

82L-3E

Enclosed Pneumatic Power Clamps | Lightweight Modular | Ordering Information

82L-3E

23

H0

40

B7

Clamp Arm Shaft

23

Description for Arms

See below for further details

Hand Lever

00

H0

HG

Description

No Hand lever

Red Hand lever

Green Hand lever

See below for further details

Cylinder (Standard)

25

2N

32

3N

40

4N

25 mm Cylinder (G1/8 Port)

25 mm Cylinder (1/8-18 NPT Port)

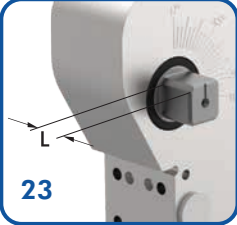
32 mm Cylinder (G1/8 Port)

32 mm Cylinder (1/8-18 NPT Port)

40 mm Cylinder (G1/4 Port)

40 mm Cylinder (1/4-18 NPT Port)

Clamp Arm Shaft



Size

25

32

40

Shaft Length (L)

8,5 mm [0.33 in]

12,5 mm [0.49 in]

16 mm [0.63 in]

Hand Lever





Hand Lever

00

H0

HG

Description

No Hand Lever

Red Hand Lever

Green Hand Lever

Shown with U-Arm

8JG-067-2-01

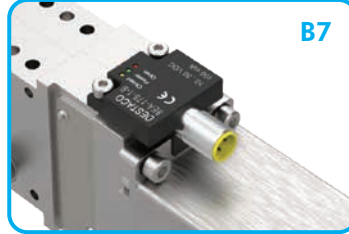
(order separately)

Enclosed Pneumatic Power Clamps | Lightweight Modular | Ordering Information

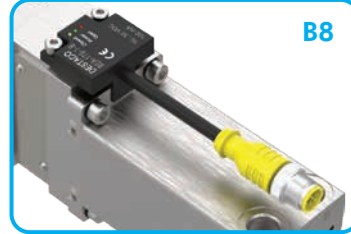
Sensor	Description
00	Without Sensing System
C8	Inductive Sensing System with In-Line M8x1 Connector (Size 25: 8EA-174-1-B, Size 32/40: 8EA-177-1-B)
B7	Inductive Sensing System with In-Line M12x1 Connector (Size 25: 8EA-175-1-B, Size 32/40: 8EA-178-1-B)
B8	Inductive Sensing System with M12x1 Connector with Cable (Size 25: 8EA-176-1-B, Size 32/40: 8EA-179-1-B)



C8



B7



B8



25/N

Max Holding Torque
75 Nm [55 ft-lb]
Max Clamping Torque
25 Nm [18 ft-lb]
at 5 bar [72 psi]

32/N

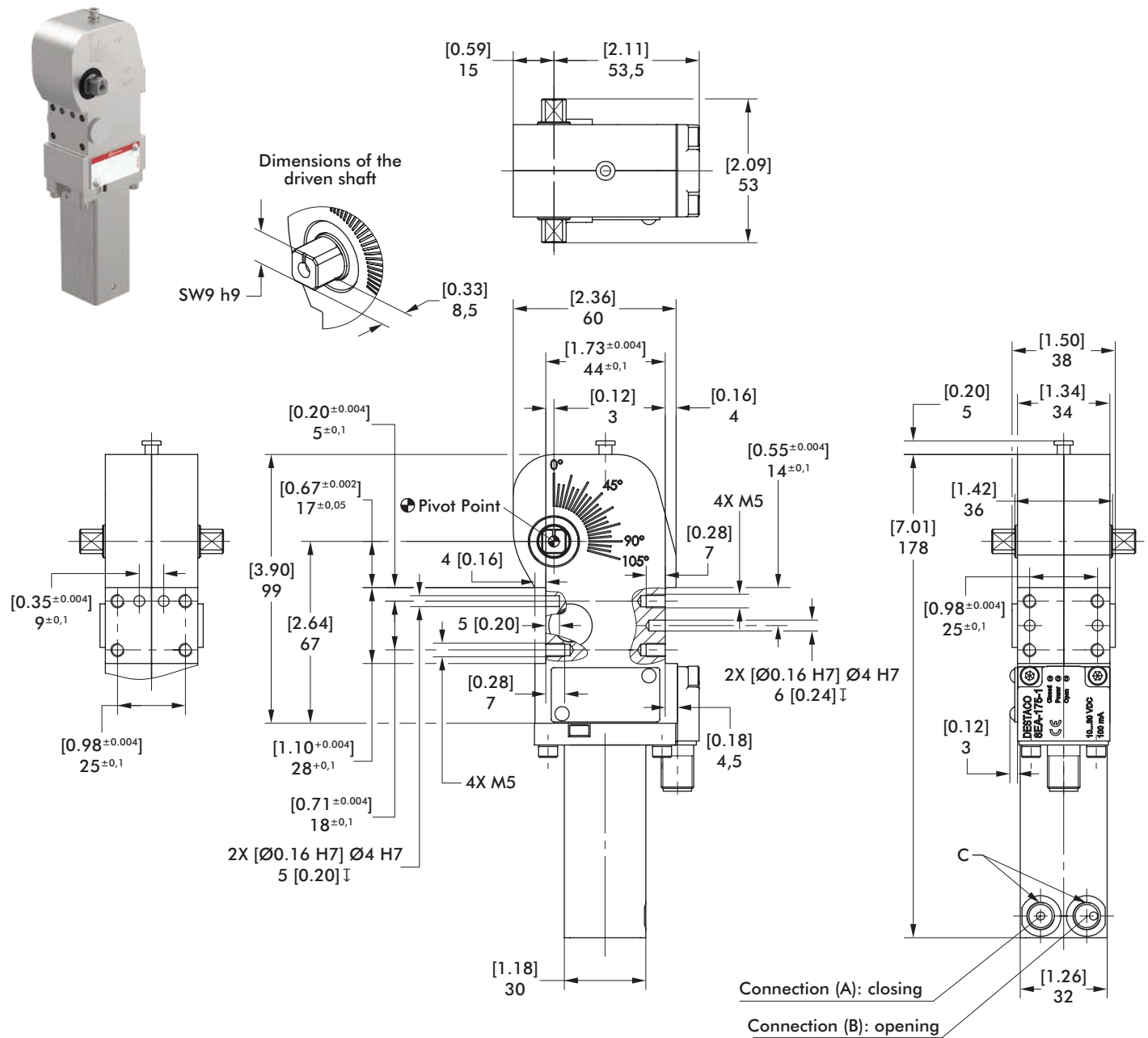
Max Holding Torque
180 Nm [133 ft-lb]
Max Clamping Torque
55 Nm [41 ft-lb]
at 5 bar [72 psi]

40/N

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

82L-3E

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



Power by compressed air, max. 6 bar [87psi].

