

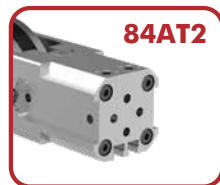
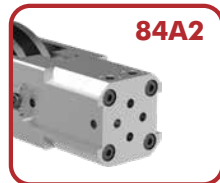
84A2 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Ordering Information



Body Style Options

- Description
- 84A2 Standard
 - 84AT2 Sensor T-Slot



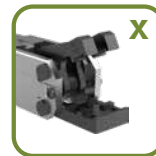
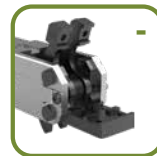
Porting Options

- Description
- 1 (2) M5
 - V (2) G1/8



Jaw Opening Options

- Description
- 72° Jaw Opening (Std.)
 - X 30° Jaw Opening
 - Y 45° Jaw Opening



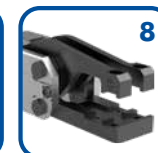
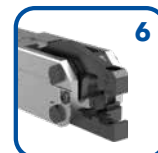
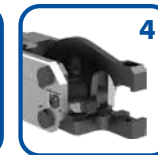
Jaw Orientation Options (Option 8 Only)

- Description
- "Blank" Double Jaw
 - L Single Left Jaw
 - R Single Right Jaw



Jaw Arrangement Options

- Description
- 1 Double Upper, Straight Design
 - 2 Double Upper, 90° Design
 - 4 Single Upper, Left, Straight Design
 - 6 Single Upper, Right, Straight Design
 - 7 Double Upper, Straight Design, Drop Jaw
 - 8 Double/Single Upper Extended Jaw
 - 0 Double Upper, 45° Offset Design
 - 9 Fixed Upper, Double Lower Jaws, 90° Design:
 [84A2/84AT2 (-)1/V 9] 45° Jaw Opening Angle Std.
 [84A2/84AT2 (X)1/V 9] 30° Jaw Opening Angle Std.



Specifications	Unit	
Piston	mm	25
Actuation Time (open/close)	sec	<0,1
Air Consumption per Double Stroke at 6 bar	L	0,32

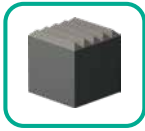
84A2 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Ordering Information

Gripper Teeth, Points and Crown Options (Upper and Lower)

Steel Teeth

- 00** None
- BA** Hardened - 8JZ-027-1
- BD** Hardened (Upper) - 8JZ-049-1



- BB** Soft Steel - 8JZ-028-1



High Temperature (84A2 Only)

- FF** Soft Steel - 8JZ-085-1



- EE** Soft Steel - 8JZ-092-1



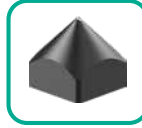
Plastic Teeth*

- 00** None
- KF** 90 Shore - 8JZ-045-2
- *Not suitable for High Temperature applications



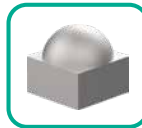
Steel Points

- 00** None
- PH** Hardened - 8JZ-029-1

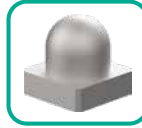


High Temperature (84A2 Only)

- PI** Soft Steel - 8JZ-074-1



- RR** Soft Steel - 8JZ-088-1



Crown Teeth

- 00** None
- SK** Hardened (Lower) - 8JZ-036-2
- SQ** Hardened (Lower) - 8JZ-051-1
- SL** Hardened (Upper) - 8JZ-037-1
- SM** Hardened (Upper) - 8JZ-038-1
- SN** Hardened (Upper) - 8JZ-039-1
- SP** Hardened (Upper) - 8JZ-040-1

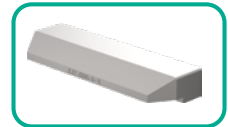


High Temperature (84A2 Only)

- DD** Soft Steel - 8JZ-087-1 (Lower)



- LL** Soft Steel - 8JZ-086-1 (Lower)



Shims for gripper teeth available
Order Separately **8SB-039-1**
Dimensions: 10 x 10 x 1 mm

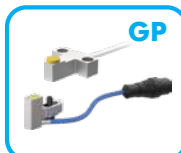
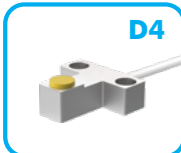


Sensor Options (not suitable for High Temperature applications)

Description

- 00** None
- D4*** Part Present Sensor 3mm Sensing Distance, 2m Cable - 8EA-164-1
- D5** Double Sheet Control Sensor, M12x1 Plug - 8EA-087-1
- D7*** Part Present Sensor, 3mm Sensing Distance, M12x1 Plug - 8EA-165-1
- D8** 2X Position Sensor - 8EA-109-1 (84AT2 Models Only)
- GP*** 1X D4 + 1X D5
- GQ*** 1X D5 + 1X D7
- GK** 2X D5 (not for 84AT2 Models)

*For Jaw Arrangements Options 1, 2, 7, 8, 9 only.



Cable support for **D4** Sensor. Order Separately **8MA-149-1**
Mounted on lower side of gripper (for 84A2-11, 84A2-V1,
84A2-18, 84A2-V8 only) (not for 84AT2 Models)

Cover for Sensing Systems **D5, GP, GQ, GK**
Order Separately **82ZB-185-1**



Mounting Options

Description

- 0** None
- I** Ø20mm Rear Rod 8MA-165-1
- J** Ø25mm Rear Rod 8MA-166-1
- Z** Ø1.00" Rear Rod 8MA-168-1
- L** Ø20mm Apple Core GT-20M-84A2-L-R
- M** Ø32mm Rear Ball GT-32B-84A2-L-R
- N** Ø32mm Flanged Ball GT-32B-84A2-B
- Q** Guards 8MH-054-1 (For Jaw Arrangements Options 1, 4, 6 only)
- V** Rear Flange 8MA-147-1
- W** On-Body Swivel Ball 82ZB-025-2

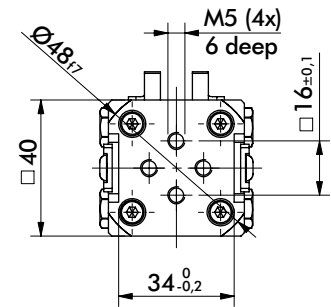
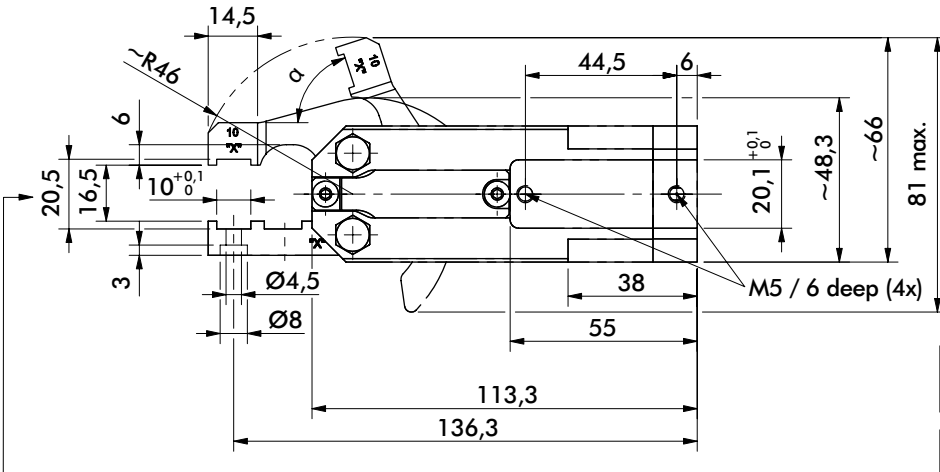
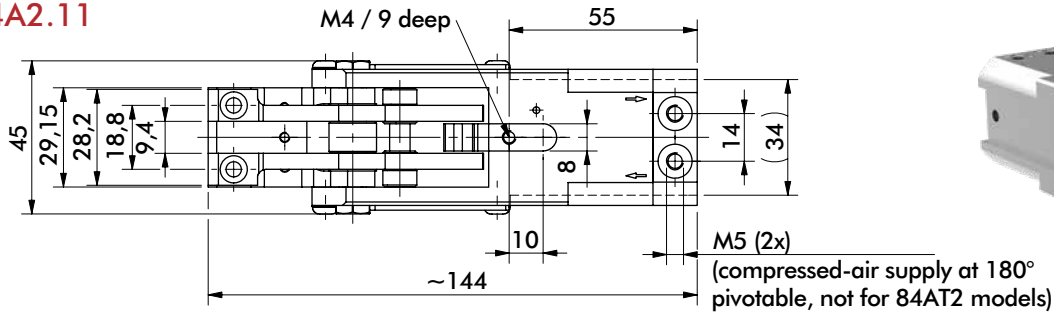


Both Included

84A2..1 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.11

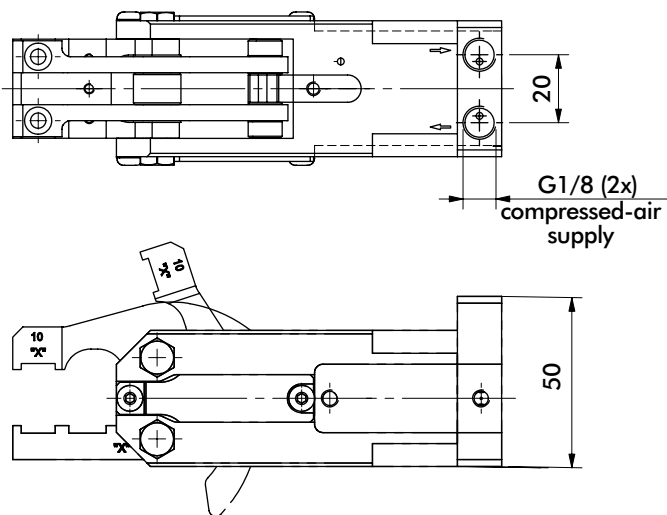


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

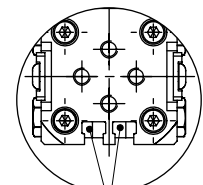
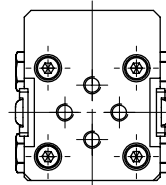
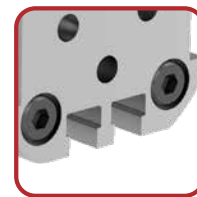
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

84A2.V1



84AT2..1



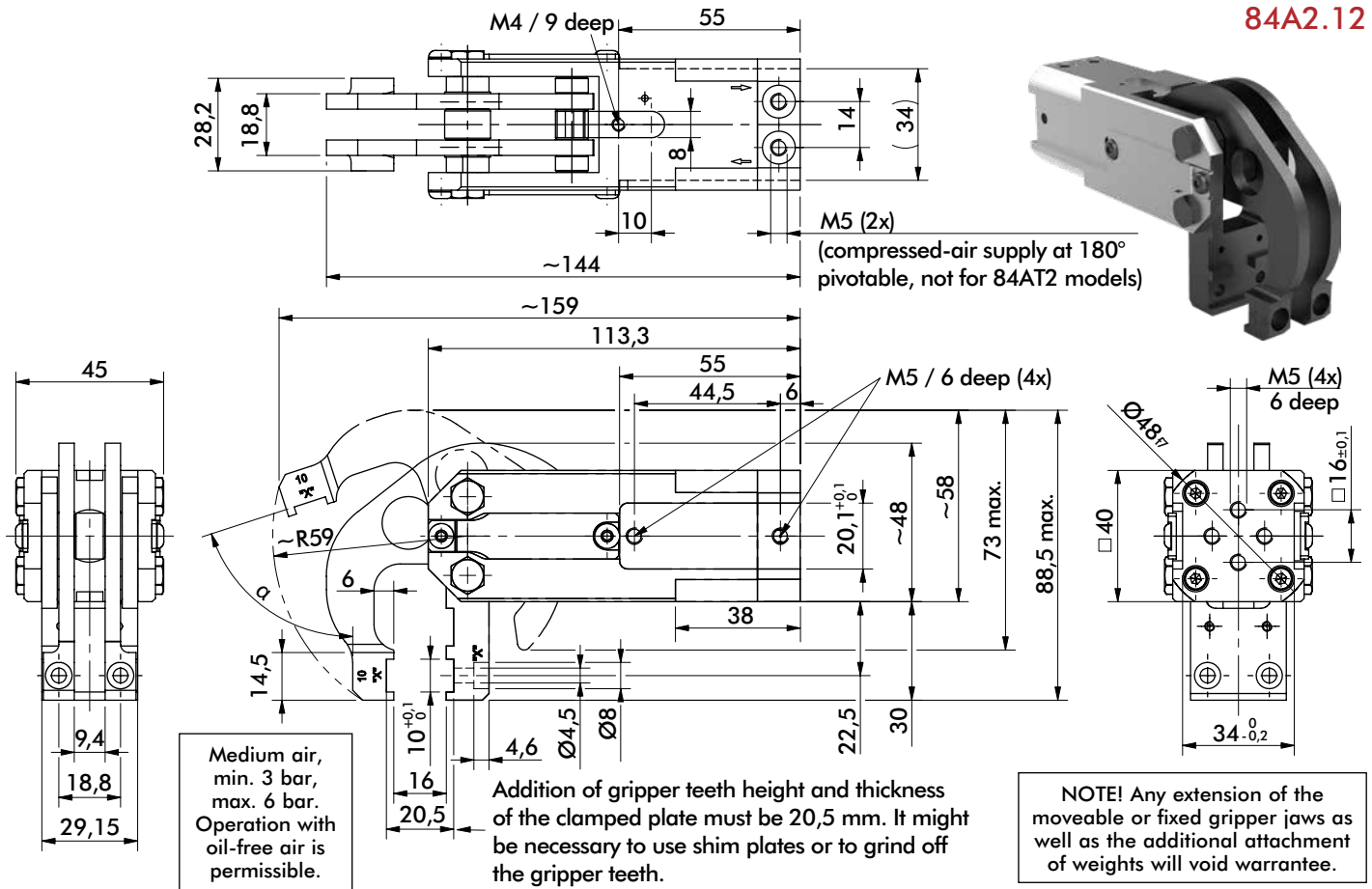
T-groove for sensor

Model	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
84A2..1/84AT2..1			
-	72°		
X	30°	920 [207]	0,6 [1.32]
Y	45°		

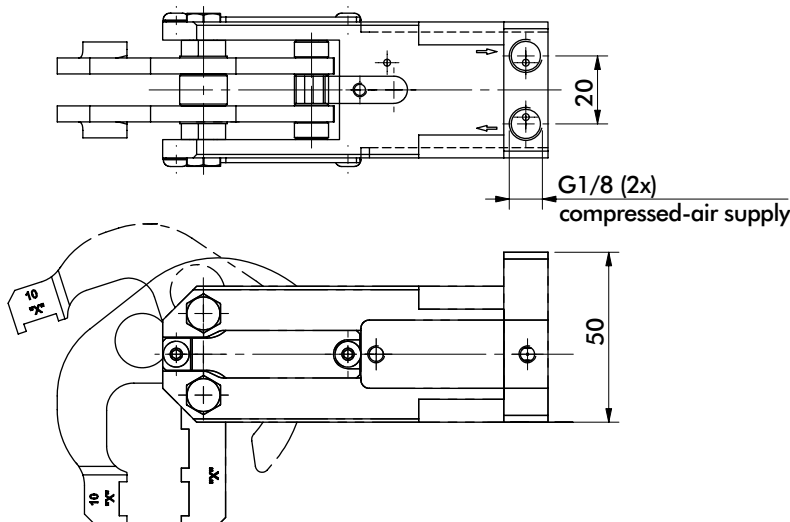
84A2..2 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

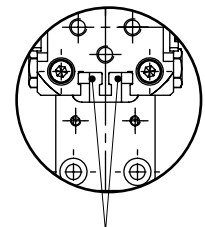
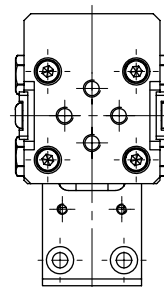
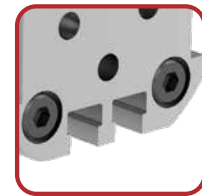
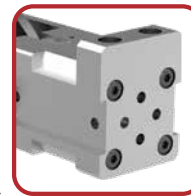
84A2.12



84A2.V2



84AT2..2



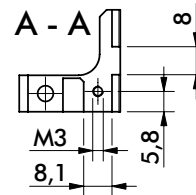
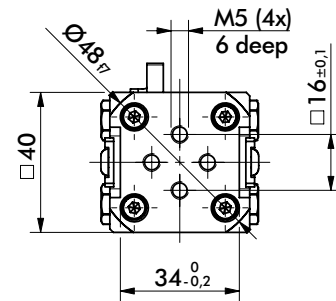
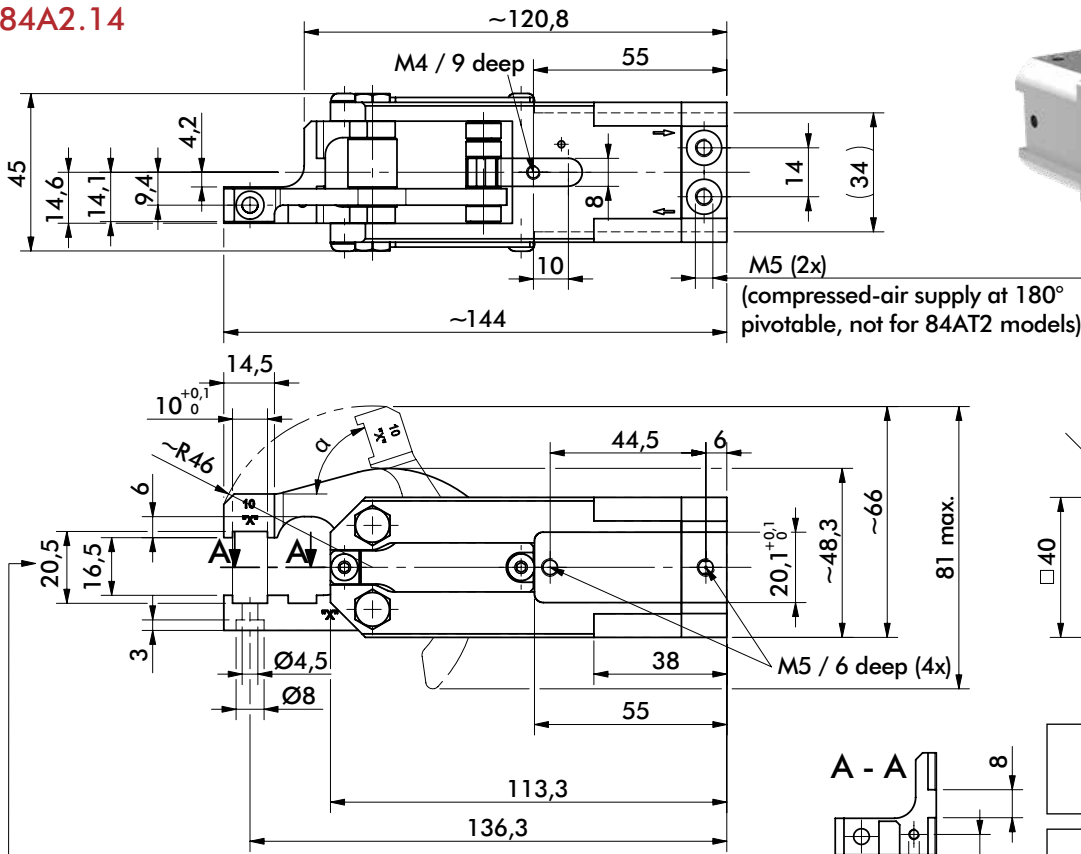
T-groove for sensor

Model 84A2..2/84AT2..2	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°		
X	30°	575 [129]	0,65 [1.43]
Y	45°		

84A2..4 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.14

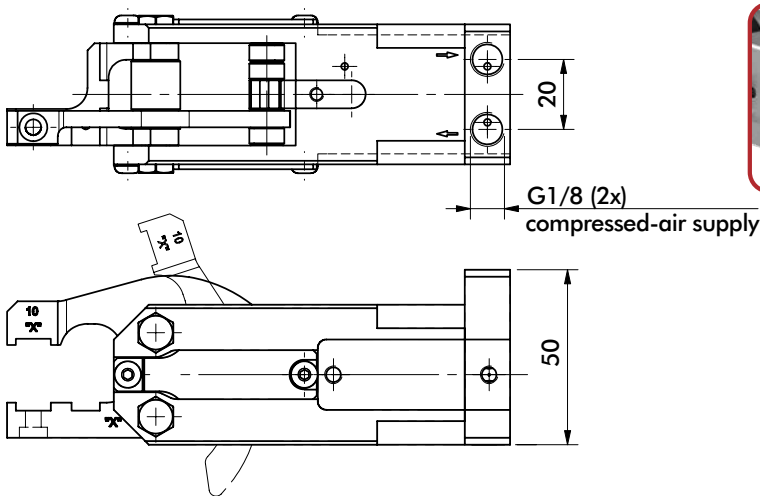


Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

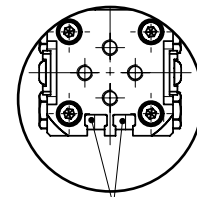
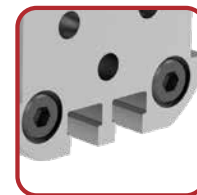
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warranty.

Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

84A2.V4



84AT2..4



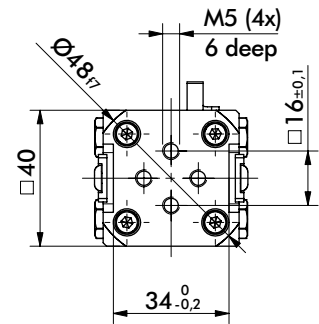
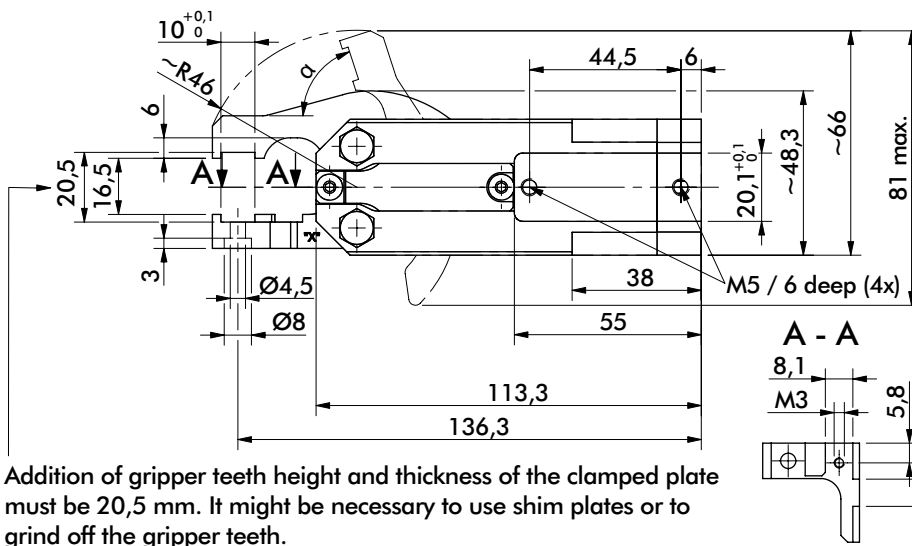
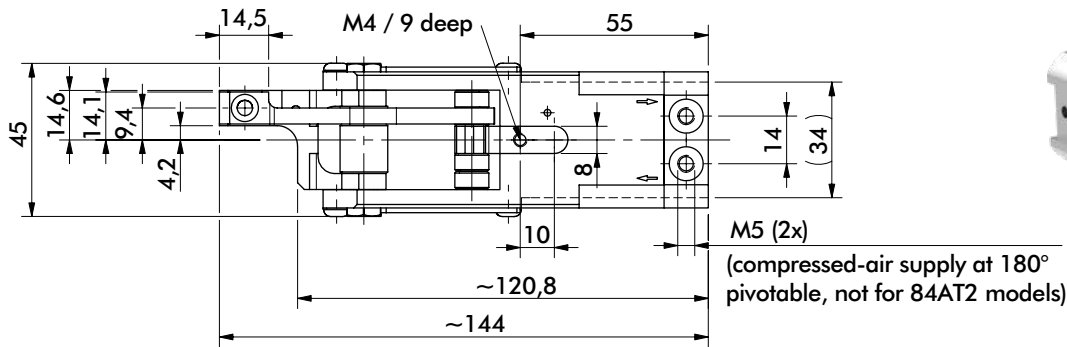
T-groove for sensor

Model	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
84A2..4/84AT2..4			
-	72°		
X	30°	920 [207]	0,5 [1.1]
Y	45°		

84A2..6 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.16

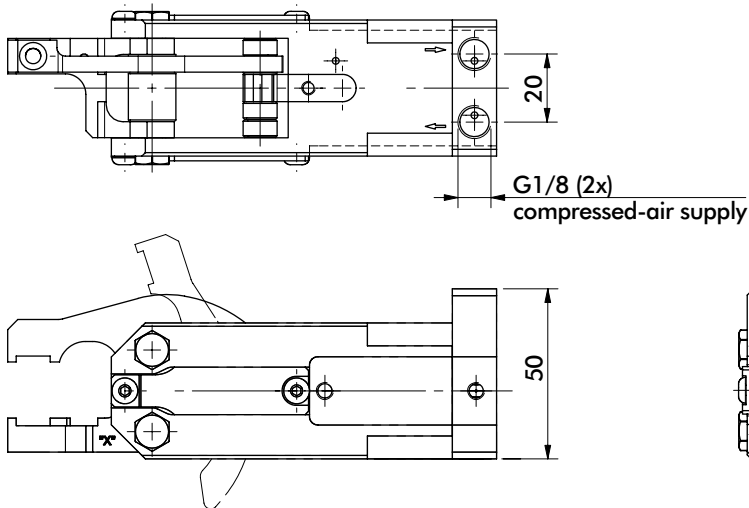


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

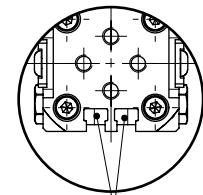
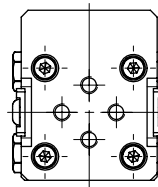
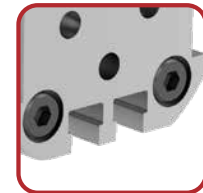
Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V6



