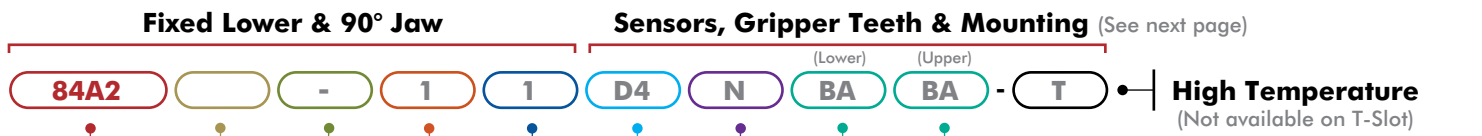


84A2 SERIES (FIXED LOWER JAW)

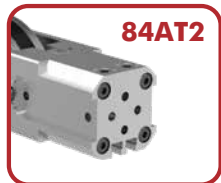
Cam Type Sheet Metal Grippers | Ordering Information



Body Style Options

Description

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



Porting Options

Description

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



Jaw Arrangement Options

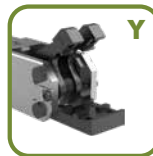
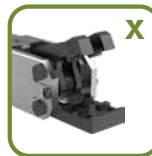
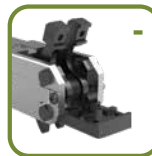
Description

- 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.

Jaw Opening Options

Description

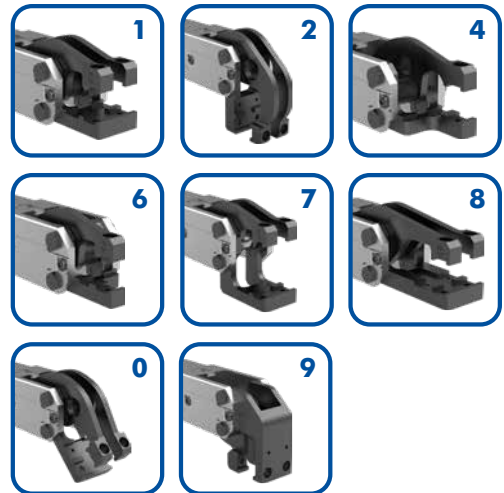
- 72° Jaw Opening (Std.)
- X** 30° Jaw Opening
- Y** 45° Jaw Opening



Jaw Orientation Options (Option 8 Only)

Description

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



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

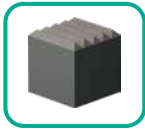
84A2 SERIES (FIXED LOWER JAW)

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

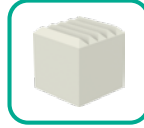


- EE** Soft Steel - 8JZ-092-1



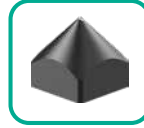
Plastic Teeth*

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



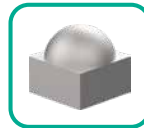
Steel Points

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

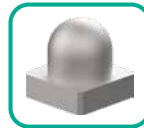


High Temperature (84A2 Only)

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



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



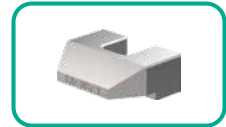
Crown Teeth

- 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

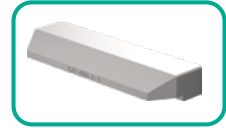


High Temperature (84A2 Only)

- 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

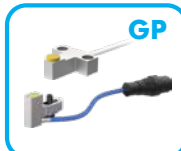
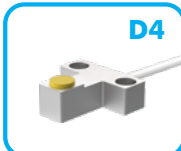


Sensor Options (not suitable for High Temperature applications)

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

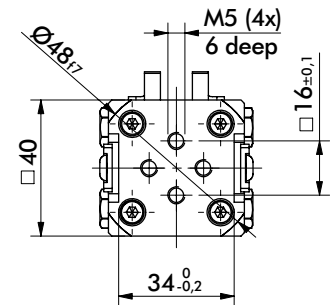
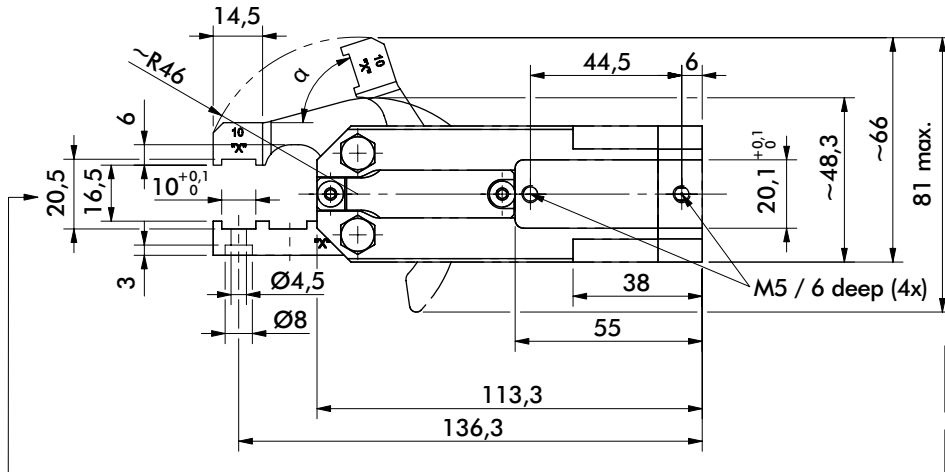
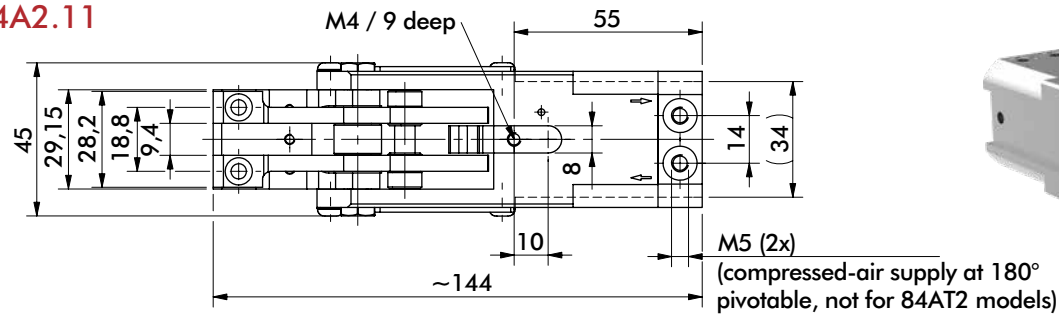
- 0** None
- I** Ø20mm Rear Rod 8MA-165-1
- J** Ø25mm Rear Rod 8MA-166-1
- Z** Ø1.00" Rear Rod 8MA-168-1
- L** Ø20mm Apple Core GT-20M-84A2-L-R
- M** Ø32mm Rear Ball GT-32B-84A2-L-R
- N** Ø32mm Flanged Ball GT-32B-84A2-B
- Q** Guards 8MH-054-1 (For Jaw Arrangements Options 1, 4, 6 only)
- V** Rear Flange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



84A2..1 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.11

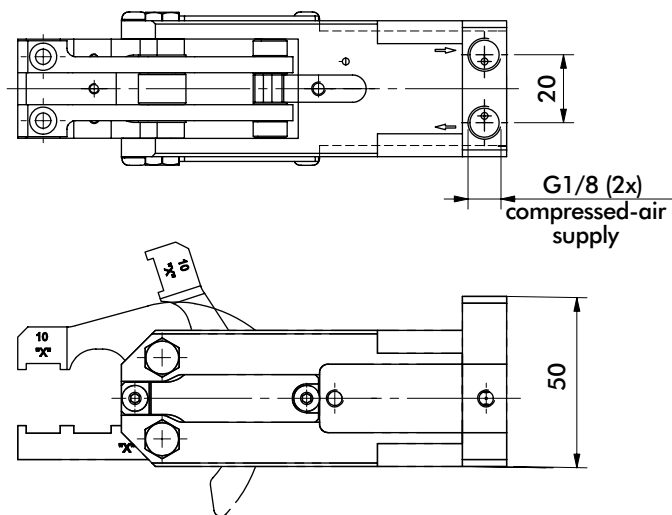


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

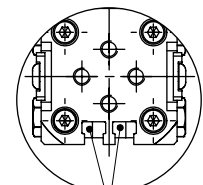
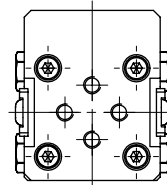
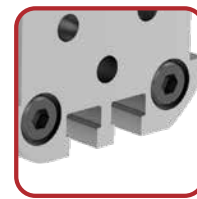
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

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



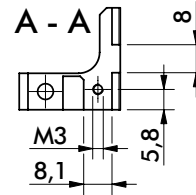
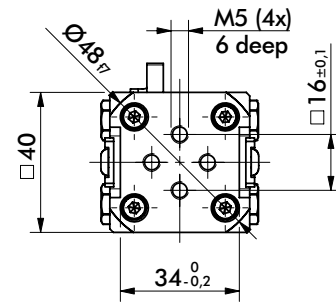
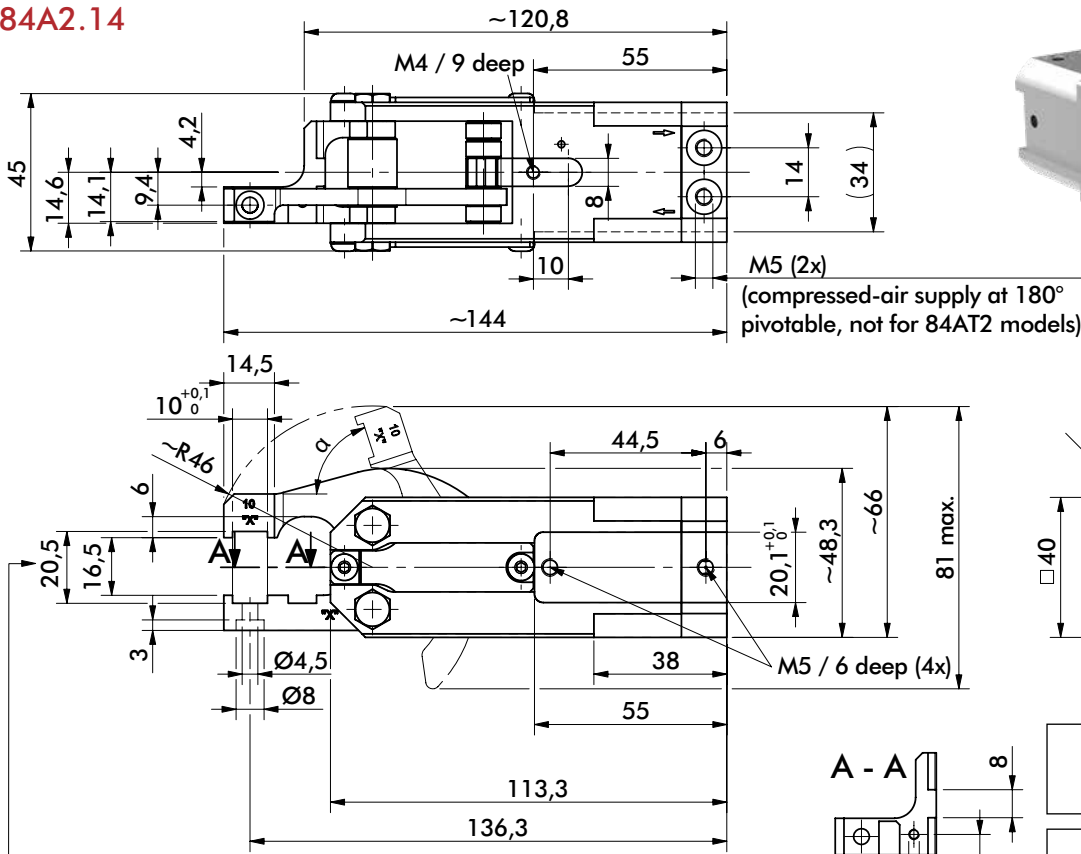
T-groove for sensor

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..4 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.14

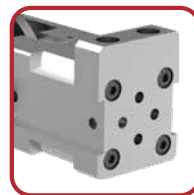
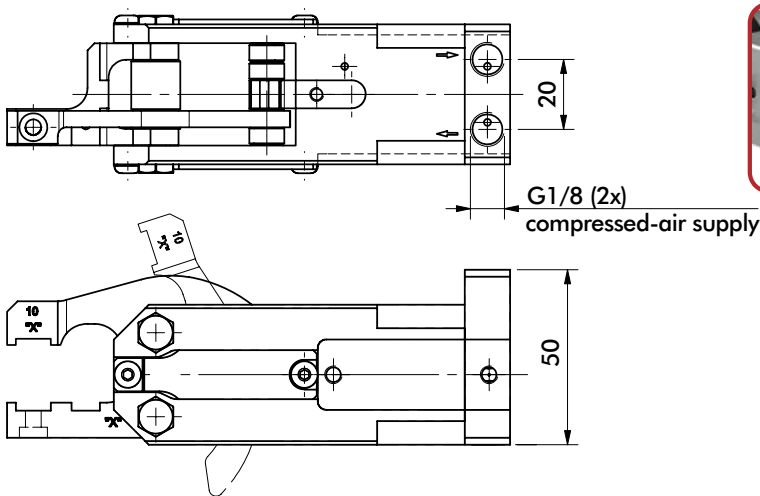


Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

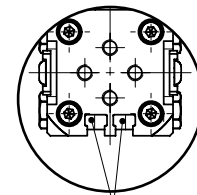
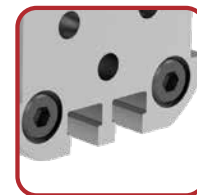
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warranty.