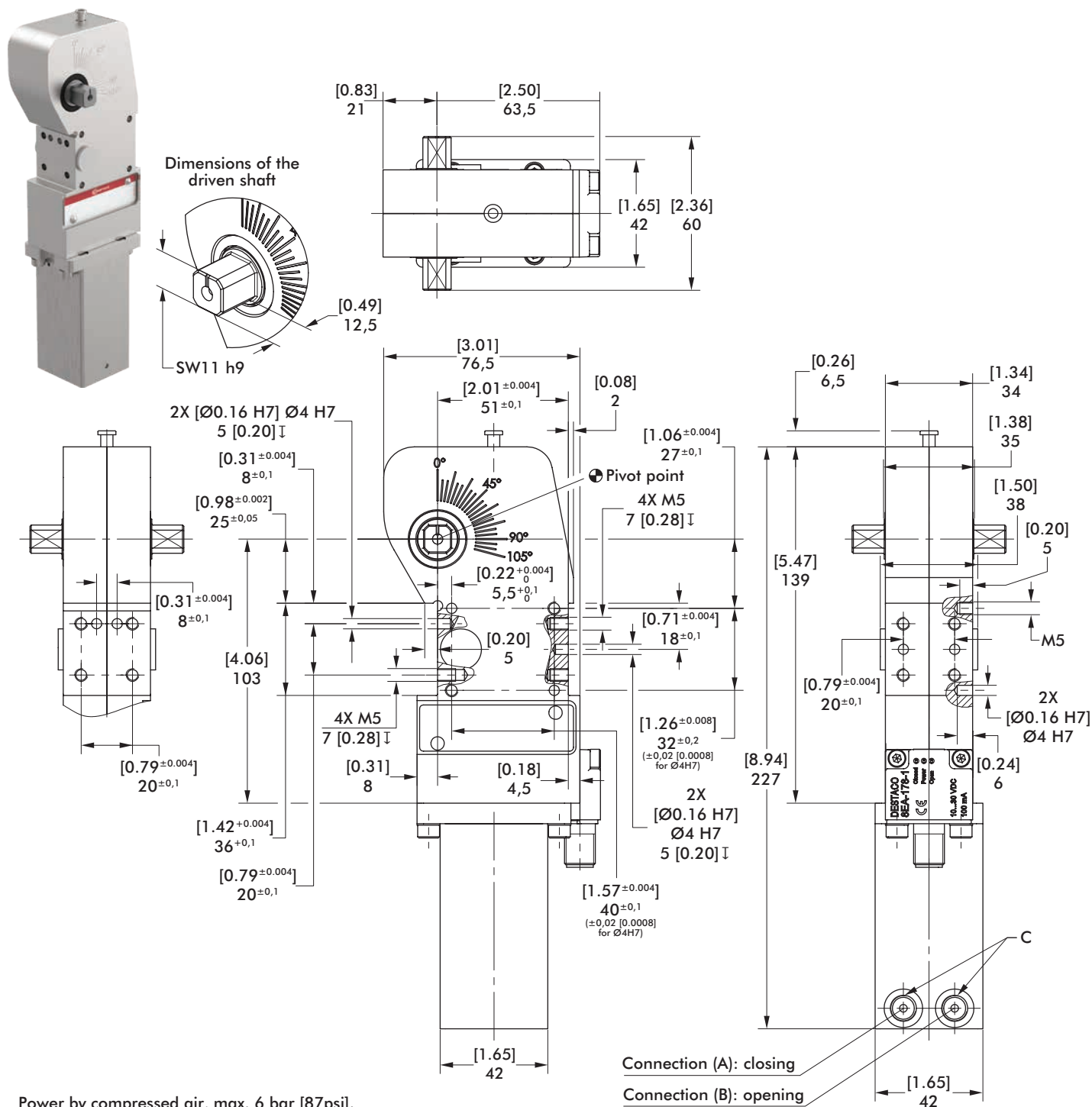
Operation with oil-free air is permissible.

The connector socket and the cable are not supplied with the unit.

Clamping arms sold separately.

Model	Max. Holding Torque Nm [ft.-lb]	Clamping Torque at 5 bar [72 psi] Nm [ft.-lb]	Piston Ø mm	Weight kg [lbs]	Air consumption per double stroke at 5 bar [72 psi] dm ³ [ft ³]	Connection C
82L-3E230025..	[55] 75	[18] 25	25	[1.32] 0,6	[0.01] 0,4	G1/8
82L-3E23002N..						1/8-18 NPT

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



Power by compressed air, max. 6 bar [87psi].

Operation with oil-free air is permissible.

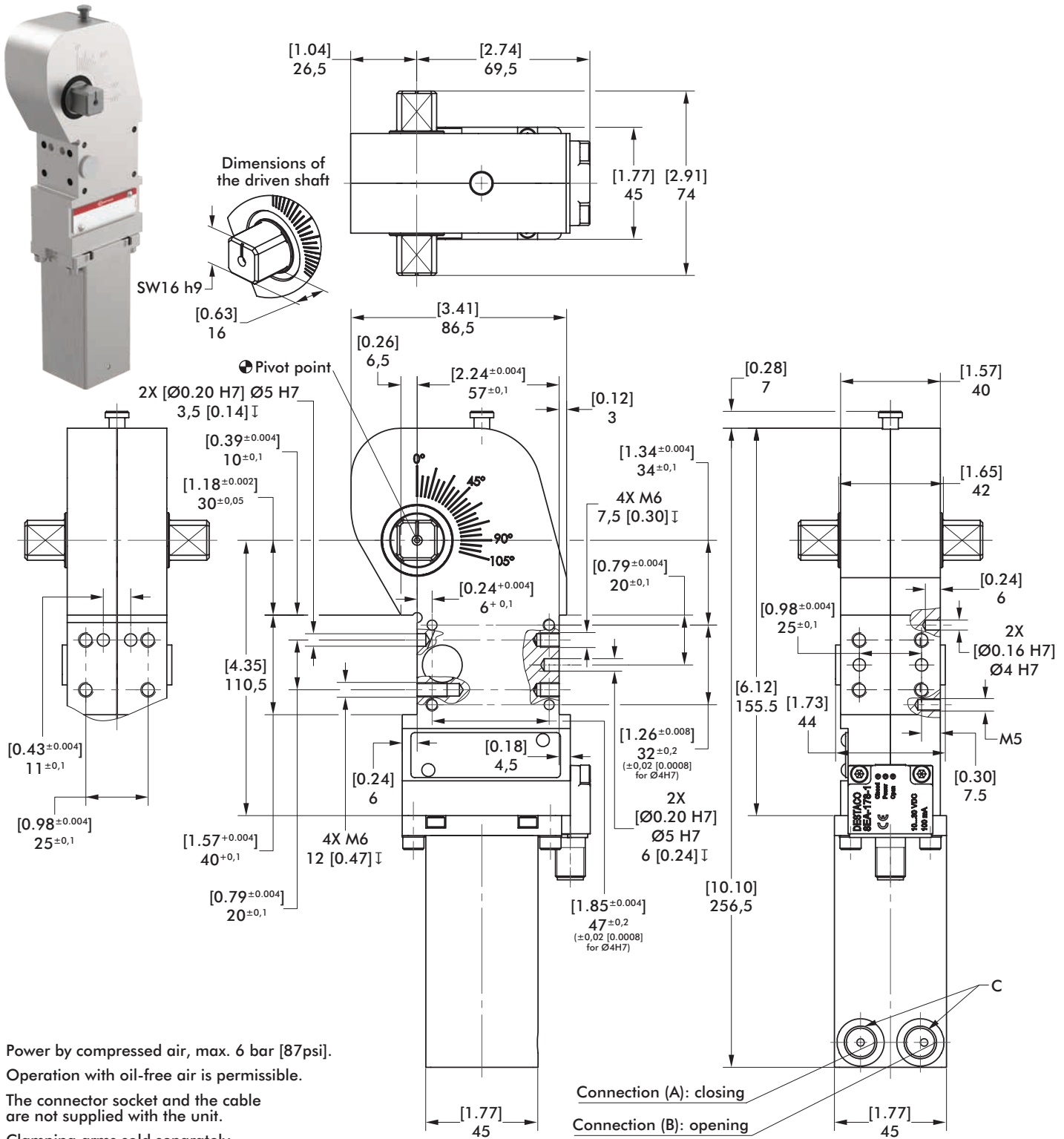
The connector socket and the cable are not supplied with the unit.