84AT2..6



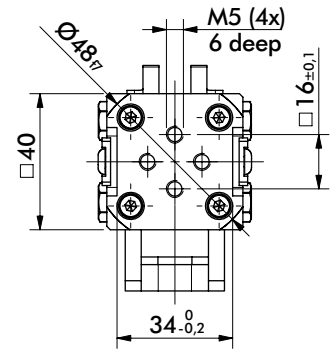
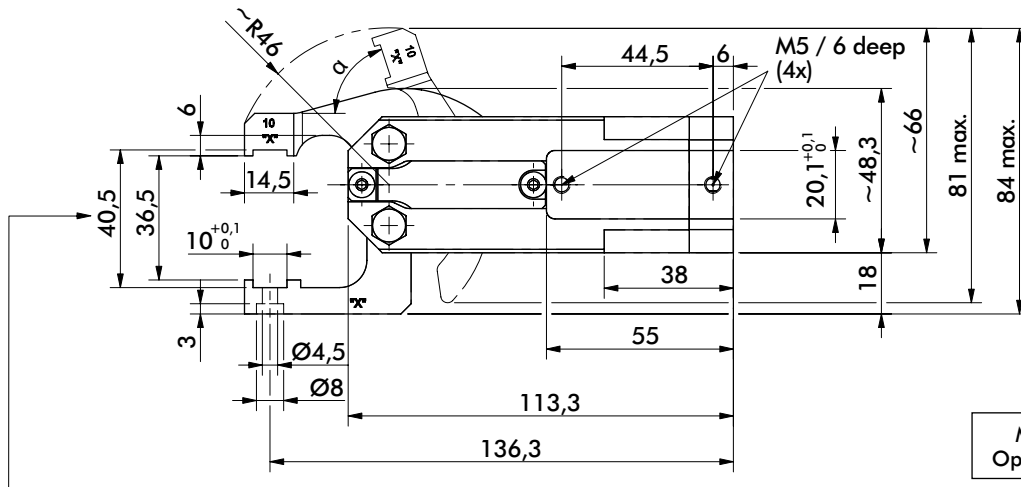
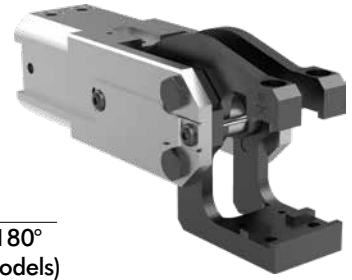
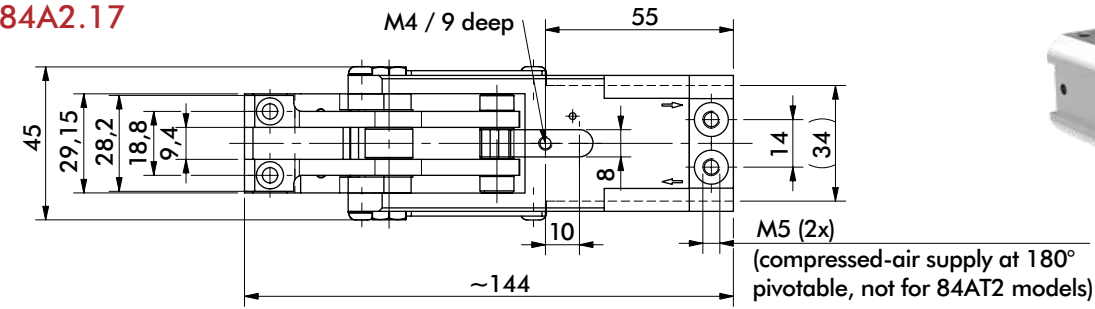
T-groove for sensor

Model 84A2..6/84AT2..6	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	920 [207]	0,5 [1.1]
X	30°		
Y	45°		

84A2..7 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.17

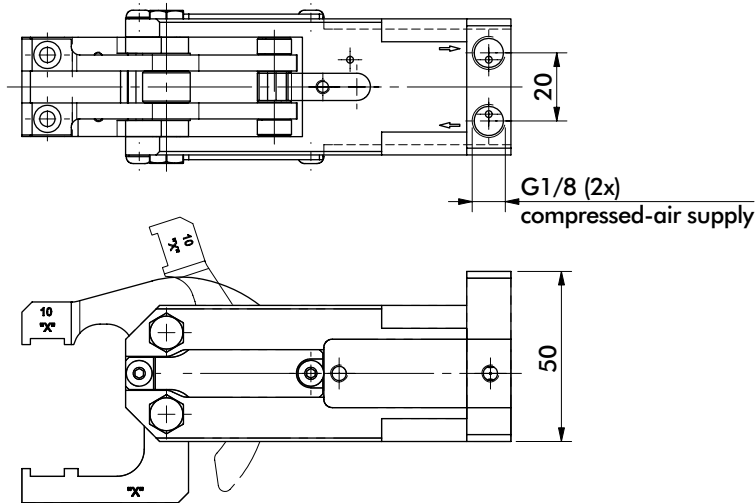


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

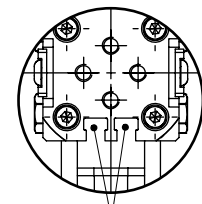
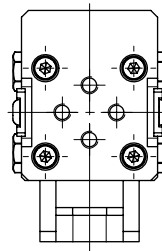
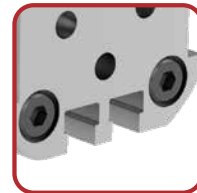
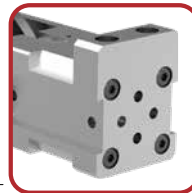
Addition of gripper teeth height and thickness of the clamped plate must be 40,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V7



84AT2..7



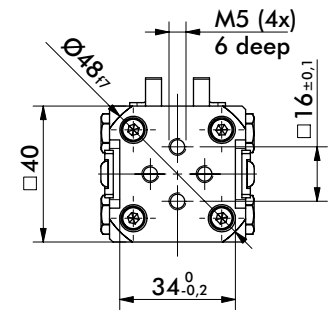
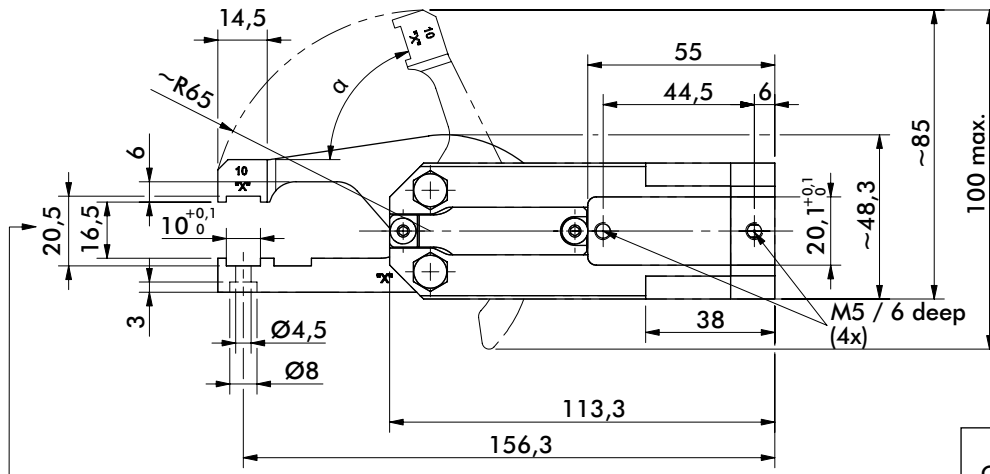
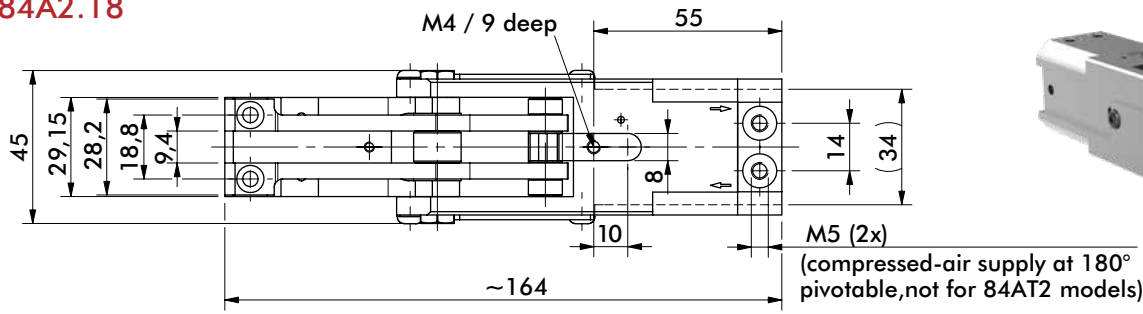
T-groove for sensor

Model 84A2..7/84AT2..7	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°		
X	30°	920 [207]	0,6 [1.32]
Y	45°		

84A2..8 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.18

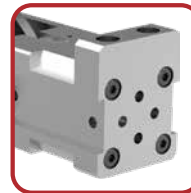
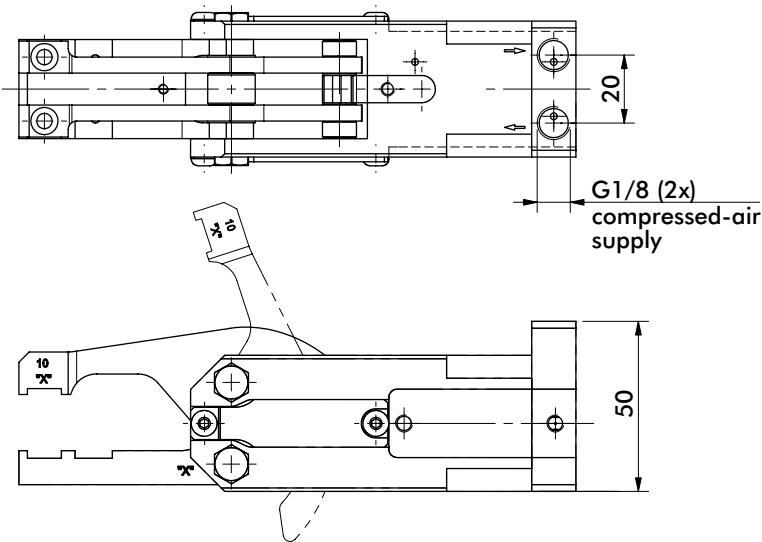


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

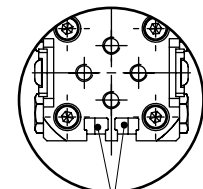
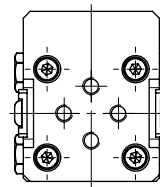
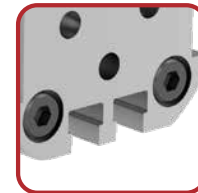
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V8



84AT2..8



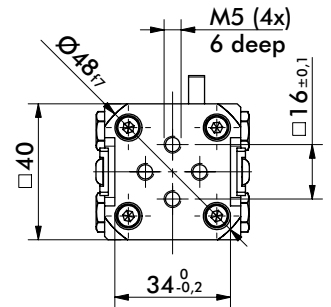
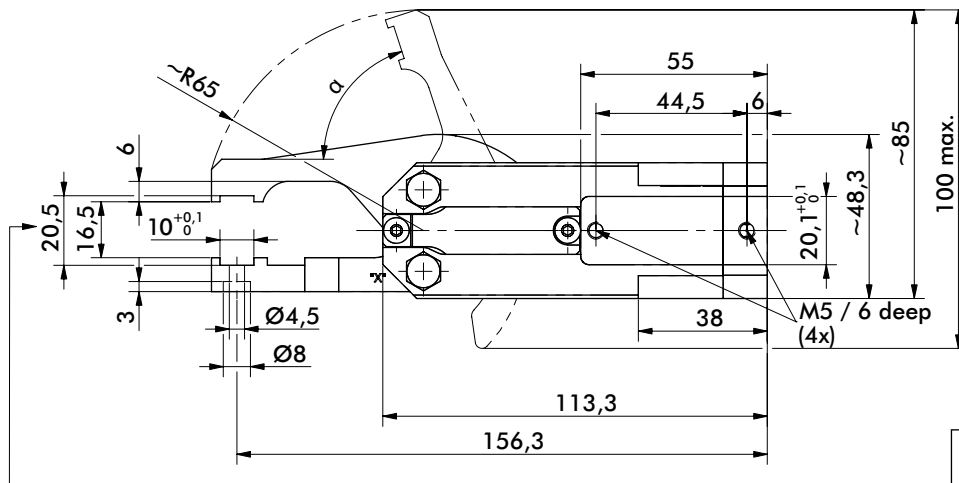
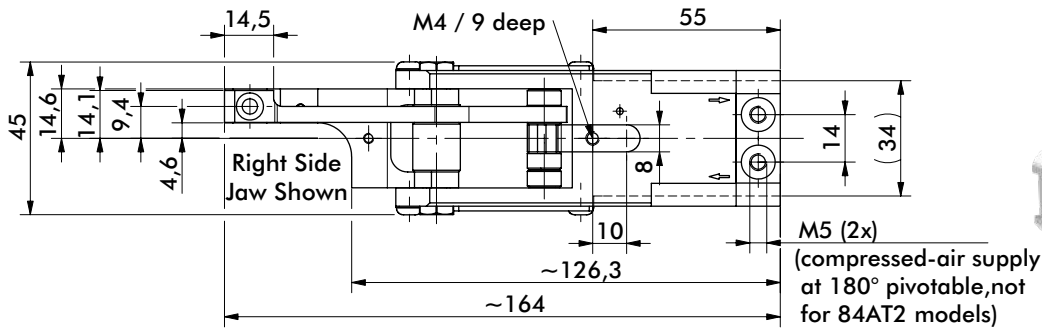
T-groove for sensor

Model 84A2..8/84AT2..8	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°		
X	30°	560 [126]	0,65 [1.43]
Y	45°		

84A2...8 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..18

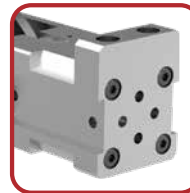
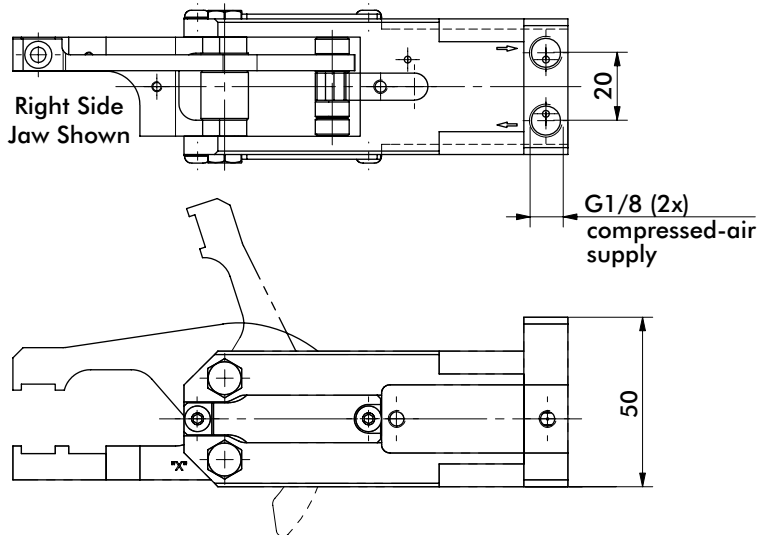


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

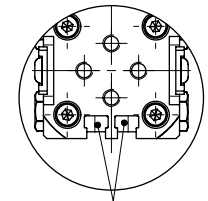
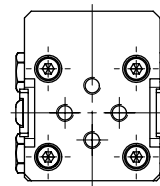
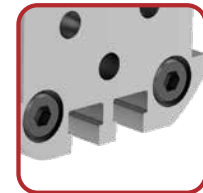
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2..V8



84AT2...8



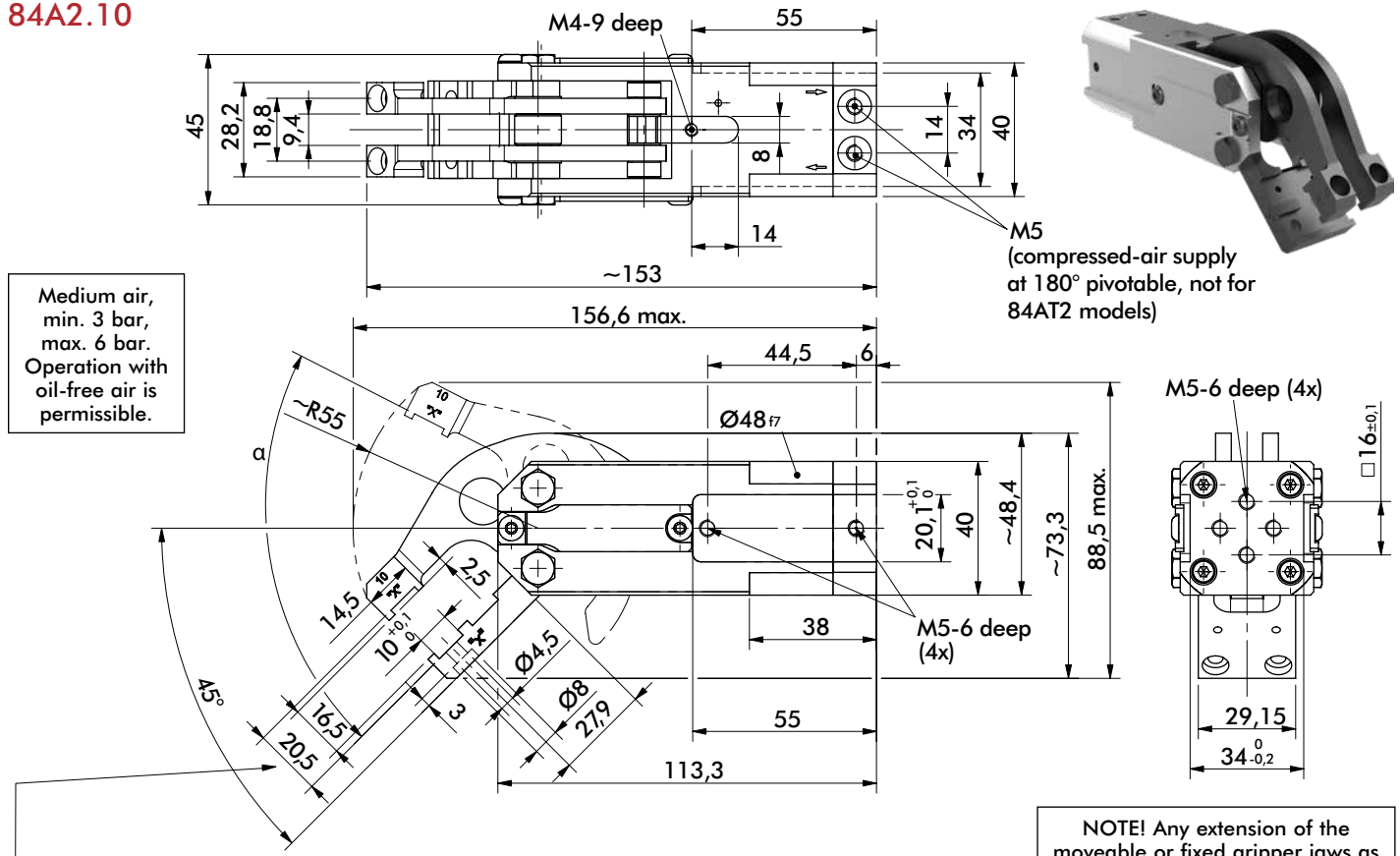
T-groove for sensor

Model 84A2...8/84AT2...8	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°		
Y	30°	560 [126]	0,65 [1.43]
X	45°		

84A2..0 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

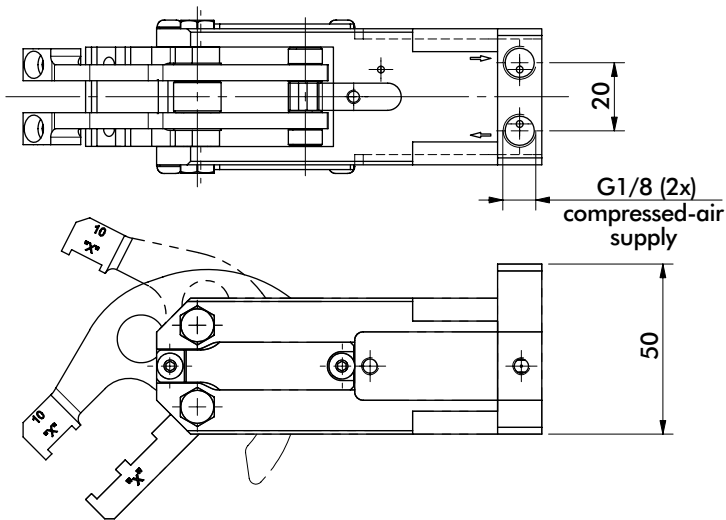
84A2.10



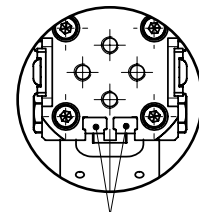
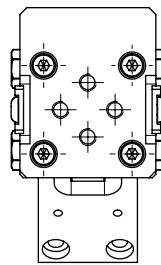
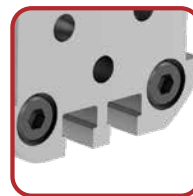
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V0



84AT2..0



T-groove for sensor

Model 84A2..0/84AT2..0	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°		
X	30°	600 [135]	0,65 [1.43]
Y	45°		

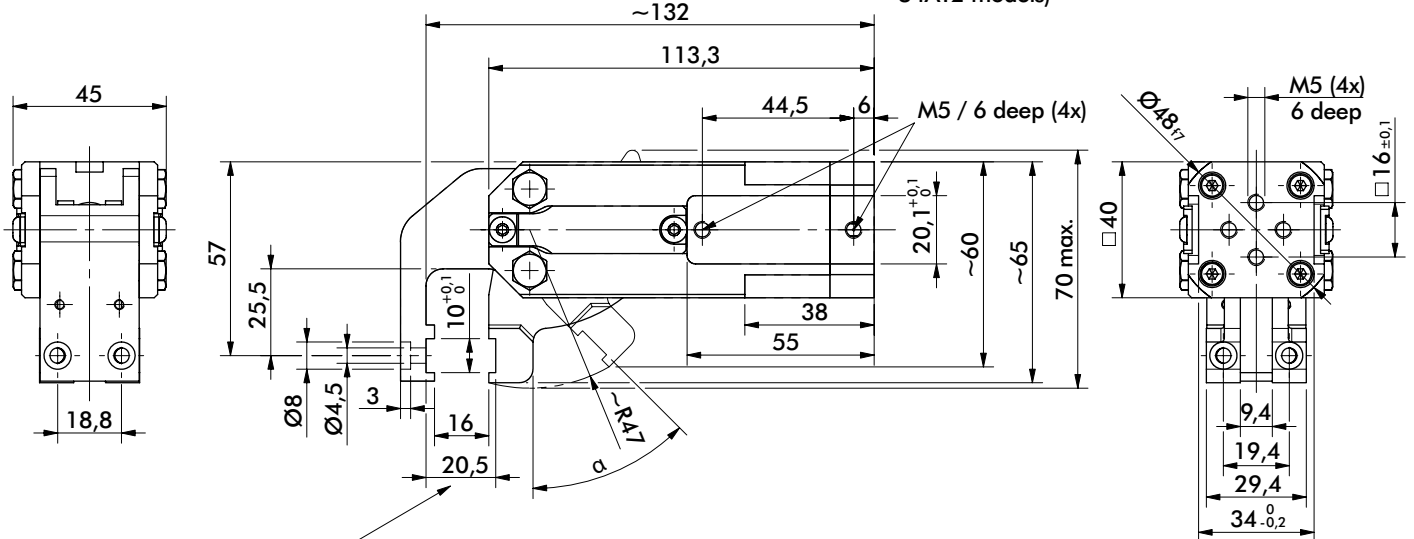
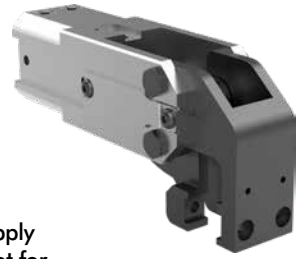
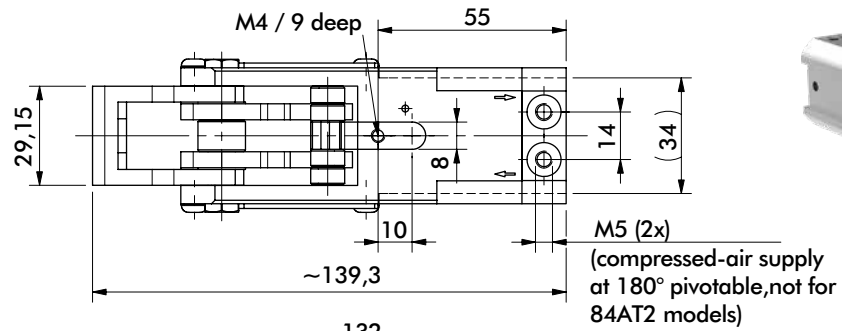
84A2..9 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

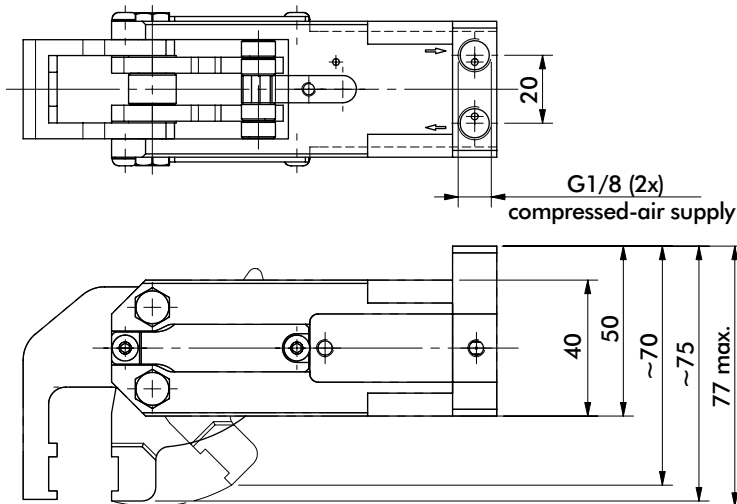
84A2.19

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warranty.

