

82L...-2...

Enclosed Pneumatic Power Clamps | Lightweight Modular | Ordering Information

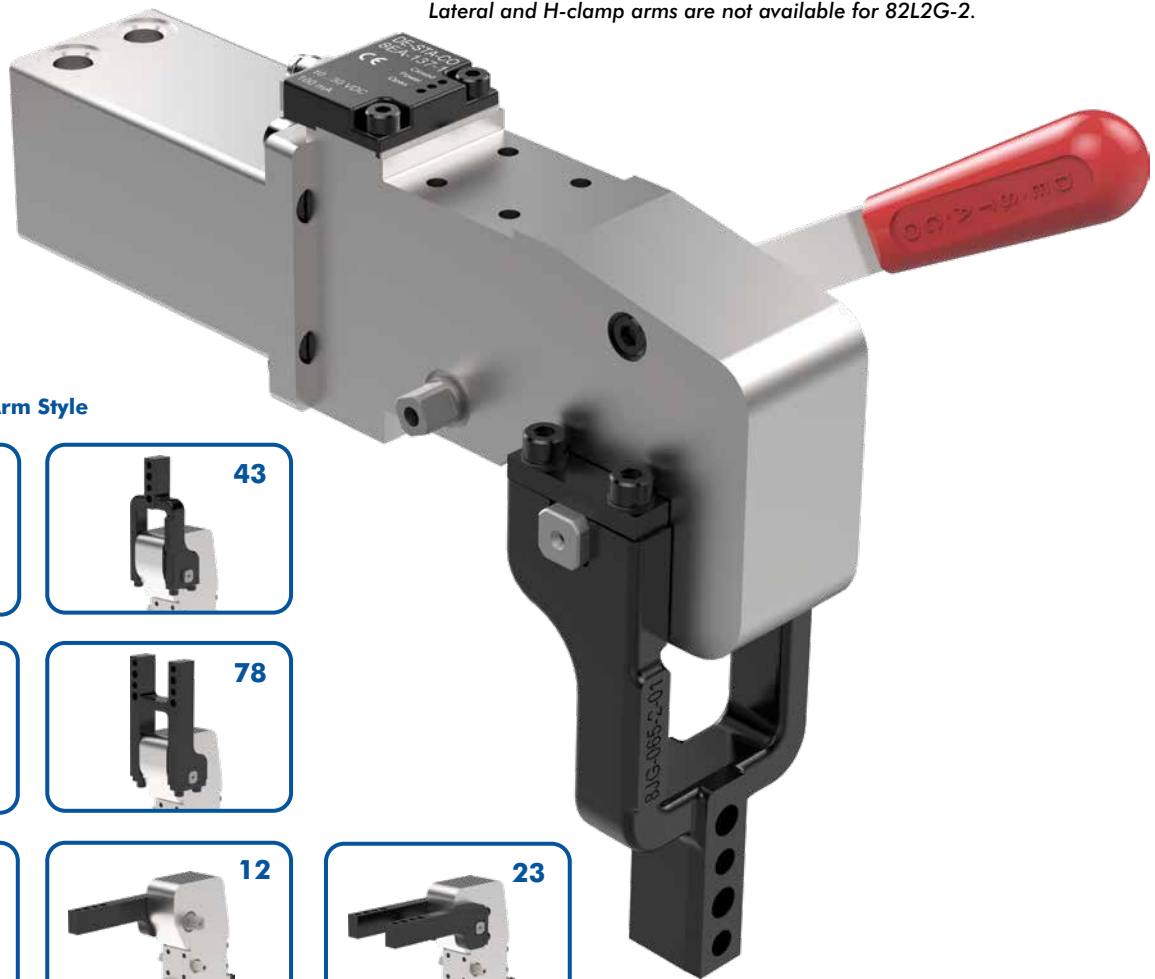


Size	Description
2G-2	25 mm Cylinder (G1/8 Port)
3G-2	32 mm Cylinder (G1/8 Port)
3N-2	32 mm Cylinder (1/8-18 NPT Port)
4G-2	40 mm Cylinder (G1/4 Port)
4N-2	40 mm Cylinder (1/4-18 NPT Port)