Clamping arms sold separately.

Model	Max. Holding Torque Nm [ft-lb]	Clamping Torque at 5 bar [72 psi] Nm [ft-lb]	Piston Ø mm	Weight kg [lbs]	Air consumption per double stroke at 5 bar [72 psi] dm ³ [ft ³]	Connection C
82L-3E230032..	[133] 180	[41] 55	32	[2.43] 1,1	[0.03] 0,8	G1/8
82L-3E23003N..						1/8-18 NPT

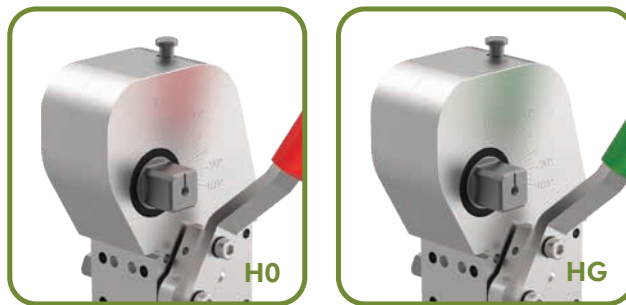
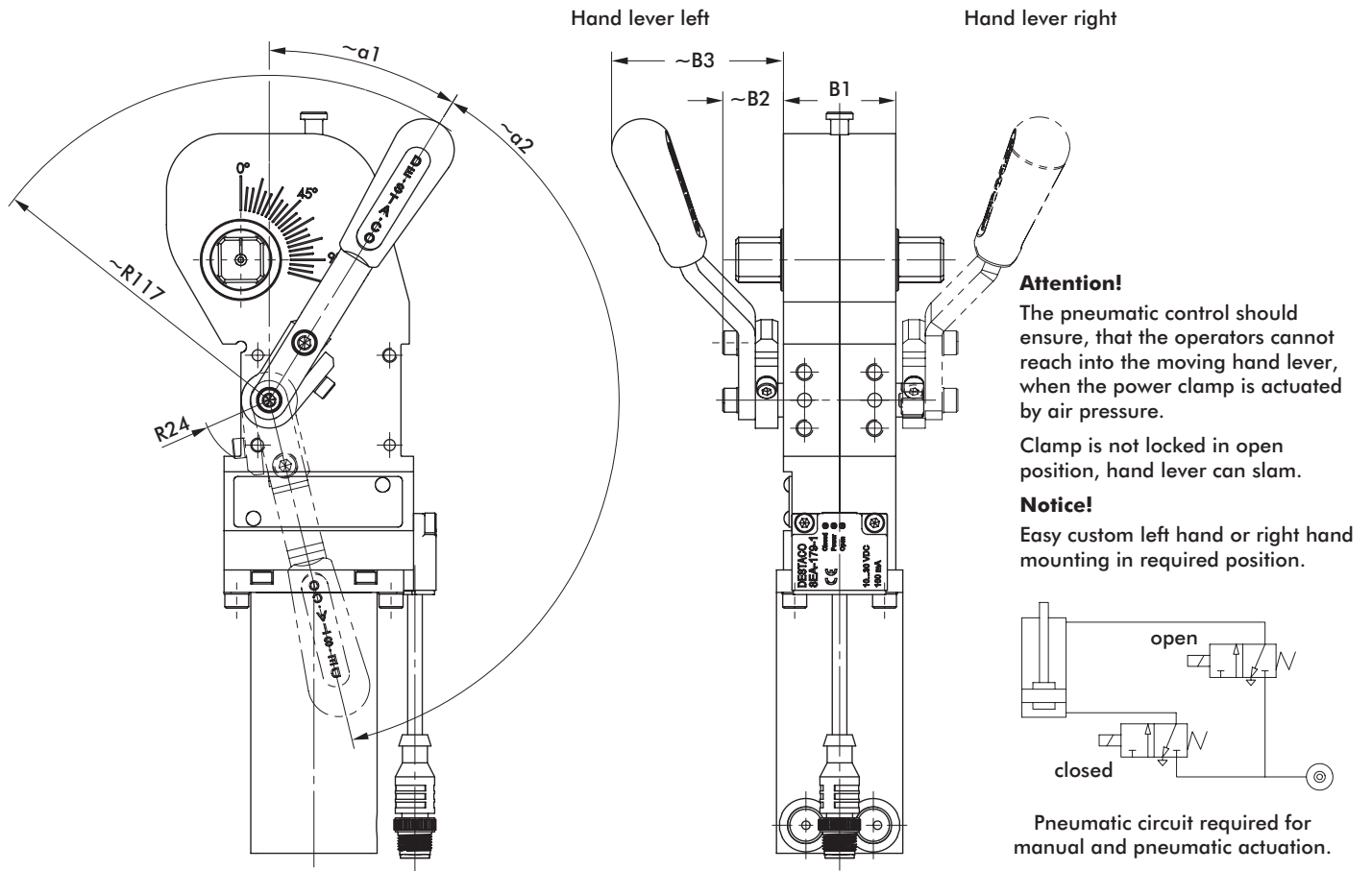
82L-3E

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



Power by compressed air, max. 6 bar [87psi].
Operation with oil-free air is permissible.
The connector socket and the cable are not supplied with the unit.
Clamping arms sold separately.

