84A2 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Ordering Information

Fixed Lower & 90° Jaw | **Sensors, Gripper Teeth & Mounting** (See next page)

84A2		-	1	1	D4	N	BA (Lower)	BA (Upper)	-	T

High Temperature
(Not available on T-Slot)

Body Style Options

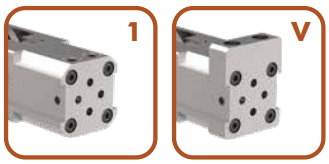
	Description
84A2	Standard
84AT2	Sensor T-Slot





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

Dimensions and technical information are subject to change without notice

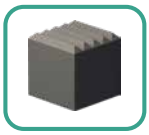
84A2 SERIES (FIXED LOWER JAW)

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

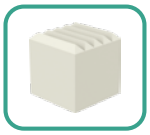


EE Soft Steel - 8JZ-092-1



Plastic Teeth*

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

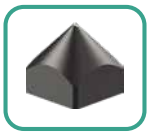




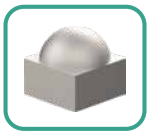
Shims for gripper teeth available
Order Separately **8SB-039-1**
Dimensions: 10 x 10 x 1 mm

Steel Points

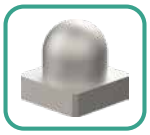
00 None
PH Hardened - 8JZ-029-1



High Temperature (84A2 Only)
PI Soft Steel - 8JZ-074-1



RR Soft Steel - 8JZ-088-1



Crown Teeth

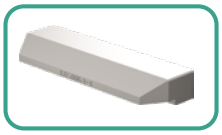
00 None
SK Hardened (Lower) - 8JZ-036-2
SQ Hardened (Lower) - 8JZ-051-1
SL Hardened (Upper) - 8JZ-037-1
SM Hardened (Upper) - 8JZ-038-1
SN Hardened (Upper) - 8JZ-039-1
SP Hardened (Upper) - 8JZ-040-1



High Temperature (84A2 Only)
DD Soft Steel - 8JZ-087-1 (Lower)



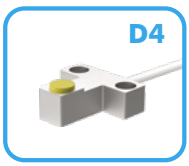
LL Soft Steel - 8JZ-086-1 (Lower)



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)

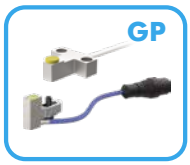
*For Jaw Arrangements Options 1, 2, 7, 8 ,9 only.

















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)



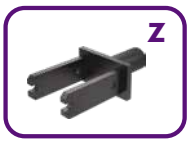
Cover for Sensing Systems **D5**, **GP**, **GQ**, **GK**
Order Separately **82ZB-185-1**

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















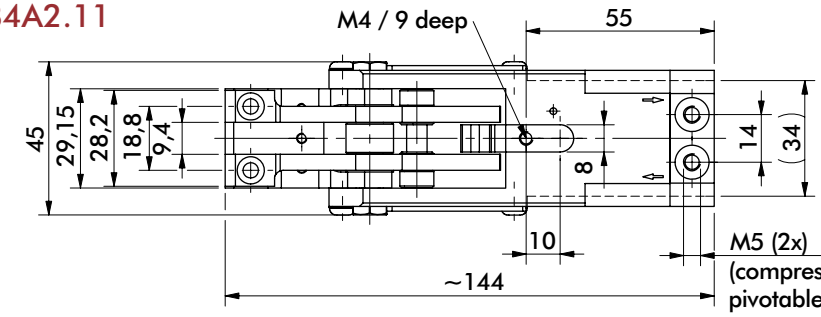




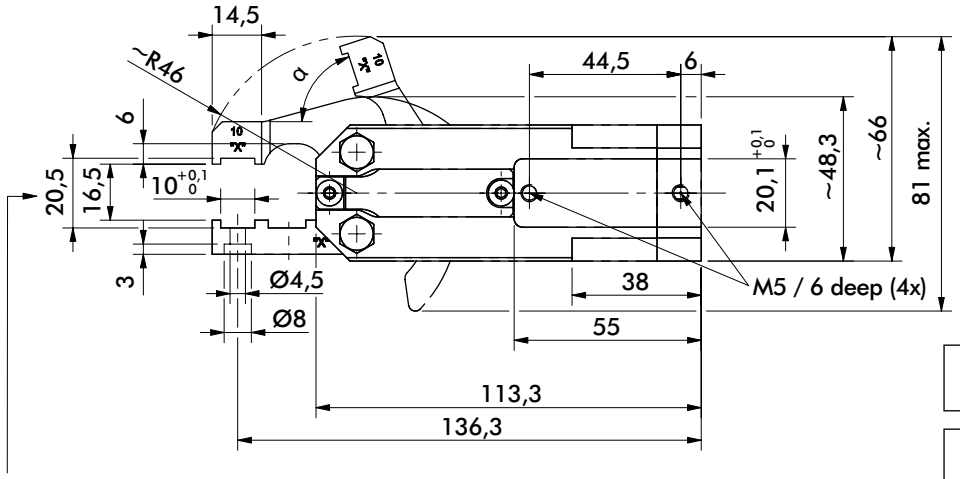
84A2..1 SERIES (FIXED LOWER JAW)

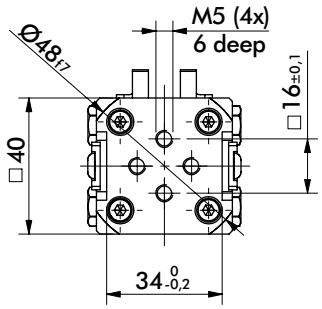
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.11







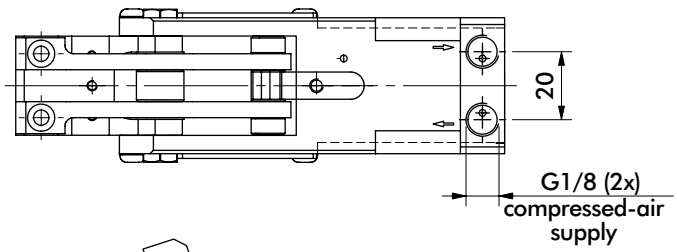


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

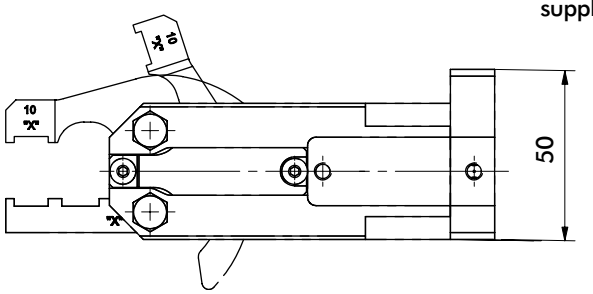
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

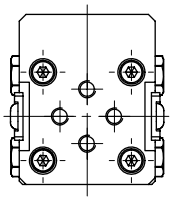
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

84A2.V1

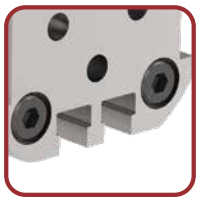


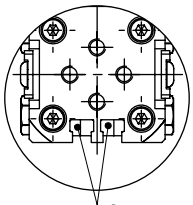






84AT2..1



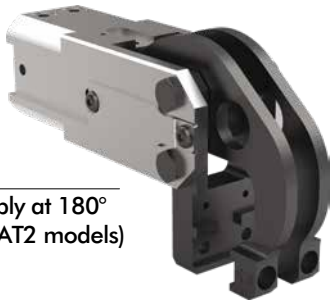


Model 84A2..1/84AT2..1	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	920 [207]	0,6 [1.32]
X	30°		
Y	45°		

84A2..2 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.12

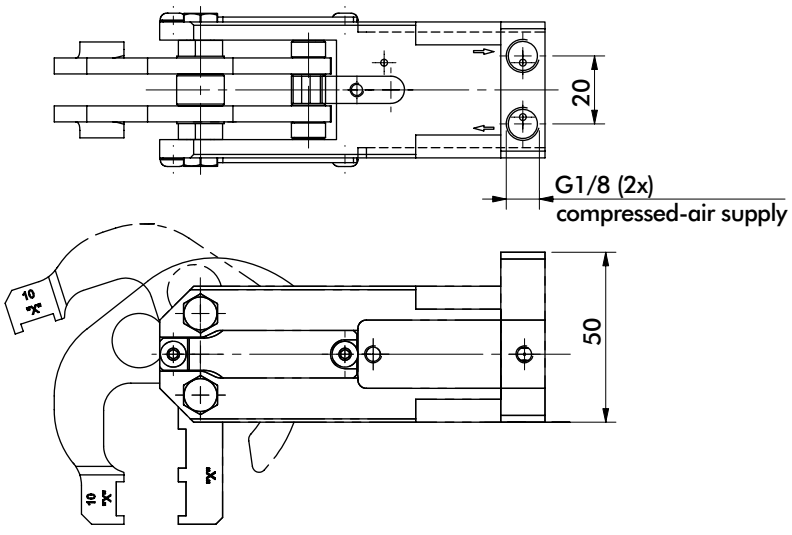


Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

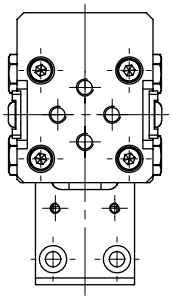
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

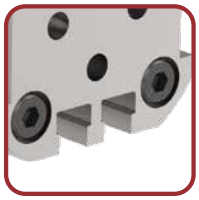
84A2.V2

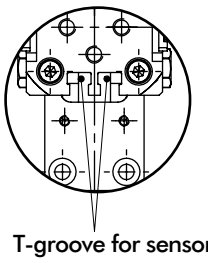






84AT2..2



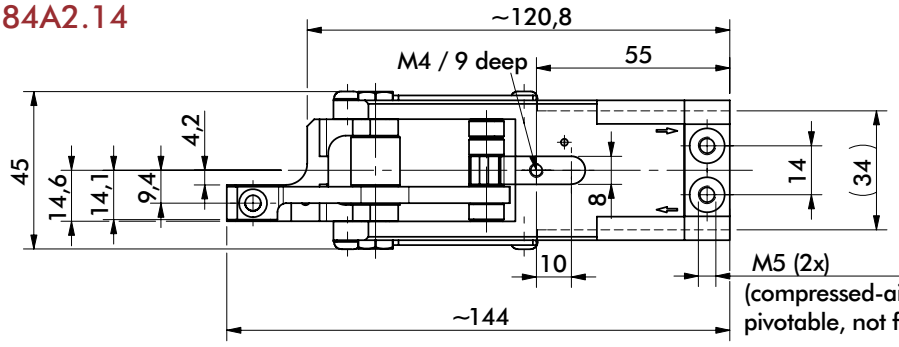


Model 84A2..2/84AT2..2	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	575 [129]	0,65 [1.43]
X	30°		
Y	45°		