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



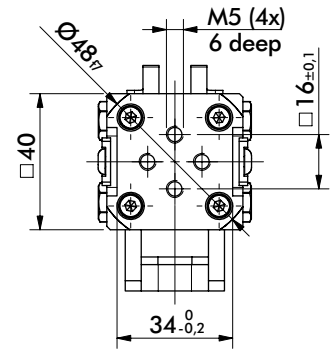
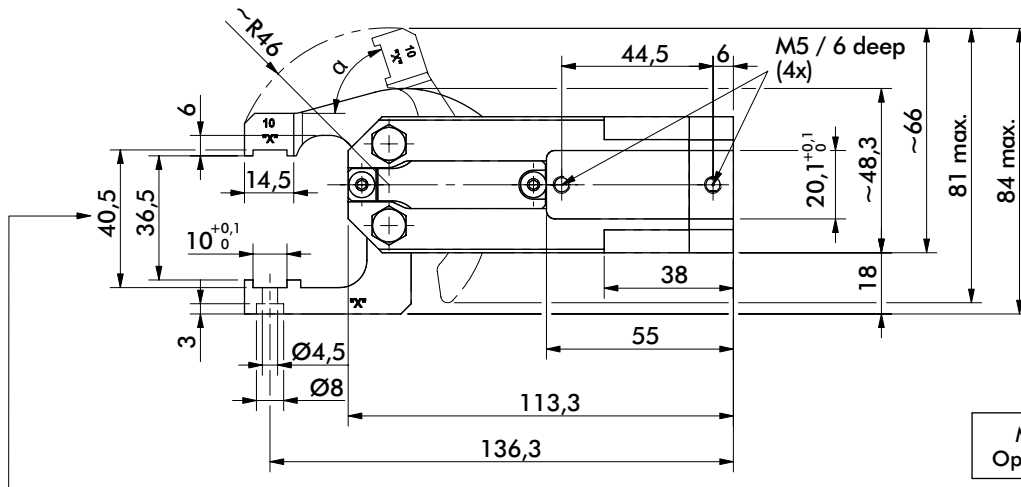
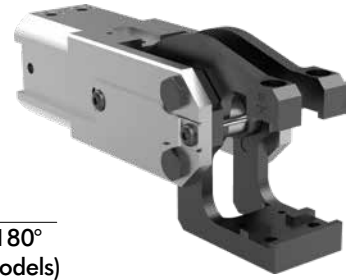
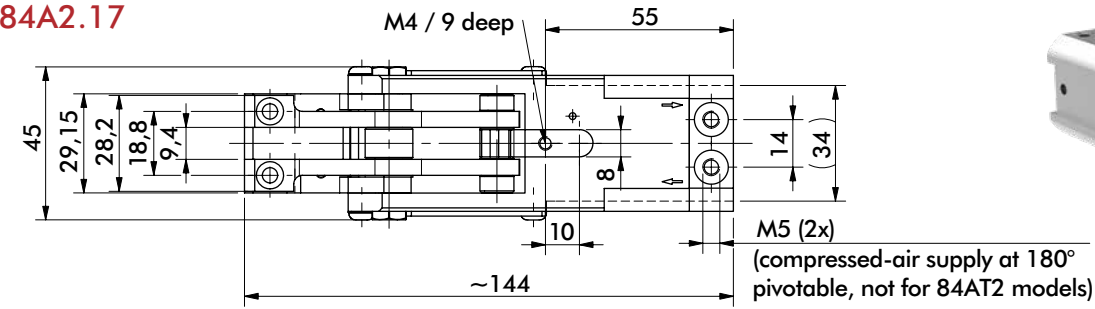
T-groove for sensor

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..7 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.17

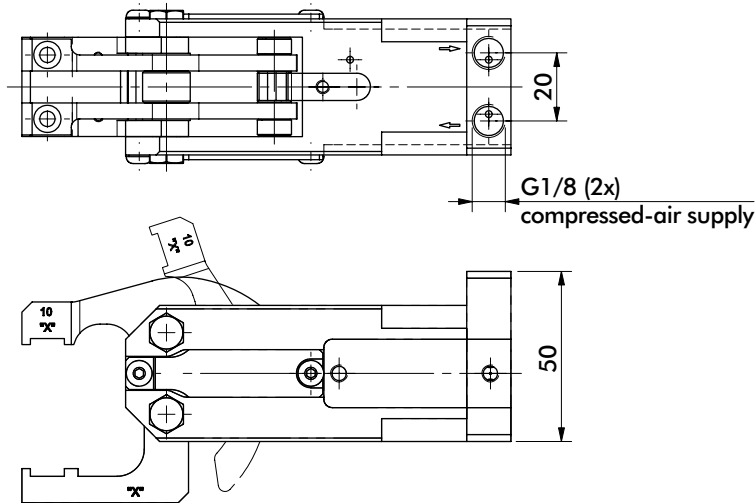


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

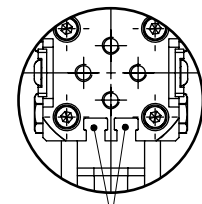
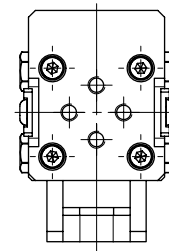
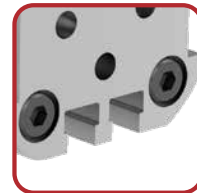
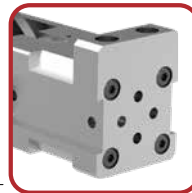
Addition of gripper teeth height and thickness of the clamped plate must be 40,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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



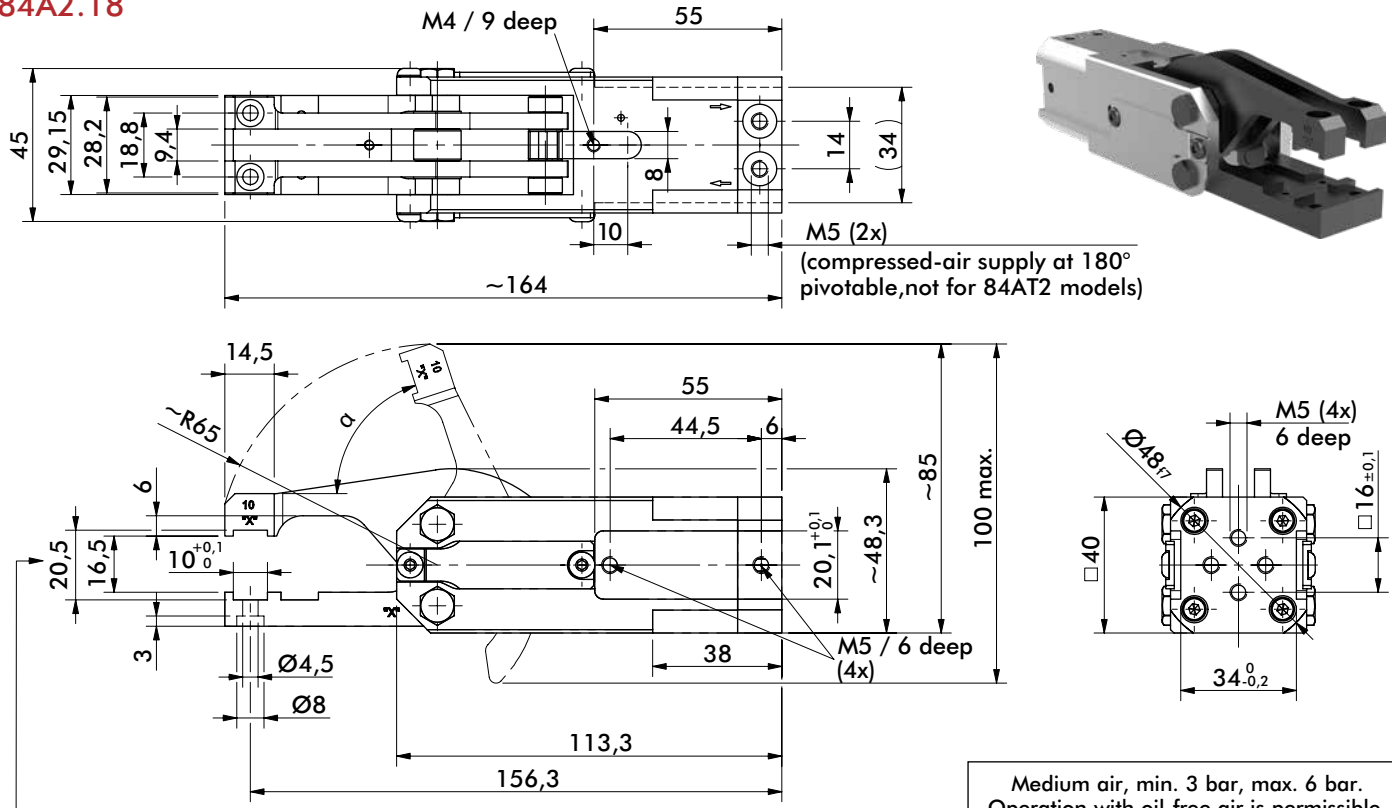
T-groove for sensor

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

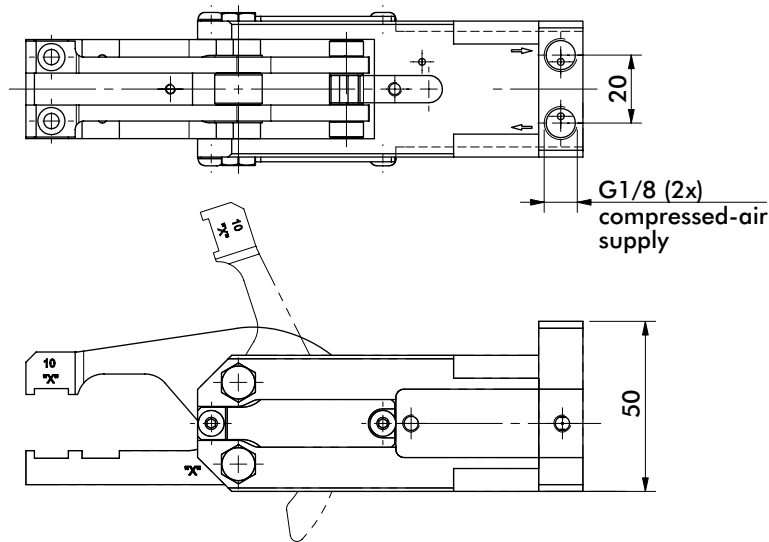
84A2.18



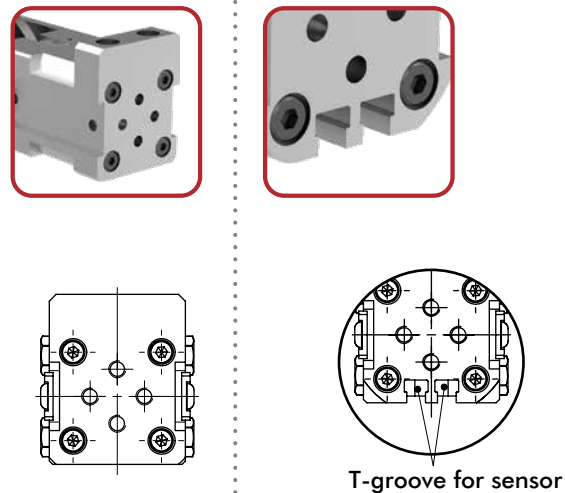
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2.V8