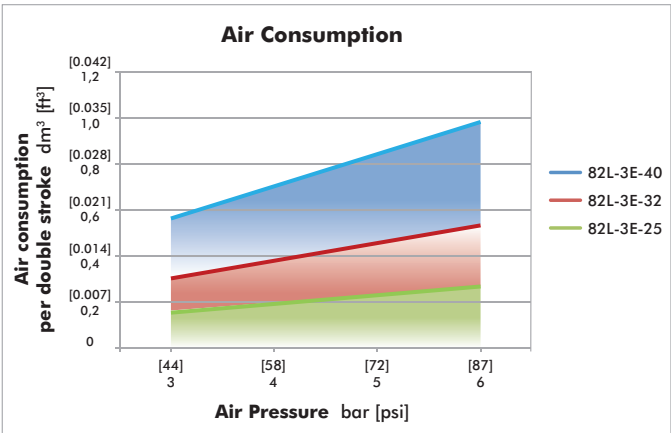
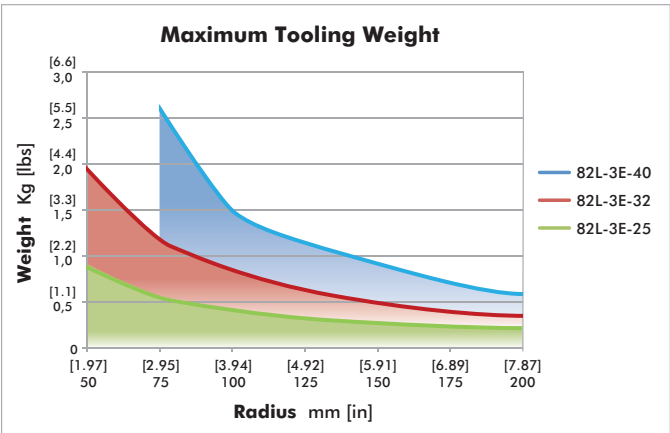
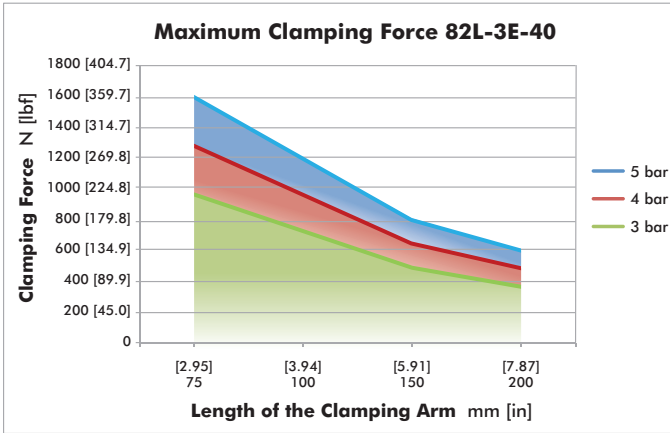
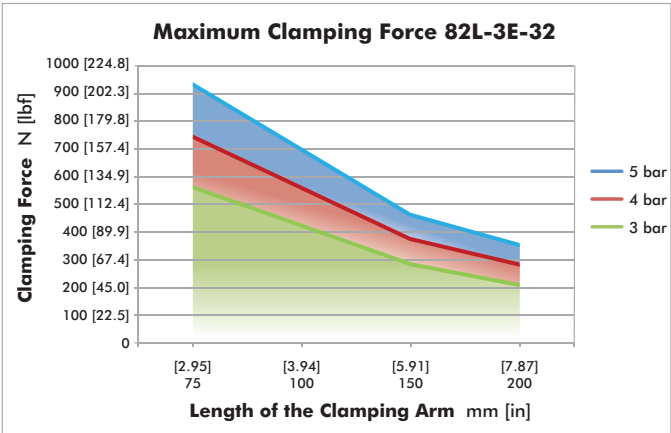
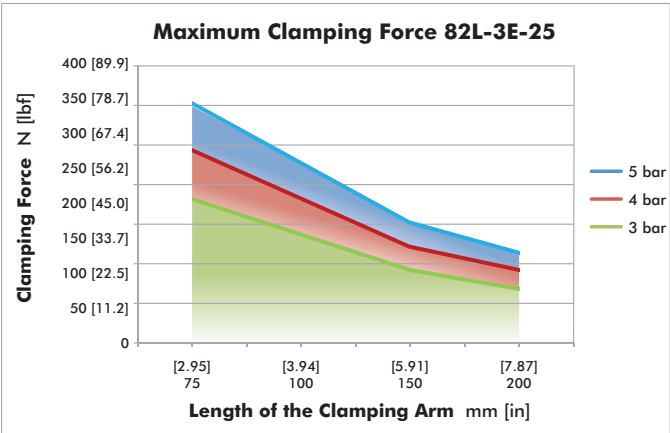
Model	Max. Holding Torque Nm [ft-lb]	Clamping Torque at 5 bar [72 psi] Nm [ft-lb]	Piston Ø mm	Weight kg [lbs]	Air consumption per double stroke at 5 bar [72 psi] dm³ [ft³]	Connection C
82L-3E230040..	[280] 380	[89] 120	40	[3.53] 1,6	[0.04] 1,2	G1/4
82L-3E23004N..						1/4-18 NPT



Model No.	Weight Kg [lbs]	Swivel Angle ~α2 (with reference to opening angle of clamp arm)										
		B1	~B2	~B3	~α1	15°	30°	45°	60°	75°	90°	105°
82L-3E23H.2...	0,8 [1.76]	[1.34] 34	[0.85] 21,5	[2.40] 61	32°	39°	52°	64°	76°	90°	109°	130°
82L-3E23H.3...	1,3 [2.87]		[0.87] 22	[2.44] 62	31°			62°	74°	87°	103°	124°
82L-3E23H.4...	1,8 [3.97]	[1.57] 40			32°	47°	60°	71°	83°	97°	114°	135°

82L-3E

Enclosed Pneumatic Power Clamps | Lightweight Modular | Technical Specifications

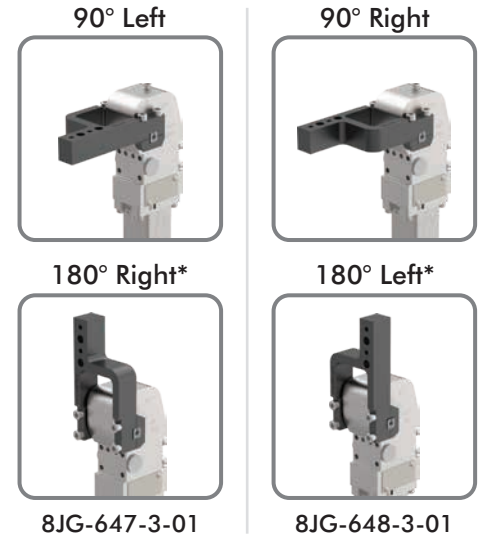
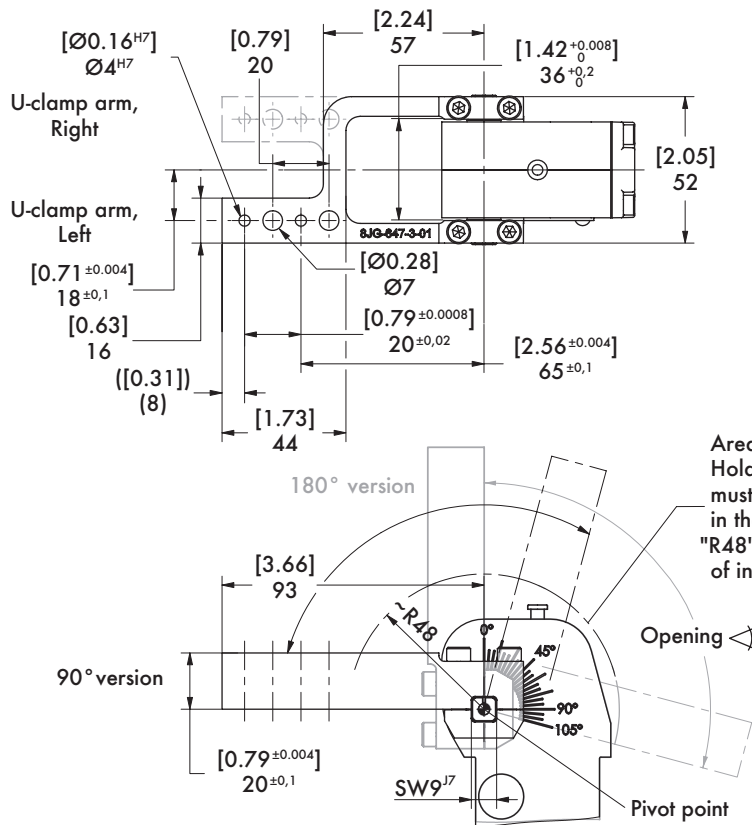


All data refers to a pneumatic pressure of 6 bar [87 psi] and to an opening or closing time of 1 second, as well as to the center of gravity of the complete construction directly attached to the clamp arm related to the fixed fulcrum.

