



APEM



THE BROADEST RANGE OF HMI COMPONENTS & SOLUTIONS

PANEL SWITCHES

PCB SWITCHES

LED INDICATORS

JOYSTICKS

SWITCH PANELS

CUSTOM

www.apem.com

A GLOBAL FOOTPRINT...

OVER 60 YEARS OF EXPERIENCE



PANEL SWITCHES	PCB SWITCHES	LED INDICATORS	JOYSTICKS	SWITCH PANELS	CUSTOM
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YOUR EXPERT & PARTNER

APEM offers the widest range of HMI components & solutions

TECHNICAL & INDUSTRIAL EXCELLENCE

APEM is a vertically integrated manufacturer, from innovative designs and development and raw materials, to a quality finished product.

We continuously strive to innovate and develop new exciting products, focusing on exceptionally high standards in safety, design, quality and reliability.

APEM is certified to international quality standards.

APEM EXPERTISE

Our business model is built upon our key industry segments and our product development road map.

We offer quick and efficient customization from the customer specific modifications of standard products to brand new custom designs, utilizing our knowledge and mastery of switching technology and industry standards.

We understand and work with our customers, allowing us the opportunity to be your preferred supplier.

Constant innovation for ever-changing requirements



TOGGLE SWITCHES

OUR RANGE For more information, see APEM website



SERIES	ZL	SMT TL	TL	S and SF	5000	10600	11000	12000	12000X778
Approvals				UL - CECC	VDE - UL CSA - CECC	CECC	CECC	CECC	CECC - MIL
Poles	1	1	1,2	1,2	1,2,3,4	1,2	1,2,3,4	2,3,4	2,3,4
Maximum ratings	500mA 48VDC	0,4VA 20V AC/DC	0,5A 48V AC/DC	(2A 250VAC)* 4A 30VDC	(3A 250VAC)* 4A 30VDC	3A 24VDC	4A 30VDC	4A 30VDC	4A 30VDC
Bushing dimensions									
Ø4,83 (10-48)	X								
Ø6 (.236)					X				
Ø6,35 (1/4)				X	X		X		
Ø10 (.393)						X			
Ø11,9 (15/32)					X			X	X
Mounting options									
Horizontal SMT		X							
Vertical right angle SMT		X							
Vertical - Through hole	X		X	X	X		X	X	X
Horizontal - Through hole			X	X	X		X		
Vert. right angle - Through hole			X	X	X				
Panel	X			X	X	X	X	X	X
Terminal options									
PCB	X	X	X	X	X		X	X	X
Solder lugs	X			X	X	X	X	X	X
Quick-connect					X				
Wire wrap			X		X				
Sealing	No	Process	Process	Process	Optional	No	Optional	Optional	IP67



APEM
BEST SELLER

12000 SERIES ROBUST SWITCHES FOR HIGH SPECIFICATION ENVIRONMENTS

PINNED LEVER AS STANDARD
Preventing internal damage to the contact arm and mechanism

APEM
EXCLUSIVE

- DESIGNED TO MIL & CECC SPECIFICATIONS
- PROVEN RELIABILITY IN THE HARSHTEST ENVIRONMENTS
- NUMEROUS RATING, SEALING, LEVER FINISH OPTIONS AND SEALING BOOTS
- HIGH PERFORMANCE VERSION



SERIES	1000	1500	1600/ 1700	4600/ 4400	600H	600NH	660	3500	3600NF	6000
Approvals		UL		VDE - UL CSA		NF - VDE UL - CSA		CECC	UL	
Poles	1	1	1	1,2,3	1,2,3	1,2,3	4	1,2	1,2	1,2,3,4
Maximum ratings	6A 30VDC	(6A 250VAC)* 5A 12VDC	4A 30VDC	(4A 250VAC)*	(15A 250VAC)* 10A 24VDC	(15A 250VAC)* 10A 24VDC	10A 30VDC	15A 28VDC	(6A 250VAC)* 15A 28VDC	6,5A 30VDC
Bushing dimensions										
Ø11,9 (15/32)								X		X
Ø12 (.472)	X	X	X	X	X	X	X		X	
Mounting options										
Vertical - Through hole				X						
Panel	X	X	X	X	X	X	X	X	X	X
Terminal options										
PCB				X						
Solder lugs	X	X	X	X	X	X	X	X	X	X
Quick-connect	X	X	X	X	X	X	X	X	X	X
Screw	X		X		X	X	X	X	X	X
Sealing	No	No	No	No	Optional	No	Optional	IP67, IP69K	IP67	Optional

