



**MACHINE
ACCESSORIES**

BRAUER[®]

Since 1926, Brauer has been providing industry with the finest engineered products, expert technical support, on time deliveries and unparalleled customer service. Our brands are now recognised world-wide as products of the highest quality, and the breadth of our product portfolio provides our demanding customers with a tooling solution for a wide variety of problems.

Our team of highly talented engineers is backed by the latest computer aided design facilities including three dimensional feature based parametric solid modelling. Manufacturing is carried out in our modern, well equipped factory accredited with ISO 9001 certification and situated in Milton Keynes, some 40 miles north of London.

At Brauer, we continue to be motivated by working with our customers in providing innovative solutions for their particular tooling requirements. These working partnerships, built by many years of unparalleled customer service, will ensure that Brauer branded tooling, and automation products, will remain at the forefront of their markets.

To view the complete tooling portfolio manufactured by the Brauer companies, please consult our Web Site at www.Brauer.co.uk.



***For further details of any Brauer Product
contact***

BRAUER[®]

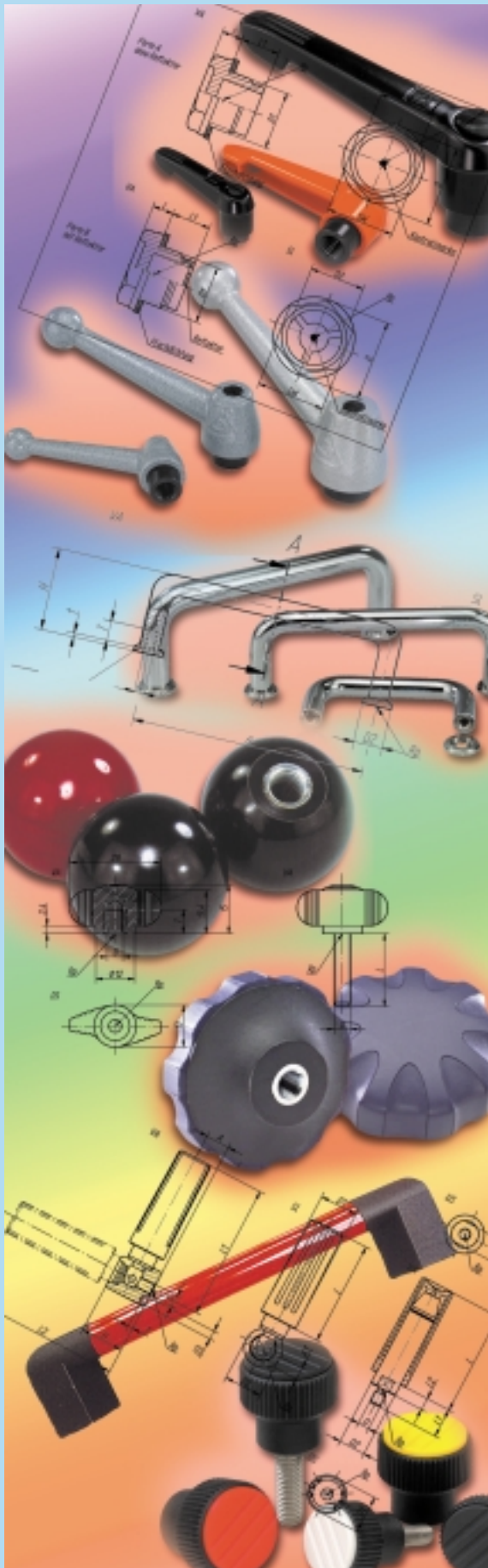
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Special Products

Products available in various colours and materials. If, after considering our standard range of product, you are unable to find a solution to suit your particular application, then please consult our sales and design engineers who will be only too pleased to consider the design and manufacture of a **bespoke** specially designed item to meet your particular needs.



SHAPES



BLUE



YELLOW



BLACK



STAINLESS

THREADS



SHORT (any length)



LONG (any length)



STEEL CLASS 5.8



STAINLESS STEEL

MATERIALS



STAINLESS STEEL



ZINC CAST



PLASTIC

What are you going to **Soft Touch?**

Soft Touch[™] products feature the latest in

TPE technology that not only **feel good** in

your hand but have added safety and

aesthetic benefits. Our hands-on **ergonomic**

designs strive to perfect the moment of

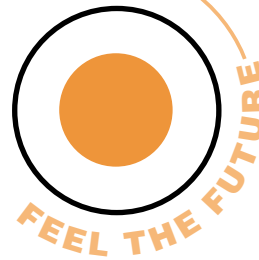
human contact and compliment form and

function.

Call us today to see what we can add

to **your** list of **ergonomically friendly**

- **feel good** industrial and consumer products.





Soft Touch

MACHINE ACCESSORIES

CALL US AT: 00 44 (0)1908 374022 OR FAX US AT: 00 44 (0)1908 641628

Soft Touch - The New Standard

It happens in an instant. It happens so quickly that it is hard to define the exact instant when our sense of touch registers pleasure or pain, control or panic, effort or relief.

It is this instant, this exact moment that **Soft Touch** is designed for.

Soft Touch is the new standard for two-shot injection moulding and is at the forefront of innovative product design meeting consumer needs for more and more ergonomically friendly applications.

The applications for thermoplastic elastomers (TPE) have literally exploded over recent years. **Soft Touch** injection moulding provides unmatched control combined with sturdy durable performance in custom designed products for our customers. We can develop a custom piece that will be truly unique.

Soft Touch contains our product range of knobs and levers in various designs and shapes like the innovative "FL" series with its Darwinian ergonomic engineering. The fingers of the hand attach onto the "FL" series like magnetism because of man and woman's evolution into having a hand that works with four fingers and a thumb, our five lobe "FL" series feels wonderful because of this.

Our new and innovative hand controlled clamp levers eliminate the need for adjustment tools and equipment thus allowing operators to make instant installations and changes. The result is set-up and cycle time reductions, speed means more efficiency, essential in the global economy.

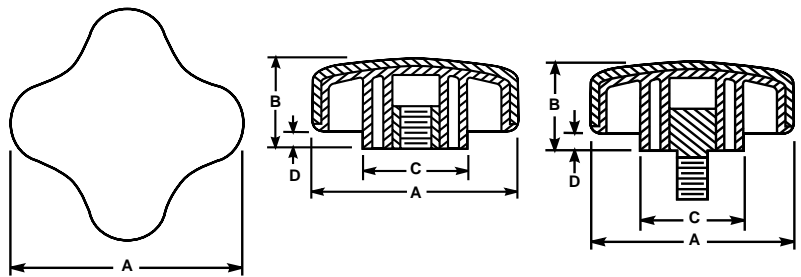
Soft Touch - "LP" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Four Lobe Design proved to allow more hand sized to fold around the gripping perimeter faster than a five lobe.



Dimensions in (mm)

PART NO.	A	B	C	D
PT-CL-LP-J1	1.40 (35.56)	.68 (17.27)	.56 (14.22)	.18 (4.57)
PT-CL-LP-J2	1.75 (44.45)	.75 (19.05)	.68 (17.27)	.12 (3.05)
PT-CL-LP-J3	1.99 (50.55)	.86 (21.84)	.91 (23.11)	.16 (4.06)
PT-CL-LP-1	2.48 (62.99)	1.098 (27.69)	1.25 (31.75)	.18 (4.57)
PT-CL-LP-3	3.00 (76.20)	1.30 (33.02)	1.50 (38.10)	.22 (5.59)

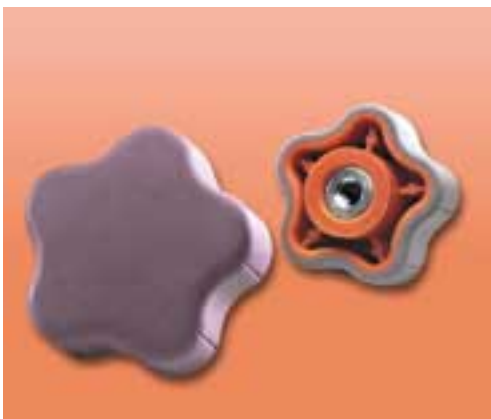
Inserts and Studs

PART NO.	10-32	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-LP-J1	X	X	X			X	X		
PT-CL-LP-J2	X	X	X	X		X	X	X	
PT-CL-LP-J3	X	X	X	X	X	X	X	X	X
PT-CL-LP-1		X	X	X	X	X	X	X	X
PT-CL-LP-3		X	X	X	X	X	X	X	X

XX = ±010"

Add -st to part # to indicate stud selection. Popular stud lengths are more readily available

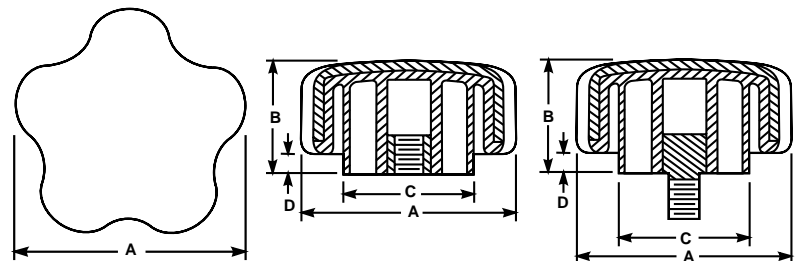
Soft Touch - "FL" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Five Lobe design ergonomically engineering to comfortably fit fingers and thumb.



Inserts and Studs

PART NO.	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-FL-40	X	X	X		X	X	X	
PT-CL-FL-50	X	X	X	X	X	X	X	X
PT-CL-FL-60	X	X	X	X	X	X	X	X

Dimensions in (mm)

PART NO.	A	B	C	D
PT-CL-FL-40	1.52 (38.61)	1.09 (27.69)	.69 (17.45)	.18 (4.57)
PT-CL-FL-50	1.91 (48.51)	1.09 (27.69)	.93 (23.50)	.17 (4.32)
PT-CL-FL-60	2.26 (57.40)	1.09 (27.69)	1.25 (31.75)	.16 (4.06)

Add -st to part # to indicate stud selection.
Popular stud lengths are more readily available

XX = ±010"

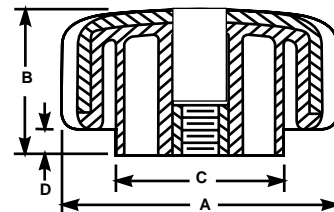
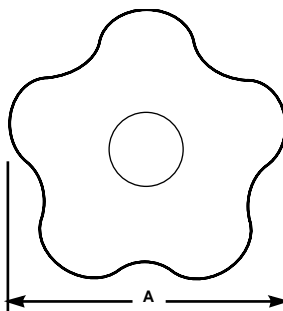
Soft Touch - "FL-H" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Five Lobe Design now available with a thru hole (-H) option.



Dimensions in (mm)

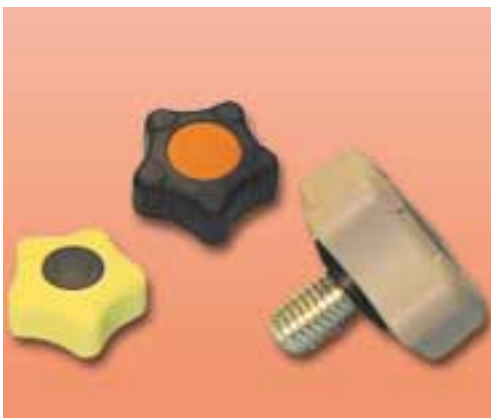
PART NO.	A	B	C	D
PT-CL-FL-H-40	1.52 (38.61)	1.09 (27.69)	.69 (17.45)	.18 (4.57)
PT-CL-FL-H-50	1.91 (48.51)	1.09 (27.69)	.93 (23.50)	.17 (4.32)
PT-CL-FL-H-60	2.26 (57.40)	1.09 (27.69)	1.25 (31.75)	.16 (4.06)

Inserts

PART NO.	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-FL-H-40	X	X	X		X	X	X	
PT-CL-FL-H-50	X	X	X	X	X	X	X	X
PT-CL-FL-H-60	X	X	X	X	X	X	X	X

XX = ±010"

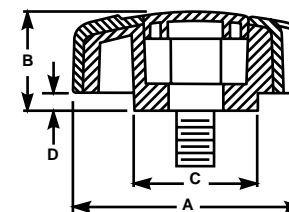
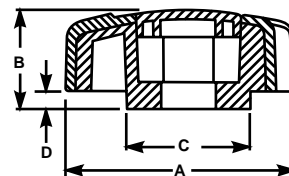
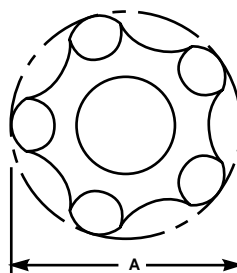
Soft Touch - "EDSR" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Consists of a soft outer surface two shot moulded knob body and a polypropylene cap.



Dimensions in (mm)

PART NO.	A	B	C	D
PT-CL-EDSR-34	1.34 (34.01)	.65 (16.51)	.50 (12.7)	.14 (3.56)
PT-CL-EDSR-38	1.50 (38.00)	.70 (17.78)	.60 (15.24)	.14 (3.56)
PT-CL-EDSR-43	1.69 (43.00)	.84 (21.34)	.96 (24.38)	.22 (5.59)
PT-CL-EDSR-53	2.09 (53.01)	.87 (22.1)	1.02 (25.91)	.17 (4.32)

Nuts and Bolts

PART NO.	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-EDSR-34	X				X			
PT-CL-EDSR-38	X	X			X	X		
PT-CL-EDSR-43	X	X	X		X	X	X	
PT-CL-EDSR-53		X	X	X		X	X	X

XX = ±010"

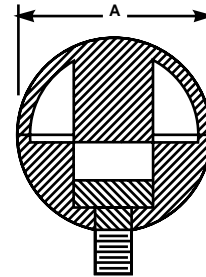
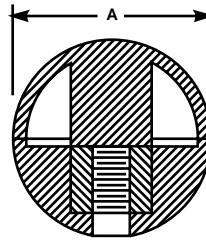
Soft Touch - "BK" Ball Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Ball design available in five sizes, standard and special colours with a variety of stud lengths.



Dimensions in (mm)

PART NO.	A
BK-2	.75 (19.05)
BK-5	1.00 (25.40)
BK-20	1.38 (35.05)
BK-30	1.63 (41.40)
BK-40	1.88 (47.75)

XX = ±010"

Insert and Studs

PART NO.	10-32	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
BK-2	X								
BK-5	X								
BK-20	X	X	X	X		X	X	X	
BK-30	X	X	X	X		X	X	X	
BK-40			X	X	X		X	X	X

Add -st to part # to indicate stud selection. Popular stud lengths are more readily available

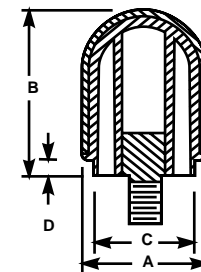
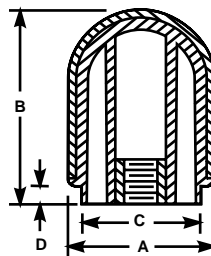
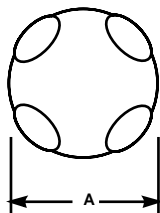
Soft Touch - "HP" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Available in varying stud lengths as standard or as made to your special order.



Dimensions in (mm)

PART NO.	A	B	C	D
PT-CL-HP-1	1.68 (42.67)	2.18 (55.37)	1.34 (34.04)	.20 (5.08)
PT-CL-HP-3	1.87 (47.50)	2.44 (61.98)	1.50 (38.10)	.22 (5.59)

XX = ±010"

Inserts and Studs

PART NO.	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-HP-1	X	X	X	X	X	X	X	X
PT-CL-HP-3	X	X	X	X	X	X	X	X

Add -st to part # to indicate stud selection. Popular stud lengths are more readily available

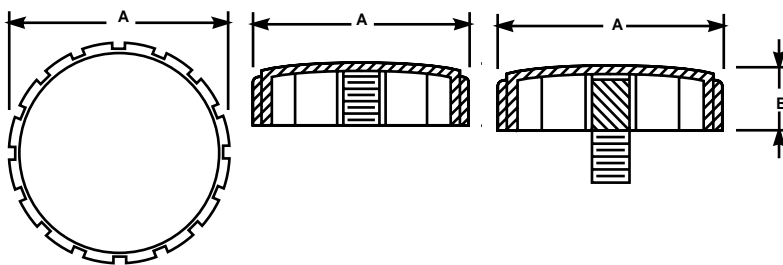
Soft Touch - "WH" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Clamping hub is only 17.02mm in height making it excellent for space limited applications.



Dimensions in (mm)

PART NO.	A	B
PT-CL-WH	2.26 (57.40)	.67 (17.02)

XX = ±010"

Inserts and Studs

PART NO.	10-32	1/4-20	5/16-18	3/8-16	M6	M8	M10
PT-CL-WH	X	X	X	X	X	X	X

Add -st to part # to indicate stud selection. Popular stud lengths are more readily available

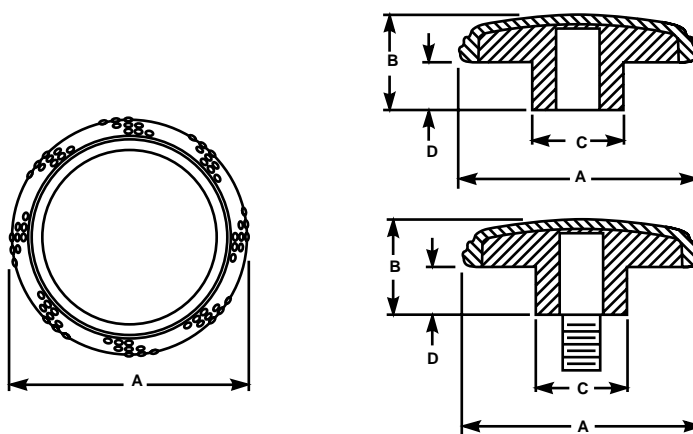
Soft Touch - "WK" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Made from solid plastic with the special soft touch outer layer.



Dimensions in (mm)

PART NO.	A	B	C	D
PT-CL-WK-25	.98 (24.89)	.67 (17.01)	.50 (12.70)	.42 (10.67)
PT-CL-WK-32	1.26 (32.00)	.67 (17.01)	.75 (19.05)	.40 (10.16)
PT-CL-WK-40	1.57 (39.87)	.65 (16.51)	.75 (19.05)	.32 (8.13)
PT-CL-WK-50	1.97 (50.04)	.65 (16.51)	.77 (17.78)	.21 (5.33)

XX = ±010"

Inserts and Studs

PART NO.	10/32	1/4-20	5/16-18	3/8-16	M6	M8	M10
PT-CL-WK-25	X	X			X		
PT-CL-WK-32		X	X	X	X	X	X
PT-CL-WK-40		X	X	X	X	X	X
PT-CL-WK-50		X	X	X	X	X	X

Add -st to part # to indicate stud selection. Popular stud lengths are more readily available

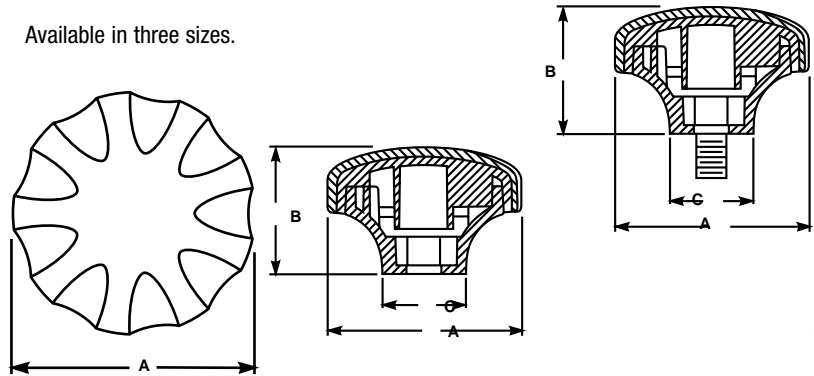
Soft Touch - "AJK" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Available in three sizes.



Dimensions in (mm)

PART NO.	A	B	C
PT-CL-AJK-32	1.26 (31.98)	.785 (19.94)	.71 (18.03)
PT-CL-AJK-42	1.65 (42.01)	1.10 (27.94)	.77 (19.56)
PT-CL-AJK-62	2.44 (61.98)	1.45 (36.83)	1.01 (25.65)

Nuts and Bolts

PART NO.	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-AJK-32	X				X			
PT-CL-AJK-42	X	X	X		X	X	X	
PT-CL-AJK-62		X	X	X		X	X	X

XX = ±010"

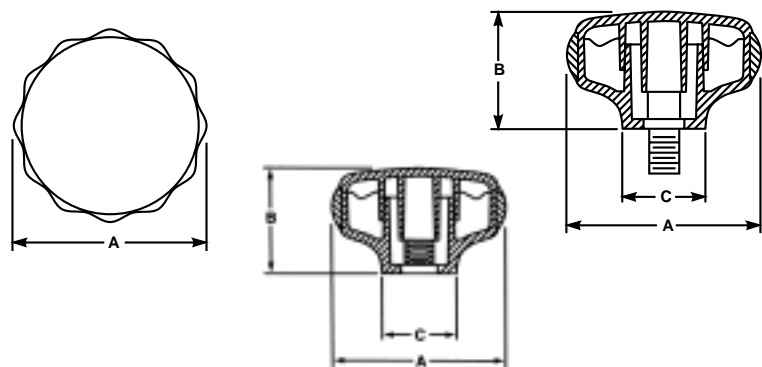
Soft Touch - "JVH" Clamp Knob



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Three part assembly, top half, bottom half and insert or stud.



Dimensions in (mm)

PART NO.	A	B	C
PT-CL-JVH-32	1.26 (31.65)	.71 (18.14)	.71 (18.14)
PT-CL-JVH-42	1.65 (42.01)	1.0 (25.4)	.88 (22.35)
PT-CL-JVH-62	2.44 (62.05)	1.34 (34.04)	.96 (24.38)

Inserts and Studs

PART NO.	10/32	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-JVH-32	X	X				X			
PT-CL-JVH-42		X	X	X		X	X	X	
PT-CL-JVH-62			X	X	X		X	X	X

XX = ±010"

Add -st to part # to indicate stud selection. Popular stud lengths are more readily available

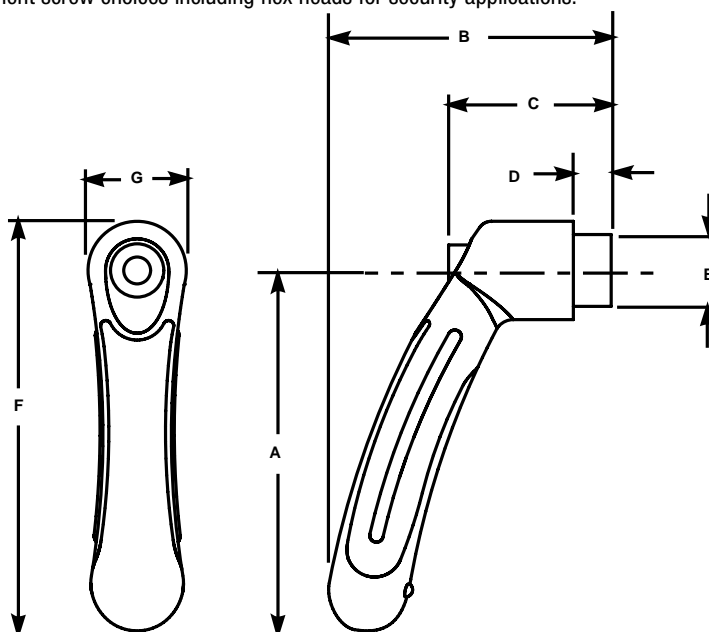
Soft Touch - Clamp levers



Material:

Manufactured in thermoplastic elastomer Soft Touch a feel unique and friendly to the flesh.

Available in custom colours, metric and imperial threads, stainless steel hardware and adjustment screw choices including hex heads for security applications.



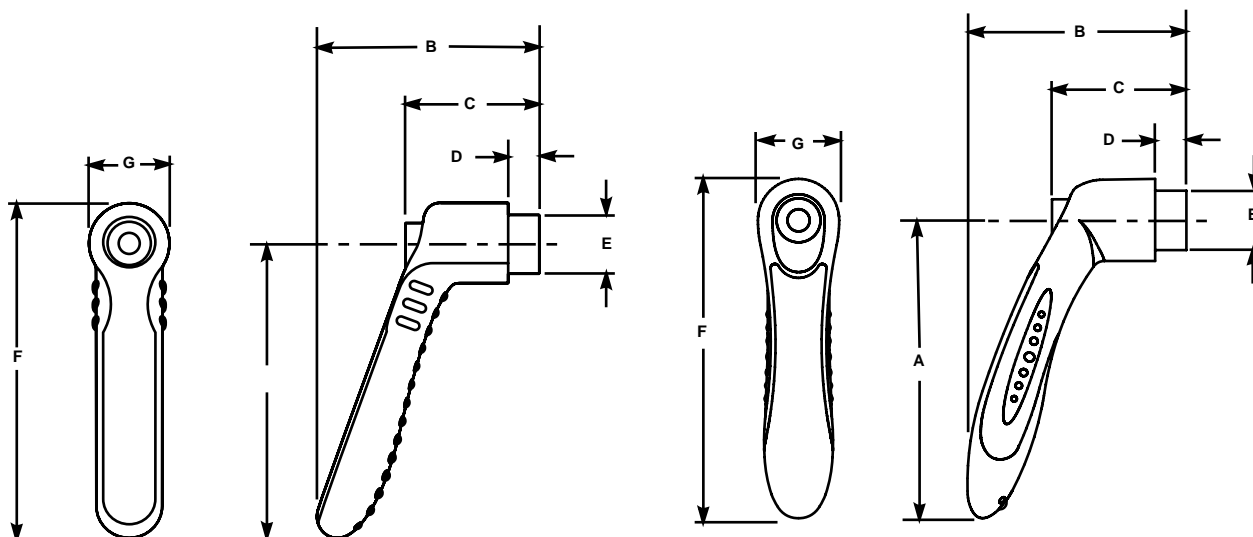
Dimensions in (mm)

PART NO.	A	B	C	D	E	F	G
PT-AXL-3-40	1.57 (40.00)	1.46 (37.00)	0.96 (24.50)	0.22 (5.50)	0.39 (10.00)	1.87 (47.50)	0.55 (14.00)
PT-AXL-3-65	2.56 (65.00)	1.99 (50.50)	1.12 (28.50)	0.26 (6.50)	0.49 (12.50)	2.91 (74.00)	0.75 (19.00)
PT-AXL-3-80	3.15 (80.00)	2.54 (64.50)	1.46 (37.00)	0.39 (10.00)	0.63 (16.00)	3.58 (91.00)	0.87 (22.00)
PT-AXL-3-95	3.74 (95.00)	2.94 (74.70)	1.69 (43.00)	0.39 (10.00)	0.75 (19.00)	4.25 (108.00)	1.02 (26.00)

Inserts and Studs

PART NO.	10-32	1/4-20	5/16-18	3/8-16	1/2-13	M6	M8	M10	M12
PT-CL-AXL-*-40	X	X				X			
PT-CL-AXL-*-65		X	X	X		X	X	X	
PT-CL-AXL-*-80			X	X			X	X	
PT-CL-AXL-*-95				X	X			X	X

Add -st to part # to indicate stud selection. Popular stud lengths are more readily available





Levers and Joints

MACHINE ACCESSORIES

CALL US AT: 00 44 (0)1908 374022 OR FAX US AT: 00 44 (0)1908 641628

Clamp Levers with internal thread



Material:

Handle in die cast zinc to DIN 1743, steel parts quality class 5.8

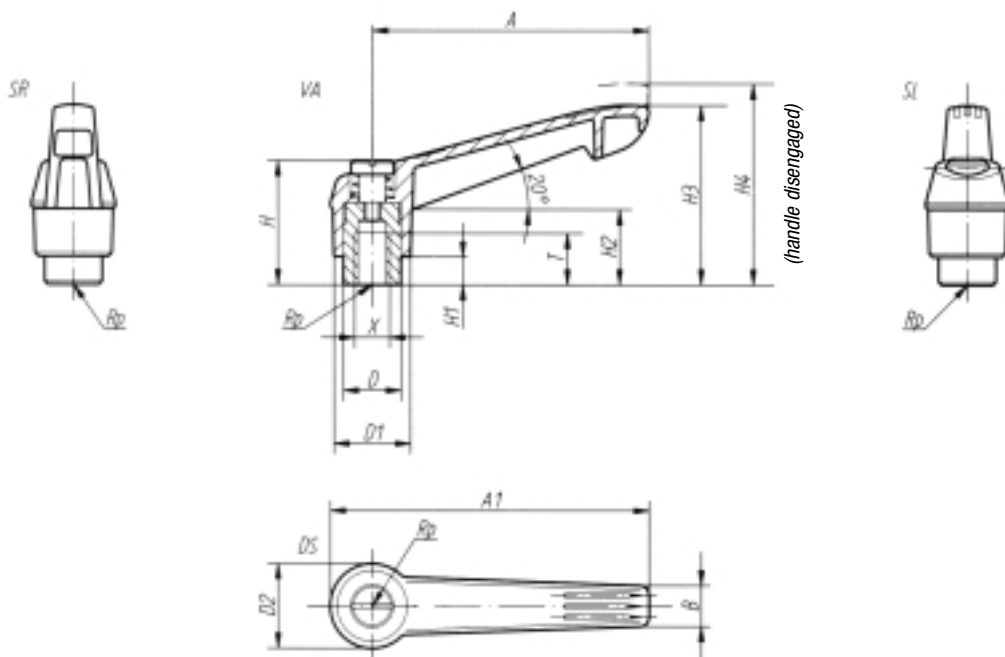
Surface finish:

Handle plastic-coated, steel parts black oxide finish

Note:

Standard colours are:
black satin finish, orange RAL 2004

Other colours available on request.
Other materials, surface finishes, special versions, etc. are available.



disengage
by lifting



Clamp Levers with internal thread

Order No. black satin finish	Order No. orange	Size	Internal thread X*	T	D	D1	D2	H	H1**	H2	H3	H4	A	A1	B	No. of teeth	Approx. weight kg
50 104000 01	50 104000 02	1	M 4	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,030
50 105000 01	50 105000 02	1	M 5	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,030
50 106000 01	50 106000 02	1	M 6	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,030
50 206000 01	50 206000 02	2	M 6	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,070
50 208000 01	50 208000 02	2	M 8	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,070
50 308000 01	50 308000 02	3	M 8	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,110
50 310000 01	50 310000 02	3	M 10	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,110
50 410000 01	50 410000 02	4	M 10	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,190
50 412000 01	50 412000 02	4	M 12	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,190
50 512000 01	50 512000 02	5	M 12	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,300
50 516000 01	50 516000 02	5	M 16	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,300

Sample order: Clamp Lever 5031000001

*Other internal threads available on request **Dimension "H1" available in other lengths at extra charge

Clamp Levers with external thread



Material:

Handle in die cast zinc to DIN 1743, steel parts quality class 5.8

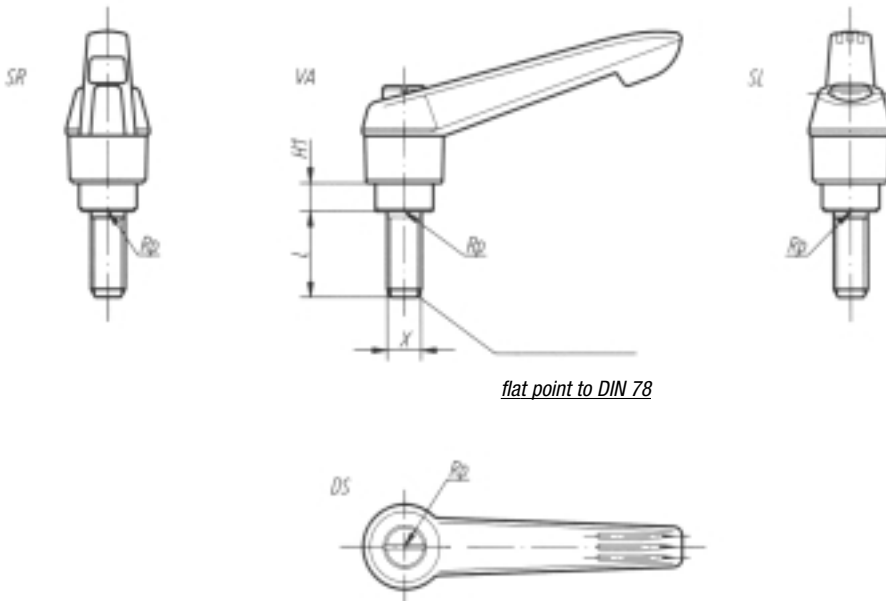
Surface finish:

Handle plastic-coated, steel parts black oxide finish

Note:

Standard colours are:
black satin finish, orange RAL 2004

Other colours available on request.
Other materials, surface finishes, special versions, etc. are available.



flat point to DIN 78

disengage
by lifting



Clamp Levers with external thread

Order No. black satin finish	Order No. orange	Size	External thread X**	H1*	L = Screw length **													
50 105*** 01	50 105*** 02	1	M 5	4	10	15	20	25	30	35	40	45	50	-	-	-	-	-
50 106*** 01	50 106*** 02	1	M 6	4	10	15	20	25	30	35	40	45	50	-	-	-	-	-
50 206*** 01	50 206*** 02	2	M 6	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
50 208*** 01	50 208*** 02	2	M 8	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
50 210*** 01	50 210*** 02	2	M 10	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
50 310*** 01	50 310*** 02	3	M 10	10	-	15	20	25	30	35	40	45	50	55	60	-	-	-
50 410*** 01	50 410*** 02	4	M 10	10	-	-	20	25	30	35	40	45	50	55	60	70	80	90
50 412*** 01	50 412*** 02	4	M 12	10	-	-	20	25	30	35	40	45	50	55	60	70	80	90
50 512*** 01	50 512*** 02	5	M 12	12	-	-	-	25	30	35	40	45	50	55	60	70	80	90
50 516*** 01	50 516*** 02	5	M 16	12	-	-	-	25	30	35	40	45	50	55	60	70	80	90

Sample order: Clamp Lever 5031005002
(Length L)

*Dimension "H1" available in other lengths at extra charge
***Add the desired screw length here, e.g. 050 for L = 50 mm

**Other external threads and screw lengths available on request

Clamp Levers with internal thread, steel parts in stainless steel



Material:

Handle in die cast zinc to DIN 1743, steel parts in stainless steel, X 10 CrNiS 18 9 = 1.4305

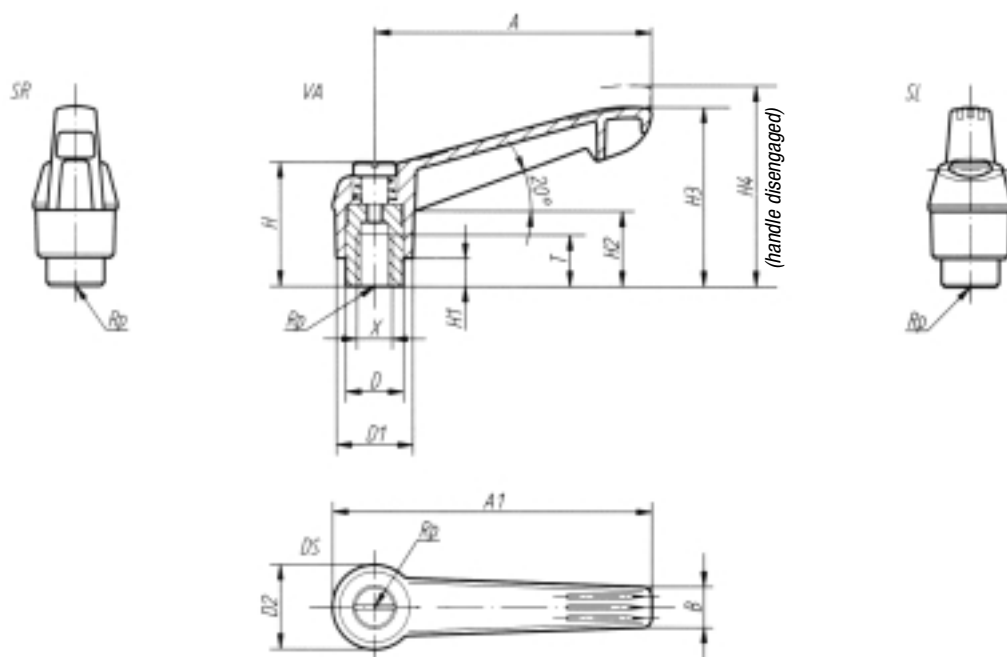
Surface finish:

Handle plastic-coated, steel parts natural finish

Note:

Standard colours are:
black satin finish, orange RAL 2004

Other colours available on request.
Other materials, surface finishes, special versions, etc. are available.



disengage by lifting

Clamp Levers with internal thread, steel parts in stainless steel

Order No. black satin finish	Order No. orange	Size	Internal thread X*	T	D	D1	D2	H	H1**	H2	H3	H4	A	A1	B	No. of teeth	Approx. weight kg
50 105000 01 OS0	50 105000 02 OS0	1	M 5	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,030
50 106000 01 OS0	50 106000 02 OS0	1	M 6	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,030
50 206000 01 OS0	50 206000 02 OS0	2	M 6	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,070
50 208000 01 OS0	50 208000 02 OS0	2	M 8	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,070
50 308000 01 OS0	50 308000 02 OS0	3	M 8	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,110
50 310000 01 OS0	50 310000 02 OS0	3	M 10	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,110
50 410000 01 OS0	50 410000 02 OS0	4	M 10	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,190
50 412000 01 OS0	50 412000 02 OS0	4	M 12	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,190
50 512000 01 OS0	50 512000 02 OS0	5	M 12	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,300
50 516000 01 OS0	50 516000 02 OS0	5	M 16	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,300

Sample order: Clamp Lever 50310000010S0

*Other internal threads available on request

**Dimension "H1" available in other lengths at extra charge

MACHINE ACCESSORIES

Clamp Levers with external thread, steel parts in stainless steel



Material:

Handle in die cast zinc to DIN 1743, steel parts in stainless steel, X 10 CrNiS 18 9 = 1.4305

Surface finish:

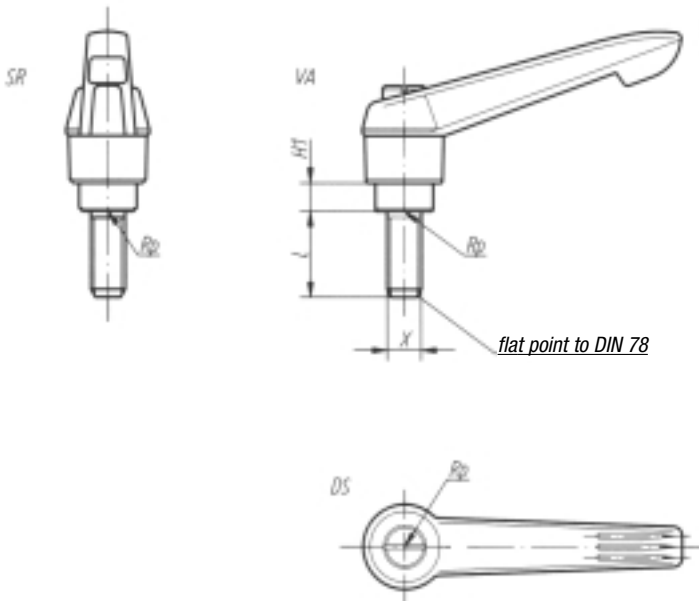
Handle plastic-coated, steel parts natural finish

Note:

Standard colours are:
black satin finish, orange RAL 2004

Other colours available on request.

Other materials, surface finishes, special versions, etc. are available.



Clamp Levers with external thread, steel parts in stainless steel

Order No. black satin finish	Order No. orange	Size	External thread X**	H1*	L = Screw length **								
50 105*** 01 OS0	50 105*** 02 OS0	1	M 5	4	-	15	20	25	-	-	-	-	-
50 106*** 01 OS0	50 106*** 02 OS0	1	M 6	4	10	15	20	25	30	40	50	-	-
50 206*** 01 OS0	50 206*** 02 OS0	2	M 6	6,5	-	15	20	25	30	40	50	60	-
50 208*** 01 OS0	50 208*** 02 OS0	2	M 8	6,5	-	15	20	25	30	40	50	60	-
50 210*** 01 OS0	50 210*** 02 OS0	2	M 10	6,5	-	-	20	25	30	40	50	60	-
50 310*** 01 OS0	50 310*** 02 OS0	3	M 10	10	-	-	20	25	30	40	50	60	-
50 412*** 01 OS0	50 412*** 02 OS0	4	M 12	10	-	-	-	25	30	40	50	60	-
50 516*** 01 OS0	50 516*** 02 OS0	5	M 16	12	-	-	-	-	30	40	50	60	-

Sample order: Clamp Lever 50310050020S0
(Length L)

* Dimension "H1" available in other lengths at extra charge
*** Add the desired screw length here, e.g. 050 for L = 50 mm

**Other external threads and screw lengths available on request

Clamp Levers with internal thread and plastic handle



Material:

Handle in glass-fibre reinforced plastic with toothed wheel in die cast zinc, steel parts quality class 5.8

Surface finish:

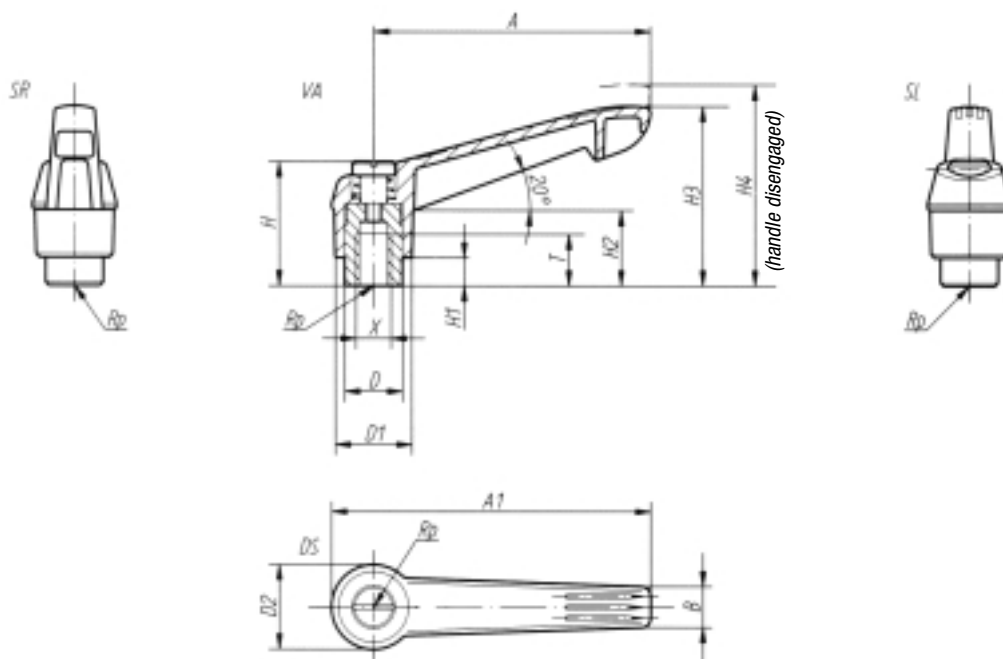
Steel parts black oxide finish

Note:

Standard colours are:
anthracite grey RAL 7021, orange RAL 2004

Other colours available on request.

Other materials, surface finishes, special versions, etc. are available.



Clamp Levers with internal thread and plastic handle

Order No. anthracite grey	Order No. orange	Size	Internal thread X*	T	D	D1	D2	H	H1**	H2	H3	H4	A	A1	B	No. of teeth	Approx. weight kg
51 104000 90	51 104000 02	1	M 4	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,013
51 105000 90	51 105000 02	1	M 5	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,013
51 106000 90	51 106000 02	1	M 6	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,013
51 206000 90	51 206000 02	2	M 6	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,029
51 208000 90	51 208000 02	2	M 8	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,029
51 308000 90	51 308000 02	3	M 8	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,050
51 310000 90	51 310000 02	3	M 10	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,050
51 410000 90	51 410000 02	4	M 10	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,078
51 412000 90	51 412000 02	4	M 12	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,078
51 512000 90	51 512000 02	5	M 12	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,130
51 516000 90	51 516000 02	5	M 16	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,130

Sample order: Clamp Lever 5120800090

*Other internal threads available on request

**Dimension "H1" available in other lengths at extra charge

Clamp Levers with external thread and plastic handle



Material:

Handle in glass-fibre reinforced plastic with toothed wheel in die cast zinc, steel parts quality class 5.8

Surface finish:

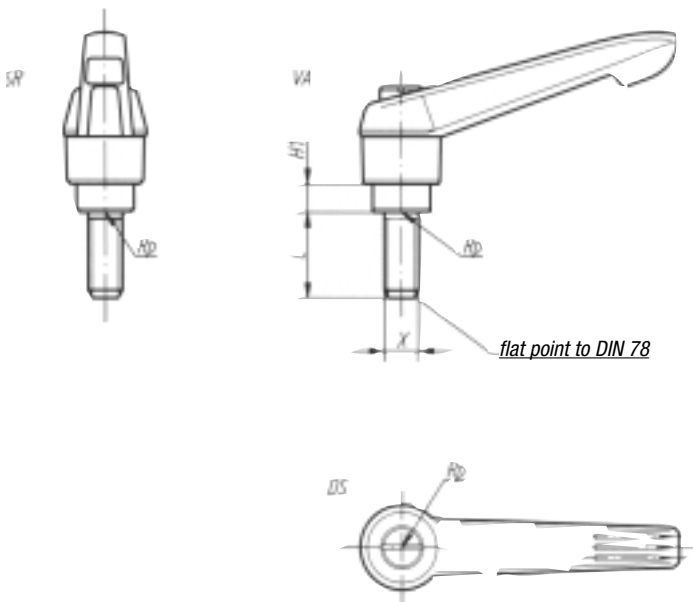
Steel parts black oxide finish

Note:

Standard colours are: anthracite grey RAL 7021, orange RAL 2004

Other colours available on request.

Other materials, surface finishes, special versions, etc. are available.



Clamp Levers with external thread and plastic handle

Order No. anthracite grey	Order No. orange	Size	External thread X**	H1*	L = Screw length **													
51 105*** 90	51 105*** 02	1	M 5	4	10	15	20	25	30	35	40	45	50	-	-	-	-	-
51 106*** 90	51 106*** 02	1	M 6	4	10	15	20	25	30	35	40	45	50	-	-	-	-	-
51 206*** 90	51 206*** 02	2	M 6	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 208*** 90	51 208*** 02	2	M 8	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 210*** 90	51 210*** 02	2	M 10	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 310*** 90	51 310*** 02	3	M 10	10	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 410*** 90	51 410*** 02	4	M 10	10	-	-	20	25	30	35	40	45	50	55	60	70	80	90
51 412*** 90	51 412*** 02	4	M 12	10	-	-	20	25	30	35	40	45	50	55	60	70	80	90
51 512*** 90	51 512*** 02	5	M 12	12	-	-	-	25	30	35	40	45	50	55	60	70	80	90
51 516*** 90	51 516*** 02	5	M 16	12	-	-	-	25	30	35	40	45	50	55	60	70	80	90

Sample order: Clamp Lever 5141205002
(Length L)

*Dimension "H1" available in other lengths at extra charge
***Add the desired screw length here, e.g. 050 for L = 50 mm

**Other external threads and screw lengths available on request

Clamp Levers with internal thread and plastic handle, steel parts in stainless steel



Material:

Handle in glass-fibre reinforced plastic with toothed wheel in die cast zinc; steel parts in stainless steel, X 10 CrNiS 18 9 = 1.4305

Surface finish:

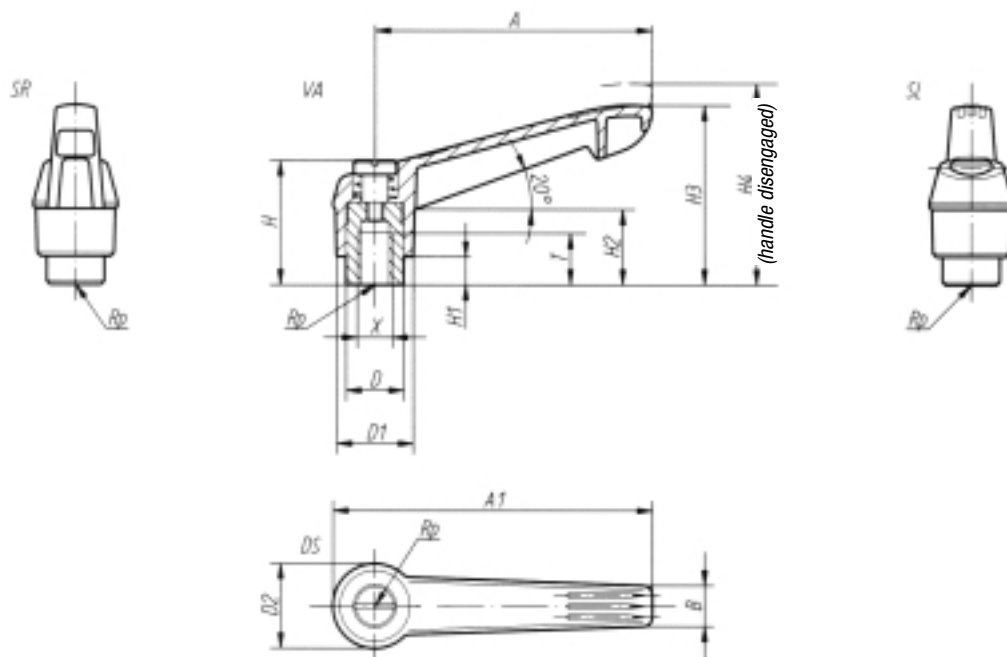
Steel parts natural finish

Note:

Standard colours are:
anthracite grey RAL 7021, orange RAL 2004

Other colours available on request.

Other materials, surface finishes, special versions, etc. are available.



Clamp Levers with internal thread and plastic handle, steel parts in stainless steel

Order No. anthracite grey	Order No. orange	Size	Internal thread X*	T	D	D1	D2	H	H1**	H2	H3	H4	A	A1	B	No. of teeth	Approx. weight kg
51 105000 90 OSO	51 105000 02 OSO	1	M 5	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,013
51 106000 90 OSO	51 106000 02 OSO	1	M 6	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	0,013
51 206000 90 OSO	51 206000 02 OSO	2	M 6	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,029
51 208000 90 OSO	51 208000 02 OSO	2	M 8	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	0,029
51 308000 90 OSO	51 308000 02 OSO	3	M 8	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,050
51 310000 90 OSO	51 310000 02 OSO	3	M 10	14	16	21,5	23	37,5	10	24	53	57	80	91,5	11	22	0,050
51 410000 90 OSO	51 410000 02 OSO	4	M 10	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,078
51 412000 90 OSO	51 412000 02 OSO	4	M 12	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	0,078
51 512000 90 OSO	51 512000 02 OSO	5	M 12	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,130
51 516000 90 OSO	51 516000 02 OSO	5	M 16	23	23	30	32,5	51	12	33	72,5	77,5	110	126,5	15,5	26	0,130

Sample order: Clamp Lever 51310000020SO

*Other internal threads available on request

**Dimension "H1" available in other lengths at extra charge

Clamp Levers with external thread and plastic handle, steel parts in stainless steel



Material:

Handle in glass-fibre reinforced plastic with toothed wheel in die cast zinc; steel parts in stainless steel, X 10 CrNiS 18 9 = 1.4305

Surface finish:

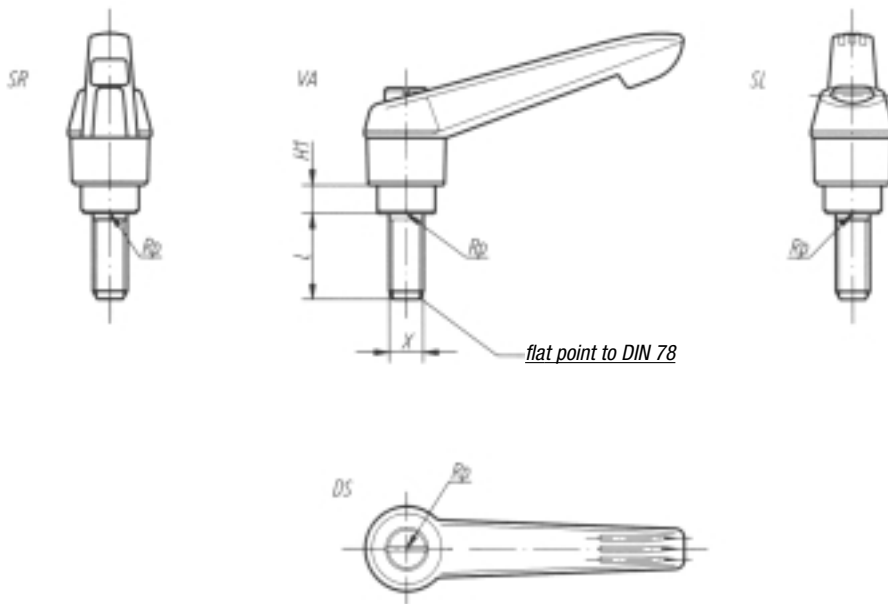
Steel parts natural finish

Note:

Standard colours are: anthracite grey RAL 7021, orange RAL 2004

Other colours available on request.

Other materials, surface finishes, special versions, etc. are available.



Clamp Levers with external thread and plastic handle, steel parts in stainless steel

Order No. anthracite grey	Order No. orange	Size	External thread X**	H1*	L = Screw length **							
51 105*** 90 0S0	51 105*** 02 0S0	1	M 5	4	-	15	20	25	-	-	-	-
51 106*** 90 0S0	51 106*** 02 0S0	1	M 6	4	10	15	20	25	30	40	50	-
51 206*** 90 0S0	51 206*** 02 0S0	2	M 6	6,5	-	15	20	25	30	40	50	60
51 208*** 90 0S0	51 208*** 02 0S0	2	M 8	6,5	-	15	20	25	30	40	50	60
51 210*** 90 0S0	51 210*** 02 0S0	2	M 10	6,5	-	-	20	25	30	40	50	60
51 310*** 90 0S0	51 310*** 02 0S0	3	M 10	10	-	-	20	25	30	40	50	60
51 412*** 90 0S0	51 412*** 02 0S0	4	M 12	10	-	-	-	25	30	40	50	60
51 516*** 90 0S0	51 516*** 02 0S0	5	M 16	12	-	-	-	-	30	40	50	60

Sample order: Clamp Lever 50310050020S0
(Length L)

* Dimension "H1" available in other lengths at extra charge
*** Add the desired screw length here, e.g. 050 for L = 50 mm

**Other external threads and screw lengths available on request

Coloured Clamp Levers with internal thread



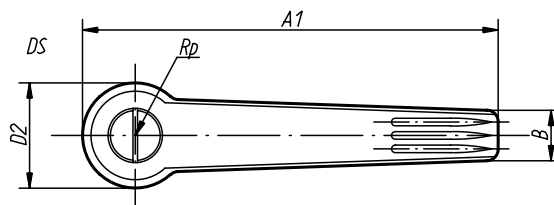
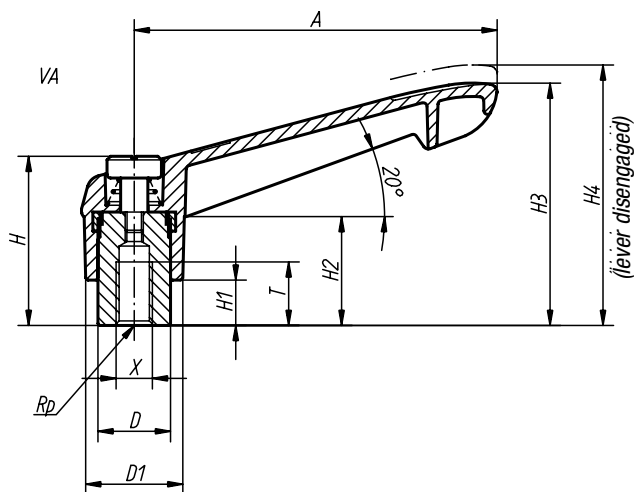
For many people the Clamp Lever represents the key to secure and comfortable gripping. This lever provides a future-oriented and powerful solution for almost any operating and clamping problem.

