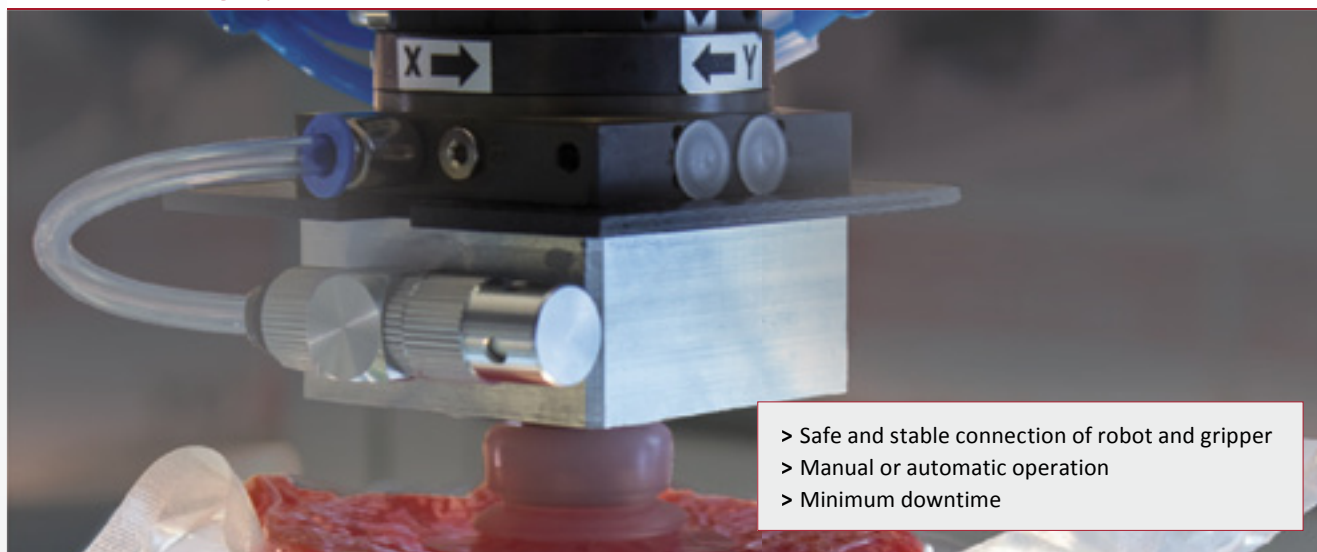


<b>Cambo de embridaje rápido</b>	<b>12</b>
Serie S .....	13
Serie SR .....	18
Serie ASR .....	39



## FIPA Quick-change systems



- > Safe and stable connection of robot and gripper
- > Manual or automatic operation
- > Minimum downtime



### Manual quick-change systems, square

- > Four sizes with load capacity from 5 to 40 kg
- > Easy change-over of base plates and pneumatic couplings
- > Spring-loaded base plates for compensating ejector lift of injection molding machines (GR05.023, GR05.024)

> See page 13



### Manual quick-change systems, round

- > Three sizes with load capacity of 20, 40 and 100 kg
- > Secure snap-on coupling SAFE-LOCK
- > Locking position optically indicated (red/green)
- > Model MV comes with micro valves for automatic air lock off during coupling

> See page 18



### Automatic quick-change systems, round

- > Two sizes with load capacity 5 and 20 kg
- > Secure locking system with guide pins compensates positional deviations during coupling
- > Optional electric plug connectors for transmitting up to eight sensor signals

> See page 39



### Accessories

- > Plates to adapt SLine and MLine extrusions directly to round quick-changers
- > Fits to round quick-changers from FIPA and other brands
- > Wall brackets for safe storing of gripper systems

> See page 36



### Quick-change systems - square, robot side, without fittings

COMPATIBLE WITH GRIPPER MOUNTING  
PLATES IN INDUSTRY STANDARD SIZES



GR04.041



GR05.021 | GR05.031 | GR05.051

#### Product description

- > Manual interface between robot and gripper system
- > Minimised down time due to fast gripper change
- > Comes in four sizes

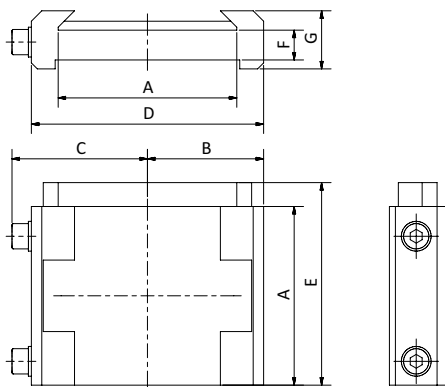
#### Ordering notes

- > GR05.021, GR05.031, GR05.051: Clamping levers included in scope of delivery
- > GR05.041: Clamping levers optionally available
- > Base plates and pneumatic connections not included in scope of delivery

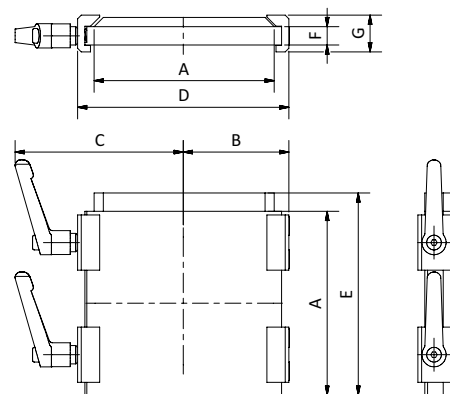
#### Technical data

Item no.	Industry standard code	Number of pneumatic connections	Compatible hose Ø [mm]	Max. lifting force [kg]	Weight [g]	Accessories
GR05.041	GR-0	5	6	5	315	Gripper base plate GR05.042 (p.14) Quick-connection couplers KIT1-GR05.041 Lever GR05.041-Hebel
GR05.021	GR-1	5	6	10	570	Gripper base plate GR05.022 (p.14) Quick-connection couplers KIT1-GR05.021
GR05.031	GR-2	5	3x6, 2x8	20	1,970	Gripper base plate GR05.032 (p.14) Gripper base plate GR-XL05.032 (p.14) Quick-connection couplers KIT1-GR05.031
GR05.051	GR-3	5	3x6, 2x8	40	4,520	Gripper base plate GR05.052 (p.14) Gripper base plate GR-XL05.052 (p.14) Quick-connection couplers KIT1-GR05.031

#### Dimensions



GR05.041



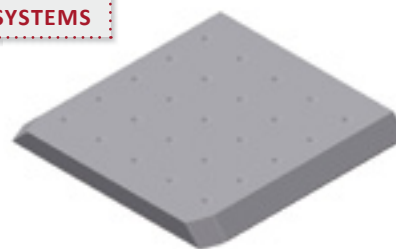
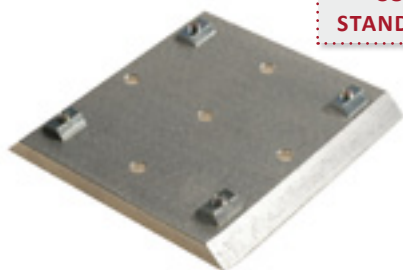
GR05.021 | GR05.031 | GR05.051