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



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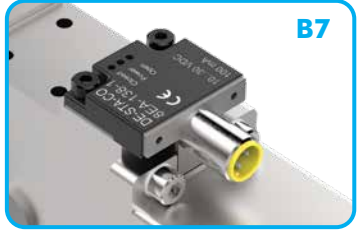
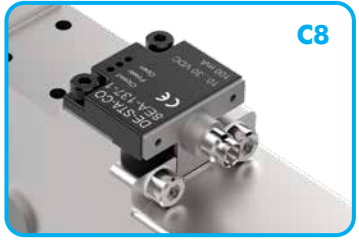
Hand Lever	Description
0	No Hand Lever
H	With Hand Lever

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°



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



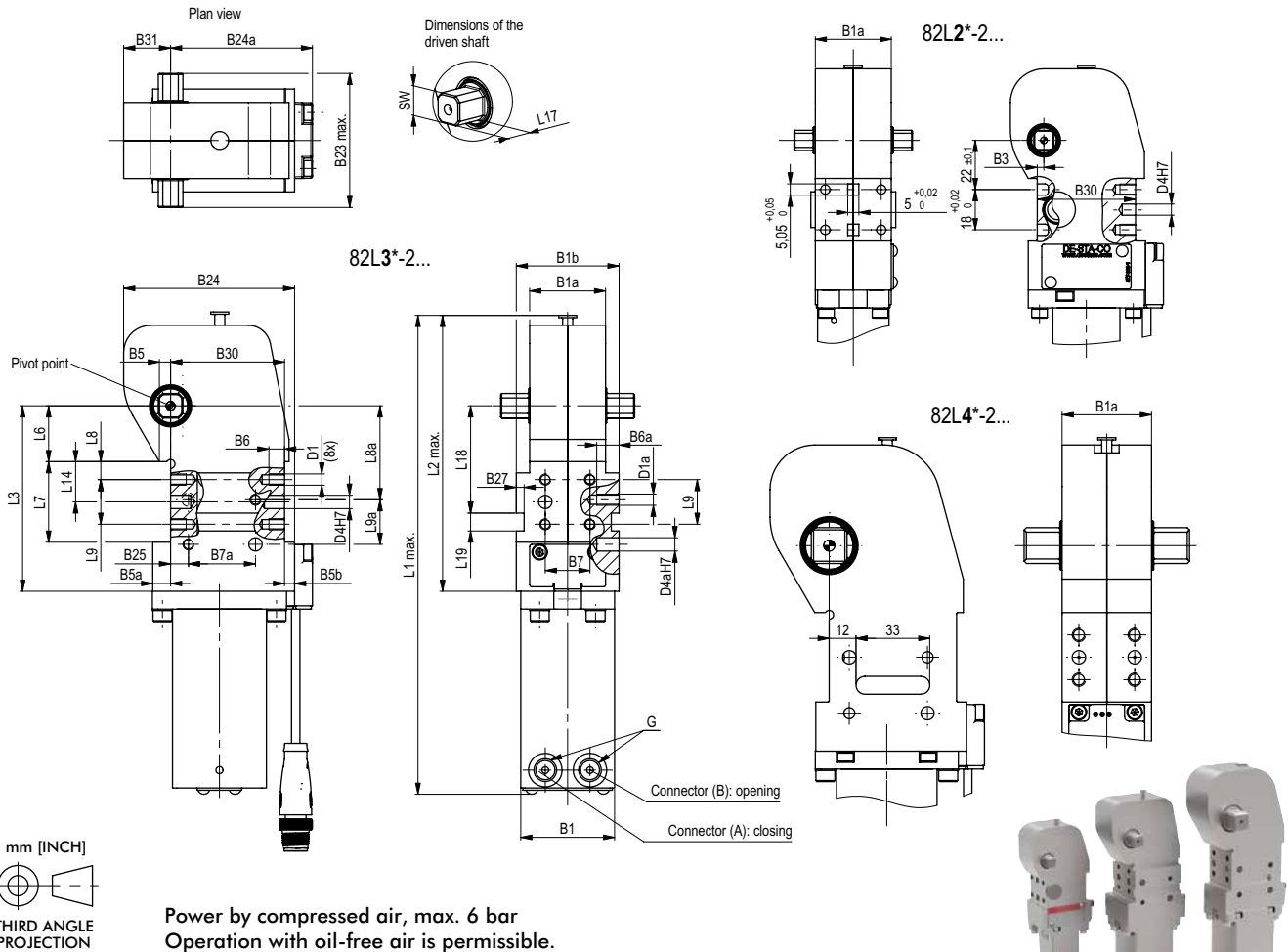
2G
 Max Holding Torque
 75 Nm [55.3 ft-lb]
 Max Clamping Torque
 25 Nm [18.4 ft-lb]
 at 5 bar [72 psi]

