



The hinge company

Catalogue

2023 I 2024

OBE GmbH & Co. KG with its headquarters in Germany is one of the very few international large-scale manufacturers of eyewear components. Our mission is to offer an optimum articulation and comfort for all kind of spectacles.

The company was founded in 1904 and today we have 2 production facilities in Germany and China. In total the OBE group has 500 employees including our subsidiaries and representations in the key optical production markets world-wide. Since 1996 we have been certified according to DIN EN ISO 9001:2015. We also implemented in the same year an environmental management system obtaining the certification according to DIN EN ISO 14001 and EMAS. By 2040 OBE aims to be carbon neutral.

We produce roughly 500.000.000 components per year and each day we process approx. 2.000.000 parts at our factories. Our core technologies are machining of profiles, CNC machining, over moulding of screws and hinges, surface treatment by galvanic and tumbling, automated laser welding of hinges and assembling of mechanisms.

Our fully automated warehouse system in combination with a monthly production plan and an established supply chain management guarantee our reliable delivery capabilities. Apart from Germany we also have warehouses in China, Hong Kong, Italy and Japan.

<p>TRADITION SINCE</p> <p>BEST FLEXIBILITY</p>	<p>RELIABILITY</p>	<p>INNOVATION</p> <p>SMOOTH MOVEMENT</p>
<p>2 FACILITIES IN GERMANY & CHINA</p>	<p>INTERNATIONAL NETWORK</p>	<p>SUSTAINABILITY</p>

As a leading company in the eyewear component industry we strive at all times to avoid or minimise harm to the environment arising from the production and use of our products. Already in the 1990s we developed an environmental management system and were certified according to ISO 14001 and also EMAS – ECO Management Audit Scheme - implemented by the European Community.

In the last 30 years OBE achieved thanks to the integrated environmental organisation substantial results reducing the consumption of important resources like water, energy and waste. Another key factor in our environmental strategy is the recycling of raw materials which are returned after processing to our suppliers. For this engagement OBE received many awards – among them back in 2008 a special SILMO d’Or for our sustainable performance.

Deeply committed to the protection of the environment we are continuously improving our processes to realize a circular economy and to reduce our CO2 emissions. Our goal is to be carbon neutral by 2040.



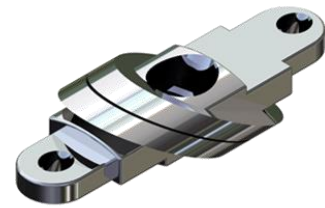
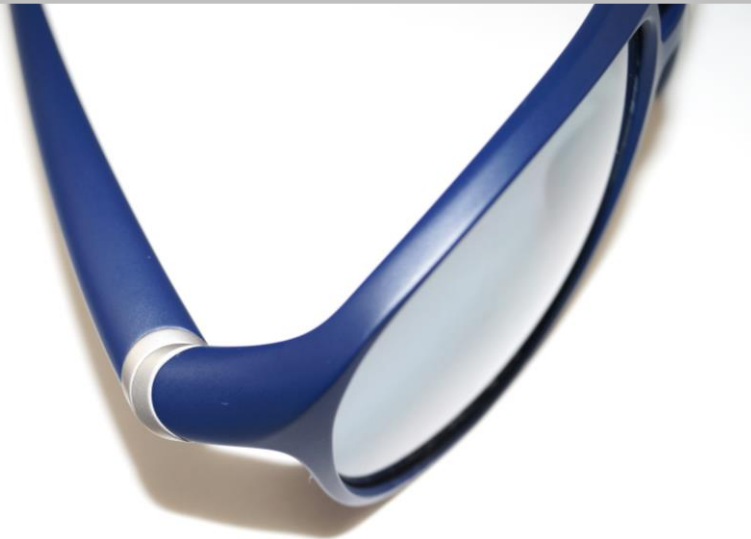
For highly complex shaped components which cannot be realised by traditional technologies OBE is able to offer parts in Metal Injection Moulding (MIM). We have implemented this technology at the OBE group since 1996 and have realised since then a huge number of parts in stainless steel and titanium for our catalogue and also for customer specific solutions.

Since 2022 OBE is also able to offer components in metal 3D printing technologies. Currently these parts are orientated more for prototyping purposes.

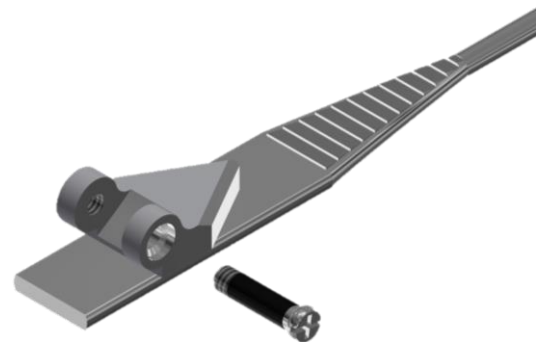




Design by Mykita with MIM hinge



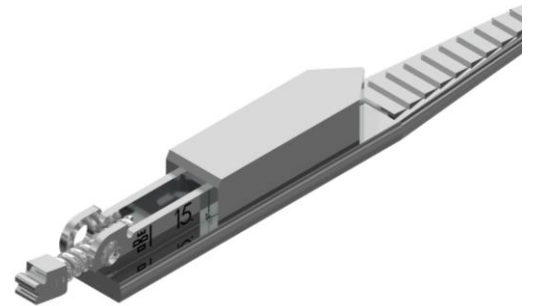
Design by Ross Lovegrove with OBE 27° MIM hinge



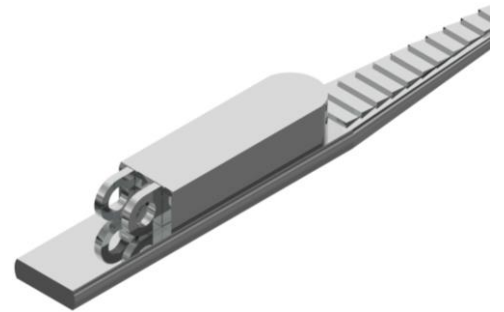
Design by STATE with special hinge on wire



Design by Ace & Tate with INFLEX

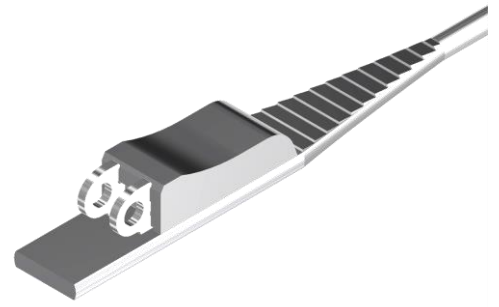


Design by Woodys with SPIKE



Design by Mathieu with Wafer





Design by Very French Gangsters with flexUno on wire 4.3 mm



Design by Steve McQueen with customised rivet hinge



Design by Li & Nung with flexUno mini stainless steel

Premium stainless steel spring hinges

for metal / plastic / combination frames

	width mm	article	page
Introduction			15
FLEXINO			
flexIno loose	2.4	60-44051	16
flexIno on wire	2.4	73-44051	17
FLEXUNO			
flexUno mini loose	3.3	60-44031	18
flexUno mini on wire	3.3	73-44031	19
flexUno classic loose S	2.7	60-44062	20
flexUno classic on wire S	2.7	73-44062	21
flexUno classic loose M	3.0	60-44063	22
flexUno classic on wire M	3.0	73-44063	23

Premium nickel silver spring hinges

for metal / plastic / combination frames

	width mm	article	page
Introduction			25
FLEXUNO			
flexUno classic loose S	2.7	60-04062	26
flexUno classic on wire S	2.7	73-04062	27
flexUno classic loose M	3.0	60-04063	28
flexUno classic on wire M	3.0	73-04063.xxx	29
flexUno on short wire M	3.0	73-04063.900	28
flexUno classic loose XL	4.3	60-04064	30
flexUno classic on wire XL	4.3	73-04064.xxx	31
flexUno on short wire XL	4.3	73-04064.900	30

Premium titanium spring hinges

for pure titanium or combination frames

	width mm	article	page
Introduction			32
FLEXINO			
flexIno slim 21	2.1	60-24021	33
flexIno medium 24	2.4	60-24002	34
flexIno Wafer 28	2.8	60-24006	35
FLEXUNO			
flexUno Wafer 36	3.6	60-24061	36
flexUno classic XL	4.3	60-24064	37

Basic nickel silver spring hinges

for metal / plastic / combination frames

	width mm	article	page
Introduction			39
LITE-Line loose S	2.0	60-08080	40
LITE-Line on wire S	2.0	73-08080	41
LITE-Line loose M	2.4	60-08084	42
LITE-Line on wire M	2.4	73-08084	43
LITE-Line loose L	2.8	60-08088	44
LITE-Line on wire L	2.8	73-08088	45

Hidden spring hinges

for plastic & combination frames

	width mm	article	page
Introduction			46
flexUno Plug & Flex	2.8	60-49460	47
flexUno Wafer			
loose	3.0	60-04053.51x	48
	4.0	60-04066	50
	4.8	60-04061.200	52
on wire	3.0	73-04053.51x	49
	4.0	73-04066.xxx	51
	4.8	73-04061.40x	53
flexUno Spike			
loose	3.0	60-04053.050	54
	4.0	60-04066.050	56
on wire	3.0	73-04053.55x	55
	4.0	73-04066.75x	57
flexUno Chip	4.0	73-04066.50x	58
flexUno Caché	3.0	73-07050	59
flexIno Cachew	2.8	60-08042.50x	60

Special hinges

for 3D printing / smart glasses / wood / horn

	width mm	article	page
Introduction			61
INFLEXino	2.8	60-08042.x90	62
INFLEX	2.8	60-44064.xxx	63
Waferella	4.0	73-04066.900	64
	4.8	73-04061.900	65
C'Flex	3.0	60-04088	66
Slidex	4.5	60-03088	67
ShuttleFlex	5.0	60-64050	68

Spring mechanisms

for metal frames

	width mm	article	page
Introduction			69
flexIno	S	60-04015	70
	M short	60-46500	71
	M	60-44022	72
	L	60-04055	73
flexUno	XL short	60-44063.20x	74
		60-44063.8xx	75

Spring hinge temples

for metal & combination frames

	width mm	article	page
Introduction			76
Bellissimo	3.2	60-07058	77
Bello	2.3	60-07053	78
Bella	2.3	60-17051	79
Skinny	1.9	60-x7042	80
Stealth	1.9	60-x7043	81
Dune	3.2	60-07056	82
Fizzy	2.5	60-07055	83
Simplex	2.0	60-27019	84

Non flex hinges

for metal frames

	width mm	article	page
Introduction			85
Space hinges nickel silver	2.1 - 4.0		86
Conical hinges nickel silver	2.1 - 4.0		87
Regular hinges stainless steel	1.5 - 3.0		88
Regular hinges titanium	2.3		89
	3.0		

Non flex hinges

for plastic & combination frames

	width mm	article	page
Introduction			90
Hinges on wire	2.5 - 8.0		91-98
Animelle	4.0 - 4.5	70-0205x	99
Inject-it	1.2	70-0211x	100-101
	1.6	70-0211x	
ISH² - Injection Safety Hinges	2x 1.2	33-04214	102
ISH - Injection Safety Hinges	1.3 - 1.7		103
Safety Rivet Hinges	2.6 - 8.0		104-109
Safety Plastic Hinges	3.0 - 6.0		110-111

Accessories

for all kind of frames

	width mm	article	page
Introduction			112
Space Screws for hinges	M1.4		113
Safety Screws for rim locks	M1.2, M1.4		114
6 point star screws	M1.4		115
Direct joining screws	DJ1.2, DJ1.4		116
Conical head screws	M1.2, M1.4, M1.6		117
Flat head screws	M1.2, M1.4, M1.6		118
Dummy screws	M1.4		119
Pins-up fixing system		64-4200x	120
Safety Nut	M1.2	93-02525	121
	M1.4	93-02524	122
Blocks / Pins			123
Oil pen			124



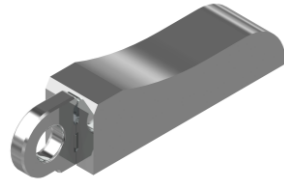


I Power I Zero corrosion I Pure surface I

	width mm	article	page
FLEXINO			
flexIno loose	2.4	60-44051	16
flexIno on wire	2.4	73-44051	17
FLEXUNO			
flexUno mini loose	3.3	60-44031	18
flexUno mini on wire	3.3	73-44031	19
flexUno classic loose S	2.7	60-44062	20
flexUno classic on wire S	2.7	73-44062	21
flexUno classic loose M	3.0	60-44063	22
flexUno classic on wire M	3.0	73-44063	23

Features

- 100% stainless steel spring hinge
- Elegant short construction
- Stable mechanism already pre-assembled
- Best application mainly in **metal temples**
- flexIno one barrel construction
- Zero corrosion

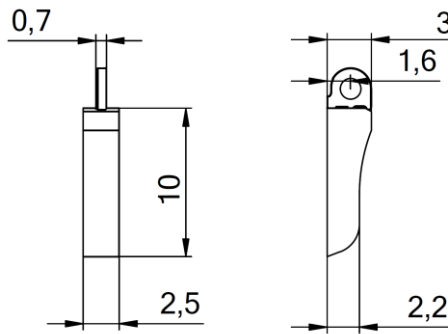


patented

60-44051

laser welding

mechanism not exchangeable

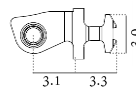
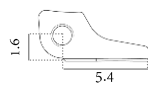


Stainless steel matching parts

Front hinges
for soldering

Front hinges
for plastic frames 90°

Screws



52-45051

33-44151

99-01811
99-02525
99-04811

Features

- 100% stainless steel spring hinge on wire
- Best application mainly in acetate temples
- Stable mechanism already pre-assembled
- flexIno one barrel construction
- Zero corrosion

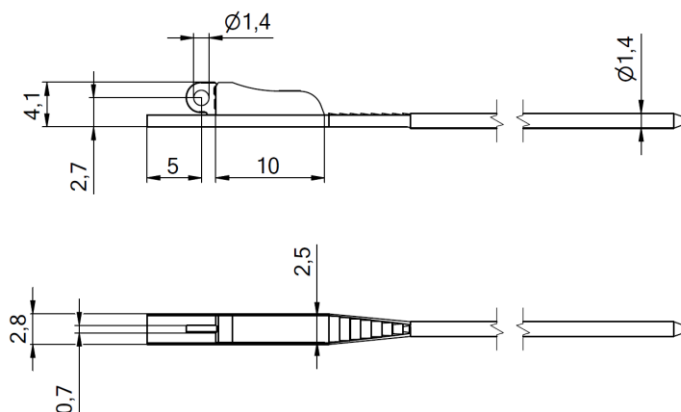


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73-44051

insertion

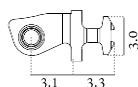
mechanism not exchangeable



Stainless steel matching parts

Front hinges
for plastic frames 90°

Screws



33-44151

99-01811

99-02525

99-04811

Features

- Extremely short spring hinge 100% in stainless steel
- Elegant low construction mainly for **stainless steel temples**
- Stable U-shaped mechanism already pre-assembled or for click-in
- Zero corrosion
- 100% of recycled stainless steel sprues are used in the production of new cases



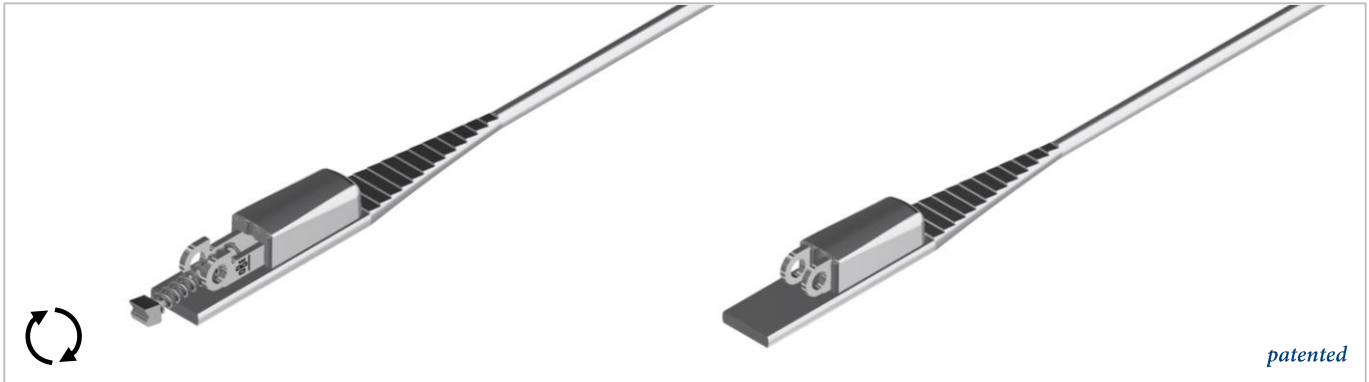
Catalogue 2023 I 2024 - Subject to change without prior notice - all measurements in mm

60-44031.XXX	soldering or laser welding	mechanism exchangeable	60-44031.200	only laser welding	mechanism not exchangeable
Case	Side hinge	Spring mechanism			
17-44031	44-44031	60-04031			

Matching parts						
Front hinges for soldering	Front hinges for laser welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Screws
52-04131 nickel silver 52-44131 stainless steel	52-45031 stainless steel	33-04031 nickel silver 33-44031 stainless steel	33-04131 nickel silver	52-04231 nickel silver	51-04031 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-01764 99-02030 stainless steel

Features

- 100% stainless steel spring hinge on wire with short case
- Elegant low construction mainly for acetate temples
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero corrosion
- 100% of recycled stainless steel sprues are used in the production of new cases



Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

73-44031.50X	insertion	mechanism exchangeable	73-44031.30X	insertion	mechanism not exchangeable

Matching parts				
Front hinges for soldering	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
52-44131 stainless steel	33-04031 nickel silver 33-44031 stainless steel	33-04131 nickel silver	52-04231 nickel silver	99-01764 99-02030 stainless steel

Features

- Elegant & short 100% stainless steel spring hinge
- Best application mainly in **metal temples**
- Easy & stable U-shaped click-in mechanism
- Zero rocking & easy adjustment with flexUno two barrel construction
- Zero corrosion

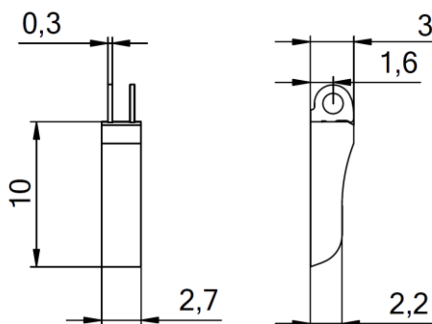


patented

60-44062

soldering or laser welding

mechanism exchangeable

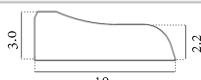


Barreling cap for case 91-20219

Case

Side hinge

Spring mechanism



17-44062

44-44062

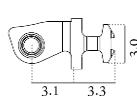
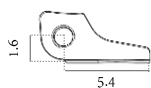
60-04063.030

Stainless steel matching parts

Front hinges
for soldering

Front hinges
for plastic frames 90°

Screws



52-45062

33-44162

99-01730
99-02016
99-04724

Features

- 100% stainless steel spring hinge on wire
- Best application mainly in acetate temples
- Stable U-shaped mechanism already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- Zero corrosion

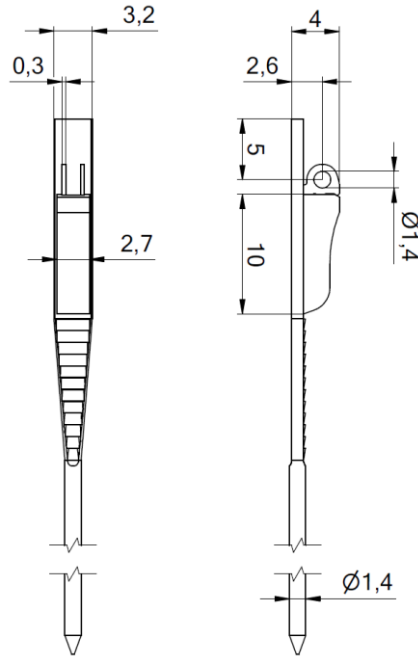


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73-44062

insertion

mechanism not exchangeable

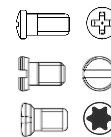
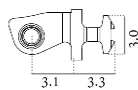


Barreling cap for case 91-20219

Stainless steel matching parts

Front hinges
for plastic frames 90°

Screws



52-45062

99-01730
99-02016
99-04724

Features

- Elegant & short 100% stainless steel spring hinge
- Best application mainly in **metal temples**
- Easy & stable U-shaped click-in mechanism
- Zero rocking & easy adjustment with flexUno two barrel construction
- Zero corrosion

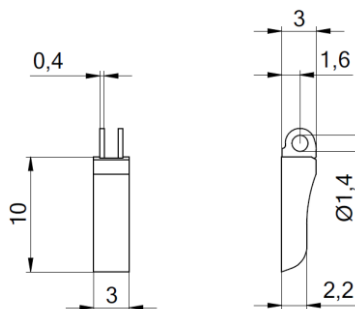


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60-44063

soldering or laser welding

mechanism exchangeable

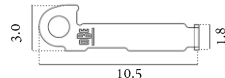
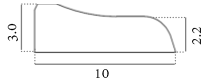


Barreling cap for case 91-20217

Case

Side hinge

Spring mechanism



17-44063

44-44063

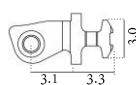
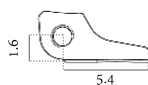
60-04063.030

Stainless steel matching parts

Front hinges for soldering

Front hinges for plastic frames 90°

Screws



52-45063

33-44163

99-01814
99-02524
99-04814

Features

- 100% stainless steel spring hinge on wire
- Best application mainly in **acetate temples**
- Stable U-shaped mechanism already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- Zero corrosion

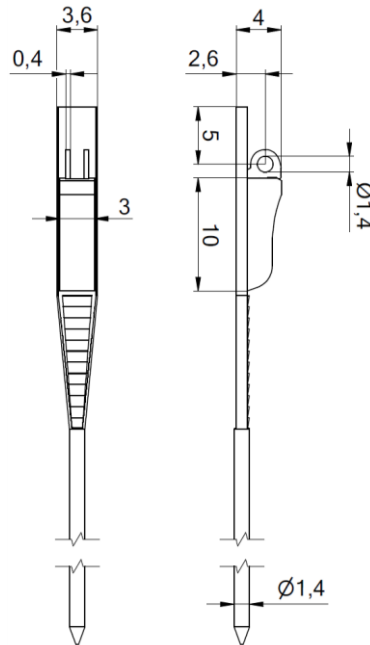


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73-44063

insertion

mechanism not exchangeable

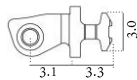


Barreling cap for case 91-20217

Stainless steel matching parts

Front hinges
for plastic frames 90°

Screws



33-44163

99-01814
99-02524
99-04814



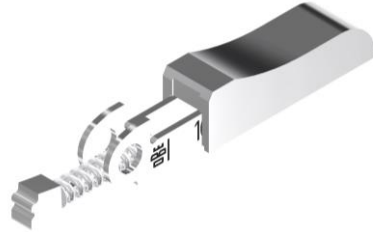


I Durability I Reliability I Variability I

	width mm	article	page
FLEXUNO			
flexUno classic loose S	2.7	60-04062	26
flexUno classic on wire S	2.7	73-04062	27
flexUno classic loose M	3.0	60-04063	28
flexUno classic on wire M	3.0	73-04063.xxx	29
flexUno on short wire M	3.0	73-04063.900	28
flexUno classic loose XL	4.3	60-04064	30
flexUno classic on wire XL	4.3	73-04064.xxx	31
flexUno on short wire XL	4.3	73-04064.900	30

Features

- Elegant & short nickel silver spring hinge
- Best application mainly in **metal temples**
- Easy & stable U-shaped click-in mechanism in stainless steel
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases

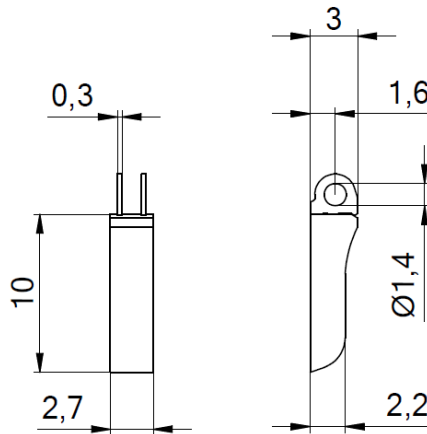


patented

60-04062.XXX

soldering

mechanism exchangeable



Barreling cap for case 91-20219

Case

Side hinge

Spring mechanism



17-04062

44-44062

60-04063.030

Matching parts

Front hinges for soldering

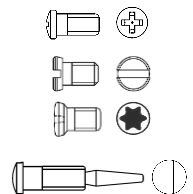
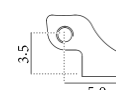
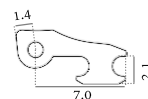
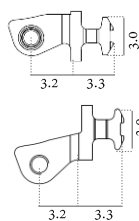
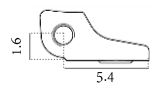
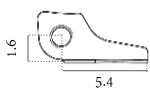
Front hinges for welding

