



**Combination knobs,
Disk, Nut cover**

- Black, RAL 9005
- Dust grey, RAL 7037

Covers

(depends on size/type)

- Black, RAL 9005
- Red, RAL F12/0-10
- Yellow, RAL F12/0-1
- Green, RAL F12/0-43
- Blue, RAL 5012
- Pebble grey, RAL 7032
- Dust grey, RAL 7037

Arrow disk

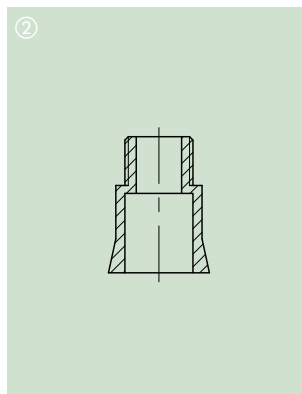
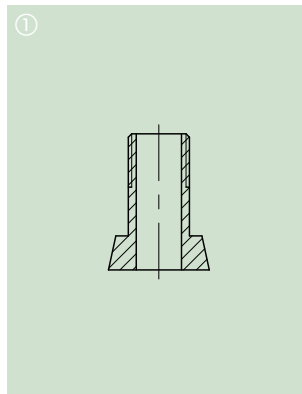
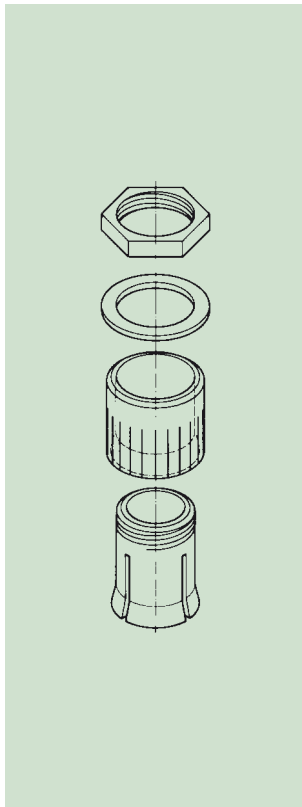
- Black, RAL 9005
- Red, RAL F12/0-10
- Dust grey, RAL 7037

Dial

- Transparent, bright surface with/without symbols

Stator

- Aluminium, marking black



THE PRODUCT

The name COMBINATION KNOBS stands for an exceedingly functional range of rotary buttons with a reliable collet fixture system. They offer a versatile range of possible applications as round knobs, wing knobs and spindle-shaped knobs with a large selection of accessories.

APPLICATIONS

Well-proven for electro-mechanical rotary potentiometers with shaft ends corresponding to DIN 41 591. Measuring and control technology, heating and air conditioning.

YOUR ADVANTAGE

Tried and tested collet fixture system. Convenient assembly of knobs from the front, easy adjusting (by means of an adjusting key – see accessory page 18). Tight fitting of knobs on the axis. Sizes 10 and 13 have blind holes and screw fixing. From knob size 23 up, through holes ① (sizes 16 + 20 steppt ②, except for axes 4 mm).

Round, wing and spindle-shaped knobs with the same standardized design and with matt surface.

A large variety of functional accessories, e.g. covers in seven colours and transparent dials. Easy push-on assembly.

We also produce our COMBINATION KNOBS in special colours, moq reserved. Please advise us of the colour and quantity you require.

MATERIAL

Knobs, covers, arrow disks and nut covers: ABS (UL 94 HB).

Dials: Polycarbonate.

Stator: Al-sheet 0.5 mm

with self-adhesive film.

Please refer to specifications on page 29.

COMBINATION KNOBS



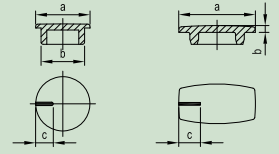
TYPES

Knob Ø	Torque (Nm)		ROUND KNOB		WING KNOB		SPINDLE-SHAPED KNOB	
	assembly	function	borehole		borehole		borehole	
9	0.4	0.4	4 mm					
10	0.4	0.4	3 mm					
	0.4	0.4	4 mm					
	0.4	0.4	1/8"					
13.5	0.5	0.5	4 mm					
	0.7	0.6	6 mm					
16	0.5	0.5	–				3 mm	
	0.6	0.5	4 mm					
	0.8	0.7	6 mm					
	0.8	0.7	1/4"					
20	0.8	0.7	4 mm					
	1.0	0.9	6 mm					
	1.0	0.9	1/4"					
23	1.0	0.8	4 mm				4 mm	
	1.2	1.0	6 mm					
	1.2	1.0	1/4"					
31	1.8	1.6	6 mm				6 mm	
	1.8	1.6	1/4"					
40	2.5	1.6	6 mm				6 mm	
	2.8	1.8	8 mm					
50	3.0	1.8	6 mm					
	3.5	2.0	8 mm					