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]

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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

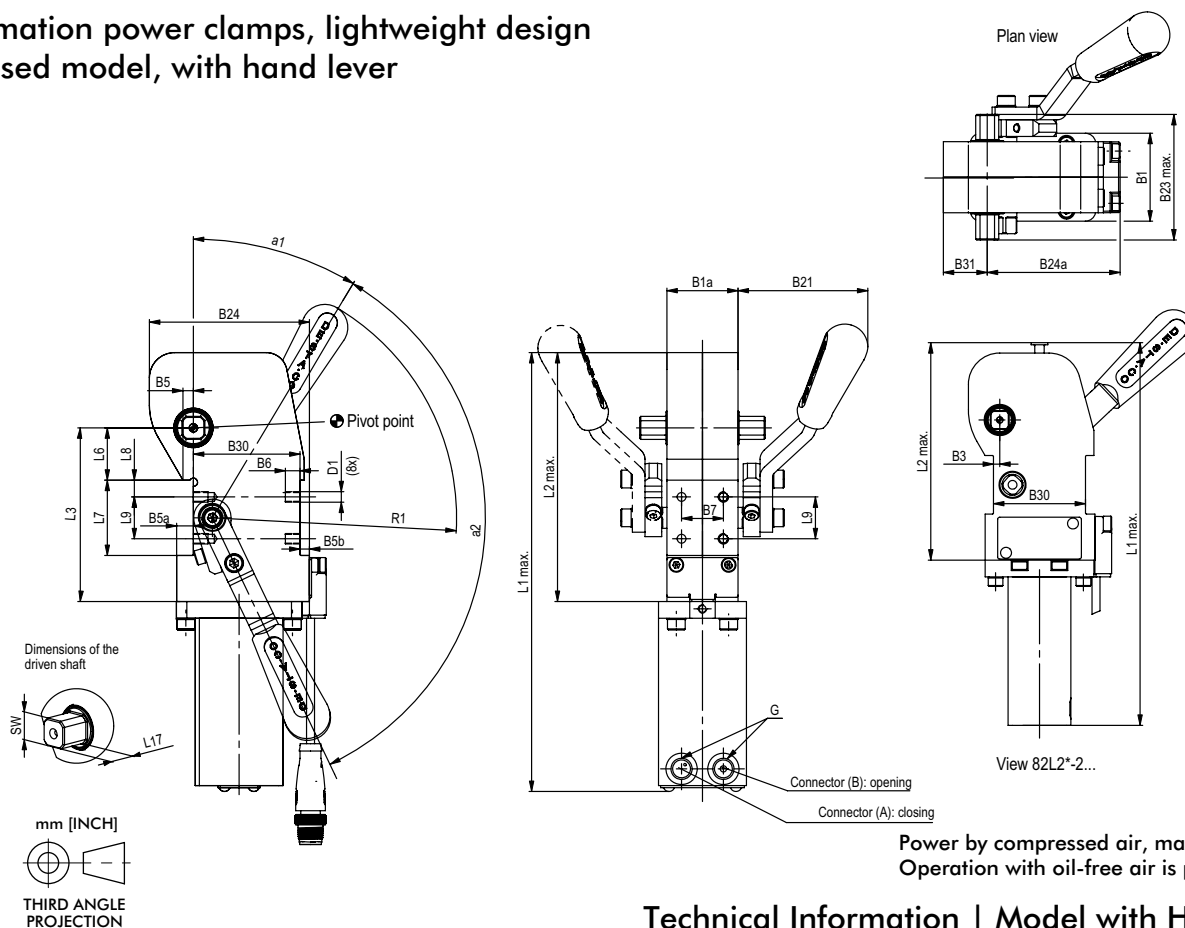
Model	B1	B1a	B1b	B3	B5	B5a	B5b	B6	B6a	B7	B7a**	B23	B24	B24a	B25	B27	B30	B31
										± 0,1	± 0,1	max.			+0,1		± 0,1	
82L2G-2...	32	34	-	3	4	4	4,5	7	-	25	-	53	60,5	53,5	-	-	44	15
82L3.-2...	42	34	46	-	5	8	4,5	7	10	20	30	60	76,5	63,5	8	3,5	51	21
82L4.-2...	45	40	-	-	6,5	6	4,5	10	10	25	35	74	88	69,5	9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