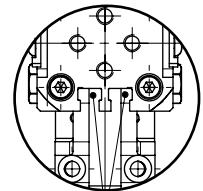
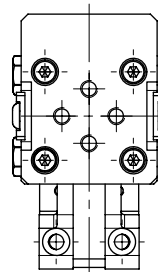
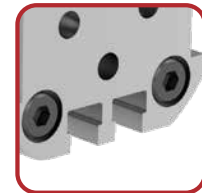
Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.



84A2.V9



84AT2..9

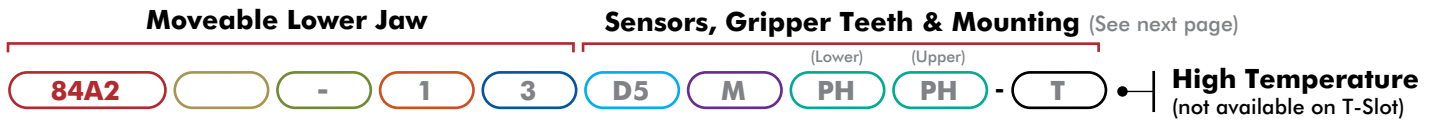


T-groove for sensor

Model	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
84A2..9/84AT2..9	45°	860 [193]	0,6 [1.32]
-	30°		
X			

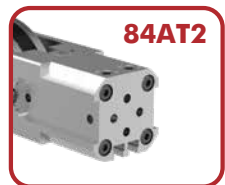
84A2 SERIES (MOVEABLE LOWER JAWS)

Cam Type Sheet Metal Grippers | Ordering Information



Body Style Options

- Description**
84A2 Standard
84AT2 Sensor T-Slot



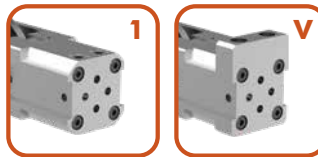
Jaw Orientation Options

- Description**
"Blank" Double (Jaw Arrangement Options 3 only)
L Single Left (Jaw Arrangement Options 5 only)
R Single Right (Jaw Arrangement Options 5 only)



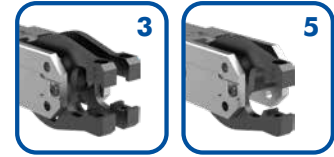
Porting Options

- Description**
1 (2) M5
V (2) G1/8



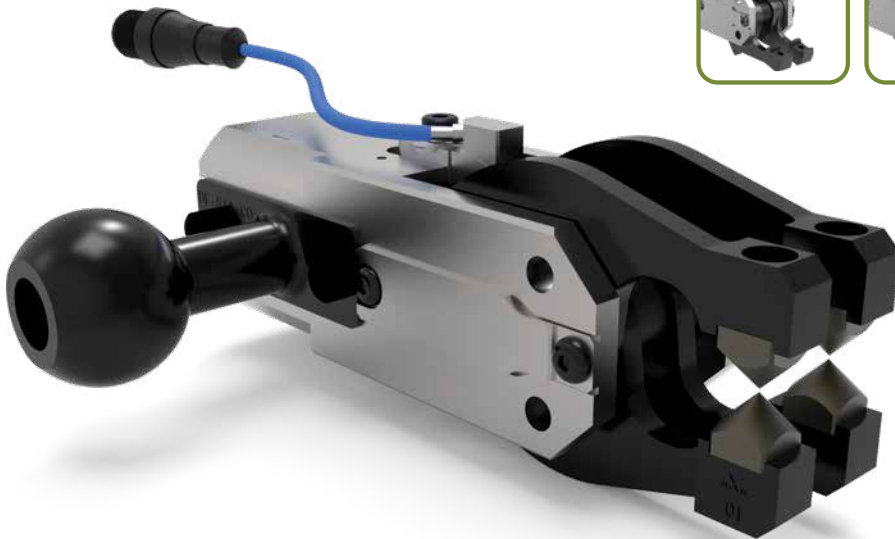
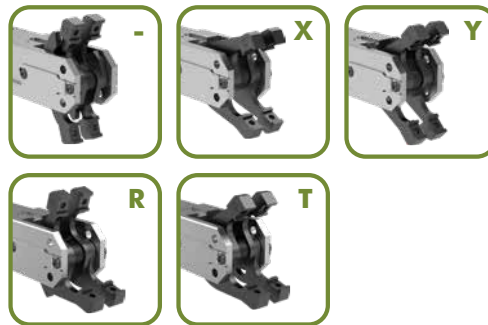
Jaw Arrangement Options

- Description**
3 Double Symmetrical, Straight Design
5 Single Symmetrical, Straight Design



Jaw Opening Options

- Description**
- 72° Jaw Opening (Symmetrical)
X 30° Jaw Opening (Symmetrical)
Y 45° Jaw Opening (Symmetrical)
R 72° Upper/15° Lower Jaw
T 45° Upper/15° Lower Jaw



Specifications	Unit	
Piston	mm	25
Actuation Time (open/close)	sec	<0,1
Air Consumption per Double Stroke at 6 bar	L	0,32

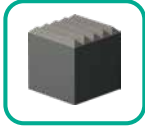
84A2 SERIES (MOVEABLE LOWER JAWS)

Cam Type Sheet Metal Grippers | Ordering Information

Gripper Teeth, Points and Crown Options (Upper and Lower)

Steel Teeth

- 00** None
- BA** Hardened - 8JZ-027-1
- BD** Hardened (Upper) - 8JZ-049-1



- BB** Soft Steel - 8JZ-028-1



High Temperature (84A2 Only)

- FF** Soft Steel - 8JZ-085-1



- EE** Soft Steel - 8JZ-092-1



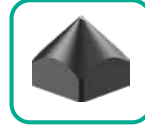
Plastic Teeth*

- 00** None
 - KF** 90 Shore - 8JZ-045-2
- *Not suitable for High Temperature applications



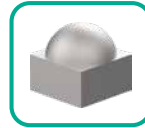
Steel Points

- 00** None
- PH** Hardened - 8JZ-029-1

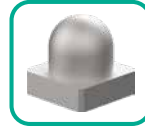


High Temperature (84A2 Only)

- PI** Soft Steel - 8JZ-074-1



- RR** Soft Steel - 8JZ-088-1



Crown Teeth

- 00** None
- SK** Hardened (Lower) - 8JZ-036-2
- SQ** Hardened (Lower) - 8JZ-051-1
- SL** Hardened (Upper) - 8JZ-037-1
- SM** Hardened (Upper) - 8JZ-038-1
- SN** Hardened (Upper) - 8JZ-039-1
- SP** Hardened (Upper) - 8JZ-040-1

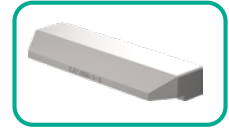


High Temperature (84A2 Only)

- DD** Soft Steel - 8JZ-087-1 (Lower)



- LL** Soft Steel - 8JZ-086-1 (Lower)



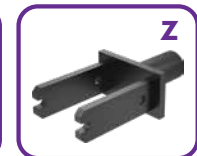
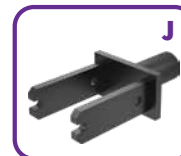
Shims for gripper teeth available
Order Separately - **85B-039-1**
Dimensions: 10 x 10 x 1 mm



Mounting Options

Description

- | | |
|--|---|
| 0 None | M Ø32mm Rear Ball
GT-32B-84A2- L-R |
| I Ø20mm Rear Rod
8MA-165-1 | N Ø32mm Flanged Ball
GT-32B-84A2- B |
| J Ø25mm Rear Rod
8MA-166-1 | V Rear Flange
8MA-147-1 |
| Z Ø1.00" Rear Rod
8MA-168-1 | W On-Body Swivel Ball
82ZB-025-2 |
| L Ø20mm Apple Core
GT-20M-84A2-L-R | |



Ø25mm
Ø30mm
Both Included

Sensor Options (not suitable for High Temperature applications)

Description

- 00** None
- D5** Double Sheet Control Sensor, M12x1 Plug - 8EA-087-1
- D8** 2X Position Sensor - 8EA-109-1 (84AT2 Models Only)
- GK** 2X **D5** (not for 84AT2 Models)

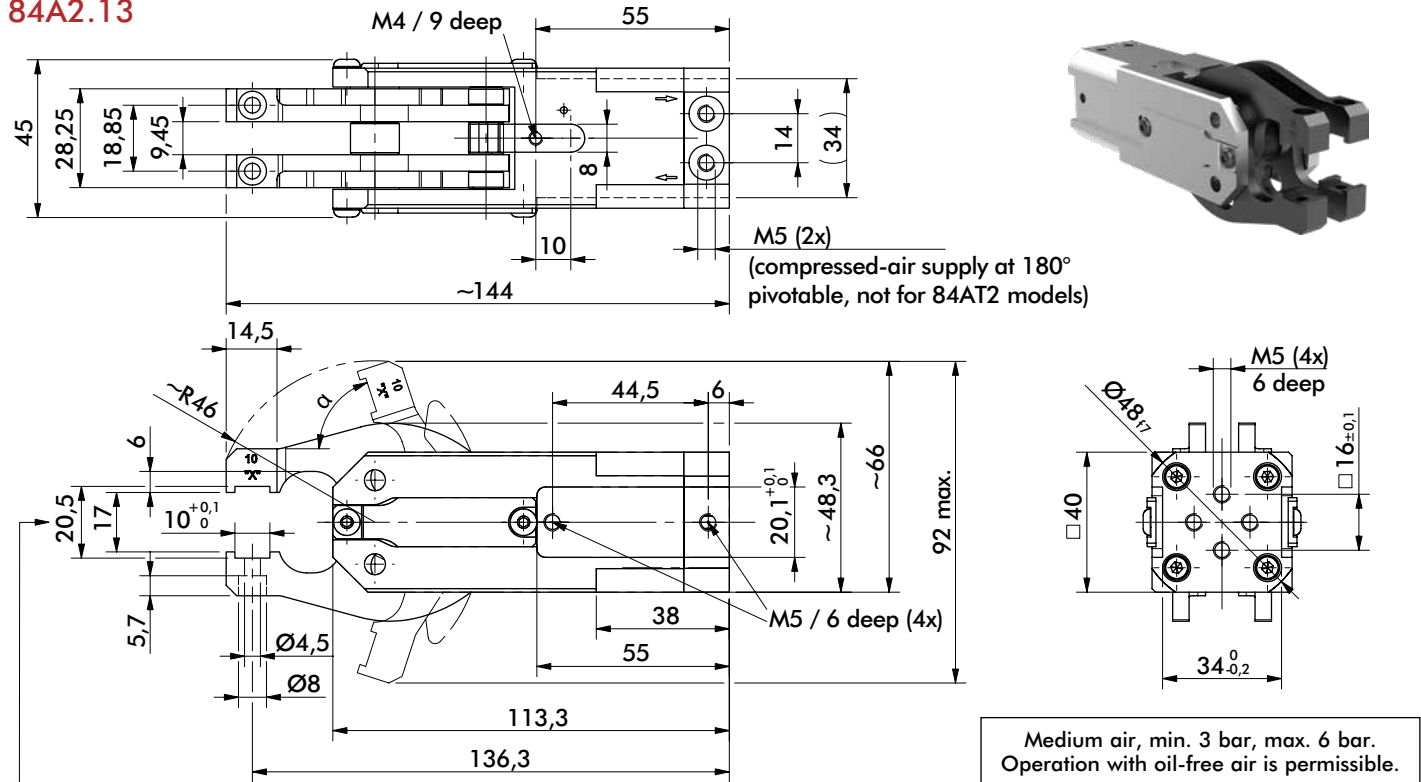


Cover for Sensing Systems **D5, GK**
Order Separately **82ZB-185-1**

84A2..3 SERIES (DOUBLE SYMMETRICAL MOVEABLE JAWS)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

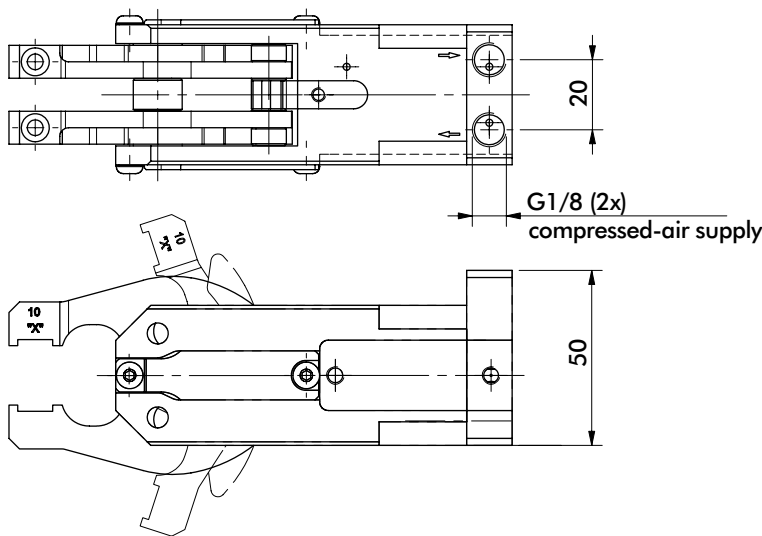
84A2.13



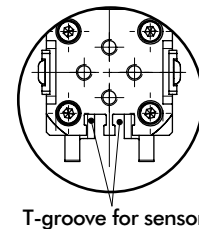
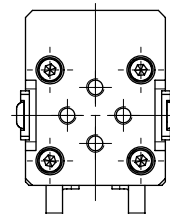
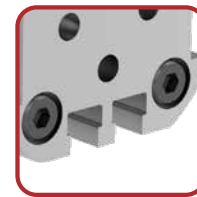
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V3



84AT2..3

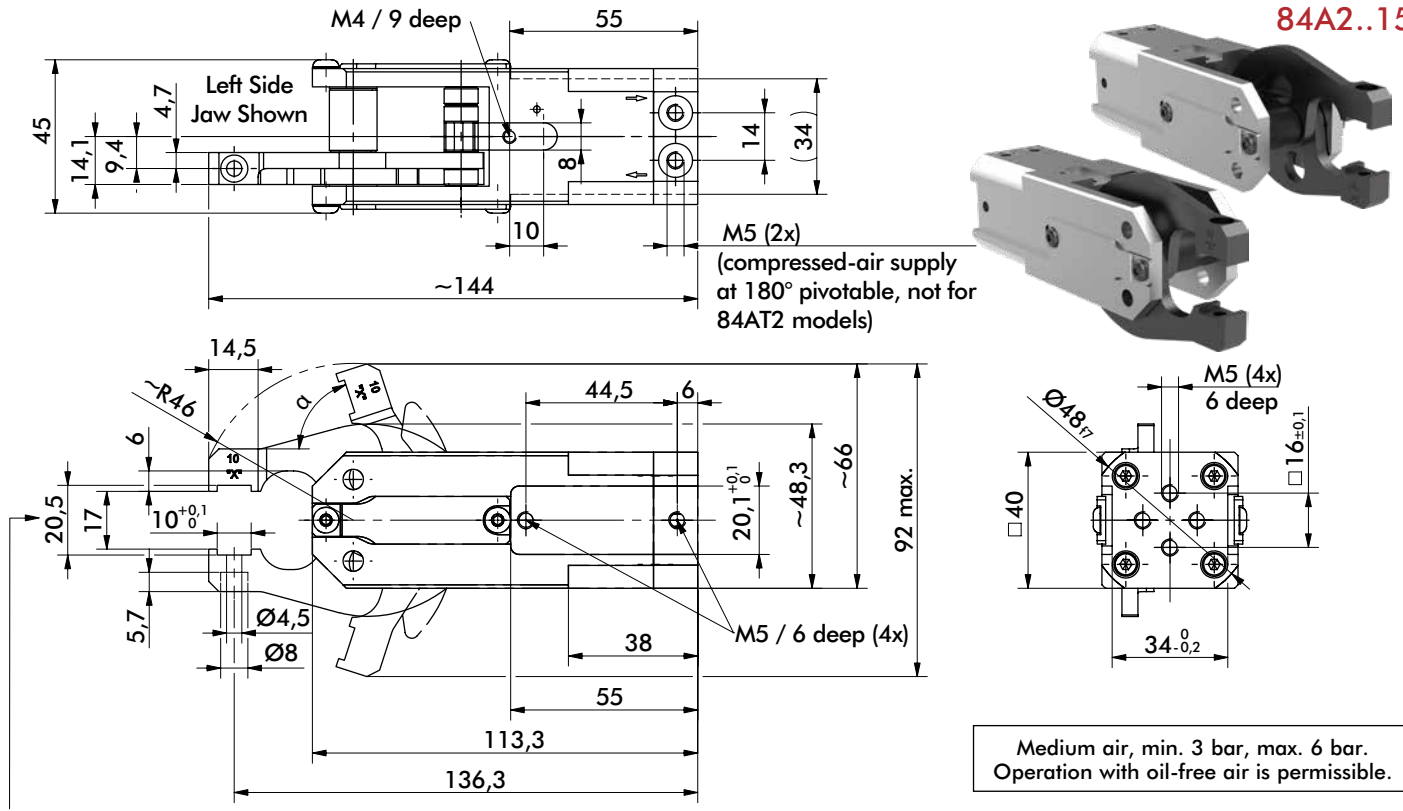


Model 84A2..3/84AT2..3	Opening Angle α Symmetrical	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°		
X	30°	475 [107]	0,6 [1.32]
Y	45°		

84A2...5 SERIES (SINGLE SYMMETRICAL MOVEABLE JAWS)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..15

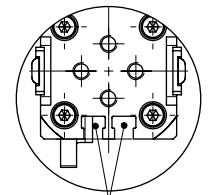
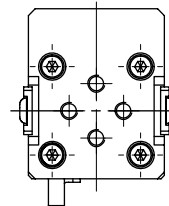
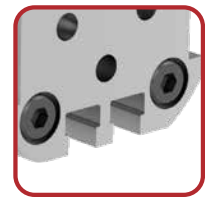
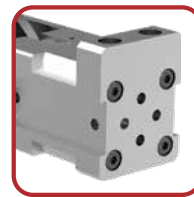
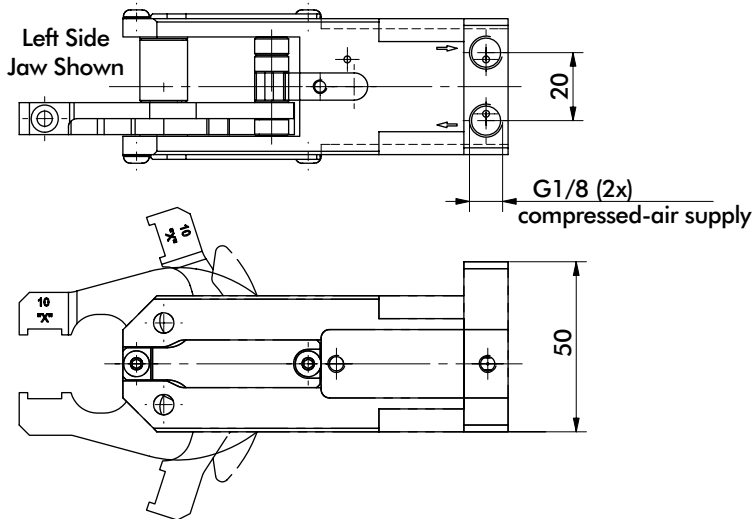


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2..V5

84AT2...5



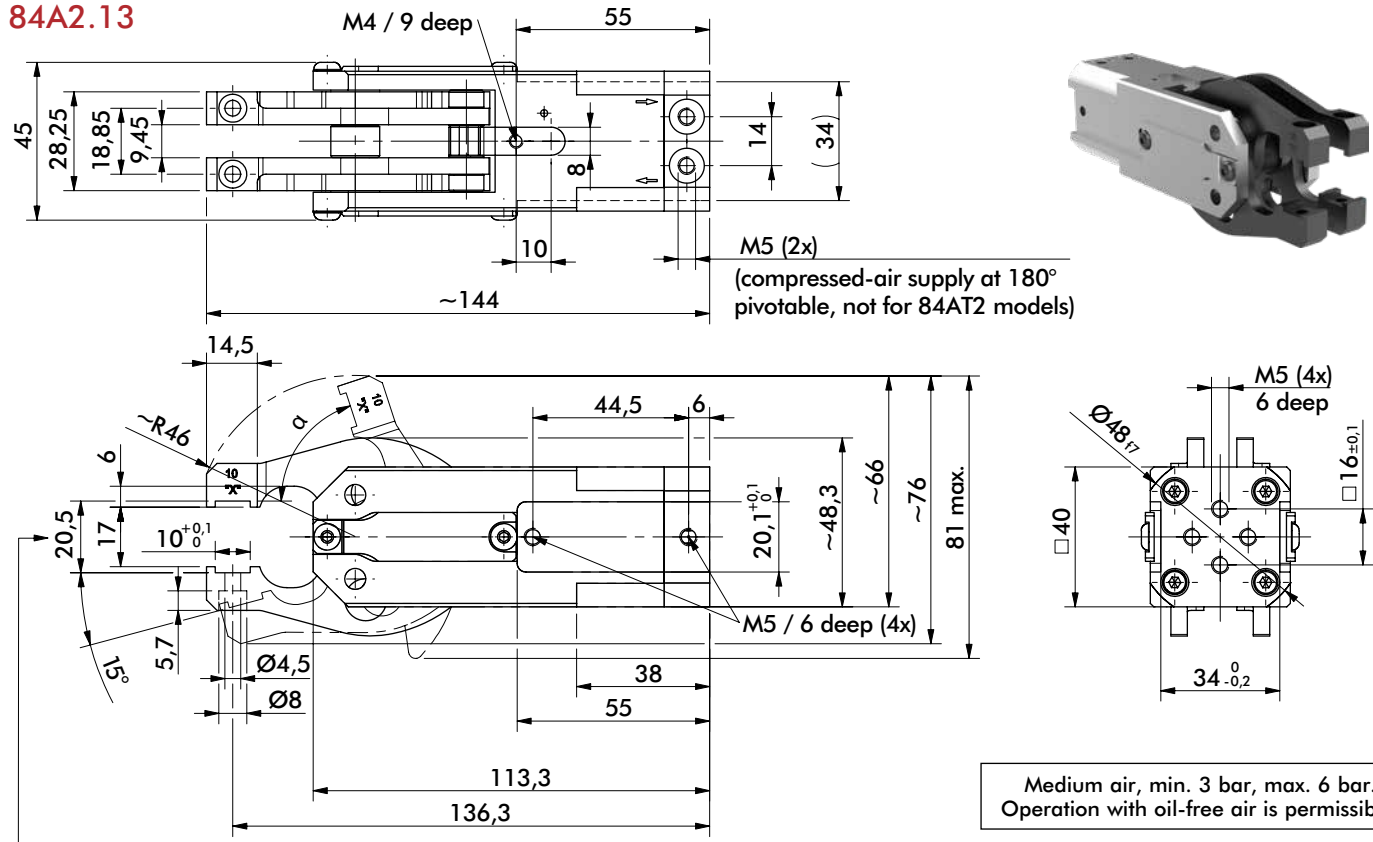
T-groove for sensor

Model 84A2...5/84AT2...5	Opening Angle α Symmetrical	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	475 [107]	0,47 [1.04]
X	30°		
Y	45°		

84A2..3 SERIES (DOUBLE 15° MOVEABLE LOWER JAWS)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.13

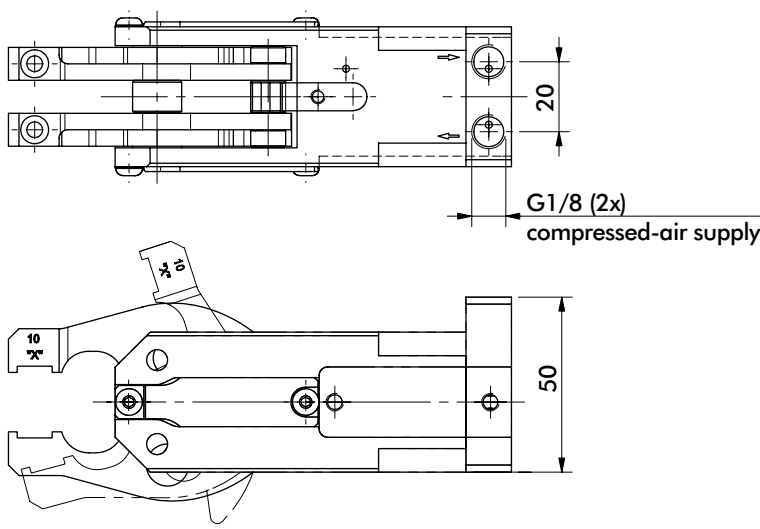


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

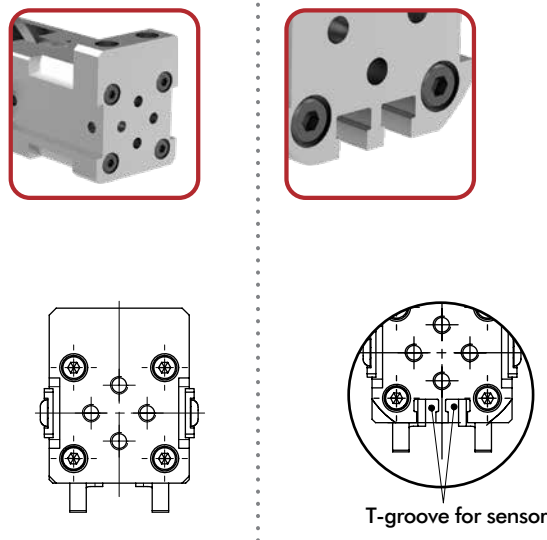
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V3