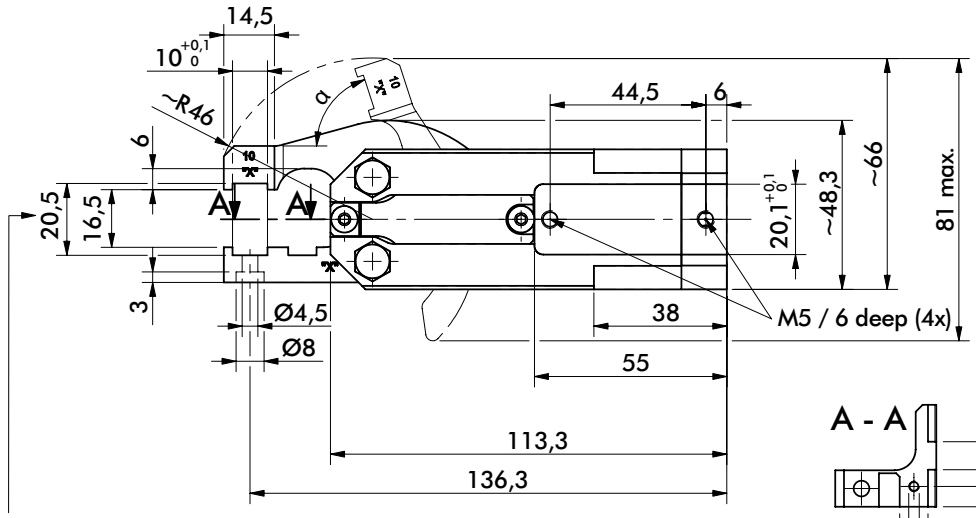
84A2..4 SERIES (FIXED LOWER JAW)

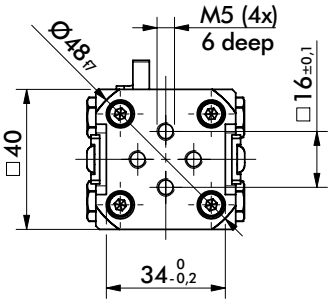
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

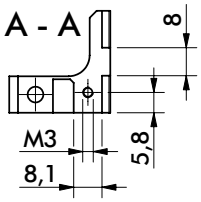
84A2.14









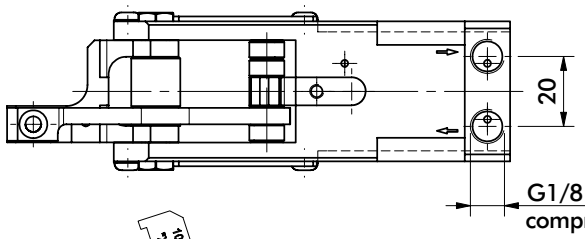


Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

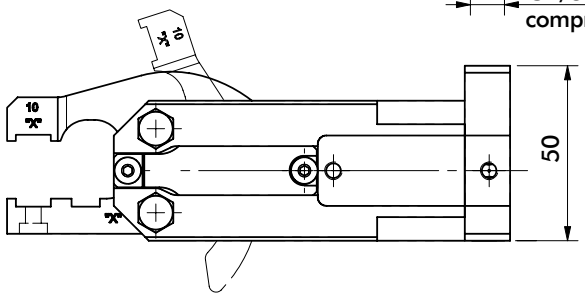
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

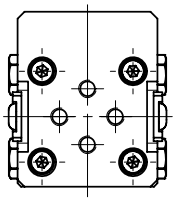
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

84A2.V4

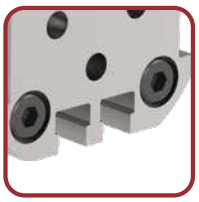


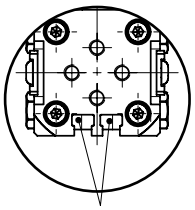






84AT2..4





T-groove for sensor

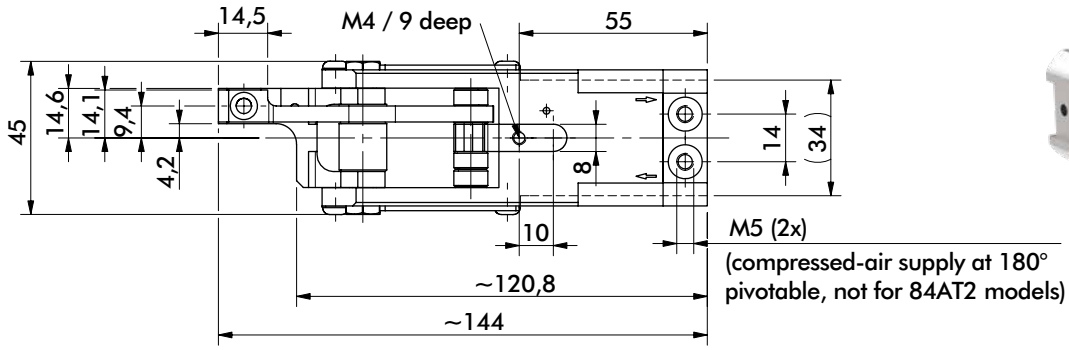
Model 84A2..4/84AT2..4	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	920 [207]	0,5 [1.1]
X	30°		
Y	45°		

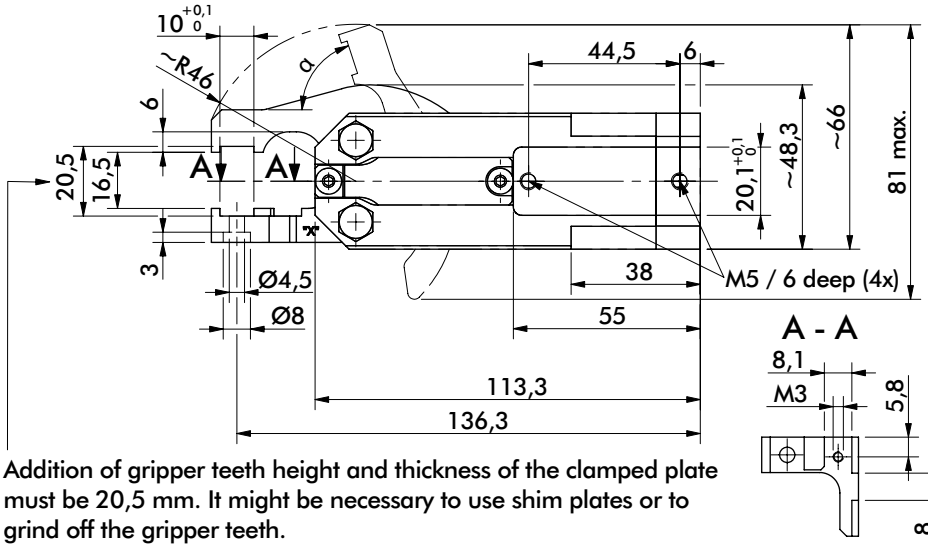
84A2..6 SERIES (FIXED LOWER JAW)

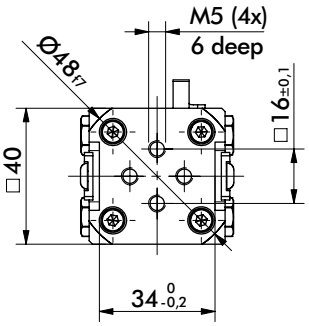
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.16







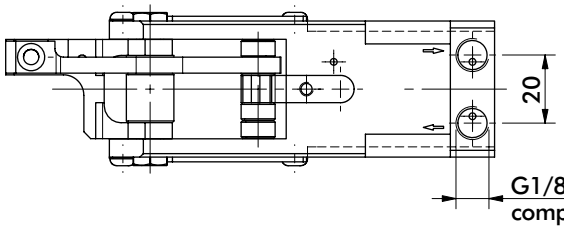


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

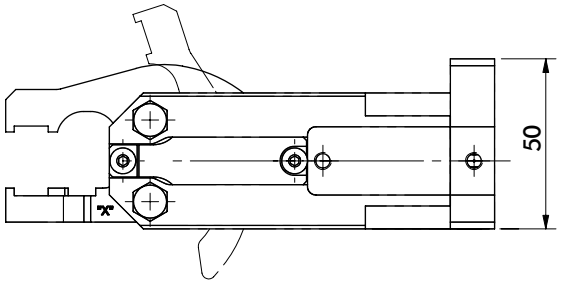
Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

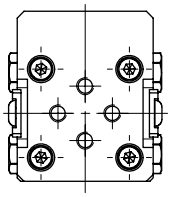
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V6

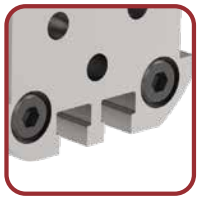


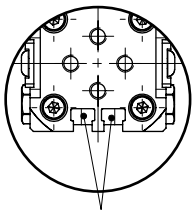






84AT2..6





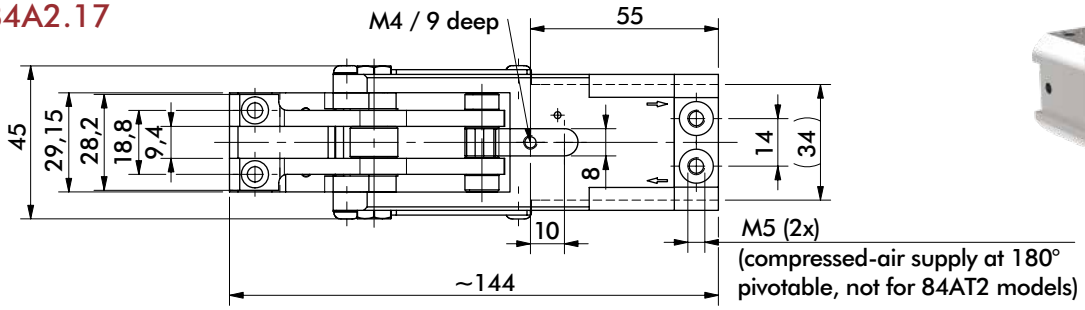
T-groove for sensor

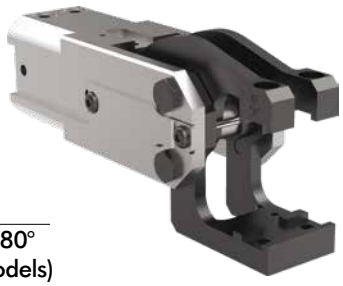
Model 84A2..6/84AT2..6	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	920 [207]	0,5 [1.1]
X	30°		
Y	45°		

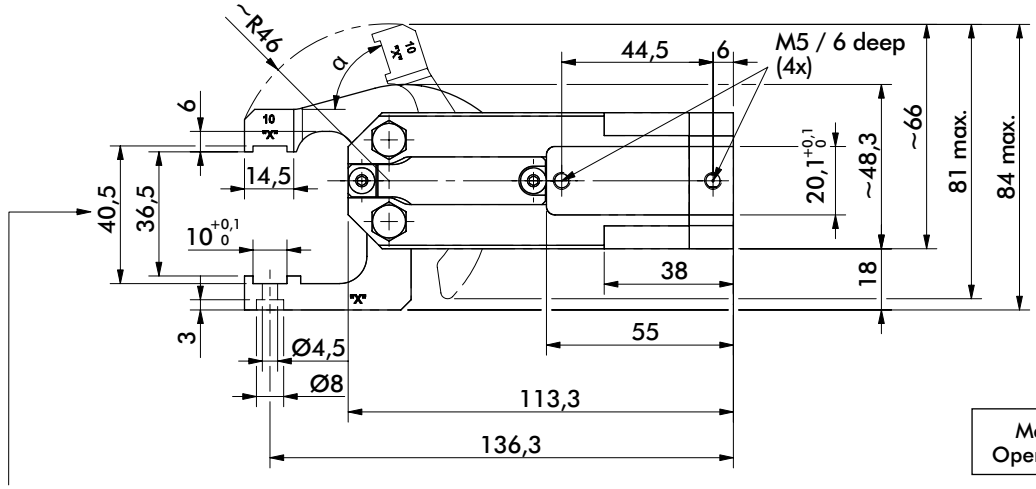
84A2..7 SERIES (FIXED LOWER JAW)