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

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

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

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



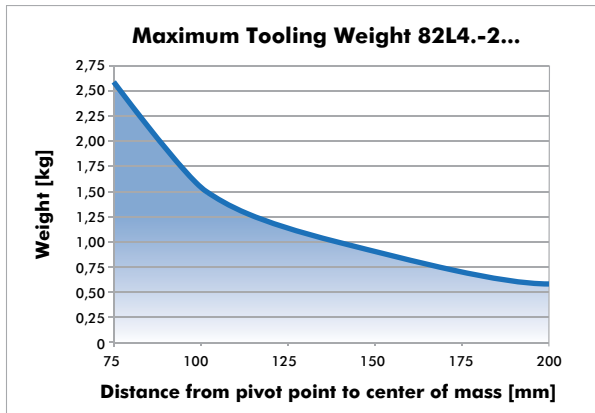
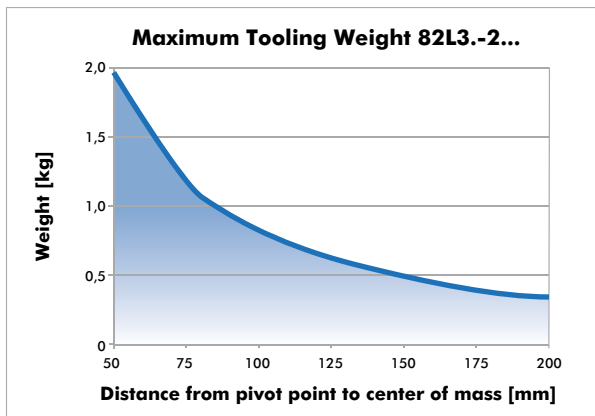
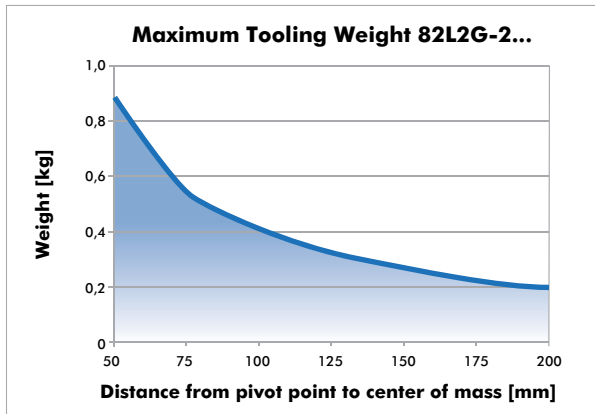
Technical Information | Model with Hand Lever

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

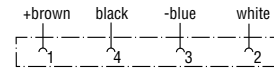
Enclosed Pneumatic Power Clamps | Lightweight Modular | Technical Specifications



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

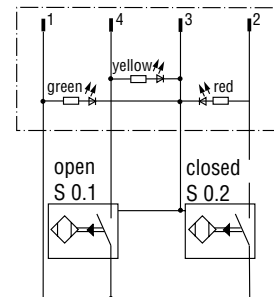
Inductive version: B8, B7, C8

Pin Assignment

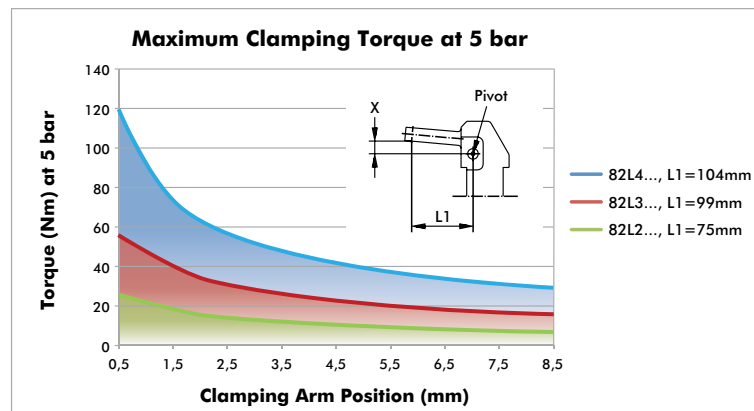


Plug M8x1

Plug M12x1



ATTENTION:
Calculation tool available. Please consult factory.