82L-3E U-ARMS OFFSET, U-ARMS CENTER (STEEL)

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

For Size 25mm

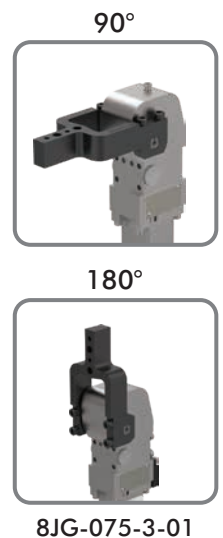
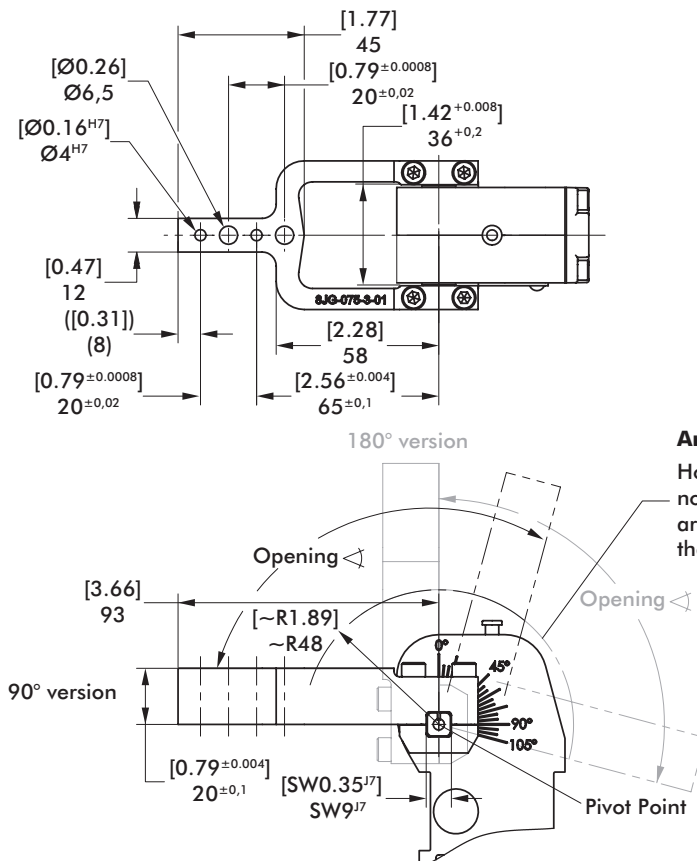


*90° left/180° right uses same clamp arm.
90° right/180° left uses same clamp arm.

Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-647-3-01	105°	105°	[0.66] 0,3
8JG-648-3-01			

For Size 25mm



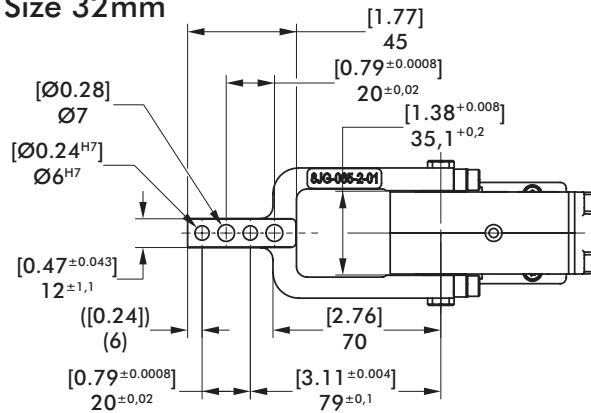
Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-075-3-01	105°	105°	[0.66] 0,3

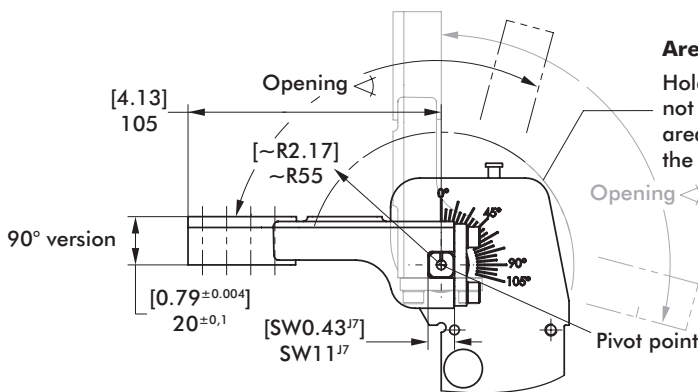
82L-3E U-ARMS CENTER (STEEL)

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

For Size 32mm



180° version

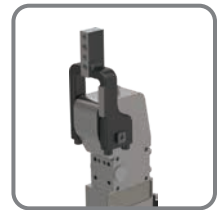


Area of interference

Hold-down piece must not protrude in the interior area "R55 [R2.17]" due to the area of interference.



90°



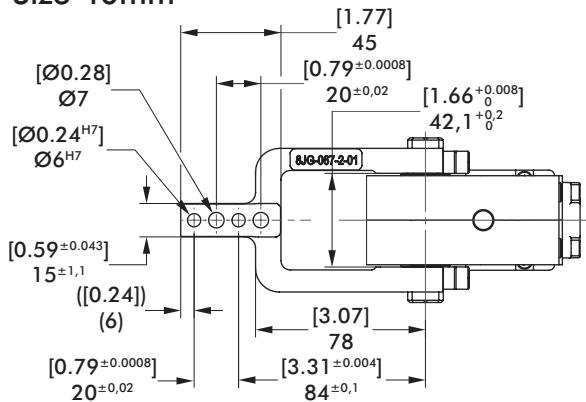
180°

8JG-065-2-01

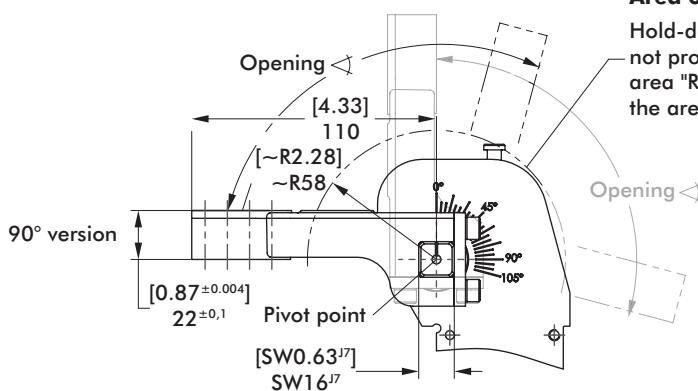
Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-065-2-01	105°	105°	[0.82] 0,37

For Size 40mm



180° version

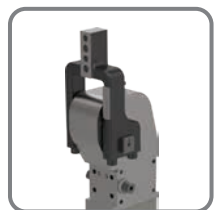


Area of interference

Hold-down piece must not protrude in the interior area "R58 [R2.28]" due to the area of interference.