"I" RANGE PUSHBUTTON SWITCHES



IR SERIES INCREASED VISIBILITY

ILLUMINATED BEZEL

SPECIFIC BACKLIGHTING
for visibility whatever the
viewing angle

LARGE DIAMETER :
16 MM

FRONT PANEL SEALING

LARGE CHOICE OF OPTIONS:
COLOR, SHAPE, MARKING,
ILLUMINATION

APEM EXCLUSIVE

OUR RANGE

For more information,
see APEM website



SERIES	IC	IL	IM	IP	IB-IS	IHS Hall effect	IHL Hall effect	IQ momentary
Approvals			UL	UL	UL			
Poles	1	1	1	1	1	1 NPN	1	1
Maximum ratings	5A 28VDC	24 24VDC	3A 28VDC	5A 28VDC 4A 12VDC	100mA 24VDC	5mA 24VDC	1.25mA 4.5VDC	4 A 28VDC
Illuminated		X		X				X
Bushing dimensions								
Ø12 (.472)	X	X	X	X	X	X	X	
Ø16 (.629)								X
Mounting options								
Panel	X	X	X	X	X	X	X	
Snap-in					X			X
Terminal options								
PCB	X	X	X	X	X			X
Solder lugs	X	X		X	X			X
Quick-connect	X		X	X	X			X
Screw								X
Flying leads	X	X		X		X	X	X
Sealing	IP67	IP67	IP67	IP67	IP54 or IP67	IP67	IP67	IP54

SERIES	IQ latching	IZ metal	IZ plastic	IR standard	IR microswitch	IR latching	IA	IF
Approvals								
Poles	1	1	1	1	1	1	1	1
Maximum ratings	100mA 24VDC	4A 48VDC 100mA 24VDC	4A 48VDC 100mA 24VDC	4A 48VDC	5A 250VAC	100mA 24VDC	2A 24VDC	100mA 48VDC
Illuminated	X	X	X	X	X	X		
Bushing dimensions								
Ø12 (.472)								
Ø16 (.629)	X	X	X	X	X	X	X	X
Mounting options								
Panel		X	X	X	X	X	X	X
Snap-in	X							X
Terminal options								
PCB	X	X	X	X		X		
Solder lugs	X	X	X	X		X		
Quick-connect	X	X	X	X	X	X		X
Screw		X	X	X				
Flying leads	X	X	X	X		X	X	
Sealing	IP54	IP67	IP67	IP67	IP67	IP67	IP67	IP67

PUSHBUTTON SWITCHES

APEM DESIGN

FP SERIES
DESIGNED TO
ATTRACT ATTENTION

APEM EXCLUSIVE

PRECISE laser etched symbols.
For total switch customization

LARGE SWITCH WITH FULLY ILLUMINATED ACTUATOR
EASY TO MARK AND CUSTOMIZE



SERIES	CG	CP	PBA	FP	MP	LPI
Approvals			Atex			
Poles	1 NPN	1 NPN	1	1,2	1,2	1
Maximum ratings	200mA 24VDC	200mA 24VDC	1A 24VDC	200mA 12VDC	20mA 5VDC	5A 12VDC 100mA 12VDC
Illuminated	X	X	X	X		X
Bushing dimensions						
Ø15,20 (.598)					X	
Ø16 (.629)		X	X			
Ø19 (.748)		X	X			
Ø22 (.866)		X	X			
Ø24 (.944)				X		
Ø30 (1.18)				X		
Ø38 (1.496)						X
Ø44 (1.732)						X
Mounting options						
Panel	X	X	X	X	X	X
Terminal options						
Solder lugs				X		
Screw						X
Flying leads		X	X			
Cable		X	X	X		
Connector	X	X			X	
Sealing	N/A	IP68, IP69K	IP68, IP69K	No	IP68	IP53