Item no.	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
GR05.041	60	39	44	78	68	10	19.5
GR05.021	100	60	89	115	110	10	20
GR05.031	160	100	134	200	170	13	25
GR05.051	250	152	190	295	260	13	32



### Gripper mounting plates

COMPATIBLE WITH INDUSTRY  
STANDARD QUICK CHANGE SYSTEMS



Base plate with pre-located, center-punched holes

### Product description

- > Suitable for square quick-change systems GR05.021 to GR05.051
- > Base plates with pre-located, center-punched holes enable custom drilling patterns (index -X)

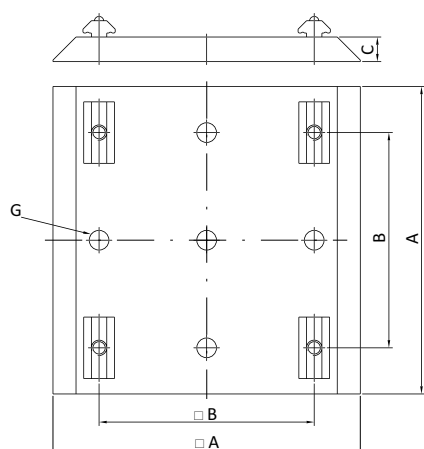
### Ordering notes

- > Slot nuts and mounting screws included in scope of delivery, except for base plates index -X

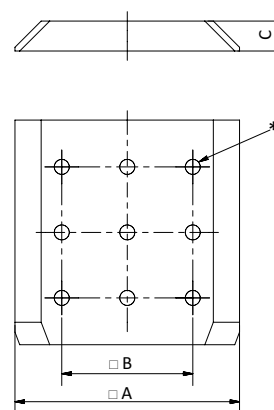
### Technical data

Item no.	Suitable for extrusion system	Industry standard code	Weight [g]	Suitable robot adapter plates
GR05.042	SLine / MLine	GR-0	80	GR05.041 (p.13)
GR05.022	SLine / MLine	GR-1	230	GR05.021 (p.13)
GR05.032	SLine / MLine	GR-2	635	GR05.031 (p.13)
GR05.052	SLine / MLine	GR-3	1,650	GR05.051 (p.13)
GR-XL05.032	XLine	GR-2	752	GR05.031 (p.13)
GR-XL05.052	XLine	GR-3	1,784	GR05.051 (p.13)
GR05.042-X	SLine / MLine	GR-0	80	GR05.041 (p.13)
GR05.022-X	SLine / MLine	GR-1	80	GR05.021 (p.13)
GR05.032-X	SLine / MLine	GR-2	635	GR05.031 (p.13)
GR05.052-X	SLine / MLine	GR-3	1,650	GR05.051 (p.13)

### Dimensions



GR05.042 | GR05.022 | GR05.032 |  
GR05.052 | GR-XL05.032 | GR-XL05.052

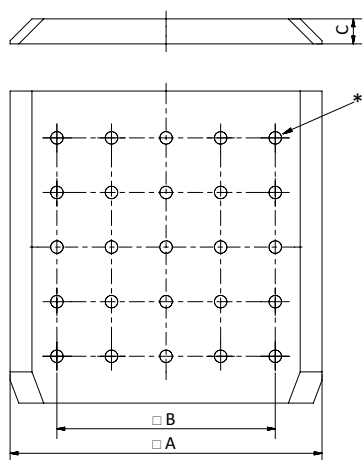


GR05.042-X

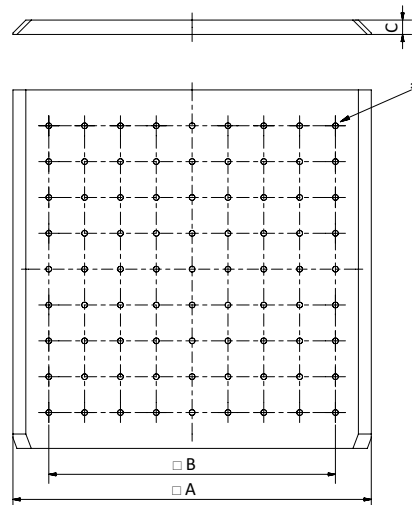
\* = Counterbore



## Dimensions



GR05.022-X | GR05.032-X



GR05.052-X

\* = Counterbore

Item no.	A [mm]	B [mm]	C [mm]	G
GR05.042	60	35	8	M4
GR05.022	100	70	8	M4
GR05.032	160	120	10	M4
GR05.052	250	200	10	M4
GR-XL05.032	160	120	10	M8
GR-XL05.052	250	200	10	M8
GR05.042-X	60	35	8	--
GR05.022-X	100	70	8	--
GR05.032-X	160	120	10	--
GR05.052-X	250	200	10	--



### Gripper mounting plates - spring-loaded



COMPATIBLE WITH GRIPPER MOUNTING PLATES  
IN INDUSTRY STANDARD SIZE GR-1

#### Product description

- > Base plate for compensating ejector lift of injection molding machine
- > High quality slide bearings ensure accurate guidance
- > Simplified assembly vs. combining non-sprung plates with spring-loaded components

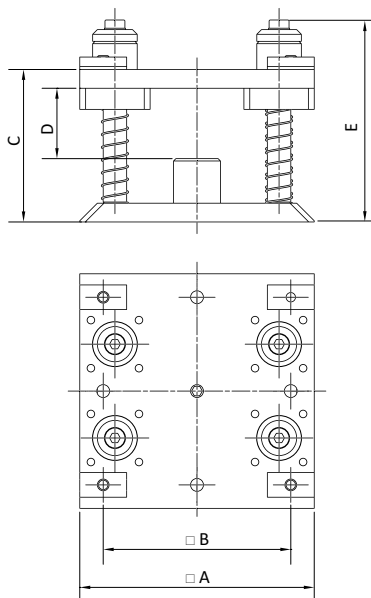
#### Ordering notes

- > A second set of springs with stronger spring stiffnesses to compensate a stronger lift included in scope of delivery
- > Slot nuts and mounting screws included in scope of delivery

#### Technical data

Item no.	Suitable for extrusion system	Industry standard code	Lift [mm]	Spring stiffness (already built in) [N/mm]	Spring stiffness (alternatively) [N/mm]	Weight [g]	Suitable robot adapter plates
GR05.023	SLine	GR-1	30	0.143	0.349	660	GR05.021 (p.13)
GR05.024	SLine / MLine	GR-1	30	0.143	0.349	660	GR05.021 (p.13)

#### Dimensions



Item no.	□ A [mm]	□ B [mm]	C [mm]	D [mm]	E [mm]
GR05.023	100	80	65	30	86
GR05.024	110	85	65	30	86



### Wall bracket for square quick-change plates



Wall bracket with quick-change plate

#### Product description

- > Easy storing of gripping systems
- > Also suitable for third-party square gripper base plates