90°



180°

8JG-067-2-01

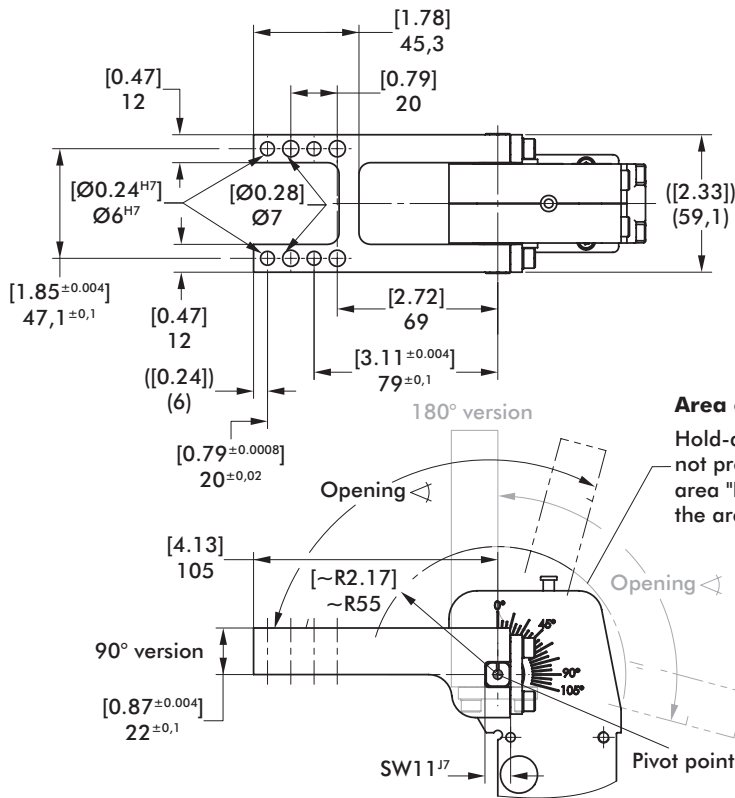
Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-067-2-01	105°	105°	[1.10] 0,5

82L-3E H-ARMS (STEEL)

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

For Size 32mm



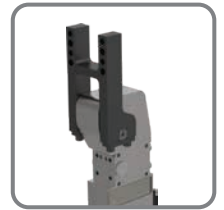
Area of interference

Hold-down piece must not protrude in the interior area "R55 [R2.17]" due to the area of interference.

90°



180°

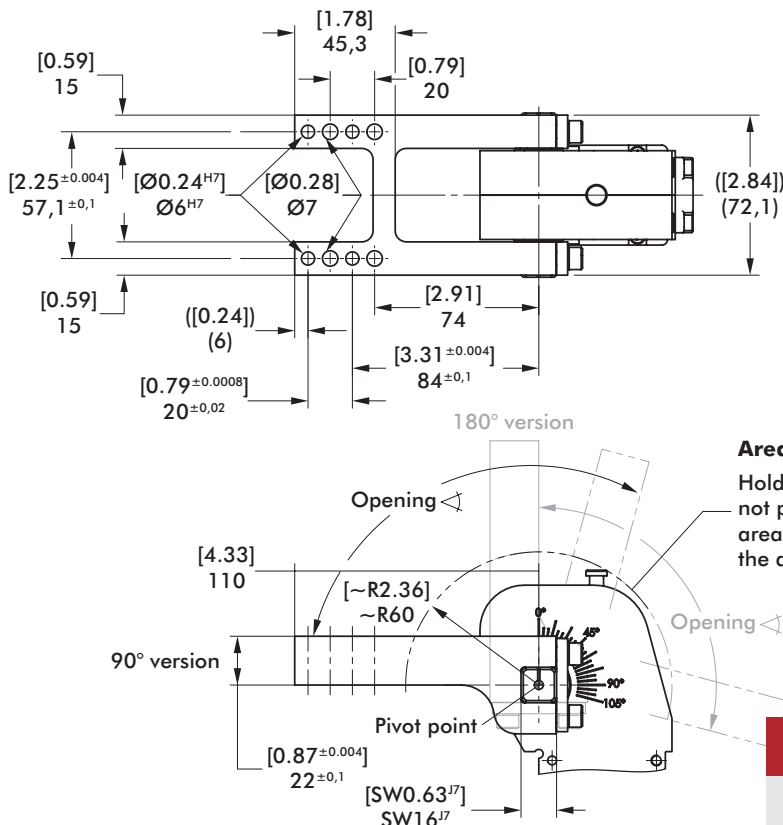


8JG-363-1-01

Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-363-1-01	105°	105°	[1.15] 0,52

For Size 40mm



Area of interference

Hold-down piece must not protrude in the interior area "R60 [R2.36]" due to the area of interference.

90°



180°



8JG-364-1-01

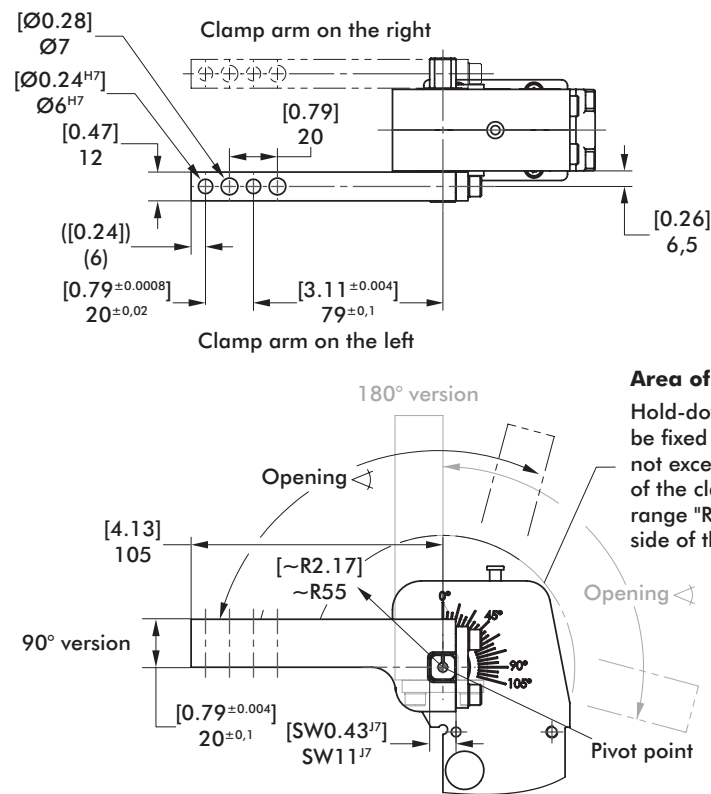
Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-364-1-01	105°	105°	[1.70] 0,77

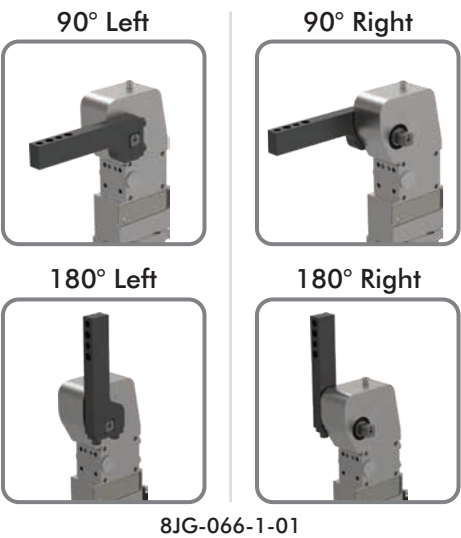
82L-3E LATERAL ARMS (STEEL)

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

For Size 32mm



Area of interference
Hold-down pieces which must be fixed on the clamp arm must not exceed the width "12 [0.47]" of the clamp arm in the swivelling range "R55 [R2.17]" on the inner side of the clamp arm.

