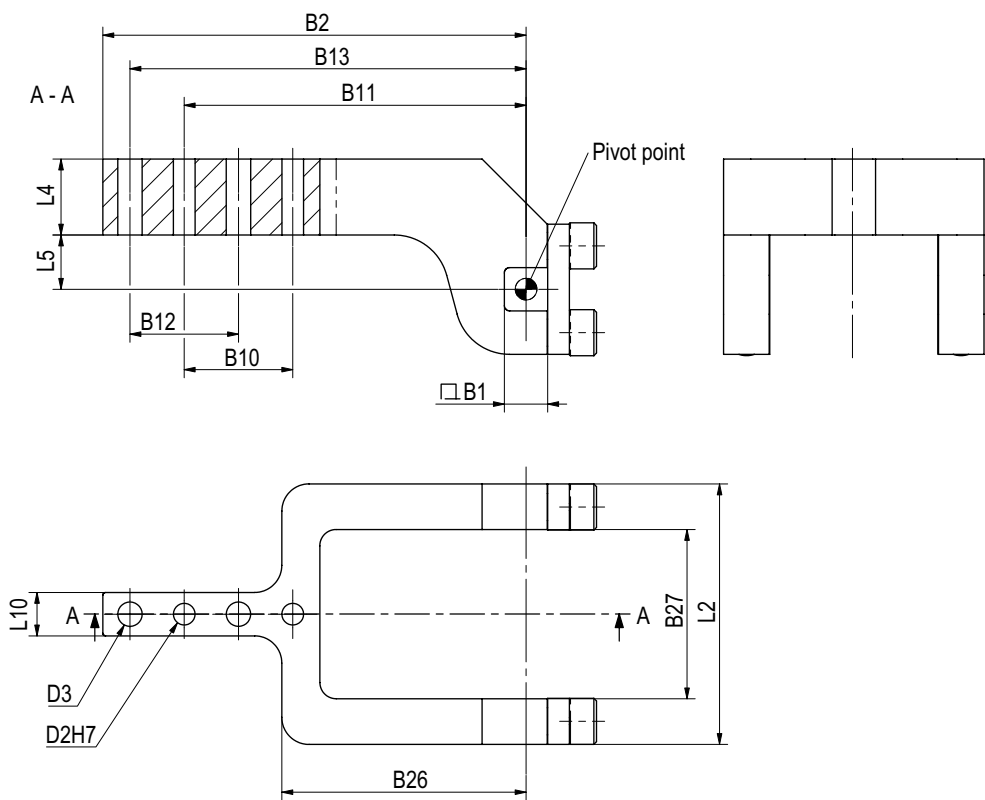


Power by compressed air, max. 6 bar Operation with oil-free air is permissible.

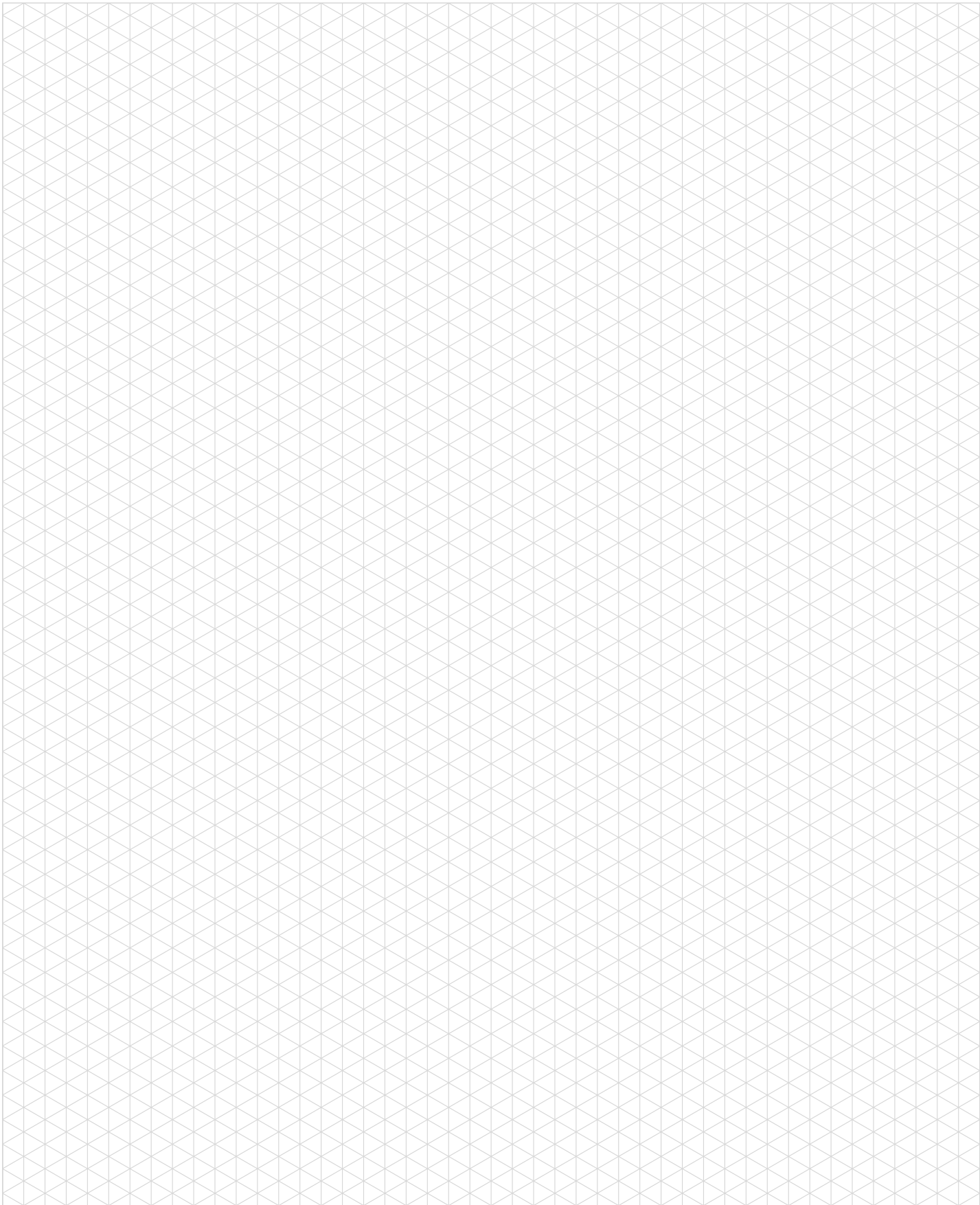
Model	Max. Holding Torque Nm [lb ft]	Max. Clamping Torque at 5 bar [72 psi] Nm [lb ft]	Weight [with arm] kg [lb]	Air Consumption per double stroke at 5 bar [72 psi] dm ³ [ft ³]	Max. Added Load (at Position "X") g [oz]
82L25-4030	80 [59]	31,8 [23.5]	0,66 [1.5]	0,40 [0.01]	100 [3.5]
82L25-4430	80 [59]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

82L...-4...

Enclosed Pneumatic Power Clamps | Miniature | 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...

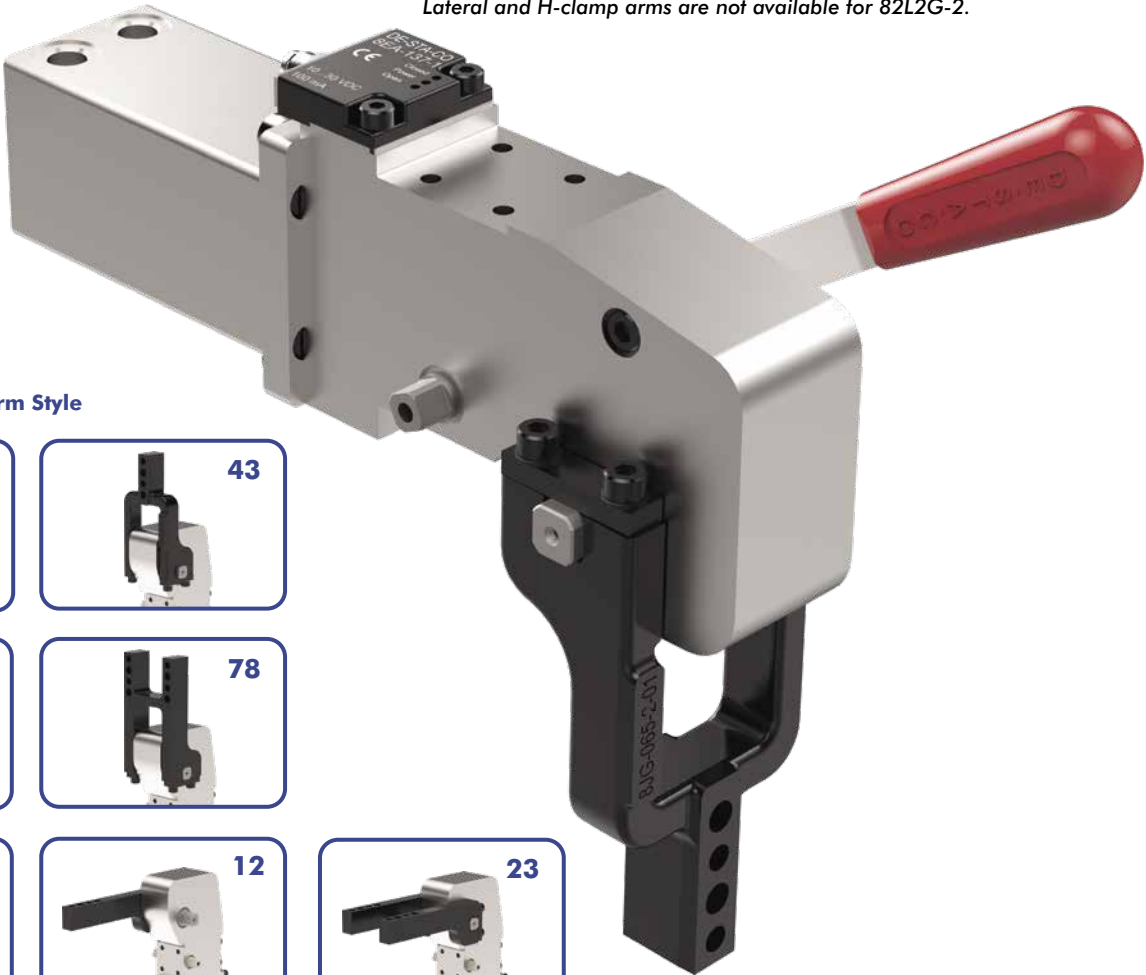
Enclosed Pneumatic Power Clamps | Lightweight Modular | Ordering Information



Size	Description
2G-2	25 mm Cylinder (G1/8 Port)
3G-2	32 mm Cylinder (G1/8 Port)
3N-2	32 mm Cylinder (1/8-18 NPT Port)
4G-2	40 mm Cylinder (G1/4 Port)
4N-2	40 mm Cylinder (1/4-18 NPT Port)

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

See below for further details.
Lateral and H-clamp arms are not available for 82L2G-2.



Arm Style



Enclosed Pneumatic Power Clamps | Lightweight Modular | Ordering Information

Hand Lever	Description
0	No Hand Lever
H	With Hand Lever

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

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

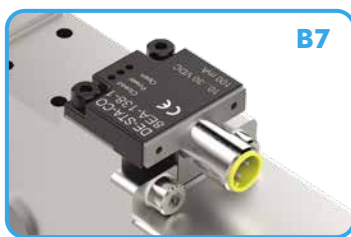
H



Sensor	Description
00	Without Sensing System
C8	Inductive Sensing System with In-Line M8x1 Connector
B7	Inductive Sensing System with In-Line M12x1 Connector
B8	Inductive Sensing System with M12x1 Connector with Cable



C8



B7



B8



2G

Max Holding Torque
75 Nm [55.3 ft-lb]
Max Clamping Torque
25 Nm [18.4 ft-lb]
at 5 bar [72 psi]

3G/N

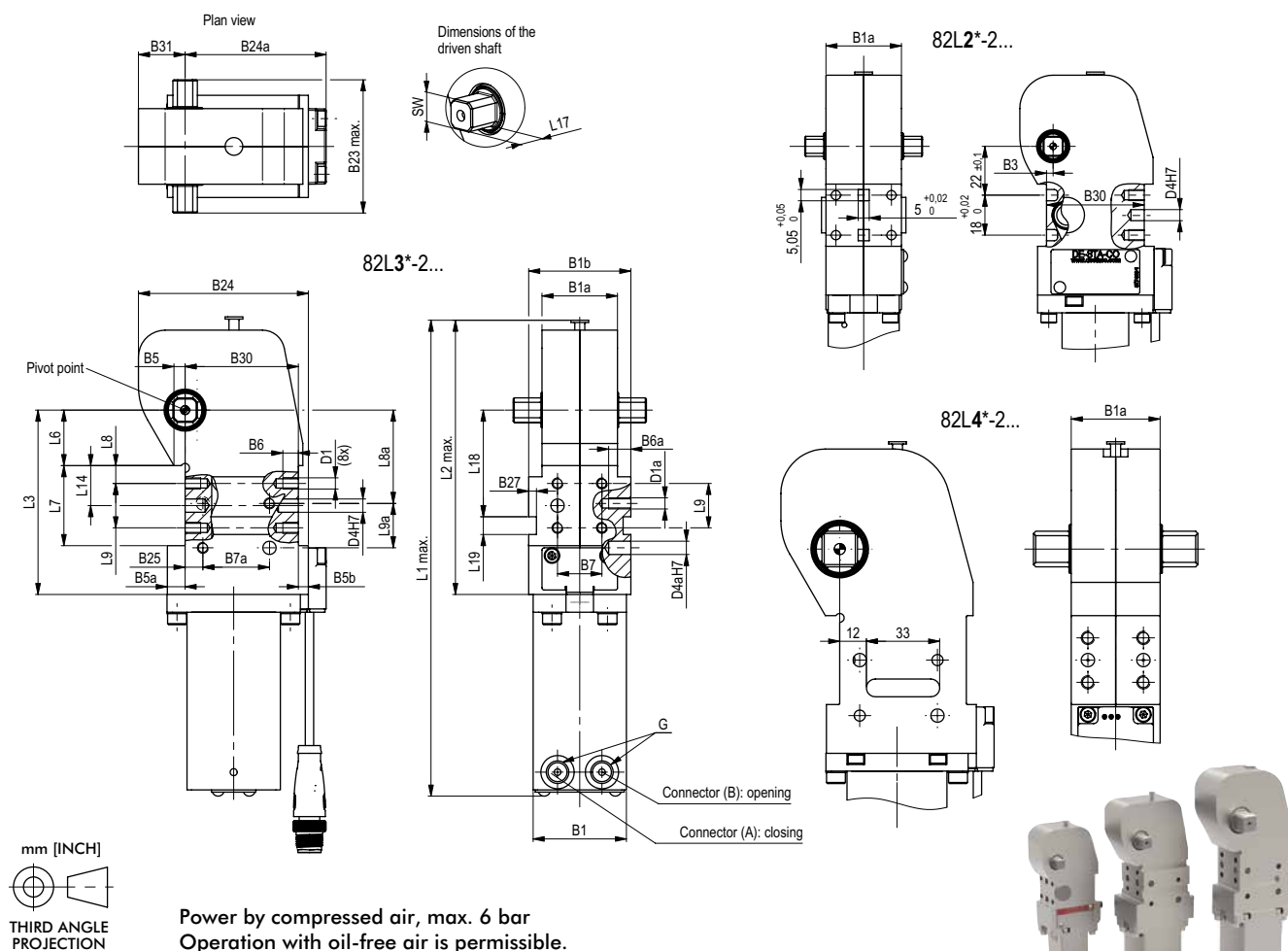
Max Holding Torque
180 Nm [132.8 ft-lb]
Max Clamping Torque
55 Nm [40.6 ft-lb]
at 5 bar [72 psi]

4G/N

Max Holding Torque
380 Nm [280.3 ft-lb]
Max Clamping Torque
120 Nm [88.5 ft-lb]
at 5 bar [72 psi]

82L...-2...

Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications



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 ³ [ft ³]	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

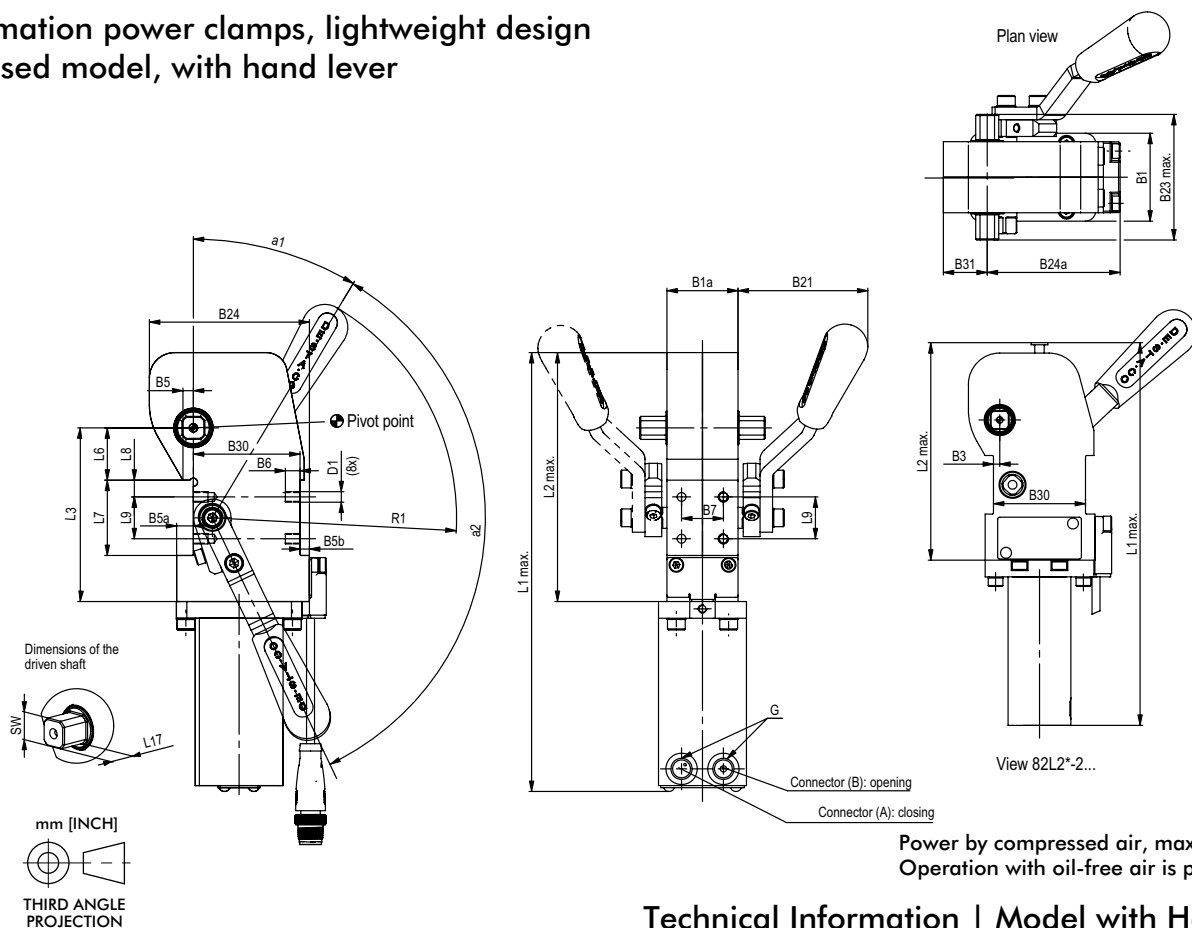
Model	B1	B1a	B1b	B3	B5	B5a	B5b	B6	B6a	B7 ± 0,1	B7a** ± 0,1	B23 max.	B24	B24a	B25 +0,1	B27	B30 ± 0,1	B31
82L2G-2...	32	34	-	3	4	4	4,5	7	-	25	-	53	60,5	53,5	-	-	44	15
82L3-2...	42	34	46	-	5	8	4,5	7	10	20	30	60	76,5	63,5	8	3,5	51	21
82L4-2...	45	40	-	-	6,5	6	4,5	10	10	25	35	74	88	69,5	9	3,5	57	26,5

Model	D1	D1a	D4 H7	D4a H7	L1 max.	L2 max.	L3	L6 ± 0,05	L7 + 0,1	L8 ± 0,1	L8a ± 0,1	L9 ± 0,1	L9a** ± 0,1	L14 ± 0,1	L17	L18	L19 N9	SW 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

Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

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



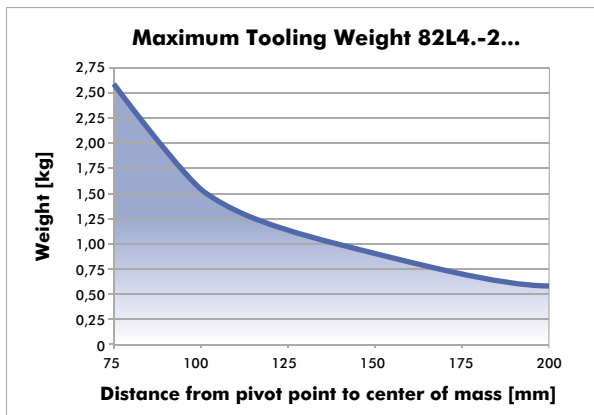
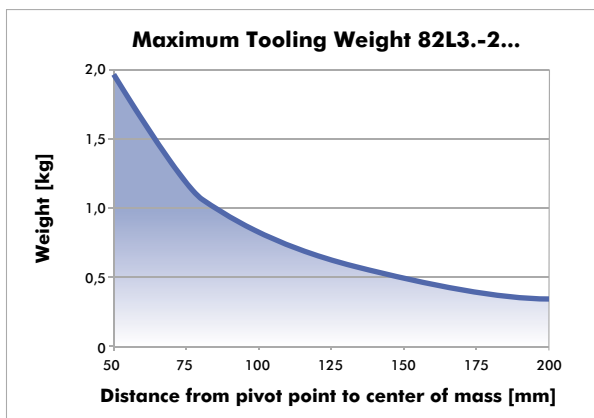
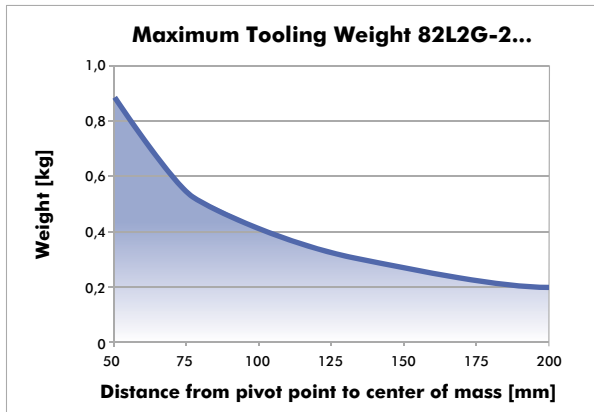
Technical Information | Model with Hand Lever

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 ³ [ft ³]	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

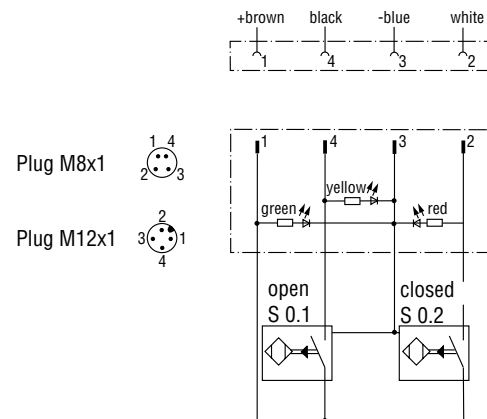
Enclosed Pneumatic Power Clamps | Lightweight Modular | Technical Specifications



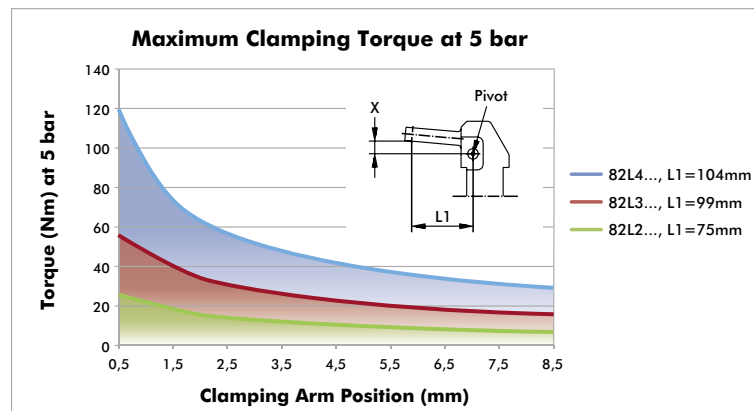
Wiring diagram of electrical sensing system
Sensing system immune to interference from d.c. arc welding and a.c. arc welding

Inductive version: B8, B7, C8

Pin Assignment



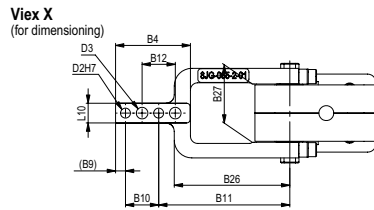
ATTENTION:
Calculation tool
available. Please
consult factory.



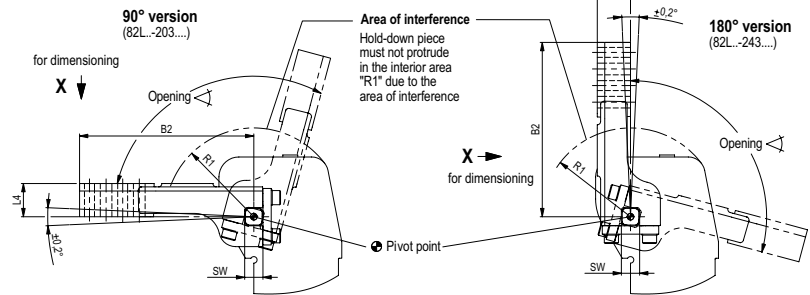
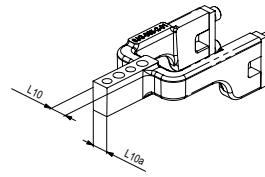
All data refers to a pneumatic pressure of 6 bar and to a opening and closing time of 1 second, as well as to the center of gravity of the complete construction directly attached to the clamp arm related to the fixed fulcrum.

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

Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

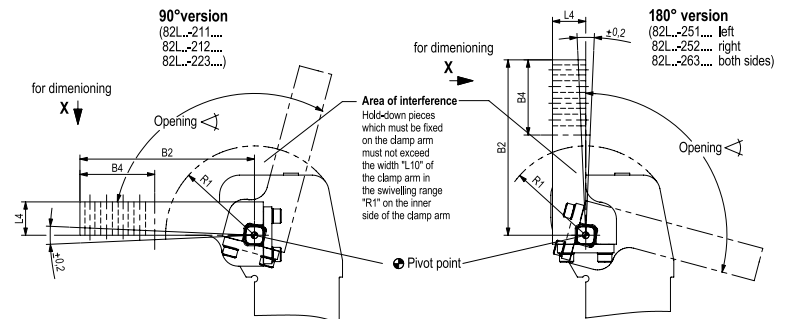
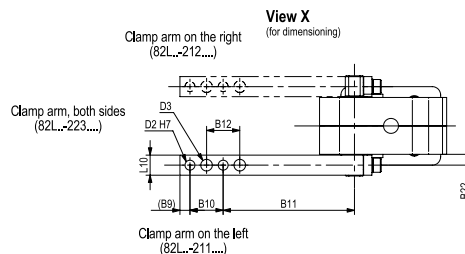


U-Type Central Clamping Arms



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	L10a	R1	SW J7
		max.	max.																
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

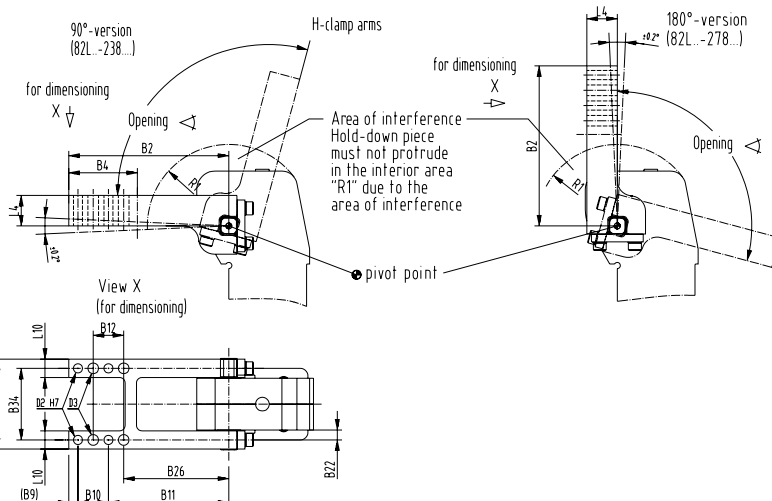
Lateral Clamping Arms



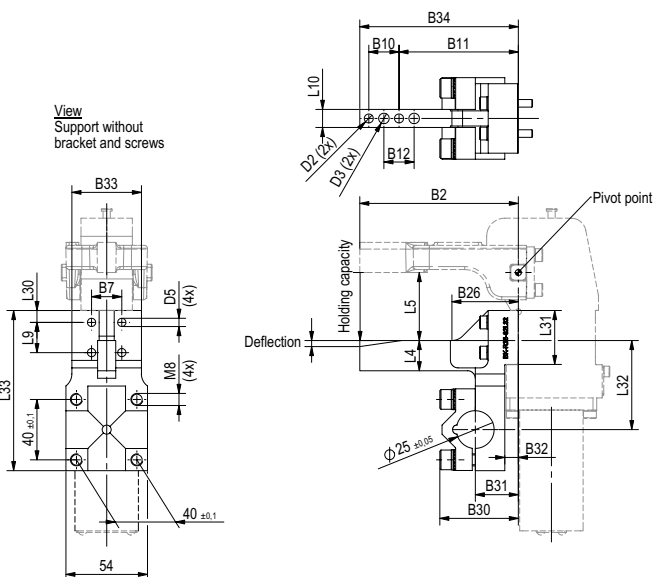
Model	Order no. for set of Lateral clamping arms	Opening angle for 90° - Version	Opening angle for 180° - Version	Weight [kg]	B2	B4	B9	B10	B11	B12	B22	D2	D3	L4	L10	R1
		max.	max.													
82L3.-2...	8JG-066-1-01	105°	105°	0,25	105	45	6	20	79	20	6,5	6	7	20	12	55
82L4.-2...	8JG-068-1-01	105°	105°	0,3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

Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

LEGO Technic part 1132, a dark grey 1x3 beam with a central hole and a side hole.



