

# 82L-3E

Enclosed Pneumatic Power Clamps | Lightweight Modular | Ordering Information

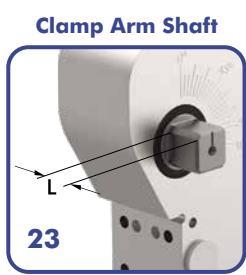
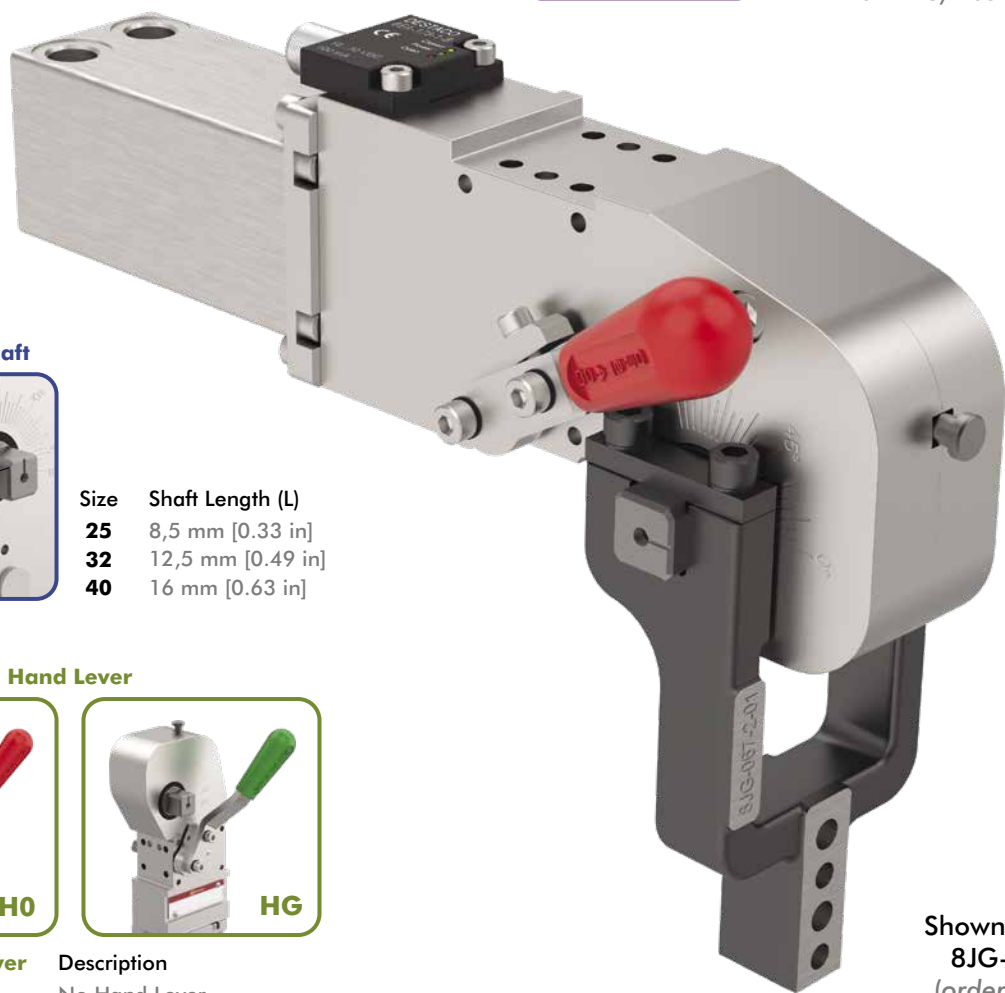
- 82L-3E
- 23
- H0
- 40
- B7

**Clamp Arm Shaft**  
**23**  
 Description for Arms  
 See below for further details

**Hand Lever** Description  
**00** No Hand lever  
**H0** Red Hand lever  
**HG** Green Hand lever  
 See below for further details



**Cylinder (Standard)**  
**25** 25 mm Cylinder (G1/8 Port)  
**2N** 25 mm Cylinder (1/8-18 NPT Port)  
**32** 32 mm Cylinder (G1/8 Port)  
**3N** 32 mm Cylinder (1/8-18 NPT Port)  
**40** 40 mm Cylinder (G1/4 Port)  
**4N** 40 mm Cylinder (1/4-18 NPT Port)



Size	Shaft Length (L)
<b>25</b>	8,5 mm [0.33 in]
<b>32</b>	12,5 mm [0.49 in]
<b>40</b>	16 mm [0.63 in]

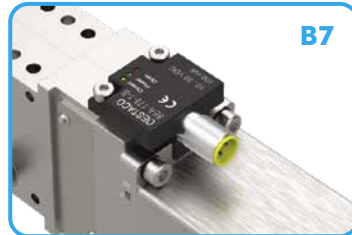


**Hand Lever** Description  
**00** No Hand Lever  
**H0** Red Hand Lever  
**HG** Green Hand Lever

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)