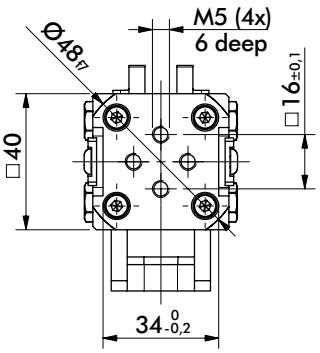
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.17







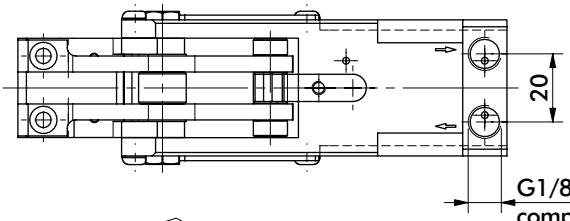


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

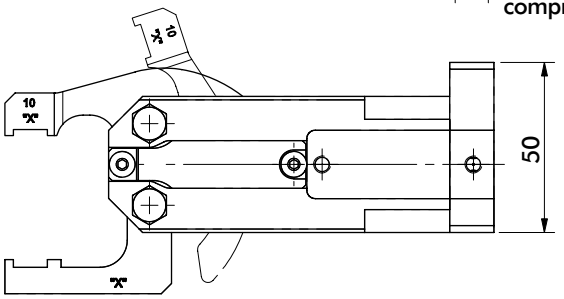
Addition of gripper teeth height and thickness of the clamped plate must be 40,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

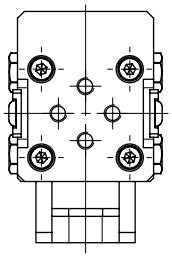
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V7

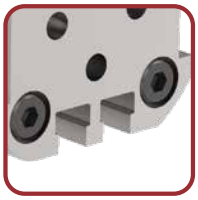


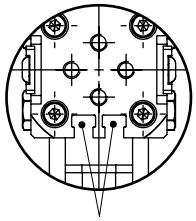






84AT2..7





T-groove for sensor

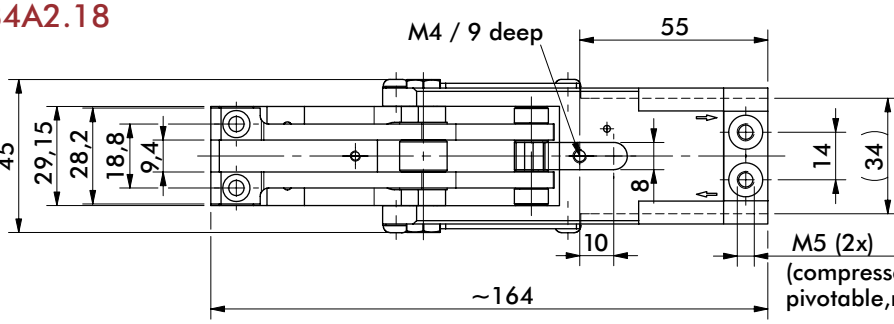
Model 84A2..7/84AT2..7	Opening Angle α	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	920 [207]	0,6 [1.32]
X	30°		
Y	45°		

Notes

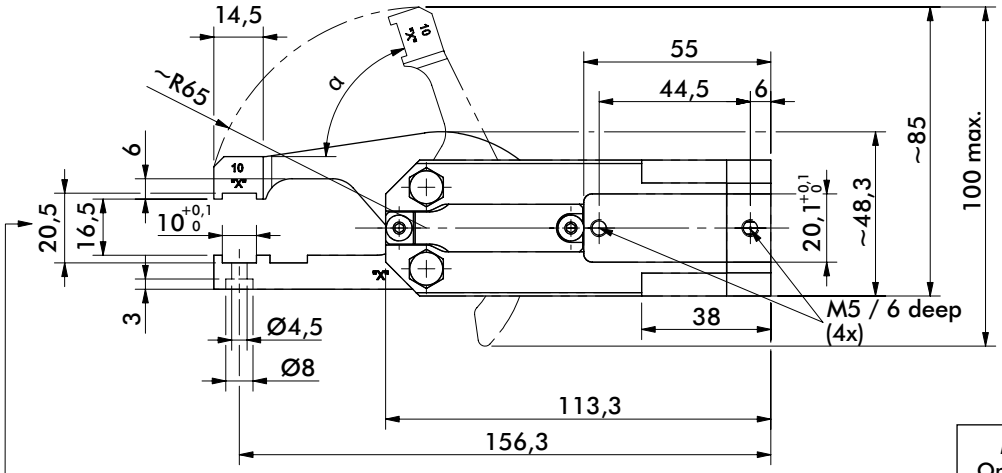
84A2..8 SERIES (FIXED LOWER JAW)

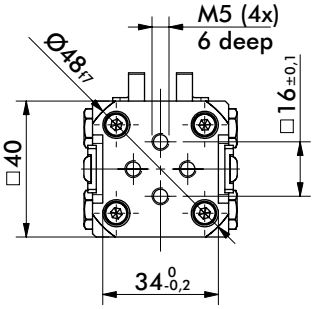
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.18







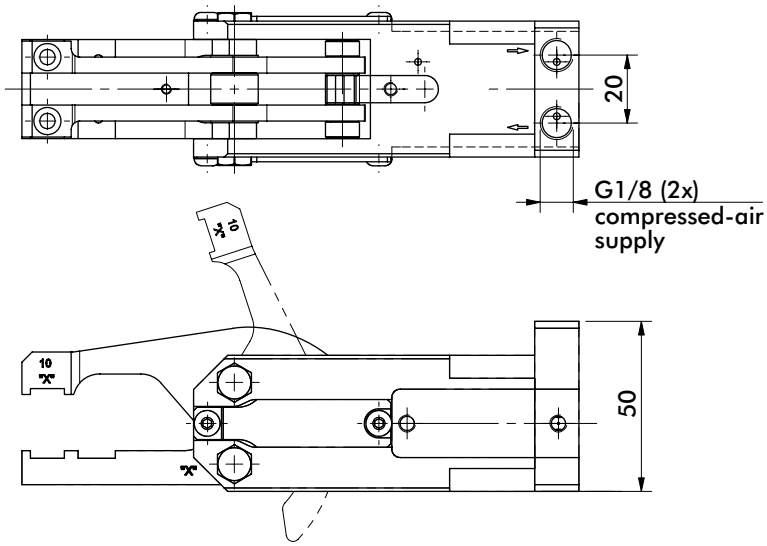


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

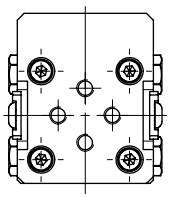
Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

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

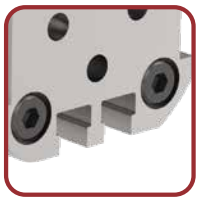
84A2.V8

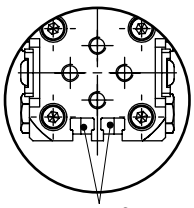






84AT2..8



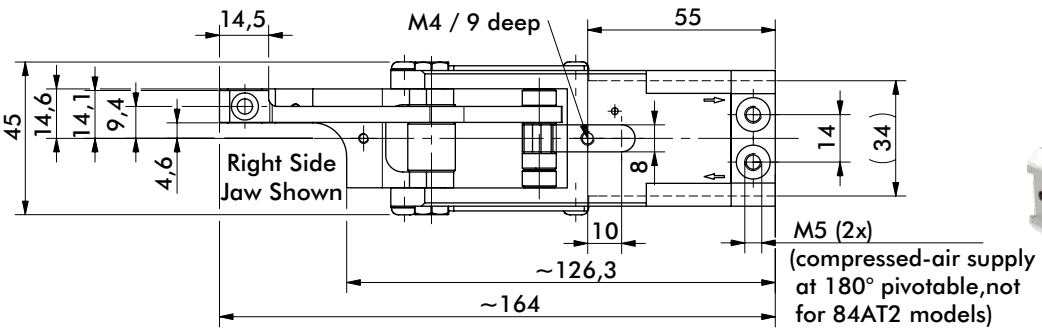


T-groove for sensor

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]
X	30°		
Y	45°		

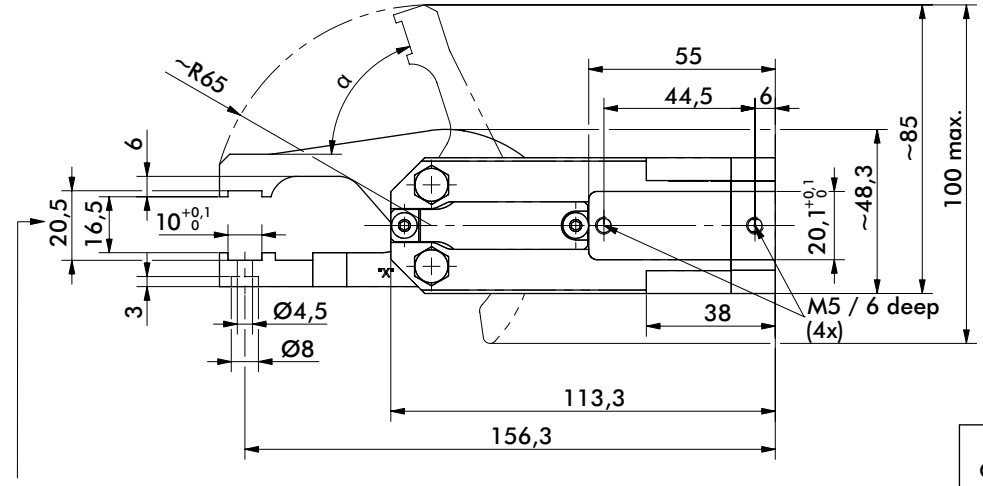
84A2...8 SERIES (FIXED LOWER JAW)

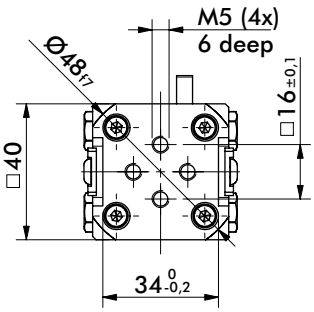
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



84A2..18





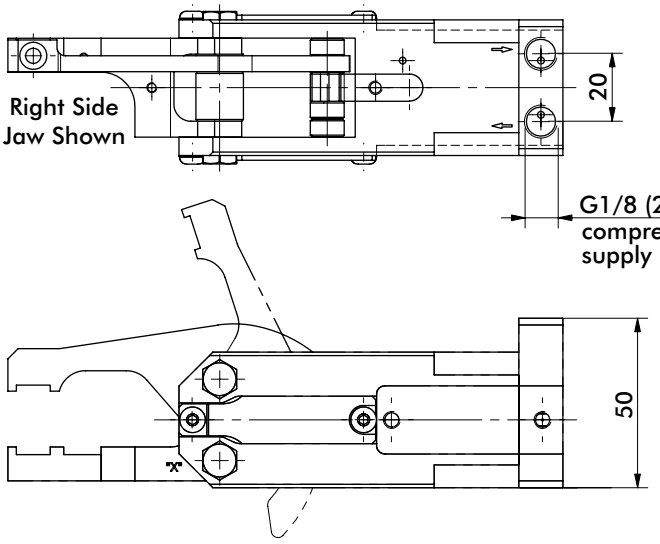


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

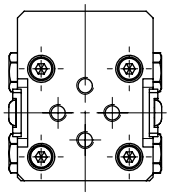
Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