Model	Order no. for set of H-type clamping arms	Opening angle for 90° - Version	Opening angle for 180° - Version	Weight	B2	B4	B9	B10	B11	B12	B26	B34	B35	D2	D3	L4	L10	R1
		max.	max.	[kg]														
									±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



** = distance from pivot point

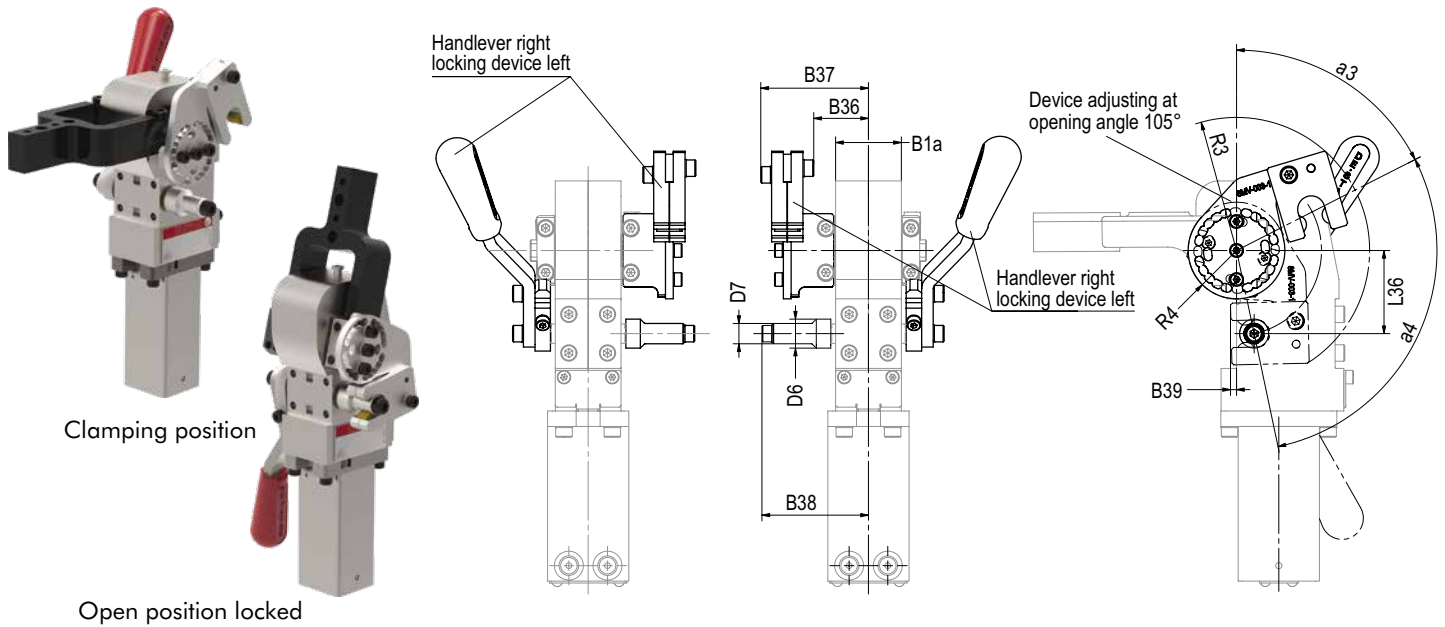
Model	Fit for Model	Holding Capacity	Deflection	Weight	B2	B7*	B10	B11	B12	B26**	B30**	B31**	B32**
		max. [N]	[mm]	[kg]		±0,1	±0,02			~			
BK-R25-82L25-1	82L2_	914	0,2	0,4	93	25	20	62	20	42	55	31,5	11
BK-R25-82L32-1	82L3_	660	0,16	0,5	105	20	20	79	20	44	52	28,5	9
BK-R25-82L40-1	82L4_	2000	0,37	0,56	110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

Model	B33	B34	D2	D3	D5	L4	L5	L9	L10	L30	L31	L32	L33
	Ø H7			Ø	Ø	±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

Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

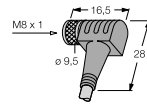
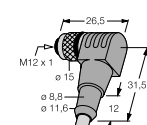
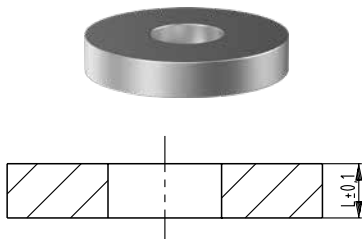
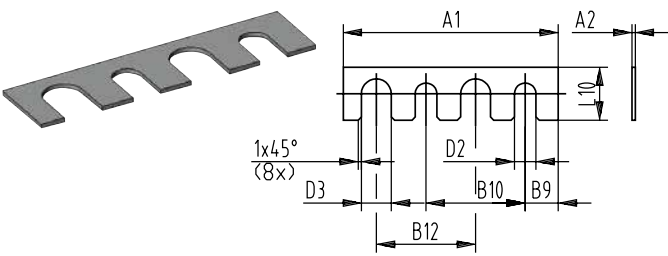
Hold Open Device

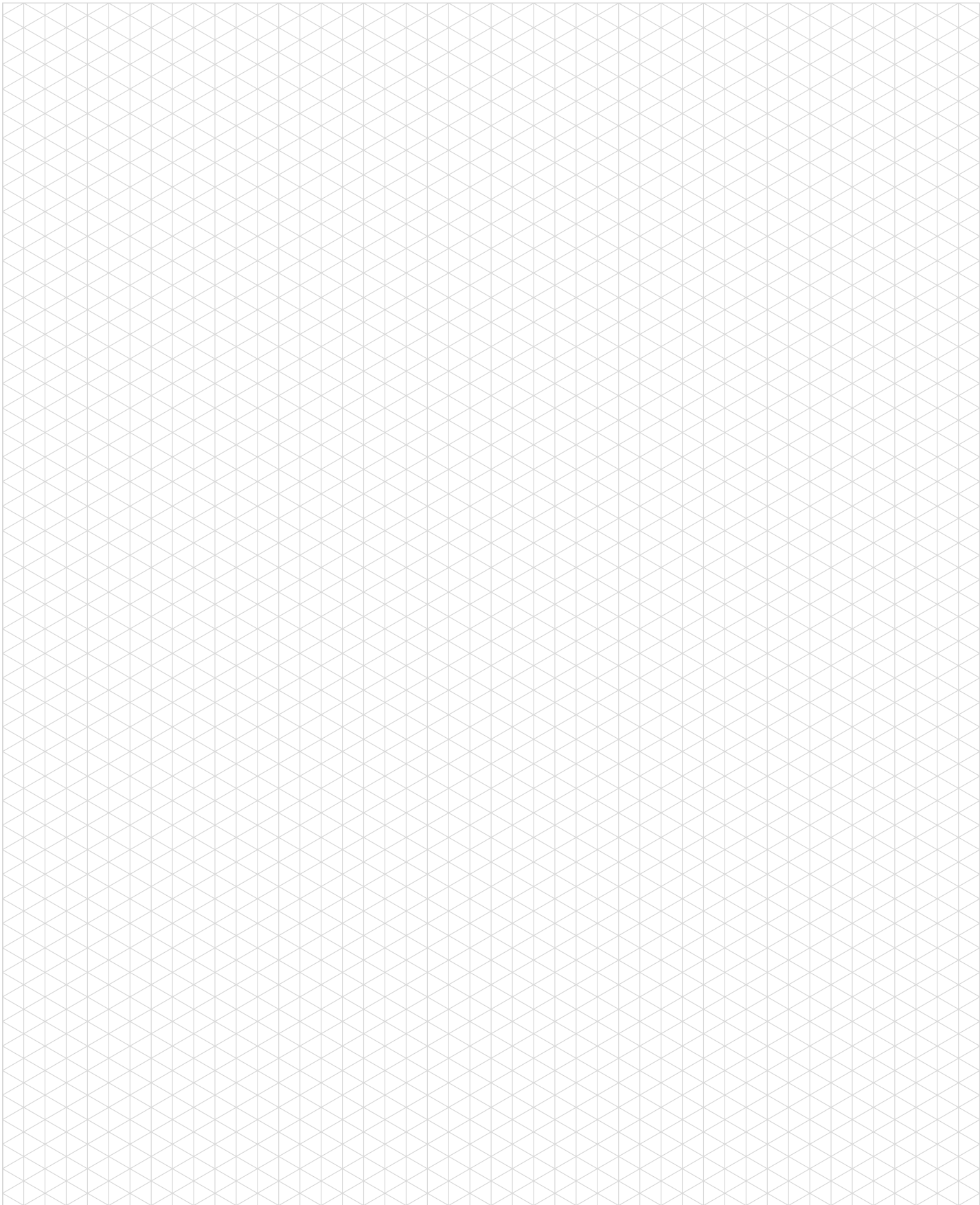


Model	Fit for Model	B1α	B36	B37	B38	B39	D6	D7	L36	R3	R4	α3	α4
82ZB-036-1	82L2.-2....H..	34	25	47	47	3	15	10	31	53	18,5	63°	105°
82ZB-037-1	82L3.-2....H..	34	28	56	56	4	15	10,5	43	69	25	63°	105°
82ZB-038-1	82L4.-2....H..	40	30	58	58	3	15	10,5	50	76	27	63°	105°

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

Enclosed Pneumatic Power Clamps | Lightweight Modular | 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						
Sensor Cables (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		82L2G-2		82L3.-2		82L4.-2				
		Opening Angle	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	42	0,1	6,5	7	6	20	20	11,8
		82ZB-SH4002		0,2						
		82ZB-SH4005		0,5						
		82ZB-SH4010		1,0						
		82ZB-SH4020		2,0						
		82ZB-SH4050		5,0						
		Spare Parts		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										
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 AND TCC

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

82M Series Enclosed Power Clamp

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



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

Same mounting pattern as size 50 and 63mm



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

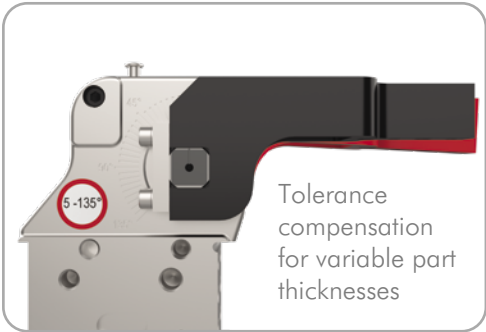
80mm	63mm	50mm	40mm
Max Holding Torque 3000 Nm	Max Holding Torque 1800 Nm	Max Holding Torque 1300 Nm	Max Holding Torque 380 Nm
Max Clamping Torque 850 Nm at 5bar	Max Clamping Torque 420 Nm at 5bar	Max Clamping Torque 270 Nm at 5bar	Max Clamping Torque 120 Nm at 5bar

TCC Tolerance Compensating Power Clamp

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

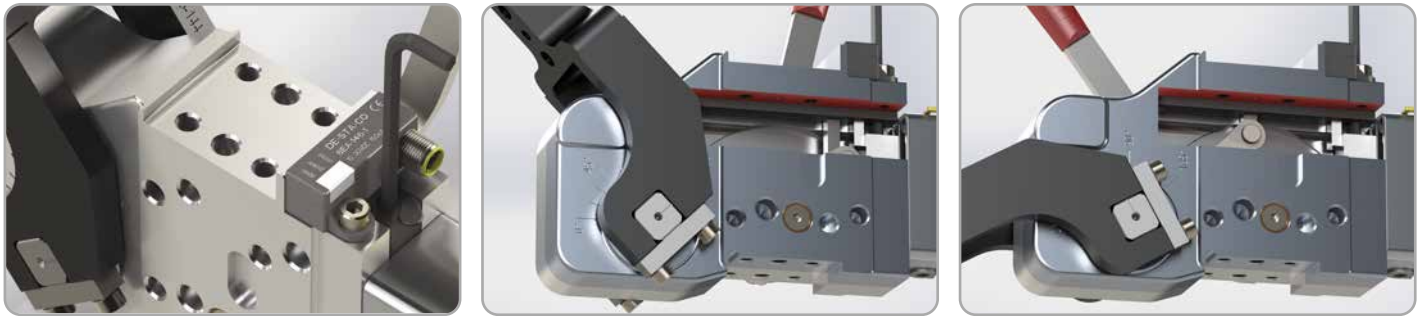


63mm	50mm	40mm
Max Holding Torque 295 Nm	Max Holding Torque 175 Nm	Max Holding Torque 85 Nm
Max Clamping Torque 295 Nm at 5bar	Max Clamping Torque 175 Nm at 5bar	Max Clamping Torque 85 Nm at 5bar



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

Adjusting the Arm Opening Angle

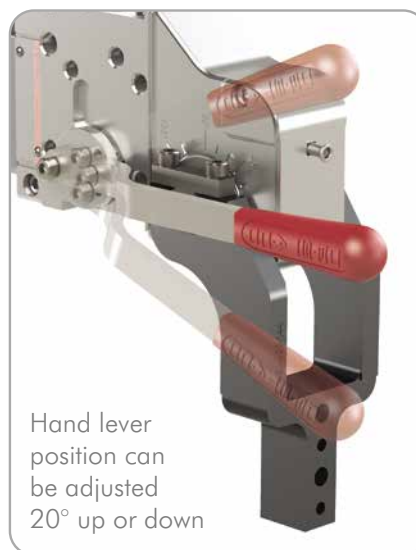


Easily adjust arm opening angle with an M5 Allen wrench.

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

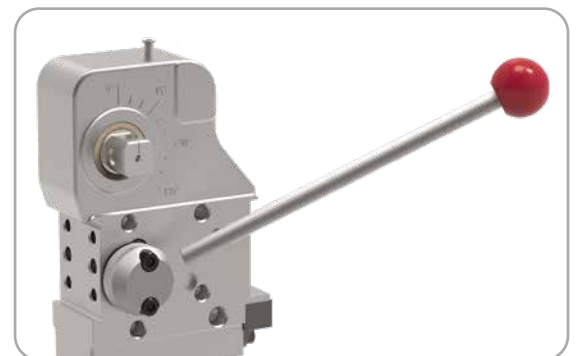
Enclosed Power Clamp Hand Lever (82M-3E Models Only)

Standard Adjustable Hand Lever



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

Weldable Hand Lever



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

TCC-2

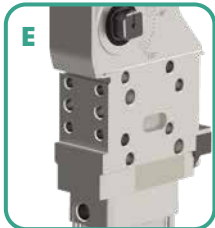
Enclosed Pneumatic Power Clamps | Heavy-Duty, Tolerance Compensation | Ordering Information

TCC-2		E	03	00	6A	L8
Mounting	Description	Clamp Arm Shaft		Description	Handle	
E	Standard Mounting	03	for U-Arms	00	No Hand lever	
B	Common Front Mount for Size 40 only (same mount pattern as size 50 & 63)	23	for Lateral Arms			
N	NAAMS Side Mounting for Size 63 only	See below for further details				

Mounting



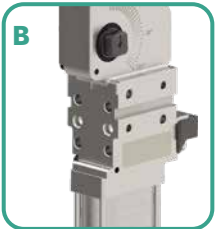
Size 40



Size 50



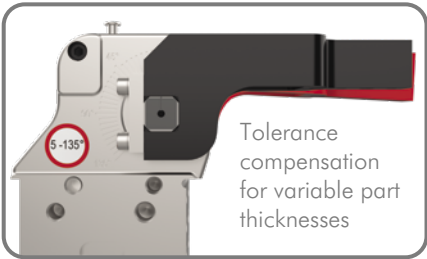
Size 63



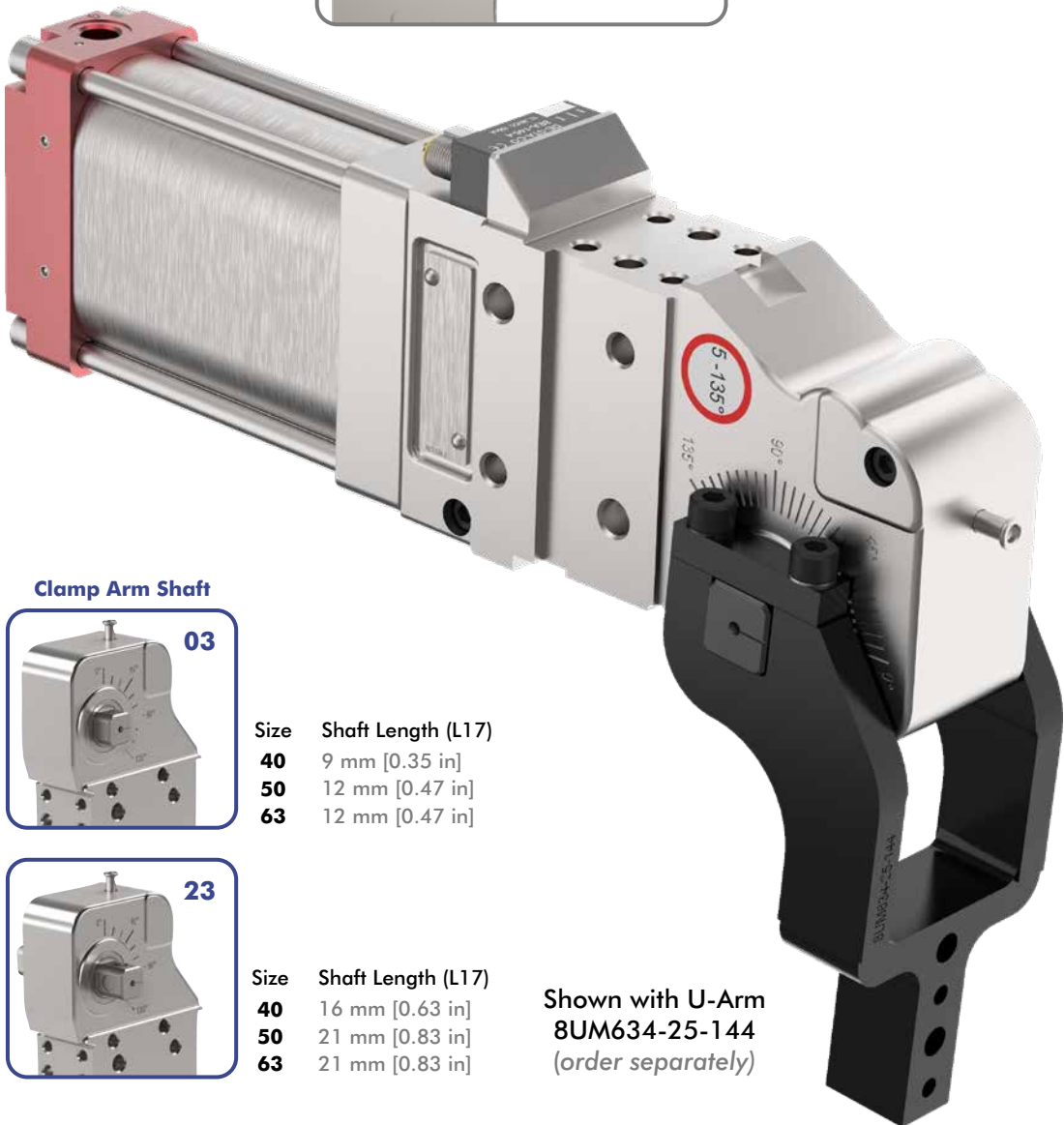
Size 40 Only



Size 63 Only



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



Clamp Arm Shaft



03

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



23

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

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

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

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

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



L8/N8



L9/N9



K8/K9



Cylinder (Standard)

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



Cylinder with Unlockable Return Valve

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



Cylinder with Internal Hold Open Device

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



Cylinder with Piston Rod Locking Device

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



40

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



50

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



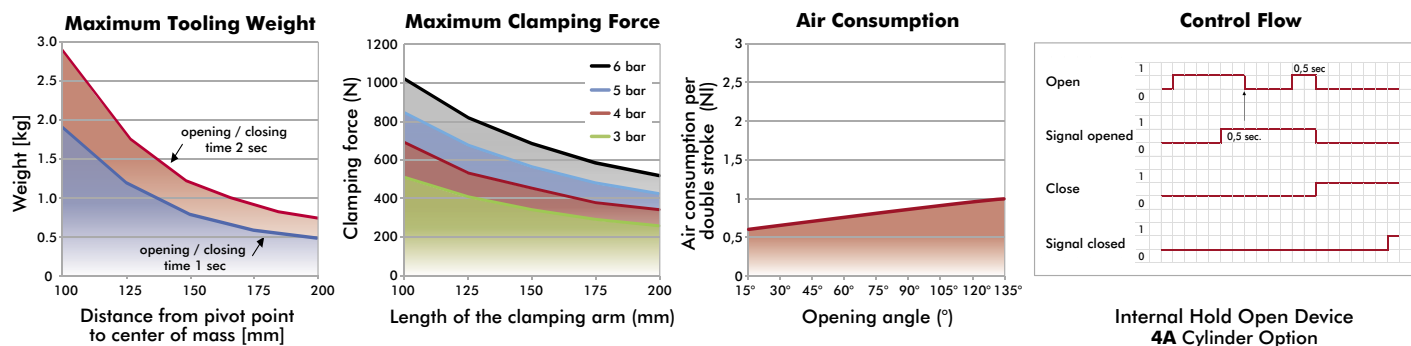
63

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

TCC-2

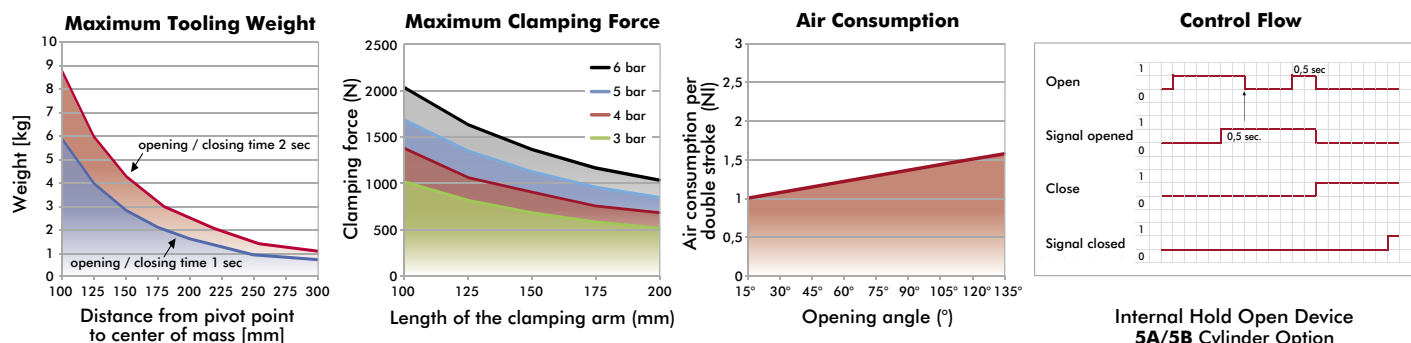
Enclosed Pneumatic Power Clamps | Heavy-Duty, Tolerance Compensation | Technical Specifications

Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
TCC-2.....40..	85	85	40	1,6	0,9
TCC-2.....4A..				1,7	
TCC-2.....4B..				1,6	
TCC-2.....4V..				1,6	



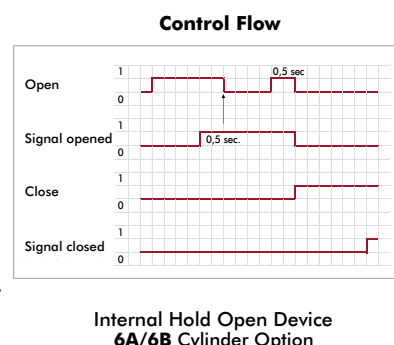
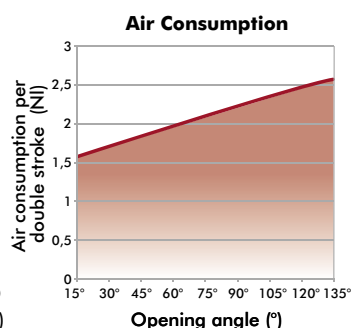
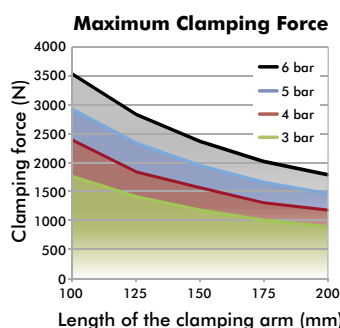
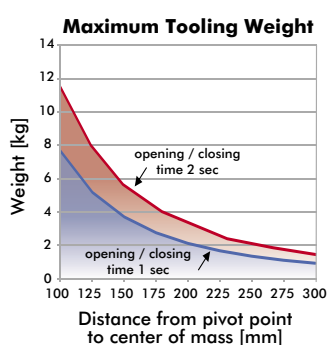
ATTENTION: Calculation tool available. Please consult factory.

Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
TCC-2E....50..	175	175	50	2,8	1,6
TCC-2E....5N..				2,8	
TCC-2E....5A..				2,8	
TCC-2E....5B..				2,8	
TCC-2E....5C..				3,0	
TCC-2E....5D..				3,0	
TCC-2E....5V..				2,9	



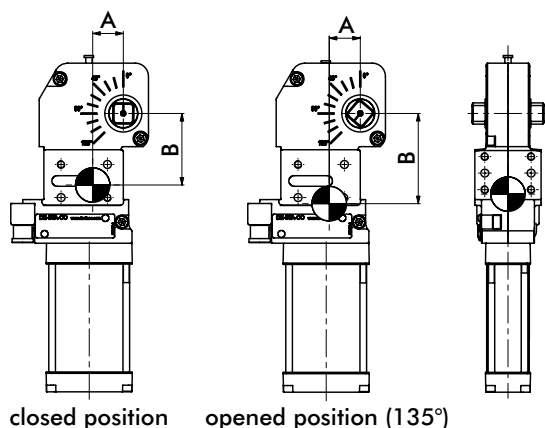
ATTENTION: Calculation tool available. Please consult factory.

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



ATTENTION: Calculation tool available. Please consult factory.

Center of Mass



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

82M-3

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

82M-3 E 23 H0 50 L8

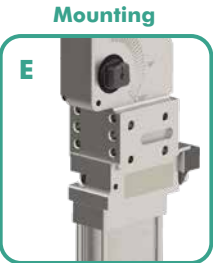
Mounting	Description
E	Standard Mounting
B	Common Front Mount for Size 40 only (same mount pattern as size 50 & 63)
N	NAAMS Side Mounting for Size 63 only

Clamp Arm Shaft	Description
03	for U-Arms
23	for Lateral Arms
D0	for Lateral Arms (size 63 NAAMS only)

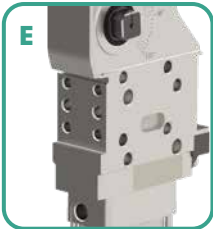
Handle	Description
00	No Hand lever
H0	Hand Lever
HS	Weldable

See below for further details

See below for further details



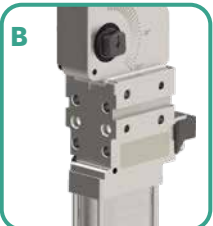
Size 40



Size 50



Size 63/80



Size 40 Only

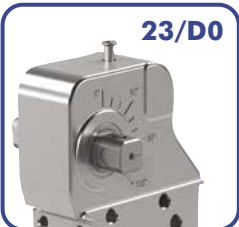


Size 63 Only

Clamp Arm Shaft



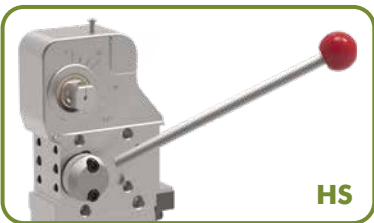
Size	Shaft Length (L17)
40	9 mm [0.35 in]
50	12 mm [0.47 in]
63	12 mm [0.47 in]



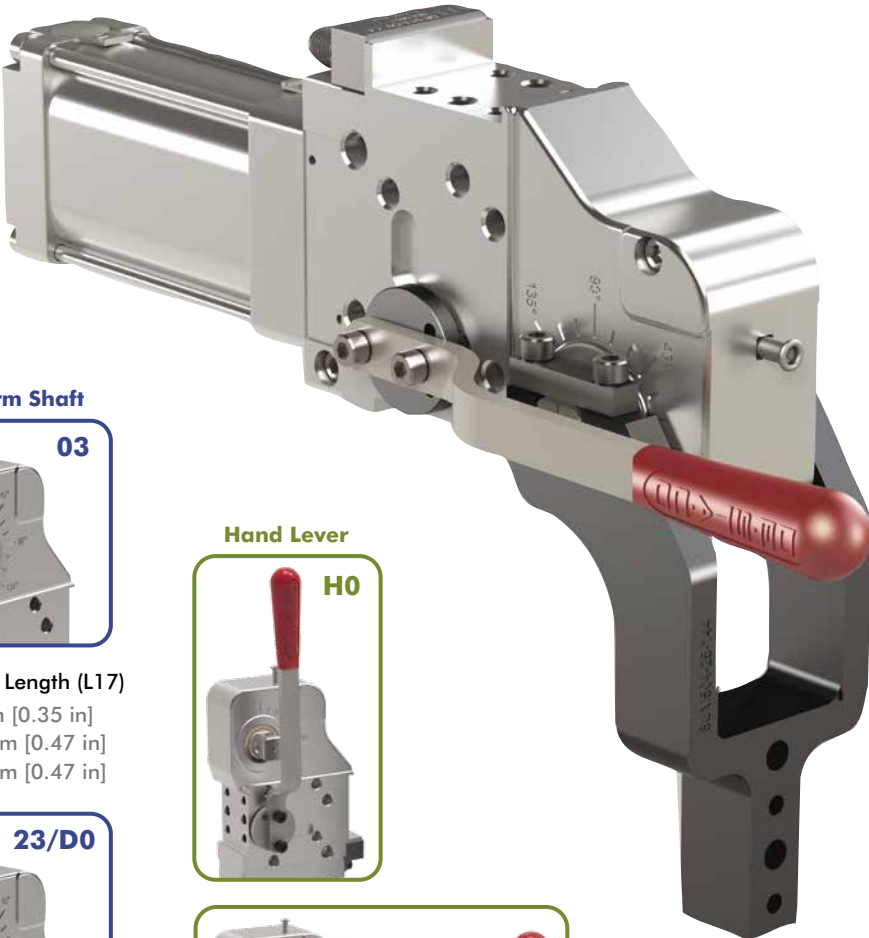
Size	Shaft Length (L17)
40	16 mm [0.63 in]
50	21 mm [0.83 in]
63	21 mm [0.83 in]
80	32 mm [1.26 in]

Size	Shaft Length (L17)
63	26 mm [1.02 in]

Hand Lever



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



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

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

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



Cylinder - Standard

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



Cylinder with Internal Hold Open Device

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



40

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

50

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

63

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

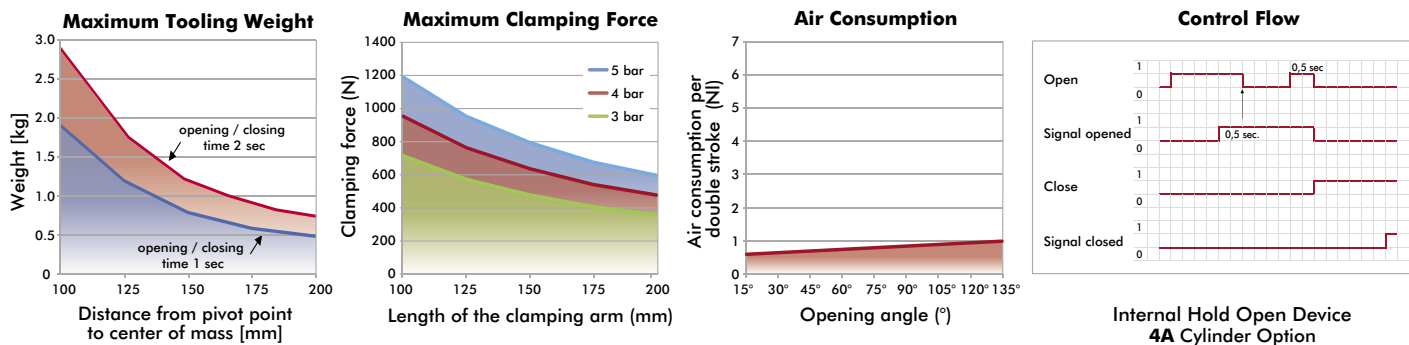
80

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

82M-3

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

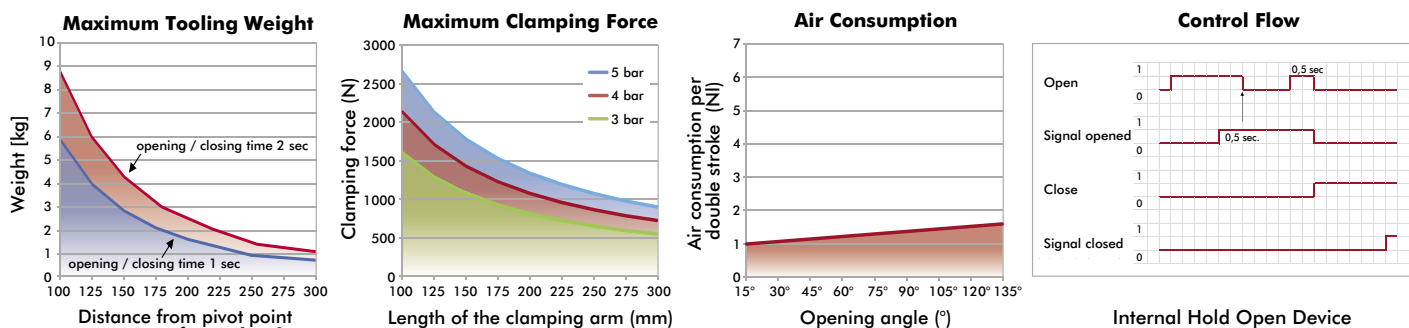
Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E...4...	380	120	40	1,5	0,9
82M-3B...4...					



