

Series **82G80-4** Product Overview

Automation power clamp, heavy-duty design, enclosed and narrow design

Features:

- Dirt-resistant
- Compact, enclosed design
- High holding torques
- Long life cycle
- Wide range of clamping arm variants
- Mounting areas at front, back and sides
- Toggle action mechanism
- Manual unlocking in case of pressure drop
- Inductive sensing module with LED display
- Shielded body

Application:

Clamping, holding, gripping and positioning of metal sheets and other parts, mainly in jigs and handling systems for high clamping and holding forces.

Key areas of application:

Automotive manufacturing, jig and general mechanical engineering.

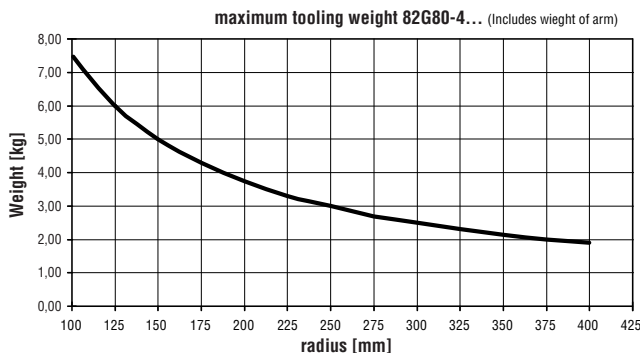


**82G80-423C800B**

Automation power clamp, heavy-duty design

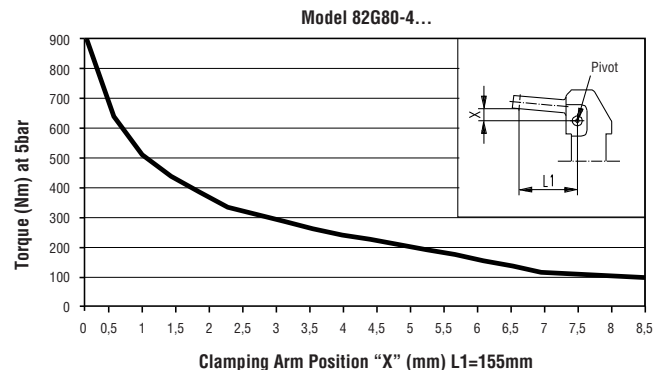
Model w/ ind. sensing Connector M12x1, parallel with cylinder	Clamping position	Standard opening angle	Driven shaft for clamping arm variants	Max. holding torque Nm [ft lb]	Clamping torque at 5 bar Nm [ft lb]	Piston Ø mm [in]	Air con- sumption per double stroke at 5 bar dm <sup>3</sup> [ft <sup>3</sup> ]	Weight ~ kg [lbs]
<b>82G80-423C800B</b>	horizontal	135°	lateral-both sides lateral-left lateral-right or U-central	2200 [1623]	850 [625]	80 [3.1]	5,8 [0.2]	14 [30.9]
<b>82G80-463C800B</b>	vertical	96°						

