

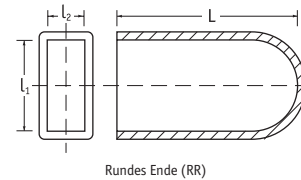
Rechteckige Kappen/Hülsen

SR 1524
Flexibles PVC, schwarz

- Ideal zum Abdecken flacher Handgriffe
- Hervorragende elektrische Isolation


Runde Enden

Artikelnummer	Abmessungen (mm)					Verpackungseinheit
	l1	l1 (Zoll)	l2	l2 (Zoll)	L	
RRWA-91768-060	29.7	-	2.5	-	60	500
RRWA-91616-100	19.0	-	3.0	-	100	500
RRWA-91783-060	17.5	-	3.0	-	60	500
RRWA-91618-100	25.0	-	3.0	-	100	500
RRWA-91620-110	12.7	1/2	3.2	1/8	110	1500
RRWA-91622-110	19.1	3/4	3.2	1/8	110	600
RRWA-91624-110	25.4	1	3.2	1/8	110	250
RRWA-91688-110	19.0	-	6.0	-	110	500
RRWA-91626-110	25.0	-	6.0	-	110	400
RRWA-91689-110	30.0	-	6.0	-	110	400
RRWA-91628-110	25.4	1	6.4	1/4	110	400



Handgriffe

SR 1525
PVC, schwarz

- Breites Sortiment
- Ideal für die unterschiedlichsten Anwendungsbereiche


Typ 1-12

Artikelnummer	Abmessungen (mm)		Typ	Länge (mm)	Verpackungseinheit
	(mm)	(Zoll)			
10130	19.1	3/4	1	75	800
10131	22.2	7/8	1	75	400
10161	22.2	7/8	2	105	250
10188	19.1	3/4	2	105	250
10189	25.4	1	2	105	100
10126	25.4	1	3	110	250
10156	22.2	7/8	3	110	250
50521*	15.9	5/8	4	75	700
50640	19.1	3/4	4	75	600
15358	13.0	1/2	5	108	600
10186	19.1	3/4	6	110	400
FCWA-0127-110	13.0	1/2	7	110	600
FCWA-0159-110	15.9	5/8	7	110	1000
FCWA-0191-110	19.1	3/4	7	110	800
FCWA-0222-110	22.2	7/8	7	110	250
FCWA-0254-110	25.4	1	7	110	250
NGWA-0191-110	19.1	3/4	8	110	300
NGWA-0222-110	22.2	7/8	8	110	300
NGWA-0254-110	25.4	1	8	110	300
PGWA-0191-400	19.1	3/4	9	400	125
HGWA-0254-150	25.4	1	10	150	250
RGWA-0127-230	13.0	1/2	11	230	400
SGWA-0191-110	19.1	3/4	12	110	300
SGWA-0222-110	22.2	7/8	12	110	300
SGWA-0254-110	25.4	1	12	110	300

*Flexibles weißes PVC

Tapered flanged handles

Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, glossy finish.

STANDARD EXECUTION

Plain pass-through hole with polyamide based (PA) technopolymer guide bosses in both ends.

Revolving handles

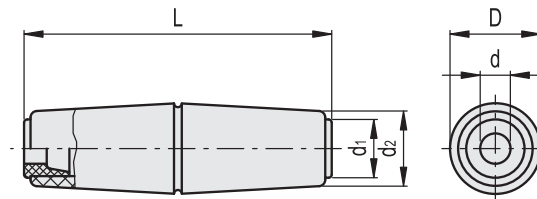
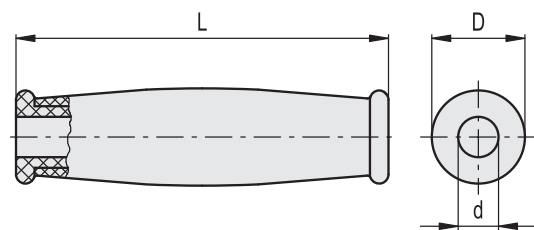
Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, matte finish with equatorial groove.

STANDARD EXECUTION

Plain pass-through hole with polyamide based (PA) technopolymer guide bosses in both ends.