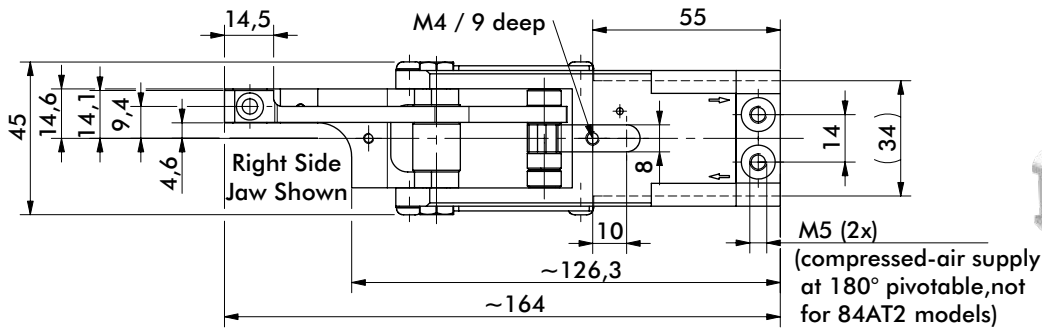
84AT2..8



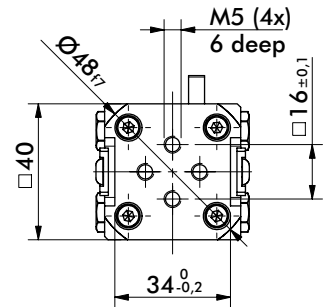
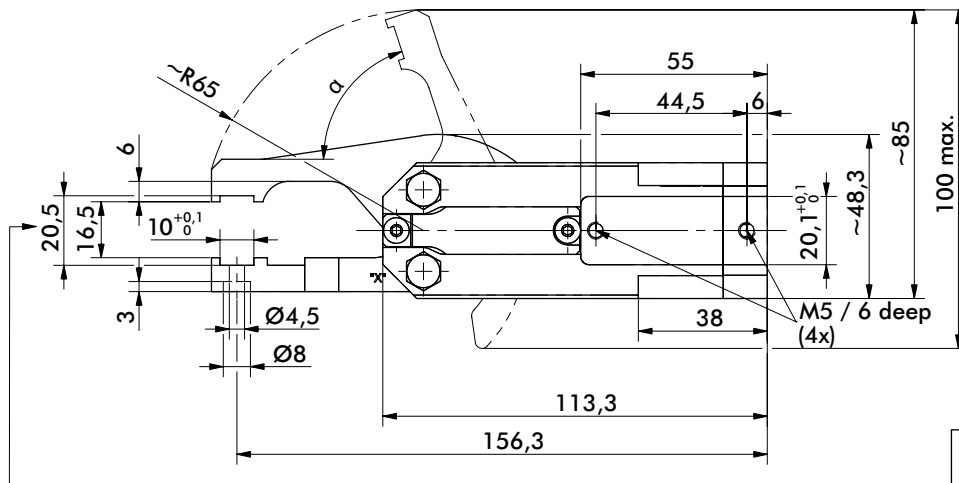
Model 84A2..8/84AT2..8	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°		
X	30°	560 [126]	0,65 [1.43]
Y	45°		

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



84A2..18

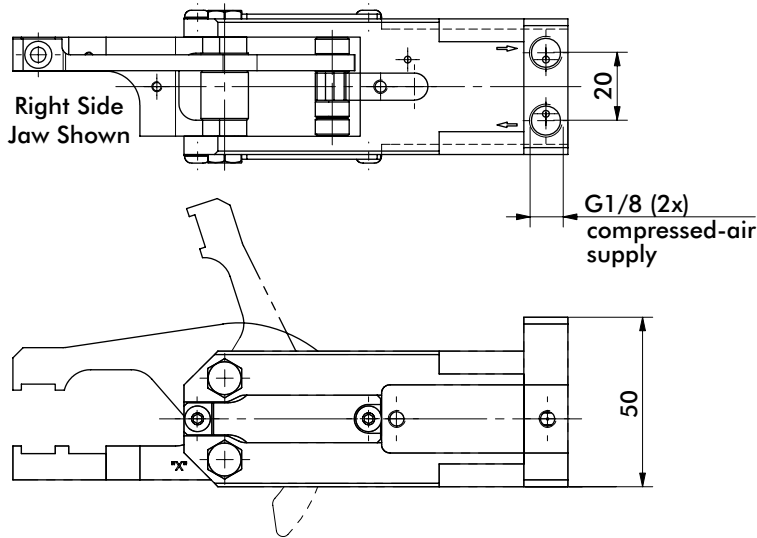


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

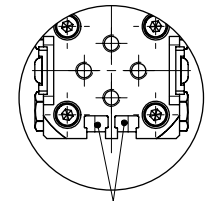
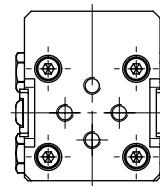
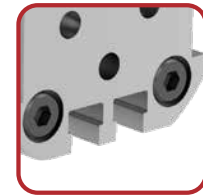
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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



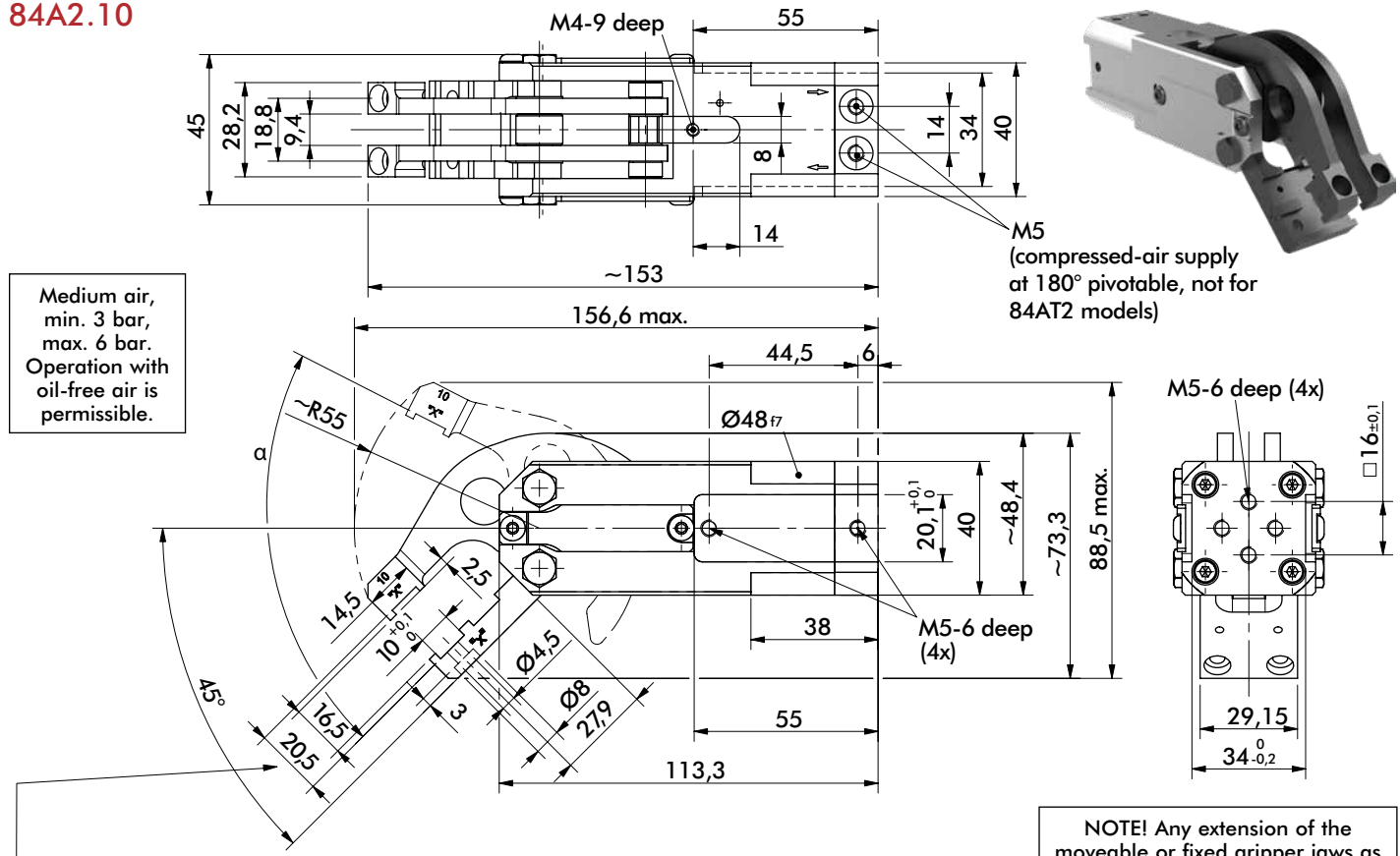
T-groove for sensor

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

84A2..0 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.10

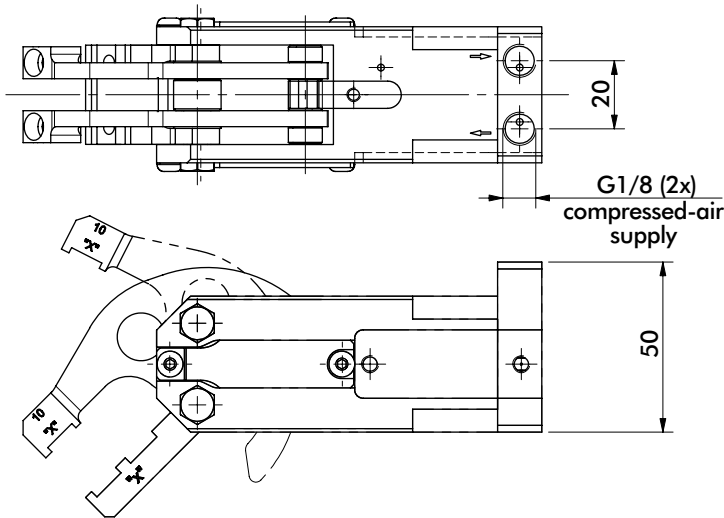


Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

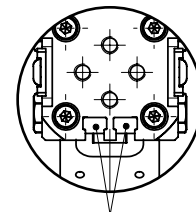
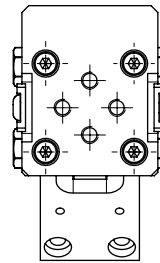
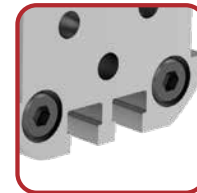
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2.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°		

