by Kynoppe
TACTHILL®

SOAT SERIES

MINIATURE PUSH BUTTONS • DIA. 13.6MM



DISTINCTIVE FEATURES

renowned compact design
IP67 & IP68
illuminated versions
momentary or maintained
outstanding durability
custom wiring
custom marking

ELECTRICAL CHARACTERISTICS

Max. current with resistive load:
Momentary Plastic body:
400mA @ 32Vac • 100mA @50 Vdc • 125mA @ 125 Vac
Momentary Metal body:
500mA @ 48 Vac • 200mA @ 50 Vdc • 200mA @ 250 Vac
Maintained Plastic body:
2A @ 125 Vac • 100mA @ 24Vdc
Electrical life (depending on version):
Momentary: 500.000 cycles at max. load
Maintained: 200.000 cycles (100mA) • 10.000 cycles (2A)
Contact type: NO or NC
Initial contact resistance: 50mΩ max
Insulation resistance: 1 GΩ min, DC500V
Dielectric strength:
Plastic body 1000 Vac rms • Metal body 1500 Vac rms
Typical LED supply (@20mA): see Order Guide
Typical LED life: 40.000 hours

MECHANICAL CHARACTERISTICS

Actuation force: 2 to 5 Newtons
Travel: 1.5 mm
Contact bounce: 10ms

Mechanical life: 1.000.000 cycles

Materials:
Contact base: P.C.
Contact: gold-plated silver
Body: diallyl phthalate (DAP UL94v0) • Zamak
Actuator: polyamide 6/6 (PA66)
Terminals: gold-plated copper
Wires: stranded AWG20, 0.6mm2 UL-certified

Tightening torque applied to the nut:
Plastic body: 0.5Nm
Metal body: 1.5Nm

ENVIRONMENTAL CHARACTERISTICS

Operating temperature: -30°C to +85°C
Protection rating: IP67 (SOAT12) • IP68 (SOAT68)
Compliant with IEC60947-5-1

GENERAL CHARACTERISTICS

Typical cut-out diameter: 13.6 mm
Panel thickness:
Snap-in body Y1: 0.8 mm ~ 1.8 mm
Snap-in body Y2: 3 mm, ±0.25mm
Screw-in body: 1.5 mm ~ 4 mm
Soldering profile: 300°C max. for 5 seconds

IDEAL FOR...



CE Reach friendly RoHS✓ service U.DESIGN

ORDER GUIDE

Family	Family	Body	Actuator	Illumination	Function	Connector type	LED colour
SOAT	12	D	K	D		J	B

Type - Sealing

12	Dia. 13.6, IP67
68	Dia. 13.6, IP68

Body Version

	Shape	Fixing	Material
D	Round	Screw-in	Black Zamak
D2	Square	Screw-in	
D11	Round	Screw-in	Chrome Zamak
D21	Square	Screw-in	
D12	Round	Screw-in	Satin Zamak
D22	Square	Screw-in	
D13	Round	Screw-in	Velvet-effect Zamak
D23	Square	Screw-in	
P	Round	Screw-in	DAP Plastic
P2	Square	Screw-in	DAP Plastic
Y1	Round	Snap-in type 1	DAP Plastic
Y2	Round	Snap-in type 2	DAP Plastic

Illumination1

-	Non-illuminated
D	Illuminated centre dot

Actuator Version

Material	Colour	Type: flush matte	domed matte	raised matte	domed glossy	raised glossy
PA66	Black	K	K1	K2	K3	K4
PA66	Red	R	R1	R2	R3	R4
PA66	Green	G	G1	G2	G3	G4
PA66	White	W	W1	W2	W3	W4
PA66	Blue	B	B1	B2	B3	B4
PA66	Yellow	Y	Y1	Y2	Y3	Y4
PA66	Orange	O	O1	O2	O3	O4

Contact Type / Function

-	N.O. / Momentary
Z	N.O. / Maintained (on/off) 2
N	N.C. / Momentary

LED Colour

		Vmin	Vmax
-	Non-illuminated	-	-
R	Red	2.0	2.5
G	Green	2.2	2.7
Y	Yellow	2.1	2.6
B	Blue	3.1	3.6
W	White	2.8	3.3
RB	Red & Blue	2.0/3.2	2.6/3.6
RG	Red & Green	2.0/2.0	2.6/2.6
GB	Green & Blue	2.0/3.2	2.6/2.6

Connector type

J	Solder tabs
F1	Sealed wire leads 500mm 3
F2	Wire leads 90mm 3
F3	Wire leads 100mm 3
P	PCB pins

ABOUT THIS SERIES

1 Illumination only available for IP67 versions, with flush actuators.

2 NO Maintained version only available for DAP Plastic body

3 Wire leads customisable with connectors, sleeving, etc.

Our push buttons are supplied as standard with a hexagonal nut in nickel-plated brass, a washer and a sealing gasket.