Material, surface finish:

Lever in glass-fibre reinforced plastic, toothed wheel in die cast zinc, steel parts 5.8 black oxide finish or stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish

Note:

Other internal threads X available on request. Dimension H1 available in other lengths on request at extra cost.



anthracite grey $\Delta\Delta = 90$



RAL 7021

signal green $\Delta\Delta = 86$



RAL 6032

traffic red $\Delta\Delta = 84$



RAL 3020

bright yellow $\Delta\Delta = 16$



RAL 1021

traffic blue $\Delta\Delta = 87$



RAL 5017

Clamp Levers with internal thread

Order No. steel	Order No. stainless steel	Size	X	T	D	D1	D2	H	H1	H2	H3	H4	A	A1	B	No. of teeth	Approx. weight g
51 104000 $\Delta\Delta$	-	1	M4	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	13
51 105000 $\Delta\Delta$	51 105000 $\Delta\Delta$ OS0	1	M5	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	13
51 106000 $\Delta\Delta$	51 106000 $\Delta\Delta$ OS0	1	M6	9	10	13	14,5	24	4	15	29,5	33,5	40	47	7,5	16	13
51 206000 $\Delta\Delta$	51 206000 $\Delta\Delta$ OS0	2	M6	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	30
51 208000 $\Delta\Delta$	51 208000 $\Delta\Delta$ OS0	2	M8	12	13,5	18	19,5	29	6,5	17,5	41	45	65	75	9,5	20	30
51 308000 $\Delta\Delta$	51 308000 $\Delta\Delta$ OS0	3	M8	14	16	21,5	23	37,5	10	24	53	57	80	92	11	22	52
51 310000 $\Delta\Delta$	51 310000 $\Delta\Delta$ OS0	3	M10	14	16	21,5	23	37,5	10	24	53	57	80	92	11	22	52
51 410000 $\Delta\Delta$	51 410000 $\Delta\Delta$ OS0	4	M10	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	82
51 412000 $\Delta\Delta$	51 412000 $\Delta\Delta$ OS0	4	M12	17	19	25,5	27,5	42,5	10	27	61	65	95	109	13	24	82
51 512000 $\Delta\Delta$	51 512000 $\Delta\Delta$ OS0	5	M12	23	23	30	32,5	51	12	33	72,5	77,5	110	127	15,5	26	136
51 516000 $\Delta\Delta$	51 516000 $\Delta\Delta$ OS0	5	M16	23	23	30	32,5	51	12	33	72,5	77,5	110	127	15,5	26	136

Sample order: Clamp Lever 51412 000 86 OS0 (clamp lever signal green)

$\Delta\Delta$ Add the desired colour of the clamp lever here

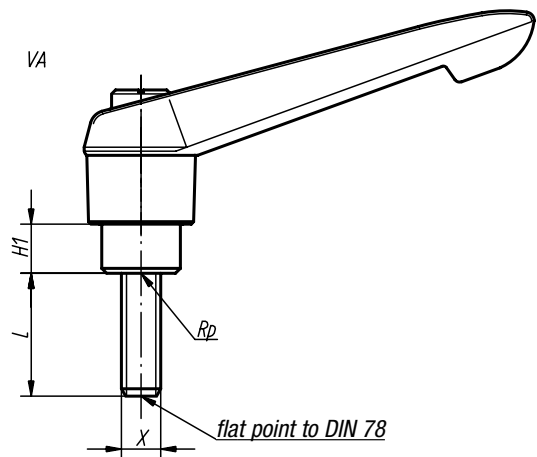
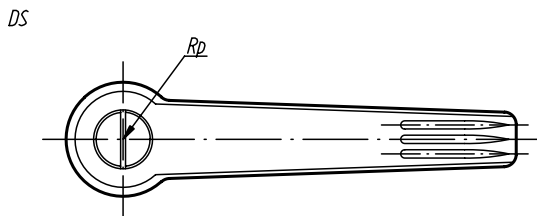
Coloured Clamp Levers with external thread



Note:

Other external threads X and screw lengths available on request. Dimension H1 available in other lengths on request at extra cost.

Material specification, missing dimensions and colour coding on previous page.



Clamp Levers with external thread in stainless steel

Order No. stainless steel	Size	X	H1	L = Screw length												
51 105 *** $\Delta\Delta$ OS0	1	M 5	4	-	15	20	25	-	-	-	-	-	-	-	-	-
51 106 *** $\Delta\Delta$ OS0	1	M 6	4	10	15	20	25	30	40	50	-	-	-	-	-	-
51 206 *** $\Delta\Delta$ OS0	2	M6	6,5	-	15	20	25	30	40	50	60	-	-	-	-	-
51 208 *** $\Delta\Delta$ OS0	2	M 8	6,5	-	15	20	25	30	40	50	60	-	-	-	-	-
51 210 *** $\Delta\Delta$ OS0	2	M 10	6,5	-	-	20	25	30	40	50	60	-	-	-	-	-
51 310 *** $\Delta\Delta$ OS0	3	M 10	10	-	-	20	25	30	40	50	60	-	-	-	-	-
51 412 *** $\Delta\Delta$ OS0	4	M 12	10	-	-	-	25	30	40	50	60	-	-	-	-	-
51 516 *** $\Delta\Delta$ OS0	5	M 16	12	-	-	-	-	-	30	40	50	60	-	-	-	-

Clamp Levers with external thread in steel

Order No. steel	Size	X	H1	L = Screw length													
51 105 *** $\Delta\Delta$	1	M 5	4	10	15	20	25	30	35	40	45	50	-	-	-	-	-
51 106 *** $\Delta\Delta$	1	M 6	4	10	15	20	25	30	35	40	45	50	-	-	-	-	-
51 206 *** $\Delta\Delta$	2	M6	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 208 *** $\Delta\Delta$	2	M 8	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 210 *** $\Delta\Delta$	2	M 10	6,5	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 310 *** $\Delta\Delta$	3	M 10	10	-	15	20	25	30	35	40	45	50	55	60	-	-	-
51 410 *** $\Delta\Delta$	4	M 10	10	-	-	20	25	30	35	40	45	50	55	60	70	80	90
51 412 *** $\Delta\Delta$	4	M 12	10	-	-	20	25	30	35	40	45	50	55	60	70	80	90
51 512 *** $\Delta\Delta$	5	M 12	12	-	-	-	25	30	35	40	45	50	55	60	70	80	90
51 516 *** $\Delta\Delta$	5	M 16	12	-	-	-	25	30	35	40	45	50	55	60	70	80	90

Sample order: Clamp Lever 51 310 $\Delta\Delta$ 90 (clamp lever anthracite grey)
(length L)

$\Delta\Delta$ Add the desired clamp lever colour here
*** Add the desired screw length here, e.g. 040 for L = 40 mm

Non-adjustable clamp levers



Material:

Handle in glass-fibre reinforced plastic, steel parts quality class 5.8

Surface finish:

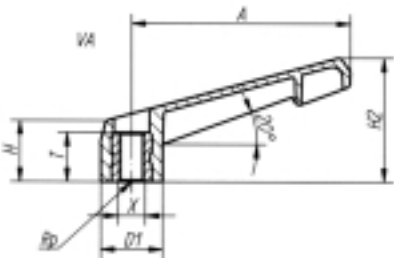
Handle in anthracite grey, steel parts yellow chromated

Note:

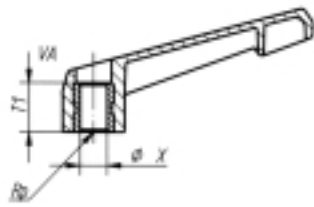
Other materials, surface finishes, special versions, etc. are available.

Non-Adjustable Clamp Levers can be used for simple applications. Generally there must be enough space so that the lever can be turned 360°.

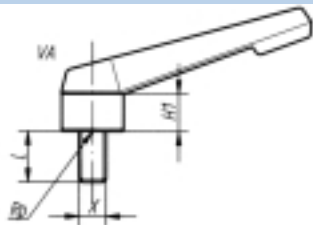
Non-Adjustable Clamp Levers with internal thread



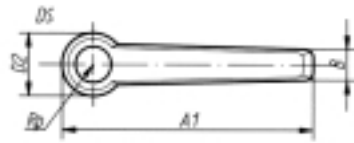
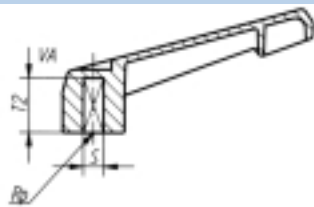
Non-Adjustable Clamp Levers with locating hole



Non-Adjustable Clamp Levers with external thread



Non-Adjustable Clamp Levers with square socket



Non-Adjustable Clamp Levers

Order No.	Internal thread		Approx. weight g	Size	D1	D2	H	H1	H2	A	A1	B
	X	T										
20 104000 90	M 4	10	11	1	13,8	14	17	11	27	40	47	8
20 105000 90	M 5	10	10	1	13,8	14	17	11	27	40	47	8
20 106000 90	M 6	10	10	1	13,8	14	17	11	27	40	47	8
20 208000 90	M 8	14	20	2	18,3	18,5	18	11	36,5	65	75	9
20 310000 90	M 10	14	41	3	21,8	22	22	14	45	80	91	11
20 412000 90	M 12	18	65	4	25,8	26	26	17	54	95	108	13
20 516000 90	M 16	18	105	5	30,8	31	31	21	63	110	126	16

Order No.	External thread		Approx. weight g	Locating hole			Square socket		Approx. weight g	Size	D1	D2	H	H1	H2	A	A1	B		
	X	L = Screw length		Order No.	X ^{H19}	T1	Order No.	S ^{H11}											T2	
20 105*** 90	M 5	20	14	-	-	-	20 105002 90	5	13	5	1	13,8	14	17	11	27	40	47	8	
20 106*** 90	M 6	20	15	20 106001 90	6	10	10	-	-	-	1	13,8	14	17	11	27	40	47	8	
20 208*** 90	M 8	15	20	20 208001 90	8	14	19	20 206002 90	6	16	10	2	18,3	18,5	18	11	36,5	65	75	9
20 310*** 90	M 10	30	65	20 310001 90	10	14	38	20 308002 90	8	18	15	3	21,8	22	22	14	45	80	91	11
20 412*** 90	M 12	30	102	20 412001 90	12	18	62	20 410002 90	10	20	24	4	25,8	26	26	17	54	95	108	13
20 516*** 90	M 16	40	195	20 516001 90	16	18	102	20 512002 90	12	26	40	5	30,8	31	31	21	63	110	126	16

Sample order: Non-Adjustable Clamp Lever 2020802090

*** Add the desired screw length here, e.g. 020 for L = 20 mm

Tension Levers with internal thread



Material:

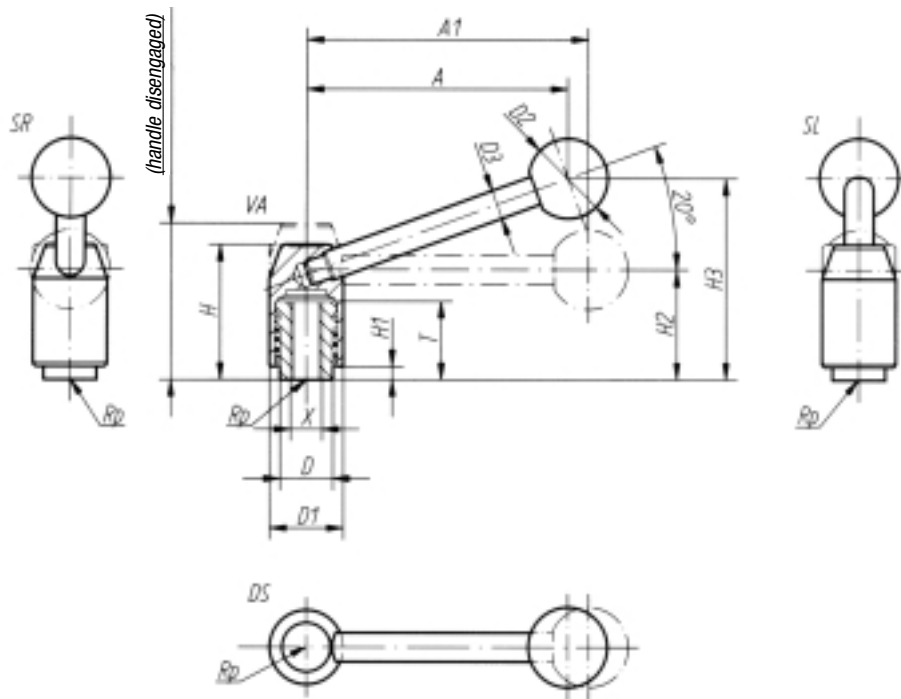
Steel parts quality class 5.8, black plastic ball knob

Surface finish:

Black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.



disengage
by lifting

Tension Levers with internal thread

Order No. black oxide finish 0 degrees	Order No. black oxide finish 20 degrees	Size	Internal thread X*	T	D	D1	D2	D3	H	H1**	H2	H3	H4	A**	A1**	No. of teeth	Approx. weight kg
05 108000 00	05 108000 20	1	M 8	23	17	24	25	10	44	4	36,5	64	49	81	87	28	0,170
05 110000 00	05 110000 20	1	M 10	23	17	24	25	10	44	4	36,5	64	49	81	87	28	0,170
05 210000 00	05 210000 20	2	M 10	26	20	28	30	11	51	5	41,5	76	49	98	106	30	0,260
05 212000 00	05 212000 20	2	M 12	26	20	28	30	11	51	5	41,5	76	57	98	106	30	0,260
05 312000 00	05 312000 20	3	M 12	30	24	33	32	12	57	5	46	87	64	118	128	35	0,400
05 316000 00	05 316000 20	3	M 16	30	24	33	32	12	57	5	46	87	64	118	128	35	0,400
05 416000 00	05 416000 20	4	M 16	35	30	41	37	14	67	6	55	100	75	136	147	38	0,670
05 420000 00	05 420000 20	4	M 20	35	30	41	37	14	67	6	55	100	75	136	147	38	0,670
05 424000 00	05 424000 20	4	M 24	35	30	41	37	14	67	6	55	100	75	136	147	38	1,000

Sample order: Tension Lever 0531200020

*Other internal threads available on request **Dimension "H1", "A" and "A1" available in other lengths at extra charge

Tension Levers with external thread



Material:

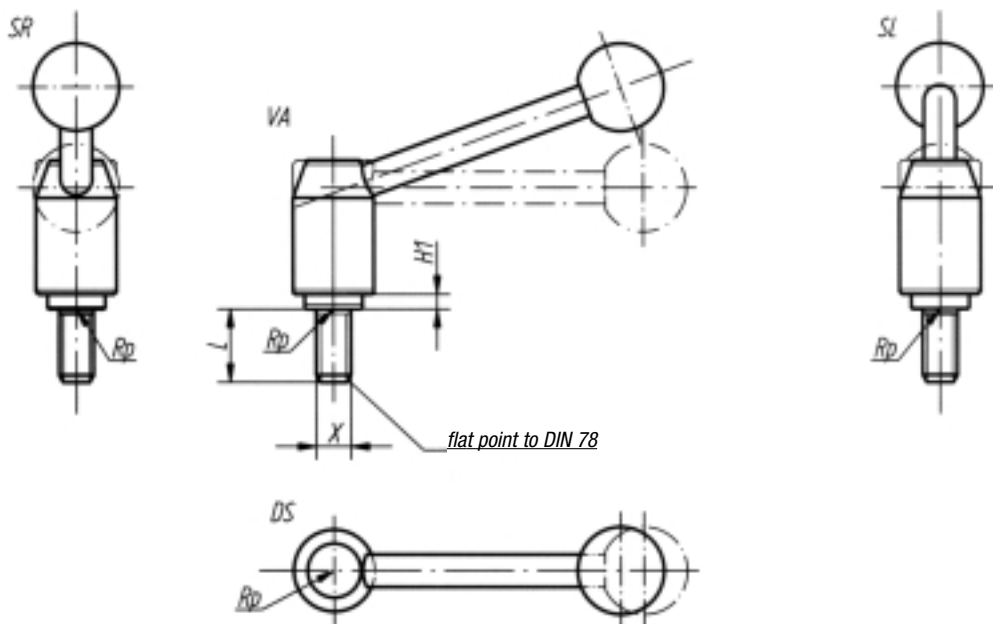
Steel parts quality class 5.8, black plastic ball knob

Surface finish:

Black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.



Clamp Levers with external thread and plastic handle, steel parts in stainless steel

Order No. black oxide finish 0 degrees	Order No. black oxide finish 20 degrees	Size	External thread X**	H1*	L = Screw length **									
05 108*** 00	05 108*** 20	1	M 8	4	15	20	25	30	40	50	60	-	-	-
05 110*** 00	05 110*** 20	1	M 10	4	15	20	25	30	40	50	60	-	-	-
05 112*** 00	05 112*** 20	1	M 12	4	15	20	25	30	40	50	60	-	-	-
05 212*** 00	05 212*** 20	2	M 12	5	-	20	25	30	40	50	60	-	-	-
05 312*** 00	05 312*** 20	3	M 12	5	-	20	25	30	40	50	60	70	80	90
05 316*** 00	05 316*** 20	3	M 16	5	-	20	25	30	40	50	60	70	80	90
05 416*** 00	05 416*** 20	4	M 16	6	-	-	-	30	40	50	60	70	80	90
05 420*** 00	05 420*** 20	4	M 20	6	-	-	-	30	40	50	60	70	80	90
05 424*** 00	05 424*** 20	4	M 24	6	-	-	-	30	40	50	60	70	80	90

Sample order: Tension Lever 0541605000
(Length L)

* Dimension "H1" available in other lengths at extra charge
*** Add the desired screw length here, e.g. 050 for L = 50 mm

**Other external threads and screw lengths available on request

Tension Levers with internal thread

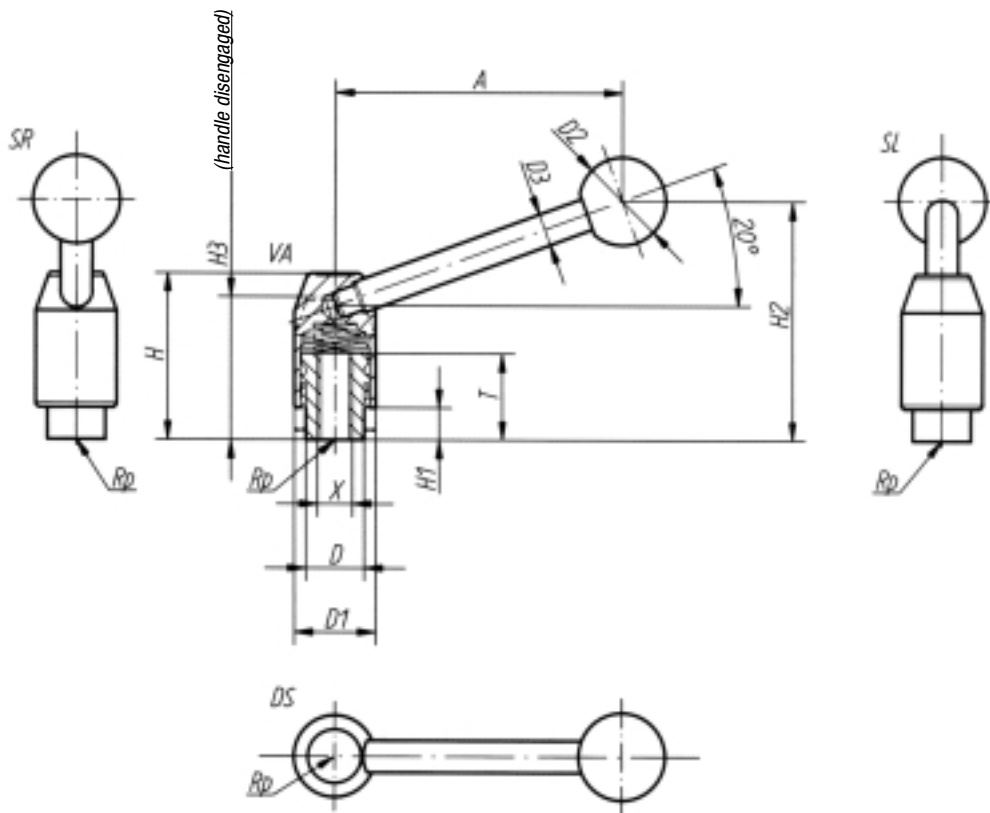


Material:
Steel parts quality class 5.8, black plastic ball knob

Surface finish:
Black oxide finish

Note:
Other materials, surface finishes, special versions, etc. are available.

Method of operation:
To operate Safety Tension Levers, press the handle down until the teeth are fully engaged. The object concerned can now be clamped or released. Spring pressure releases the locking mechanism immediately, thereby restoring the safety function (handle can be turned effortlessly).



engage
by pressing
(safety function)



Safety Tension Levers with internal thread

Order No. black oxide finish	Size	Internal thread X	T	D	D1	D2	D3	H	H1*	H2	H3	A*	No. of teeth	Approx. weight kg
06 108000 20	1	M 8	23	17	24	25	10	49	9	69	44	81	28	0,160
06 110000 20	1	M 10	23	17	24	25	10	49	9	69	44	81	28	0,160
06 210000 20	2	M 10	26	20	28	30	11	57	11	82	44	99	30	0,250
06 212000 20	2	M 12	26	20	28	30	11	57	11	82	51	99	30	0,250
06 312000 20	3	M 12	30	24	33	32	12	64	12	94	57	118	35	0,370
06 316000 20	3	M 16	30	24	33	32	12	64	12	94	57	118	35	0,370

Sample order: Safety Tension Lever 0621000020

Dimensions "H1", "A" and "A1" available in other lengths at extra charge

Tension Levers with external thread



Material:

Steel parts quality class 5.8, black plastic ball knob

Surface finish:

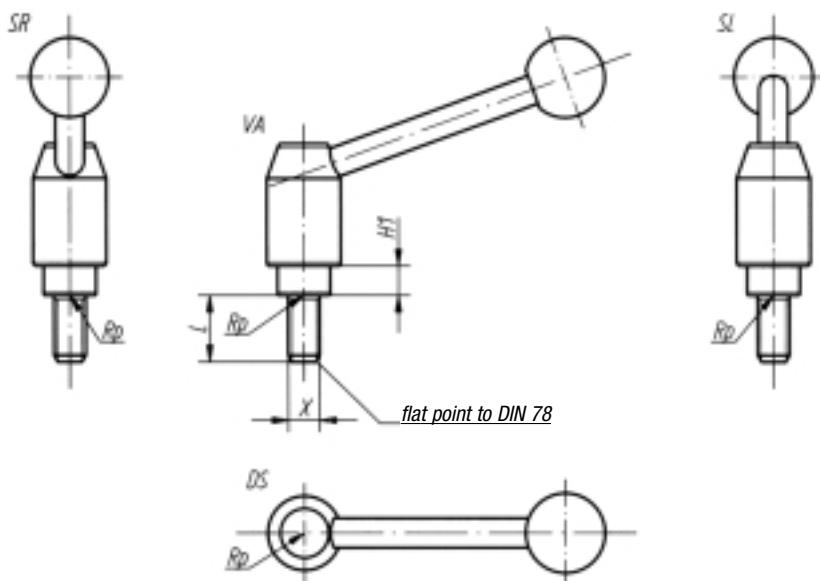
Black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.

Method of operation:

To operate Safety Tension Levers, press the handle down until the teeth are fully engaged. The object concerned can now be clamped or released. Spring pressure releases the locking mechanism immediately, thereby restoring the safety function (handle can be turned effortlessly).



engage
by pressing
(safety function)



Safety Tension Levers with external thread

Order No. black oxide finish	Size	External thread X**	H1*	L = Screw length **						
06 108*** 20	1	M 8	9	20	25	30	40	50	60	
06 110*** 20	1	M 10	9	20	25	30	40	50	60	
06 112*** 20	1	M 12	9	20	25	30	40	50	60	
06 212*** 20	2	M 12	11	20	25	30	40	50	60	
06 312*** 20	3	M 12	12	20	25	30	40	50	60	
06 316*** 20	3	M 16	12	20	25	30	40	50	60	

Sample order: Safety Tension Lever 0631605020
(Length L)

* Dimension "H1" available in other lengths at extra charge
** Other external threads and screw lengths available on request
*** Add the desired screw length here, e.g. 050 for L = 50 mm

Flat Tension Levers with internal thread



Material:

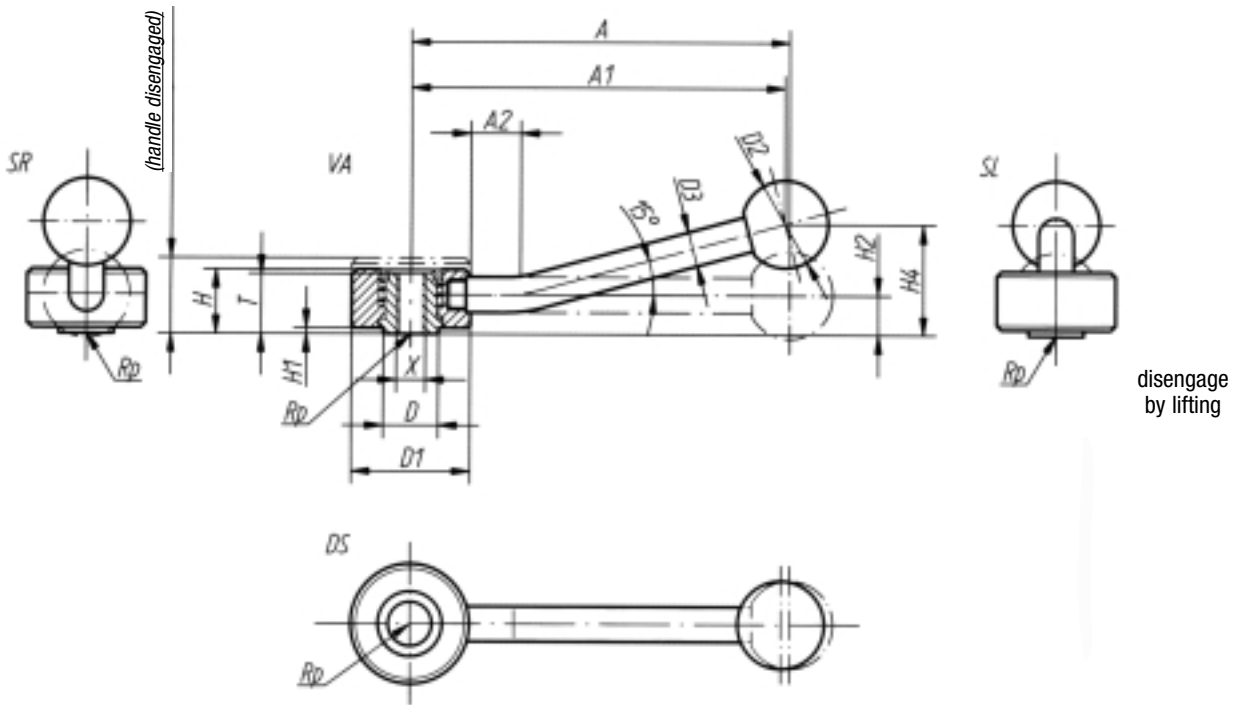
Steel parts quality class 5.8, black plastic ball knob

Surface finish:

Black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.



Flat Tension Levers with internal thread

Order No. black oxide finish 0 degrees	Order No. black oxide finish 15 degrees	Size	Internal thread X*	T	D	D1	D2	D3	H	H1**	H2	H3	H4	A**	A1**	A2	No. of teeth	Approx. weight kg
07 106000 00	07 106000 15	1	M 6	18	13,5	33	25	10	19	2	12	23	29	102	100	15	26	0,160
07 108000 00	07 108000 15	1	M 8	18	13,5	33	25	10	19	2	12	23	29	102	100	15	26	0,160
07 210000 00	07 210000 15	2	M 10	21	19	41	30	12	22	2	13,5	26	38	130	127	15	30	0,290
07 212000 00	07 212000 15	2	M 12	21	19	41	30	12	22	2	13,5	26	38	130	127	15	30	0,290
07 312000 00	07 312000 15	3	M 12	27	23	45	37	14	28	2	17	33	48	148	145	15	36	0,450
07 316000 00	07 316000 15	3	M 16	27	23	45	37	14	28	2	17	33	48	148	145	15	36	0,450

Sample order: Flat Tension Lever 0710600000

*Other internal threads available on request **Dimensions "H1", "A" and "A1" available in other lengths at extra charge

Flat Tension Levers with external thread



Material:

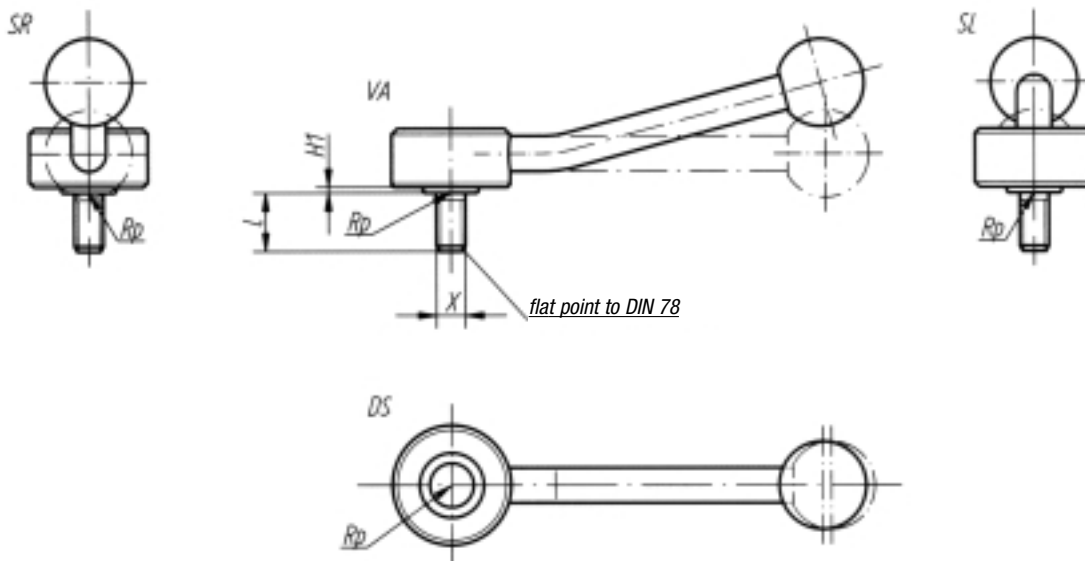
Steel parts quality class 5.8, black plastic ball knob

Surface finish:

Black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.



disengage
by lifting

Flat Tension Levers with external thread

Order No. black oxide finish 0 degrees	Order No. black oxide finish 15 degrees	Size	External thread X**	H1*	L = Screw length **						
07 108*** 00	07 108*** 15	1	M 8	2	15	20	25	30	40	50	60
07 110*** 00	07 110*** 15	1	M 10	2	15	20	25	30	40	50	60
07 210*** 00	07 210*** 15	2	M 10	2	-	20	25	30	40	50	60
07 212*** 00	07 212*** 15	2	M 12	2	-	20	25	30	40	50	60
07 312*** 00	07 312*** 15	3	M 12	2	-	20	25	30	40	50	60
07 316*** 00	07 316*** 15	3	M 16	2	-	20	25	30	40	50	60

Sample order: Flat Tension Lever 0731605015
(Length L)

* Dimension "H1" available in other lengths at extra charge
** Other external threads and screw lengths available on request
*** Add the desired screw length here, e.g. 050 for L = 50 mm

Steel Clamp Levers with internal thread



Material:

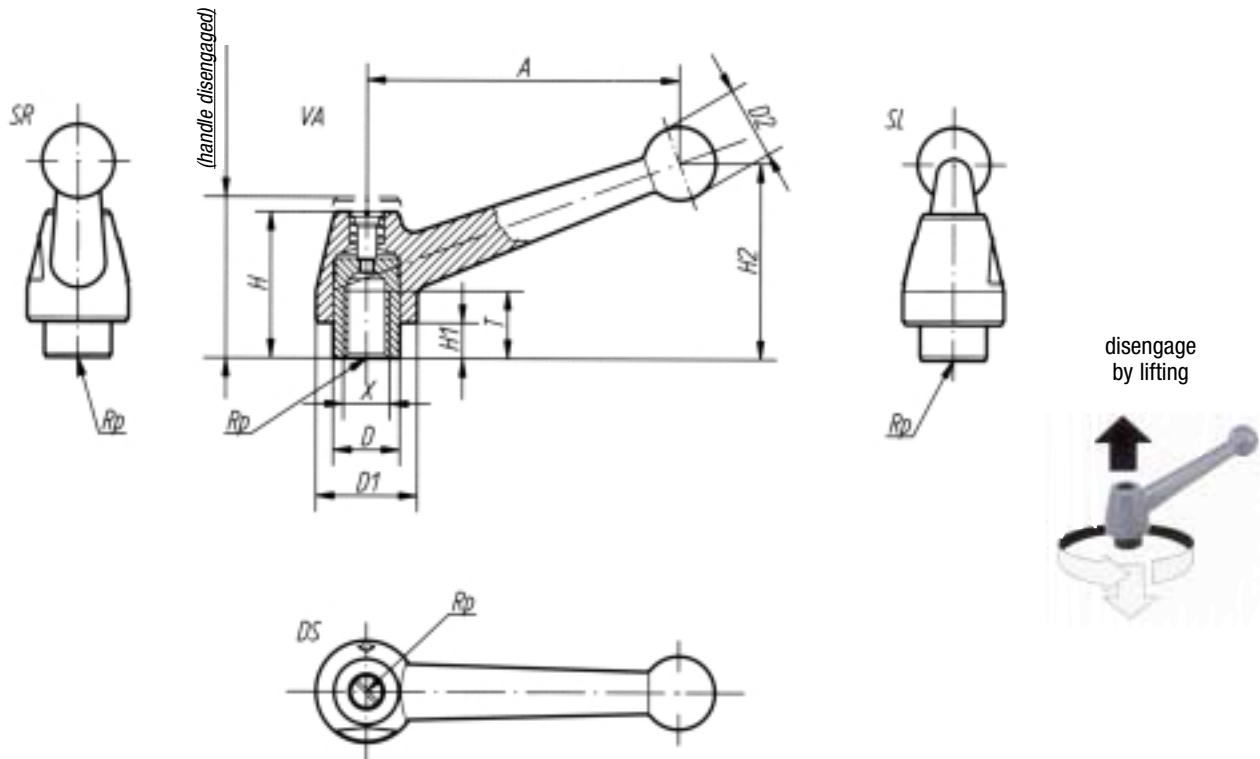
Steel handle in C 35 drop forged steel, all other steel parts quality class 5.8

Surface finish:

Handle painted silver-grey with hammertone finish, steel black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.



Steel Clamp Levers with internal thread

Order No. silver-grey hammertone finish	Size	Internal thread X*	T	D	D1	D2	H	H1**	H2	H3	A	No. of teeth	Approx. weight kg
03 108000	1	M 8	17	19	28	20	44	12	54	49	83	24	0,230
03 110000	1	M 10	17	19	28	20	44	12	54	49	83	24	0,230
03 112000	1	M 12	17	19	28	20	44	12	54	49	83	24	0,230
03 212000	2	M 12	23	23	35	25	50	12	69	56	108	26	0,440
03 216000	2	M 16	23	23	35	25	50	12	69	56	108	26	0,440
03 316000	3	M 16	27	30	43	30	58,5	12	78	65	132	36	0,730
03 320000	3	M 20	27	30	43	30	58,5	12	78	65	132	36	0,730

Sample order: Steel Clamp Lever 03216000

* Other internal threads available on request

** Dimension "H1" available in other lengths at extra charge

Steel Clamp Levers with external thread



Material:

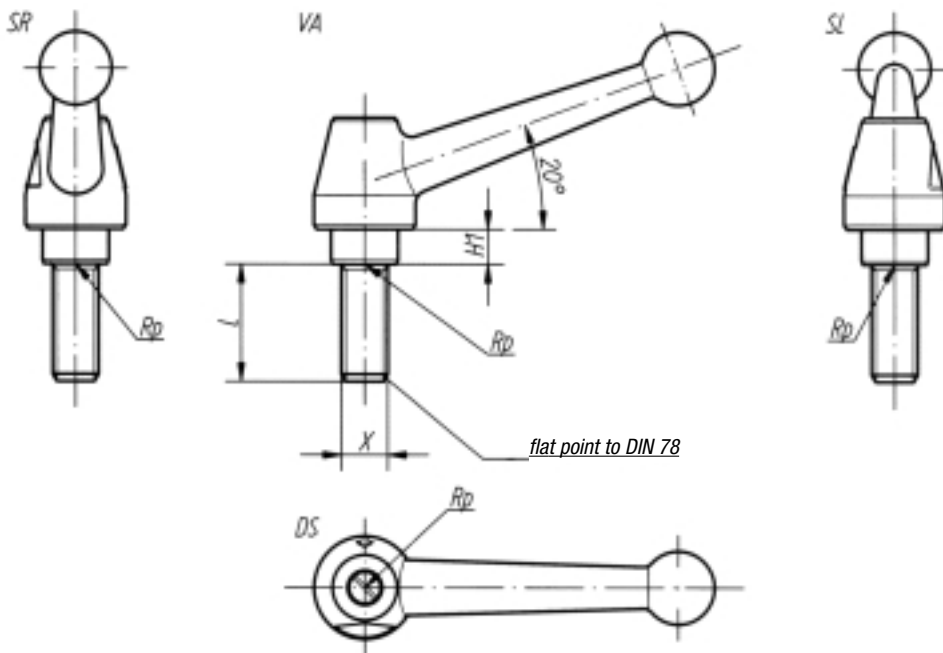
Steel handle in C 35 drop forged steel, all other steel parts quality class 5.8

Surface finish:

Handle painted silver-grey with hammertone finish, steel black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.



disengage
by lifting



Steel Clamp Levers with external thread

Order No. silver-grey hammertone finish	Size	External thread X**	H1*	L = Screw length **											
03 110***	1	M 10	12	20	25	30	35	40	45	50	55	60	70	80	90
03 112***	1	M 12	12	20	25	30	35	40	45	50	55	60	70	80	90
03 212***	2	M 12	12	-	25	30	35	40	45	50	55	60	70	80	90
03 216***	2	M 16	12	-	25	30	35	40	45	50	55	60	70	80	90
03 316***	3	M 16	12	-	-	30	-	40	-	50	-	60	70	80	90
03 320***	3	M 20	12	-	-	30	-	40	-	50	-	60	70	80	90

Sample order: Steel Clamp Lever 03216030
(Length L)

* Dimension "H1" available in other lengths at extra charge
*** Add the desired screw length here, e.g. 030 for L = 30 mm

**Other external threads and screw lengths available on request

Ratchet Levers



Material:

Housing in tempered steel, tension nut and tension pin in case-hardened free-cutting steel

Surface finish:

Black oxide finish, matt-finished or high-polish chromium-plated versions available at extra charge

Note:

Tension Pin A standard model (for ratchet action):

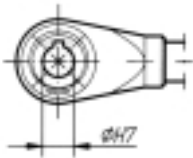
Use for clamping and releasing in limited space and when considerable travel is involved. In order to change the tightening direction, the handle must be reversed by 180°.

Tension Pin B special model:

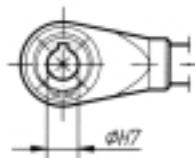
Use for clamping and releasing in limited space and when short travel is involved. The handle is not reversed in order to change the tightening direction. It must be pulled out before it can be engaged in the next slot.

Sample order:

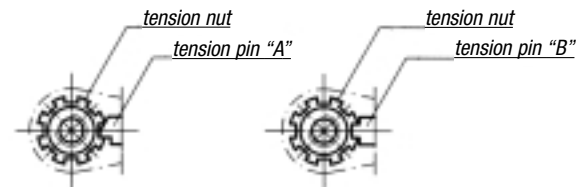
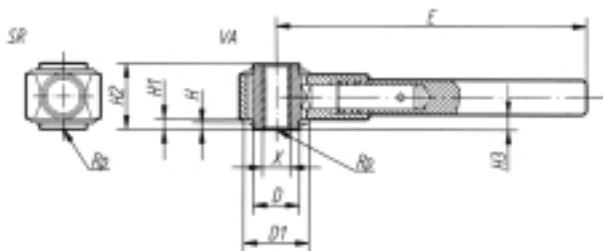
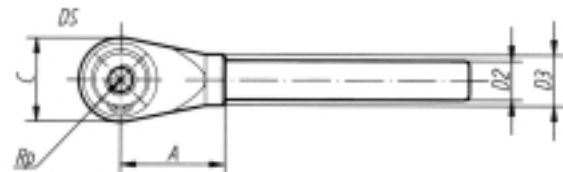
Ratchet Lever 17 214000, special model: Tension Pin B



Ratchet Lever with square socket



Ratchet Lever with locating hole and feather slot to DIN 6885 Sheet 1, tolerance quality JS 9



Order No.	Internal thread X*	Order No.	Locating hole dia. with feather slot to DIN 6885 Sheet 1	Order No.	Square socket SW*	Size	D	D1	D2	D3	H	H1	H2	H3	C	A	E**	No. of locking slots	Approx. weight kg
black oxide finish		black oxide finish		black oxide finish															
17 110000	M 10	17 112001	12	17 110002	10	1	22	33	17	22	3	4,5	31	15,5	36	48	150	7	0,460
17 112000	M 12			17 112002	12	1	22	33	17	22	3	4,5	31	15,5	36	48	150	7	0,460
17 214000	M 14	17 214001	14	17 213002	13	2	27	38	20	26	4	6	38	19	43	54	180	8	0,760
		17 215001	15			2	27	38	20	26	4	6	38	19	43	54	180	8	0,760
17 216000	M 16	17 216001	16	17 214002	14	2	27	38	20	26	4	6	38	19	43	54	180	8	0,760
17 318000	M 18	17 318001	18	17 317002	17	3	35	45	24	30	4	6	42	21	51	70	230	8	1,350
17 320000	M 20	17 320001	20			3	35	45	24	30	4	6	42	21	51	70	230	8	1,350
17 422000	M 22	17 422001	22	17 419002	19	4	42	56	28	35	4	6	47	23,5	61	80	300	9	2,300
17 424000	M 24	17 425001	25	17 420002	20	4	42	56	28	35	4	6	47	23,5	61	80	300	9	2,300
				17 422002	22	4	42	56	28	35	4	6	47	23,5	61	80	300	9	2,300
17 427000	M 27	17 427001	27	17 424002	24	4	42	56	28	35	4	6	47	23,5	61	80	300	9	2,300
17 530000	M 30	17 530001	30	17 530002	30	5	60	75	32	38	5	7,5	53	26,5	82	110	400	11	4,200
17 536000	M 36					5	60	75	32	38	5	7,5	53	26,5	82	110	400	11	4,200
17 542000	M 42	17 536001	36	17 532002	32	5	60	75	32	38	5	7,5	53	26,5	82	110	400	11	4,200

Sample order: Ratchet Lever 17 320000

*Other internal threads, locating holes and square sockets available on request **Dimension "E" available in other lengths at extra charge

Control Handles



Material:

Steel parts quality class 5.8, black plastic ball knob

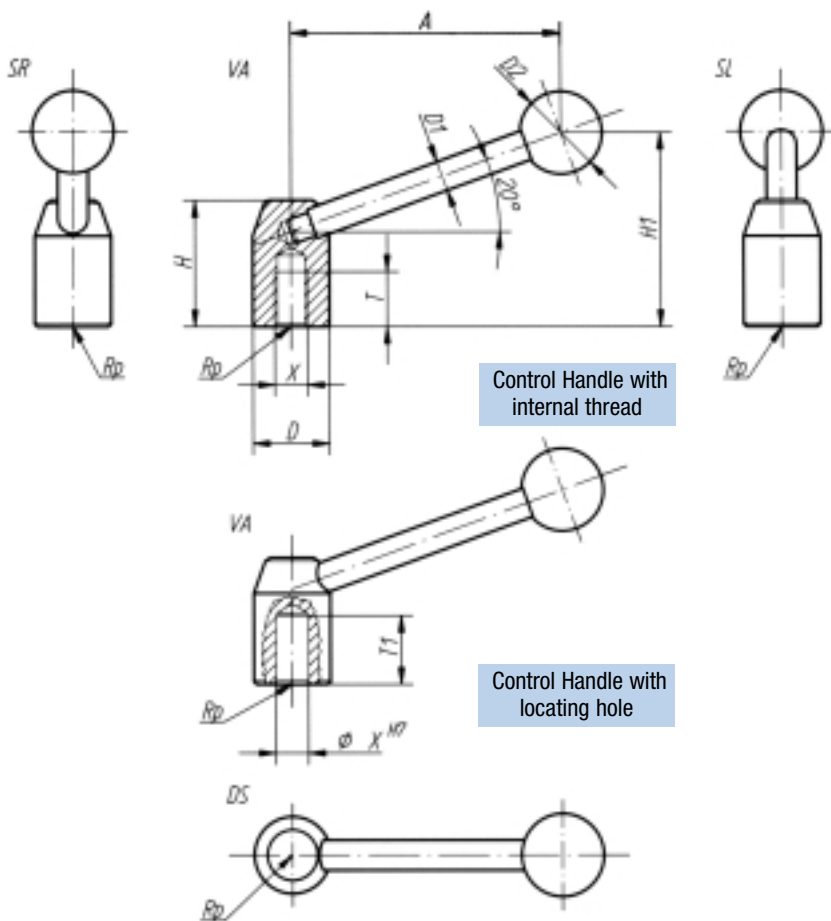
Surface finish:

Black oxide finish

Note:

Other materials, surface finishes, special versions, etc. are available.

Control Handles can be used for simple clamping applications and switching operations. Generally there must be enough space so that the handle can be turned 360°.



Control Handle with internal thread

Control Handle with locating hole

Order No.	Internal thread X**	Order No.	Locating hole X**	Size	T	T1	D	D1	D2	H	H1	A*	Approx. weight kg
14108000	M8	14108001	8	1	18	22	24	10	25	40	60	81	0,170
14110000	M10	14110001	10	1	19	22	24	10	25	40	60	81	0,170
14212000	M12	14212001	12	2	20	25	28	11	30	46	71	99	0,260
-	-	14214001	14	2	20	25	28	11	30	46	71	99	0,260
14316000	M16	14316001	16	3	23	28	33	12	32	52	82	118	0,380
-	-	14318001	18	3	23	28	33	12	32	52	82	118	0,380
14420000	M20	14420001	20	4	26	32	41	14	37	61	94	136	0,660

Sample order: Control Handle 14316000

*Dimension "A" available in other lengths at extra charge

** Other internal threads and locating holes available on request

Flat Control Handles



Material:

Steel parts quality class 5.8, black ball knob in duroplastic FS 31

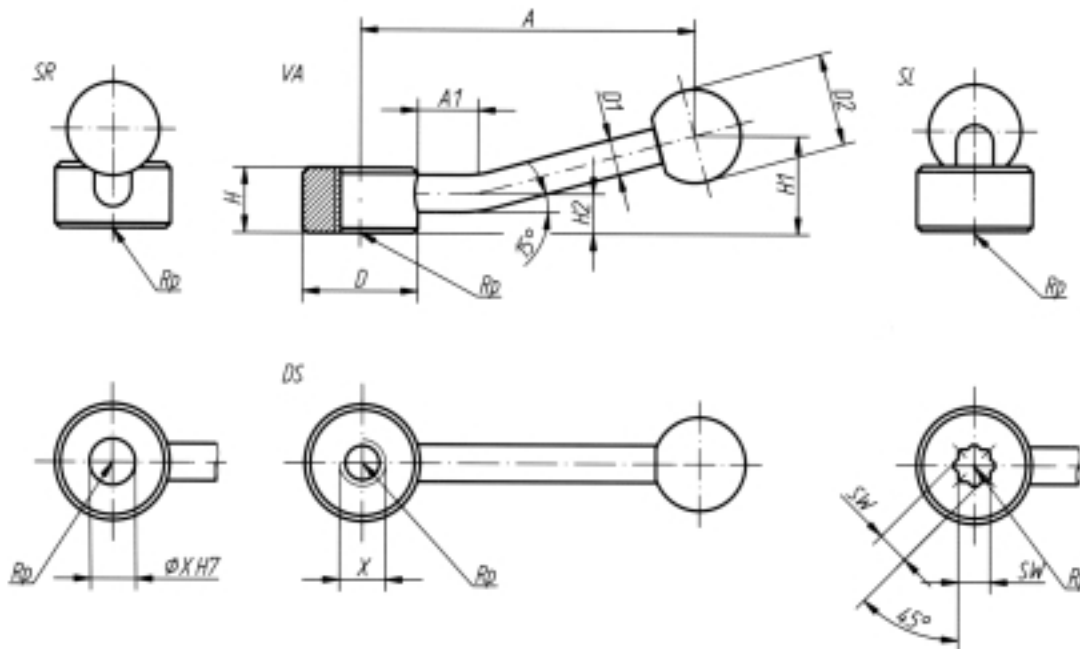
Surface finish:

Black oxide finish

Note:

Flat Control Handles can be used for simple clamping applications and switching operations. Generally there must be enough space so that the handle can be turned 360°.

The version with star socket is designed to allow turning in steps of 45°.



Flat Control Handle with locating hole

Flat Control Handle with internal thread

Flat Control Handle with star socket

Flat Control Handles

Order No.	internal thread		Locating hole		Star socket		Size	D	D1	D2	H	H1	H2	A**	A1		
	X*	Approx. weight g	Order No.	X ^{H*}	Approx. weight g	Order No.										SW*	Approx. weight g
14106000F	M 6	81	14106001F	6	80	-	-	-	1	25	8	20	14	22	8,5	75	12
14108000F	M 8	78	14108001F	8	78	14105004F	5,5	79	1	25	8	20	14	22	8,5	75	12
14110000F	M 10	76	14110001F	10	75	14107004F	7	77	1	25	8	20	14	22	8,5	75	12
14212000F	M 12	156	14212001F	12	152	14209004F	9	154	2	33	10	25	17	27	10	100	15
14216000F	M 16	144	14216001F	16	140	14211004F	11	149	2	33	10	25	17	27	10	100	15
14320000F	M 20	258	14320001F	20	248	14314004F	14	273	3	41	12	30	20	36	11,5	128	15
14324000F	M 24	246	14324001F	24	238	14319004F	19	245	3	41	12	30	20	36	11,5	128	15

Sample order: Flat Control Handle 14320000F

* Other internal threads, locating holes and star sockets available on request
 ** Dimension "A" available in other lengths at extra charge

Clamp Joints with Clamp Lever

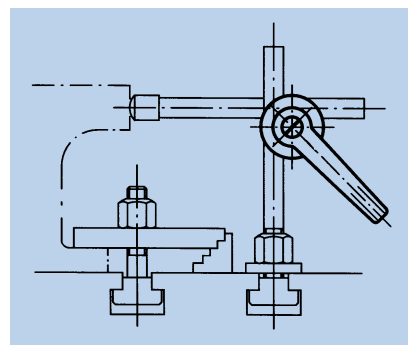
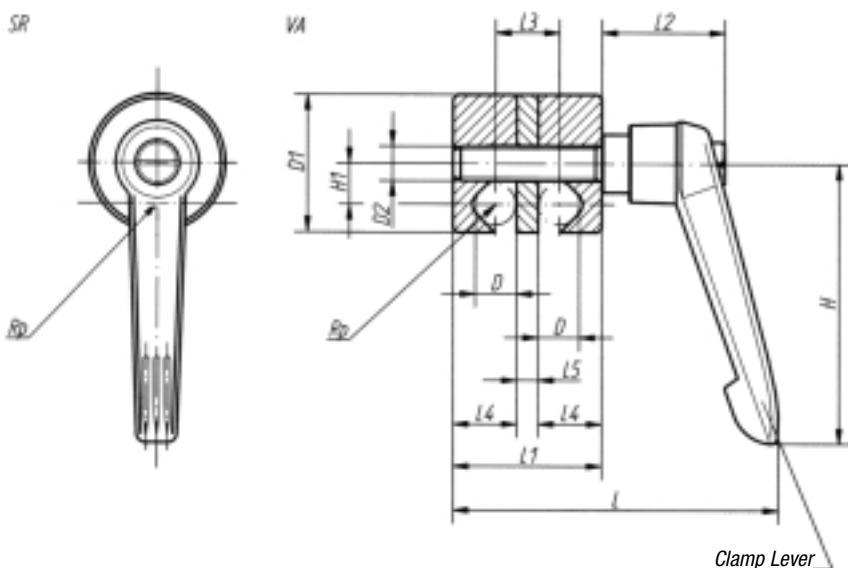


Material, surface finish:

Clamp Lever handle in glass-fibre reinforced thermoplastic, anthracite grey; steel parts quality class 5.8, black oxide finish; other parts in high-strength aluminium nickel silver anodised

Note:

Clamping Joints are used to clamp round cross sections (bars, tubes, etc.) and are continuously adjustable. The design has been kept as simple as possible and, in conjunction with the adjustable Clamp Lever, it permits rapid clamping.