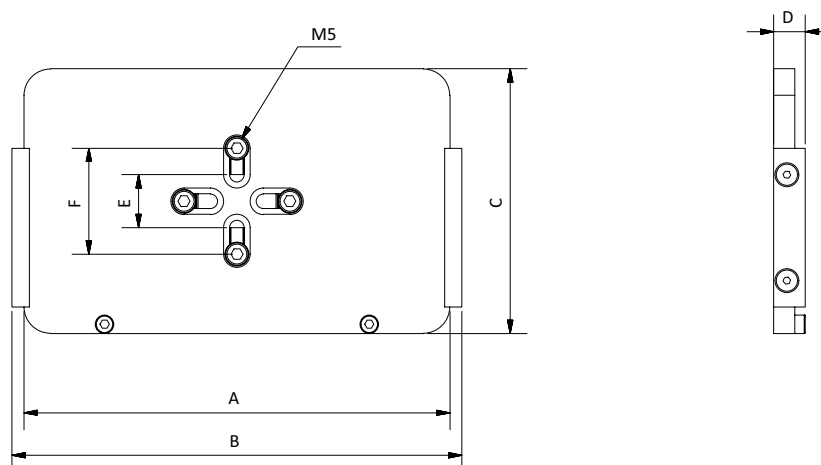
#### Ordering notes

- > Mounting material included in delivery

#### Technical data

Item no.	Weight [g]	Suitable gripper base plate
GR05.042-W	145	GR05.042 (p.14)
GR05.022-W	212	GR05.022 (p.14)
GR05.032-W	385	GR05.032 (p.14)
GR05.052-W	1,218	GR05.052 (p.14)

#### Dimensions



Item no.	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
GR05.042-W	60	70	80	12	20	40
GR05.022-W	100	110	80	12	20	40
GR05.032-W	160	170	100	12	20	40
GR05.052-W	260	251	200	12	60	120



## Quick-change systems | Series SR

Round quick-changers Ø 50 mm, 6 air inlets - robot side

Round quick-changers Ø 50 mm, 6 air inlets - robot side



### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Body made of high-strength, anodised aluminium alloy

### Ordering notes

- > Stainless steel design on request

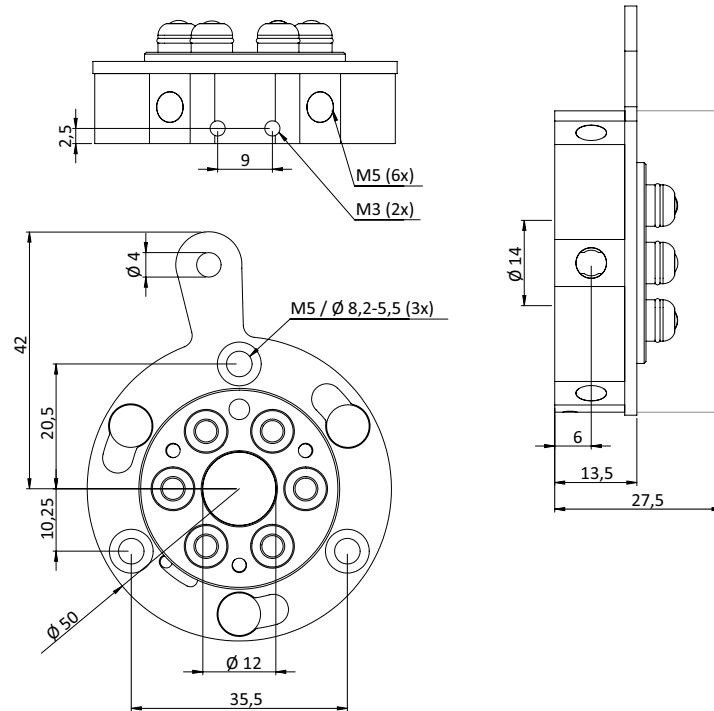
### Technical data

Item no.	SR50-A
Lifting force [N]	200
Number of pneumatic connections	6xM5
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	50
Max. bending moment [Nm]	30
Repeat accuracy [mm]	+/- 0.025
Weight [g]	65
Suitable plug connectors	20.537 (p.38)





## Dimensions





## Quick-change systems | Series SR

Round quick-changers Ø 50 mm, 6 air inlets - robot side - SAFE-LOCK

Round quick-changers Ø 50 mm, 6 air inlets - robot side - SAFE-LOCK

**NEW**



**SECURE SAFE-LOCK ENSURES MAXIMUM FUNCTIONAL RELIABILITY**

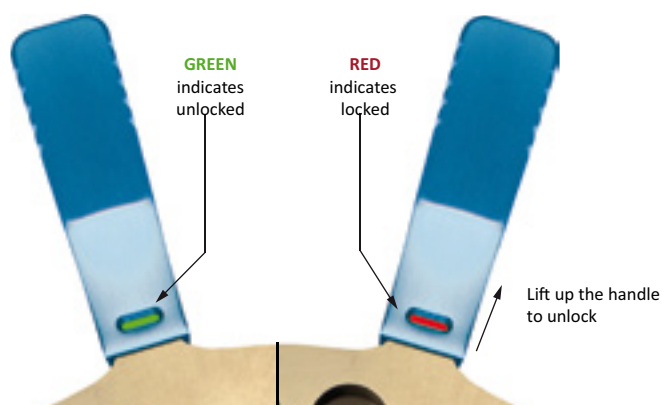
### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Secure locking with snap-on SAFE-LOCK
- > Optical locking indication (red / green)
- > Body made of high-strength, anodised aluminium alloy

### Technical data

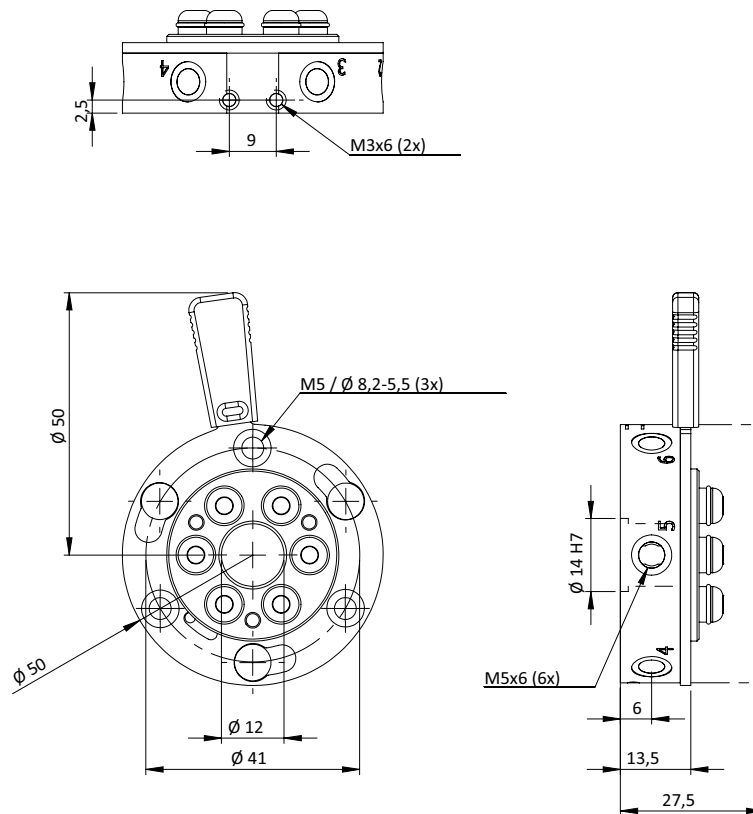
Item no.	SR50-A-SL
Lifting force [N]	200
Number of pneumatic connections	6xM5
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	50
Max. bending moment [Nm]	30
Repeat accuracy [mm]	+/- 0.025
Weight [g]	65
Suitable plug connectors	20.537 (p.38)

