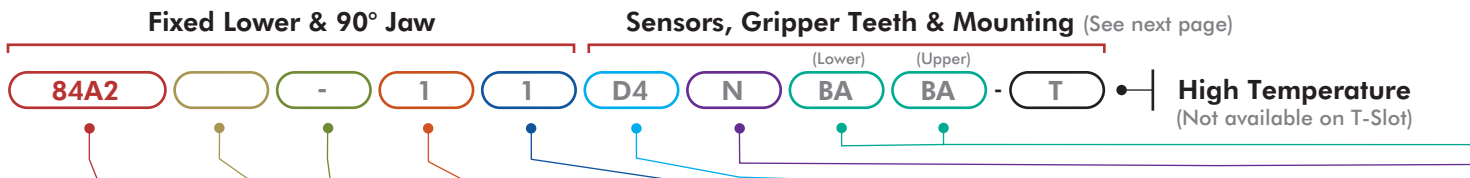


84A2 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Ordering Information



Body Style Options

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



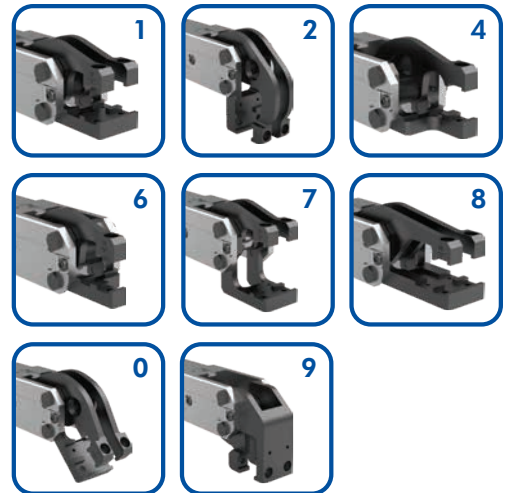
Porting Options

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



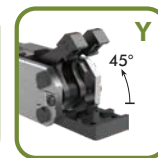
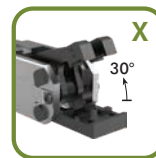
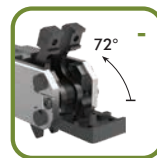
Jaw Arrangement Options

- 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.



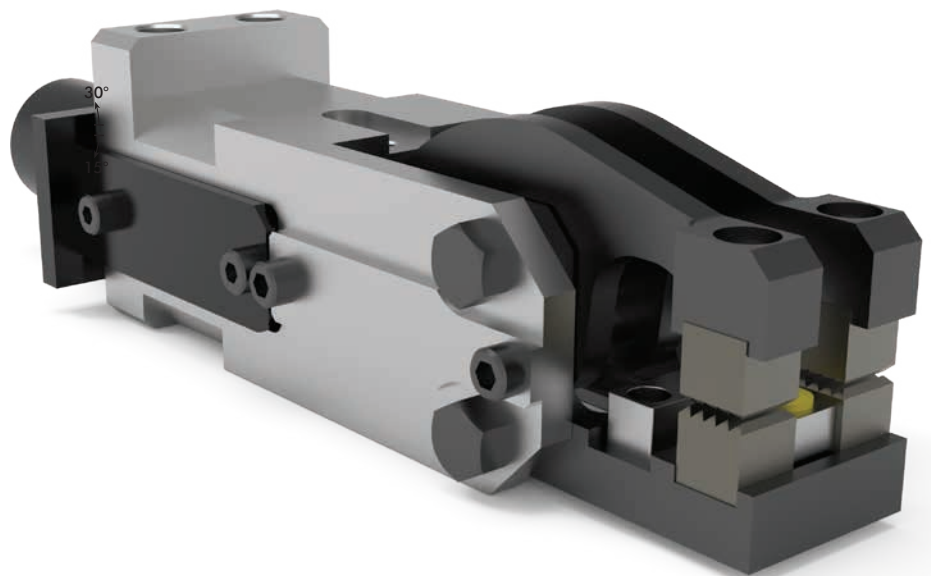
Jaw Opening Options

- 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

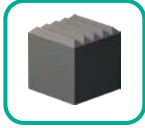
84A2 SERIES (FIXED LOWER JAW)

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



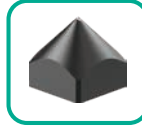
Plastic Teeth*

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



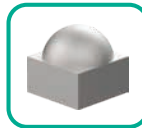
Steel Points

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

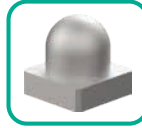


High Temperature (84A2 Only)

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



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



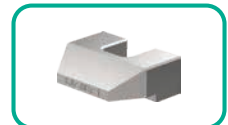
Crown Teeth

- 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

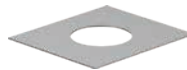


High Temperature (84A2 Only)

- 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 0,1 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, 0 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**

T-Coupler M12x1 for Sensing Systems **GP, GQ, GK**
Order Separately **7000-41161-000000**

Mounting Options

Description

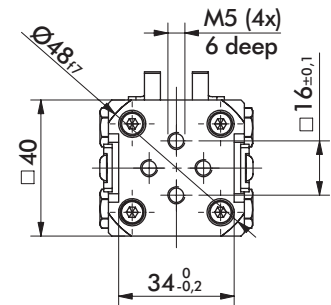
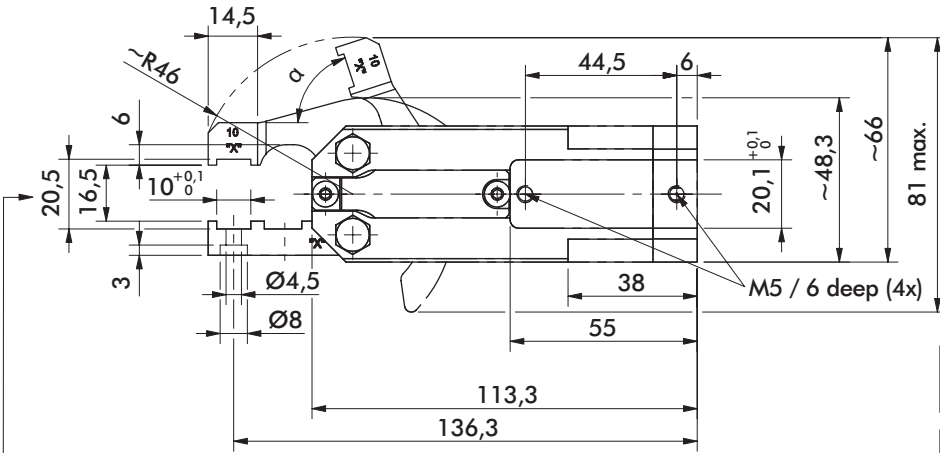
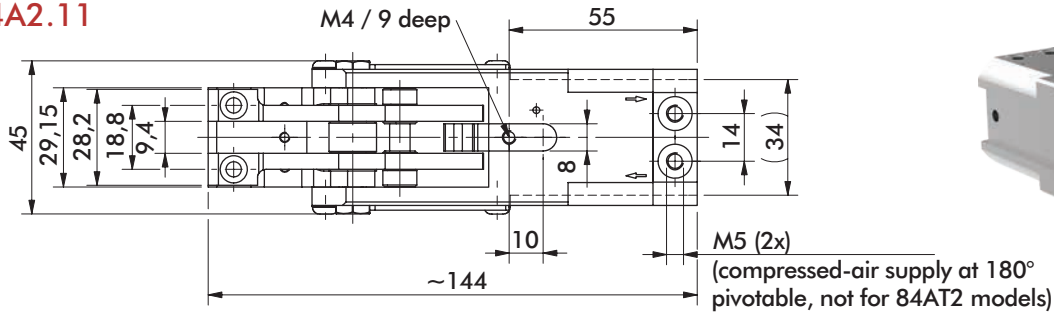
- 0** None
- I** Ø20mm Rear Rod
8MA-165-1
- J** Ø25mm Rear Rod
8MA-166-1
- Z** Ø1.00" Rear Rod
8MA-168-1
- L** Ø20mm Apple Core
GT-20M-84A2-L-R
- M** Ø32mm Rear Ball
GT-32B-84A2- L-R
- N** Ø32mm Flanged Ball
GT-32B-84A2- B
- Q** Guards 8MH-054-1
(For Jaw Arrangements
Options 1, 4, 6 only)
- V** Rear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

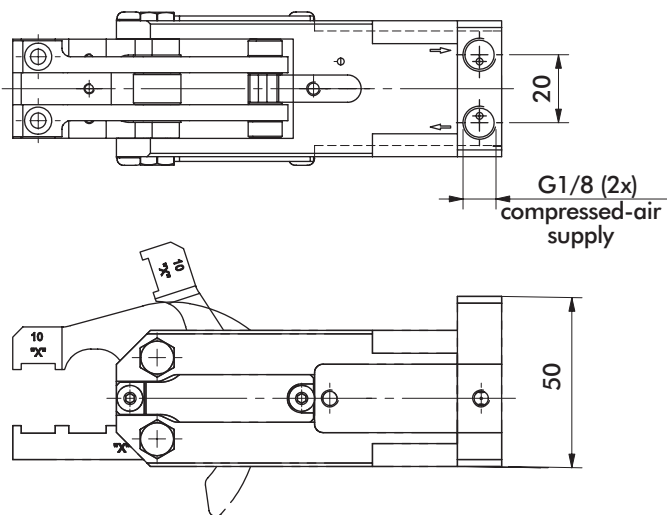


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

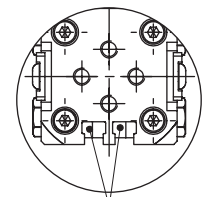
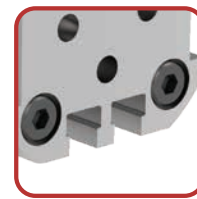
NOTE! Any extension of the
moveable or fixed gripper jaws as
well as the additional attachment
of weights will void warranty.