Clamping Joints with Clamp Lever

Order No.	Size	D	D1	D2	L	L1	L2	L3	L4	L5	H	H1	With corresponding Clamp Lever (supplied)	Approx. weight kg
42108 08	1	8	28	M 8	72	31	29	13	13	5	65	8,5	51 208030 90	0,082
42210 10	2	10	32	M 8	76	35	29	15	15	5	65	9,5	51 208035 90	0,100
42312 12	3	12	36	M 8	81	40	29	18	17	6	65	10,5	51 208040 90	0,127
42416 16	4	16	45	M 10	103	50	37,5	22	22	6	80	13,5	51 310050 90	0,233

Sample order: Clamping Joint with Clamp Lever 42210 10

Clamp Joints individually adjustable

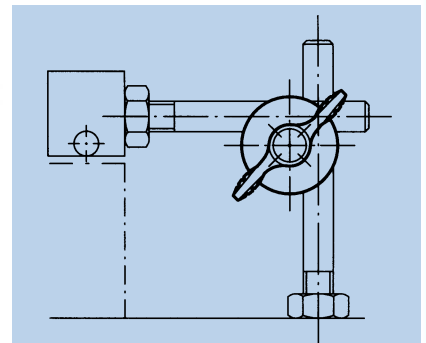
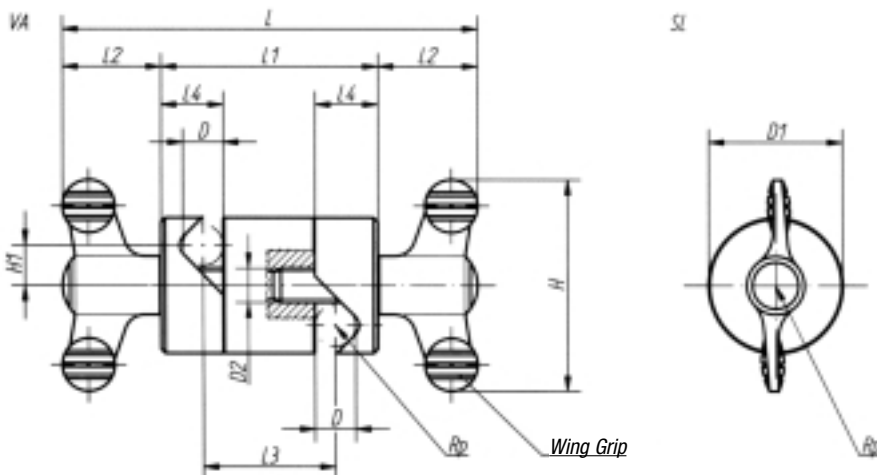


Material, surface finish:

Wing Grip handle in thermoplastic, anthracite grey; threaded bolt in yellow chromated steel 5.8; other parts in high-strength aluminium nickel silver anodised

Note:

Clamping Joints are used to clamp round cross sections (bars, tubes, etc.) and are continuously adjustable. The design has been kept as simple as possible and, in conjunction with the Wing Grips, it permits rapid clamping.



Clamping Joints individually adjustable

Order No.	Size	D	D1	D2	L	L1	L2	L3	L4	H	H1	With corresponding Wing Grips (supplied)	Approx. weight kg
42108 08A	1	8	28	M 8	90	42	24	24	13	50	8,5	203-108020	0,086
42210 10A	2	10	32	M 8	100	52	24	32	15	50	9,5	203-108025	0,124
42312 12A	3	12	36	M 8	104	56	24	34	17	50	10,5	203-108025	0,157
42416 16A	4	16	45	M 10	142	72	35	44	22	75	13,5	203-210035	0,345

Sample order: Clamping Joint individually adjustable 42210 10A

Multiple Connectors

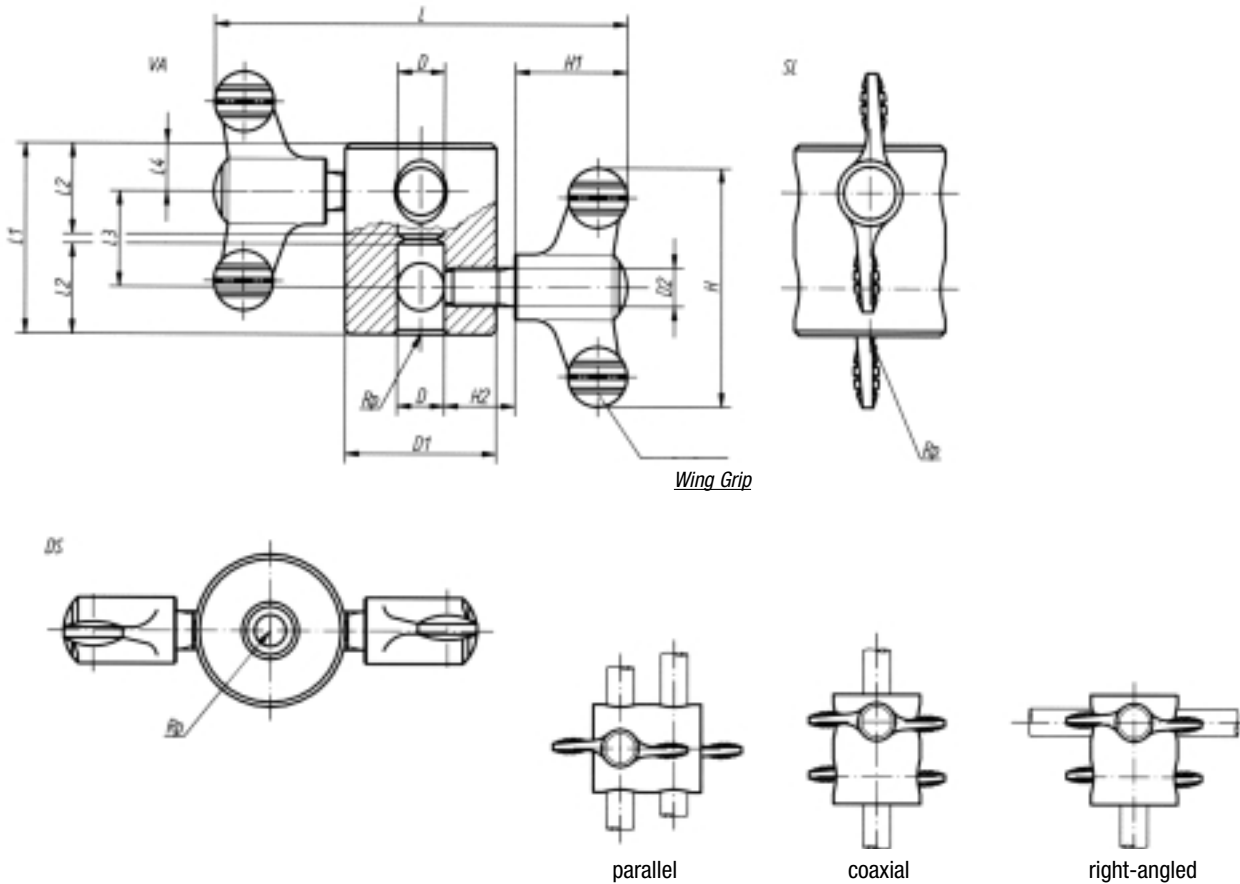


Material, surface finish:

Wing Grip handle in thermoplastic, anthracite grey; threaded bolt in yellow chromated steel 5.8; main body in high-strength aluminium nickel silver anodised

Note:

Multiple Connectors are used to extend round cross sections (bars, tubes, etc.) in a coaxial or parallel arrangement. A parallel arrangement of bars, for example, can also be used to strengthen or stiffen an assembly. The locating hole system in the main body also makes it possible to produce right-angled connections.



Multiple Connectors

Order No.	Size	D	D1	D2	L	L1	L2	L3	L4	H	H1	H2	With corresponding Wing Grips (supplied)	Approx. weight kg
42108 08B	1	8	28	M 8	86	36	17	20	8	50	24	15	203-108015	0,074
42210 10B	2	10	32	M 8	90	40	19	20	10	50	24	15	203-108015	0,093
42312 12B	3	12	36	M 8	90	44	21	20	12	50	24	15	203-108015	0,118
42416 16B	4	16	45	M 10	126	56	27	24	16	75	35	20	203-210020	0,262

Sample order: Multiple Connector 42416 16B



Handles

MACHINE ACCESSORIES

CALL US AT: 00 44 (0)1908 374022 OR FAX US AT: 00 44 (0)1908 641628

Crank Handles with cylindrical revolving grip



Crank Handles set trend-setting standards in all essential fields of operation and application. The actual challenge is to ensure simple handling and a universal range of application despite the sophisticated technology.

Material, surface finish:

Anthracite grey thermoplastic, steel parts black oxide finish

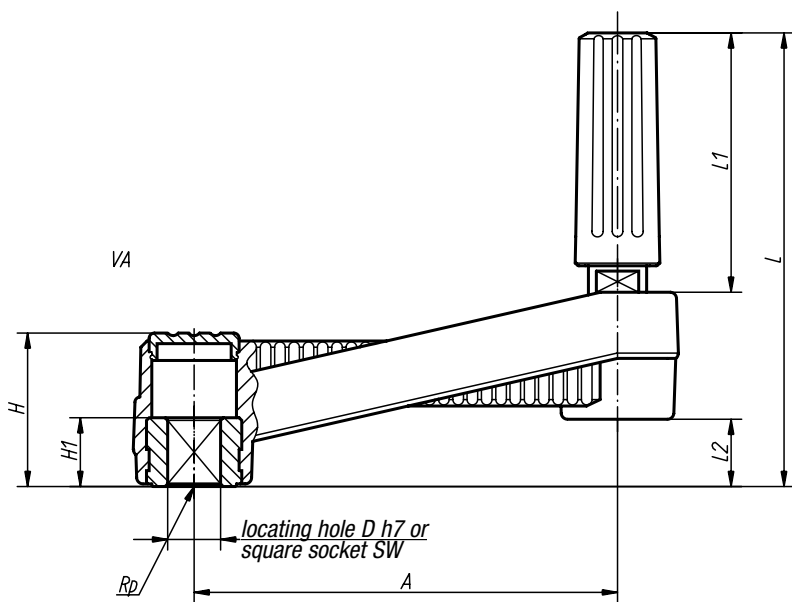
Note:

The hub cover is supplied unassembled.

The handwheels can be secured axially to the shaft via feather connection by cross-pinning or with a socket head screw to DIN 6912 and a washer to DIN 7349. The Cylindrical Revolving Grip is supplied unassembled. In order to assemble it, the axis must be screwed into the receiving hole.

Locating hole with feather slot available on request.

For missing dimensions, see next page.



Crank Handles with cylindrical revolving grip

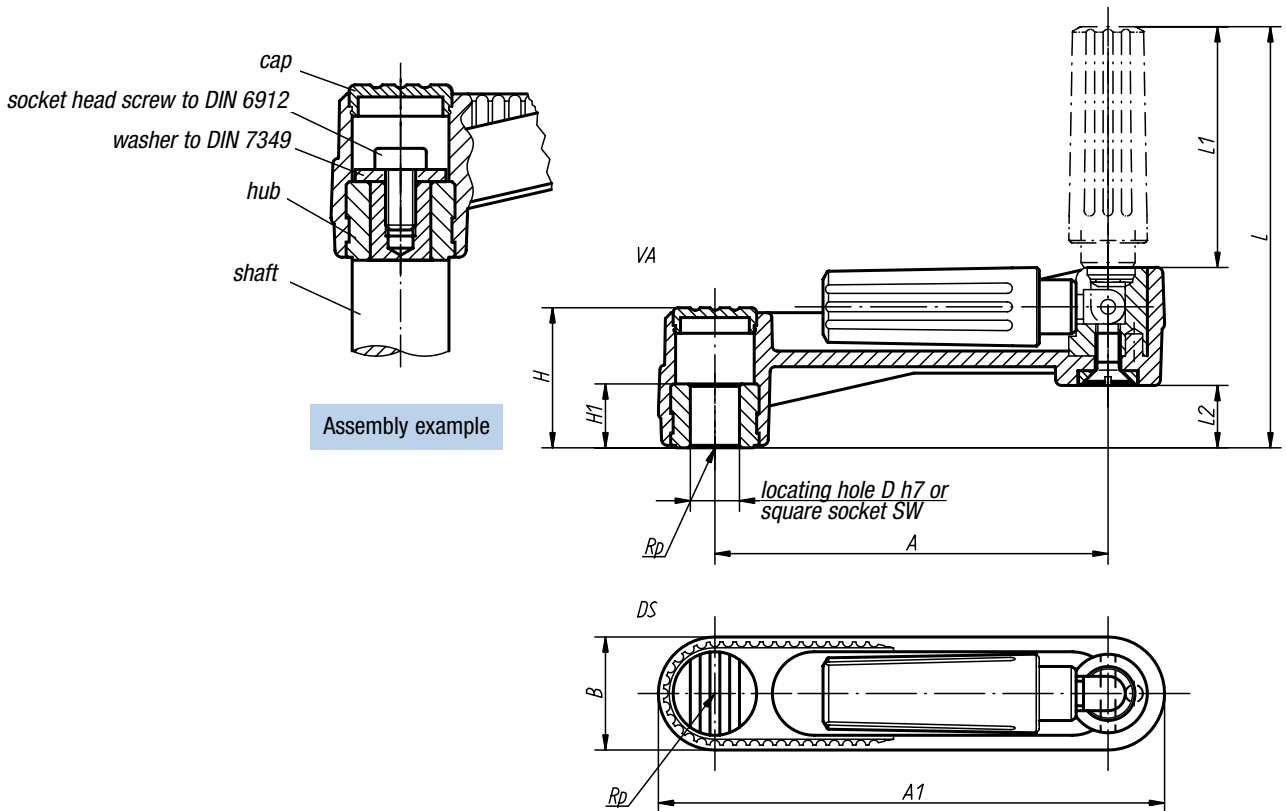
Order No. locating hole	Order No. square socket	Size	D ¹⁷	SW	Approx. weight g
214-1 080 08 001	214-1 080 08 002	1	8	8	110
214-1 080 10 001	214-1 080 10 002	1	10	10	110
214-2 100 10 001	214-2 100 10 002	2	10	10	210
214-2 100 12 001	214-2 100 12 002	2	12	12	210
214-3 125 12 001	214-3 125 12 002	3	12	12	405
214-3 125 14 001	214-3 125 14 002	3	14	14	405

Sample order: Crank Handle with cylindrical revolving grip 214-1 080 08 002

Crank Handles with cylindrical fold-away grip



Of course, Crank Handles comply with standards regarding their centre distances. They also come with Cylindrical Fold-Away Grips, highly reinforced, stable plastics and can be used for shaft or square sections. Moreover, they offer axial and radial fastening possibilities.



Assembly example

Crank Handles with cylindrical fold-away grip

Order No. locating hole	Order No. square socket	Size	A	A1	B	D ^{h7}	SW	H	H1	L	L1	L2	Approx. weight g
215-1 080 08 001	215-1 080 08 002	1	80	104	24	8	8	29	13	85,5	49	13	100
215-1 080 10 001	215-1 080 10 002	1	80	104	24	10	10	29	13	85,5	49	13	100
215-2 100 10 001	215-2 100 10 002	2	100	129	29	10	10	36	13	105	59,5	16	190
215-2 100 12 001	215-2 100 12 002	2	100	129	29	12	12	36	13	105	59,5	16	190
215-3 125 12 001	215-3 125 12 002	3	125	161	36	12	12	44	18,5	140	83,5	19,5	370
215-3 125 14 001	215-3 125 14 002	3	125	161	36	14	14	44	18,5	140	83,5	19,5	370

Sample order: Crank Handle with cylindrical fold-away grip 215-1 080 08 001

Crank Handles with cylindrical safety grip



The overriding safety aspect of these Crank Handles is the automatically returning Cylindrical Grip without limiting their comfortable handling and reliable functionality.

Material, surface finish:

Body and grip in anthracite grey thermoplastic, steel parts black oxide finish

Note:

The hub cover is supplied unassembled.

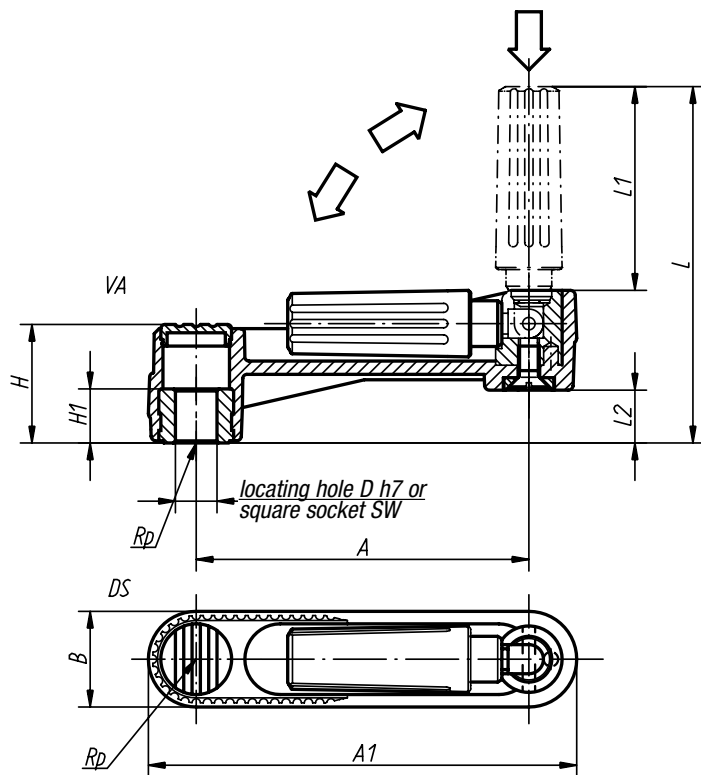
The crank handles can be secured axially to the shaft by cross-pinning or with a socket head screw to DIN 6912 and a washer to DIN 7349.

Two steps have to be executed to bring the Cylindrical Safety Grip into operating position: Swivel the grip around the axis of rotation until it stops (90°).

Press the grip in axial direction into locking position.

The pressed-in position is the most comfortable position to crank.

The grip returns automatically after letting go.



Crank Handles with cylindrical safety grip

Order No. locating hole	Order No. square socket	Size	A	A1	B	D ^{h7}	SW	H	H1	L	L1	L2	Approx. weight g
K3236 11 080 08	K3236 21 080 08	1	80	104	24	8	8	29	13	84	47,5	13	100
K3236 11 080 10	K3236 21 080 10	1	80	104	24	10	10	29	13	84	47,5	13	100
K3236 12 100 10	K3236 22 100 10	2	100	129	29	10	10	36	13	104	58,5	16	190
K3236 12 100 12	K3236 22 100 12	2	100	129	29	12	12	36	13	104	58,5	16	190
K3236 13 125 12	K3236 23 125 12	3	125	161	36	12	12	44	18,5	138,5	82	19,5	370
K3236 13 125 14	K3236 23 125 14	3	125	161	36	14	14	44	18,5	138,5	82	19,5	370

Sample order: Crank Handle with cylindrical safety grip K3236 12 100 10

Bighand



Secure gripping with the Bighand. This design supports the “tailor-made” gripping position and its universal alteration of handle orientation takes the requirements of application masterly into account.

Material, surface finish:

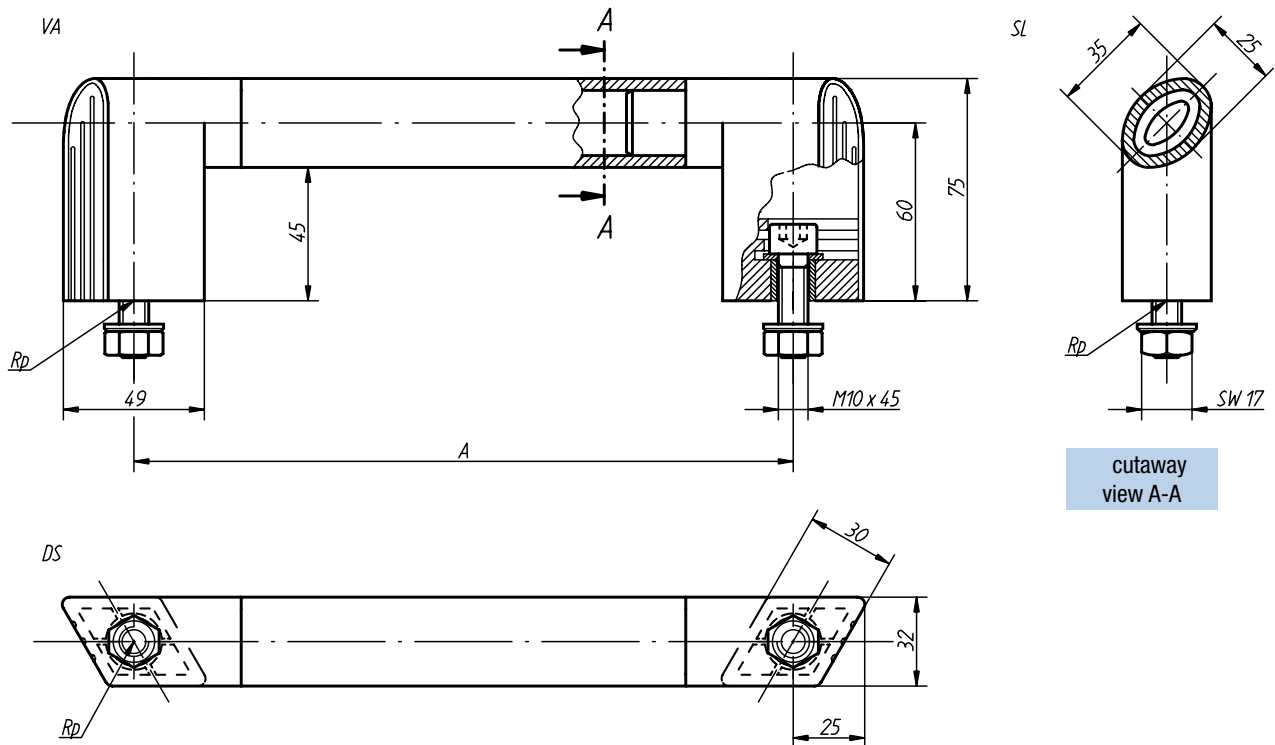
Diamond corner parts in anthracite grey thermoplastic, oval tube in aluminium, coated or anodised

Note:

The covers of the diamond corner parts are supplied unassembled. Leg length A is available in stepped special lengths on request.

Optional supply: a set of screws M 10 for variations 1+2, a set of wood screws \varnothing 5 with dowel for variation 3 (see following page).

A drill template and assembly tools are supplied with variation 3.



cutaway view A-A

Bighand

Order No. variations 1+2 socket head screw DIN 912	Order No. variation 3 hexagon wood screw DIN 571	A	Approx. weight g
218-1 180 $\Delta\Delta$	218-1 180 $\Delta\Delta$ 11	180	280
218-1 200 $\Delta\Delta$	218-1 200 $\Delta\Delta$ 11	200	300
218-1 250 $\Delta\Delta$	218-1 250 $\Delta\Delta$ 11	250	350
218-1 300 $\Delta\Delta$	218-1 300 $\Delta\Delta$ 11	300	400
218-1 350 $\Delta\Delta$	218-1 350 $\Delta\Delta$ 11	350	450
218-1 400 $\Delta\Delta$	218-1 400 $\Delta\Delta$ 11	400	500
218-1 500 $\Delta\Delta$	218-1 500 $\Delta\Delta$ 11	500	600
218-1 600 $\Delta\Delta$	218-1 600 $\Delta\Delta$ 11	600	700

Sample order: Bighand 218-1 250 70 (oval tube colour raspberry red)

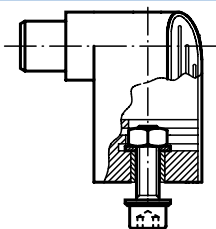
$\Delta\Delta$ Add the desired colour code here. The codes are listed on following page. No colour code is required with anthracite grey oval tubes.

Bighand G

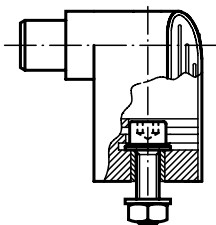


Now a joint piece allows the extended use of the Bighand on different levels and adjustable "angle positions" with the aim of avoiding gaps in operation. Bighand "G" provides a completely new philosophy of gripping and flexibility.

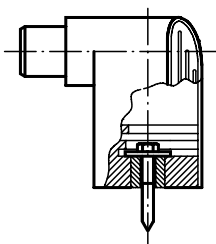
Mounting variations



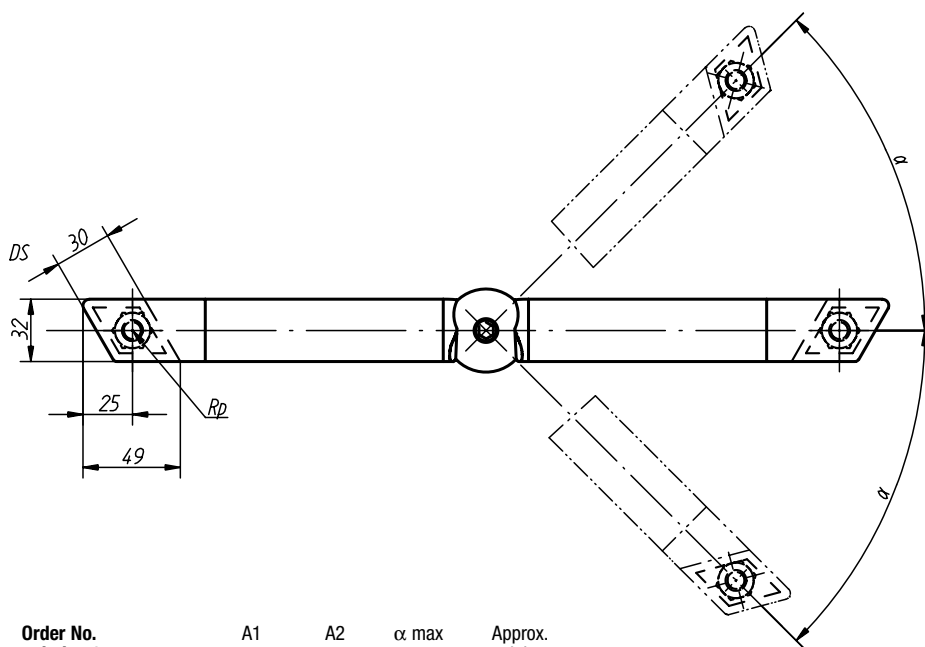
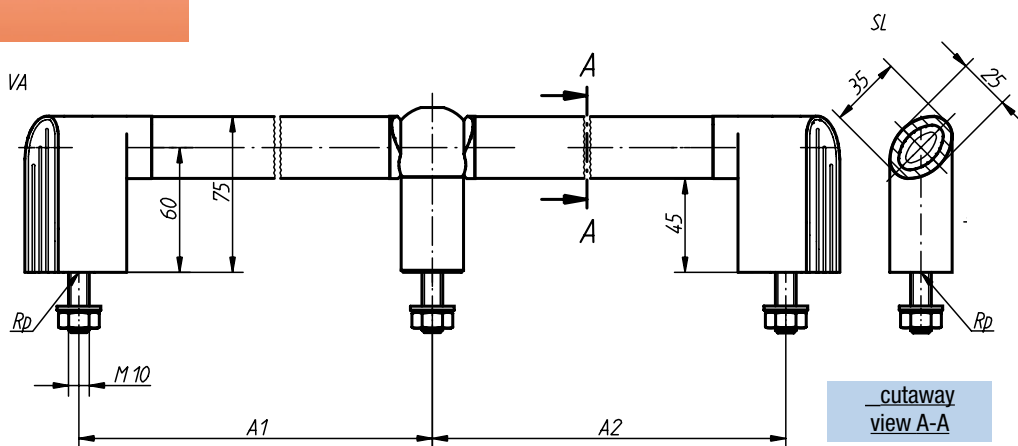
variation 1



variation 2



variation 3



Bighand G

Order No. variation 1 socket head screw DIN 912	Order No. variation 3 hexagon wood screw DIN 571	A1	A2	α max	Approx. weight g
218-G 280280 ΔΔ	218-G 280280 ΔΔ 11	280	280	90°	700
218-G 280380 ΔΔ	218-G 280380 ΔΔ 11	280	380	90°	800
218-G 380380 ΔΔ	218-G 380380 ΔΔ 11	380	380	90°	900
218-G 380480 ΔΔ	218-G 380480 ΔΔ 11	380	480	90°	1000
218-G 480480 ΔΔ	218-G 480480 ΔΔ 11	480	480	90°	1100

Sample order: Bighand G 218-G 280280 70 11 (oval tube colour raspberry red; mounting with hexagon wood screw DIN 571)

ΔΔ Add the desired colour code here. The codes are listed on following page. No colour code is required with anthracite grey oval tubes.

Bighand / Bighand G Colour Codes



anthracite grey



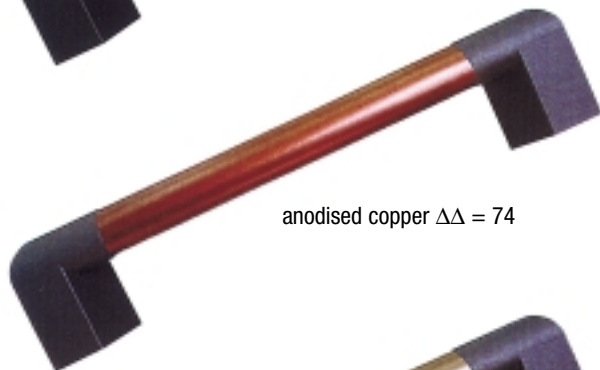
ruby red $\Delta\Delta = 27$



anodised black $\Delta\Delta = 01$



raspberry red $\Delta\Delta = 70$



anodised copper $\Delta\Delta = 74$



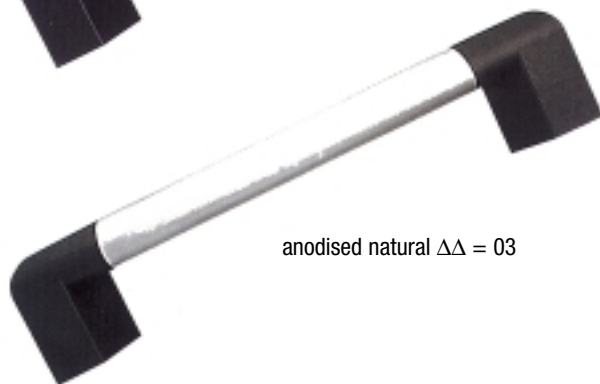
brown grey $\Delta\Delta = 72$



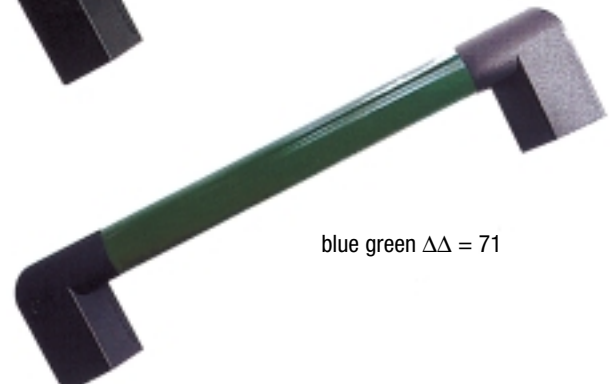
anodised medium bronze $\Delta\Delta = 75$



ocean blue $\Delta\Delta = 73$



anodised natural $\Delta\Delta = 03$



blue green $\Delta\Delta = 71$

Handles



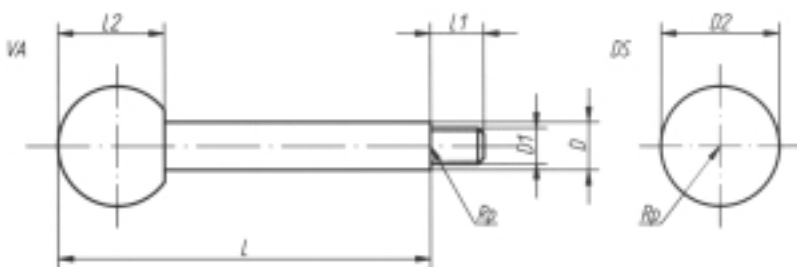
Material:

Free-cutting steel, knobs in black duroplastic FS 31

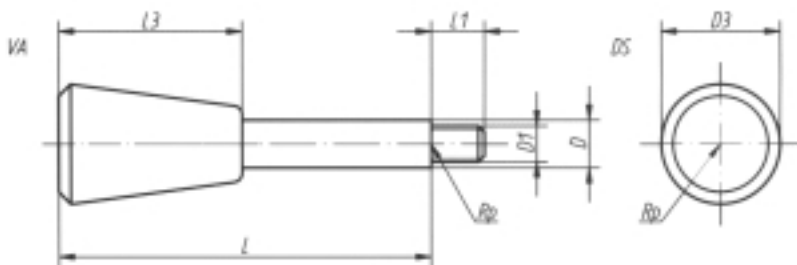
Surface finish:

Natural finish

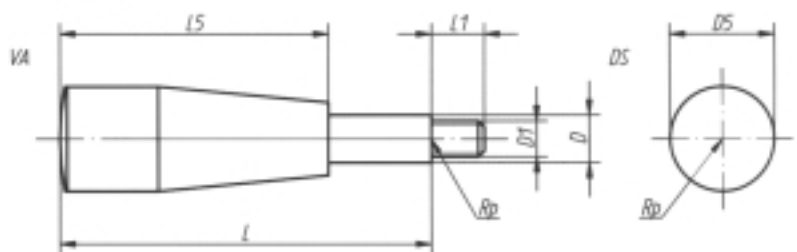
Form A



Form C



Form E



Handles

Order No. Form A	Order No. Form C	Order No. Form E	D	D1	D2	D3	D5	L	L1	L2	L3	L5						
06360-108x***	06360-308x***	06360-508x***	8	M 6	20	20	17	63	80	100	-	-	-	-	9	18	30	45
06360-110x***	06360-310x***	06360-510x***	10	M 8	25	25	23	-	80	100	125	-	-	-	11	22,5	38	60
06360-112x***	06360-312x***	06360-512x***	12	M 10	32	30	28	-	100	125	160	-	-	-	14	29	46	70
06360-114x***	06360-314x***	06360-514x***	14	M 12	35	35	28	-	-	125	160	200	-	-	16	32,5	53	70
06360-116x***	06360-316x***	06360-516x***	16	M 14	40	35	28	-	-	-	160	200	250	18	37	53	70	

Sample order: Handle Form C 06360-310x100,
(Length L)

*** Add the desired screw length here, e.g. 100 for L = 100 mm

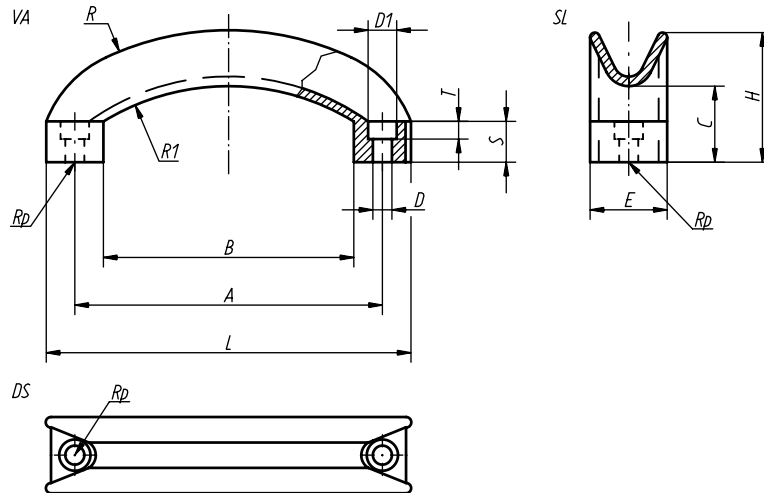
Bridge and Stirrup Handles



The U-shaped open design has been defined in such a way that perfect handling, structural dynamics, design and innovation can be realised. The Bridge Handle relieves gripping pressure, helps to avoid gripping errors and allows the operator to focus on the essentials, whereas the principle of secure "side changing" applies particularly to the Stirrup Handle.

Material, surface finish:

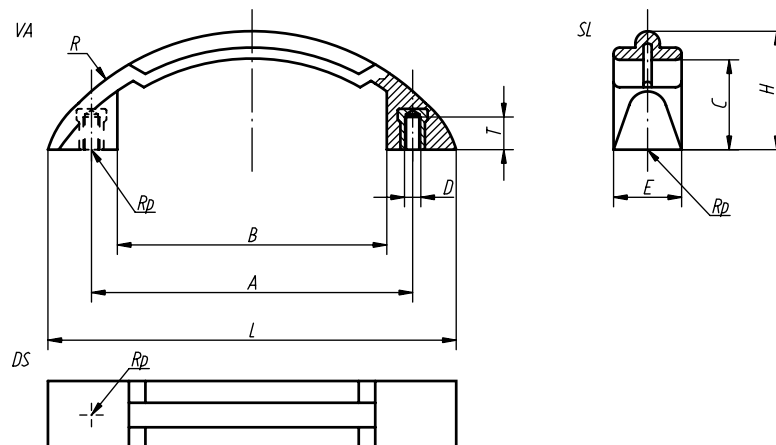
Anthracite grey thermoplastic, stirrup handle bush in steel 5.8, yellow chromated



Bridge Handle

Order No.	D	D1	A	B	C	E	H	L	R	R1	S	T	Approx. weight g
212-11406	6,5	10,5	114	92	29	28	48	134	117	79	15	6,5	37

Sample order: Bridge Handle 212-11406



Stirrup Handle

Order No.	D	A	B	C	E	H	L	R	T	Approx. weight g
213-11906	M 6	119	98	33	25	43,5	150	94	10	45

Sample order: Stirrup Handle 213-11906

Stirrup Shaped Handles in duroplastic

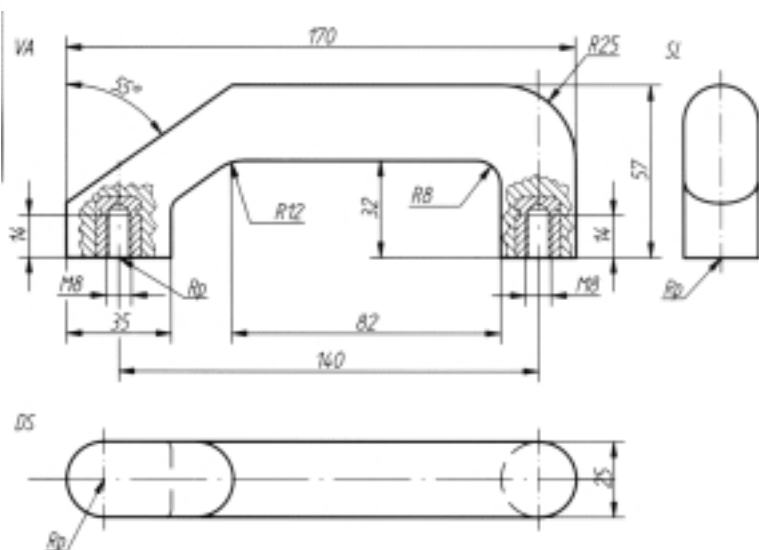


Material:

Black duroplastic FS 31, bush in brass or in galvanised steel

Surface finish:

Deburred and high-polish finish

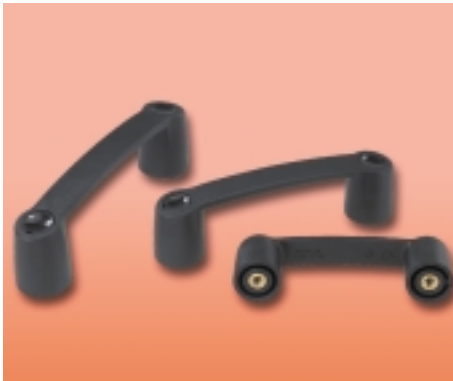


Stirrup-Shaped Handles in duroplastic

Order No.	Bush material	Approx. weight g
35 14008 MS	brass bush	180
35 14008 ST	galvanised steel bush	180

Sample order: Stirrup-Shaped Handle 35 14008 MS

Stirrup Shaped Handles in thermoplastic



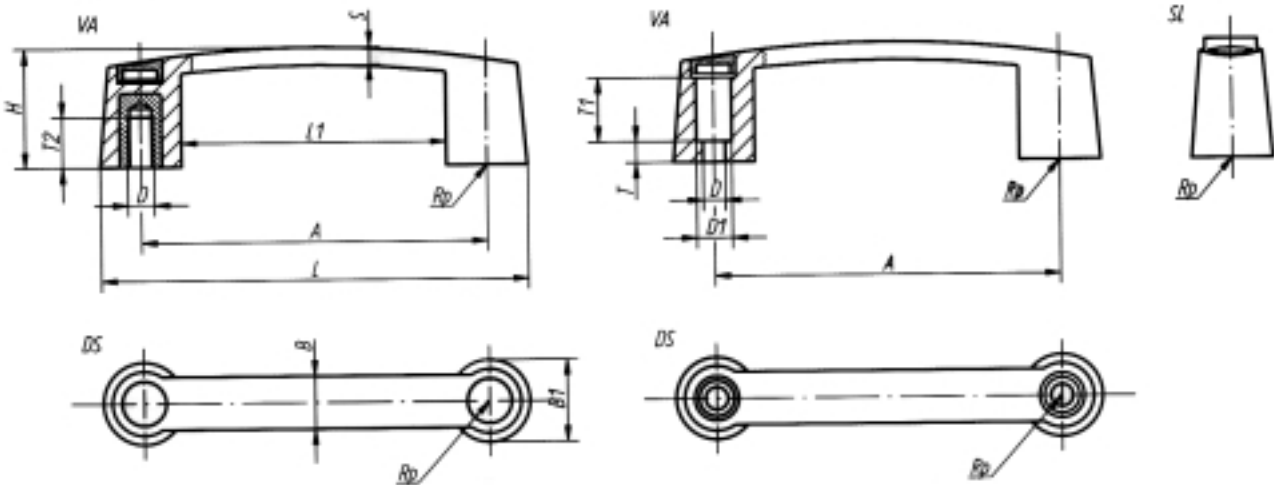
Material:
Thermoplastic, bush in brass

Surface finish:
Handle and handle cap in black

Note:
Other handle or handle cap colours available on request.

Form A

Form B



Stirrup-Shaped Handles in thermoplastic

Order No. Form A	Order No. Form B	A	B	B1	D		H	L	L1	S	T	T1	T2	Approx. weight g		
					Form A	Form B								Form A	Form B	
K2505 109406	K2505 209406	93,5	17	26	M 6	6,8	12	35	119,5	67,5	5,8	4,5	19	15,5	49	32
K2505 109408	-	93,5	17	26	M 8	-	-	35	119,5	67,5	5,8	-	-	16	43	-
K2505 111706	-	117	19	29	M 6	-	-	40	145	89	6,4	-	-	15,5	86	-
K2505 111708	K2505 211708	117	19	29	M 8	8,5	13,5	40	145	89	6,4	4,5	23	16	80	41
K2505 113206	-	132	20	31	M 6	-	-	45	163	101	6,7	-	-	15,5	98	-
K2505 113208	K2505 213208	132	20	31	M 8	8,5	13,5	45	163	101	6,7	8	22	16	91	59
K2505 117910	K2505 217908	179	22	35	M 10	8,5	13,5	50	213	145	7,1	12	22	22	147	87
K2505 117912	-	179	22	35	M 12	-	-	50	213	145	7,1	-	-	22	135	-

Sample order: Stirrup-Shaped Handle K2505 109408

Stirrup Shaped Handles in aluminium



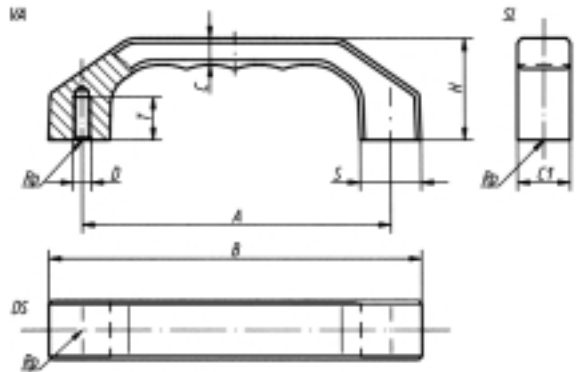
Material:
AlMgSi 0.5

Surface finish:
Matt-finished and anodised

Form A
natural colour anodised

Form B
black anodised

Form C
titan colour anodised



Stirrup-Shaped Handles in aluminium

Order No. Form A	Order No. Form B	Order No. Form C	A	B	C	C1	D	H	S	T	Approx. weight g
06915-120061	06915-120062	06915-120063	120	146	10,5	22	M 6	39	24	15	127
06915-140081	06915-140082	06915-140083	140	170	12	25	M 8	45	28	16	193
06915-160081	06915-160082	06915-160083	160	194	13,5	28	M 8	52	32	16	293

Sample order: Stirrup-Shaped Handle 06915-140082

Stirrup Shaped Handles in thermoplastic

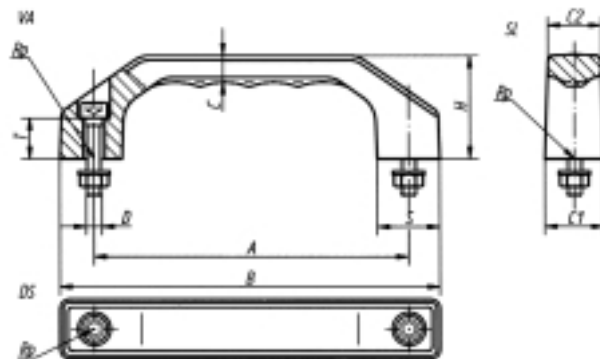


Material, surface finish:

Glass-fibre reinforced thermo-plastic, matt-finished black or orange with fine texture.

Note:

These handles possess extreme torsional strength and are highly operator friendly. Fastening screws, nuts and flat washers are supplied. For wet areas, the fastening screws, nuts and flat washers are supplied in refined steel.



Stirrup-Shaped Handles in thermoplastic

Order No. Black	Order No. Black for wet areas	Order No. Orange	Order No. Orange for wet areas	A	B	C	C1	C2	D	H	S	T	Approx. weight g
06916-100051	06916-100052	06916-100009	06916-xxxxxx	100	122	8,5	19	17	M 5 x 22	33	20	13	49
06916-120061	06916-120062	06916-120009	06916-xxxxxx	120	146	10,5	23	20,5	M 6 x 25	39	24	15	88
06916-140081	06916-140082	06916-140009	06916-xxxxxx	140	170	12	27	24	M 8 x 30	45	28	16	158
06916-160081	06916-160082	06916-160009	06916-xxxxxx	160	194	13,5	31	27,5	M 8 x 35	52	32	20	212
06916-180081	06916-180082	06916-180009	06916-xxxxxx	180	218	15,5	35	31	M 10 x 40	58	36	20	350

Sample order: Stirrup-Shaped Handle 06916-140082

xxxxxx - on application

Series KW Plastic Handle



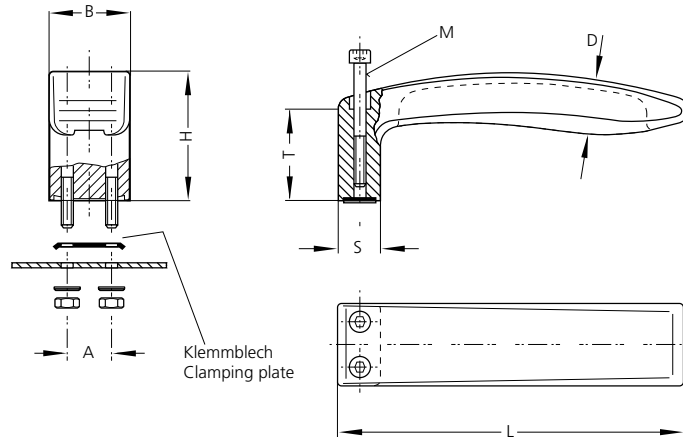
For all usages where one-sided fastening is required; stable in form and stress-resistant.

Material:

Thermoplastic PA6, glass ball reinforced, matt black with fine structure.

Scope of supply:

Including cheese head screws with hexagon sockets DIN 912 and nuts DIN 934 with washers DIN 125, plus a clamping plate of stainless steel for additional torsion locking. All items made of stainless steel (Material no. 1.4301).



A	L	Order no.	M	T	B	H	D	S
17	128	KW-30.017.84	M5 x 45	33	30	48	20	18
22	156	KW-36.020.84	M6 x 55	40	36	58	24	22

Series BS Plastic Handle



Thermo-setting plastic handle especially for the food and hygiene areas.

Material:

Thermo-setting plastic MF 152 (melamine resin reinforced with cellulose); stainless steel threaded bush, material 1.4305.

Versions:

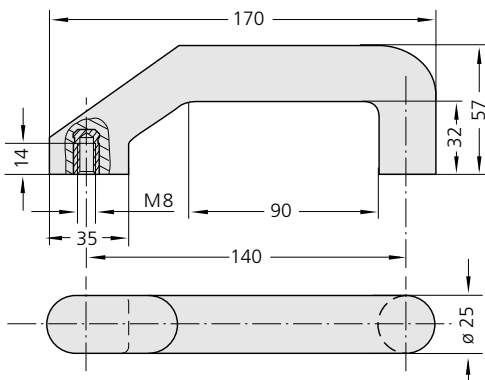
Deburred and highly polished; colour shade signal white similar to RAL 9003.

Temperature stability:

From -40°C to +150°C.

Custom Colours:

Other colours available on request.



Order no.

BS-25.140.9003

All dimensions in mm.

Series KA Plastic Handles with Blanking Caps



Material:

Thermoplastic PA 6 glass-ball reinforced.

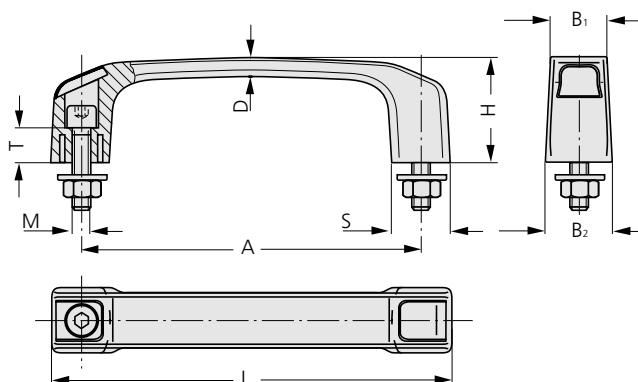
Versions:

Dull black with attractive fine-grain structure. Blanking caps in the same surface structure available in black - similar to RAL 9017

- red similar to RAL 3020
- green similar to RAL 6024
- blue similar to RAL 5017
- yellow similar to RAL 1023

Extent of supply:

includes electrogalvanized socket-head cap bolts DIN 912, nuts DIN 934 and washers DIN 125.



Handles with and without caps

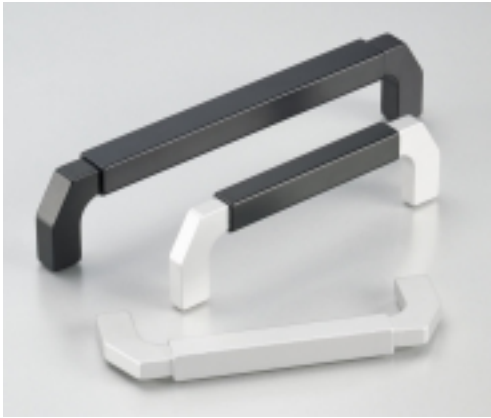
A	L	Order no.	colour of cap	M	T	H	B ₁	B ₂	D	S
120	141	KA-21.120.K9017	black	6 x 25	13	39	21	24	7	21
		KA-21.120.K3020	red							
		KA-21.120.K6024	green							
		KA-21.120.K5017	blue							
		KA-21.120.K1023	yellow							
		KA-21.120.K0000	without caps and screws							
140	164	KA-24.140.K9017	black	8 x 30	15	45	24	28	8	24
		KA-24.140.K3020	red							
		KA-24.140.K6024	green							
		KA-24.140.K5017	blue							
		KA-24.140.K1023	yellow							
		KA-24.140.K0000	without caps and screws							

Caps as single elements

Order no.
KA-21.000.K9017
KA-21.000.K3020
KA-21.000.K6024
KA-21.000.K5017
KA-21.000.K1023
Pack of 20 pieces/colour
KA-24.000.K9017
KA-24.000.K3020
KA-24.000.K6024
KA-24.000.K5017
KA-24.000.K1023
Pack of 20 pieces/colour

All dimensions in mm.

Series AS Handle



Handle series in any length composed of machined parts.

Material:

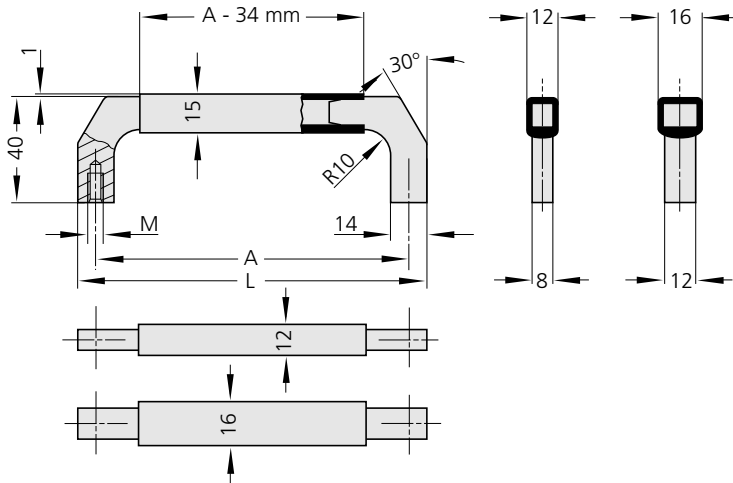
Grip ledge and handle shank of profiled aluminium AIMgSi 0.5.

Surface finish:

Finely polished, frosted and anodized in various colour combinations.

Note:

Handles come assembled ready for mounting.



Anodizing version of grip ledge

Typ AS-08		Shank colour	Anodizing version of grip ledge		M
A	L		natural coloured Order no.	black Order no.	
100	114	natural black	AS-08.100.N01 AS-08.100.S01	AS-08.100.N04 AS-08.100.S04	M4 x 8
120	134	natural black	AS-08.120.N01 AS-08.120.S01	AS-08.120.N04 AS-08.120.S04	
180	194	natural black	AS-08.180.N01 AS-08.180.S01	AS-08.180.N04 AS-08.180.S04	
200	214	natural black	AS-08.200.N01 AS-08.200.S01	AS-08.200.N04 AS-08.200.S04	
235	249	natural black	AS-08.235.N01 AS-08.235.S01	AS-08.235.N04 AS-08.235.S04	

Type AS-12		Shank colour	Anodizing version of grip ledge		M
A	L		natural coloured Order no.	black Order no.	
100	114	natural black	AS-12.100.N01 AS-12.100.S01	AS-12.100.N04 AS-12.100.S04	M5 x 10
120	134	natural black	AS-12.120.N01 AS-12.120.S01	AS-12.120.N04 AS-12.120.S04	
180	194	natural black	AS-12.180.N01 AS-12.180.S01	AS-12.180.N04 AS-12.180.S04	
200	214	natural black	AS-12.200.N01 AS-12.200.S01	AS-12.200.N04 AS-12.200.S04	
235	249	natural black	AS-12.235.N01 AS-12.235.S01	AS-12.235.N04 AS-12.235.S04	

All dimensions in mm.

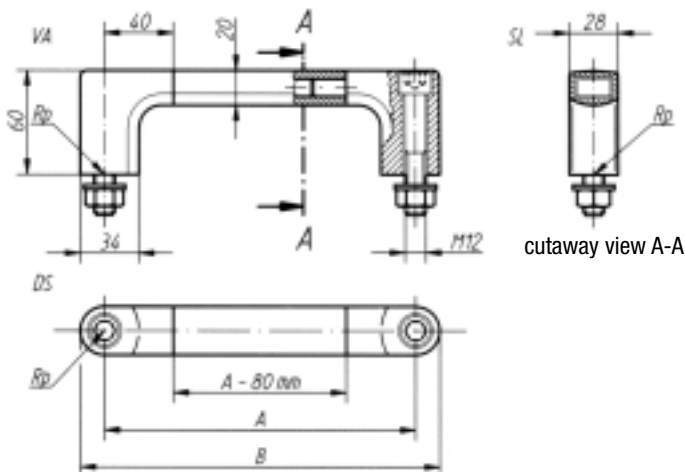
All-Purpose Machine Handles



Material:
Aluminium

Surface finish:
Grip leg black colour-coated, connecting bridge natural colour anodised

Note:
The centre distance can be adjusted as to the desired dimension by shortening the connecting bridge. Black galvanised fastening screws with hexagon socket M 12 x 70 as well as suitable washers and nuts are supplied.