### Display of optical locking indication





## Dimensions





## Quick-change systems | Series SR

Round quick-changers Ø 50 mm, 6 air inlets - gripper side

Round quick-changers Ø 50 mm, 6 air inlets - gripper side



### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Body made of high-strength, anodised aluminium alloy

### Ordering notes

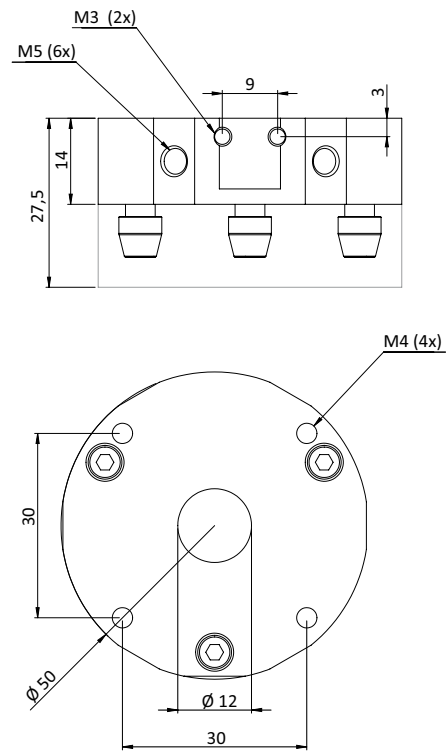
- > Stainless steel design on request

### Technical data

Item no.	SR50-B
Lifting force [N]	200
Number of pneumatic connections	6xM5
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	50
Max. bending moment [Nm]	30
Repeat accuracy [mm]	+/- 0.025
Weight [g]	69
Suitable plug connectors	20.538 (p.38)



## Dimensions





## Quick-change systems | Series SR

Round quick-changers Ø 90 mm, 8 air inlets - robot side

### Round quick-changers Ø 90 mm, 8 air inlets - robot side



SR90-A



SR90-A-MV

#### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Body made of high-strength, anodised aluminium alloy

#### Notes

- > Model MV comes with micro valves for automatic media lock off during coupling
- > Suitable for FIPA and third-party quick-change systems - gripper side

#### Ordering notes

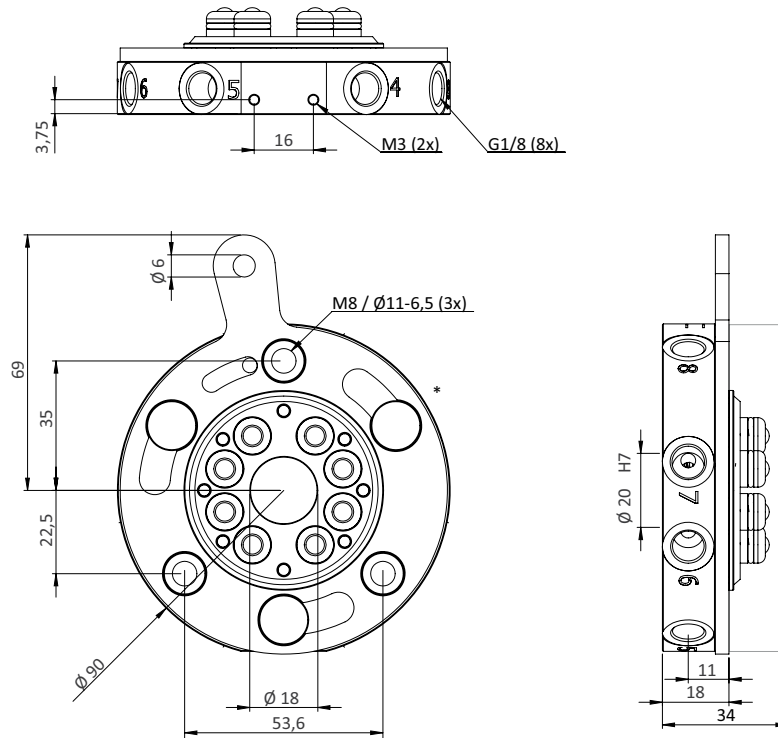
- > Stainless steel design on request

#### Technical data

Item no.	SR90-A	SR90-A-MV
Lifting force [N]	400	400
Number of pneumatic connections	8xG1/8	8xG1/8
Max. working pressure [bar]	6	6
Max. working vacuum [bar]	-1	-1
Max. torque [Nm]	100	100
Max. bending moment [Nm]	60	60
Repeat accuracy [mm]	+/- 0.025	+/- 0.025
Weight [g]	320	320
Suitable plug connectors	--	20.536 (p.38)



## Dimensions



\* = Conical fixing screw for zero tolerance between the parts A and B after connection of robot and gripper side (not pictured)



## Quick-change systems | Series SR

Round quick-changers Ø 90 mm, 8 air inlets - robot side - SAFE-LOCK

Round quick-changers Ø 90 mm, 8 air inlets - robot side - SAFE-LOCK

**NEW**



**SECURE SAFE-LOCK ENSURES MAXIMUM  
FUNCTIONAL RELIABILITY**

### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Secure locking with snap-on SAFE-LOCK
- > Optical locking indication (red / green)
- > Body made of high-strength, anodised aluminium alloy

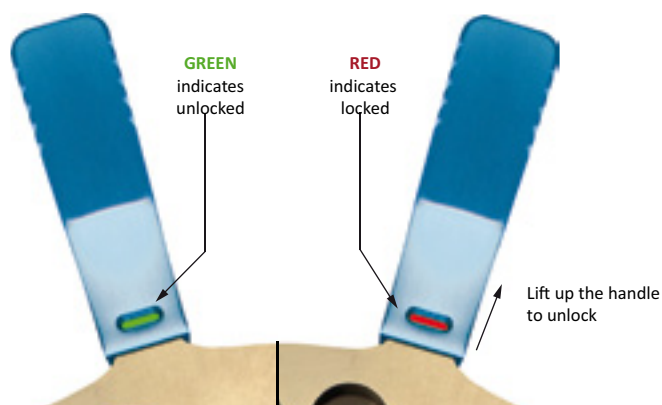
### Notes

- > Suitable for FIPA and third-party quick-change systems

### Technical data

Item no.	SR90-A-SL
Lifting force [N]	400
Number of pneumatic connections	8xG1/8
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	100
Max. bending moment [Nm]	60
Repeat accuracy [mm]	+/- 0.025
Weight [g]	320
Suitable plug connectors	20.535 (p.38)