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

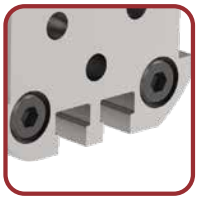
84A2..V8

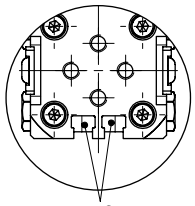






84AT2...8





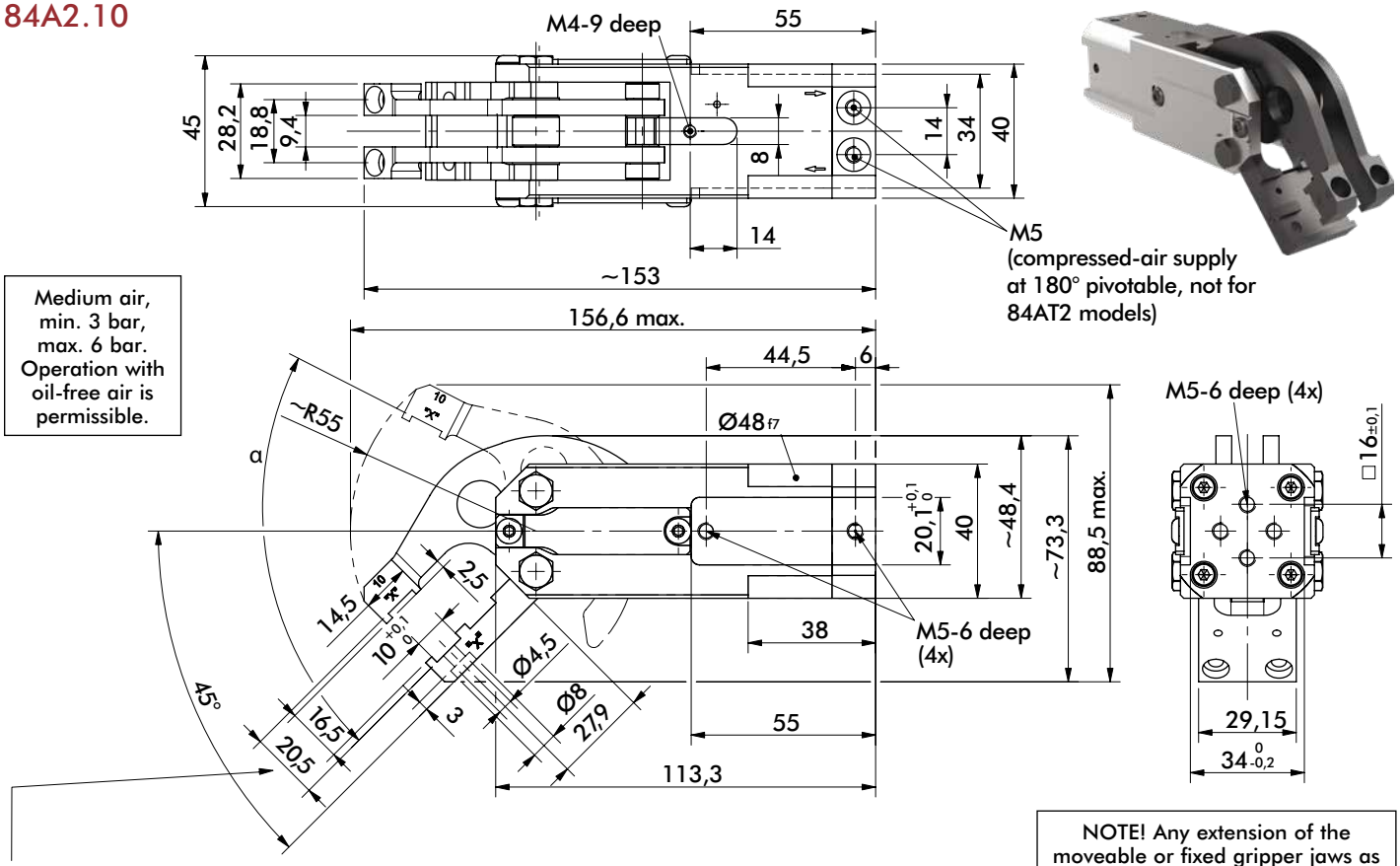
T-groove for sensor

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

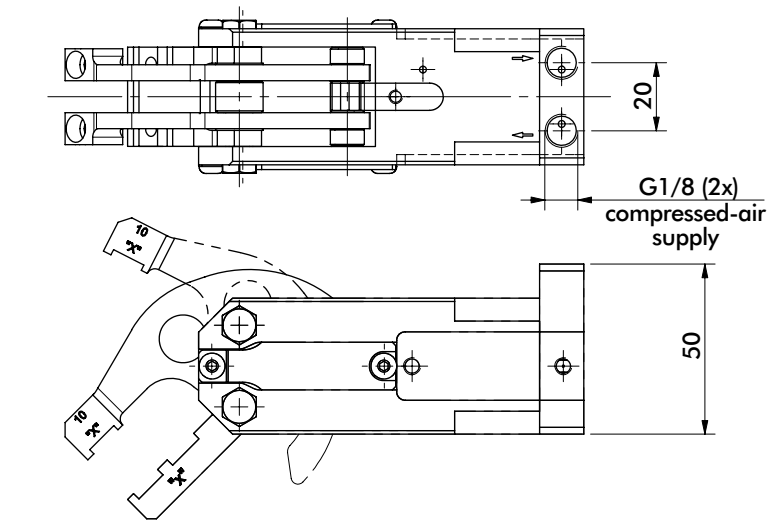
84A2.10



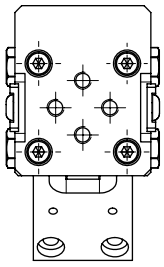
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm.
It might be necessary to use shim plates or to grind off the gripper teeth.

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

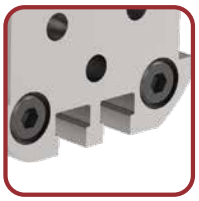
84A2.V0

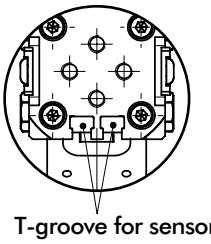






84AT2..0





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

Dimensions and technical information are subject to change without notice

84A2..9 SERIES (FIXED LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

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

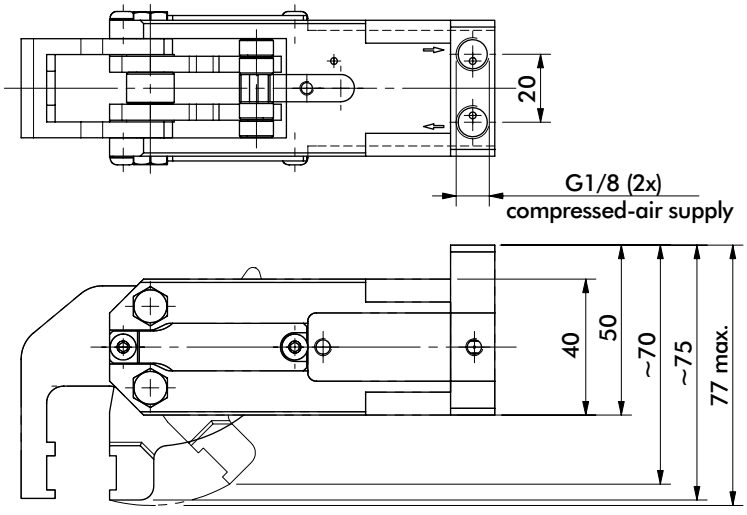
Medium air, min. 3 bar, max. 6 bar. Operation with oil-free air is permissible.

84A2.19

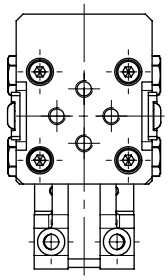


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm.
It might be necessary to use shim plates or to grind off the gripper teeth.

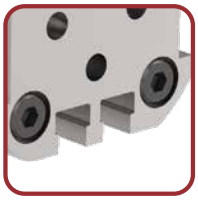
84A2.V9

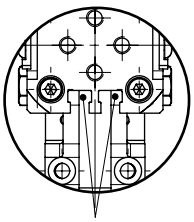






84AT2..9





T-groove for sensor

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

84A2 SERIES (MOVEABLE LOWER JAWS)

Cam Type Sheet Metal Grippers | Ordering Information

Moveable Lower Jaw | **Sensors, Gripper Teeth & Mounting** (See next page)

84A2		-	1	3	D5	M	PH (Lower)	PH (Upper)	-	T

High Temperature (not available on T-Slot)

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

Dimensions and technical information are subject to change without notice

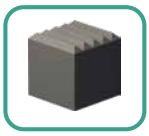
84A2 SERIES (MOVEABLE LOWER JAWS)

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

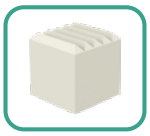


EE Soft Steel - 8JZ-092-1



Plastic Teeth*

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

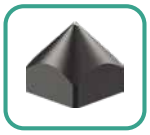




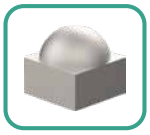
Shims for gripper teeth available
Order Separately - **8SB-039-1**
Dimensions: 10 x 10 x 1 mm

Steel Points

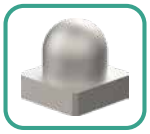
00 None
PH Hardened - 8JZ-029-1



High Temperature (84A2 Only)
PI Soft Steel - 8JZ-074-1



RR Soft Steel - 8JZ-088-1

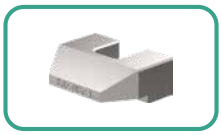


Crown Teeth

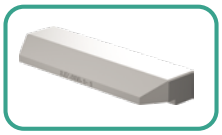
00 None
SK Hardened (Lower) - 8JZ-036-2
SQ Hardened (Lower) - 8JZ-051-1
SL Hardened (Upper) - 8JZ-037-1
SM Hardened (Upper) - 8JZ-038-1
SN Hardened (Upper) - 8JZ-039-1
SP Hardened (Upper) - 8JZ-040-1



High Temperature (84A2 Only)
DD Soft Steel - 8JZ-087-1 (Lower)



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



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
V	Rear Flange 8MA-147-1
W	On-Body Swivel Ball 82ZB-025-2

















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)