Internal Hold Open Device
4A Cylinder Option

ATTENTION: Calculation tool available. Please consult factory.

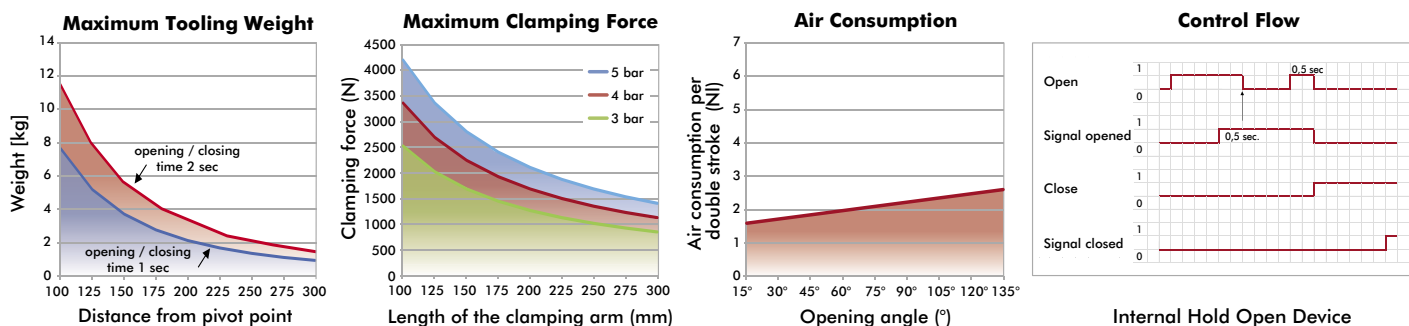
Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E...5...	1300	270	50	2,8	1,6



Internal Hold Open Device
5A/5B Cylinder Option

ATTENTION: Calculation tool available. Please consult factory.

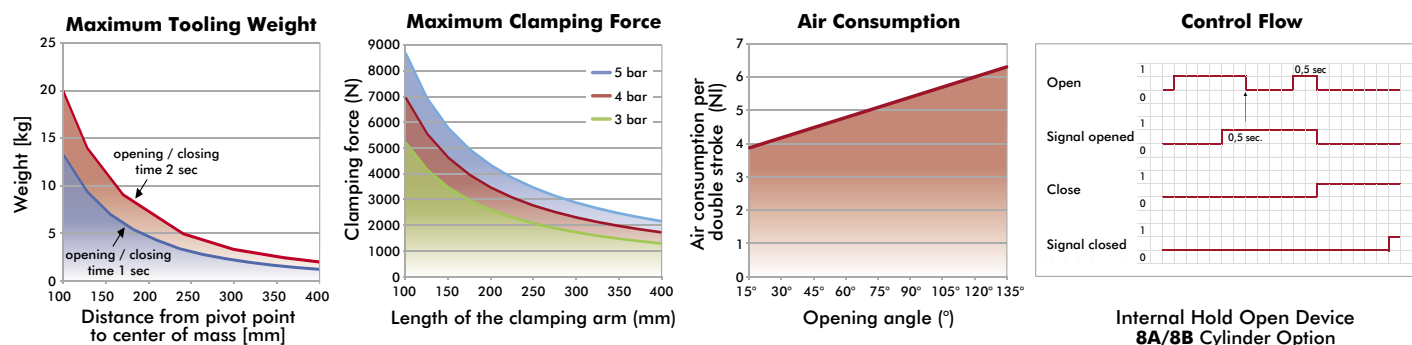
Model	Max. Holding Torque (Nm)	Clamping Torque at 5 bar (Nm)	Cylinder Ø (mm)	Weight (kg)	Air Consumption per double stroke at 5 bar (liter)
82M-3E...6...	1800	420	63	3,8	2,6
82M-3N...6...					



Internal Hold Open Device
6A/6B Cylinder Option

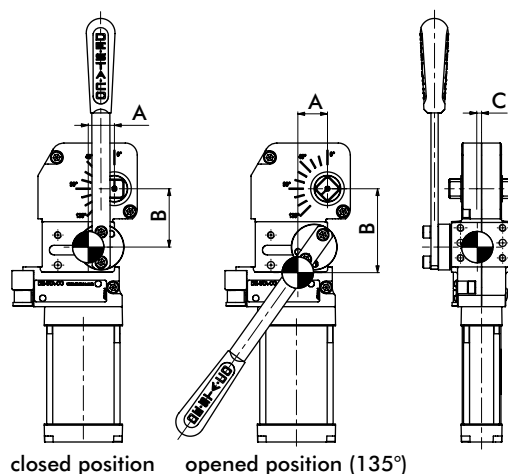
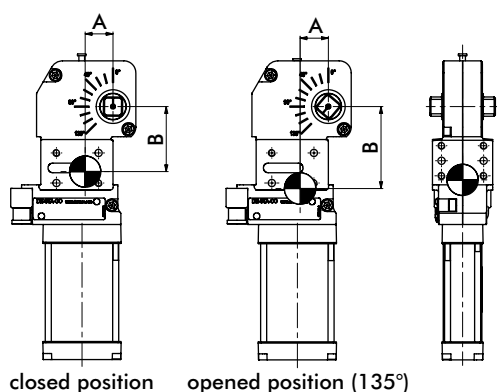
ATTENTION: Calculation tool available. Please consult factory.

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



ATTENTION: Calculation tool available. Please consult factory.

Center of Mass



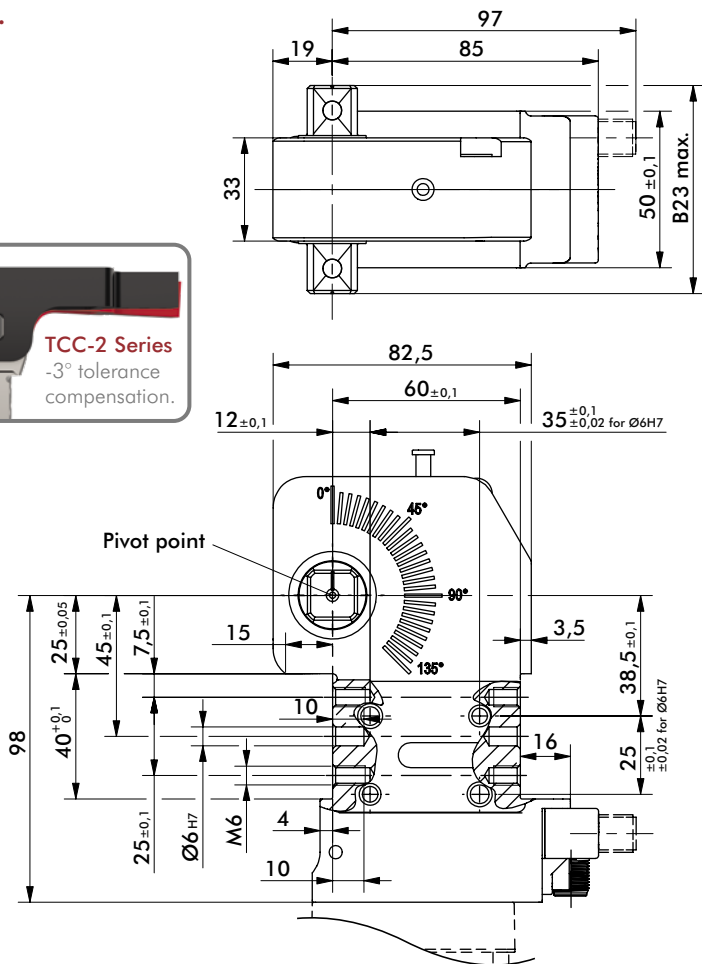
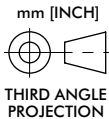
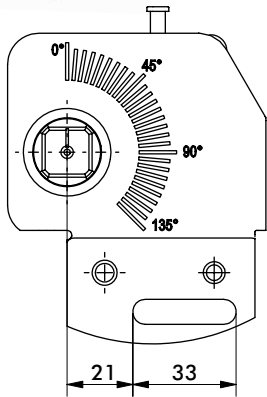
Model	Without Handle				Weight
	A		B		
	Closed	Open	Closed	Open	
82M-3E....40..	23	24	55	69	1,5
82M-3B....40..	24		54	68	
82M-3E....4A..	22	23	72	86	1,6
82M-3B....4A..	23		85	85	
82M-3E....50..	24	25	70	87	2,8
82M-3E....5N..			83	99	
82M-3E....5A..					
82M-3E....5B..					
82M-3.....63..	27	28	88	103	3,8
82M-3.....6N..			98	114	
82M-3.....6A..					
82M-3.....6B..					
82M-3E....80..	36	37	98	123	8,7
82M-3E....8N..			104	129	
82M-3E....8A..					
82M-3E....8B..					

	With Handle					
Model	A		B		C	Weight
	Closed	Open	Closed	Open		
82M-3E....40..	22	25	49	70	4	1,6
82M-3B....40..	24	27	46	67		
82M-3E....50..	23	30	62	85		
82M-3E....5N..						
82M-3.....63..	26	30	80	102	3	4,2
82M-3.....6N..						
82M-3E....80..	35	38	93	122	2	9,2
82M-3E....8N..						

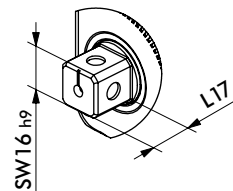
82M-3/TCC-2, 40MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions

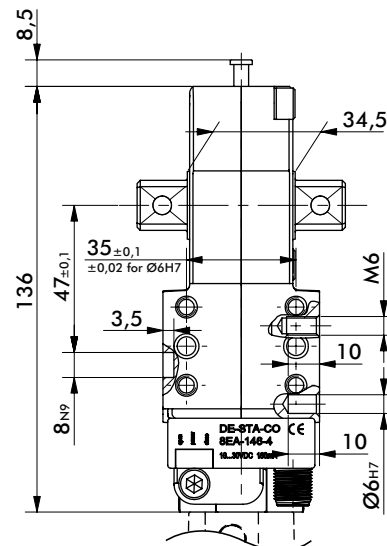
82M-3E/TCC-2E....4.



Dimensions of the driven shaft



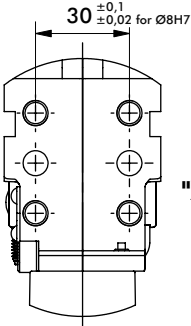
Model	B23 Max.	L17
82M-3.03/TCC-2.03..4...	54,5	9
82M-3.23/TCC-2.23..4...	66,5	16



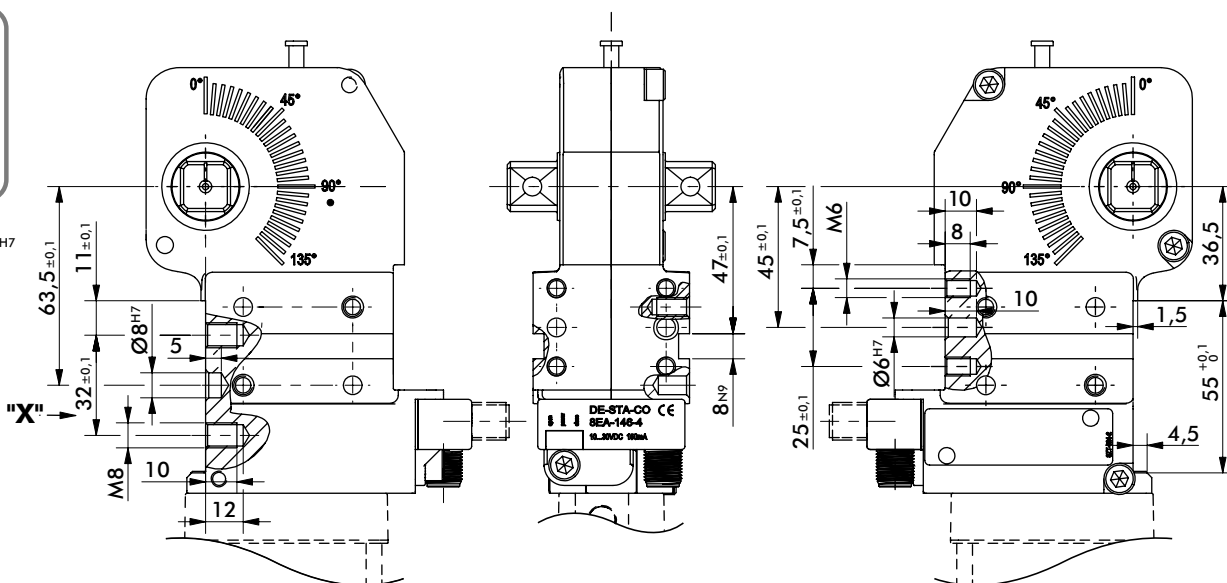
Power by compressed air, max. 6 bar operation with oil-free air is permissible.
The connector socket and the cable are not supplied with the unit.
Safe "holding/clamping" only under pressurization (for TCC models only).

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

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



View "X"

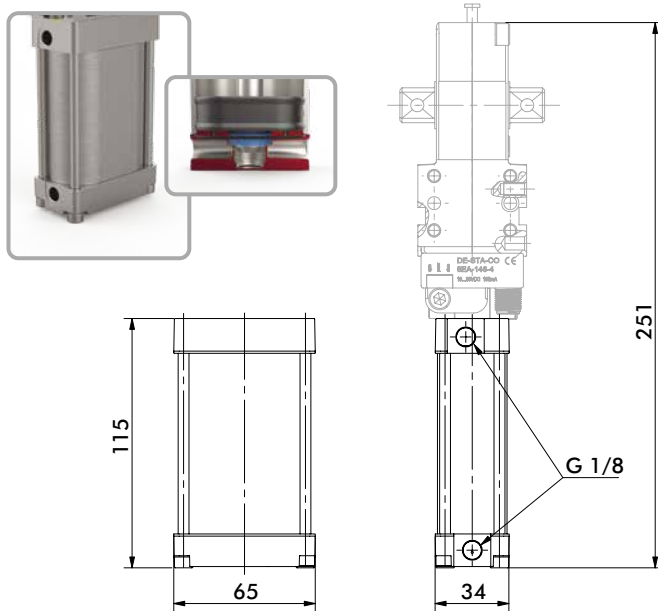


82M-3/TCC-2, 40MM

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

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

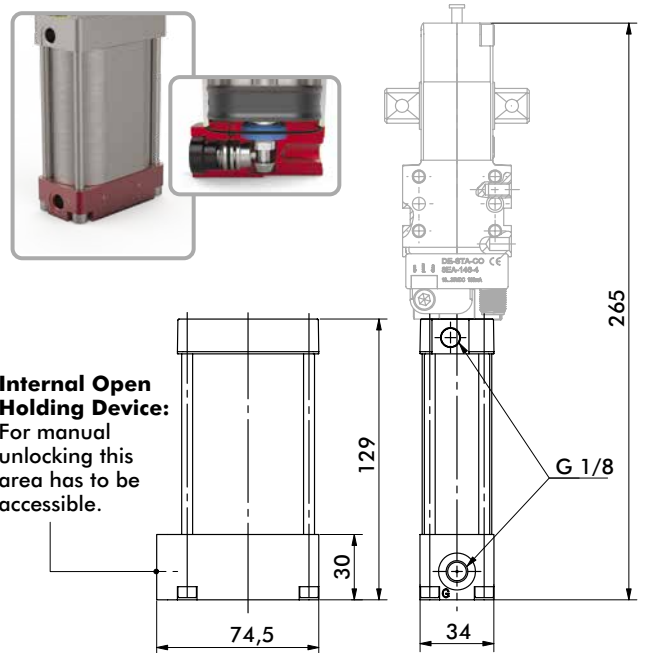
Standard Cylinder



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

Cylinder with Internal Hold Open Device

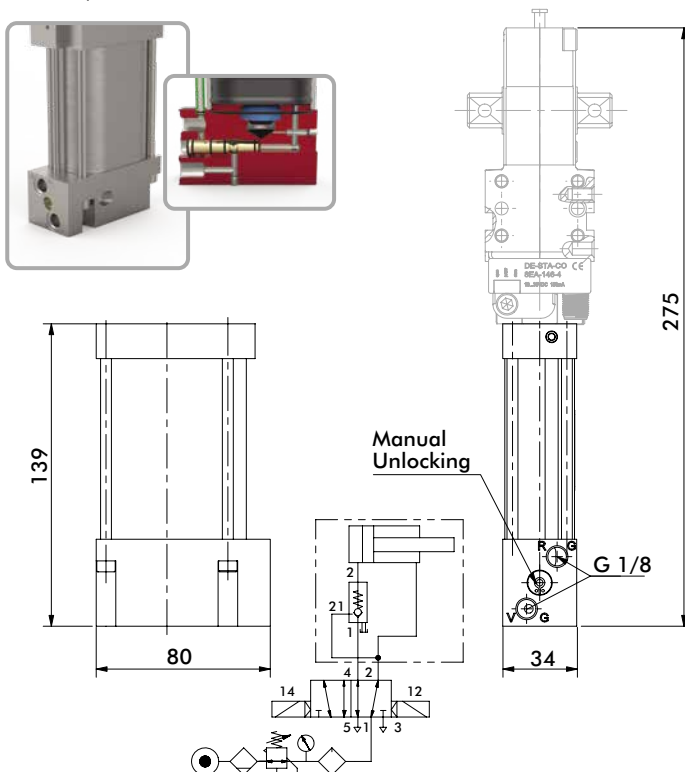
Securely holds clamp in the open position.



TCC-2.....4C

Cylinder with Unlock-able Return Valve

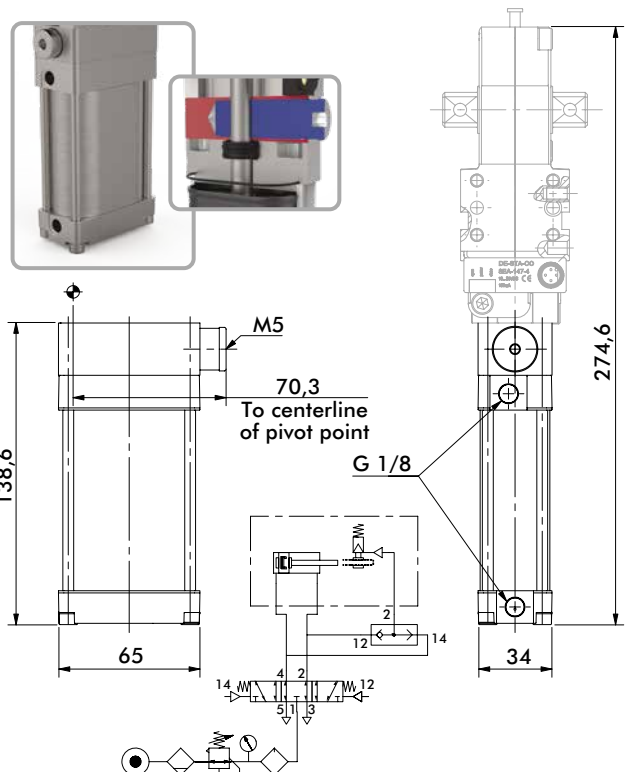
Pneumatically holds clamp arm in the closed position when air is released.



TCC-2.....4V

Cylinder with Rod Locking Device

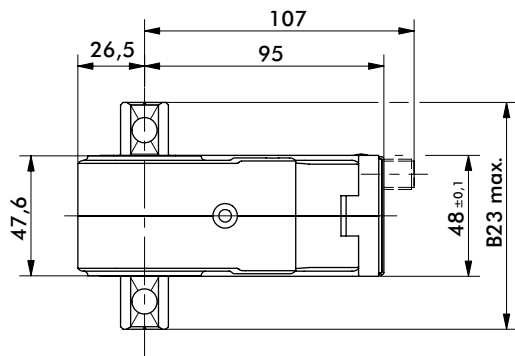
Uses friction to clamp rod at any point between open and closed positions.



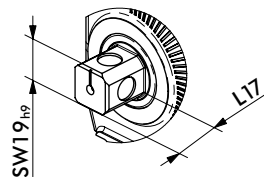
82M-3/TCC-2, 50MM

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions

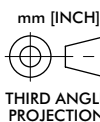
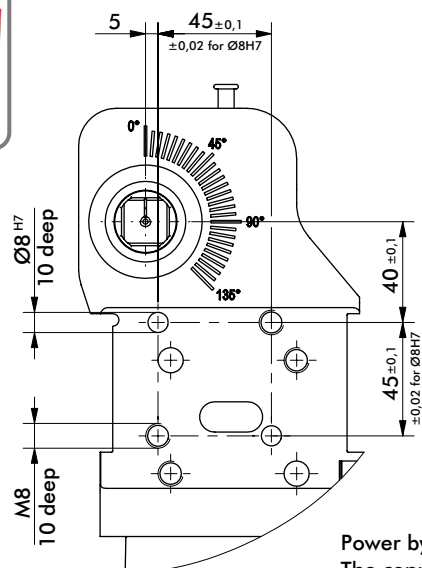
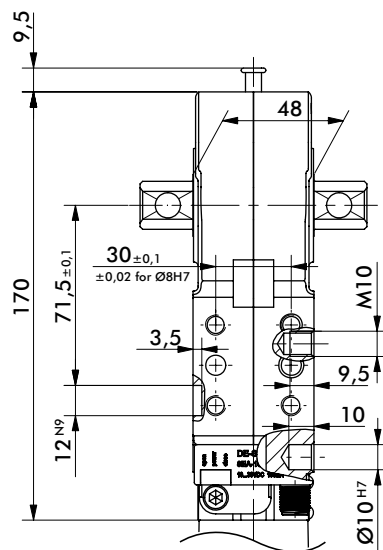
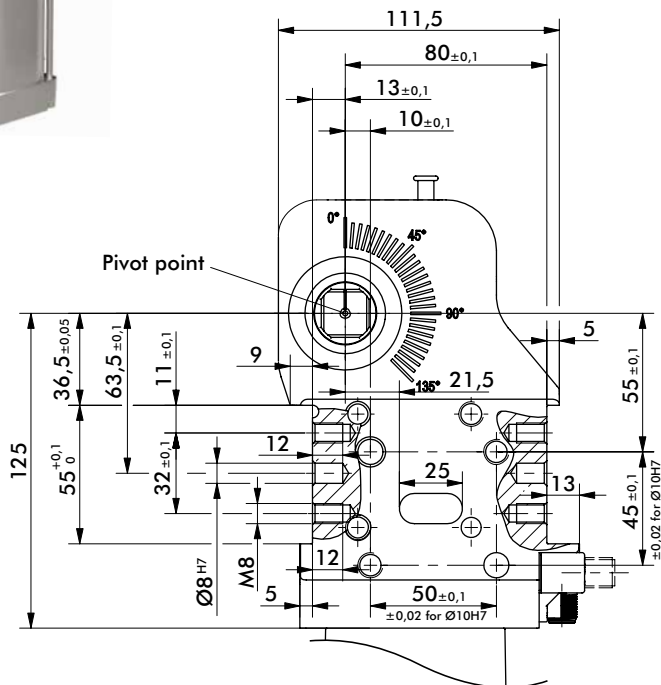
82M-3E/TCC-2E....5.



Dimensions of the driven shaft



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



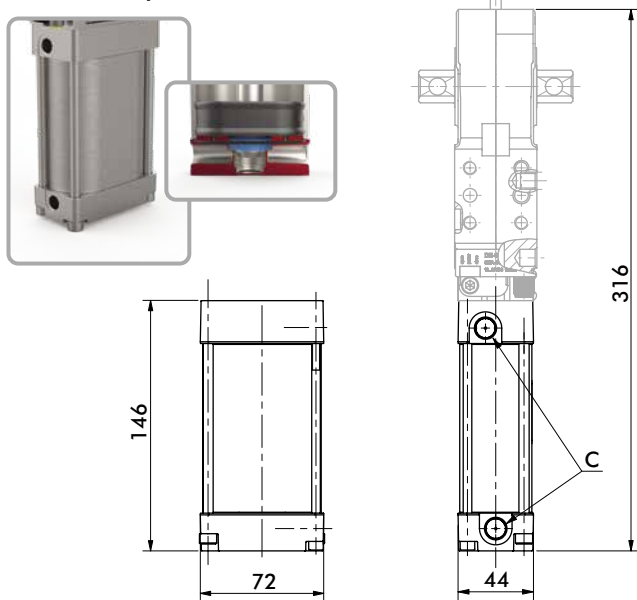
Power by compressed air, max. 6 bar operation with oil-free air is permissible.
The connector socket and the cable are not supplied with the unit.
Safe "holding/clamping" only under pressurization (for TCC models only).

82M-3/TCC-2, 50MM

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

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

Standard Cylinder



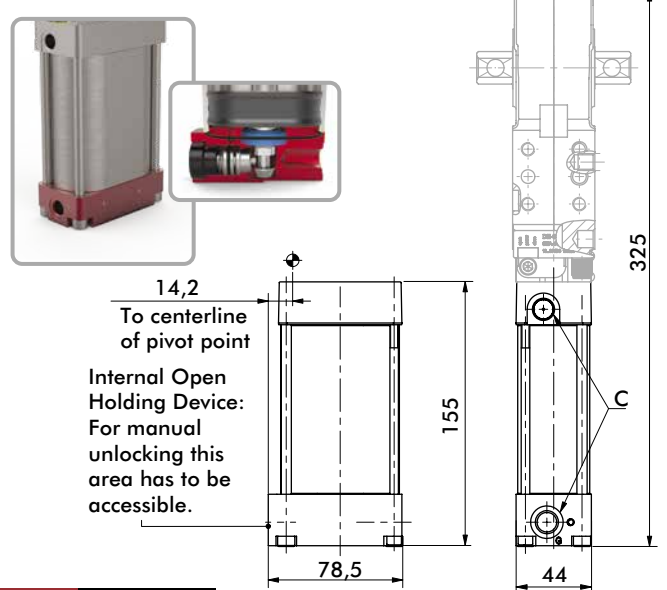
Ports	C
50	G1/4
5N	1/4-18 NPT

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

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

Cylinder with Internal Hold Open Device

Securely holds clamp in the open position.



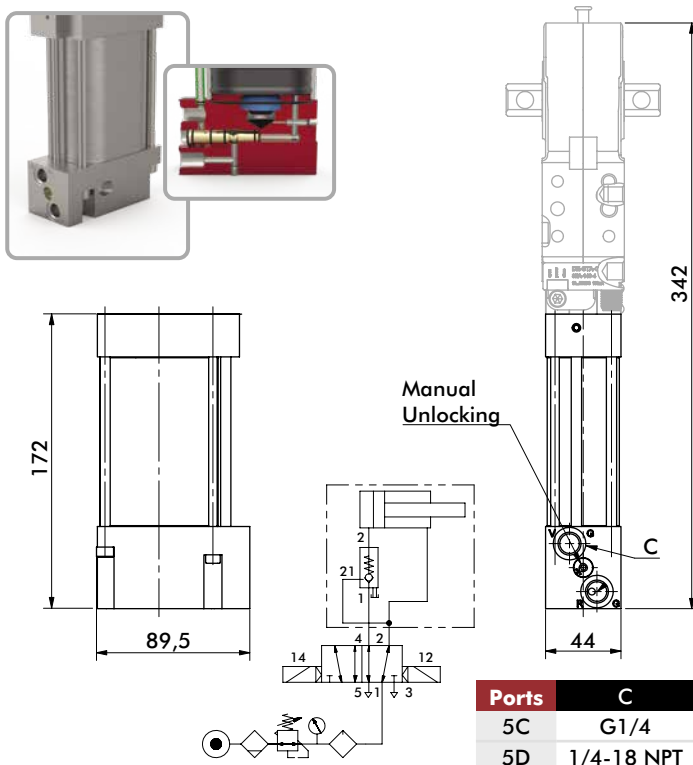
Ports	C
5A	G1/4
5B	1/4-18 NPT

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

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

Cylinder with Unlock-able Return Valve

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

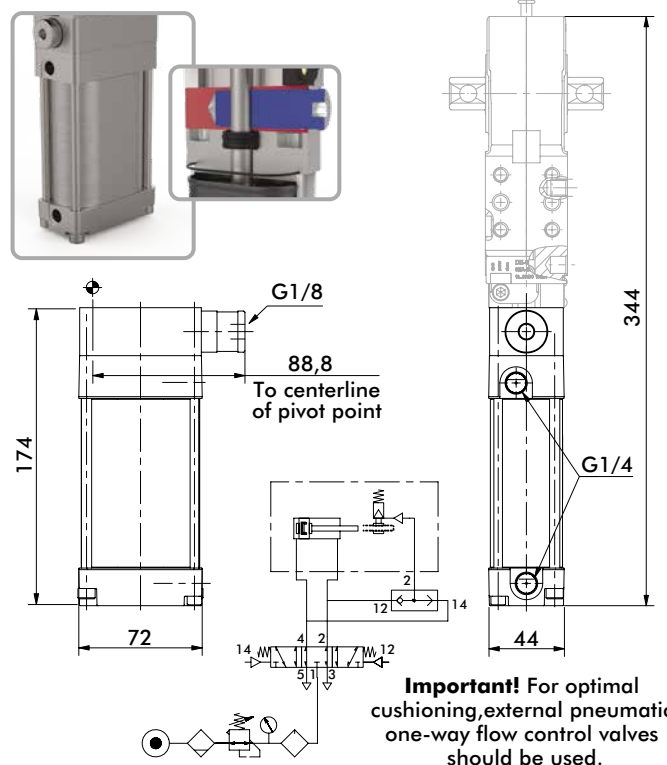


Ports	C
5C	G1/4
5D	1/4-18 NPT

TCC-2E...5V

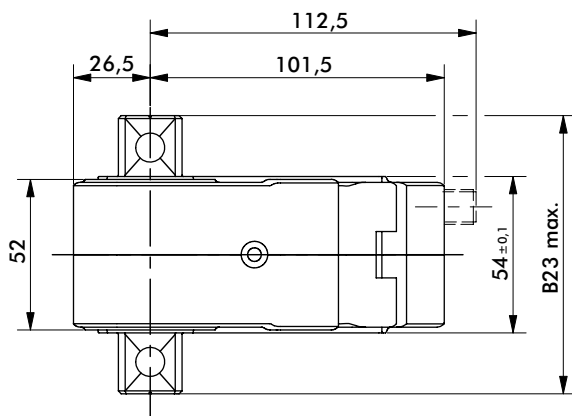
Cylinder with Rod Locking Device

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



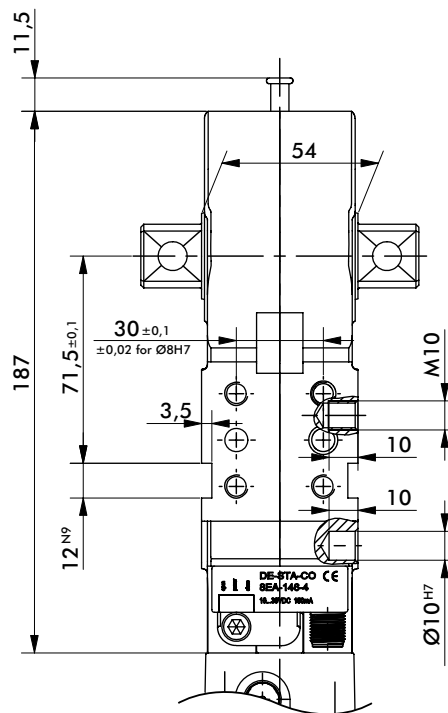
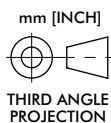
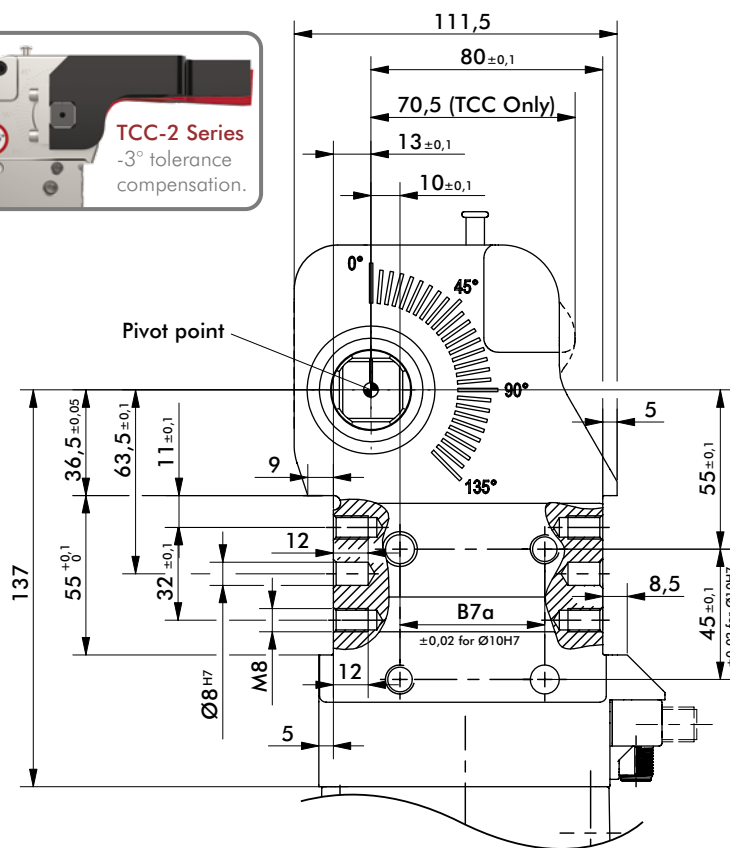
Important! For optimal cushioning, external pneumatic one-way flow control valves should be used.