Code	Description	D	L	d	Δ
19001	1.135/120-10	30	120	10	77
19002	1.135/120-11	30	120	11	76
19003	1.135/120-13	30	120	13	74

Code	Description	D	L	d	d1	d2	Δ
55701	SI.134/105-6	29	105	6	18	23	52
55711	SI.134/105-7	29	105	7	18	23	52
55721	SI.134/105-8	29	105	8	18	23	51
55731	SI.134/105-10	29	105	10	18	23	50

Cylindrical handles

Technopolymer

MATERIAL

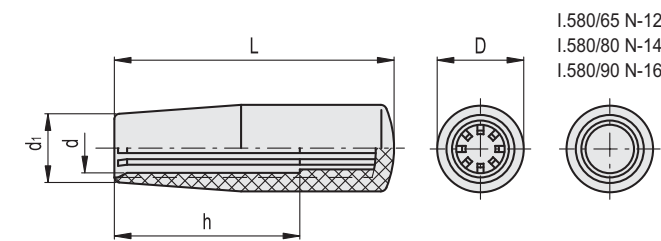
High-resilience polypropylene based (PP) technopolymer, black colour, matte finish.

STANDARD EXECUTION

Blind hole.
The elastic coupling, by press-fit assembly on h9 tolerance drawn stock bars, is not affected by vibrations and prevents the handle from slipping off (see Technical Data on page A13).

ASSEMBLY INSTRUCTIONS

Fit the handle onto slight chamfered shaft end and push as far as possible by hand or by means of a small press. Alternatively it is possible to tap the handle with a plastic or wooden mallet until firmly in place. In this case we strongly recommend to use a cloth or other suitable soft material over the product to avoid any surface damage.



Code	Description	D	L	d	d1	h	Δ
24821	1.580/40 N-8	18	40	8	15	28	8
24831	1.580/50 N-10	21	50	10	17	35	10
24846	1.580/65 N-10	23	65	10	19	45	17
24848	1.580/65 N-12*	23	65	12	19	45	16
24861	1.580/80 N-12	26	80	12	21	50	25
24863	1.580/80 N-14*	26	80	14	21	50	24
24875	1.580/90 N-15	28	90	15	22	60	33
24876	1.580/90 N-16*	28	90	16	22	60	32

* The assembly holes marked with * are cylindrical holes without fins.

Cylindrical handles

"Soft-touch" technopolymer

MATERIAL

High-resilience polypropylene based (PP) technopolyme, coated with "soft-touch" thermoplastic elastomer (TPE) chemically bonded, hardness 70 Shore A, black colour, matte finish.

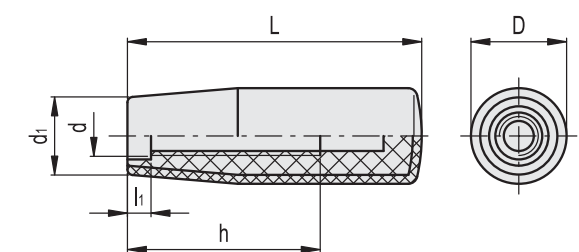
The coating material is certified in compliance with FDA (U.S. Food and Drug Administration).

STANDARD EXECUTION

Threaded blind hole.

FEATURES AND APPLICATIONS

The coating, with "soft-touch" elastomer, improves the grip even in the presence of oils, greases and sweat from the hand. For this reason it is suitable for fitness machines, tools and machines for gardening and goods transport, high-precision instruments and disability aids.



Code	Description	D	L	d	d1	h	li	Δ
124861	1.680/65-M8 SOFT	24.5	65	M8	20.5	30	7	34
124862	1.680/65-M10 SOFT	24.5	65	M10	20.5	40	7	33
124864	1.680/80-M8 SOFT	26.5	80	M8	21	40	7	46
124865	1.680/80-M10 SOFT	26.5	80	M10	21	55	7	45
124866	1.680/80-M12 SOFT	26.5	80	M12	21	55	7	44
124871	1.680/90-M10 SOFT	28.5	90	M10	22	56	7	51
124872	1.680/90-M12 SOFT	28.5	90	M12	22	58	10	50

Bridge handles

Technopolymer

STANDARD EXECUTIONS

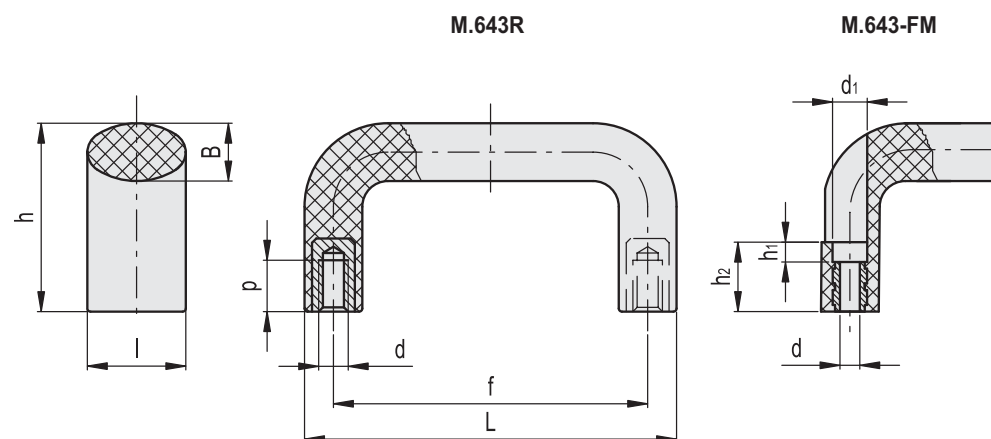
Brass bosses, threaded blind holes.

