

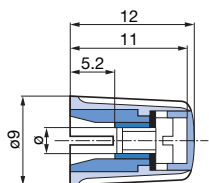
- **modular collet knob system for various shaft diameters**
- **excellent surface finish (matt/glossy)**
- **special colors on request**



Knob program additions on page 46, soft touch and new look knobs on page 47 -48

Knob ø 9mm

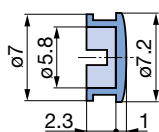
Knob



Marking	ø	grey		black	
		matt	glossy	matt	glossy
	2	020-1015	020-1010	020-1025	020-1020
	3	020-1115	020-1110	020-1125	020-1120
	1/8"	020-1215	020-1210	020-1225	020-1220
	2	021-1015	021-1010	021-1025	021-1020
	3	021-1115	021-1110	021-1125	021-1120
	1/8"	021-1215	021-1210	021-1225	021-1220

packing unit: 100 pieces

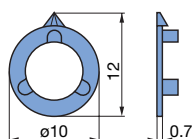
Cap



Marking	Surface	grey	black	red	blue	yellow	green
	matt	040-1015	040-1025	040-1035	040-1045	040-1055	040-1065
	glossy	040-1010	040-1020	040-1030	040-1040	040-1050	040-1060
	matt	040-1615	040-1625	040-1635	040-1645	040-1655	040-1665
	glossy	040-1610	040-1620	040-1630	040-1640	040-1650	040-1660

packing unit: 100 pieces

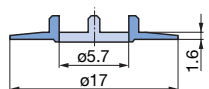
Pointer



Surface	grey	black	red	blue	yellow	green
matt	041-1015	041-1025	041-1035	041-1045	041-1055	041-1065
glossy	041-1010	041-1020	041-1030	041-1040	041-1050	041-1060

packing unit: 100 pieces

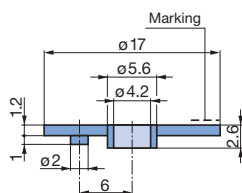
Pointer dial



Marking	Surface	grey	black	red
	matt	042-1915	042-1925	042-1935
	glossy	042-1910	042-1920	042-1930

packing unit: 100 pieces

Stator



	with line grey: glossy	30° black: glossy
	043-2111	043-2221

packing unit: 100 pieces

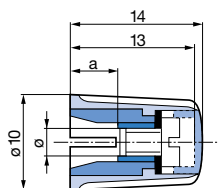
Figure dial (same dimension as pointer dial)

Marking										
	-	0-11	1-12	0-9	1-10	0-5	1-6	0-F	-	-
ø 17 mm	042-1000	042-1100	042-1200	042-1300	042-1400	042-1500	042-1600	042-1700	042-1800	042-1802

packing unit: 100 pieces

Knob ø 10 mm

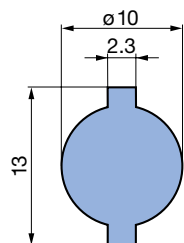
Knob



Marking	a	ø	grey 		black 	
			matt	glossy	matt	glossy
without line 	4,5	2	020-2015	020-2010	020-2025	020-2020
	5,2	3	020-2115	020-2110	020-2125	020-2120
	5,2	1/8"	020-2215	020-2210	020-2225	020-2220
	5,2	4	020-2315	020-2310	020-2325	020-2320
with line 	4,5	4	021-2015	021-2010	021-2025	021-2020
	5,2	3	021-2115	021-2110	021-2125	021-2120
	5,2	1/8"	021-2215	021-2210	021-2225	021-2220
	5,2	4	021-2315	021-2310	021-2325	021-2320

packing unit: 100 pieces

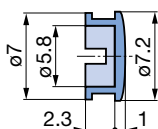
Wing knob



Marking	a	ø	grey 		black 	
			matt	glossy	matt	glossy
without line 	4,5	2	022-2015	022-2010	022-2025	022-2020
	5,2	3	022-2115	022-2110	022-2125	022-2120
	5,2	1/8"	022-2215	022-2210	022-2225	022-2220
	5,2	4	022-2315	022-2310	022-2325	022-2320
with line 	4,5	2	023-2015	023-2010	023-2025	023-2020
	5,2	3	023-2115	023-2110	023-2125	023-2120
	5,2	1/8"	023-2215	023-2210	023-2225	023-2220
	5,2	4	023-2315	023-2310	023-2325	023-2320