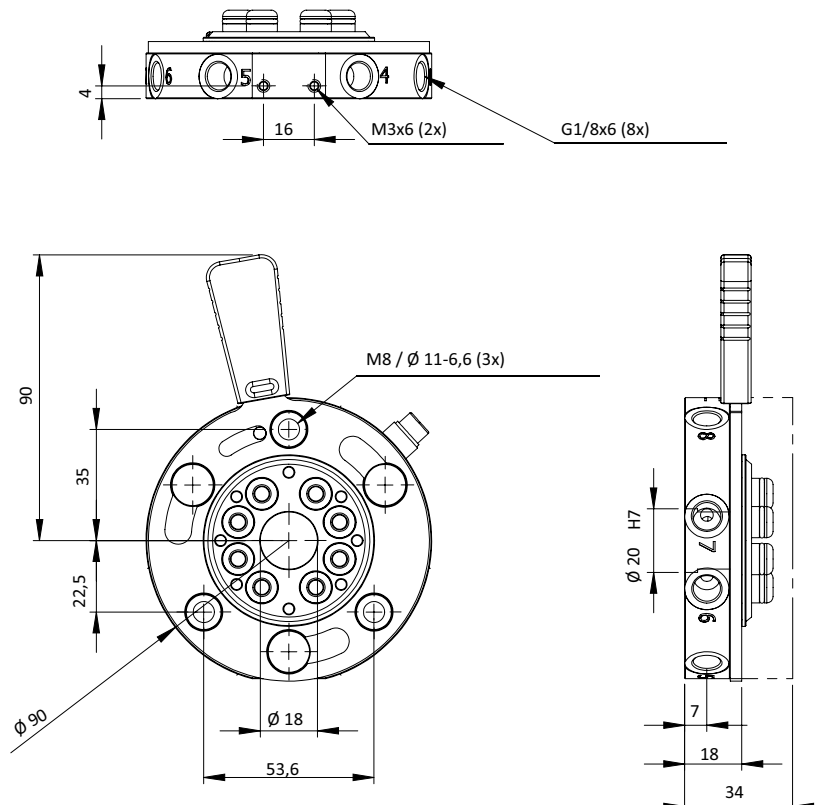
### Display of optical locking indication







## Dimensions





## Quick-change systems | Series SR

Round quick-changers Ø 90 mm, 8 air inlets - gripper side

Round quick-changers Ø 90 mm, 8 air inlets - gripper side



### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Body made of high-strength, anodised aluminium alloy

### Notes

- > Suitable for FIPA and third-party quick-change systems

### Ordering notes

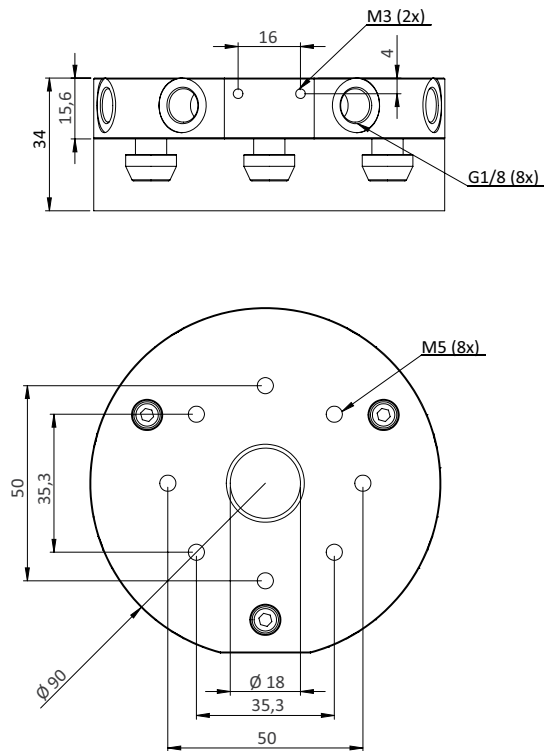
- > Stainless steel design on request

### Technical data

Item no.	SR90-B
Lifting force [N]	400
Number of pneumatic connections	8xG1/8
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	100
Max. bending moment [Nm]	60
Repeat accuracy [mm]	+/- 0.025
Weight [g]	220
Suitable plug connectors	20.536 (p.38)



## Dimensions





## Quick-change systems | Series SR

Round quick-changers Ø 150 mm, 10 air inlets - robot side

Round quick-changers Ø 150 mm, 10 air inlets - robot side



### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Body made of high-strength, anodised aluminium alloy

### Notes

- > Suitable for FIPA and third-party quick-change systems

### Ordering notes

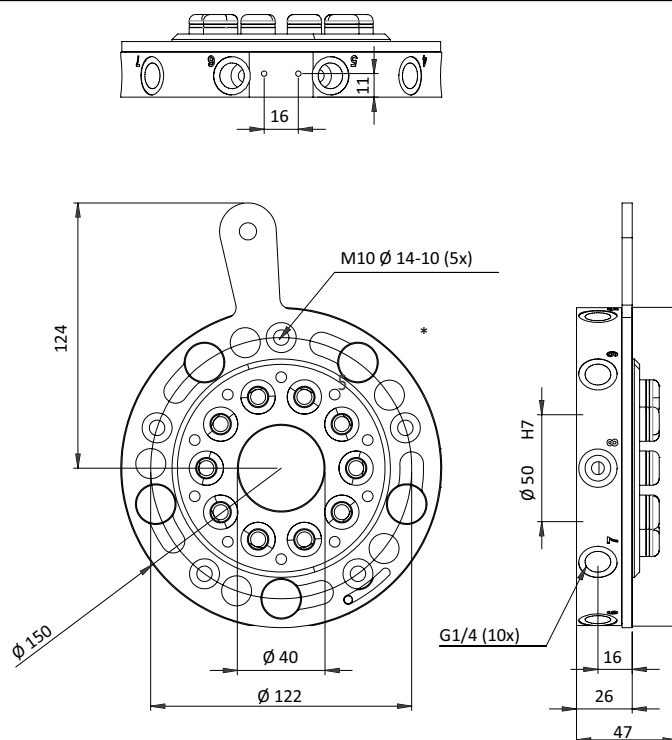
- > Stainless steel design on request

### Technical data

Item no.	SR150-A
Lifting force [N]	1,000
Number of pneumatic connections	10xG1/8
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	250
Max. bending moment [Nm]	100
Repeat accuracy [mm]	+/- 0.025
Weight [g]	1,190
Suitable plug connectors	20.535 (p.38)



## Dimensions



\* = Conical fixing screw for zero tolerance between the parts A and B after connection of robot and gripper side (not pictured)



## Quick-change systems | Series SR

Round quick-changers Ø 150 mm, 10 air inlets - robot side - SAFE-LOCK

Round quick-changers Ø 150 mm, 10 air inlets - robot side - SAFE-LOCK

**NEW**



**SECURE SAFE-LOCK ENSURES MAXIMUM FUNCTIONAL RELIABILITY**

### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Secure locking with snap-on SAFE-LOCK
- > Optical locking indication (green / red)
- > Body made of high-strength, anodised aluminium alloy