- **M.643**: high-resilience polypropylene based (PP) technopolymer, black colour, matte finish.
- **M.643R** (reduced version h=45): glass-fibre reinforced polyamide based (PA) technopolymer, black colour, matte finish.
- **M.643-FM**: high-resilience polypropylene based (PP) technopolymer, black colour, matte finish.

Brass bosses, pass-through holes for cylindrical-head screws with hexagon socket.

TECHNICAL DATA

Tensile stress and impact strength: F1, F2, L1 and L2 values reported in the table are the result of breaking tests carried out with the appropriate dynamometric equipment under the test conditions shown in the figure with ambient temperature.



M.643R

Code	Description	L	f	d6H	h	B	l	p	F1 [N]	F2 [N]	L1 [J]	L2 [J]	Δ
37353	M.643R/200 B-M8	196	179±1	M8	45	15	27	13	4000	3500	25	25	118

M.643-FM

Code	Description	L	f	d	d1	h	h1	h2	B	l	F1 [N]	F2 [N]	L1 [J]	L2 [J]	Δ
137301	M.643 FM/100 B-5	100	86±0.5	5.4	8.5	44	5.5	20.5	14	23	3000	2200	11	9	45
137311	M.643 FM/140 B-6	134	117±0.5	6.4	10.5	49	6	21	15	25	2000	2800	11	9	64
137331	M.643 FM/150 B-6	148	132±0.5	6.4	10.5	53	8.5	23.5	16	26	1900	1900	11	9	70
137351	M.643 FM/200 B-6	196	179±1	6.4	10.5	57	6	21	16	27	1900	1900	11	13	89

Adapters for assembly on tubes of M.643-FM handles

Technopolymer

MATERIAL

Glass-fibre reinforced polyamide based (PA) technopolymer, black colour, matte finish.

FEATURES AND APPLICATIONS

The adapters allow assembling M.643-FM handles on round tubes with a diameter between 28.6 mm and 32 mm.