Enclosed Pneumatic Power Clamps | Heavy-Duty Modular | Dimensions



Technical drawing of a bolt head. The drawing shows a hexagonal bolt head with a central hexagonal hole. Two dimensions are indicated: L17, which is the length of the bolt, and SW22h9, which is the width across the flats of the hexagonal head.

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



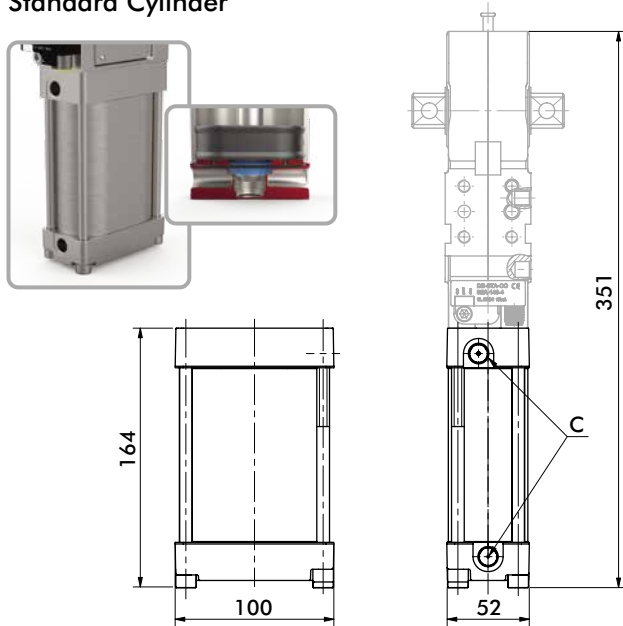
Power by compressed air, max. 6 bar operation with oil-free air is permissible.
The connector socket and the cable are not supplied with the unit.
Safe "holding/clamping" only under pressurization (for TCC models only).

82M-3/TCC-2, 63MM

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

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

Standard Cylinder



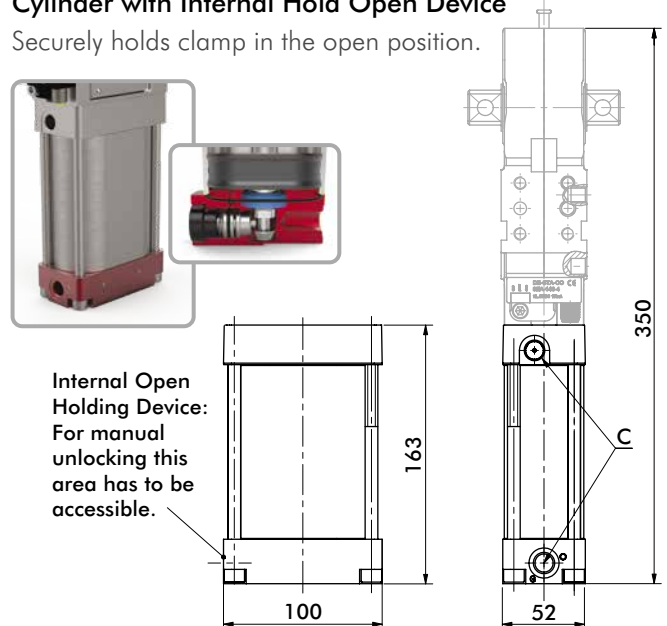
Ports	C
63	G1/4
6N	1/4-18 NPT

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

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

Cylinder with Internal Hold Open Device

Securely holds clamp in the open position.



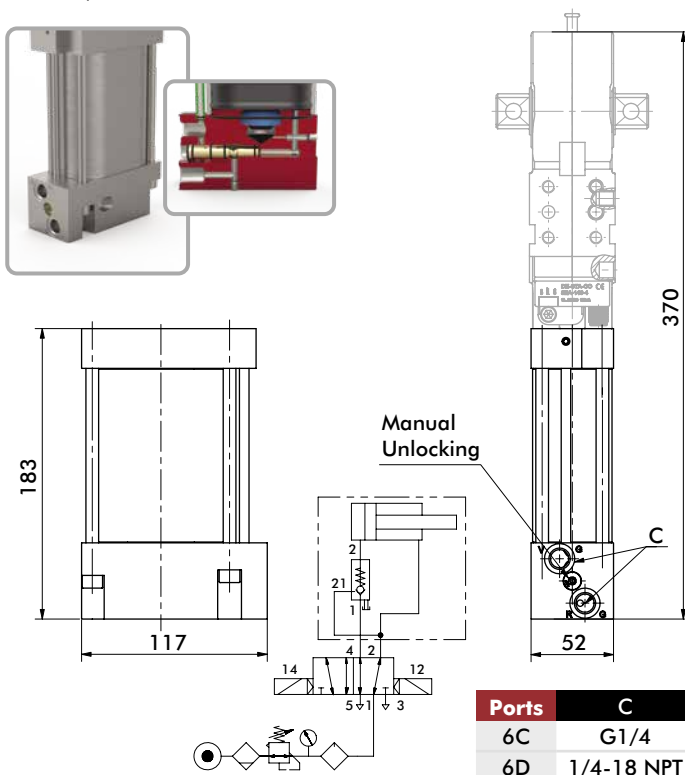
Ports	C
6A	G1/4
6B	1/4-18 NPT

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

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

Cylinder with Unlock-able Return Valve

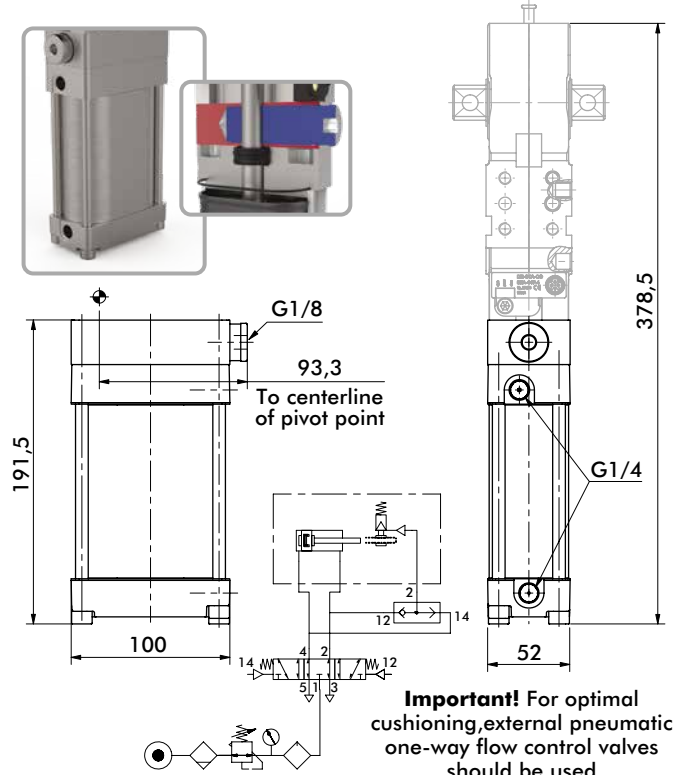
Pneumatically holds clamp arm in the closed position when air is released.



TCC-2.....6V

Cylinder with Rod Locking Device

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



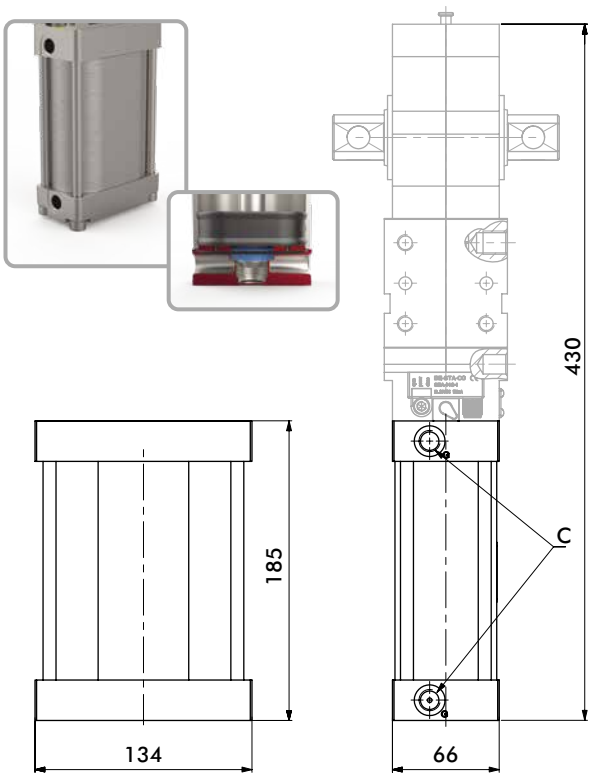
Important! For optimal cushioning, external pneumatic one-way flow control valves should be used.

82M-3, 80MM

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

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

Standard Cylinder



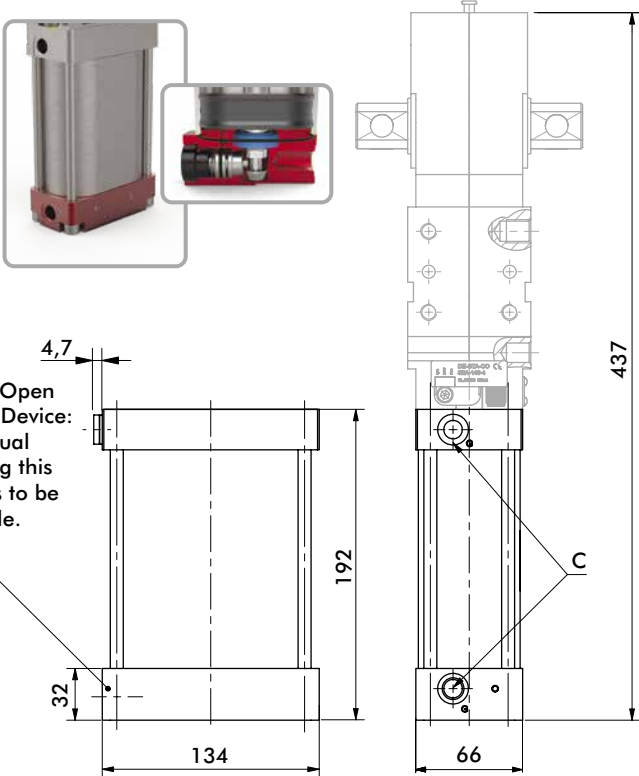
Ports	C
80	G1/4
8N	1/4-18 NPT

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

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

Cylinder with Internal Hold Open Device

Securely holds clamp in the open position.



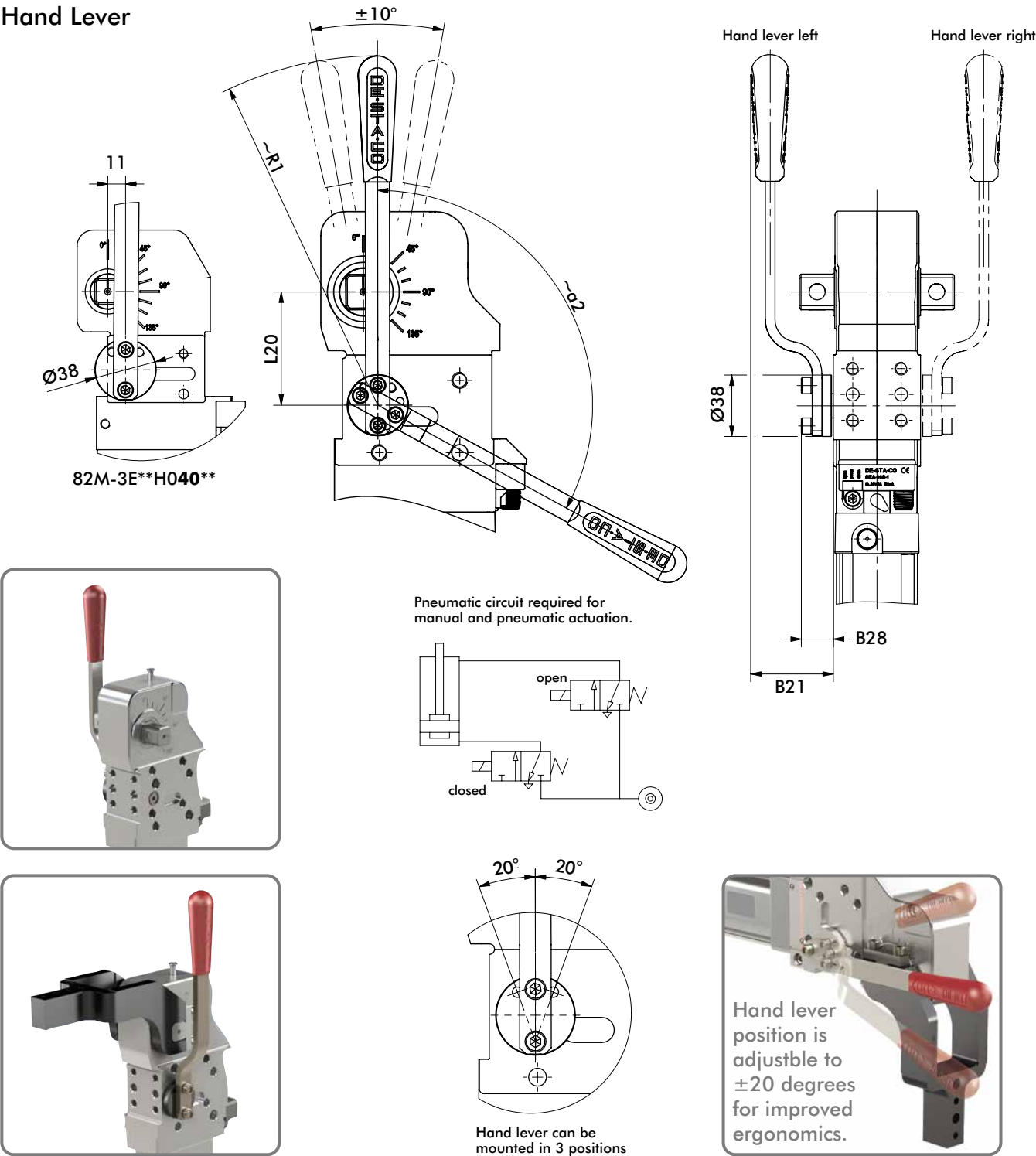
Ports	C
8A	G1/4
8B	1/4-18 NPT

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

82M-3 ACCESSORIES

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

Hand Lever

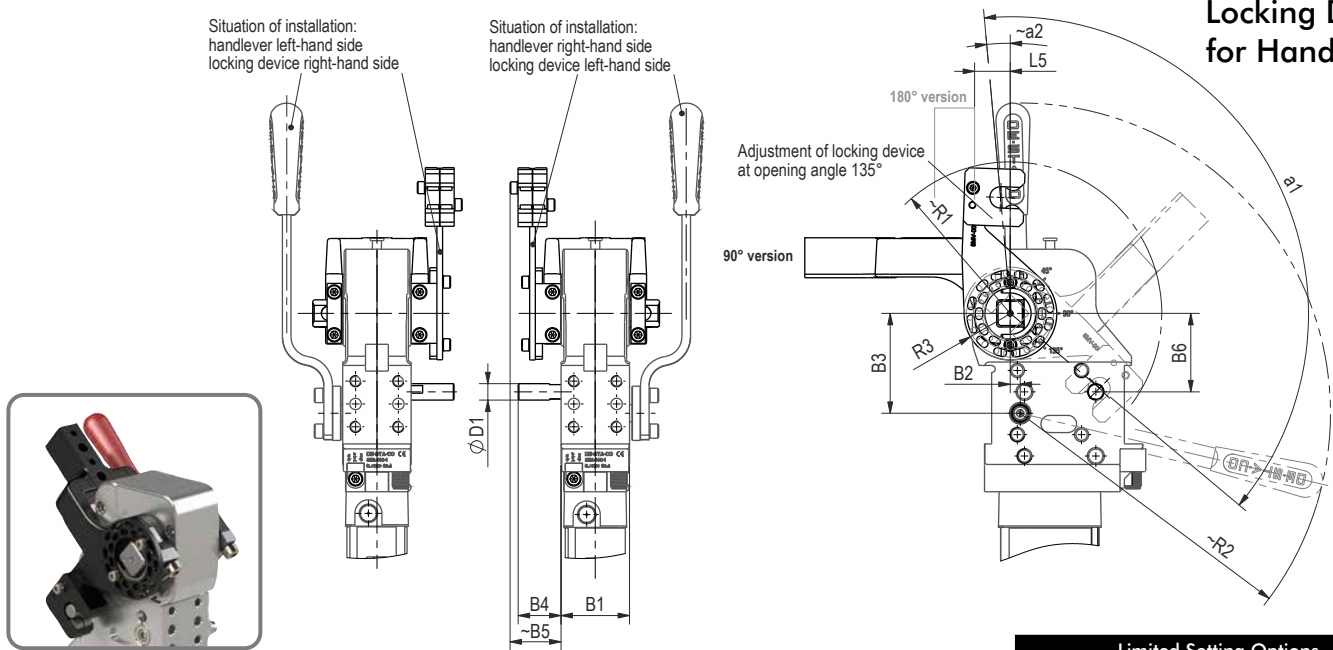


Model No.	B21	B28	L20	~R1	Swivel Angle α2 (with reference to opening angle of clamp arm)									
					0°	15°	30°	45°	60°	75°	90°	105°	120°	135°
82M-3...H040..	27	24	48,5	160	0°	31°	41°	49°	58°	69°	88°	113°	134°	144°
82M-3...H05...	52	20	70	218	-1°	30°	39°	46°	53°	61°	70°	81°	92°	103°
82M-3...H06..	52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

82M-3 ACCESSORIES

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

Locking Device for Hand Lever

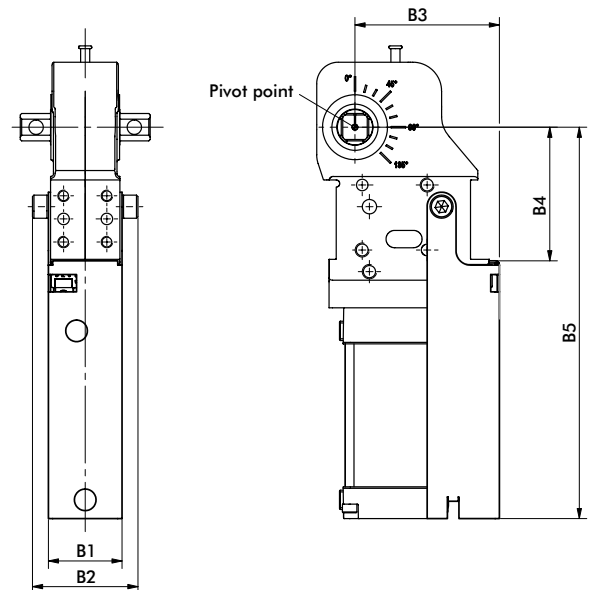


Order No.	For Model	B1	B2	B3	B4	B5	B6	ØD1	R1	R2	R3	α2	Limited Setting Options					
													Height of the clamping arm: L5 max.					
													90° version	180° version				
82ZB-162-1	82M-3...H040..	50	11	48,5	25	31	38,5	10,5	81	160	27	6	120°	—	105°	120°	120°	120°
82ZB-084-1	82M-3...H05...	48	7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



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

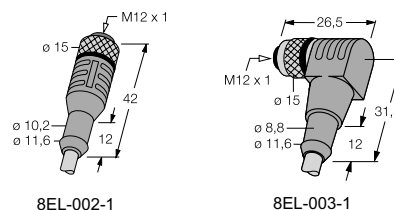
Anti-Ramming Device



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

Cable and Connector

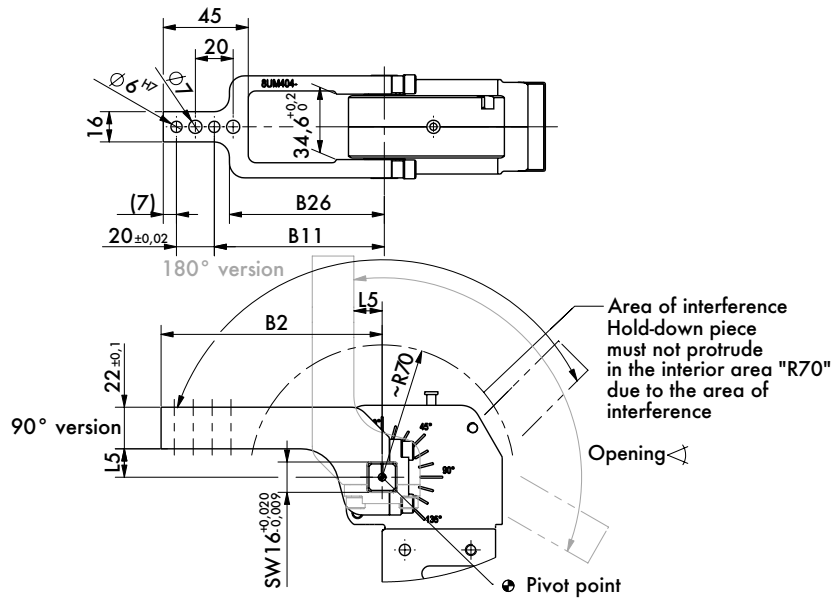
Order No.	Description
8EL-002-1	M12x1, Straight, 5-pin Connector with 5m Cable
8EL-003-1	M12x1, Angular, 4-pin Connector with 5m Cable



U-ARMS CENTER (ALUMINUM)

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

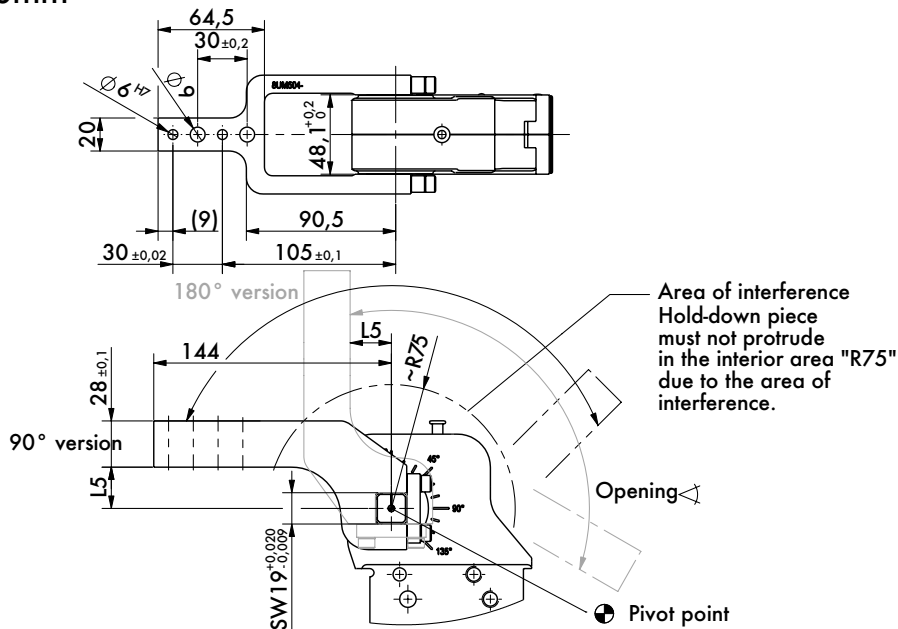
For Size 40mm



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

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

For Size 50mm



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

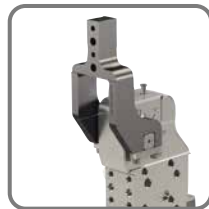
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	L5
8UM504-15-144	135°	105°	0,44	15
8UM504-25-144		120°	0,45	25
8UM504-45-144		135°	0,48	45

U-ARMS CENTER (ALUMINUM)

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

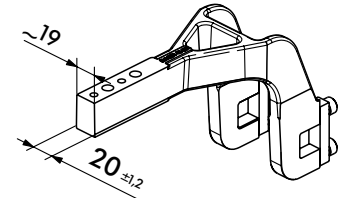
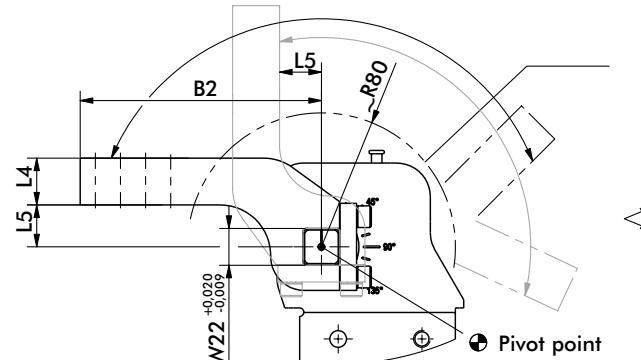
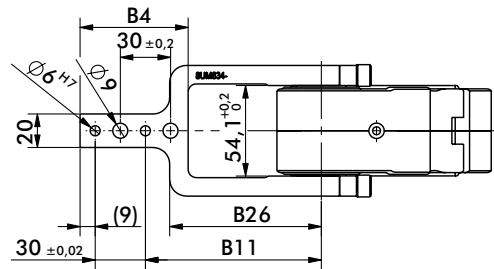


90°



180°

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



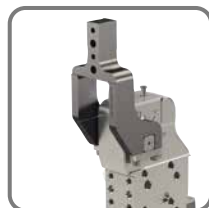
Dimensions are only for

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			0,56						45
8UM631-75-204*		135°	1,7	204	82	165	107	30	75

* only steel version available.

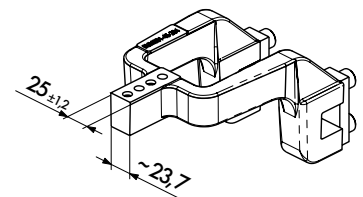
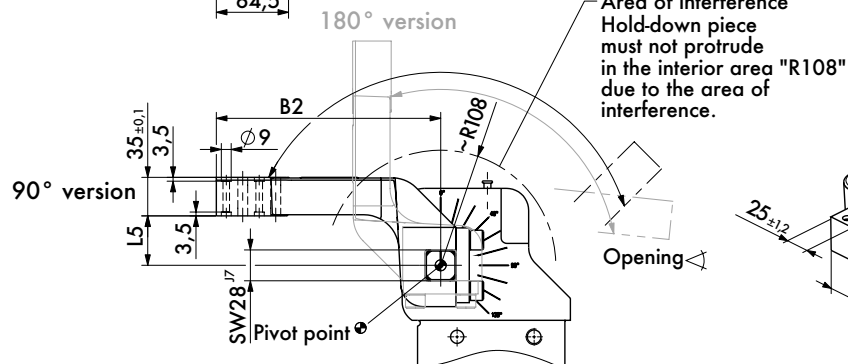
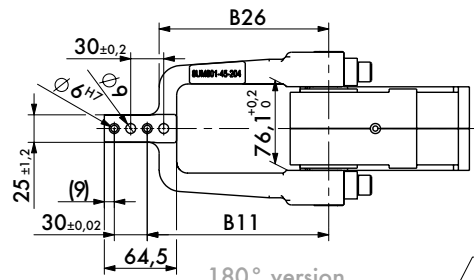


90°



180°

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



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

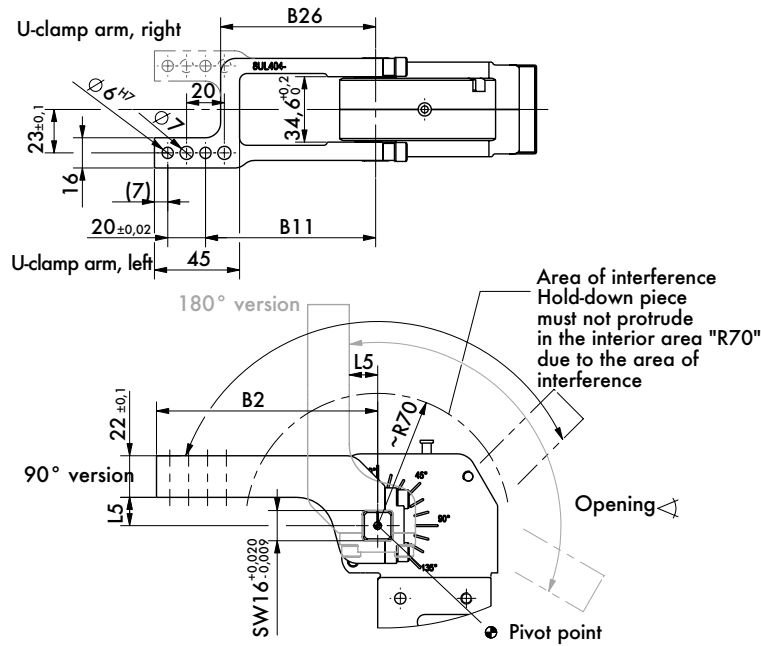
*only steel version available.