All-Purpose Machine Handles

Order No.	A	B	Approx. weight g
06925-180	180	208	552
06925-200	200	228	575
06925-250	250	278	620
06925-300	300	328	695
06925-350	350	378	732
06925-400	400	428	758
06925-500	500	528	815
06925-600	600	628	895

Sample order: All-Purpose Machine Handle 06925-300

Series M1 & M4 Handle for Housing on Machines and Controls



Material:

Round bar aluminium AlMgSi 0.5.

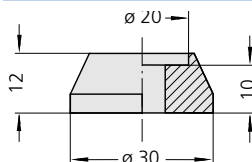
Surface treatment:

Vibratory ground and powder-coated in RAL 9002 grey white.

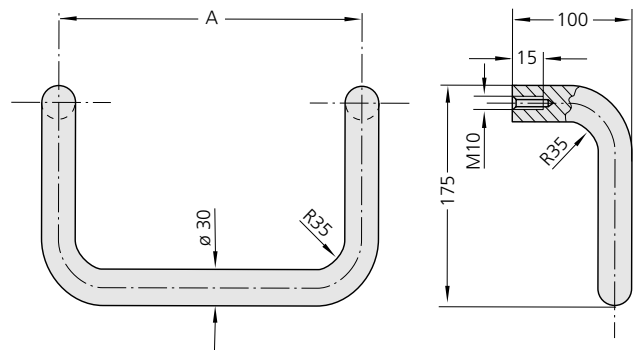
Special colour versions:

Other RAL shades available on request.

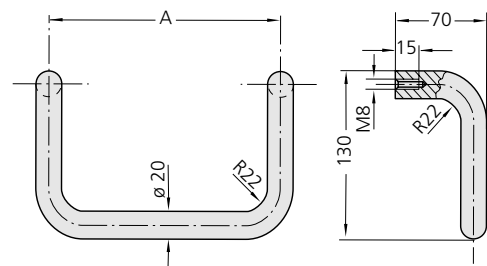
AL-cover plates for handle types M1-20 und M4-20



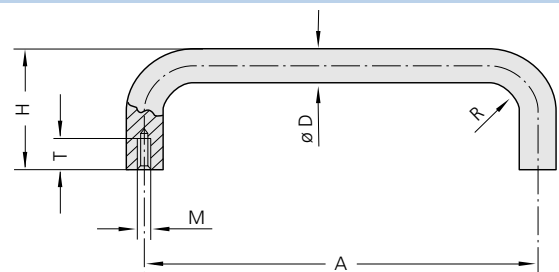
Type M4-30



Type M4-20



Type M1



Type M1		grey white RAL 9002	M	T	H	R
A	Order no.					
Ø 20	200	M1-20.200.9002				
	250	M1-20.250.9002				
	300	M1-20.300.9002	8	15	70	22
	350	M1-20.350.9002				
	400	M1-20.400.9002				
600	M1-20.600.9002					
AL-cover plates	M1-20.000.9002	Pack of 4 pieces				
Ø 25	200	M1-25.200.9002				
	250	M1-25.250.9002				
	300	M1-25.300.9002	8	15	85	28
	400	M1-25.400.9002				
	600	M1-25.600.9002				
Ø 30	300	M1-30.300.9002				
	400	M1-30.400.9002	10	15	100	34
	600	M1-30.600.9002				
Typ M4						
Ø 20	200	M4-20.200.9002				
	250	M4-20.250.9002				
	300	M4-20.300.9002				
	350	M4-20.350.9002				
	400	M4-20.400.9002				
AL-cover plates	M1-20.000.9002	Pack of 4 pieces				
Ø 30	300	M4-30.300.9002				
	350	M4-30.350.9002				
	400	M4-30.400.9002				
	500	M4-30.500.9002				

All dimensions in mm.

Series M2 Machine Handles



Material:

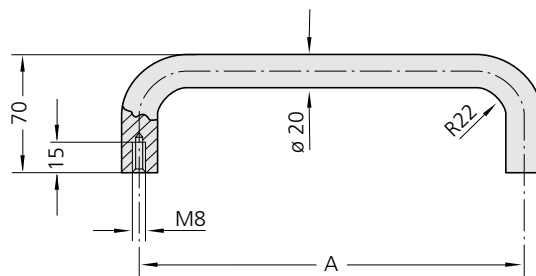
Round bar steel \varnothing 20 mm.

Surface treatment:

Ground, brushed mat chromium plated or black powder coated with fine structure.

Special versions:

Handles with other bore hole distances are available on request.



Two-colour offset printer with stirrup-shaped handles with pearl-brightness chromium plating.

A	mat chromium plated Order no.	black powder coated Order no.
200	M2-20.200.27	M2-20.200.54
250	M2-20.250.27	M2-20.250.54
300	M2-20.300.27	M2-20.300.54
350	M2-20.350.27	M2-20.350.54
400	M2-20.400.27	M2-20.400.54

All dimensions in mm.

Series M1 Machine and Control Housing Handle



Material:

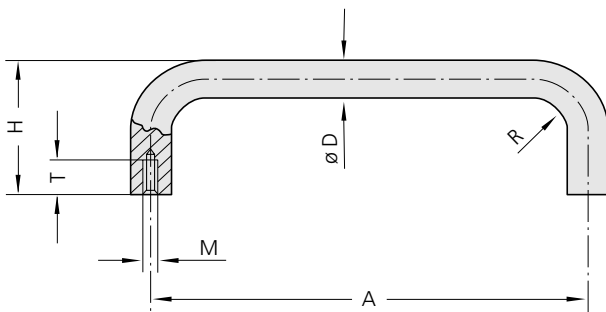
Round bar aluminium AlMgSi 0,5.

Surface treatment:

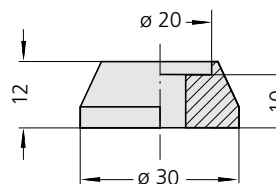
Ground, glass-bead-blasted and anodized in 2 colours with satin finish.

Special versions:

Handles with other bore hole distances are available on request.



AL-cover plates for dia. 20



Ø	A	natural coloured anodized	black anodized	M	T	H	R
		Order no.	Order no.				
20	200	M1-20.200.11	M1-20.200.14	8	15	70	22
	250	M1-20.250.11	M1-20.250.14				
	300	M1-20.300.11	M1-20.300.14				
	350	M1-20.350.11	M1-20.350.14				
	400	M1-20.400.11	M1-20.400.14				
	600	M1-20.600.11	M1-20.600.14				
AL-cover plates for Ø 20		M1-20.000.01	M1-20.000.04	Pack of 2 pieces			
25	200	M1-25.200.11	M1-25.200.14	8	15	85	28
	250	M1-25.250.11	M1-25.250.14				
	300	M1-25.300.11	M1-25.300.14				
	400	M1-25.400.11	M1-25.400.14				
	600	M1-25.600.11	M1-25.600.14				
30	300	M1-30.300.11	M1-30.300.14	10	15	100	34
	400	M1-30.400.11	M1-30.400.14				
	600	M1-30.600.11	M1-30.600.14				

All dimensions in mm.

Series M1 Machine and Control Housing Handle



Material:

Round bar aluminium AlMgSi 0,5.

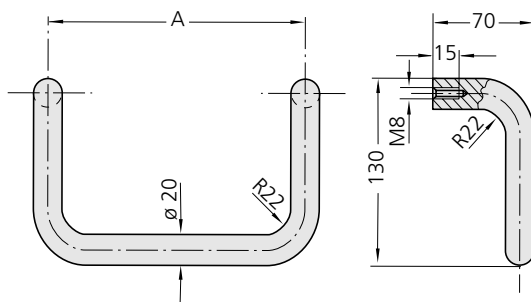
Surface treatment:

Ground, glass-bead-blasted and anodized in 2 colours with satin finish.

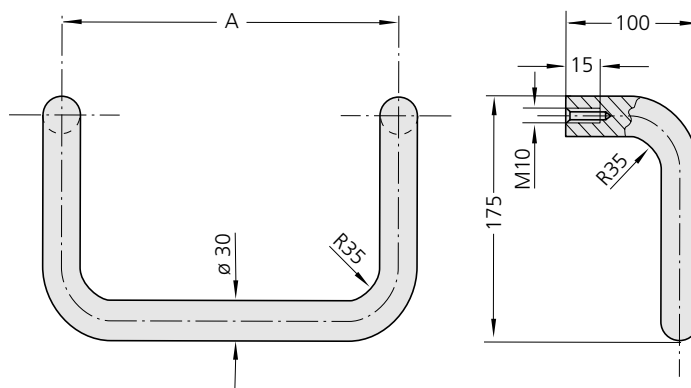
Special versions:

Handles with other bore hole distances are available on request.

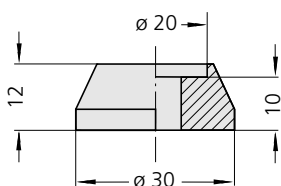
Type M4-20



Type M4-30



AL-cover plates for handles types M1-20 and M4-20



Ø	A	natural coloured anodized	black anodized
		Order no.	Order no.
20	200	M4-20.200.11	M4-20.200.14
	250	M4-20.250.11	M4-20.250.14
	300	M4-20.300.11	M4-20.300.14
	350	M4-20.350.11	M4-20.350.14
	400	M4-20.400.11	M4-20.400.14
AL-cover plates for Ø 20		M1-20.000.01	M1-20.000.04
Pack of 2 pieces			
30	300	M4-30.300.11	M4-30.300.14
	350	M4-30.350.11	M4-30.350.14
	400	M4-30.400.11	M4-30.400.14
	500	M4-30.500.11	M4-30.500.14

All dimensions in mm.



Lightweight Handles



Material:

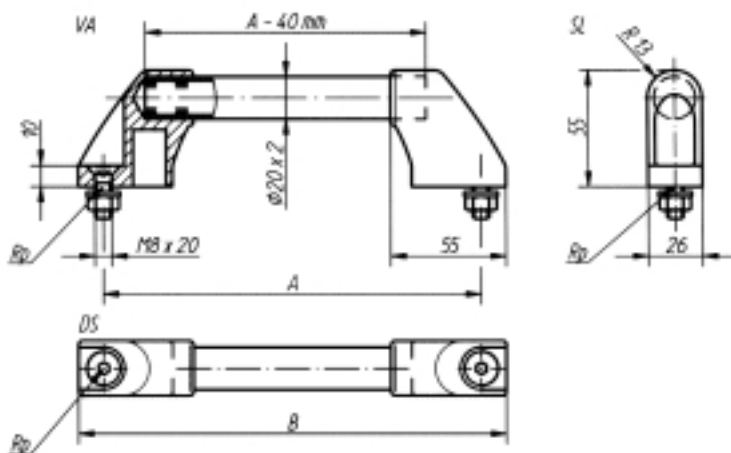
Grip legs in black glass-fibre reinforced thermoplastic, connecting tube in aluminium

Note:

The grip legs have four clamping webs close to the tube accommodation. These clamping webs are shaved away when the connecting tube is inserted (push-fit). In this way, an exact fit is generated. Black galvanised fastening screws as well as suitable washers and nuts are supplied.

Form A
connecting tube ground
and natural colour
anodised

Form B
connecting tube with
serrated plastic coating



Lightweight Handles

Order No. Form A	Order No. Form B	A	B	Approx. weight g
06926-180	06926-1803	180	204	165
06926-200	06926-2003	200	224	175
06926-250	06926-2503	250	274	185
06926-300	06926-3003	300	324	200
06926-350	06926-3503	350	374	210
06926-400	06926-4003	400	424	220
06926-500	06926-5003	500	524	245
06926-600	06926-6003	600	624	270

Sample order: Lightweight Handle 06926-200

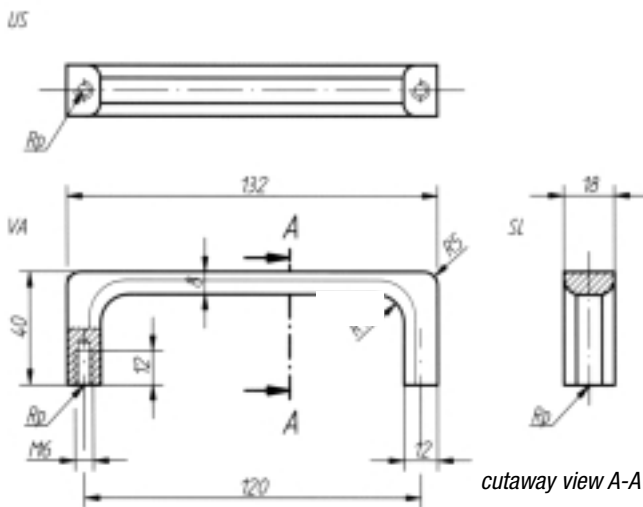
Apparatus Handles



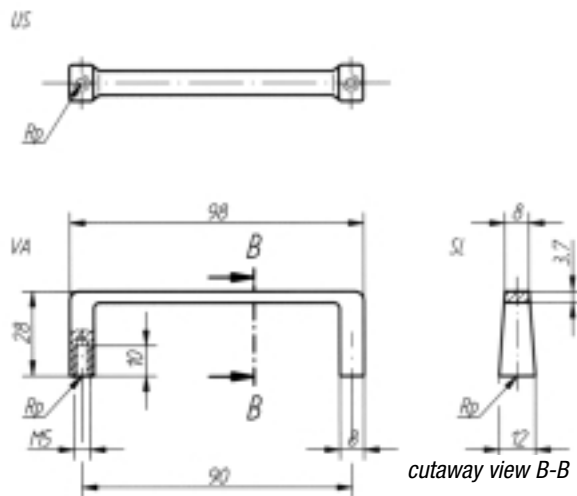
Material:
AlMgSi 0.5

Surface finish:
Matt-finished, black and natural colour anodised

Form A



Form B



Apparatus Handles

Order No. black anodised		Order No. natural colour anodised		Approx. weight g
06929-12001	Form A	06929-12003	Form A	70
06929-09001	Form B	06929-09003	Form B	10

Sample order: Apparatus Handle 06929-12001

Series RA Handle



Material:

Round bar aluminium diam. 10 mm.

Standard version:

Anodized with a matte finish in natural colour or black.

Satin-finish version:

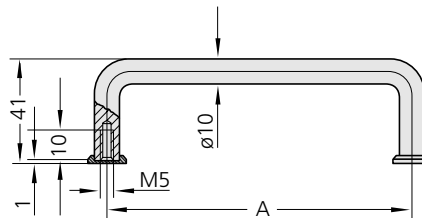
Surface glass-bead-blasted and satin finish natural-colour or black anodizing.

Special versions:

Other dimensions available on request.

Custom colours:

Other colours available on request.



A	Standard natural coloured	black	Satin-finish natural coloured	black
	Order no.	Order no.	Order no.	Order no.
55	RA-10.055.01	RA-10.055.04	RA-10.055.11	RA-10.055.14
88	RA-10.088.01	RA-10.088.04	RA-10.088.11	RA-10.088.14
100	RA-10.100.01	RA-10.100.04	RA-10.100.11	RA-10.100.14
120	RA-10.120.01	RA-10.120.04	RA-10.120.11	RA-10.120.14
180	RA-10.180.01	RA-10.180.04	RA-10.180.11	RA-10.180.14
200	RA-10.200.01	RA-10.200.04	RA-10.200.11	RA-10.200.14
235	RA-10.235.01	RA-10.235.04	RA-10.235.11	RA-10.235.14
250	RA-10.250.01	RA-10.250.04	RA-10.250.11	RA-10.250.14

Single components	Order no.
*Al cover plates, natural coloured	RA-10.000.01
*Al cover plates, black	RA-10.000.04

*Pack of 20 pieces, available only in standard version.

All dimensions in mm.

Series AE Offset Drawer Handles



Material:

Round bar aluminium.

Surface finish:

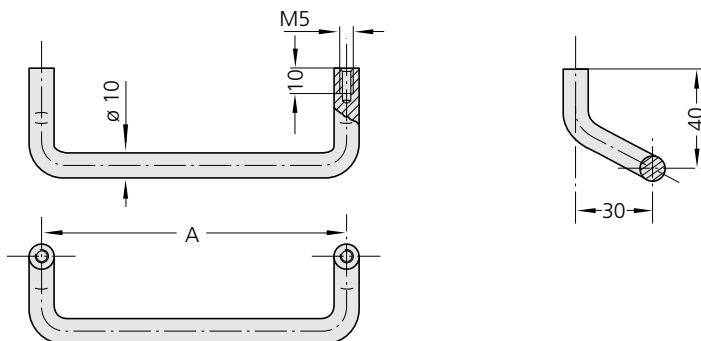
Vibration ground, and anodized with a matte finish in natural or black colour.

Special versions:

Any specified dimensions available on request.

Custom colours:

Other **colours** available on request.



A	natural coloured Order no.	black Order no.
86	AE-10.086.01	AE-10.086.04
120	AE-10.120.01	AE-10.120.04
180	AE-10.180.01	AE-10.180.04

All dimensions in mm.

Series RA & AE Handle



Material:

Profile aluminium AlMgSi 0.5.

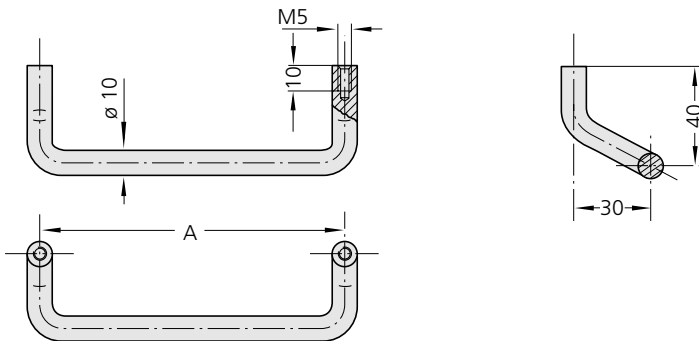
Surface treatment:

Vibratory ground and powder-coated in RAL 9002 grey white.

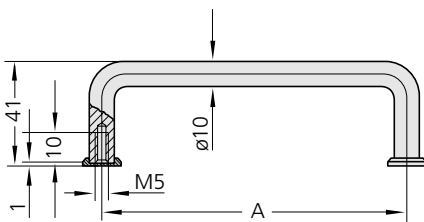
Special colour versions:

Other RAL shades available on request.

Type AE



Type RA

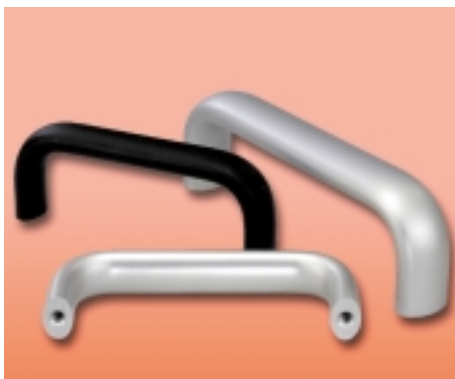


grey white
RAL 9002

Typ	A	Order no.
RA	55	RA-10.055.9002
	88	RA-10.088.9002
	100	RA-10.100.9002
	120	RA-10.120.9002
	180	RA-10.180.9002
	200	RA-10.200.9002
	235	RA-10.235.9002
AE	250	RA-10.250.9002
	86	AE-10.086.9002
	120	AE-10.120.9002
	180	AE-10.180.9002

All dimensions in mm.

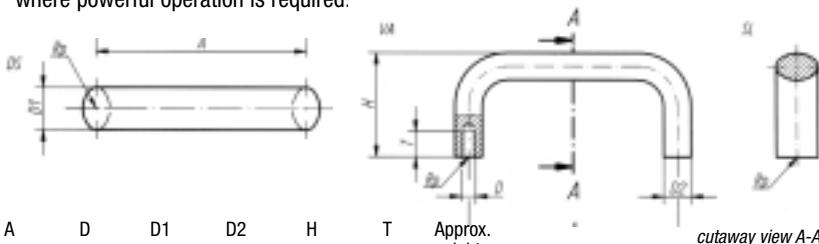
Oval Bow Handles



Material:
AlMgSi 0.5

Surface finish:
Black colour-coated, natural colour anodised

Note:
These Oval Bow Handles are extremely robust and can also be used in any situation where powerful operation is required.



Oval Bow Handles

Order No. black colour-coated	Order No. natural colour anodised	Order No. powder-coated, black semimatt	A	D	D1	D2	H	T	Approx. weight g
06920-10001	06920-xxxxx	06920-10054	100	M 6	20	13	50	12	90
06920-11201	06920-xxxxx	06920-11254	112	M 6	20	13	50	12	95
06920-12001	06920-xxxxx	06920-12054	120	M 6	20	13	50	12	100
06920-12801	06920-xxxxx	06920-12854	128	M 6	20	13	50	12	120
06920-16001	06920-xxxxx	06920-16054	160	M 6	20	TBC	50	12	TBC
06926-11201	06926-xxxxx	06926-11254	112	M 8	26	TBC	55	14	TBC
06926-12001	06926-xxxxx	06926-12054	120	M 8	26	TBC	55	14	TBC
06926-12801	06926-xxxxx	06926-12854	128	M 8	26	TBC	55	14	TBC
06926-16001	06926-xxxxx	06926-16054	160	M 8	26	17	55	14	208
06926-18001	06926-xxxxx	06926-18054	180	M 8	26	17	55	14	226
06926-19201	06926-xxxxx	06926-19254	192	M 8	26	17	55	14	245
06926-35001	06926-xxxxx	06926-35054	350	M 8	26	17	55	14	382

Sample order: Oval Bow Handle 06920-10003 xxxxxx - on application

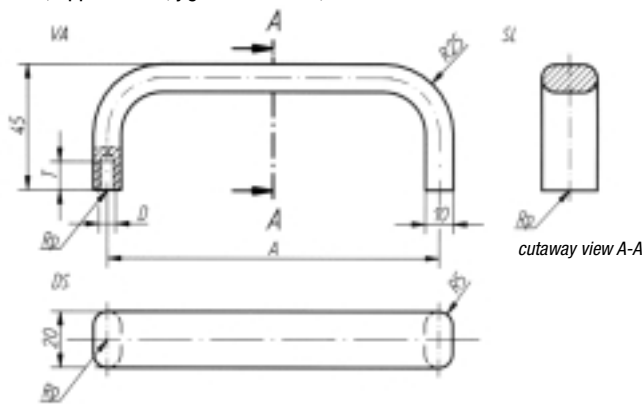
Flat Profile Bow Handles



Material:
AlMgSi 0.5

Surface finish:
Matt-finished, black and natural colour anodised

Note:
These elegant Flat Profile Bow Handles made of aluminium are especially suitable for machines, appliances, apparatuses, jigs and fixtures, etc.



Flat Profile Bow Handles

Order No. black anodised	Order No. natural colour anodised	A	D	T	Approx. weight g
06921-12001	06921-12003	120	M 5	10	85
06921-18001	06921-18003	180	M 5	10	100
06921-20001	06921-20003	200	M 5	10	120
06921-35001	06921-35003	350	M 6	12	190

Sample order: Flat Profile Bow Handle 06921-18001

Series OA & MF Handle



Material:

Flat-oval profiled aluminium AlMgSi 0.5.

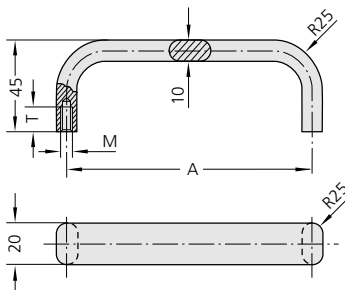
Surface treatment:

Vibratory ground and powder-coated in RAL 9002 grey white.

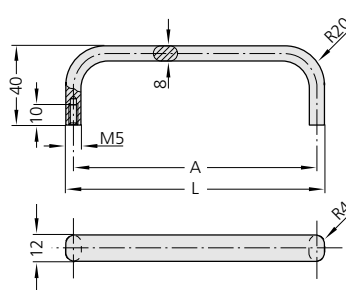
Special colour versions:

Other RAL shades available on request.

Type MF



Type OA



Type	A	grey white RAL 9002 Order no.
OA	55	OA-12.055.9002
	88	OA-12.088.9002
	100	OA-12.100.9002
	120	OA-12.120.9002
	180	OA-12.180.9002
	200	OA-12.200.9002
MF	235	OA-12.235.9002
	250	OA-12.250.9002
	120	MF-20.120.9002
	140	MF-20.140.9002
	180	MF-20.180.9002
	200	MF-20.200.9002
	350	MF-20.350.9002

All dimensions in mm.

Series MO Handle



Material:

Oval profiled aluminium AlMgSi 0.5.

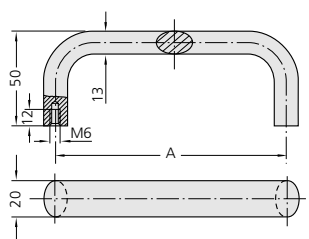
Surface treatment:

Vibratory ground and powder coated in RAL 9002 grey white.

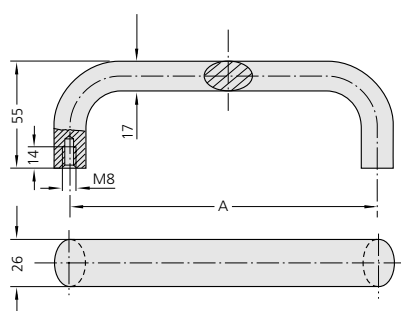
Special colour versions:

Other RAL shades available on request.

Type MO-20



Type MO-26



Typ	A	grey white RAL 9002 Order no.
MO-20	100	MO-20.100.9002
	128	MO-20.128.9002
	160	MO-20.160.9002
MO-26	140	MO-26.140.9002
	160	MO-26.160.9002
	180	MO-26.180.9002
	192	MO-26.192.9002
	350	MO-26.350.9002

All dimensions in mm.

Series OA Handle



Material:

Oval aluminium.

Standard version:

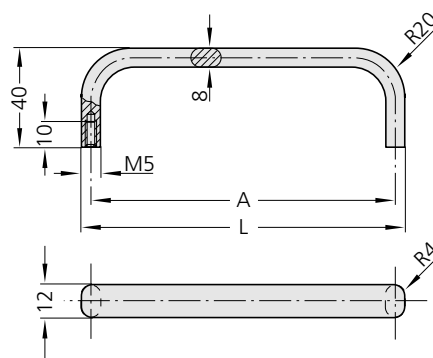
Anodized with a matte finish in natural colour or black.

Special versions:

Other dimensions are available on request.

Custom colours:

Other colours available on request.



All dimensions in mm.

A	L	natural coloured Order no.	black Order no.
55	63	OA-12.055.01	OA-12.055.04
88	96	OA-12.088.01	OA-12.088.04
100	108	OA-12.100.01	OA-12.100.04
120	128	OA-12.120.01	OA-12.120.04
180	188	OA-12.180.01	OA-12.180.04
200	208	OA-12.200.01	OA-12.200.04
235	243	OA-12.235.01	OA-12.235.04
250	258	OA-12.250.01	OA-12.250.04

Series AB Aluminium Bow Type Handles

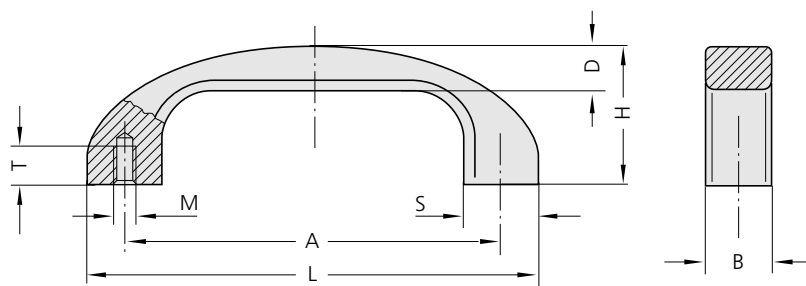


Material:

Aluminium section AlMgSi 0.5.

Surface finish:

Anodized in a special quality, glass ball blasted, satin finish in 2 standard colours.



A	L	Anodizing colour		M	T	H	B	D	S
		natural coloured	black						
Order no.	Order no.								
120	144	AB-22.120.11	AB-22.120.14	6	12	46	22	15	24
140	168	AB-25.140.11	AB-25.140.14	8	15	53	25	17	28

All dimensions in mm.

Series AB & AG Aluminium Bow-Type Handle



Material:

Solid aluminium handles in a modern industrial design.
Aluminium section AlMgSi 0.5.

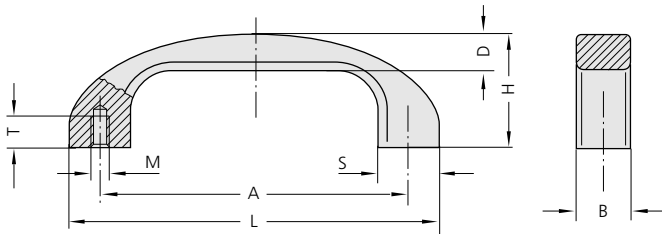
Surface treatment:

Vibratory ground and powder coated in RAL 9002 grey white.

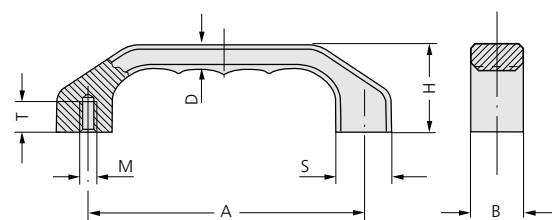
Special colour versions:

Other RAL shades available on request.

Type AB



Type AG



grey white
RAL 9002

Typ	A	L	Order no.	M	T	H	B	D	S
AB	120	144	AB-22.120.9002	6	12	46	22	15	24
	140	168	AB-25.140.9002	8	15	53	25	17	28
AG	120	146	AG-22.120.9002	6	12	39	22	10,5	24
	140	170	AG-25.140.9002	8	15	45	25	12	28
	160	194	AG-28.160.9002	8	15	52	28	13,5	32

All dimensions in mm.

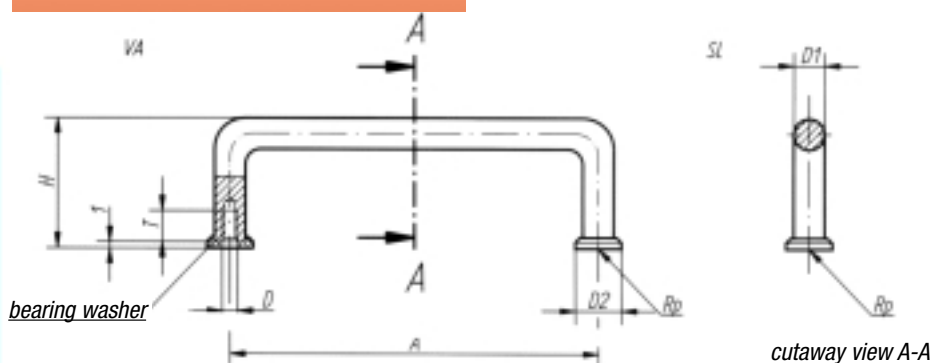
Bow Handles high-polish chromium-plated



Material:
Steel

Surface finish:
Very finely ground and high-polish chromium-plated

Note:
These Bow Handles are used primarily on optical devices, laboratory installations, audio, video and hi-fi equipment, etc. The bearing washers are supplied unattached. Other surface finishes available on request.



Bow Handles high-polish chromium-plated

Order No.	A	D	D1	D2	H	T	Approx. weight g
06930-03203	32	M 3	5	8	20	6	8
06930-042xx	42	M 3	5	TBC	TBC	6	TBC
06930-05503	55	M 3	5	8	24	6	13
06930-076xx	76	M 3	5	TBC	TBC	6	TBC
06930-08803	88	M 3	5	8	24	6	18
06930-08804	88	M 4	8	12,5	33	8	50
06930-09604	96	M 4	8	12,5	33	8	56
06930-098xx	98	M 4	8	TBC	TBC	8	TBC
06930-10204	102	M 4	8	12,5	33	8	58
06930-12004	120	M 4	8	12,5	33	8	65
06930-128xx	128	M 4	8	TBC	TBC	8	TBC
06930-136xx	136	M 4	8	TBC	TBC	8	TBC
06930-055xx	55	M 5	10	TBC	TBC	10	TBC
06930-088xx	88	M 5	10	TBC	TBC	10	TBC
06930-10005	100	M 5	10	15	41	10	94
06930-102xx	102	M 5	10	TBC	TBC	10	TBC
06930-115xx	115	M 5	10	TBC	TBC	10	TBC
06930-12005	120	M 5	10	15	41	10	105
06930-13605	136	M 5	10	15	41	10	112
06930-18005	180	M 5	10	15	41	10	142
06930-20005	200	M 5	10	15	41	10	154
06930-23505	235	M 5	10	15	41	10	175
06930-250xx	250	M 5	10	TBC	TBC	10	TBC

Sample order: Bow Handle high-polish chromium-plated 06930-10204

Bowed Tube Handles



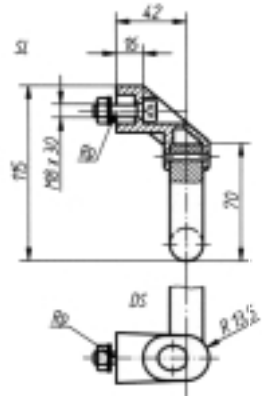
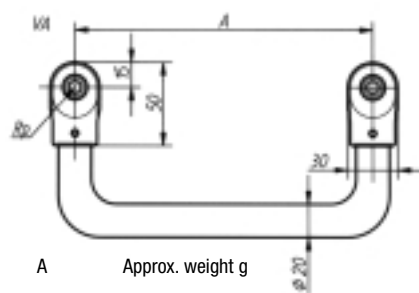
Material:

Grip legs in black glass-fibre reinforced thermoplastic, connecting tube in anodised aluminium

Note:

The grip legs are pinned to the aluminium connecting tube. Black galvanised cylindrical screws with hexagon socket, nuts and washers are supplied.

Form A connecting tube natural colour anodised	Form B connecting tube black anodised	Form C connecting tube titan colour anodised
------------------------------------------------------	---------------------------------------------	----------------------------------------------------



Bowed Tube Handles

Order No. Form A	Order No. Form B	Order No. Form C	A	Approx. weight g
06936-2001	06936-2002	06936-2003	200	361
06936-2501	06936-2502	06936-2503	250	410
06936-3001	06936-3002	06936-3003	300	451
06936-3501	06936-3502	06936-3503	350	493
06936-4001	06936-4002	06936-4003	400	525

Sample order: Bowed Tube Handle 06936-3002

Tube Handles



Material:

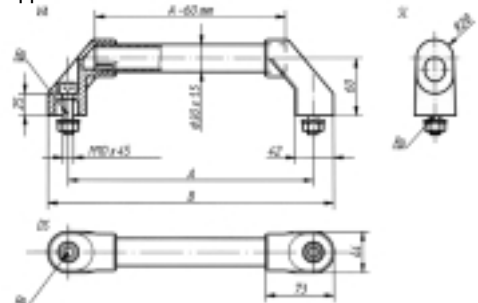
Grip legs in black glass-fibre reinforced thermoplastic, connecting tube in aluminium

Note:

The grip legs have four clamping webs close to the tube accommodation. These clamping webs are shaved away when the connecting tube is inserted (push-fit). In this way an exact fit is generated. Black galvanised fastening screws as well as suitable washers and nuts are supplied.

Form A
connecting tube
ground and natural
colour anodised

Form B
connecting tube
with serrated plastic
cover



Tube Handles

Order No. Form A	Order No. Form B	A	B	Approx. weight g
06937-1801	06937-1802	180	210	170
06937-2001	06937-2002	200	230	175
06937-2501	06937-2502	250	280	190
06937-3001	06937-3002	300	330	205
06937-3501	06937-3502	350	380	220
06937-4001	06937-4002	400	430	235
06937-5001	06937-5002	500	530	270
06937-6001	06937-6002	600	630	300

Sample order: Tube Handle 06937-3001

Series R1 & S1 Handle



Material:

Cut profiled Aluminium AlMgSi 0.5.

Surface treatment:

Vibratory ground and powder coated in RAL 9002 grey white.

Special colour versions:

Other RAL shades available on request.

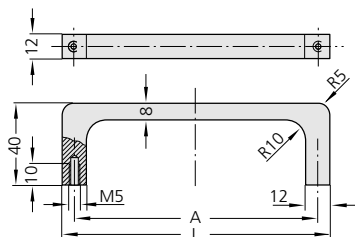
grey white
RAL 9002

Order no.

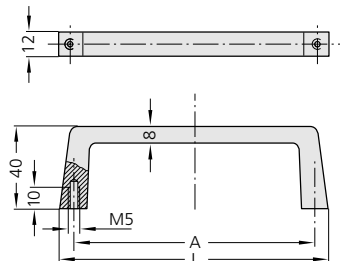
Typ	A	L	Order no.
R1	55	67	R1-12.055.9002
	88	100	R1-12.088.9002
	120	132	R1-12.120.9002
	180	192	R1-12.180.9002
	235	247	R1-12.235.9002
S1	25	40	S1-12.025.9002
	55	69	S1-12.055.9002
	88	102	S1-12.088.9002
	120	134	S1-12.120.9002
	180	194	S1-12.180.9002
	235	249	S1-12.235.9002

All dimensions in mm.

Type R1



Type S1



Series MG Handle



Material:

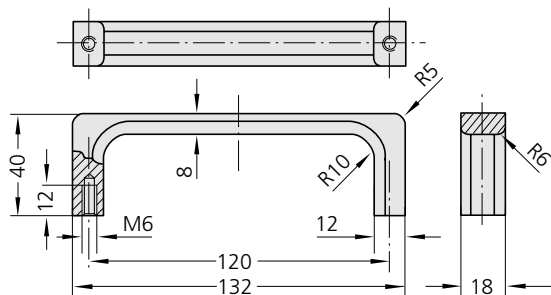
Round bar aluminium AlMgSi 0.5.

Surface treatment:

Vibratory ground and powder-coated in RAL 9002 grey white.

Special colour versions:

Other RAL shades available on request.



Order no

grey white
RAL 9002

MG-02.120.9002

All dimensions in mm.

Series AR Handle



Made of solid aluminium components, specially suited for protecting edges.

Material:

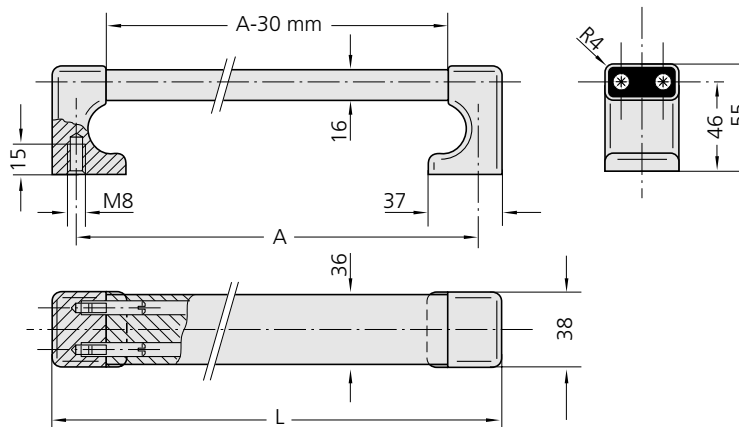
Handle shank and grip ledge made of aluminium section AIMgSi 0.5, connection pins made of high-grade steel.

Surface treatment:

Handle shank precision-ground, mat finished and anodized in 2 standard colours, grip ledge mat finished and anodized in 3 standard colours.

Special versions:

Any desired handle lengths on request.



A	Shank colour L	Anodizing version of grip ledge		titan coloured Order no.
		natural coloured Order no.	black Order no.	
250274	natural	AR-36.250.N01	-	-
	black	AR-36.250.S01	AR-36.250.S04	AR-36.250.S05
300324	natural	AR-36.300.N01	-	-
	black	AR-36.300.S01	AR-36.300.S04	AR-36.300.S05
350374	natural	AR-36.350.N01	-	-
	black	AR-36.350.S01	AR-36.350.S04	AR-36.350.S05
400424	natural	AR-36.400.N01	-	-
	black	AR-36.400.S01	AR-36.400.S04	AR-36.400.S05
500524	natural	AR-36.500.N01	-	-
	black	AR-36.500.S01	AR-36.500.S04	AR-36.500.S05
600624	natural	AR-36.600.N01	-	-
	black	AR-36.600.S01	AR-36.600.S04	AR-36.600.S05
700724	natural	AR-36.700.N01	-	-
	black	AR-36.700.S01	AR-36.700.S04	AR-36.700.S05
800824	natural	AR-36.800.N01	-	-
	black	AR-36.800.S01	AR-36.800.S04	AR-36.800.S05

All dimensions in mm.

Measurement Device Handles



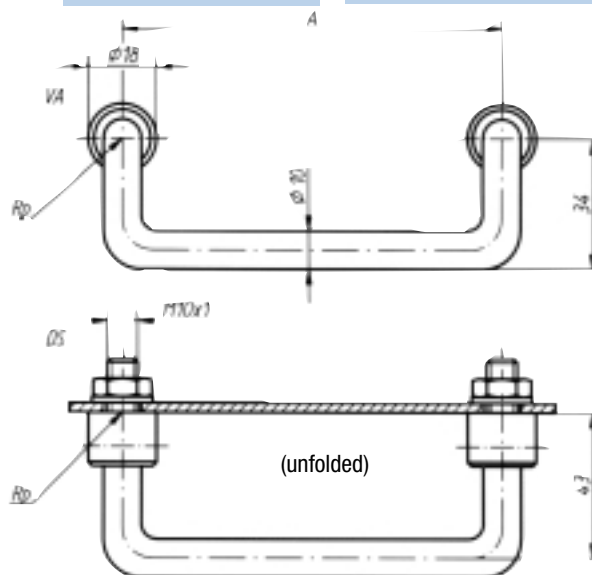
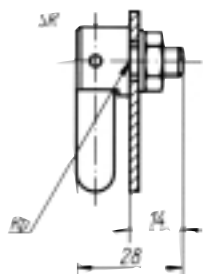
Material:
Steel

Surface finish:
Surface very finely ground and high-polish chromium-plated, connecting bridge of Form B with additional smooth plastic coating

Note:
Galvanised flat washers and nuts are supplied.

Form A
surface very finely
ground and high-polish
chromium-plated

Form B
like form A, connecting
bridge with additional
smooth plastic cover



Measurement Device Handles

Order No. Form A	Order No. Form B	A	Approx. weight g
06934-1001	06934-1002	100	135
06934-1201	06934-1202	120	160
06934-1801	06934-1802	180	215

Tube Handles



Material:

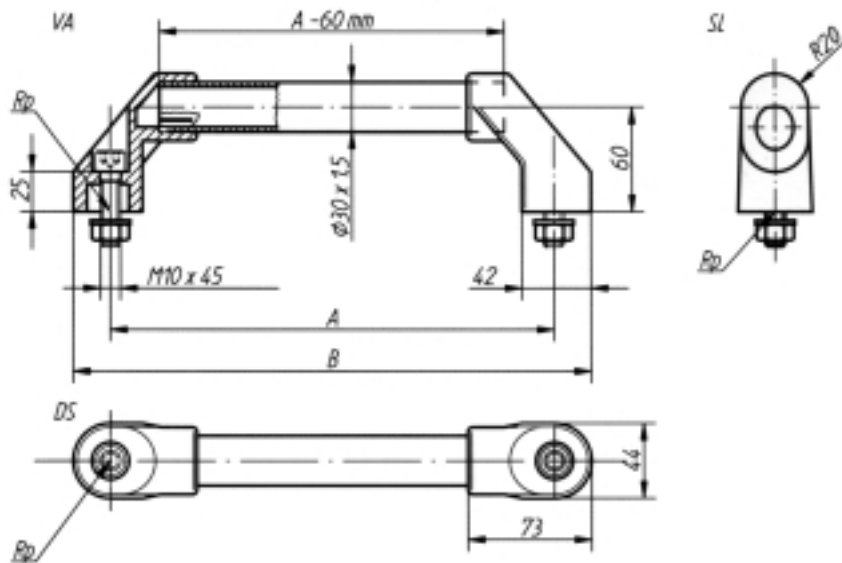
Grip legs in black glass-fibre reinforced thermoplastic, connecting tube in aluminium

Note:

The grip legs have two three-square PVC profiles close to the tube accommodation. These three-square PVC profiles are shaved away when the connecting tube is inserted (push-fit). In this way an exact fit is generated. Black galvanised fastening screws as well as suitable washers and nuts are supplied.

Form A
connecting tube
ground and natural
colour anodised

Form B
connecting tube with
serrated plastic cover

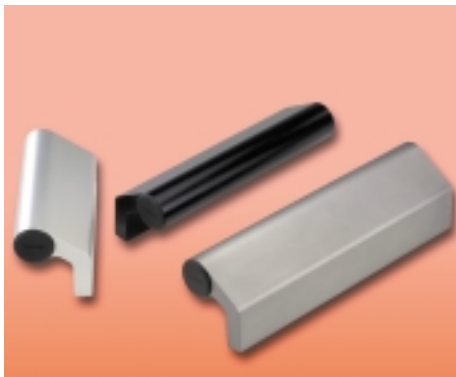


Tube Handles

Order No. Form A	Order No. Form B	A	B	Approx. weight g
06938-2501	06938-2502	250	294	390
06938-3001	06938-3002	300	344	405
06938-3501	06938-3502	350	394	425
06938-4001	06938-4002	400	444	445
06938-5001	06938-5002	500	544	480
06938-6001	06938-6002	600	644	520

Sample order: Tube Handle 06938-3501

Angled Handles



Material:

Profile aluminium AlMgSi 0.5, end caps in black thermoplastic

Surface finish:

Profile aluminium matt-polished anodised

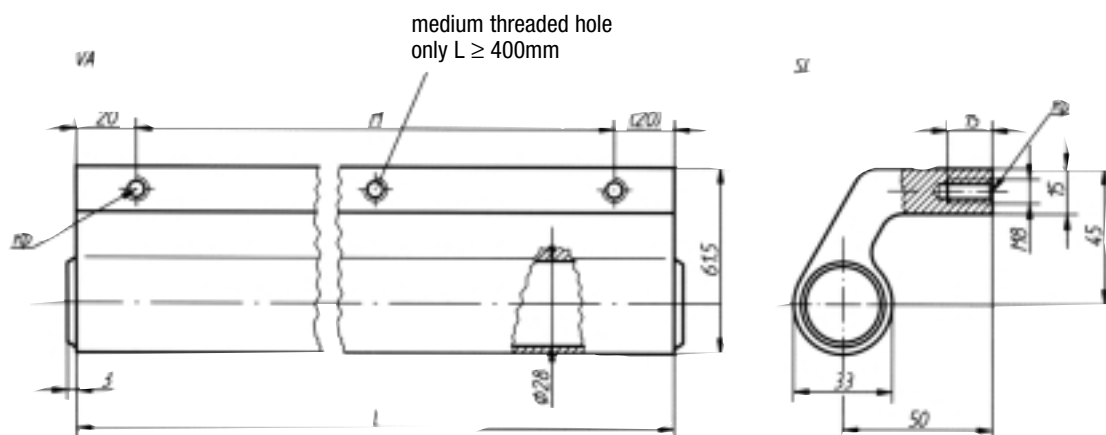
Note:

Among other things, Angled Handles are used for sliding doors and technical installations. As an alternative, this handle is also suitable as edge protection.

Form A
natural colour anodised

Form B
black anodised

Form C
titan colour anodised



Angled Handles

Order No. Form A	Order No. Form B	Order No. Form C	L	M	Approx. weight kg
06950-1501	06950-1502	06950-1503	150	110	0,530
06950-2001	06950-2002	06950-2003	200	160	0,671
06950-2501	06950-2502	06950-2503	250	210	0,850
06950-3001	06950-3002	06950-3003	300	260	1,006
06950-3501	06950-3502	06950-3503	350	310	1,166
06950-4001	06950-4002	06950-4003	400	360	1,321
06950-5001	06950-5002	06950-5003	500	460	1,636
06950-6001	06950-6002	06950-6003	600	560	1,953

Sample order: Angled Handle 06950-3001

Angled Leg Handles and Connecting Tubes



Material:

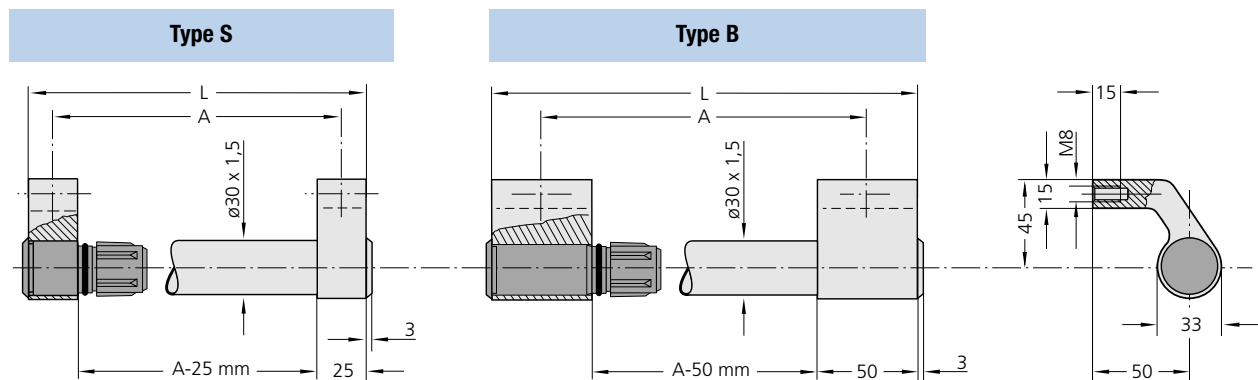
Grip and connecting leg in extruded AlMgSi 0.5, leg insert in glass-ball reinforced thermoplastic, connecting tube in AlMgSi 0.5

Surface finish:

Grip and connecting legs matt-polished black anodised, leg insert black, connecting tube finely ground and anodised, powder-coated or with black serrated plastic cover

Note:

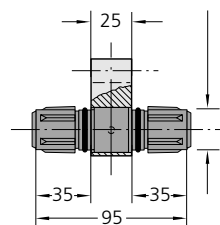
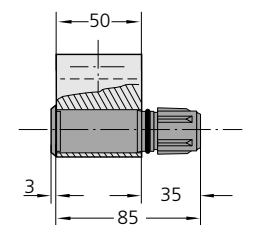
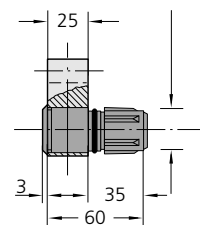
The components of the insert system shown can be supplied as complete handles or as pre-assembled grip and connecting legs for tube orders by customers. The connection between leg and connecting tube is splash-proof and absolutely tight.



Shank type S, narrow version (left)

Shank type B, Shank wide version (left)

Connecting-shank



Shanks	Version	Width	Order no.
Handle shank, right	S	25 mm	W1-30.RS25.14
	B	50 mm	W1-30.RS50.14
Handle shank, left	S	25 mm	W1-30.LS25.14
	B	50 mm	W1-30.LS50.14
Connecting shank	S	25 mm	W1-30.VS25.14

All dimensions in mm.

Handles (complete mounted)

Tubes in anodizing versions

A	L	Type	Tubes	Tubes with	powder coated	plastic cover
			natural coloured Order no.	black Order no.	black Order no.	black, grooved Order no.
200	225	S	W1-30.S200.01	W1-30.S200.04	W1-30.S200.54	W1-30.S200.63
	250	B	W1-30.B200.01	W1-30.B200.04	W1-30.B200.54	W1-30.B200.63
250	275	S	W1-30.S250.01	W1-30.S250.04	W1-30.S250.54	W1-30.S250.63
	300	B	W1-30.B250.01	W1-30.B250.04	W1-30.B250.54	W1-30.B250.63
300	325	S	W1-30.S300.01	W1-30.S300.04	W1-30.S300.54	W1-30.S300.63
	350	B	W1-30.B300.01	W1-30.B300.04	W1-30.B300.54	W1-30.B300.63
350	375	S	W1-30.S350.01	W1-30.S350.04	W1-30.S350.54	W1-30.S350.63
	400	B	W1-30.B350.01	W1-30.B350.04	W1-30.B350.54	W1-30.B350.63
400	425	S	W1-30.S400.01	W1-30.S400.04	W1-30.S400.54	W1-30.S400.63
	450	B	W1-30.B400.01	W1-30.B400.04	W1-30.B400.54	W1-30.B400.63
500	525	S	W1-30.S500.01	W1-30.S500.04	W1-30.S500.54	W1-30.S500.63
	550	B	W1-30.B500.01	W1-30.B500.04	W1-30.B500.54	W1-30.B500.63
600	625	S	W1-30.S600.01	W1-30.S600.04	W1-30.S600.54	W1-30.S600.63
	650	B	W1-30.B600.01	W1-30.B600.04	W1-30.B600.54	W1-30.B600.63

Series UG-02/03/04 Universal Equipment Handle



The U-shaped grips of Type UG-04 are also available in a silver metallic finish. Please ask about the price.

The common characteristic of the Rohde UG-series is their universal usability. They are assembled by fitting the grip ledge to the two elbow side sections. Depending on the degree of stress they will be subjected to, the elbow sections can be selected with or without steel reinforcement.

Material:

Grip ledge: aluminium tubing. Handle shanks made of high-duty polyamide, glass ball reinforced, black, semimatt, with fine structure. (Details see versions).

Surface finish:

The grip ledge is anodized with a matte finish in natural or black colour.

Versions:

Type UG-02

with brass threaded bushing, stress resistance 200 N per handle.

Type UG-03

with features galvanized full steel core, stress resistance 500 N per handle.

Type UG-04

screw-attachment from in front, steel plate reinforcement, stress resistance 500 N per handle.

Scope of supply incl. glossy nickel-plated cheese head screws with hexagon socket M 5 x 45 DIN 912 and galvanized, self-locking ratchet nuts.

Notes:

Any other handle lengths available upon request.

Grip ledge and elbow-sections are supplied unassembled.

It means for 19" front panel handles:

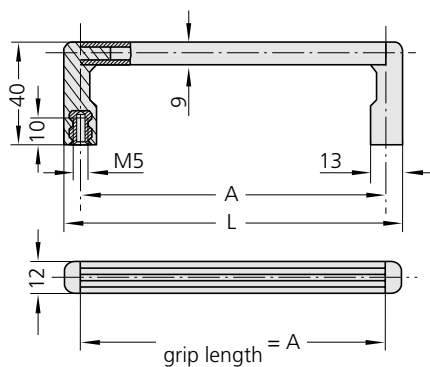
HE = units of height 1 HE 44.45 mm = 1 6/8"

Height of front panels = HE x 44.45 – 0.8 mm

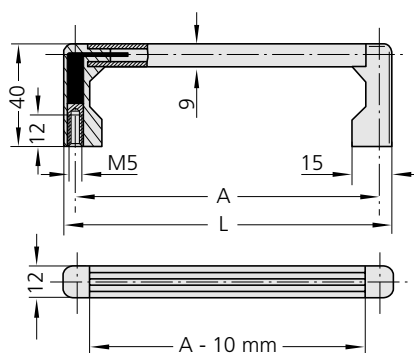
Single components	Order no.
Handle shank, 1 piece	UG-02.000.84
	UG-03.000.84
	UG-04.000.84
Grip ledge, 1 m, natural coloured	UG-RS.001.01
Grip ledge, 1 m, black	UG-RS.001.04

All dimensions in mm.