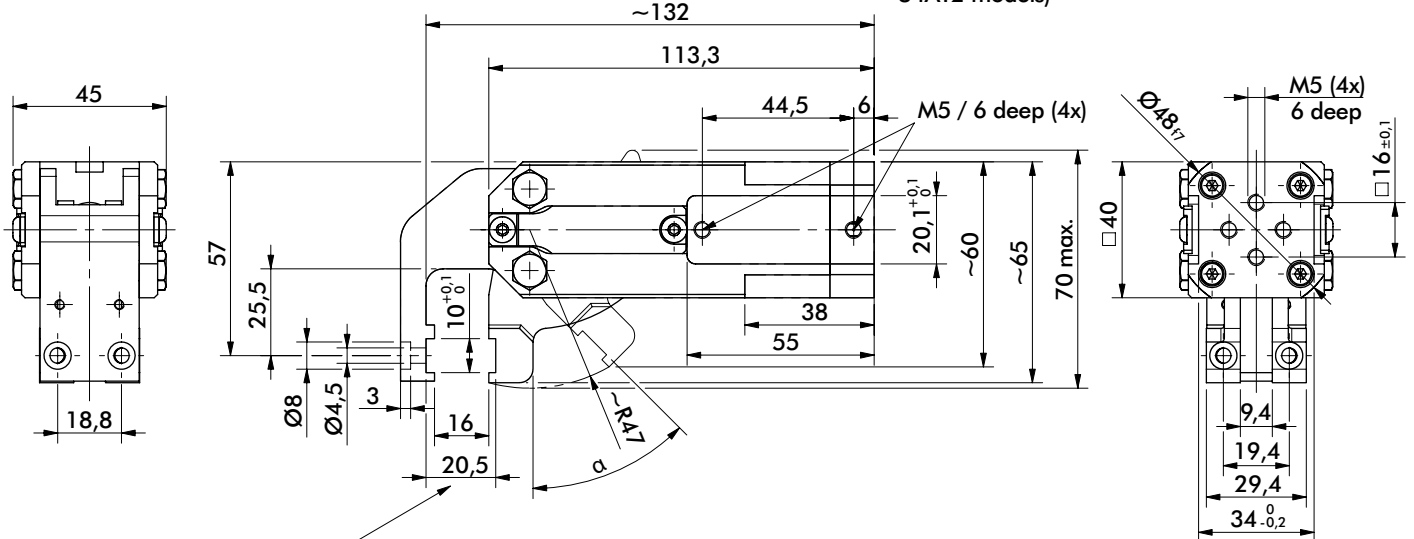
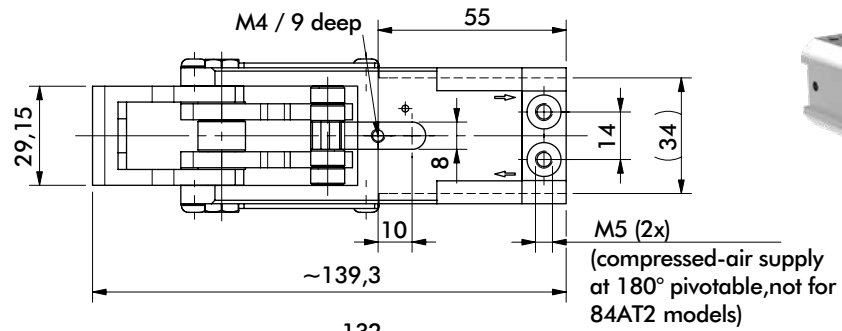
84A2..9 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.19

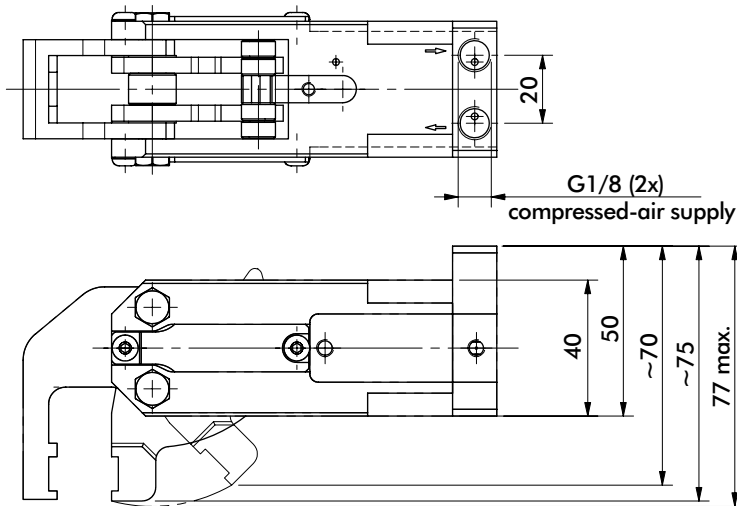
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warranty.

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

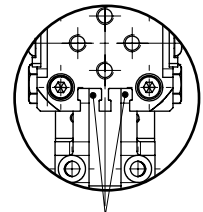
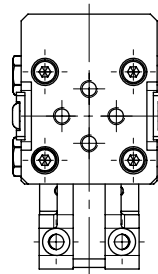
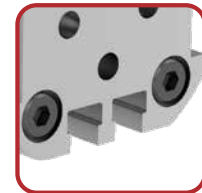
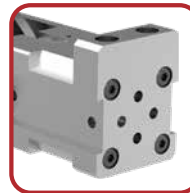


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

84A2.V9



84AT2..9

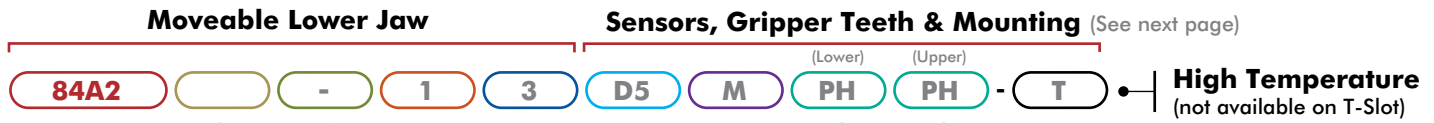


T-groove for sensor

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)

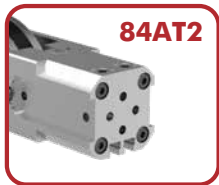
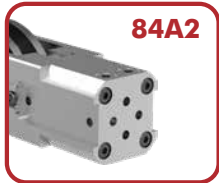
Cam Type Sheet Metal Grippers | Ordering Information



Body Style Options

Description

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



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 Orientation Options

Description

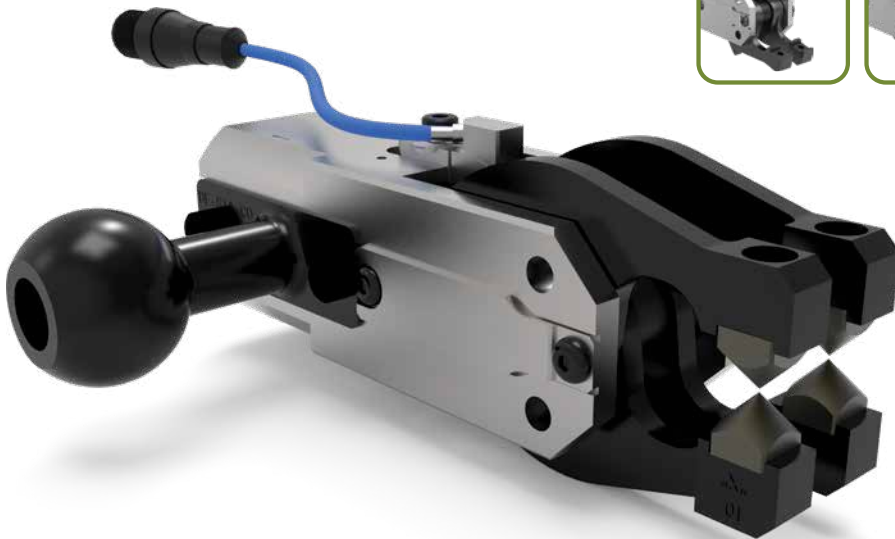
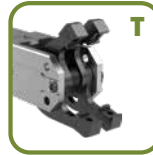
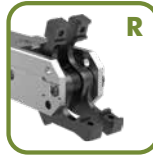
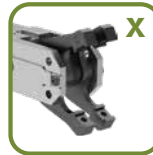
- "Blank"** Double (Jaw Arrangement Options 3 only)
- L** Single Left (Jaw Arrangement Options 5 only)
- R** Single Right (Jaw Arrangement Options 5 only)



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

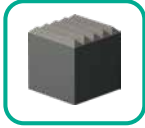
84A2 SERIES (MOVEABLE LOWER JAWS)

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

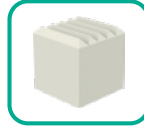


- EE** Soft Steel - 8JZ-092-1



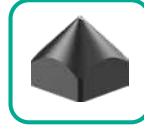
Plastic Teeth*

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



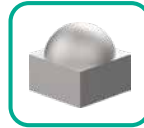
Steel Points

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

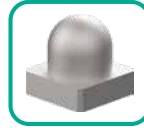


High Temperature (84A2 Only)

- 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

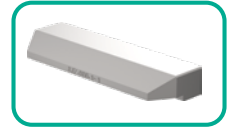


High Temperature (84A2 Only)

- 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 | |



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)