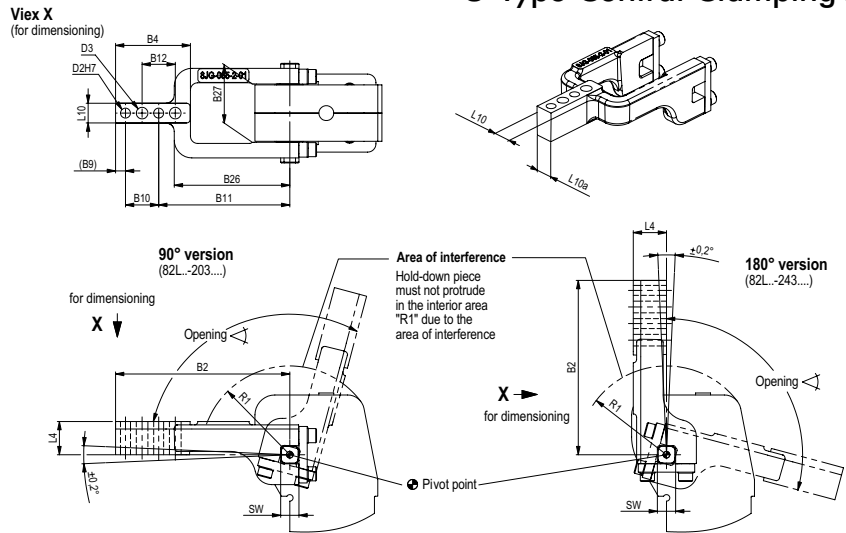
All data refers to a pneumatic pressure of 6 bar and to a opening and closing time of 1 second, as well as to the center of gravity of the complete construction directly attached to the clamp arm related to the fixed fulcrum.

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

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

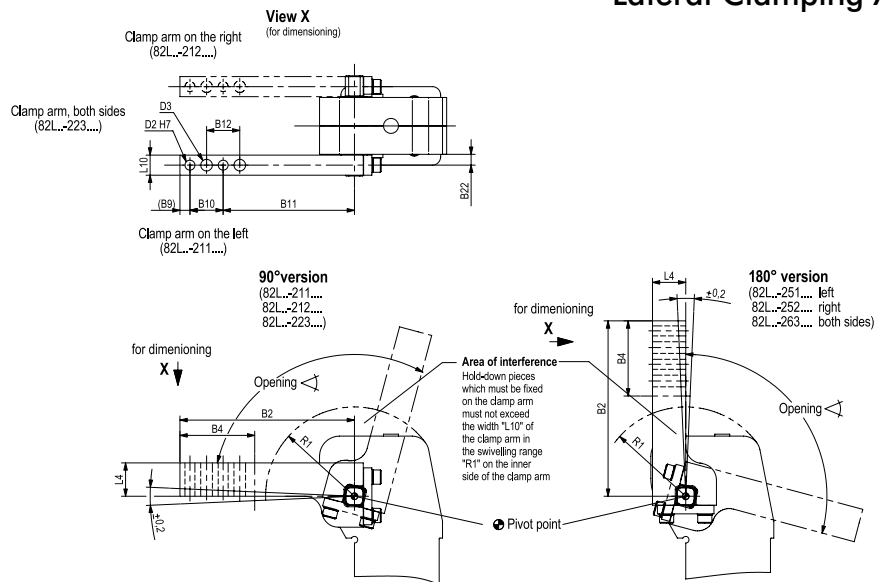


U-Type Central Clamping Arms



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.												H7			~	~
82L2G-2...	8JG-075-3-01	105°	105°	0,3	93	45	8	20	65	20	58	36	4	6,5	20	12	-	45	9
82L3.-2...	8JG-065-2-01	105°	105°	0,37	105	45	6	20	79	20	69	35,1	6	7	20	12*	11,4	55	11
82L4.-2...	8JG-067-2-01	105°	105°	0,5	110	45	6	20	84	20	78	42,1	6	7	22	15*	14,3	58	16