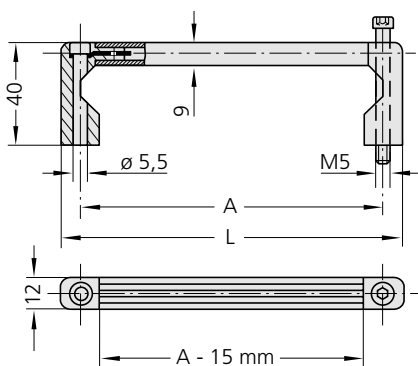
Type UG-02



Type UG-03

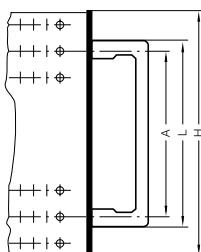


Type UG-04

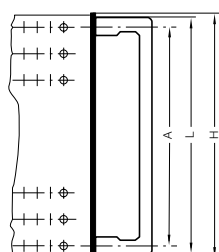


Mounting on 19"- front panels

Mounting-version 1



Mounting-version 2



Series UG-02/03/04 Universal Equipment Handle

Handles for mounting version 1 (L < height of front panel H)

A	Height of front panel H	Colour of grip ledge	Type UG-02		Type UG-03		Type UG-04	
			Order no.	L	Order no.	L	Order no.	L
55	88,1 (2 HE)	natural	UG-02.055.01	69	UG-03.055.01	65	UG-04.055.01	70
		black	UG-02.055.04	69	UG-03.055.04	65	UG-04.055.04	70
88	132,5 (3 HE)	natural	UG-02.088.01	102	UG-03.088.01	98	UG-04.088.01	103
		black	UG-02.088.04	102	UG-03.088.04	98	UG-04.088.04	103
100	132,5 (3 HE)	natural	UG-02.100.01	114	UG-03.100.01	110	UG-04.100.01	115
		black	UG-02.100.04	114	UG-03.100.04	110	UG-04.100.04	115
120	177,0 (4 HE)	natural	UG-02.120.01	134	UG-03.120.01	130	UG-04.120.01	135
		black	UG-02.120.04	134	UG-03.120.04	130	UG-04.120.04	135
180	221,5 (5 HE)	natural	UG-02.180.01	194	UG-03.180.01	190	UG-04.180.01	195
		black	UG-02.180.04	194	UG-03.180.04	190	UG-04.180.04	195
235	266,0 (6 HE)	natural	UG-02.235.01	249	UG-03.235.01	245	UG-04.235.01	250
		black	UG-02.235.04	249	UG-03.235.04	245	UG-04.235.04	250

Handles for mounting version 2 (L < height of front panel - 0,5mm)

A	Height of front panel H	Colour of grip ledge	Type UG-02		Type UG-03		Type UG-04	
			Order no.	A	Order no.	A	Order no.	A
43	43,5 (1 HE)	natural	UG-02.029.01	29	–	–	–	–
		black	UG-02.029.04	29	–	–	–	–
87,5	88,1 (2 HE)	natural	UG-02.073.01	73,5	UG-03.077.01	77,5	UG-04.072.01	72,5
		black	UG-02.073.04	73,5	UG-03.077.04	77,5	UG-04.072.04	72,5
132	132,5 (3 HE)	natural	UG-02.118.01	118	UG-03.122.01	122	UG-04.117.01	117
		black	UG-02.118.04	118	UG-03.122.04	122	UG-04.117.04	117
176,5	177,0 (4 HE)	natural	UG-02.162.01	162,5	UG-03.166.01	166,5	UG-04.161.01	161,5
		black	UG-02.162.04	162,5	UG-03.166.04	166,5	UG-04.161.04	161,5



1000 N stress resistance

Bolt-together handle type for any hole spacing required.

Material:

Handle cross rail in sectional aluminium. Handle arms in polyamide, glass bead reinforced, black, similar to RAL 9005, half matt with fine texture.

Design advantages:

Solid aluminium cross rail. Handle arms with screw retaining facilities. Assembled by bolting on from the front through the cross rail, providing a load capacity up to 1000 N per handle.

Surface finish:

Grip ledge anodized in natural or black colour with a matte finish.

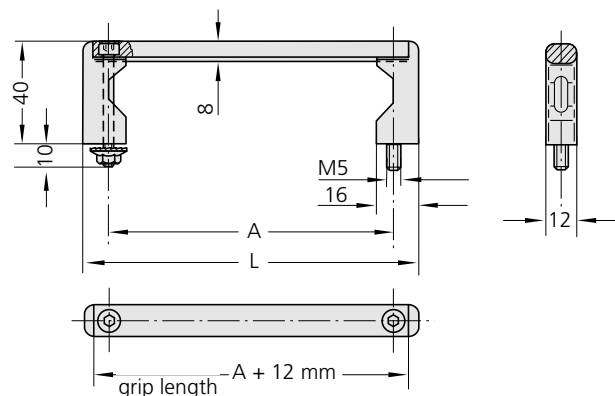
Scope of supply:

Includes nickel plated cheese head screws with hexagon sockets M 5 x 45 to DIN 7984 or DIN 6912 and galvanized self-locking detent nuts.

A	L	Grip ledge natural colour Order no.	Grip ledge black Order no.
25	45	UG-05.025.01	UG-05.025.04
55	75	UG-05.055.01	UG-05.055.04
88	108	UG-05.088.01	UG-05.088.04
100	120	UG-05.100.01	UG-05.100.04
120	140	UG-05.120.01	UG-05.120.04
180	200	UG-05.180.01	UG-05.180.04
235	255	UG-05.235.01	UG-05.235.04

Any desired handle lengths available

All dimensions in mm.



Series UG-01 Universal Equipment Handle



For small appliances, front panels and similar applications. Ledge and shank are interchangeable as fitting components.

Versions:

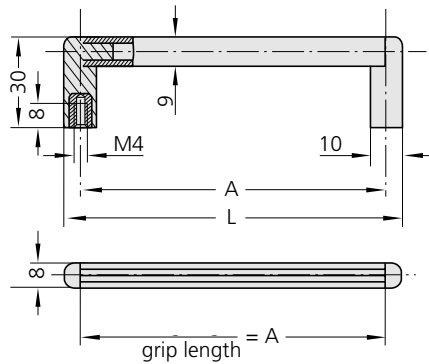
Handle ledge of aluminium special section tube, mat finishing and natural-coloured or black anodizing.

Handle shank of heavy-duty polyamide, glass-bead reinforced with fine structure and brass threaded bush.

Stress resistance 200 N per handle.

Notes:

Any other handle lengths available upon request.



A	L	Grip ledge natural colour Order no.	Grip ledge black Order no.
32	42	UG-01.032.01	UG-01.032.04
55	65	UG-01.055.01	UG-01.055.04
62	72	UG-01.062.01	UG-01.062.04
86	96	UG-01.086.01	UG-01.086.04
88	98	UG-01.088.01	UG-01.088.04
90	100	UG-01.090.01	UG-01.090.04
120	130	UG-01.120.01	UG-01.120.04
134	144	UG-01.134.01	UG-01.134.04

Single components	Order no.
Handle shank, 1 piece	UG-01.000.84
Grip ledge, 1 m, natural coloured	UG-01.001.01
Grip ledge, 1 m, black	UG-01.001.04

All dimensions in mm.

Series R Handle



Mounting on 19" front panels

Particularly versatile and attractive series for 19" drawers and instruments.

Material:
Profile aluminium AlMgSi 0.5.

Surface finish:
Vibration ground and anodized to a matte finish in natural or black colour.

Versions:

Types R 1 and R 2 differ in width and in size of thread, can therefore be adapted to case specifications.

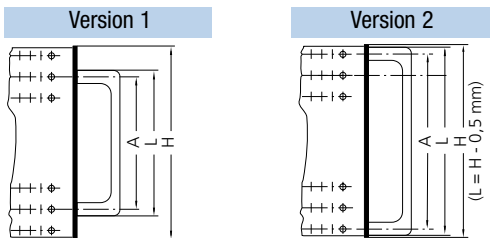
Type R 3

For screws mounting from the front. Scope of supply incl. glossy nickel-plated cheese head screws with hexagon socket M 5 x 45 DIN 912 and galvanized, self-locking ratchet nuts.

Custom colours:
Other colours available on request.

It means for 19" front panel handles:

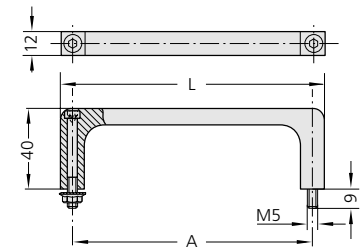
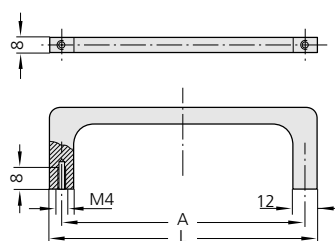
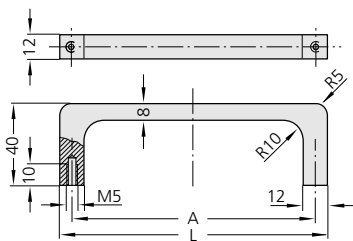
HE = unit of height
1 HE = 44.45 mm = 1 6/8"
Height of front panels ≈
HE x 44.45 mm - 0.8 mm



Type R 1
Wide version

Type R 2
Narrow version

Type R 3



Suitable mounting version	Height of front panel			Handle colour	Order no.		
	L	A	H		Typ R1	Typ R2	Typ R3
1	67	55	88,1 (2HE)	natural black	R1-12.055.01 R1-12.055.04	R2-08.055.01 R2-08.055.04	R3-12.055.01 R3-12.055.04
	100	88	132,5 (3HE)	natural black	R1-12.088.01 R1-12.088.04	R2-08.088.01 R2-08.088.04	R3-12.088.01 R3-12.088.04
	132	120	177,0 (4HE)	natural black	R1-12.120.01 R1-12.120.04	R2-08.120.01 R2-08.120.04	R3-12.120.01 R3-12.120.04
	192	180	221,5 (5HE)	natural black	R1-12.180.01 R1-12.180.04	R2-08.180.01 R2-08.180.04	R3-12.180.01 R3-12.180.04
	247	235	266,0 (6HE)	natural black	R1-12.235.01 R1-12.235.04	R2-08.235.01 R2-08.235.04	R3-12.235.01 R3-12.235.04
2	43,5	32,0	44,0 (1HE)	natural black	R1-12.032.01 R1-12.032.04	R2-08.032.01 R2-08.032.04	R3-12.032.01 R3-12.032.04
	87,5	75,5	88,1 (2HE)	natural black	R1-12.075.01 R1-12.075.04	R2-08.075.01 R2-08.075.04	R3-12.075.01 R3-12.075.04
	132,0	120,0	132,5 (3HE)	natural black	R1-12.120.01 R1-12.120.04	R2-08.120.01 R2-08.120.04	R3-12.120.01 R3-12.120.04
	265,5	253,5	266,0 (6HE)	natural black	R1-12.253.01 R1-12.253.04	R2-08.253.01 R2-08.253.04	R3-12.253.01 R3-12.253.04

All dimensions in mm.

Series S Handle



Standard versions for 19" drawers and instruments.

Material:

Cut profiled aluminium AlMgSi 0.5.

Surface finish:

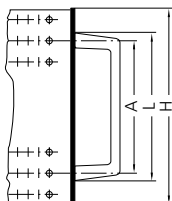
Anodized with a matte finish in natural colour or black

Custom colours:

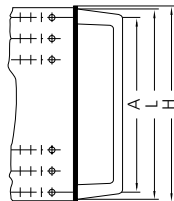
Other colours available on request.

19" front panels:

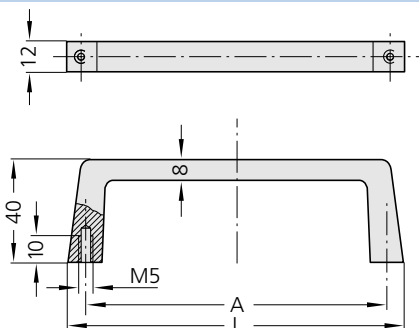
Version 1



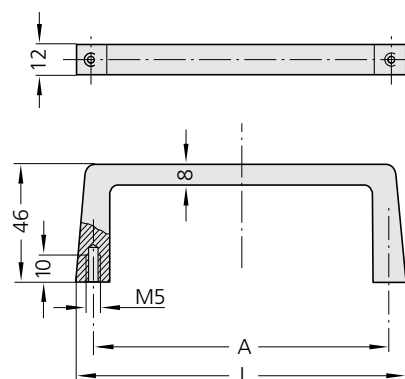
Version 2



Type S1



Type S2



Type	L	A	Suitable mounting version	Height of front panel H		natural coloured Order no.	black Order no.
S1	40	25	1	44,0	(1HE)	S1-12.025.01	S1-12.025.04
	69	55	1	88,1	(2HE)	S1-12.055.01	S1-12.055.04
	102	88	1	132,5	(3HE)	S1-12.088.01	S1-12.088.04
	134	120	1	177,0	(4HE)	S1-12.120.01	S1-12.120.04
	146,5	133,4 = grid scale	3HE			S1-12.133.01	S1-12.133.04
	191	177,8 = grid scale	4HE			S1-12.177.01	S1-12.177.04
	194	180	1	221,5	(5HE)	S1-12.180.01	S1-12.180.04
	249	235	1	266,0	(6HE)	S1-12.235.01	S1-12.235.04
S2	265,5	251,5	2	266,0	(6HE)	S1-12.251.01	S1-12.251.04
	102	88	1	132,5	(3HE)	S2-12.088.01	S2-12.088.04
	132	120	2	132,5	(3HE)	S2-12.120.01	S2-12.120.04
	265,5	251,5	2	266,0	(6HE)	S2-12.251.01	S2-12.251.04

It means for 19" front panel handles:
HE = units of height, 1 HE = 44.45 mm = 1 6/8", Height of front panels ≈ HE x 44.45 - 0.8 mm

Series W1 & W2 Handle System



These intermateable round tube handles are suitable for any screw-on spacing.

Material and surface treatment:

Shanks and connecting tubes dia. 30 x 1,5 mm made of extruded aluminium sections AIMgSi 0.5, powder coated in RAL 9002 grey white.

Shank insert made of polyamide 6, glass-bead reinforced in similar colour shade.

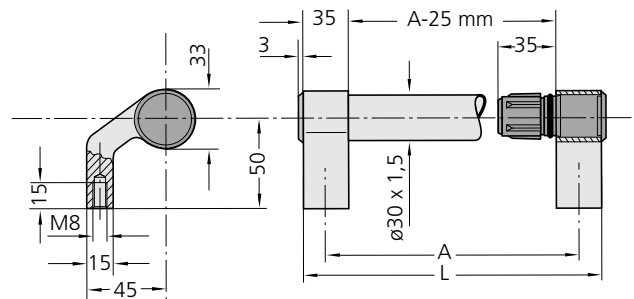
Design advantages:

Torsionally stiff with edges rounded by vibratory grinding.

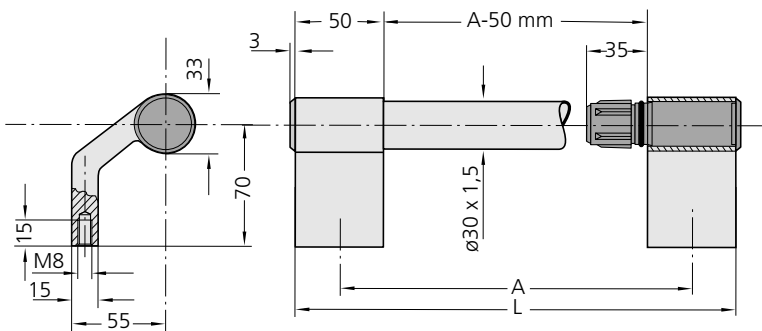
Special colour versions:

All handle lengths and RAL shades available on request.

Type W1



Type W2



		Type W1 grey white RAL 9002	Type W2 grey white RAL 9002
A	L	Order no.	Order no.
200	250	W1-30S.200.9002	W2-30.200.9002
250	300	W1-30S.250.9002	W2-30.250.9002
300	350	W1-30S.300.9002	W2-30.300.9002
350	400	W1-30S.350.9002	W2-30.350.9002
400	450	W1-30S.400.9002	W2-30.400.9002
500	550	W1-30S.500.9002	W2-30.500.9002
600	650	W1-30S.600.9002	W2-30.600.9002

All dimensions in mm.

Series RR Handle



Multi-purpose Rohde handle types in 2 design dimensions, similar to series RS, for engineering and apparatus building.

Material:

Handle shanks made of high-duty polyamide, glass ball reinforced, black, similar to RAL 9005, semimatt, with fine structure. Connecting tubes made of aluminium AlMgSi 0.5.

Design advantages:

The handle shank RR-20 is provided with 4 clamping bars and the handle shank RR-30 with 2 triangular PVC profiles inside of the pipe connection. When the round tube is pressing in, they will be peeled and give firm fitting.

Version A:

Connecting tube ground and anodized in natural colour.

Version B:

Connecting tube with grooved plastic cover.

Version C:

Connecting tube black powder coated with fine structure.

Scope of delivery:

RR-20 including black galvanized hexagon screws M 5 x 20 DIN 933 and galvanized nuts DIN 934 with washers DIN 125. RR-30 same as above however with screws M 8 x 25.

Special Designs:

Any desired handle lengths on request.



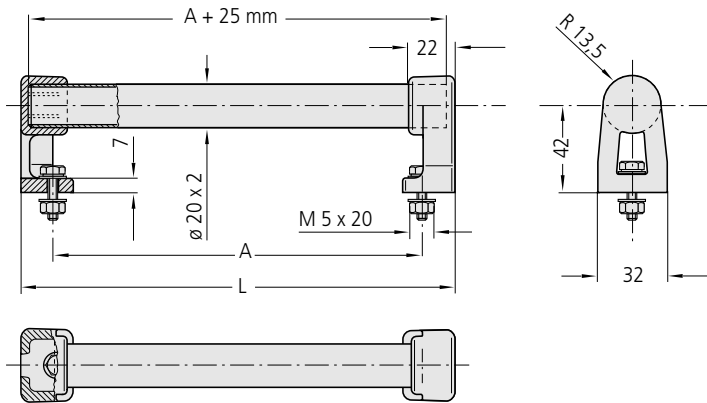
Single components

Item	Type RR-20 Order no.	Type RR-30 Order no.
Handle shank, 1 piece, with mounting material	RR-20.000.84	RR-30.000.84
Handles shank, 1 piece, without mounting material	RR-20.0WS.84	RR-30.0WS.84
Connecting tube, 1 m, Version A	RR-20.001.01	RR-30.001.01

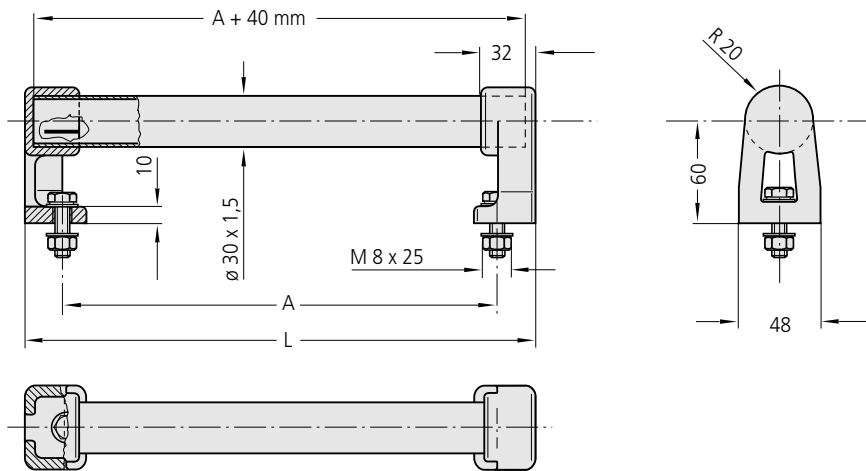
All dimensions in mm.

Series RR Handle

Type RR-20



Type RR-30



Type RR-20				Type RR-30				
A	Version A Order no.	Version B Order no.	Version C Order no.	L	Version A Order no.	Version B Order no.	Typ C Order no.	L
150	RR-20.150.62	RR-20.150.63	RR-20.150.64	184	RR-30.150.62	RR-30.150.63	RR-30.150.64	200
200	RR-20.200.62	RR-20.200.63	RR-20.200.64	234	RR-30.200.62	RR-30.200.63	RR-30.200.64	250
250	RR-20.250.62	RR-20.250.63	RR-20.250.64	284	RR-30.250.62	RR-30.250.63	RR-30.250.64	300
300	RR-20.300.62	RR-20.300.63	RR-20.300.64	334	RR-30.300.62	RR-30.300.63	RR-30.300.64	350
350	RR-20.350.62	RR-20.350.63	RR-20.350.64	384	RR-30.350.62	RR-30.350.63	RR-30.350.64	400
400	RR-20.400.62	RR-20.400.63	RR-20.400.64	434	RR-30.400.62	RR-30.400.63	RR-30.400.64	450
500	RR-20.500.62	RR-20.500.63	RR-20.500.64	534	RR-30.500.62	RR-30.500.63	RR-30.500.64	550
600	RR-20.600.62	RR-20.600.63	RR-20.600.64	634	RR-30.600.62	RR-30.600.63	RR-30.600.64	650

All dimensions in mm.

Series U1 Tube Handle



Material and surface treatment:

Tubes of $\varnothing 30 \times 1.5$ mm aluminium AlMgSi 0.5, precision-ground and anodized in 3 colours, or black powder-coated, with fine structure.

Tube holders and tube caps made of polyamide (PA 6), glass-bead-reinforced, black, semimat with fine-grain structure.

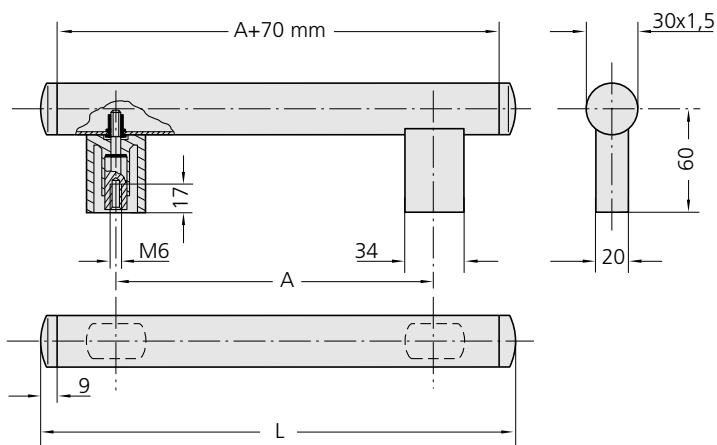
Tube threaded insert made of aluminium, screw-down insert made of steel, galvanized.

Technical features:

Screwed connection from the grip holder to the tube with nondetachable blind rivet nuts to prevent it being pulled off.

Special versions:

Handle lengths and screw-down spacers available as required on request.



Handles	Tubes in anodizing versions			Tubes powder coated black		
	L	A	Order no.		Order no.	Order no.
	288	200	U1-30.200.01	U1-30.200.04	U1-30.200.05	U1-30.200.54
	338	250	U1-30.250.01	U1-30.250.04	U1-30.250.05	U1-30.250.54
	388	300	U1-30.300.01	U1-30.300.04	U1-30.300.05	U1-30.300.54
	438	350	U1-30.350.01	U1-30.350.04	U1-30.350.05	U1-30.350.54
	488	400	U1-30.400.01	U1-30.400.04	U1-30.400.05	U1-30.400.54
	588	500	U1-30.500.01	U1-30.500.04	U1-30.500.05	U1-30.500.54
	688	600	U1-30.600.01	U1-30.600.04	U1-30.600.05	U1-30.600.54

All dimensions in mm.

Series A1 Handle



For 19" front panels and appliances.

Solid aluminium components and high stability under load distinguish these handle series which are available in several versions and in any lengths.

Material:

Handle shank and grip ledge made of aluminium section AlMgSi 0.5, connecting moulded components made of black polyamide with high-grade steel pin.

Surface treatment:

Handle shank precision-ground, mat finished and anodized in 2 standard colours. Grip ledge mat finished and anodized in 3 standard colours.

Type G:

Handles with straight aluminium shanks, completely assembled.

Type A:

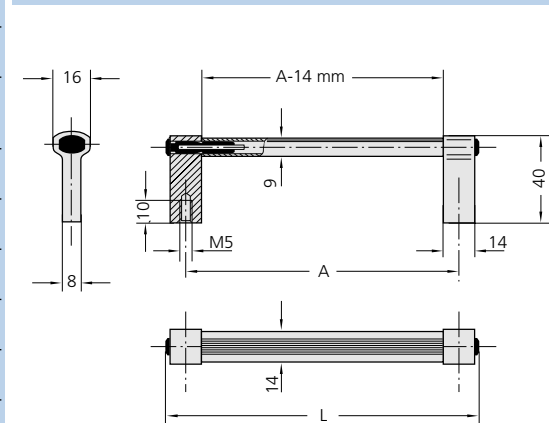
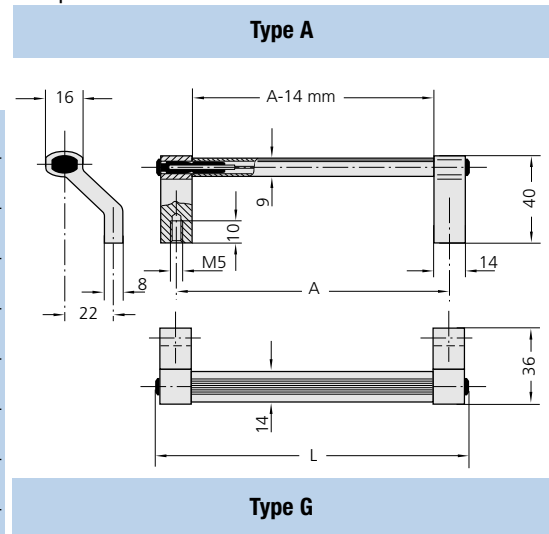
Handle with tangent-bent aluminium shanks, completely assembled.

Special versions:

Any desired handle lengths on request.

Type G	L	Shank colour	Anodizing version of grip ledge			
			natural coloured Order no.	black Order no.	titanium coloured Order no.	
Type G	55	natural black	A1-14.G055.N01 A1-14.G055.S01	- A1-14.G055.S04	- A1-14.G055.S05	
	69	natural black	A1-14.G069.N01 A1-14.G069.S01	- A1-14.G069.S04	- A1-14.G069.S05	
	88	natural black	A1-14.G088.N01 A1-14.G088.S01	- A1-14.G088.S04	- A1-14.G088.S05	
	100	natural black	A1-14.G100.N01 A1-14.G100.S01	- A1-14.G100.S04	- A1-14.G100.S05	
	114	natural black	A1-14.G114.N01 A1-14.G114.S01	- A1-14.G114.S04	- A1-14.G114.S05	
	120	natural black	A1-14.G120.N01 A1-14.G120.S01	- A1-14.G120.S04	- A1-14.G120.S05	
	180	natural black	A1-14.G180.N01 A1-14.G180.S01	- A1-14.G180.S04	- A1-14.G180.S05	
	200	natural black	A1-14.G200.N01 A1-14.G200.S01	- A1-14.G200.S04	- A1-14.G200.S05	
	235	natural sblack	A1-14.G235.N01 A1-14.G235.S01	- A1-14.G235.S04	- A1-14.G235.S05	
	250	natural black	A1-14.G250.N01 A1-14.G250.S01	- A1-14.G250.S04	- A1-14.G250.S05	
	Typ A					
	55	73	natural black	A1-14.A055.N01 A1-14.A055.S01	- A1-14.A055.S04	- A1-14.A055.S05
	69	87*	natural black	A1-14.A069.N01 A1-14.A069.S01	- A1-14.A069.S04	- A1-14.A069.S05
88	106	natural black	A1-14.A088.N01 A1-14.A088.S01	- A1-14.A088.S04	- A1-14.A088.S05	
100	118	natural black	A1-14.A100.N01 A1-14.A100.S01	- A1-14.A100.S04	- A1-14.A100.S05	
114	132*	natural black	A1-14.A114.N01 A1-14.A114.S01	- A1-14.A114.S04	- A1-14.A114.S05	
120	138	natural black	A1-14.A120.N01 A1-14.A120.S01	- A1-14.A120.S04	- A1-14.A120.S05	
180	198	natur/natural schwarz/black	A1-14.A180.N01 A1-14.A180.S01	- A1-14.A180.S04	- A1-14.A180.S05	
200	218	natural black	A1-14.A200.N01 A1-14.A200.S01	- A1-14.A200.S04	- A1-14.A200.S05	
235	253	natural black	A1-14.A235.N01 A1-14.A235.S01	- A1-14.A235.S04	- A1-14.A235.S05	
250	268	natural black	A1-14.A250.N01 A1-14.A250.S01	- A1-14.A250.S04	- A1-14.A250.S05	

* Handle length according to the height of 2 resp. 3 HE (HE= unit of height) of 19" front panels.



Series A2 Plug-in Handle



Various colour combination possibilities and 3 different versions distinguish these sturdy and heavy-duty aluminium handles.

Material:

Handle shank and handle ledge of aluminium section AlMgSi 0,5. Connecting pins of high-grade steel.

Surface treatment:

Handle shank glass-bead-blasted and semi-glossed, anodized in 2 standard colours.
Handle ledge with brushed finish and anodizing in 3 standard colours.

Type G:

Handles with straight aluminium shanks.

Type A:

Handles with tangent-bent aluminium shanks.

Type S:

Handles with slanted aluminium shanks.

Scope of delivery:

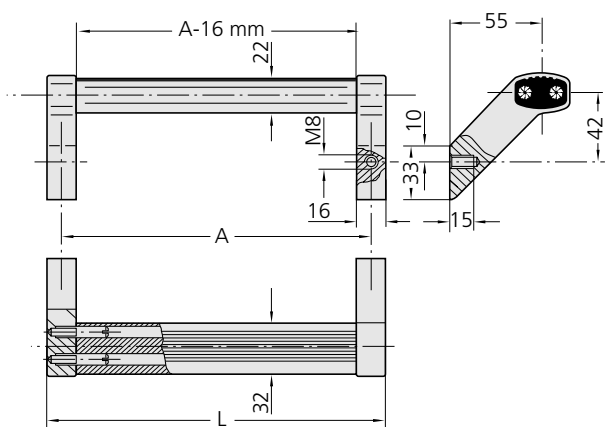
Includes galvanized hexagon screws M 8 x 16, DIN 933 and galvanized washers DIN 125.

Handles fully assembled.

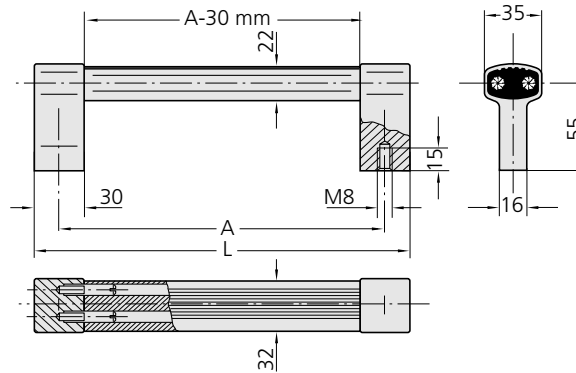
Special versions:

Any desired handle lengths on request.

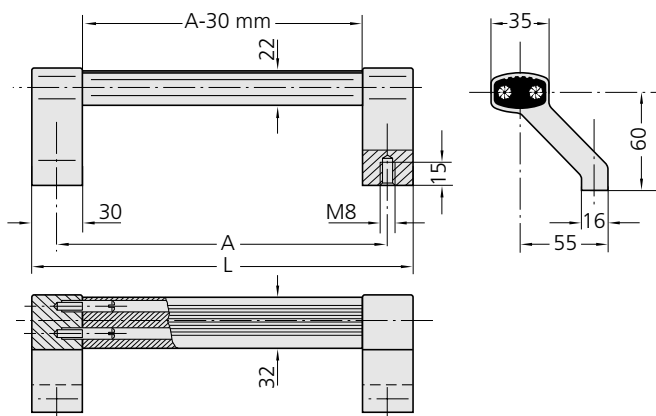
Type S



Type G



Type A



Series A2 Plug-in Handle

			Anodizing version of grip ledge		
			natural coloured	black	titanium coloured
Type G		Shank colour	Order no.	Order no.	Order no.
A	L				
200	230	natural	A2-32.G200.N01	-	-
		black	A2-32.G200.S01	A2-32.G200.S04	A2-32.G200.S05
250	280	natural	A2-32.G250.N01	-	-
		black	A2-32.G250.S01	A2-32.G250.S04	A2-32.G250.S05
300	330	natural	A2-32.G300.N01	-	-
		black	A2-32.G300.S01	A2-32.G300.S04	A2-32.G300.S05
350	380	natural	A2-32.G350.N01	-	-
		black	A2-32.G350.S01	A2-32.G350.S04	A2-32.G350.S05
400	430	natural	A2-32.G400.N01	-	-
		black	A2-32.G400.S01	A2-32.G400.S04	A2-32.G400.S05
500	530	natural	A2-32.G500.N01	-	-
		black	A2-32.G500.S01	A2-32.G500.S04	A2-32.G500.S05
600	630	natural	A2-32.G600.N01	-	-
		black	A2-32.G600.S01	A2-32.G600.S04	A2-32.G600.S05
Type A					
200	230	natural	A2-32.A200.N01	-	-
		black	A2-32.A200.S01	A2-32.A200.S04	A2-32.A200.S05
250	280	natural	A2-32.A250.N01	-	-
		black	A2-32.A250.S01	A2-32.A250.S04	A2-32.A250.S05
300	330	natural	A2-32.A300.N01	-	-
		black	A2-32.A300.S01	A2-32.A300.S04	A2-32.A300.S05
350	380	natural	A2-32.A350.N01	-	-
		black	A2-32.A350.S01	A2-32.A350.S04	A2-32.A350.S05
400	430	natural	A2-32.A400.N01	-	-
		black	A2-32.A400.S01	A2-32.A400.S04	A2-32.A400.S05
500	530	natural	A2-32.A500.N01	-	-
		black	A2-32.A500.S01	A2-32.A500.S04	A2-32.A500.S05
600	630	natural	A2-32.A600.N01	-	-
		black	A2-32.A600.S01	A2-32.A600.S04	A2-32.A600.S05
Type S					
200	216	natural	A2-32.S200.N01	-	-
		black	A2-32.S200.S01	A2-32.S200.S04	A2-32.S200.S05
250	266	natural	A2-32.S250.N01	-	-
		black	A2-32.S250.S01	A2-32.S250.S04	A2-32.S250.S05
300	316	natural	A2-32.S300.N01	-	-
		black	A2-32.S300.S01	A2-32.S300.S04	A2-32.S300.S05
350	366	natural	A2-32.S350.N01	-	-
		black	A2-32.S350.S01	A2-32.S350.S04	A2-32.S350.S05
400	416	natural	A2-32.S400.N01	-	-
		black	A2-32.S400.S01	A2-32.S400.S04	A2-32.S400.S05
500	516	natural	A2-32.S500.N01	-	-
		black	A2-32.S500.S01	A2-32.S500.S04	A2-32.S500.S05
600	616	natural	A2-32.S600.N01	-	-
		black	A2-32.S600.S01	A2-32.S600.S04	A2-32.S600.S05

All dimensions in mm.

Series KB Handle



These push-in type machine handles are distinguished by their modern industrial design.

Material and design:

Polyamide handle posts, anthracite, silk mat, with fine texture. Oval section aluminium connecting pipe, natural colour anodized or anthracite plastic coated.

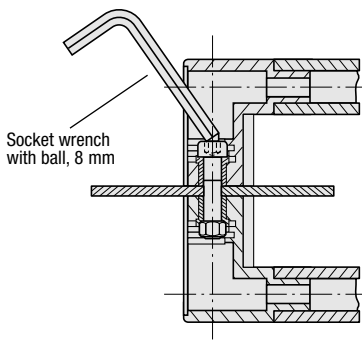
Structural features:

The oval pipe fits accurately and firmly on the pins of the handle posts. Optional fixing with bolts at the front, at the back and for double handle mounting.

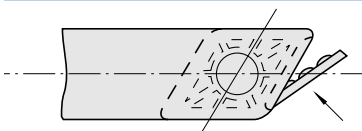
Supply:

Including M 10 x 45 DIN 912 screws with nuts and washers, galvanized and chromized.

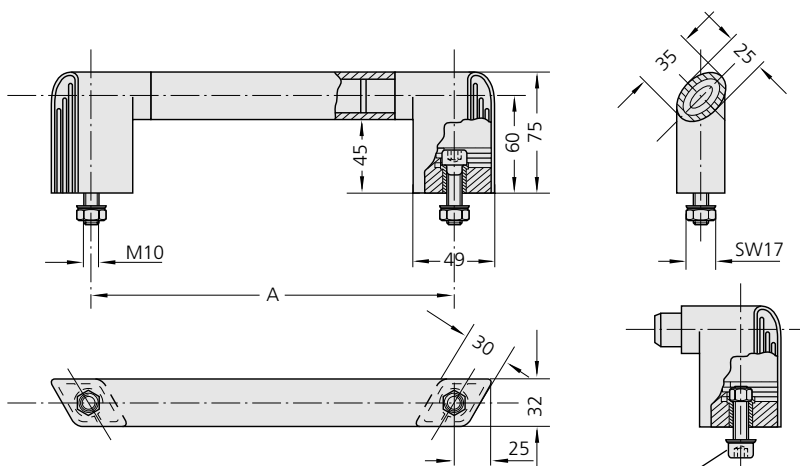
Assembly of double handles



Cap mounting



Set the long side of the lid into the handle side. Press until it clicks into place.



Further fastening possibility

A	Oval tube anodized Order no.	Oval tube anthracite plastic coated Order no.
180	KB-32.180.62	KB-32.180.65
200	KB-32.200.62	KB-32.200.65
250	KB-32.250.62	KB-32.250.65
300	KB-32.300.62	KB-32.300.65
350	KB-32.350.62	KB-32.350.65
400	KB-32.400.62	KB-32.400.65
500	KB-32.500.62	KB-32.500.65
600	KB-32.600.62	KB-32.600.65

All dimensions in mm.

Series W3 Offset Handle



Handles in a special heavy-duty design for different technical applications.

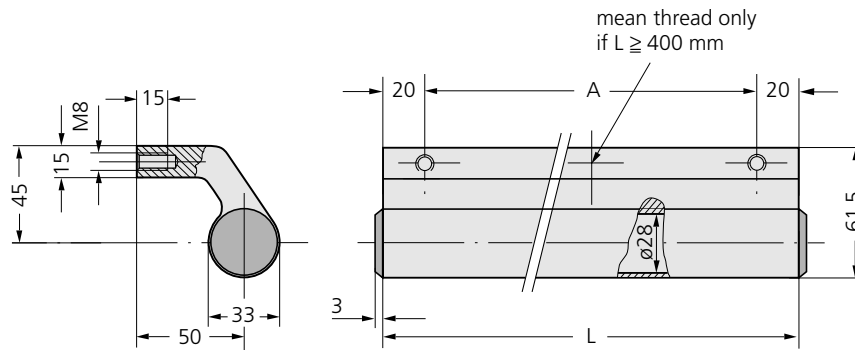
Material and surface treatment:

Aluminium section AlMgSi 0,5 powder coated in RAL 9002 grey white.

Cover caps made of polyamide 6, glass-bead reinforced in similar colour shade.

Special colour versions:

All handle lengths and RAL shades available on request.



A	L	grey white RAL 9002 Order no.
150	110	W3-33.110.9002
200	160	W3-33.160.9002
250	210	W3-33.210.9002
300	260	W3-33.260.9002
350	310	W3-33.310.9002
400	360	W3-33.360.9002
500	460	W3-33.460.9002
600	560	W3-33.560.9002

All dimensions in mm.

Series U1 Handle



Material and surface treatment:

Tube dia. 30 x 1,5 mm aluminium section AIMgSi 0.5 powder-coated in RAL 9002 grey white.

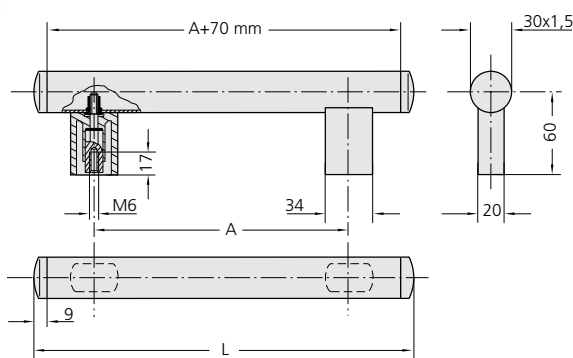
Tube holder and tube cap made of polyamide (PA6) glass-bead reinforced, semi-gloss with fine-grain structure, in the respective similar RAL colour shade.

Technical features:

Nondetachable blind rivet nuts ensure that the handle holder cannot be torn out of its screwed connection to the tube.

Special colour versions:

All handle lengths and RAL shades available on request.



A	L	grey white RAL 9002 Order no.
200	288	U1-30.200.9002
250	338	U1-30.250.9002
300	388	U1-30.300.9002
350	438	U1-30.350.9002
400	488	U1-30.400.9002
500	588	U1-30.500.9002
600	688	U1-30.600.9002

All dimensions in mm.

Series KL Handle



Dimensionally stable handle for drawers and casings

Material:

Polyamide 6, glass ball reinforced.

Versions:

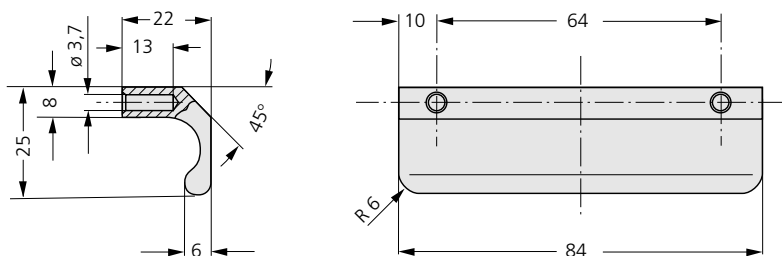
Surface with fine structure, colour version similar to RAL 7035 light-grey, RAL 9002 grey white or RAL 9005 black.

Extent of supply:

Includes sheet metal screws dia. 4.2 x 9.5 mm in accordance with DIN 7981, electrogalvanized.

Custom Colours:

Other colours available on request.



	Order no.
light grey similar RAL 7035	KL-25.064.7035
grey white similar RAL 9002	KL-25.064.9002
black similar RAL 9005	KL-25.064.9005

All dimensions in mm.

Series ET Stainless Steel Handle



The trumped-style form of the handle feet makes them easy to clean thoroughly. These types of handles are therefore particularly suitable for hygiene areas.

Material:

Single components are made of round bar stainless steel, material 1.4305.

Version A:

Surface vibration ground with a semi-matte finish.

Version B:

Surface vibration ground, blasted and electropolished with a semi-matte finish.

Extent of supply:

Including stainless steel hexagon head screws DIN 933 and stainless steel washers DIN 925, material no. 1.4301

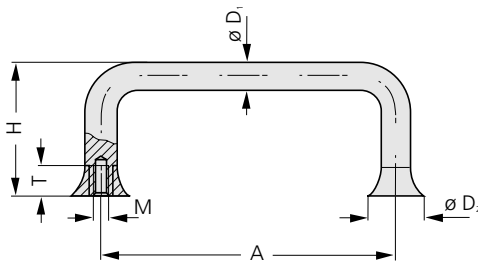
Handle types

ET-10.E and ET-10.A
screws M5x10,

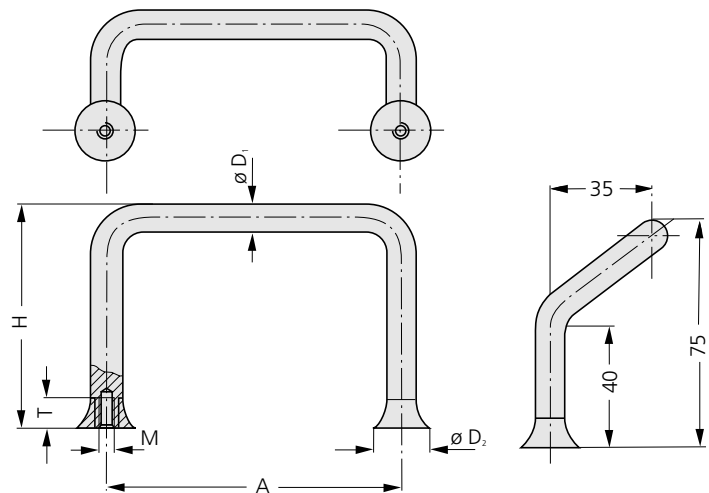
Handle type

ET-15.E
screws M6 x 12.

Type ET-10.E & Type ET-15.E



Type ET-10.A



Type ET-10.E		Version A	Version B				
D ₁	A	Order no.	Order no.	M	T	D ₂	H
∅ 10	100	ET-10.E100.31	ET-10.E100.36	5	10	20	45
	120	ET-10.E120.31	ET-10.E120.36				
Typ ET-15.E							
∅ 15	120	ET-15.E120.31	ET-15.E120.36	6	12	30	60
	140	ET-15.E140.31	ET-15.E140.36				
	200	ET-15.E200.31	ET-15.E200.36				
Typ ET-10.A							
∅ 10	100	ET-10.A100.31	ET-10.A100.36	5	10	20	75
	120	ET-10.A120.31	ET-10.A120.36				

All dimensions in mm.

Series EL Stainless Steel Handle



Material:

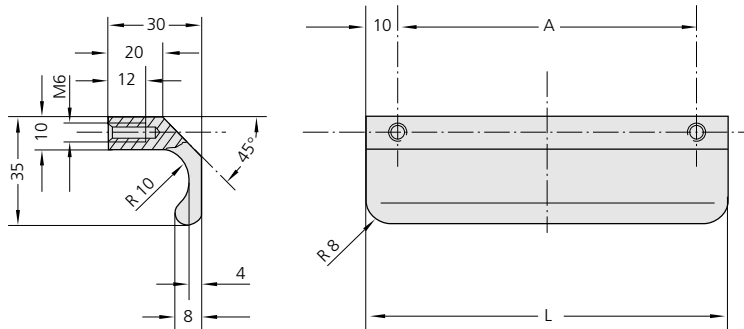
Profiled stainless steel, X2 CrNiMo 17 13 2, material no. 1.4404

Surface finish:

Blasted and electropolished with a semi-matt finish..

Special versions:

Any other handle lengths available on request.



A	L	Order no.
60	80	EL-35.060.36
80	100	EL-35.080.36
100	120	EL-35.100.36
130	150	EL-35.130.36
Profile material, 1 m		EL-35.001.36

Series EK Collapsible Stainless Steel Handle



Material:

All components made of round bar stainless steel, material no. 1.4305.

Surface treatment:

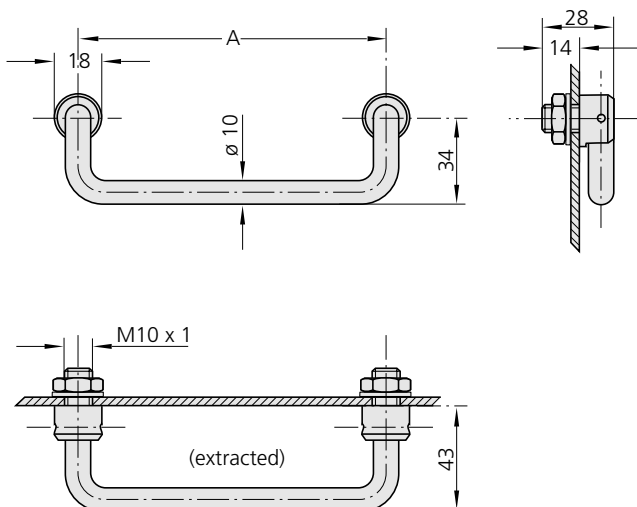
Vibration ground free of flutes to a semimatte finish.

Design features:

Spring-arrestment in both end positions. One-piece shank. Stress capacity up to 1000 N per pair.

Note:

Supplied complete with washers and nuts of stainless steel.



A	Order no.
100	EK-10.100.31
120	EK-10.120.31
180	EK-10.180.31

Series SS Handle



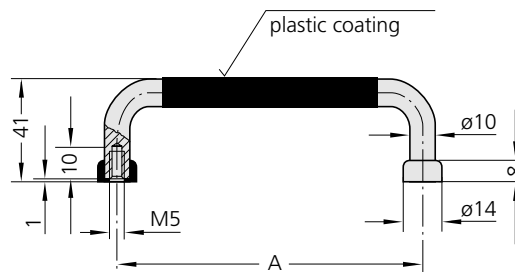
High quality handles for front panels and similar applications.

Material:
Round steel bar.

Version:
Precision ground and matt gloss chromium plated surface, handle arms with smooth plastic covering. Including matt gloss chromium plated brass end bushes.

Special versions:
Other dimensions on request.
Also available with high gloss chromium plated surface.

A	Order no.	All dimensions in mm.
55	SS-10.055.28	
88	SS-10.088.28	
100	SS-10.100.28	
102	SS-10.102.28	
115	SS-10.115.28	
120	SS-10.120.28	
136	SS-10.136.28	
180	SS-10.180.28	
200	SS-10.200.28	
235	SS-10.235.28	
250	SS-10.250.28	

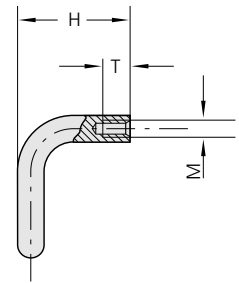
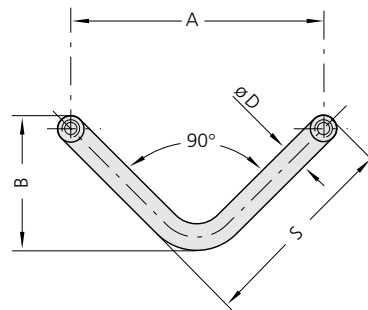


Series WS Steel Offset Handle



Material:
Round steel bar.

Design:
Polished and bright chromium-plated surface finish.
Concentric threaded hole.



A	Order no.	Ø	H	B	S	M	T
75	WS-08.075.22	8	32	41	61	4	8
90	WS-10.090.22	10	40	49	73	5	10

All dimensions in mm.

Series AM Cranked Machine Handle



Material:

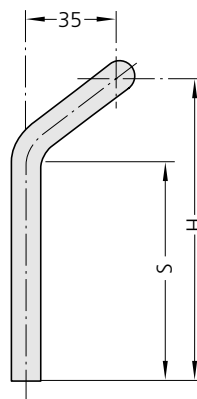
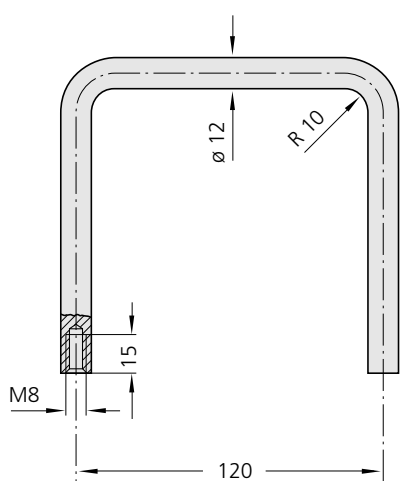
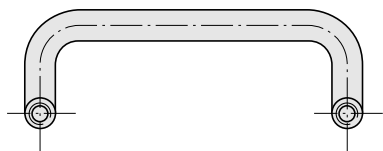
Round bar steel, \varnothing 12 mm.

Surface finish:

Precision-ground and chromium-plated mirror finish.

Special versions:

Additional sizes or surface versions on request.



H	Order no.	S
60	AM-27.120.22	27
120	AM-87.120.22	87

All dimensions in mm.

Series ES Stainless Steel Handle



High-grade steel handles which can be used universally; can be assembled together; for any spacing between screw-on positions. Particularly suitable also for the food industry.

Material:

Handle shank made of precision casting G-X7 CrNiMoNb 18 10, material no. G 4581. Connecting tubes and fixing material made of X5 CrNi 18 9, material no. 1.4301. Clamping and packing ring of silicon rubber in food quality.

Long-term temperature resistance from -60 °C to +200 °C.

Design advantages:

Splash proof tube-shank connection. Additional tube clamping through Allen set screw. Can be screwed on from front or behind. Easy to clean.

Surface treatment:

Connection tubes finish ground and brushed. Handle shanks glass blasted and electropolished with a semi-matt finish.

Standard screwing:

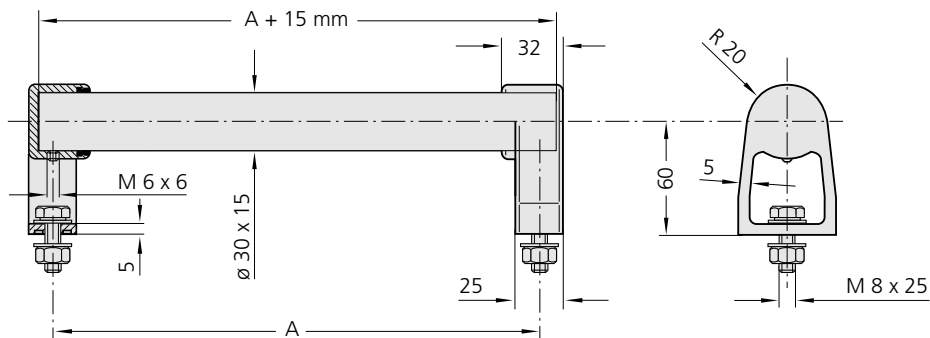
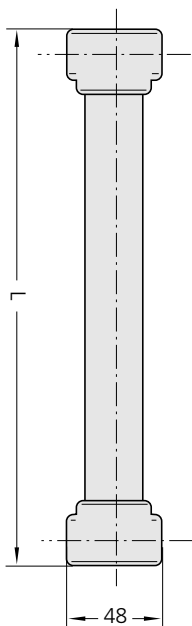
For screw-attachment from in front or behind. Handle shanks including hexagon screws M 8 x 25 DIN 933, nuts DIN 934 and washers DIN 125. Furthermore hexagon socket screws M 6 x 6 DIN 913 for tube fixation just as clamping and packing rings.

Safety screwing:

For entrance doors, screw-attachment from behind. Scope of supply same as standard version, however with cup square bolts M 8 x 25 DIN 603.

Special designs:

Any desired handle lengths on request.



		Standard handles		Safety handles	
A	L	Order no.		Order no.	
200	225	ES-30.200.ST		ES-30.200.SI	
250	275	ES-30.250.ST		ES-30.250.SI	
300	325	ES-30.300.ST		ES-30.300.SI	
350	375	ES-30.350.ST		ES-30.350.SI	
400	425	ES-30.400.ST		ES-30.400.SI	
500	525	ES-30.500.ST		ES-30.500.SI	
600	625	ES-30.600.ST		ES-30.600.SI	

Single components

Item	Standard screwing Order no.	Safety screwing Order no.
Handle shank, 1 piece	ES-30.000.ST	ES-30.000.SI
Connection tube, 1 m	ES-30.001.33	

All dimensions in mm.



Series EU Stainless Steel Handle



High-quality series of handles that can be varied in length and fitted from the front or rear.

Material:

Solid handle leg made from precision cast G-X7 CrNiMoNb 18 10, material no. G 4581.