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.V1



84AT2..1

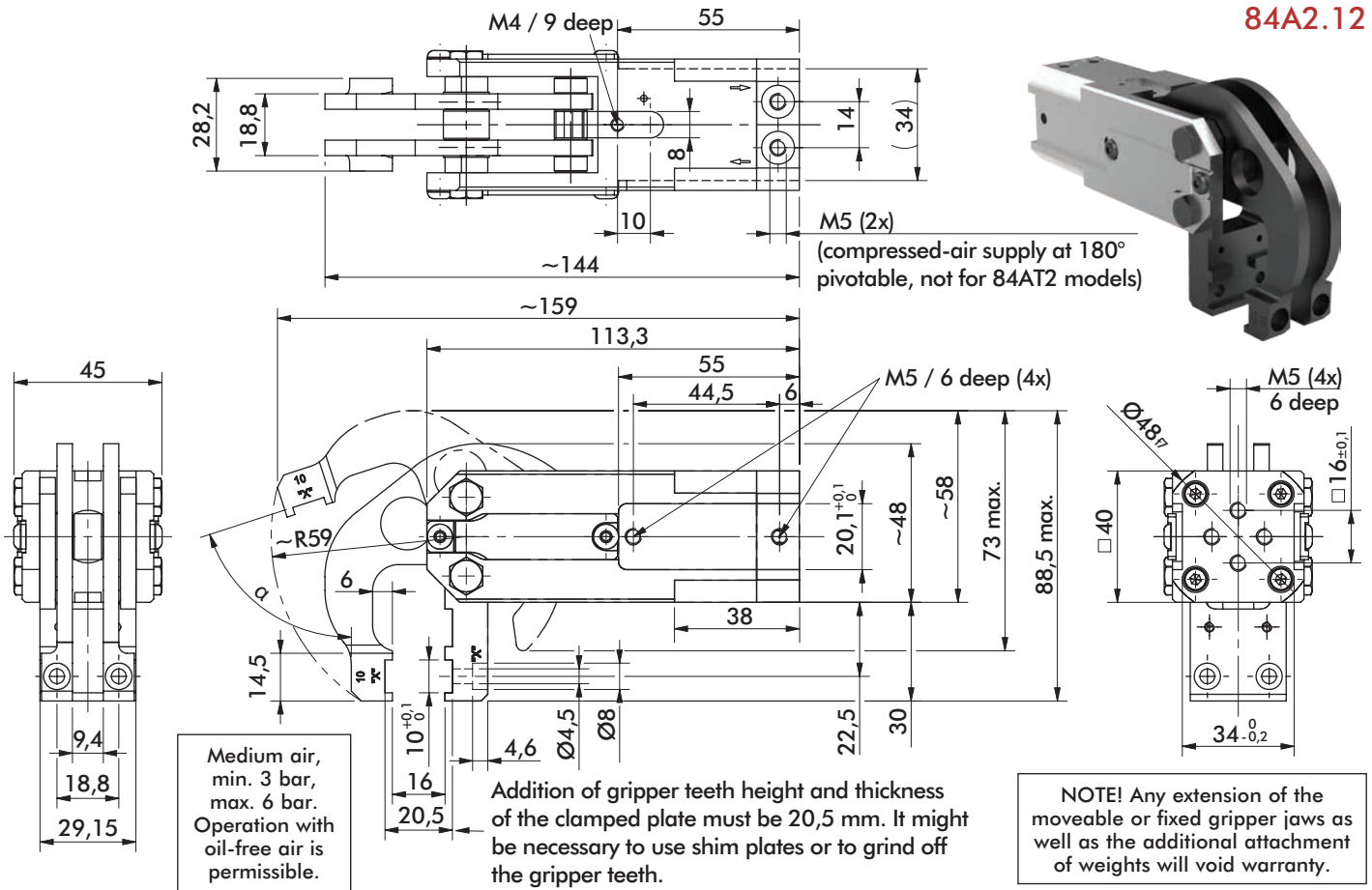


Model 84A2..1/84AT2..1	Opening Angle α	Clamping force at 6 bar ~N [lbf]	Weight Kg [lbs]
-	72°		
X	30°	920 [207]	0,6 [1.32]
Y	45°		

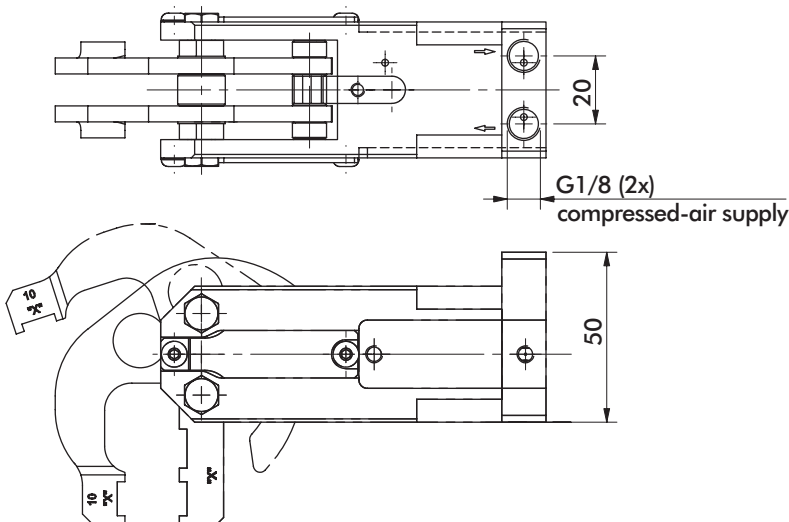
84A2..2 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

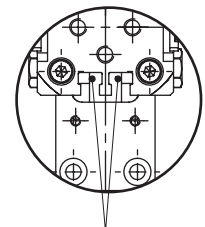
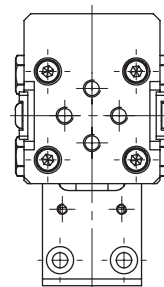
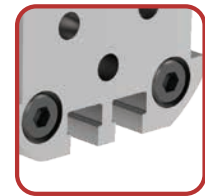
84A2.12



84A2.V2



84AT2..2



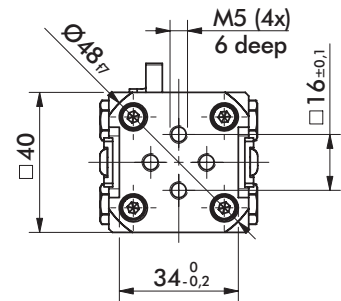
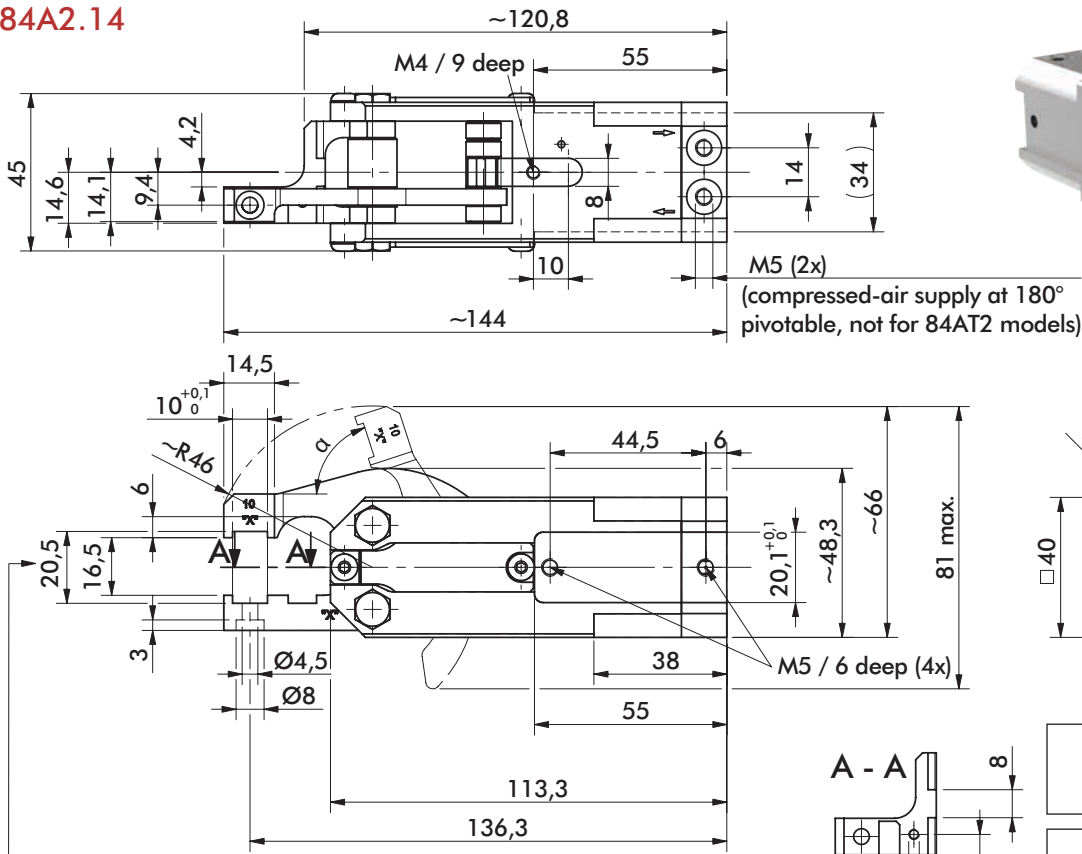
T-groove for sensor

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

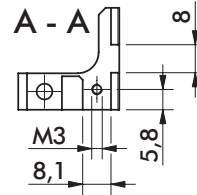
84A2..4 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.14



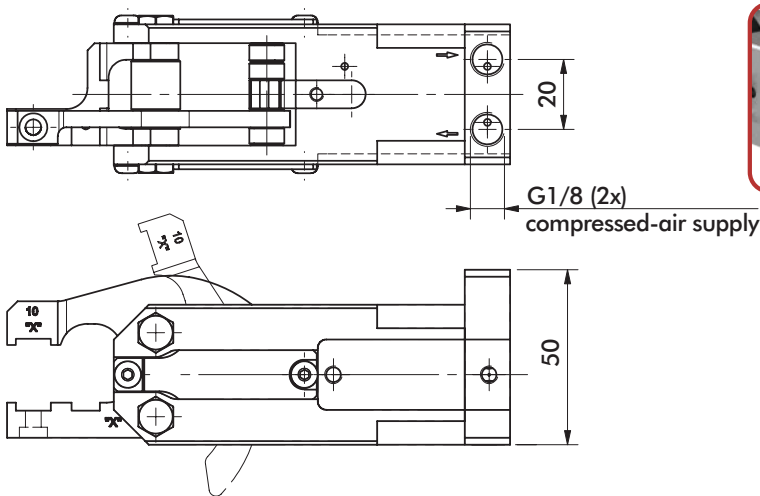
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.



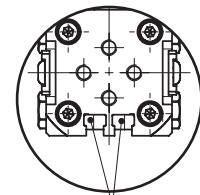
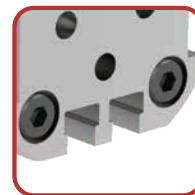
Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