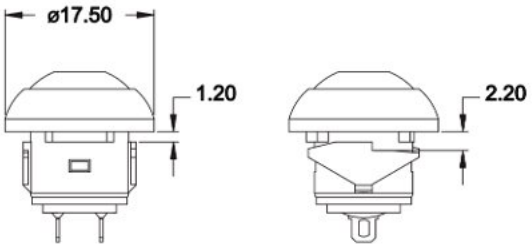
⚠SOME CONFIGURATIONS MAY NOT BE AVAILABLE OR MAY BE SUBJECT TO A M.O.Q.

FOR ALL YOUR CUSTOM REQUESTS, CONTACT US !
sales@kynoppe.com

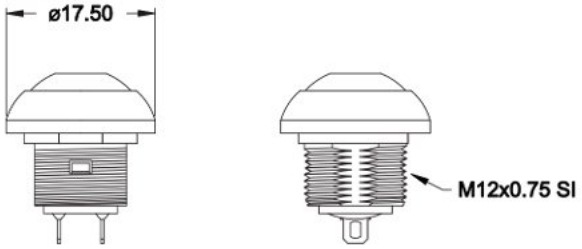
ORDER GUIDE - DETAILS

BODY VERSIONS

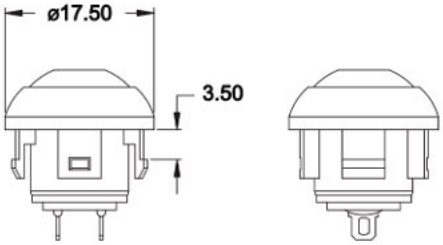
Y1 Snap-in 1 DAP Plastic (round)



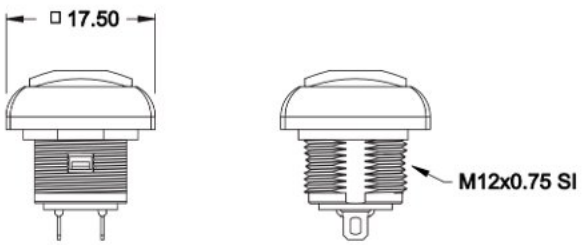
N / A / D / P Screw-in, round



Y2 Snap-in 2 DAP Plastic (round)