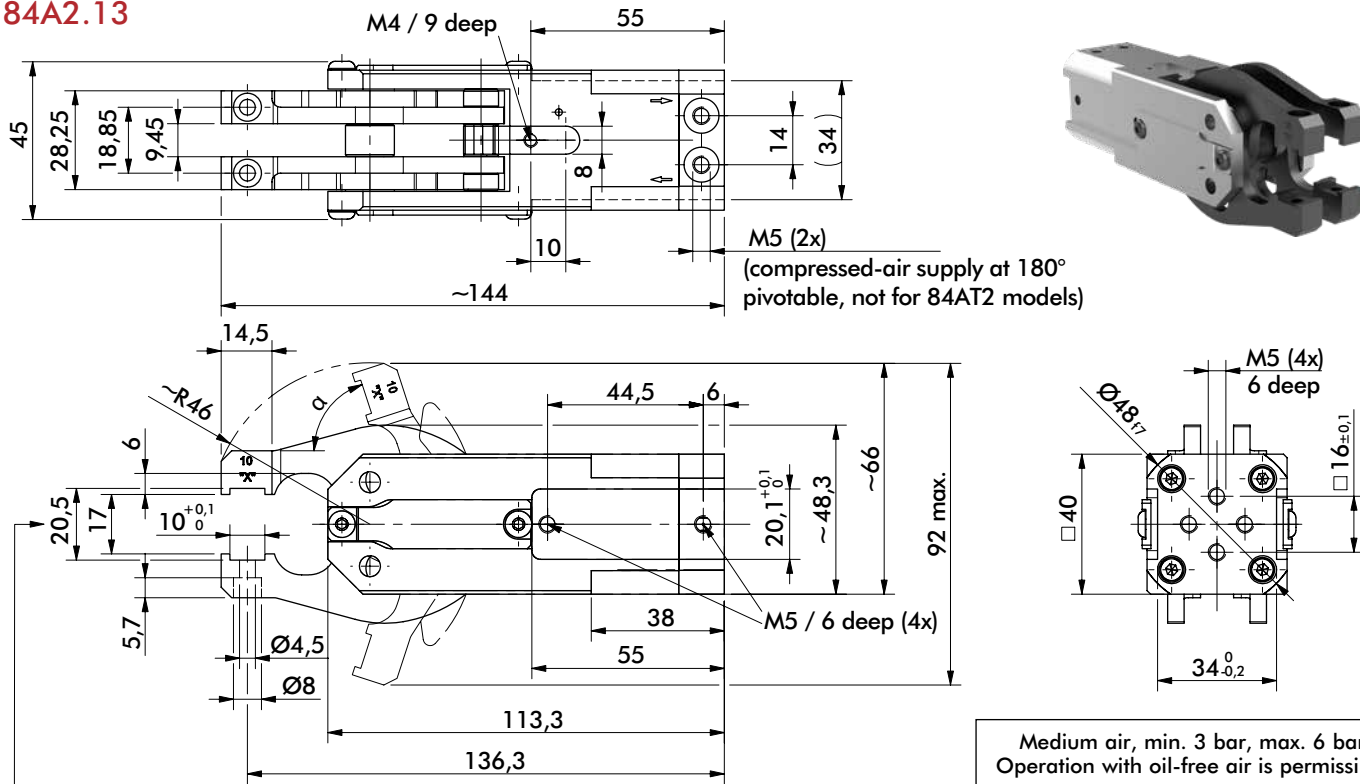


Cover for Sensing Systems **D5, GK**
Order Separately **82ZB-185-1**

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

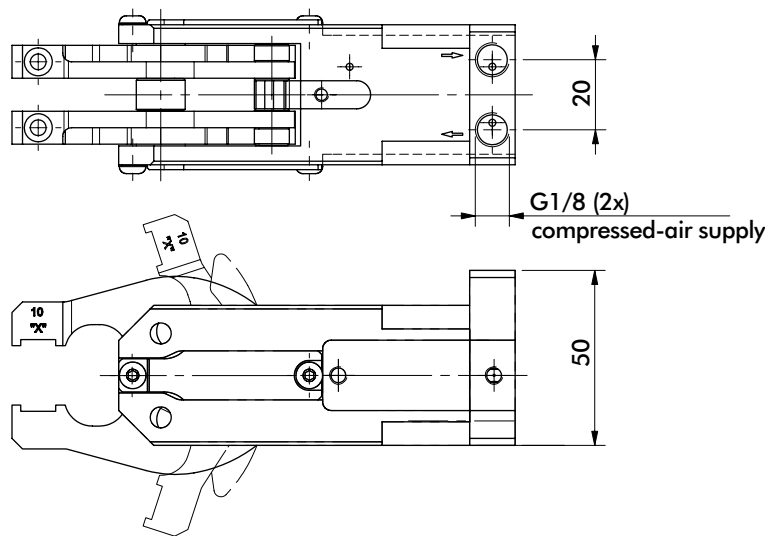
84A2.13



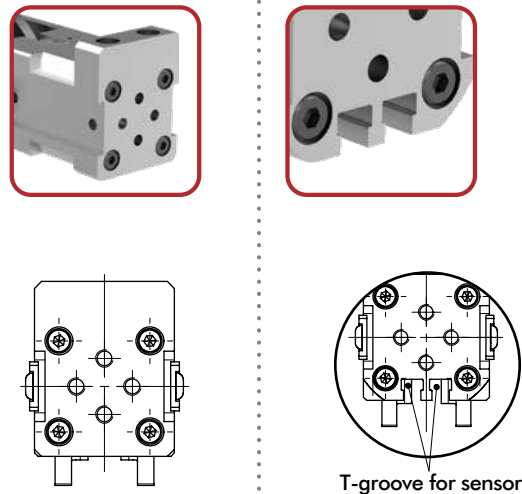
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

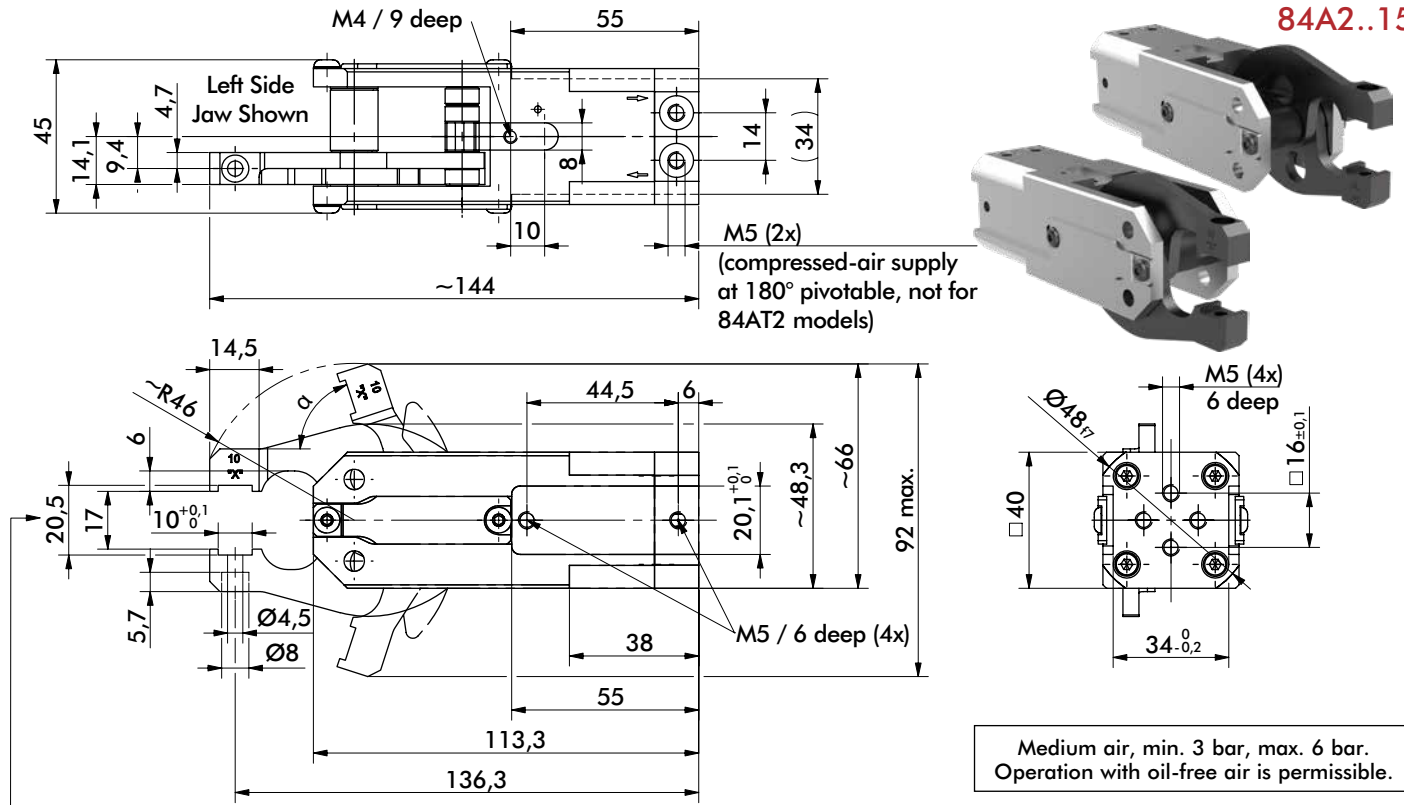


Model	Opening Angle α	Clamping force at 6 bar	Weight
84A2..3/84AT2..3	Symmetrical	~N [lbs]	Kg [lbs]
-	72°		
X	30°	475 [107]	0,6 [1.32]
Y	45°		

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..15

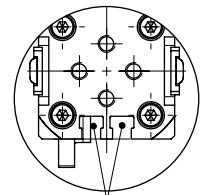
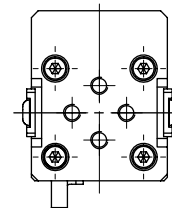
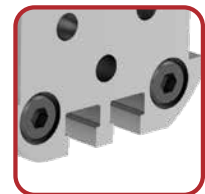
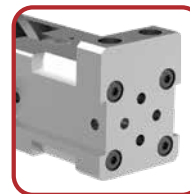
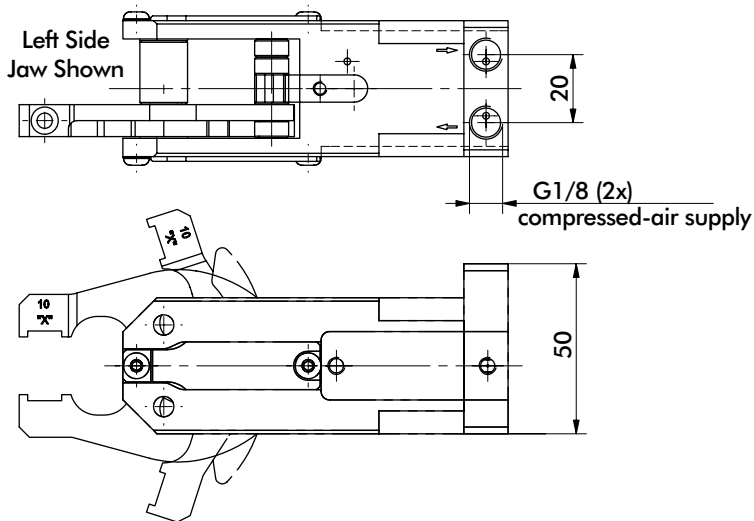


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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