packing unit: 100 pieces

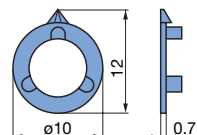
Cap



Marking	Surface	grey 	black 	red 	blue 	yellow 	green 
without line 	matt	040-1015	040-1025	040-1035	040-1045	040-1055	040-1065
	glossy	040-1010	040-1020	040-1030	040-1040	040-1050	040-1060
with line 	matt	040-1615	040-1625	040-1635	040-1645	040-1655	040-1665
	glossy	040-1610	040-1620	040-1630	040-1640	040-1650	040-1660

packing unit: 100 pieces

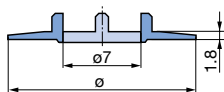
Pointer



Surface	grey 	black 	red 	blue 	yellow 	green 
matt	041-2015	041-2025	041-2035	041-2045	041-2055	041-2065
glossy	041-2010	041-2020	041-2030	041-2040	041-2050	041-2060

packing unit: 100 pieces

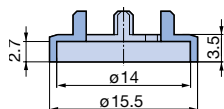
Pointer dial



Marking	Surface	Ø	grey	black	red
	matt	17	-	042-2928	-
	glossy	17	-	042-2923	-
	matt	20	042-2915	042-2925	042-2935
	glossy	20	042-2910	042-2920	042-2930

packing unit: 100 pieces

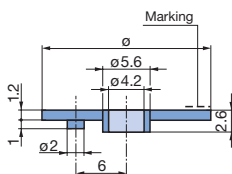
Nut cover



Marking	Surface	grey	black
without line	matt	044-2015	044-2025
	glossy	044-2010	044-2020
with line	matt	044-2115	044-2125
	glossy	044-2110	044-2120

packing unit: 100 pieces

Stator



Marking	Ø	with line grey: glossy	30° black: glossy
	17	043-2111	043-2221
	20	043-2110	043-2220

packing unit: 100 pieces

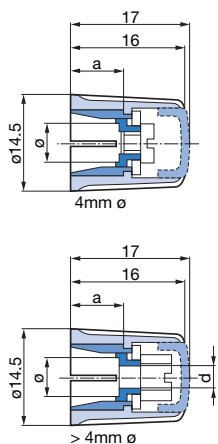
Figure dial (same dimension as pointer dial)

Marking	-	30	30	36	36	60	60	22,5	-	-
	-	0-11	1-12	0-9	1-10	0-5	1-6	0-F	-	-
Ø 17 mm	042-2001	042-2101	042-2201	042-2301	042-2401	-	-	042-2701	042-2801	-
Ø 20 mm	042-2000	042-2100	042-2200	042-2300	042-2400	042-2500	042-2600	042-2700	042-2800	042-2802

packing unit: 100 pieces

Knob ø 14,5 mm

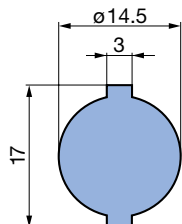
Knob

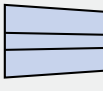
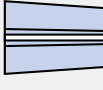


Marking	a	d	ø	grey 		black 	
				matt	glossy	matt	glossy
	5,2	-	3	020-3115	020-3110	020-3125	020-3120
	5,2	-	1/8"	020-3215	020-3210	020-3225	020-3220
	5,2	-	4	020-3315	020-3310	020-3325	020-3320
	7,0	3,2	6	020-3415	020-3410	020-3425	020-3420
	7,0	3,2	1/4"	020-3515	020-3510	020-3525	020-3520
	5,2	-	3	021-3115	021-3110	021-3125	021-3120
	5,2	-	1/8"	021-3215	021-3210	021-3225	021-3220
	5,2	-	4	021-3315	021-3310	021-3325	021-3320
	7,0	3,2	6	021-3415	021-3410	021-3425	021-3420
	7,0	3,2	1/4"	021-3515	021-3510	021-3525	021-3520