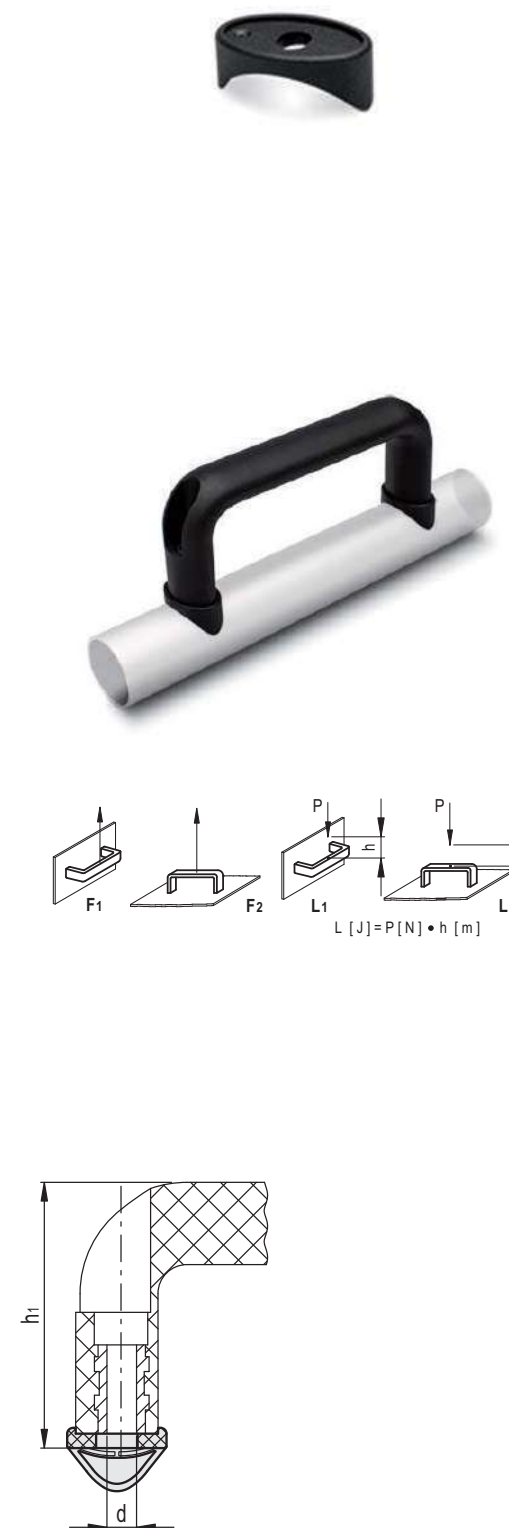
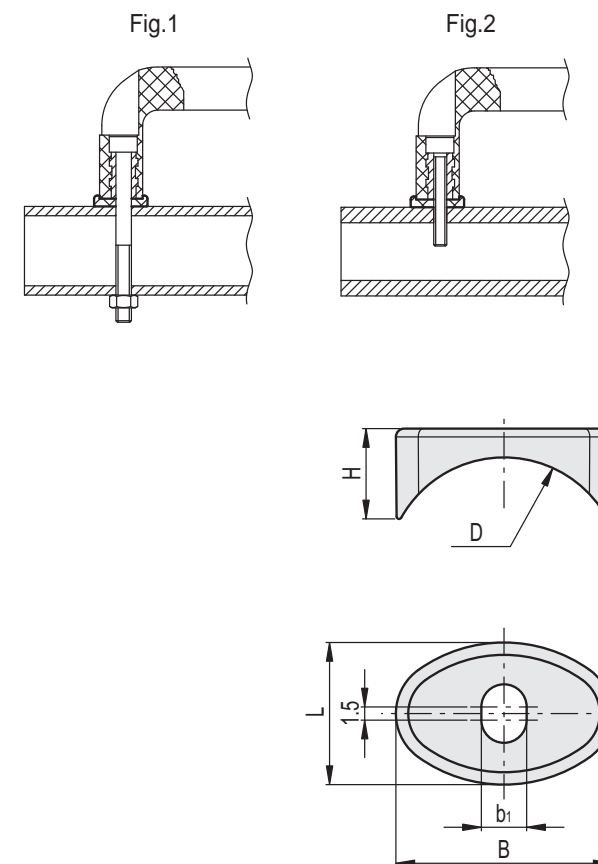
MOUNTING

- Plain hole passing completely through the tube with a nut on the outside (Fig.1).
- Threaded hole in the tube wall for tubes with thickness > 2mm (Fig.2).

TECHNICAL DATA

Tensile stress and impact strength: F1, F2, L1 and L2 values reported in the table are the result of breaking tests carried out with the appropriate dynamometric equipment under the test conditions shown in the figure with ambient temperature.

Code	Description	Handle adapter	
		Code	Description
260051	ADT-M.643-FM/100	137301	M.643 FM/100 B-5
260053	ADT-M.643-FM/140	137311	M.643 FM/140 B-6



Code	Description	L	d	D	H	h1	B	b1	D Tube	F1 [N]	F2 [N]	L1 [J]	L2 [J]	C# [Nm]	Δ
260051	ADT-M.643-FM/100	17	5	28.6	11	45	26	5.5	28.6+32	1600	2500	9	7	5	3
260053	ADT-M.643-FM/140	19	6	28.6	13	51	28.5	6.5	28.6+32	1700	2900	9	7	6	4

Maximum tightening torque.

Tapered handles

Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, glossy finish.

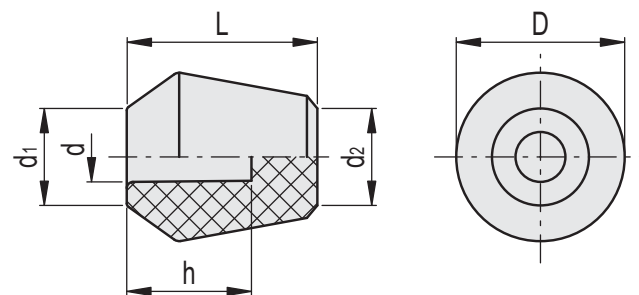
STANDARD EXECUTION

Plain blind hole.

The elastic coupling, by press-fit assembly on h9 tolerance drawn stock bars, is not affected by vibrations and prevents the handle from slipping off (see Technical Data on page A13).