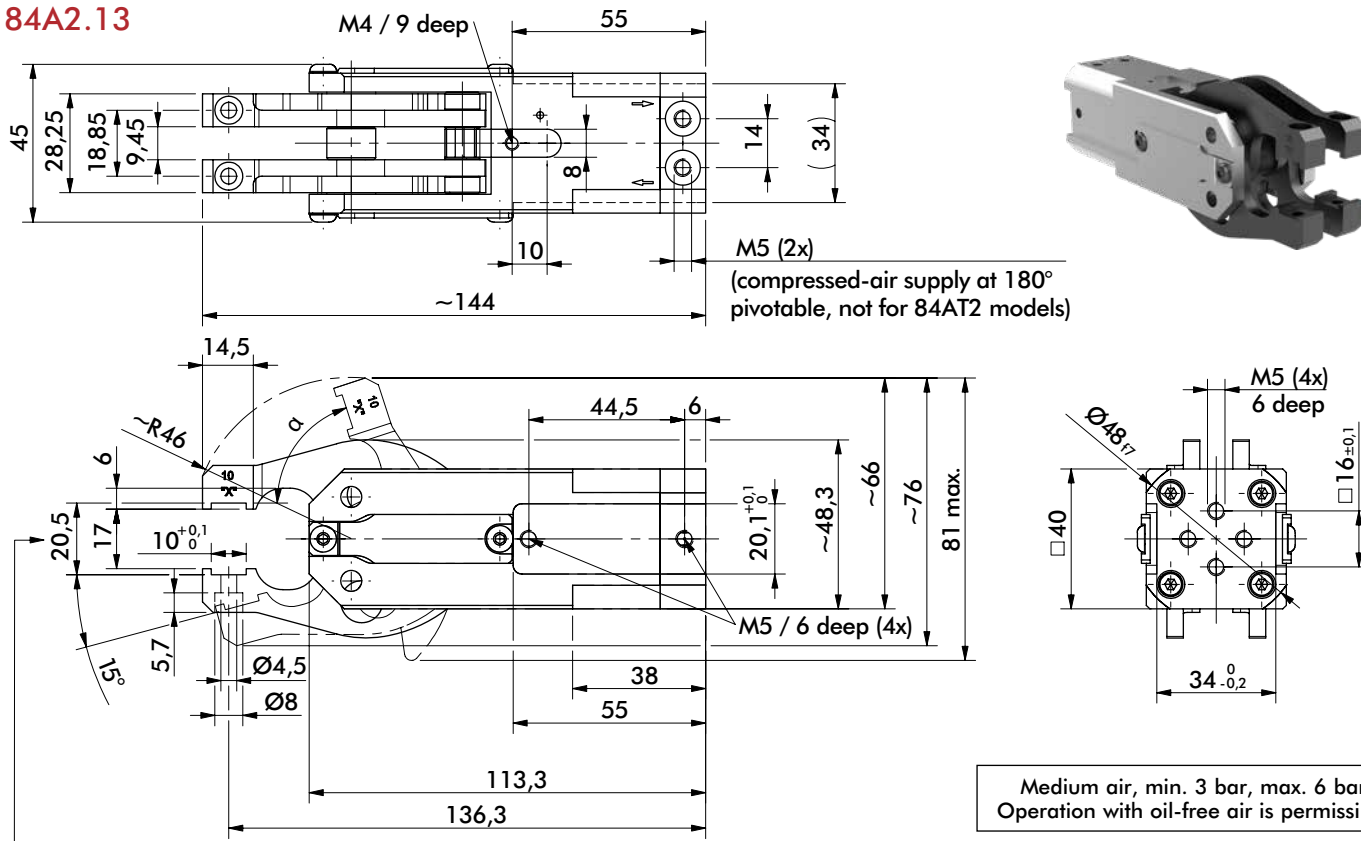
T-groove for sensor

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

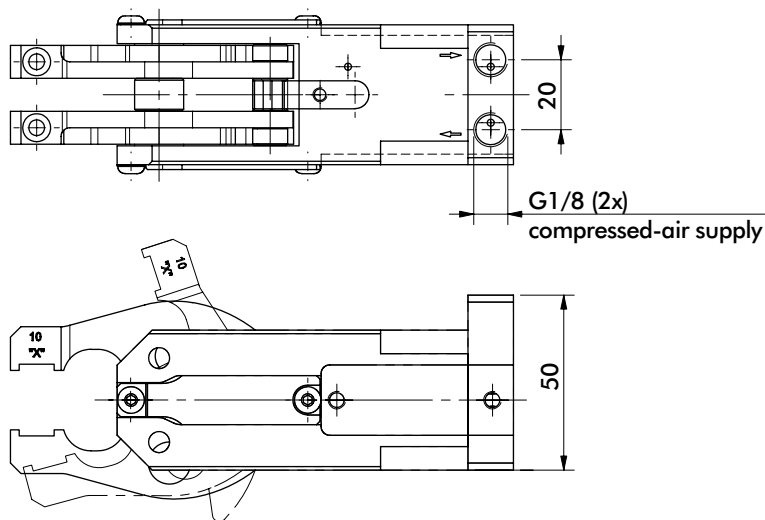


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

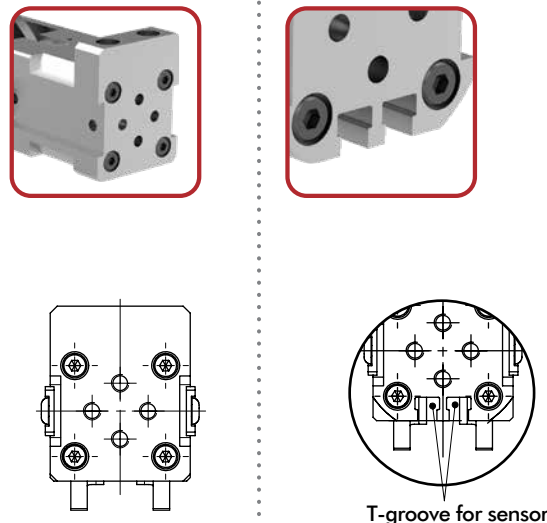
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

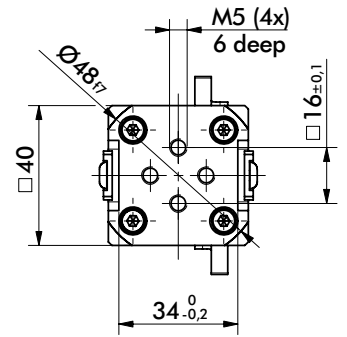
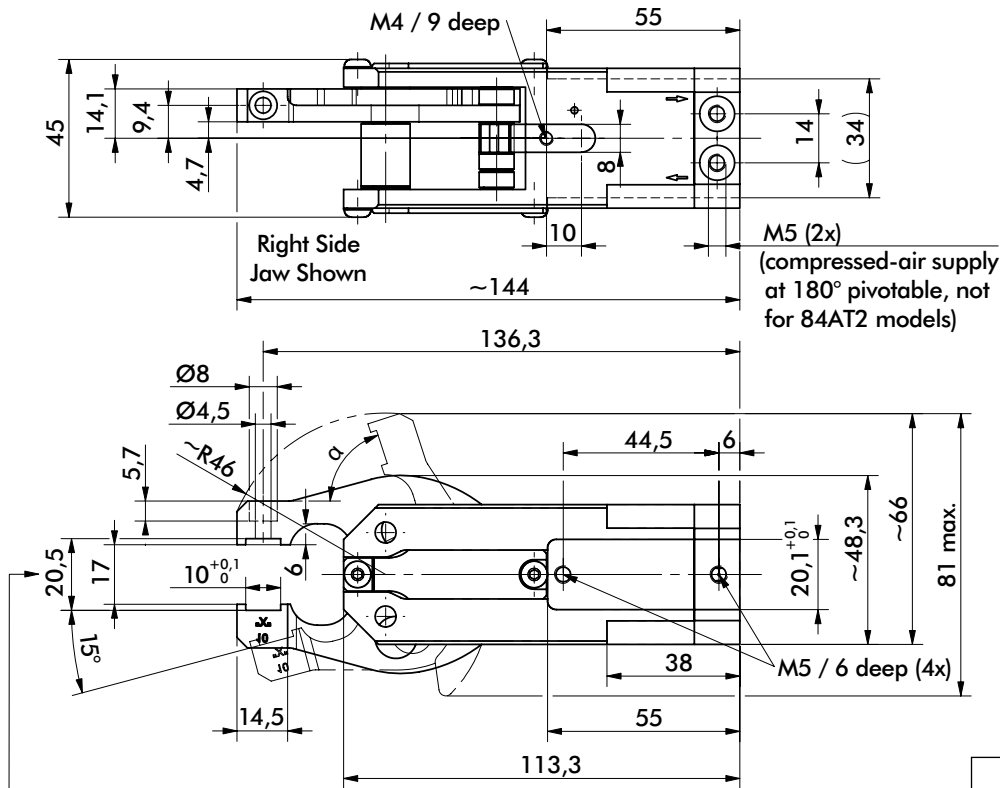


Model	Opening Angle α Upper/Lower	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
84A2..3/84AT2..3			
R	72°/15°	475 [107]	0,6 [1.32]
T	45°/15		

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..15

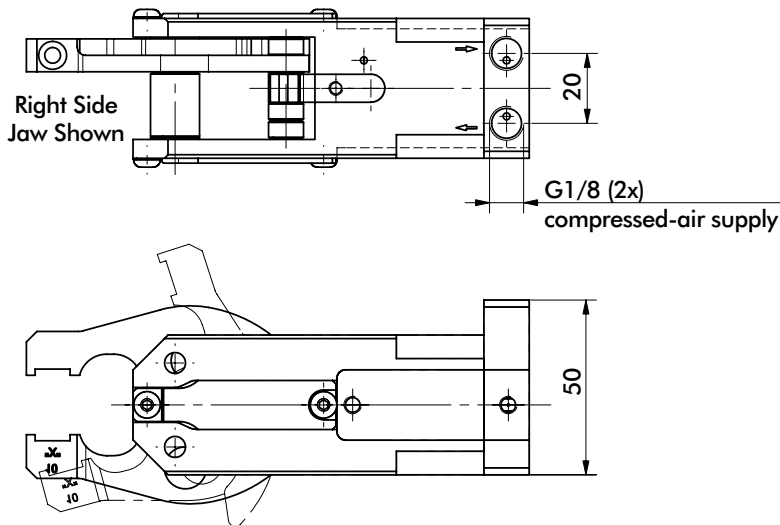


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

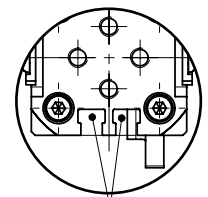
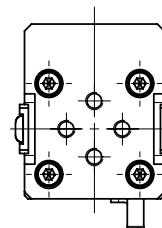
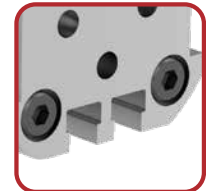
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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



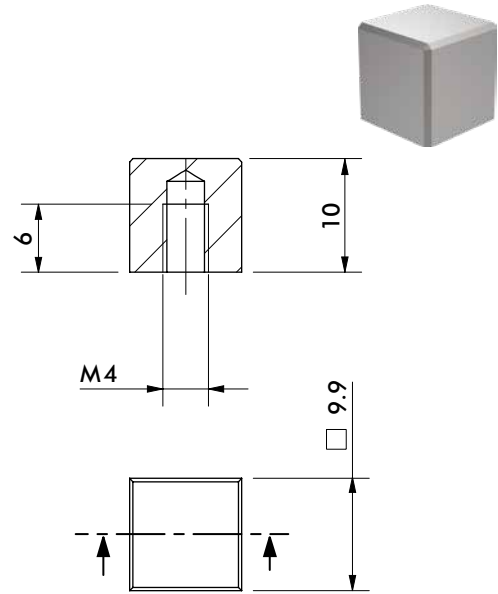
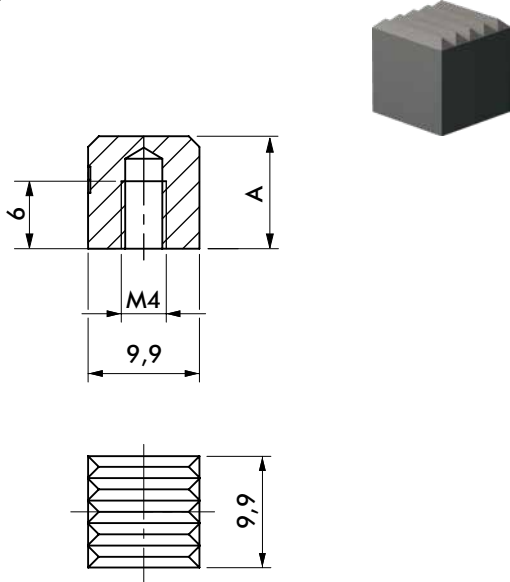
T-groove for sensor

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

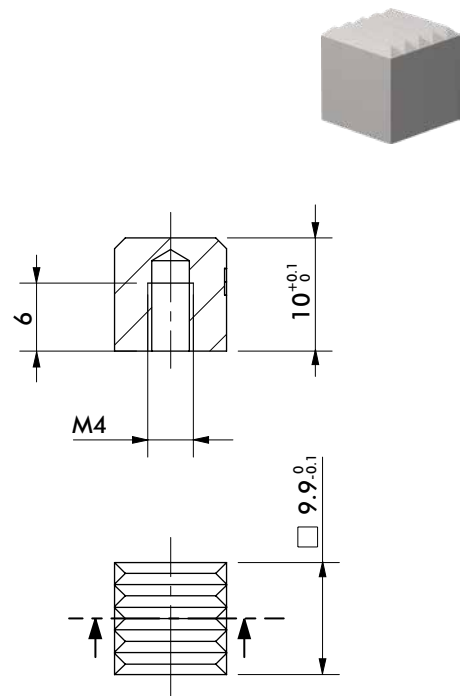
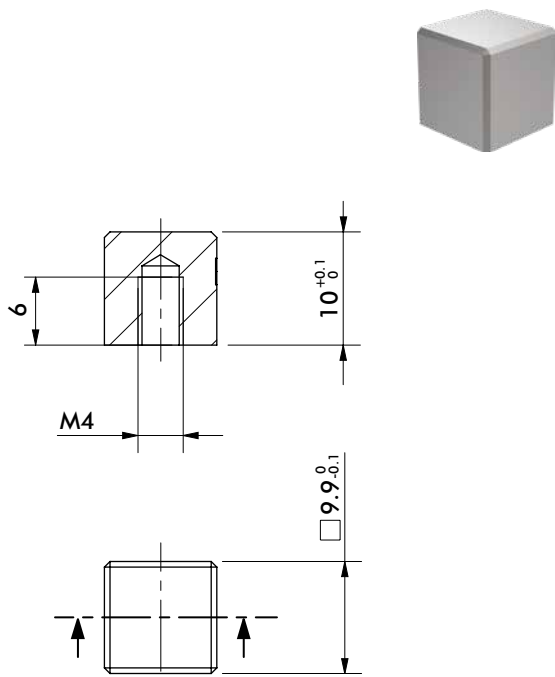
Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