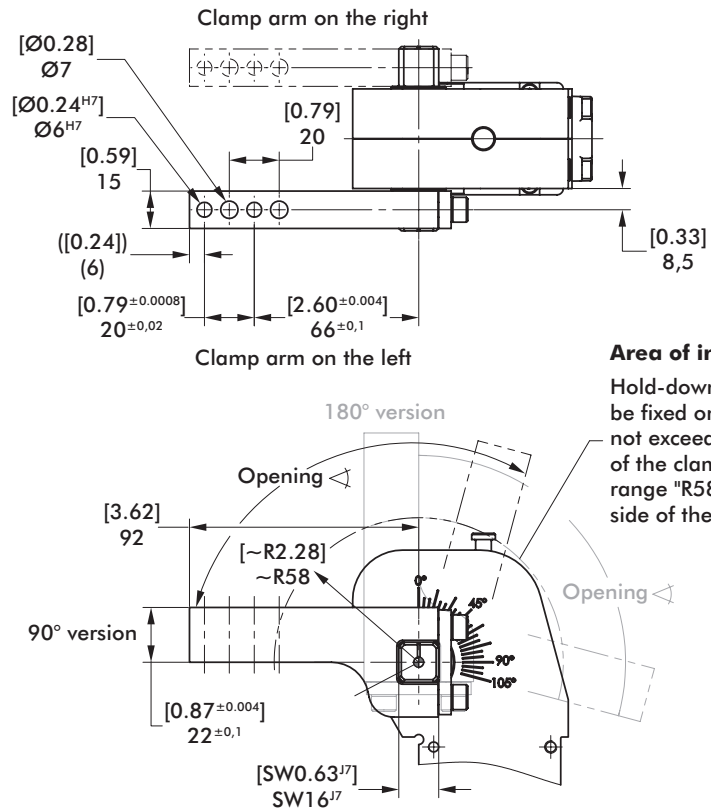


8JG-066-1-01

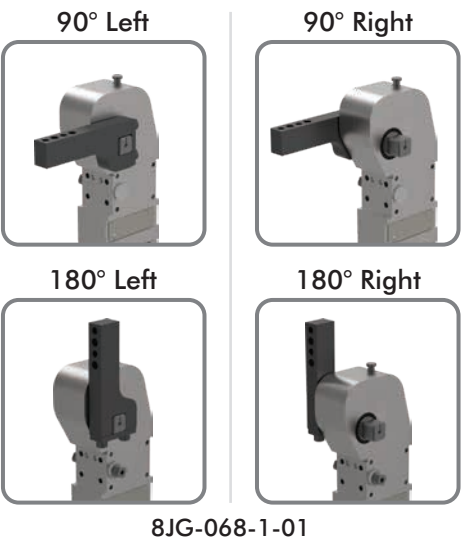
Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-066-1-01	105°	105°	[0.55] 0,25

For Size 40mm



Area of interference
Hold-down pieces which must be fixed on the clamp arm must not exceed the width "15 [0.59]" of the clamp arm in the swivelling range "R58 [R2.28]" on the inner side of the clamp arm.



8JG-068-1-01

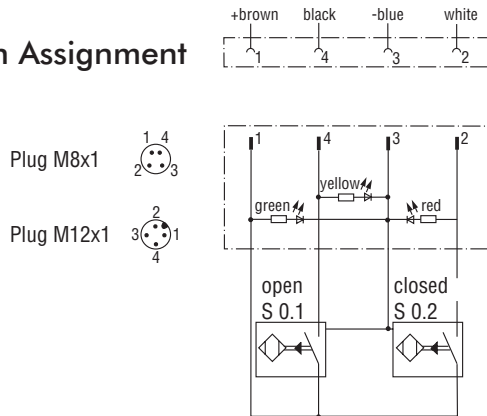
Clamp arm sets consists of clamp arm, links and screws.

Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-068-1-01	105°	105°	[0.66] 0,3

82L-3E ACCESSORIES

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

Pin Assignment



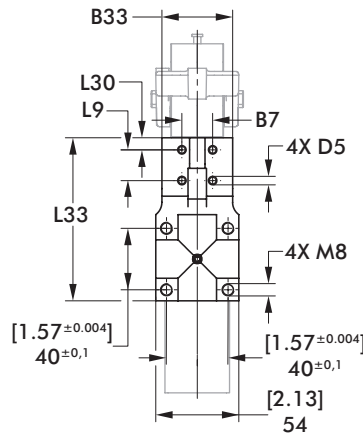
Wiring diagram of electrical sensing system

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

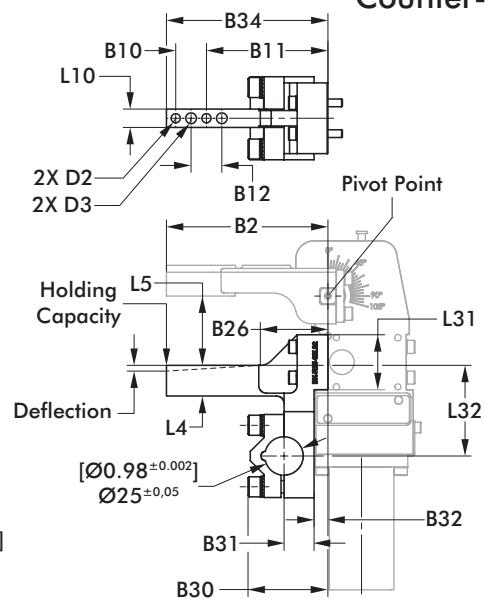
Inductive version: B8, B7, C8



View Counter-support without bracket and screws



Counter-Support



* = Tolerance for distance to dowel holes $\pm 0,02$ [± 00.001 in]