### 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

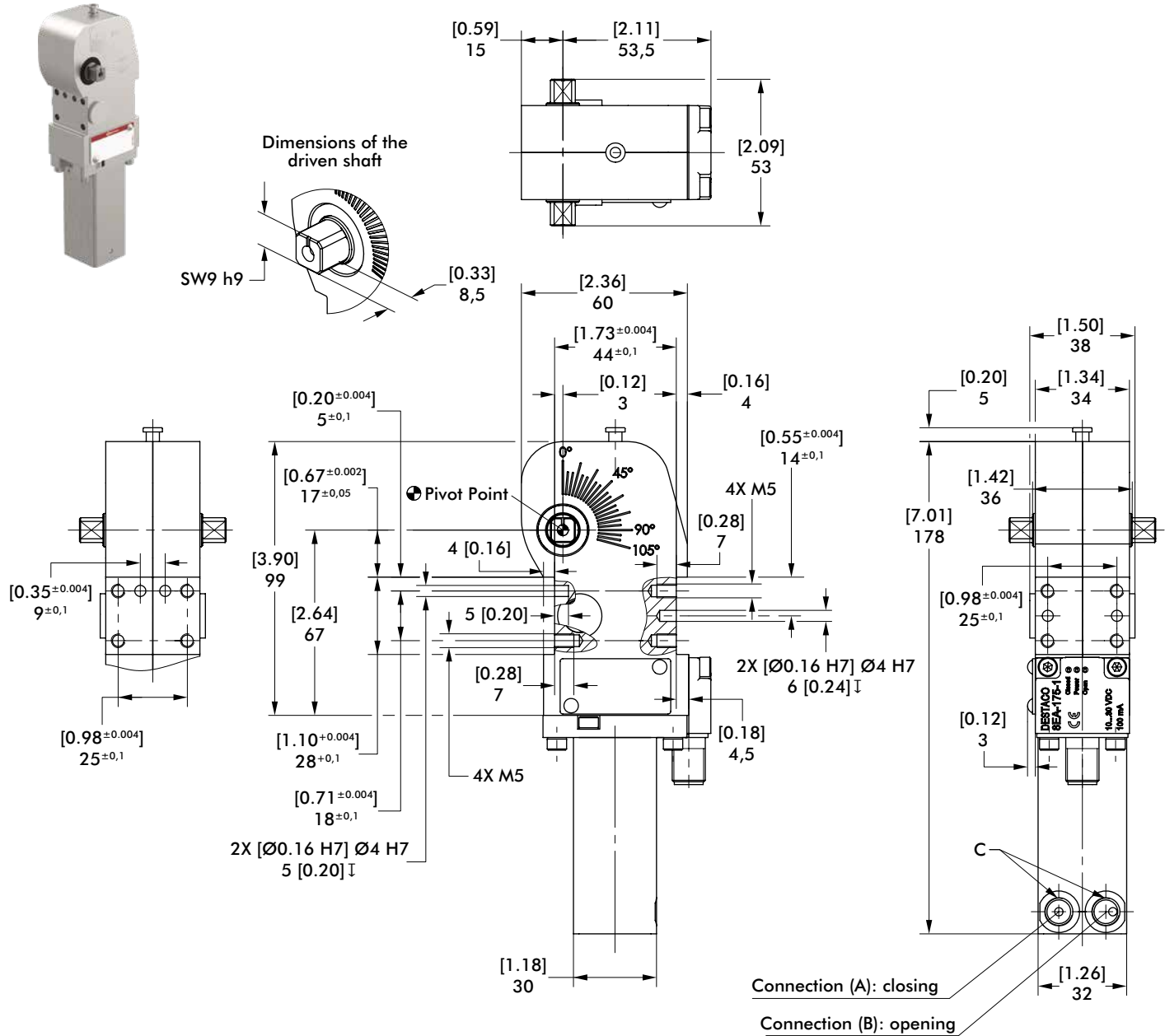
Max Holding Torque  
180 Nm [133 ft-lb]  
Max Clamping Torque  
55 Nm [41 ft-lb]  
at 5 bar [72 psi]

### 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

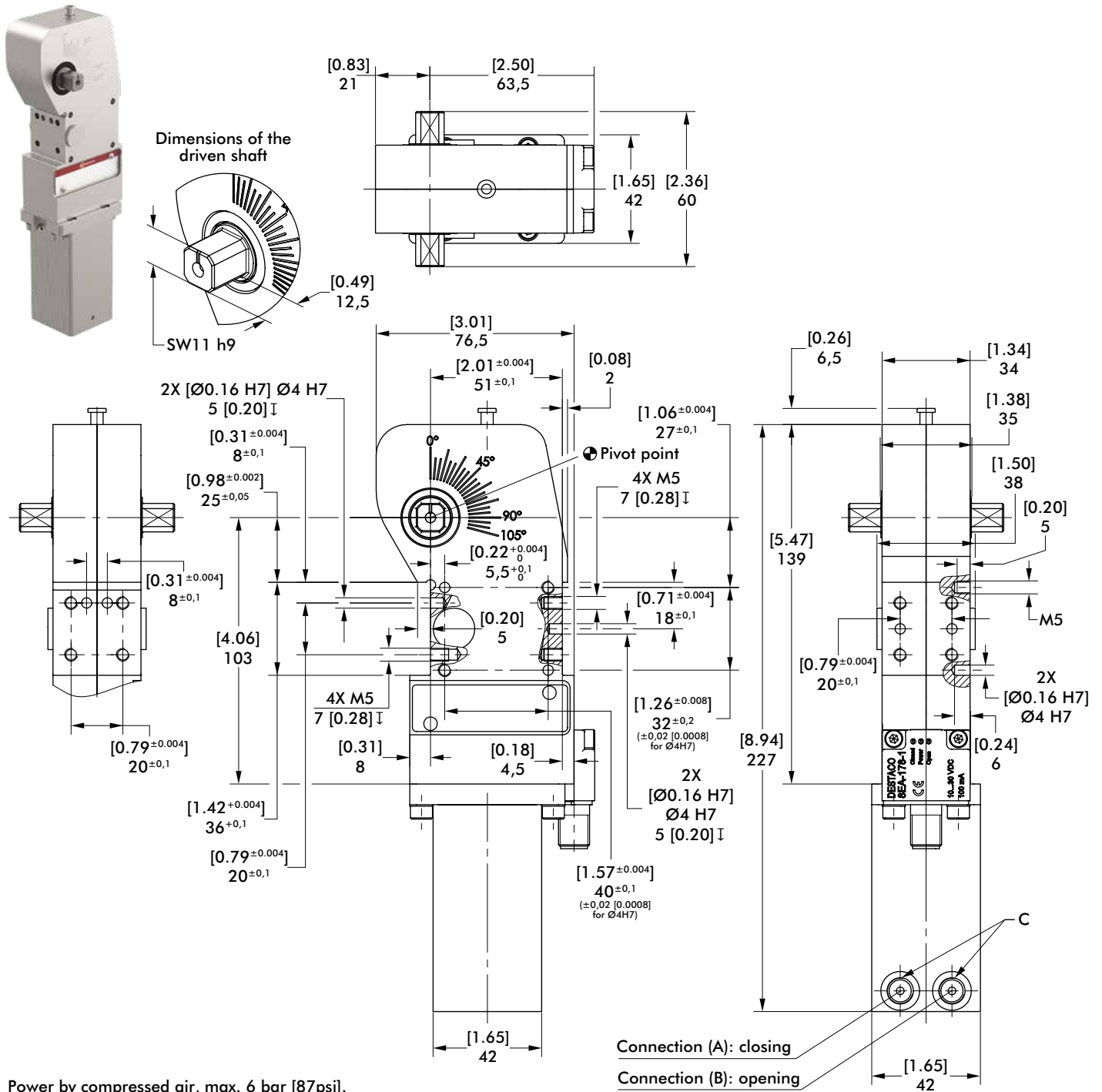
## Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications



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 <sup>3</sup> [ft <sup>3</sup> ]	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.