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



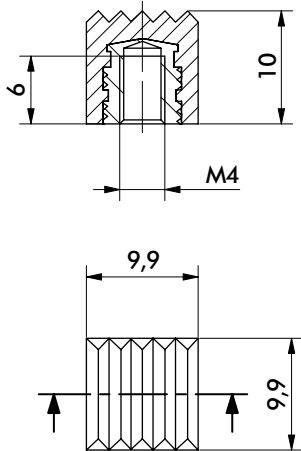
Hi-Temp Soft Steel Teeth	Part Number
Non-Serrated	8JZ-085-1

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

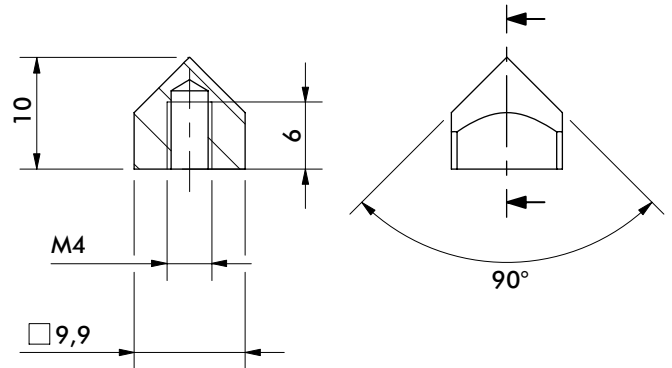
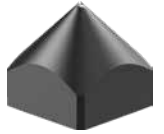
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Plastic Teeth



Steel Points



Plastic Teeth

90 Shore, Serrated

Part Number

8JZ-045-2

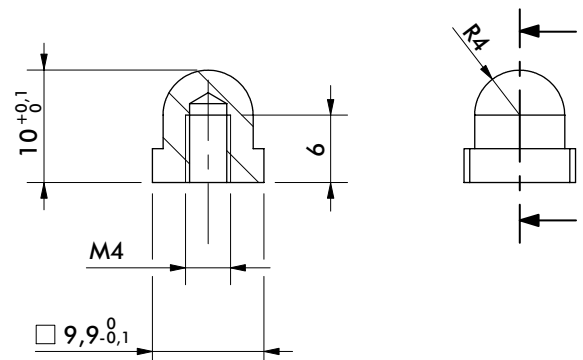
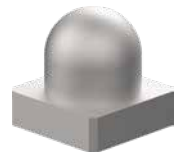
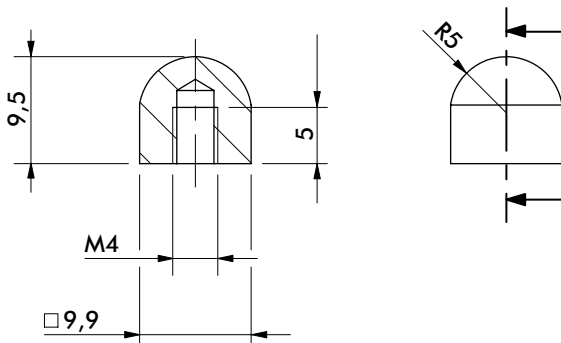
Hardened Steel Point

Pointed

Part Number

8JZ-029-1

Steel Points



Hi-Temp Soft Steel Point

Rounded

Part Number

8JZ-074-1

Hi-Temp Soft Steel Point

Rounded

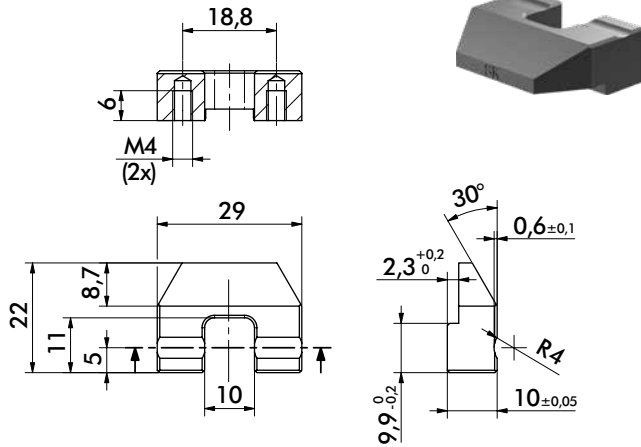
Part Number

8JZ-088-1

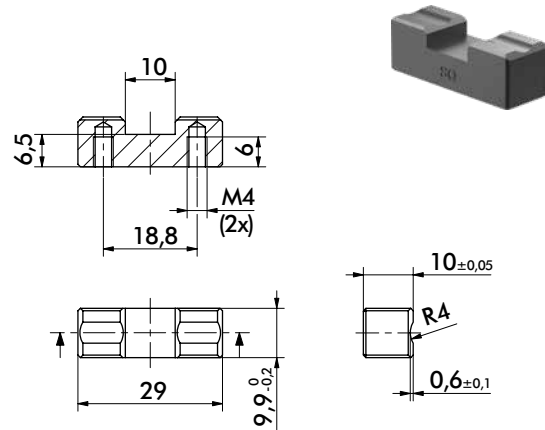
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

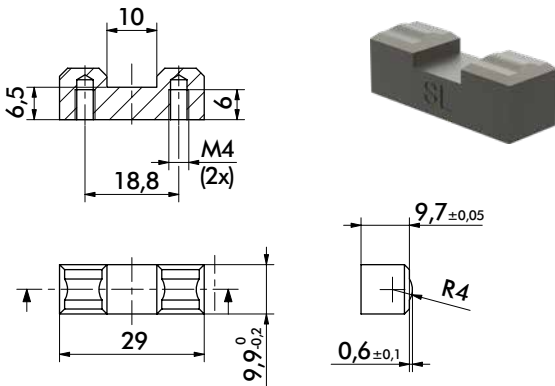
Crown Teeth



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

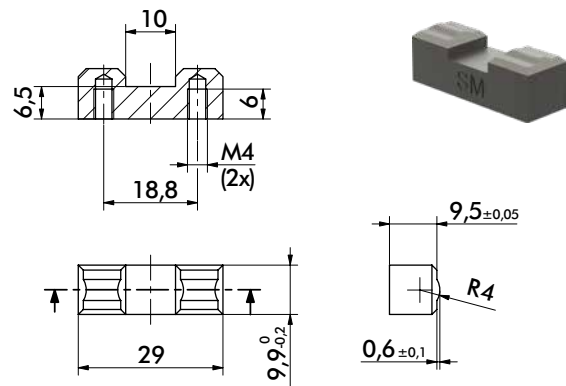


Hardened Steel Teeth Part Number **8JZ-051-1**
Crown Lower



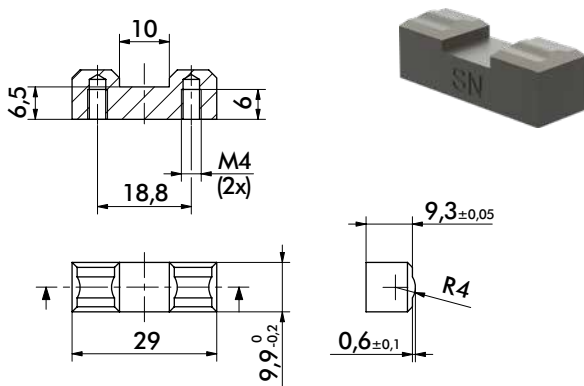
For material thickness 0,5 - 0,8 mm

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



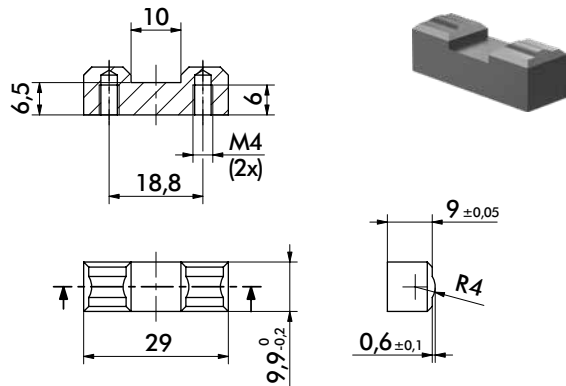
For material thickness 0,9 - 1,2 mm

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



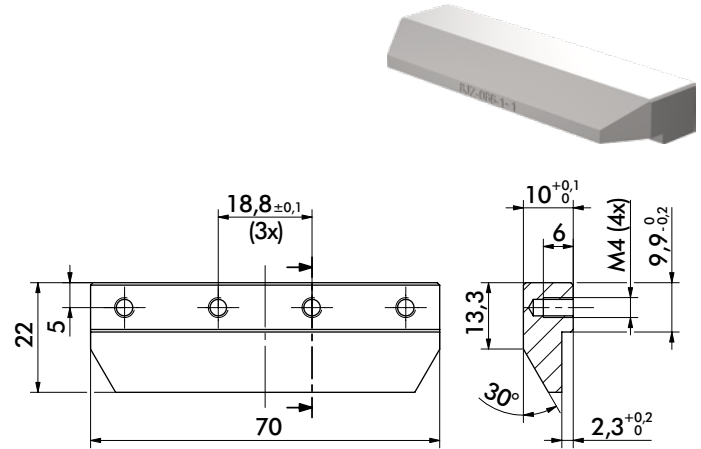
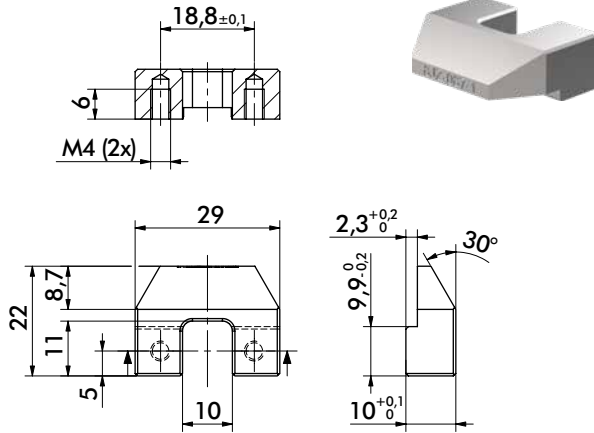
For material thickness 1,7 - 2,1 mm

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

84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

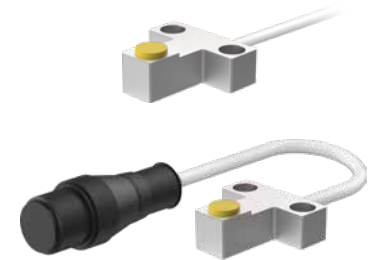
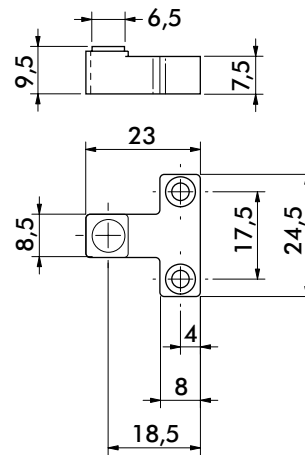
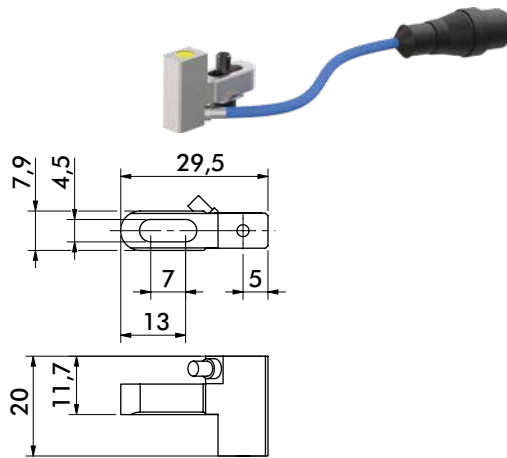
Crown Teeth