packing unit: 100 pieces

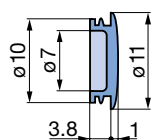
Wing knob



Marking	a	d	ø	grey 		black 	
				matt	glossy	matt	glossy
	5,2	-	3	022-3115	022-3110	022-3125	022-3120
	5,2	-	1/8"	022-3215	022-3210	022-3225	022-3220
	5,2	-	4	022-3315	022-3310	022-3325	022-3320
	7,0	3,2	6	022-3415	022-3410	022-3425	022-3420
	7,0	3,2	1/4"	022-3515	022-3510	022-3525	022-3520
	5,2	-	3	023-3115	023-3110	023-3125	023-3120
	5,2	-	1/8"	023-3215	023-3210	023-3225	023-3220
	5,2	-	4	023-3315	023-3310	023-3325	023-3320
	7,0	3,2	6	023-3415	023-3410	023-3425	023-3420
	7,0	3,2	1/4"	023-3515	023-3510	023-3525	023-3520

packing unit: 100 pieces

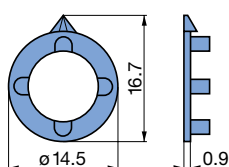
Cap



Marking	Surface	grey 	black 	red 	blue 	yellow 	green 
	matt	040-3015	040-3025	040-3035	040-3045	040-3055	040-3065
	glossy	040-3010	040-3020	040-3030	040-3040	040-3050	040-3060
	matt	040-3615	040-3625	040-3635	040-3645	040-3655	040-3665
	glossy	040-3610	040-3620	040-3630	040-3640	040-3650	040-3660

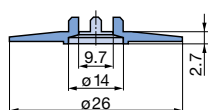
packing unit: 100 pieces

Pointer



Surface	grey 	black 	red 	blue 	yellow 	green 
matt	041-3015	041-3025	041-3035	041-3045	041-3055	041-3065
glossy	041-3010	041-3020	041-3030	041-3040	041-3050	041-3060

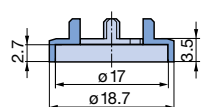
packing unit: 100 pieces



Pointer dial

Marking	Surface	grey	black	red
	matt	042-3915	042-3925	042-3935
	glossy	042-3910	042-3920	042-3930

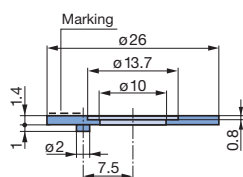
packing unit: 100 pieces



Nut cover

Marking	Surface	grey	black	red
	without line	044-3015	044-3025	044-3035
	glossy	044-3010	044-3020	044-3030
	with line	044-3115	044-3125	044-3135
	glossy	044-3110	044-3120	044-3130
	only for wing with knob	044-3215	044-3225	044-3235
	glossy	044-3210	044-3220	044-3230

packing unit: 100 pieces



Stator

Marking	with line, grey: glossy	30° black: glossy
	043-3110	043-3220

packing unit: 100 pieces

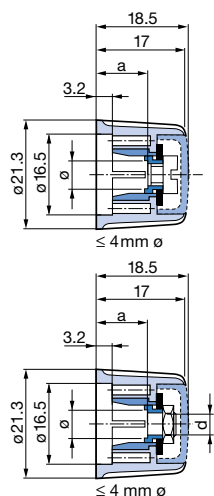
Figure dial (same dimension as pointer dial)

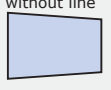
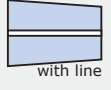
Marking										
ø 26 mm	042-3000	042-3100	042-3200	042-3300	042-3400	042-3500	042-3600	042-3700	042-3800	042-3802
ø 44 mm	042-3010	-	-	-	-	-	-	-	-	-

packing unit: 100 pieces

Knob ø 21 mm

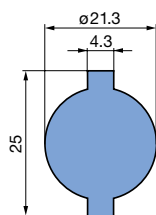
Knob

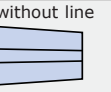
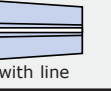