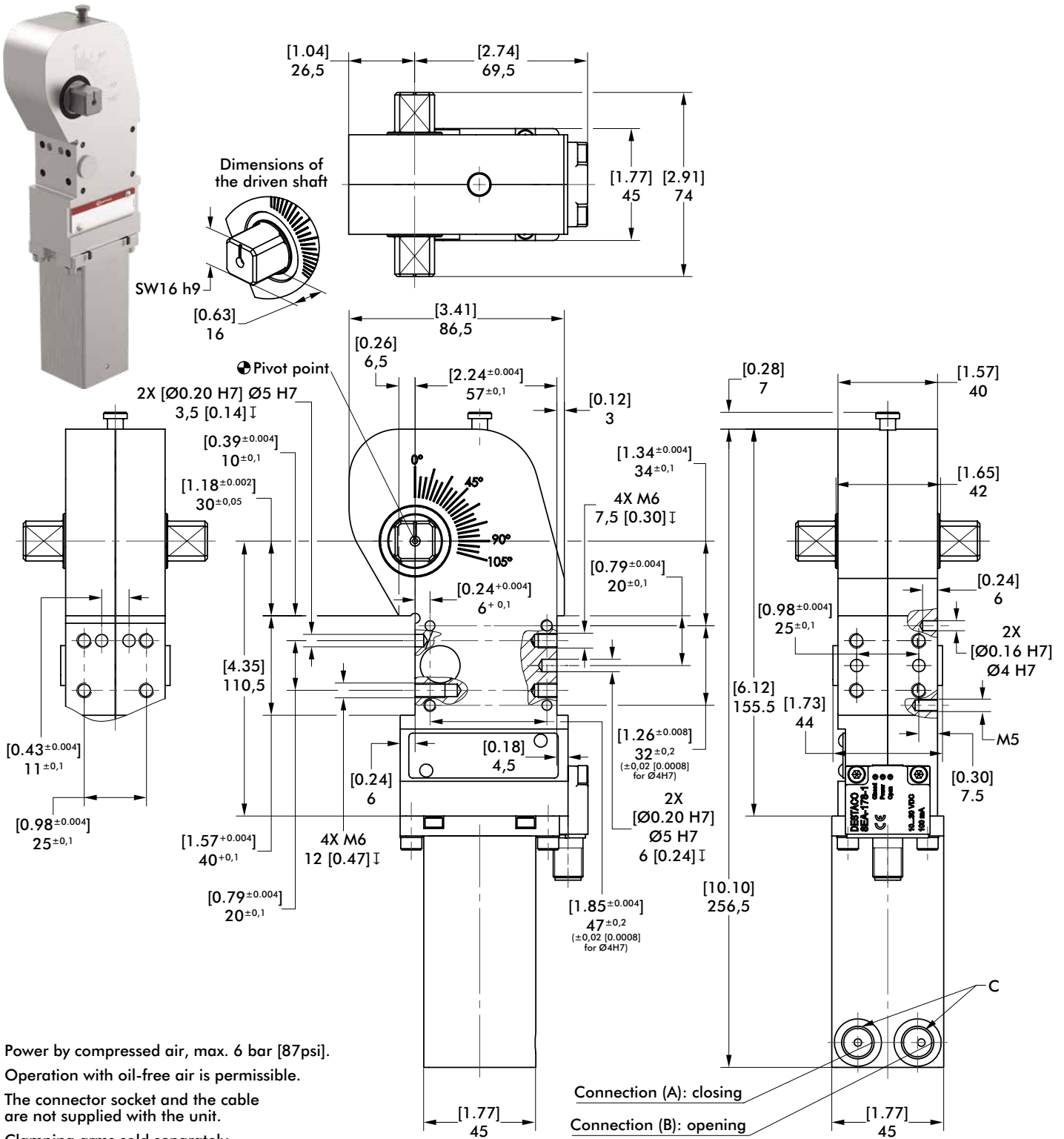
The connector socket and the cable are not supplied with the unit.

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 <sup>3</sup> [ft <sup>3</sup> ]	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