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

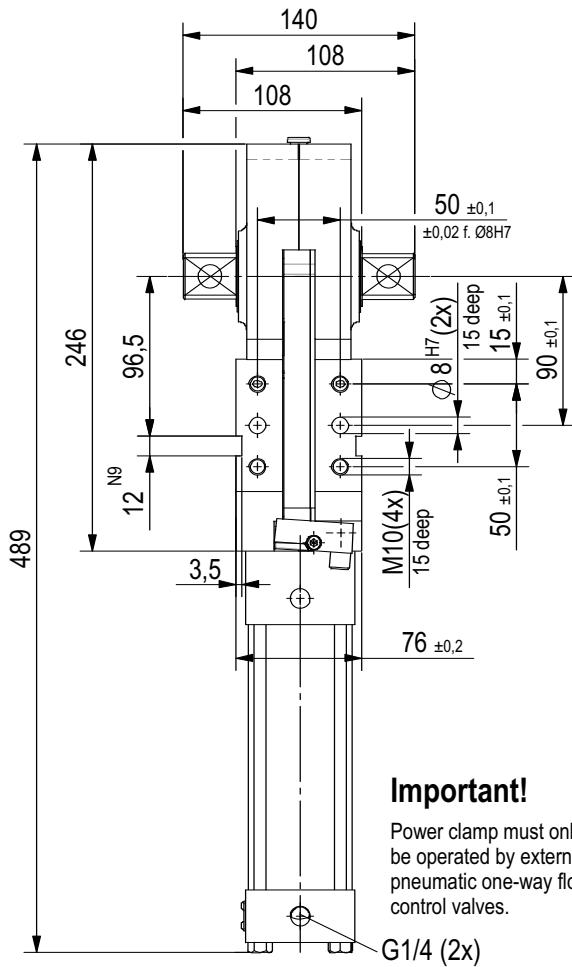


All details apply under an air pressure of 6 bar and opening and closure times of 1 second each.

Diagram of clamping force (at 5 bar)

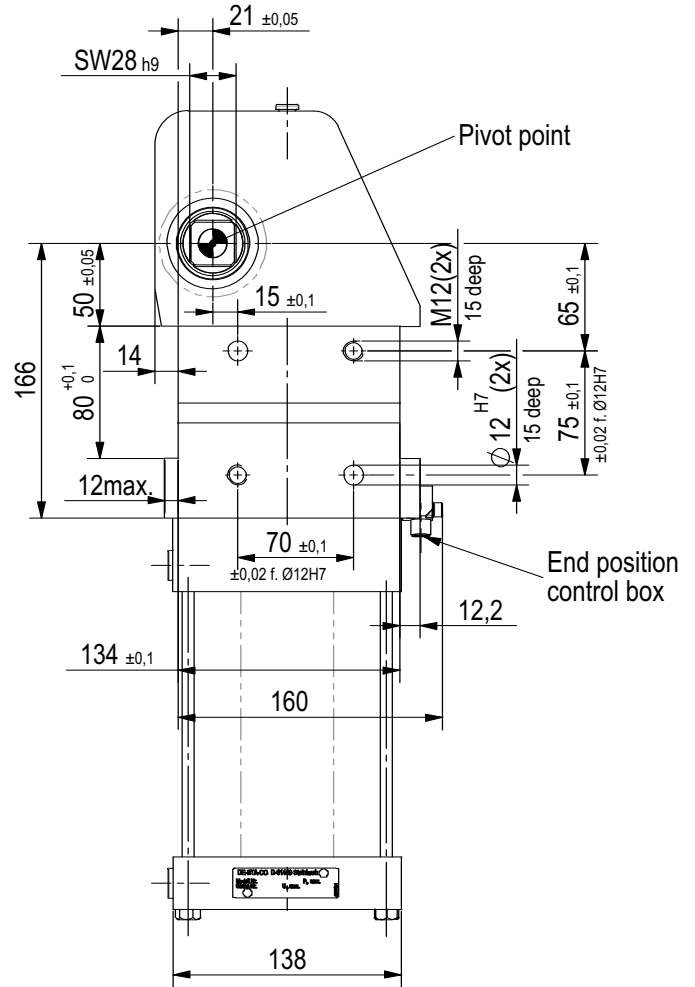


Series 82G80-4 Standard Dimensions

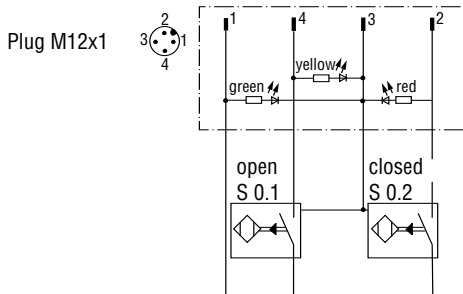
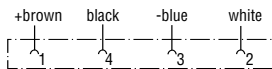


**Important!**

Power clamp must only be operated by external pneumatic one-way flow control valves.