Front hinges for plastic frames 90°

Front hinges for plastic frames 180°

Step hinges for soldering

Screws



52-05069

52-04062

33-05062
33-04262 off center
0°/6° inclination

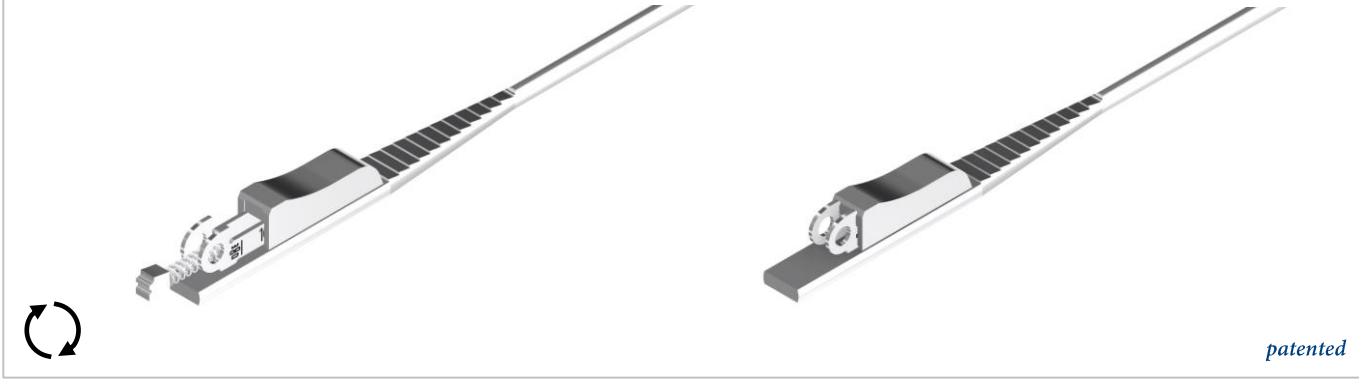
33-04062

52-05462

99-01730
99-02016
99-04724
99-02016.800
self aligning for break off

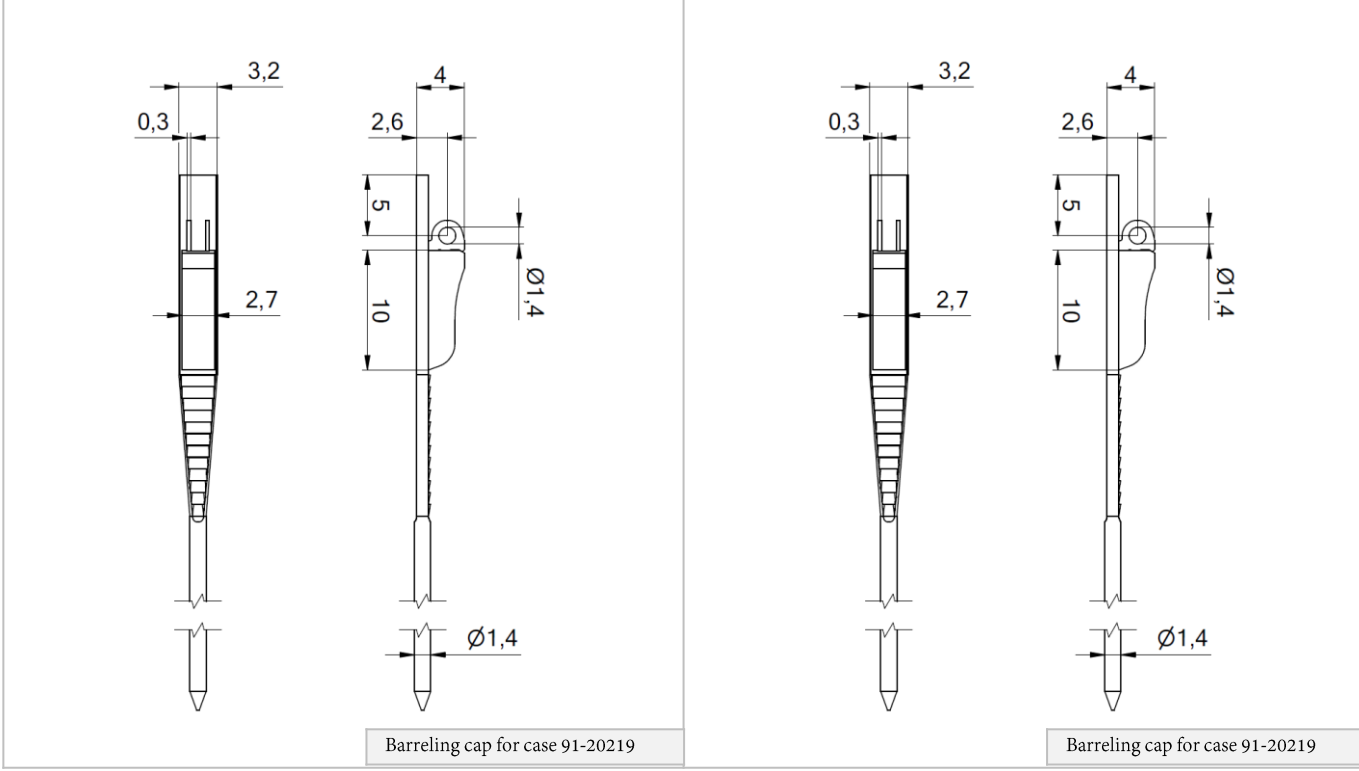
Features

- Nickel silver spring hinge on wire – nickel plated
- Best application mainly in **acetate temples**
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

73-04062.70X	insertion	mechanism exchangeable	73-04062.40X	insertion	mechanism not exchangeable
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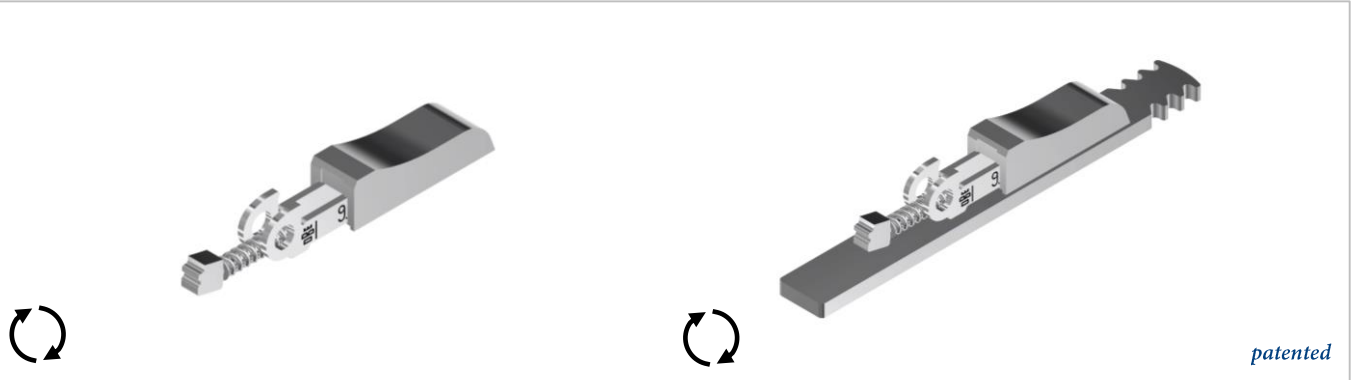


Matching parts

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
33-05062 33-04262 off center 0°/6° inclination	33-04062	52-05462	99-01730 99-02016 99-04724 99-02016.800 self-aligning for break off

Features

- Loose elegant & short nickel silver spring hinge
Best application mainly in **metal templates**
- Nickel silver short hinge on wire – nickel plated
Best application in **injected templates**
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



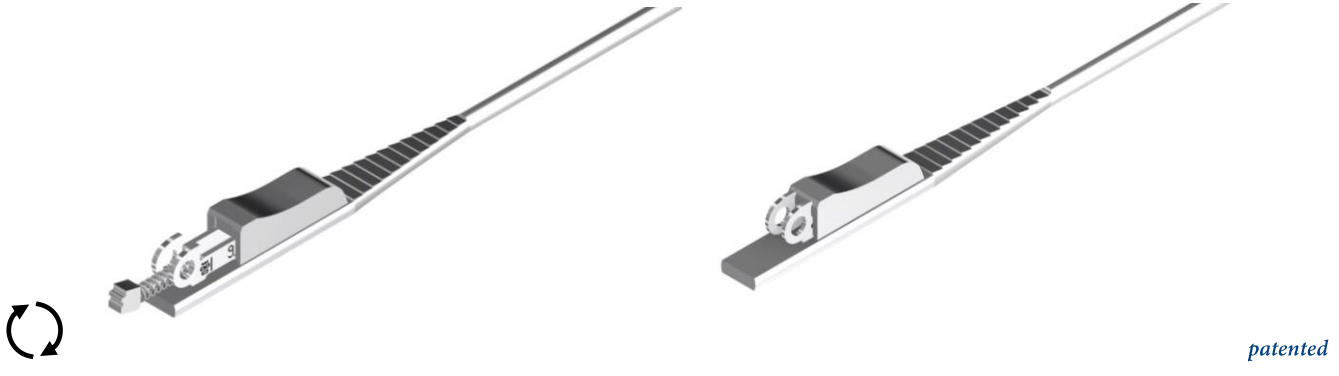
Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

60-04063.XXX	soldering	mechanism exchangeable	73-04063.900	injection	mechanism exchangeable
Case		Side hinge		Spring mechanism	
17-04063		44-44063		60-04063.030	

Matching parts					
Front hinges for soldering	Front hinges for welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
52-05067 52-04263	52-04063	33-05363 33-04163 off center 33-04067 33-02363 0°/6° inclination	33-04063	52-05363 52-05463 52-05563	99-01814 99-02524 99-04814 99-02524.800 self aligning for break off

Features

- Nickel silver spring hinge on wire – nickel plated
- Best application mainly in acetate templates
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



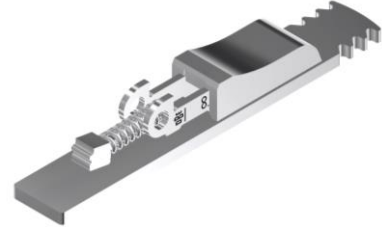
Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

73-04063.70X	insertion	mechanism exchangeable	73-04063.40X	insertion	mechanism not exchangeable
				<p>Barreling cap for case 91-20217</p>	

Matching parts				
Front hinges for soldering	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
52-04263	33-05363 33-04163 off center 33-04067 33-02363 0°/6° inclination	33-04063	52-05363 52-05463 52-05563	99-01814 99-02524 99-04814 99-02524.800 self aligning for break off

Features

- Loose elegant & short nickel silver spring hinge
Best application mainly in **metal templates**
- Nickel silver short hinge on wire – nickel plated
Best application in **injected templates**
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases


patented

60-04064.XXX	soldering	mechanism exchangeable	73-04064.900	injection	mechanism exchangeable
Barreling cap for case 91-20212		Barreling cap for case 91-20212			
Case		Side hinge		Spring mechanism	
17-04064		44-44064		60-04064.050	

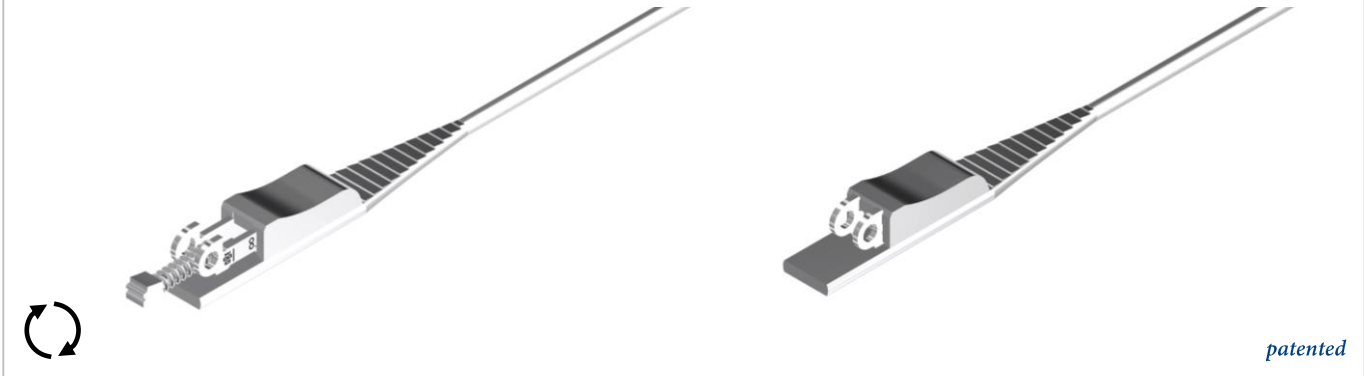
Matching parts

Front hinges for soldering	Front hinges for welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
52-05064 52-04264	52-04064	33-05164 33-04164 off center 33-02364 0°/6° inclination	33-04064	52-05164 52-05264	99-01816 99-02503 99-04816 99-02503.800 self aligning for break off 99-02591 self aligning

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Nickel silver spring hinge on wire – nickel plated
- Best application mainly in **acetate temples**
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

73-04064.70X	insertion	mechanism exchangeable	73-04064.40X	insertion	mechanism not exchangeable
		Barreling cap for case 91-20212			Barreling cap for case 91-20212

Matching parts

Front hinges for soldering	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
52-04264	33-05164 33-04164 offcenter 33-02364 0°/6° inclination	33-04064	52-05164 52-05264	99-01816 99-02503 99-04816 99-02503.800 self aligning for break off 99-02591self aligning

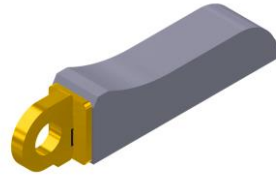


I Functionality I Efficiency I Variety I

	width mm	article	page
FLEXINO			
flexIno slim 21	2.1	60-24021	33
flexIno medium 24	2.4	60-24002	34
flexIno Wafer 28	2.8	60-24006	35
FLEXUNO			
flexUno Wafer 36	3.6	60-24061	36
flexUno classic XL	4.3	60-24064	37

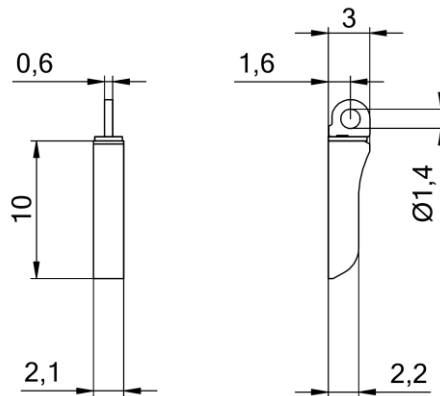
Features

- Zero allergy titanium spring hinge for **pure titanium frames**
- Stable mechanism in stainless steel already pre-assembled
- flexIno one barrel construction - blade technology for excellent double action
- Corrosion resistance thanks to gold plating
- Available in 2023



60-24021

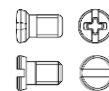
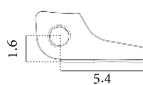
laser welding



Matching parts

Front hinges
for laser welding

Screws

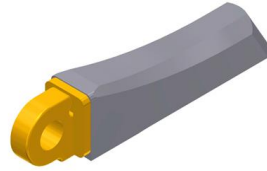


52-24021

99-01810
99-02506

Features

- Zero allergy titanium spring hinge for **pure titanium frames**
- Stable mechanism in stainless steel already pre-assembled
- flexIno one barrel construction
- Corrosion resistance thanks to gold plating



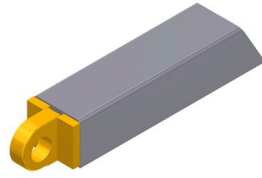
60-24002	resistance welding	60-24102	laser welding

Matching parts

Front hinges for soldering and laser welding	Front hinges for soldering and laser welding	Front hinges for welding	Front hinges for welding	Front hinges for plastic frames 90°	Screws
52-25067 single action	52-25071 double action	52-25064 single action	52-25076 double action	33-05100 nickel silver 0°/6° inclination	99-01811 99-02525 99-04811

Features

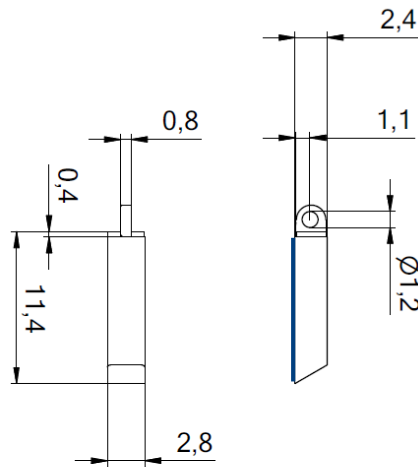
- Zero allergy titanium spring hinge in low profile for **pure titanium frames**
- Stable mechanism in stainless steel already pre-assembled
- flexIno one barrel construction in wafer look
- Corrosion resistance thanks to gold plating



patented

60-24006

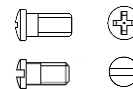
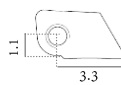
laser welding



Matching parts

Front hinges
for soldering and laser welding

Screws

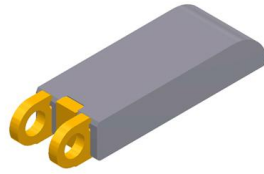


52-24106

99-01756
99-02031

Features

- Zero allergy titanium spring hinge in low profile for **pure titanium frames**
- Zero rocking mechanism in stainless steel already pre-assembled
- flexUno two barrel construction in wafer look
- Corrosion resistance thanks to gold plating



patented

60-24061	resistance welding	60-24161	laser welding

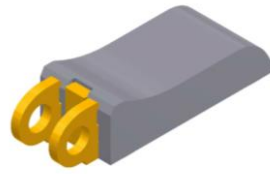
Matching parts

Front hinges for soldering and laser welding	Front hinges for welding	Front hinges for plastic frames	Screws
52-24161	52-24061	33-04066 nickel silver 0°/6° inclination	99-02023

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Features

- Zero allergy titanium spring hinge for **pure titanium frames**
- Zero rocking mechanism in stainless steel already pre-assembled
- flexUno two barrel construction
- Corrosion resistance thanks to gold plating


patented

60-24064	resistance welding	60-24164	laser welding

Matching parts

Front hinges for soldering and laser welding	Front hinges for welding	Front hinges for plastic frames 90°	Step hinges for soldering	Screws
52-24065	52-24064	33-05164 nickel silver 0°/6° inclination	52-25264	99-01816 99-02503 99-04816 99-02503.800 self aligning for break off

Catalogue 2023 I 2024 - Subject to change without prior notice - all measurements in mm



 SANI

Hersteller

Typ
Profil
Baugruppe



I Functionality I Simplicity I Convenience I

	width mm	article	page
LITE-Line loose S	2.0	60-08080	40
LITE-Line on wire S	2.0	73-08080	41
LITE-Line loose M	2.4	60-08084	42
LITE-Line on wire M	2.4	73-08084	43
LITE-Line loose L	2.8	60-08088	44
LITE-Line on wire L	2.8	73-08088	45

Features

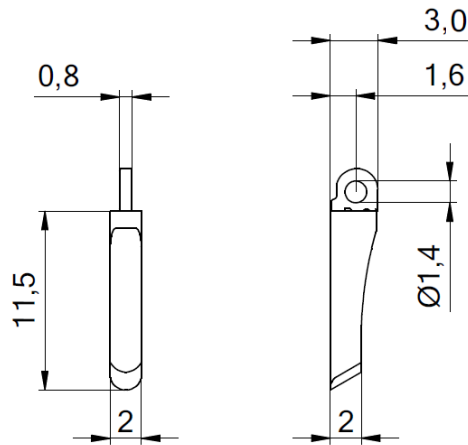
- Nickel silver spring hinge with closed bottom
- Easy click-in mechanism in stainless steel
- Best application mainly in **metal temples**
- One barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



60-08080

soldering

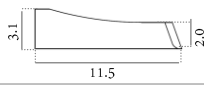
mechanism not exchangeable



Barreling cap for case 91-20222

Case

Spring mechanism



17-08080

60-45001.220

Matching parts

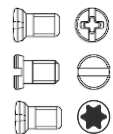
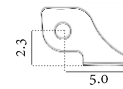
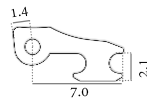
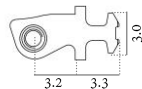
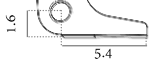
Front hinges
for soldering

Front hinges
for plastic frames 90°

Front hinges
for plastic frames 180°

Step hinges
for soldering

Screws



52-05075

33-05105

33-05010

52-05112

99-01803
99-02530
99-04803

Features

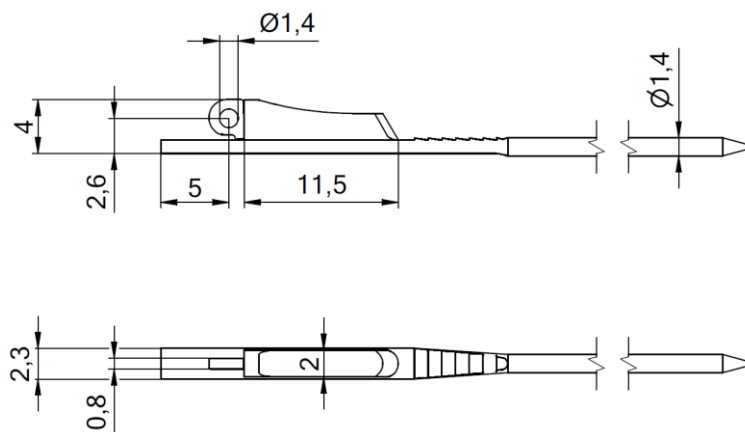
- Nickel silver spring hinge on wire – nickel plated
- Best application mainly in acetate temples
- Stable stainless steel mechanism already pre-assembled
- One barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



73-08080.30X

insertion

mechanism not exchangeable



Barreling cap for case 91-20222

Matching parts

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
33-05105	33-05010	52-05112	99-01803 99-02530 99-04803

Features

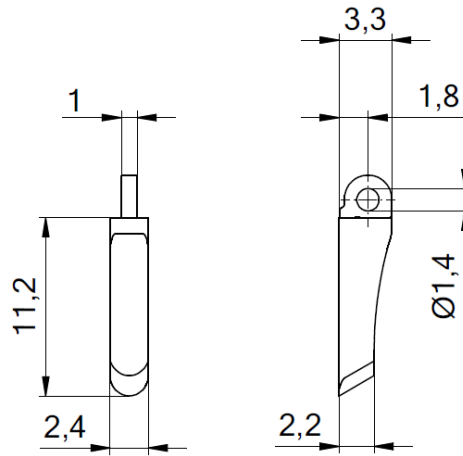
- Nickel silver spring hinge with closed bottom
- Easy click-in mechanism in stainless steel
- Best application mainly in **metal temples**
- One barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



60-08084

soldering

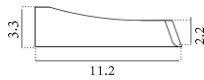
mechanism not exchangeable



Barreling cap for case 91-20201

Case

Spring mechanism



17-08084

60-45002.130

Matching parts

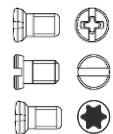
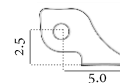
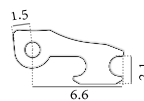
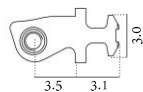
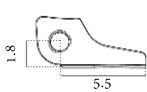
Front hinges
for soldering

Front hinges
for plastic frames 90°

Front hinges
for plastic frames 180°

Step hinges
for soldering

Screws



52-05097

33-05104

33-05012

52-05111

99-01811

99-02525

99-04811

Features

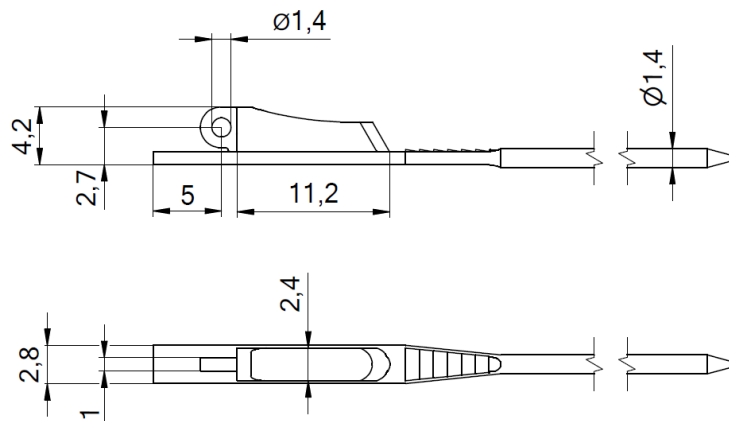
- Nickel silver spring hinge on wire – nickel plated
- Best application mainly in **acetate temples**
- Stable stainless steel mechanism already pre-assembled
- One barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