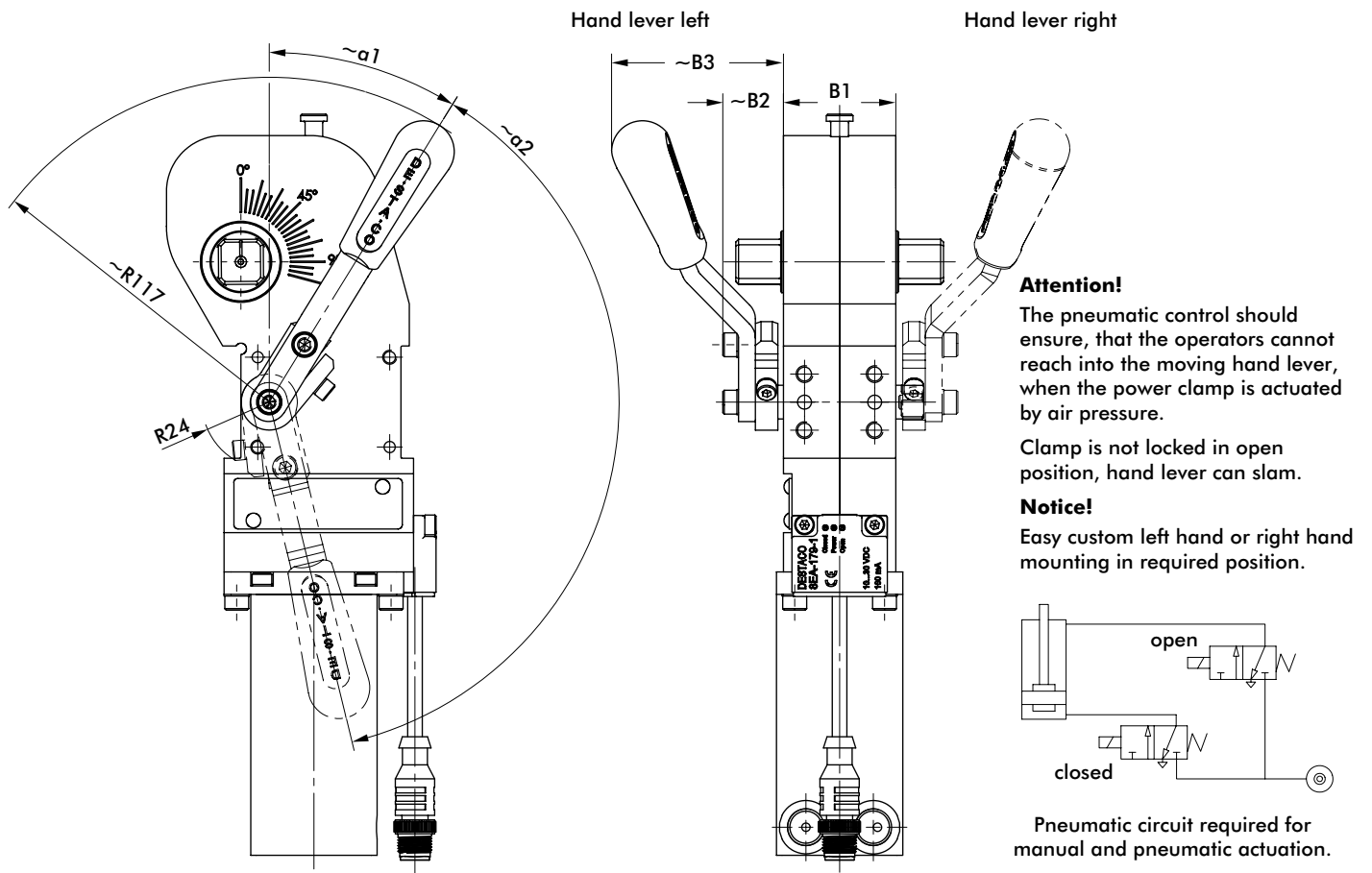
# 82L-3E

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.

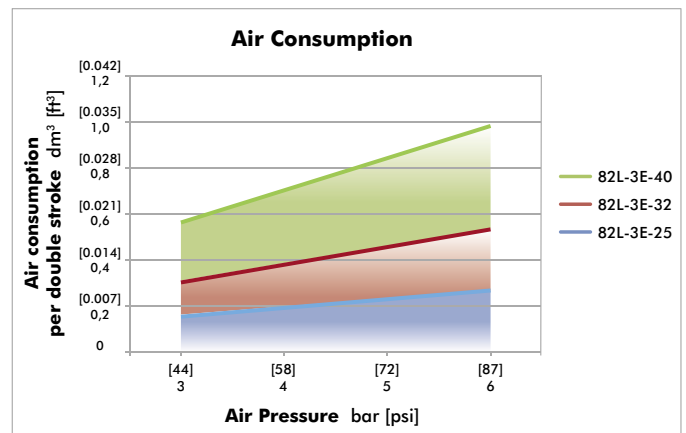
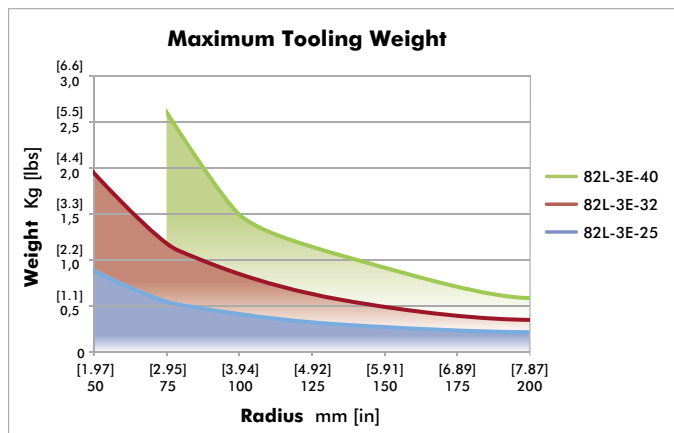
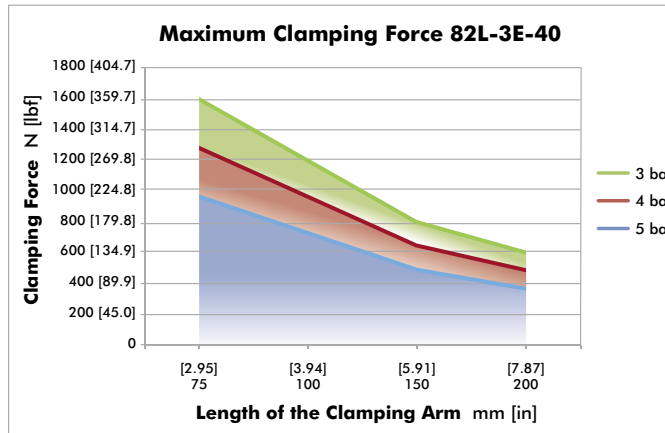
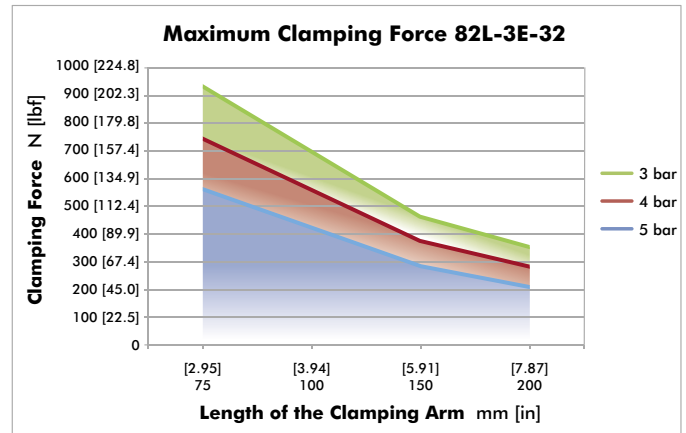
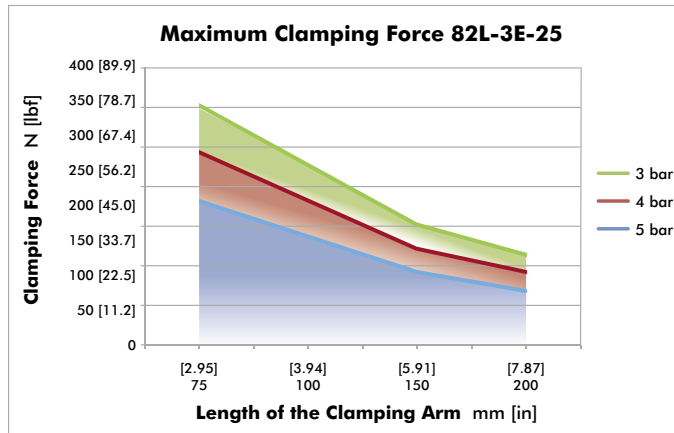
Model	Max. Holding Torque Nm [ft-lb]	Clamping Torque at 5 bar [72 psi] Nm [ft-lb]	Piston Ø mm	Weight kg [lbs]	Air consumption per double stroke at 5 bar [72 psi] dm <sup>3</sup> [ft <sup>3</sup> ]	Connection C
82L-3E230040..	[280] 380	[89] 120	40	[3.53] 1,6	[0.04] 1,2	G1/4
82L-3E23004N..						1/4-18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