ASSEMBLY INSTRUCTIONS

Fit the handle onto slight chamfered shaft end and push as far as possible by hand or by means of a small press. Alternatively it is possible to tap the handle with a plastic or wooden mallet until firmly in place. In this case we strongly recommend to use a cloth or other suitable soft material over the product to avoid any surface damage.



Code	Description	D	L	d	d1	d2	h	△△
47011	P.390/25-8	25	28	8	15	16	13	12
47111	P.390/30-10	30	34	10	18	19	18	20
47211	P.390/35-12	35	39	12	20	22	20	32
47311	P.390/40-14	40	45	14	23	25	24	47

Tapered handles

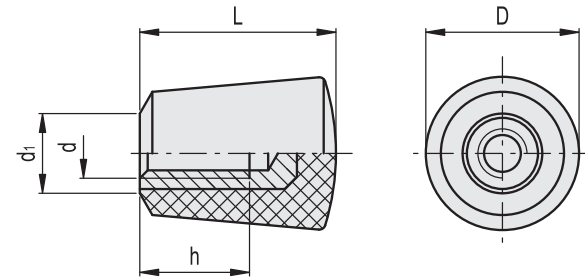
Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, glossy finish.

STANDARD EXECUTION

Brass boss, tapped blind hole.



Code	Description	D	L	d6H	d1	h	△△
23801	I.307/20 B-M5	15	20	M5	7	12	6
23901	I.307/25 B-M6	20	26	M6	10	16	12
23902	I.307/25 B-M8	20	26	M8	10	15	14
24001	I.307/30 B-M10	25	32	M10	13	17	25

Knurled handle

"Soft-touch" technopolymer

MATERIAL

Glass-fibre reinforced polyamide based (PA) technopolymer coated with "soft-touch" thermoplastic elastomer (TPE), hardness 90 Shore A, black colour, matte finish. The coating material is certified in compliance with FDA (U.S. Food and Drug Administration).

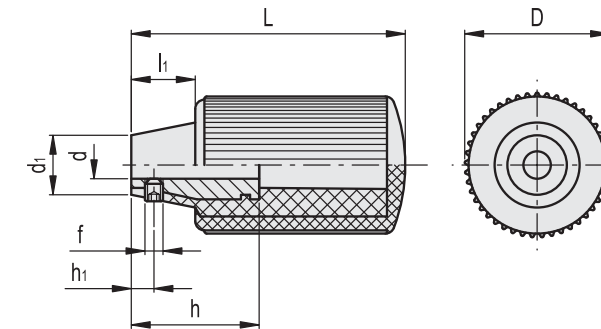
STANDARD EXECUTION

Brass boss, plain blind hole.

Fitting to the shaft by means of a black-oxide steel socket set screw according to ISO 4029 (grub screws with hexagon socket and cup end).

FEATURES AND APPLICATIONS

The coating, with "soft-touch" elastomer, improves the grip even in the presence of oils, greases and sweat from the hand. For this reason it is suitable for fitness machines, tools and machines for gardening and goods transport, high-precision instruments and disability aids.



Code	Description	D	L	dH7	d1	h	h1	l1	f	△△
120402	I.168/60 B-6-SOFT	30	60	6	13	28	5	14	M4	59

Tapered handles

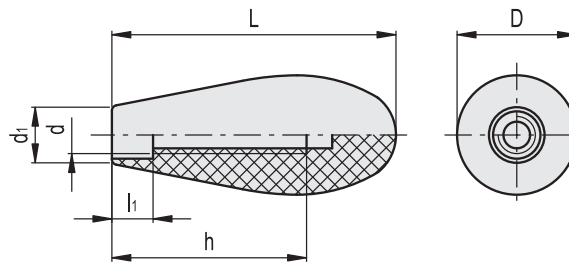
Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, glossy finish.

STANDARD EXECUTION

Threaded blind hole.



Code	Description	D	L	d	d1	h	li	Δ
19301	I.137/70-M8	29	69	M8	14	45	10	37
19302	I.137/70-M10	29	69	M10	14	45	15	35
19401	I.137/80-M12	35	79	M12	17	55	12	60

Shaped handle

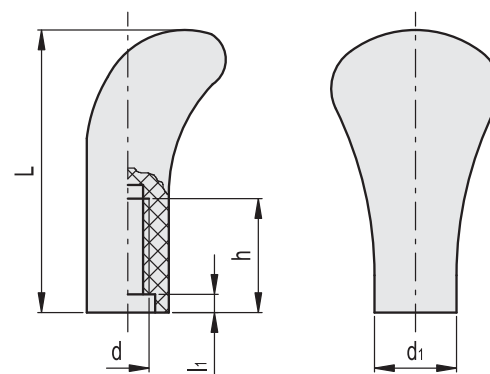
Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, glossy finish.