Connection tube and fixing material made of X5 CrNi 18 9, material no. 1.4301.

Design:

Handle leg abrasive-blasted and electropolished for a dull-bright finish.

Connection tube precision-ground in design **A** or with a grooved plastic coating in design **B**.

Scope of delivery:

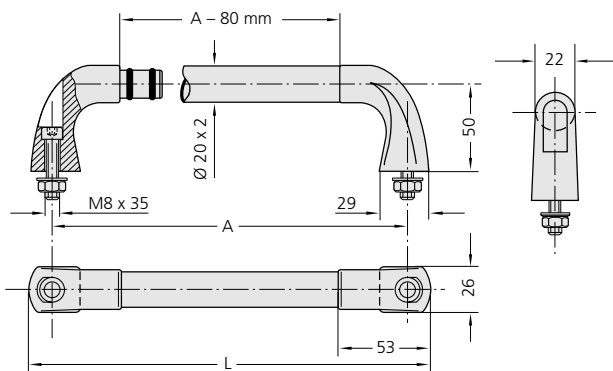
Handle type **EU-20.F** incl. DIN 912 socket head cap screws M8 x 35, DIN 934 nuts and DIN 125 washers.

Handle type **EU-20.R** incl. DIN 933 hexagon head cap screws and DIN 125 washers.

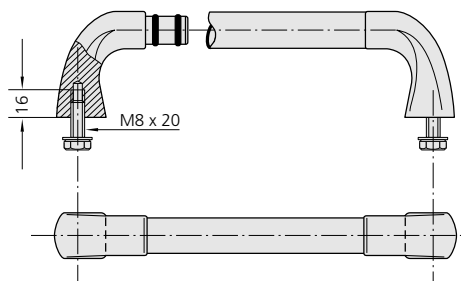
Special versions:

Any desired handle lengths on request.

Type EU-20.F



Type EU-20.R



Type EU-20.F
screw attachment
from in front

Version A
tube ground

Version B
tube with plastic cover

A	L	Order no.	Order no.
200	226	EU-20.F200.A	EU-20.F200.B
250	276	EU-20.F250.A	EU-20.F250.B
300	326	EU-20.F300.A	EU-20.F300.B
350	376	EU-20.F350.A	EU-20.F350.B
400	426	EU-20.F400.A	EU-20.F400.B

Type EU-20.R
screw attachment
from behind

Version A
tube ground

Version B
tube with plastic cover

Order no.	Order no.
EU-20.R200.A	EU-20.R200.B
EU-20.R250.A	EU-20.R250.B
EU-20.R300.A	EU-20.R300.B
EU-20.R350.A	EU-20.R350.B
EU-20.R400.A	EU-20.R400.B

Single components

	Order no.
Handle shank, screw attachment from in front, 1 piece	EU-20.F000.S
Handle shank, screw attachment from behind, 1 piece	EU-20.R000.S
Connecting tube Ø 20 x 2 mm, 1 m	EU-20.0001.A

All dimensions in mm.



Series EB Stainless Steel Handle



For machines and all technical areas where maximum load-bearing capacity is required.

Material:

Round stainless steel X12 CrNiS 18 8, material no. 1.4305.

Design:

Ground and brushed for a dull-bright finish.

Scope of delivery:

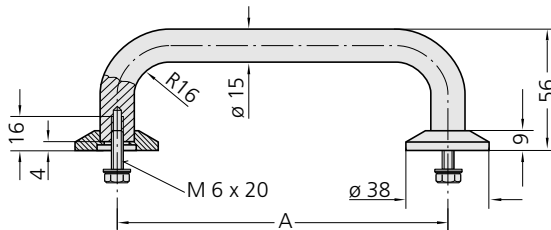
Handle versions **EB-15.R** and **EB-20.R** including hexagon screws DIN 933 and washers DIN 125;

Version **EB-20.F** including mounting adapter, nuts DIN 934 and washers DIN 125 made of stainless steel, material no. 1.4301.

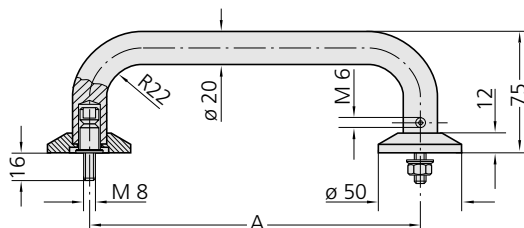
Special designs:

Other dimensions upon request.

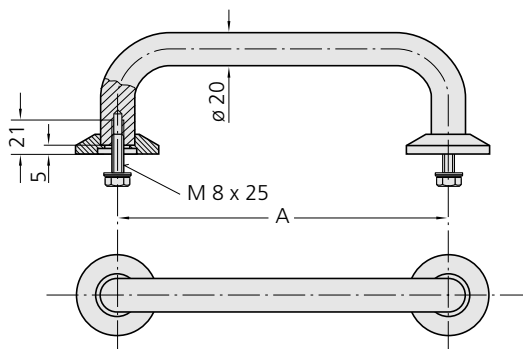
Type EB-15.R
screws
attachment
from behind



Type EB-20.F
screws
attachment
in front



Type EB-20.R
screws
attachment
from behind



A	Type EB-15.R Order no.	Type EB-20.F Order no.	Type EB-20.R Order no.
150	EB-15.R150.33	-	-
200	EB-15.R200.33	EB-20.F200.33	EB-20.R200.33
250	EB-15.R250.33	EB-20.F250.33	EB-20.R250.33
300	-	EB-20.F300.33	EB-20.R300.33

All dimensions in mm.

Series ER Stainless Steel Tube Handle



For wet zones, medical and chemical systems; especially suitable as wall and door handles.

Material:

Stainless steel tube, material No. 1.4301, inner parts of stainless steel material No. 1.4305.

Surface:

Smooth ground and brushed surface.

Design features:

The fastening technology of the Rohde handle ER types makes it possible to use them as single handles or as double handles for two-sided door assembly.

An M 8 threaded bolt with inner hexagonal head guarantees for proper and tight seating with the handles in the elbow version **K**; upon request, this version is also available with 2 threaded bolts for especially heavy doors.

Assembly and order information:

With all double handle types, the supplied inner hexagonal socket head cap screw M 10 x 60 DIN 912 permit fastening to doors completely made of glass with a door leaf thickness of 6 – 20 mm; the use of longer standard screws enables assembly to any optional door thickness.

For entrance doors, the elbow version **K** should be situated in the inside for reasons of safety.

Supply:

All handle models supplied ready for fixing including standard fixing materials of stainless steel.

Single **G** type post handle (with threaded insert): M 10 x 30 DIN 912 bolt with washer.

Single **K** type post handle (with clamping sleeve): M 10 x 40 DIN 912 bolt with washer and nut.

Double handle:

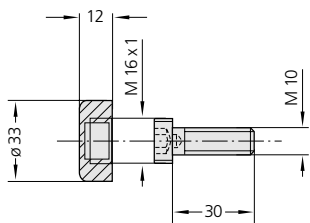
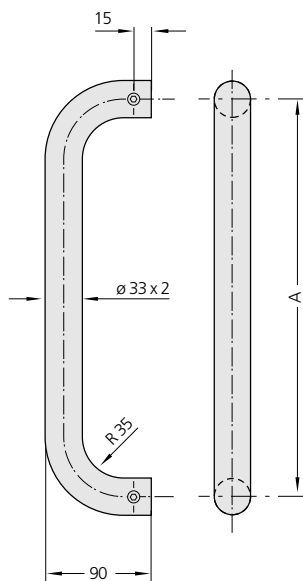
M 10 x 60 DIN 912 bolt.

For stainless steel roses with plastic plates and stainless steel covers (as shown opposite) see under Accessories in the table.

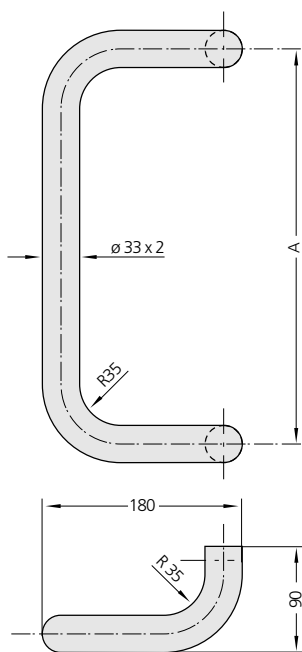
Special versions:

Any optional handle lengths on request.

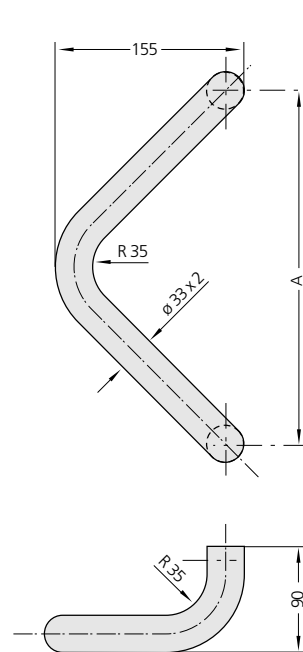
Type ER-33.S



Type ER-33.A



Type ER-33.D



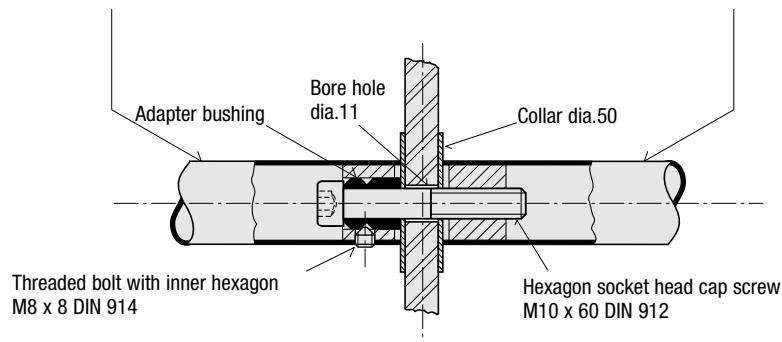
All dimensions in mm.

Series ER Stainless Steel Tube Handle

Mounting

Elbow version K (adapter bushing)

Elbow version G (thread M10)



Single handles



Type ER-33.S

Type ER-33.A

Type ER-33.D

A	Handle elbow version	Order no.	Order no.	Order no.
300	G	–	–	ER-33.D300.EG
	K	–	–	ER-33.D300.EK
350	G	ER-33.S350.EG	ER-33.A350.EG	–
	K	ER-33.S350.EK	ER-33.A350.EK	–
500	G	ER-33.S500.EG	ER-33.A500.EG	–
	K	ER-33.S500.EK	ER-33.A500.EK	–



Double handles

300	G/K	–	–	ER-33.D300.DO
350	G/K	ER-33.S350.DO	ER-33.A350.DO	–
500	G/K	ER-33.S500.DO	ER-33.A500.DO	–

Accessories

	Order no.
Stainless steel roses with plastic plates	ER-33.0050.R0
Stainless steel cover with screw for single handles	ER-33.0000.AK

All dimensions in mm.

Series VA Stainless Steel Handle

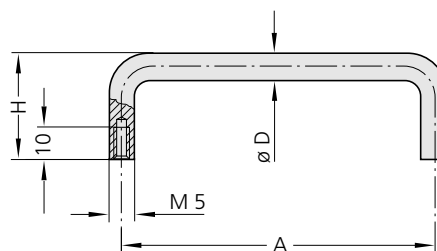


For medical technology, laboratory instruments with high chemical resistance.

Material:
Stainless steel rod X12 CrNiS 18 8, No. 1.4305.

Version:
matte gloss surface.

Special versions:
Additional sizes on request.



A	Order no.	Ø D	H
64	VA-08.064.31	8	35
88	VA-08.088.31		
100	VA-08.100.31		
120	VA-10.120.31	10	40
180	VA-10.180.31		
250	VA-10.250.31		
350	VA-10.350.31		

All dimensions in mm.

Series EF Stainless Steel Handle



Attractively shaped handles for all applications, with high corrosive and chemical resistance.

Material:
Sectional high-grade steel X12 CrNiS 18 8 Material no. 1.4305

Version A:
Surface vibration ground with a semi-matte finish.

Version B:
Surface vibration ground, blasted and electropolished with a semi-matte finish.

Extent of delivery:
Includes high-grade steel hexagonal head screws DIN 933, and washes DIN 125, Material no. 1.4301

Wide design:
screws M 6 x 12

Narrow design:
screws M 5 x 10

Special designs:
Other dimensions on request.

Narrow version		Version A	Version B	M	T	H	D	R
B	A	Order no.	Order no.					
12	100	EF-12.100.31	EF-12.100.36	M 5 x 10	10	40	8	22
	120	EF-12.120.31	EF-12.120.36					
	150	EF-12.150.31	EF-12.150.36					
	180	EF-12.180.31	EF-12.180.36					
	250	EF-12.250.31	EF-12.250.36					
	350	EF-12.350.31	EF-12.350.36					
Wide version								
19,5	100	EF-19.100.31	EF-19.100.36	M 6 x 12	12	45	10	24
	120	EF-19.120.31	EF-19.120.36					
	150	EF-19.150.31	EF-19.150.36					
	180	EF-19.180.31	EF-19.180.36					
	250	EF-19.250.31	EF-19.250.36					
	350	EF-19.350.31	EF-19.350.36					

All dimensions in mm.

Series HS-30 Handrail and Tube Handle System



Multi-purpose plug-in system for machines, technical systems and security zones.

Connection pieces

Standard version:

Moulded parts made of die-cast aluminium, black powder-coated, semimatt with fine structure.

Screws and tightening elements made of steel, galvanized and passivated.

Ready-for-assembly, End and T-pieces including black galvanized fastening screws according to the drawings.

Wet zone version:

Same as standard version, however, screws, nuts and washers are made of stainless steel (Material no. 1.4301), M 8 tightening screws with splash-proof washers made of plastic.

Design advantages:

Simple assembly of the single parts.

Continuous transition from the connection pieces to the tube.

O-seal clamping of the tubes via tightening elements.

Splash-proof design for wet zones.

Single components look.



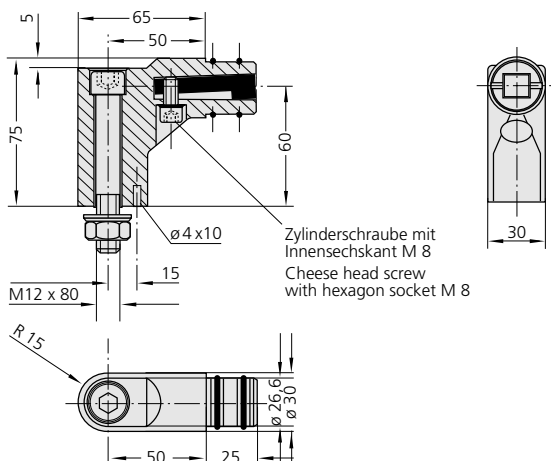
Examples of variations



CNC-Universal circular grinding machine with handrail system HS-30

Series HS-30 Handrail and Tube Handle System

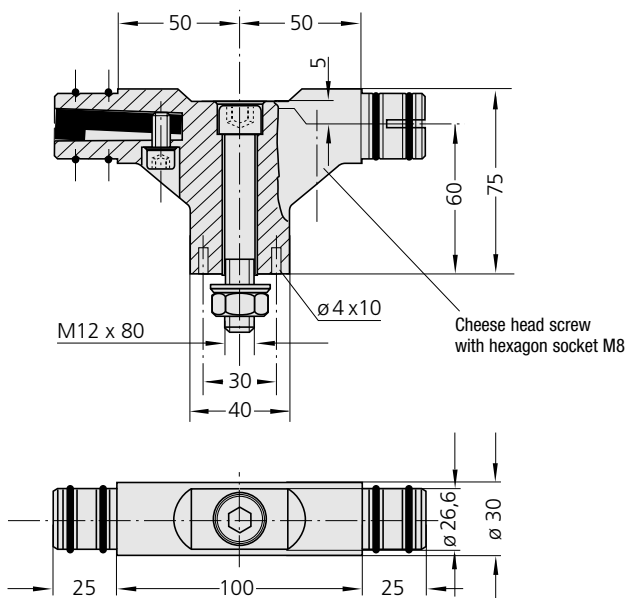
End piece



End piece	Order no.
Standard	HS-30.ESA.54
Wet-well design	HS-30.ENA.54

All dimensions in mm.

T-piece

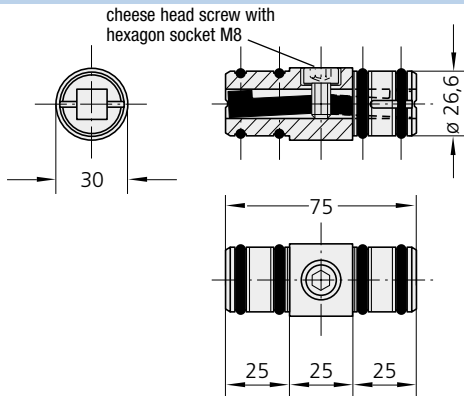


T-piece	Order no.
Standard	HS-30.TSA.54
Wet-well design	HS-30.TNA.54

All dimensions in mm.

Series HS-30 Handrail and Tube Handle System

Coupling hange



Tubes and Bends:

Material:

Aluminium tube AlMgSi 0.5.

Version A:

Surface ground, glass-blasted and anodized in natural colour with a satin finish.

Version B:

Surface black powder-coated, semimatte with fine structure in accordance to the connection pieces.

Special versions:

Any specified tube lengths and bends (also in stainless steel) upon request.

Custom colours:

Other colours available on request.

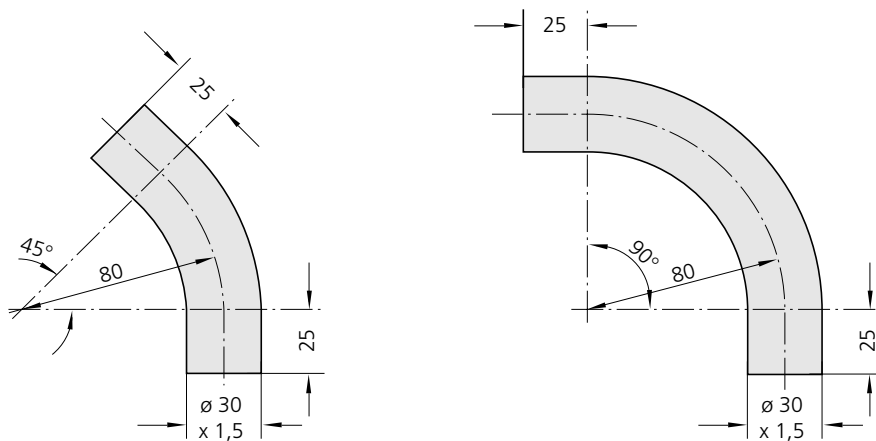
Coupling hange

Order no.

Standard	HS-30.KSA.54
Wet-well design	HS-30.KNA.54

All dimensions in mm.

Tube bends



Tubes, $\varnothing 30 \times 1,5$

Length

Length	Version A Order no.	Version B Order no.
200	HS-30.200.11	HS-30.200.54
300	HS-30.300.11	HS-30.300.54
400	HS-30.400.11	HS-30.400.54
500	HS-30.500.11	HS-30.500.54
600	HS-30.600.11	HS-30.600.54
700	HS-30.700.11	HS-30.700.54

Fastening distance (between T- and End pieces) = length of tube + 100 mm

Tube bends $\varnothing 30 \times 1,5$

Order no.	Order no.
45° HS-30.B45.11	HS-30.B45.54
90° HS-30.B90.11	HS-30.B90.54

All dimensions in mm.

Series KG Control Panel Handle



Material:

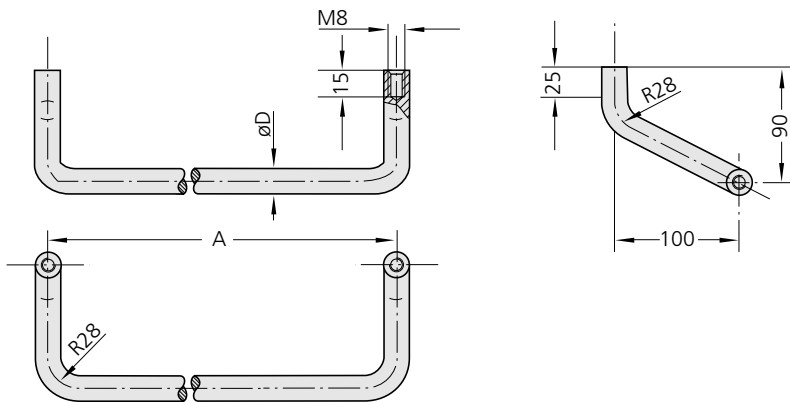
Round bar aluminium AlMgSi 0.5.

Surface finish:

Ground, glass-blasted, satin-finished black anodized.

Special Versions:

All handles lengths available on request.



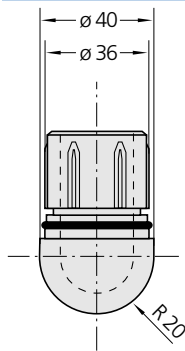
A	Order no.	ø D	Installation hardware	Handle ø D	Order no.
200	KG-16.200.14	16	Al cover plates, black anodized, semi-matte, finish pack of 2 pieces	16	KG-16.000.04
250	KG-16.250.14				
300	KG-16.300.14				
350	KG-16.350.14				
400	KG-16.400.14				
450	KG-16.450.14	18	Al cover plates, black anodized, semi-matte, finish pack of 2 pieces	18	KG-18.000.04
500	KG-18.500.14				
550	KG-18.550.14				
600	KG-18.600.14				
650	KG-18.650.14				

All dimensions in mm.

Series U2 Handle



End cap



Heavy-duty pipe handles for mechanical and process equipment engineering purposes.

Design:

Stainless steel pipe 40 \times 2, material no. 1.4301, precision ground. Die cast aluminium holder, black powder coated, silk mat with fine texture. Galvanized, chromized steel screws. PA 6 end cap, glass ball reinforced, black, silk mat with fine texture.

Structural benefits:

Simplest fixing of components from the front. The same handle length can be fixed at any support spacing. Holder suitable for mounting long pipes without problems.

Special versions:

Any handle length and support spacing on application.

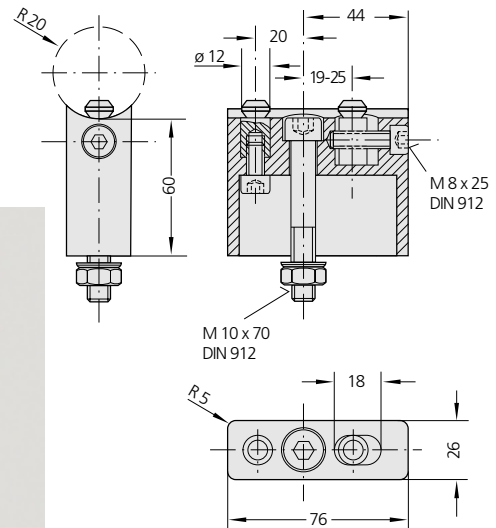
Single components

	Order no.
Fastener*, 1 piece	U2-40.00H.54
End cap, 1 piece	U2-40.00K.64

*with installation screw and nut

All dimensions in mm.

Fastener, clamping scheme

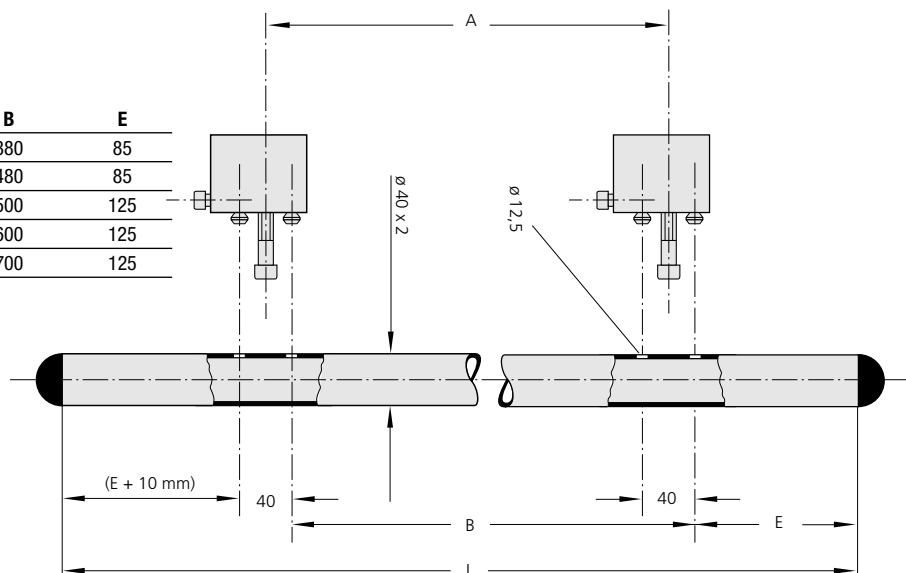


Standard handles

Standard handles

L	Order no.	A	B	E
600	U2-40.380.37	380	380	85
700	U2-40.480.37	480	480	85
800	U2-40.500.37	500	500	125
900	U2-40.600.37	600	600	125
1000	U2-40.700.37	700	700	125

All dimensions in mm.



Series RE Handle



Heavy-duty design, plastic and stainless steel, push-in type pipe handles for machines, technical installations and doors.

Material and surface finish:

Heavy-duty PA 6 thermoplastic, glass ball reinforced handle posts, black, similar to RAL 9005, silk mat with fine texture. Stainless steel pipe 35 \varnothing x 2 mm, material no. 1.4301, precision ground.

Stainless steel threaded inserts, material no. 1.4305, with finishing cut.

Design benefits:

Pipe accurately fits on the plastic pens using clamp ridges. Spraywatertight seal by O-rings. Two different mounting inserts allow bolting from the front, the back and to each other.

Supply:

Handle with "S" bolt head insert incl. M 10 x 25 DIN 912 stainless steel socket screws, DIN 934 stainless steel nuts and DIN 125 washers.

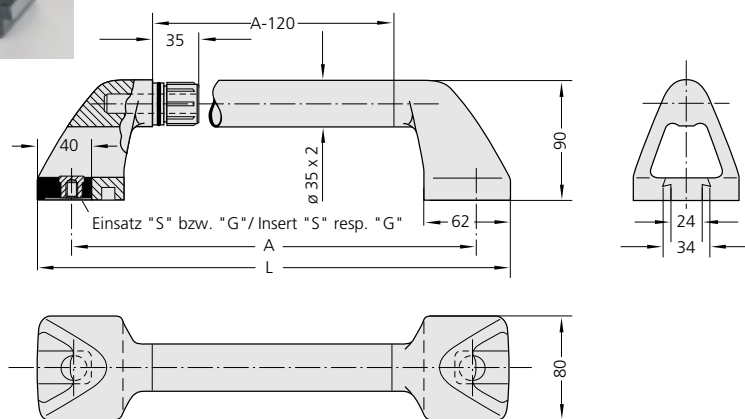
Handle with "G" threaded inserts without screws.

Special versions:

Any handle length on request.

A	L	Handle with insert SA Order no.	Handle with insert G Order no.
300	350	RE-35.300.ES	RE-35.300.EG
350	400	RE-35.350.ES	RE-35.350.EG
400	450	RE-35.400.ES	RE-35.400.EG
450	500	RE-35.450.ES	RE-35.450.EG
500	550	RE-35.500.ES	RE-35.500.EG
600	650	RE-35.600.ES	RE-35.600.EG
700	750	RE-35.700.ES	RE-35.700.EG
800	850	RE-35.800.ES	RE-35.800.EG

All dimensions in mm.

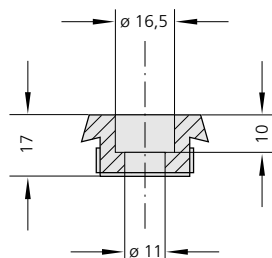


Single components

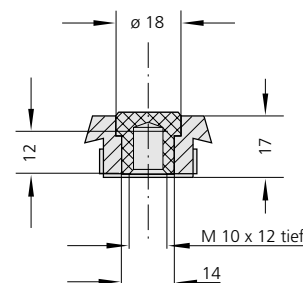
	Order no.
Handle shank without insert, 1 piece	RE-35.000.00
Insert S, 1 piece, with screw, nut and washer	RE-35.000.ES
Insert G, 1 piece	RE-35.000.EG

All dimensions in mm.

Bold head insert S



Thread insert G



Series W2 Control Panel Handle



Technical design similar to the insertion handle system W1 but with larger dimension for the housing.

Material and design:

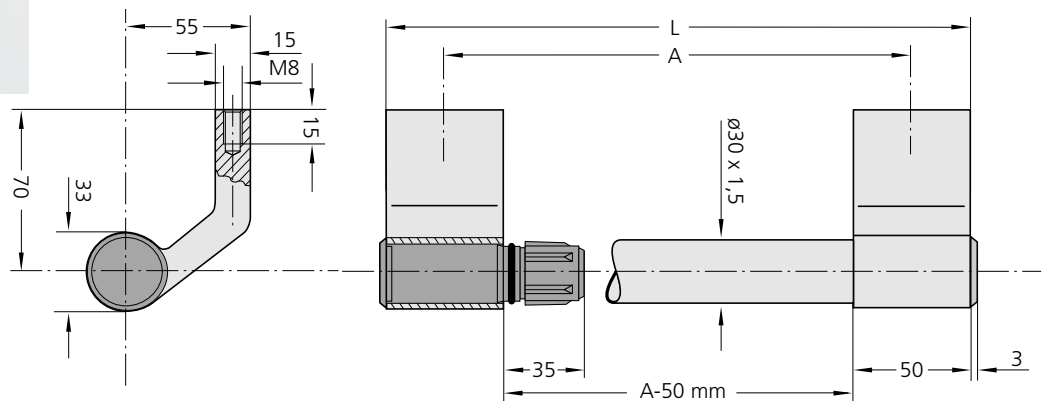
Handle leg of extruded aluminium AlMgSi 0.5 in a satin-finish black anodizing.

Leg insert of polyamide, glass bead reinforcement, black. Visible surfaces with fine-grain structure.

Connecting tubes of $\varnothing 30 \times 1.5$ mm aluminium AlMgSi 0.5 ground and anodized in 2 colours resp. with a black fluted plastic coating or black powder-coated with fine structure.

Special versions:

All handle lengths available on request.



Single components	Order no.
Handle shank, right	W2-30.RS50.14
Handle shank, left	W2-30.LS50.14

Handles		Tubes in anodizing versions		Tubes powder coated black	Tubes with plastic cover black, grooved
A	L	natural coloured Order no.	black Order no.	Order no.	Order no.
200	250	W2-30.200.01	W2-30.200.04	W2-30.200.54	W2-30.200.63
250	300	W2-30.250.01	W2-30.250.04	W2-30.250.54	W2-30.250.63
300	350	W2-30.300.01	W2-30.300.04	W2-30.300.54	W2-30.300.63
350	400	W2-30.350.01	W2-30.350.04	W2-30.350.54	W2-30.350.63
400	450	W2-30.400.01	W2-30.400.04	W2-30.400.54	W2-30.400.63
500	550	W2-30.500.01	W2-30.500.04	W2-30.500.54	W2-30.500.63
600	650	W2-30.600.01	W2-30.600.04	W2-30.600.54	W2-30.600.63

All dimensions in mm.

Series SG Tray Handle



The SG tray handle can be supplied in any length.

Material and surface treatment:

Handle tray made of aluminium section, vanished in RAL 9002 grey white. Side end caps made of PA6 in similar RAL colour shade.

Design advantages:

Very simple installation. Does not require screws for metal thicknesses of 1-2.5 mm. Two rubber inserts guarantee tight and secure installation.

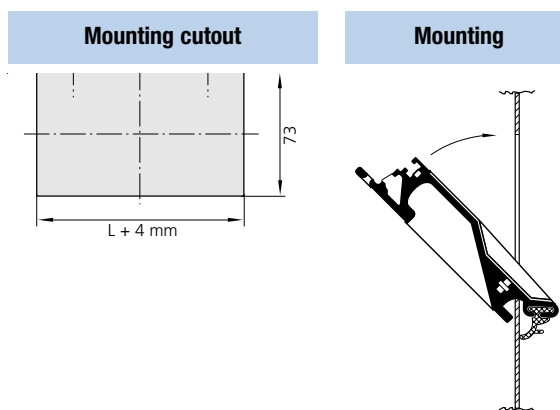
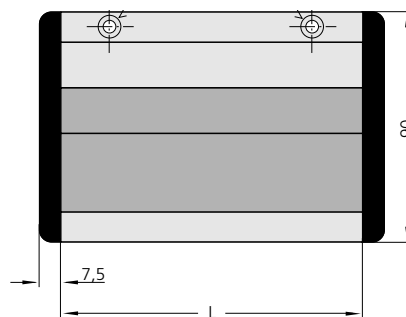
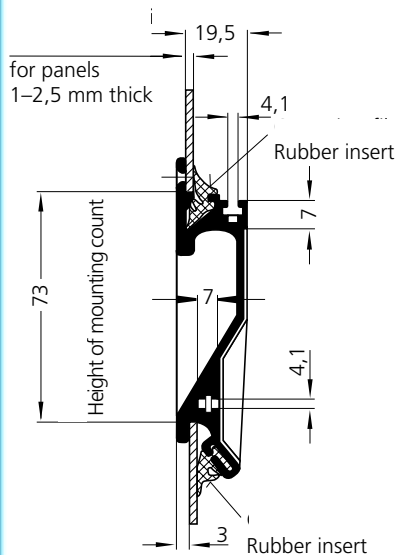
Two cross-slotted grooves for M 4-screws juxtaposed by 90° provide firm connection or may be used as mounting aids for installation elements. (For square nuts according to DIN standard 562).

Mounting:

After insertion of the bottom rubber insert, the two end finials must be pushed on to the tray. Next the handle must be pressed over the lower edge of the mounting cutout at a 45° angle. Holding the handle against the housing panel, now the second rubber insert is pushed into the upper groove (see illustration).

Custom colours:

All handle lengths and RAL shades available on request.



L	grey white RAL 9002 Order no.	Mounting cutout
100	SG-73.100.9002	104 x 73
118	SG-73.118.9002	122 x 73
167	SG-73.167.9002	171 x 73

All dimensions in mm.

Series KM Plastic Hollow Handle



This variable trough-inset handle is suitable for different degrees of panel thickness. Its design guarantees that it fits securely at all time.

Design features:

Simple and secure screw mounting with threaded brass bush for housing panel thickness of 1-5 mm. Ergonomic formation of the tray interior.

Material:

Thermoplastic PA6, glass bead reinforced, fine-grain structure in visible surfaces colour shade similar to RAL 9002 grey white.

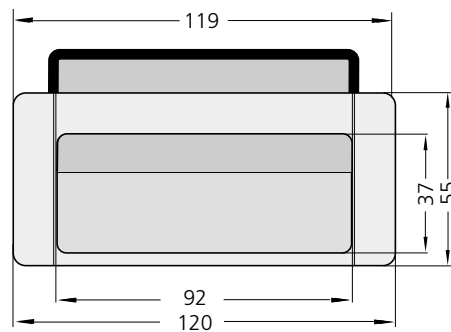
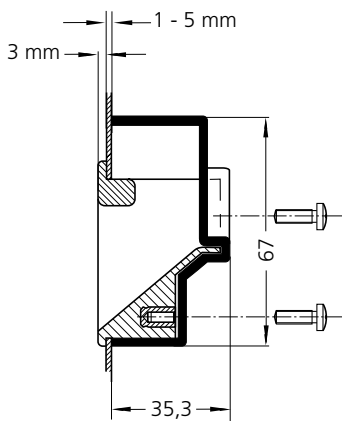
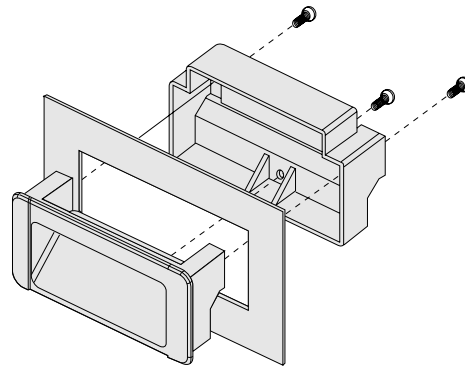
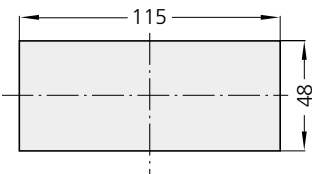
Mounting:

The front section is first set into the recess in the housing panel. The rear section is now pushed onto the front section which projects into the housing interior. The handle is then fixed in position with the aid of three screws.

Scope of supply:

Includes galvanized oval-head screws with Phillips cross recess, German industrial standard

Mounting cutout



Version

grey white

Order no.

KM-48.115.9002

All dimensions in mm.

Series SK Tray Handle



Collapsible tray handles feature contemporary design and are used wherever both durability and attractive styling are required.

Design features:

Mountable in front of or behind the housing wall with the same housing cutout. Natural finger profiling at the rear of the hinged handle. Can also be used for lifting a device in the retracted state.

Type SK-50.S and SK-79.S

With snap-locks both in rest and work positions.

Type SK-50.R and SK-79.R

With pull-back spring from the working to the rest position.

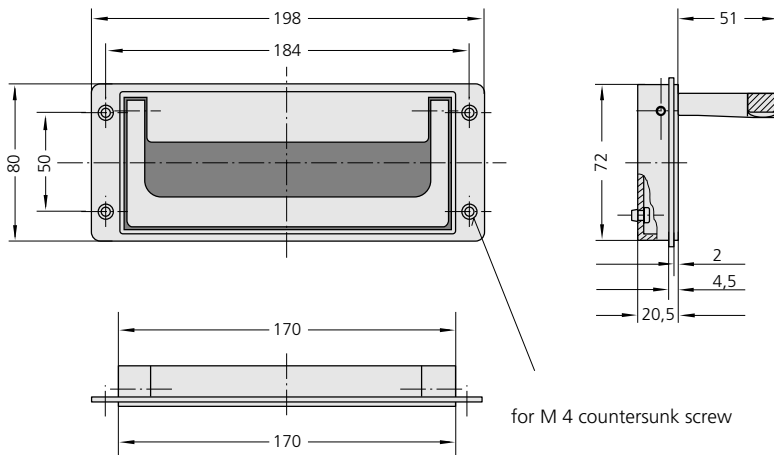
Material:

Aluminium pressure diecasting GD AISi 8 Cu 3.

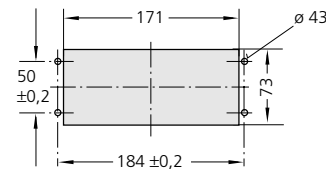
Surface treatment:

Tray and handle are powder-coated in RAL 9002 grey white.

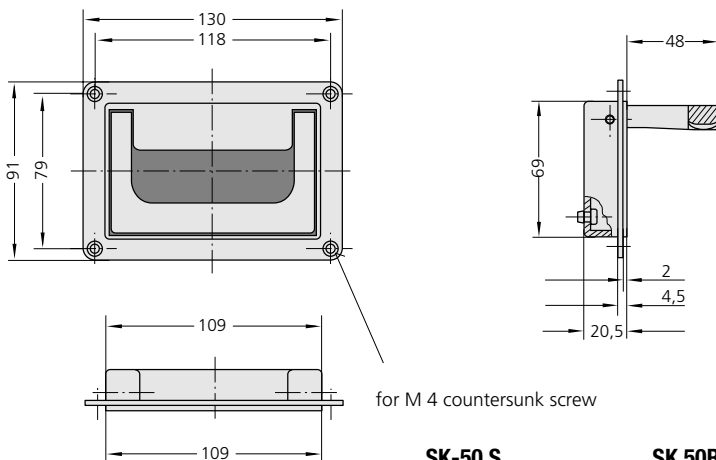
Type SK-50



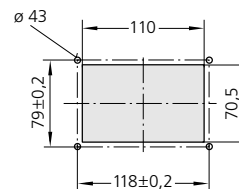
Mounting cutout



Type SK-79



Mounting cutout



SK-50.S
with snaplocks

SK.50R
with pull-back
spring

SK-79.S
with snaplocks

SK.79R
with pull-back
spring

Supply versions

Order no.

Order no.

Order no.

Order no.

grey white

SK-50.S184.9002

SK-50.R184.9002

SK-79.S118.9002

SK-79.R118.9002



Knobs and Wheels

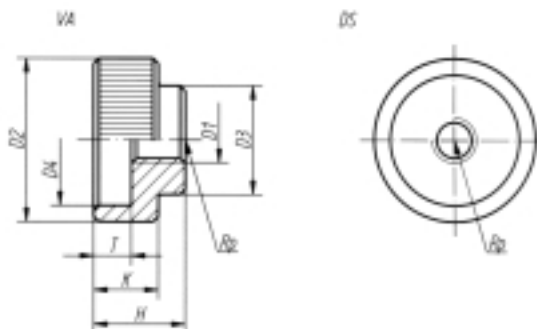
MACHINE ACCESSORIES

CALL US AT: 00 44 (0)1908 374022 OR FAX US AT: 00 44 (0)1908 641628

Knurled Nuts in steel and stainless steel to DIN 6303



Material:
Form A in free-cutting steel natural finish,
Form B in stainless steel natural finish



Knurled Nuts in steel and stainless steel to DIN 6303

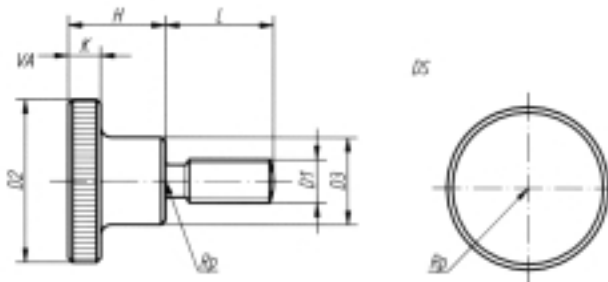
Order No. Form A steel	Order No. Form B stainless steel	D1	D2	D3	D4	H	K	T	Approx. weight g
06010-105	06010-1052	M 5	20	14	15	12	8	5	16
06010-106	06010-1062	M 6	24	16	18	14	10	6	27
06010-108	06010-1082	M 8	30	20	24	17	12	7	50
06010-110	06010-1102	M 10	36	28	30	20	14	8	83
06010-112	06010-1122	M 12	40	32	34	24	16	10	123

Sample order: Knurled Nut 06010-108

Knurled Thumb Screws in steel and stainless steel to DIN 6303



Material:
Form A in free-cutting steel natural finish,
Form B in stainless steel natural finish



Knurled Thumb Screws in steel and stainless steel to DIN 464

Order No. Form A steel	Order No. Form B stainless steel	D1	D2	D3	L	H	K			
06090-04 x **	06090-042 x **	M 4	16	8	10	16	20 [•]	–	9,5	3,5
06090-05 x **	06090-052 x **	M 5	20	10	10	16	20 [•]	–	11,5	4
06090-06 x **	06090-062 x **	M 6	24	12	10	16	20	25 [•]	15	5
06090-08 x **	06090-082 x **	M 8	30	16	–	16	20	25	18	6
06090-10 x **	06090-102 x **	M 10	36	20	–	–	20	25	23	8

Sample order: Knurled Thumb Screw 06090-06X20
(Length L)

** Add the desired screw length here, e.g. 20 for L = 20 mm
• The Knurled Thumb Screw is supplied with a shaft in this length (no thread undercut)

Ball Knobs with smooth surface to DIN 319 extended



Material:

Black duroplastic FS 31, bush in galvanised steel

Surface finish:

Deburred and high-polish finish

Note:

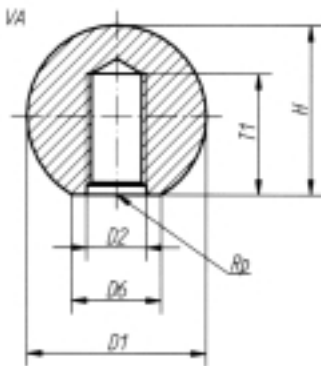
Assembly Form L:

The Ball Knobs are mounted firmly by tapping a hammer lightly. Please only use a rubber or plastic hammer, with a weight up to 200 g!

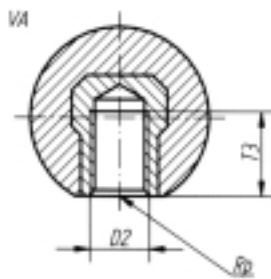
Shaft tolerance:

Ball Knobs with clamping sleeves can be mounted on standard rods with tolerance h9. The clamping sleeve supplied assures a firm and reliable fit.

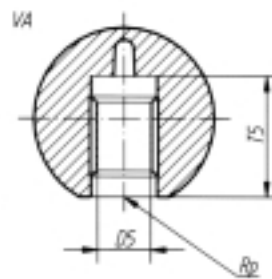
Form C
with pressed thread



Form E
with threaded bush



Form L
with clamping sleeve



Ball Knobs with smooth surface to DIN 319 extended

Order No. Form C	Order No. Form E	Order No. Form L	D1	D2	D5	D6	H	T1 min	T3	T5
21 C 1604	** 21 E 1604	21 L 1604	16	M 4	4	8	15	7,5	6	11
21 C 1605	-	-	16	M 5	-	8	15	7,5	-	-
21 C 1606	-	-	16	M 6	-	8	15	7,5	-	-
21 C 2005 •	21 E 2005 •	21 L 2005	20	M 5	5	12	18	10,5	7,5	13
21 C 2006	21 E 2006	-	20	M 6	-	12	18	10,5	8	-
21 C 2506 •	21 E 2506 •	21 L 2506	25	M 6	6	15	23	13,5	12,5	16
21 C 2508	21 E 2508	21 L 2508	25	M 8	8	15	23	13,5	13,5	15
21 C 3008 •	* 21 E 3008 •	-	30	M 8	-	16	28	14	14	-
21 C 3010	21 E 3010	-	30	M 10	-	16	28	18	14	-
21 C 3208 •	21 E 3208	21 L 3208	32	M 8	8	18	29	16	16	15
21 C 3210	21 E 3210	21 L 3210	32	M 10	10	18	29	16	16	20
21 C 3508 •	* 21 E 3508	-	37	M 8	-	17	33	20	14	-
21 C 3510 •	21 E 3510	-	37	M 10	-	17	33	21	14	-
21 C 3512	21 E 3512	-	37	M 12	-	17	33	23	14	-
21 C 4008	* 21 E 4008	-	40	M 8	-	20	37,5	22	14	-
21 C 4010 •	21 E 4010 •	21 L 4010	40	M 10	10	20	37,5	23	22	20
21 C 4012	21 E 4012	21 L 4012	40	M 12	12	20	37,5	23	21	23
21 C 4510	21 E 4510	-	45	M 10	-	20	43	26	22	-
21 C 4512	21 E 4512	-	45	M 12	-	20	43	30	21	-
21 C 5010	21 E 5010	-	50	M 10	-	22	48	30	22	-
21 C 5012 •	21 E 5012 •	21 L 5012	50	M 12	12	22	48	31	21	20

Sample order: Ball Knob 21 C 2506

- These versions are available from stock in dark red at extra charge
- * Bush in copper-plated steel
- ** Bush in brass

Ball Knobs with serrated surface



Material:

Black duroplastic FS 31, bush in galvanised steel

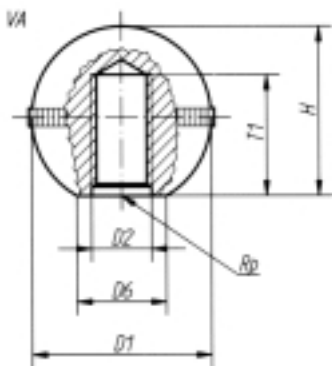
Surface finish:

Deburred and high-polish finish

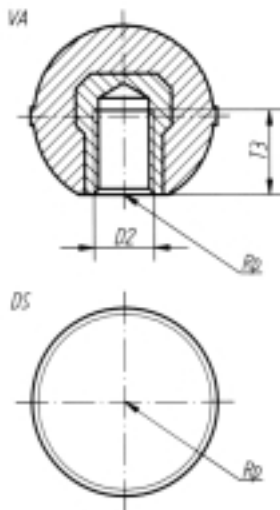
Note:

Other colours available on request.

Form C
with pressed thread



Form E
with threaded bush



Ball Knobs with serrated surface

Order No. Form C	Order No. Form E	D1	D2	D6	H	T1	T3
21 C 2506 R	21 E 2506 R	25	M 6	13	23	15	12
21 C 2508 R	21 E 2508 R	25	M 8	13	23	16	11
21 C 3008 R	21 E 3008 R*	30	M 8	16	28	17	14
21 C 3010 R	21 E 3010 R	30	M 10	16	28	18	14
21 C 3508 R	21 E 3508 R*	35	M 8	17	33	20	14
-	21 E 3512 R	35	M 12	17	33	23	14
21 C 4008 R	21 E 4008 R*	40	M 8	20	37,5	23	14
21 C 4010 R	21 E 4010 R	40	M 10	20	37,5	26	22
21 C 4012 R	21 E 4012 R	40	M 12	20	37,5	27	21
-	21 E 4510 R	45	M 10	20	43	26	22
21 C 5010 R	21 E 5010 R	50	M 10	22	48	32	22
-	21 E 5012 R	50	M 12	22	48	32	21

Sample order: Ball Knob 21 E 3512 R

* Threaded bush in copper-plated steel

Taper Knobs with smooth and serrated surface



Material:

Black duroplastic FS 31, bush in galvanised steel

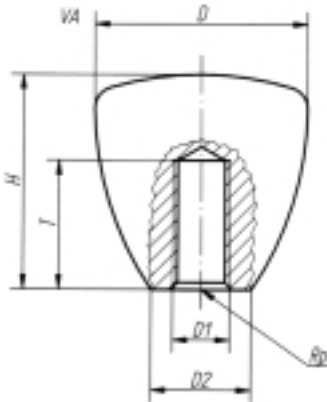
Surface finish:

Deburred and high-polish finish

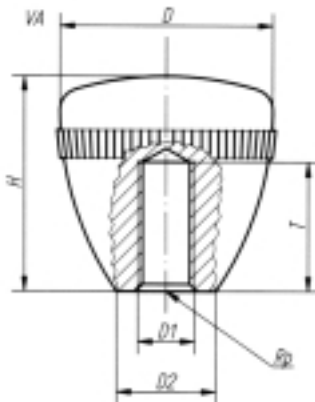
Note:

Other colours available on request.

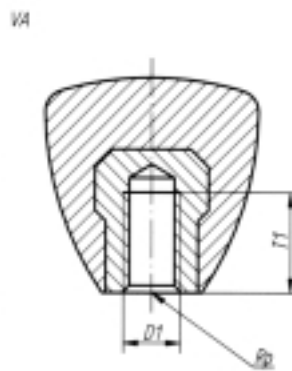
Form C, smooth with pressed thread



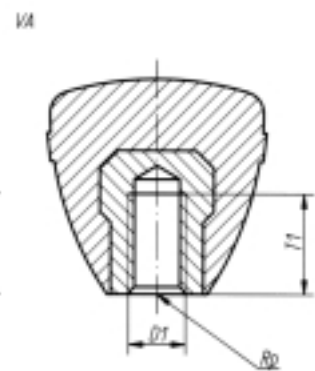
Form C, serrated with pressed thread



Form E, smooth with threaded bush



Form E, serrated with threaded bush



Taper Knobs with smooth and serrated surface

Order No. Form C smooth	Order No. Form E smooth	Order No. Form C serrated	Order No. Form E serrated	D	D1	D2	H	T	T1
22 C 2506	22 E 2506	22 C 2506 R	22 E 2506 R	25	M 6	12	25	14	12
22 C 2508	-	22 C 2508 R	-	25	M 8	12	25	18	-
22 C 3008	22 E 3008 *	22 C 3008 R	22 E 3008 R*	30	M 8	14	30	18	14
22 C 3010	-	22 C 3010 R	-	30	M 10	14	30	20	-
-	22 E 3508 *	-	22 E 3508 R*	35	M 8	16	35	-	14
-	22 E 3510	22 C 3510 R	22 E 3510 R	35	M 10	16	35	22	22
-	-	-	22 E 4008 R*	40	M 8	18	40	-	14
22 C 4010	22 E 4010	22 C 4010 R	22 E 4010 R	40	M 10	18	40	25	22
-	22 E 4012	-	22 E 4012 R	40	M 12	18	40	-	21
-	22 E 4510	-	22 E 4510 R	45	M 10	20	45	-	22
-	22 E 4512	22 C 4512 R	22 E 4512 R	45	M 12	20	45	35	21

Sample order: Taper Knob 22 E 3008

* Threaded bush in copper-plated steel

Series BL Knob



Thermo-setting plastic series especially for the food and hygiene areas.

Material:

Thermo-setting plastic MF 152 (melamine resin reinforced with cellulose); stainless steel threaded bush and bolt, material 1.4305.

Versions:

Deburred and highly polished; colour shade signal white similar to RAL 9003.

Temperature stability:

From -40°C to +150°C.

Custom Colours:

Other colours available on request.

Typ BL-IG with threaded bolt

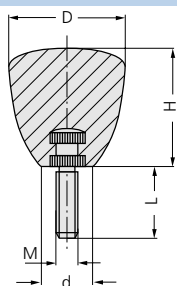
D	Order no.	M	L	H	d
25	BL-IG.025.9003	6	20	25	12
30	BL-IG.030.9003	6	20	30	14
35	BL-IG.035.9003	8	20	35	16
40	BL-IG.040.9003	10	30	40	18
45	BL-IG.045.9003	10	30	45	20

Typ BL-GZ with inside thread

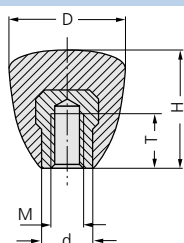
D	Order no.	M	T	H	d
25	BL-GZ.025.9003	6	9	25	12
30	BL-GZ.030.9003	8	13	30	14
35	BL-GZ.035.9003	8	13	35	16
40	BL-GZ.040.9003	10	13	40	18
45	BL-GZ.045.9003	10	13	45	20

All dimensions in mm.

Type BL-GZ



Type BL-IG



Series BM Knurled Knob



Thermo-setting plastic series especially for food and hygiene areas.

Material:

Thermo-setting plastic MF 152 (melamine resin reinforced with cellulose); stainless steel threaded bush and bolt, material 1.4305.

Versions:

Deburred and highly polished; colour shade signal white similar to RAL 9003.

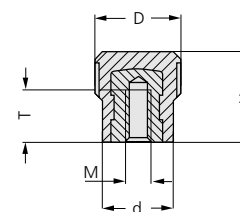
Temperature stability:

From -40°C to +150°C.

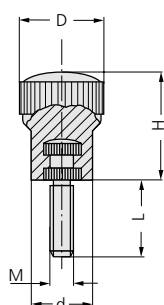
Custom Colours:

Other colours available on request.

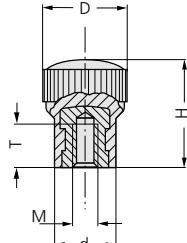
Type BM-A1



Type BM-BZ



Type BM-B1



with inside thread

Type	D	Order no.	M	T	H	d
BM-A1	12	BM-A1.412.9003	4	9	13,5	10
	15	BM-A1.515.9003	5	9	13,5	12
BM-B1	17	BM-B1.617.9003	6	9	22	12

with threaded bolt

Type	D	Order no.	M	L	H	d
BM-BZ	17	BM-BZ.517.9003	5	15	22	12
	17	BM-BZ.617.9003	6	20	22	12

All dimensions in mm.