73-08084.30X

insertion

mechanism not exchangeable



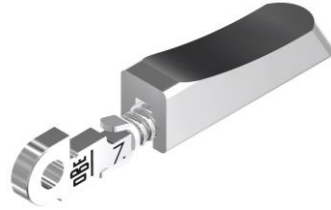
Barreling cap for case 91-20201

Matching parts

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
33-05104	33-05012	52-05111	99-01811 99-02525 99-04811

Features

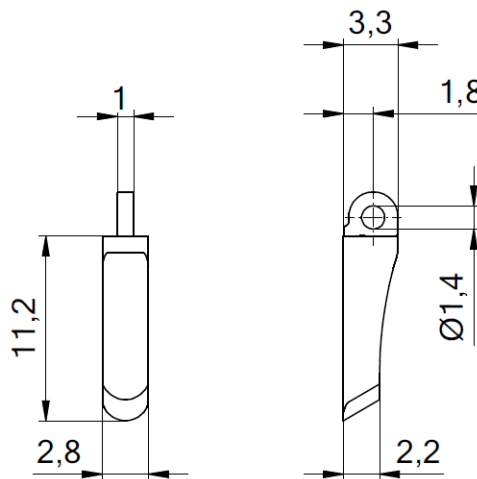
- Nickel silver spring hinge with closed bottom
- Easy click-in mechanism in stainless steel
- Best application mainly in **metal temples**
- One barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



60-08088

soldering

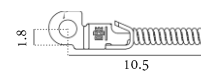
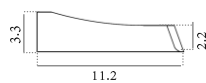
mechanism not exchangeable



Barreling cap for case 91-20221

Case

Spring mechanism



17-08088

60-45002.130

Matching parts

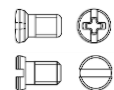
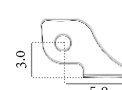
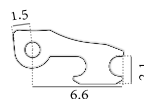
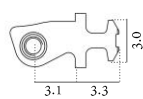
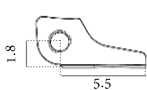
Front hinges
for soldering

Front hinges
for plastic frames 90°

Front hinges
for plastic frames 180°

Step hinges
for soldering

Screws



52-05194

33-05106

33-05063

52-05153

99-01813
99-02501

Features

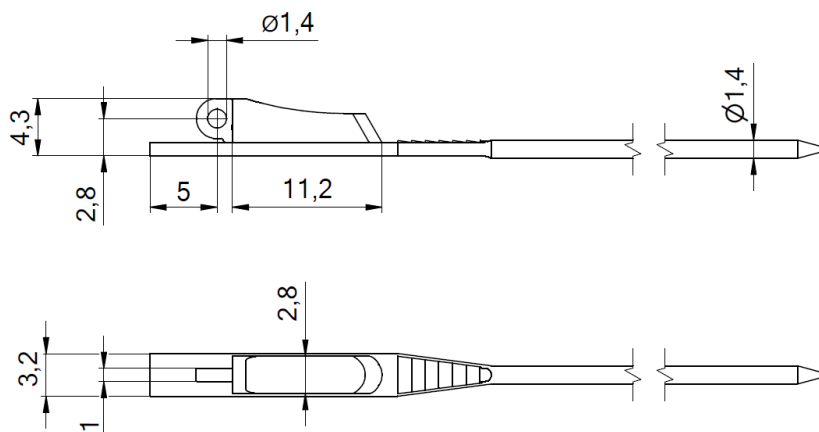
- Nickel silver spring hinge on wire – nickel plated
- Best application mainly in **acetate temples**
- Stable stainless steel mechanism already pre-assembled
- One barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



73-08088.30X

insertion

mechanism not exchangeable



Barreling cap for case 91-20221

Matching parts

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
33-05106	33-05063	52-05153	99-01813 99-02501



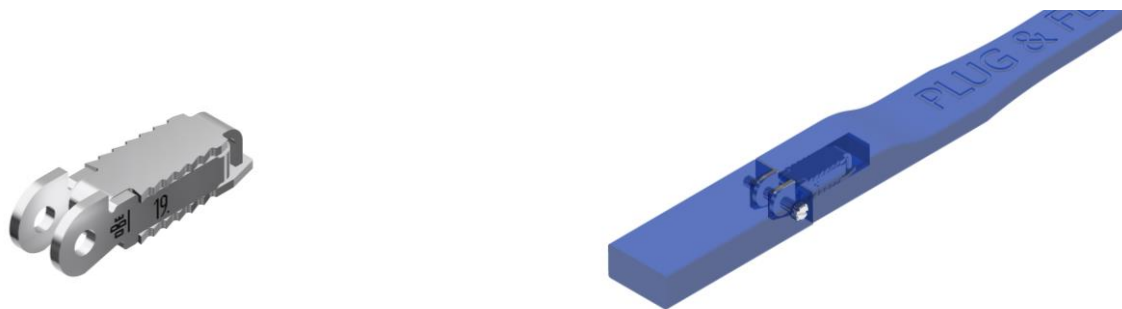
Photo courtesy by Woodys

I Elegance I Variety I Invisibility I

	width mm	article	page
flexUno Plug & Flex	2.8	60-49460	47
flexUno Wafer			
loose	3.0	60-04053.51x	48
	4.0	60-04066	50
	4.8	60-04061.200	52
on wire	3.0	73-04053.51x	49
	4.0	73-04066.xxx	51
	4.8	73-04061.40x	53
flexUno Spike			
loose	3.0	60-04053.050	54
	4.0	60-04066.050	56
on wire	3.0	73-04053.55x	55
	4.0	73-04066.75x	57
flexUno Chip	4.0	73-04066.50x	58
flexUno Caché	3.0	73-07050	59
flexIno Cachew	2.8	60-08042.50x	60

Features

- Spring hinge for injected frames
- 100% made in stainless steel
- Extreme tear out force thanks to special construction
- Easy, fast and cost effective mounting
- Zero rocking thanks to flexUno technology

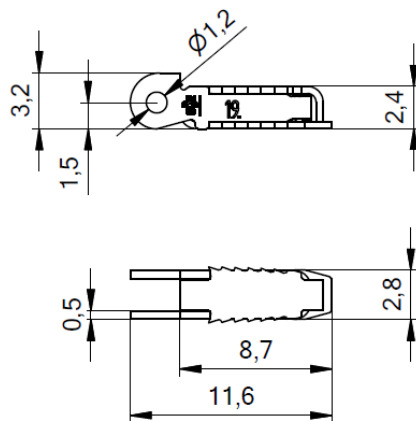


patented

60-49460.200.10

injection

mechanism not exchangeable



Matching parts

Direct joining

Pin

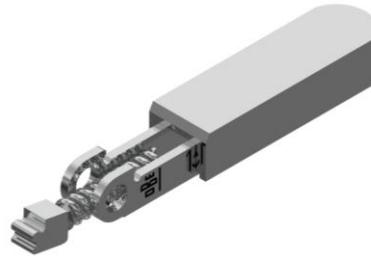


99-02910 - 6.0 mm
99-02911 - 8.0 mm

11-20025

Features

- Round shaped nickel silver spring hinge in low profile
- Flat design enables elegant integration mainly in acetate temples
- Easy & stable U-shaped click-in mechanism in stainless steel
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



patented

60-04053	soldering	mechanism exchangeable
		<p>Case 17-04053 Barreling cap for case 91-04053</p> <p>Side hinge 44-44053</p> <p>Spring mechanism 60-04053.050</p>

Matching parts - Standard

Front hinges for soldering	Front hinges for welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Hinge screws
52-04053	52-04253	33-04153 33-04025 off center 33-04353 off center 0°/6° inclination	33-04253	52-04153 52-04154	99-02027 99-02027.800 self aligning for break off 99-02032 self aligning

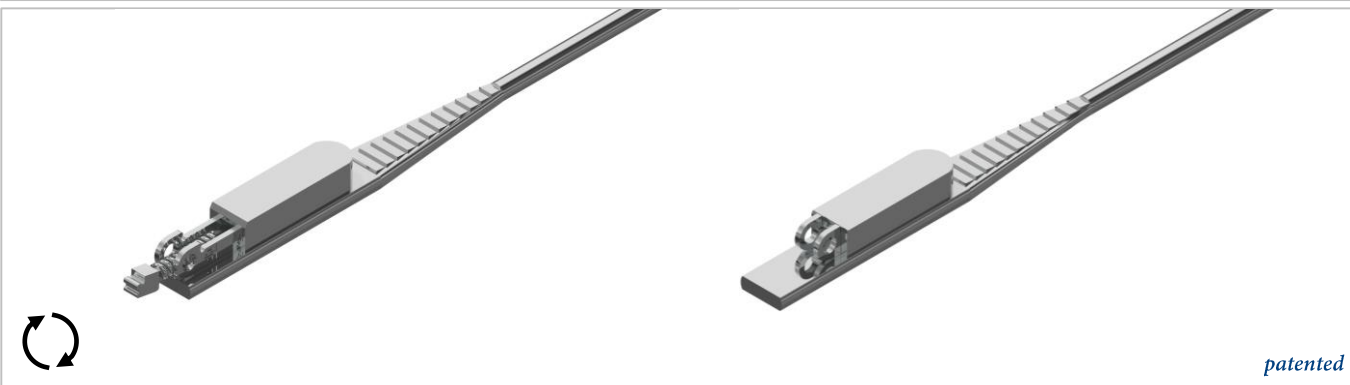
Matching parts – Hidden solution

Three barrel block hinges I Fixation screws to front I Hinge pins

32-04062	I	99-00065	I	Pin 11-20012
32-04061	I	99-01753	I	Pin 11-20012

Features

- Round shaped nickel silver spring hinge on wire in low profile – nickel plated
- Flat design enables elegant integration and semi hidden look in acetate temples
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

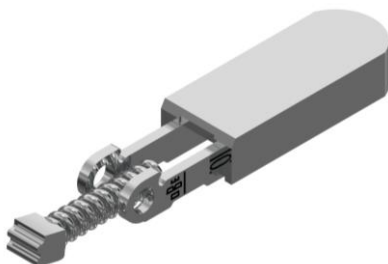
73-04053.51X	insertion	mechanism exchangeable	73-04053.30X	insertion	mechanism not exchangeable
				<p>Barreling cap for case 91-04053</p>	

Matching parts - Standard			
Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Hinge screws
33-04153 33-04025 off center 33-04353 off center 0°/6° inclination	33-04253	52-04153 52-04154	99-02027 99-02027.800 self aligning for break of 99-02032 self aligning

Matching parts – Hidden solution			
One barrel block hinges I Fixation screws to front I Hinge screws only for 73-04053.30X		Three barrel block hinges I Fixation screws to front I Hinge pins for 73-04053.51X and 73-04053.30X	
32-04055 I 99-00065 I 99-00065		32-04062 I 99-00065 I Pin 11-20012	
32-04056 I 99-01753 I 99-00065		32-04061 I 99-01753 I Pin 11-20012	

Features

- Round shaped nickel silver spring hinge in low profile
- Flat design enables elegant integration mainly in acetate temples
- Easy & stable U-shaped click-in mechanism in stainless steel
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



patented

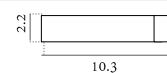
60-04066

soldering

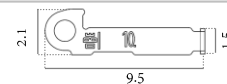
mechanism exchangeable

Case 17-04066

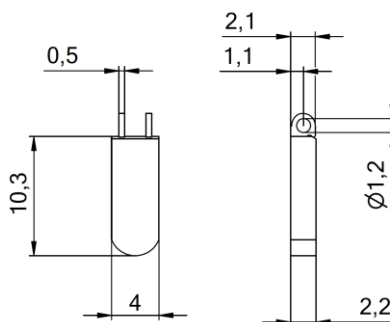
Barreling cap for case 91-04066



Side hinge 44-44061



Spring mechanism 60-04061.050



Matching parts

Front hinges for soldering	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws
52-04276	33-04066 33-04266 off center 0°/6° inclination	33-04166	52-04166	51-05066 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-01732 99-02036 99-02036.800 self aligning for break off

Catalogue 2023 I 2024 - Subject to change without prior notice - all measurements in mm

Features

- Round shaped nickel silver spring hinge on wire in low profile – nickel plated
- Flat design enables elegant integration and semi hidden look in acetate temples
- Optionally available for long temple tips - 73-04053.40X
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

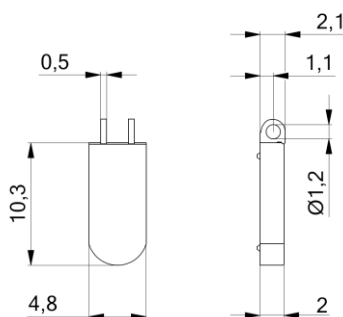
73-04066.70X	insertion	mechanism exchangeable	73-04066.30X	insertion	mechanism not exchangeable

Matching parts - Standard				
Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws
33-04066 33-04266 off center 0°/6° inclination	33-04166	52-04166	51-05066 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-01732 99-02036 99-02036.800 self aligning for break off

Matching parts – Hidden solution				
One barrel block hinges I Fixation screws to front I Hinge pins only for 73-04066.30X				
32-04060 I	99-00064 I	Pin 11-20010		
32-04059 I	99-01753 I	Pin 11-20010		

Features

- Round shaped nickel silver spring hinge in low profile
- Flat design enables elegant integration mainly in **acetate temples**
- Easy & stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases


patented
60-04061.200
resistance welding
mechanism not exchangeable


Barreling cap for case 91-05061

Matching parts - Standard

Front hinges for soldering	Front hinges for welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws
52-04261	52-04061	33-04061 33-04071 round foot 33-04261 off center 0°/6° inclination	33-04161	52-04161	51-05061 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-02017 99-02017.800 self aligning for break off

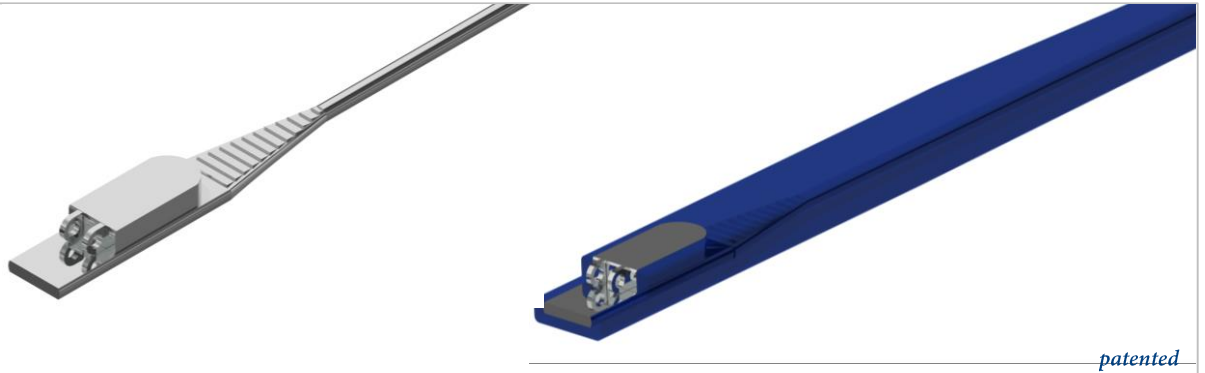
Matching parts – Hidden solution

One barrel block hinges I Fixation screws to front I Hinge pins					Three barrel block hinges I Fixation screws to front I Hinge screws				
32-04060	I	99-00064	I	Pin 11-20010	32-04054	I	99-00064	I	99-02023
32-04059	I	99-01753	I	Pin 11-20010	32-04053	I	99-01753	I	99-02023

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Round shaped nickel silver spring hinge on wire in low profile – nickel plated
- Flat design enables elegant integration and semi hidden look in acetate temples
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases

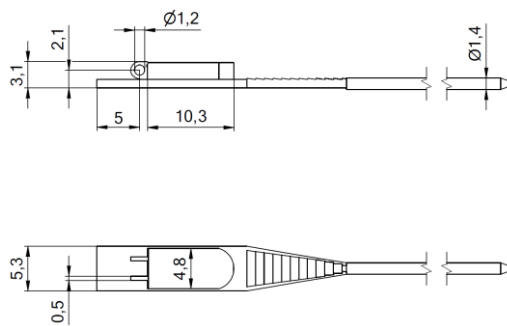


patented

73-04061.40X

insertion

mechanism not exchangeable



Barreling cap for case 91-05061

Matching parts - Standard

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws
33-04061 33-04071 round foot 33-04261 offcenter 0°/6° inclination	33-04161	52-04161	51-05061 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-02017 99-02017.800 self aligning for break off

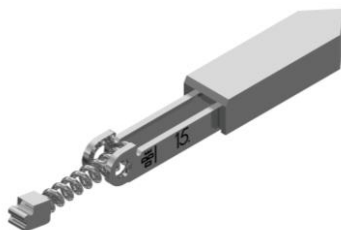
Matching parts – Hidden solution

One barrel block hinges I Fixation screws to front I Hinge pins	Three barrel block hinges I Fixation screws to front I Hinge screws
32-04060 I 99-00064 I Pin 11-20010 32-04059 I 99-01753 I Pin 11-20010	32-04054 I 99-00064 I 99-02023 32-04053 I 99-01753 I 99-02023

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Pointed nickel silver spring hinge in low profile
- Flat design enables elegant integration mainly in **acetate temples**
- Easy & stable U-shaped click-in mechanism in stainless steel
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



patented

60-04053.050	soldering	mechanism exchangeable
		Case 17-04053.050 Barreling cap for case 91-04053
		Side hinge 44-44053
		Spring mechanism 60-04053.040

Matching parts - Standard

Spike front hinges	Front hinges for soldering	Front hinges for welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Hinge screws
33-04253.050	52-04053	52-04253	33-04153 33-04025 offcenter 33-04353 offcenter 0°/6° inclination	33-04253	52-04153 52-04154	99-02027 99-02027.800 self aligning for break off 99-02032 self aligning

Matching parts – Hidden solution

Three barrel block hinges I Fixation screws to front I Hinge pins

32-04062	I	99-00065	I Pin 11-20012
32-04061	I	99-01753	I Pin 11-20012

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

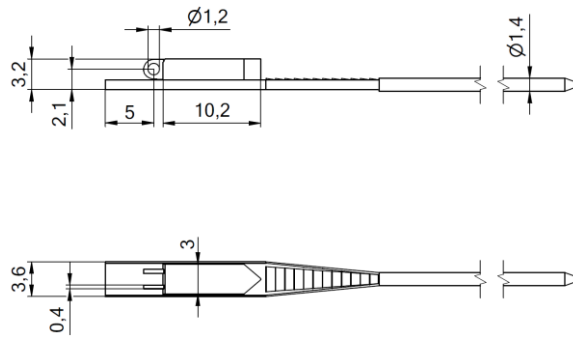
- Pointed nickel silver spring hinge on wire in low profile – nickel plated
- Flat design enables elegant integration and semi hidden look in acetate temples
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



73-04053.55X

insertion

mechanism exchangeable



Barreling cap for case 91-04053

Matching parts - Standard

Spike front hinges	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Hinge screws
33-04253.050	33-04153 33-04025 off center 33-04353 off center 0°/6° inclination	33-04253	52-04153 52-04154	99-02027 99-02027.800 self aligning for break off 99-02032 self aligning

Matching parts – Hidden solution

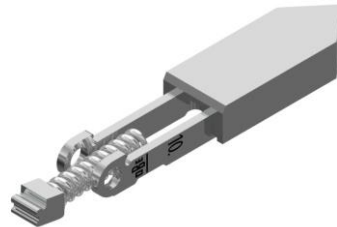
Three barrel block hinges I Fixation screws to front I Hinge pins

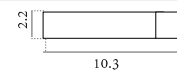
32-04062	I 99-00065	I Pin 11-20012	
32-04061	I 99-01753	I Pin 11-20012	

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

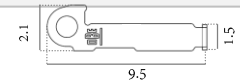
Features

- Pointed nickel silver spring hinge in low profile
- Flat design enables elegant integration mainly in **acetate temples**
- Easy & stable U-shaped click-in mechanism in stainless steel
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases

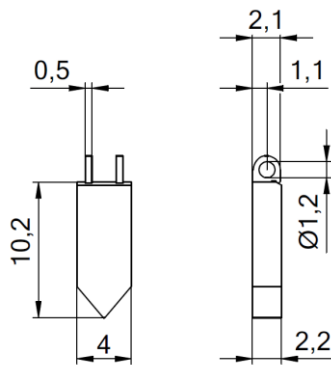

patented
60-04066.050
soldering
mechanism exchangeable

 Case 17-04066.050
 Barreling cap for case 91-04066


Side hinge 44-44061



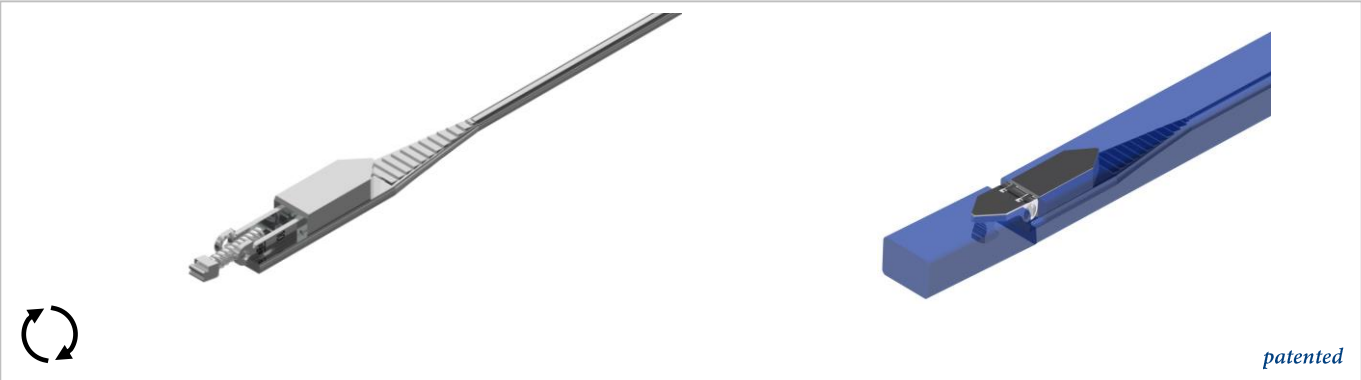
Spring mechanism 60-04061.050


Matching parts - Standard

Spike front hinges	Front hinges for soldering	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws
33-04166.050	52-04276	33-04066 33-04266 off center 0°/6° inclination	33-04166	52-04166	51-05066 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-01732 99-02036 99-02036.800 self aligning for break off

Features

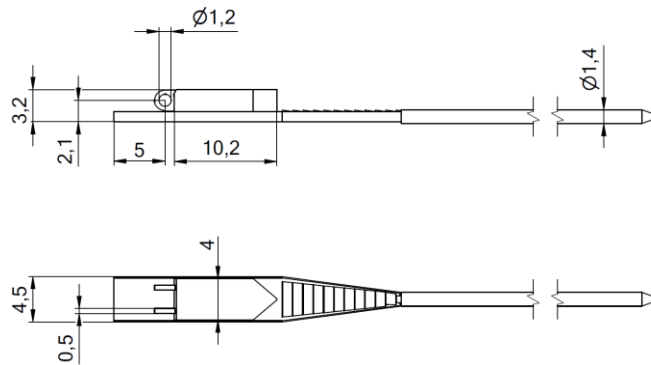
- Pointed nickel silver spring hinge on wire in low profile – nickel plated
- Flat design enables elegant integration and semi hidden look in acetate temples
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



73-04066.75X

insertion

mechanism exchangeable



Barreling cap for case 91-04066

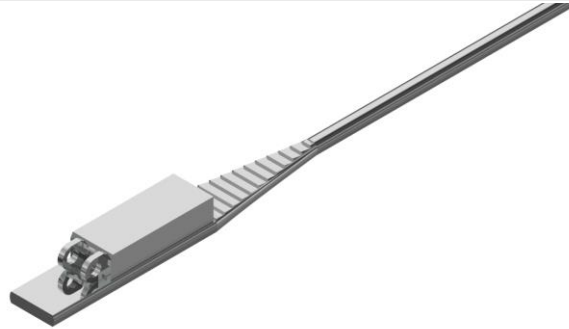
Matching parts - Standard

Spike front hinges	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws
33-04166.050	33-04066 33-04266 offcenter 0°/6° inclination	33-04166	52-04166	51-05066 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-01732 99-02036 99-02036.800 self aligning for break off

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Nickel silver spring hinge on wire in brick look – nickel plated
- Low construction and semi hidden look in acetate temples
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases