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

84A2.V4



84AT2..4



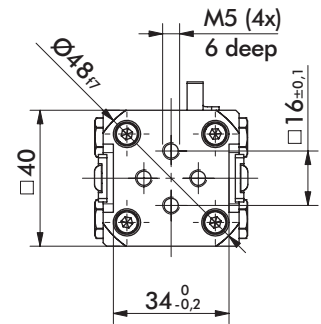
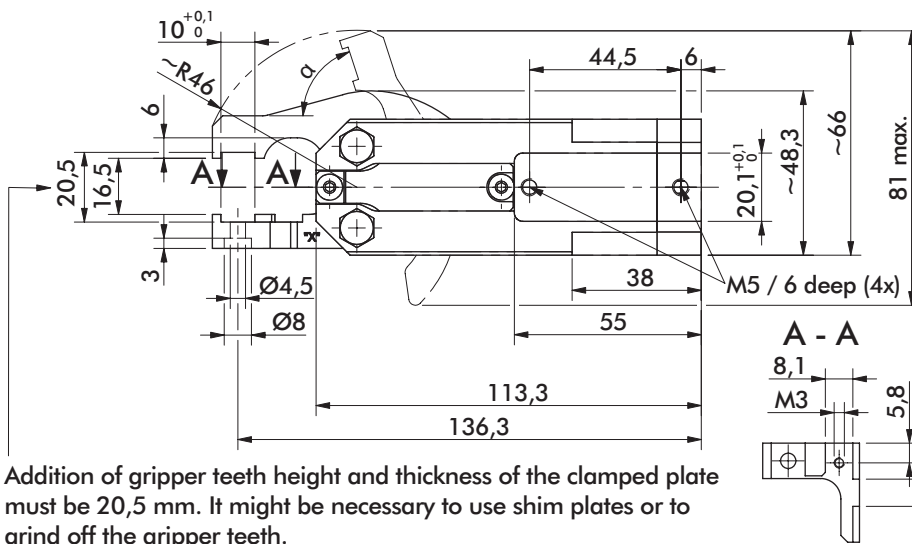
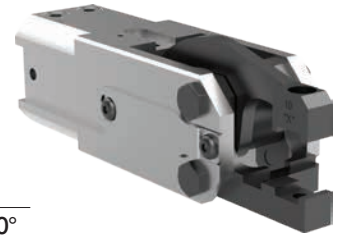
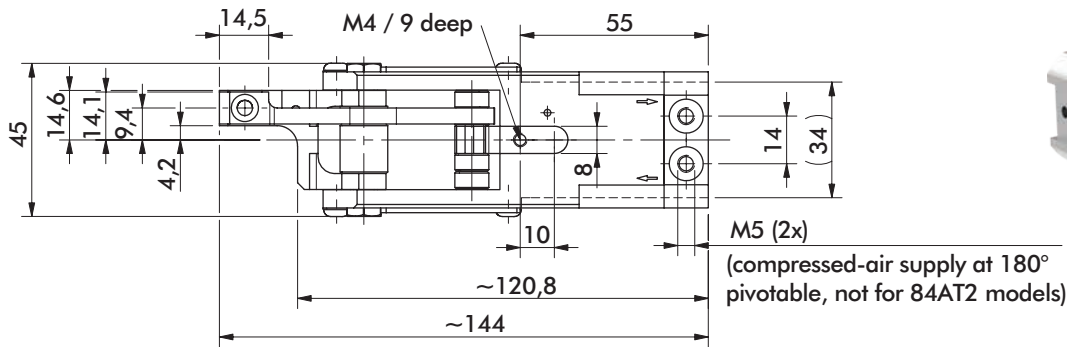
T-groove for sensor

Model	Opening Angle α	Clamping force at 6 bar ~N [lbf]	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

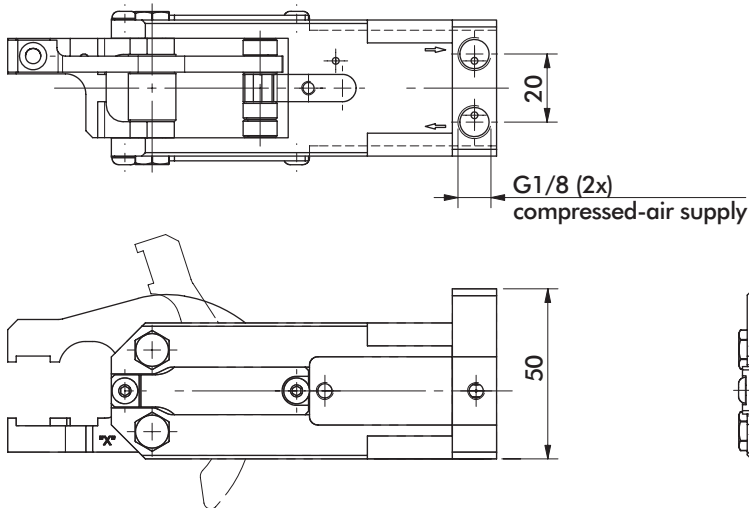


Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

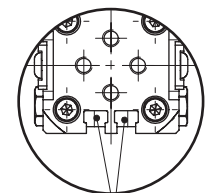
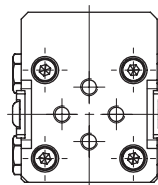
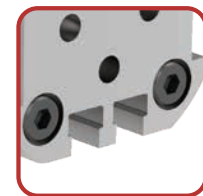
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warranty.

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.V6



84AT2..6



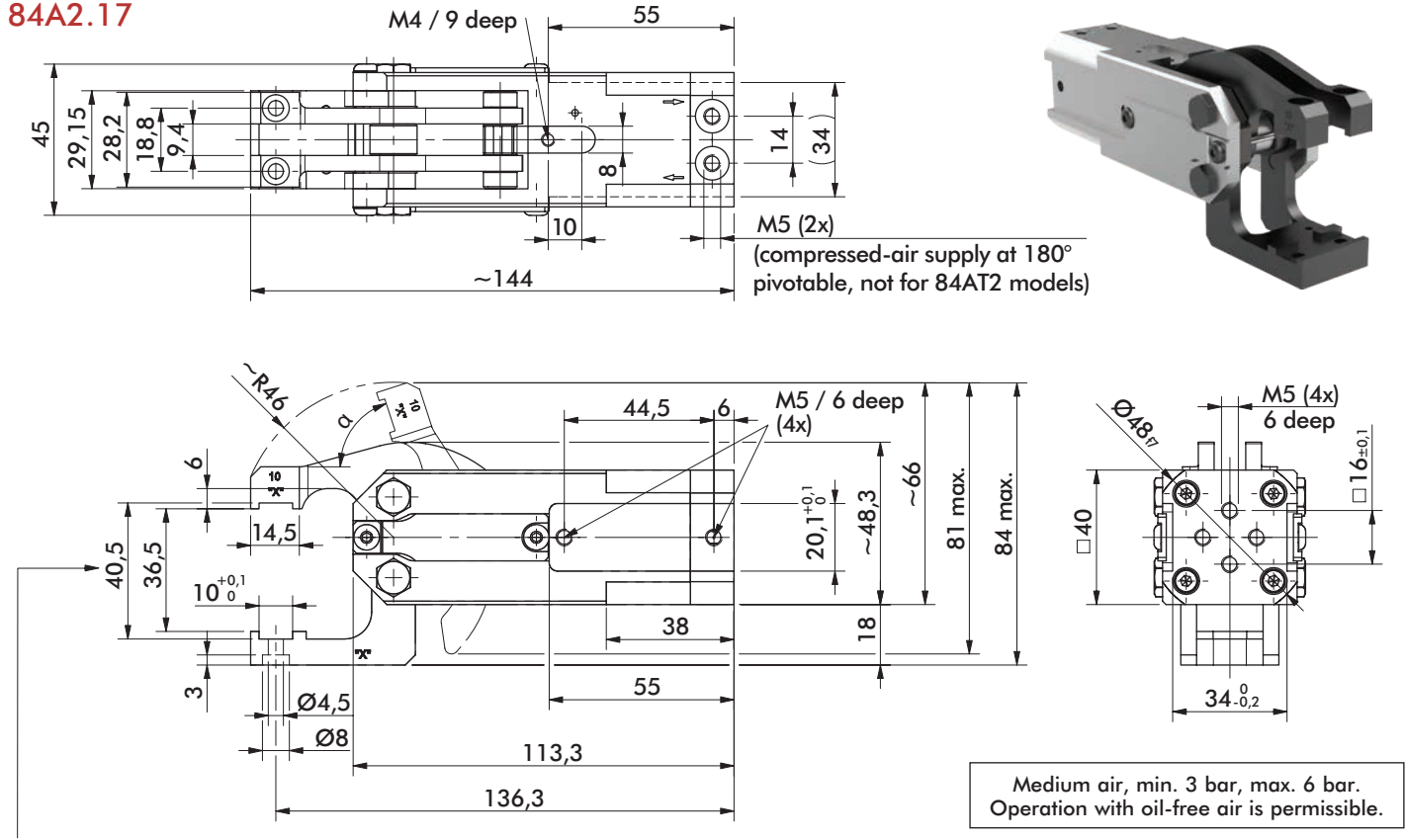
T-groove for sensor

Model 84A2..6/84AT2..6	Opening Angle α	Clamping force at 6 bar ~N [lbf]	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

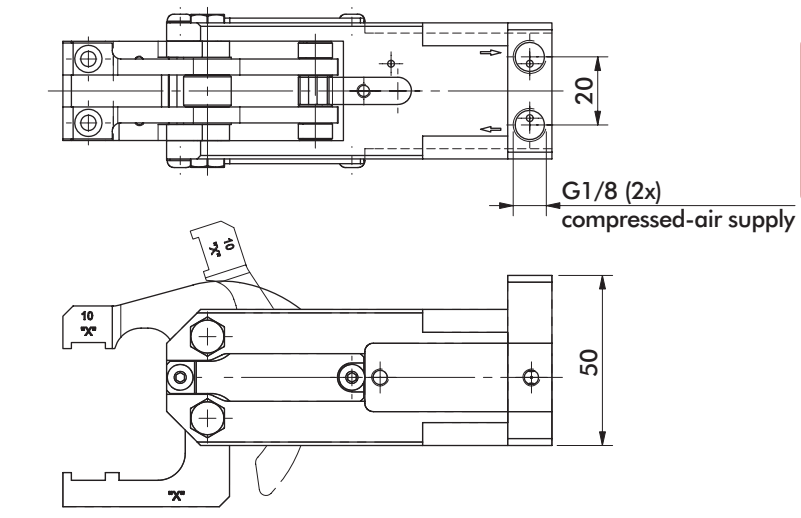
84A2.17



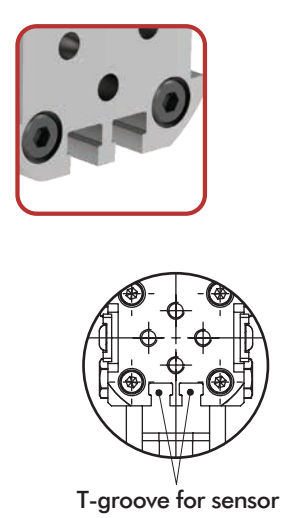
Addition of gripper teeth height and thickness of the clamped plate must be 40,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2.V7