84AT2..3

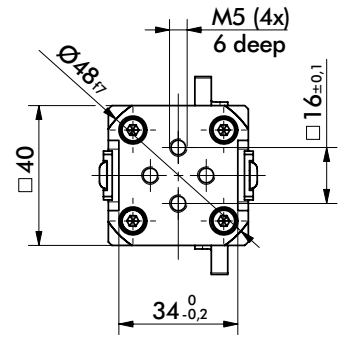
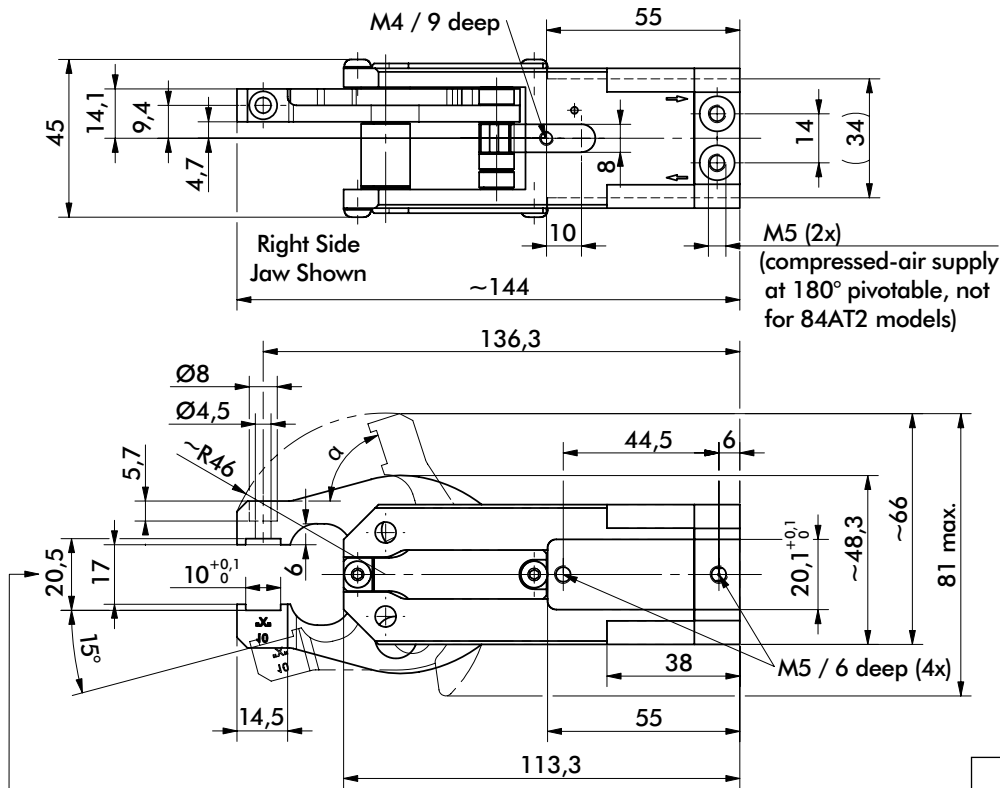


Model	Opening Angle α Upper/Lower	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
84A2..3/84AT2..3			
R	72°/15°	475 [107]	0,6 [1.32]
T	45°/15		

84A2...5 SERIES (SINGLE 15° MOVEABLE LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..15

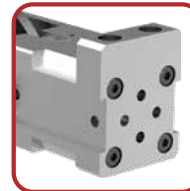
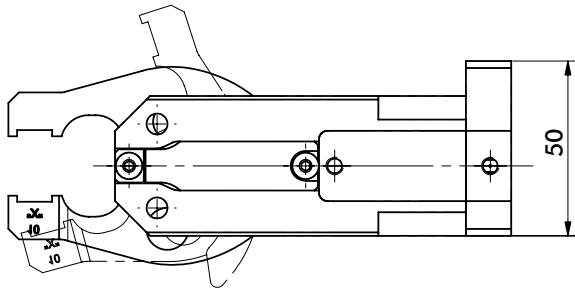
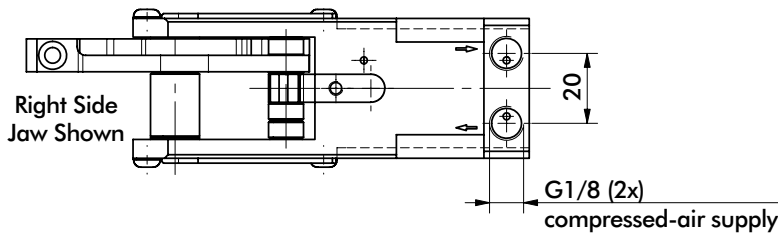


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

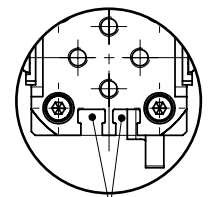
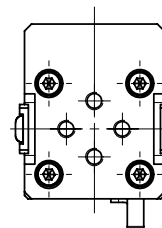
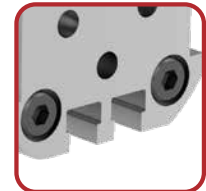
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2..V5



84AT2...5

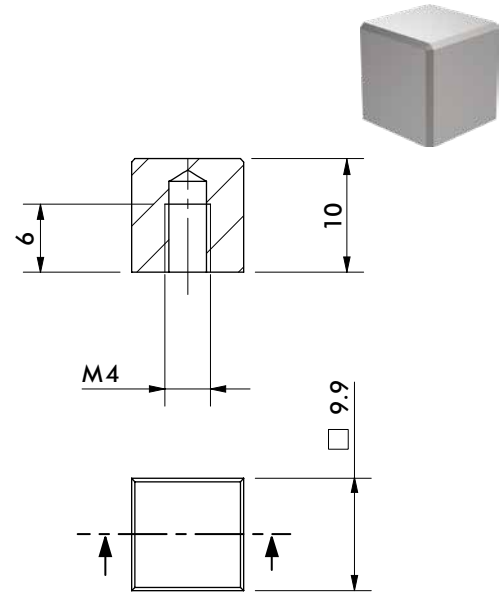
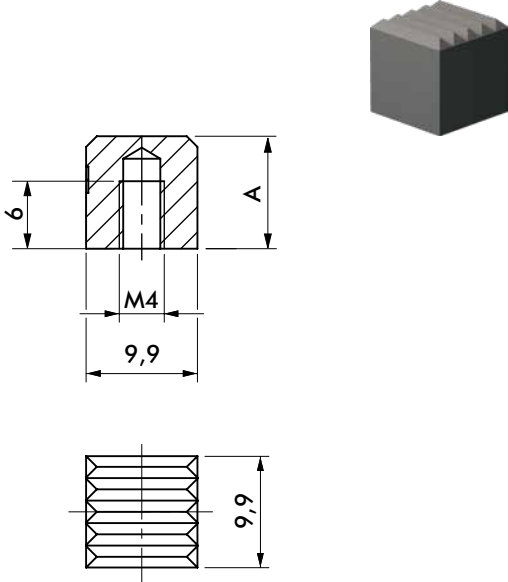


Model	Opening Angle α Upper/Lower	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
84A2...5/84AT2...5			
R	72°/15°	475 [107]	0,47 [1.04]
T	45°/15		

84A2 SERIES ACCESSORIES

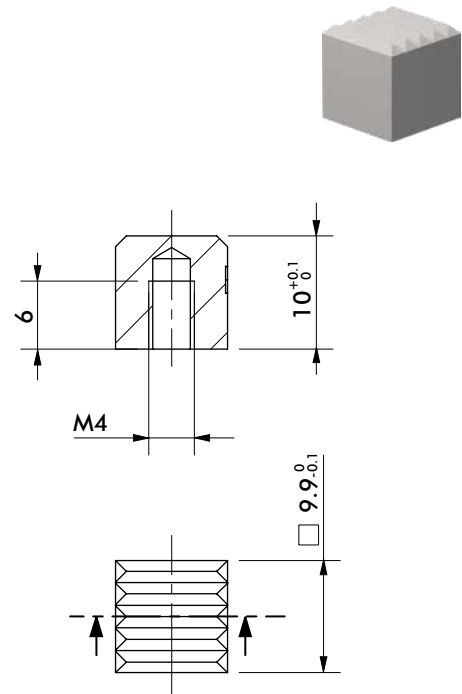
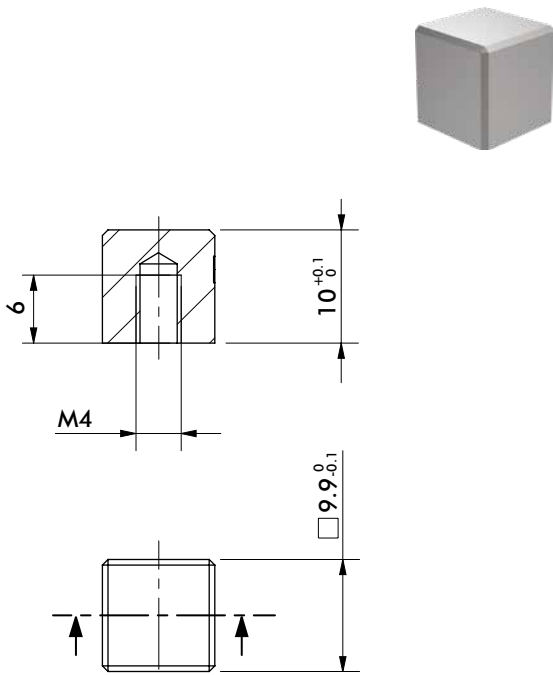
Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Steel Teeth



Hardened Steel Teeth	Part Number	A
Serrated	8JZ-049-1	9
Serrated	8JZ-027-1	10

Soft Steel Teeth	Part Number
Non-Serrated	8JZ-028-1



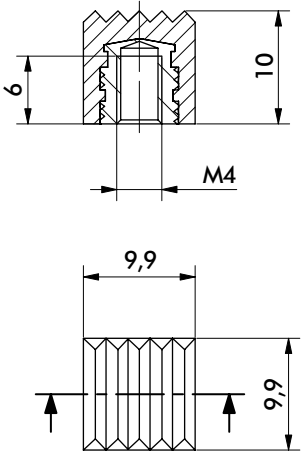
Hi-Temp Soft Steel Teeth	Part Number
Non-Serrated	8JZ-085-1

Hi-Temp Soft Steel Teeth	Part Number
Serrated	8JZ-092-1

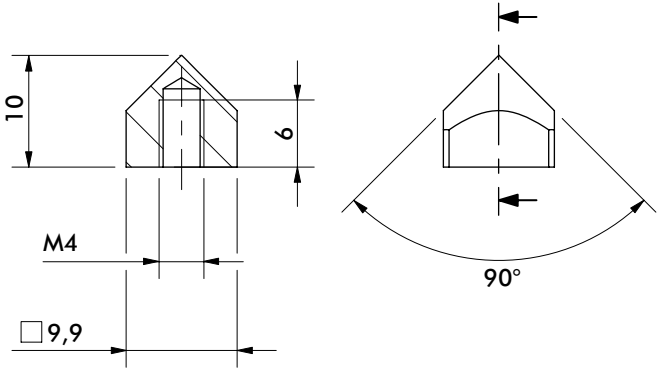
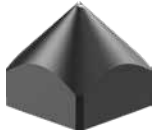
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Plastic Teeth



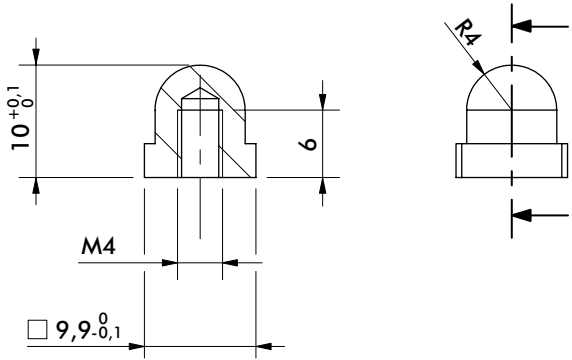
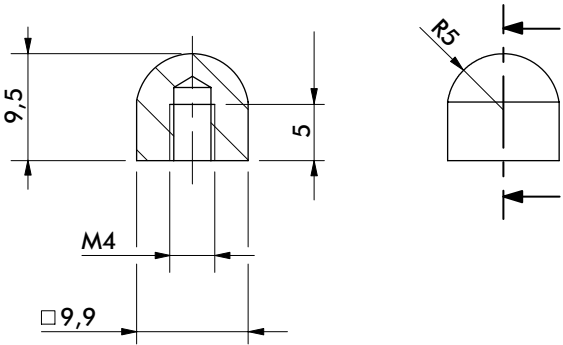
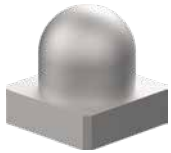
Steel Points



Plastic Teeth Part Number
90 Shore, Serrated **8JZ-045-2**

Hardened Steel Point Part Number
Pointed **8JZ-029-1**

Steel Points



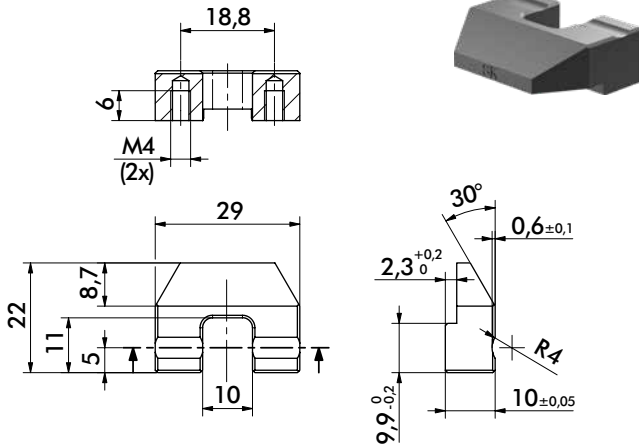
Hi-Temp Soft Steel Point Part Number
Rounded **8JZ-074-1**

Hi-Temp Soft Steel Point Part Number
Rounded **8JZ-088-1**

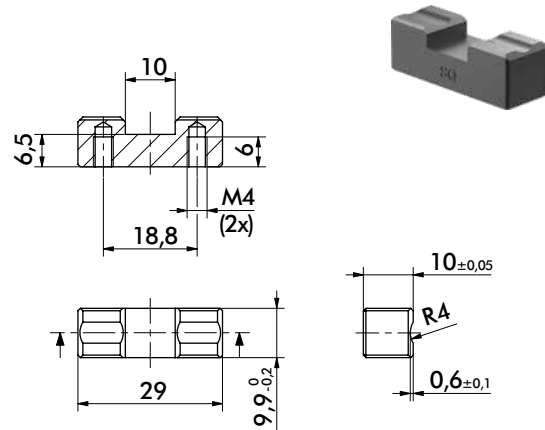
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

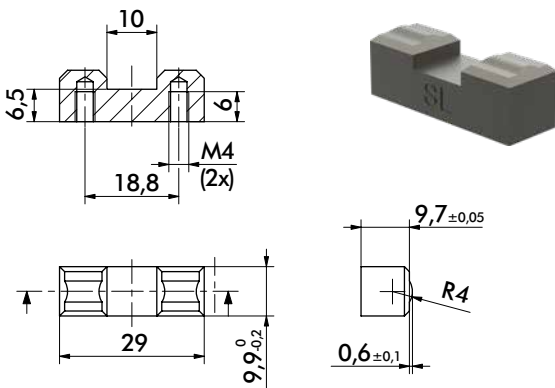
Crown Teeth



Hardened Steel Teeth Part Number **8JZ-036-2**
Crown Lower

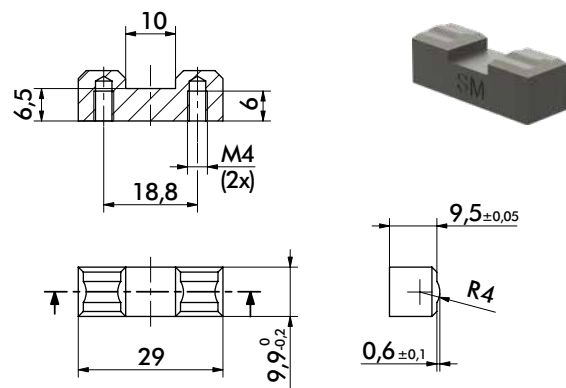


Hardened Steel Teeth Part Number **8JZ-051-1**
Crown Lower



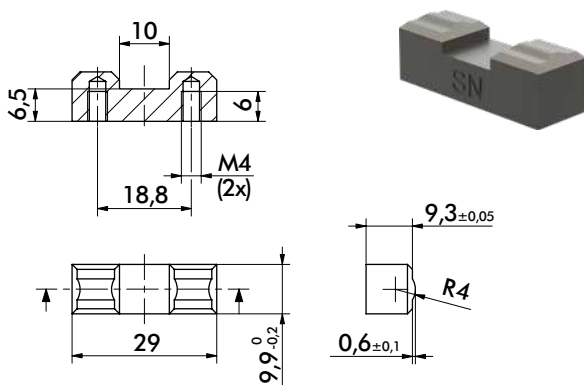
For material thickness 0,5 - 0,8 mm

Hardened Steel Teeth Part Number **8JZ-037-1**
Crown Upper



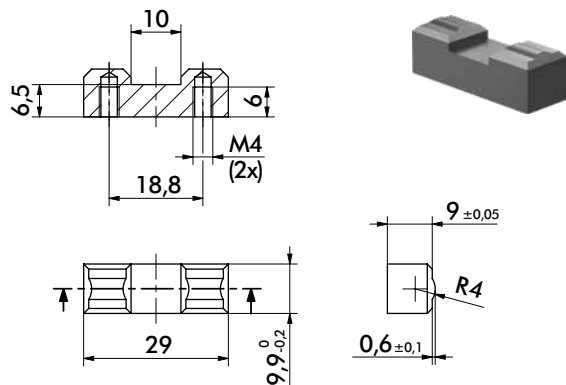
For material thickness 0,9 - 1,2 mm

Hardened Steel Teeth Part Number **8JZ-038-1**
Crown Upper



For material thickness 1,3 - 1,6 mm

Hardened Steel Teeth Part Number **8JZ-039-1**
Crown Upper



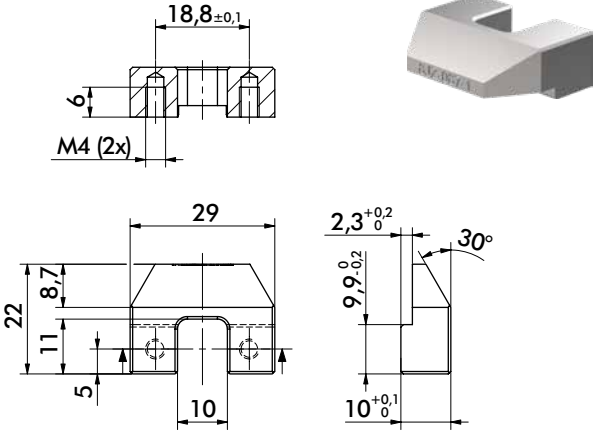
For material thickness 1,7 - 2,1 mm

Hardened Steel Teeth Part Number **8JZ-040-1**
Crown Upper

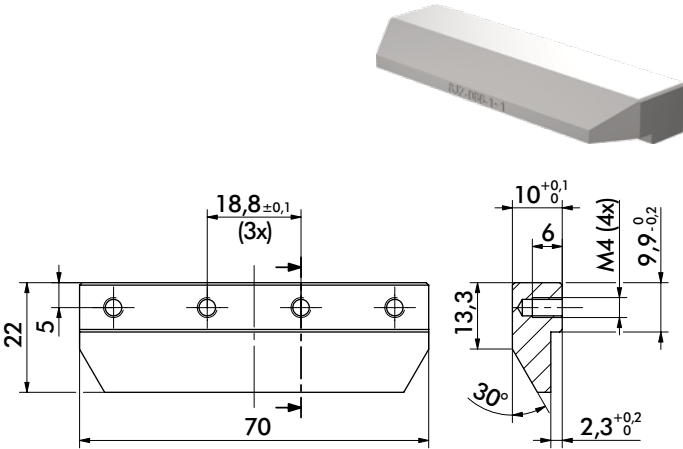
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Crown Teeth

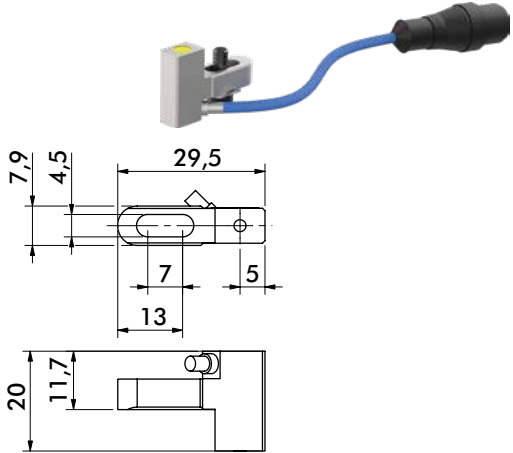


Hi-Temp Soft Steel Teeth Part Number **8JZ-087-1**
Crown Lower

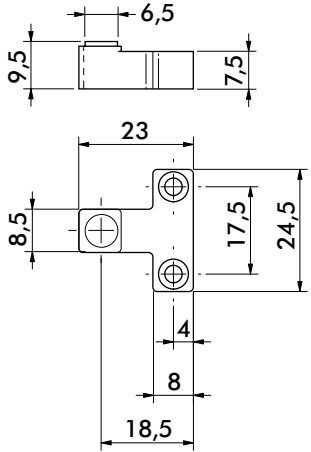


Hi-Temp Soft Steel Teeth Part Number **8JZ-086-1**
Crown Lower

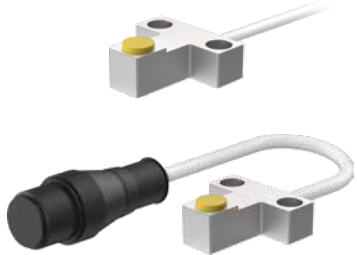
Sensors



Part Present Sensor Part Number **8EA-087-1**
1.5mm Sensing Distance

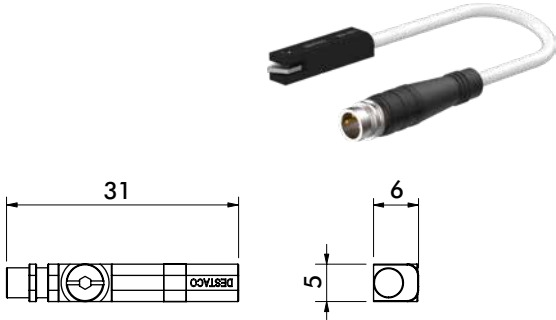


Part Present Sensor Part Number **8EA-164-1**
3mm Sensing Distance, 2m Cable



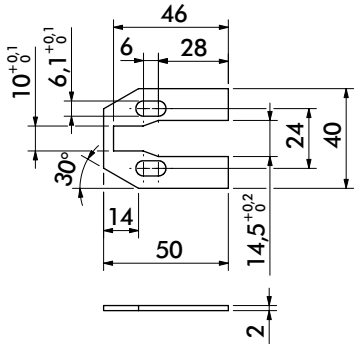
Part Present Sensor Part Number **8EA-165-1**
3mm Sensing Distance, M12X1

Sensors

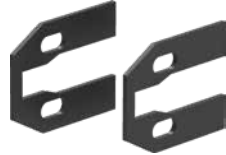


Proximity Switch Part Number **8EA-109-1**
T-Slot, M8x1 Plug

Mount



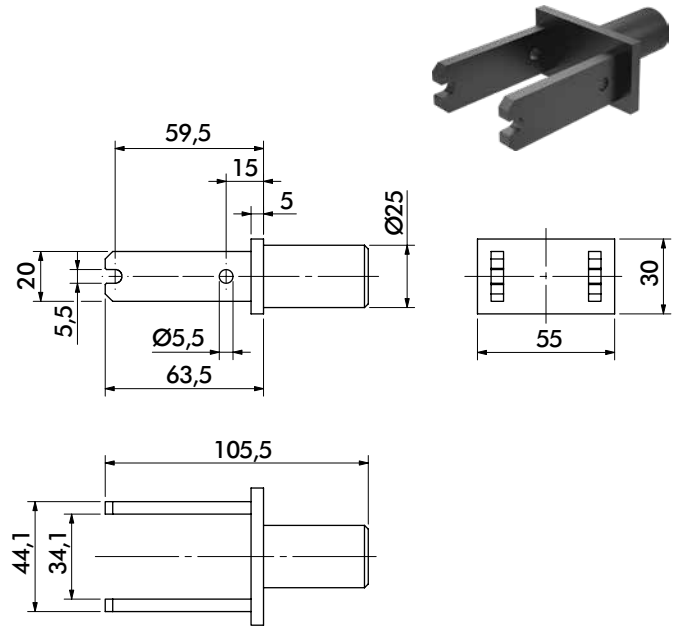
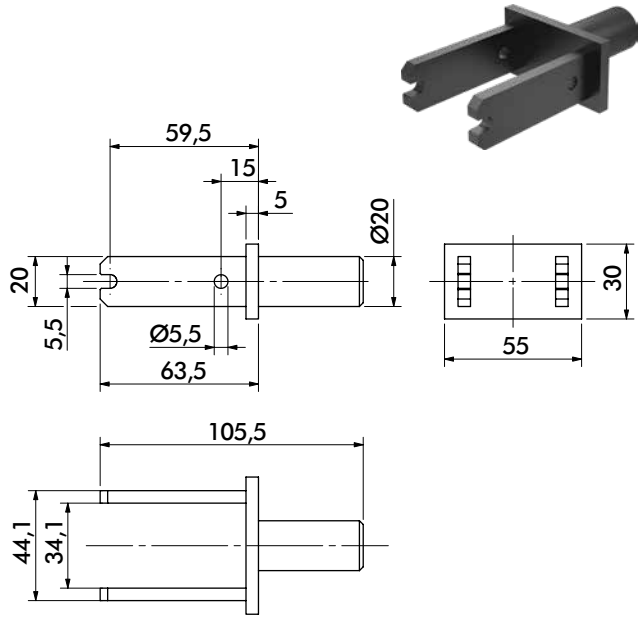
Mount Part Number **8MH-054-1**
Guards