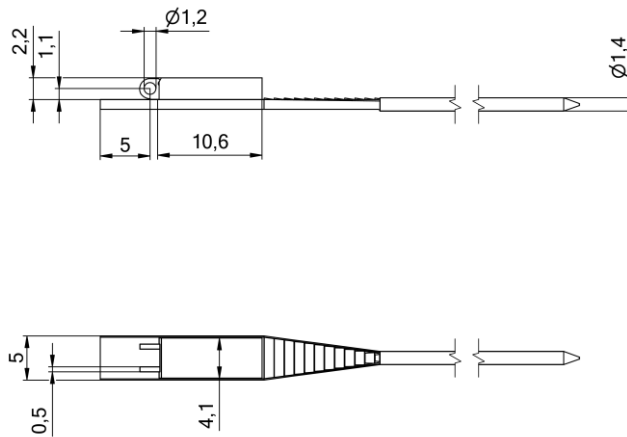


patented

73-04066.50X

insertion

mechanism not exchangeable



Barreling cap for case 91-04066

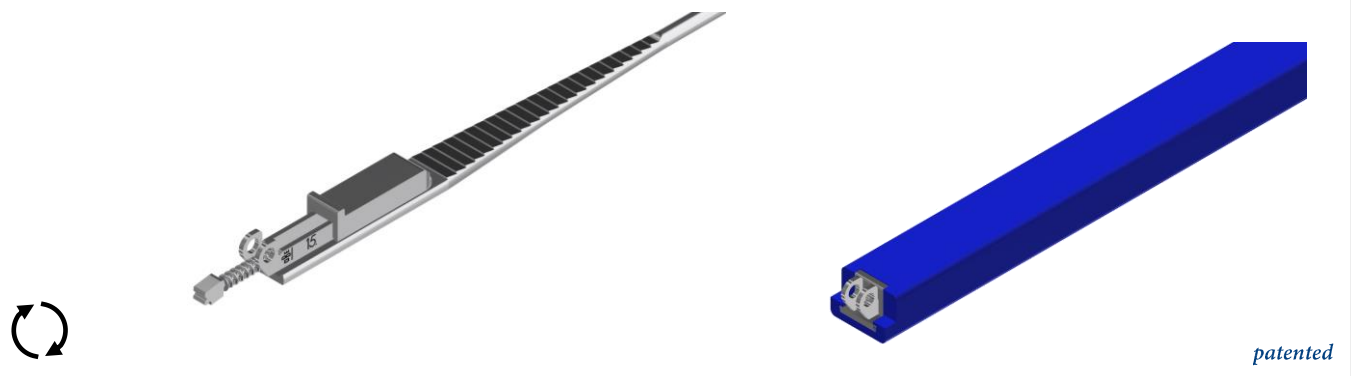
Matching parts - Standard

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws
<p>33-04066 33-04266 offcenter</p> <p>0°/6° inclination</p>	<p>33-04166</p>	<p>52-04166</p>	<p>51-05066</p> <p>11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm</p>	<p>99-01732 99-02036 99-02036.800 selfaligning for break off</p>

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Embedded nickel silver spring hinge on wire in low profile – nickel plated
- Super-flat design enables total integration in acetate temples without metal visibility
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- 75% of recycled nickel silver chips are used in the production of new cases



73-07050	insertion	mechanism exchangeable

Matching parts - Standard

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Hinge screws
33-04027	33-04028	52-07050	99-02030 99-02032 self-aligning 99-02027.800 self-aligning for break off

Matching parts – Hidden solution

Three barrel block hinges I Fixation screws to front I Hinge pin

32-04077	I	99-01752	I	11-20012

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

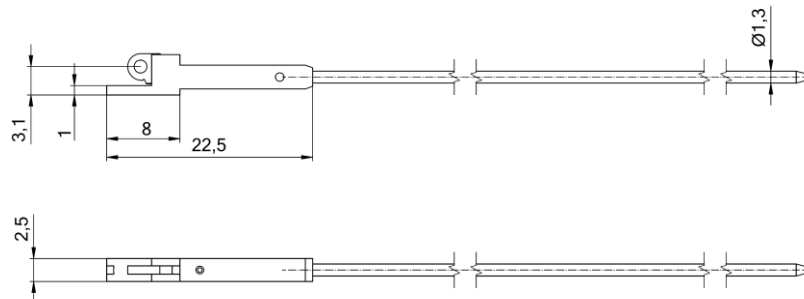
- Totally hidden spring hinge on wire for long temple tips – nickel plated
- Plain look between temple und front in **acetate temples**
- Stable mechanism in stainless steel already pre-assembled
- Safe connection with OBE screw
- Wide variety of front hinges for full plastic or combination frames



60-08042.50X

injection / fixing with screw

mechanism not exchangeable



Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Matching parts

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Front hinges	Hinge screws	Fixation to temple	Fixation to front
33-04041	33-05016	52-05128	33-02113	99-01811 99-02525	99-02027	99-01375

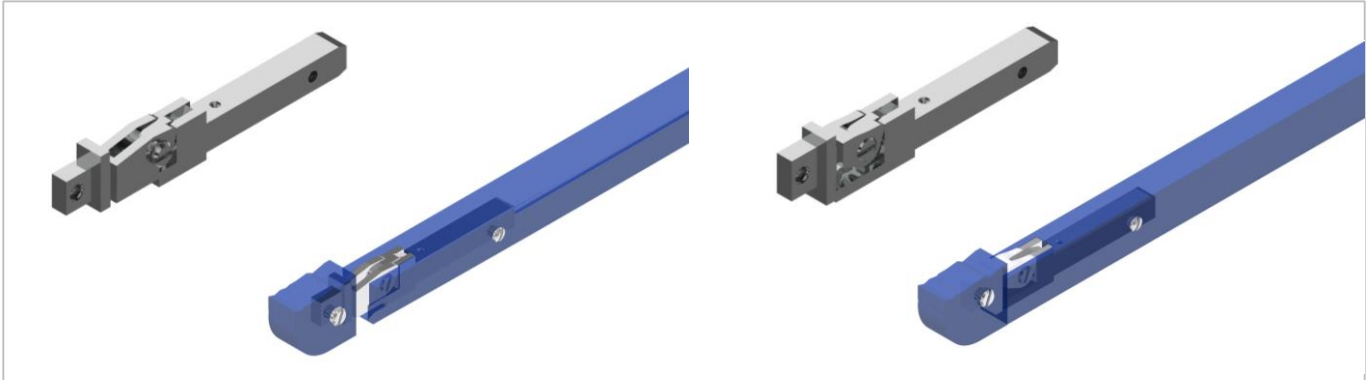


I Integration I Connectivity I Ready to use I

	width mm	article	page
INFLEXino	2.8	60-08042.x90	62
INFLEX	2.8	60-44064.xxx	63
Waferella	4.0	73-04066.900	64
	4.8	73-04061.900	65
C'Flex	3.0	60-04088	66
Slidex	4.5	60-03088	67
ShuttleFlex	5.0	60-64050	68

Features

- Nickel silver spring hinge ready to use
- Easy assembly with screw mainly in **injected** or **3D printed** temples
- Already assembled with front hinge
- Stable mechanism in stainless steel already pre-assembled
- Two designs possible: OPEN or CLOSED



60-08042.690	injection / fixing with screw	mechanism not exchangeable	60-08042.790	injection / fixing with screw	mechanism not exchangeable

Matching parts

Fixation to front	Fixation to temple
99-01375 M1.4 x 3.4	99-02027 M1.2 x 3.8

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Short nickel silver spring hinge for total integration in temple
- Easy assembly with screw mainly in **injected or 3D printed temples**
- Optionally assembled with block hinge – nickel plated
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction



patented

60-44064.866	injection / fixing with screw	mechanism exchangeable	60-44064.290	injection / fixing with screw	mechanism exchangeable

Matching parts - Standard

Front hinges for plastic frames 90°	Step hinges for soldering	Hinge screws	Direct joining	Fixation of Inflex with temple
33-04164	52-05265	99-01816 99-02503 99-04816 99-02591 selfaligning	99-02907	99-01436 (ø 2.5 with stop) 99-01750 (ø 2.2) 99-02037 (ø 2.2)

Matching parts – Hidden solution

Three barrel block hinges I	Fixation screws to front I	Hinge screws
32-04078 I	99-01752 - 3.7mm 99-02023 - 4.4mm 99-02009 - 4.5 mm 99-02028 - 5.6 mm	99-01816 99-02503 99-02591 self aligning

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Round shaped nickel silver spring hinge on short wire – nickel plated
- Flat design enables elegant integration mainly in **wooden frames**
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- MOQ 500 pairs
- 75% of recycled nickel silver chips are used in the production of new cases

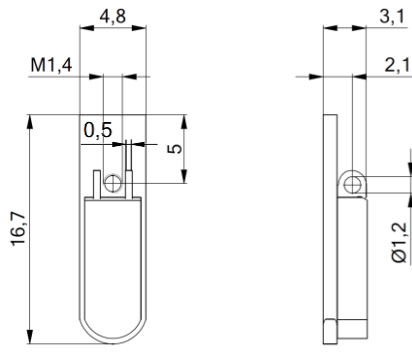


patented

73-04066.900

fixing with screw

mechanism exchangeable



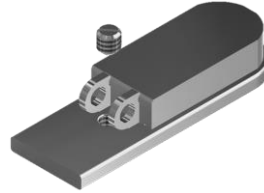
Barreling cap for case 91-04066
Milling tool 20-47452

Matching parts - Standard

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws	Fixation to temple
<p>33-04066 33-04266 off center</p> <p>0°/6° inclination</p>	<p>33-04166</p>	<p>52-04166</p>	<p>51-05066</p> <p>11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm</p>	<p>99-01732 99-02036 99-02036.800 self aligning for break off</p>	<p>99-02024</p>

Features

- Round shaped nickel silver spring hinge on short wire – nickel plated
- Flat design enables elegant integration mainly in **wooden frames**
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- MOQ 500 pairs
- 75% of recycled nickel silver chips are used in the production of new cases

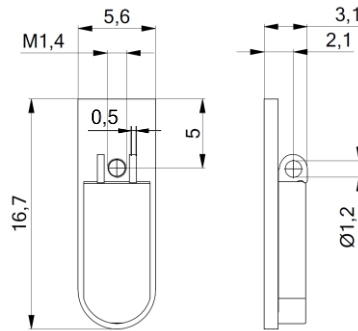


patented

73-04061.900

fixing with screw

mechanism not exchangeable



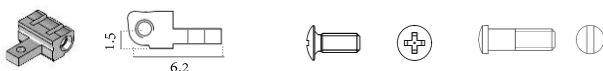
Barreling cap for case 91-05061
Milling tool 20-47448

Matching parts - Standard

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws	Fixation to temple
<p>33-04061 33-04071 round foot 33-04261 off center</p> <p>0°/6° inclination</p>	<p>33-04161</p>	<p>52-04161</p>	<p>51-05061</p> <p>11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm</p>	<p>99-02017 99-02017.800 self aligning for break off</p>	<p>99-02024</p>

Matching parts – Hidden solution

Three barrel block hinges I Fixation screws to front I Hinge screws

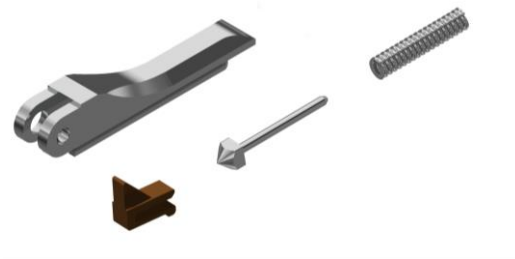


32-04053 I 99-01753 I 99-02023

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

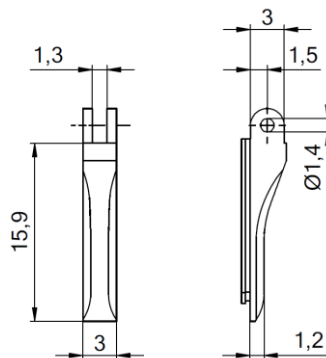
- Nickel silver spring hinge in low profile
- Flat design enables elegant integration in **titanium or aluminium temples**
- 75% of recycled nickel silver chips are used in the production of new cases



60-04088

fixing in temple groove

loose mechanism parts

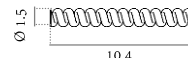
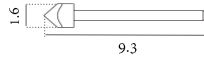
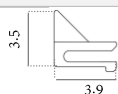
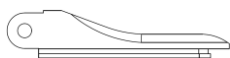


Case

Plunger

Spring bolt

Spring



60-04088.023

11-20132

11-20133.041

97-17899

Matching parts

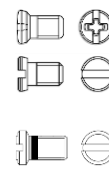
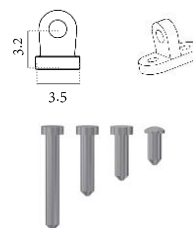
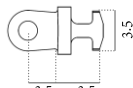
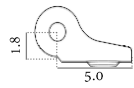
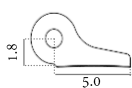
Front hinges
for soldering

Front hinges
for welding

Front hinges
for plastic frames 90°

Rivet hinges /
Rivets

Screws



52-05101

52-04266 titanium

33-05067

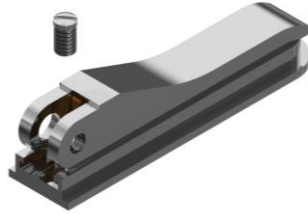
51-05005

- 11-20247 - 8.0 mm
- 11-20251 - 5.4 mm
- 11-20245 - 4.2 mm
- 11-20246 - 3.0 mm

- 99-01813
- 99-02501
- 99-01539

Features

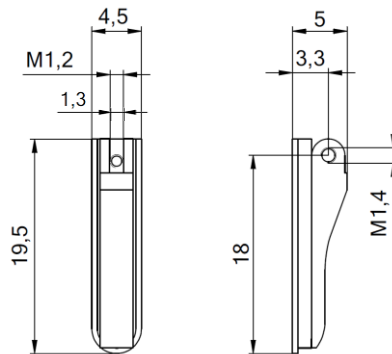
- Nickel silver spring hinge on short wire in low profile – nickel plated
- Flat design enables elegant integration in **buffalo horn or wooden temples**
- Stable pre-assembled spring mechanism
- MOQ 200 pairs
- 75% of recycled nickel silver chips are used in the production of new cases



60-03088

fixing with screw

mechanism not exchangeable



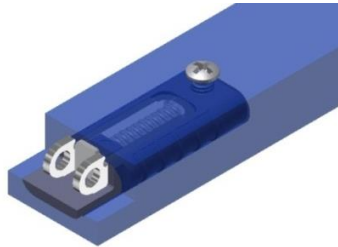
Milling tool 20-47441

Matching parts

Front hinges for plastic frames 90°	Rivet hinges / Rivets	Hinge screws	Fixation to temple
33-05066	51-05005 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-01813 99-02501 99-01539	99-02018

Features

- Carbon fiber spring hinge carrier
- Easy assembly with screw mainly in **injected or 3D printed temples**
- Stable U-shaped mechanism in stainless steel already pre-assembled
- Zero rocking & easy adjustment with flexUno two barrel construction
- MOQ 500 pairs
- 90% of recycled carbon chips are used in the production of new carrier

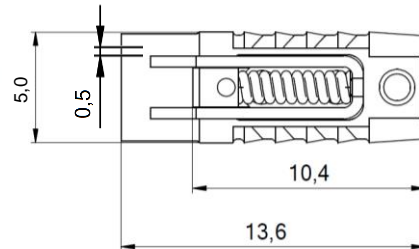
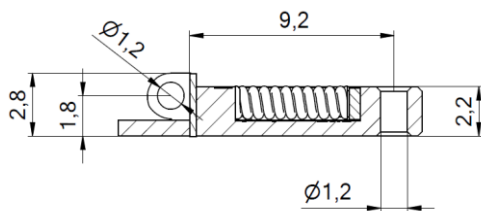


patented

60-64050

fixing with screw

mechanism exchangeable



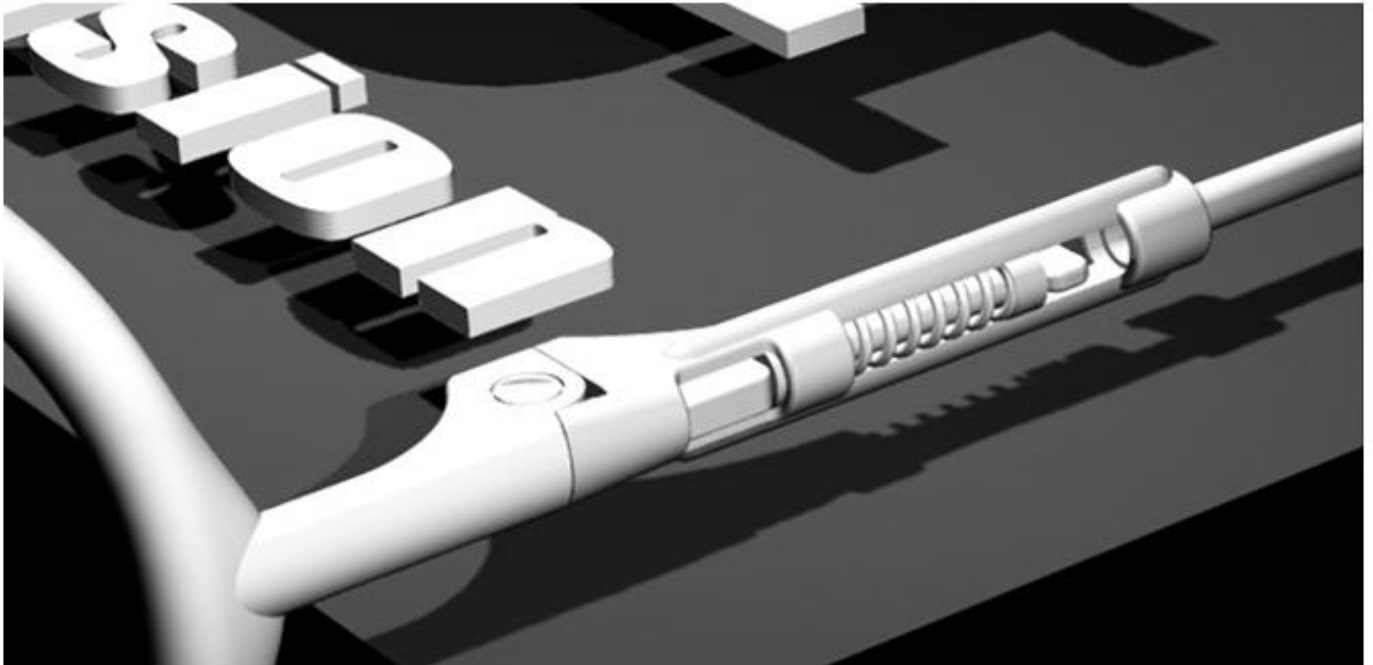
Matching parts - Standard

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Rivet hinges / Rivets	Hinge screws	Fixation of ShuttleFlex with temple
33-04061 33-04071 round foot 33-04261 off center 0°/6° inclination	33-04161	52-04161	51-05061 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-02017 99-02028 self aligning 99-02017.800 self aligning for break off	99-01729.090 99-01727.090 smaller head 99-00064 11-20010 Pin

Matching parts – Hidden solution

One barrel block hinges I Fixation screws to front I Hinge pins	Three barrel block hinges I Fixation screws to front I Hinge screws
32-04060 I 99-00064 I Pin 11-20010 32-04059 I 99-01753 I Pin 11-20010	32-04054 I 99-00064 I 99-02023 32-04053 I 99-01753 I 99-02023

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm



I Variety I Processability I Endurance I

	width mm	article	page
flexIno	S	60-04015	70
	M short	60-46500	71
	M	60-44022	72
	L	60-04055	73
flexUno	XL short	60-44063.20x	74
		60-44063.8xx	75

Features

- One barrel spring mechanism in stainless steel (0.6 mm wide) – not plated
- To use in metal or titanium temples
- Gold plating protection for titanium temples against aggressive acids
- Recommended temple width 1.9 – 2.6 mm



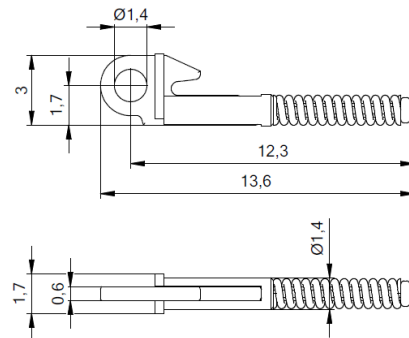
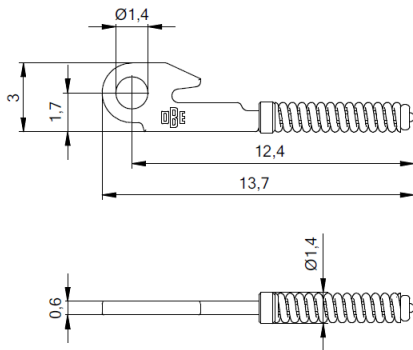
patented

60-44015.100

fixation by peening

60-44015.8XX

fixation by peening



Washer width (mm)

1.7

Features

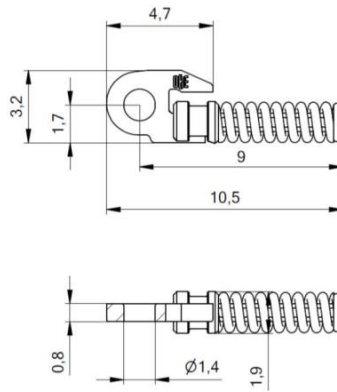
- One barrel spring mechanism in stainless steel (0.8 mm wide) – not plated
- To use in **metal temples or end pieces**
- Gold plating protection for titanium temples against aggressive acids
- Recommended width 2.6 – 3.4 mm



patented

60-46500.120

fixation by peening or screw-in



Features

- One barrel spring mechanism in stainless steel (0.9 mm wide) – not plated
- To use in metal or titanium temples
- Gold plating protection for titanium temples against aggressive acids
- Recommended temple width 2.1 – 3.5 mm



patented

60-44022.200	fixation by peening	60-44022.500	fixation by peening	60-44022.8XX	fixation by peening
<p>Different washer widths available for titanium temples (mm)</p>					<p>2.00, 2.20, 2.40, 2.60, 3.00, 3.60, 3.40, 5.50</p>

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

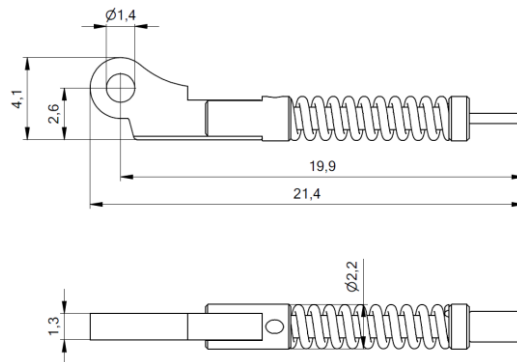
- One barrel spring mechanism in nickel silver (1.3 mm wide) – nickel plated
- To use in **metal temples with single action**
- Recommended temple width 2.8 – 6.0 mm



patented

60-04055.130

fixation by peening





Features

- Two barrel spring mechanism in stainless steel (2 x 0.4 mm) – no plating
- To use in **metal temples or end pieces**
- Recommended temple width 3.2 – 8.0 mm
- Zero rocking & easy adjustment with flexUno technology



patented

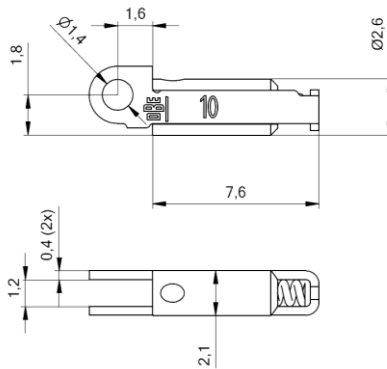
60-44063.200

fixation by peening

standard spring

60-44063.205

strong spring



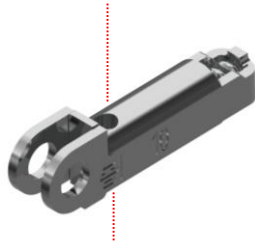
Matching parts

Front hinges for soldering	Front hinges for welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Step hinges for soldering	Screws
52-05067	52-04063	33-05363 33-04163 33-04067 off center 0°/6° inclination	33-04063	52-05363 52-05463	99-01814 99-02524 99-04814

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Features

- Two barrel spring mechanism in stainless steel (2 x 0.4 mm) – gold plated
- To use in metal or titanium temples or end pieces
- Recommended temple width 3.2 – 8.0 mm
- Zero rocking & easy adjustment with flexUno technology



patented

60-44063.855	fixation with pin or screw-in	strong spring	60-44063.820	fixation by peening	standard spring
			60-44063.825		strong spring