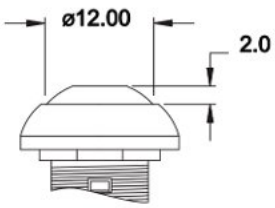


D2 / P2 Screw-in, square

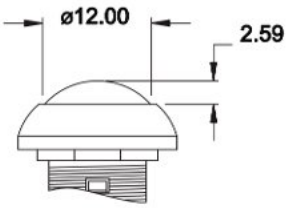


ACTUATOR VERSIONS

Flush Actuator

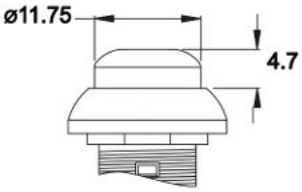


Domed Actuator



only available for A, D, P, S, S2 bodies

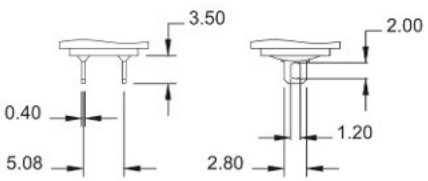
Raised Actuator



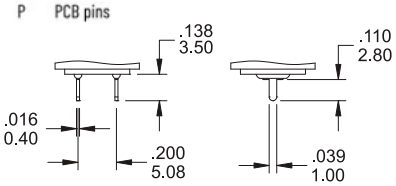
only available for D, P bodies

CONNECTOR VERSIONS

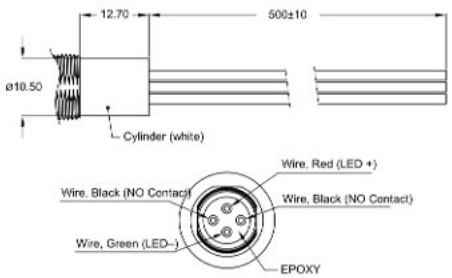
J Solder tabs



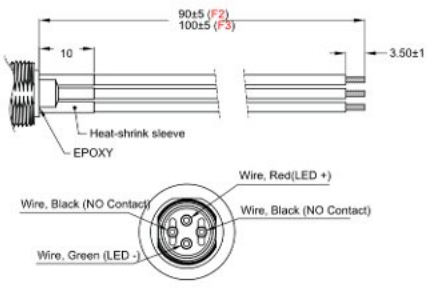
P PCB pins



F1 Sealed wire leads 500mm



F2 / F3 Wire leads 90mm and 100mm



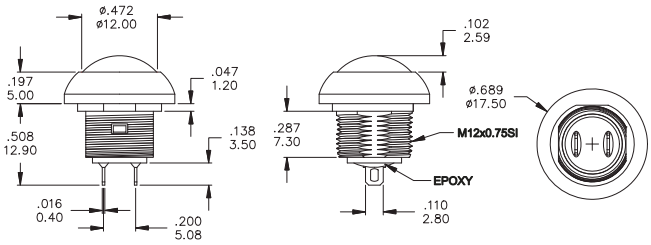
CONFIGURATION EXAMPLES

NON-ILLUMINATED - NO - MOMENTARY



SOAT68PK3J

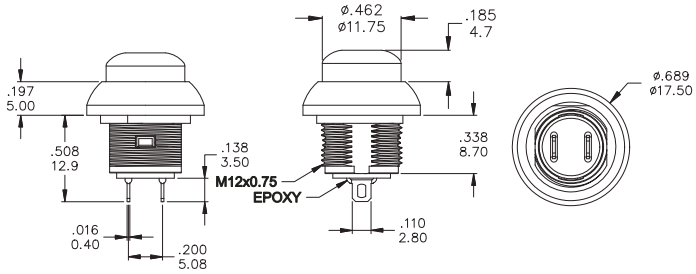
glossy PA66 actuator, black IP68 plastic body, solder tabs





SOAT12PK2J

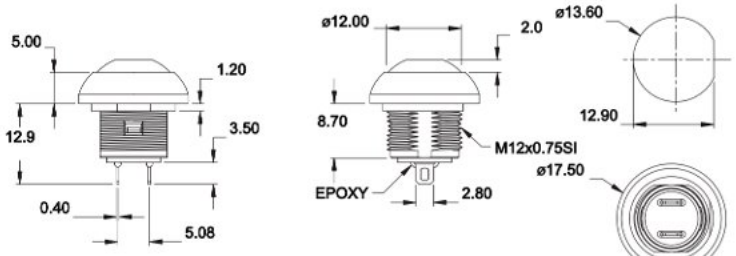
raised PA66 actuator, black Zamak body, solder tabs





SOAT12DKJ

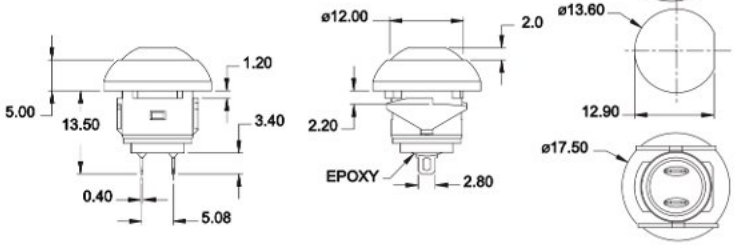
PA66 actuator, black Zamak body, solder tabs





SOAT12Y1BJ

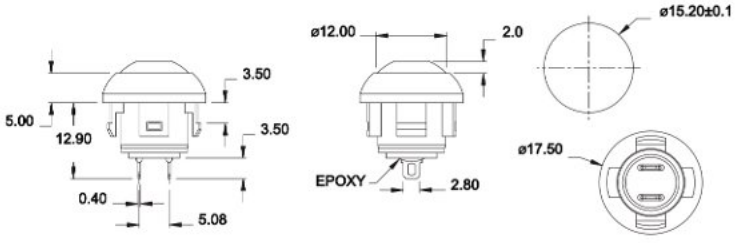
PA66 actuator, snap-in 1 plastic body, solder tabs