84AT2..7

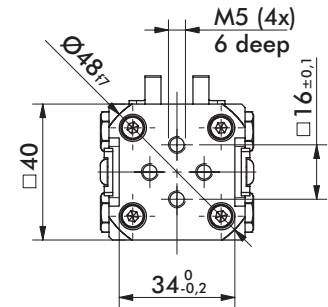
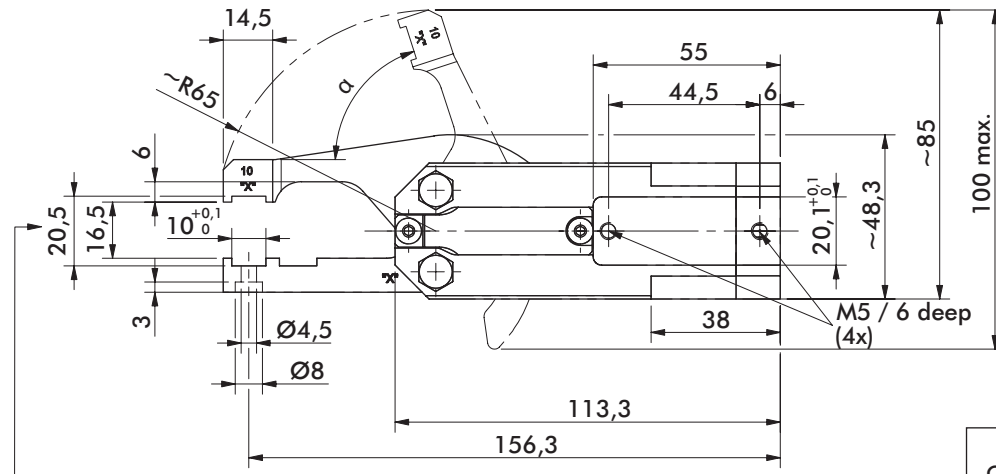
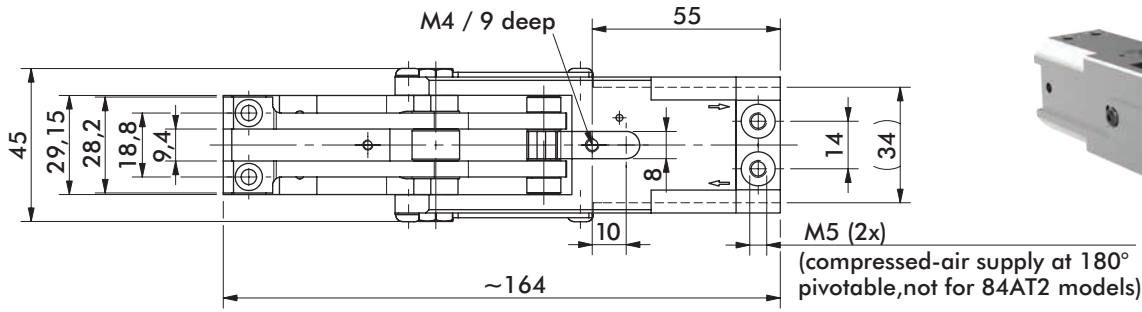


Model 84A2..7/84AT2..7	Opening Angle α	Clamping force at 6 bar ~N [lbf]	Weight Kg [lbs]
-	72°	920 [207]	0,6 [1.32]
X	30°		
Y	45°		

84A2..8 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.18

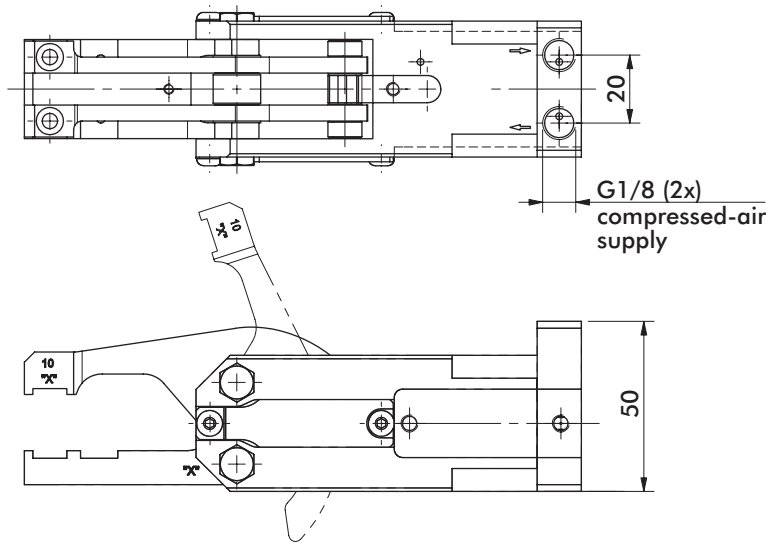


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

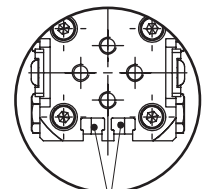
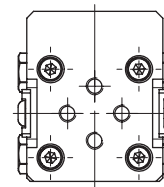
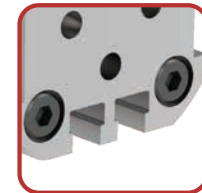
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2.V8



84AT2..8



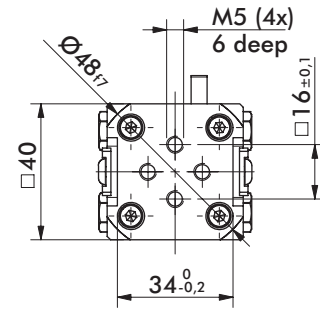
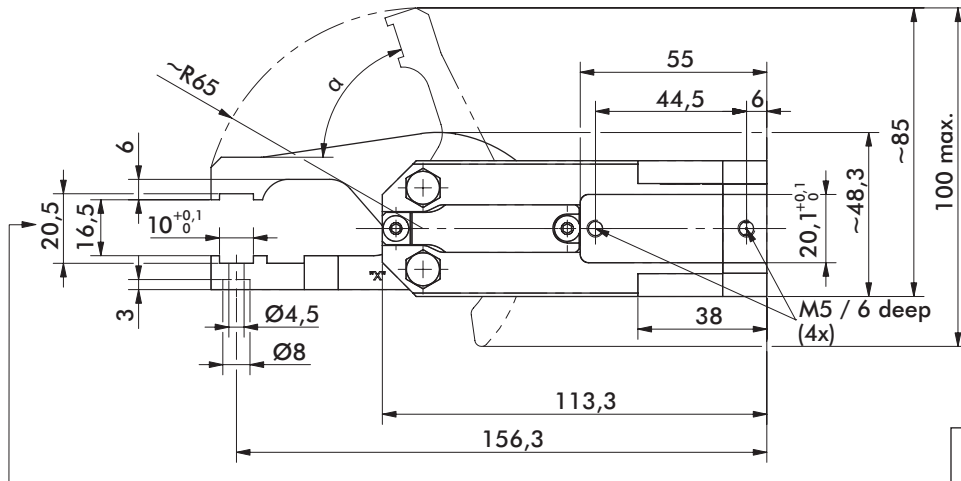
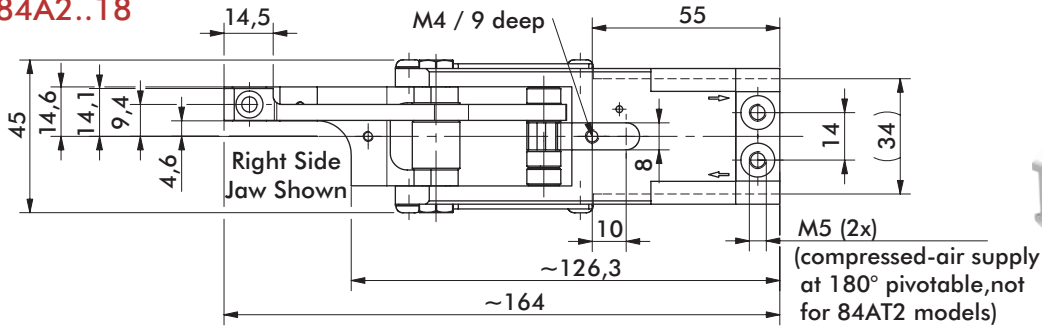
T-groove for sensor

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

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..18

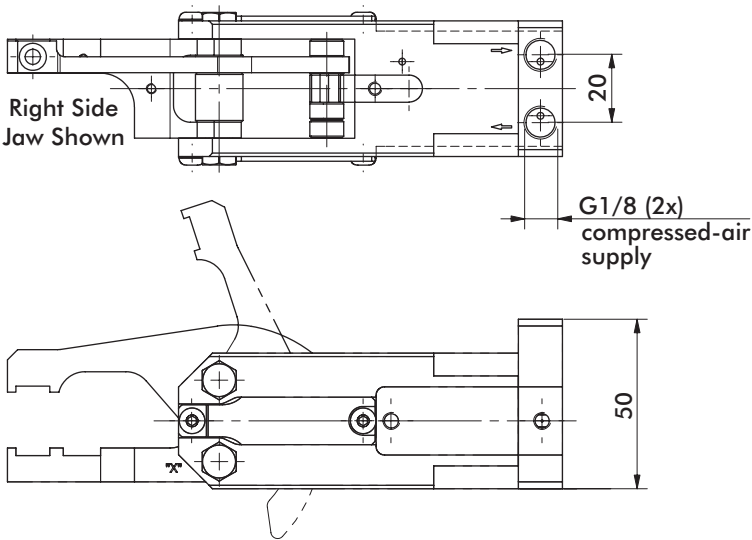


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

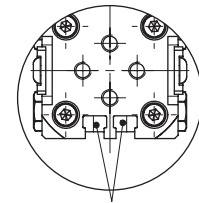
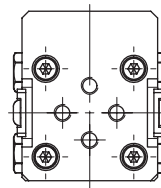
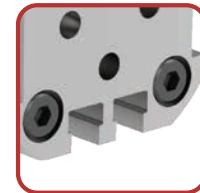
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2..V8