Matching parts

Front hinges for soldering and laser welding	Front hinges for welding	Screws
52-25065 titanium	52-24063 titanium	99-01814 99-02524 99-04814

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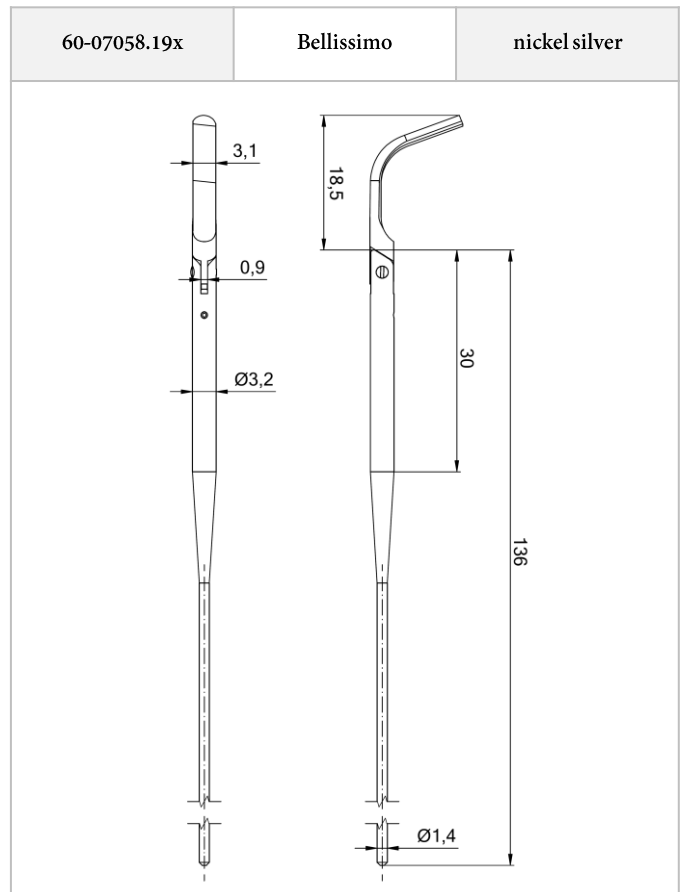
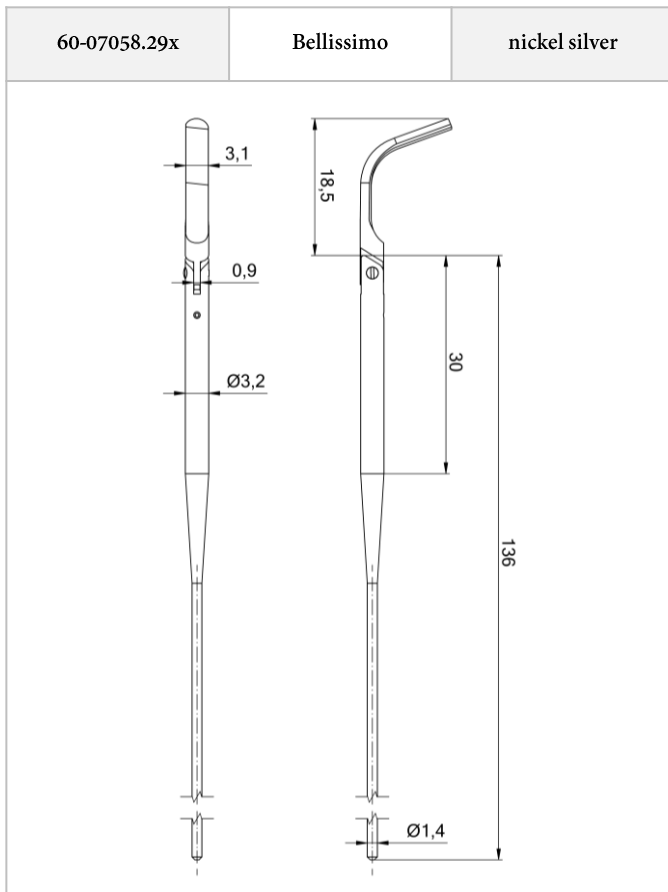
I Timelessness I Functionality I Material choice I

	width mm	article	page
Bellissimo	3.2	60-07058	77
Bello	2.3	60-07053	78
Bella	2.3	60-17051	79
Skinny	1.9	60-x7042	80
Stealth	1.9	60-x7043	81
Dune	3.2	60-07056	82
Fizzy	2.5	60-07055	83
Simplex	2.0	60-27019	84



Delivered assembled with endpiece

patented





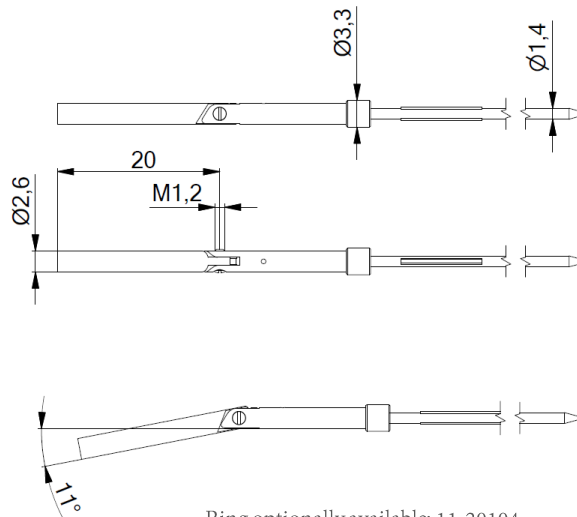
Delivered assembled with endpiece

patented

60-07053

Bello

nickel silver/ stainless steel



Ring optionally available: 11-20104





Delivered assembled with endpiece

patented

Catalogue 2023 I 2024 - Subject to change without prior notice - all measurements in mm

60-17051 with one piece end piece 52-14023.300	Bella	bronze
--	-------	--------

OBE Star nut M1.4

Screws:
99-01610

Safety

60-17051 with one piece end piece 52-14023.400	Bella	bronze
--	-------	--------

2x M1.4

Screws:
99-01610

Safety

60-17051.29X	Bella	bronze
--------------	-------	--------

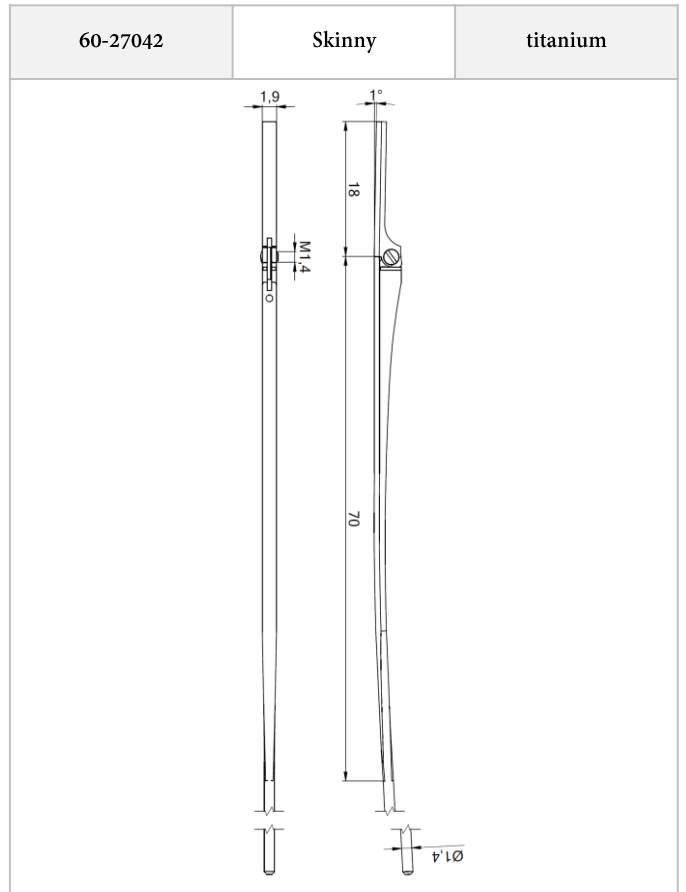
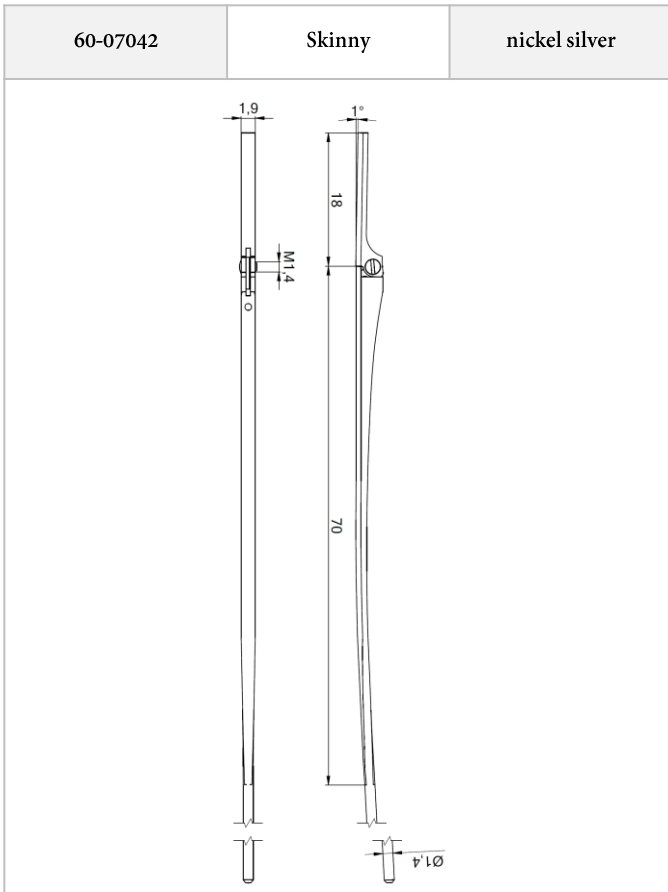
M1.4

Screws:
99-01610

Safety

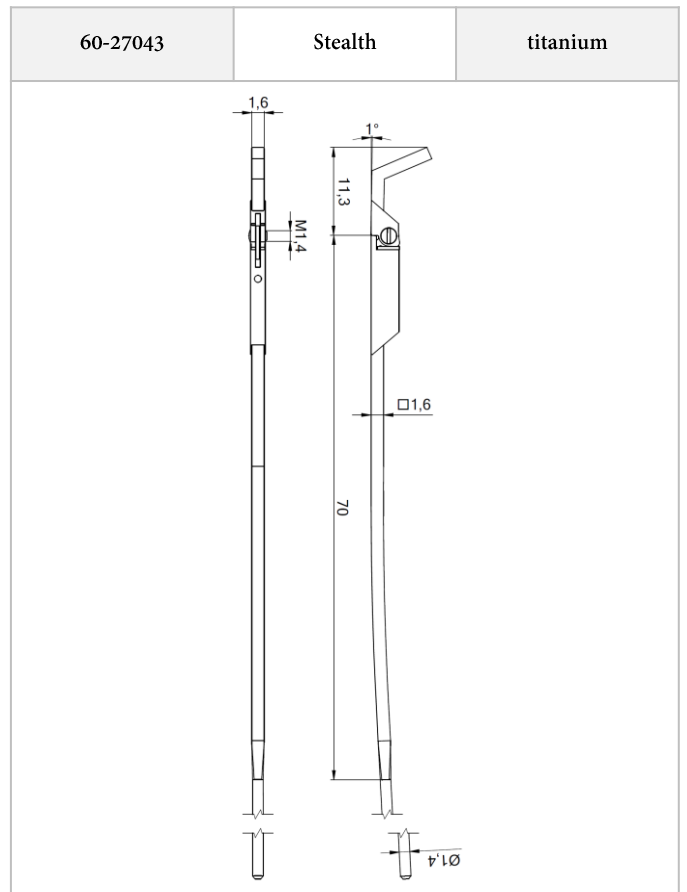
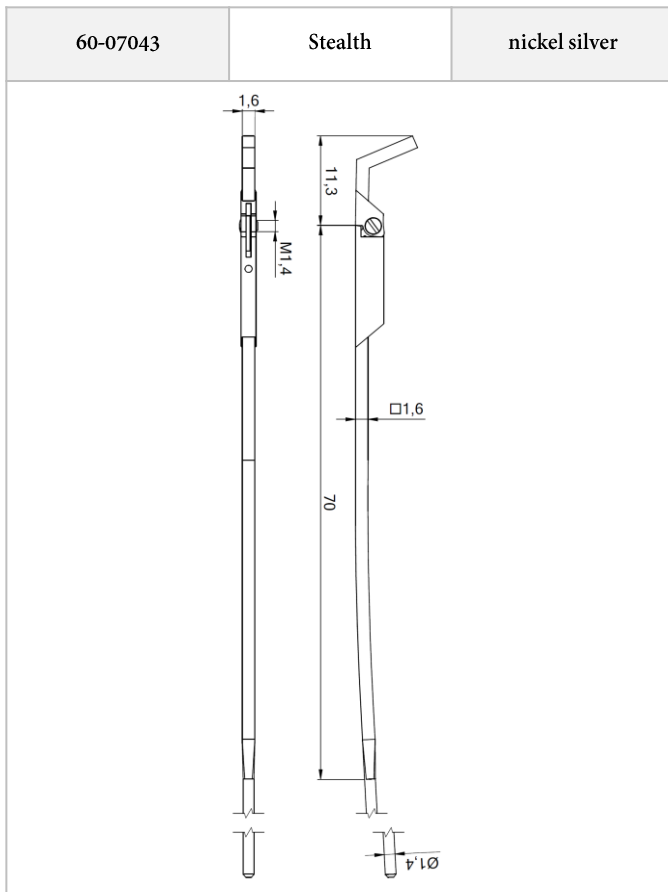


Delivered assembled with endpiece





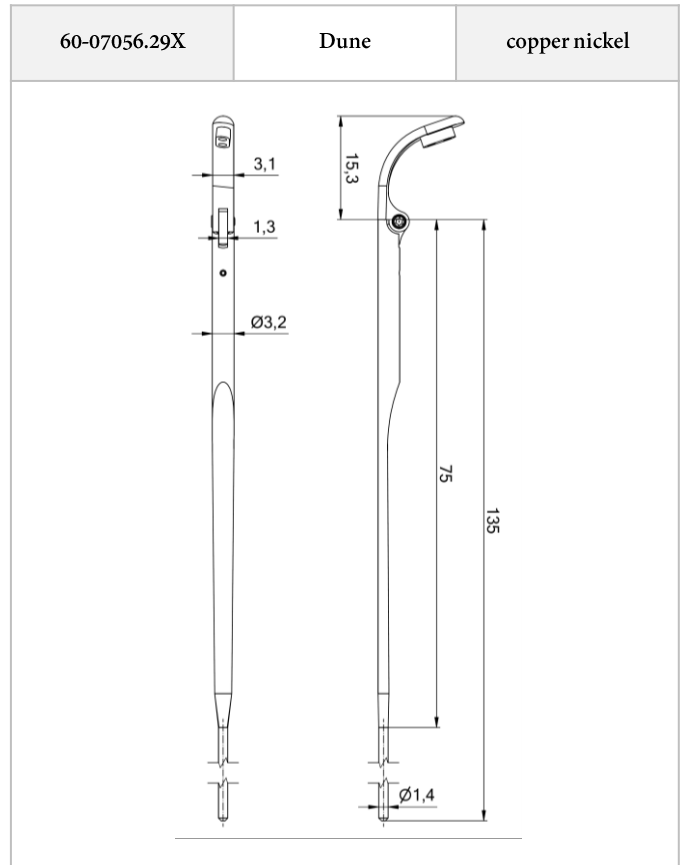
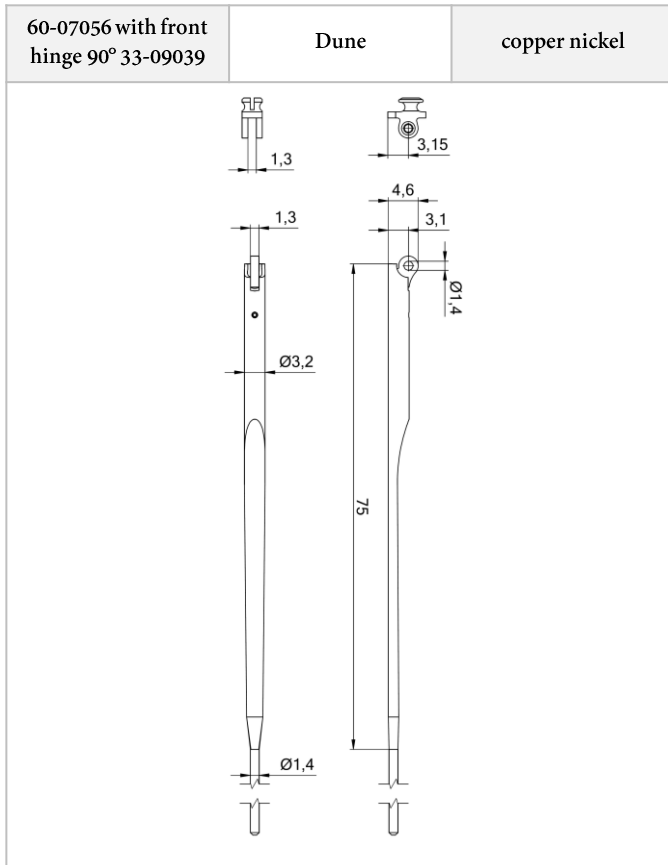
Delivered assembled with endpiece

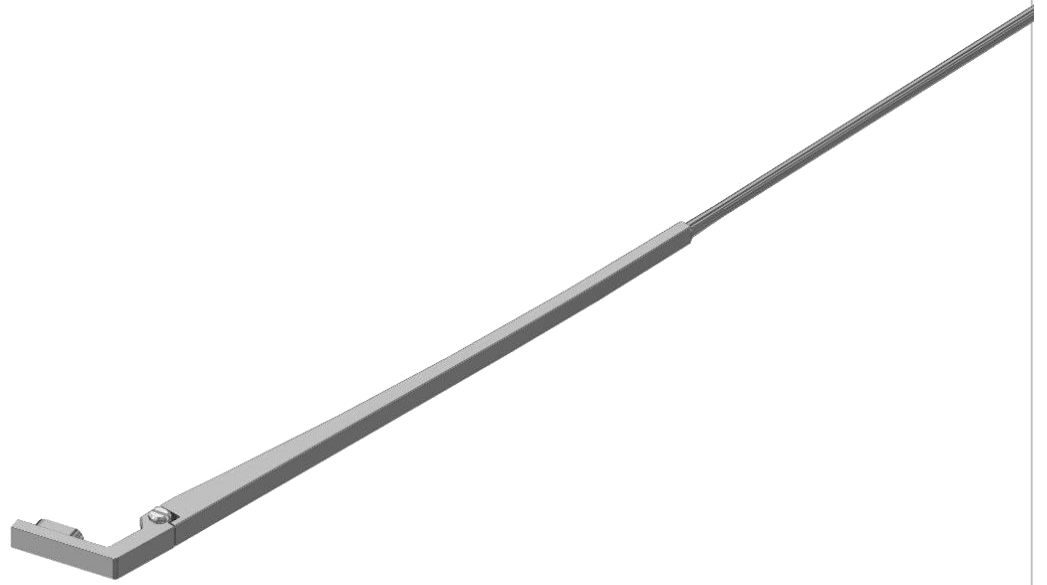




Delivered assembled with endpiece

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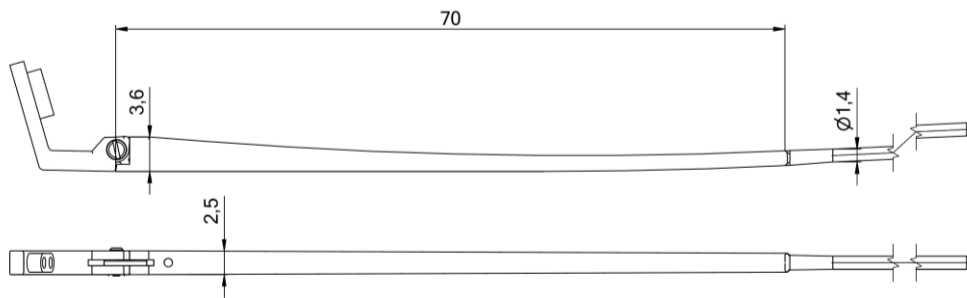


Delivered assembled with endpiece

60-07055

Fizzy

nickel silver



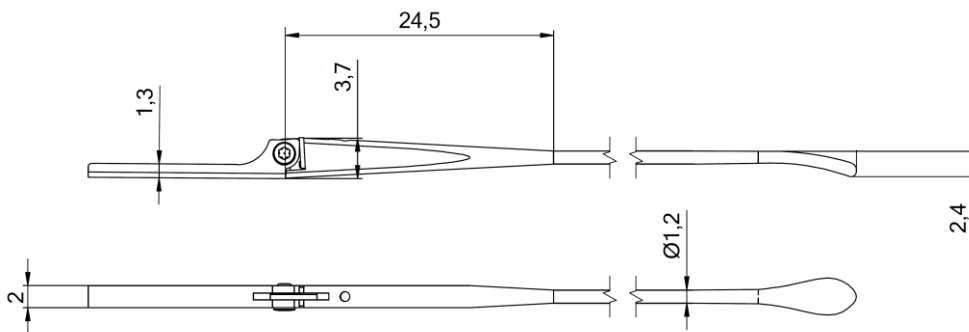


Delivered assembled with endpiece

60-25019

Simplex

titanium



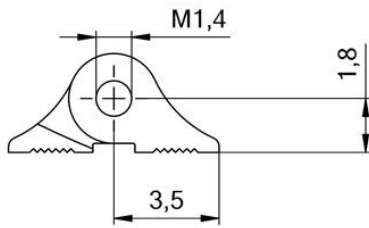
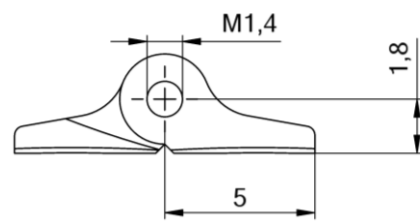
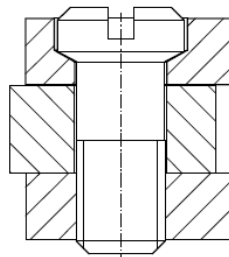
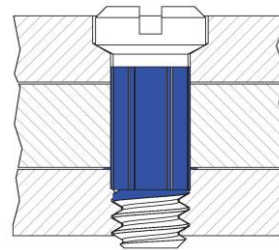


I Reliability I Comfort I Safety I

		width mm	article	page
Space hinges nickel silver	soldering & welding	2.1 - 4.0		86
Conical hinges nickel silver	soldering & welding	2.1 - 4.0		87
Regular hinges stainless steel	soldering & welding	1.5 - 3.0		88
Regular hinges titanium	soldering & welding	2.3 3.0		89

Features

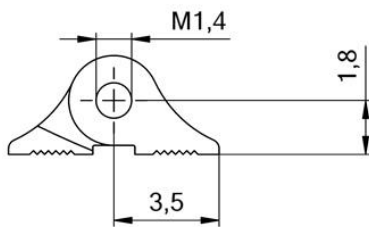
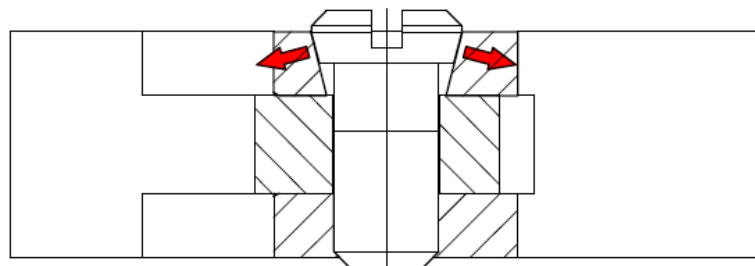
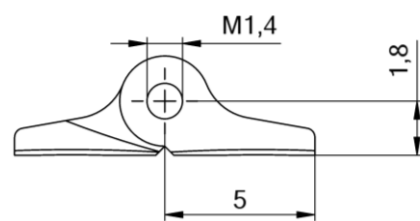
- Regular nickel silver hinge for **metal temples**
- Optional smooth movement & anti-loosening function with Space screws
- Available widths: 2.1 / 2.5 / 3.0 / 3.5 / 4.0 mm
- Delivery status loose – assembled with screw upon request


Profile: A

Profile: B

Standard

Space

Matching parts

Art.No.	51-04200	50-04236	51-04206	51-04120	51-04418	51-04121	51-04205
Profile	A soldering	B welding	A soldering	B soldering	A soldering	B soldering	A soldering
Width	2.1	2.1	3.0	3.0	3.5	3.5	4.0
Slot	0.9	0.9	1.2	1.2	1.4	1.4	1.6
Screw head Ø	2.5	2.5	2.0	2.0	2.0	2.0	2.0
Screws	 99-05328.600 99-02328.600 99-01435	 99-05324.600 99-02324.600 99-01375	 99-05324.600 99-02324.600 99-01375	 99-05325.600 99-02325.600 99-01376 99-01700	 99-05327.600 99-02327.600 99-01377		