Model No.	Weight Kg [lbs]	Swivel Angle ~a2 (with reference to opening angle of clamp arm)										
		B1	~B2	~B3	~a1	15°	30°	45°	60°	75°	90°	105°
82L-3E23H.2...	0,8 [1.76]	[1.34]	[0.85] 21,5	[2.40] 61	32°	39°	52°	64°	76°	90°	109°	130°
82L-3E23H.3...	1,3 [2.87]	34	[0.87]	[2.44] 62	31°			62°	74°	87°	103°	124°
82L-3E23H.4...	1,8 [3.97]	[1.57] 40	22		32°	47°	60°	71°	83°	97°	114°	135°

# 82L-3E

## Enclosed Pneumatic Power Clamps | Lightweight Modular | Technical Specifications

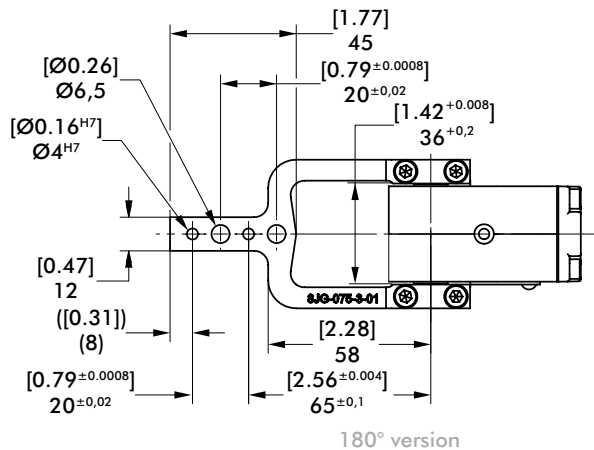


All data refers to a pneumatic pressure of 6 bar [87 psi] and to an opening or closing time of 1 second, as well as to the center of gravity of the complete construction directly attached to the clamp arm related to the fixed fulcrum.

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

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

For Size 25mm



90°

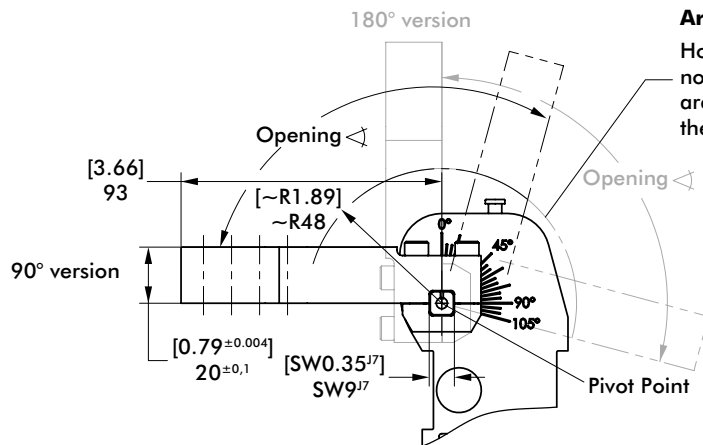


180°

8JG-075-3-01

### Area of interference

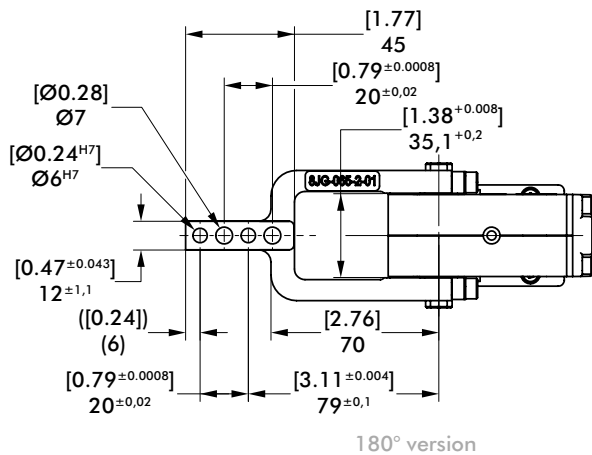
Hold-down piece must not protrude in the interior area "R48 [R1.89]" due to the area of interference.