** Tolerance measured 80mm from pivot point.

U-ARMS OFFSET (ALUMINUM)

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

For Size 40mm



90° Left



90° Right



180° Right*



180° Left*



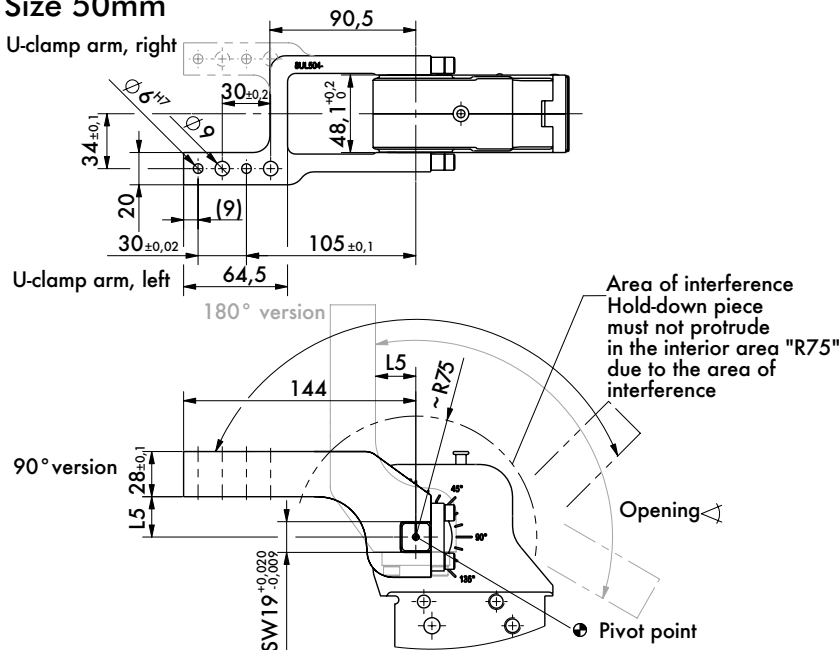
8UL404-00-117
8UL404-15-117
8UL404-25-117
8UL404-45-107

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	135°	105°	0,23				0
8U(•)404-15-117		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

For Size 50mm



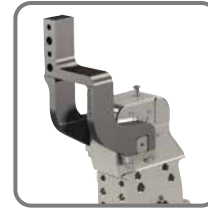
90° Left



90° Right



180° Right*



180° Left*



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

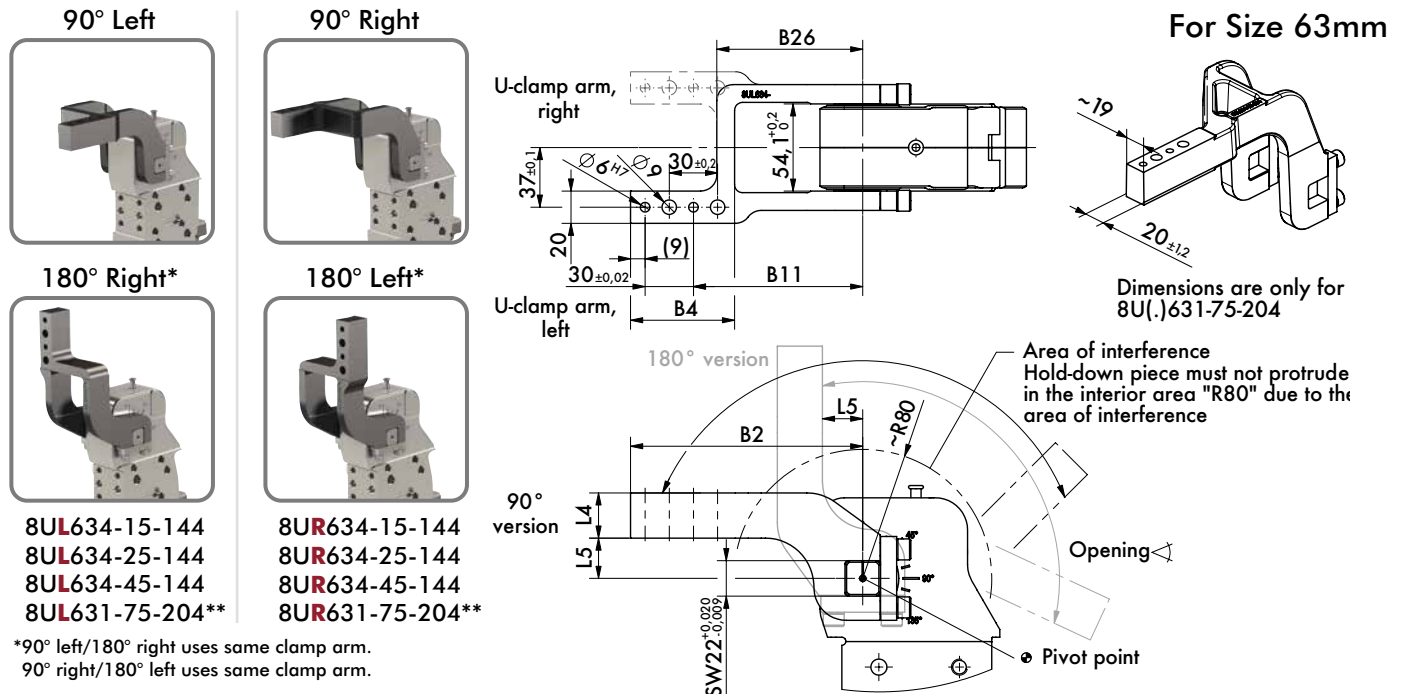
8UR504-15-144
8UR504-25-144
8UR504-45-144

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

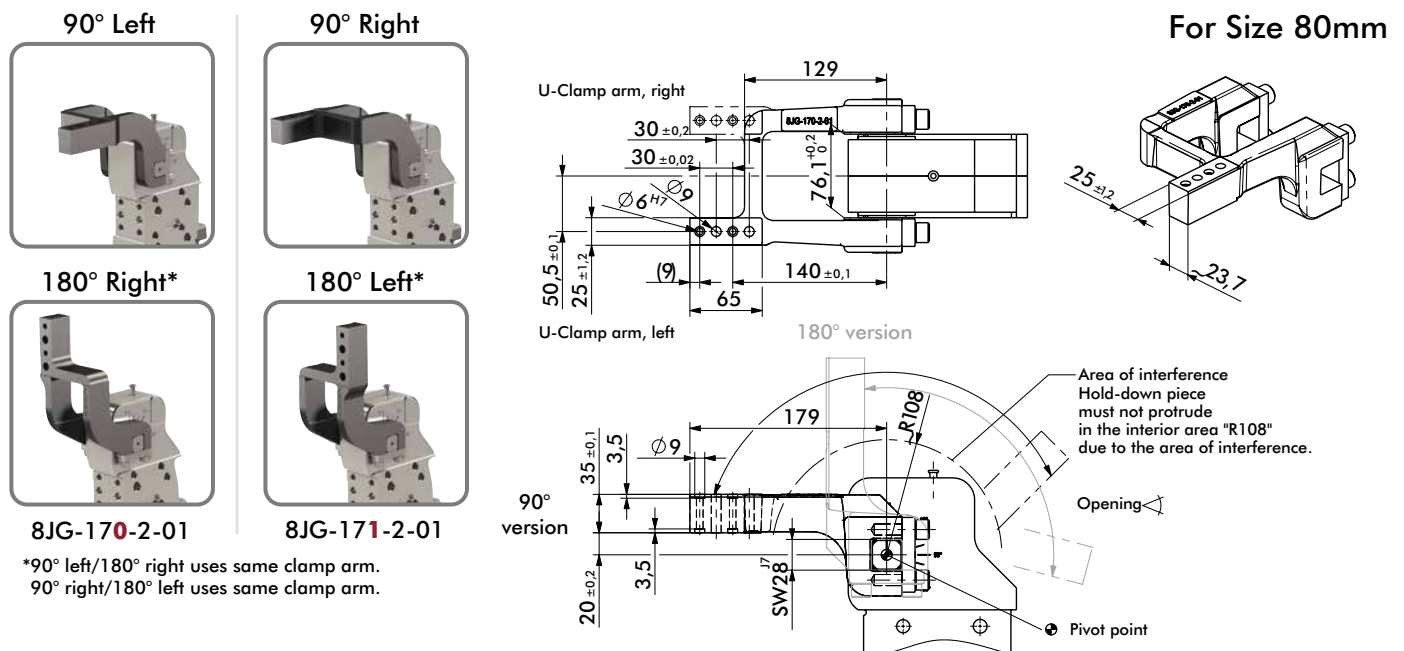
U-ARMS OFFSET (ALUMINUM)

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



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						75

** only steel version available.



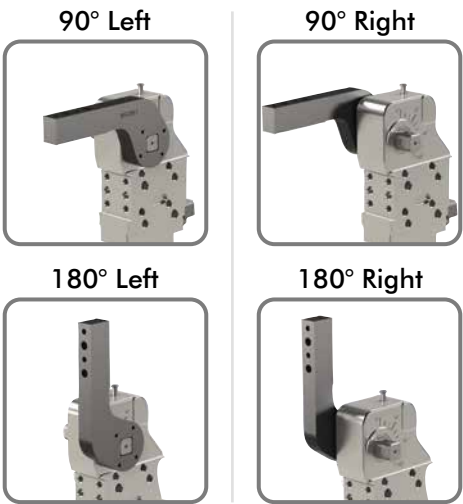
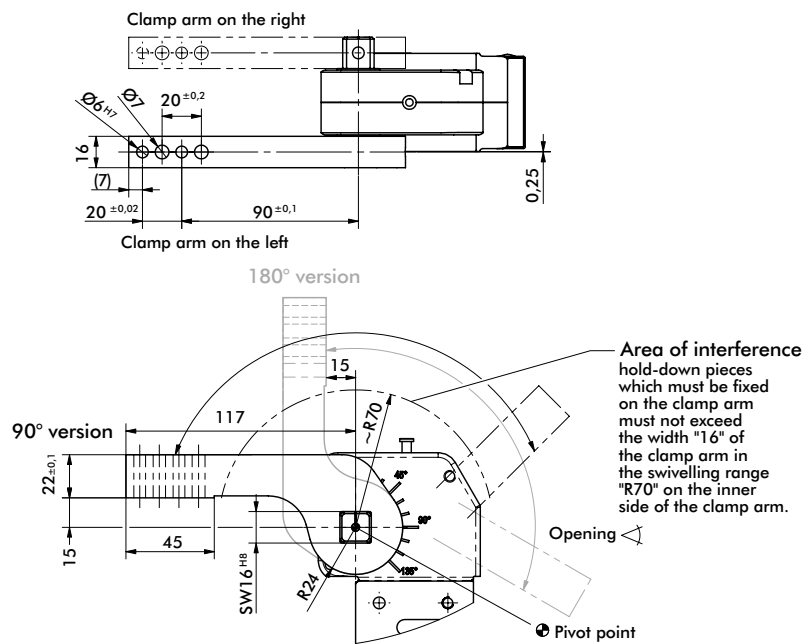
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)
8JG-17(.)-2-01**	135°	105°	3,5

**only steel version available.

LATERAL (SIDE) ARMS

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

For Size 40mm

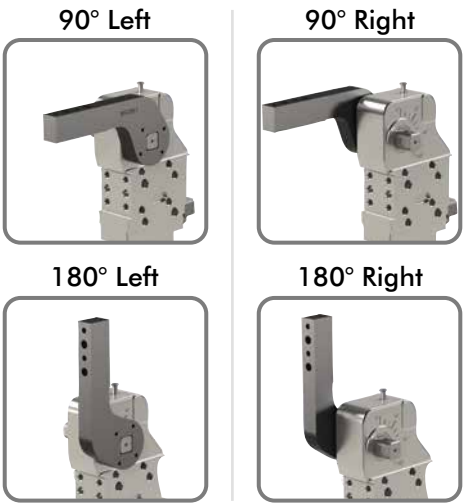
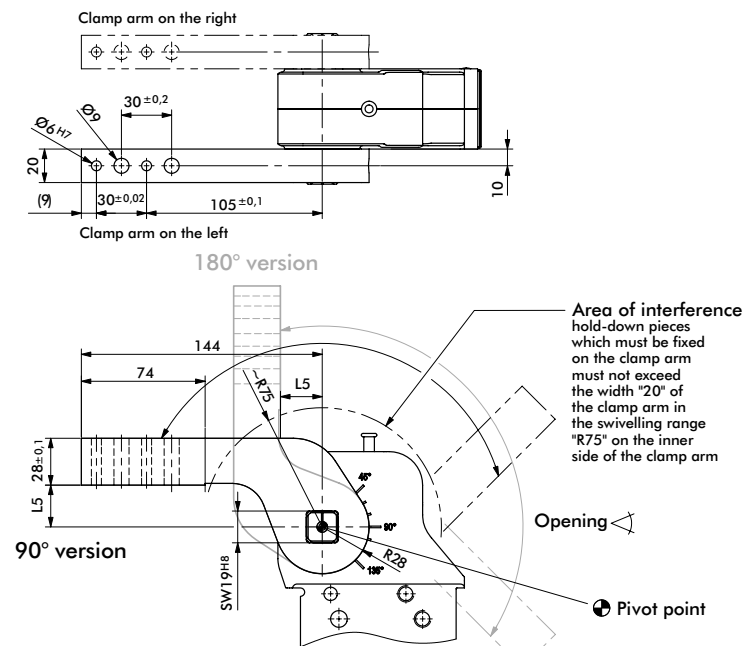


8S401-15-117

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

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

For Size 50mm



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

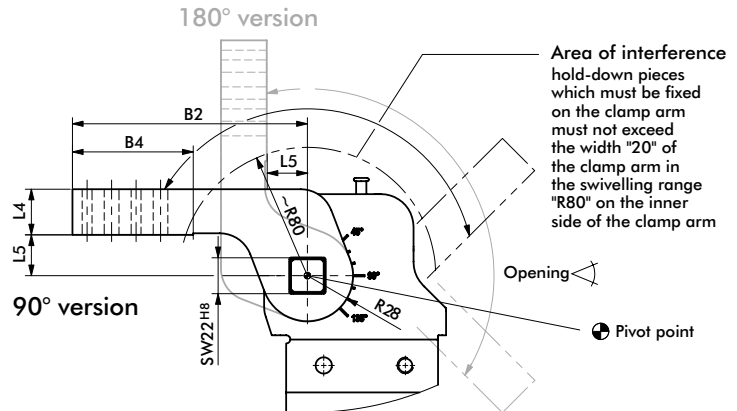
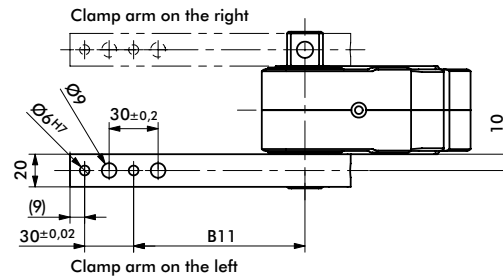
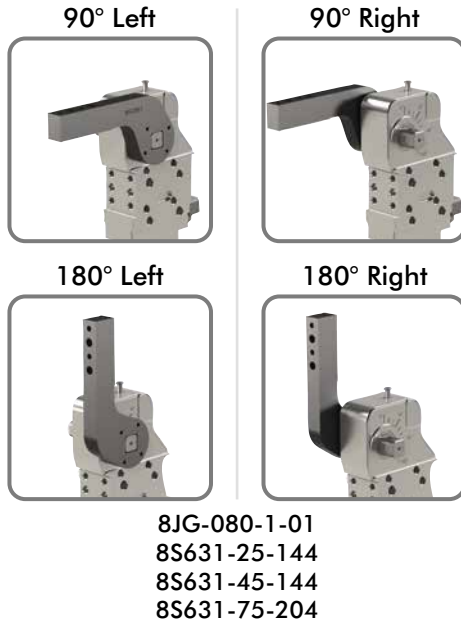
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	L5
8JG-070-1-01	135°	135°	0,9	15
8S501-25-144			1,0	25

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

LATERAL (SIDE) ARMS

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

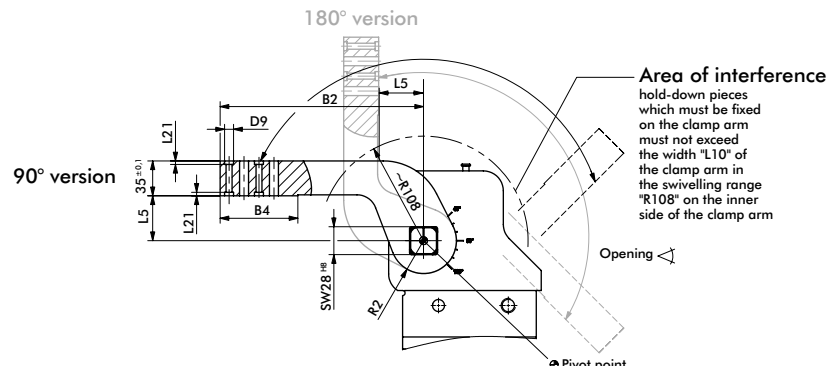
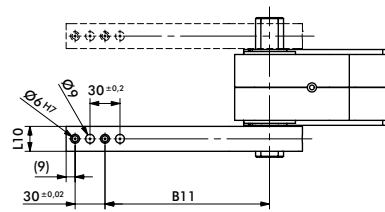
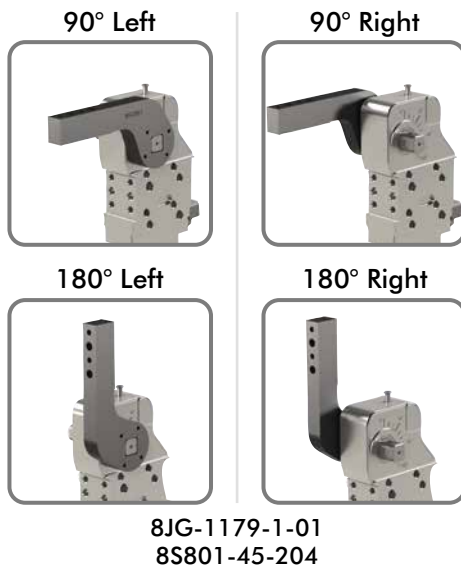
For Size 63mm



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					15
8S631-25-144			1,0	144	74	105	28	25
8S631-45-144			1,1					45
8S631-75-204			1,5	204	78	165	30	75

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

For Size 80mm



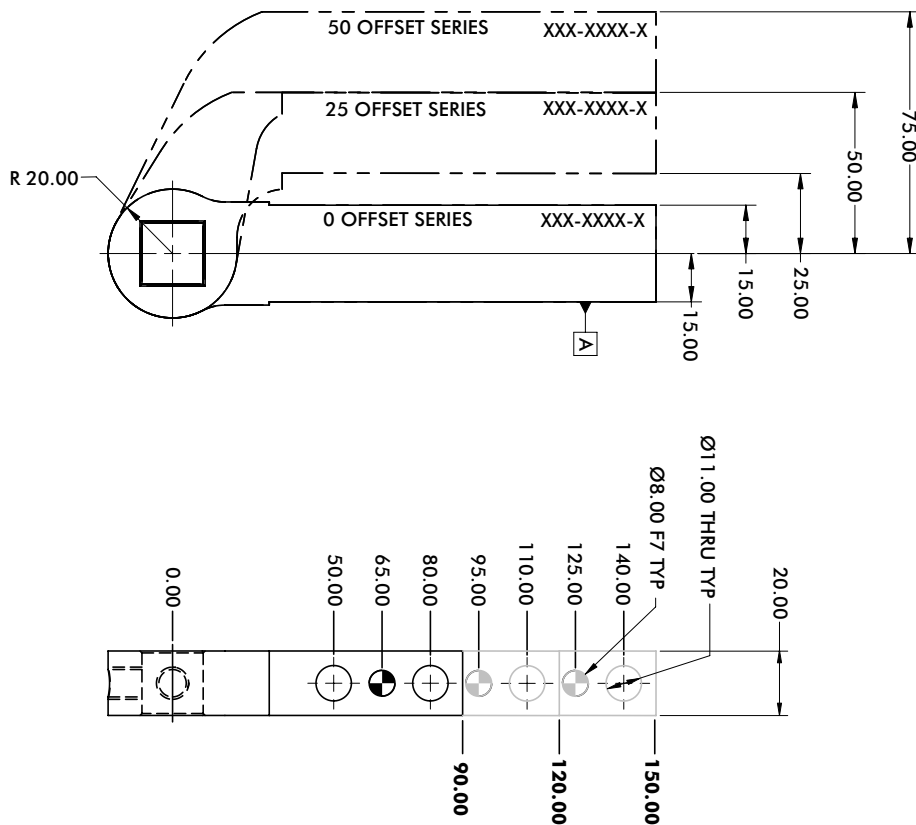
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	D9	B11 ±0,1	L5	L10	L21	R2
8JG-1179-1-01	135°	135°	2,1	179	74	-	140	20	30	-	35
8S801-45-204				204	78	9	165	45	25	3,5	33

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

LATERAL (SIDE) ARMS, NAAMS-STYLE

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

For Size 50mm



9mm Thru Hole (6.00 H7 Dowel)

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

11mm Thru Hole (8.00 F7 Dowel)

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

▲ Common in North America

(•) STANDARD ARM OFFERING

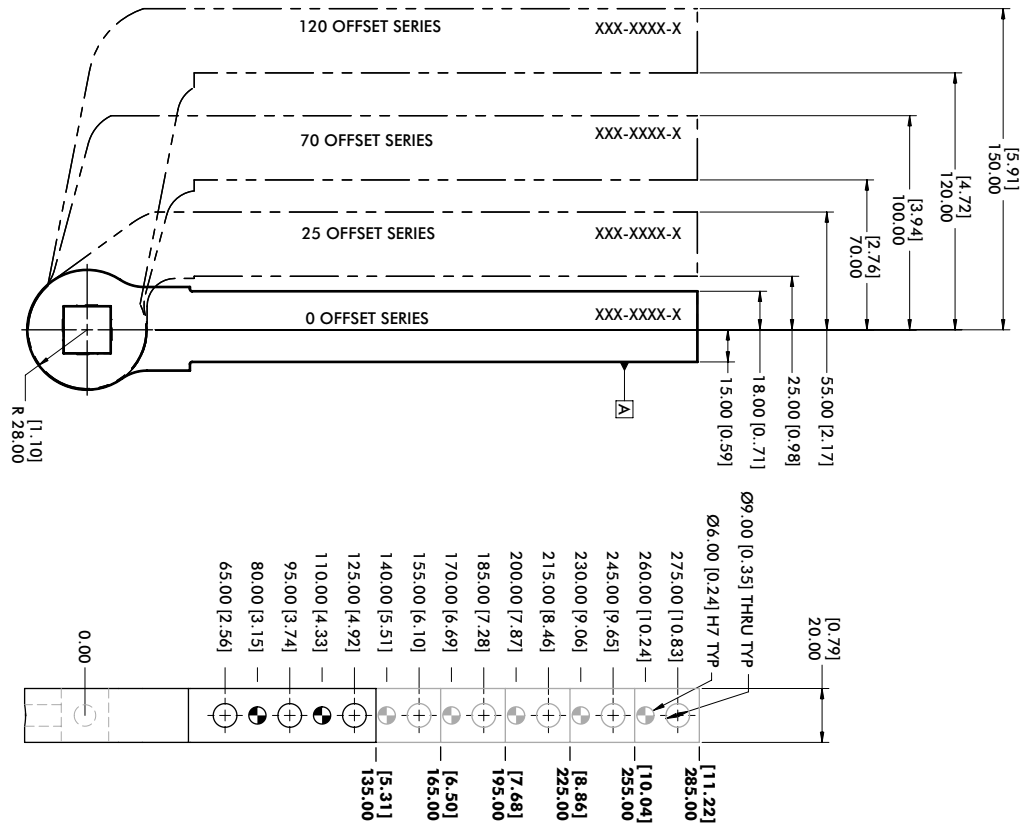
Maximum Opening Angle (shown in locked position)

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

LATERAL (SIDE) ARMS, NAAMS-STYLE

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

For Size 63mm with 23 Clamp Arm Shaft Option



135mm [5.31"] Arm Length

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

165mm [6.50"] Arm Length

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

195mm [7.68"] Arm Length

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

225mm [8.86"] Arm Length

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

255mm [10.04"] Arm Length

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

285mm [11.22"] Arm Length

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

▲ Common in North America

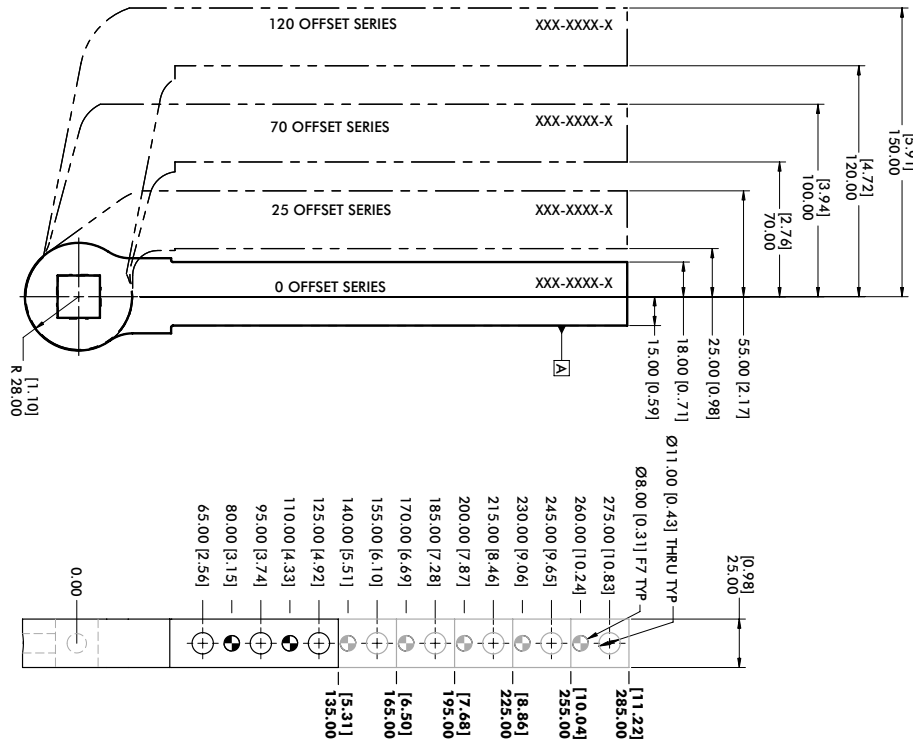
Maximum Opening Angle (shown in locked position)

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

LATERAL (SIDE) ARMS, NAAMS-STYLE

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

For Size 63mm with D0 Clamp Arm Shaft Option



135mm [5.31"] Arm Length			165mm [6.50"] Arm Length			195mm [7.68"] Arm Length		
Series	Arm Style	Model	Series	Arm Style	Model	Series	Arm Style	Model
120 Offset	▲ • 1043	B8JG-1043-1	120 Offset	▲ ⓘ 1044	B8JG-1044-1	120 Offset	▲ ⓘ 1045	B8JG-1045-1
70 Offset	▲ • 1031	B8JG-1031-1	70 Offset	▲ • 1032	B8JG-1032-1	70 Offset	▲ • 1033	B8JG-1033-1
25 Offset	▲ • 1019	B8JG-1019-1	25 Offset	▲ • 1020	B8JG-1020-1	25 Offset	▲ ⓘ 1021	B8JG-1021-1
0 Offset	▲ • 1007	B8JG-1007-1	0 Offset	▲ • 1008	B8JG-1008-1	0 Offset	▲ • 1009	B8JG-1009-1

225mm [8.86"] Arm Length			255mm [10.04"] Arm Length			285mm [11.22"] Arm Length		
Series	Arm Style	Model	Series	Arm Style	Model	Series	Arm Style	Model
120 Offset	▲ ⓘ 1046	B8JG-1046-1	120 Offset	▲ ⓘ 1047	B8JG-1047-1	120 Offset	▲ ⓘ 1048	B8JG-1048-1
70 Offset	▲ • 1034	B8JG-1034-1	70 Offset	▲ • 1035	B8JG-1035-1	70 Offset	▲ ⓘ 1036	B8JG-1036-1
25 Offset	▲ ⓘ 1022	B8JG-1022-1	25 Offset	▲ ⓘ 1023	B8JG-1023-1	25 Offset	▲ ⓘ 1024	B8JG-1024-1
0 Offset	▲ ⓘ 1010	B8JG-1010-1	0 Offset	▲ ⓘ 1011	B8JG-1011-1	0 Offset	▲ ⓘ 1012	B8JG-1012-1

▲ Common in North America (•) STANDARD ARM OFFERING ⓘ NON-STANDARD ARM OFFERING (extended leadtimes apply)

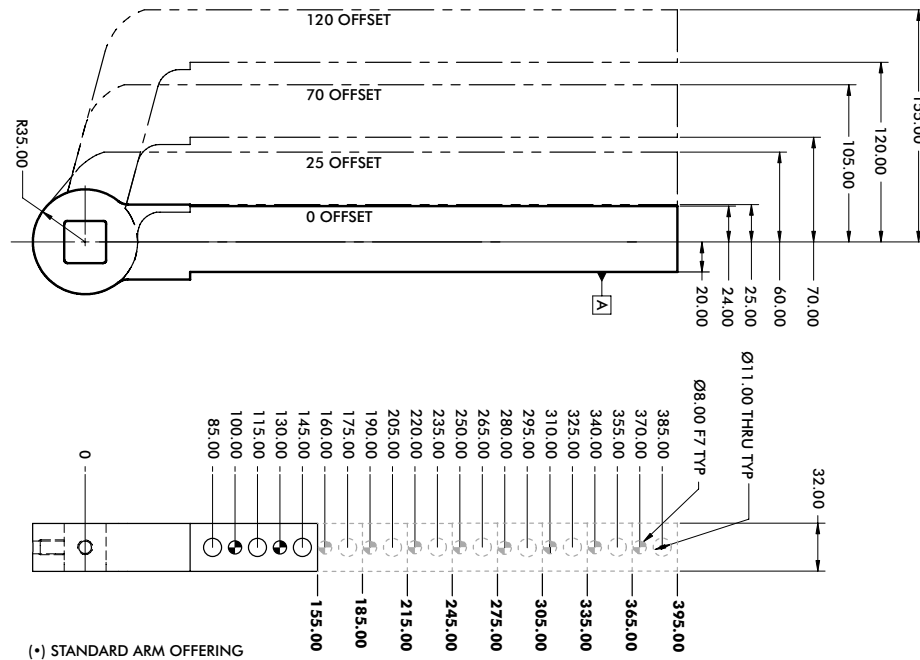
Maximum Opening Angle (shown in locked position)

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

LATERAL (SIDE) ARMS, NAAMS-STYLE

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

For Size 80mm



155mm [4.53"] Arm Length

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

185mm [7.28"] Arm Length

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

215mm [8.46"] Arm Length

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

245mm [9.65"] Arm Length

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

275mm [10.83"] Arm Length

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

305mm [12.00"] Arm Length

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

335mm [13.19"] Arm Length

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

365mm [14.37"] Arm Length

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

395mm [15.55"] Arm Length

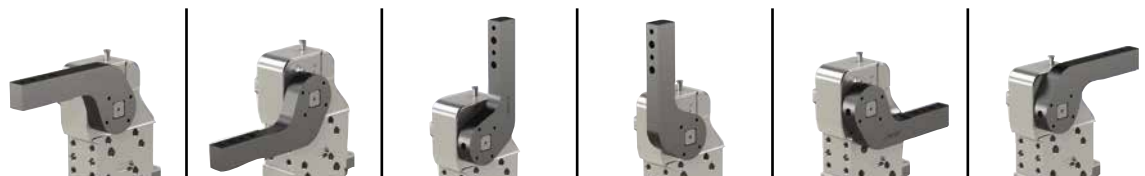
Series	Arm Style	Model
120 Offset	▲ ⓘ 1178	B8JG-1178-1
70 Offset	▲ • 1158	B8JG-1158-1
25 Offset	▲ ⓘ 1138	B8JG-1138-1
0 Offset	▲ • 1118	B8JG-1118-1

▲ Common in North America

(*) STANDARD ARM OFFERING

ⓘ NON-STANDARD ARM OFFERING (extended leadtimes apply)

Maximum Opening Angle (shown in locked position)