STANDARD EXECUTION

Threaded blind hole.



Code	Description	L	d	d1	h	li	Δ
20801	I.218/60-M10	62	M10	18	25	4	32

Tapered handles

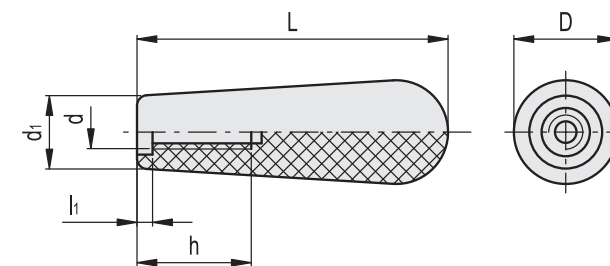
Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, glossy finish.

STANDARD EXECUTION

Threaded blind hole.



Code	Description	D	L	d	d1	h	li	Δ
19701	I.142/60-M8	20	60	M8	14	20	3	17

Tapered handles

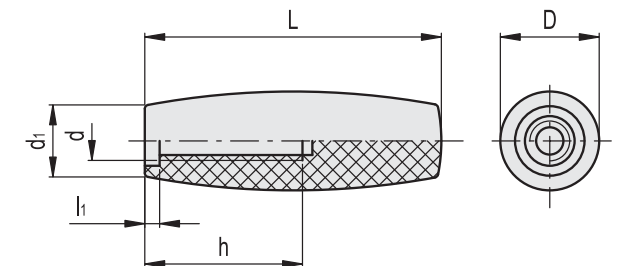
Duroplast

MATERIAL

Phenolic based (PF) Duroplast, black colour, glossy finish.

STANDARD EXECUTION

Threaded blind hole.



Code	Description	D	L	d	d1	h	li	Δ
20401	I.195/60-M8	20	60	M8	14	30	4	18

Cylindrical handles

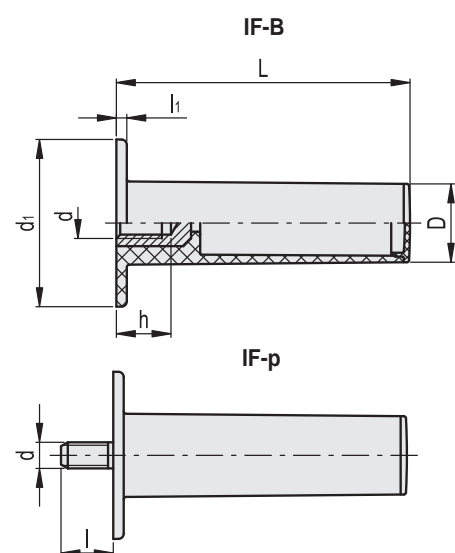
with protection, technopolymer

MATERIAL

Glass-fibre reinforced polyamide based (PA) technopolymer, black colour, matte finish.

STANDARD EXECUTIONS

- **IF-B**: brass boss, threaded blind hole.
- **IF-p**: zinc-plated steel threaded stud, chamfered flat end according to UNI 947 : ISO 4753 (see Technical Data on page A11).



IF-B

Code	Description	D	L	d6H	d1	h	l1	△△
26801	IF.112 B-M8	30	112	M8	64	20	4	73
26802	IF.112 B-M10	30	112	M10	64	18	4	75

IF-p

Code	Description	D	L	d6g	d1	l	l1	△△
26824	IF.112 p-M8x20	30	112	M8	64	20	4	78
26834	IF.112 p-M10x20	30	112	M10	64	20	4	87

Cylindrical handles

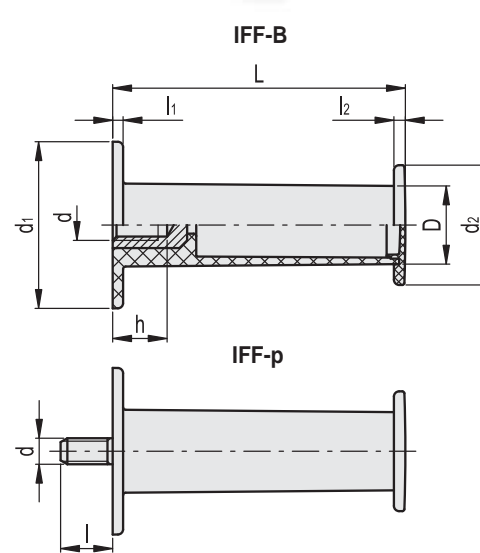
with double protection, technopolymer

MATERIAL

Glass-fibre reinforced polyamide based (PA) technopolymer, black colour, matte finish.