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

For Size 32mm



90°

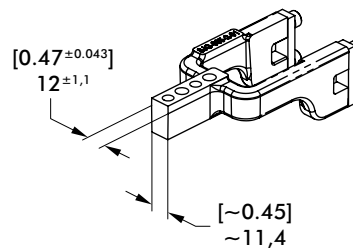
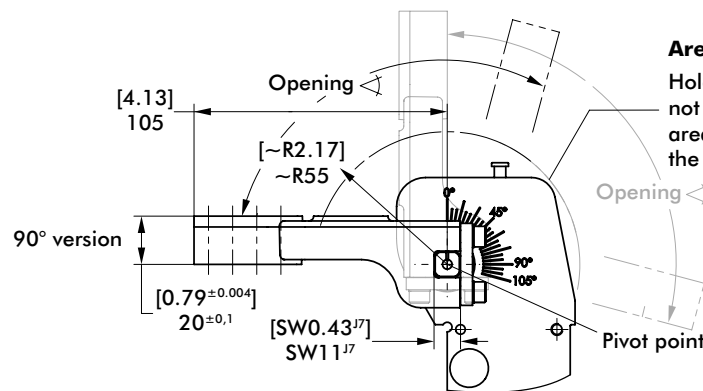


180°

8JG-065-2-01

### Area of interference

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



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

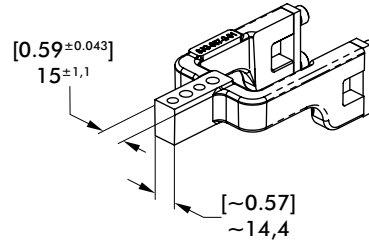
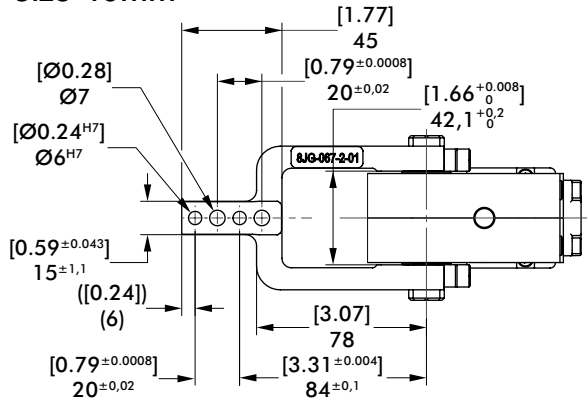
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-065-2-01	105°	105°	[0.82] 0,37



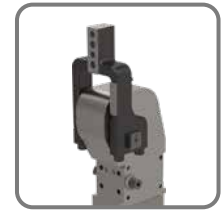
# 82L-3E U-ARMS CENTER (STEEL)

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

For Size 40mm

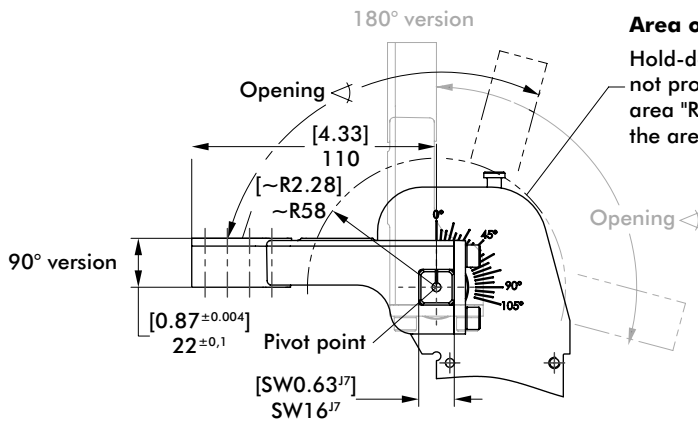


90°



180°

8JG-067-2-01



### Area of interference

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

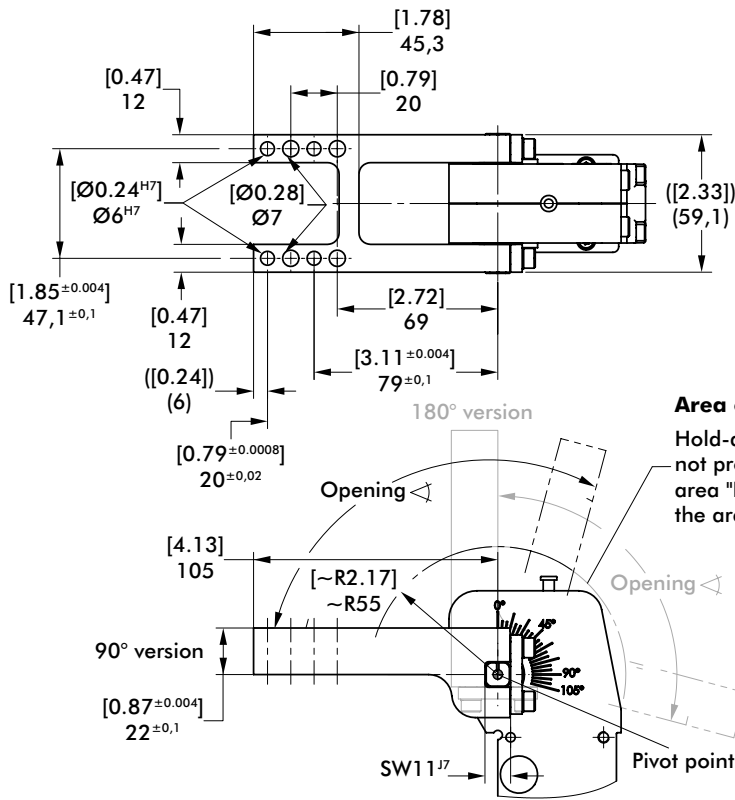
Clamp arm sets consists of clamp arm, links and screws.