Marking	a	d	ø	grey 		black 	
				matt	glossy	matt	glossy
	8,3	-	4	020-4315	020-4310	020-4325	020-4320
	10	4,05	6	020-4415	020-4410	020-4425	020-4420
	10	3,2	1/4"	020-4515	020-4510	020-4525	020-4520
	8,3	-	4	021-4315	021-4310	021-4325	021-4320
	10	4,05	6	021-4415	021-4410	021-4425	021-4420
	10	3,2	1/4"	021-4515	021-4510	021-4525	021-4520

packing unit: 100 pieces

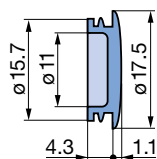
Wing knob

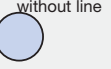
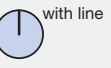


Marking	a	d	ø	grey 		black 	
				matt	glossy	matt	glossy
	8,3	-	4	022-4315	022-4310	022-4325	022-4320
	10	4,05	6	022-4415	022-4410	022-4425	022-4420
	10	3,2	1/4"	022-4515	022-4510	022-4525	022-4520
	8,3	-	4	023-4315	023-4310	023-4325	023-4320
	10	4,05	6	023-4415	023-4410	023-4425	023-4420
	10	3,2	1/4"	023-4515	023-4510	023-4525	023-4520

packing unit: 100 pieces

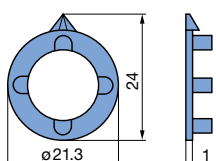
Cap



Marking	Surface	grey 	black 	red 	blue 	yellow 	green 
	matt	040-4015	040-4025	040-4035	040-4045	040-4055	040-4065
	glossy	040-4010	040-4020	040-4030	040-4040	040-4050	040-4060
	matt	040-4615	040-4625	040-4635	040-4645	040-4655	040-4665
	glossy	040-4610	040-4620	040-4630	040-4640	040-4650	040-4660

packing unit: 100 pieces

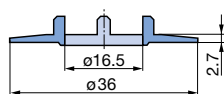
Pointer



Surface	grey 	black 	red 	blue 	yellow 	green 
matt	041-4015	041-4025	041-4035	041-4045	041-4055	041-4065
glossy	041-4010	041-4020	041-4030	041-4040	041-4050	041-4060

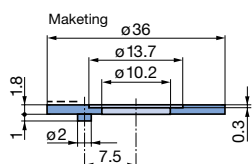
packing unit: 100 pieces

Pointer dial



Marking	Surface	grey 	black 	red 
	matt	042-4915	042-4925	042-4935
	glossy	042-4910	042-4920	042-4930

packing unit: 100 pieces

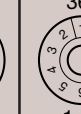
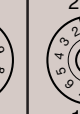


Stator

Marking	with line, grey: glossy	30° black: glossy	15° black: glossy
  	043-4110	043-4220	043-4230

packing unit: 100 pieces

Figure dial (same dimension as pointer dial)

Marking											
	0-11	1-12	0-9	1-10	1-13	0-23	1-24	0-23	1-24	0-23	1-24
ø 36 mm	042-4000	042-4100	042-4200	042-4300	042-4400	042-4700	042-4900	042-4901	042-4800	042-4802	
ø 44 mm	042-4010	-	-	-	-	-	-	-	-	-	-
ø 53 mm	042-4020	-	-	-	-	-	-	-	-	-	-

packing unit: 100 pieces

Marking	d	ø	grey		black	
			matt	glossy	matt	glossy
without line	4,05	6	020-5415	020-5410	020-5425	020-5420
	3,2	1/4"	020-5515	020-5510	020-5525	020-5520
	4,05	6	021-5415	021-5410	021-5425	021-5420
	3,2	1/4"	021-5515	021-5510	021-5525	021-5520
with line						

Technical drawing of a blue spherical object with a vertical neck. The neck has a diameter of 4.5 and a height of 33. The main sphere has a diameter of 28.