OUR RANGE

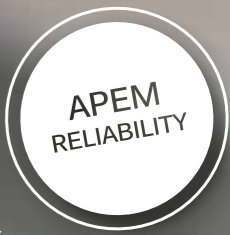
For more information, see APEM website



SERIES	ZP	SMT TP	TP	9500	PHAP40	SP	8000	9400/9600
Approvals						UL	UL	
Poles	1	1	1,2	1	2	1,2	1,2	1
Maximum ratings	500mA 48VDC	0,4VA 20V AC/DC	0,5A 48V AC/DC	100mA 30VDC	100mA 30VDC	1A 30VDC	(3A 250VAC)* 4A 30VDC	1A 30VDC
Bushing dimensions								
Ø4 (.157)				X				
Ø4,83 (10-48)	X							
Ø6,35 (1/4)						X	X	X
Ø11,9 (15/32)							X	
Ø16 (.629)								X
Mounting options								
Horizontal SMT		X						
Vertical right angle SMT		X						
Vertical - Through hole	X		X	X	X	X	X	X
Horizontal - Through hole			X			X	X	
Vert. right angle Through hole			X	X		X		
Panel	X			X		X	X	X
Terminal options								
PCB	X	X	X	X	X	X	X	X
Solder lugs	X			X			X	X
Quick-connect								X
Sealing	No	Process	Process	Optional	No	Process	Optional	Optional



SERIES	10400	13000	13000X778	18000	1200	1400	4700/4800
Approvals	CECC	UL - CECC	CECC		NF - UL - CSA		VDE - UL - CSA
Poles	1,2	1,2	2,3	1,2	1	1	1,2
Maximum ratings	3A 24VDC	(2A 250VAC)* 4A 30VDC	4A 28VDC	7A 30VDC	(4A 250VAC)* 4A 24VDC	6A 12VDC	(3A 250VAC)*
Bushing dimensions							
Ø6,35 (1/4)		X		X			
Ø10 (.393)	X						
Ø11,9 (15/32)		X	X				
Ø12 (.472)					X		X
Mounting options							
Vertical - Through hole		X	X	X		X	X
Horizontal - Through hole		X		X			
Vert. right angle Through hole				X			
Panel	X	X	X	X	X	X	X
Snap-in				X		X	
Terminal options							
PCB		X	X	X			
Solder lugs	X	X	X	X	X	X	X
Quick-connect					X	X	X
Screw					X		
Sealing	No	Optional	IP67	No	No	No	No



AV SERIES PUSHBUTTON SWITCHES



AV SERIES WITHSTAND ANY AGGRESSIVE USE

- ★ RESISTANT to demanding environmental requirements (rain/frost/salt/UV), resistant to vandalism
- ★ IK & IP: TESTED & QUALIFIED PRODUCTS
- 🎨 APPEALING AESTHETICS : MATERIALS, COLORS, CONTRAST, BRIGHT OR DIM ILLUMINATION, EMBOSING, BRAILLE MARKING, SHAPES & DIMENSIONS...
- 💧 RESISTANT MATERIALS : STAINLESS STEEL, FLAME-RETARDANT PLASTICS...