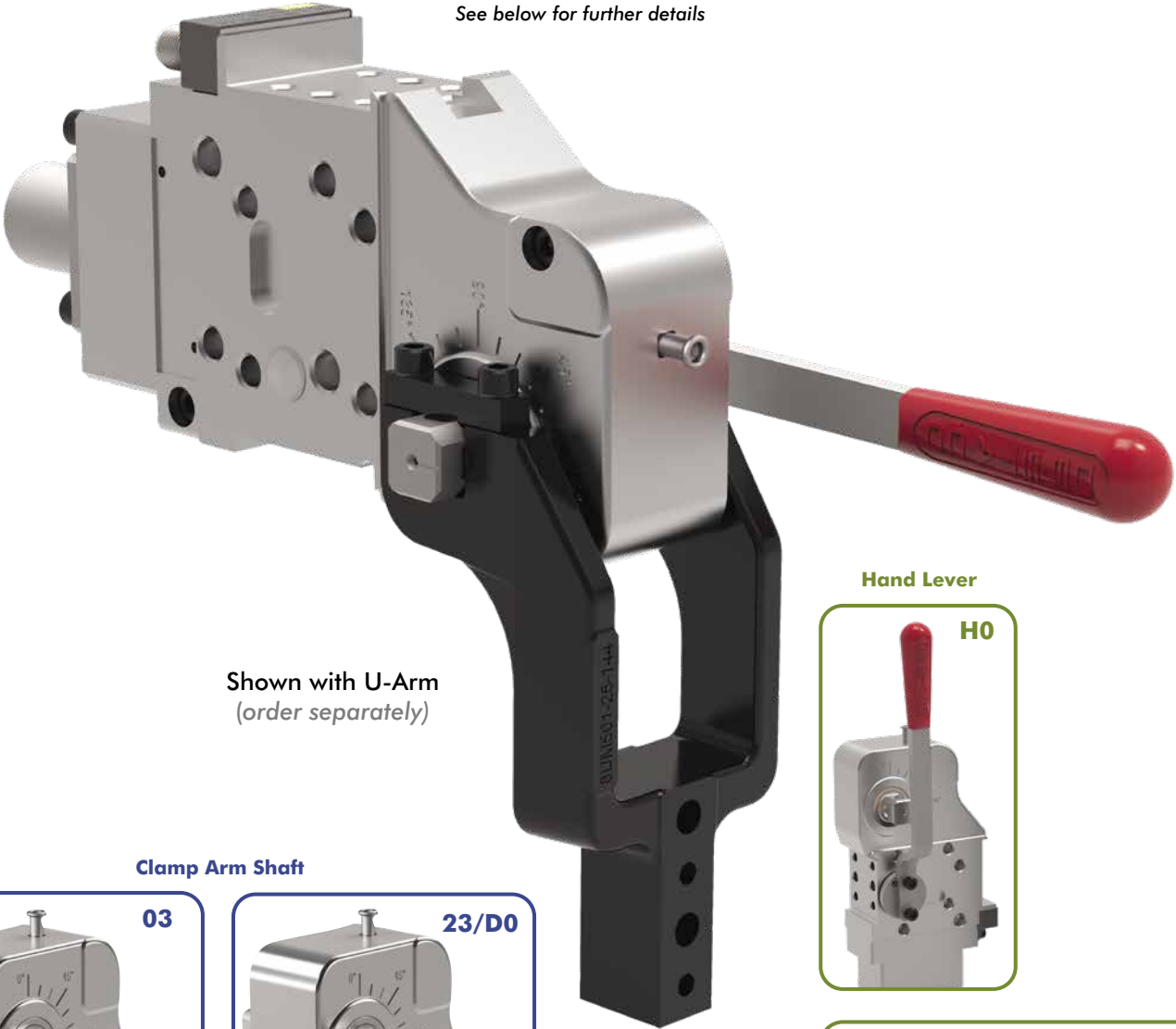
Arm Styles						
1110 - 1118	135°	135°	100°	100°	N/A	N/A
1130 - 1138	135°	N/A	60°	120°	N/A	30°
1150 - 1158	125°	N/A	35°	135°	N/A	55°
1170 - 1178	115°	N/A	25°	135°	N/A	80°

52H-3

Enclosed Modular Manual Power Clamps | Heavy-Duty | Ordering Information

52H-3		E		23		H0		50		L8	
Mounting	Description	Clamp Arm Shaft		Description		Handle		Description			
E	Standard	03		for U-Arms		H0		Hand lever			
N	NAAMS (Size 63 only)	23		for Lateral Arms		HS		Hand Lever (Weldable)			
		D0		for Lateral Arms (size 63 only)							

See below for further details



Shown with U-Arm
(order separately)

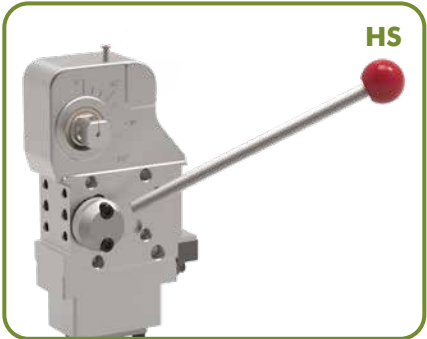
Clamp Arm Shaft



Size	Shaft Length (L17)
50	12 mm [0.47 in]
63	12 mm [0.47 in]

23	Shaft Length (L17)
50	21 mm [0.83 in]
63	21 mm [0.83 in]

D0	Shaft Length (L17)
D0	26 mm [1.02 in]

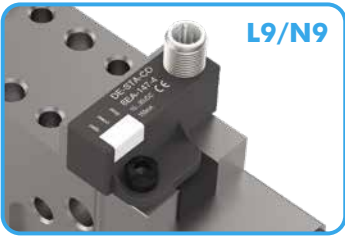


Enclosed Modular Manual Power Clamps | Heavy-Duty | Ordering Information

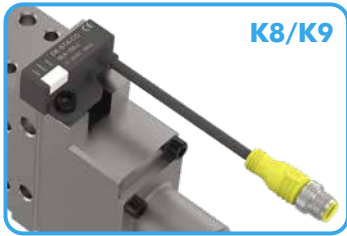
Sensor	Description
00	Without Sensing System
L8	PNP Sensor with In-line M12x1 Connector (8EA-146-4-B)
N8	NPN Sensor with In-line M12x1 Connector (8EA-154-4-B)
L9	PNP Sensor with 90° M12x1 Connector (8EA-147-4-B)
N9	NPN Sensor with 90° M12x1 Connector (8EA-155-4-B)
K8	PNP Sensor with M12x1 Cable Connector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



L8/N8



L9/N9



K8/K9

Size	Description
50	Size 50 mm
63	Size 63 mm



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



50

Max Holding Torque
1300 Nm [959 ft-lb]

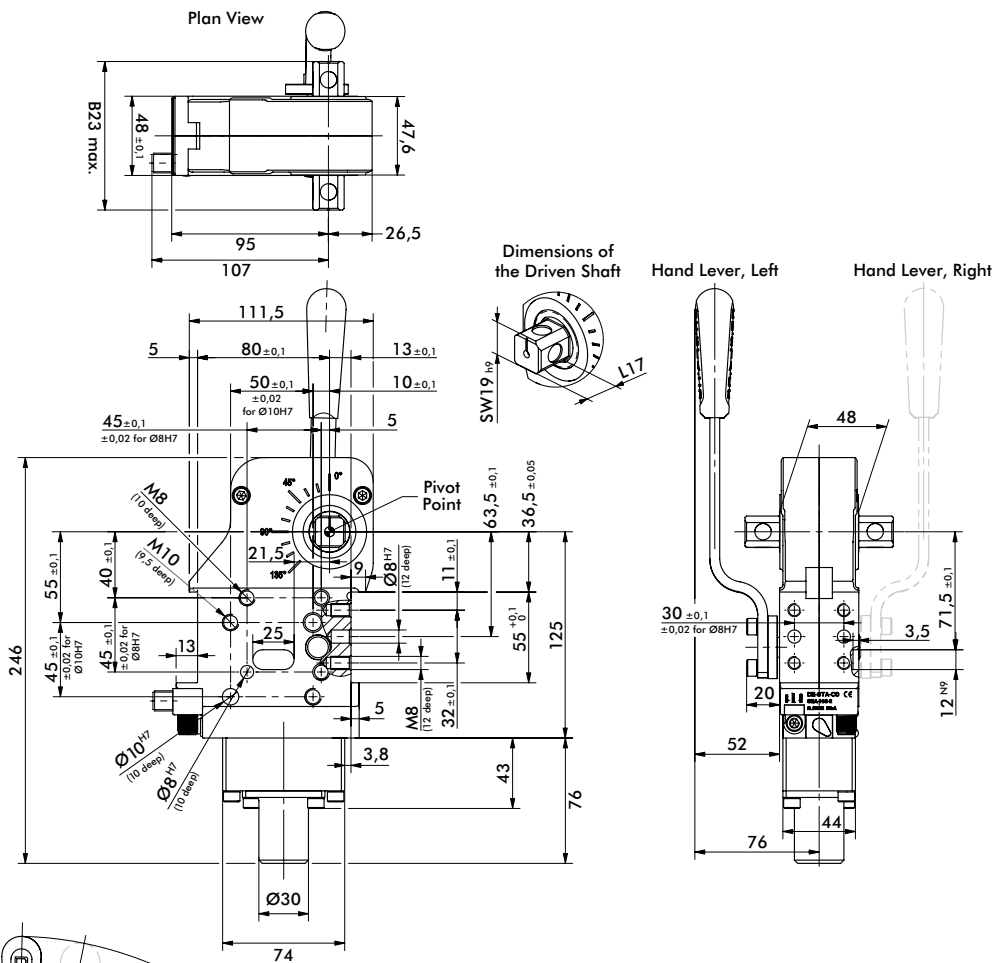


63

Max Holding Torque
1800 Nm [1328 ft-lb]

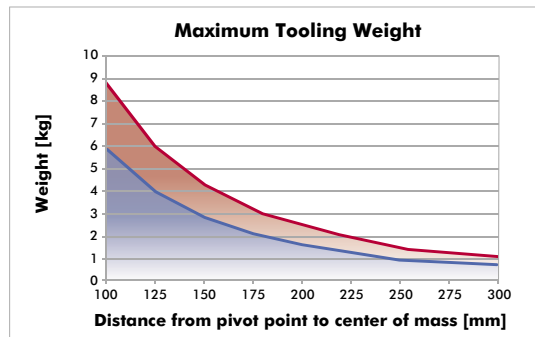
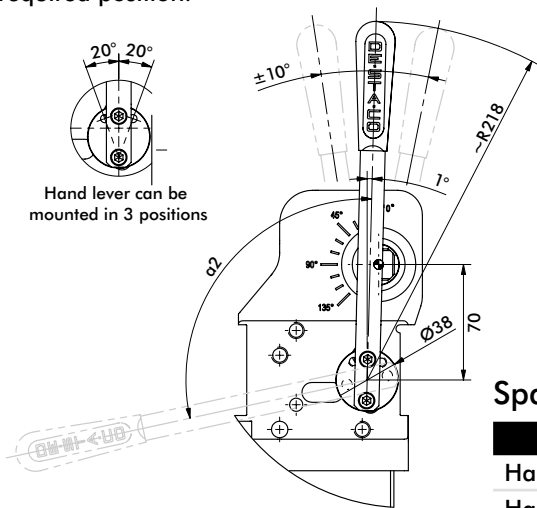
52H-3E 50MM

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

[illegible]

Notice!

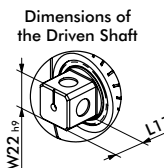
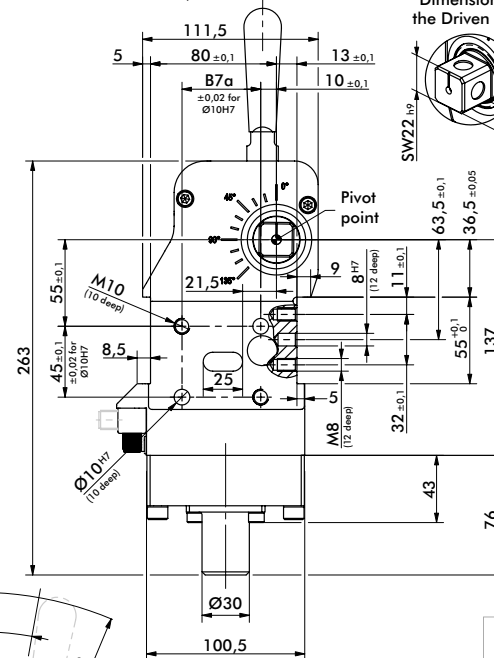
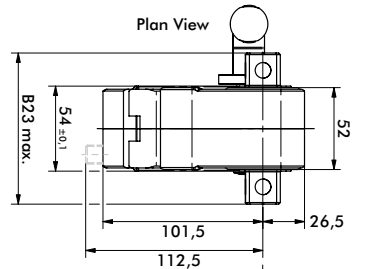
The hand lever is supplied loose enclosed. Easy custom left hand or right hand mounting in required position.



Spare parts

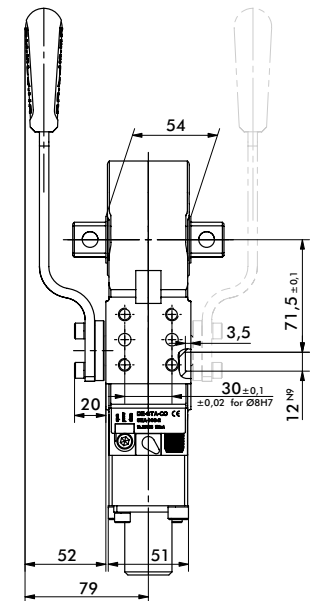
Specification	Base component	Order no.	Comment
Hand lever set	52H-3E...50	8KB-098-1	
Hand lever set (weldable)		8KB-102-1	
Sensor box		8EA-146-2 (L8)	Connector 180°
		8EA-147-2 (L9)	Connector 90°
		8EA-158-2 (K8)	Cable Connection

Model	Max. Holding Torque (Nm)	Weight (kg)	B7a	B23 max.	L17	Swivel Angle α2 (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	96	12										
52H-3N23H06...			55		21										
52H-3ND0H06...			55		106										

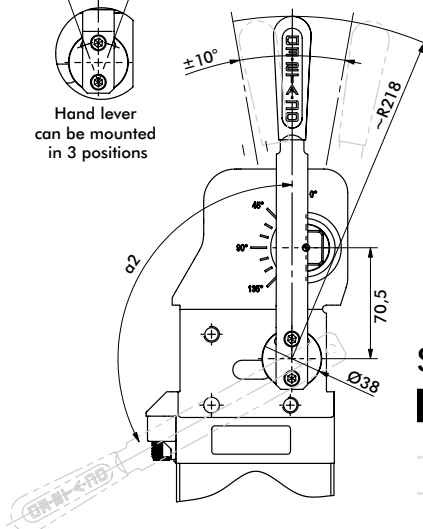


Hand lever, Left

Hand lever, Right

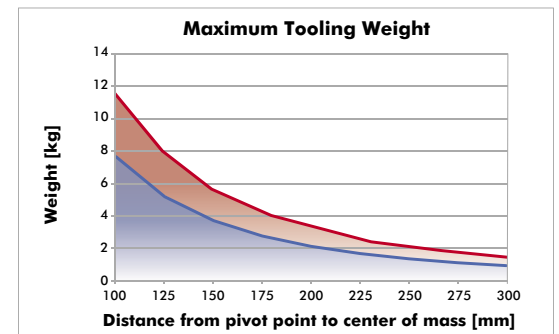


Notice!
The hand lever is supplied loose enclosed. Easy custom left hand or right hand mounting in required position.



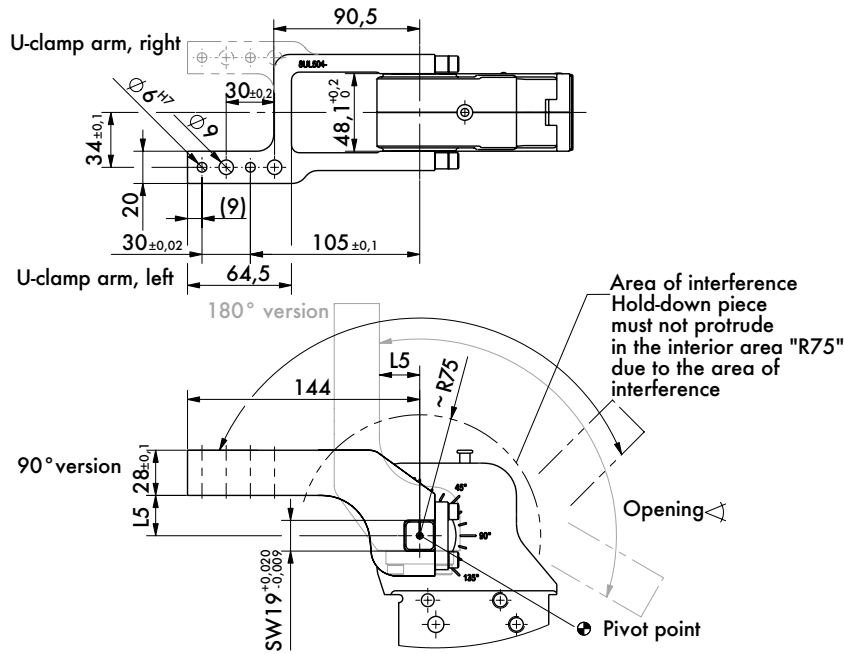
Spare parts

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)	Connector 180°
		8EA-147-2 (L9)	Connector 90°
		8EA-158-2 (K8)	Cable Connection



U-ARMS OFFSET (ALUMINUM)

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



For Size 50

90° Left



90° Right



180° Right*



180° Left*

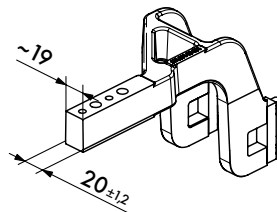
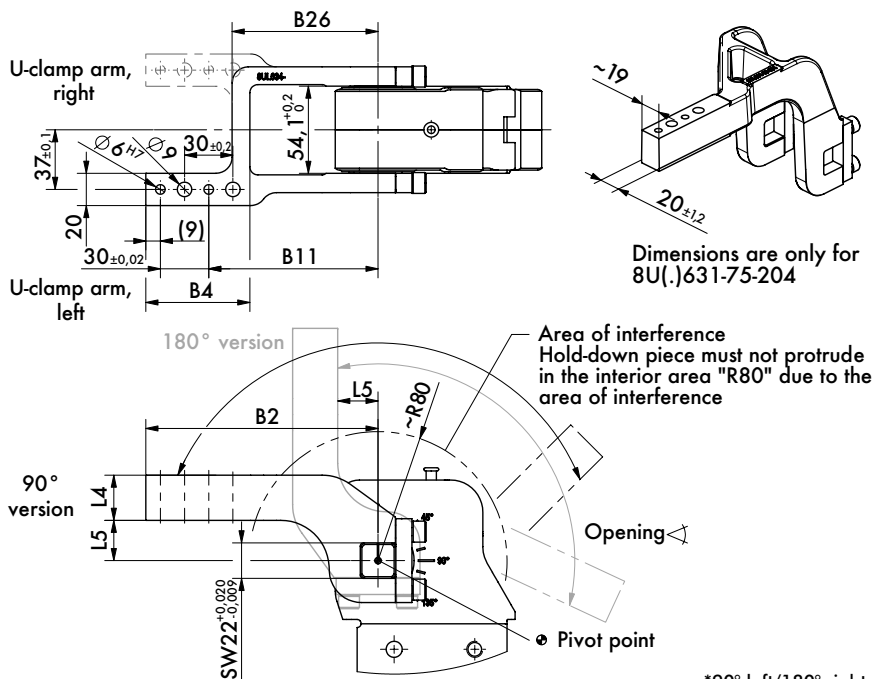


8UL504-15-144
8UL504-25-144
8UL504-45-144

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



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

For Size 63

90° Left



90° Right



180° Right*



180° Left*



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

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

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

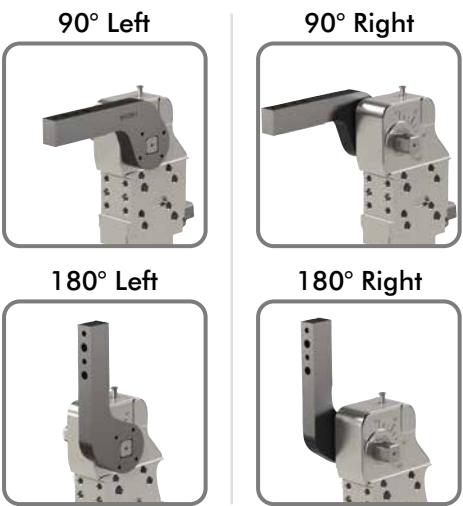
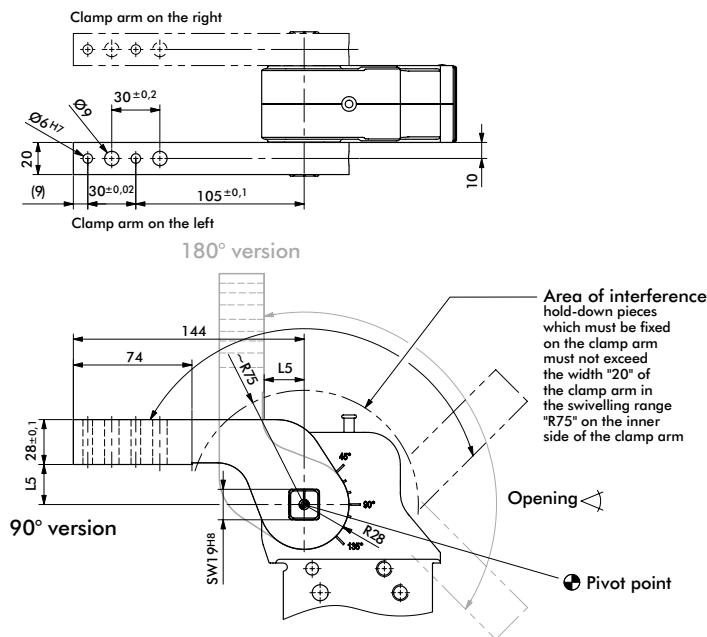
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight	B2	B4	B11 ±0,1	B26	L4 ±0,1	L5
8U(•)634-15-144	135°	105°	0,52	144	64,5	105	90,5	28	15
8U(•)634-25-144		120°	0,54						25
8U(•)634-45-144		135°	0,58						45
8U(•)631-75-204**		135°	1,9	204	82	165	119	30	75

** only steel version available.

LATERAL (SIDE) ARMS

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

For Size 50

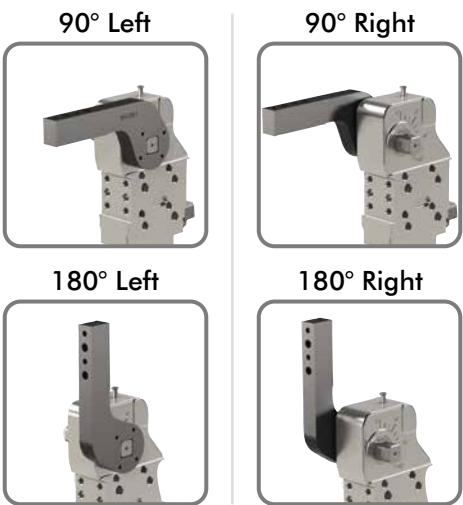
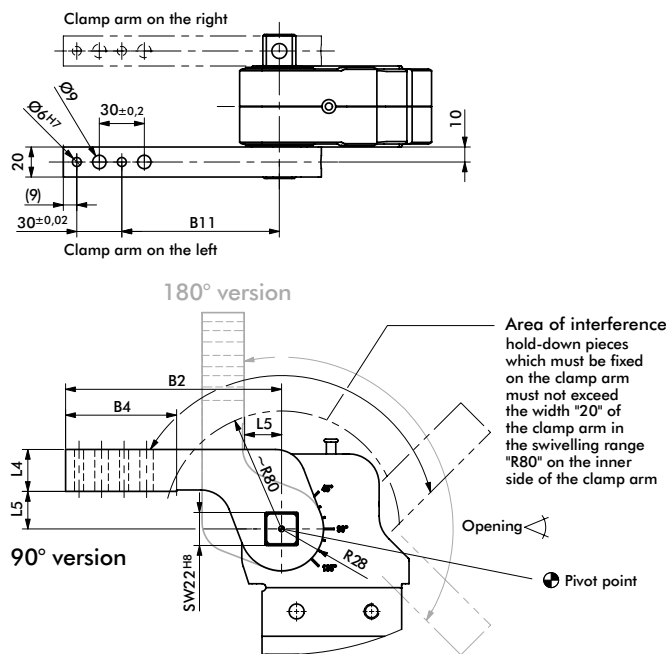


8JG-070-1-01
8S501-25-144

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.

For Size 63



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

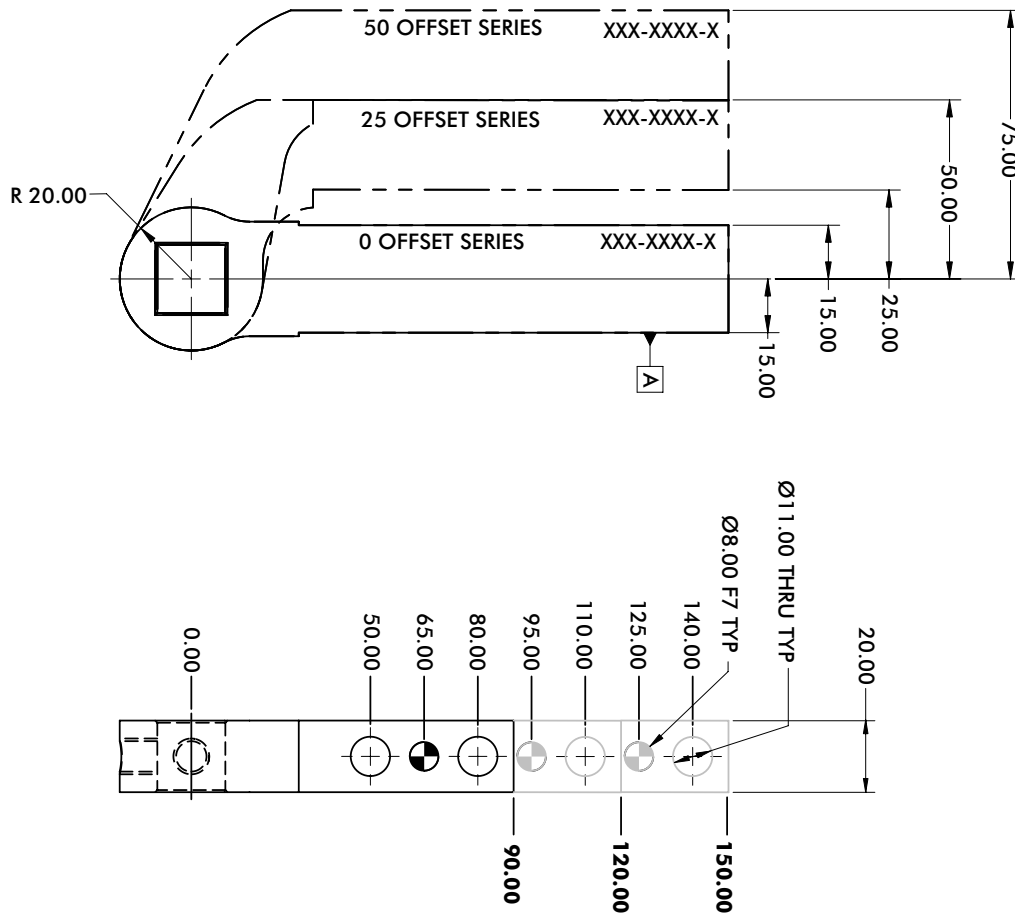
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight (kg)	B2	B4	B11 ±0,1	L4 ±0,1	L5
8JG-080-1-01	135°	135°	0,9	144	74	105	28	15
8S631-25-144			1,0					25
8S631-45-144			1,1					45
8S631-75-204			1,5					75

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

LATERAL (SIDE) ARMS, NAAMS-STYLE

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

For Size 50



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

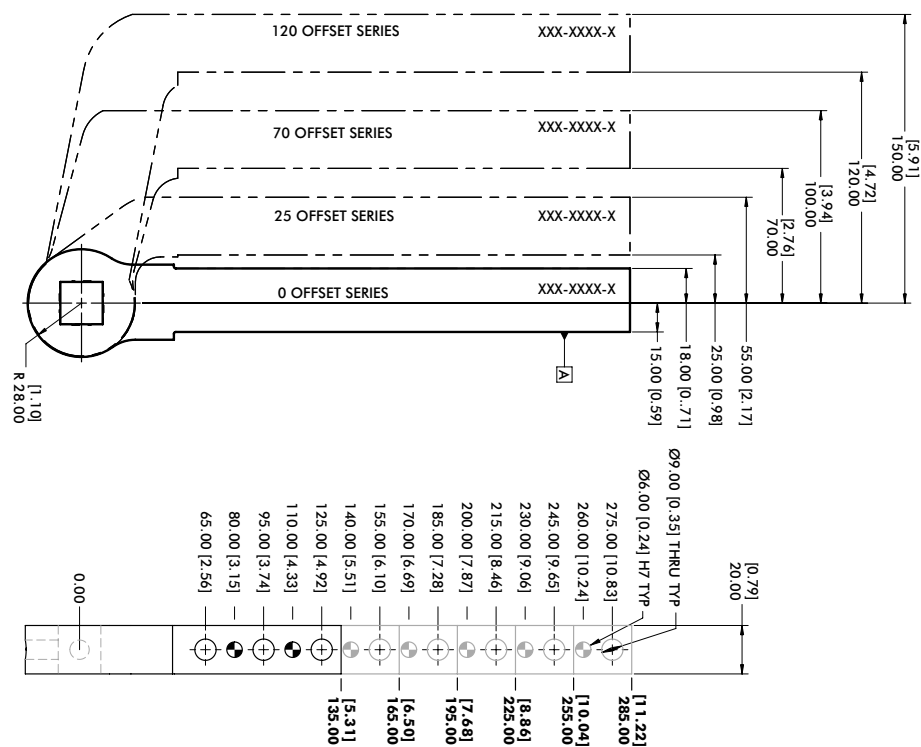
Maximum Opening Angle (shown in locked position)

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

LATERAL (SIDE) ARMS, NAAMS-STYLE

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

For Size 63mm for 23 Clamp Arm Shaft Option



135mm [5.31"] Arm Length			165mm [6.50"] Arm Length			195mm [7.68"] Arm Length		
Series	Arm Style	Model	Series	Arm Style	Model	Series	Arm Style	Model
120 Offset	▲ 1543	B8JG-1543-1	120 Offset	▲ 1544	B8JG-1544-1	120 Offset	▲ 1545	B8JG-1545-1
70 Offset	▲ 1531	B8JG-1531-1	70 Offset	▲ 1532	B8JG-1532-1	70 Offset	▲ 1533	B8JG-1533-1
25 Offset	▲ 1519	B8JG-1519-1	25 Offset	▲ 1520	B8JG-1520-1	25 Offset	▲ 1521	B8JG-1521-1
0 Offset	▲ 1507	B8JG-1507-1	0 Offset	▲ 1508	B8JG-1508-1	0 Offset	▲ 1509	B8JG-1509-1

225mm [8.86"] Arm Length			255mm [10.04"] Arm Length			285mm [11.22"] Arm Length		
Series	Arm Style	Model	Series	Arm Style	Model	Series	Arm Style	Model
120 Offset	▲ 1546	B8JG-1546-1	120 Offset	▲ 1547	B8JG-1547-1	120 Offset	▲ 1548	B8JG-1548-1
70 Offset	▲ 1534	B8JG-1534-1	70 Offset	▲ 1535	B8JG-1535-1	70 Offset	▲ 1536	B8JG-1536-1
25 Offset	▲ 1522	B8JG-1522-1	25 Offset	▲ 1523	B8JG-1523-1	25 Offset	▲ 1524	B8JG-1524-1
0 Offset	▲ 1510	B8JG-1510-1	0 Offset	▲ 1511	B8JG-1511-1	0 Offset	▲ 1512	B8JG-1512-1

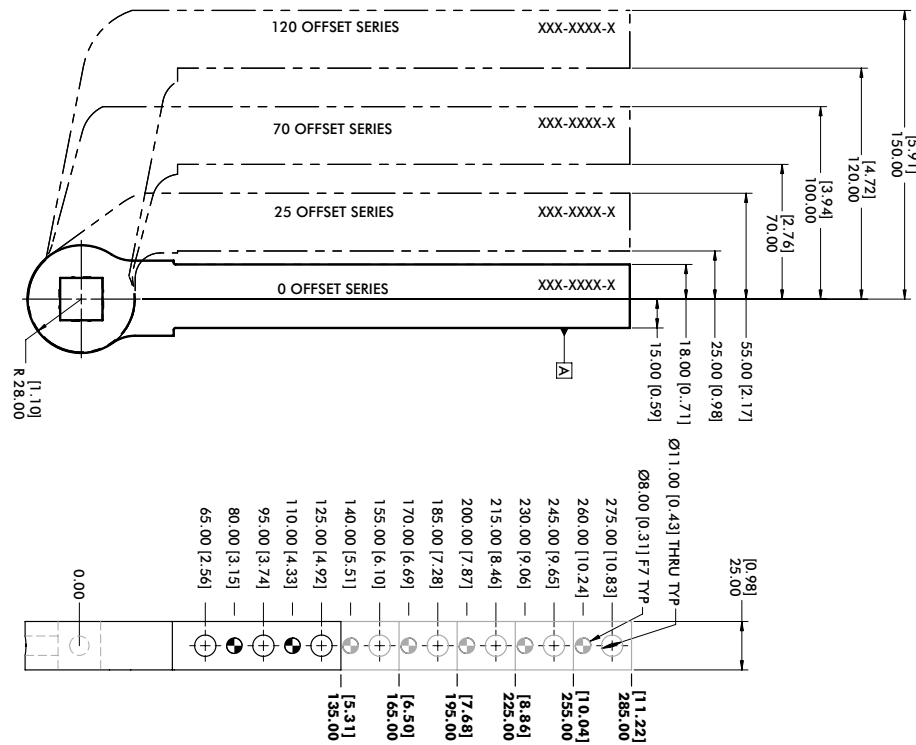
▲ Common in North America

Maximum Opening Angle (shown in locked position)						
Arm Styles						
1510-1512/1507-1509	135°	135°	100°	100°	N/A	N/A
1522-1524/1519-1521	135°	N/A	50°	130°	N/A	40°
1534-1536/1531-1533	115°	N/A	25°	135°	N/A	75°
1546-1548/1543-1545	110°	N/A	20°	135°	N/A	85°

LATERAL (SIDE) ARMS, NAAMS-STYLE

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

For Size 63mm for DO 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

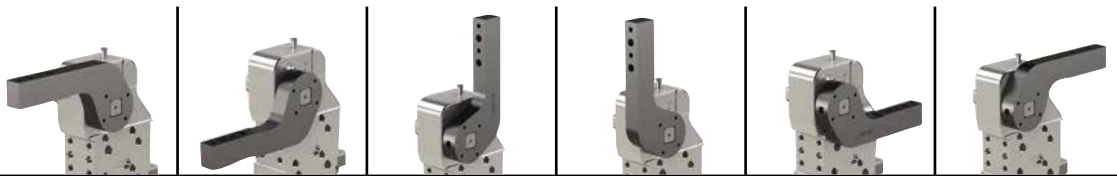
Series	Arm Style	Model
120 Offset	▲ ① 1048	B8JG-1048-1
70 Offset	▲ ① 1036	B8JG-1036-1
25 Offset	▲ ① 1024	B8JG-1024-1
0 Offset	▲ ① 1012	B8JG-1012-1

▲ 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

Pneumatic Power Clamps | Ordering Information

870-2

Base Model	Description
870-2	38,1 mm [1.5 in.] Cylinder with Vertical Clamp Arm
871-2	38,1 mm [1.5 in.] Cylinder 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 below for sensor specifications.