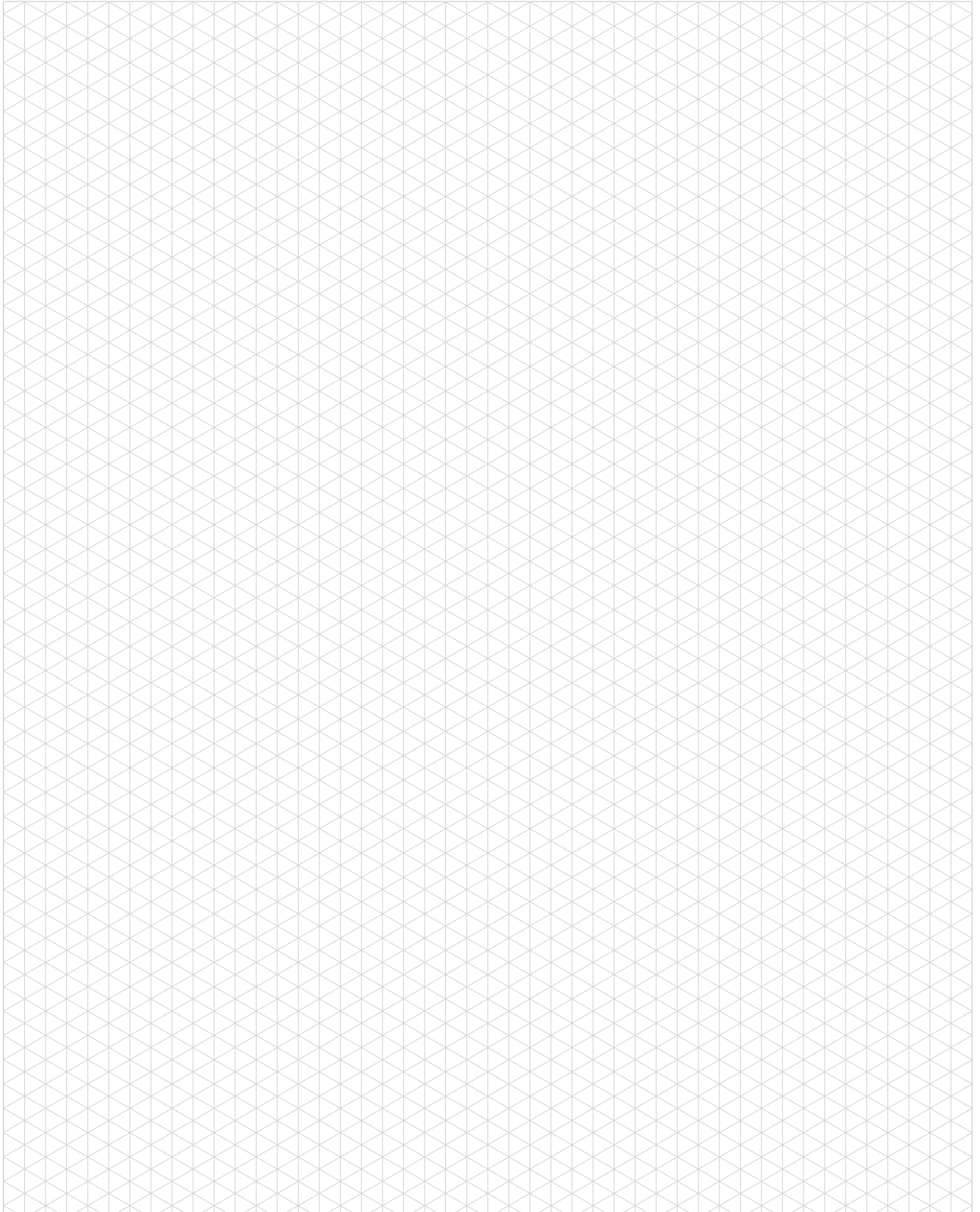


84AT2...8



T-groove for sensor

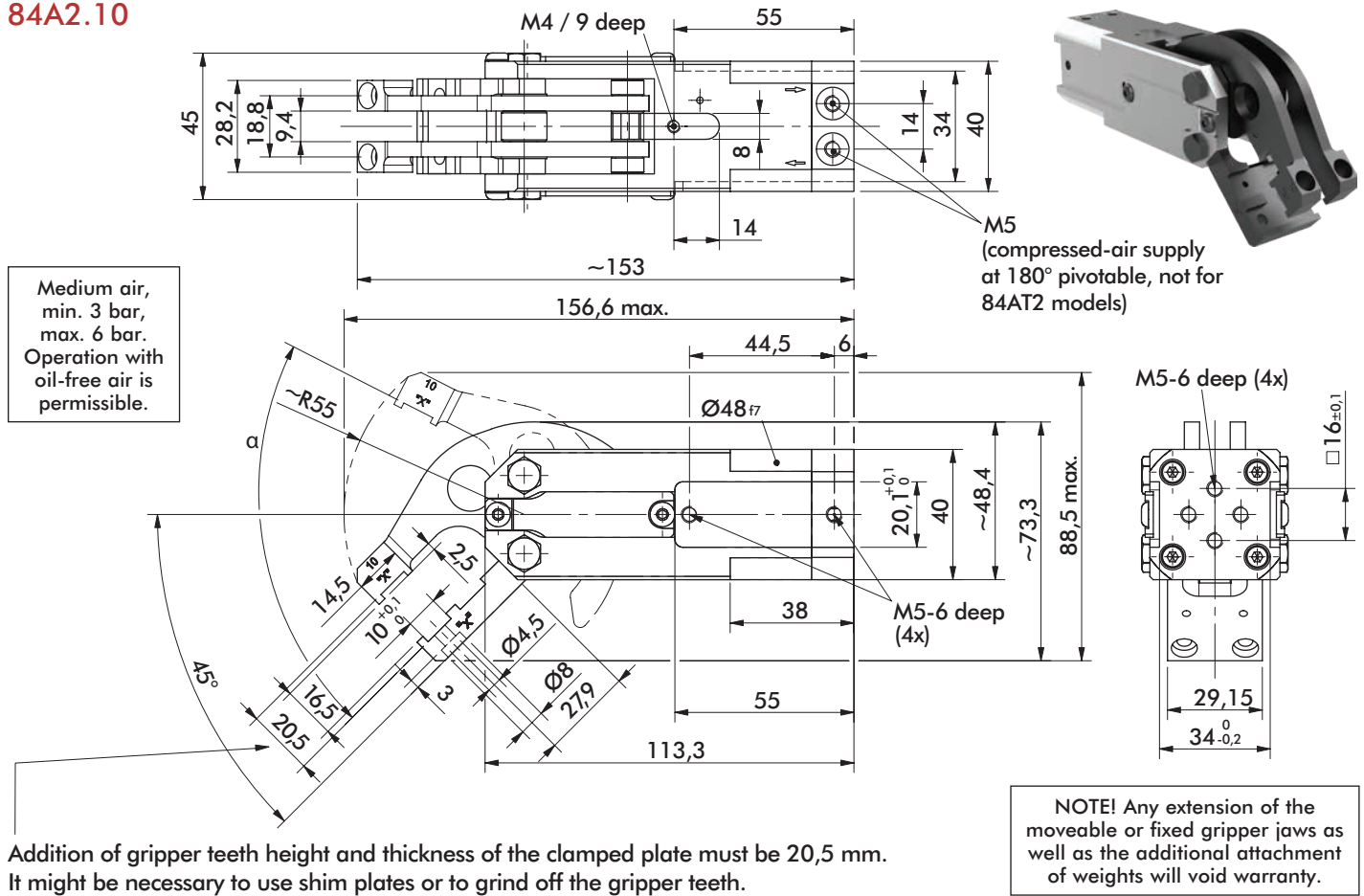
Model 84A2...8/84AT2...8	Opening Angle α	Clamping force at 6 bar ~N [lbf]	Weight Kg [lbs]
-	72°	560 [126]	0,65 [1.43]
Y	30°		
X	45°		



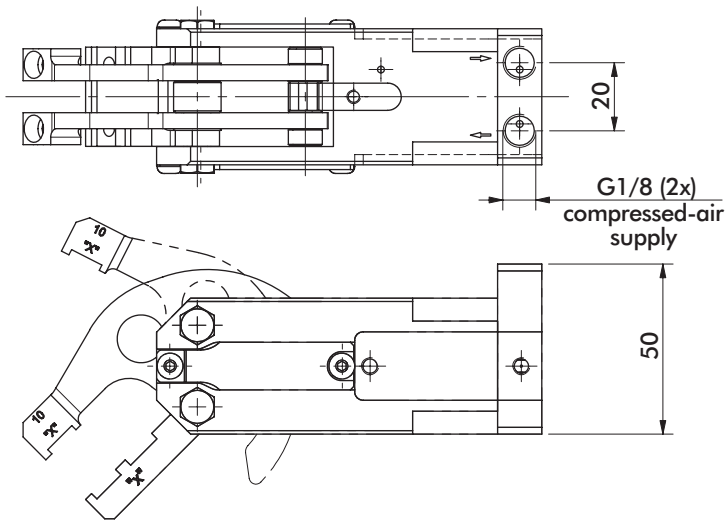
84A2..0 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

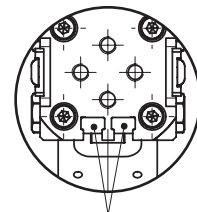
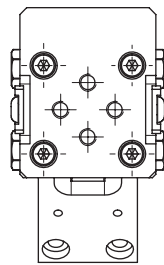
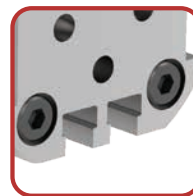
84A2.10



84A2.V0



84AT2..0



T-groove for sensor

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

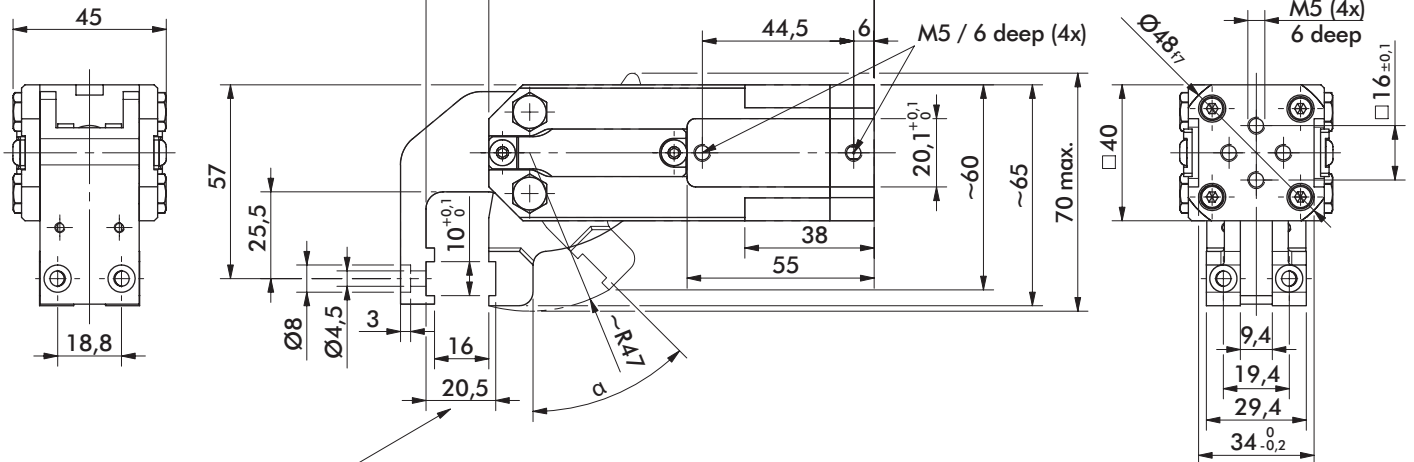
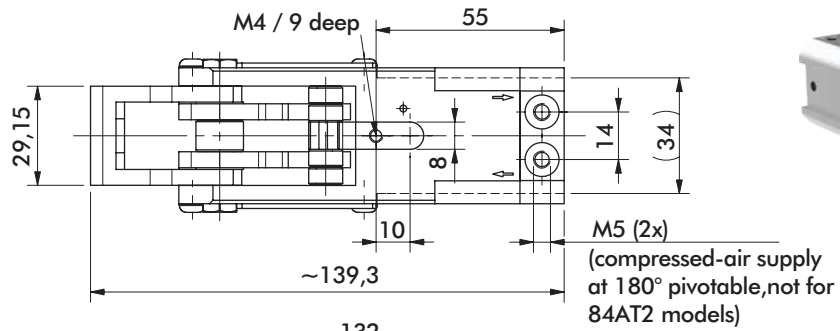
84A2..9 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.19

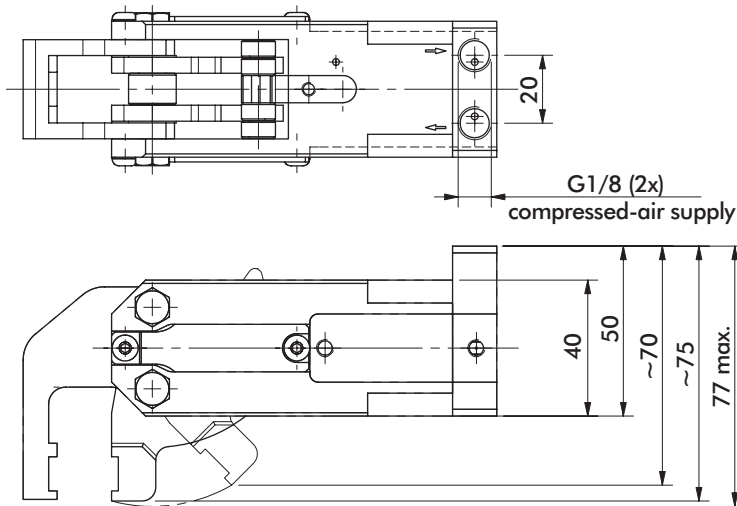
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warranty.