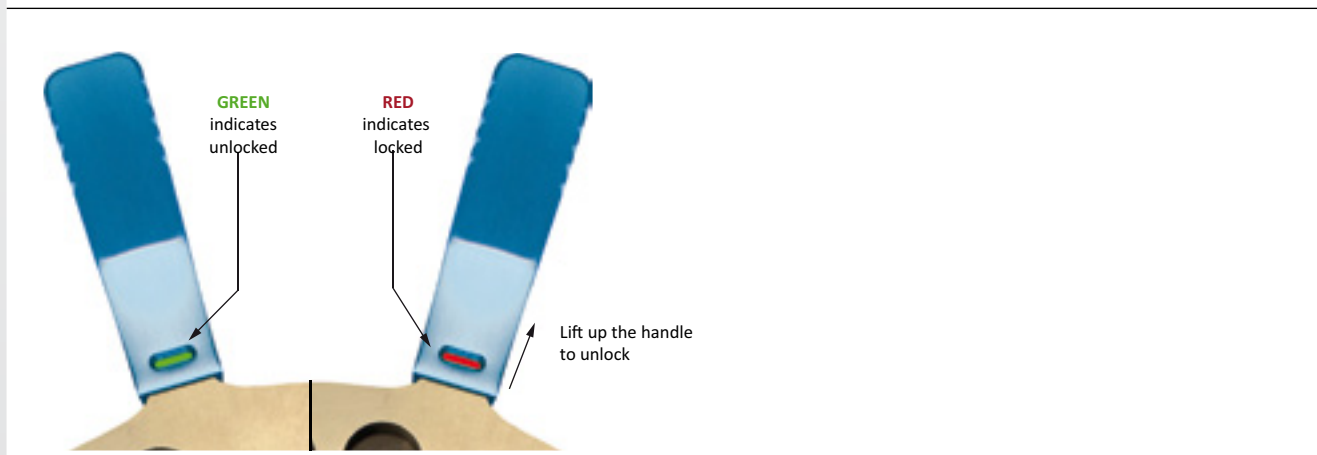
### Notes

- > Suitable for FIPA and third-party quick-change systems

### Technical data

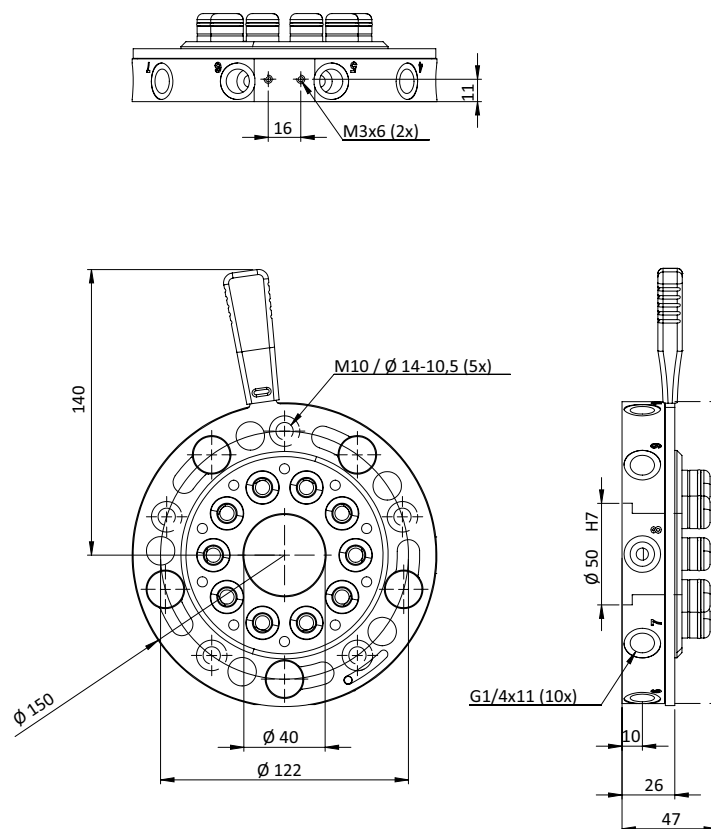
Item no.	SR150-A-SL
Lifting force [N]	1,000
Number of pneumatic connections	10xG1/8
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	250
Max. bending moment [Nm]	100
Repeat accuracy [mm]	+/- 0.025
Weight [g]	1,190
Suitable plug connectors	20.535 (p.38)

### Display of optical locking indication





## Dimensions





## Quick-change systems | Series SR

Round quick-changers Ø 150 mm, 10 air inlets - gripper side

Round quick-changers Ø 150 mm, 10 air inlets - gripper side



### Product description

- > Manual interface between robot and gripper system
- > Air connections always correctly aligned
- > Suitable for high acceleration and vibration
- > Body made of high-strength, anodised aluminium alloy

### Notes

- > Suitable for FIPA quick-change systems SR150-A, SR150-A-SL as well as third-party quick-change systems, robot side

### Ordering notes

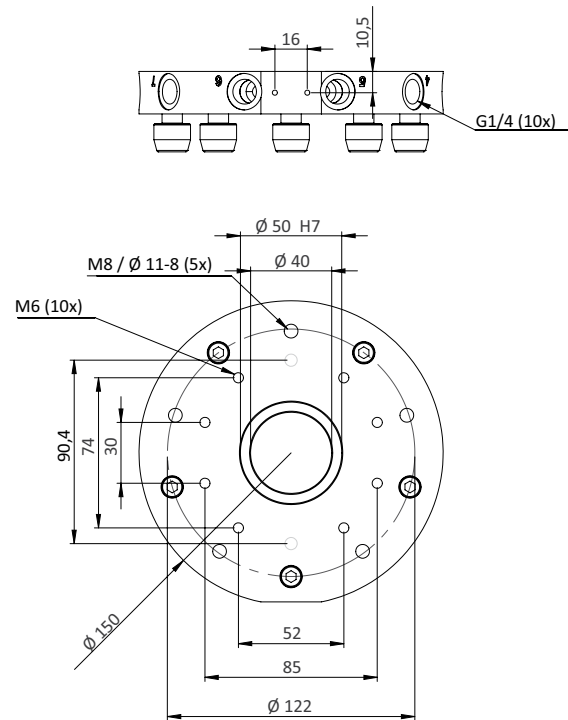
- > Stainless steel design on request

### Technical data

Item no.	SR150-B
Lifting force [N]	1,000
Number of pneumatic connections	10xG1/8
Max. working pressure [bar]	6
Max. working vacuum [bar]	-1
Max. torque [Nm]	250
Max. bending moment [Nm]	100
Repeat accuracy [mm]	+/- 0.025
Weight [g]	850
Suitable plug connectors	20.536 (p.38)



## Dimensions





# Quick-change systems | Series SR

Robot-adaptor plates for round quick-changers

## Robot-adaptor plates for round quick-changers

**FITS TO FIPA AND THIRD-PARTY SYSTEMS**



SR50-C | SR90-C | SR150-C



GR05.100 | GR05.101 | GR05.102

### Product description

- > Adaptor plates for linking SLine and MLine extrusions to round quick-changers
- > Fits to FIPA and third-party systems
- > Special models for Sepro quick-changers