Marking	d	ø	grey		black	
			matt	glossy	matt	glossy
without line	4,05	6	022-5415	022-5410	022-5425	022-5420
	3,2	1/4"	022-5515	022-5510	022-5525	022-5520
with line	4,05	6	023-5415	023-5410	023-5425	023-5420
	3,2	1/4"	023-5515	023-5510	023-5525	023-5520

Technical drawing of a flange with the following dimensions:

- Outer diameter: $\varnothing 22.4$
- Inner diameter: $\varnothing 18$
- Total thickness: $\varnothing 23.5$
- Radial thickness of the top flange: 4.3
- Radial thickness of the bottom flange: 1.3

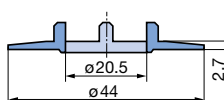
Marking	Surface	grey	black	red	blue	yellow	green
without line	2	040-5015	040-5025	040-5035	040-5045	040-5055	040-5065
	3	040-5010	040-5020	040-5030	040-5040	040-5050	040-5060
with line	1/8"	040-5615	040-5625	040-5635	040-5645	040-5655	040-5665
	2	040-5610	040-5620	040-5630	040-5640	040-5650	040-5660

Technical drawing of a circular part. The front view shows a circle with an outer diameter of 31 and an inner hole diameter of 28. There are four raised features around the inner hole. The side view shows the height of these features is 1.1.

Surface	grey	black	red	blue	yellow	green
matt	041-5015	041-5025	041-5035	041-5045	041-5055	041-5065
glossy	041-5010	041-5020	041-5030	041-5040	041-5050	041-5060

42

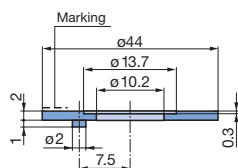
Pointer dial



Marking	Surface	grey 	black 	red 
	matt	042-5915	042-5925	042-5935
	glossy	042-5910	042-5920	042-5930

packing unit: 100 pieces

Stator



	with line, grey: 	30° black: 	15° black: 
	glossy	glossy	glossy
	043-5110	043-5220	043-5230

packing unit: 100 pieces

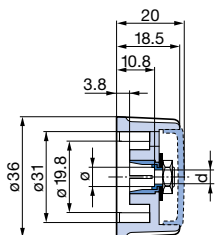
Figure dial (same dimension as pointer dial)

Marking		30° 	30° 	27,7 	15° 	15° 		
	-	0-11	1-12	1-13	0-23	1-24	-	-
ø 44 mm	042-5000	042-5100	042-5200	042-5700	042-5900	042-5901	042-5800	042-5802
ø 53 mm	042-5020							
ø 63 mm	042-5030							

packing unit: 100 pieces

Knob ø 36 mm

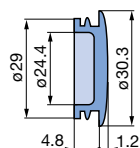
Knob



Marking	d	ø	grey 		black 	
			matt	glossy	matt	glossy
	4,05	6	020-6415	020-6410	020-6425	020-6420
	3,2	1/4"	020-6515	020-6510	020-6525	020-6520
	4,05	6	021-6415	021-6410	021-6425	021-6420
	3,2	1/4"	021-6515	021-6510	021-6525	021-6520

packing unit: 50 pieces

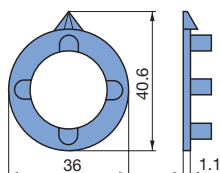
Cap



Marking	Surface	grey 	black 	red 
	matt	040-6015	040-6025	040-6035
	glossy	040-6010	040-6020	040-6030
	matt	040-6615	040-6625	040-6635
	glossy	040-6610	040-6620	040-6630

packing unit: 100 pieces

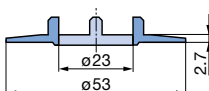
Pointer



Surface	grey 	black 	red 
matt	041-6015	041-6025	041-6035
glossy	041-6010	041-6020	041-6030

packing unit: 100 pieces

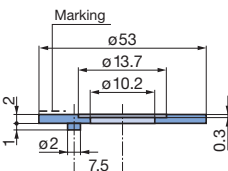
Pointer dial



Marking	Surface	grey 	black 	red 
	matt	042-6915	042-6925	042-6935
	glossy	042-6910	042-6920	042-6930

packing unit: 100 pieces

Stator



Marking	with line, grey: glossy 	30° black: glossy 
	043-6110	043-6220

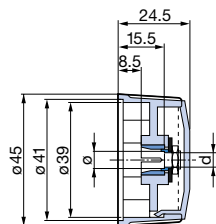
packing unit: 100 pieces

Figure dial (same dimension as pointer dial)