Features

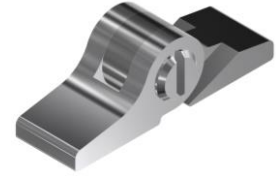
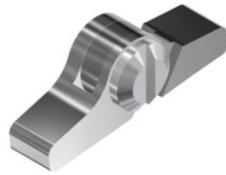
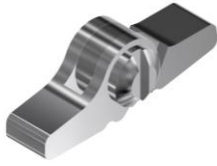
- Regular nickel silver hinge for **metal templates**
- Anti-loosening & overtightening function with conical head system
- Available widths: 2.1 / 3.0 / 3.5 / 4.0 mm
- Delivery status loose - assembled with screw upon request


Profile: A

Profile: B

Matching parts

Art.No.	51-04400	51-04408	51-04407	51-04405	50-04448	51-04401	51-04402	51-04412	51-04403
Profile	A soldering	B soldering	A soldering	B soldering	B welding	A soldering	A soldering	B soldering	A soldering
Width	2.1	2.1	2.5	2.5	2.5	3.0	3.5	3.5	4.0
Slot	0.9	0.9	1.0	1.0	1.0	1.2	1.4	1.4	1.6
Screw head Ø	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Screws	 99-01810 99-02506	 99-01811 99-02525 99-04811			 99-01813 99-02501		 99-01817 99-02502		 99-01816 99-02503 99-04816

Features

- Regular stainless steel hinge for **stainless steel temples**
- Anti-loosening function with Space Screws, ISS technology or conical head system
- Available widths: 1.5 / 2.1 / 3.0 mm
- Delivery status loose - assembled with screw upon request



Profile: A	soldering	Profile: B	welding	Profile: C	soldering

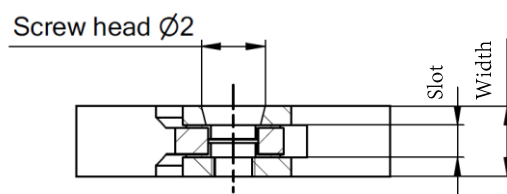
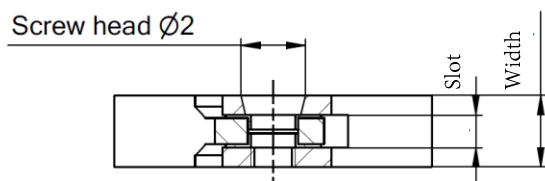
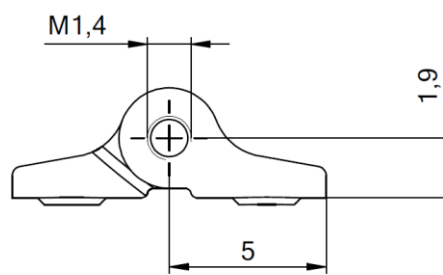
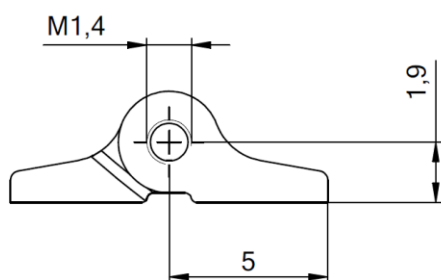
Matching parts

Art.No.	51-44520	50-44530	51-44015	50-44030	51-44534	50-44534	51-44526	51-44511
Profile	A	B	A	B	A	B	C	C
Width	1.5	1.5	1.5	1.5	2.1	2.1	3.0	3.0
Slot	0.7	0.7	0.7	0.7	0.9	0.9	1.2	1.3
Screw head Ø	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0
Screws	 99-02001	 99-02001	 99-01915	 99-01915	 99-01592 99-01850	 99-01592 99-01850	 99-05324.600 99-02324.600	 99-01813 99-02501

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Features

- Regular titanium hinge for **titanium temples**
- Anti-loosening function with conical head system
- Available widths: 2.3 & 3.0 mm
- Delivery status assembled with screw


Profile: A
soldering
Profile: B
welding

Matching parts

Art.No.	51-27412.100 ☹ 51-27412.200 ☹☹	50-27422.100 ☹	51-27414.100 ☹ 51-27414.200 ☹☹	50-27424.100 ☹ 50-27424.200 ☹☹
Profile	A	B	A	B
Width	2.3	2.3	3.0	3.0
Slot	1.0	1.0	1.2	1.2
Screw head Ø	2.0	2.0	2.0	2.0

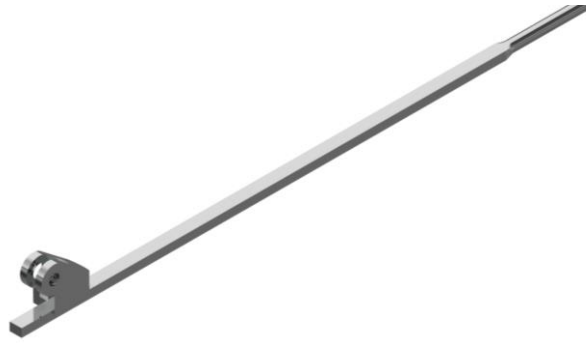


I Smooth movement I Safety I Personalisation I

	width mm	article	page
Hinges on wire	2.5 - 8.0		91-98
Animelle	4.0 - 4.5	70-0205x	99
Inject-it	1.2	70-0211x	100-101
	1.6	70-0211x	
ISH ² - Injection Safety Hinges	2x 1.2	33-04214	102
ISH - Injection Safety Hinges	1.3 - 1.7		103
Safety Rivet Hinges	2.6 - 8.0		104-109
Safety Plastic Hinges	3.0 - 6.0		110-111

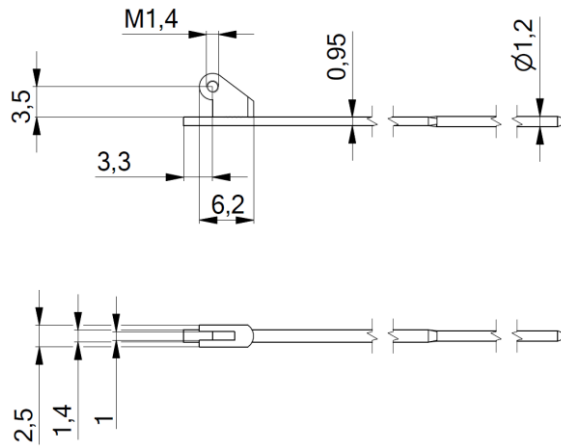
Features

- Super slim regular hinge on wire in stainless steel
- To be inserted in **acetate templates**
- Minimum width with plastic 2.8 mm
- Smooth movement and anti-loosening function with Space Screws

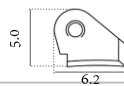


70-48716

insertion



Available separately



52-09080

Matching parts

Front hinges for soldering	Front hinges for welding	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Rivet hinges / Rivets	Screws
51-04405	50-04448	33-04553 0°/6° inclination	33-01870	51-05009 51-05007 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm 0°/6° inclination	99-05310.600 99-02310.600

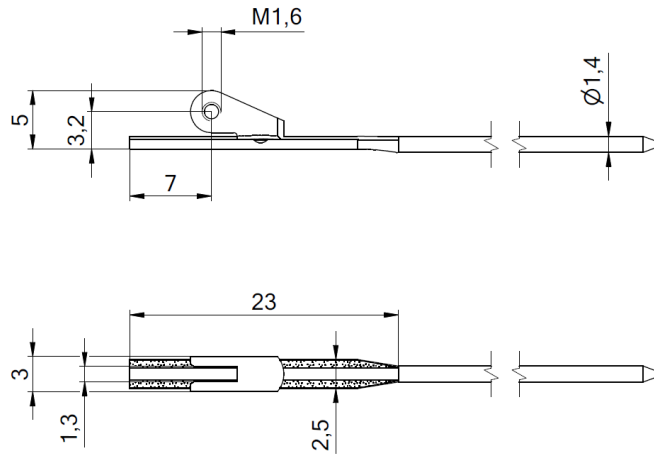
Features

- Slim regular hinge on wire in nickel silver – nickel plated
- To be inserted in **acetate templates**
- Minimum width with plastic 5.0 mm
- Smooth movement with Safety Screws or ISH technology
- 75% of recycled nickel silver material is used in the production of new wires

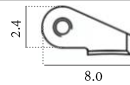


70-07621

insertion



Available separately



42-03984

Matching parts

Safety hinges for plastic frames 90°	Safety hinges for plastic frames 180°	Front hinges for plastic frames 90°	Step hinges for soldering	Screws
<p>ISH</p>	<p>ISH</p>			<p>Safety</p>
<p>33-04215 33-04211 round foot</p>	<p>33-04538</p>	<p>33-04221</p>	<p>52-04255</p>	<p>99-01723 for safety hinges 99-01458 for safety hinges 99-01523 for standard hinges</p>

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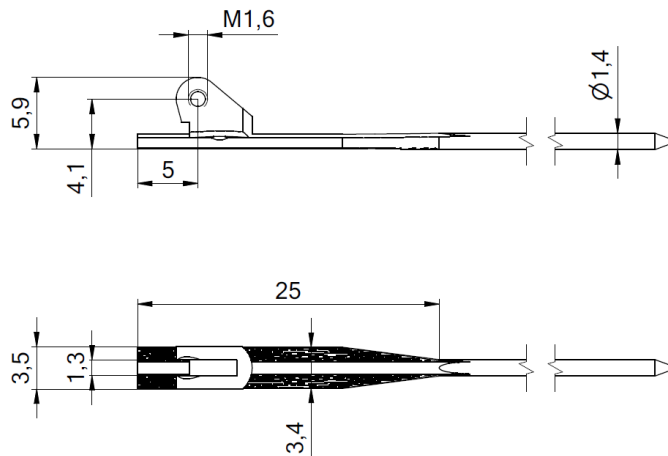
Features

- Midsize regular hinge on wire in nickel silver – nickel plated
- To be inserted in acetate templates
- Minimum width with plastic 5.5 mm
- Smooth movement with ISH technology
- 75% of recycled nickel silver material is used in the production of new wires

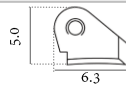


70-07759

insertion



Available separately



42-02459.000

Matching parts

Safety hinges for plastic frames 90°	Safety hinges for plastic frames 180°	Front hinges for plastic frames 90°	Step hinges for soldering	Rivet hinges / Rivets	Screws
<p>ISH</p>	<p>ISH</p>				
<p>33-04215 33-04211 round foot</p>	<p>33-04538</p>	<p>33-04221</p>	<p>52-04255</p>	<p>51-05039 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm</p>	<p>99-01357</p>

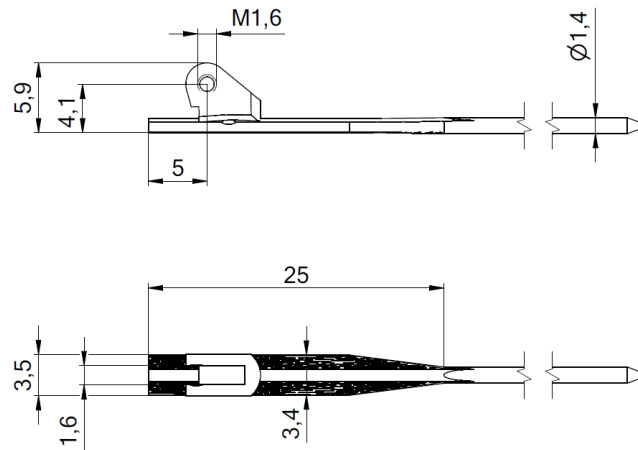
Features

- Midsize regular hinge on wire in nickel silver – nickel plated
- To be inserted in acetate templates
- Minimum width with plastic 5.5 mm
- Smooth movement with ISH technology
- 75% of recycled nickel silver material is used in the production of new wires

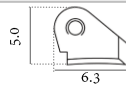


70-07761

insertion



Available separately



42-02459.160

Matching parts

Safety hinges for plastic frames 90°	Safety hinges for plastic frames 180°	Step hinge for soldering	Rivet hinges / Rivets	Screws
<p>ISH</p>	<p>ISH</p>			
<p>32-02483 33-04271</p>	<p>33-04537 33-04540</p>	<p>52-04256</p>	<p>51-05038 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm</p>	<p>99-01357</p>

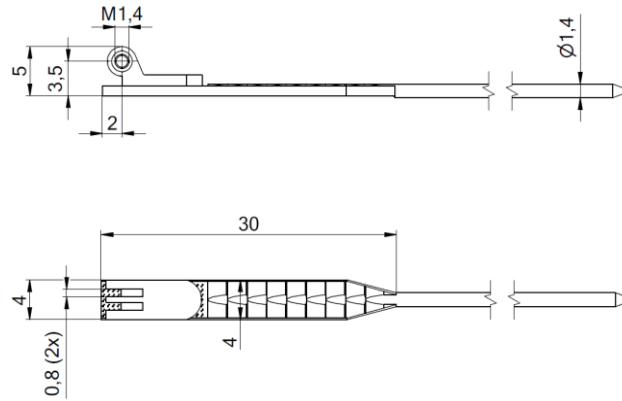
Features

- Wide regular hinge on wire in nickel silver – nickel plated
- To be inserted in acetate templates
- Minimum width with plastic 6.0 mm
- Smooth movement with Space Screws

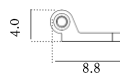


70-07793

insertion



Available separately



42-02029

Matching parts

Front hinges for plastic frames 90°	Rivet hinges / Rivets	Rivet hinges / Rivets	Screws
			<p>Space</p>
<p>33-04555</p> <p>0°/6° inclination</p>	<p>51-05000.903.03</p> <p>11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm 11-20260 - doublerivet</p>	<p>51-05024*</p> <p>11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm * 0°/6° inclination</p>	<p>99-05379.600</p> <p>99-02379.600</p>

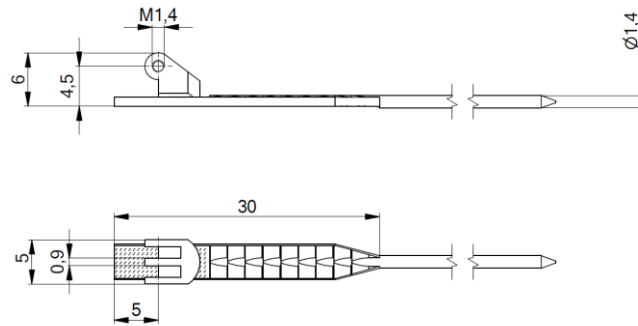
Features

- Wide regular hinge on wire in nickel silver – nickel plated
- To be inserted in acetate templates
- Minimum width with plastic 7.0 mm
- Smooth movement with Space Screws

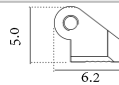


70-07765

insertion



Available separately



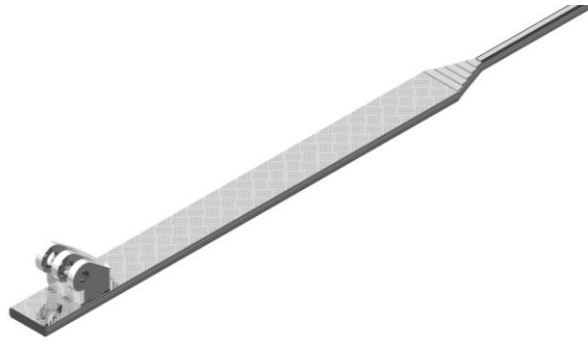
42-02465

Matching parts

Safety hinges for plastic frames 90°	Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Rivet hinges / Rivets	Screws
33-04214	33-04217 33-04232	33-04234	51-05028 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-05334.600 99-02334.600 99-47140 (for 33-04214) 99-44175 (for 33-04214)

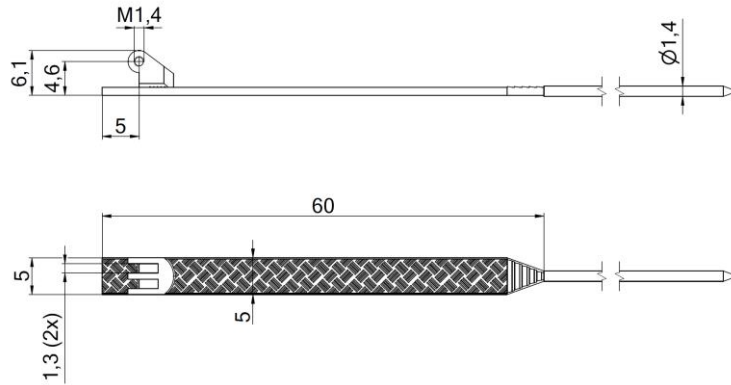
Features

- Wide regular hinge on wire in nickel silver – nickel plated
- To be inserted in **acetate templates**
- Minimum width with plastic 7.0 mm
- Perfect articulation with Space Screws or ISH technology

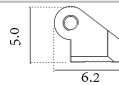


70-07794

insertion



Available separately



42-02465

Matching parts

Safety hinges for plastic frames 90°	Front hinges for plastic frames 90°	Rivet hinges/ Rivets	Screws
<p>ISH²</p>			<p>Space</p>
33-04214	33-04217 33-04232	51-05028 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	99-05334.600 99-02334.600 99-47140 (for 33-04214)

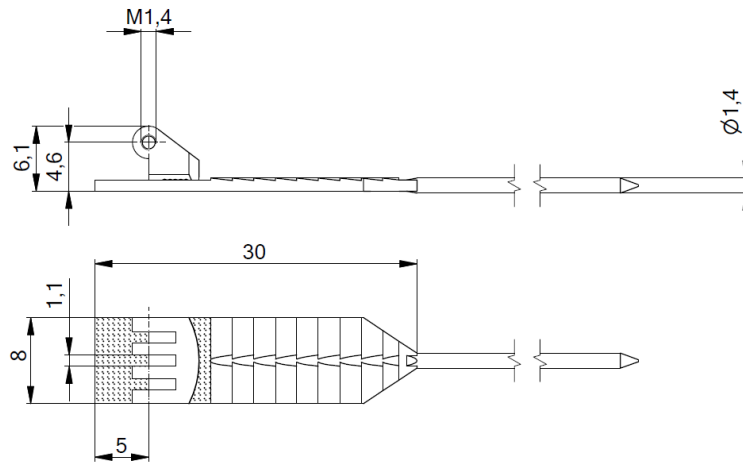
Features

- Extra wide regular hinge on wire in nickel silver – nickel plated
- To be inserted in acetate templates
- Minimum width with plastic 10.0 mm
- Smooth movement with Space Screws

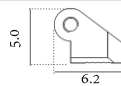


70-01037

insertion



Available separately



42-01036

Matching parts

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Rivet hinges / Rivets	Screws
33-04233	33-05147	51-05083	99-05380.600 99-02380.600
0°/6° inclination		11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm 0°/6° inclination	

Features

- Regular hinge on short hinge on wire – nickel plated
- Best application in **injected frames**
- Smooth movement with ISH technology



70-02050	injection	70-02057	injection

Matching parts 70-02050			Matching parts 70-02057	
Safety hinges for plastic frames 90°	Safety hinges for plastic frames 180°	Screws	Safety hinges for plastic frames 180°	Screws
32-02483	33-04540 33-04537	99-01455	33-04541 with stop	99-01377

Catologue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- One piece short hinge on wire in nickel silver – nickel plated
- Best application in **injected frames**
- Smooth movement with ISH or Space Screws



70-02110	injection	70-02111 – with injected plastic	injection
Screw 99-05324.600 99-02324.600		Screw 99-01375	

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Matching parts

Front hinges for plastic frames 90°	Front hinges for plastic frames 180°	Rivet hinges / Rivets	Step hinges
33-02111 33-02112	33-02110	51-02113 11-20247 - 8.0 mm 11-20251 - 5.4 mm 11-20245 - 4.2 mm 11-20246 - 3.0 mm	52-02111

Features

- One piece short hinge on wire in nickel silver – nickel plated
- Best application in **injected frames**
- Smooth movement with ISH or Space Screws

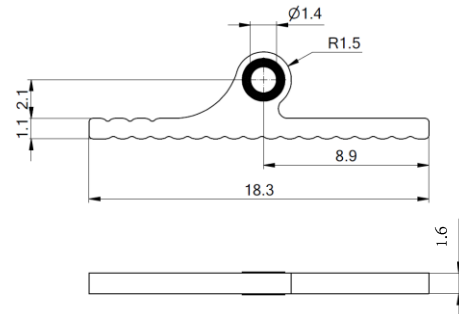
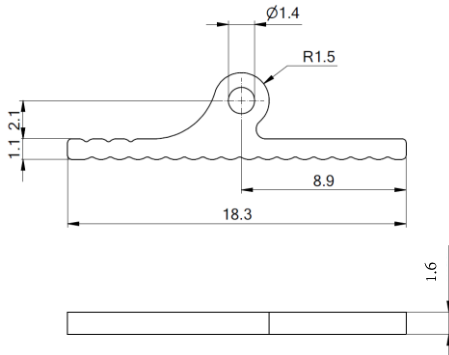


70-02116

injection

70-02117 – with injected plastic

injection



Screw 99-05327.600
99-02327.600



Screw 99-01377



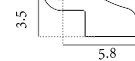
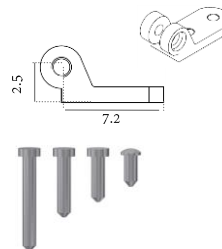
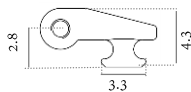
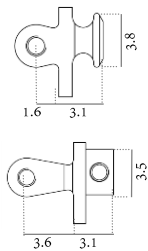
Matching parts

Front hinges
for plastic frames 90°

Front hinges
for plastic frames 180°

Rivet hinges /
Rivets

Step hinges



33-02117
33-02118

33-02116

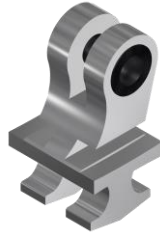
51-02129

11-20247 - 8.0 mm
11-20251 - 5.4 mm
11-20245 - 4.2 mm
11-20246 - 3.0 mm

52-02116

Features

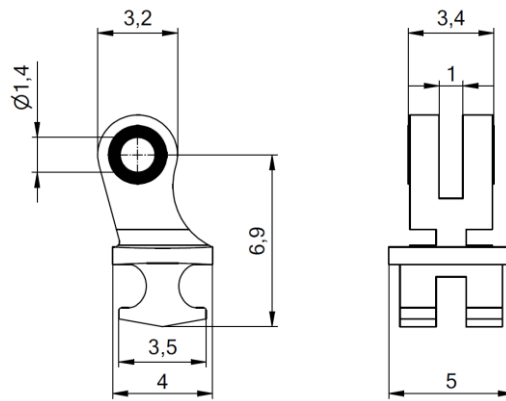
- ISH front hinge with double barrel made from nickel silver
- Maintenance free anti-rocking front hinge
- Consistent & smooth temple movement
- For full acetate frames
- Can be bent (6°)



patent pending

33-04214

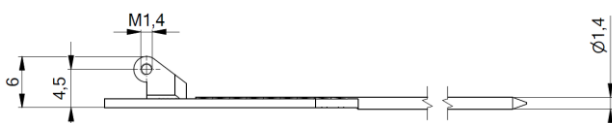
insertion



Matching parts

Hinges on wire

Screws



70-07765

99-47140

Features

- Nickel silver front hinges with ISH technology for smooth movement – nickel plated
- Best application in **full acetate frames**
- Optionally in 90° or 180°

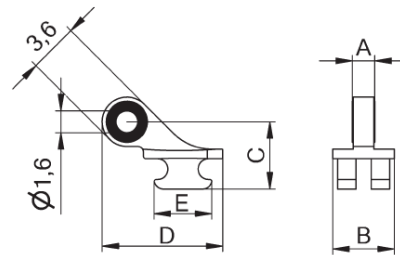
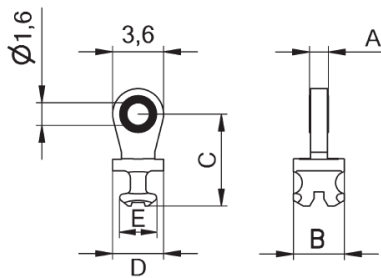


90°

insertion

180°

insertion



Front hinges 90° - 0°/6° inclination

Front hinges 180° - 0°/6° inclination

Art. No.	A	B	C	D	E
33-04215	1.3	2.8	6.5	4.0	3.0
33-04211	1.3	4.5	6.5	4.0	3.0
33-04271	1.6	4.5	6.5	4.0	3.0
32-02483	1.6	7.0	6.7	4.0	3.0