APEM EXCLUSIVE

OUR RANGE

For more information, see APEM website

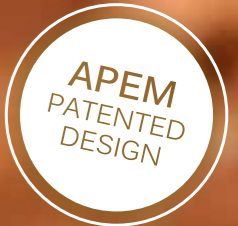


MODELS	AV09/ AV19	AV03/ AV02	AV063/ AV163	AV061/ AV161	AV09/ AV19	AV19LP/ AV19LB	AV9/ AV3	AV09..EA/ AV19..EA
General specifications								
Anti-vandal (IK08/IK10)	X	X						
Security			X	X	X	X	X	X
Approvals	UL/CSA	UL/CSA			UL/CSA			
Sealing	Up to IP65	Up to IP65	Up to IP65	Up to IP65	Up to IP65	IP65, IP69K	Up to IP67	Up to IP65
Illumination							X	X
Marking					X			
Electrical specifications								
Maximum ratings	2A 48VDC (4A 250VAC)*	2A 48VDC (4A 250VAC)*	0,2A 48VDC	1A 24VDC	2A 48VDC (4A 250VAC)*	5A 15VDC	1A 30VDC	2A 48VDC
Momentary (NO)	X	X			X			
Momentary (NC)			X					
Momentary (NO) tactile						X	X	
Momentary NC/NO								
Latching				X				X
Diameter and shape								
Ø 16 (.629) Flat			AV063	AV061				
Ø 16 (.629) Curved			AV163	AV161				
Ø 19 (.748) Flat	AV09				AV09	AV19LP	AV9	AV09..EA
Ø 19 (.748) Curved	AV19				AV19	AV19LB		AV19..EA
Ø 22 (.866) Flat		AV03					AV3	
Ø 22 (.866) Curved		AV02						



MODELS	AV09C7/ AV19C7	AV9S/ AV3S	AV03/ AV02	AV031/ AV021	AV044700	AV03..EA/ AV02..EA	AV22L/ AV24L	AV22PNA
General specifications								
Security	X	X	X	X	X	X	X	X
Approvals			UL/CSA	NF	VDE UL/CSA		NF/UL	NF/UL
Sealing	Up to IP65	Up to IP67, IP69K	Up to IP65	Up to IP65	Up to IP65	Up to IP65	IP65	IP65
Illumination	X	X				X		
Marking	X	X		X	X			
Electrical specifications								
Maximum ratings	50mA 24VDC	50mA 24VDC	2A 48VDC (4A 250VAC)*	2A 250VAC	3(1,5)A 250VAC	2A 48VDC	5A 250VAC	5A 250VAC
Momentary (NO)			X					
Momentary (NC)				X				
Momentary (NO) tactile	X	X						
Momentary NC/NO							X	X
Latching						X		
Alternate action					X			
Diameter and shape								
Ø 19 (.748) Flat	AV09C7	AV9S						
Ø 19 (.748) Curved	AV19C7							
Ø 22 (.866) Flat		AV3S	AV03	AV031200	AV044700	AV03..EA	AV22LP	
Ø 22 (.866) Curved			AV02	AV021200		AV02..EA	AV22LB	AV22PNA
Ø 24 (.944) Flat							AV24LP	
Ø 24 (.944) Curved							AV24LB	
Ø 24 (.944) Concave							AV24LC	

ROCKER SWITCHES



KL SERIES PROVEN RELIABILITY



MODERN APPEARANCE & INTUITIVE ERGONOMICS FOR EASY ONE-HAND ACTIVATION

APEM PATENTED DESIGN

APEM
EXCLUSIVE

NO RISK OF INADVERTENT SWITCHING

HIGH MECHANICAL STRENGTH

IP68 FRONT PANEL SEALING

CUSTOMIZABLE: MARKING, BACKLIGHTING

OUR RANGE

For more information, see APEM website



SERIES	SMT TR	TR	S-SR	AS	MT	7000	FM
Approvals			UL	UL - CSA		UL - CSA	UL - VDE
Poles	1	1,2	1,2	1	1	1,2	1
Maximum ratings	0,4VA 20V AC/DC	0,5A 48V AC/DC	(2A 250VAC)* 4A 30VDC	(2A 250VAC)*	4A 30VDC	(3A 250VAC)* 4A 30VDC	(10A 250VAC)*
Illuminated							X
Mounting options							
Horizontal SMT	X						
Vertical - Through hole		X	X	X	X	X	X
Horizontal - Through hole		X	X			X	
Vert. right angle - Through hole		X	X			X	
Snap-in			X	X		X	X
Rear mounting			X			X	
Panel cut-out				18,65 x 8,9	Ø 17,65		19,2 x 12,9
Terminal options							
PCB	X	X	X	X	X	X	X
Solder lugs			X	X	X	X	X
Quick-connect							X
Sealing	Process	Process	Process	No	No	No	Optional boot