Marking						
	-	30° 0-11	30° 1-12	27,7° 1-13	-	-
ø 53 mm	042-6000	042-6100	042-6200	042-6700	042-6800	042-6802
ø 63 mm	042-6030	-	-	-	-	-

packing unit: 100 pieces

Knob ø 45 mm

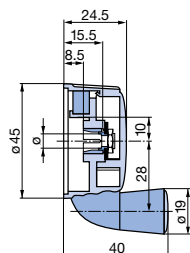


Knob

Marking	d	ø	grey: glossy	black: glossy
without line	4,05	6	020-7410	020-7420
	3,2	1/4"	020-7510	020-7520
with line	4,05	6	021-7410	021-7420
	3,2	1/4"	021-7510	021-7520

packing unit: 50 pieces

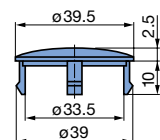
Crank Knob



Marking	d	ø	grey: glossy	black: glossy
without line	4,05	6	020-8410	020-8420

packing unit: 40 pieces

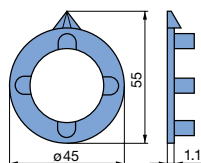
Cap



Marking	Surface	grey	black	red
without line	glossy	040-8010	040-8020	040-8030

packing unit: 100 pieces

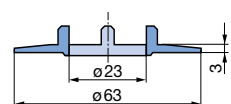
Pointer



Surface	grey	black	red
glossy	041-7110	041-7120	041-7130

packing unit: 100 pieces

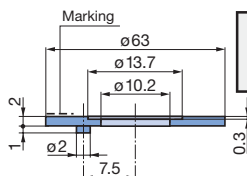
Pointer dial



Marking	Surface	grey	black
	glossy	042-7910	042-7920

packing unit: 100 pieces

Stator



Marking	with line, grey: glossy	30° black: glossy
	043-7110	043-7220

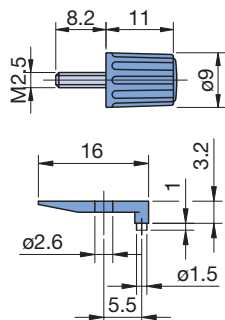
packing unit: 100 pieces

Figure dial (same dimension as pointer dial)

Marking	ø 63 mm	042-7000	042-7100	042-7200	042-7700	042-7800	042-7802

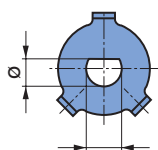
packing unit: 100 pieces

Knob Program Additions



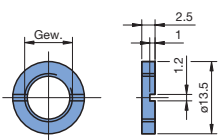
Locking set: Locks arrow dial or figure dial $\varnothing$ 20-63 mm on front panel (protection against unintentional turning)

Locking set, consisting of:	grey	black	clear transp.	clear transp. with line
Screw with knob	026-2010	026-2020		
Locking piece			026-2100	026-2200



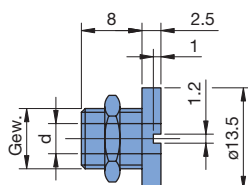
Anti-slip bracket. D-shape prevents slippage on shaft and incorrect knob mounting. For knobs $\varnothing$ 21, 28, 36 mm

Anti-slip bracket Corresponding shaft with flat	$\varnothing$	a	L	Order number
	4 mm	3,50 mm	7 mm	048-2000
	6 mm	4,60 mm	9 mm	048-2300
	6 mm	5,00 mm	9 mm	048-2100
	1/4"	5,08 mm	9 mm	048-2200



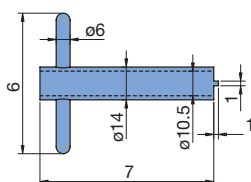
Starting with the knobs $\varnothing$ 14,5 mm, stators can be mounted directly underneath the slotted nut of the central mounting bushing of the switch.

Thread	M6 x 0.75	M7 x 0.75	M8 x 0.75	M10 x 0.75	3/8" - 32
Slotted nut	046-1000	046-1500	046-2000	046-3000	046-4000



Stators for knobs $\varnothing$ 14,5 mm or larger can be mounted directly to the bushing on the front panel in cases where the switch does not have a central mounting.