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

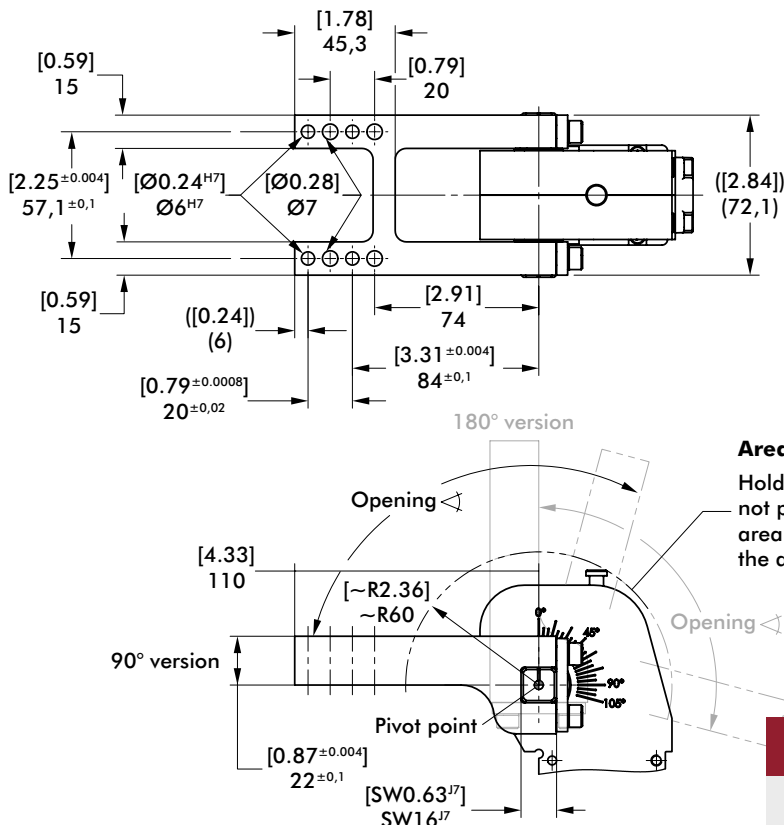


8JG-363-1-01

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



8JG-364-1-01

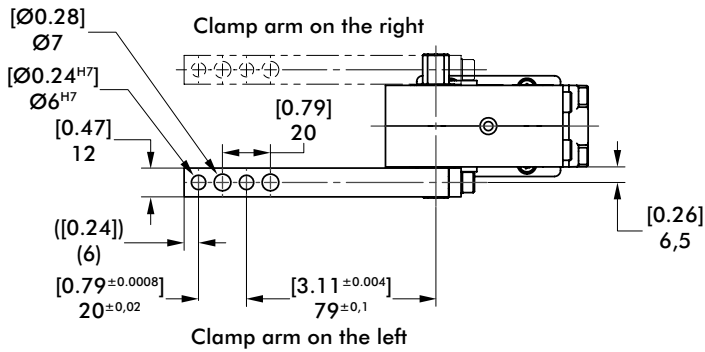
Clamp arm sets consists of clamp arm, links and screws.

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)

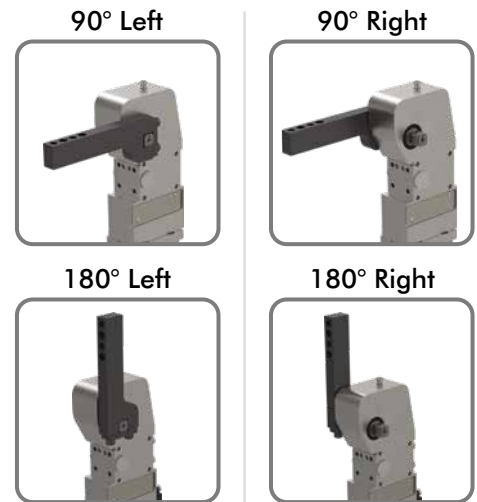
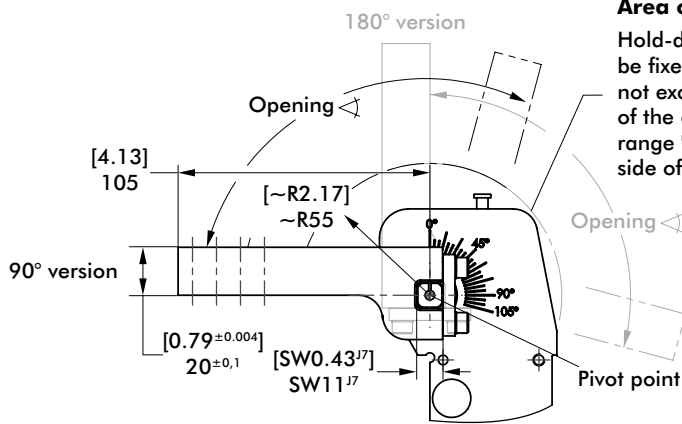
Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

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.

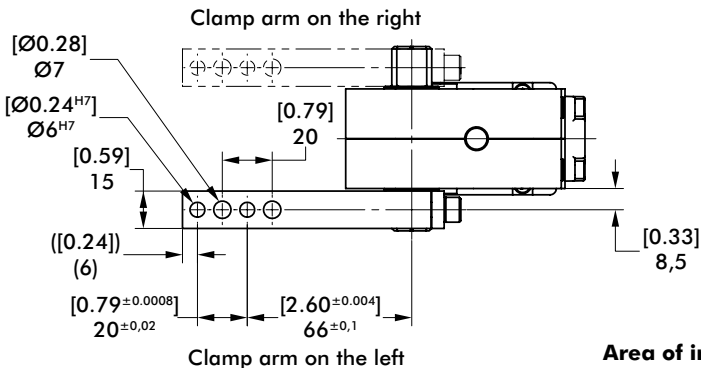


8JG-066-1-01

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

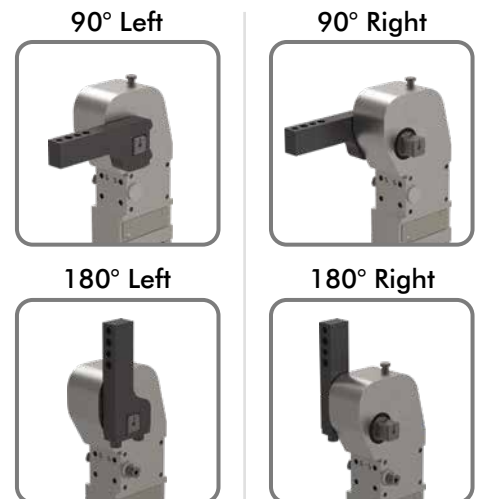
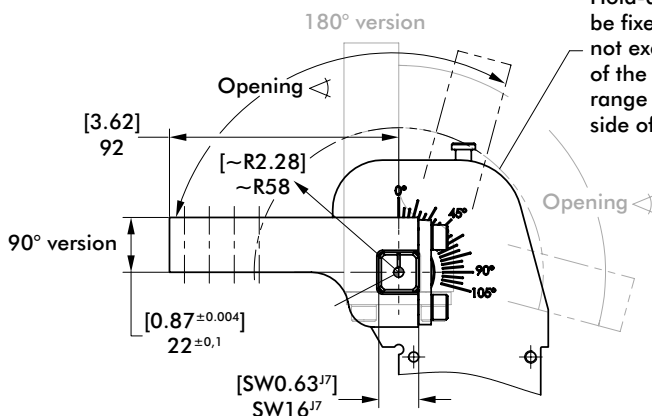
Arm Model No.	Max. Opening 90° Version	Max. Opening 180° Version	Weight kg [lbs]
8JG-066-1-01	105°	105°	[0.55] 0,25