SOAT12Y2RJ

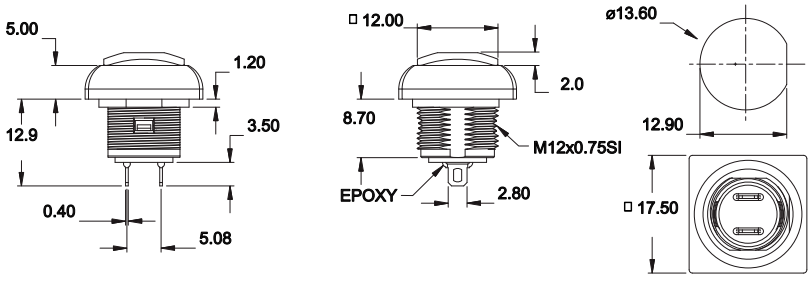
PA66 actuator, snap-in 2 plastic body, solder tabs





SOAT12D2KJ

PA66 actuator, black Zamak body, solder tabs



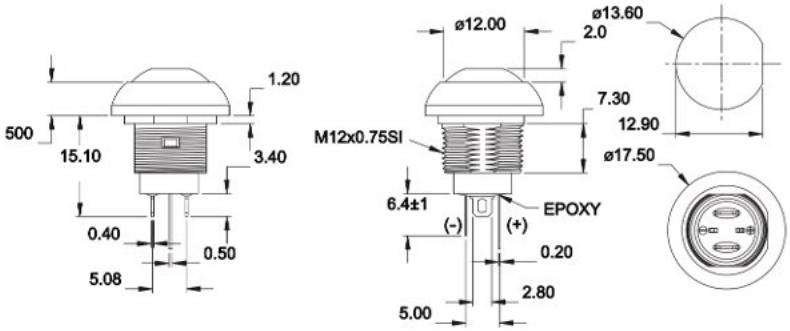
ILLUMINATED - NO



SOAT12DKDJ•

PA66 actuator, black Zamak body, momentary, solder tabs

• select the LED colour in the Order Guide

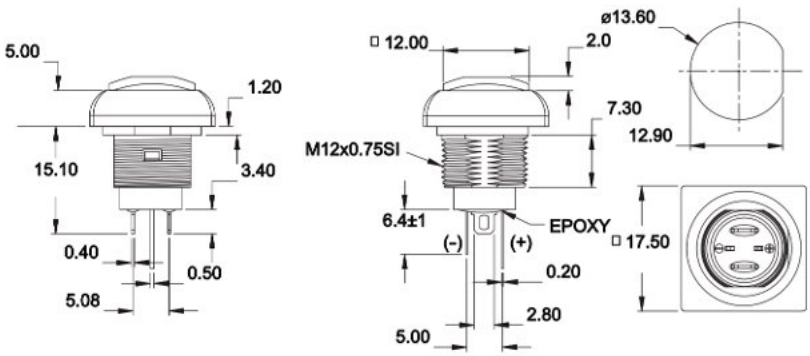




SOAT12D2KDJ•

PA66 actuator, black Zamak body, momentary, solder tabs

• select the LED colour in the Order Guide

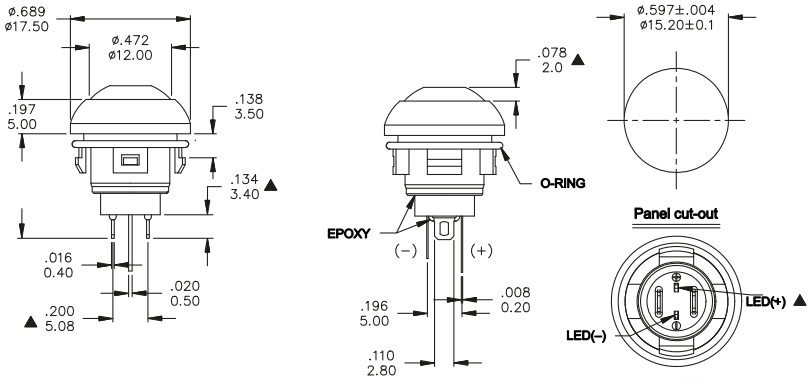




SOAT12Y2KDJ•

PA66 actuator, snap-in 2, black PA body, momentary, solder tabs

lect the LED colour in the ler Guide

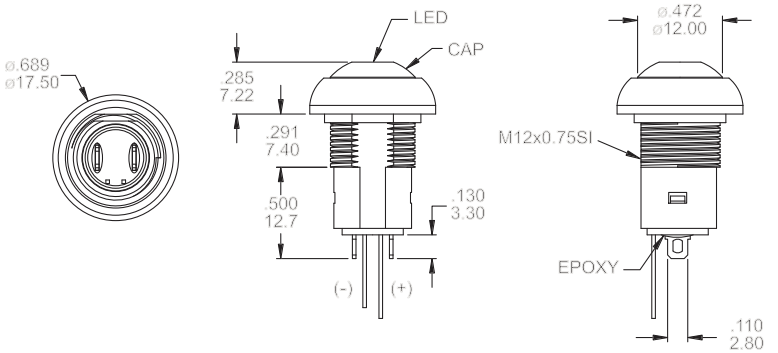




SOAT12PRDZJ•