SERIES	2600	KR	KL	KI	KG	HR
Approvals	NF-VDE-UL-CSA				VDE	
Poles	1,2	1,2	1,2	-	1,2	Dual output
Maximum ratings	(16A 250VAC)*	10A 24VDC	10A 24VDC	24VDC	(12A 250VAC)* 15A 12VDC	
Illuminated	X	X	X	X	X	X
Mounting options						
Snap-in	X	X	X	X	X	
Panel cut-out	30 x 22	36,8 x 21,08	36,8 x 21,08	36,8 x 21,08	36,8 x 21,08	
Rear						X
Terminal options						
Solder lugs	X	X	X	X	X	
Quick-connect	X	X	X	X	X	
Screw	X	X	X		X	
Connectors		X	X	X	X	X
Sealing	Optional boot	IP68	IP68	IP68	IP65	IP68



INDUSTRIAL CONTROL SWITCHES

A1 SERIES DESIGN AND AESTHETICS



★ BACKLIT LEGENDS ON METAL INSERT

★ CHEMICAL ETCHING OF METAL INSERT FOR LIGHT PASSAGE

○ METAL ASPECT & FLUSH MOUNTING FOR A SLEEK APPEARANCE

☀ BACKLIGHTING, VISIBLE EVEN IN STRONG DAYLIGHT

⊙ CUSTOMIZABLE: MARKING, BACKLIGHTING

APEM EXCLUSIVE

OUR RANGE

For more information, see APEM website



SERIES	A1	A01	A01	A01	A01	A01ES	A01
Type	Pushbutton	Pushbutton	Indicator	Rotary	Keylock	Emergency stop	Mushroom head pushbutton
Approvals	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE
Poles	1,2,3,4	1,2,3,4	-	1,2,3,4	1,2,3,4	1,2	1,2,3,4
Sealing	IP65	IP65	IP65	IP65	IP65	IP65	IP65
Back panel sealing	Option	Option	Option	Option	Option	Option	Option
Illuminated	Yes	Yes	Yes	No	No	No	No
Maximum ratings	6A 250VAC 6A 12VDC	6A 250VAC 6A 12VDC	N/A	6A 250VAC 6A 12VDC	6A 250VAC 6A 12VDC	1,5A 250VAC AC-15	6A 250VAC 6A 12VDC
Panel cut-out							
Ø 16 mm		X	X	X	X	X	X
Ø 22 mm	X	X	X	X	X		X
Flush mounting	Yes	Option	Option	Option	Option	No	Option
Terminal options							
Solder lugs	X	X	X	X	X	X	X
Quick-connect	X	X	X	X	X	X	X
PCB mounting	Option	Option	Option	Option	Option	Option	Option



SERIES	A02	A02	A02	A02ES	A02	A03	ES
Type	Pushbutton	Indicator	Rotary / Keylock	Emergency stop	Mushroom head pushbutton	Pushbutton	Emergency stop
Approvals	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	UL/CSA-VDE	
Poles	1,2,3,4,n	-	1,2,3,4,n	1,2	1,2,3,4	1,2,3,4	2,3
Sealing	IP65	IP65	IP65	IP65	IP65	IP65	IP65,IP67,IP69K
Back panel sealing	No	No	No	No	No	Option	No
Illuminated	Yes	Yes	No	No	No	Yes	No
Maximum ratings	16A 250VAC 12A 12VDC	16A 250VAC 12A 12VDC	16A 250VAC 12A 12VDC	2,5A 380VAC AC-15	16A 250VAC 12A 12VDC	6A 250VAC 6A 12VDC	1A 24VDC
Panel cut-out							
Ø 22 mm	X	X	X	X	X	X	X
Ø 30 mm	X	X	X			X	Ø 28 mm
Flush mounting	Yes	Yes	Option	No	Option	Yes	No
Terminal options							
Solder lugs						X	X
Quick-connect	Option	Option	Option	Option	Option	X	
Screw	X	X	X	X	X		
Straight PC							X
PCB mounting	No	No	No	No	No	Option	No