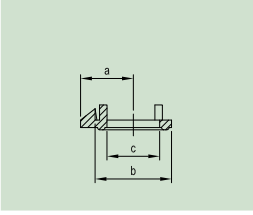
COMBINATION KNOBS

ROUND KNOB
WING KNOB
SPINDLE-SHAPED KNOB
COVER


...100 = indicator line white, otherwise in black



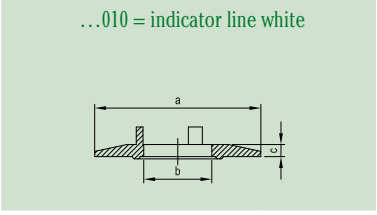
Knob Ø	Shape	Borehole D	Cover				without indicator line		with indicator line	
			Black	White	Grey	White	Black	White	Black	White
9	 ROUND KNOB	4 mm, with chamfer	A 25 09 040	A 26 09 040			a = 8.0 b = 6.5 c = 2.6		A 41 10 000	A 41 10 100
						A 41 10 002			A 41 10 102	
10	 ROUND KNOB	3 mm, with chamfer	A 25 10 030	A 26 10 030	A 25 10 038	A 26 10 038			A 41 10 004	A 41 10 104
		1/8", with chamfer	A 25 10 320	A 26 10 320					A 41 10 005	A 41 10 105
		4 mm, with chamfer	A 25 10 040	A 26 10 040	A 25 10 048	A 26 10 048			A 41 10 006	A 41 10 106
13.5	 ROUND KNOB	4 mm, with chamfer	A 25 13 040	A 26 13 040	A 25 13 048	A 26 13 048	a = 11.2 b = 9.2 c = 3.0		A 41 13 000	A 41 13 100
		6 mm, with chamfer	A 25 13 060	A 26 13 060	A 25 13 068	A 26 13 068			A 41 13 002	A 41 13 102
	 WING KNOB	6 mm, with chamfer		A 28 13 060					A 41 13 004	A 41 13 104
									A 41 13 005	A 41 13 105
16	 ROUND KNOB	4 mm, without chamfer	A 25 16 040	A 26 16 040	A 25 16 048	A 26 16 048	a = 13.5 b = 11.2 c = 4.0		A 41 16 000	A 41 16 100
		6 mm, with chamfer	A 25 16 060	A 26 16 060	A 25 16 068	A 26 16 068			A 41 16 002	A 41 16 102
		1/4", with chamfer	A 25 16 630	A 26 16 630	A 25 16 638				A 41 16 004	A 41 16 104
16	 WING KNOB	6 mm, with chamfer		A 28 16 060					A 41 16 005	A 41 16 105
									A 41 16 006	A 41 16 106
16	 SPINDLE-SHAPED KNOB	3 mm, with chamfer		A 24 16 030			a = 14.0 b = 1.2 c = 4.0		A 50 16 000	A 50 16 100
		4 mm, with chamfer	A 23 16 040	A 24 16 040		A 24 16 048				A 50 16 108

ARROW DISK


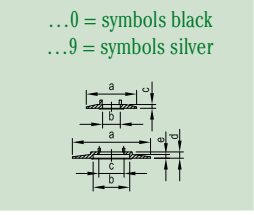
a = 7.0 b = 10.1 c = 7.0		A 42 10 000
		A 42 10 002
		A 42 10 008

a = 9.0 b = 13.6 c = 8.0		A 42 13 000
		A 42 13 002
		A 42 13 008

a = 10.5 b = 16.3 c = 10.0		A 42 16 000
		A 42 16 002
		A 42 16 008

DISK


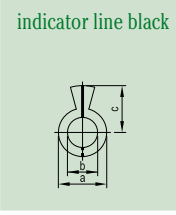
		A 73 16 000	A 73 16 010
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DIAL


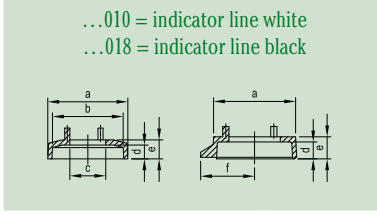
a = 20.0 b = 7.0 c = 1.5		A 44 10 001
		A 44 10 060
(only for knob ø 10)		

a = 26.0 b = 8.0 c = 1.5		A 44 13 010
		A 44 13 020
		A 44 13 039
		A 44 13 049
		A 44 13 060

a = 31.0 b = 14.5 c = 10.0 d = 2.5 e = 1.7		A 44 16 001
		A 44 16 010
		A 44 16 020
		A 44 16 039
		A 44 16 049
		A 44 16 059
		A 44 16 060
(ø 16 with moulded-on nut cover)		

STATOR


a=16.0 b=10.1 c=15.5	A 60 16 019
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NUT COVER


a = 15.5 b = 14.0 c = 7.0 d = 2.9 e = 3.7		A 75 10 000	A 75 10 010
			A 75 10 018
(only for knob ø 10)			

a = 17.5 b = 15.7 c = 9.0 d = 3.2 e = 4.3		A 75 13 000	A 75 13 010
			A 75 13 018

a = 19.3 b = 17.6 c = 10.0 d = 3.3 e = 4.3		A 75 16 000	A 75 16 010
			A 75 16 018
a = 16.4 b = 14.6 c = 10.0 d = 3.3 e = 4.3 f = 10.2		A 76 16 000	
		A 76 16 008	
a = 16.0 b = 14.8 c = 8.3 d = 3.3 e = 4.3		A 51 16 000	
		A 51 16 008	