PA66 actuator, black PA body, maintained, solder tabs

• select the LED colour in the Order Guide



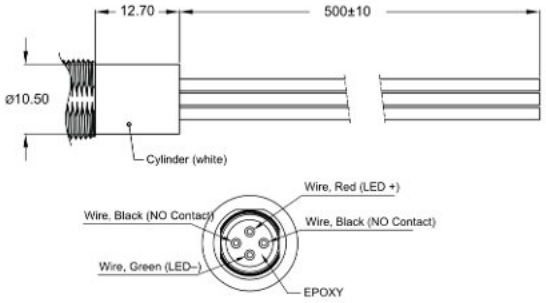
SEALED WIRE LEADS - NO - MOMENTARY



SOAT12PKDF1•

PA66 actuator, black PA body, wire leads 500mm

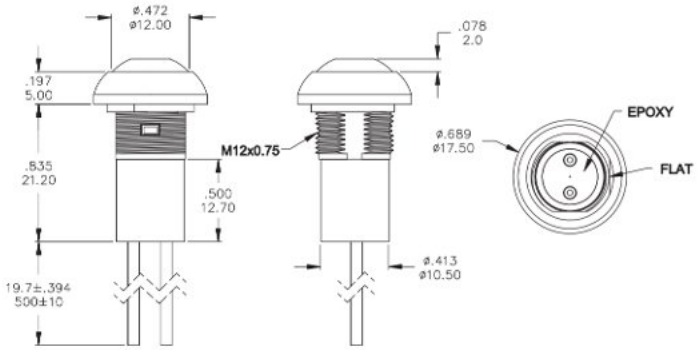
• select the LED colour in the Order Guide





SOAT12PGF1

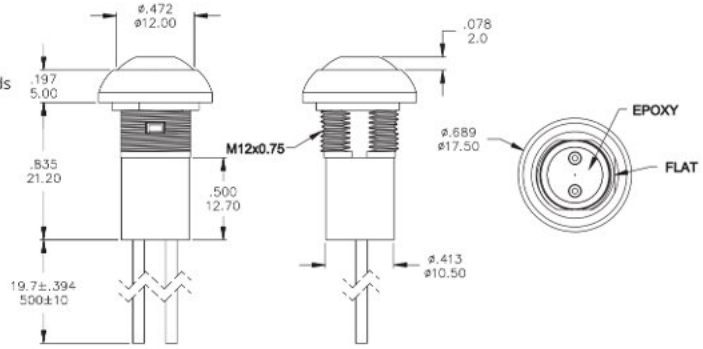
PA66 actuator, black PA body, wire leads 500mm





SOAT12DKF1

PA66 actuator, black ZAMAC body, wire leads 500mm



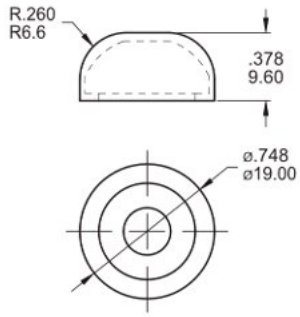
ACCESSORIES



80-59918•

silicone cap providing additional IP68 front-face sealing

• Colours	
9	Transparent
R	Red
K	Black





80-599241

zamak protective cover with magnetic closure



example of custom wiring based on SOAT12D13WF