871-2

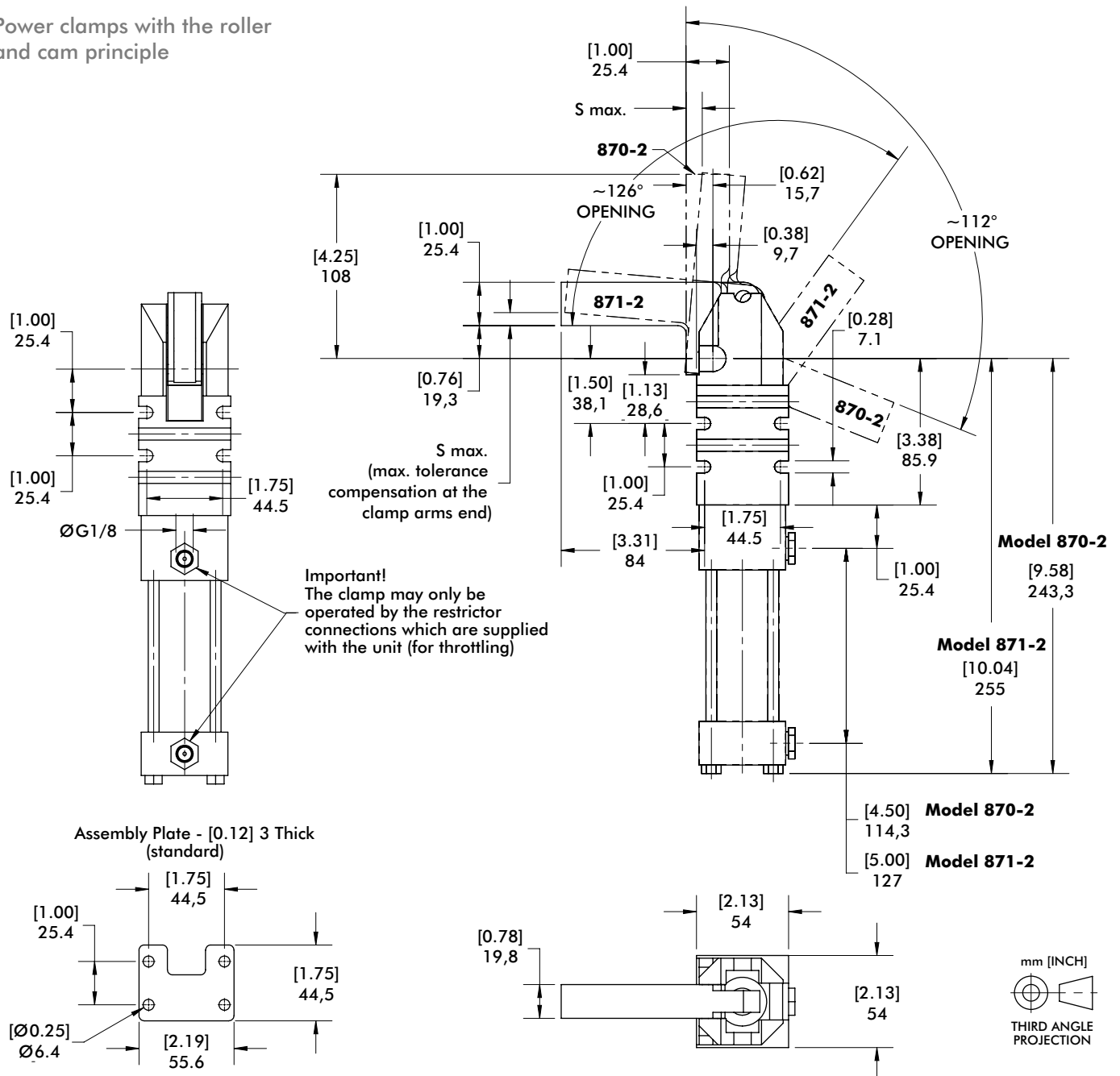
Max Holding Torque
260 Nm [192 ft-lb]
Max Clamping Torque
60 Nm [44 ft-lb]
at 5 bar [72 psi]

870-2

Max Holding Torque
260 Nm [192 ft-lb]
Max Clamping Torque
60 Nm [44 ft-lb]
at 5 bar [72 psi]

Pneumatic Power Clamps | Dimensions and 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 ³ [ft ³]
870-2	G 1/8	[3] 4,5	[145] 10	[1.50] 38,1	112°	[6.60] 3	0,95 [0.03]
871-2		[3] 3,5			118°		

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			2.7m [9ft.]	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

Pneumatic Power Clamps | Ordering Information

860

Base Model	Description
860	50,8 mm [2 in.] Cylinder with Vertical Clamp Arm
861	50,8 mm [2 in.] Cylinder with Horizontal Clamp Arm
890	63,5 mm [2.5 in.] Cylinder with Vertical Clamp Arm
891	63,5 mm [2.5 in.] Cylinder with Horizontal Clamp Arm
1000	82,5 mm [3.25 in.] Cylinder with Vertical Clamp Arm
1001	82,5 mm [3.25 in.] Cylinder 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 25 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 [280 ft-lb]
Max Clamping Torque
120 Nm [89 ft-lb]
at 5 bar [72 psi]

891

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

1001

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

860

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

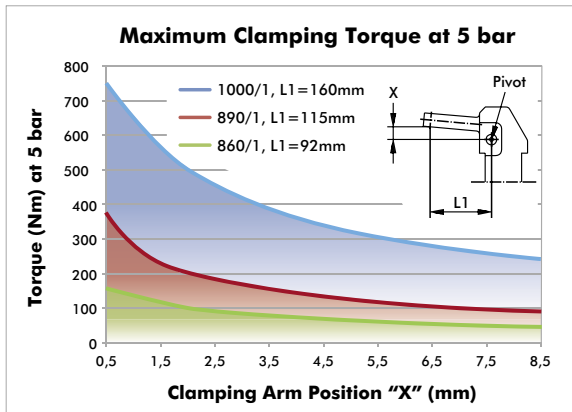
890

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

1000

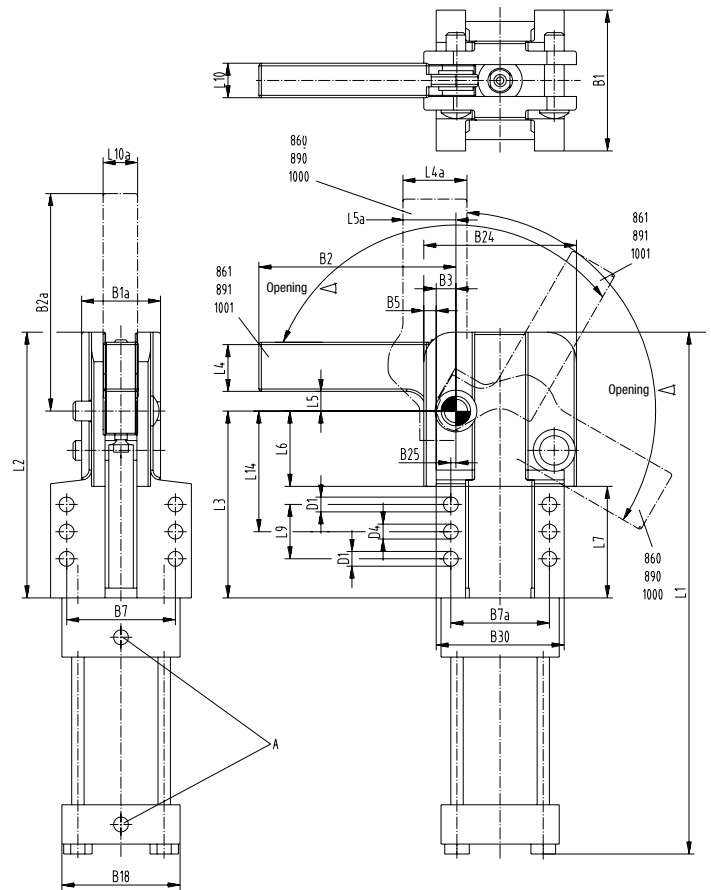
Max Holding Torque
1800 Nm [1328 ft-lb]
Max Clamping Torque
420 Nm [310 ft-lb]
at 5 bar [72 psi]

Pneumatic Power Clamps | Dimensions and 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	L5α	L6	L7	L9	L10	L10α	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

Enclosed Pneumatic Power Clamps | Dual Arm | Features and Benefits | Technical Information

82D63-5

23

C9

0

0

B

Base Model

Description

82D40-2

40 mm Cylinder (G1/4 Port)

82D63-5

63 mm Cylinder (G1/4 Port)

Clamp Arm Shaft

Description

23

includes long drive shaft ends on both sides fit for all clamping arms (standard)

Hand Lever

Description

0

Hand Lever not available

Sensor

Description

C9

includes Sensing System with M12x1 Connector (8EA-024-2) Standard

Clamp Arms

Description

B

Base model only. Order clamps arms separately. See below.

Opening Angle

Opening Angle

0

180° (standard)

1

160°

2

140°

3

120°

4

100°

5

80°

6

60°

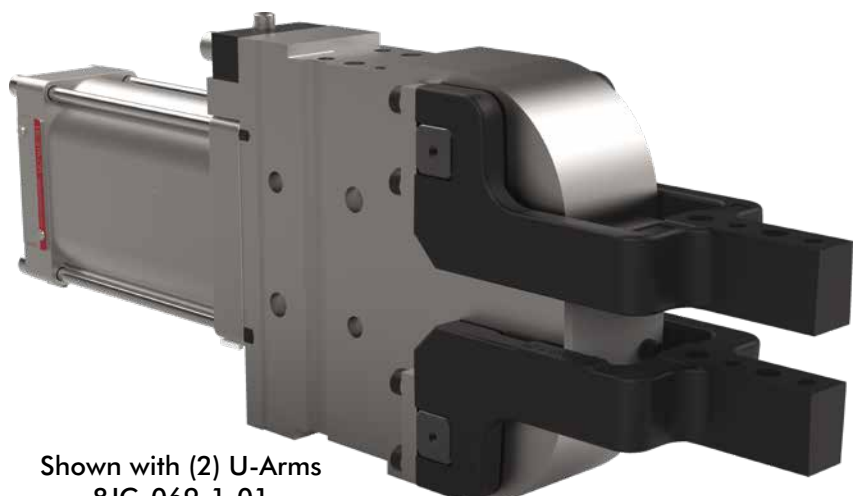
7

40°

8

20°

Reduced opening angles available upon request.



Shown with (2) U-Arms
8JG-069-1-01
(order separately)

82D63-5

Max Holding
400 Nm [295 ft-lb]
Max Clamping Torque
120 Nm [88 ft-lb]
at 5 bar [72 psi]

82D40-2

Max Holding
140 Nm [103 ft-lb]
Max Clamping Torque
60 Nm [44 ft-lb]
at 5 bar [72 psi]

U-type Central Clamping Arm



Model

Order No.
(1 clamp arm)

82D40-223C900B

8JG-065-2-01

82D63-523C900B

8JG-069-1-01

Alternate
Clamp Arm
mounting
positions



Lateral Clamping Arm

Clamp Arm Variants
Left Side, Right Side, Both Sides



Model

Order No.
(1 clamp arm)

82D40-223C900B

8JG-066-1-01

82D63-523C900B

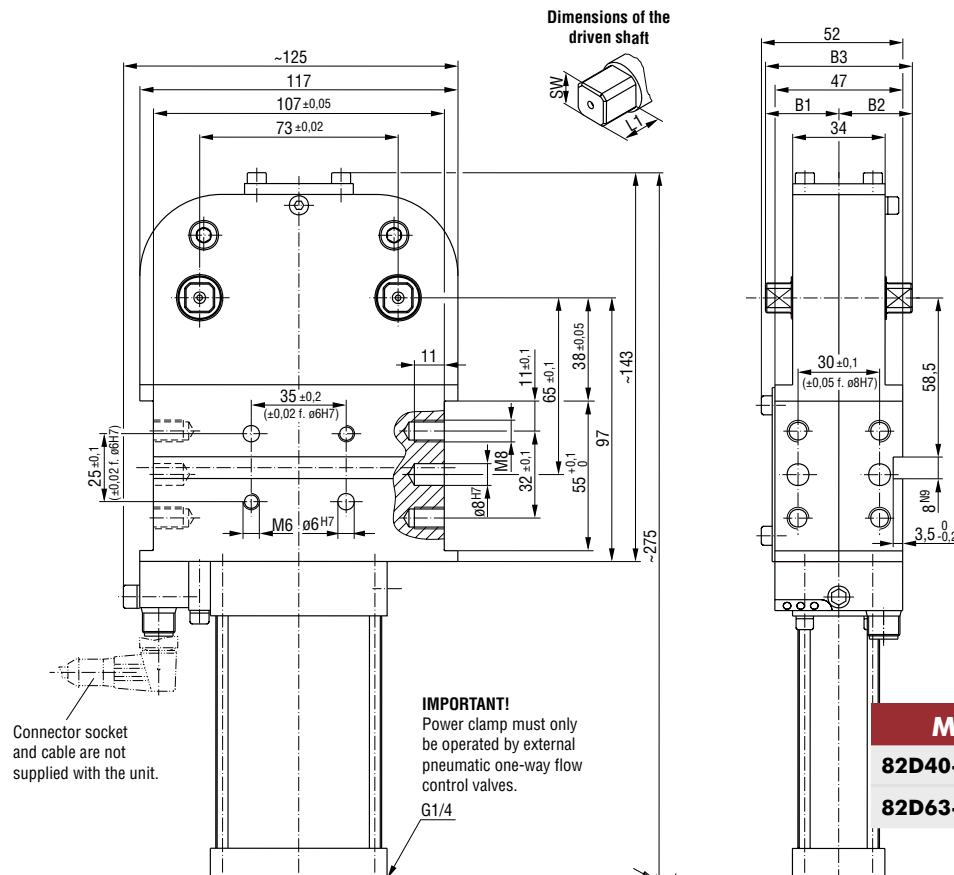
8JG-070-1-01

82D40-2/82D63-5

Enclosed Pneumatic Power Clamps | Dual Arm | Dimensions

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 ³ [ft ³]	Weight ~ kg [lbs]
82D40-223C900B	vertical	180°	lateral, both sides U-type clamping arms	55 [40]	55 [40]	40 [1.57]	1,2 [0.04]	2,5 [5.50]
82D63-523C900B				120 [88]	120 [88]	63 [2.48]	3,8 [0.13]	4,5 [9.90]

82D40-223C900B



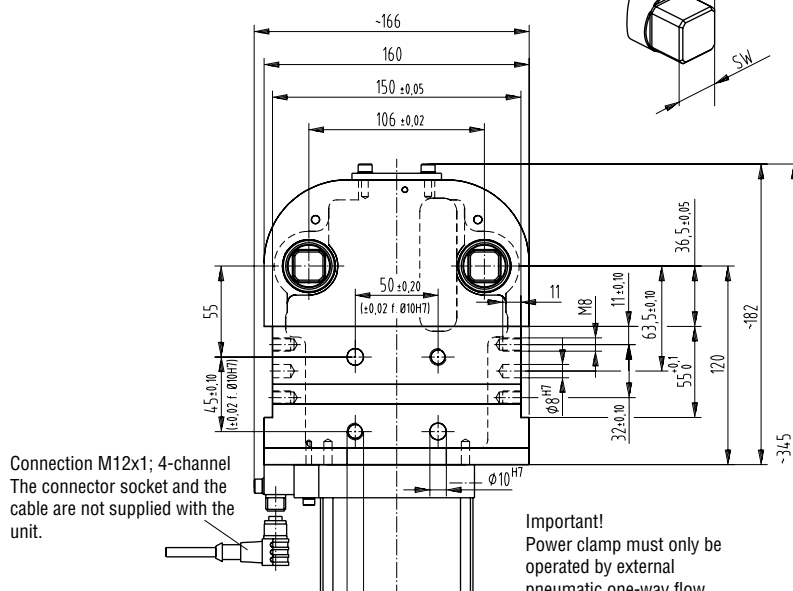
Safety notice:

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

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

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)

Enclosed Pneumatic Power Clamps | Dual Arm | Dimensions and Technical Specifications

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

Clamping arm variant U-type central clamping arm

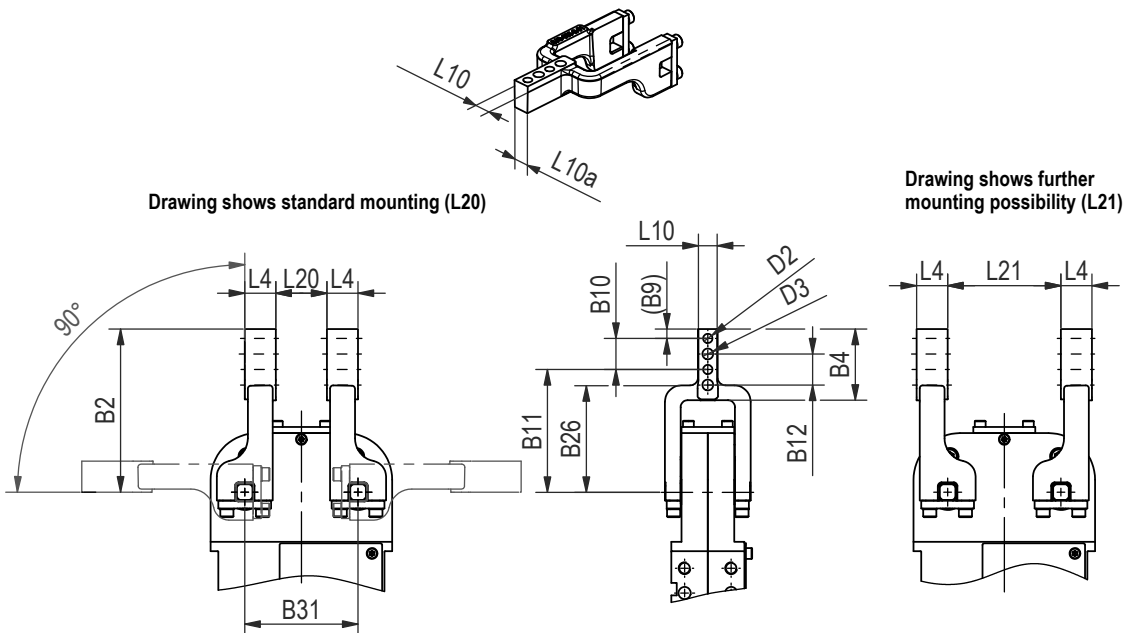


Base model with 2 U-type clamping arms, small gap between clamping arms

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
							±0,02	+0,1	±0,2	
82D40-223C900B	8JG-065-2-01	vertical	180°	105	45,3	6	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
		±0,02	H7 ø	ø		±1,1	~		
82D40-223C900B	8JG-065-2-01	73	6	7	20	12	11,3	33	73



U-ARMS CENTER (STEEL)

Enclosed Pneumatic Power Clamps | Dual Arm | Dimensions and Technical Specifications

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

Clamping arm variant U-type central clamping arm

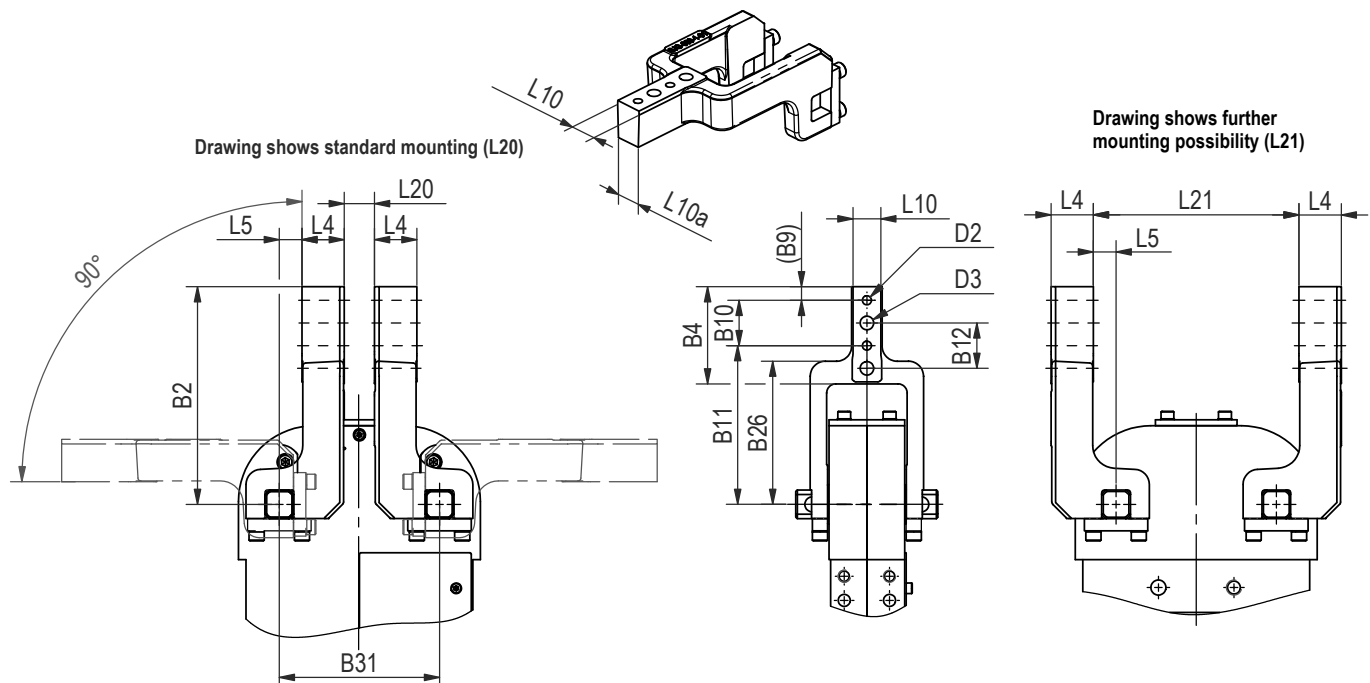


Base model with 2 U-type clamping arms, small gap between clamping arms

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
							±0,02	+0,1	±0,2	
82D63-523C900B	8JG-069-1-01	vertical	180°	144	64,3	9	30	105	30	95

Model	Order no. for U-type clamping arm set (1 clamping arm)	B31	D2	D3	L4	L5	L10	L10a	L20	L21
		±0,02	H7 Ø	Ø			±1,2	~		
82D63-523C900B	8JG-069-1-01	106	6	9	28	15	20	18	20	136



LATERAL (SIDE) ARMS

Enclosed Pneumatic Power Clamps | Dual Arm | Dimensions and 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

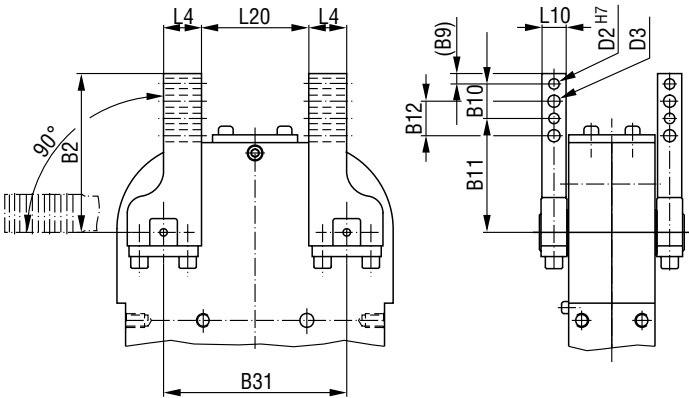


Lateral clamping arm | Technical Information

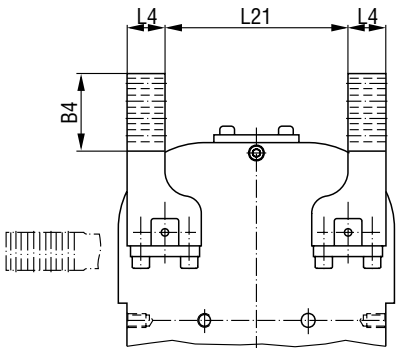
Model	Clamping arm variant	Order no. for 1 set of lateral clamping arms (1 clamping arm)	Clamping position	Standard opening angle	B2	B4	B9	B10	B11	B12
								±0,02	+0,1	±0,2
82D40-223C900B	lateral, left lateral, right lateral, both sides	8JG-066-1-01	vertical	180°	105	45	6	20	79	20

Model	Clamping arm variant	Order no. for 1 set of lateral clamping arms (1 clamping arm)	B31	D2	D3	L4	L10	L20	L21
			±0,02	H7 Ø	Ø		-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

Enclosed Pneumatic Power Clamps | Dual Arm | Dimensions and Technical Specifications

• Clamping arm variants for 82D63-5

Clamping arm variant

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



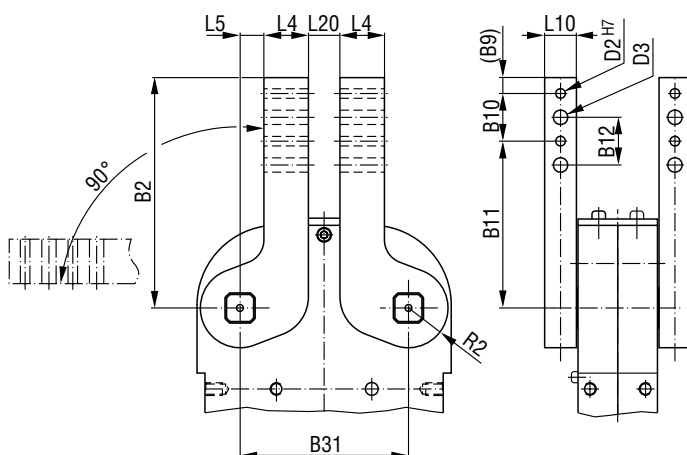
Base model with 4 lateral clamping arms, large gap between clamping arms

Lateral clamping arms | Technical Information

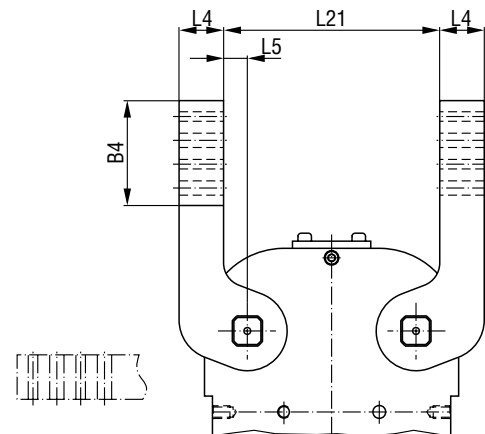
Model	Clamping arm variant	Order no. for 1 set of lateral clamping arms (1 clamping arm)	Clamping position	Standard opening angle	B2	B4	B9	B10	B11	B12
								±0,02	+0,1	±0,2
82D63-523C900B	lateral, left lateral, right lateral, both sides	8JG-070-1-01	vertical	180°	144	74	9	30	105	30

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
			±0,02	H7 Ø	Ø			-0,1			
82D63-523C900B	lateral, left lateral, right lateral, both sides	8JG-070-1-01	106	6	9	28	15	20	20	136	28

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



Drawing shows further
mounting possibility (L21)

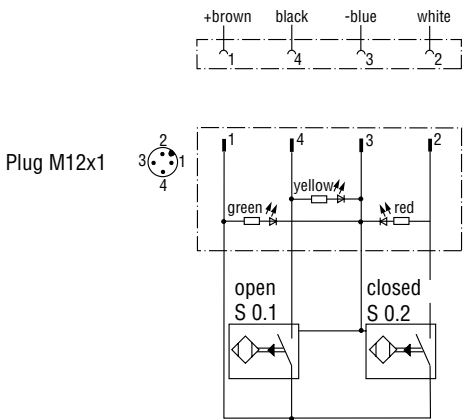


82D40-2/82D63-5

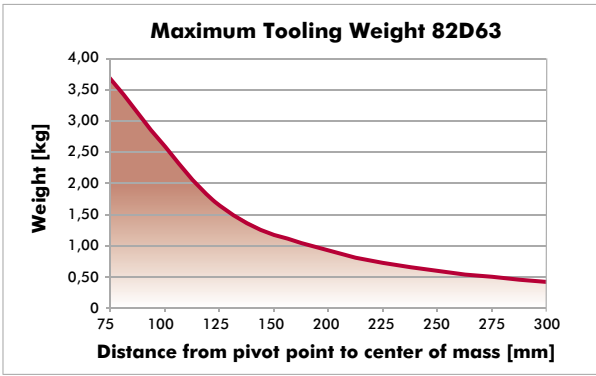
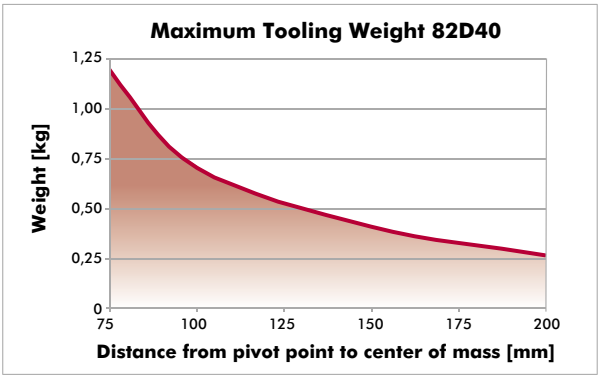
Enclosed Pneumatic Power Clamps | Dual Arm | Technical Specifications