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

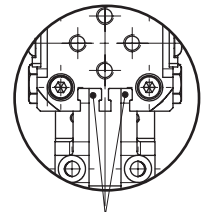
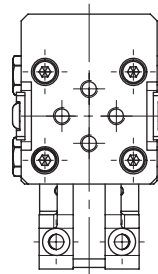
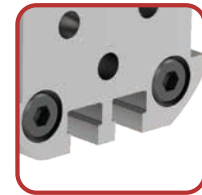


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

84A2.V9



84AT2..9

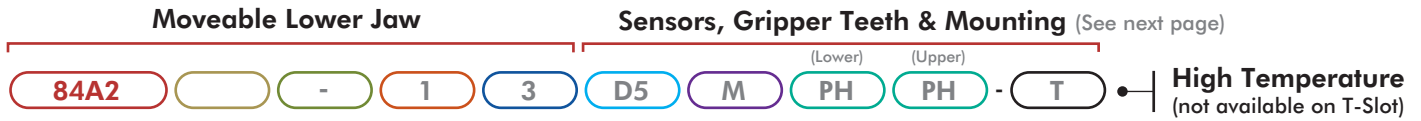


T-groove for sensor

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

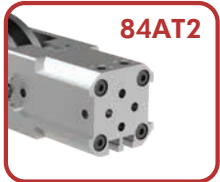
84A2 SERIES (MOVEABLE LOWER JAWS)

Cam Type Sheet Metal Grippers | Ordering Information



Body Style Options

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



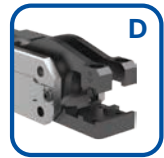
Porting Options

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



Jaw Arrangement Options

- Description
- 3** Double - 2 Upper/2 Lower Jaws
 - 5** Single - 1 Upper/1 Lower Jaw
 - D*** Double - 2 Upper/ 1 Lower Jaw
- *Excludes 84AT2 with Sensor T-Slot



Jaw Orientation Options

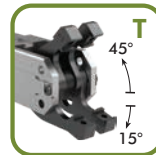
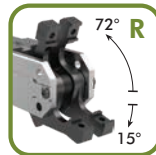
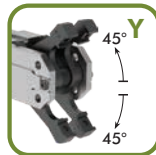
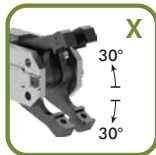
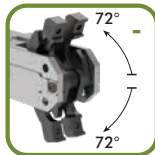
- Description
- "Blank"** Double (Jaw Arrangement 3 only)
 - L** Single Left (Jaw Arrangement 5 only)
 - R** Single Right (Jaw Arrangement 5 only)



Jaw Opening Options

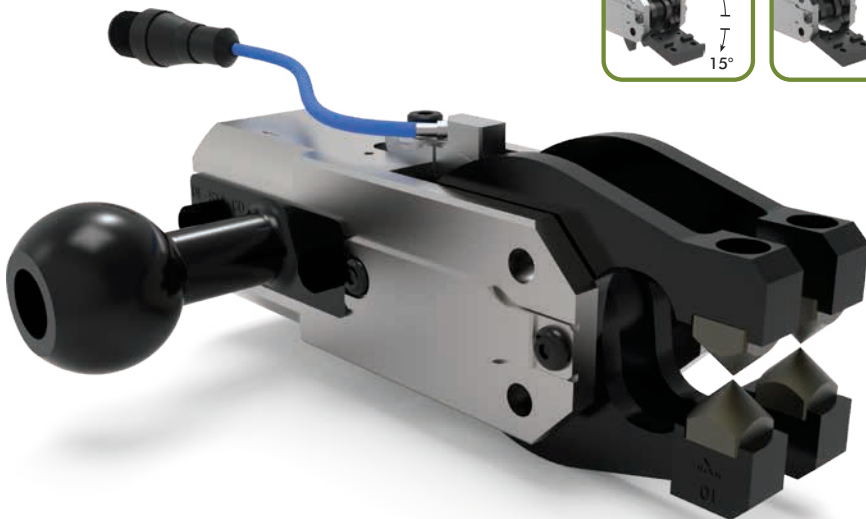
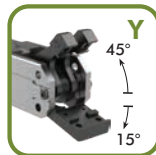
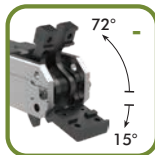
3 and 5 Jaw Arrangement Only

- 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



D Jaw Arrangement Only

- 72° Upper/15° Lower Jaw
- X** 30° Upper/15° Lower Jaw
- Y** 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

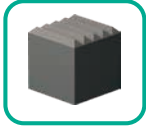
84A2 SERIES (MOVEABLE LOWER JAWS)

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



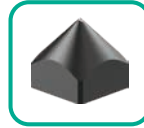
Plastic Teeth*

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



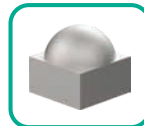
Steel Points

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

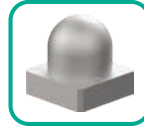


High Temperature (84A2 Only)

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



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



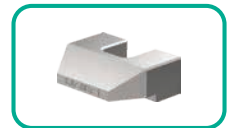
Crown Teeth

- 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)

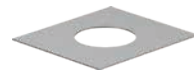
- DD** Soft Steel - 8JZ-087-1 (Lower)



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



Shims for gripper teeth available
Order Separately - **8SB-039-1**
Dimensions: 10 x 10 x 0,1 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
- 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

*For Jaw Arrangement Option D only



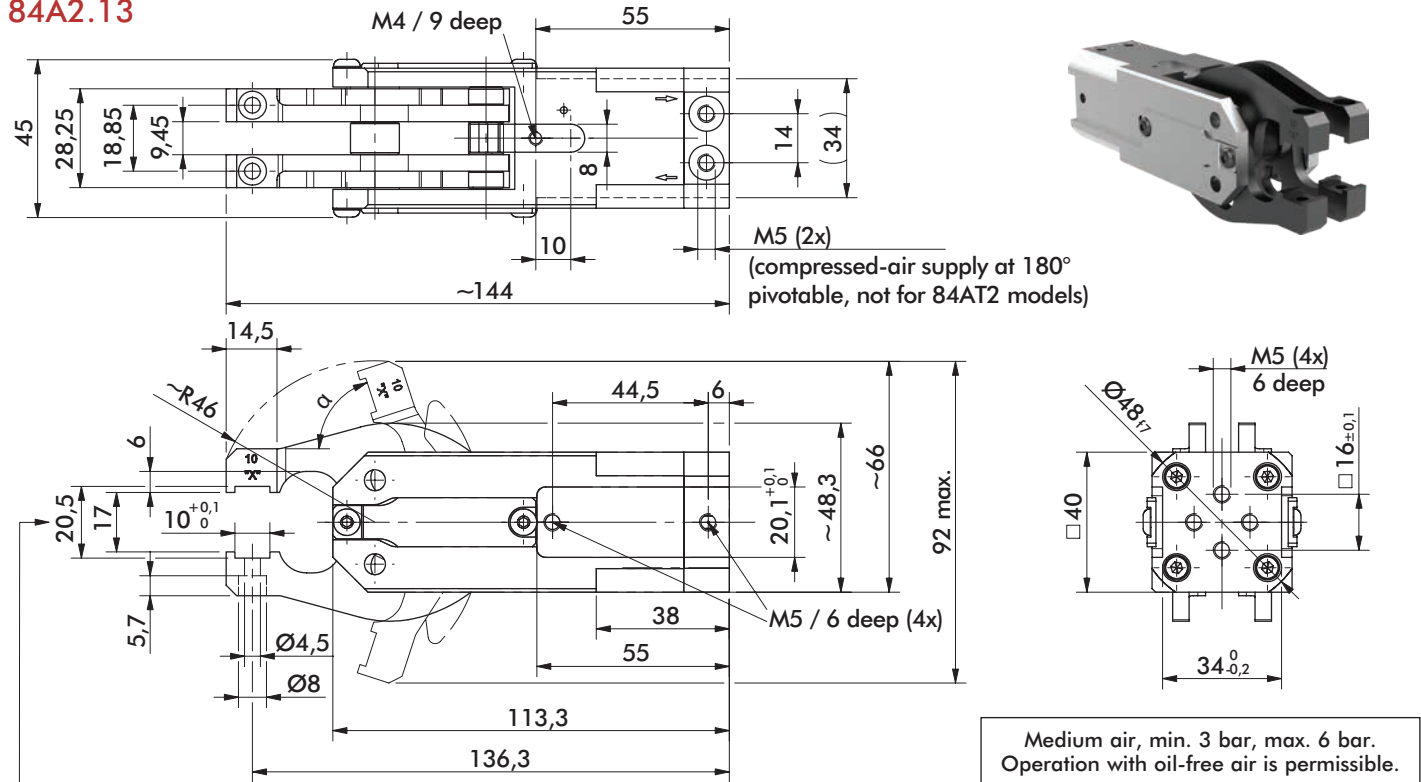
Cover for Sensing Systems **D5, GP, GQ, GK**
Order Separately **82ZB-185-1**

T-Coupler M12x1 for Sensing Systems **GP, GQ, GK**
Order Separately **7000-41161-000000**

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

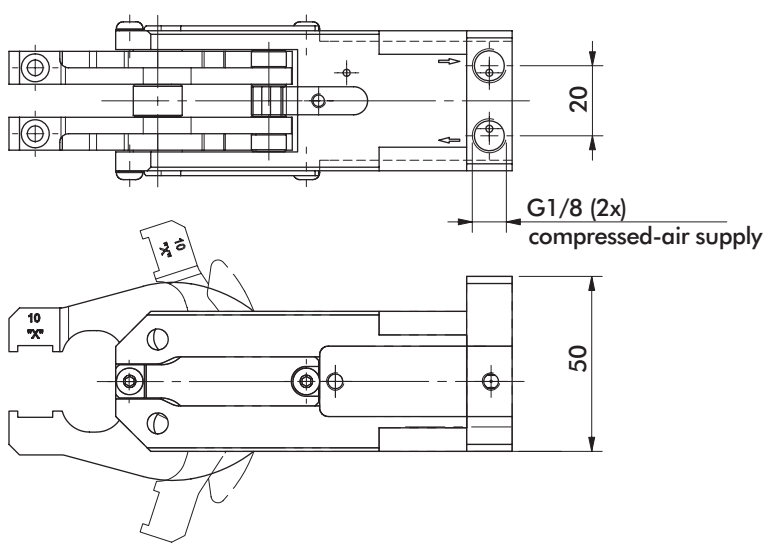
84A2.13



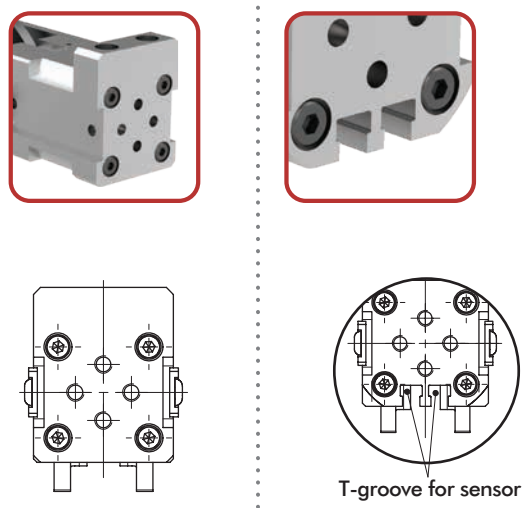
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2.V3