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



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

**Inductive design:**

- C8 Connector plug M12x1

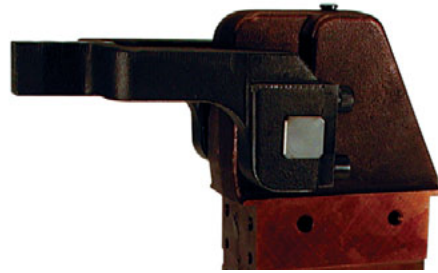
Series **82G80-4** Clamping Arm Variants

Clamping arm design

U-type central clamping arm

Clamping position

horizontal or vertical



U-type Central clamping arm, horizontal clamping position

Technical data U-type central clamping arms

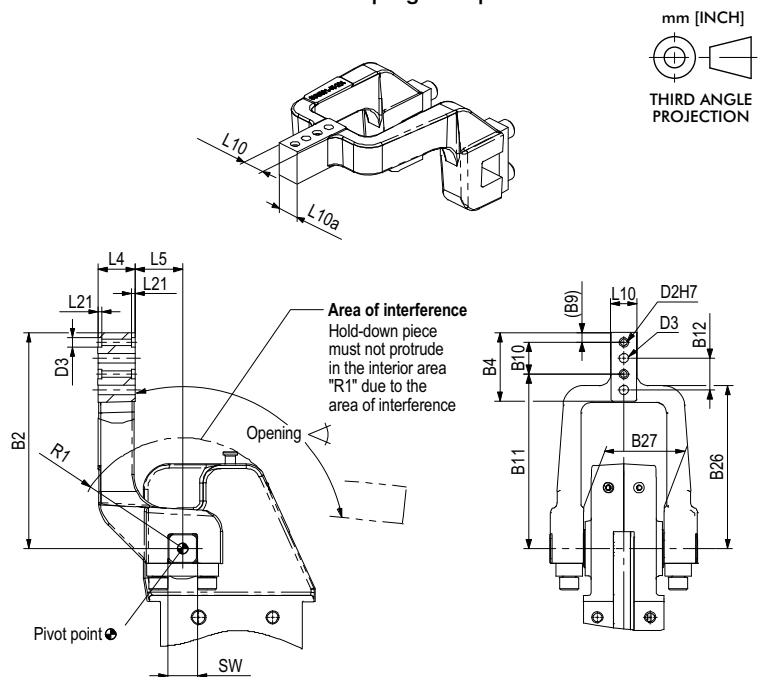
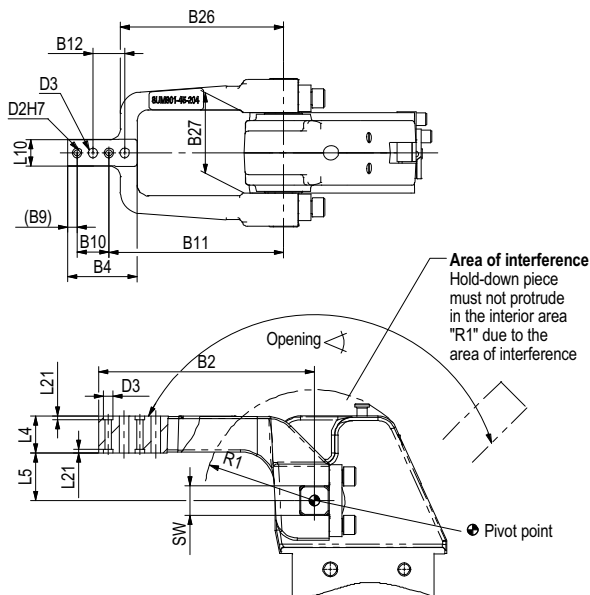
Model	Order no. U-type central clamping arm	Opening angle for clamping position		Weight [kg]	B2	B4	B9	B10 ±0,02	B11 +0,1
		horizontal	vertical						
<b>82G80-4..C800B</b>	<b>8UM801-45-204</b>	135°	96°	4,1	204	65,5	9	30	165
	<b>8JG-169-2-01</b>	135°	96°	3,5	179	65,5	9	30	140

Model	Order no. U-type central clamping arm	B12 ±0,2	B26	B27	D2 H7	D3	L4 ±0,1	L5*** ±0,2	L10 ±1,2	L10a ~	L21	R1	SW J7
	<b>8JG-169-2-01</b>	30	129	76,1	6	9	35	20	25	23,7	3,5	108	28