Lateral Clamping Arms

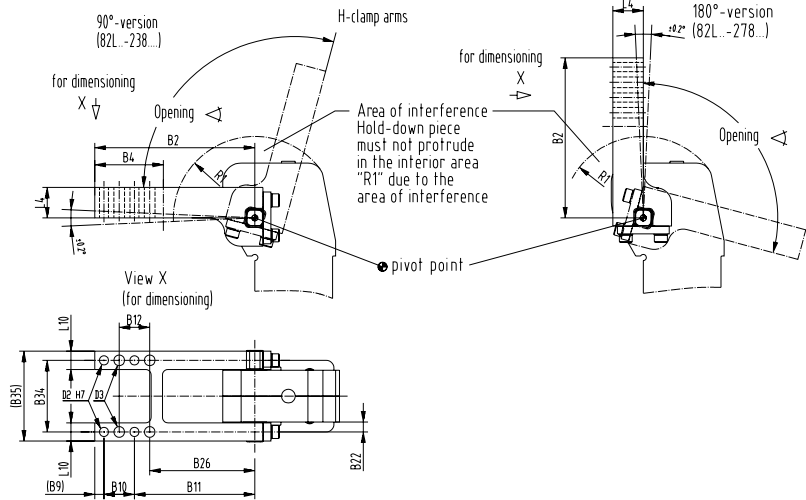


Model	Order no. for set of Lateral clamping arms	Opening angle for 90° - Version	Opening angle for 180° - Version	Weight [kg]	B2	B4	B9	B10	B11	B12	B22	D2	D3	L4	L10	R1
		max.	max.											H7		
82L3.-2...	8JG-066-1-01	105°	105°	0,25	105	45	6	20	79	20	6,5	6	7	20	12	55
82L4.-2...	8JG-068-1-01	105°	105°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

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

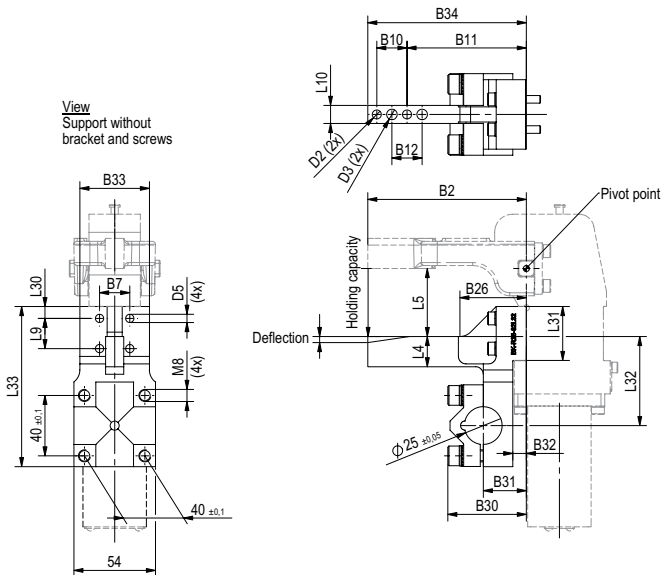
Enclosed Pneumatic Power Clamps | Lightweight Modular | Dimensions and Technical Specifications