84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Mounts



Mount

Ø20mm Rear Rod

Part Number

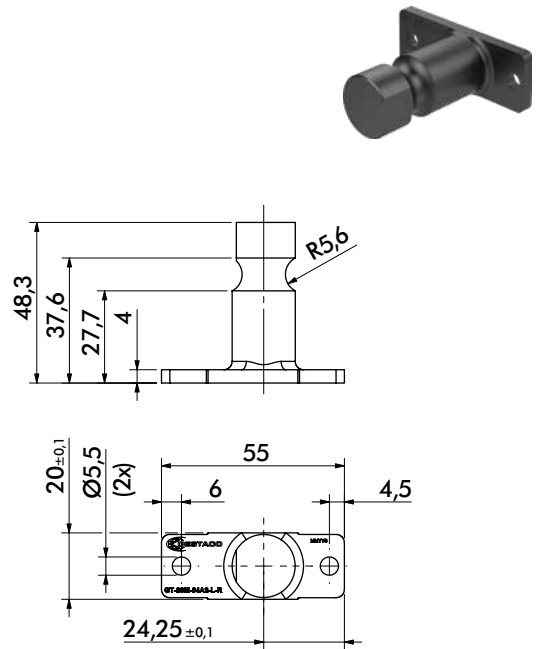
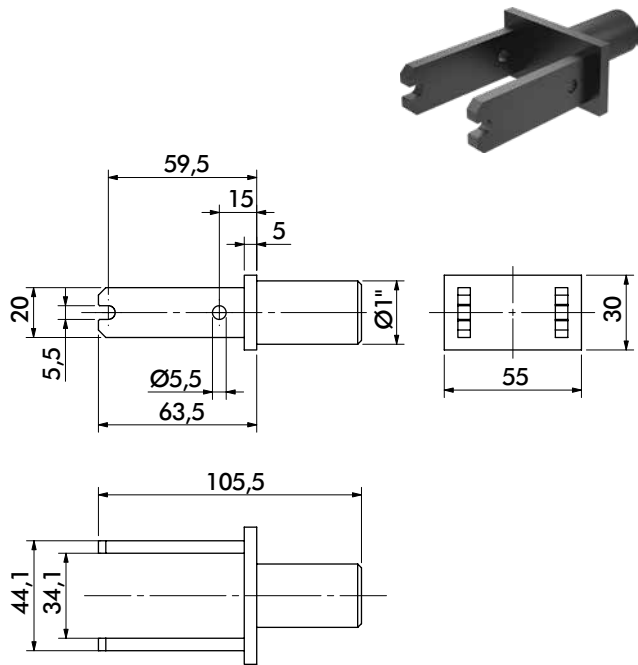
8MA-165-1

Mount

Ø25mm Rear Rod

Part Number

8MA-166-1



Mount

Ø1.00" Rear Rod

Part Number

8MA-168-1

Mount

Ø20mm Apple Core

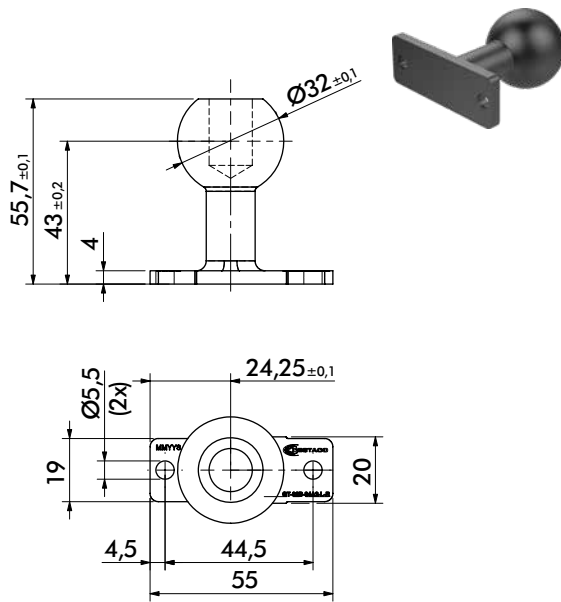
Part Number

GT-20M-84A2-L-R

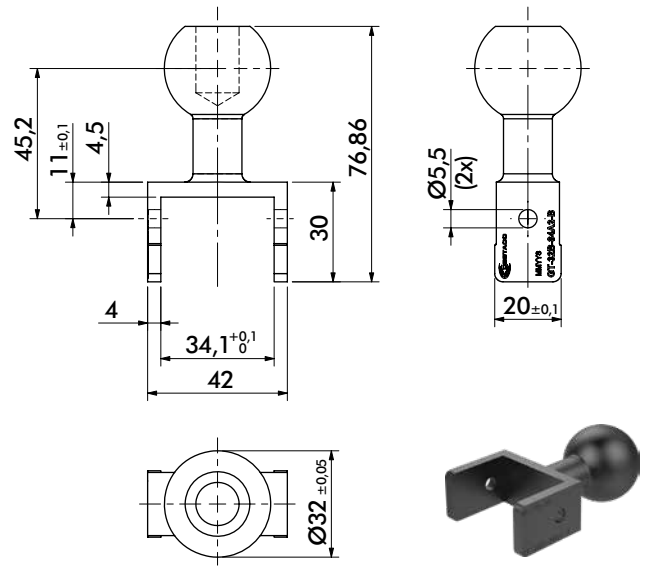
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

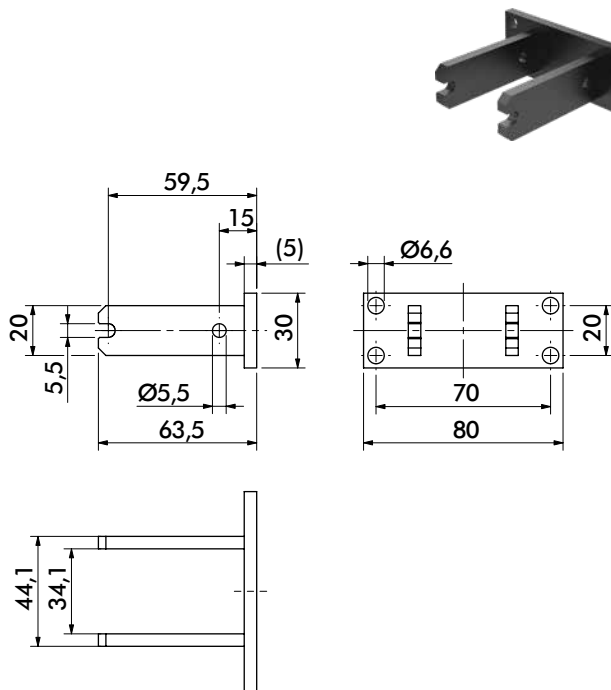
Mounts



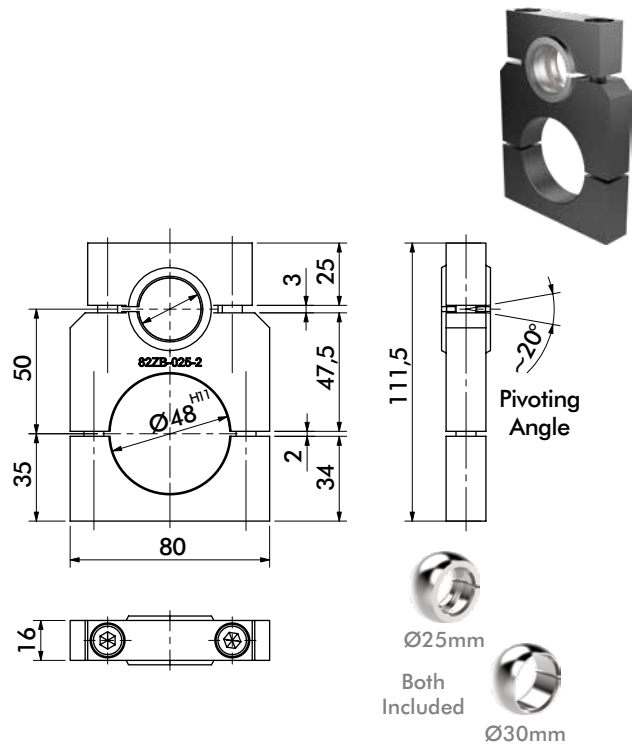
Mount Part Number
 Ø32mm Rear Ball **GT-32B-84A2-L-R**



Mount Part Number
 Ø32mm Flanged Ball **GT-32B-84A2-B**



Mount Part Number
 Rear Flange **8MA-147-1**



Mount Part Number
 On-Body Swivel Ball **82ZB-025-2**

84A3-3 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Ordering Information

Fixed Lower & 90° Jaw

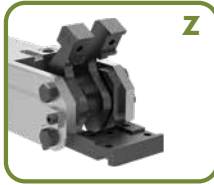
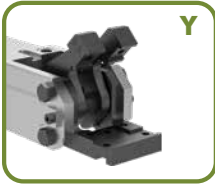
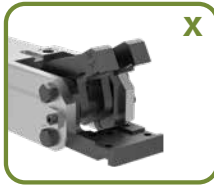
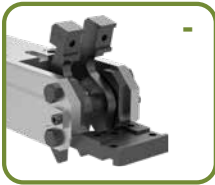
Sensors, Gripper Teeth & Mounting (See next page)

84A3 - **31** **D5** **S** **SF** **SB** - **T** | **High Temperature**

Jaw Opening Options

Description

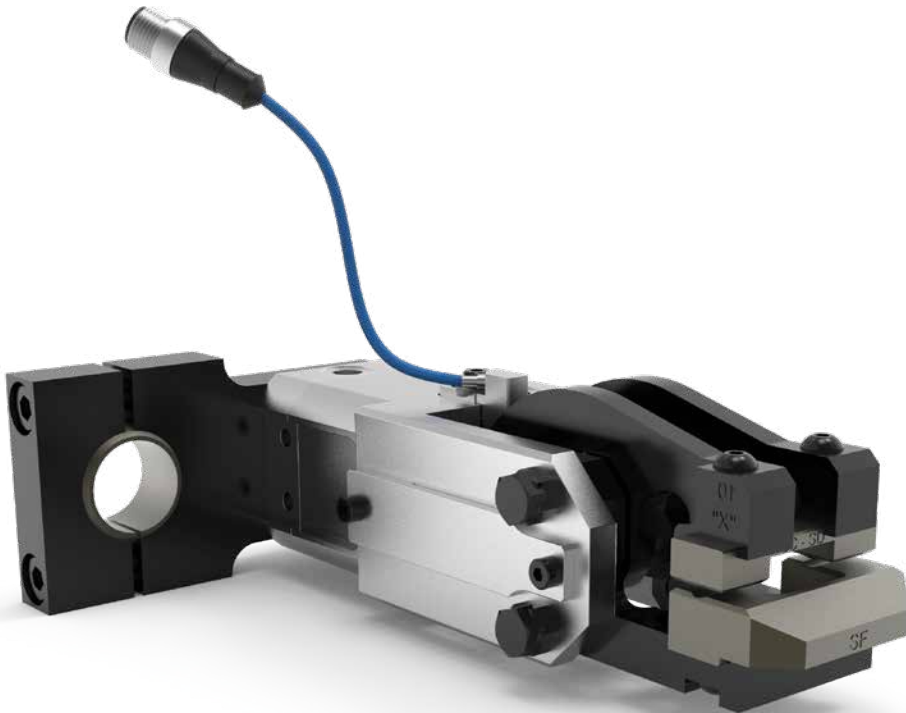
- 76° Jaw Opening (Standard)
- X 30° Jaw Opening
- Y 45° Jaw Opening
- Z 60° Jaw Opening



Jaw Arrangement Options

Description

- 30 Double Upper, Straight Design, Drop Jaw
- 31 Double Upper, Straight Design
- 32 Double Upper, 90° Design
- 34 Single Upper, Right, Straight Design
- 35 Double Upper, Narrow Jaw, Straight Design
- 36 Double Upper, Extended Jaw
- 37 Double Upper, 90° Design
- 38 Double Upper, Narrow Jaw, 90° Design
- 39 Single Upper, Left, Straight Design



Specifications	Unit	
Piston	mm	32
Actuation Time (open/close)	sec	0,2
Air Consumption per Double Stroke at 5 bar	L	0,4

84A3-3 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Ordering Information

Gripper Teeth, Points and Crown Options (Upper and Lower)

Steel Teeth

- 00** None
- AA** 14,9x21x12mm - 8JZ-014-3
- AH** 14,9x14x14mm - 8JZ-001-1
- AL** 14,9x14,9x9,8mm - 8JZ-003-1
- AC** 14,9x14x12mm - 8JZ-043-1
- AG** 14,9x14x12mm - 8JZ-050-1
- BK** 14,9x21x11mm - 8JZ-066-1

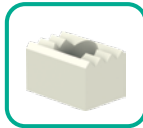


High Temperature
AS 8JZ-094-1



Plastic Teeth*

- 00** None
 - KA** 8JZ-021-1
 - KC** 8JZ-023-1 (Upper)
- *Not suitable for High Temperature applications



Shims for gripper teeth available
Order Separately **8SB-003-1**
Dimensions: 14,8 x 13 x 0,15 mm

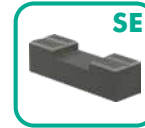
Steel Points (Upper only)

- 00** None
- PA** 8MJ-1001-1
- PB** 8MJ-1002-1
- PC** 8MJ-1003-1



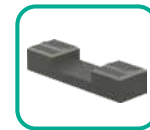
Crown Teeth - Concave (Lower Only)

- 00** None
- SE** 8JZ-019-1
(Not for use with A8 and GN Sensor)
- SF** 8JZ-020-3
- SH** 8JZ-048-1



Crown Teeth - Convex (Upper Only)

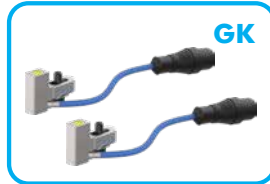
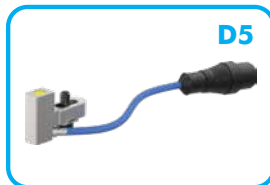
- SB** Mat. = 0,5-1mm - 8JZ-016-2
- SD** Mat. = 1-1,5mm - 8JZ-018-2



Sensor Options (not suitable for High Temperature applications)

Description

- 00** None
- KL** Position Control Set, Left for 76° Opening Angle - 8EA-022-4
- KR** Position Control Set, Right for 76° Opening Angle - 8EA-022-4
- A8** Workpiece Control, Switching Distance 7mm
8EA-092-1 (for 84A3-30/31/32/36)
- D5** Double Sheet Control, M12x1 Plug - 8EA-087-1
- GK** 2X **D5**
- GN** 1X **A8** + 1X **D5** (for 84A3-30/31/32/36 only)



Shims for Sensor A8 available
Order Separately **8MB-003-1**



Cable support for Sensing Systems **A8**
Order Separately **8MA-175-1**
Mounted on lower side of gripper (for 84A3-31/36 only)

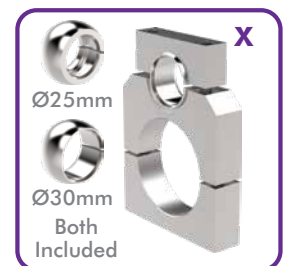
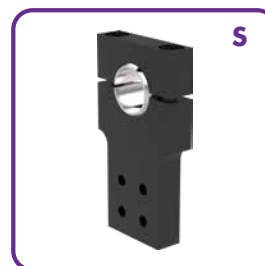


Cover for Sensing Systems **D5, GK, GN**
Order Separately **82ZB-185-1**

Mounting Options

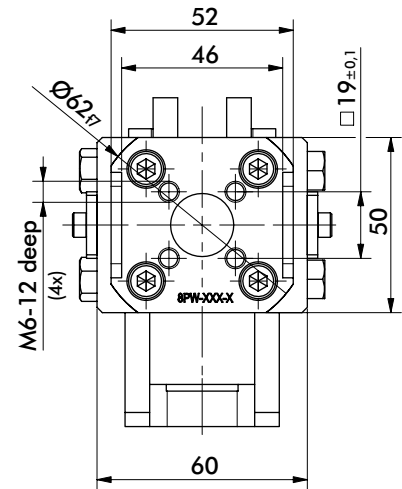
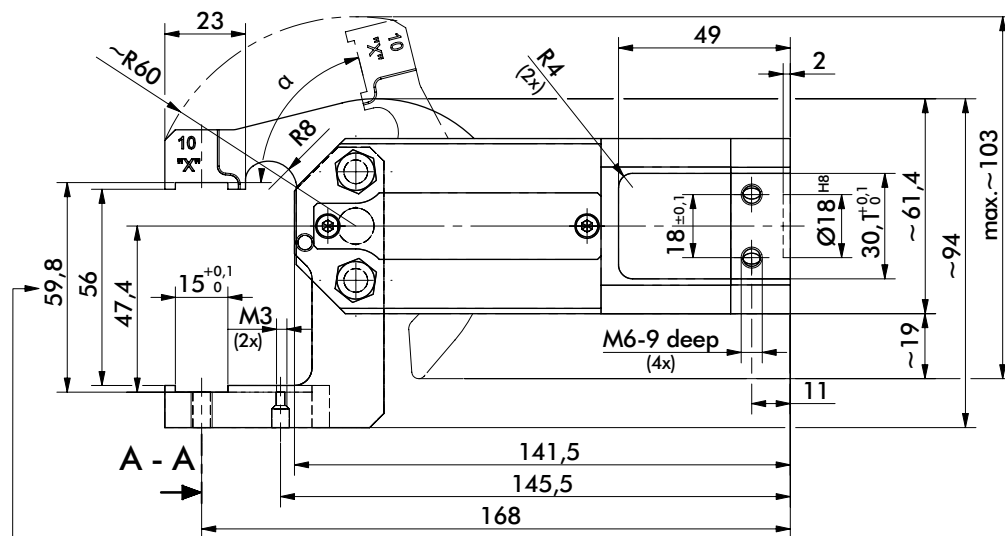
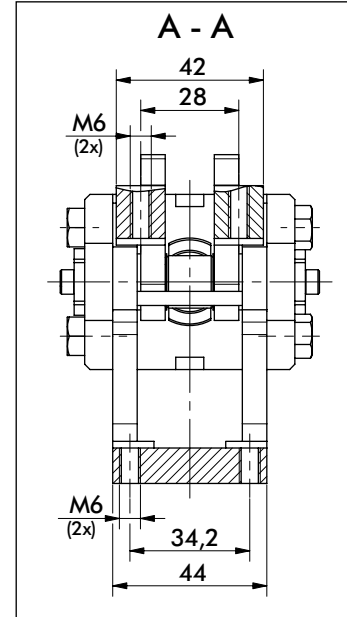
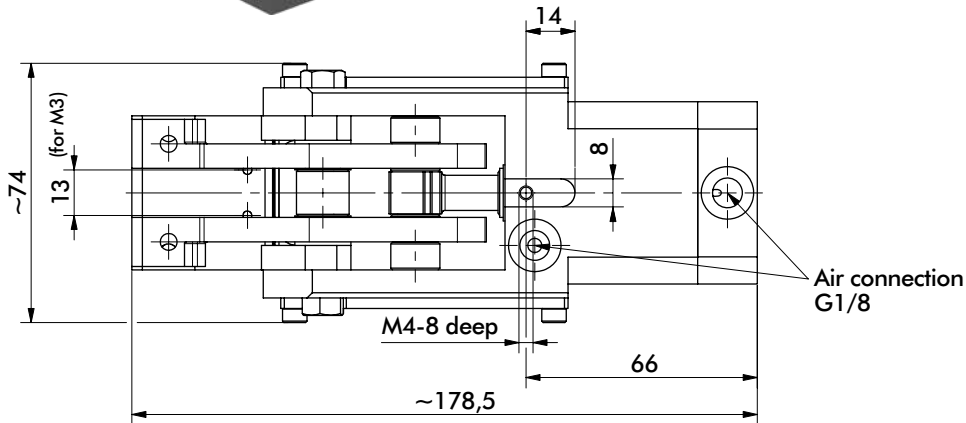
Description

- 0** None
- A** Rear Flange - 8MA-006-1
- 3** Rear Flange - 8MA-273-1
- R** Guards - 8MH-046-1
(for 84A3-31/34/35/39 only)
- S** Rear Swivel Ball - 82ZB-007-1
- X** On-Body Swivel Ball
82ZB-033-2



84A3.30 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 59,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

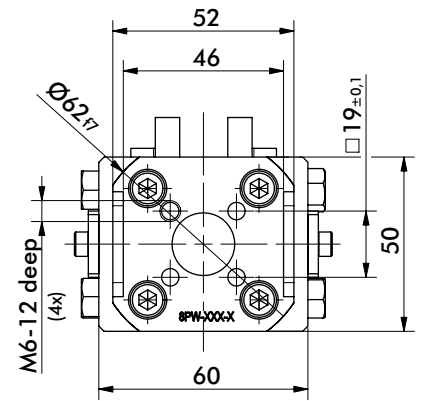
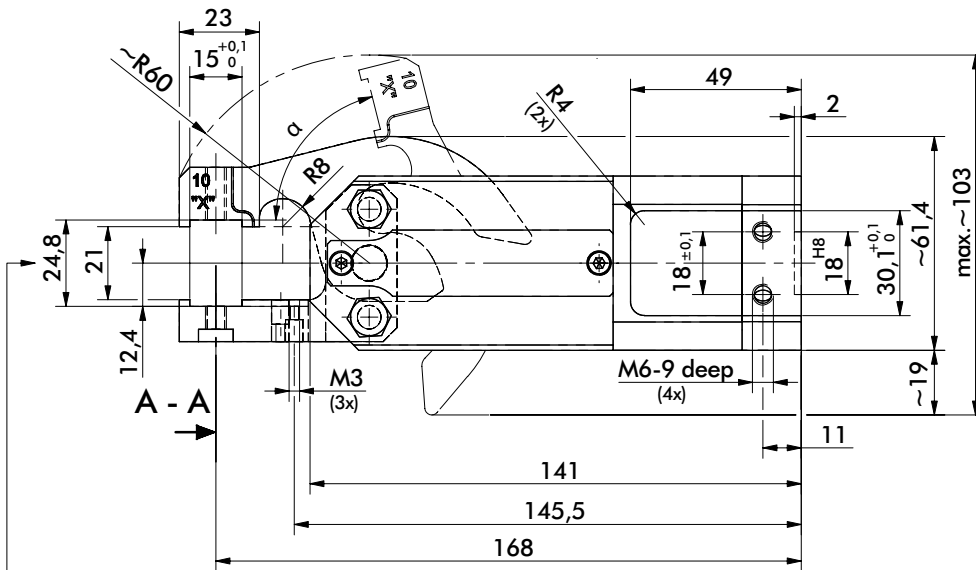
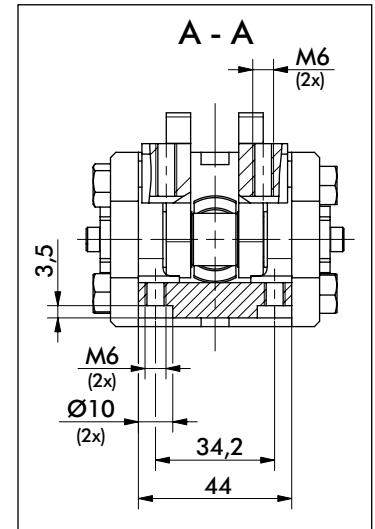
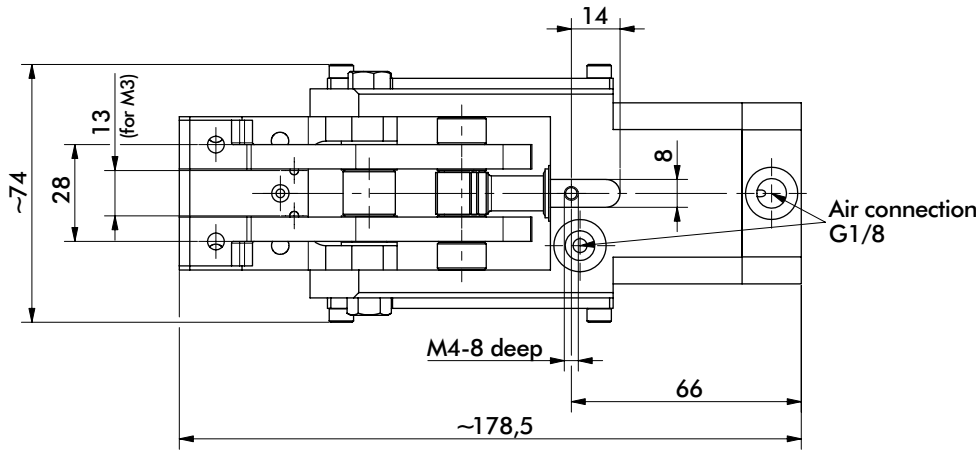
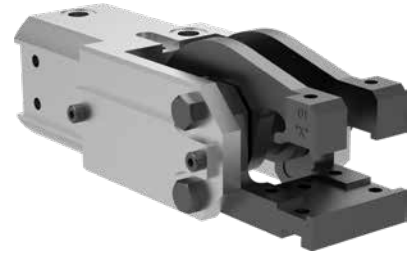
Medium air, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A3.30	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	1500 [337]	1,4 [3.09]
X	30°		
Y	45°		
Z	60°		

84A3.31 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Medium air, max. 6 bar. Operation with oil-free air is permissible.