** = distance from pivot point

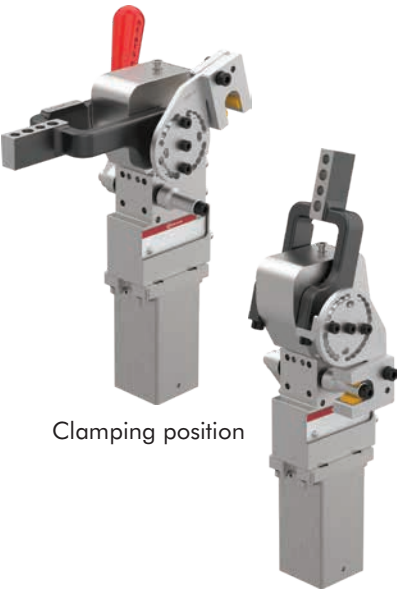
Model	Fit for Model	Max. Holding Capacity	Deflection	Weight	B2	B7*	B10	B11	B12	B26**	B30**	B31**	B32**
		N [lbf]	mm [in]	kg [lbs]		$[\pm 0.004]$ $\pm 0,1$	$[\pm 0.0008]$ $\pm 0,02$						
BK-R25-82L25-1	82L-3E23..2...	[206] 914	[0.008] 0,2	[0.88] 0,4	[3.66] 93	[0.98] 25		[2.44] 62		[1.65] 42	[2.17] 55	[1.24] 31,5	[0.43] 11
BK-R25-82L32-1	82L-3E23..3...	[148] 660	[0.006] 0,16	[1.1] 0,5	[4.13] 105	[0.79] 20	[0.79] 20	[3.11] 79	[0.79] 20	[1.73] 44	[2.05] 52	[1.12] 28,5	[0.35] 9
BK-R25-82L40-1	82L-3E23..4...	[450] 2000	[0.015] 0,37	[1.23] 0,56	[4.33] 110	[0.98] 25		[3.31] 84		[1.61] 41			[0.30] 7,5

Model	B33	B34	D2	D3	D5	L4	L5	L9	L10	L30	L31	L32	L33
			$\varnothing$ H7	$\varnothing$	$\varnothing$	$[\pm 0.004]$ $\pm 0,1$		$[\pm 0.004]$ $\pm 0,1$			$[-0.004]$ $-0,1$		
BK-R25-82L25-1	[1.38] 35	[3.54] 90	[0.16] 4	[0.26] 6,5	[0.22] 5,5	[0.79] 20		[0.71] 18	[0.47] 12	[0.19] 4,95	[1.10] 27,9	[2.00] 50,9	[4.17] 106
BK-R25-82L32-1	[1.81] 46	[4.13] 105	[0.24] 6	[0.28] 7	[0.26] 6,6	[0.87] 22	[1.77] 45	[0.79] 20		[0.31] 7,85	[1.41] 35,7	[2.32] 59	
BK-R25-82L40-1	[1.57] 40	[4.33] 110							[0.59] 15	[0.39] 9,85	[1.56] 39,7	[2.60] 66	[4.25] 108

82L-3E ACCESSORIES

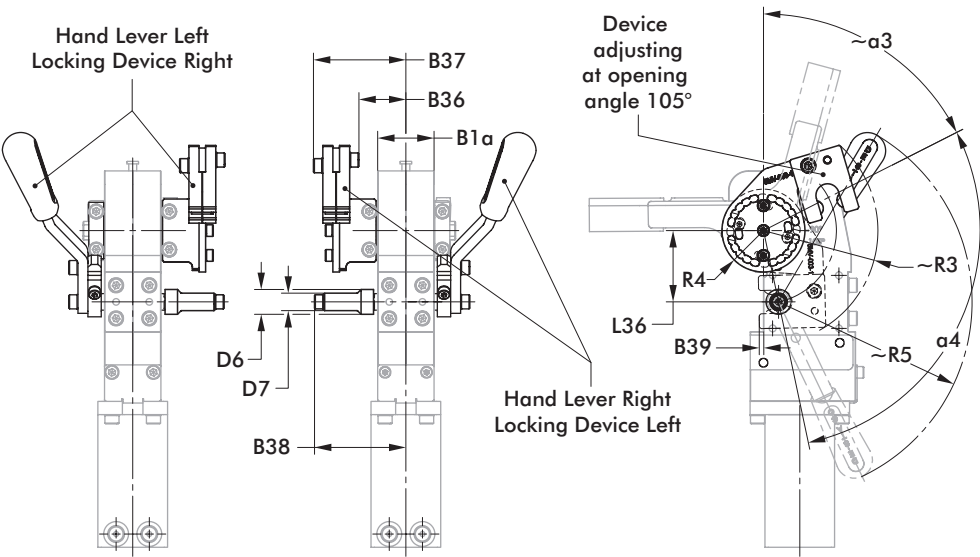
Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

Hold Open Device



Clamping position

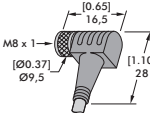
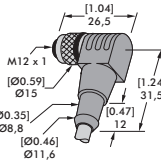
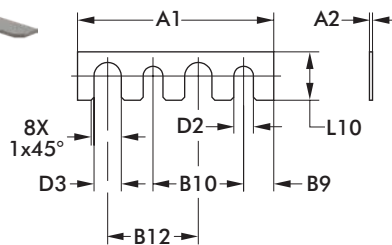
Open position locked



Model	Fit for Model	B1α	B36	B37	B38	B39	D6	D7	L36	~R3	R4	~R5	~α3	α4
82ZB-036-1	82L-3E23H.2...	[1.34]	[0.98] 25	[1.85] 47	[1.85] 47			[0.39] 10	[1.22] 31	[2.09] 53	[0.73] 18,5		64°	
82ZB-037-1	82L-3E23H.3...	34	[1.10] 28	[2.20] 56	[2.19] 55,5	[0.12] 3	[0.59] 15	[0.41] 10,5	[1.69] 43	[2.72] 69	[0.98] 25	[4.61] 117	63°	105°
82ZB-038-1	82L-3E23H.4...	[1.57] 40	[1.18] 30	[2.28] 58	[2.24] 57				[1.97] 50	[2.99] 76	[1.06] 27			

82L-3E ACCESSORIES

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

Clamping Arms		Order No. for Set 82L-3E23..2...		Order No. for Set 82L-3E23..3...		Order No. for Set 82L-3E23..4...				
U-Offset 90° Left/180° Right		8JG-647-3-01		--		--				
U-Offset 180° Left/90° Right		8JG-648-3-01		--		--				
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 [16.4 ft] 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				
Shim for Clamping Arm		Order No.	A1	A2	D2	D3	B9	B10	B12	L10
 		82ZB-SH4001	[1.65] 42	[0.004] 0,1	[0.26] 6,5	[0.28] 7	[0.24] 6	[0.79] 20	[0.79] 20	[0.46] 11,8
		82ZB-SH4002		[0.008] 0,2						
		82ZB-SH4005		[0.02] 0,5						
		82ZB-SH4010		[0.04] 1,0						
		82ZB-SH4020		[0.08] 2,0						
		82ZB-SH4050		[0.20] 5,0						
Spare Parts		Order No. for Set		Order No. for Set		Order No. for Set				
		82L-3E23..25..	82L-3E23..2N..	82L-3E23..32..	82L-3E23..3N..	82L-3E23..40..	82L-3E23..4N..			
Cylinder		82L-3E000025	82L-3E00002N	82L-3E000032	82L-3E00003N	82L-3E000040	82L-3E00004N			
Sensor Kit										
C8 Connector Plug, with In-Line M8x1		8EA-174-1-B			8EA-177-1-B					
B7 Connector Plug, with In-Line M12x1		8EA-175-1-B			8EA-178-1-B					
B8 Connector Plug, M12x1 with Cable		8EA-176-1-B			8EA-179-1-B					
Spare Parts		Order No. for Set		Order No. for Set		Order No. for Set				
		82L-3E23H02...	82L-3E23HG2...	82L-3E23H03...	82L-3E23HG3...	82L-3E23H04...	82L-3E23HG4...			
Hand Lever		8KB-031-1	8KB-091-1	8KB-031-1	8KB-091-1	8KB-032-1	8KB-092-1			