STANDARD EXECUTIONS

- **IFF-B**: brass boss, threaded blind hole.
- **IFF-p**: zinc-plated steel threaded stud, chamfered flat end according to UNI 947: ISO 4753 (see Technical Data on page A11).



IFF-B

Code	Description	D	L	d6H	d1	d2	h	l1	l2	△△
26901	IFF.112 B-M8	30	112	M8	64	46	20	4	4	78
26902	IFF.112 B-M10	30	112	M10	64	46	18	4	4	80

IFF-p

Code	Description	D	L	d6g	d1	d2	l	l1	l2	△△
26924	IFF.112 p-M8x20	30	112	M8	64	46	20	4	4	83
26934	IFF.112 p-M10x20	30	112	M10	64	46	20	4	4	92

Cylindrical handles

Technopolymer

MATERIAL

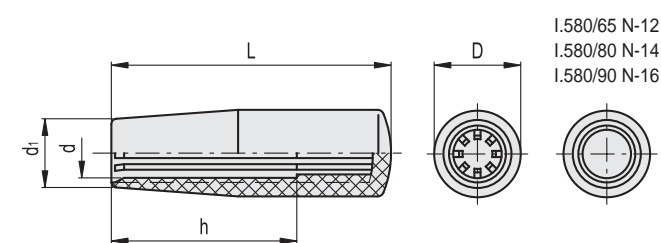
High-resilience polypropylene based (PP) technopolymer, black colour, matte finish.

STANDARD EXECUTION

Blind hole.
The elastic coupling, by press-fit assembly on h9 tolerance drawn stock bars, is not affected by vibrations and prevents the handle from slipping off (see Technical Data on page A13).

ASSEMBLY INSTRUCTIONS

Fit the handle onto slight chamfered shaft end and push as far as possible by hand or by means of a small press. Alternatively it is possible to tap the handle with a plastic or wooden mallet until firmly in place. In this case we strongly recommend to use a cloth or other suitable soft material over the product to avoid any surface damage.



Code	Description	D	L	d	d1	h	△△
24821	1.580/40 N-8	18	40	8	15	28	8
24831	1.580/50 N-10	21	50	10	17	35	10
24846	1.580/65 N-10	23	65	10	19	45	17
24848	1.580/65 N-12*	23	65	12	19	45	16
24861	1.580/80 N-12	26	80	12	21	50	25
24863	1.580/80 N-14*	26	80	14	21	50	24
24875	1.580/90 N-15	28	90	15	22	60	33
24876	1.580/90 N-16*	28	90	16	22	60	32

* The assembly holes marked with * are cylindrical holes without fins.

Cylindrical handles

"Soft-touch" technopolymer

MATERIAL

High-resilience polypropylene based (PP) technopolyme, coated with "soft-touch" thermoplastic elastomer (TPE) chemically bonded, hardness 70 Shore A, black colour, matte finish.

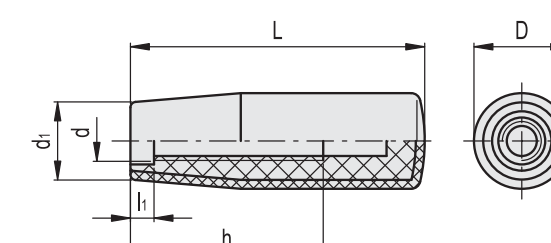
The coating material is certified in compliance with FDA (U.S. Food and Drug Administration).

STANDARD EXECUTION

Threaded blind hole.

FEATURES AND APPLICATIONS

The coating, with "soft-touch" elastomer, improves the grip even in the presence of oils, greases and sweat from the hand. For this reason it is suitable for fitness machines, tools and machines for gardening and goods transport, high-precision instruments and disability aids.



Code	Description	D	L	d	d1	h	l1	△△
124861	1.680/65-M8 SOFT	24.5	65	M8	20.5	30	7	34
124862	1.680/65-M10 SOFT	24.5	65	M10	20.5	40	7	33
124864	1.680/80-M8 SOFT	26.5	80	M8	21	40	7	46
124865	1.680/80-M10 SOFT	26.5	80	M10	21	55	7	45
124866	1.680/80-M12 SOFT	26.5	80	M12	21	55	7	44
124871	1.680/90-M10 SOFT	28.5	90	M10	22	56	7	51
124872	1.680/90-M12 SOFT	28.5	90	M12	22	58	10	50

Cylindrical lobe handle

"Soft-touch" technopolymer

MATERIAL

High-resilience polypropylene based (PP) technopolymer, coated with "soft-touch" thermoplastic elastomer (TPE) chemically bonded, hardness 70 Shore A, black colour, matte finish.