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

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

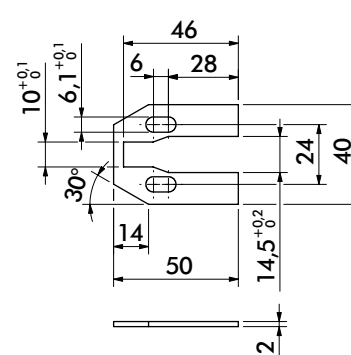
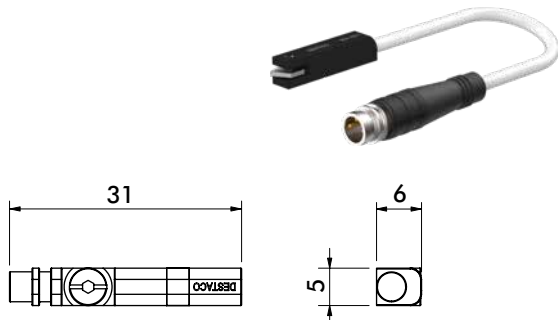
Sensors



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

Part Present Sensor Part Number
3mm Sensing Distance, 2m Cable **8EA-164-1**
3mm Sensing Distance, M12X1 **8EA-165-1**

Sensors



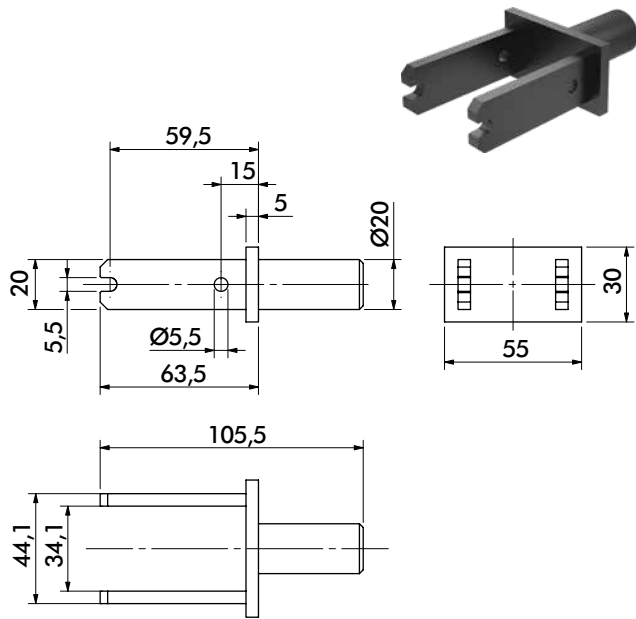
Proximity Switch Part Number
T-Slot, M8x1 Plug **8EA-109-1**

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

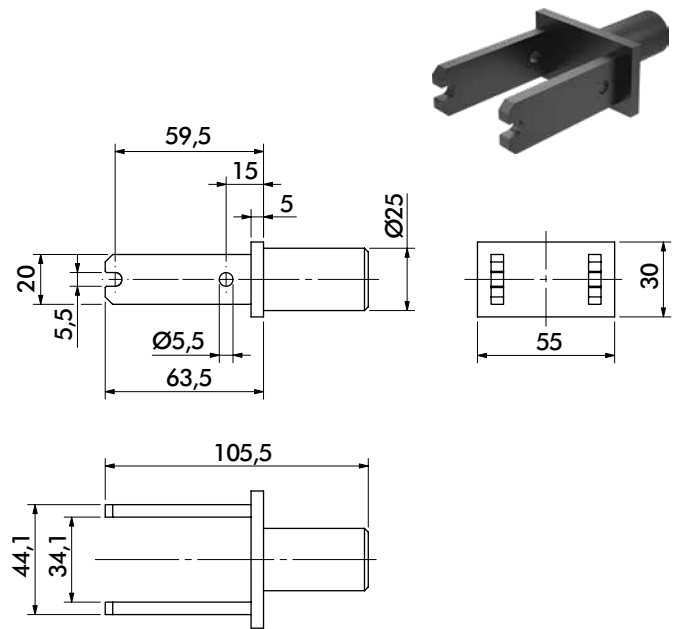
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

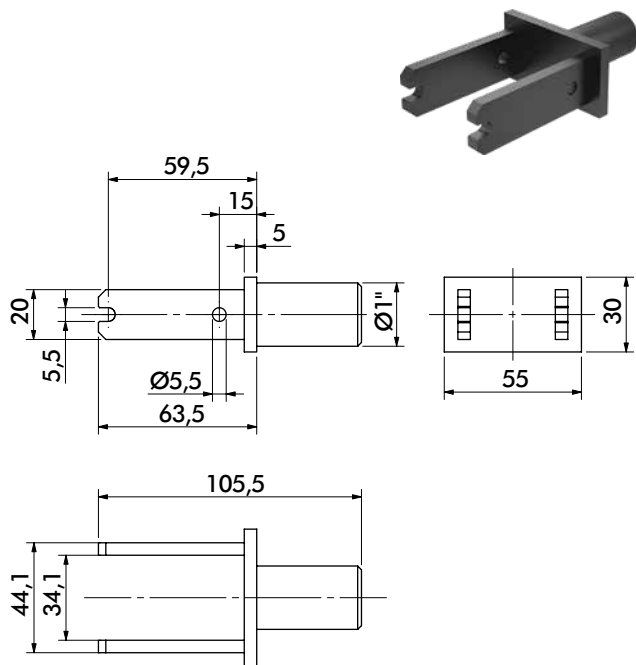
Mounts



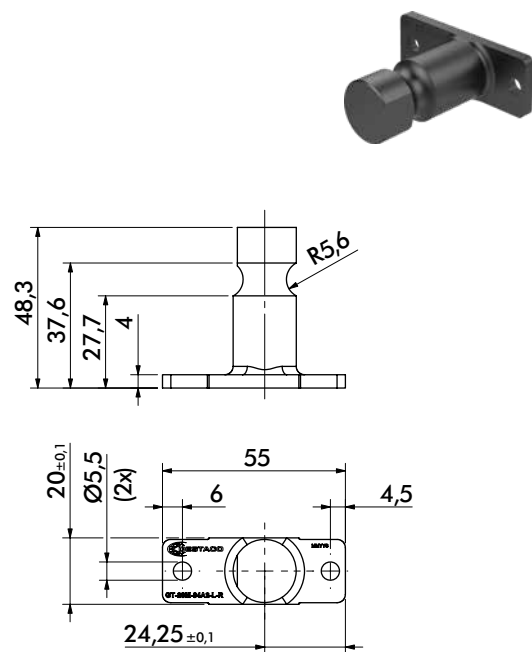
Mount	Part Number
Ø20mm Rear Rod	8MA-165-1



Mount	Part Number
Ø25mm Rear Rod	8MA-166-1



Mount	Part Number
Ø1.00" Rear Rod	8MA-168-1

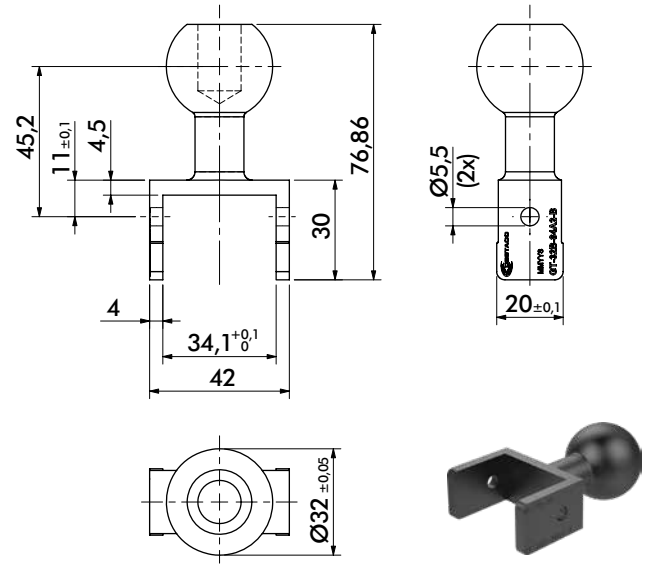
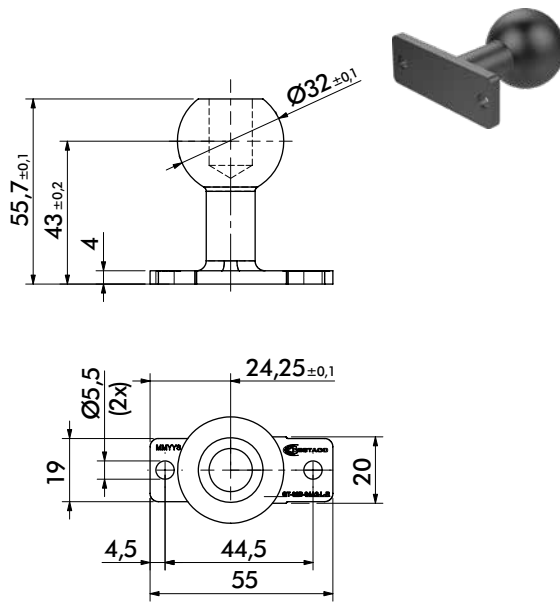


Mount	Part Number
Ø20mm Apple Core	GT-20M-84A2-L-R

84A2 SERIES ACCESSORIES

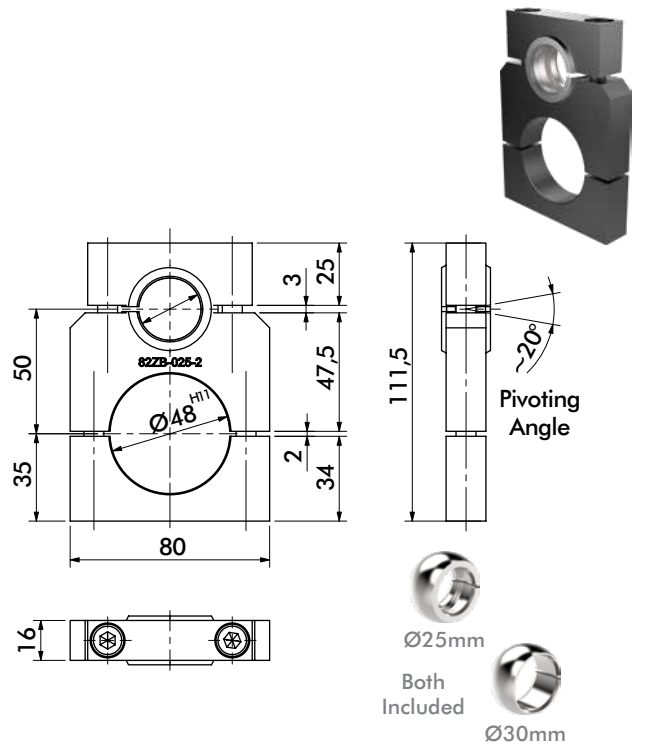
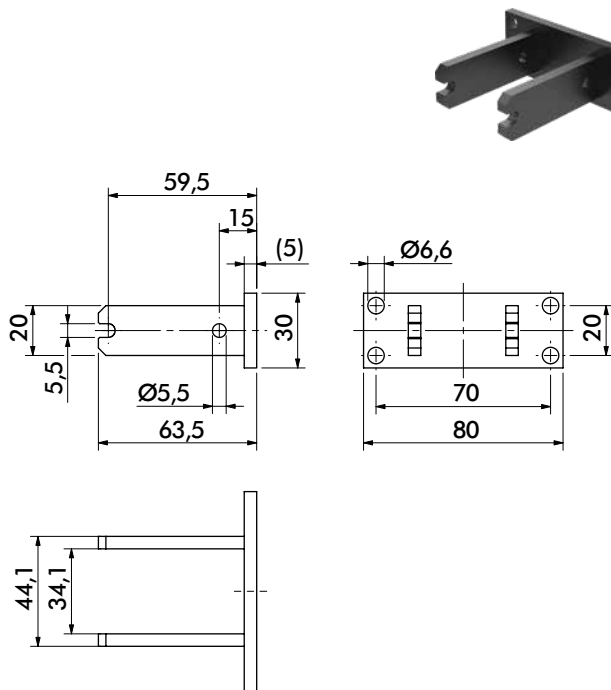
Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

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**