84AT2..3

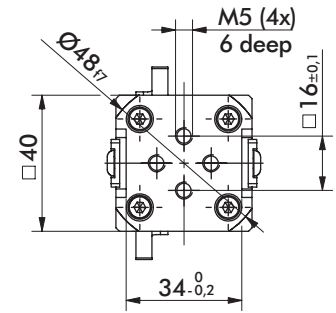
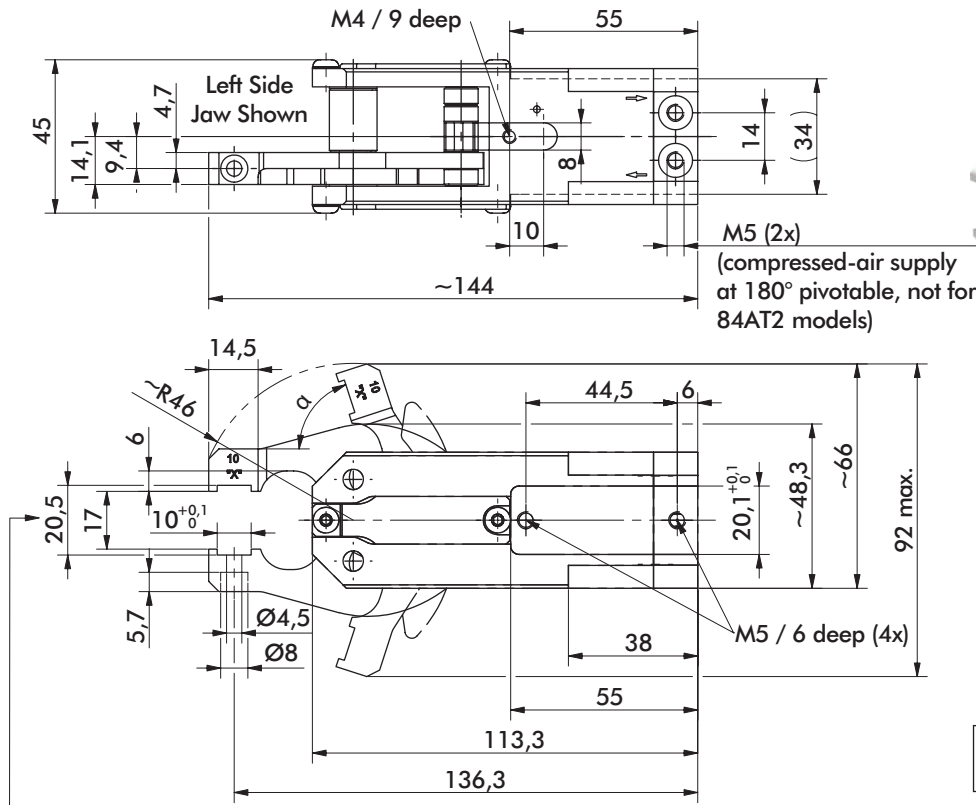


Model	Opening Angle α	Clamping force at 6 bar	Weight
84A2..3/84AT2..3	Symmetrical	~N [lbf]	Kg [lbs]
-	72°	475 [107]	0,6 [1.32]
X	30°		
Y	45°		

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..15



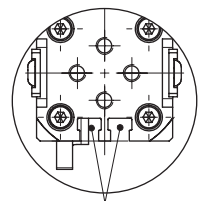
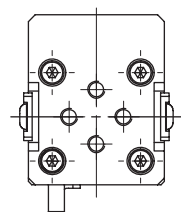
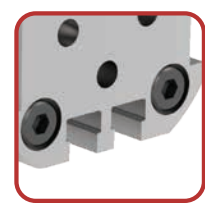
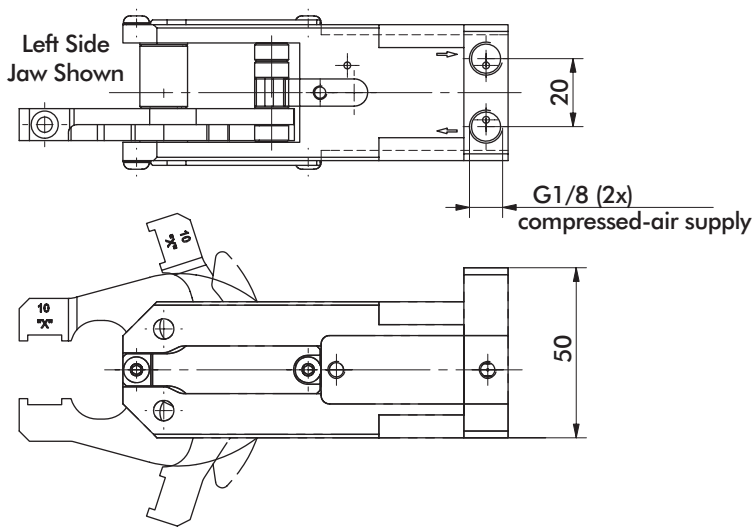
Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

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 warranty.

84A2..V5

84AT2...5



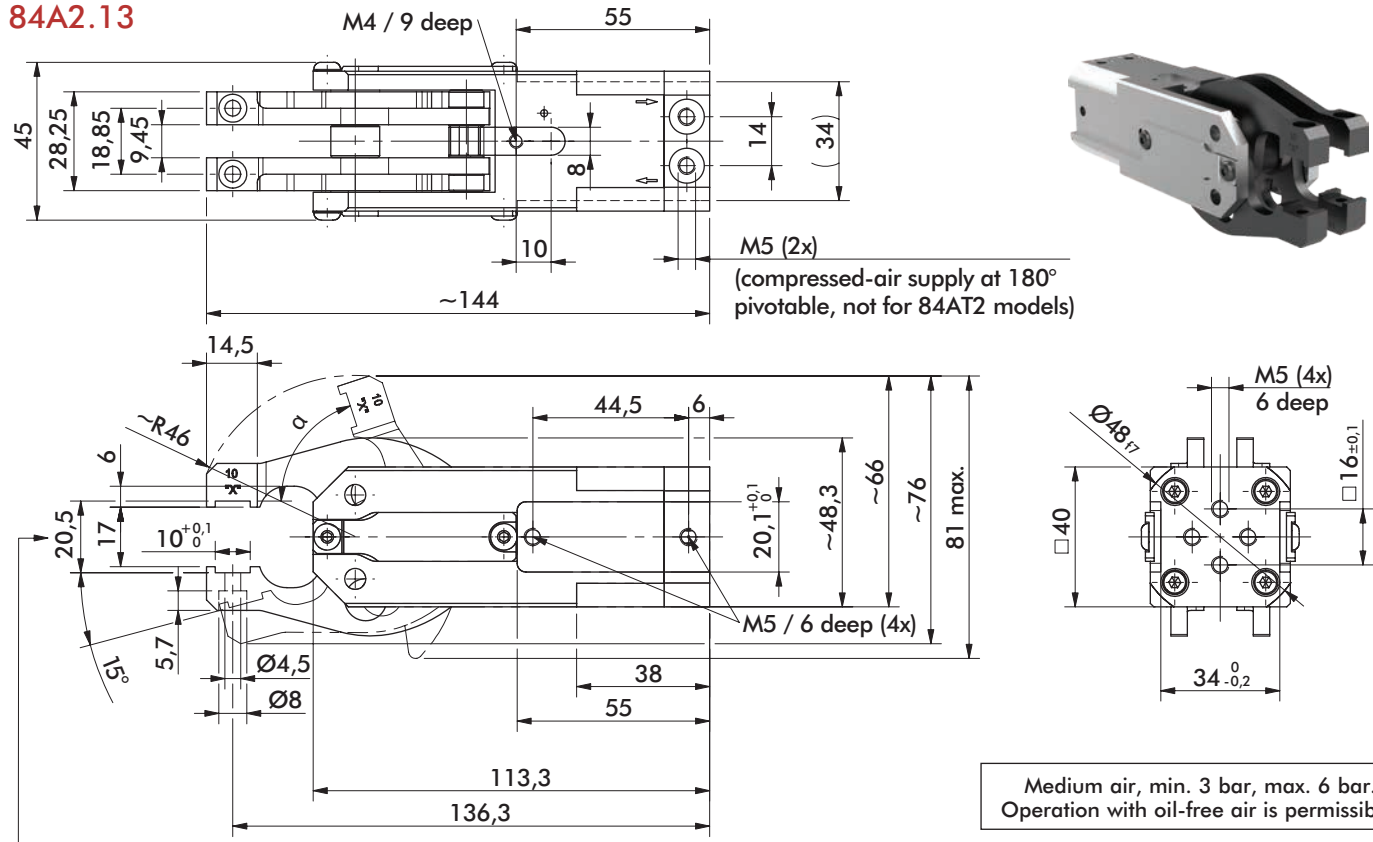
T-groove for sensor

Model 84A2...5/84AT2...5	Opening Angle α Symmetrical	Clamping force at 6 bar ~N [lbf]	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

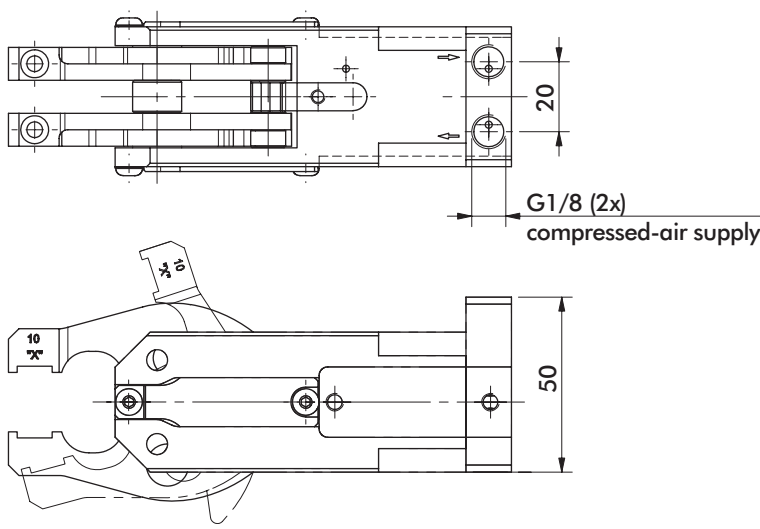


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

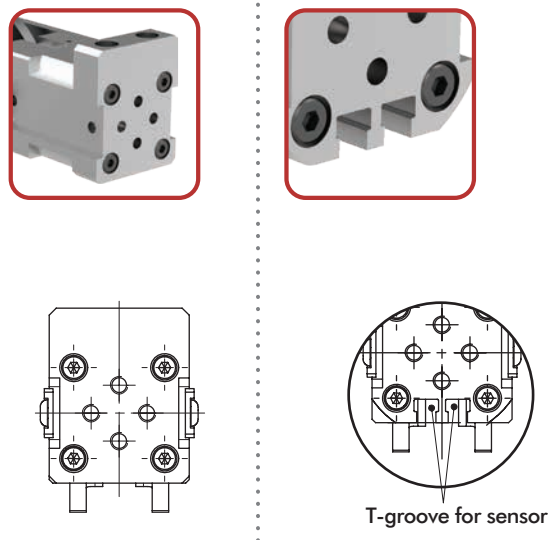
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2.V3