### Ordering notes

- > Slot nuts and mounting screws included in scope of delivery

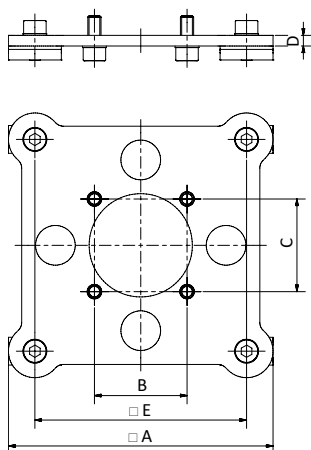
### Technical data

Item no.	Weight [g]	Suitable quick-change systems
SR50-C	107	SR50-A (p.18), SR50-B (p.22)
SR90-C	117	SR90-A (p.24), SR90-B (p.28)
SR150-C	227	SR150-A (p.30), SR150-B (p.34)
GR05.100	236	SEPRO AM02S0716605
GR05.101	272	SEPRO BP 90
GR05.102	400	SEPRO BP 120

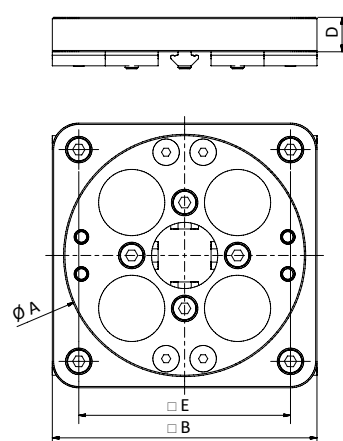
### Dimensions

$\varnothing A$ [mm]	$\square A$ [mm]	$\square B$ [mm]	C [mm]	D [mm]	E [mm]
--	90	30	30	4	70
--	100	35	35	4	80
--	150	74	52	4	130
80	--	90	--	13	70
90	--	100	--	13	80
120	--	130	--	14	110

### Dimensions



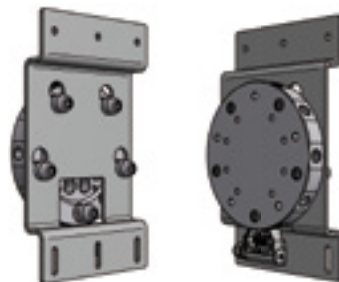
SR50-C | SR90-C | SR150-C



GR05.100 | GR05.101 | GR05.102



## Wall bracket for gripper systems with round base plate



Application example with quick-changer

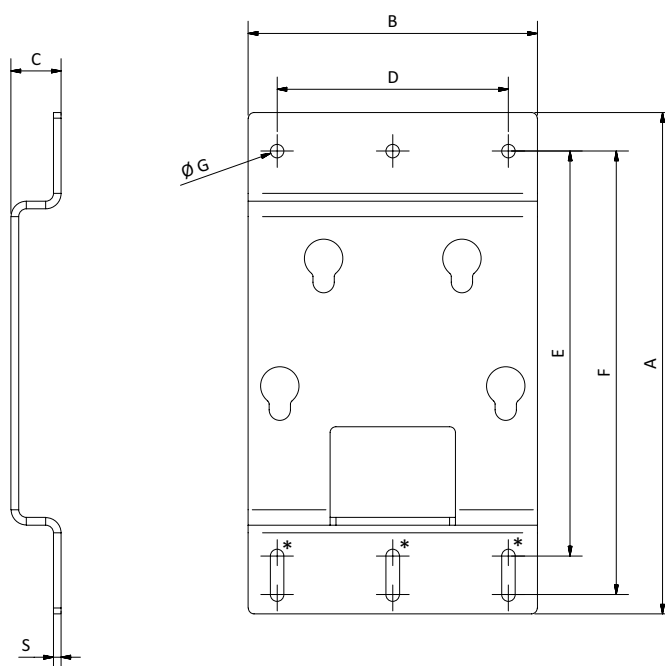
### Product description

- > Easy, gentle storage of gripper systems based on round FIPA quick-change systems
- > Also suitable for third-party round gripper systems

### Technical data

Item no.	Weight [g]	Suitable quick-change systems
SR90-W	600	SR90-B (p.28)
SR150-W	1,200	SR150-B (p.34)

### Dimensions



\* = Width of slotted hole =  $\varnothing G$

Item no.	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	$\varnothing G$ [mm]	S [mm]
SR90-W	180	100	22	80	142	158	7	3
SR150-W	260	150	26	120	210	230	7	4



## Quick-change systems | Series SR

Electric plug connectors for SR90 and SR150

### Electric plug connectors for SR90 and SR150



Robot side 20.535 | 20.537



Gripper side 20.536 | 20.538

#### Product description

- > Electronic interface between robot and gripper
- > SUB-D plug or jack with screw contacts
- > Max. cable cross section 0.14 mm<sup>2</sup> based on 16 - 18-wire cable

#### Technical data

Item no.	Suitable quick-change systems	Number of Pins	Operating voltage [VDC]	Power consumption [W]	Weight [g]	Suitable plug
20.535	SR90-A, SR150-A, SR90-A-SL, SR150-A-SL	15	24	0.5	42	20.505
20.536	SR90-B, SR150-B	15	24	0.5	41	20.505
20.537	SR50-A, SR50-A-SL	15	24	0.5	42	20.505
20.538	SR50-B	15	24	0.5	41	20.505

#### Example of application

- > SR90 with electric connectors





### Automatic quick-change systems

**MAXIMUM POSITION REPEATABILITY DUE TO  
AUTOMATIC CORRECTION DURING COUPLING**



Robot side



Gripper side

### Product description

- > Fast exchange of grippers on robots via compressed air minimises setup time
- > Secure locking system with guide pins compensates positional deviations during coupling
- > Robust construction to take high torques

### Ordering notes

- > Adaptor for connection to all commercially available robots on request
- > Electronic connector for signal transmitting see accessories

### Technical data

Item no.	ASR48-A	ASR48-B	ASR60-A	ASR60-B
Max. lifting force [kg]	5	5	20	20
Number of pneumatic connections	8xM5	6xM5	4xM5	4xM5
Max. torque [Nm]	40	40	150	150
Repeat accuracy [mm]	< 0.01	< 0.01	< 0.01	< 0.01
Operating pressure [bar]	6 - 10	6 - 10	6 - 10	6 - 10
Operating temperature [°C]	10 - 60	10 - 60	10 - 60	10 - 60
Weight [g]	200	50	400	110
Suitable plug connectors	ASR48-A-ME (p.41)	ASR48-B-ME (p.41)	ASR60-A-ME (p.41)	ASR60-B-ME (p.41)