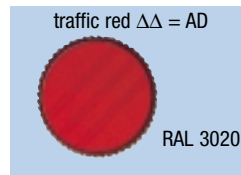
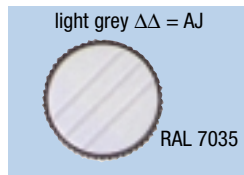
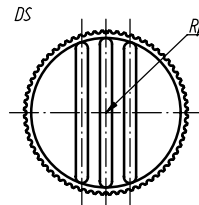
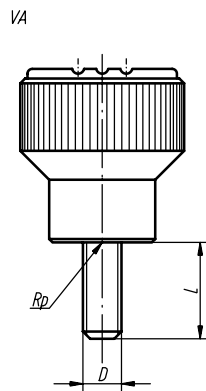
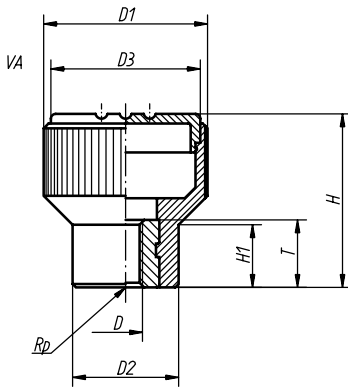
Knurled Knobs



The handy Knurled Knobs have several key features: excellent ergonomics, raised belt fluting and optimized design keep opening new target markets and increase the esthetic and safety-related profile of any product it appears with.

Material, surface finish:

Anthracite grey thermoplastic, bush and threaded bolt in steel 5.8, yellow chromated or stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish



Knurled Knobs with internal thread

Order No. bush steel	Order No. bush stainless steel	Size	D	D1	D2	D3	H	H1	T	Approx. weight g
201-104 $\Delta\Delta$	201-104 N $\Delta\Delta$	1	M 4	21	14	19	22	8	10	9,5
201-105 $\Delta\Delta$	201-105 N $\Delta\Delta$	1	M 5	21	14	19	22	8	10	9,2
201-106 $\Delta\Delta$	201-106 N $\Delta\Delta$	1	M 6	21	14	19	22	8	10	8,5
201-208 $\Delta\Delta$	201-208 N $\Delta\Delta$	2	M 8	26	18	23	26	9,5	14	21,3
201-308 $\Delta\Delta$	201-308 N $\Delta\Delta$	3	M 8	34	22	31	36	13	14	25,5
201-310 $\Delta\Delta$	201-310 N $\Delta\Delta$	3	M 10	34	22	31	36	13	14	23,8

Knurled Knobs with external thread

Order No. bolt steel	Order No. bolt stainless steel	Size	D	D1	D2	D3	H	H1	L = Bolt length					
201-105*** $\Delta\Delta$	201-105 N *** $\Delta\Delta$	1	M 5	21	14	19	22	8	10	15	20	25	-	-
201-106*** $\Delta\Delta$	201-106 N *** $\Delta\Delta$	1	M 6	21	14	19	22	8	-	15	20	25	30	-
201-208*** $\Delta\Delta$	201-208 N *** $\Delta\Delta$	2	M 8	26	18	23	26	9,5	-	-	20	25	30	40
201-310*** $\Delta\Delta$	201-310 N *** $\Delta\Delta$	3	M 10	34	22	31	36	13	-	-	20	-	30	40

Sample order: Knurled Knob 201-310020 N AD (knob cap colour traffic red)
(Length L)

Knurled Knobs



Material:

Black duroplastic FS 31, bush in brass or stainless steel, threaded bolt in steel, galvanised or stainless steel

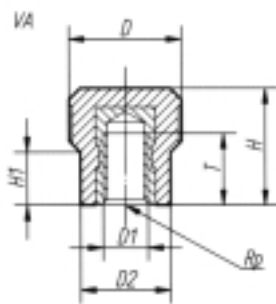
Surface finish:

Deburred and high-polish finish

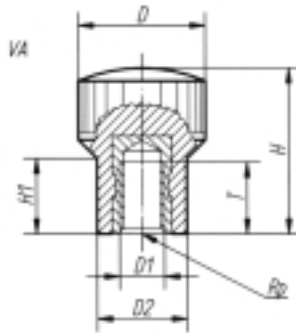
Note:

Other colours available on request.

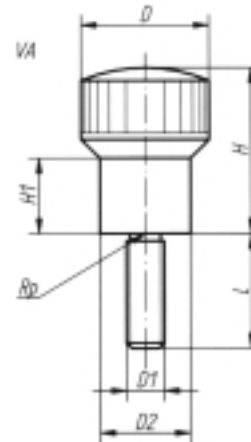
Form A



Form B



Form L



Knurled Knobs with internal thread

Order No. brass	Order No. stainless steel	Form	D	D1	D2	H	H1	T	Approx. weight g
24 A 1203	-	A	12	M 3	10	13,5	6	6,5	5
24 A 1204	24 A 1204 N	A	12	M 4	10	13,5	6	10	5
24 A 1504	24 A 1504 N	A	15	M 4	12	15,5	7	10	6
24 A 1505	24 A 1505 N	A	15	M 5	12	15,5	7	10	6
24 A 1506	24 A 1506 N	A	15	M 6	12	15,5	7	9	6
24 B 1705	24 B 1705 N	B	17	M 5	12	22	10	10	7
24 B 1706	24 B 1706 N	B	17	M 6	12	22	10	9	7

Knurled Knobs with external thread

Order No. brass	Order No. stainless steel	Form	D	D1	D2	H	H1	Steel	L Stainless steel	Approx. weight g
24 L 170408	24 L 170412 N	L	17	M 4	12	22	10	8	12	7
24 L 170510	24 L 170515 N	L	17	M 5	12	22	10	10	15	8
24 L 170615	24 L 170620 N	L	17	M 6	12	22	10	15	20	9
24 L 170618	-	L	17	M 6	12	22	10	18	-	10

Sample order: Knurled Knob 24A1505

Graduated Knobs



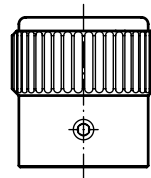
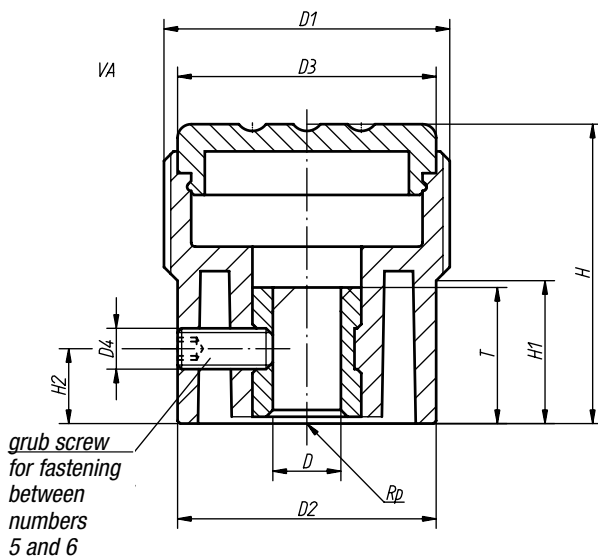
Graduated Knobs provide a precise and repeatable approach to the corresponding position. The perfectly incorporated scale marks ensure optimum readability while the integrated grub screw makes possible permanent and unproblematic fastening to the shaft.

Material, surface finish:

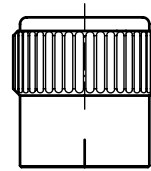
Anthracite grey thermoplastic, steel parts yellow chromated

Note:

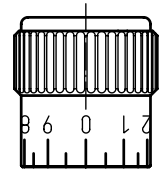
Available without scale marks, with one graduation mark or on the other hand with 20 scale marks and 10 digits.
Special scale marks available on request.



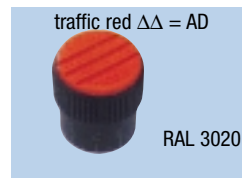
Form A
without scale marks



Form B with
graduation mark



Form C with
standard scale marks



Graduated Knobs

Order No. Form A	Order No. Form B	Order No. Form C	Size	D ^H	D1	D2	D3	D4	H	H1	H2	T	Approx. weight g
216-105 A $\Delta\Delta$	216-105 B $\Delta\Delta$	216-105 C $\Delta\Delta$	1	5	21	19	19	M 3	22	10,5	5	10	11
216-206 A $\Delta\Delta$	216-206 B $\Delta\Delta$	216-206 C $\Delta\Delta$	2	6	26	23	23	M 3	26	12	6	10	23
216-308 A $\Delta\Delta$	216-308 B $\Delta\Delta$	216-308 C $\Delta\Delta$	3	8	34	31	31	M 4	36	17,5	7	14	32

Sample order: Graduated Knob 216-105 C AJ (knob cap colour light grey)

$\Delta\Delta$ Add the desired knob cap colour here; no colour code is required with anthracite grey knob caps

Adjusting Knobs



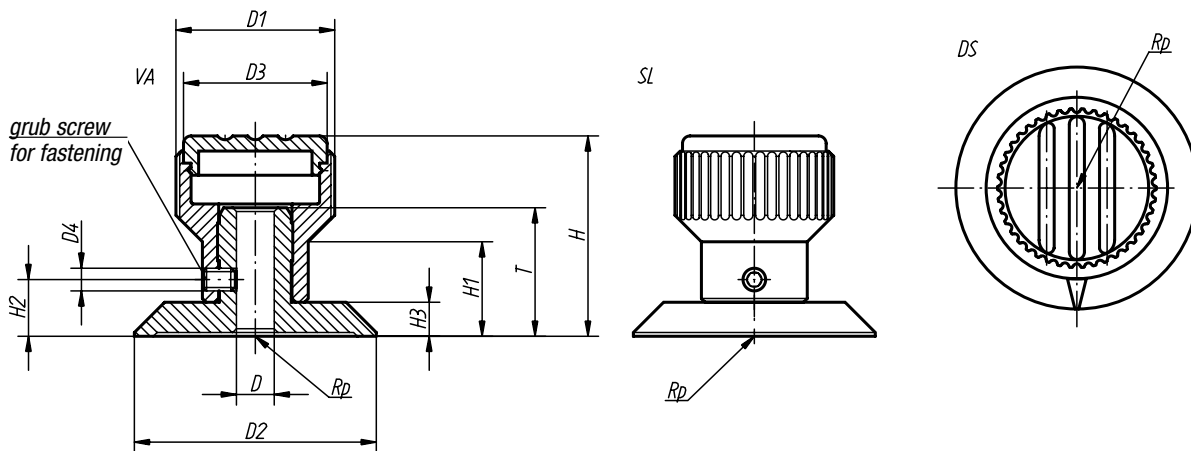
Switch positions in various fields and applications can be set easily and clearly with the Adjusting Knob. The engraved, silver-coloured arrow mark focuses your concentration on the essential point: the correct switch position.

Material, surface finish:

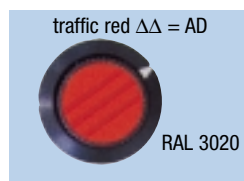
Knurled Knob in anthracite grey thermoplastic, disc in black anodized aluminium

Note:

Arrow mark engraved after anodizing, the grub screw secures both the hub and the disc. Hub hole H7 guarantees a good, tight fit on the shaft.



MACHINE ACCESSORIES



Adjusting Knobs

Order No.	Size	D ^{H7}	D1	D2	D3	D4	H	H1	H2	H3	T	Approx. weight g
217-105 $\Delta\Delta$	1	5	21	32	19	M 3	26,5	12,5	7,5	4,5	17	9,2
217-206 $\Delta\Delta$	2	6	26	40	23	M 4	31,5	15	9,5	5,5	20,5	21,3
217-308 $\Delta\Delta$	3	8	34	52	31	M 4	43	20	12	7	22	25,5

Sample order: Adjusting Knob 217-105 AJ (knob cap colour light grey) $\Delta\Delta$ Add the desired knob cap colour here; no colour code is required with anthracite grey knob caps

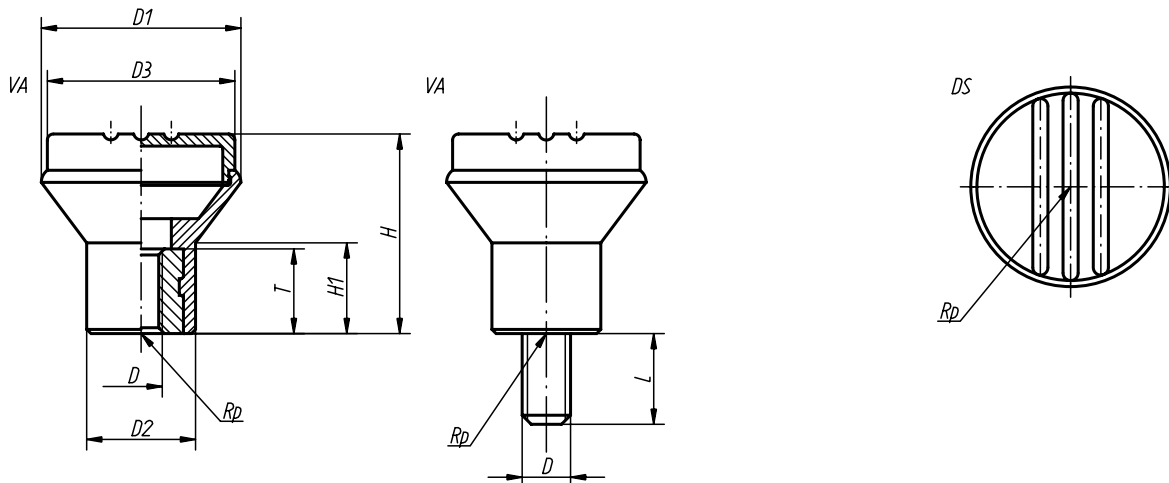
Mushroom Knobs



Mushroom Knobs represent a special form of gripping: absolutely secure, fast and easy. It is the new and unique dimension of gripping which distinguishes the Mushroom Knobs. Try it!

Material, surface finish:

Anthracite grey thermoplastic, bush and threaded bolt in steel 5.8, yellow chromated or in stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish



Mushroom Knobs with internal thread

Order No. bush steel	Order No. bush stainless steel	Size	D	D1	D2	D3	H	H1	T	Approx. weight g
200-104 ΔΔ	200-104 N ΔΔ	1	M 4	21	12	19	21	10	10	8,6
200-105 ΔΔ	200-105 N ΔΔ	1	M 5	21	12	19	21	10	10	7,8
200-206 ΔΔ	200-206 N ΔΔ	2	M 6	25	14	23	25	12	10	8,9
200-308 ΔΔ	200-308 N ΔΔ	3	M 8	33	18	31	33	15	14	22,2

Mushroom Knobs with external thread

Order No. bolt steel	Order No. bolt stainless steel	Size	D	D1	D2	D3	H	H1	L	Approx. weight g
200-104010 ΔΔ	200-104010 N ΔΔ	1	M 4	21	12	19	21	10	10	10,0
200-105010 ΔΔ	200-105010 N ΔΔ	1	M 5	21	12	19	21	10	10	10,3
200-206015 ΔΔ	200-206015 N ΔΔ	2	M 6	25	14	23	25	12	15	13,8
200-308015 ΔΔ	200-308015 N ΔΔ	3	M 8	33	18	31	33	15	15	31,0

Sample order: Mushroom Knob 200-308015 AD (knob cap colour traffic red)

ΔΔ Add the desired knob cap colour here; no colour code is required with anthracite grey knob caps

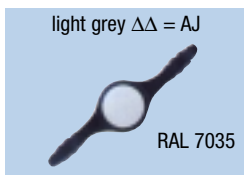
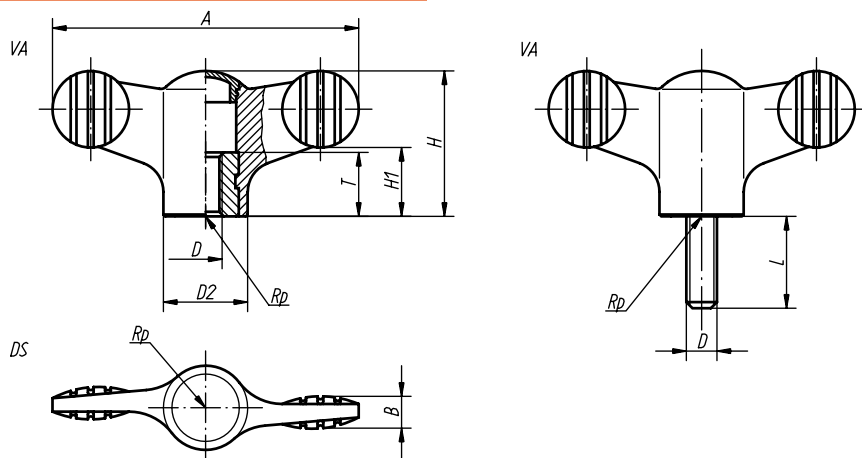
Wing Grips



For many the modern Wing Grips represent the perfect constructive and technical solution for absolutely "natural" gripping. It enables more comfortable handling than ever before.

Material, surface finish:

Anthracite grey thermoplastic, bush and threaded bolt in steel 5.8, yellow chromated or stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish



Wing Grips with internal thread

Order No. bolt steel	Order No. bush stainless steel	Size	D	D2	A	B	H	H1	T	Approx. weight g
203-105 $\Delta\Delta$	203-105 N $\Delta\Delta$	1	M 5	14	50	5	24	11,5	10	11,4
203-106 $\Delta\Delta$	203-106 N $\Delta\Delta$	1	M 6	14	50	5	24	11,5	10	10,8
203-208 $\Delta\Delta$	203-208 N $\Delta\Delta$	2	M 8	21	75	7	35	16,5	14	28,7
203-210 $\Delta\Delta$	203-210 N $\Delta\Delta$	2	M 10	21	75	7	35	16,5	14	25,2

Wing Grips with external thread

Order No. bolt steel	Order No. bolt stainless steel	Size	D	D2	A	B	H	H1	L = Bolt length				
203-105 $^{***}\Delta\Delta$	203-105 *** N $\Delta\Delta$	1	M 5	14	50	5	24	11,5	15	20	-	-	-
203-106 $^{***}\Delta\Delta$	203-106 *** N $\Delta\Delta$	1	M 6	14	50	5	24	11,5	-	20	30	40	-
203-108 $^{***}\Delta\Delta$	203-108 *** N $\Delta\Delta$	1	M 8	14	50	5	24	11,5	-	20	30	40	-
203-208 $^{***}\Delta\Delta$	203-208 *** N $\Delta\Delta$	2	M 8	21	75	7	35	16,5	-	20	30	40	-
203-210 $^{***}\Delta\Delta$	203-210 *** N $\Delta\Delta$	2	M 10	21	75	7	35	16,5	-	20	30	40	50

Sample order: Wing Grip 203-108030 AE (grip cap colour bright yellow)

(Length L)

$\Delta\Delta$ Add the desired grip cap colour here; no colour code is required with anthracite grey grip caps

*** Add the desired bolt length here, e.g. 030 for L = 30 mm

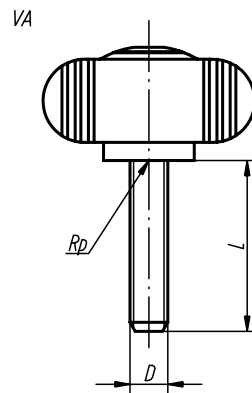
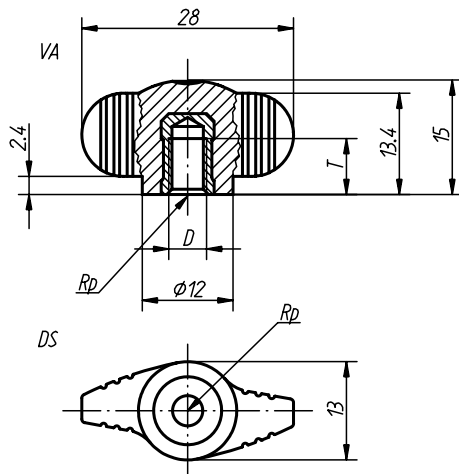
Miniwings



Technical emotions played an important role while developing these small-sized wing grips. The result is a Miniwing that is far more than a means to an end. It is a well-planned operating and working part with finger-specific ergonomics.

Material, surface finish:

Anthracite grey thermoplastic, bush in brass or stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish, threaded bolt in steel 5.8, yellow chromated or stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish



Miniwings with internal thread

Order No. bush brass	Order No. bush stainless steel	Size	D	T	Approx. weight g
203-004	203-004 N	0	M 4	6	3,3
203-005	203-005 N	0	M 5	7,5	3,9
203-006	203-006 N	0	M 6	9	4,5

Miniwings with external thread

Order No. bolt steel	Order No. bolt stainless steel	Size	D	L = Bolt length						Approx. weight g
203-004008	203-004008 N	0	M 4	8	-	-	-	-	-	4,5
203-005 ***	203-005 *** N	0	M 5	10	15	20	-	-	-	-
203-006***	203-006*** N	0	M 6	10	15	20	25	30	-	-
203-008 ***	203-008*** N	0	M 8	-	-	20	25	30	40	-

Sample order: Miniwing 203-005015
(Length L)

*** Add the desired bolt length here, e.g. 015 for L = 15 mm

T-Grips



Material:

Black duroplastic FS 31, bush and threaded bolt in steel, galvanised or stainless steel natural finish

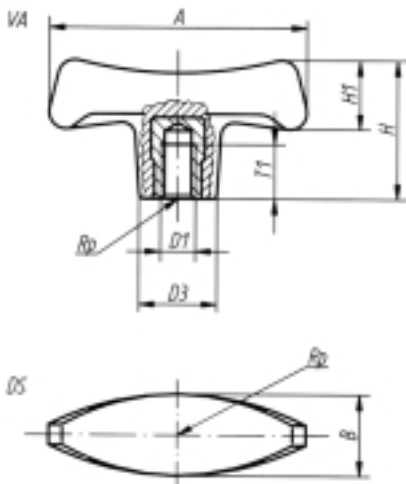
Surface finish:

Deburred and high-polish finish

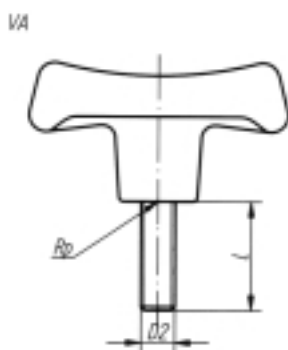
Note:

Other colours available on request.

T-Grip with internal thread



T-Grip with external thread



T-Grips with internal thread

Order No. steel	Order No. stainless steel	A	B	D1	D3	H	H1	Steel	T1 Stainless steel
33 7006	-	70	22	M 6	19,6	38,8	20,2	12	-
33 7008*	33 7008 N	70	22	M 8	19,6	38,8	20,2	14	13
33 7010	33 7010 N	70	22	M 10	19,6	38,8	20,2	14	13
33 8008*	33 8008 N	80	25	M 8	22,3	44	23	14	13
33 8010	33 8010 N	80	25	M 10	22,3	44	23	22	13
33 9010	33 9010 N	90	28	M 10	25	49,6	26	22	13
33 9012	-	90	28	M 12	25	49,6	26	21	-

T-Grips with external thread

Order No. steel	Order No. stainless steel	L = Screw length** Steel	Stainless steel	A	B	D2**	D3	H	H1
33 7006 018	-	-	18	70	22	M 6	19,6	38,8	20,2
33 7008 ***	33 7008 020 N	16	20	70	22	M 8	19,6	38,8	20,2
33 7010 025	33 7010 030 N	-	25	70	22	M 10	19,6	38,8	20,2
33 8008 024	33 8008 020 N	-	24	80	25	M 8	22,3	44	23
33 8010 ***	33 8010 030 N	-	20	80	25	M 10	22,3	44	23
33 9008 024	33 9008 020 N	-	24	90	28	M 8	25	49,6	26
33 9010 030	33 9010 030 N	-	30	90	28	M 10	25	49,6	26
33 9012 024	-	-	24	90	28	M 12	25	49,6	26

Sample order: T-Grip 338010020,
(Length L)

* Bush in copper-plated steel

** Other external threads and screw lengths available on request

*** Add the desired screw length here, e.g. 020 L = 20 mm

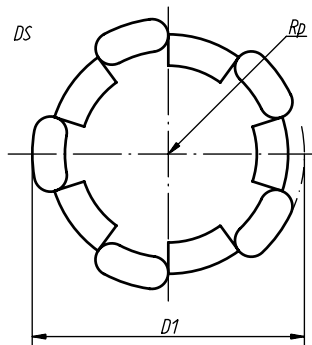
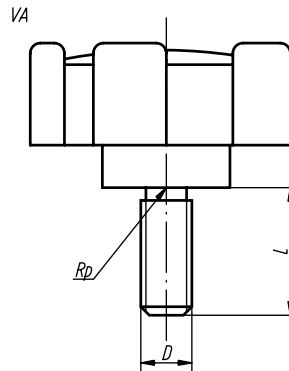
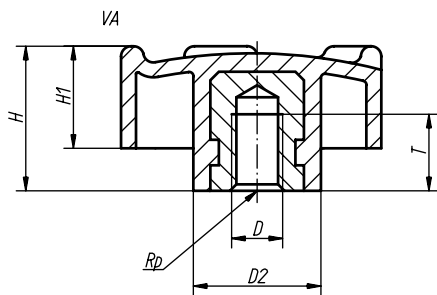
Ribbed Grips



Ribbed Grips make life easier. The ergonomic “edge rib configuration” and the perfect proportioning open up new operating-specific potential.

Material, surface finish:

Anthracite grey thermoplastic, bush and threaded bolt in steel 5.8, yellow chromated



Ribbed Grips with internal thread

Order No.	Size	D	D1	D2	H	H1	T	Approx. weight g
211-106	1	M 6	32	15	17	12	9	13
211-208	2	M 8	40	18	20,5	14,5	11	24
211-310	3	M 10	50	20	25	18	14	38

Ribbed Grips with external thread

Order No.	Size	D	D1	D2	H	H1	L	Approx. weight g
211-106015	1	M 6	32	15	17	12	15	18
211-208016	2	M 8	40	18	20,5	14,5	16	31
211-310020	3	M 10	50	20	25	18	20	55

Sample order: Ribbed Grip 211-310020

Disc Grips



Material:

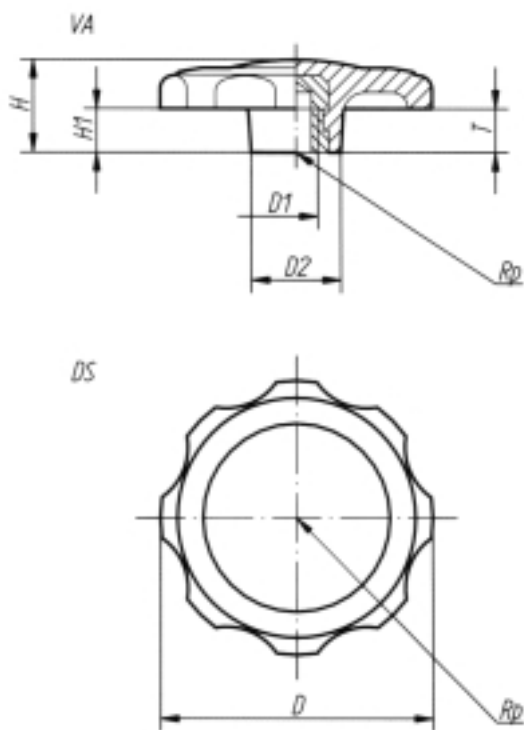
Black duroplastic FS 31, bush in galvanized steel

Surface finish:

Deburred and high-polish finish

Note:

Other colours available on request.



Disc Grips

Order No.	D	D1	D2	H	H1	T
26 4006*	40	M 6	15	14,5	7	6,5
26 5006*	50	M 6	16,5	16	8	6,5
26 5008*	50	M 8	16,5	16	8	8
26 6008	60	M 8	19,5	18	8	11
26 7008	70	M 8	23	20	8,7	11
26 7010	70	M 10	23	20	8,7	11
26 8010	80	M 10	26	23	10	14
26 8012	80	M 12	26	23	10	14

Sample order: Disc Grip 266008

*Bush in brass

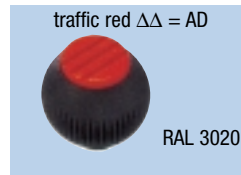
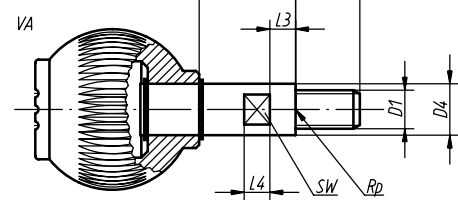
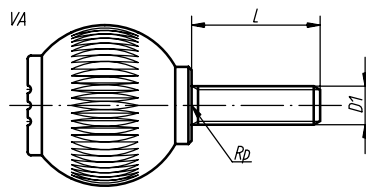
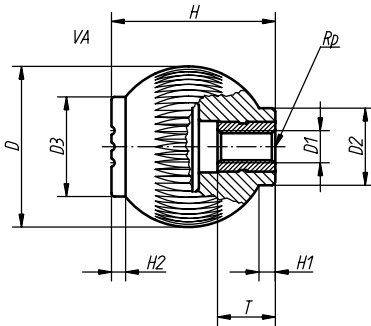
Grip Balls



A perfect product with respect to ergonomics for “three-dimensional” gripping: the “third dimension” benefits from “belt fluting.” Thanks to computer-assisted engineering-design the requirements of different industries can be met.

Material, surface finish:

Anthracite grey thermoplastic; bush, threaded bolt and shaft in steel 5.8; yellow chromated or stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish. Revolving safety rings on the Grip Balls, stainless steel models also galvanized



Grip Balls with internal thread

Order No. bush steel	Order No. bush stainless steel	Size	D	D1	D2	D3	H	H1	H2	T	Approx. weight g
219-106 ΔΔ	219-106 N ΔΔ	1	25	M 6	12	17	25	2,5	2,2	10	14
219-208 ΔΔ	219-208 N ΔΔ	2	32	M 8	15,5	19	33	3,2	2,8	14	23
219-310 ΔΔ	219-310 N ΔΔ	3	40	M 10	19	23	41,5	4	3,5	14	42
219-410 ΔΔ	219-410 N ΔΔ	4	50	M 10	24	31	51	5	4,4	14	70
219-412 ΔΔ	219-412 N ΔΔ	4	50	M 12	24	31	51	5	4,4	18	72

Grip Balls with external thread

Order No. bolt steel	Order No. bolt stainless steel	Size	D1	L = Bolt length	Approx. weight g
219-106***ΔΔ	219-106*** N ΔΔ	1	M 6	15 20 25 30	-
219-208***ΔΔ	219-208*** N ΔΔ	2	M 8	- 20 25 30	40
219-310***ΔΔ	219-310*** N ΔΔ	3	M 10	- 20 - 30	40
219-410***ΔΔ	219-410*** N ΔΔ	4	M 10	- 20 - 30	40
219-412***ΔΔ	219-412*** N ΔΔ	4	M 12	- 20 - 30	40

Grip Balls revolving

Order No. shaft steel	Order No. shaft stainless steel	Size	D1	D4	L1	L2	L3	L4	SW	Approx. weight g
219-106001 ΔΔ	219-106001 N ΔΔ	1	M 6	8	10	15	5	5	7	20
219-208001 ΔΔ	219-208001 N ΔΔ	2	M 8	10	12	20	6	6	8	42
219-310001 ΔΔ	219-310001 N ΔΔ	3	M 10	13	15	25	7	7	10	85
219-412001 ΔΔ	219-412001 N ΔΔ	4	M 12	16	20	30	8	8	13	157

Sample order: Grip Ball revolving 219-412001 AD (grip cap colour traffic red)

ΔΔ Add the desired grip cap colour here, no colour code is required with anthracite grey grip caps

*** Add the desired bolt length here, e.g. 025 for L = 25 mm

Turning Grips



Material:

Black duroplastic FS 31, bush in brass, threaded bolt in galvanized steel

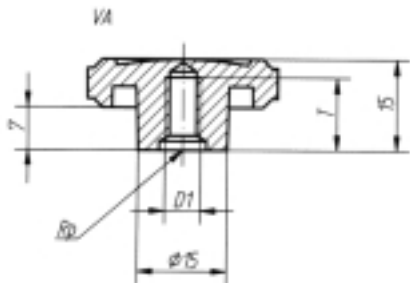
Surface finish:

Deburred and high-polish finish

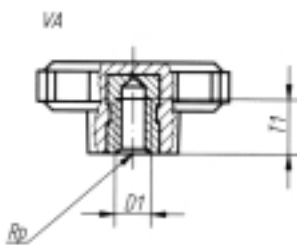
Note:

Other colours available on request.

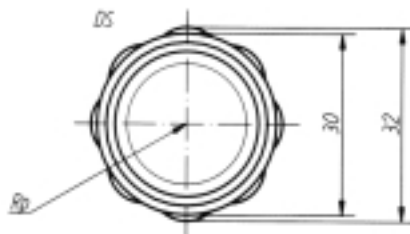
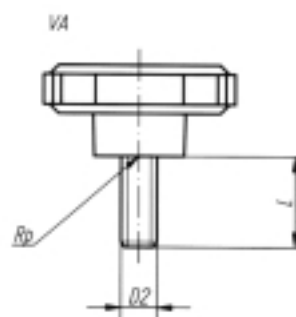
Form C
with pressed thread



Form E
with threaded bush



Form F
with external thread



Turning Grips

Order No. Form C	Order No. Form E	Order No. Form F	L = Screw length *				D1	D2*	T	T1
-	25 E 3004	-	-	-	-	-	M 4	-	-	10
-	25 E 3005	-	-	-	-	-	M 5	-	-	10
25 C 3006	25 E 3006	25 F 3006***	-	15	-	50	M 6	M 6	12	9
25 C 3008	-	25 F 3008***	12	-	16	20	M 8	M 8	12	-

Sample order: Turning Grip 25F3008012
(Length L)

* Other external threads and screw lengths available on request
*** Add the desired screw length here, e.g. 012 for L = 12 mm

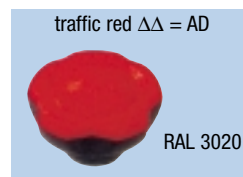
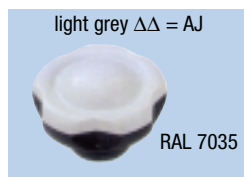
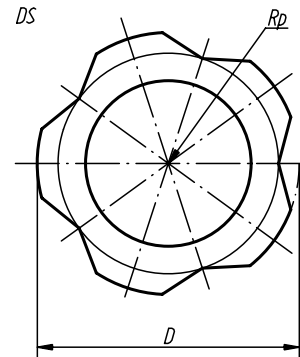
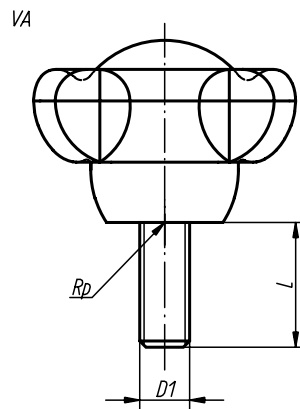
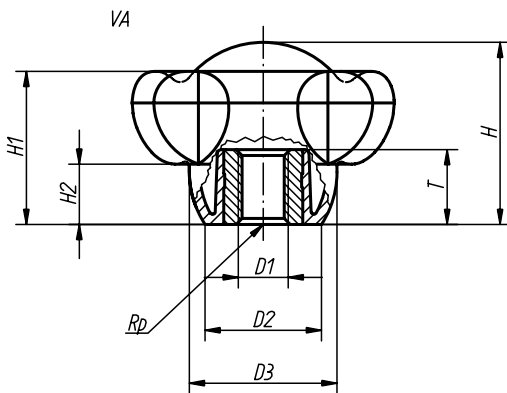
Clamp Grips



This technology and the completely new developed design make operating and clamping processes easier. New fields of application and the associated creativity are instrumental in bringing together people's needs and required safety of gripping.

Material, surface finish:

Anthracite grey thermoplastic, bush and threaded bolt in steel 5.8, yellow chromated or stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish



Clamp Grips with internal thread

Order No. bush steel	Order No. bush stainless steel	D	D1	D2	D3	H	H1	H2	T	Approx. weight g
31 K 5008 000 0 $\Delta\Delta$	31 K 5008 000 N $\Delta\Delta$	50	M 8	22,2	28,2	34,8	17,8	11,5	14	30
31 K 5010 000 0 $\Delta\Delta$	31 K 5010 000 N $\Delta\Delta$	50	M 10	22,2	28,2	34,8	17,8	11,5	14	20
31 K 5012 000 0 $\Delta\Delta$	31 K 5012 000 N $\Delta\Delta$	50	M 12	22,2	28,2	34,8	17,8	11,5	18	10
31 K 6310 000 0 $\Delta\Delta$	31 K 6310 000 N $\Delta\Delta$	63	M 10	28	35,5	44	22,5	14,5	14	70
31 K 6312 000 0 $\Delta\Delta$	31 K 6312 000 N $\Delta\Delta$	63	M 12	28	35,5	44	22,5	14,5	18	50
31 K 6316 000 0 $\Delta\Delta$	-	63	M 16	28	35,5	44	22,5	14,5	18	40

Clamp Grips with external thread

Order No. bolt steel	Order No. bolt stainless steel	D	D1	D2	D3	H	H1	H2	L = Bolt length										
31 L 5010*** 0 $\Delta\Delta$	31 L 5010*** N $\Delta\Delta$	50	M 10	22,2	28,2	34,8	17,8	11,5	15	20	25	30	35	40	45	50	60		
31 L 5012*** 0 $\Delta\Delta$	-	50	M 12	22,2	28,2	34,8	17,8	11,5	15	20	25	30	35	40	45	50	60		
31 L 6310*** 0 $\Delta\Delta$	31 L 6310*** N $\Delta\Delta$	63	M 10	28	35,5	44	22,5	14,5	-	20	25	30	35	40	45	50	60		
31 L 6312*** 0 $\Delta\Delta$	-	63	M 12	28	35,5	44	22,5	14,5	-	20	25	30	35	40	45	50	60		

Sample order: Clamp Grip 31 L 5012025 0 AD (grip cap colour traffic red)

(Length L)

$\Delta\Delta$ Add the desired grip cap colour here, no colour code is required with anthracite grey grip caps

*** Add the desired bolt length here, e.g. 025 for L = 25 mm

• These bolt lengths are not available in stainless steel

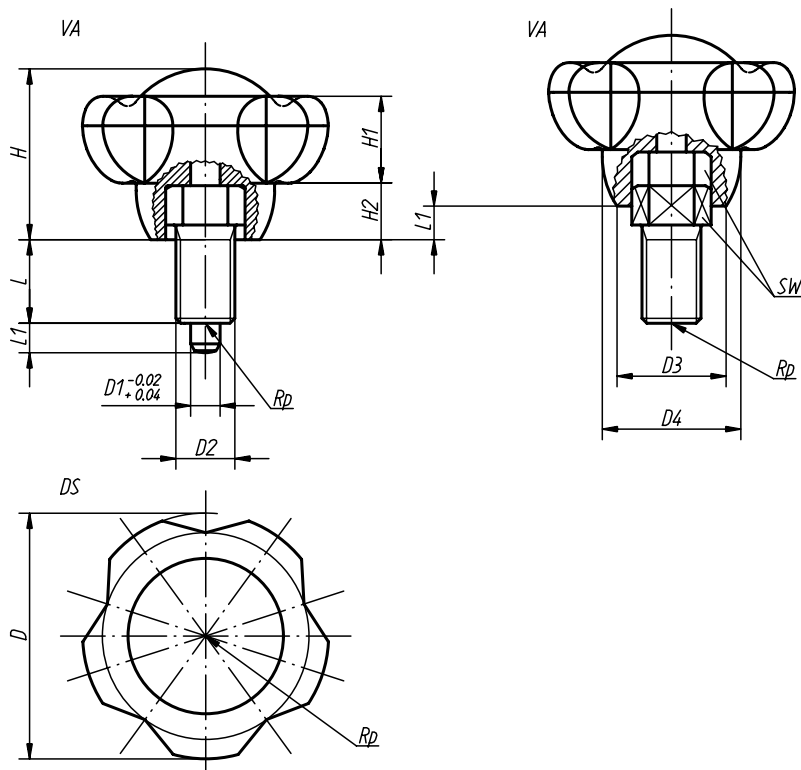
Locking and Clamp Grips



The Locking and Clamp Grip makes it possible: locking and clamping with one single product. The so-called telescopic adjustments can be positioned and clamped quickly, precisely and simply.

Material, surface finish:

Anthracite grey thermoplastic, locking pin and threaded bolt in steel 5.8, black oxide finish, locking pin hardened and ground



anthracite grey



RAL 7021

light grey $\Delta\Delta = \text{AJ}$



RAL 7035

traffic red $\Delta\Delta = \text{AD}$



RAL 3020

bright yellow $\Delta\Delta = \text{AE}$



RAL 1021

Locking and Clamp Grips

Order No.	Size	D	D1	D2	D3	D4	H	H1	H2	L	L1	SW	Approx. weight g
45 105 P 00 $\Delta\Delta$	1	50	5	M 10 x 1	22,2	28,2	34,8	17,8	11,5	13	5	13	33
45 206 P 00 $\Delta\Delta$	2	50	6	M 12 x 1,5	22,2	28,2	34,8	17,8	11,5	17	6	14	40
45 308 P 00 $\Delta\Delta$	3	63	8	M 16 x 1,5	28	35,5	44	22,5	14,5	22	8	19	97
45 410 P 00 $\Delta\Delta$	4	63	10	M 20 x 1,5	28	35,5	44	22,5	14,5	24	10	22	135

Sample order: Locking and Clamp Grip 45 105 P 00 AD (grip cap colour traffic red)

$\Delta\Delta$ Add the desired grip cap colour here, no colour code is required with anthracite grey grip caps

Triangular Star Grips



Material:

Black duroplastic FS 31, bush in brass, threaded bolt in galvanized steel

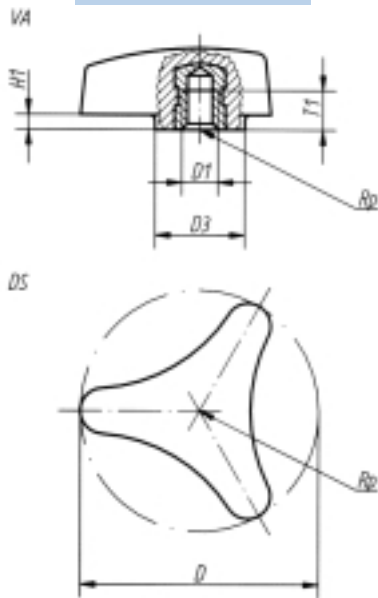
Surface finish:

Deburred and high-polish finish

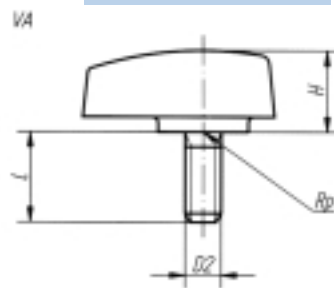
Note:

Other colours available on request.

Triangular Star Grips with internal thread



Triangular Star Grips with external thread



Triangular Star Grips

Order No. internal thread	Order No. external thread	D	D1	D2*	D3	H	H1	T1	L*
32 3204	-	32	M 4	-	12	10,5	2	6,5	-
-	32 3206 015	32	-	M 6	12	10,5	2	-	15
32 4006	32 4006 015	40	M 6	M 6	15	13,5	2,5	6,5	15
32 5006	-	50	M 6	-	19	16,5	3	6,5	-
-	32 5008 020	50	-	M 8	19	16,5	3	-	20
32 6208	-	62	M 8	-	23,5	21	4	8	-
-	32 6210 025	62	-	M 10	23,5	21	4	-	25

Sample order: Triangular Star Grip 324006015

* Other external threads and screw lengths available on request

Series BT Three Star Grips



Thermo-setting plastic series especially for food an hygiene areas.

Material:

Thermo-setting plastic MF 152 (melamine resin reinforced with cellulose); Stainless steel threaded bush and bolt material 1.4305

Versions:

Deburred and highly polished; colour shade signal white similar to RAL 9003.

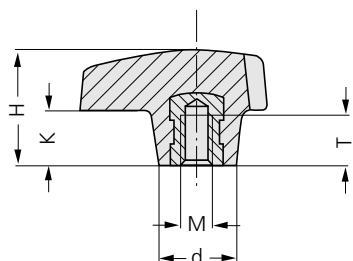
Temperature stability:

from -40°C to +150°C.

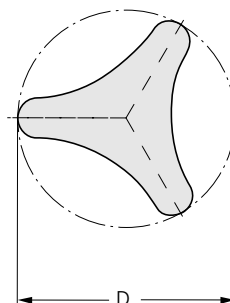
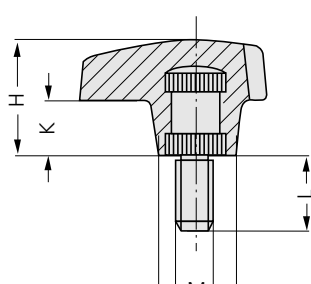
Custom Colours:

Other colours available on request.

Type BT-IG



Type BT-GZ



Type BT-GZ with threaded bolt

D	Order no.	M	L	H	K	d
40	BT-GZ.040.9003	6	20	24	13,5	13,5
50	BT-GZ.050.9003	8	20	28	14	17,5
62	BZ-GZ.062.9003	10	30	34	17	21,5

Typ BT-IG with inside thread

D	Order no.	M	T	H	K	d
40	BT-IG.040.9003	6	9	24	13,5	13,5
50	BT-IG.050.9003	8	13	28	14	17,5
62	BZ-IG.062.9003	10	13	34	17	21,5

All dimensions in mm.

Five Lobe Grips



Material:

Black duroplastic FS 31, bush and threaded bolt in steel, galvanized or stainless steel natural finish

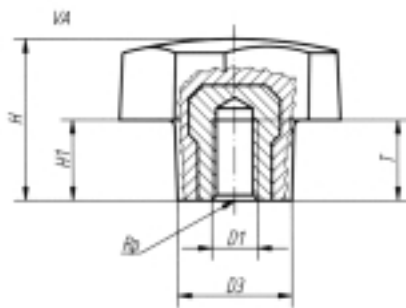
Surface finish:

Deburred and high-polish finish

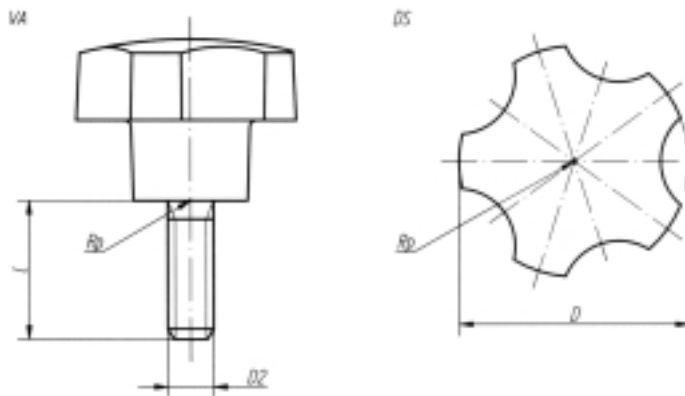
Note:

Other colours available on request.

Five Lobe Grip with internal thread



Five Lobe Grip with external thread



Five Lobe Grips with internal thread

Order No. steel	Order No. stainless steel	D	D1	D3	H	H1	T	
							Steel	Stainless steel
30 3205*	-	32	M 5	16	22,4	11,2	10	-
30 3206*	30 3206 N	32	M 6	16	22,4	11,2	9	9
-	30 3208 N	32	M 8	16	22,4	11,2	-	13
30 4006	-	40	M 6	20	28	14	12	-
30 4008**	30 4008 N	40	M 8	20	28	14	14	13
30 4010***	30 4010 N	40	M 10	20	28	14	14	13
30 5008***	-	50	M 8	25	35	17,5	14	-
30 5010	30 5010 N	50	M 10	25	35	17,5	14	13

Five Lobe Grips with external thread

Order No. steel	Order No. stainless steel	L = Screw length ****	Steel		Stainless steel		D	D2****	D3	H	H1
			-	-	-	-					
30 3206***	30 3206 020 N	12	-	18	-	20	32	M 6	16	22,4	11,2
30 3208***	30 3208 020 N	-	16	-	20	24	32	M 8	16	22,4	11,2
30 4006***	-	12	-	18	-	-	40	M 6	20	28	14
30 4008***	30 4008 020 N	-	16	-	20	24	40	M 8	20	28	14
30 4010***	30 4010 030 N	-	-	-	20	-	30	M10	20	28	14
30 5008***	-	-	16	-	-	24	50	M 8	25	35	17,5
30 5010***	305010 030 N	-	-	-	20	-	30	M 10	25	35	17,5

Sample order: Five Lobe Grip 303208024,
(Length L)

* Bush in brass ** Bush in copper-plated steel
 ***Add the desired screw length here, e.g. 024 for L = 24 mm
 **** Other external threads and screw lengths available on request

Star Grips similar to DIN 6336



Material:

Black thermoplastic, bush and threaded bolt in steel

Surface finish:

Bush and threaded bolt galvanized or yellow chromated. See sample order for grip cap **colour** variations.

Sample order:

To order grip caps in light grey, traffic red or bright yellow, please add the corresponding **colour** code below.

Colour code:

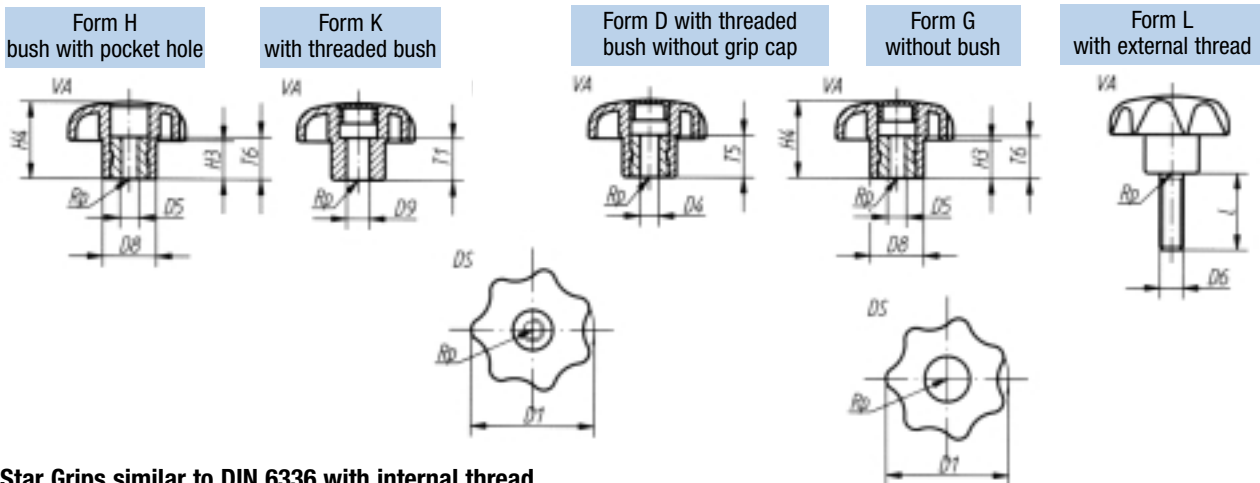
AG = light grey, AH = traffic red, AI = bright yellow, no colour code = black

Star Grip 28 K 3206 AG
(light grey)

Star Grip 28 L 3206040
(no colour code, black)

Note:

Other **colours** or designs, such as company logos, available on request.



Star Grips similar to DIN 6336 with internal thread

Order No. Form D	Order No. Form G	Order No. Form H	Order No. Form K	D1	D4 ^H	D5	D8	D9 ^{H11}	H3	H4	T1	T5	T6	Approx. weight g
28 D 2504	-	-	28 K 2504 ^{ΔΔ}	25	-	M 4	12	-	8	16	-	-	10	11
28 D 2505	28 G 2505 ^{ΔΔ}	28 H 2505 ^{ΔΔ}	28 K 2505 ^{ΔΔ}	25	5	M 5	12	5	8	16	10	10	10	10
28 D 2506	-	-	28 K 2506 ^{ΔΔ}	25	-	M 6	12	-	8	16	-	-	10	10
28 D 3205	-	-	28 K 3205 ^{ΔΔ}	32	-	M 5	14	-	10	20	-	-	10	13
28 D 3206	28 G 3206 ^{ΔΔ}	28 H 3206 ^{ΔΔ}	28 K 3206 ^{ΔΔ}	32	6	M 6	14	6	10	20	10	10	10	13
28 D 4008	28 G 4008 ^{ΔΔ}	28 H 4008 ^{ΔΔ}	28 K 4008 ^{ΔΔ}	40	8	M 8	18	8	13	25	14	14	14	25
28 D 4010	-	-	28 K 4010 ^{ΔΔ}	40	-	M 10	18	-	13	25	-	-	14	24
28 D 5008	-	-	28 K 5008 ^{ΔΔ}	50	-	M 8	22	-	17	32	-	-	14	50
28 D 5010	28 G 5010 ^{ΔΔ}	28 H 5010 ^{ΔΔ}	28 K 5010 ^{ΔΔ}	50	10	M 10	22	10	17	32	14	14	14	48
28 D 5012	-	-	28 K 5012 ^{ΔΔ}	50	-	M 12	22	-	17	32	-	-	18	46
28 D 6310	-	28 H 6310 ^{ΔΔ}	28 K 6310 ^{ΔΔ}	63	10	M 10	26	-	21	40	-	14	14	90
28 D 6312	28 G 6312 ^{ΔΔ}	28 H 6312 ^{ΔΔ}	28 K 6312 ^{ΔΔ}	63	12	M 12	26	12	21	40	18	18	18	88
28 D 6316	-	-	28 K 6316 ^{ΔΔ}	63	-	M 16	26	-	21	40	-	-	18	87

Star Grips similar to DIN 6336 with external thread

Order No. Form L	D1	D6	D8	H3	H4	L
28 L 2505 ^{*** ΔΔ}	25	M 5	12	8	16	10 - 15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 2506 ^{*** ΔΔ}	25	M 6	12	8	16	10 - 15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 3206 ^{*** ΔΔ}	32	M 6	14	10	20	10 - 15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 3208 ^{*** ΔΔ}	32	M 8	14	10	20	15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 4008 ^{*** ΔΔ}	40	M 8	18	13	25	15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 4010 ^{*** ΔΔ}	40	M 10	18	13	25	15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 5010 ^{*** ΔΔ}	50	M 10	22	17	32	15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 5012 ^{*** ΔΔ}	50	M 12	22	17	32	15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 6310 ^{*** ΔΔ}	63	M 10	26	21	40	20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 6312 ^{*** ΔΔ}	63	M 12	26	21	40	20 - 25 - 30 - 35 - 40 - 45 - 50 - 60
28 L 6316 ^{*** ΔΔ}	63	M 16	26	21	40	30 - 35 - 40 - 45 - 50 - 60

Sample order: Star Grips 28 D 4010

^{ΔΔ} Add the desired grip cap colour here (see sample order)

^{***} Add the desired screw length here, e.g. 040 for L = 40 mm

Star Grips similar to DIN 6336 steel parts in stainless steel



Material:

Black thermoplastic, bush and threaded bolt in stainless steel X 10 CrNiS 18 9 = 1.4305

Surface finish:

Bush and threaded bolt galvanized or yellow chromated. See sample order for grip cap colour variations.