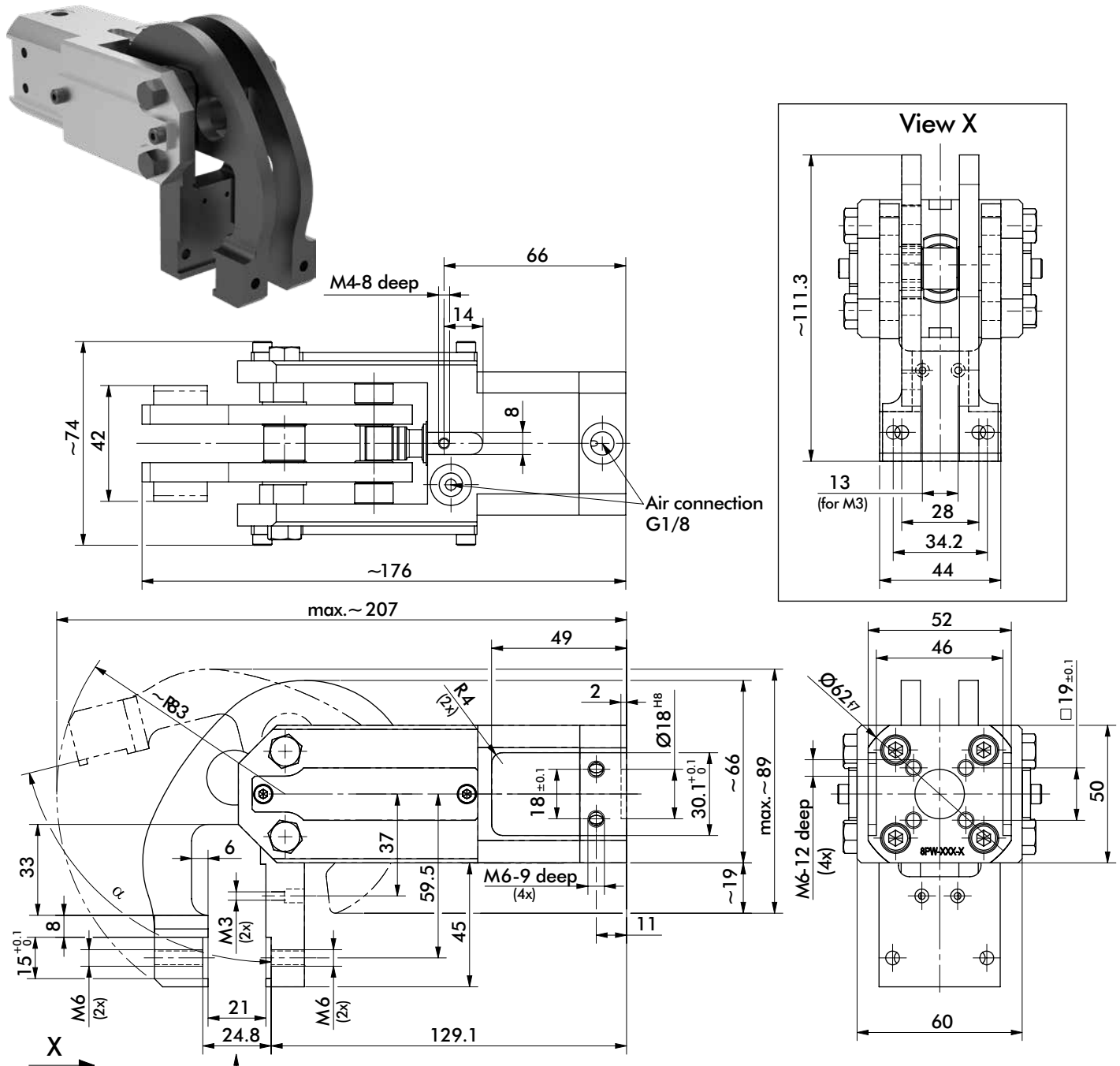
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

Model 84A3.31	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	1500 [337]	1,3 [2.87]
X	30°		
Y	45°		
Z	60°		

84A3.32 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

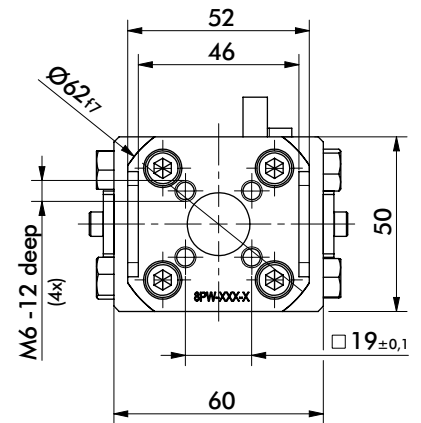
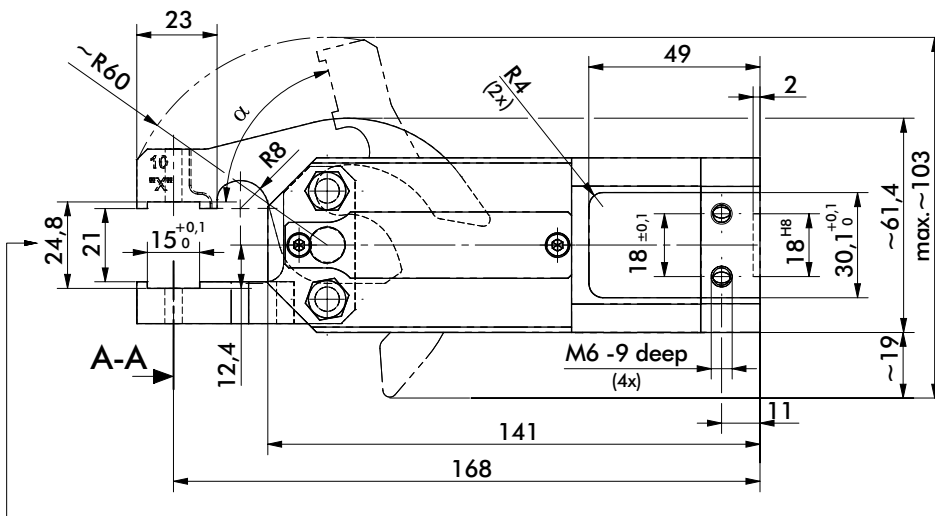
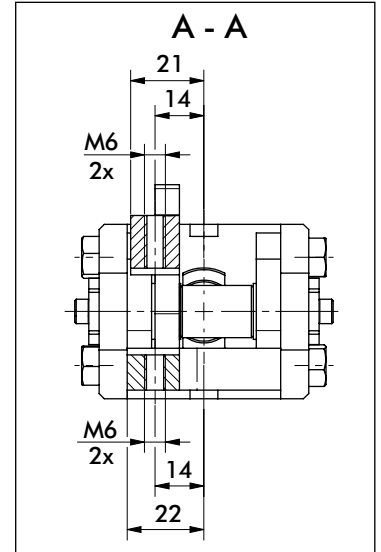
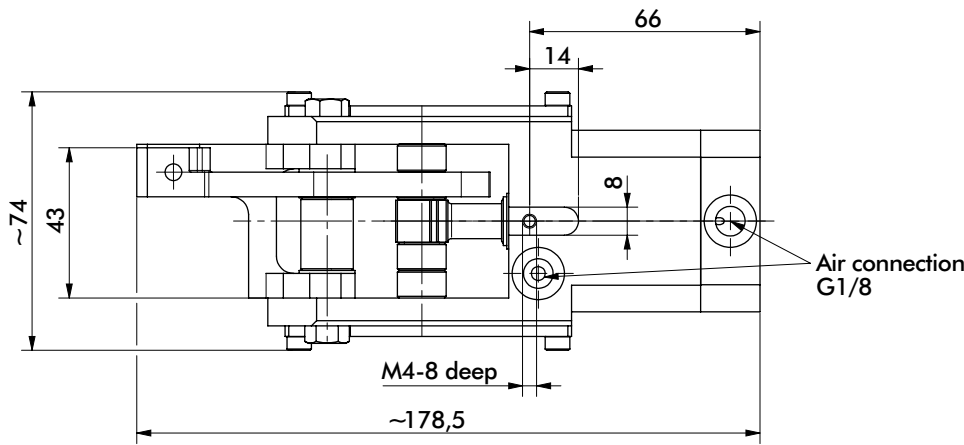
Medium air, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A3.32	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	950 [214]	1,6 [3.53]
X	30°		
Y	45°		
Z	60°		

84A3.34 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

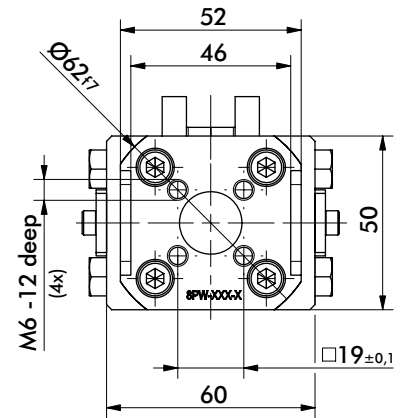
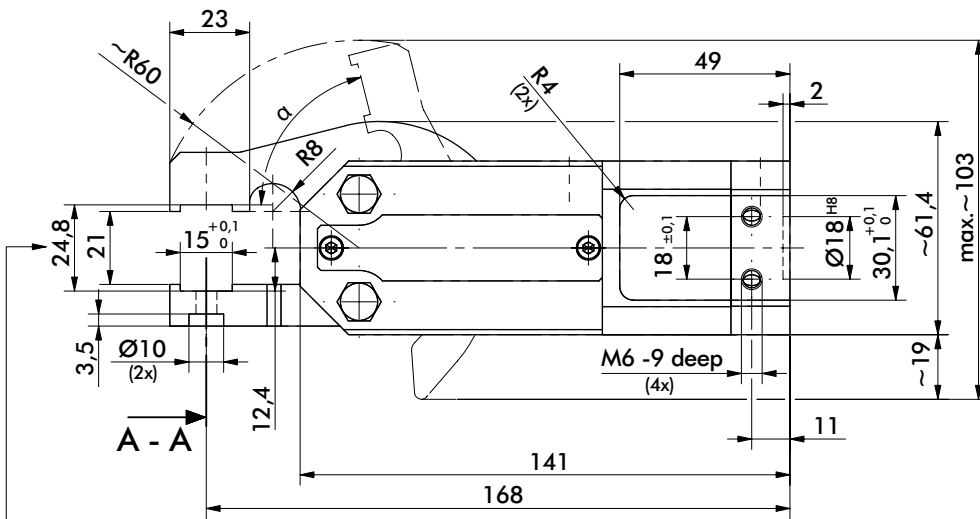
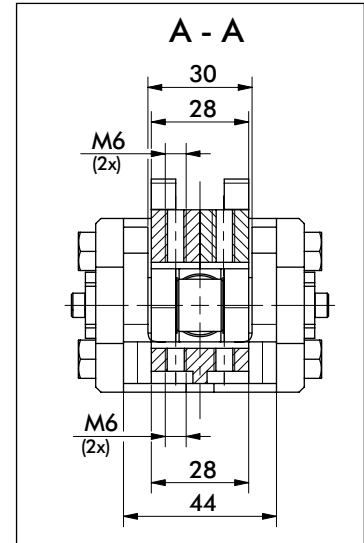
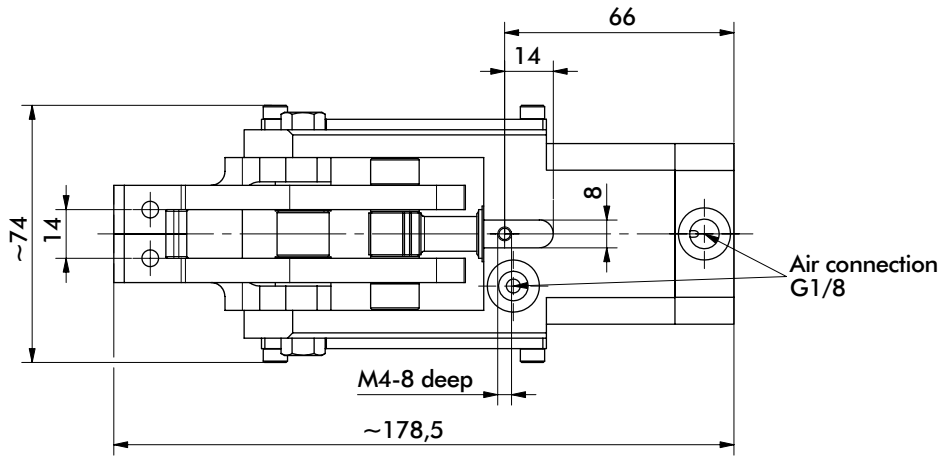
Medium air, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A3.34	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	1500 [337]	1,3 [2.87]
X	30°		
Y	45°		
Z	60°		

84A3.35 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

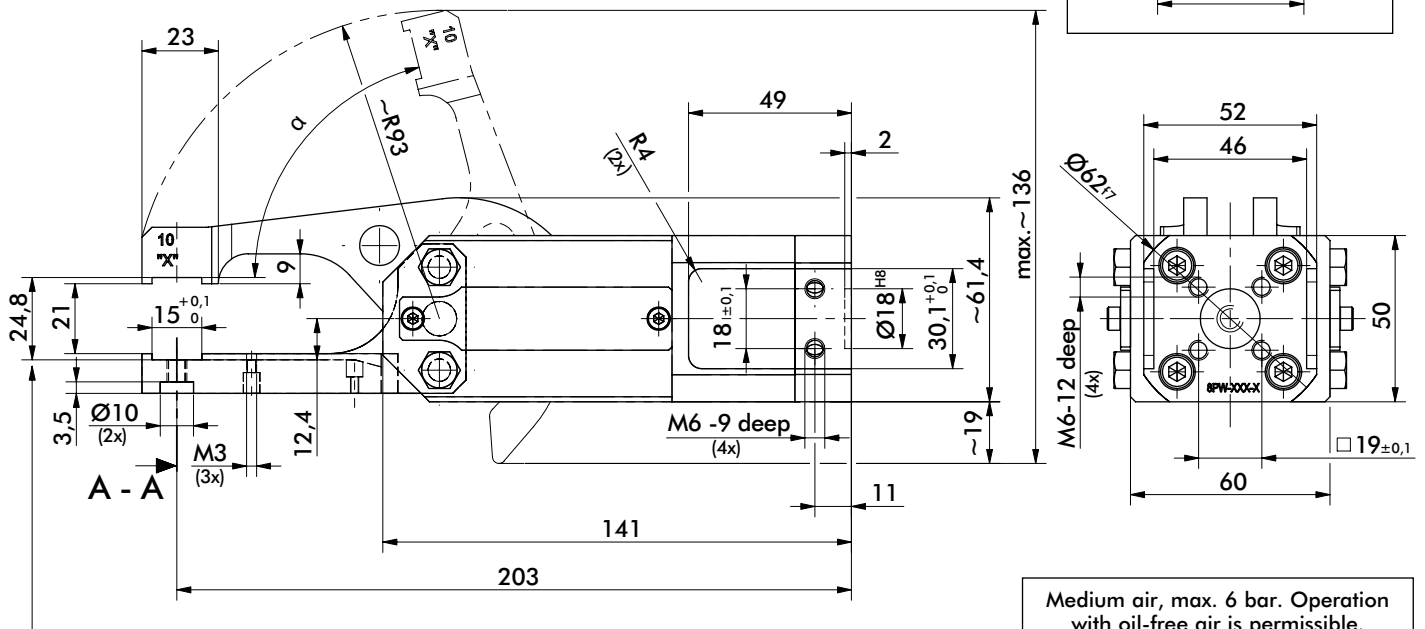
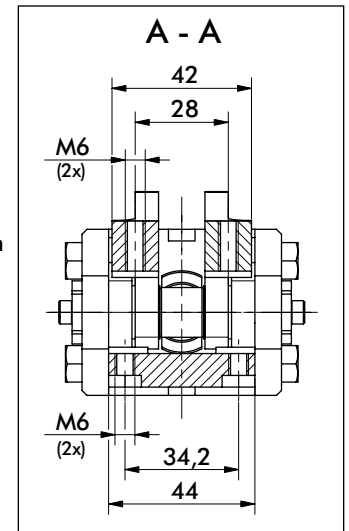
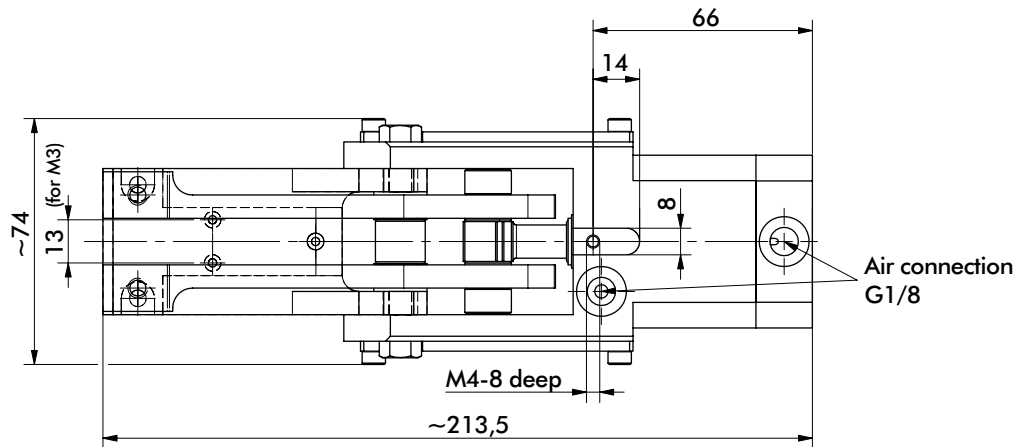
Medium air, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A3.35	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	1500 [337]	1,3 [2.87]
X	30°		
Y	45°		
Z	60°		

84A3.36 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Medium air, max. 6 bar. Operation with oil-free air is permissible.

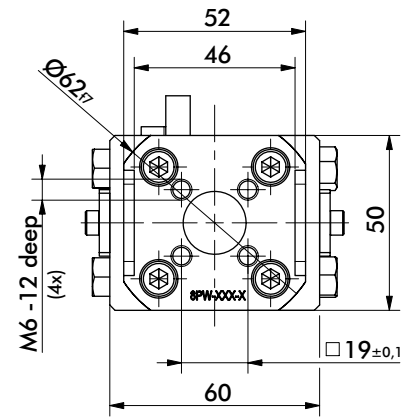
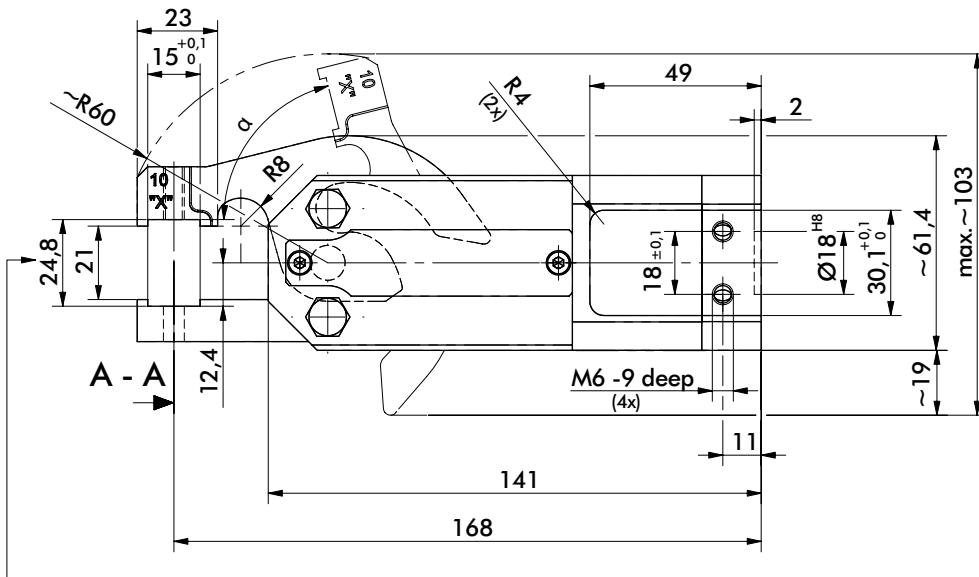
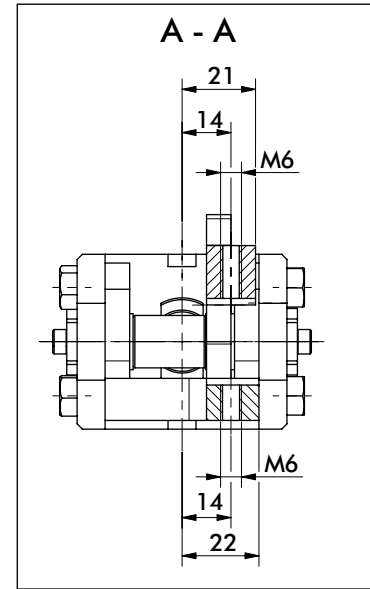
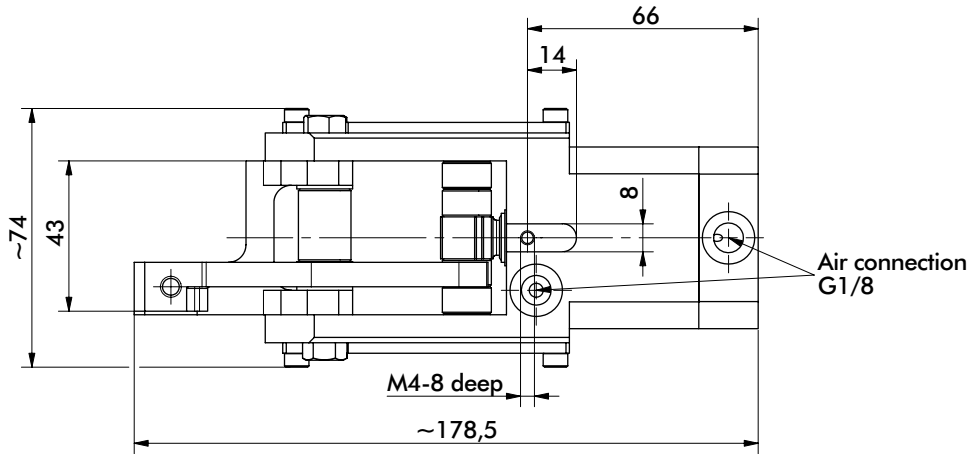
Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A3.36	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	570 [128]	1,55 [3.42]
X	30°		
Y	45°		
Z	60°		

84A3.39 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

Medium air, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A3.39	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	1500 [337]	1,3 [2.87]
X	30°		
Y	45°		
Z	60°		

84A3-3 SERIES (MOVEABLE LOWER JAWS)

Cam Type Sheet Metal Grippers | Ordering Information

Moveable Lower Jaw

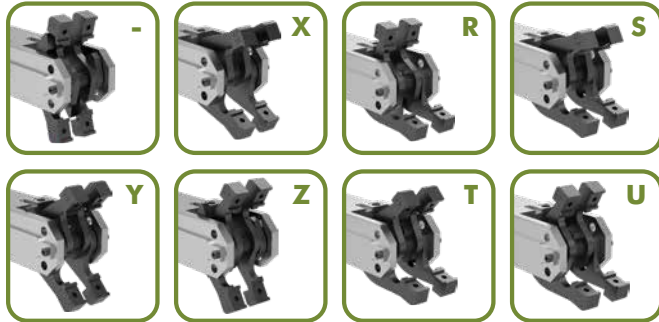
Sensors, Gripper Teeth & Mounting (See next page)

84A3 **X** **33** **00** **A** **AL** **AL** - **T** • High Temperature

Jaw Opening Options

Description

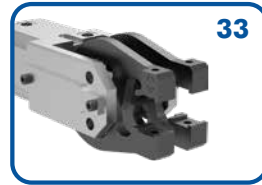
- 76° Jaw Opening (Symmetrical) **R** 76° Upper/15° Lower Jaw
- X** 30° Jaw Opening (Symmetrical) **S** 30° Upper/15° Lower Jaw
- Y** 45° Jaw Opening (Symmetrical) **T** 45° Upper/15° Lower Jaw
- Z** 60° Jaw Opening (Symmetrical) **U** 60° Upper/15° Lower Jaw



Jaw Arrangement Options

Description

- 33** Double Symmetrical, Straight Design -or- 15° Lower, Double Upper, Straight Design



Specifications	Unit	
Piston	mm	32
Actuation Time (open/close)	sec	0.2
Air Consumption per Double Stroke at 5 bar	L	0.4

84A3-3 SERIES (MOVEABLE LOWER JAWS)

Cam Type Sheet Metal Grippers | Ordering Information

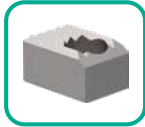
Gripper Teeth, Points and Crown Options (Upper and Lower)