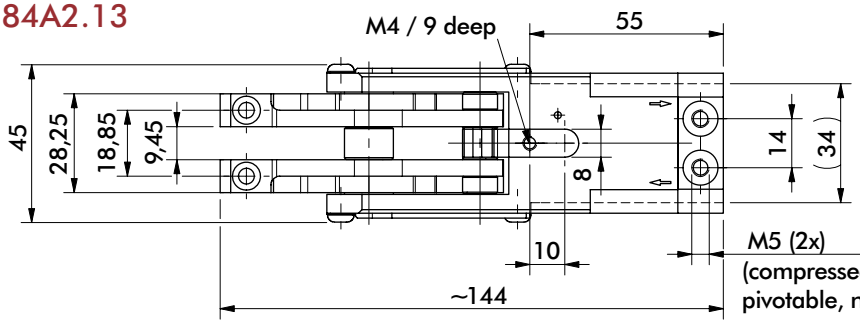


Cover for Sensing Systems **D5**, **GK**
Order Separately **82ZB-185-1**

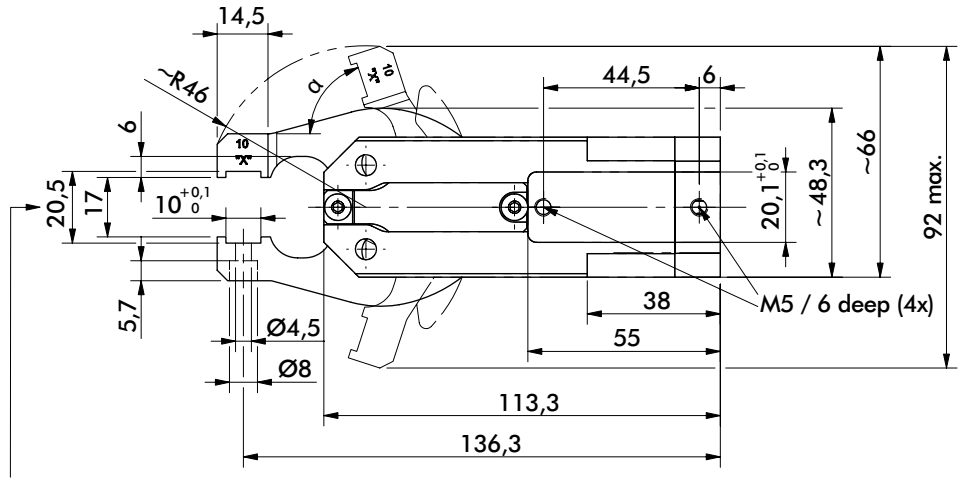
84A2..3 SERIES (DOUBLE SYMMETRICAL MOVEABLE JAWS)

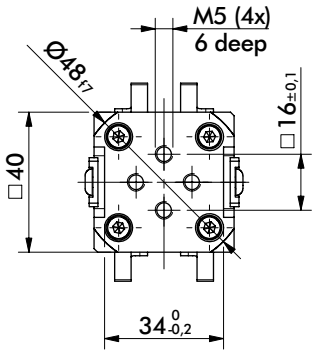
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.13







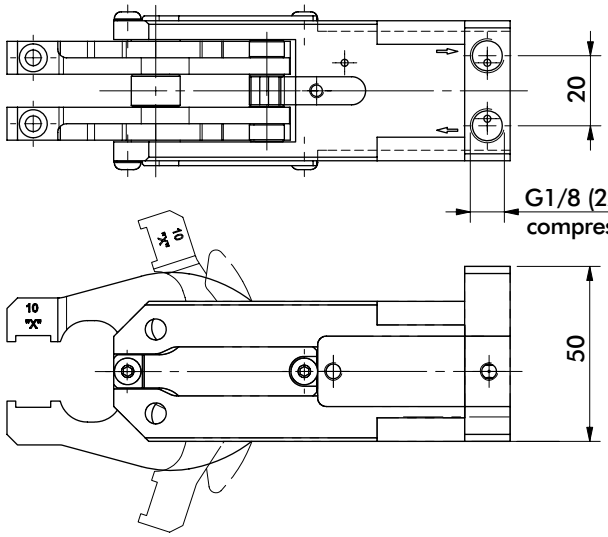


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

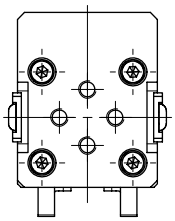
Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

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

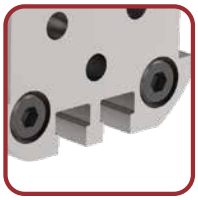
84A2.V3

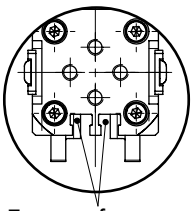






84AT2..3



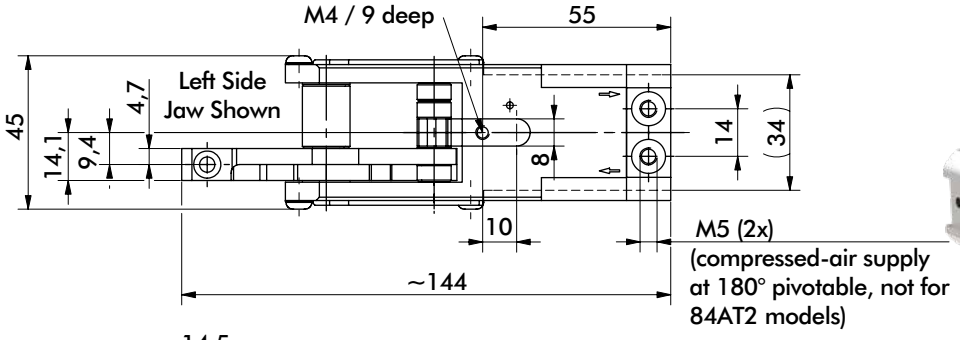


Model 84A2..3/84AT2..3	Opening Angle α Symmetrical	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
-	72°	475 [107]	0,6 [1.32]
X	30°		
Y	45°		

Dimensions and technical information are subject to change without notice

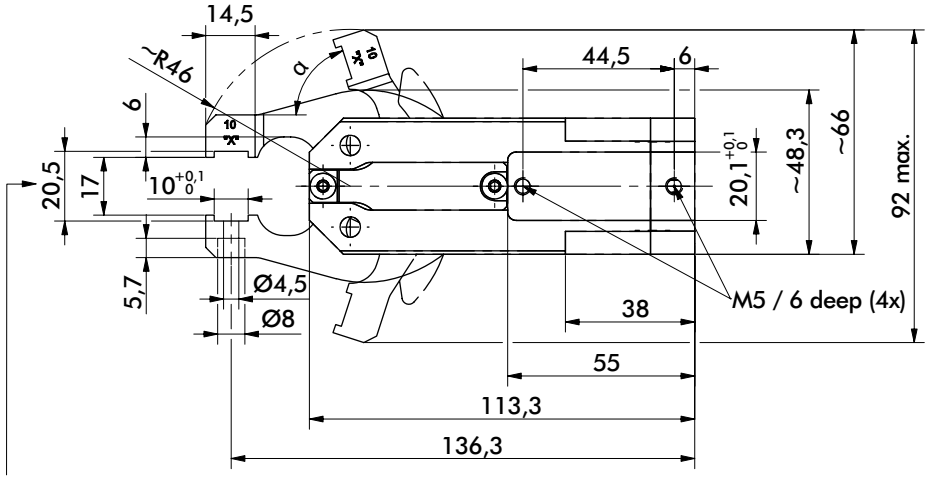
84A2...5 SERIES (SINGLE SYMMETRICAL MOVEABLE JAWS)

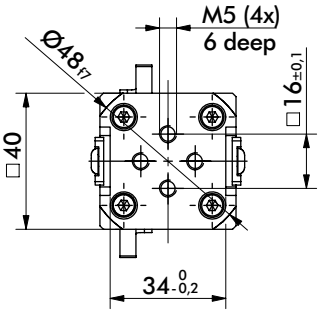
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



84A2..15





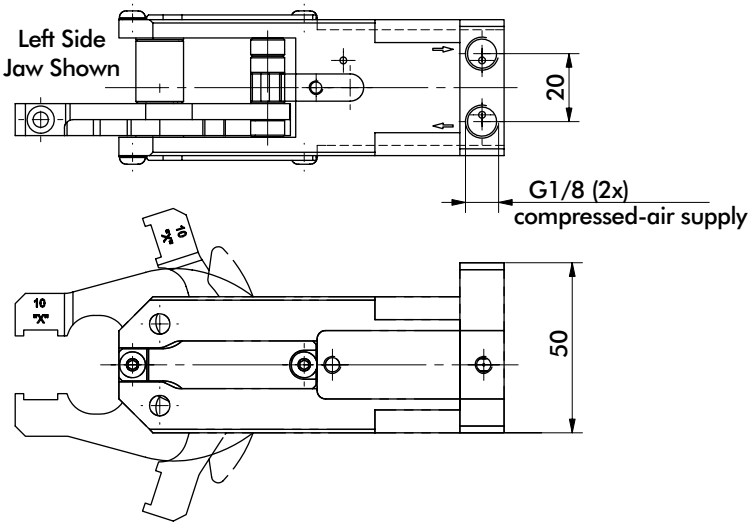


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

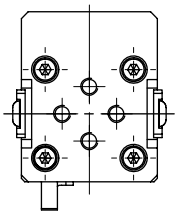
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

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

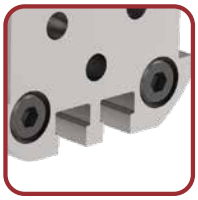
84A2..V5

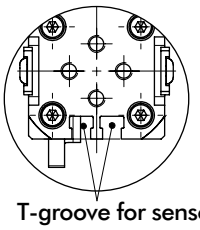






84AT2...5





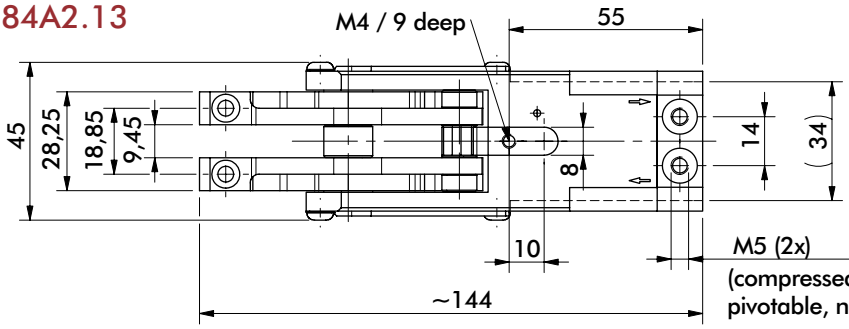
T-groove for sensor

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°		

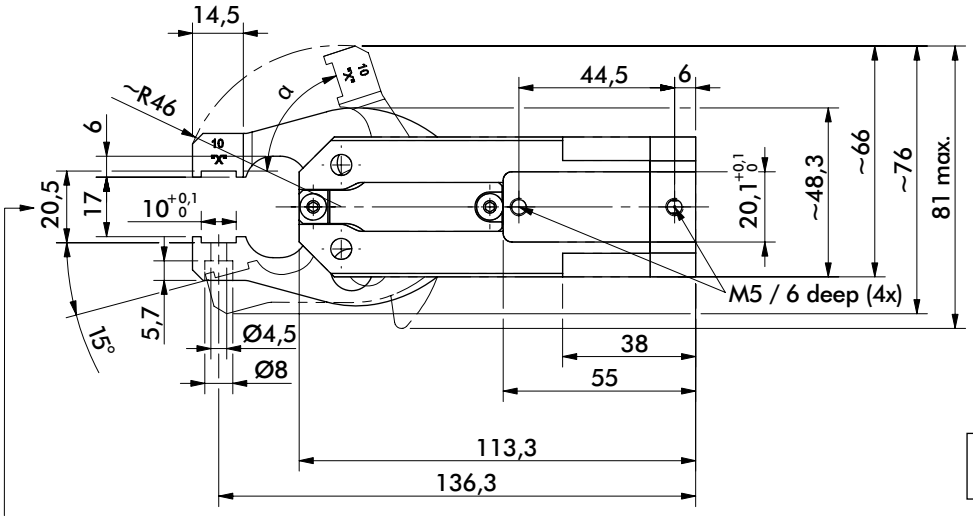
84A2..3 SERIES (DOUBLE 15° MOVEABLE LOWER JAWS)