H- Clamping Arms



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

Counter-Support



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

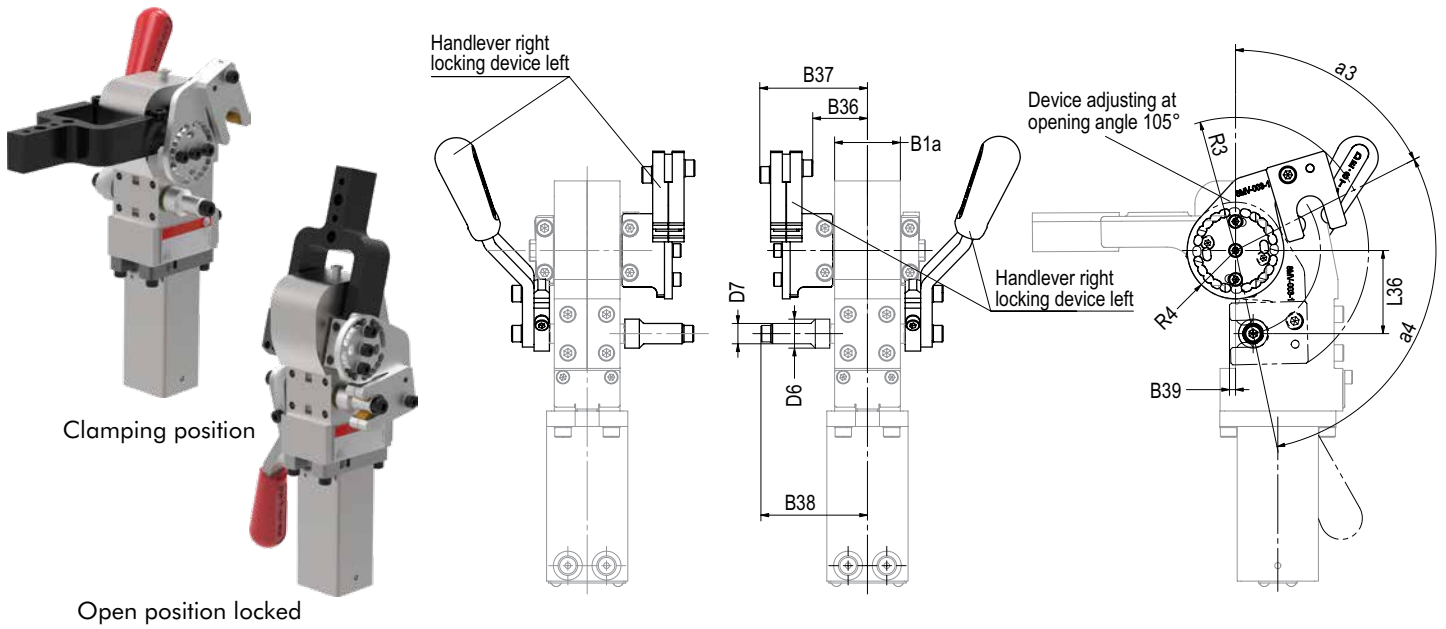
Model	Fit for Model	Holding Capacity max.	Deflection [mm]	Weight [kg]	B2	B7*	B10	B11	B12	B26**	B30**	B31**	B32**
		[N]											
BK-R25-82L25-1	82L2_	914	0,2	0,4	93	25	20	62	20	42	55	31,5	11
BK-R25-82L32-1	82L3_	660	0,16	0,5	105	20	20	79	20	44	52	28,5	9
BK-R25-82L40-1	82L4_	2000	0,37	0,56	110	25	20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

Model	B33	B34	D2	D3	D5	L4	L5	L9	L10	L30	L31	L32	L33
			\varnothing H7	\varnothing	\varnothing	$\pm 0,1$		$\pm 0,1$			-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


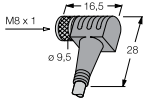

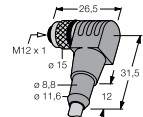
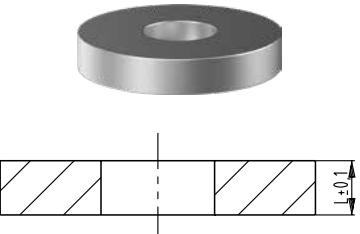
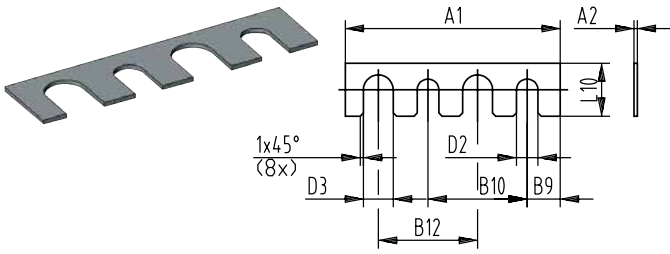
Hold Open Device



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

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

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		0,1						
		82ZB-SH4002		0,2						
		82ZB-SH4005	42	0,5	6,5	7	6	20	20	11,8
		82ZB-SH4010		1,0						
		82ZB-SH4020		2,0						
		82ZB-SH4050		5,0						
Spare Parts		Order No. for set 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..				
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			