Steel Teeth

- 00** None
- AA** 14,9x21x12mm - 8JZ-014-3
- AH** 14,9x14x14mm - 8JZ-001-1
- AL** 14,9x14,9x9,8mm - 8JZ-003-1
- AC** 14,9x14x12mm - 8JZ-043-1
- AG** 14,9x14x12mm - 8JZ-050-1
- BK** 14,9x21x11mm - 8JZ-066-1

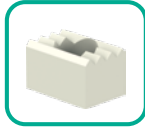


High Temperature
AS 8JZ-094-1



Plastic Teeth*

- 00** None
 - KA** 8JZ-021-1
 - KC** 8JZ-023-1 (Upper)
- *Not suitable for High Temperature applications



Shims for gripper teeth available
Order Separately **8SB-003-1**
Dimensions: 14,8 x 13 x 0,15 mm

Steel Points (Upper only)

- 00** None
- PA** 8MJ-1001-1
- PB** 8MJ-1002-1
- PC** 8MJ-1003-1



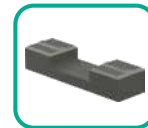
Crown Teeth - Concave (Lower Only)

- 00** None
- SE** 8JZ-019-1
- SF** 8JZ-020-3
- SH** 8JZ-048-1



Crown Teeth - Convex (Upper Only)

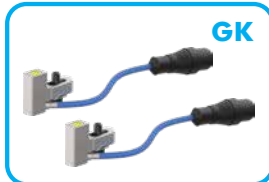
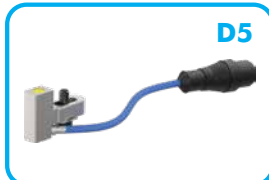
- SB** Mat. = 0,5-1mm - 8JZ-016-2
- SD** Mat. = 1-1,5mm - 8JZ-018-2



Sensor Options (not suitable for High Temperature applications)

Description

- 00** None
- KL** Position Control Set, Left for 76° Opening Angle - 8EA-022-4
- KR** Position Control Set, Right for 76° Opening Angle - 8EA-022-4
- D5** Double Sheet Control, M12x1 Plug - 8EA-087-1
- GK** 2X D5

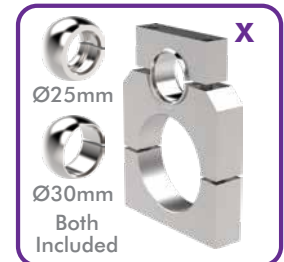
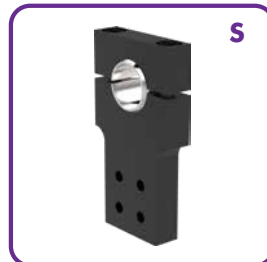


Cover for Sensing Systems **D5, GK**
Order Separately **82ZB-185-1**

Mounting Options

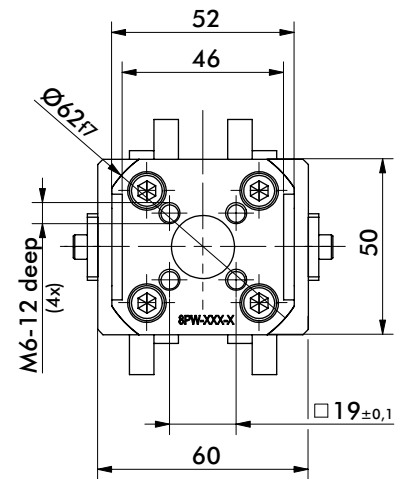
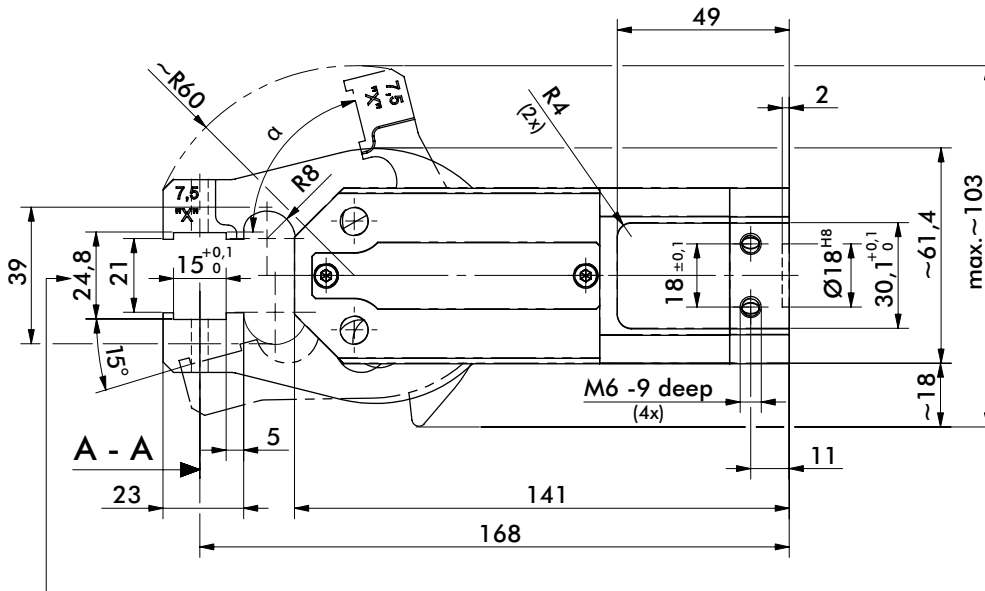
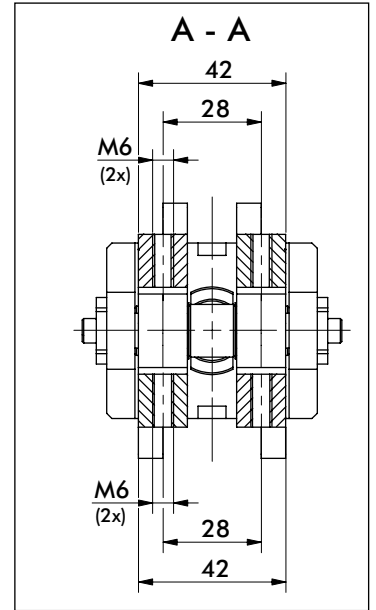
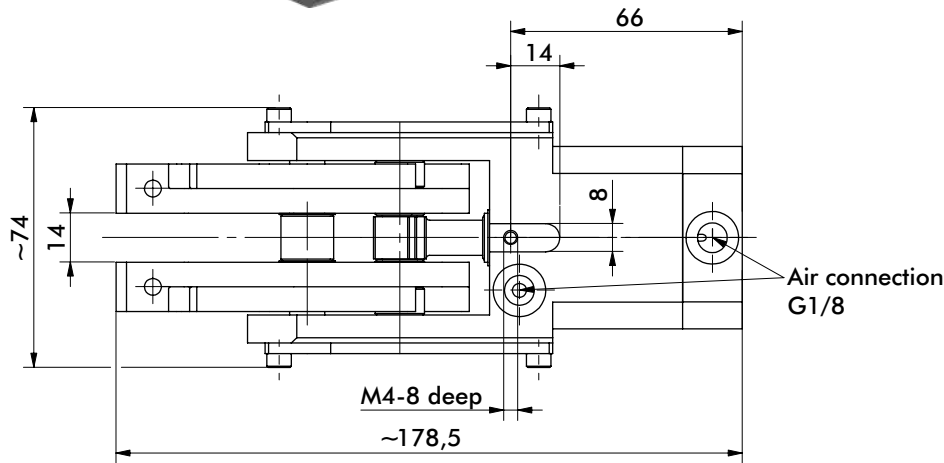
Description

- 0** None
- A** Rear Flange - 8MA-006-1
- 3** Rear Flange - 8MA-273-1
- S** Rear Swivel Ball - 82ZB-007-1
- X** On-Body Swivel Ball - 82ZB-033-2



84A3.33 SERIES (DOUBLE 15° LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

Medium air, max. 6 bar. Operation with oil-free air is permissible.

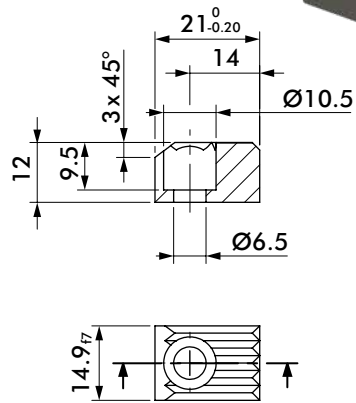
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A3.33	Opening Angle α Upper/Lower	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
R	76°/15°	750 [169]	1,35 [2.98]
S	30°/15°		
T	45°/15°		
U	60°/15°		

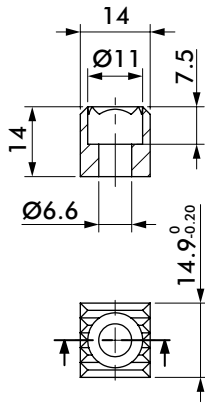
84A3 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

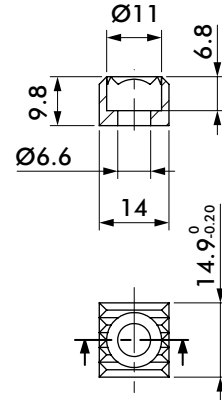
Steel Teeth



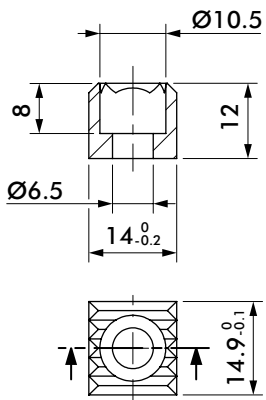
Steel Teeth Part Number
Serrated **8JZ-014-3**



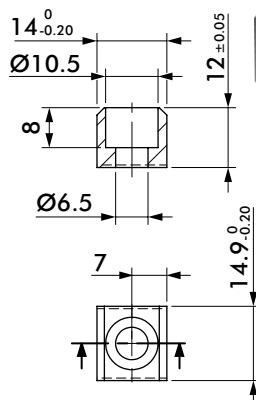
Steel Teeth Part Number
Serrated **8JZ-001-1**



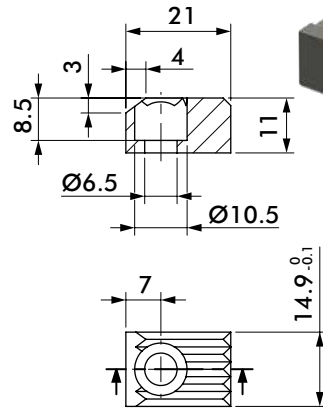
Steel Teeth Part Number
Serrated **8JZ-003-1**



Steel Teeth Part Number
Serrated **8JZ-043-1**

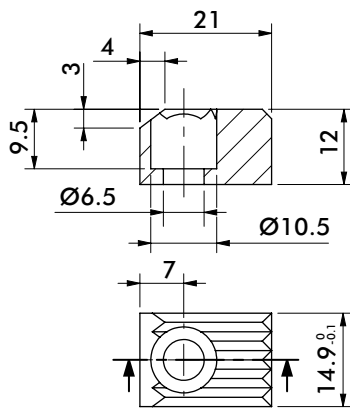


Steel Teeth Part Number
Flat **8JZ-050-1**



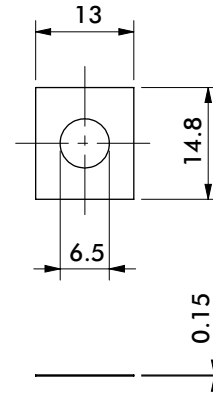
Steel Teeth Part Number
Serrated **8JZ-066-1**

High Temperature Steel Teeth



Steel Teeth Part Number
High Temperature, Serrated **8JZ-094-1**

Shims

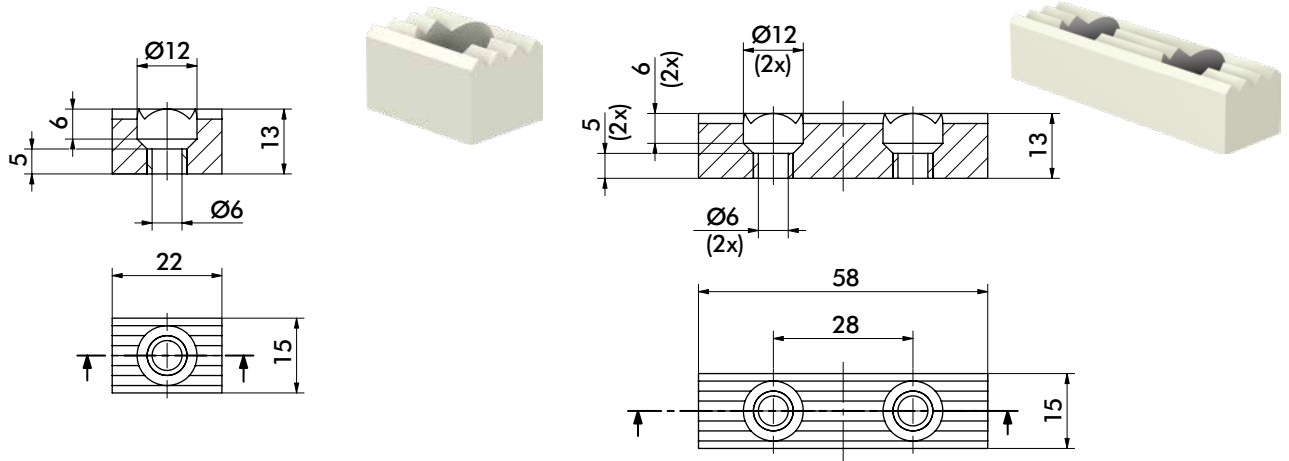


Shims Part Number
Shims for Gripper Teeth **8SB-003-1**

84A3 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

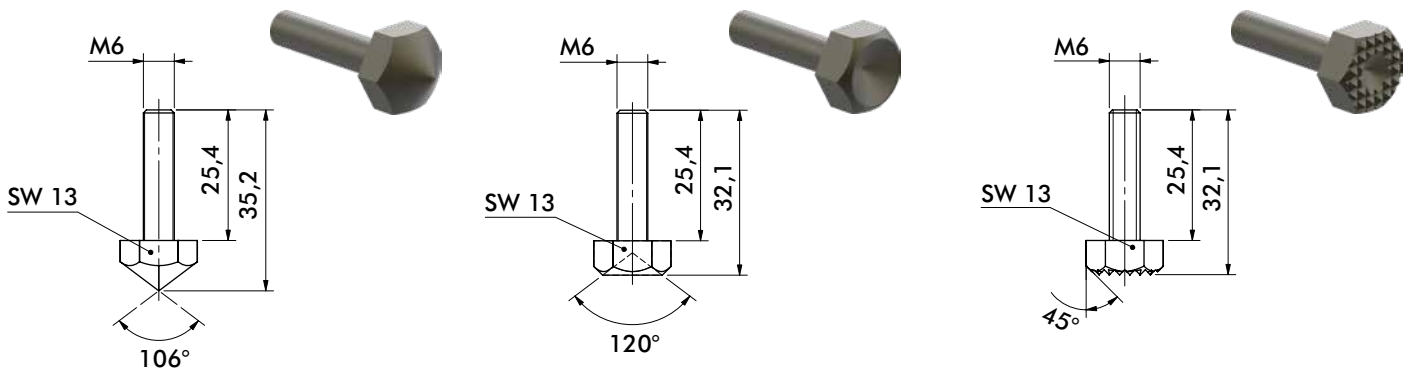
Plastic Teeth



Plastic Teeth Part Number **8JZ-021-1**
90 Shore, Serrated

Plastic Teeth Part Number **8JZ-023-1**
90 Shore, Serrated (Upper)

Steel Points

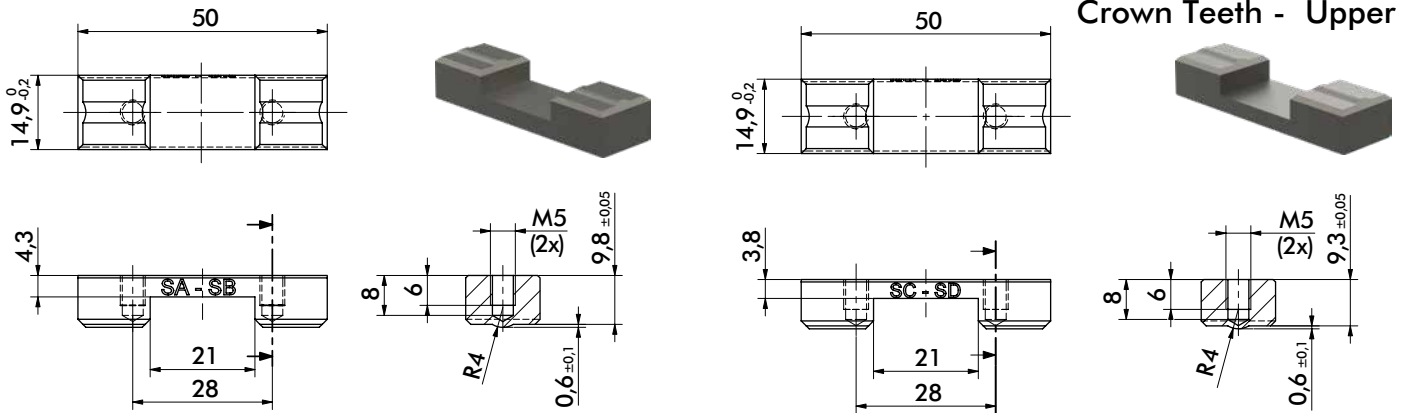


Steel Point Part Number **8MJ-1001-1**
Pointed

Steel Point Part Number **8MJ-1002-1**
Flat

Steel Point Part Number **8MJ-1003-1**
Serrated

Crown Teeth - Upper



For material thickness 0,5 - 1,0 mm

For material thickness 1,0 - 1,5 mm

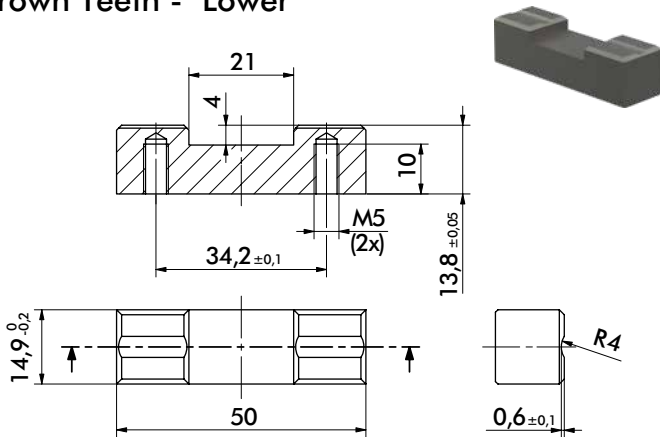
Crown Teeth Part Number **8JZ-016-2**
Convex

Crown Teeth Part Number **8JZ-018-2**
Convex

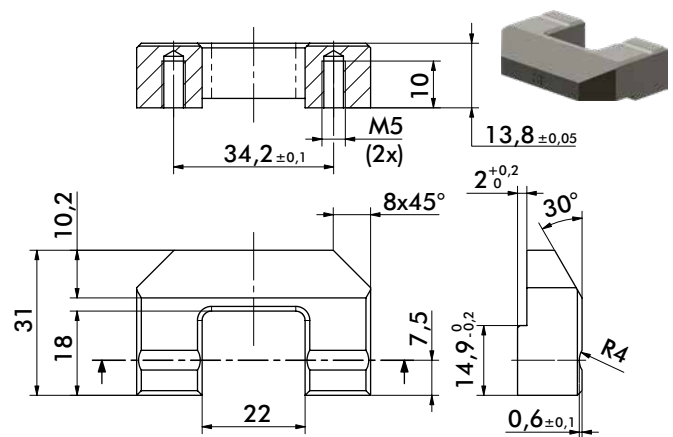
84A3 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Crown Teeth - Lower

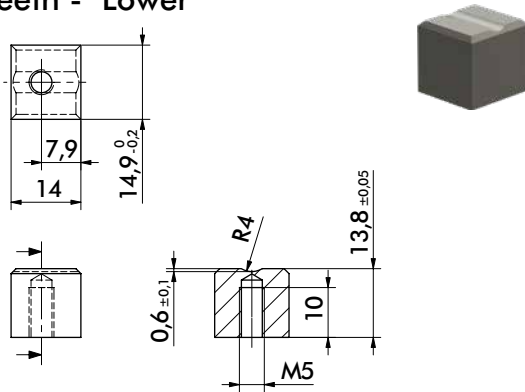


Crown Teeth
Concave
Part Number
8JZ-019-1



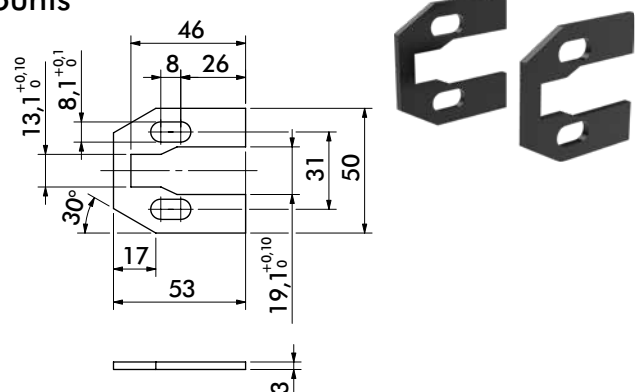
Crown Teeth
Concave
Part Number
8JZ-020-3

Crown Teeth - Lower



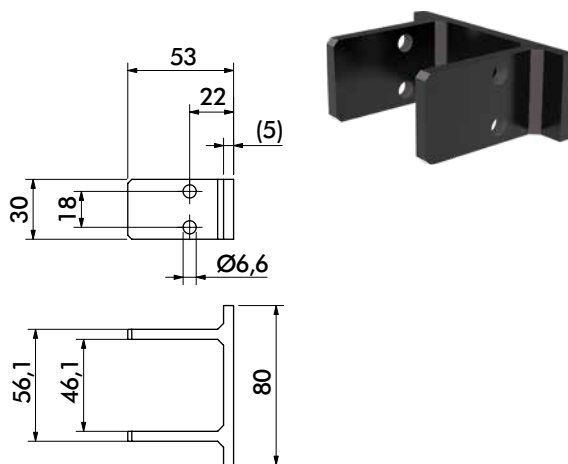
Crown Teeth
Concave
Part Number
8JZ-048-1

Mounts

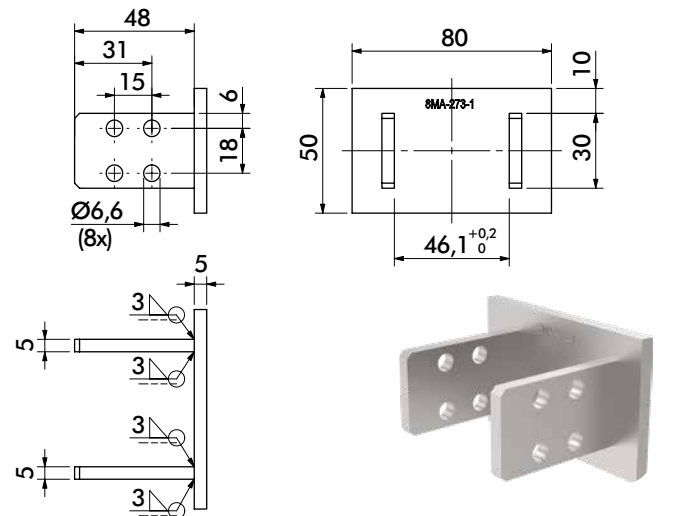


Mount
Guards
Part Number
8MH-046-1

Mounts



Mount
Rear Flange
Part Number
8MA-006-1

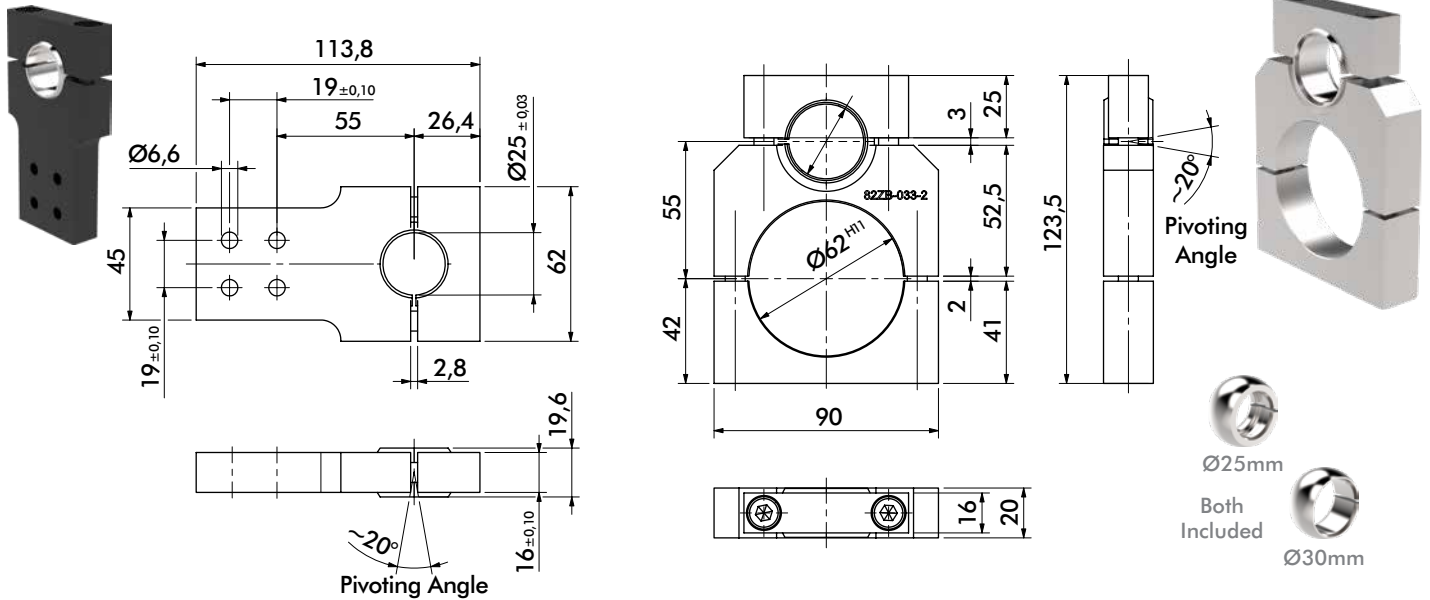


Mount
Rear Flange
Part Number
8MA-273-1

84A3 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

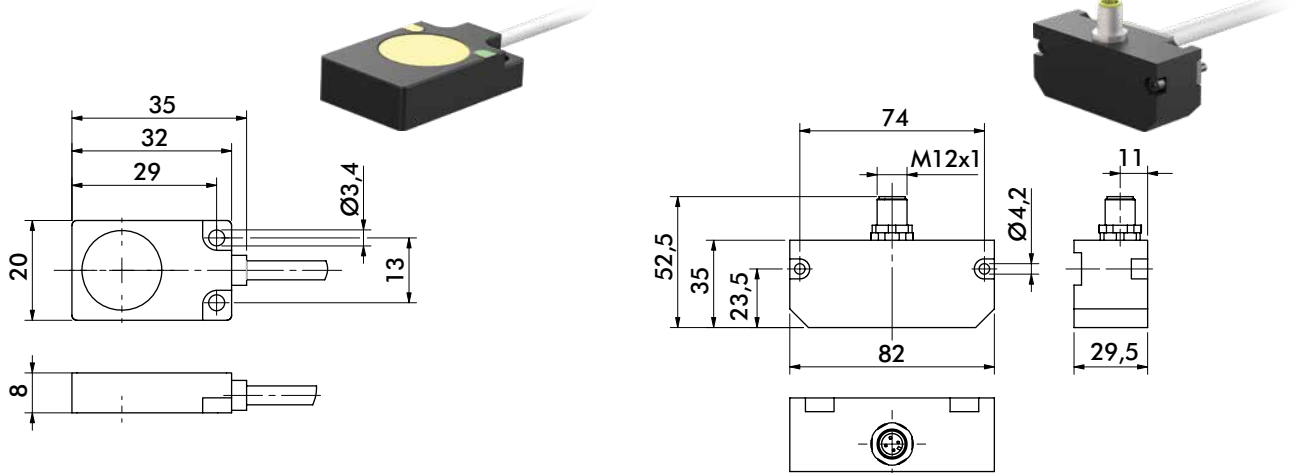
Mounts



Mount	Part Number
Rear Swivel Ball	82ZB-007-1

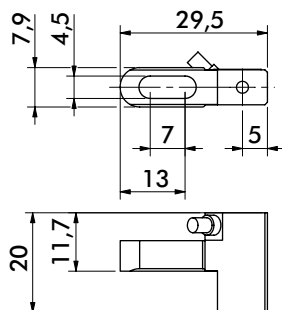
Mount	Part Number
On-Body Swivel Ball	82ZB-033-2