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

Horizontal clamping arm position

Vertical clamping arm position



Series **82G80-4** Clamping Arm Variants

Clamping arm design

- lateral / left
- lateral / right
- lateral / both sides

Clamping position

- horizontal or vertical
- horizontal or vertical
- horizontal or vertical



Lateral clamping arm, horizontal clamping position

Technical data lateral clamping arms

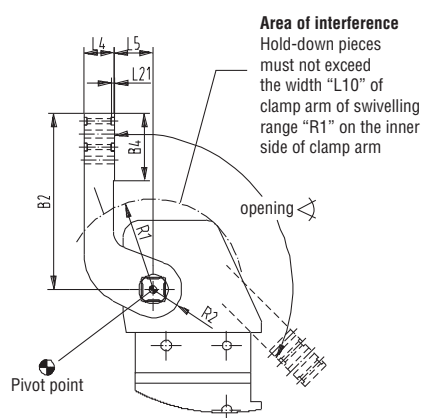
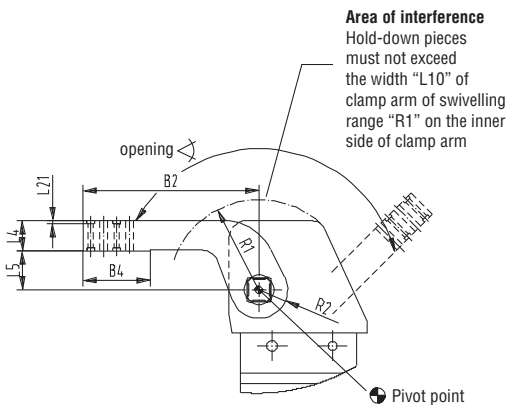
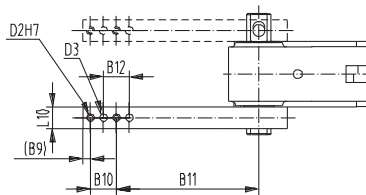
Model	Order No. lateral clamping arm	Opening angle for clamping position		Weight [kg]	B2	B4	B9	B10 ±0,02	B11 +0,1
		horizontal	vertical						
82G80-4..C800B	8S801-45-204	135°	105°	2,2	204	78	9	30	165
	8JG-1179-1-01	135°	105°	2,1	179	78	9	30	140

Model	Order No. lateral clamping arm	B12 ±0,2	D2 H7	D3	L4 ±0,1	L5*** ±0,2	L10	L21	R1	R2
	8JG-1179-1-01	30	6	9	35	20	30	--	108	35