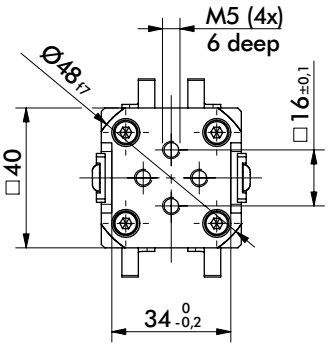
Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications

84A2.13







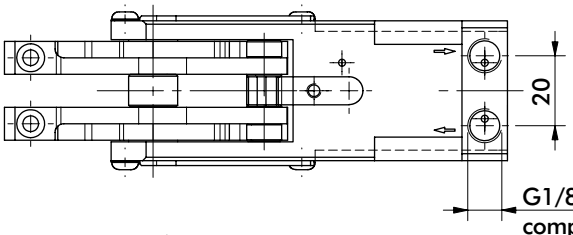


Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

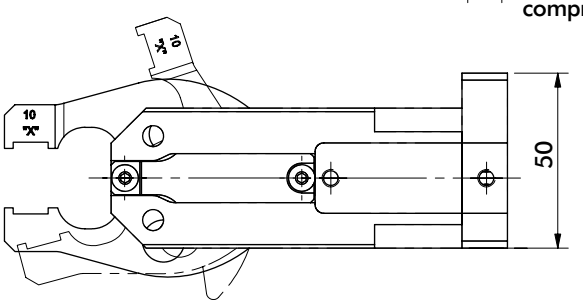
Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

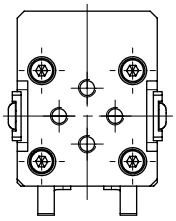
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2.V3

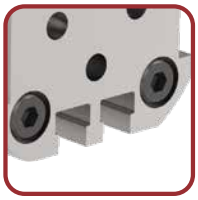


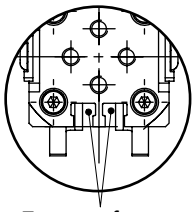






84AT2..3



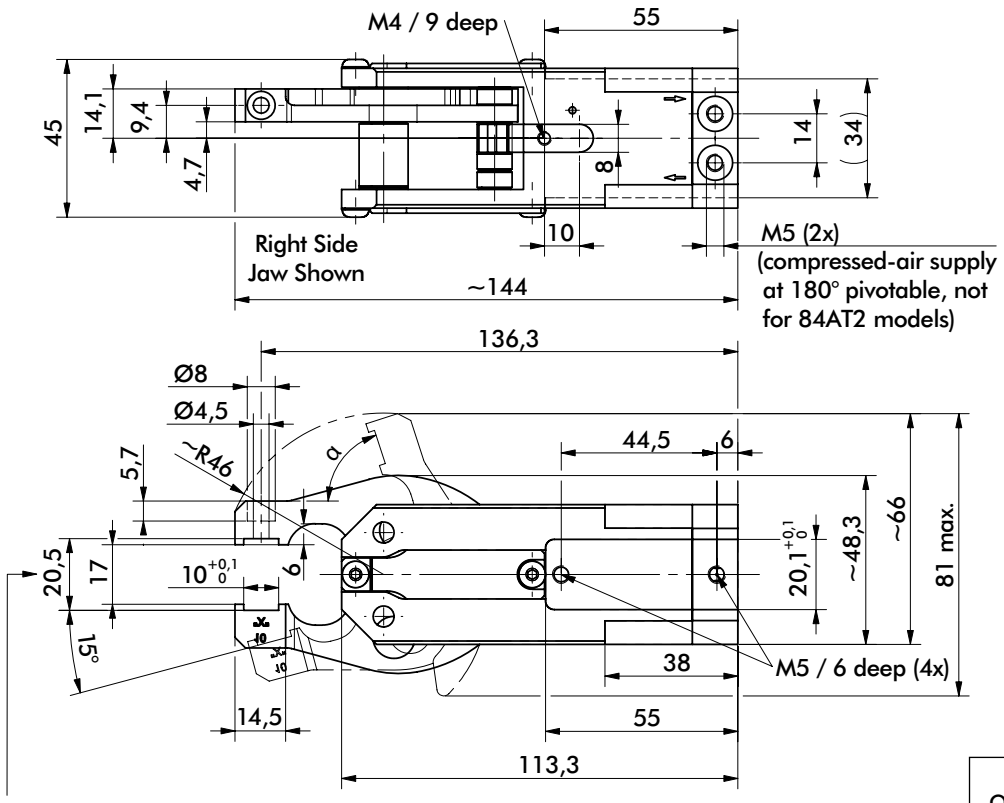


Model 84A2..3/84AT2..3	Opening Angle α Upper/Lower	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
R	72°/15°	475 [107]	0,6 [1.32]
T	45°/15		

Dimensions and technical information are subject to change without notice

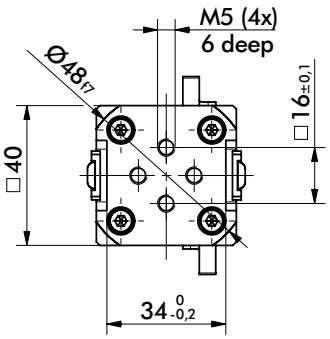
84A2...5 SERIES (SINGLE 15° MOVEABLE LOWER JAW)

Cam Type Sheet Metal Grippers | Dimensions and Technical Specifications



84A2..15



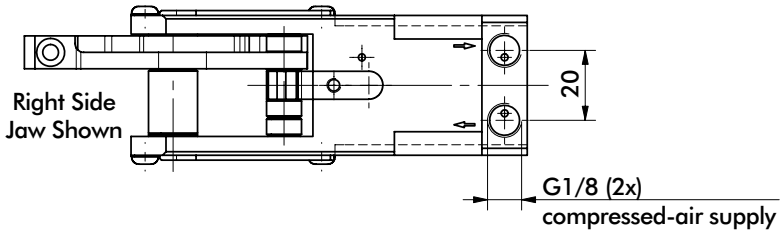


Addition of gripper teeth height and thickness of the clamped plate must be 20,5 mm. It might be necessary to use shim plates or to grind off the gripper teeth.

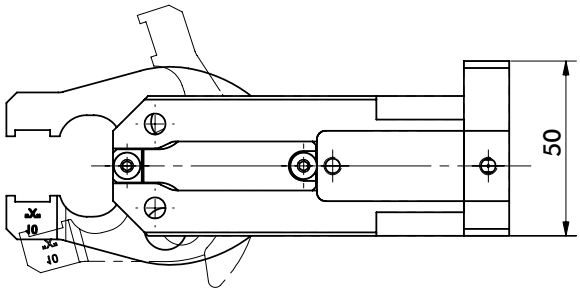
Medium air, min. 3 bar, max. 6 bar.
Operation with oil-free air is permissible.

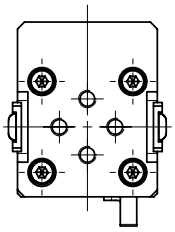
NOTE! Any extension of the moveable or fixed gripper jaws as well as the additional attachment of weights will void warrantee.

84A2..V5

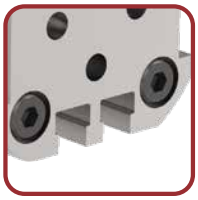


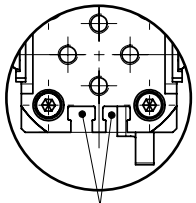






84AT2...5





T-groove for sensor

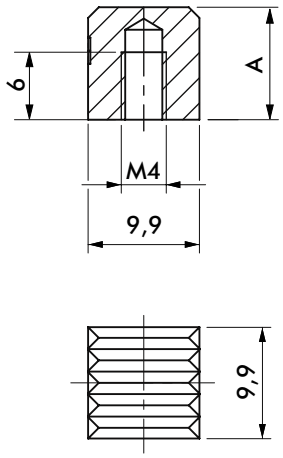
Model 84A2...5/84AT2...5	Opening Angle α Upper/Lower	Clamping force at 6 bar ~N [lbs]	Weight Kg [lbs]
R	72°/15°	475 [107]	0,47 [1.04]
T	45°/15		

84A2 SERIES ACCESSORIES

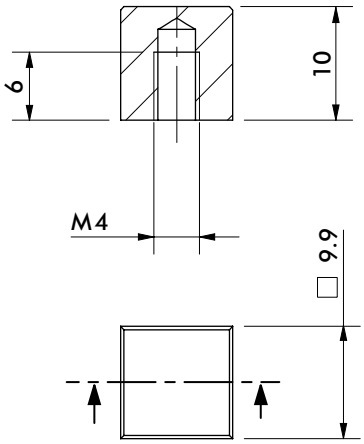
Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Steel Teeth





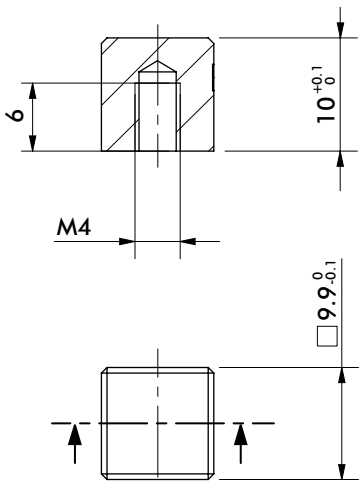




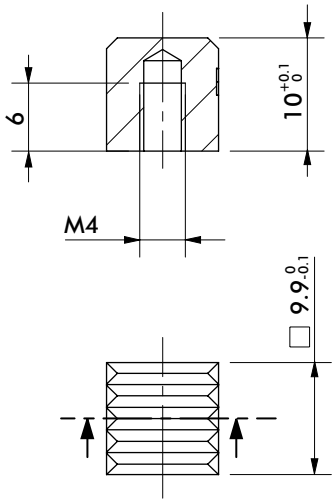
Hardened Steel Teeth	Part #	A
Serrated	**8JZ-049-1**	9
Serrated	**8JZ-027-1**	10

Soft Steel Teeth	Part #
Non-Serrated	**8JZ-028-1**









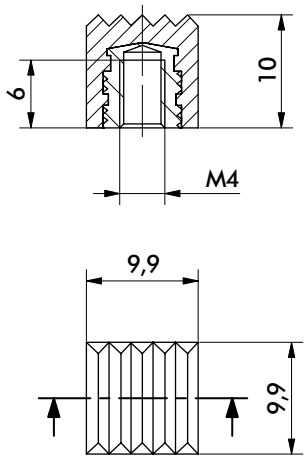
Hi-Temp Soft Steel Teeth	Part #
Non-Serrated	**8JZ-085-1**