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

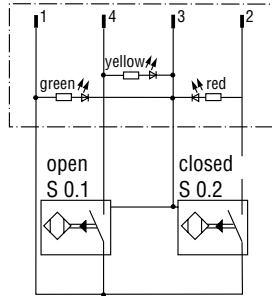
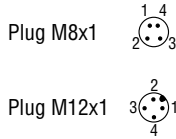
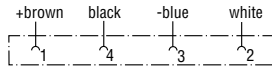
Clamp arm sets consists of clamp arm, links and screws.

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



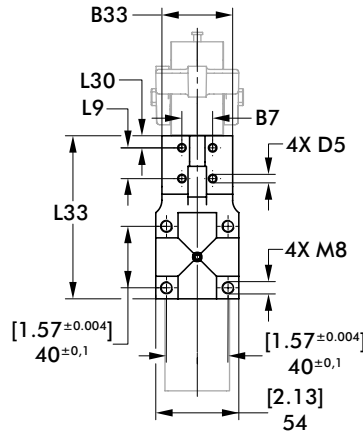
## Wiring diagram of electrical sensing system

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

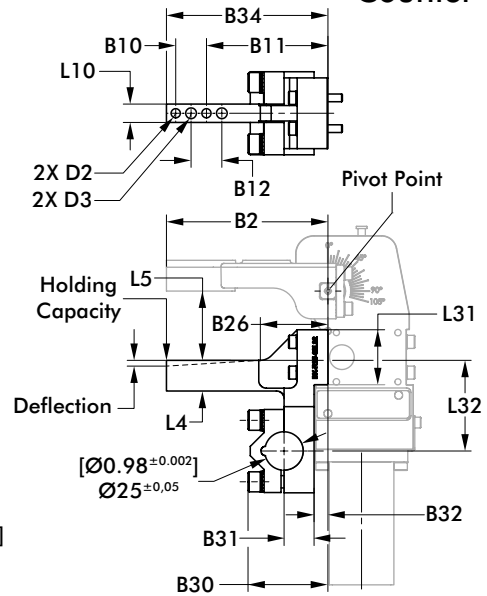
Inductive version: B8, B7, C8



View Counter-support without bracket and screws



## Counter-Support



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

Model	Fit for Model	Max. Holding Capacity N [lbf]	Deflection mm [in]	Weight kg [lbs]	B2	B7*	B10	B11	B12	B26**	B30**	B31**	B32**
					[3.66] 93	[0.98] 25	[2.44] 62	[1.65] 42	[2.17] 55	[1.24] 31,5	[0.43] 11		
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
	[1.38] 35	[3.54] 90	[0.16] 4	[0.26] 6,5	[0.22] 5,5	[0.79] 20	[1.77] 45	[0.71] 18	[0.47] 12	[0.19] 4,95	[1.10] 27,9	[2.00] 50,9	[4.17] 106
BK-R25-82L25-1													
BK-R25-82L32-1	[1.81] 46	[4.13] 105	[0.24] 6	[0.28] 7				[0.79] 20		[0.31] 7,85	[1.41] 35,7	[2.32] 59	
BK-R25-82L40-1	[1.57] 40	[4.33] 110			[0.26] 6,6	[0.87] 22			[0.59] 15	[0.39] 9,85	[1.56] 39,7	[2.60] 66	[4.25] 108

# 82L-3E ACCESSORIES

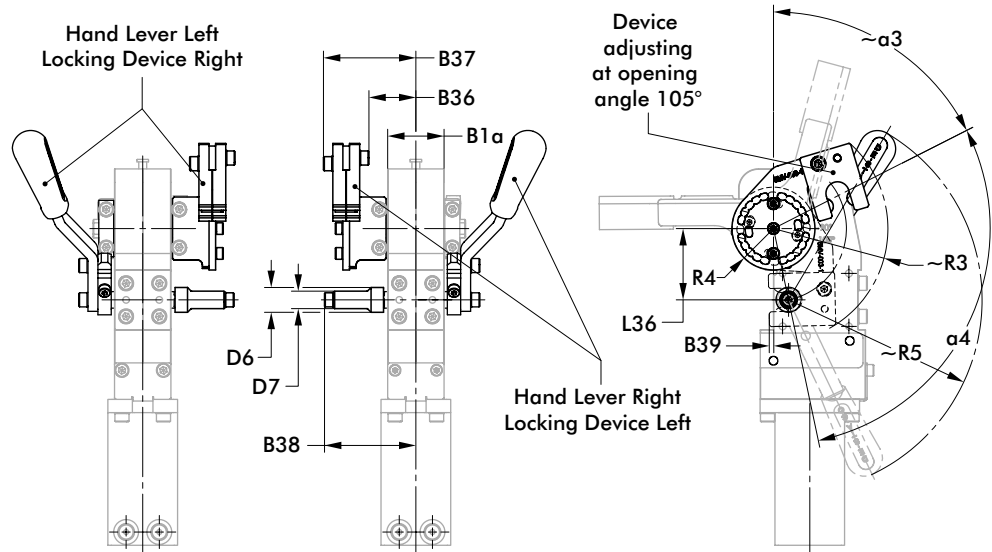
Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

## Hold Open Device



Clamping position

Open position locked



Model	Fit for Model	B1 $\alpha$	B36	B37	B38	B39	D6	D7	L36	~R3	R4	~R5	~ $\alpha$ 3	$\alpha$ 4
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-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		[0.004] 0,1						
		82ZB-SH4002		[0.008] 0,2						
		82ZB-SH4005	[1.65] 42	[0.02] 0,5	[0.26] 6,5	[0.28] 7	[0.24] 6	[0.79] 20	[0.79] 20	[0.46] 11,8
		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			