84AT2..3

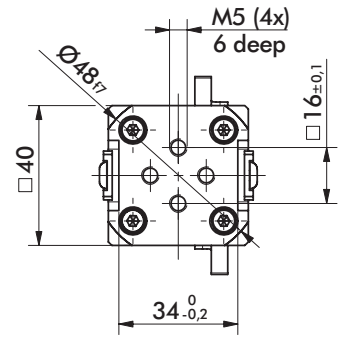
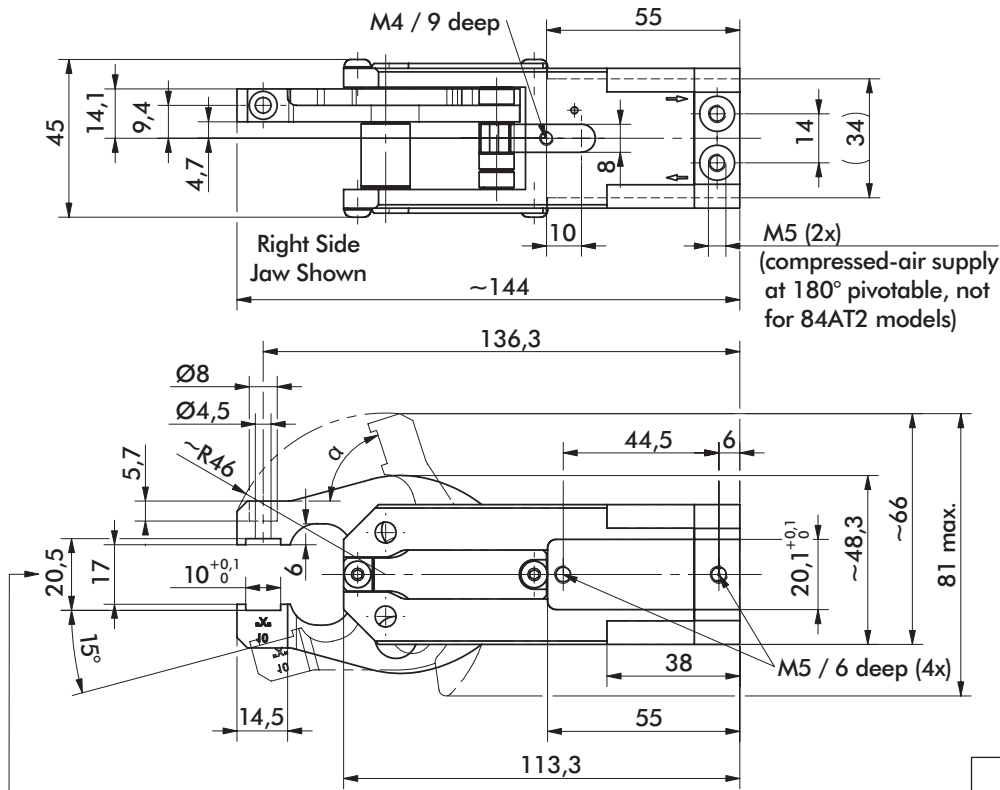


Model	Opening Angle α Upper/Lower	Clamping force at 6 bar ~N [lbf]	Weight Kg [lbs]
84A2..3/84AT2..3			
R	72°/15°	475 [107]	0,6 [1.32]
T	45°/15°		

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

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2..15

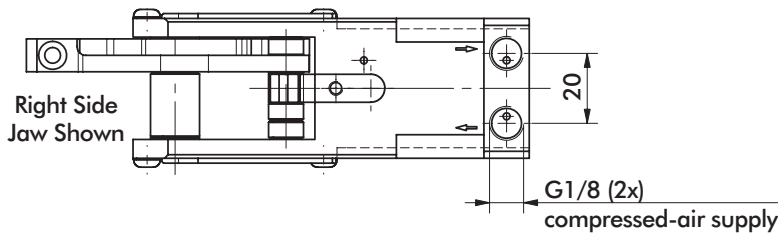


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

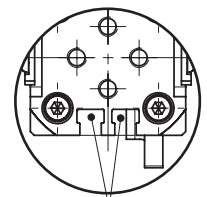
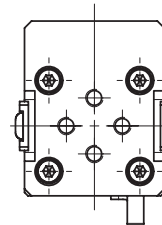
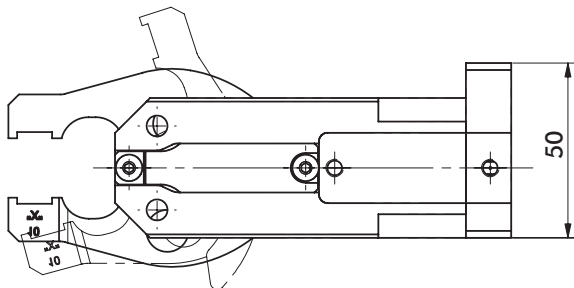
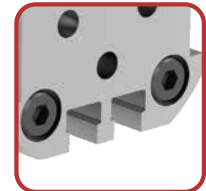
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

84A2..V5



84AT2...5



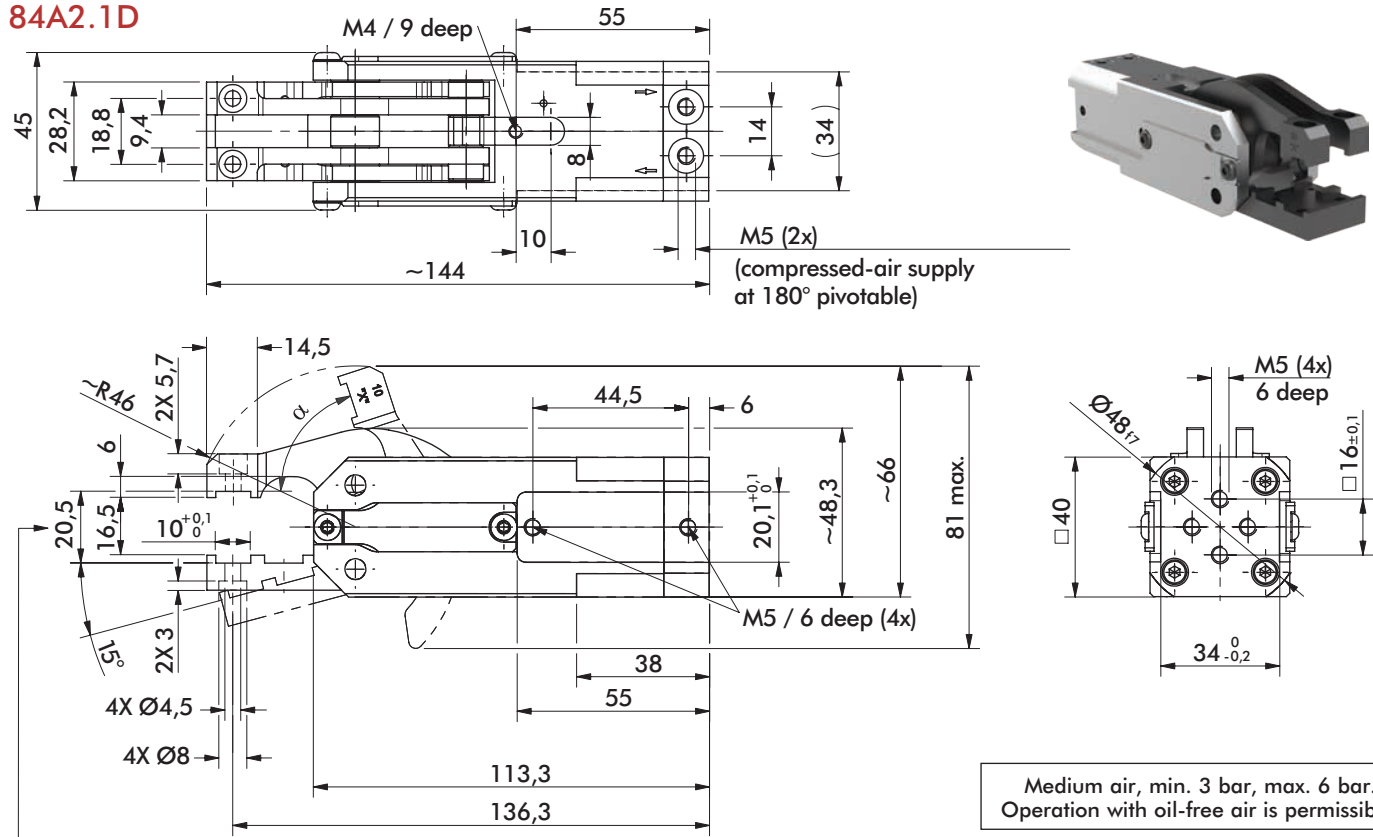
T-groove for sensor

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

84A2..D SERIES (DOUBLE UPPER, 15° SINGLE MOVEABLE LOWER)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

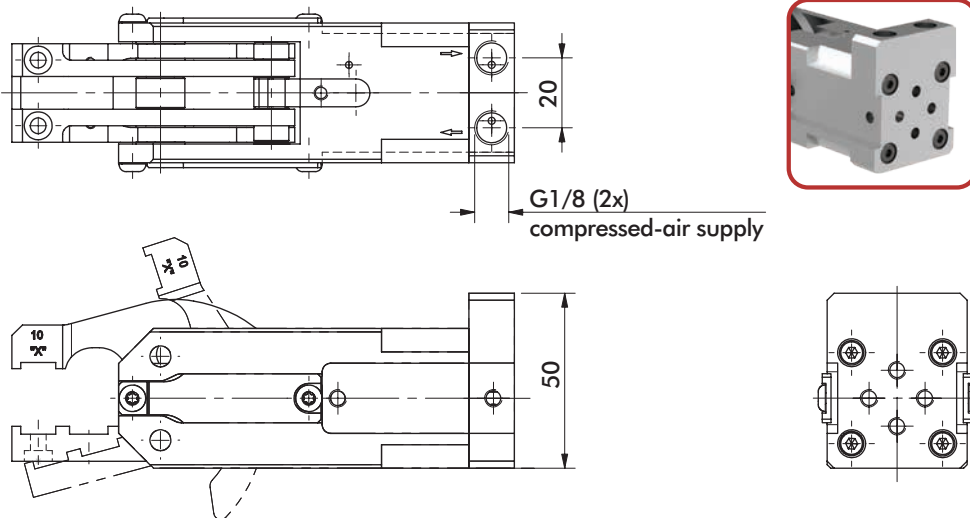
84A2.1D



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 warranty.

84A2.VD



Model 84A2..D	Opening Angle α Upper/Lower	Clamping force at 6 bar ~N [lbf]	Weight Kg [lbs]
-	72°/15°	475 [107]	0,6 [1.32]
X	30°/15°		
Y	45°/15°		