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

Dimensions and technical information are subject to change without notice

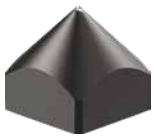
Plastic Teeth

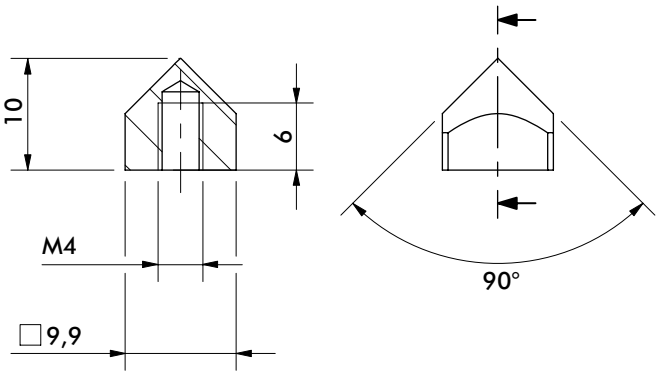




Plastic Teeth	Part #
90 Shore, Serrated	**8JZ-045-2**

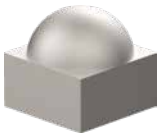
Steel Points

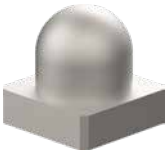


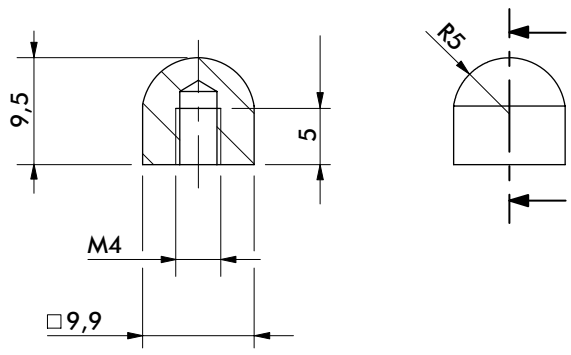


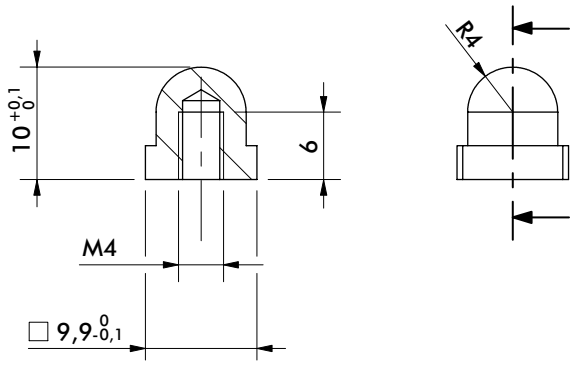
Hardened Steel Point	Part #
Pointed	**8JZ-029-1**

Steel Points









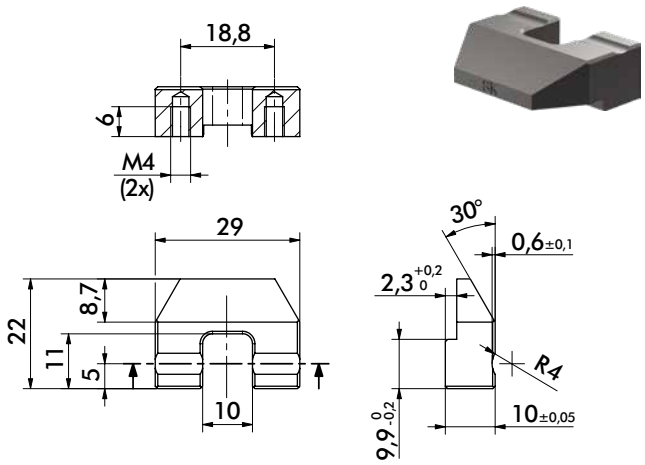
Hi-Temp Soft Steel Point	Part #
Rounded	**8JZ-074-1**

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

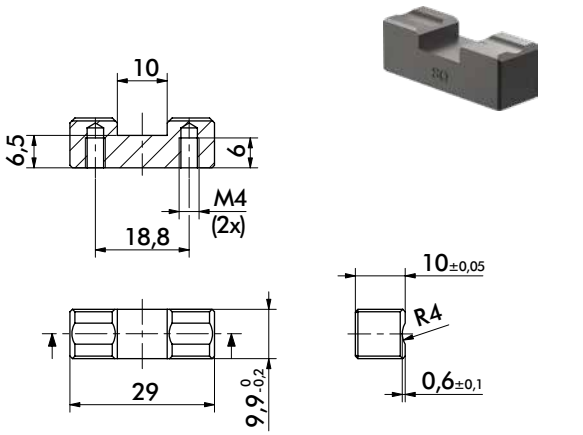
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

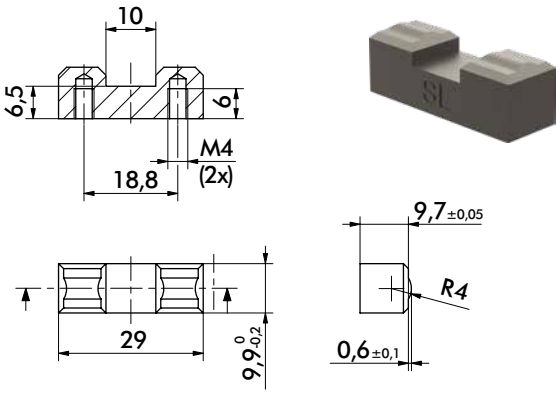
Crown Teeth



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

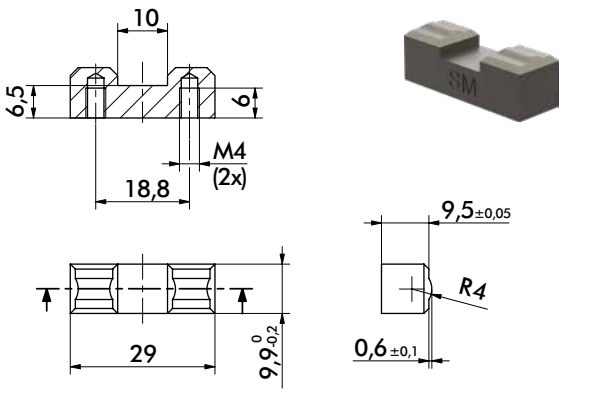


Hardened Steel Teeth	Part #
Crown Lower	**8JZ-051-1**



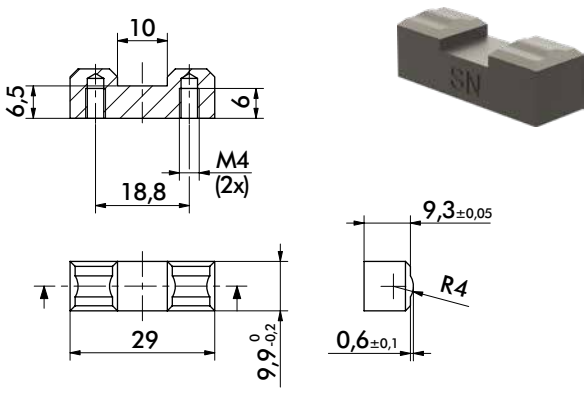
For material thickness 0,5 - 0,8 mm

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



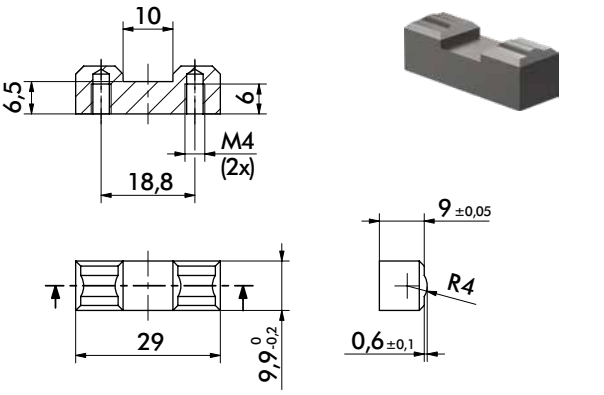
For material thickness 0,9 - 1,2 mm

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



For material thickness 1,3 - 1,6 mm

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



For material thickness 1,7 - 2,1 mm

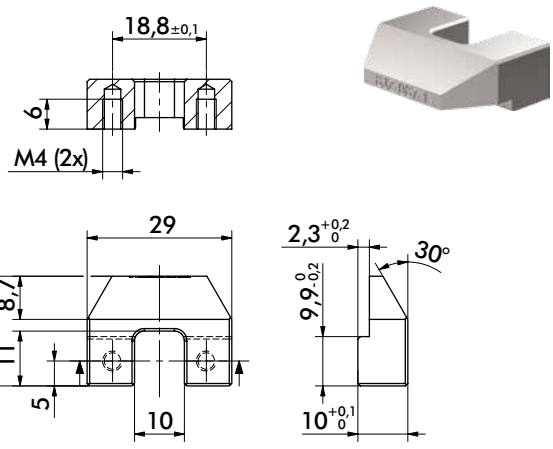
Hardened Steel Teeth	Part #
Crown Upper	**8JZ-040-1**

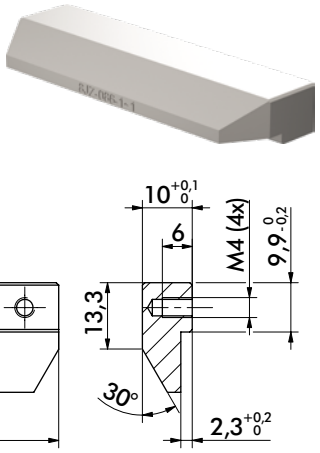
Dimensions and technical information are subject to change without notice

84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

Crown Teeth

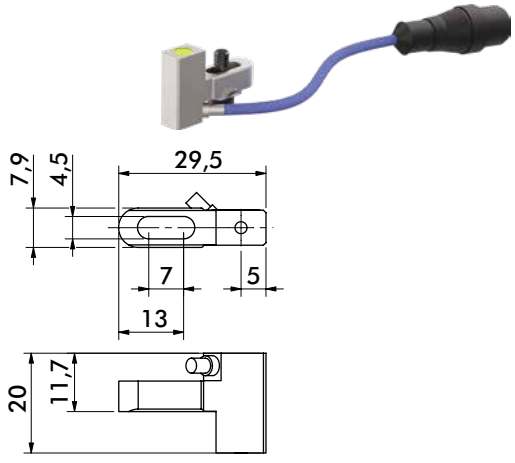


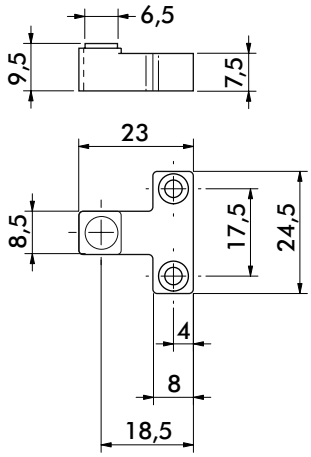


Hi-Temp Soft Steel Teeth	Part #
Crown Lower	**8JZ-087-1**

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

Sensors



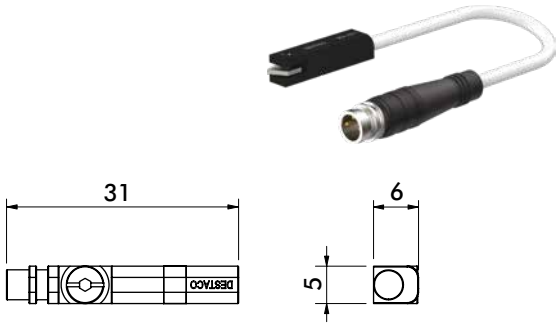




Part Present Sensor	Part #
1.5mm Sensing Distance	**8EA-087-1**

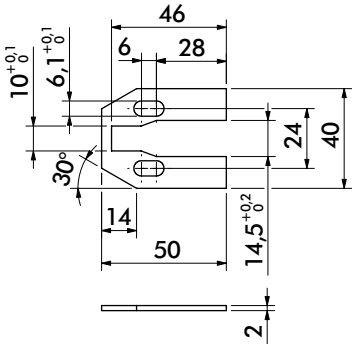
Part Present Sensor	Part #
3mm Sensing Distance, 2m Cable	**8EA-164-1**
3mm Sensing Distance, M12X1	**8EA-165-1**