Art. No.	A	B	C	D	E
33-04538	1.3	3.5	4.9	8.8	4.2
33-04541 with stop	1.6	4.0	5.3	9.1	3.8
33-04537	1.6	4.5	4.9	8.8	4.2
33-04540	1.7	4.0	5.1	9.5	3.8

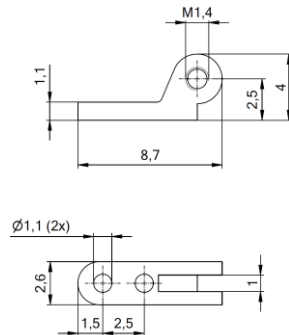
Features

- Nickel silver riveting hinges – nickel plated
- Main application in **plastic templates**
- Smooth movement with Space Screws



51-05009.903.01/02

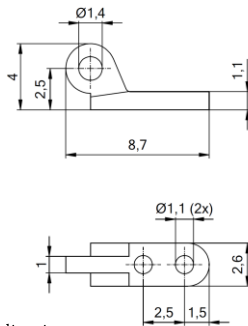
riveting



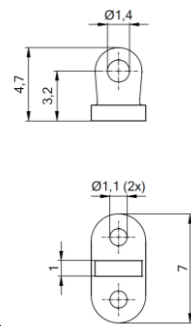
51-05009.903.03

51-05007

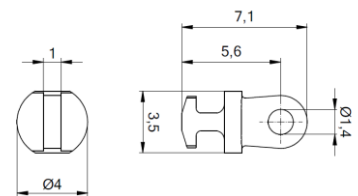
33-04553



0°/6° inclination



0°/6° inclination

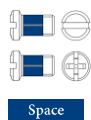


0°/6° inclination

Matching parts

Screws

Rivets



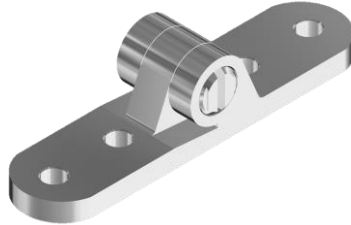
99-05310.600
99-02310.600

11-20247 - 8.0 mm
11-20251 - 5.4 mm
11-20245 - 4.2 mm
11-20246 - 3.0 mm

11-20260 - double rivet

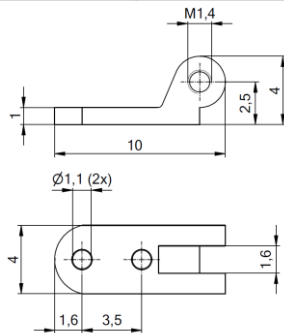
Features

- Nickel silver riveting hinges – nickel plated
- Main application in **plastic templates**
- Smooth movement with Space Screws



51-05010.903.01/02

riveting

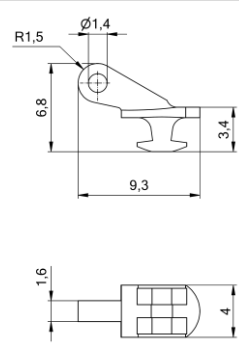
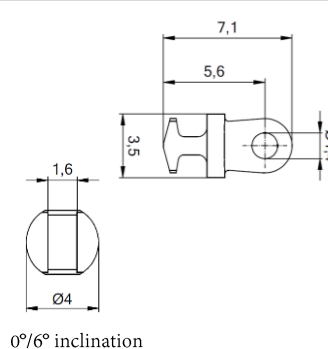
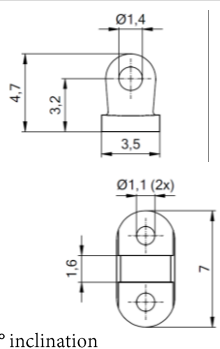
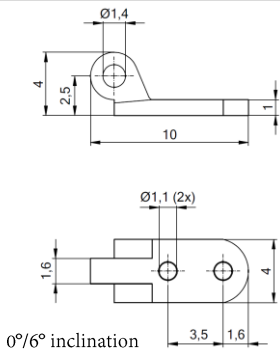


51-05010.903.03

51-05008

33-04552

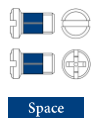
33-04560



Matching parts

Screws

Rivets



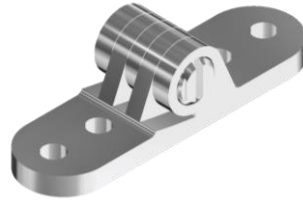
99-05327.600
99-02327.600



11-20247 - 8.0 mm
11-20251 - 5.4 mm
11-20245 - 4.2 mm
11-20246 - 3.0 mm
11-20260 - double rivet

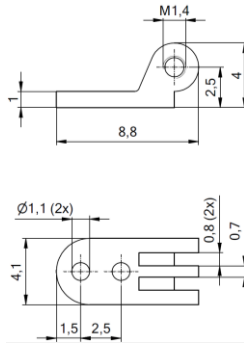
Features

- Nickel silver riveting hinges – nickel plated
- Main application in **plastic templates**
- Smooth movement with Space Screws



51-05000.903.01/02

riveting

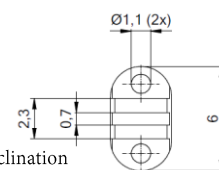
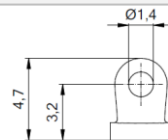
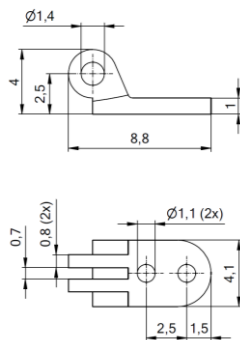


0°/6° inclination

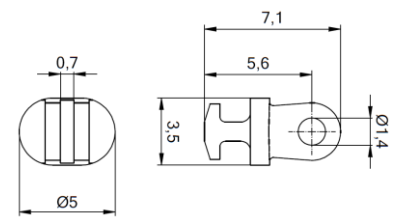
51-05000.903.03 - 0° inclination
51-05068.963.03/04 - 6° inclination

51-05024

33-04555



0°/6° inclination

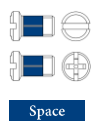


0°/6° inclination

Matching parts

Screws

Rivets



Space



99-05379.600

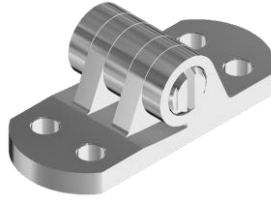
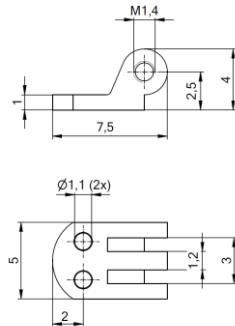
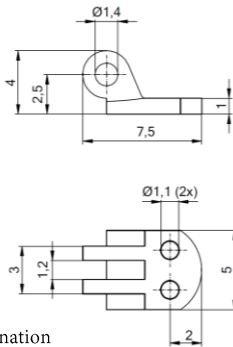
99-02379.600

11-20247 - 8.0 mm
11-20251 - 5.4 mm
11-20245 - 4.2 mm
11-20246 - 3.0 mm

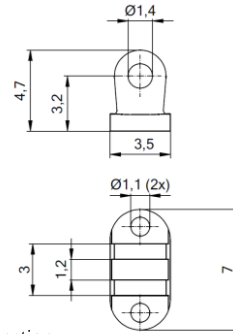
11-20260 - double rivet

Features

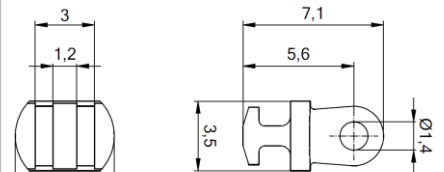
- Nickel silver riveting hinges – nickel plated
- Main application in **plastic templates**
- Smooth movement with Space Screws


51-05011.903.01/02
riveting

51-05011.903.03
51-05019
33-04554


0°/6° inclination



0°/6° inclination



0°/6° inclination

Matching parts

Screws

Rivets



Space



99-05334.600

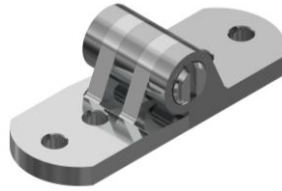
99-02334.600

 11-20247 - 8.0 mm
 11-20251 - 5.4 mm
 11-20245 - 4.2 mm
 11-20246 - 3.0 mm

11-20260 - double rivet

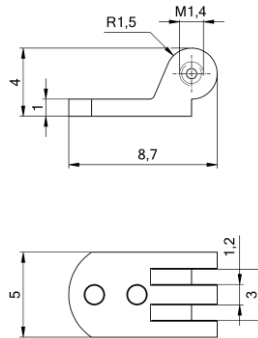
Features

- Nickel silver riveting hinges – nickel plated
- Main application in **plastic templates**
- Smooth movement with Space Screws



51-09030.903.01/02

riveting

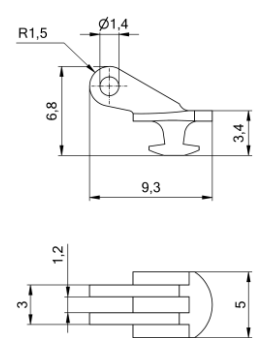
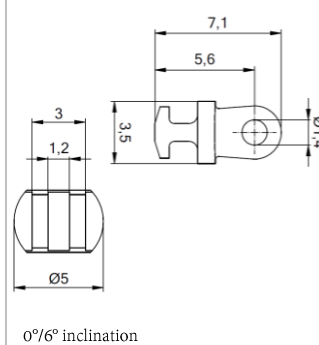
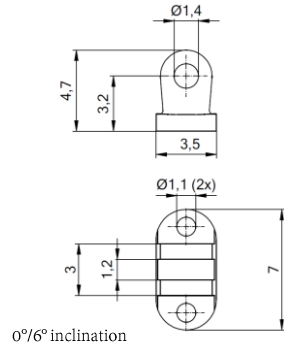
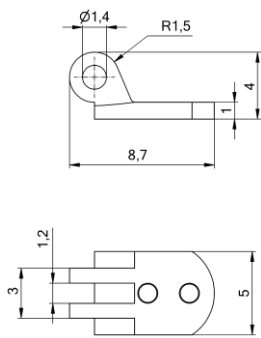


51-09030.903.03

51-05019

33-04554

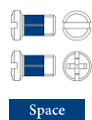
33-04561



Matching parts

Screws

Rivets



99-05334.600
99-02334.600



11-20247 - 8.0 mm
11-20251 - 5.4 mm
11-20245 - 4.2 mm
11-20246 - 3.0 mm

11-20260 - double rivet

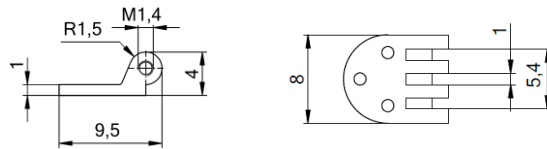
Features

- Nickel silver riveting hinges – nickel plated
- Main application in **plastic templates**
- Smooth movement with Space Screws



51-05082

riveting

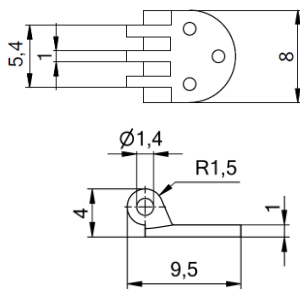


0°/6° inclination

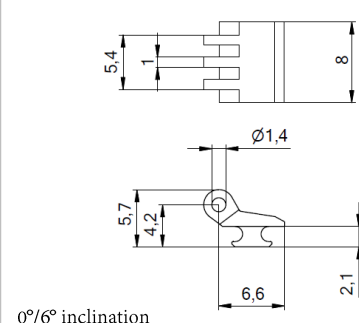
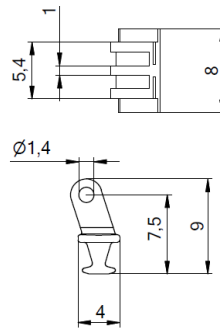
51-05083

33-04233

33-05147



0°/6° inclination

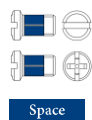


0°/6° inclination

Matching parts

Screws

Rivets

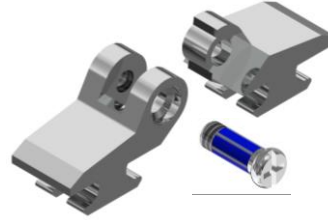


99-05380.600
99-02380.600

11-20247 - 8.0 mm
11-20251 - 5.4 mm
11-20245 - 4.2 mm
11-20246 - 3.0 mm

Features

- Nickel silver hinges – nickel plated
- Main application in **acetate frames**
- Smooth movement with Space Screws



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33-04305 / 33-04304	insertion
Matching parts	
Screws	
99-05324.600 99-02324.600	

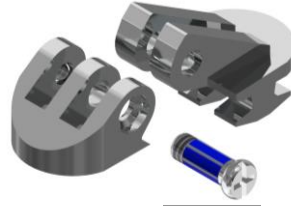
33-04307 / 33-04306 with stop function at 80°	insertion
Matching parts	
Screws	
99-05325.600 99-02325.600	

33-04309 / 33-04308 with stop function at 90°	insertion
Matching parts	
Screws	
99-05327.600 99-02327.600	

33-05142 / 33-05143 with stop function at 90°	insertion
Matching parts	
Screws	
99-05332.600 99-02332.600	

Features

- Nickel silver hinges – front part nickel plated
- Main application in **combination frames**
- Smooth movement with Space Screws



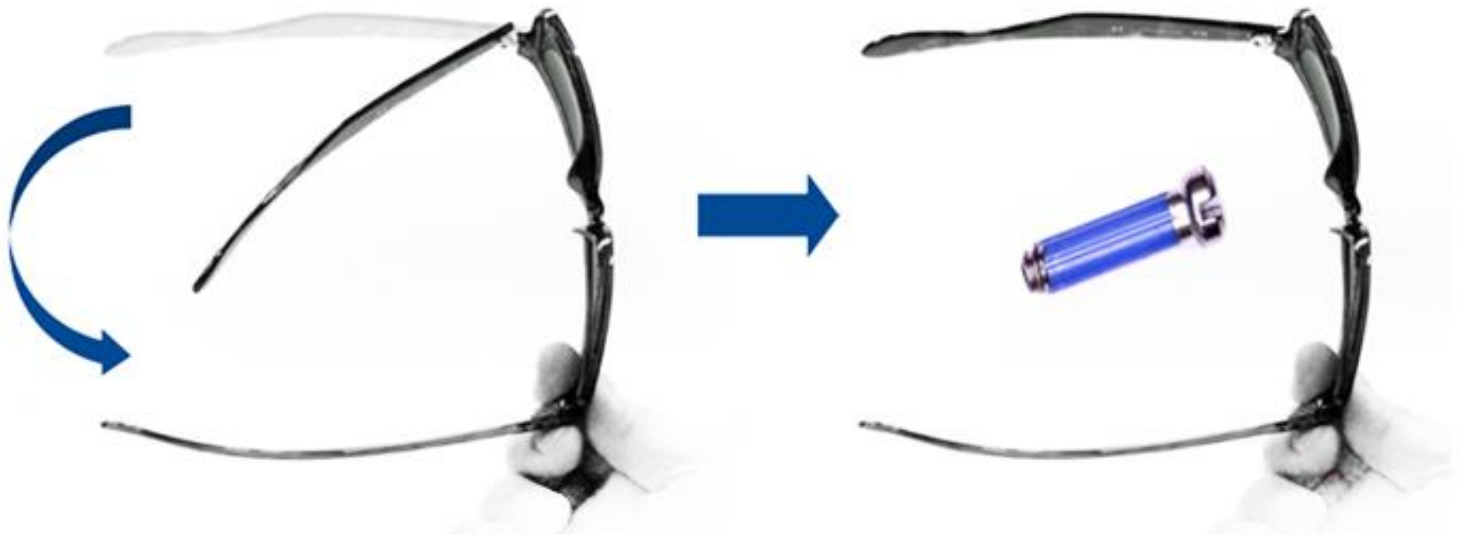
Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

42-04300 / 33-04300	soldering/insertion/injection
Matching parts	
Screws	
99-05324.600 99-02324.600	

42-04301 / 33-04301	soldering/insertion/injection
Matching parts	
Screws	
99-05325.600 99-02325.600	

42-04302 / 33-04302	soldering/insertion/injection
Matching parts	
Screws	
99-05327.600 99-02327.600	

42-04303 / 33-04303 with stop function at 80°	soldering/insertion/injection
Matching parts	
Screws	
99-05332.600 99-02332.600	

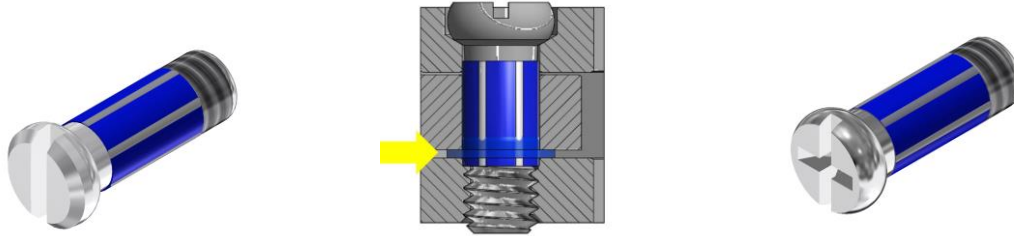
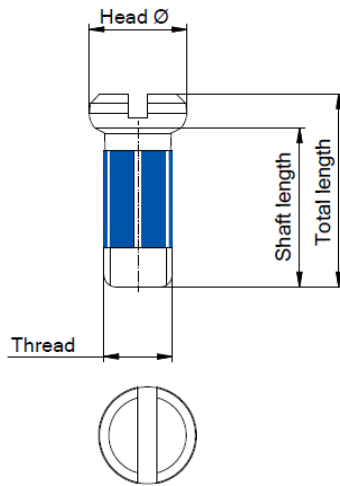
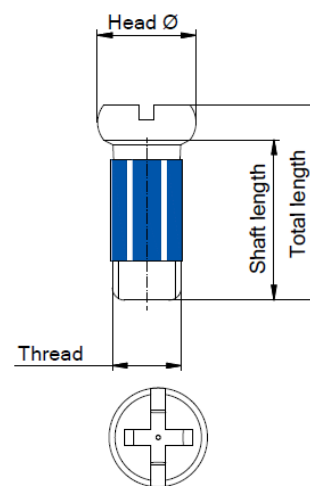


I Movement control I Loss control I Break control I

	width mm	article	page
Space Screws for hinges	M1.4		113
Safety Screws for rim locks	M1.2, M1.4		114
6 point star screws	M1.4		115
Direct joining screws	DJ1.2, DJ1.4		116
Conical head screws	M1.2, M1.4, M1.6		117
Flat head screws	M1.2, M1.4, M1.6		118
Dummy screws	M1.4		119
Pins-up fixing system		64-4200x	120
Safety Nut	M1.2	93-02525	121
	M1.4	93-02524	122
Blocks / Pins			123
Oil pen			124

Features

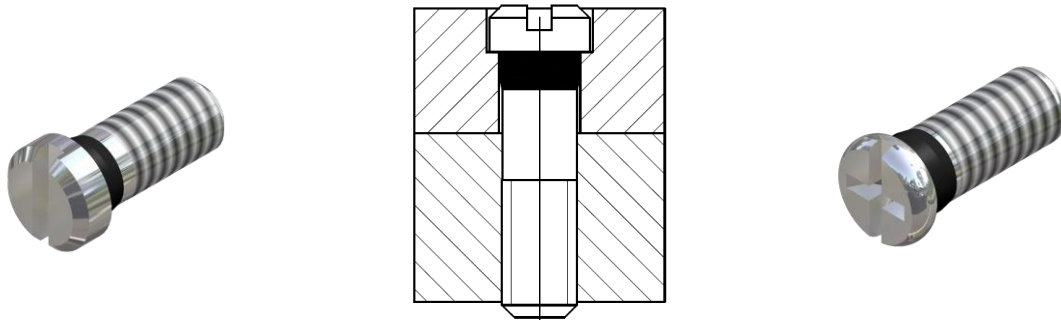
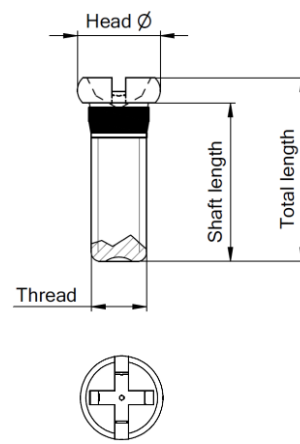
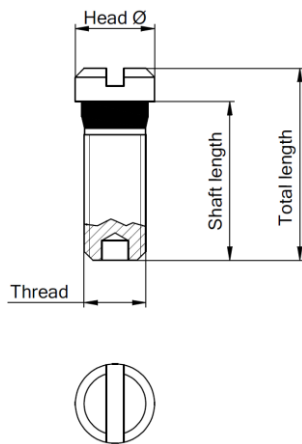
- Stainless steel screws with six bumpers for optimum articulation against floppy temples
- Main application: **non flex metal & plastic temples**
- Additional anti-loosening function integrated
- Extra tolerance compensation
- No backlash
- 90% of the recycled plastic sprues are used for injection of new Space Screws


patented
Minus head

Plus-minus head

Minus head
Plus-minus head

Art. No.	Thread	Total length	Shaft length	Head Ø	Art. No.	Thread	Total length	Shaft length	Head Ø
99-05305.600	M1.4	2.8	2.2	1.8	99-02305.600	M1.4	2.8	2.2	1.8
99-05310.600	M1.4	3.0	2.4	2.0	99-02310.600	M1.4	3.0	2.4	2.0
99-05322.600	M1.4	3.2	2.6	2.0	99-02322.600	M1.4	3.2	2.6	2.0
99-05311.600	M1.4	3.3	2.7	1.8	99-02324.600	M1.4	3.4	2.7	2.0
99-05324.600	M1.4	3.4	2.7	2.0	99-02328.600	M1.4	3.5	2.8	2.5
99-05328.600	M1.4	3.5	2.8	2.5	99-02393.600	M1.4	3.6	3.0	2.0
99-05325.600	M1.4	4.0	3.3	2.0	99-02325.600	M1.4	4.0	3.3	2.0
99-05301.600	M1.4	4.3	3.6	2.0	99-02301.600	M1.4	4.3	3.6	2.0
99-05327.600	M1.4	4.5	3.8	2.0	99-02327.600	M1.4	4.5	3.8	2.0
99-05379.600	M1.4	4.6	3.9	2.0	99-02379.600	M1.4	4.6	3.9	2.0
99-05333.600	M1.4	5.0	4.3	2.0	99-02333.600	M1.4	5.0	4.3	2.0
99-05334.600	M1.4	5.5	4.8	2.0	99-02334.600	M1.4	5.5	4.8	2.0
99-05331.600	M1.4	5.7	4.9	2.5	99-02374.600	M1.4	5.8	5.1	2.0
99-05332.600	M1.4	6.4	5.7	2.0	99-02356.600	M1.4	6.1	5.4	2.0
99-05380.600	M1.4	8.5	7.8	2.0	99-02332.600	M1.4	6.4	5.7	2.0
99-05308.600	M1.4	9.2	8.5	2.0	99-02376.600	M1.4	6.9	6.2	2.0
					99-02380.600	M1.4	8.5	7.8	2.0

Features

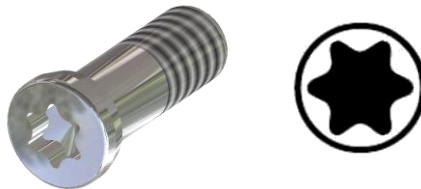
- Stainless steel screws with integrated safety system
- Main application for **rim locks in metal frames**
- Eliminate the risk of losing lenses by keeping them in position
- 90% of the recycled plastic sprues are used for injection of new Safety Screws


Minus head
Plus-minus head

Minus head
Plus-minus head

Minus head					Plus-minus head				
Art. No.	Thread	Total length	Shaft length	Head Ø	Art. No.	Thread	Total length	Shaft length	Head Ø
99-01546	M1.2	3.1	2.3	1.6	99-01624	M1.2	3.2	2.6	1.8
99-01548	M1.2	3.6	2.8	1.6	99-01627	M1.2	4.4	3.8	1.8
99-01549	M1.2	4.1	3.3	1.6	99-01690	M1.4	2.4	1.8	2.0
99-01550	M1.2	4.5	3.7	1.6	99-01610	M1.4	2.7	2.1	2.0
99-01551	M1.2	5.0	4.2	1.6	99-01606	M1.4	3.0	2.4	2.0
99-01538	M1.4	2.6	1.8	1.8	99-01644	M1.4	3.2	2.6	1.8
99-01542	M1.4	2.8	2.0	1.8	99-01604	M1.4	3.2	2.6	2.0
99-01541	M1.4	3.1	2.3	1.8	99-01609	M1.4	3.4	2.8	2.0
99-01539	M1.4	3.4	2.6	1.8	99-01603	M1.4	3.6	3.0	2.0
99-01543	M1.4	3.5	2.7	1.8	99-01601	M1.4	3.8	3.2	2.0
99-01584	M1.4	3.6	2.9	2.0	99-01608	M1.4	4.0	3.4	2.0
99-01537	M1.4	3.9	3.1	1.8	99-01602	M1.4	4.2	3.6	2.0
99-01545	M1.4	4.0	3.2	1.8	99-01607	M1.4	4.6	4.0	2.0
99-01585	M1.4	4.0	3.2	2.0	99-01605	M1.4	5.0	4.4	2.0
99-01540	M1.4	4.4	3.6	1.8	99-01600	M1.4	5.9	5.3	2.0
99-01547	M1.4	5.0	4.2	1.8					