Sensors



Workpiece Control Sensor	Part Number
7mm Sensing Distance, 2m Cable	8EA-092-1

Position Control Set Sensor	Part Number
For 76° Opening Angle Only	8EA-022-4



Double Sheet Control Sensor	Part Number
1.5mm Sensing Distance	8EA-087-1

84A5-1 SERIES

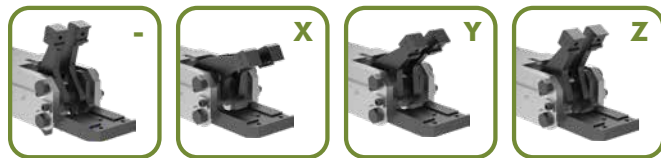
Cam Type Sheet Metal Grippers | Ordering Information

84A5 - 11 D5 A AA PA

Fixed Lower Jaw Opening Options

Description

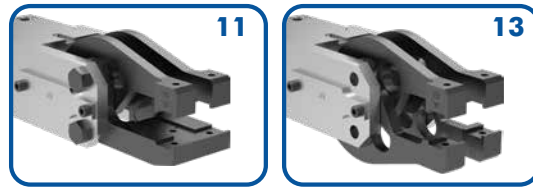
- 76° Jaw Opening (Standard)
- X 30° Jaw Opening
- Y 45° Jaw Opening
- Z 60° Jaw Opening



Jaw Arrangement Options

Description

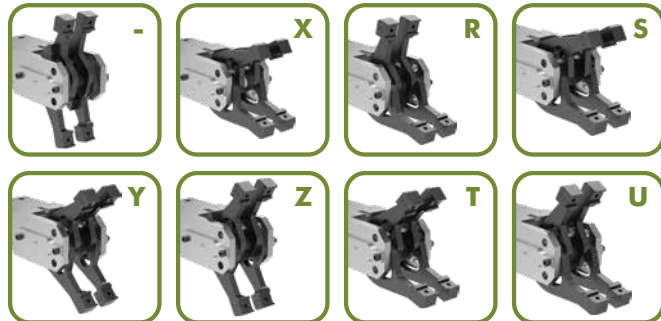
- 11 Double Upper, Single Lower, Straight Design
- 13 Double Upper and Lower, Straight Design



Moveable Lower Jaw Opening Options

Description

- 76° Jaw Opening (Symmetrical)
- X 30° Jaw Opening (Symmetrical)
- Y 45° Jaw Opening (Symmetrical)
- Z 60° Jaw Opening (Symmetrical)
- R 76° Upper/15° Lower Jaw
- S 30° Upper/15° Lower Jaw
- T 45° Upper/15° Lower Jaw
- U 60° Upper/15° Lower Jaw

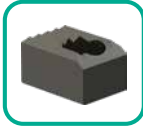


Specifications	Unit	
Piston	mm	50
Actuation Time (open/close)	sec	0.6
Air Consumption per Double Stroke at 5 bar	L	0.66

Gripper Teeth and Points Options (Upper and Lower)

Steel Teeth

- 00** None
- AA** 8JZ-014-3



Plastic Teeth

- 00** None
- KA** 8JZ-021-1*



*Cannot be used with **A8** sensor option.

Steel Points (Upper only)

- 00** None
- PA** 8MJ-1001-1
- PB** 8MJ-1002-1
- PC** 8MJ-1003-1

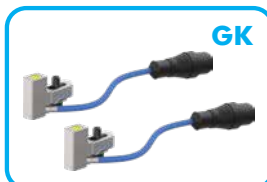


Shims for gripper teeth available
Order Separately **8SB-003-1**
Dimensions: 14,8 x 13 x 0,15 mm

Sensor Options

- | | Description |
|-----------|--|
| 00 | None |
| A8 | Workpiece Control, Switching Distance 7mm
8EA-092-1 (for 84A5-11 only)* |
| D5 | Double Sheet Control, M12x1 Plug - 8EA-087-1 |
| GK | 2X D5 |
| GN | A8 + D5 (for 84A5-11 only) |

*Cannot be used with **KA** plastic teeth option.



Shims for Sensor A8 available
Order Separately **8MB-003-1**

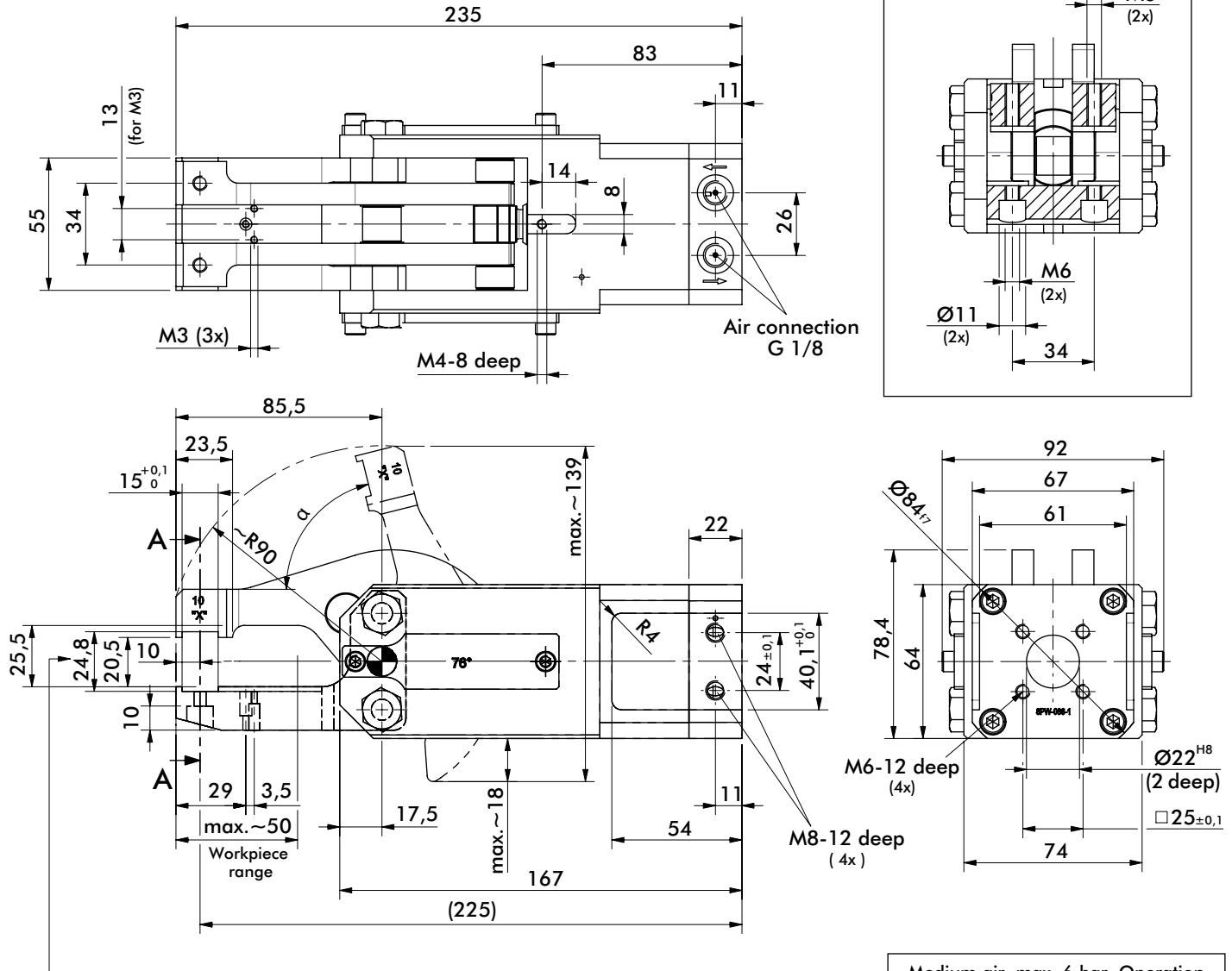
Mounting Options

- | | Description |
|----------|-------------------------|
| 0 | None |
| A | Rear Flange - 8MA-196-1 |



84A5.11 SERIES (SINGLE FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

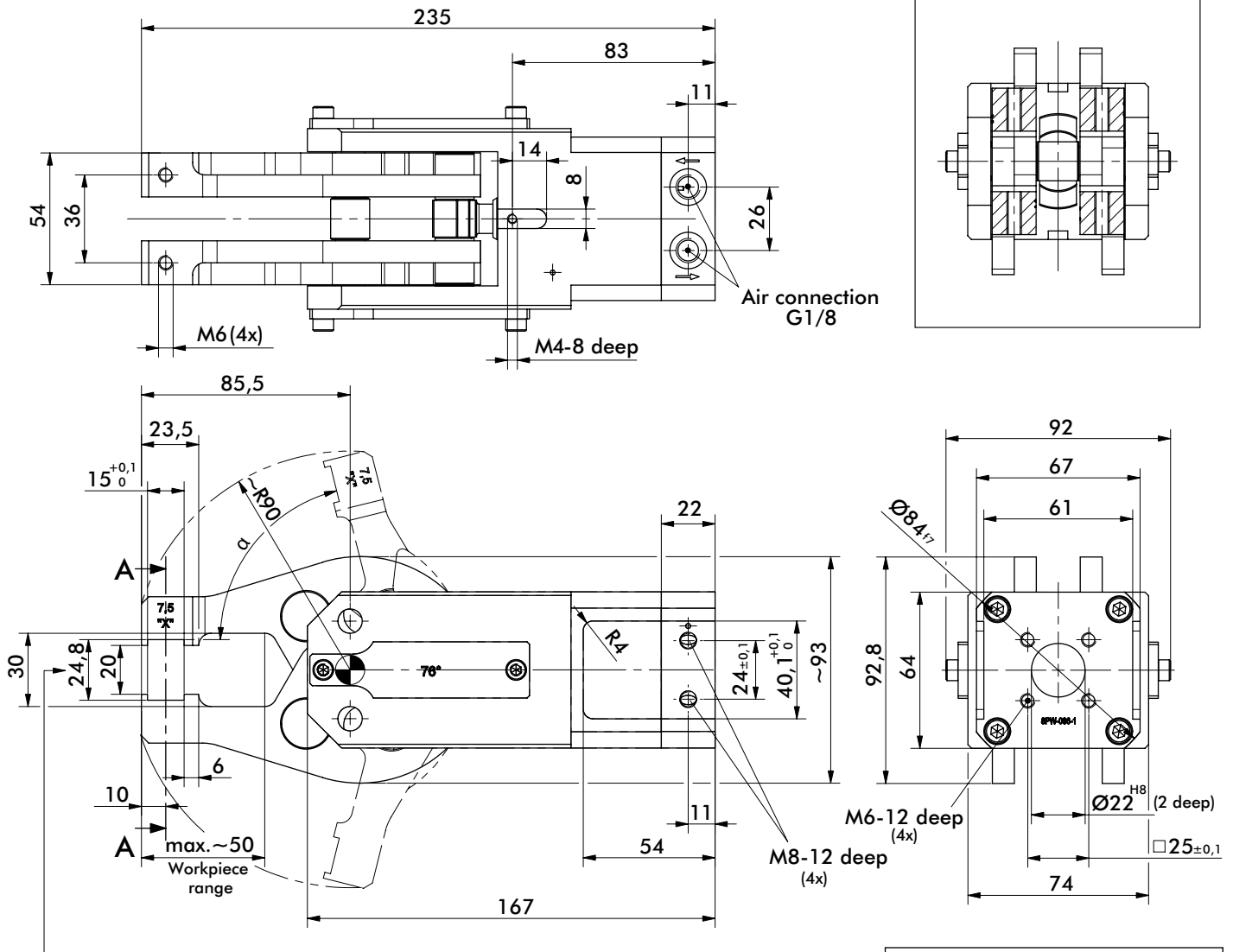
Medium air, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A5.11	Opening Angle α	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	2000 [450]	2,8 [6.17]
X	30°		
Y	45°		
Z	60°		

84A5.13 SERIES (DOUBLE SYMMETRICAL JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

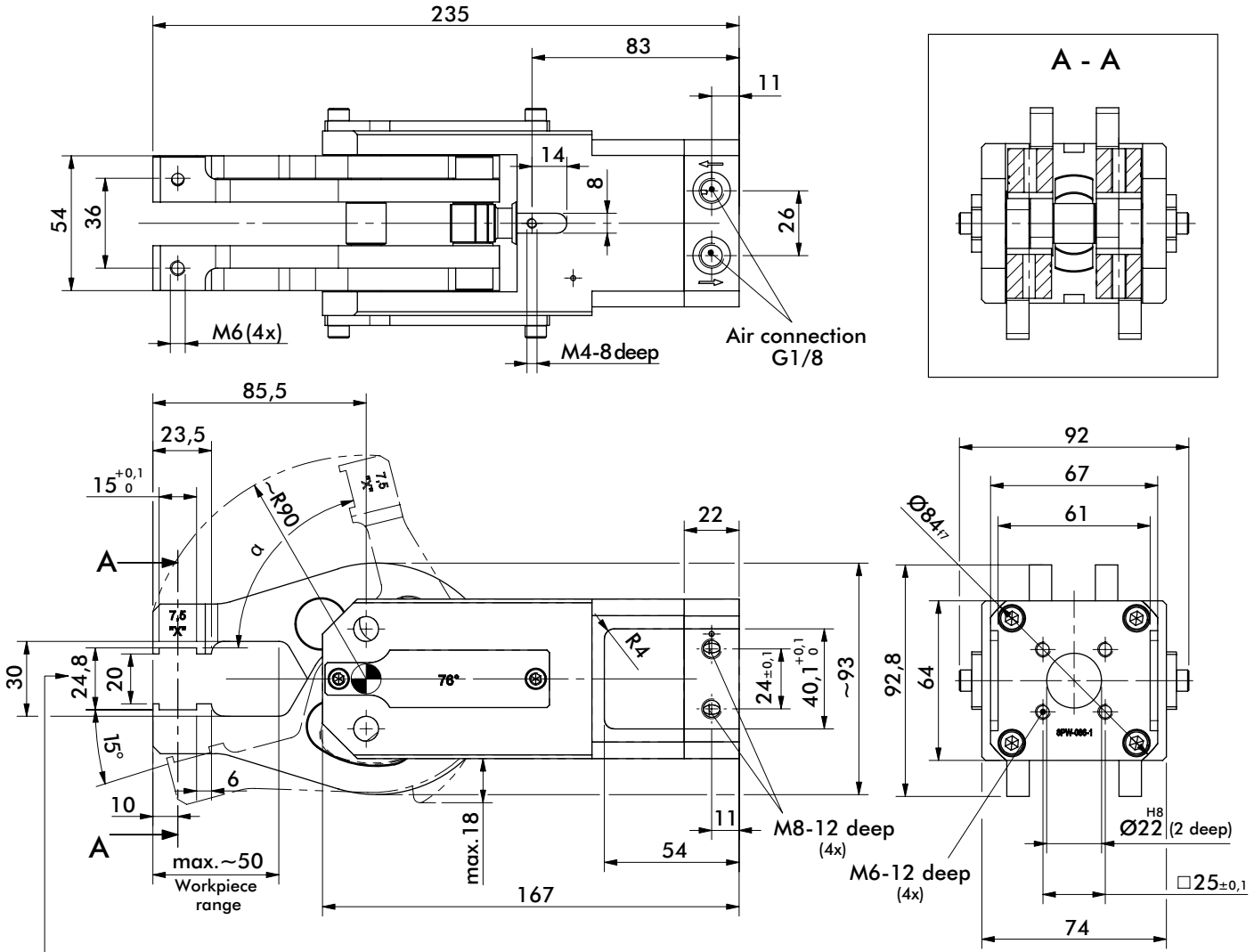
Medium air, max. 6 bar. Operation with oil-free air is permissible.

NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A5.13	Opening Angle α Symmetrical	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
-	76°	1200 [270]	2,8 [6.17]
X	30°		
Y	45°		
Z	60°		

84A5.13 SERIES (DOUBLE 15° LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



Addition of gripper teeth height and thickness of the clamped plate must be 24,8 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

Medium air, max. 6 bar. Operation with oil-free air is permissible.

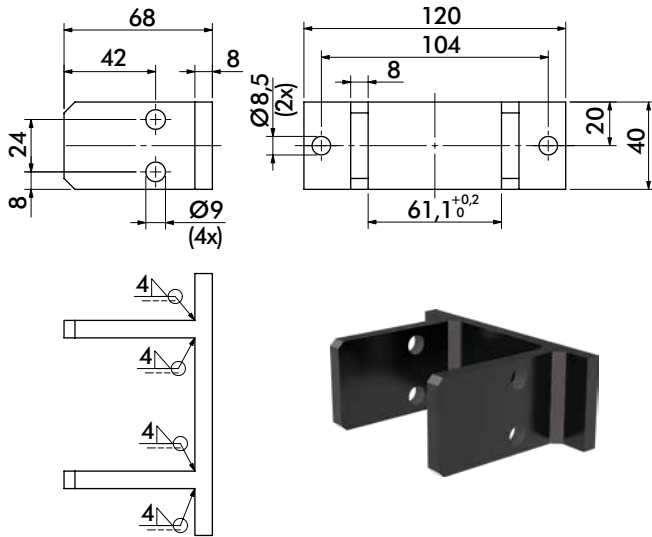
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

Model 84A5.13	Opening Angle α Upper/Lower	Clamping force at 5 bar ~N [lbs]	Weight Kg [lbs]
R	76°/15°	1200 [270]	2,8 [6.17]
S	30°/15°		
T	45°/15°		
U	60°/15°		

84A5-1 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Mount



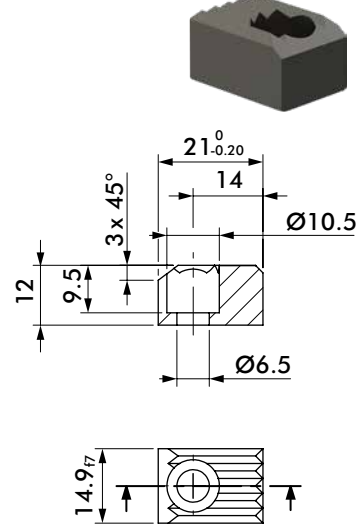
Mount

Rear Flange

Part Number

8MA-196-1

Steel Teeth



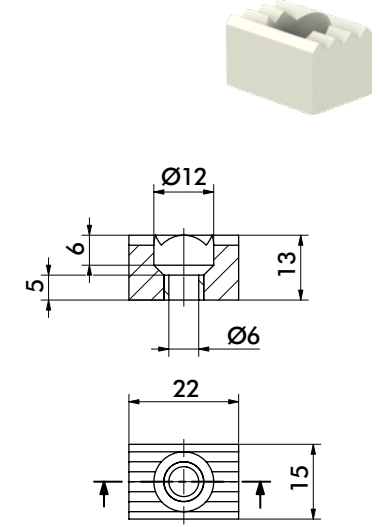
Steel Teeth

Serrated

Part Number

8JZ-014-3

Plastic Teeth



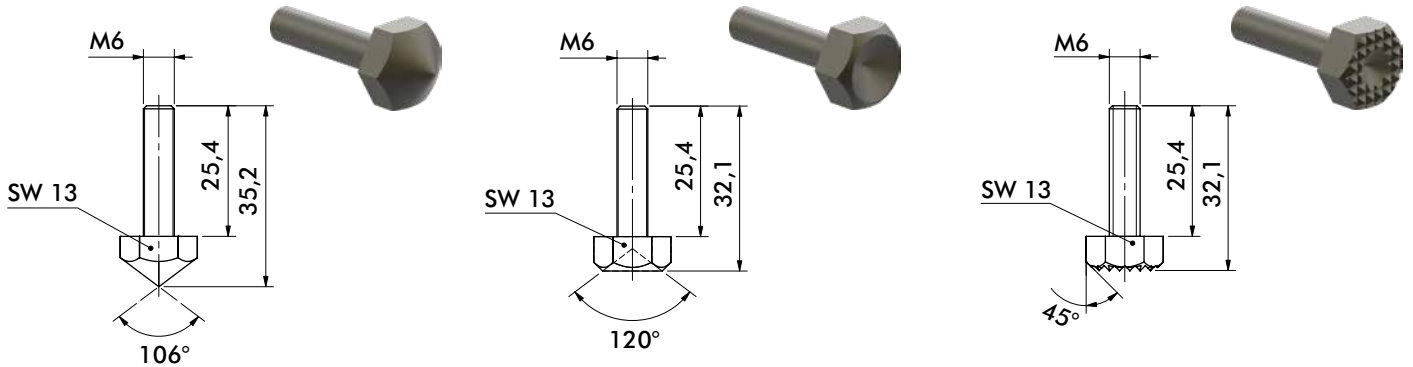
Plastic Teeth

Serrated

Part Number

8JZ-021-1

Steel Points



Steel Point

Pointed

Part Number

8MJ-1001-1

Steel Point

Flat

Part Number

8MJ-1002-1

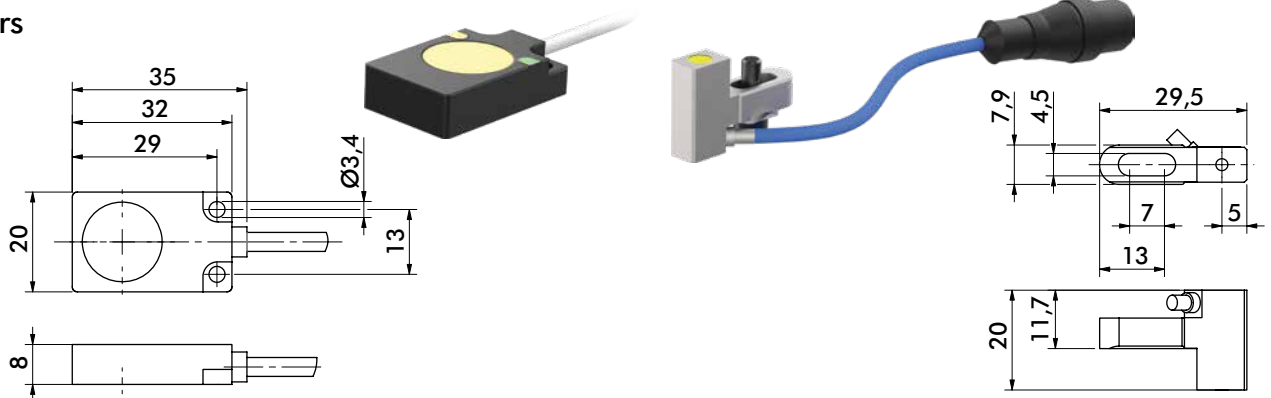
Steel Point

Serrated

Part Number

8MJ-1003-1

Sensors



Workpiece Control Sensor

7mm Sensing Distance, 2m Cable

Part Number

8EA-092-1

Double Sheet Control Sensor

1.5mm Sensing Distance

Part Number

8EA-087-1