Sample order:

To order grip caps in light grey, traffic red or bright yellow, please add the corresponding colour code below to the Order No.

Colour code:

AG = light grey, AH = traffic red, AI = bright yellow, no colour code = black

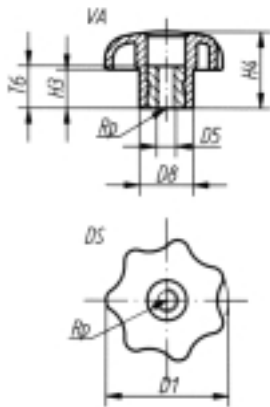
Star Grip 28 K 3206N,AG
(light grey)

Star Grip 28 L 3206020N
(no colour code, black)

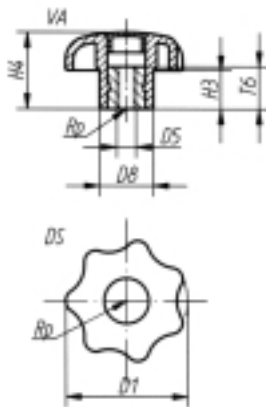
Note:

Other colours or designs, such as company logos, available on request.

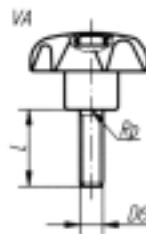
Form D with threaded bush without grip cap



Form K with threaded bush



Form L with external thread



Star Grips similar to DIN 6336 steel parts in stainless steel

Order No. Form D	Order No. Form K	D1	D5	T6	Approx. weight g
28 D 2505N	28 K 2505N ^{△△}	25	M 5	10	8
28 D 3206N	28 K 3206N ^{△△}	32	M 6	10	10
28 D 4008N	28 K 4008N ^{△△}	40	M 8	14	24
28 D 5010N	28 K 5010N ^{△△}	50	M 10	14	40
28 D 6312N	28 K 6312N ^{△△}	63	M 12	18	80

Sample order: Star Grips 28 D 3206N

Order No. Form L	D1	D6	L
28 L 2505 ^{***N} ^{△△}	25	M 5	15 - 20
28 L 3206 ^{***N} ^{△△}	32	M 6	20 - 30
28 L 4008 ^{***N} ^{△△}	40	M 8	15 - 20 - 25 - 30 - 40 - 60
28 L 5010 ^{***N} ^{△△}	50	M 10	25 - 30 - 40 - 50 - 60
-	-	-	-

^{△△} Add the desired grip cap colour here

^{***} Add the desired screw length here, e.g. 020 for L = 20 mm

Star Grips with projecting steel bush



Material:

Black thermoplastic, steel parts quality class 5.8

Surface finish:

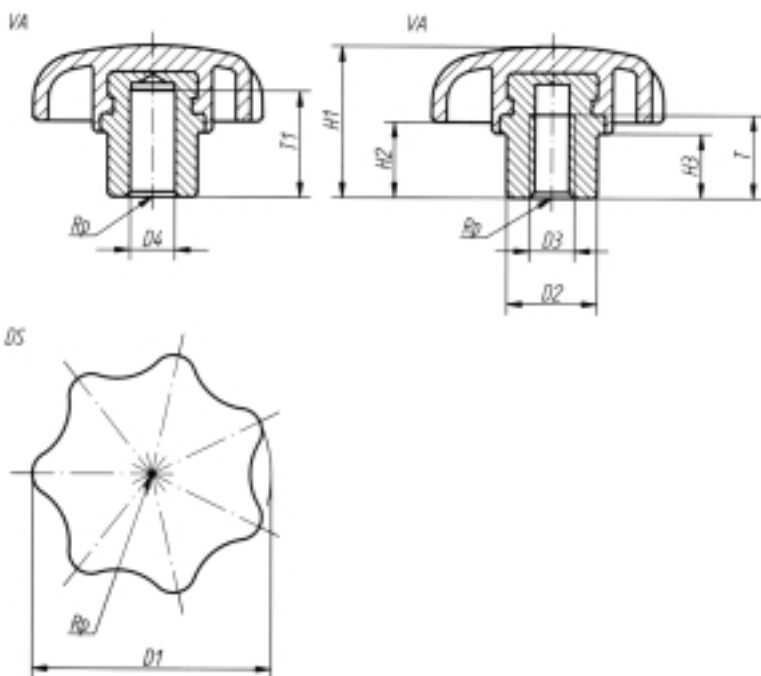
Steel parts yellow chromated

Note:

Star Grips with projecting steel bush are especially suitable for cross pin connections.

Form H
bush with blind hole

Form K
with threaded bush



Star Grips with projecting steel bush

Order No. Form H	D4 ^{H8}	T1	Approx. weight g	Order No. Form K	D3	T	Approx. weight g	D1	D2	H1	H2	H3
29 H 2505	5	9,5	8	29 K 2505	M 5	8,5	8,6	25	10	16	8	6
29 H 3206	6	12	14,8	29 K 3206	M 6	12	15,2	32	12	20	10	8,5
29 H 4006	6	14	24,8	29 K 4006	M 6	14	26	40	13,5	25	13	10
29 H 4008	8	14	24,8	29 K 4008	M 8	14	26	40	13,5	25	13	10
29 H 5008	8	18	51,9	29 K 5008	M 8	18	52,3	50	19	32	17	12
29 H 5010	10	18	51,9	29 K 5010	M 10	18	52,3	50	19	32	17	12
29 H 6310	10	22	83,8	29 K 6310	M 10	22	84,6	63	19	40	21	15
29 H 6312	12	22	83,8	29 K 6312	M 12	22	84,6	63	19	40	21	15
29 H 6316	16	22	92,5	29 K 6316	M 16	22	94,5	63	23	40	21	15

Sample order: Star Grip 29 K 5008

Palm Grips similar to DIN 6335

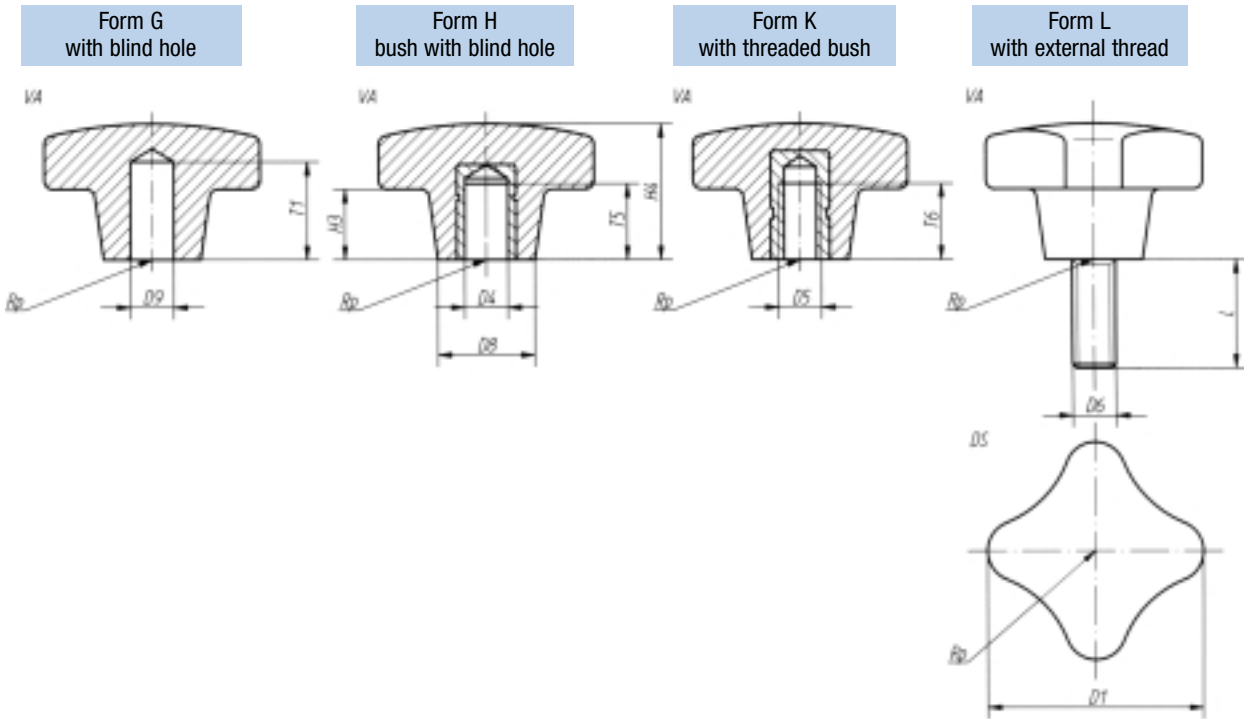


Material:

Black duroplastic FS 31, bush and external thread in galvanised steel, bush Form H natural finish

Surface finish:

Deburred and high-polish finish



Palm Grips similar to DIN 6335, Form G and Form H

Order No. Form G	D9 ^{H1}	T1	Approx. weight g	Order No. Form H	D4 ^{H7}	T5	Approx. weight g	D1	D8	H3	H4
27 G 2505	5	12	8	27 H 2505	5	7,5	11	25	12	8	16
27 G 3206	6	15	10	27 H 3206	6	9	11	32	14	10	20
27 G 4008	8	18	18	27 H 4008	8	12	18	40	18	13	25
27 G 5010	10	21	24	27 H 5010	10	15	30	50	22	20	32
27 G 6312	12	25	50	27 H 6312	12	18	60	63	26	25	40

Palm Grips similar to DIN 6335, Form K and Form L

Order No. Form K	D5	T6	Approx. weight g	Order No. Form L	D6	L = Screw length				D1	D8	H3	H4					
27 K 2505	M 5	9,5	12	27 L 2505***	M 5	15	20	25	30	-	40	-	50	-	25	12	8	16
27 K 3206	M 6	12	11	27 L 3206***	M 6	15	20	25	30	-	40	-	50	-	32	14	10	20
27 K 4008	M 8	14	18	27 L 4008***	M 8	-	20	25	30	35	40	45	50	-	40	18	13	25
27 K 5010	M 10	18	30	27 L 5010***	M 10	-	20	25	30	35	40	45	50	-	50	22	20	32
27 K 6312	M 12	22	60	27 L 6312***	M 12	-	20	-	30	-	40	-	50	60	63	26	25	40

Sample order: Palm Grip 27L5010030

*** Add the desired screw length here, e.g. 030 for L = 30 mm

Cylindrical Grips



Cylindrical Grips are a product with a universal range of applications thanks to the harmonic combination of form and function. Esthetics, reliability and perfect handling are what characterise their quality.

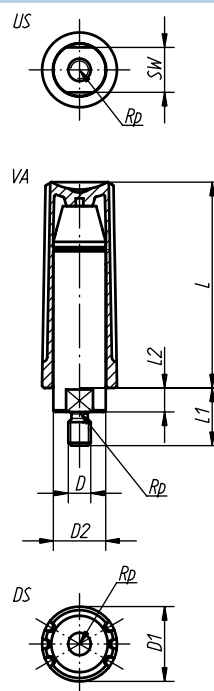
Material, surface finish:

Anthracite grey thermoplastic, steel parts black oxide finish

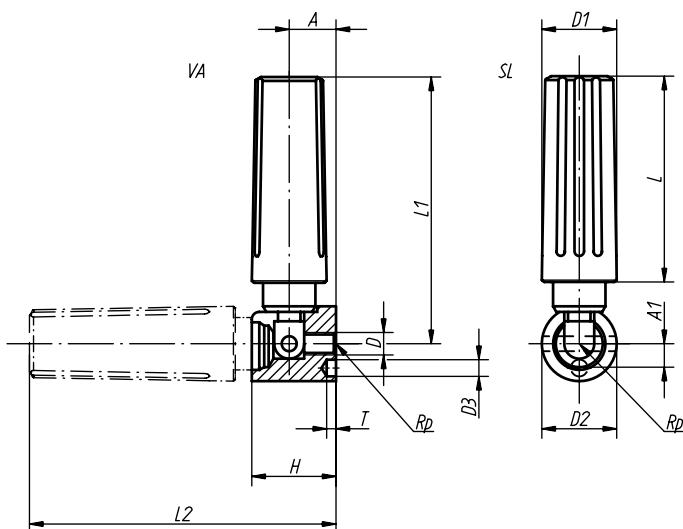
Note:

Cylindrical Grips are supplied assembled and can be screwed to handwheels, spools and cranks. Borehole D3 is used as a positioning hole.

Cylindrical Revolving Grip



Cylindrical Fold-Away Grip



Cylindrical Revolving Grips

Order No.	Size	D	D1	D2	L	L1	L2	SW	Approx. weight g
204-104	1	M 4	13	9	40	6	5	8	13,3
204-205	2	M 5	16	11	49,5	7,5	5,5	10	25
204-306	3	M 6	20	14	60	9	5	12	50
204-408	4	M 8	25	18	83,5	12	13	15	102,8

Cylindrical Fold-Away Grips

Order No.	Size	D	D1	D2	D3	A	A1	H	L	L1	L2	T	Approx. weight g
205-104	1	M 4	13	13	2,5	8	4,3	14,5	35	47	54,5	4,5	28
205-205	2	M 5	16	16	3,5	10	5,3	18	44	58	67	4,5	51
205-306	3	M 6	20	20	4,5	12,5	6,5	22,5	55	71,5	82	6	101
205-408	4	M 8	25	26	5,5	16	9	29	70,5	98,5	112,5	6,5	225

Sample order: Cylindrical Grip 205-205

Taper Grips



Material:

Black duroplastic FS 31, bush and threaded bolt in galvanised steel

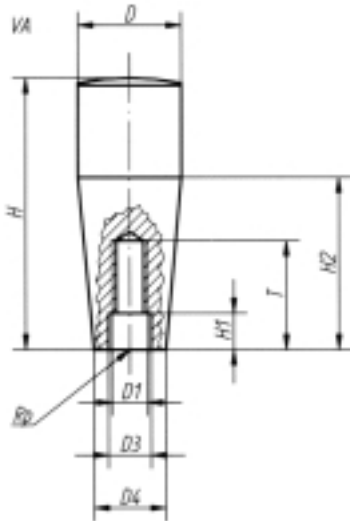
Surface finish:

Deburred and high-polish finish

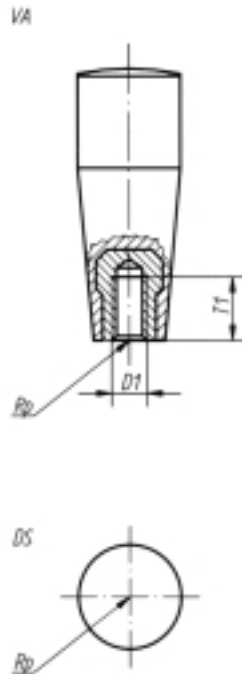
Note:

Other **colours** available on request.

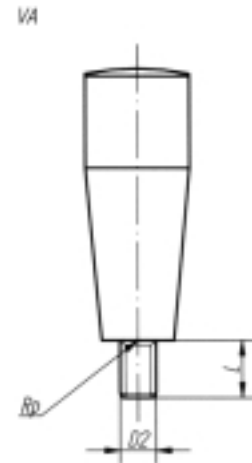
Form C
with pressed thread



Form E
with threaded bush



Form F
with external thread



Taper Grips

Order No. Form C	Order No. Form E	Order No. Form F	Size	D	D1	D2	D3	D4	H	H1	H2	T	T1	L
-	23 1E05**	-	1	17	M 5	-	-	13	45	-	26	-	10	-
23 1C06	23 1E06**	23 1F06 018	1	17	M 6	M 6	6,2	13	45	2	26	14	9	18
23 1C08	-	-	1	17	M 8	-	8,2	13	45	2	26	16	-	-
23 2C08	23 2E08*	23 2F08 012	2	23	M 8	M 8	8,5	16	60	8	38	24	14	12
-	23 3E08*	-	3	28	M 8	-	-	18	70	-	42	-	14	-
23 3C10	-	23 3F10 020	3	28	M 10	M 10	10,5	18	70	10	42	28	-	20

Sample order: Taper Grip 23 2F08 012

* Bush in copper-plated steel
** Bush in brass

Revolving Taper Grips



Material:

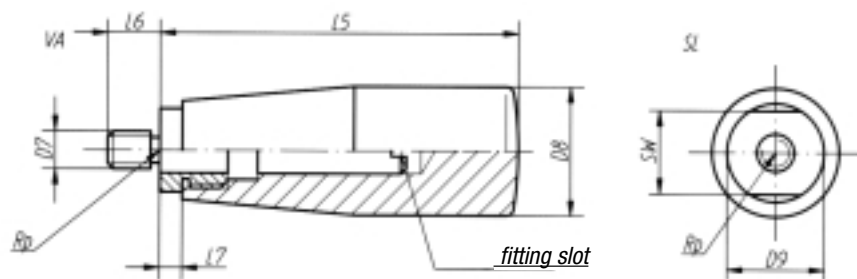
Black duroplastic FS 31, axle and threaded bush in steel, galvanised or stainless steel natural finish

Surface finish:

Deburred and high-polish finish

Note:

In order to assemble, unscrew the axle. The grips fit the Disc Hand-wheels with revolving taper grip.



Revolving Taper Grips

Order No. steel	Order No. stainless steel	Size	D7	D8	D9	L5	L6	L7	SW
40 105007	40 105007 N	1	M 5	17	13	48	7	3	11
40 208009	40 208009 N	2	M 8	23	16	64	9	4	14
40 310011	40 310011 N	3	M 10	28	18	74	11	4	16

Sample order: Revolving Taper Grip 40208009

Cylindrical Safety Grips automatically returning



The characteristics of the simple cylindrical grip naturally also apply to the automatically returning Cylindrical Safety Grip. This product combines excellent functionality and sophisticated safety technology in an ideal way.

Material, surface finish:

Grip anthracite grey thermoplastic, steel parts black oxide finish

Note:

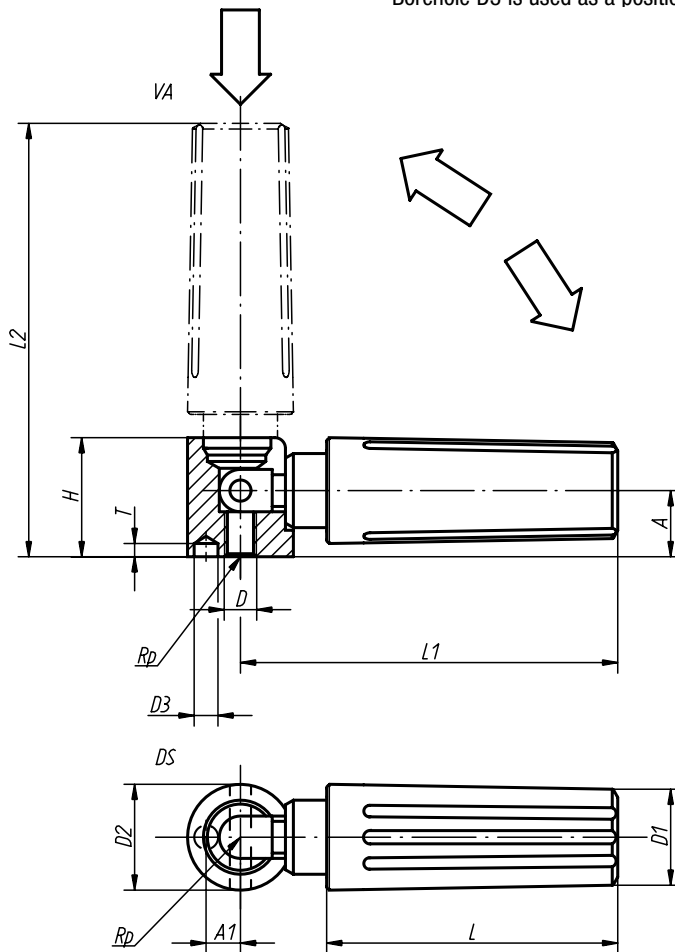
Two steps have to be executed to bring the Cylindrical Safety Grip into operating position:

- Swivel the grip around the axis of rotation until it stops (90°).
- Press the grip in axial direction into locking position.

The pressed-in position is the most comfortable position to crank. The grip returns automatically after letting go.

Cylindrical Safety Grips are supplied assembled and can be screwed to handwheels, spools and cranks.

Borehole D3 is used as a positioning hole.



Cylindrical Safety Grips automatically returning

Order No.	Size	D	D1	D2	D3	A	A1	H	L	L1	L2	T	Approx. weight g
K3255 104	1	M 4	13	13	2,5	8	4,3	14,5	35	47	52,5	4,5	28
K3255 205	2	M 5	16	16	3,5	10	5,3	18	44	58	65,5	4,5	51
K3255 306	3	M 6	20	20	4,5	12,5	6,5	22,5	55	71,5	81	6	101
K3255 408	4	M 8	25	26	5,5	16	9	29	70,5	98,5	111	6,5	225

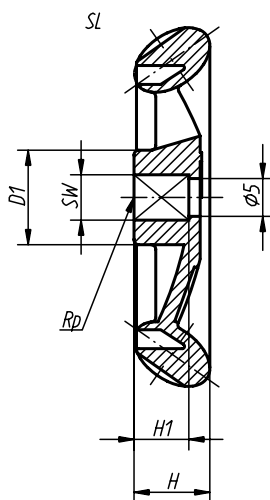
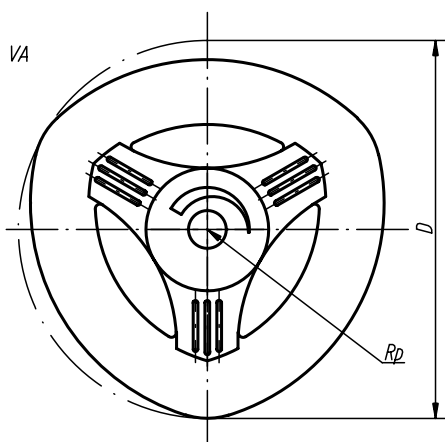
Sample order: Cylindrical Safety Grip automatically returning K3255 205

Delta Wheels



Delta Wheels serve to create better conditions so that you can give your ideas concrete form and perfect shape. The delta shape also offers you the additional benefit to grasp the handwheel securely and comfortably.

Material:
Glass-fibre reinforced thermoplastic



anthracite grey



RAL 7021

signal green $\Delta\Delta = 86$



RAL 6032

traffic red $\Delta\Delta = 84$



RAL 3020

bright yellow $\Delta\Delta = 16$



RAL 1021

traffic blue $\Delta\Delta = 87$



RAL 5017

Delta Wheels

Order No.	Size	D	D1	H	H1	SW (square)	Approx. weight g
221-105005 $\Delta\Delta$	1	50	12,5	10	7,3	5	10,0
221-105006 $\Delta\Delta$	1	50	12,5	10	7,3	6	10,0
221-206306 $\Delta\Delta$	2	63	15,8	12,6	9	6	18,5
221-206307 $\Delta\Delta$	2	63	15,8	12,6	9	7	18,5
221-308008 $\Delta\Delta$	3	80	20	16	12	8	40,0
221-308009 $\Delta\Delta$	3	80	20	16	12	9	40,0

Sample order: Delta Wheel 221-206306 86 (delta wheel signal green)

$\Delta\Delta$ Add the desired colour here, no colour code is required with anthracite grey

Handwheels with cylindrical safety grip



These handwheels focus entirely on safety. The auto-matically returning Cylindrical Grip minimises the risk of “catching” while rotating.

Material, surface finish:

Wheel body and grip in anthracite grey thermoplastic, steel parts black oxide finish

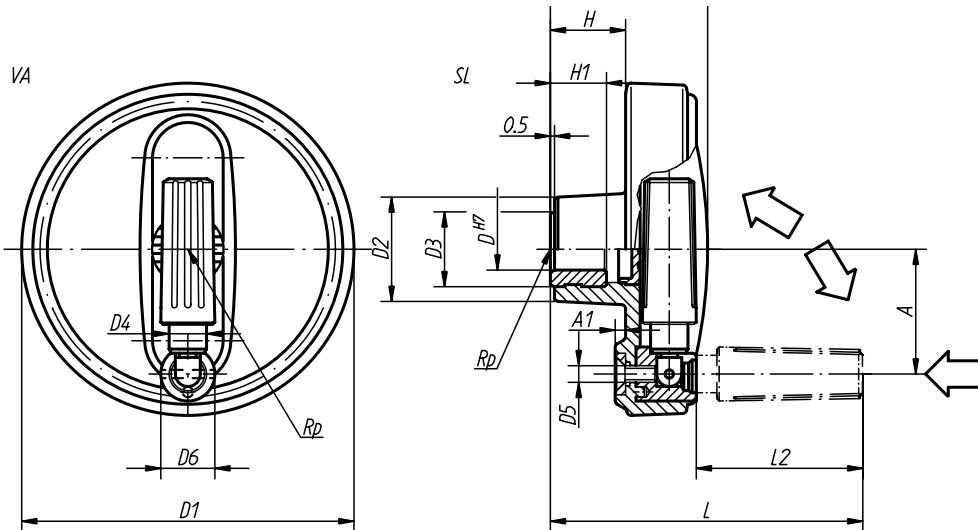
Note:

The hub cover is supplied unassembled.

The handwheels can be secured axially to the shaft via feather connection by cross-pinning or with a socket head screw to DIN 6912 and a washer to DIN 7349.

- Two steps have to be executed to bring the Cylindrical Safety Grip into operating position:
- Swivel the grip around the axis of rotation until it stops (90°). Press the grip in axial direction into locking position.

The pressed-in position is the most comfortable position to crank. The grip returns automatically after letting go.



Handwheels with cylindrical safety grip

Order No.	Size	D ^{H7}	D1	D2	D3	D4	D5	D6	A	A1	H	H1	L	L1	L2	Approx. weight g
K3226 1 080 08	1	8	80	25	19	13	M 4	13	30	2,5	17,5	13	73	37,5	38	100
K3226 1 080 10	1	10	80	25	19	13	M 4	13	30	2,5	17,5	13	73	37,5	38	100
K3226 1 080 12	1	12	80	25	19	13	M 4	13	30	2,5	17,5	13	73	37,5	38	100
K3226 2 100 10	2	10	100	28	19	16	M 5	16	38	3	20	13	88,5	44	47,5	179
K3226 2 100 12	2	12	100	28	19	16	M 5	16	38	3	20	13	88,5	44	47,5	179
K3226 3 125 12	3	12	125	35	25	20	M 6	20	47,5	4	23,5	18,5	108	53	58,5	328
K3226 3 125 14	3	14	125	35	25	20	M 6	20	47,5	4	23,5	18,5	108	53	58,5	328
K3226 3 125 16	3	16	125	35	25	20	M 6	20	47,5	4	23,5	18,5	108	53	58,5	328
K3226 4 160 14	4	14	160	45	25	25	M 8	26	62	5,6	28	18,5	142,5	64,5	82	651
K3226 4 160 16	4	16	160	45	25	25	M 8	26	62	5,6	28	18,5	142,5	64,5	82	651

Sample order: Handwheel with cylindrical safety grip K3226 3 125 14

Handwheels

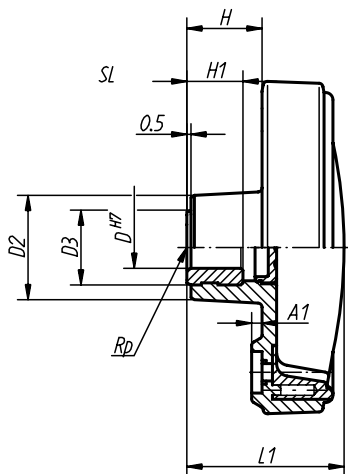
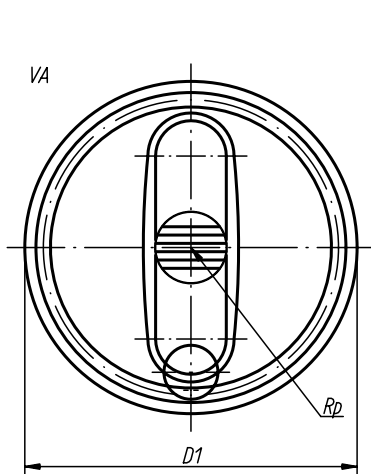


The quality of Handwheels is defined by their absolutely secure and precise turning and gripping. Handwheels often equip especially powerful products and as a result they can be used safely.

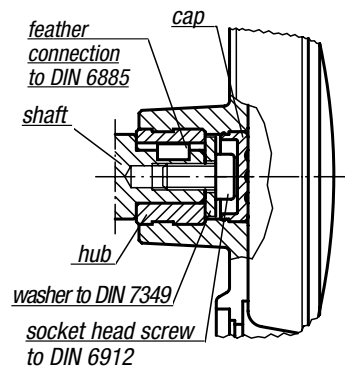
Material, surface finish:

Anthracite grey thermoplastic, steel parts black oxide finish

MACHINE ACCESSORIES



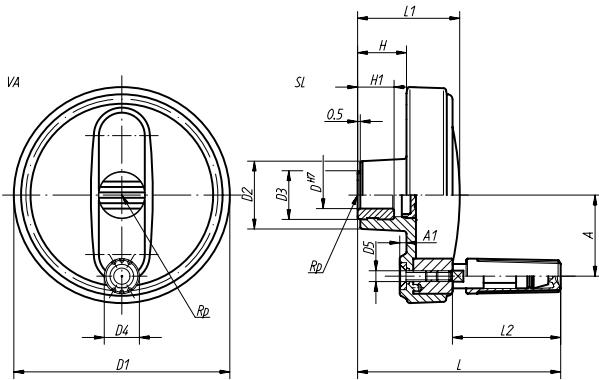
Assembly example



Handwheels without grip

Order No. without grip	Size	D ^{H7}	D1	D2	D3	A1	H	H1	L1	Approx. weight g
207-1 080 08	1	8	80	25	19	2,5	17,5	13	37,5	74
207-1 080 10	1	10	80	25	19	2,5	17,5	13	37,5	74
207-1 080 12	1	12	80	25	19	2,5	17,5	13	37,5	74
207-2 100 10	2	10	100	28	19	3	20	13	44	125
207-2 100 12	2	12	100	28	19	3	20	13	44	125
207-3 125 12	3	12	125	35	25	4	23,5	18,5	53	229
207-3 125 14	3	14	125	35	25	4	23,5	18,5	53	229
207-3 125 16	3	16	125	35	25	4	23,5	18,5	53	229
207-4 160 14	4	14	160	45	25	5,6	28	18,5	64,5	425
207-4 160 16	4	16	160	45	25	5,6	28	18,5	64,5	425

Sample order: Handwheel without grip 207-2 100 12



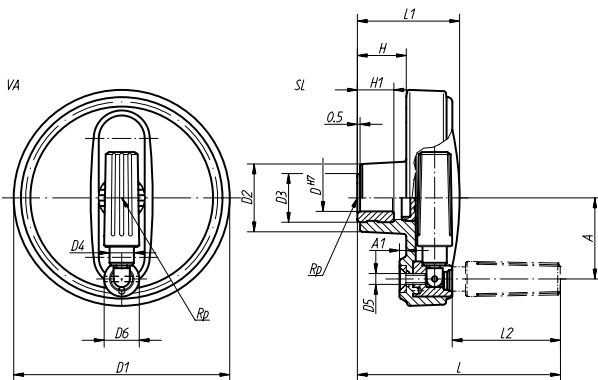
Note:

The hub cover is supplied unassembled.
The handwheels can be secured axially to the shaft via feather connection by cross-pinning or with a socket head screw to DIN 6912 and a washer to DIN 7349. The Cylindrical Revolving Grip is supplied unassembled. In order to assemble it, the axis must be screwed into the receiving hole.

Handwheels with cylindrical revolving grip

Order No. with cylindrical revolving grip	Size	D ^{H7}	D1	D2	D3	D4	D5	A	A1	H	H1	L	L1	L2	Approx. weight g
208-1 080 08	1	8	80	25	19	13	M 4	30	2,5	17,5	13	75	37,5	40	101
208-1 080 10	1	10	80	25	19	13	M 4	30	2,5	17,5	13	75	37,5	40	101
208-1 080 12	1	12	80	25	19	13	M 4	30	2,5	17,5	13	75	37,5	40	101
208-2 100 10	2	10	100	28	19	16	M 5	38	3	20	13	90	44	49,5	178
208-2 100 12	2	12	100	28	19	16	M 5	38	3	20	13	90	44	49,5	178
208-3 125 12	3	12	125	35	25	20	M 6	47,5	4	23,5	18,5	109	53	60	318
208-3 125 14	3	14	125	35	25	20	M 6	47,5	4	23,5	18,5	109	53	60	318
208-3 125 16	3	16	125	35	25	20	M 6	47,5	4	23,5	18,5	109	53	60	318
208-4 160 14	4	14	160	45	25	25	M 8	62	5,6	28	18,5	144	64,5	83,5	636
208-4 160 16	4	16	160	45	25	25	M 8	62	5,6	28	18,5	144	64,5	83,5	636

Sample order: Handwheel with cylindrical revolving grip 208-3 125 12



Handwheels with cylindrical fold-away grip

Order No. with cylindrical fold-away grip	Size	D ^{H7}	D1	D2	D3	D4	D5	D6	A	A1	H	H1	L	L1	L2	Approx. weight g
209-1 080 08	1	8	80	25	19	13	M 4	13	30	2,5	17,5	13	75	37,5	40	100
209-1 080 10	1	10	80	25	19	13	M 4	13	30	2,5	17,5	13	75	37,5	40	100
209-1 080 12	1	12	80	25	19	13	M 4	13	30	2,5	17,5	13	75	37,5	40	100
209-2 100 10	2	10	100	28	19	16	M 5	16	38	3	20	13	90	44	49	179
209-2 100 12	2	12	100	28	19	16	M 5	16	38	3	20	13	90	44	49	179
209-3 125 12	3	12	125	35	25	20	M 6	20	47,5	4	23,5	18,5	109	53	59,5	328
209-3 125 14	3	14	125	35	25	20	M 6	20	47,5	4	23,5	18,5	109	53	59,5	328
209-3 125 16	3	16	125	35	25	20	M 6	20	47,5	4	23,5	18,5	109	53	59,5	328
209-4 160 14	4	14	160	45	25	25	M 8	26	62	5,6	28	18,5	144	64,5	83,5	651
209-4 160 16	4	16	160	45	25	25	M 8	26	62	5,6	28	18,5	144	64,5	83,5	651

Sample order: Handwheel with cylindrical fold-away grip 209-3 125 12

Disc Handwheels with revolving taper grip



Material:

Black duroplastic FS 31; bush in steel, chromium-plated or stainless steel natural finish; grip revolving, steel parts galvanised or in stainless steel natural finish

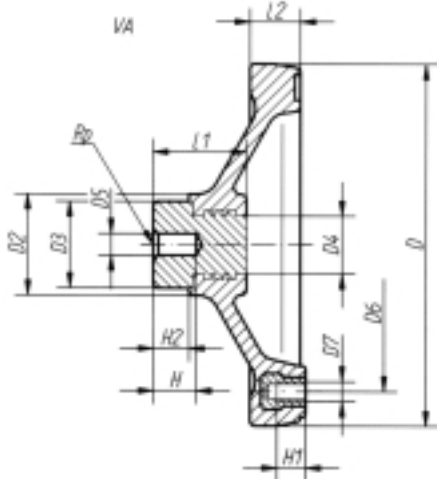
Surface finish:

Deburred and high-polish finish

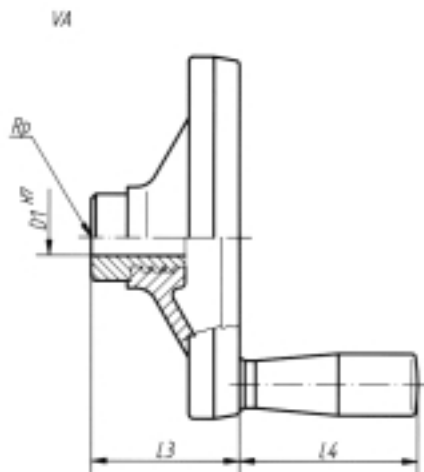
Note:

Handwheel and grip will be delivered unassembled. Other colours available on request.

Form D
predrilled



Form E
locating hole



Disc Handwheels with revolving taper grip

Order No. Form D	Order No. Form E	Size	D	D1 ^{HT*}	D2	D3	D4	D5	D6	D7	H	H1	H2	L1	L2	L3	L4
38 1D100 06	38 1E100 10	1	100	10	28	24	16	6	81	M 5**	12	7	10	26	14	41	49
38 2D120 08	38 2E120 12	2	120	12	34	28	20	8	98	M 8	15	9	12	30,5	17	48,5	65
38 3D140 08	38 3E140 14	3	140	14	40	32	24	8	118	M 8	16	11	14	36	20	58	65
38 4D160 10	38 4E160 16	4	160	16	50	36	35	10	136	M 10	20	11	15	35,5	22	59	75,5
38 5D190 10	38 5E190 18	5	190	18	50	40	35	10	166	M 10	30	11	15	45	25	77	75,5

Disc Handwheels with revolving taper grip, steel parts in stainless steel

STAINLESS
STEEL
OPTION

Order No. Form D steel parts	Order No. Form E stainless steel	Size	D	D1 ^{HT*}	D2	D3	D4	D5	D6	D7	H	H1	H2	L1	L2	L3	L4
38 1D100 06 N	38 1E100 10 N	1	100	10	28	24	16	6	81	M 5	12	7	10	26	14	41	49
38 2D120 08 N	38 2E120 12 N	2	120	12	34	28	20	8	98	M 8	15	9	12	30,5	17	48,5	65
38 3D140 08 N	38 3E140 14 N	3	140	14	40	32	24	8	118	M 8	16	11	14	36	20	58	65
38 4D160 10 N	38 4E160 16 N	4	160	16	50	36	35	10	136	M 10	20	11	15	35,5	22	59	75,5
38 5D190 10 N	38 5E190 18 N	5	190	18	50	40	35	10	166	M 10	30	11	15	45	25	77	75,5

Sample order: Disc Handwheel 38 3D140 08 N

*Other locating holes available on request
**Bush in brass

Disc Handwheels without taper grip



Material:

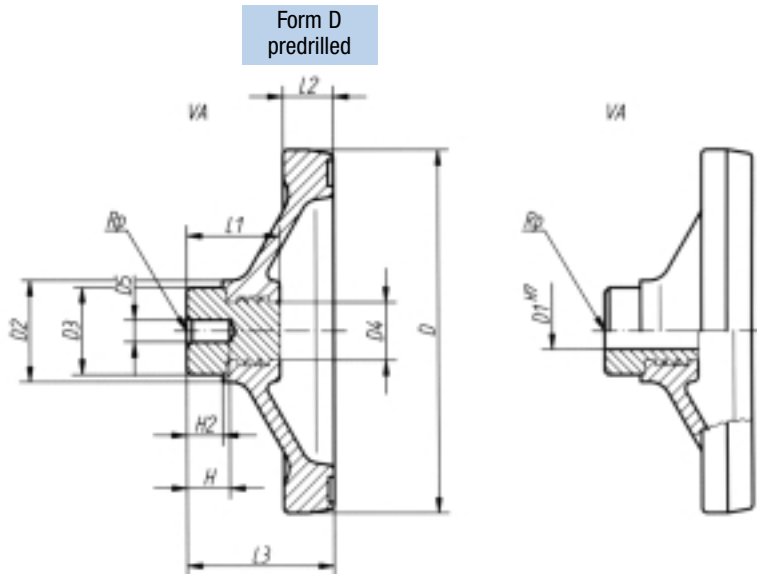
Black duroplastic FS 31; bush in steel, chromium-plated or in stainless steel natural finish

Surface finish:

Deburred and high-polish finish

Note:

Other colours available on request.



Disc Handwheels without taper grip, bush in steel

Order No. Form D bush steel	Order No. Form E bush steel	Size	D	D1 ^{HT*}	D2	D3	D4	D5	H	H2	L1	L2	L3
39 1D100 06	39 1E100 10	1	100	10	28	24	16	6	12	10	26	14	41
39 2D120 08	39 2E120 12	2	120	12	34	28	20	8	15	12	30,5	17	48,5
39 3D140 08	39 3E140 14	3	140	14	40	32	24	8	16	14	36	20	58
39 4D160 10	39 4E160 16	4	160	16	50	36	35	10	20	15	35,5	22	59
39 5D190 10	39 5E190 18	5	190	18	50	40	35	10	30	15	45	25	77

Disc Handwheels without taper grip, bush in stainless steel

STAINLESS
STEEL
OPTION

Order No. Form D bush stainless steel	Order No. Form E bush stainless steel	Size	D	D1 ^{HT*}	D2	D3	D4	D5	H	H2	L1	L2	L3
39 1D100 06 N	39 1E100 10 N	1	100	10	28	24	16	6	12	10	26	14	41
39 2D120 08 N	39 2E120 12 N	2	120	12	34	28	20	8	15	12	30,5	17	48,5
39 3D140 08 N	39 3E140 14 N	3	140	14	40	32	24	8	16	14	36	20	58
39 4D160 10 N	39 4E160 16 N	4	160	16	50	36	35	10	20	15	35,5	22	59
39 5D190 10 N	39 5E190 18 N	5	190	18	50	40	35	10	30	15	45	25	77

Sample order: Disc Handwheel without taper grip 39 3D140 08 N

*Other locating holes available on request

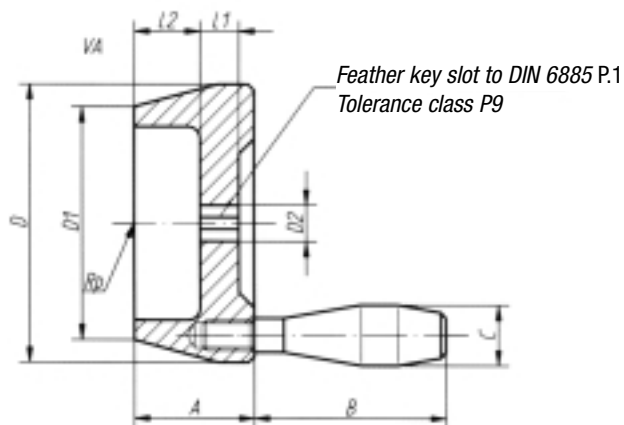
Aluminium Handwheels



Material:
Light metal casting

Surface finish:
Turned and polished

Note:
Hub machined and drilled to ISO fit H7.



Aluminium Handwheels

Order No.	Size	D	D1	D2 ^{H7}	L1	L2	A	B	C	Suitable for (see pages 314 and 315)
18 106046	1	46	38,5	6	6,5	11	20	32	10	PSSK 40
18 208070	2	70	58	8	11	14	30	50	16	PSSK 60
18 312094	3	94	78	12	15	19	40	50	16	PSSK 80
18 412112	4	112	95	12	18	23	48	64	20	PSSK 100
18 514140	5	140	120	14	24,5	24	57	64	20	PSSK 125

Sample order: Aluminium Handwheel 18 312094

Knurled Wheels



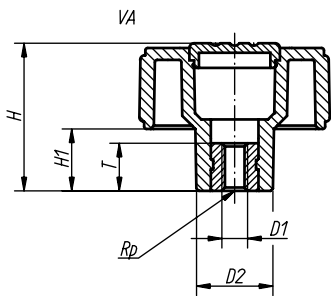
Knurled Wheels are characterised mainly by their wide range of applications and their outstanding design. The ergonomically designed Knurled Wheel guarantees absolutely secure and perfect handling.

Material, surface finish:

Anthracite grey thermoplastic, bush and threaded bolt in steel 5.8, yellow chromated

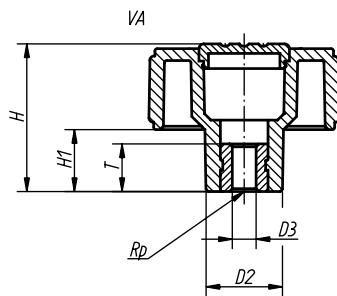
Form D
threaded bush without wheel cap

Form K
threaded bush with wheel cap

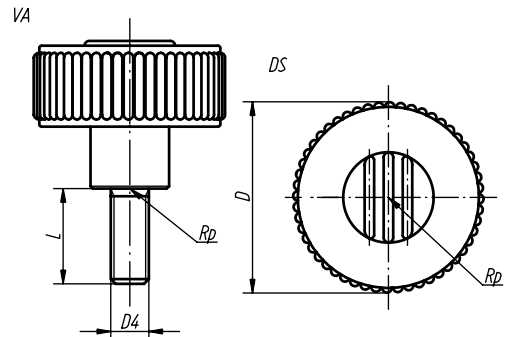


Form E bush with pocket hole without wheel cap

Form H
bush with pocket hole with wheel cap



Form L
with external thread



anthracite grey



RAL 7021

light grey $\Delta\Delta$ = AJ



RAL 7035

bright yellow $\Delta\Delta$ = AE



RAL 1021

traffic red $\Delta\Delta$ = AD



RAL 3020

Knurled Wheels with internal thread and bush with pocket hole

Order No. Form D	Order No. Form E	Order No. Form H	Order No. Form K	Size	D	D1	D2	D3 ^{HS}	H	H1	T
K3010 1105	-	-	K3010 2105 $\Delta\Delta$	1	40	M 5	16,5	-	31	13	10
K3010 1106	K3010 3106	K3010 4106 $\Delta\Delta$	K3010 2106 $\Delta\Delta$	1	40	M 6	16,5	6	31	13	10
K3010 1108	-	-	K3010 2108 $\Delta\Delta$	1	40	M 8	16,5	-	31	13	14
K3010 1208	K3010 3208	K3010 4208 $\Delta\Delta$	K3010 2208 $\Delta\Delta$	2	50	M 8	18	8	36	15	14
K3010 1210	-	-	K3010 2210 $\Delta\Delta$	2	50	M 10	18	-	36	15	14
K3010 1310	K3010 3310	K3010 4310 $\Delta\Delta$	K3010 2310 $\Delta\Delta$	3	63	M 10	22	10	41	17	14
K3010 1312	-	-	K3010 2312 $\Delta\Delta$	3	63	M 12	22	-	41	17	18

Knurled Wheels with external thread

Order No. Form L	Size	D	D4	H	H1	L = Bolt length					
K3010 5105 ^{***} $\Delta\Delta$	1	40	M 5	31	13	10	-	20	-	40	-
K3010 5106 ^{***} $\Delta\Delta$	1	40	M 6	31	13	10	-	20	-	40	-
K3010 5108 ^{***} $\Delta\Delta$	1	40	M 8	31	13	-	15	-	30	-	60
K3010 5208 ^{***} $\Delta\Delta$	2	50	M 8	36	15	-	15	-	30	-	60
K3010 5210 ^{***} $\Delta\Delta$	2	50	M 10	36	15	-	-	20	30	-	60
K3010 5310 ^{***} $\Delta\Delta$	3	63	M 10	41	17	-	-	20	30	-	60
K3010 5312 ^{***} $\Delta\Delta$	3	63	M 12	41	17	-	-	-	30	-	60

Sample order: Knurled Wheel K3010 5108 Q15 AD (wheel cap colour traffic red)
(length L)

$\Delta\Delta$ Add the desired wheel cap colour here, no colour code is required with anthracite grey wheel caps

^{***} Add the desired bolt length here, e.g. 015 for L = 15 mm

Knurled Wheels steel parts in stainless steel



Knurled Wheels are characterised mainly by their wide range of applications and their outstanding design. The ergonomically designed Knurled Wheel guarantees absolutely secure and perfect handling.

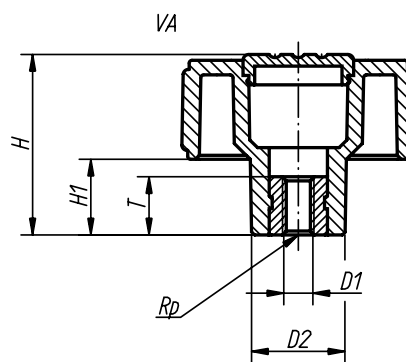
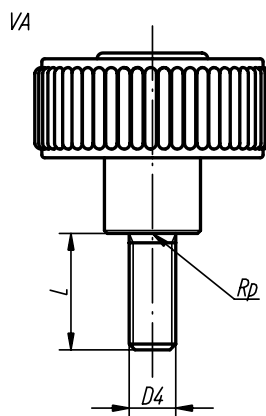
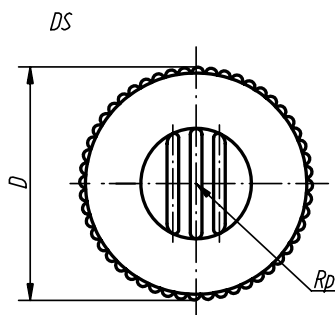
Material, surface finish:

Anthracite grey thermoplastic, bush and threaded bolt in stainless steel, X 10 CrNiS 18 9 = 1.4305 natural finish

Form L
with external thread

Form D
threaded bush without wheel cap

Form K
threaded bush with wheel cap



anthracite grey



RAL 7021

light grey $\Delta\Delta = AJ$



RAL 7035

traffic red $\Delta\Delta = AD$



RAL 3020

bright yellow $\Delta\Delta = AE$



RAL 1021

Knurled Wheels with internal thread, stainless steel

Order No. Form D	Order No. Form K	Size	D	D1	D2	H	H1	T
K3010 1105 N	K3010 2105 N $\Delta\Delta$	1	40	M 5	16,5	31	13	10
K3010 1106 N	K3010 2106 N $\Delta\Delta$	1	40	M 6	16,5	31	13	10
K3010 1108 N	K3010 2108 N $\Delta\Delta$	1	40	M 8	16,5	31	13	14
K3010 1208 N	K3010 2208 N $\Delta\Delta$	2	50	M 8	18	36	15	14
K3010 1210 N	K3010 2210 N $\Delta\Delta$	2	50	M 10	18	36	15	14
K3010 1310 N	K3010 2310 N $\Delta\Delta$	3	63	M 10	22	41	17	14
K3010 1312 N	K3010 2312 N $\Delta\Delta$	3	63	M 12	22	41	17	18

Knurled Wheels with external thread, stainless steel

Order No. Form L	Size	D	D4	H	H1	L = Bolt length					
K3010 5105*** N $\Delta\Delta$	1	40	M 5	31	13	10	-	20	-	-	-
K3010 5106*** N $\Delta\Delta$	1	40	M 6	31	13	10	-	20	-	40	-
K3010 5108*** N $\Delta\Delta$	1	40	M 8	31	13	-	15	-	30	-	60
K3010 5208*** N $\Delta\Delta$	2	50	M 8	36	15	-	15	-	30	-	60
K3010 5210*** N $\Delta\Delta$	2	50	M 10	36	15	-	-	20	30	-	60
K3010 5310*** N $\Delta\Delta$	3	63	M 10	41	17	-	-	20	30	-	60

Sample order: Knurled Wheel K3010 5108 $\overset{\square}{Q15}$ N AD (wheel cap colour traffic red)
(length L)

$\Delta\Delta$ Add the desired wheel cap colour here, no colour code is required for anthracite grey wheel caps

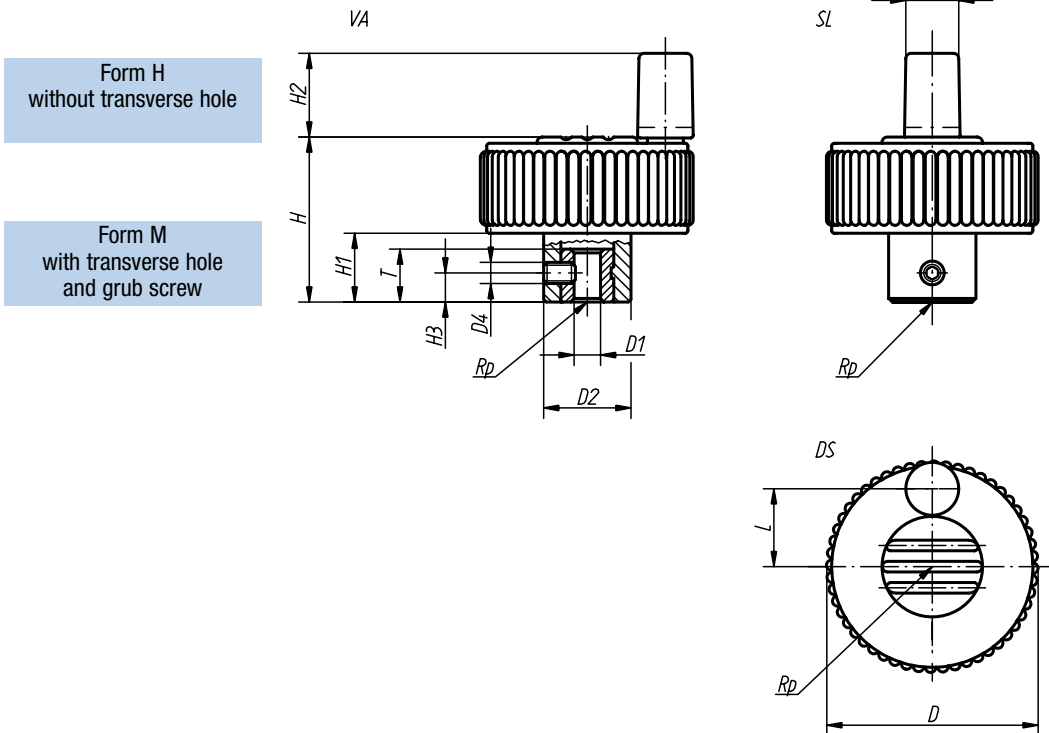
*** Add the desired bolt length here, e.g. 015 for L = 15 mm

Positioning Wheels



The extremely attractive design and the excellent ergonomic form make this Positioning Wheel a trend-setting product, which allows precise and secure positioning. Due to the sophisticated technology, the Positioning Wheels make any type of work easier than before.

Material, surface finish:
Anthracite grey thermoplastic, bush in steel 5.8, yellow chromated



Form H
without transverse hole

Form M
with transverse hole
and grub screw



Positioning Wheels

Order No. Form H	Order No. Form M	Size	D	D ¹ ^{HB}	D2	D3	D4	H	H1	H2	H3	L	T
K3201 2106 $\Delta\Delta$	K3201 1106 $\Delta\Delta$	1	40	6	16,5	10	M 4	31	13	16	5,5	15	10
K3201 2206 $\Delta\Delta$	K3201 1206 $\Delta\Delta$	2	50	6	18	10	M 4	36	15	16	5,5	18,5	10
K3201 2308 $\Delta\Delta$	K3201 1308 $\Delta\Delta$	3	63	8	22	10	M 4	41	17	16	8	25	14

Sample order: Positioning Wheel K3201 1106 AD (wheel cap colour traffic red)
 $\Delta\Delta$ Add the desired wheel cap colour here, no colour code is required with anthracite grey wheel caps

ALSO AVAILABLE FROM **BRAUER**[®]

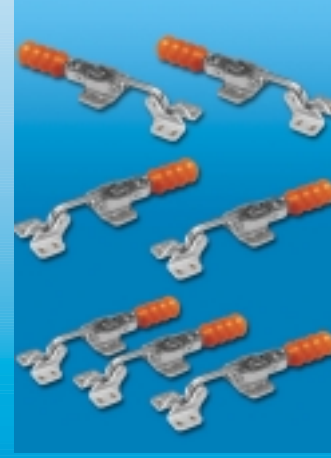
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