Threaded bushing with through-hole $\varnothing$ 6 mm	047-3000
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Tool for tightening of our slotted nuts and threaded bushings.

Tool	048-100
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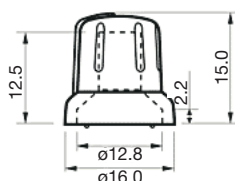
Knobs

soft touch and push-on

- Collet Knobs with "soft touch feel"
- Push-on Knobs with "soft touch" and hard feel



FLAT SIZE
6mm shaft Ø
4.5mm flat size
Specify orientation
of pointer to flat

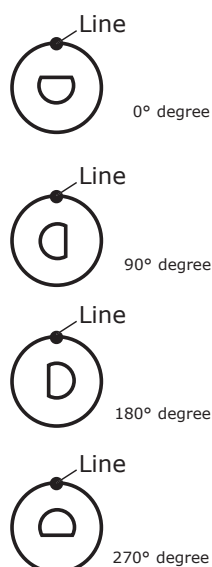


Push on Knobs (black) - two color in soft and hard touch

Soft (black), 16mm diameter, type K65		
Degree pointer to flat	Line color, white	Line color, blue
0 degree	K65-DRNP12000-03	K65-DRNP12000-05
90 degree	K65-DRNP12090-03	K65-DRNP12090-05
180 degree	K65-DRNP12180-03	K65-DRNP12180-05
270 degree	K65-DRNP12270-03	K65-DRNP12270-05

- Line color red, yellow, green on request
- Material: 1st shot: talc filled Polypropylene, 2nd shot: thermoplastic Elastomer
- Operating temperature: -30°C to +50°C

Line positioning for flattet shafts



Hard (black), 16mm diameter, type K66		
Degree pointer to flat	Line color, white	Line color, blue
0 degree	K66-DRNP12000-03	K66-DRNP12000-05
90 degree	K66-DRNP12090-03	K66-DRNP12090-05
180 degree	K66-DRNP12180-03	K66-DRNP12180-05
270 degree	K66-DRNP12270-03	K66-DRNP12270-05

- Line color red, yellow, green on request
- Material: talc filled Polypropylene
- Operating temperature: -30°C to +50°C

Two shot soft touch collet knobs (all black)



15 mm diameter type K60

Shaft diameter	without line	with white line
4mm	K60-S150-004	K60-S151-004
6mm	K60-S150-006	K60-S151-006
1/4 "	K60-S150-250	K60-S151-250

- Base Ø: 15.5 mm
- Height (inc. cap): 14.3 mm
- Shaft Depth: 7.0 mm

Fixing tools (for collet knobs 15 mm) type K51

only for 15 mm diameter	K51-1000-00
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21 mm diameter type K60

Shaft diameter	without line	with white line
4mm	K60-S210-004	K60-S211-004
6mm	K60-S210-006	K60-S211-006
1/4 "	K60-S210-250	K60-S211-250

packing unit: 100 pieces

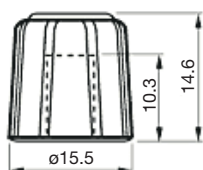
- Base Ø: 21.5 mm
- Height (inc. cap): 17.7 mm
- Shaft Depth: 10.0 mm
- Material: 1st shot: talc filled Polypropylene, 2nd shot: thermoplastic Elastomer
- Operating temperature: -30°C to +50°C



FLAT SIZE

6mm shaft Ø
4.5mm flat size

Specify orientation
of pointer to flat



Push on knobs

15 mm diameter without line, with D-shaft type K55

Shaft diameter / Flat size	with compression ring	without compression ring
6 mm / 4.5 mm	K55-DC150-006	K55-DR150-006

- Material: Nylon 6
- Operating temperature: -30°C to +50°C

Caps

Type K51

Knob diameter	without line	with white line	with white spot
15mm black	K51-C150-01	K51-C151-01	K51-C152-01
15mm grey	K51-C150-02	K51-C151-02	K51-C152-02
21mm black	K51-C210-01	K51-C211-01	K51-C212-01
21mm grey	K51-C210-02	K51-C211-02	K51-C212-02

- red, blue, yellow or green color, on request
- Material: Nylon 6
- Operating temperature: -30°C to +50°C