The coating material is certified in compliance with FDA (U.S. Food and Drug Administration).

STANDARD EXECUTION

Plain blind hole.

The elastic coupling, by press-fit assembly on h9 tolerance drawn stock bars, is not affected by vibrations and prevents the handle from slipping off (see Technical Data on page A13).

FEATURES AND APPLICATIONS

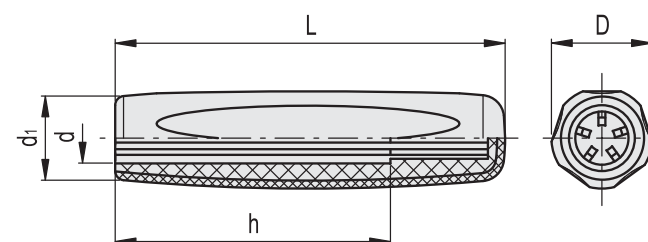
The coating, with "soft-touch" elastomer, improves the grip even in the presence of oils, greases and sweat from the hand. For this reason it is suitable for fitness machines, tools and machines for gardening and goods transport, high-precision instruments and disability aids.

ASSEMBLY INSTRUCTIONS

Fit the handle onto slight chamfered shaft end and push as far as possible by hand or by means of a small press. Alternatively it is possible to tap the handle with a plastic or wooden mallet until firmly in place. In this case we strongly recommend to use a cloth or other suitable soft material over the product to avoid any surface damage.



ERGOSTYLE®



Code	Description	D	L	d	d1	h	ΔΔ
286151-C1	EGH.85 N-8-C1-SOFT	22	85	8	18	60	30

Cylindrical handles

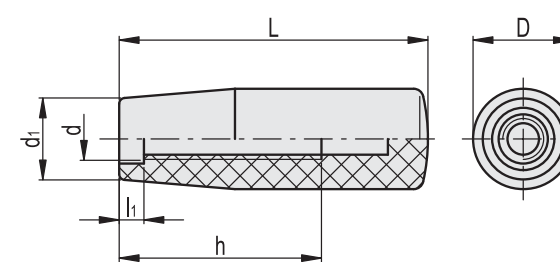
Technopolymer

MATERIAL

Glass-fibre reinforced polyamide based (PA) technopolymer, black or red colour, matte finish.

ASSEMBLY

Threaded blind hole.



■ C9 RAL9005 ■ C6 RAL3000

Code	Description	D	L	d	d1	h	li	ΔΔ
124791	1.780/65-M8-C9	24.5	65	M8	20.5	30	7	34
124792	1.780/65-M10-C9	24.5	65	M10	20.5	40	7	34
124806	1.780/80-M8-C9	26.5	80	M8	21	40	7	45
124807	1.780/80-M10-C9	26.5	80	M10	21	55	7	45
124808	1.780/80-M12-C9	26.5	80	M12	21	55	7	45
124817	1.780/90-M10-C9	28.5	90	M10	22.5	55	7	50
124818	1.780/90-M12-C9	28.5	90	M12	22.5	58	7	50
124801	1.780/65-M8-C6	24.5	65	M8	20.5	30	7	34
124812	1.780/80-M10-C6	26.5	80	M10	21	55	7	45
124822	1.780/90-M12-C6	28.5	90	M12	22.5	58	7	50

Tapered handles

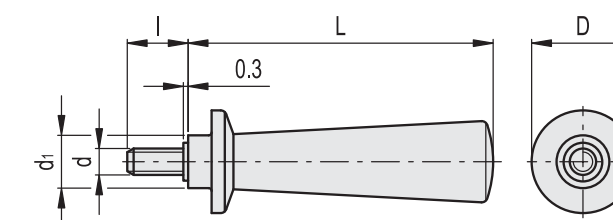
Duroplast

MATERIAL

Phenolic based (PF) Duroplast body, polyamide based (PA) technopolymer flange, black colour, glossy finish.

STANDARD EXECUTION

Zinc-plated steel threaded stud, chamfered flat end according to UNI 947 : ISO 4753 (see Technical Data on page A11).



Code	Description	D	L	d6g	d1	l	ΔΔ
20306	1.167/103 p-M8x16	35	104	M8	18	16	90
20311	1.167/103 p-M8x25	35	104	M8	18	25	94