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

Horizontal clamping arm position

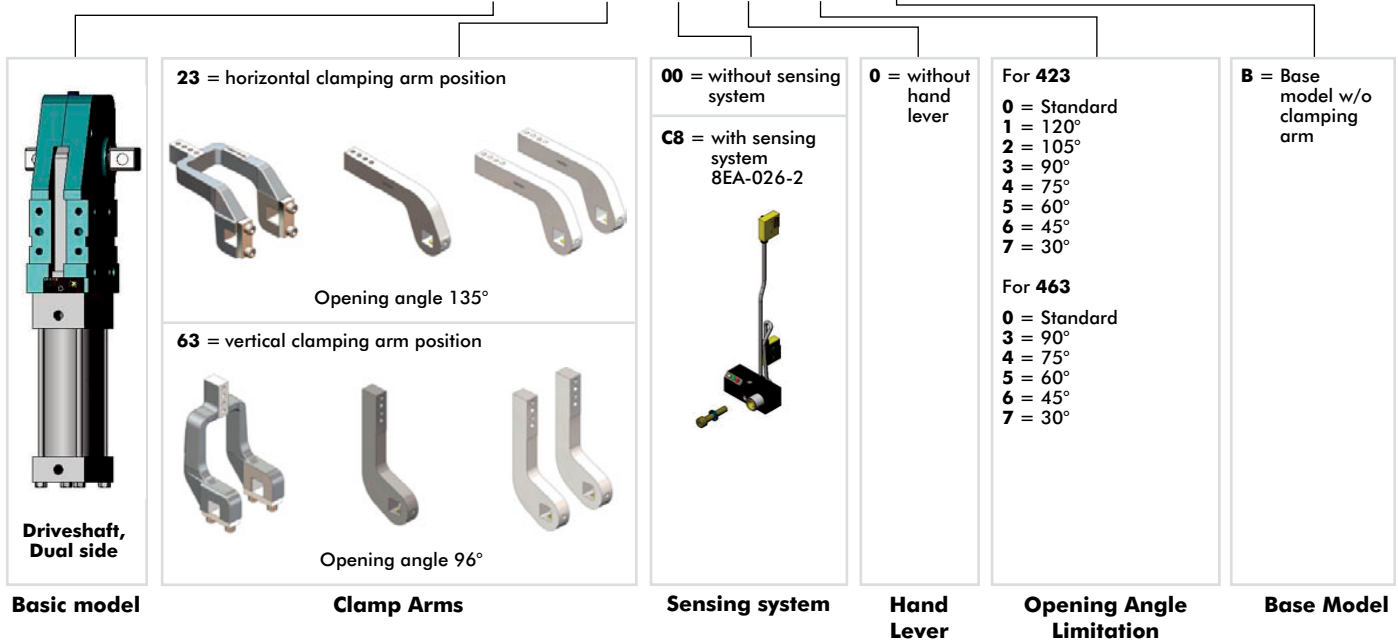
Vertical clamping arm position



Series **82G80-4** Ordering Information

Model numbering code for 82G80-4....

Example Order No.: **82G80-4 23 C8 0 0 B**


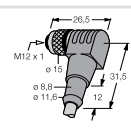


Spare parts

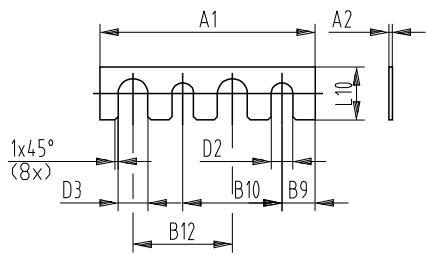
Specification	Order no. for structural component 82G80-4..C800B
Cylinder	8PW-1004-1
Seal kit	8PW-1001-1-00
Sensing kit C8	82G80-4C8
Sensing system C8 Connector plug M12x1	8EA-026-2

Series 82G80-4 Accessories

Clamping Arms				Order No. for set 82G80-4..C800B	Comment
Clamping arm variant	Clamping arm length	Fulcrum distance	Clamping position		
U-central	179	20	horizontal / vertical	8JG-169-2-01	Set consists of clamping arm, screws, and links.
U-central	204	45	horizontal / vertical	8UM801-45-204	
lateral right/left	179	20	horizontal / vertical	8JG-1179-1-01	Set consists of clamping arm and set screws.
lateral right/left	204	45	horizontal / vertical	8S801-45-204	
lateral both sides					you need 2 sets of clamping arms

Connector cable (1 connector socket & 5 m cable)		Order No.	
connector socket M12x1 straight, 5-pin		8EL-002-1	
connector socket M12x1 angular, 4-pin		8EL-003-1	

Opening angle limitation	Order No.	
120°	8CE-1002-3	Height 9,1 mm
105°	8CE-1000-3	Height 21,1 mm
96°	8CE-220-2	Height 28,6 mm
90°	8CE-1004-3	Height 33,8 mm
75°	8CE-1008-3	Height 46,5 mm
60°	8CE-1012-3	Height 58,2 mm
45°	8CE-1016-3	Height 69,6 mm
30°	8CE-1020-3	Height 81,0 mm

Shim for clamping arm	Order No.	A1	A2	D2	D3	B9	B10	B12	L10
	82ZB-SH5001		0,1						
	82ZB-SH5002		0,2						
	82ZB-SH5005	65	0,5	6,5	9	10	30	30	16
	82ZB-SH5010		1,0						
	82ZB-SH5020		2,0						
	82ZB-SH5050		5,0						