Wiring diagram of electrical sensing system

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

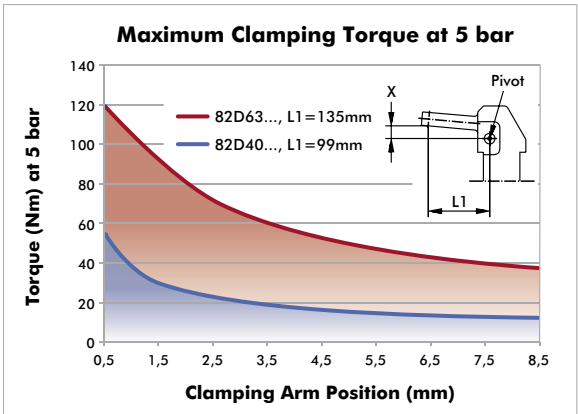


Concept guideline (with reference to axis of clamping arm rotation)



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

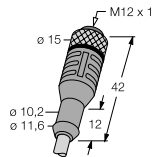
Diagram of clamping torque



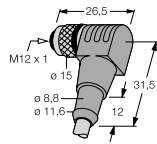
82D40-2/82D63-5 ACCESSORIES

Enclosed Pneumatic Power Clamps | Dual Arm | Ordering Information

Clamping Arms		Order no. for Structural component		Comment
Clamping are variant	Clamping position	82D40-223C900B	82D63-523C900B	
U-central	vertical	8JG-065-1-01	8JG-069-1-01	sets of U-type clamping arms consist of clamping arm, links and screws
lateral right/left	vertical	8JG-066-1-01¹⁾	8JG-070-1-01²⁾	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	8JG-066-1-01¹⁾	8JG-070-1-01²⁾	you need 4 sets of clamping arms



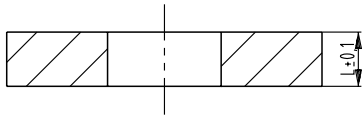
Connector socket
M12x1 straight, 5-pin

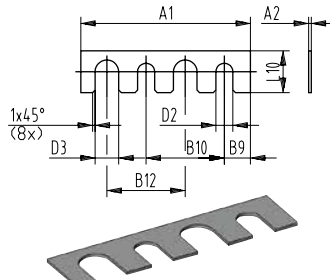


Connector socket
M12x1 angular, 4-pin

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

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



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
	82ZB-SH4001		0,1							82ZB-SH5001		0,1						
	82ZB-SH4002		0,2							82ZB-SH5002		0,2						
	82ZB-SH4005	42	0,5	6,5	7	6	20	20	12	82ZB-SH5005	65	0,5	6,5	9	10	30	30	16
	82ZB-SH4010		1,0							82ZB-SH5010		1,0						
	82ZB-SH4020		2,0							82ZB-SH5020		2,0						
	82ZB-SH4050		5,0							82ZB-SH5050		5,0						

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

84A

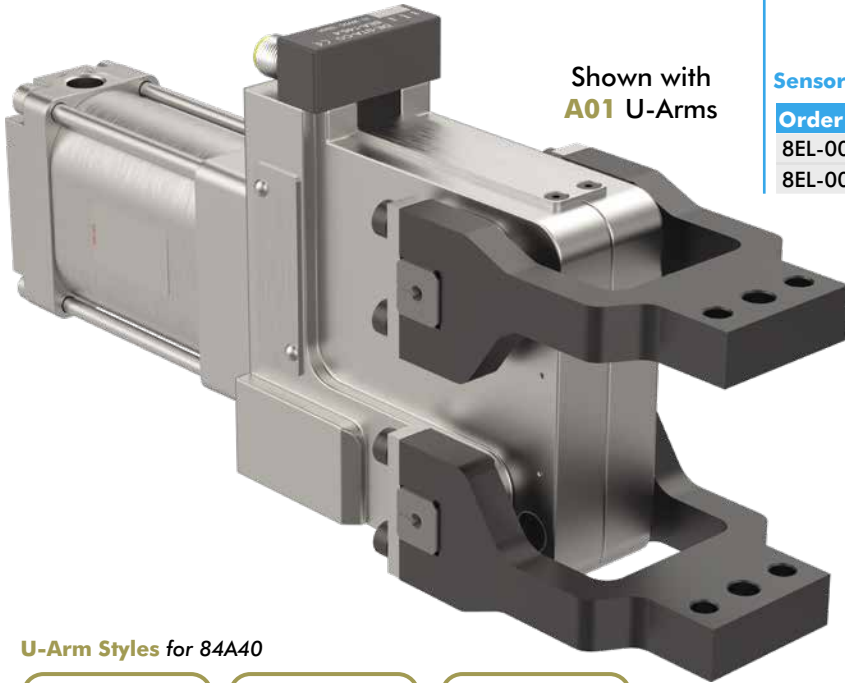
Enclosed Pneumatic Power Clamps | Dual Arm, Tolerance Compensation | Ordering Information

84A **50-1** **A01** **L8**

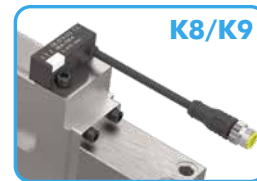
Size	Description
40-1	32 mm Cylinder (G1/8 Port)
50-1	50 mm Cylinder (G1/4 Port)

U-Arm Style	Description
000	Without Clamping Arms
A01	Double Tip, Surface Clamping
A02	Single Tip, Point Clamping
A03	Double Tip, Surface Clamping (Standard Profile 84A40 , Wide Profile 84A50)
A04	Double Tip, Surface Clamping, Wide Profile <i>for 84A50 only</i>

Shown with
A01 U-Arms

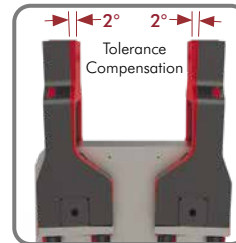


Sensor	Description
00	Without Sensing System
L8	PNP Sensor with In-line M12x1 Connector (8EA-146-4-B)
N8	NPN Sensor with In-line M12x1 Connector (8EA-154-4-B)
L9	PNP Sensor with 90° M12x1 Connector (8EA-147-4-B)
N9	NPN Sensor with 90° M12x1 Connector (8EA-155-4-B)
K8	PNP Sensor with M12x1 Cable Connector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



Sensor Cables Order separately

Order No.	Description
8EL-002-1	M12x1, Straight, 5-pin Connector w/5 m [16 ft.] Cable
8EL-003-1	M12x1, Angular, 4-pin Connector w/5 m [16 ft.] Cable



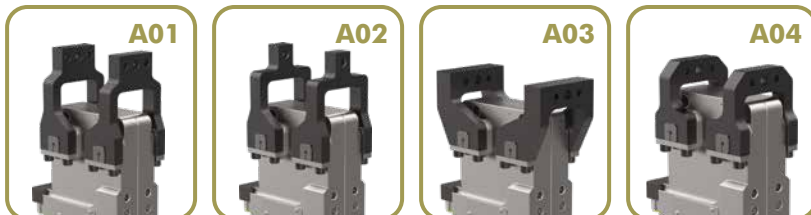
Dual Arm Compensation

- 2° of tolerance compensation per clamp arm
- Compensates for variable sheet metal thicknesses
- There is no need for shimming

U-Arm Styles for 84A40



U-Arm Styles for 84A50

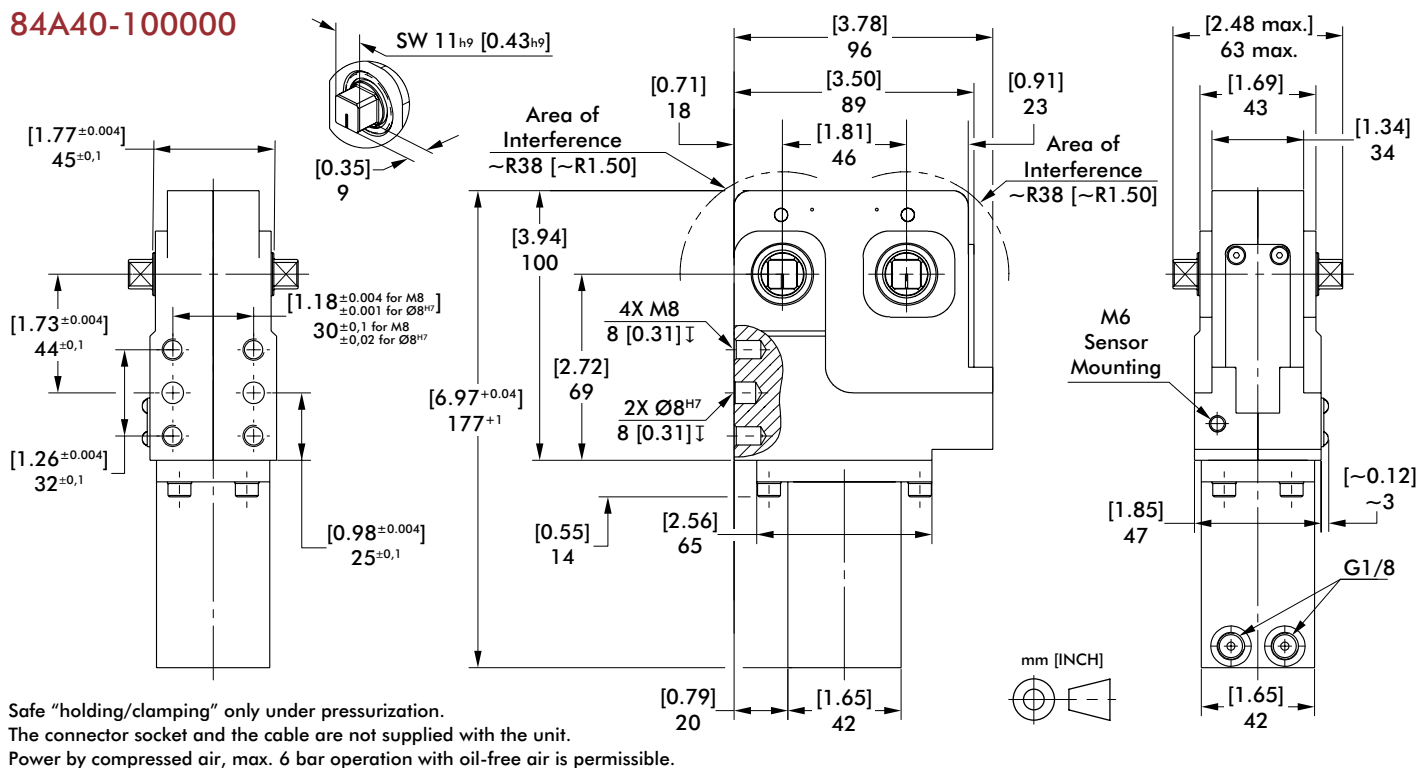


84A40-1

84A50-1

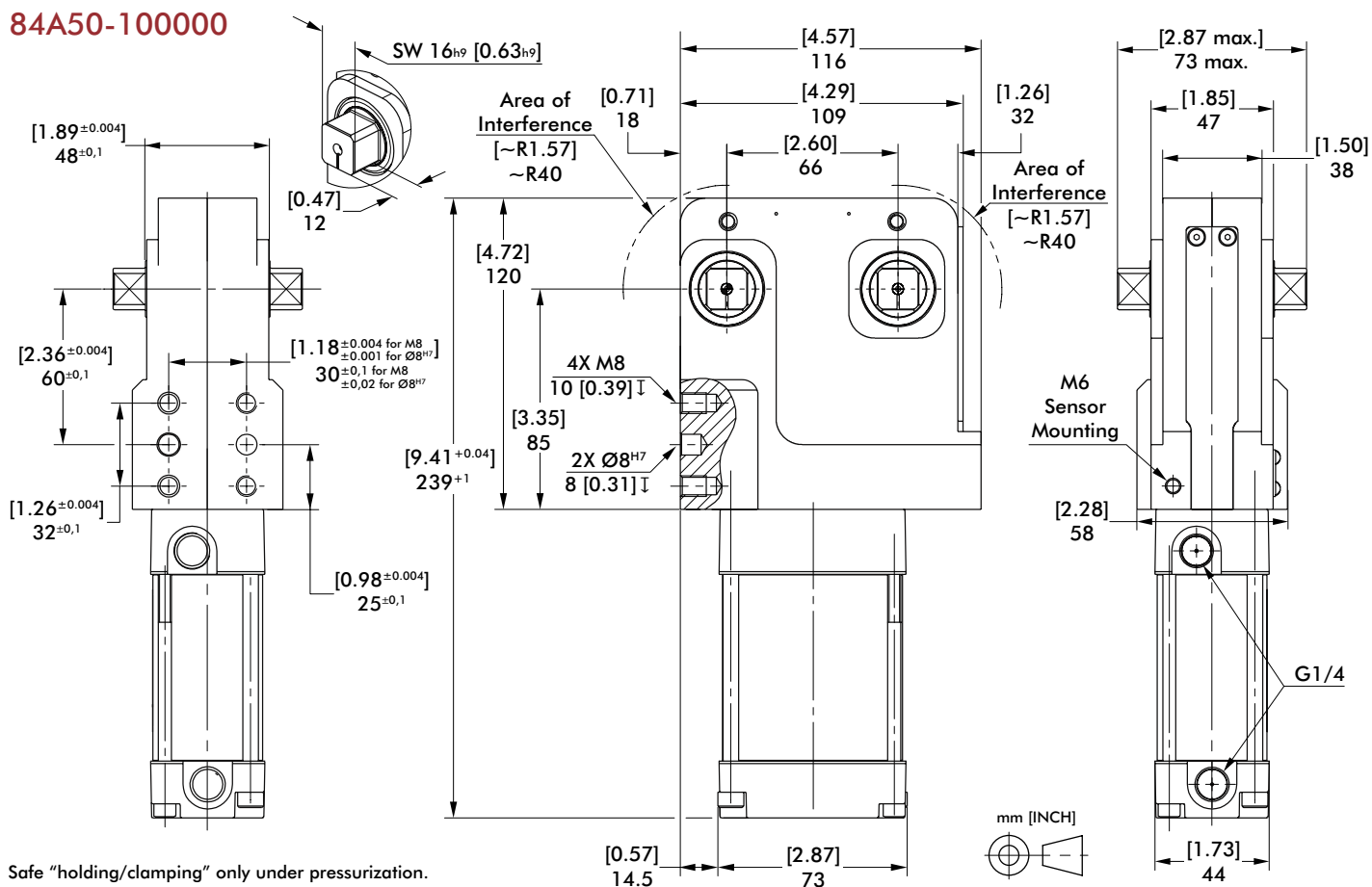
Enclosed Pneumatic Power Clamps | Dual Arm, Tolerance Compensation | Dimensions

84A40-100000



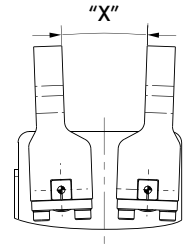
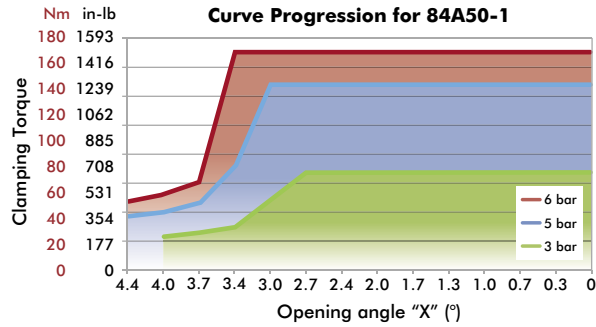
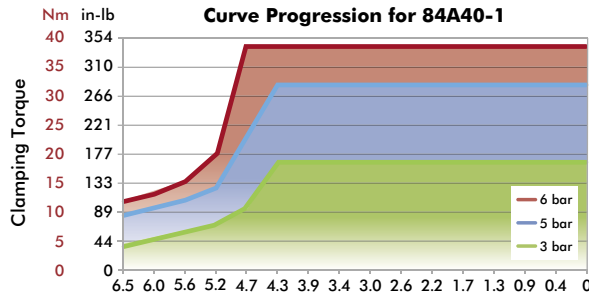
Safe "holding/clamping" only under pressurization.
The connector socket and the cable are not supplied with the unit.
Power by compressed air, max. 6 bar operation with oil-free air is permissible.

84A50-100000

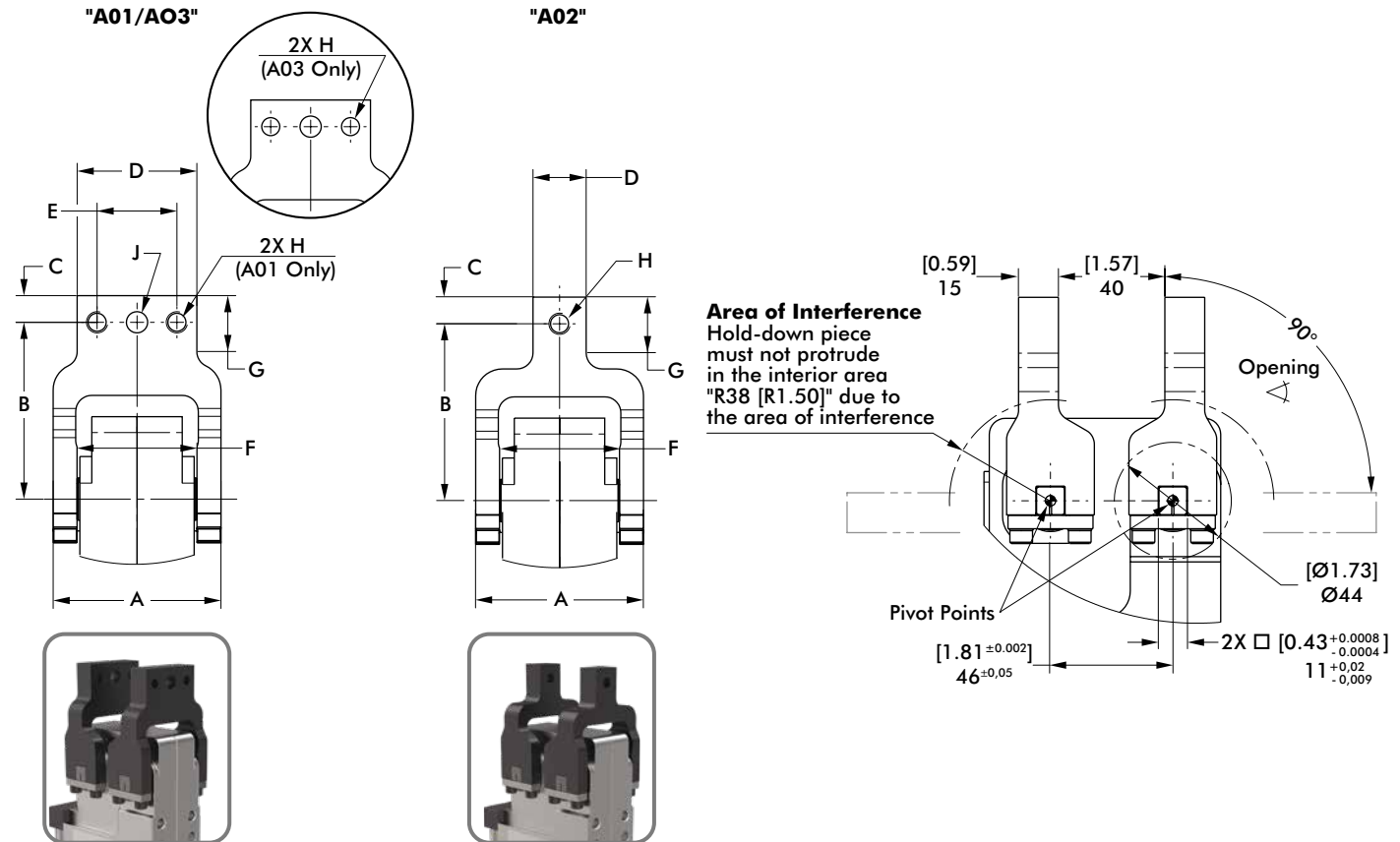


Safe "holding/clamping" only under pressurization. [0.57]
 The connector socket and the cable are not supplied with the unit. 14.5
 Power by compressed air, max. 6 bar operation with oil-free air is permissible.

Model	Connection	Max. Holding Torque at 5 bar [72psi] Nm [in-lb]	Max. Clamping Torque at 5 bar [72psi] Nm [in-lb]	Piston Ø mm [in]	~Weight kg [lb]	Air Consumption per double stroke at 5 bar [72 psi] liter [in ³]
84A40-1.....	G1/8	29 [257]	29 [257]	40 [1.57]	1,5 [3.31]	0,45 [27]
84A50-1.....	G1/4	136 [1200]	136 [1200]	50 [1.97]	2,4 [5.29]	0,72 [44]

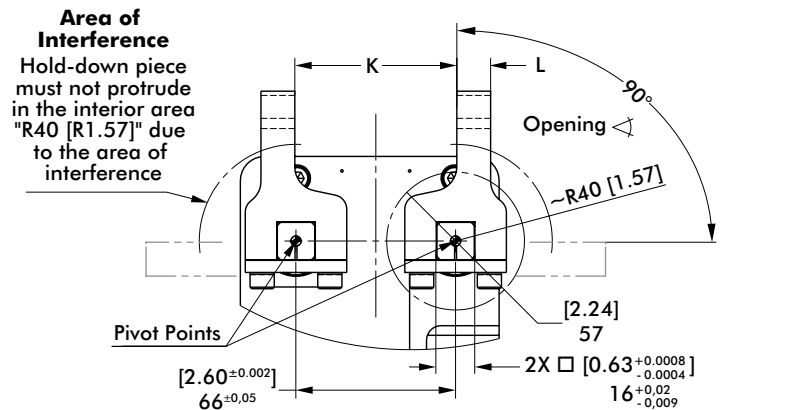
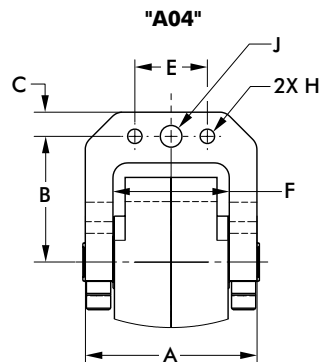
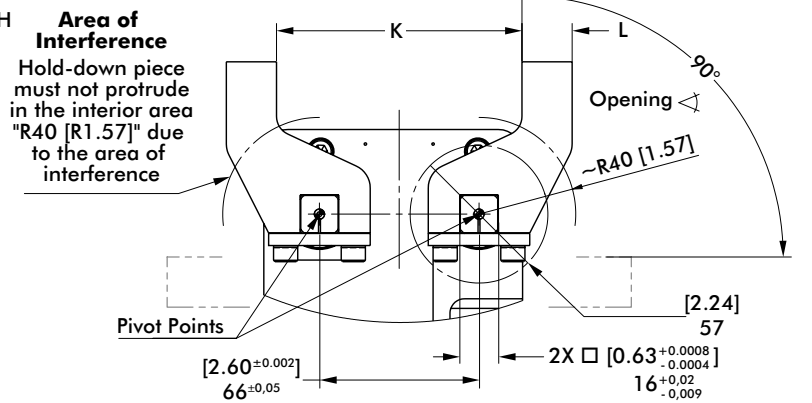
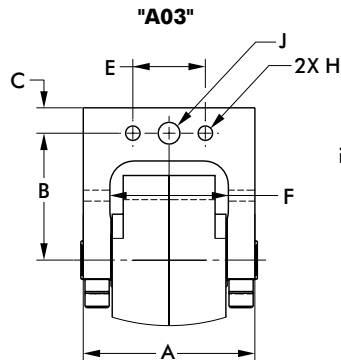
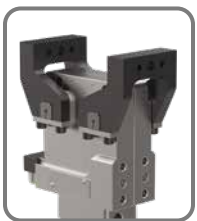
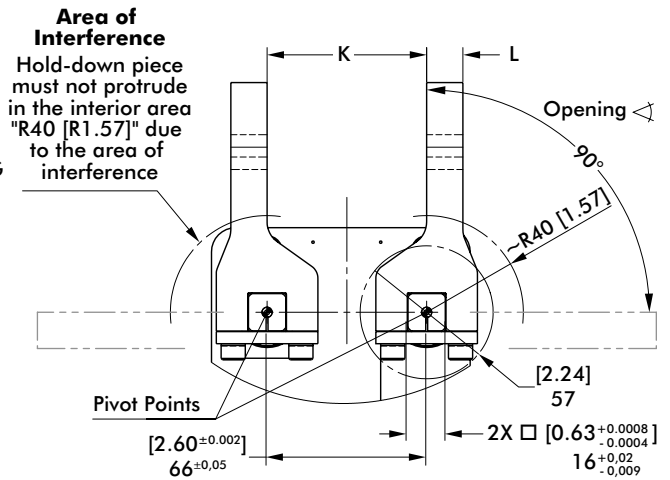
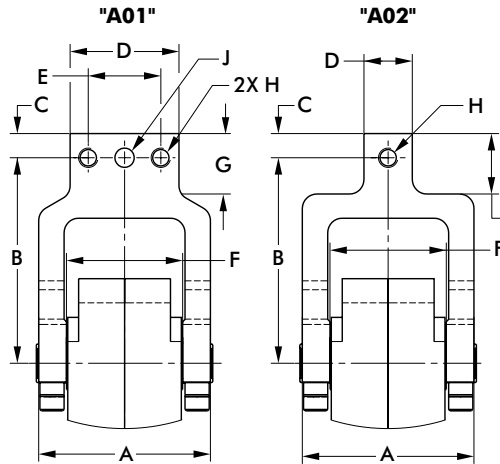


U-Type Central Clamping Arms (Aluminum) - For Size 84A40



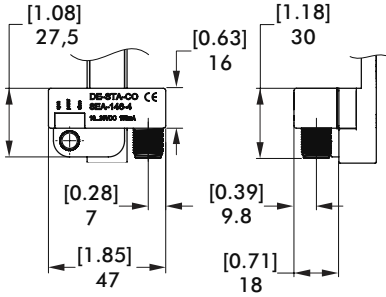
Arm Model No.	Arm Order No.	Weight kg [lb]	A ±0,5 [±0.02]	B ±0,1 [±0.004]	C -0,05 [-0.002]	D	E	F +0,2 [+0.008]	G	ØH	ØJ
A01	8AM801-40-066	0,17 [0.37]	[2.48]	[2.62]	[0.39]	45 [1.77]	30 [1.18] ±0,1 [±0.004]	[1.78]	[0.83]	M8	8 ^{H7} [0.31 ^{H7}]
A03	8AM803-40-001		63,1	66,5	10		30 [1.18] ±0,02 [±0.008]	45,1	21	6 ^{H7} [0.24 ^{H7}]	9 [0.35]
A02	8AM802-40-066	0,14 [0.31]				20 [0.79]	--			M8	--

U-Type Central Clamping Arms (Aluminum) - For Size 84A50

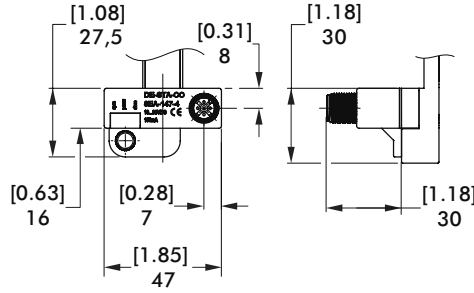


Arm Model No.	Arm Order No.	Weight kg [lb]	A ±0,5 [±0.02]	B ±0,1 [±0.004]	C -0,05 [-0.002]	D	E ±0,1 [±0.004]	F +0,2 [±0.008]	G	ØH	ØJ	K	L
A01	8AM801-50-085	[0.97] 0,44	[2.80] 71	[3.35] 85	[0.39] 10	[1.77] 45	30 [1.18] ±0,1 [±0.004]	[1.89] 48,1	[0.98] 25	M8	[0.31] 8 ^{H7}	[2.60] 66	[0.59] 15
A02	8AM802-50-085	[0.9] 0,41		85	10	[0.79] 20	--		--	--	--	66	15
A03	8AM803-50-001	[1.1] 0,5		[2.07] 52,5	[0.41] 10,5	--	30 [1.18] ±0,02 [±0.008]		--	[0.24 ^{H7}] 6 ^{H7}	[0.35] 9	[4.00] 101.5	[0.82] 20.75
A04	8AM804-50-001	[0.79] 0,36		[2.05] 52	[0.39] 10	--	--		--	--	--	[2.64] 67	[0.55] 14

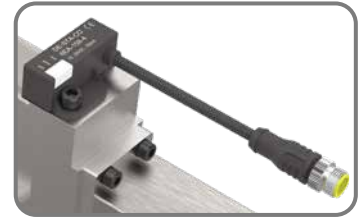
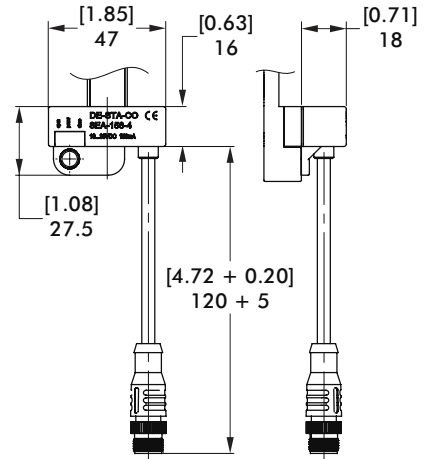
L8, N8 Inductive Sensing System



L9, N9 Inductive Sensing System with 90° Connector

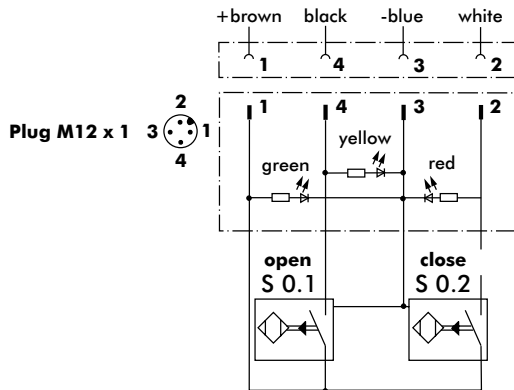


K8, K9 Inductive Sensing System with Pigtail Connector



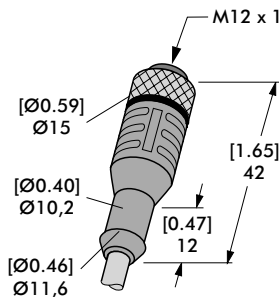
Inductive Sensor Wiring Diagram

Sensing system immune to interference from AC / DC arc welding.

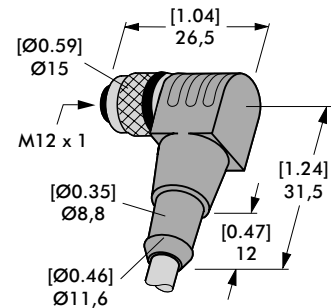


Sensor Cable Accessories

Sensor Cables (1 connector & 5m cable)	Order no.
M12x1 connector, straight, 5-pin	8EL-002-1
M12x1 connector, 90° angular, 4-pin	8EL-003-1



Straight Cable
8EL-002-1



Angular Cable
8EL-003-1