Features

- Stainless steel screws in Torx® system
- Application in **all kind of frames**
- Optimal handling: no slipping – easy assembling – no over-torquing
- Long versions available for **rimless frames**
- 90% of the recycled plastic sprues are used for injection of new Safety Screws



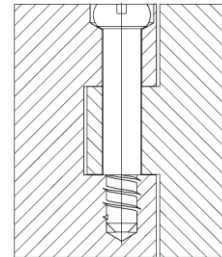
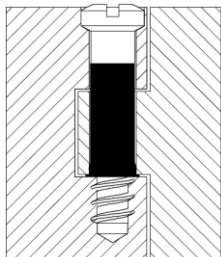
Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Conical head	Flat head	Injection safety screw for rim locks	Injection safety screw for hinges

Art. No.	Size	Thread	Total length	Shaft length	Head Ø	Screw type
99-04750	T3	M1.2	2.3	1.8	2.2	Flat head screw
99-04002	T3	M1.2	9.0	8.5	1.9	Flat head screw for rimless frames
99-04001	T3	M1.2	13.0	12.4	2.0	Flat head screw for rimless frames
99-04803	T3	M1.4	2.4	1.6	2.0	Conical head screw
99-04728	T3	M1.4	2.8	2.1	2.0	Flat head screw
99-04811	T3	M1.4	3.0	2.2	2.0	Conical head screw
99-04812	T3	M1.4	3.3	2.5	2.0	Conical head screw
99-04324	T3	M1.4	3.4	2.7	2.0	Injection safety screw for hinges
99-04609	T3	M1.4	3.5	2.8	2.0	Injection safety screw for rim locks
99-04724	T3	M1.4	3.5	2.8	2.0	Flat head screw
99-04814	T3	M1.4	3.8	3.0	2.0	Conical head screw
99-04701	T3	M1.4	3.9	3.2	2.0	Flat head screw
99-04602	T3	M1.4	4.3	3.6	2.0	Injection safety screw for rim locks
99-04327	T3	M1.4	4.5	3.8	2.0	Injection safety screw for hinges
99-04816	T3	M1.4	4.5	3.7	2.0	Conical head screw
99-04333	T3	M1.4	5.0	4.3	2.0	Injection safety screw for hinges
99-04730	T3	M1.4	6.0	5.3	2.0	Flat head screw
99-04726	T3	M1.6	5.0	4.3	2.5	Flat head screw
99-04725	T3	M1.6	5.3	4.5	2.5	Flat head screw

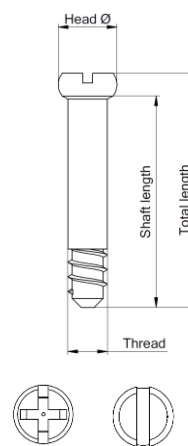
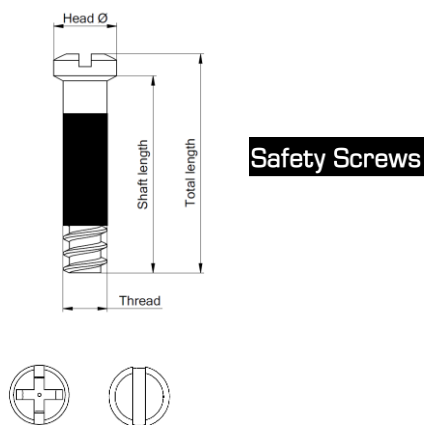
Features

- Stainless steel screws with self-tapping function for **plastic frames**
- Stainless steel screws with self-tapping function with ISS technology for **combination frames**
- 90% of the recycled plastic sprues are used for injection of new Safety Screws



DJ-Screws with Safety Technology

DJ-Screws with conical head



DJ-Screws with Safety Technology

DJ-Screws with conical head

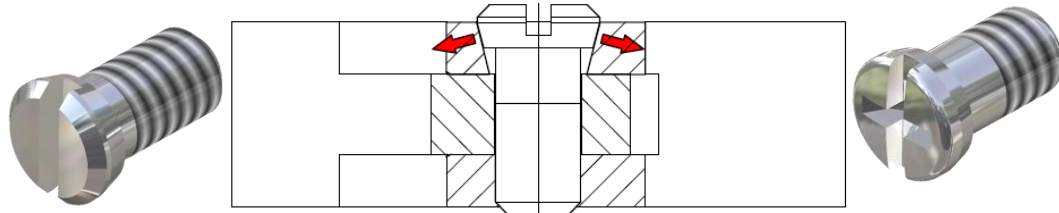
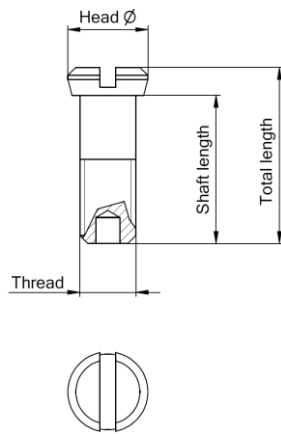
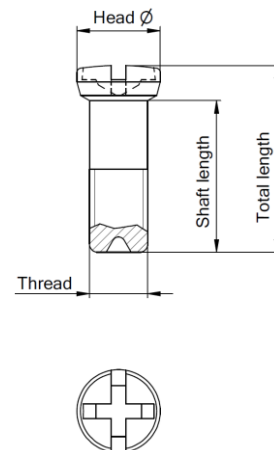
Art. No.	Thread	Total length	Shaft length	Head Ø
99-02902 	DJ1.4	6.2	5.5	2.0
99-02903 	DJ1.4	7.0	6.3	2.0

Art. No.	Thread	Total length	Shaft length	Head Ø
99-02901 	DJ1.2	2.7	2.1	1.6
99-02910 	DJ1.2	6.0	5.3	1.8
99-02906 	DJ1.4	7.0	6.3	2.0
99-02911 	DJ1.2	8.0	7.3	1.8

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Features

- Stainless steel screws with anti-loosening function
- Application in **OBE non flex & flex hinges**
- Enable equal and precise movement of the hinge

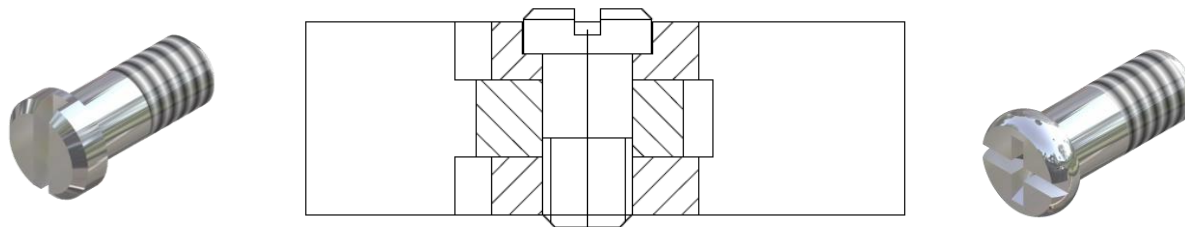

Minus head

Plus-minus head

Minus head
Plus-minus head

Art. No.	Thread	Total length	Shaft length	Head Ø
99-02550	M1.2	2.4	1.9	1.8
99-02530	M1.4	2.3	1.8	2.0
99-02506	M1.4	2.6	1.9	2.0
99-02525	M1.4	2.9	2.2	2.0
99-02507 Thread length 1.3	M1.4	3.2	2.5	2.0
99-02500 Thread length 1.6	M1.4	3.2	2.5	2.0
99-02501	M1.4	3.4	2.7	2.0
99-02524	M1.4	3.7	3.0	2.0
99-02502	M1.4	3.9	3.2	2.0
99-02503	M1.4	4.4	3.7	2.0
99-02511	M1.6	3.5	2.7	2.5

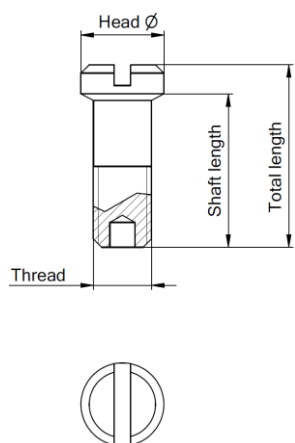
Art. No.	Thread	Total length	Shaft length	Head Ø
99-01803	M1.4	2.4	1.7	2.0
99-01810	M1.4	2.7	1.9	2.0
99-01811	M1.4	3.0	2.2	2.0
99-01812	M1.4	3.3	2.4	2.0
99-01813 Thread length 1.4	M1.4	3.5	2.7	2.0
99-01815 Thread length 1.9	M1.4	3.5	2.7	2.0
99-01814	M1.4	3.8	3.0	2.0
99-01817	M1.4	4.0	3.2	2.0
99-01818	M1.4	4.2	3.4	2.0
99-01816	M1.4	4.5	3.7	2.0

Features

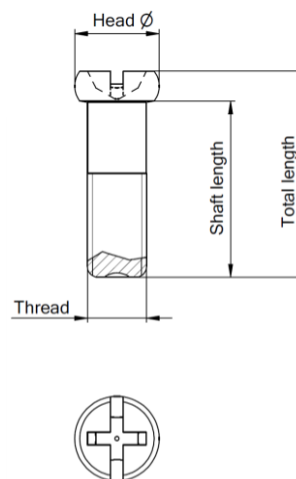
- Stainless steel screws
- Application: **non flex OBE hinges**
- Can be nickel or gold plated



Minus head



Plus-minus head

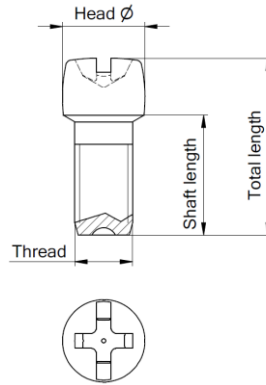

Minus head
Plus-minus head

Art. No.	Thread	Total length	Shaft length	Head Ø
99-02001	M1.2	2.3	1.8	1.8
99-02023	M1.2	4.4	3.9	1.6
99-02017	M1.2	5.2	4.5	1.6
99-02008	M1.4	2.7	2.1	2.0
99-02035	M1.4	3.4	2.7	1.8
99-01375	M1.4	3.4	2.7	2.0
99-01435	M1.4	3.6	3.0	2.5
99-01376	M1.4	3.9	3.2	2.0
99-01377	M1.4	4.4	3.7	2.0
99-01362	M1.6	3.4	2.8	2.5
99-01458	M1.6	3.5	2.9	2.5
99-01363	M1.6	4.0	3.3	2.5
99-01364	M1.6	4.4	3.7	2.5
99-01357	M1.6	4.8	3.9	2.8

Art. No.	Thread	Total length	Shaft length	Head Ø
99-01750	M1.2	2.0	1.5	2.2
99-01751	M1.2	2.3	1.8	2.2
99-01722	M1.4	2.1	1.5	2.5
99-01703	M1.4	3.5	2.8	1.8
99-01730	M1.4	3.5	2.8	1.9
99-01700	M1.4	3.9	3.2	2.0
99-01708	M1.4	4.2	3.5	1.8
99-01715	M1.4	4.7	4.0	2.0
99-01721	M1.4	5.1	4.4	2.0
99-01718	M1.4	5.5	4.8	2.0
99-01720	M1.4	6.2	5.5	2.0
99-01719	M1.4	6.4	5.7	2.0
99-01716	M1.4	6.7	6.0	2.0

Features

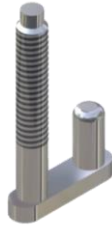
- Stainless steel screws replacing Safety screws in soldering process
- Application: **non flex metal frames**
- Easy handling & reusable


Plus-minus head

Plus-minus head

Art. No.	For hinges with wide of	Thread	Total length	Shaft length	Head Ø
99-01891	2.5 mm	M1.4	3.8	2.8	2.0
99-01893	3.0 mm	M1.4	4.3	2.8	2.0
99-01896	4.0 mm	M1.4	5.3	3.6	2.0
99-01898	4.5 mm	M1.4	5.8	4.0	2.0

Features

- Fixing end piece in stainless steel
- Best application in rimless frames for screw-in or pressure-mount
- Stable one piece construction

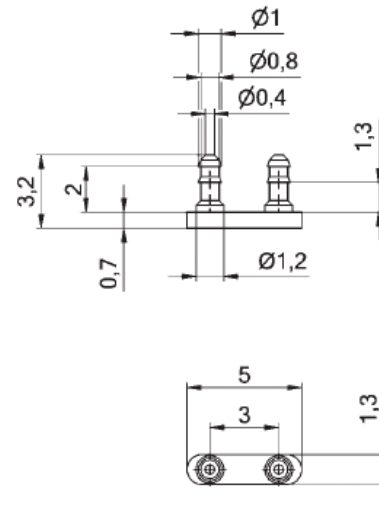
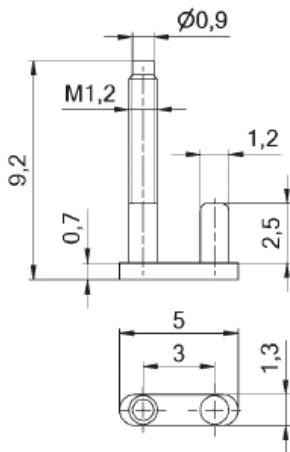


64-42004

screw-in

64-42005

clip-in

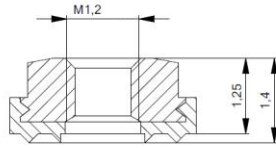
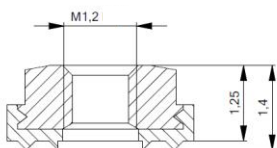


Matching parts

64-42004

OBE Star M1.2

OBE Star M1.2 gold plated

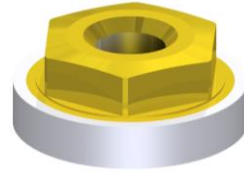
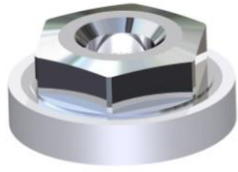


93-02525.340.00

93-02525.340.60

Features

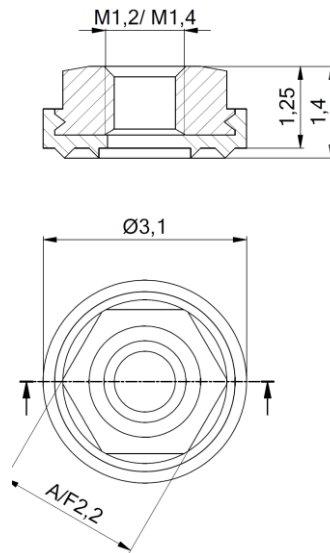
- Stainless steel safety nut with integrated plastic washer
- Application: **rimless frames**
- Anti-loosening effect
- Two versions available: in silver and gold color
- 90% of the recycled plastic sprues are used for injection of new Safety Nut



patented

Standard

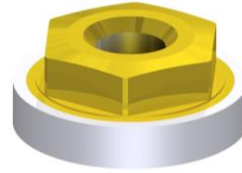
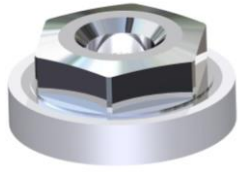
Gold plated



Version	Standard	Gold plated
M1.2	93-02525.340.00	93-02525.340.60
M1.4	93-02524.340.00	93-02524.340.60

Features

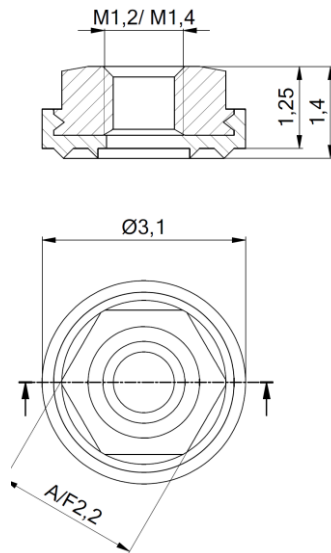
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patented

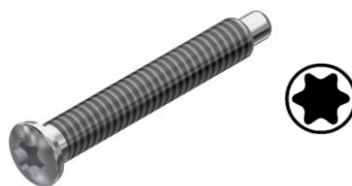
Standard

Gold plated



Version	Standard	Gold plated
M1.2	93-02525.340.00	93-02525.340.60
M1.4	93-02524.340.00	93-02524.340.60

Matching parts for 93-02525

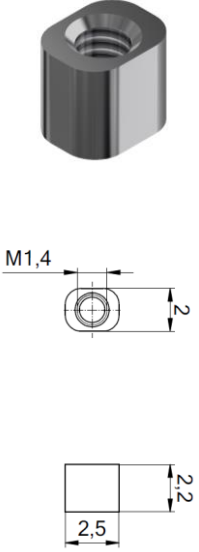
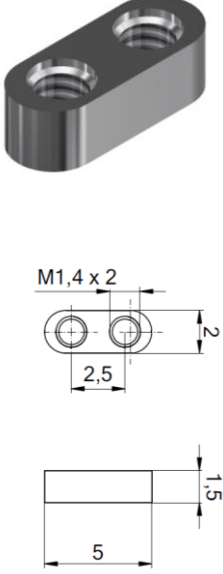
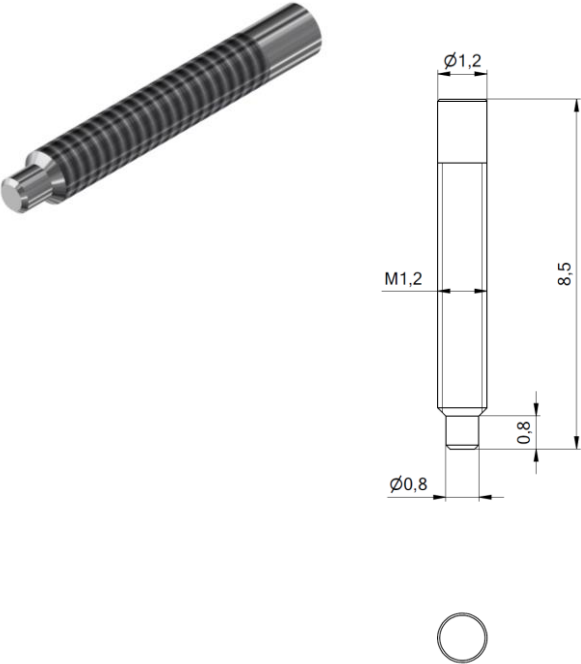
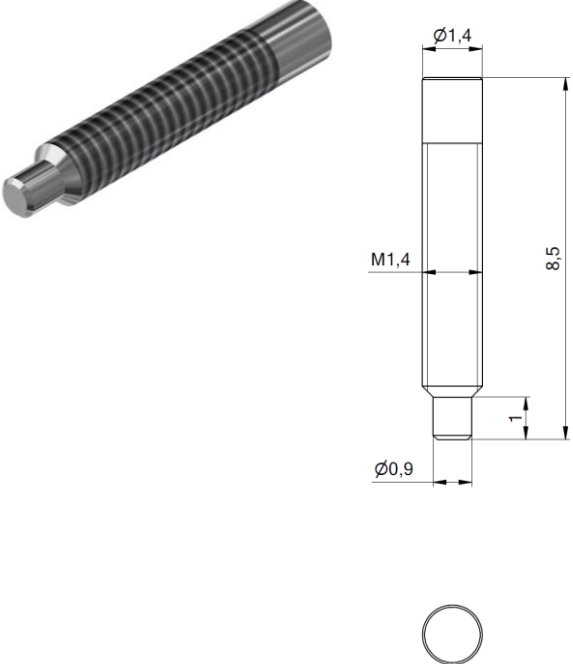


99-04002 9 mm
99-04001 13 mm

Catalogue 2023 I 2024 - Subject to change without prior notice – all measurements in mm

Features

- Connecting parts for end pieces
- Main application for **rimless frames**
- Increase combination possibilities to front parts

11-40341	nickel silver	11-20030	nickel silver
			
99-00069	stainless steel	99-00068	stainless steel
			

Catalogue 2023 I 2024 - Subject to change without prior notice - all measurements in mm

Features

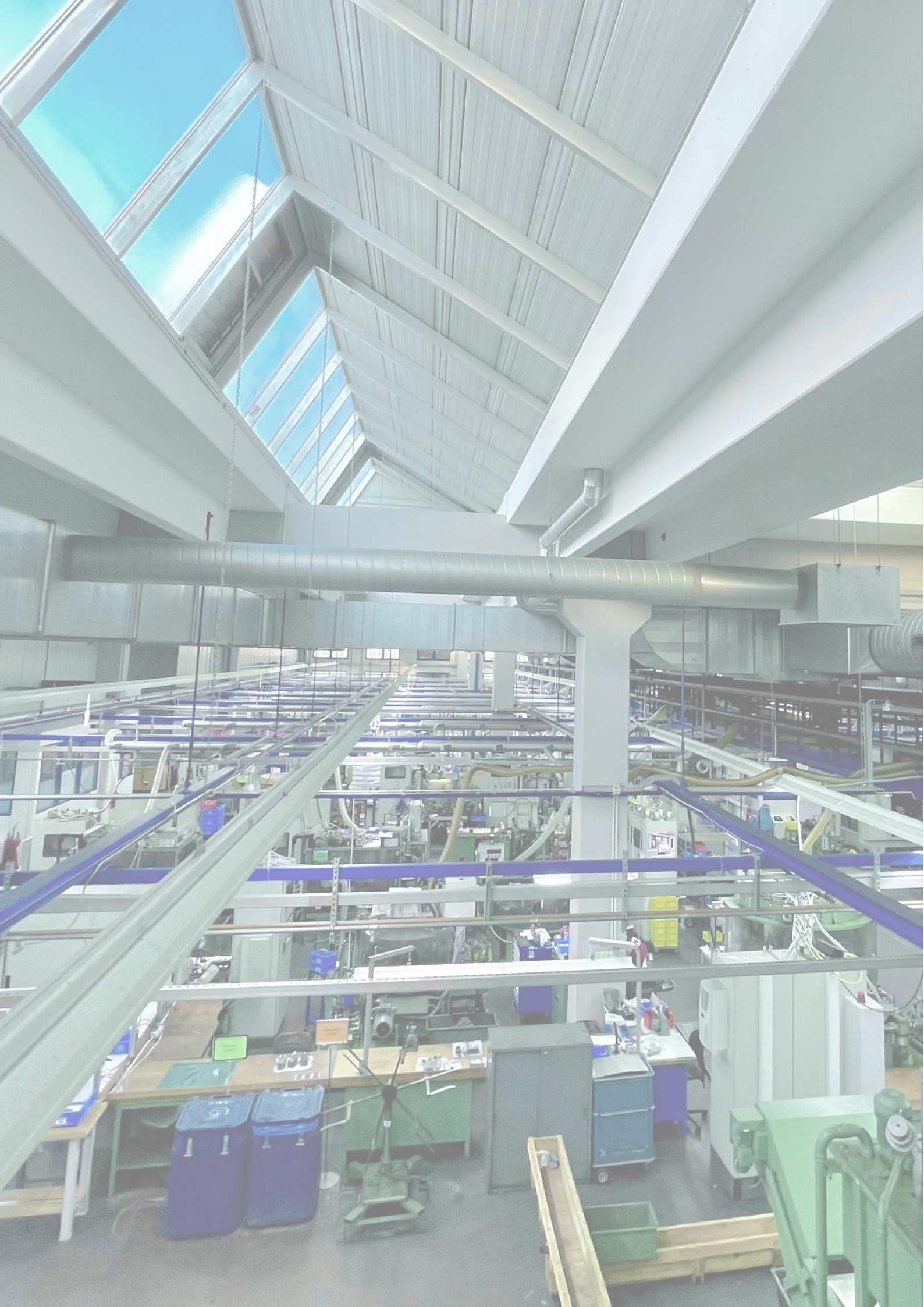
- Highly additive lubricating oil especially developed for hinges
- Reduces friction and ensures running properties.
- Good anticorrosive properties

Technical Data

Color		white
Name		CLPF22
Density 20°C	kg/m ³	880
Temperature Range °C	-15 -> +150	
Pour point	°C	-30
Flash point COC	°C	180
Content PTFE	%	4

The indicated service temperatures are guide values depending on the lubricants composition and on the application. They may vary in case of special influences or ongoing use.





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