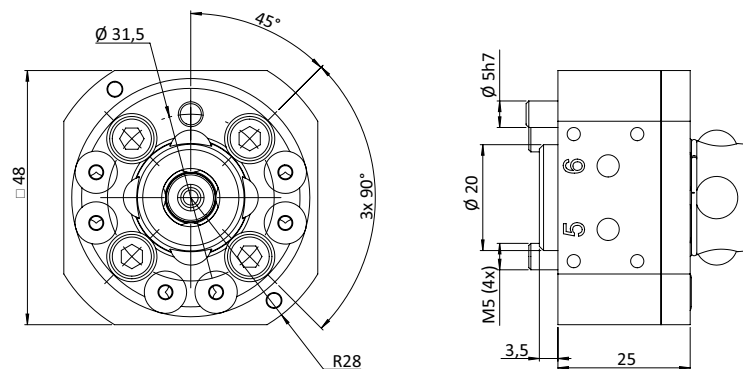
### Application example



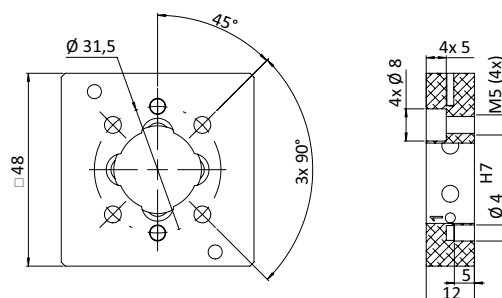
Continued on the next page →



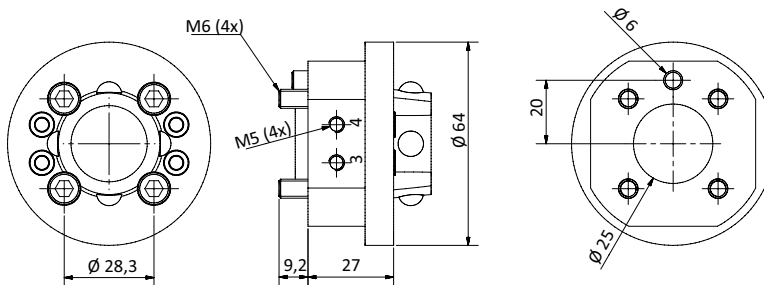
### Dimensions



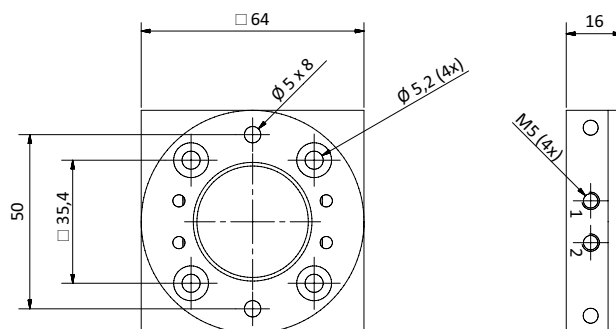
ASR48-A



ASR48-B



ASR60-A



ASR60-B



**NEW**



Display with quick-change system - robot side



Display with quick-change system - gripper side

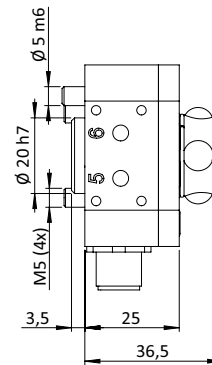
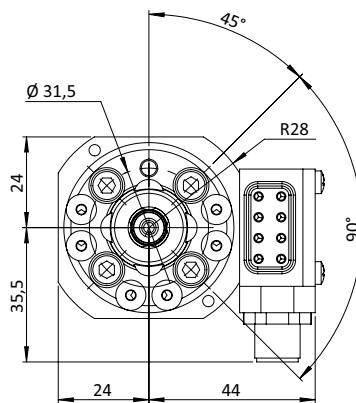
## Product description

- > Electronic modules for transmitting up to eight signals
- > Automatic electric connection via spring loaded electric pins after coupling is completed
- > This reduces wear of the pins thus increasing life time

## Technical data

Item no.	Max. operating voltage [V]	Number of electrical channels	Current consumption [A]	Connection	Operating temperature [°C]	Weight [g]
ASR48-A-ME	60	8	2	M12	10 - 60	50
ASR48-B-ME	60	8	2	M12	10 - 60	20
ASR60-A-ME	60	8	2	M12	10 - 60	50
ASR60-B-ME	60	8	2	M12	10 - 60	20

## Dimensions



ASR48-A-ME

\* = ASR60 with electronic module ASR60-A-ME, ASR60 with electric module ASR60-B-ME

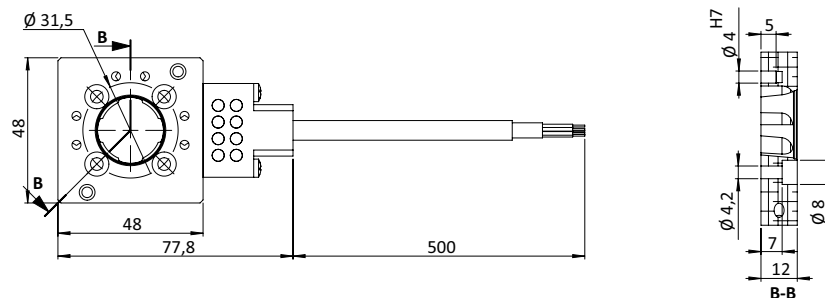
Continued on the next page



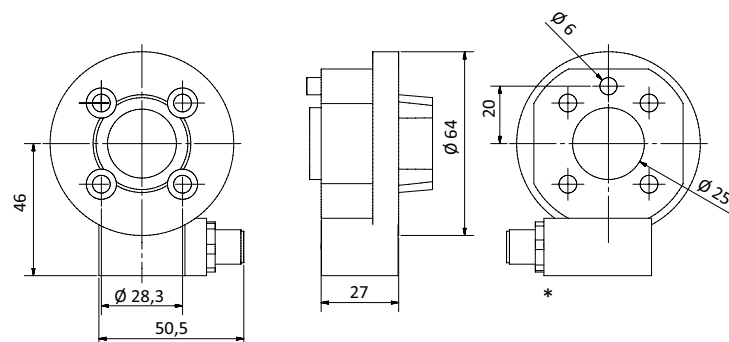
# Quick-change systems | Series ASR

Electronic connectors for automatic quick-changers

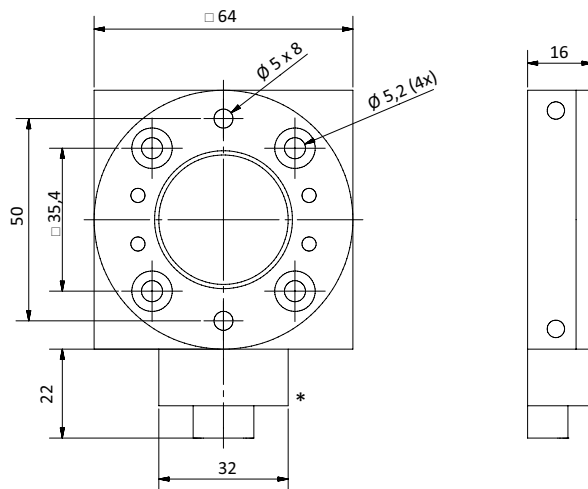
## Dimensions



ASR48-B-ME



ASR60-A-ME



ASR60-B-ME

\* = ASR60 with electronic module ASR60-A-ME, ASR60 with electric module ASR60-B-ME