Sensors



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

Mount



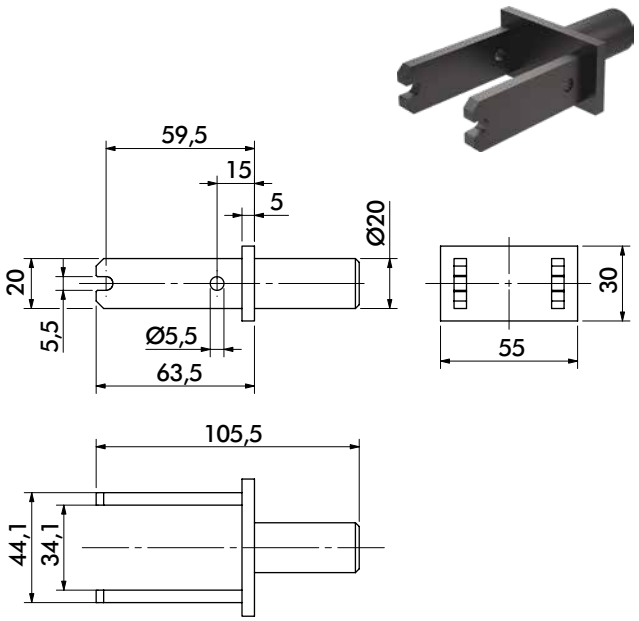


Mount	Part #
Guards	**8MH-054-1**

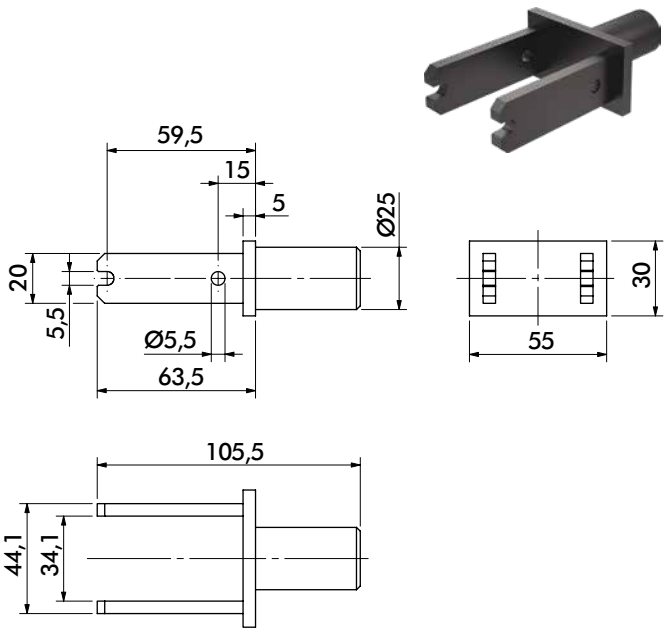
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

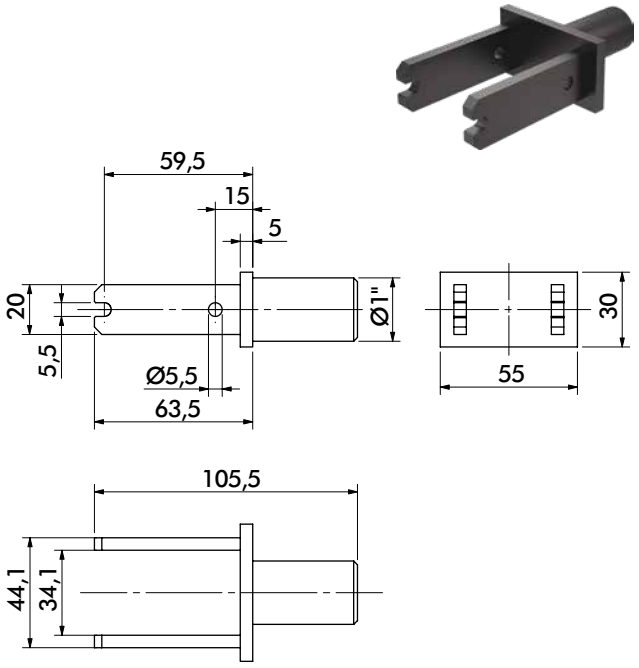
Mounts



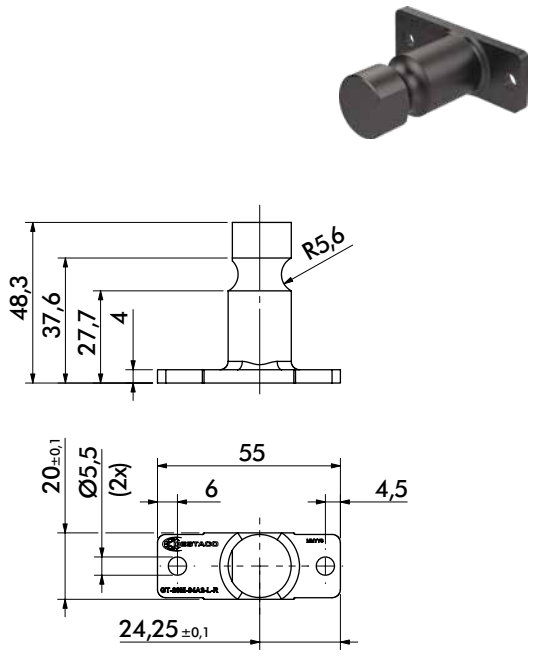
Mount	Part #
Ø20mm Rear Rod	**8MA-165-1**



Mount	Part #
Ø25mm Rear Rod	**8MA-166-1**



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



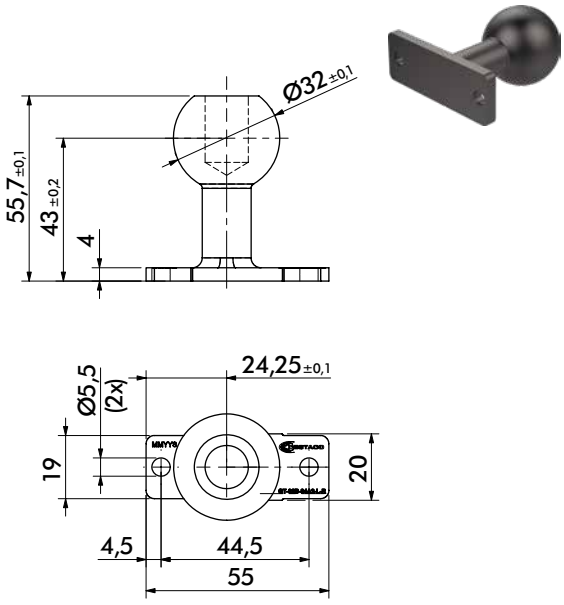
Mount	Part #
Ø20mm Apple Core	**GT-20M-84A2-L-R**

Dimensions and technical information are subject to change without notice

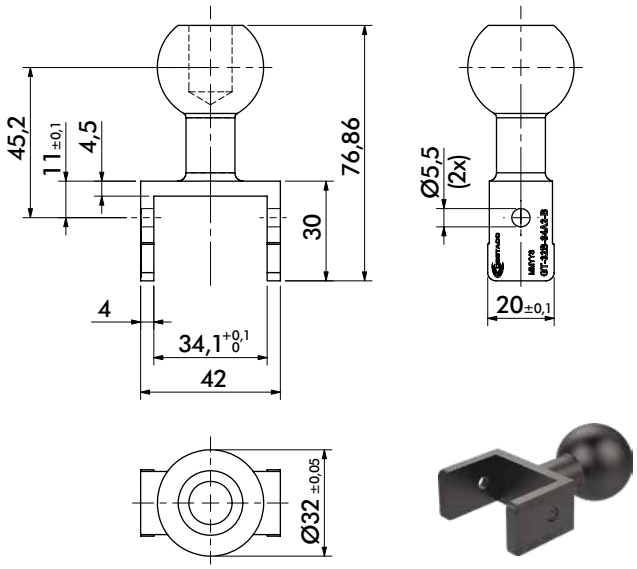
84A2 SERIES ACCESSORIES

Cam Type Sheet Metal Grippers | Dimensions and Ordering Information

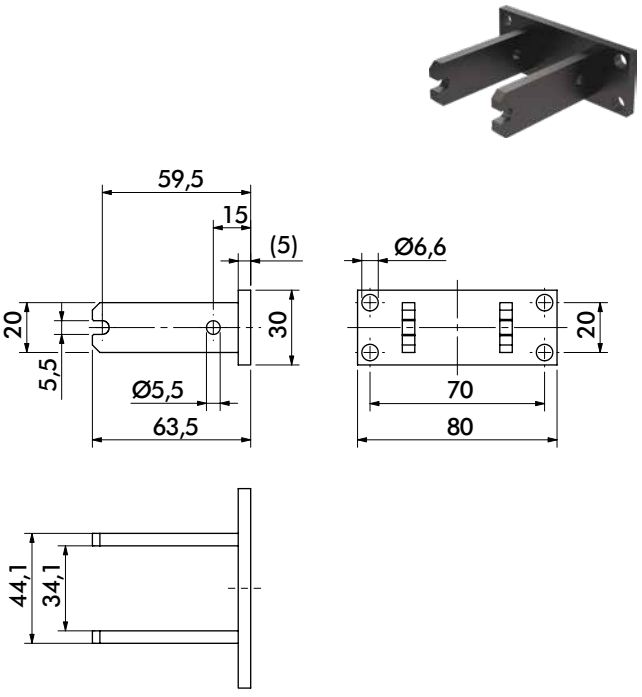
Mounts



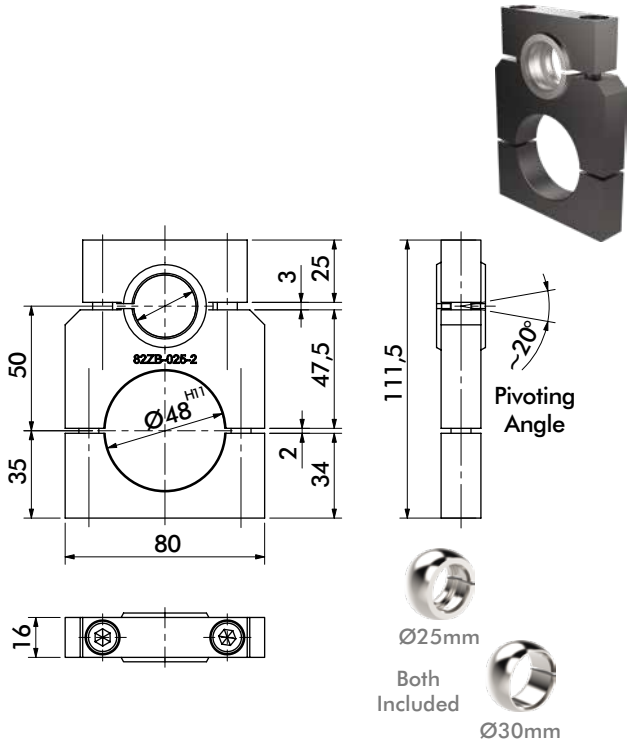
Mount	Part #
Ø32mm Rear Ball	**GT-32B-84A2-L-R**



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



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



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