TACTILE SWITCHES



5 SERIES HIGHER PERFORMANCE

★ 10 MILLION TROUBLE-FREE ACTUATIONS

MEC EXCLUSIVE

- ✓ WAVE SOLDERABLE
- 🔍 LARGE CHOICE OF CAPS WITH SUPERIOR CAP RETENTION SYSTEM
- 📄 AVAILABLE IN NC/NO

OUR RANGE

For more information, see www.mec.dk



MULTIMEC 5 SERIES - 5E & 5G

Through-hole or SMT mounting
IP67 sealed
50mA/24VDC
10 000 000 operations
Single pole /momentary
NO or NC/NO

UNIMEC

Through-hole mounting
IP54 sealed
Max 250mA/120V/9W
Double pole
Momentary or latching
8 contact functions



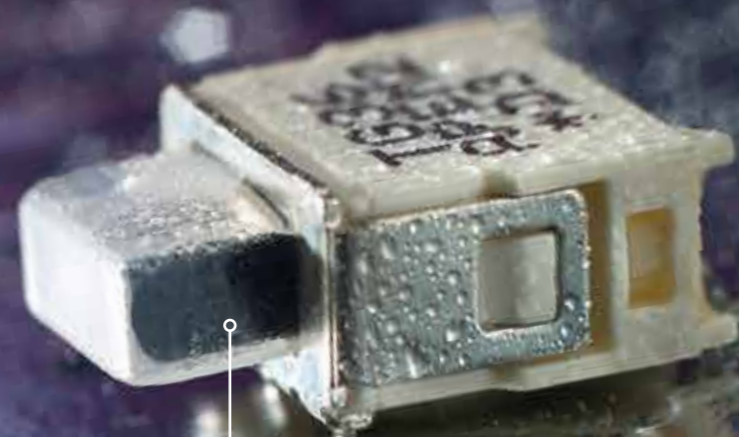
1SS	1IS	1LS	1KS	1KBS	1KCS	1TS	1VS
Solid, round cap Ø 6,5 mm 9 standard height options 7 standard color choices	Fully-illuminated Ø 6,5 mm 7 standard height options Transparent or frosted white	Illuminated with lens Ø 6,5 mm 5 standard height options Multiple colors available 5 lens color options	Solid or illuminated 14,3 x 14,3 mm, h. 19,1 mm Square, flat cap Multiple colors & legends available	Illuminated 14,3 x 14,3 mm, h. 20,2 mm Convex square cap	Illuminated 14,3 x 14,3 mm, h. 20,1 mm Concave square caps	Solid or illuminated 10,6 x 10,6 mm Rounded top surface 7 standard color options for non-illuminated Panel sealed	Solid or illuminated Half ellipse shaped cap 10,4x13,25mm Rounded top surface 7 standard solid color options Panel sealed

1US	1DS	1ES	1FS	1GAS	1GCS	1YS (for 5E switch only)	1JS
Solid or illuminated Ø 10,6mm Rounded top surface 7 standard solid color options Panel sealed	Solid or illuminated round cap Ø 9,6 mm, h. 14,9 mm Standard & custom legends available 18 color options	Illuminated with lens Ø 9,6 mm, h. 14,9 mm 7 standard color options 5 lens color options	Illuminated with lens Ø 9,6 mm, h. 14,9 mm 5 lens color options 7 standard color options Standard & custom legends available	Solid or illuminated Ø 11 mm, h. 12,5 mm Flat, round caps perfect for foil overlay 7 standard color options for solid	Solid or illuminated Ø 15 mm, h. 12,5 mm Flat, round caps perfect for foil overlay 7 standard color options for solid	Illuminated by board chip LEDs 15 x 15 mm, h. 12,5 mm Square cap designed for foil overlay	Solid or illuminated Ø 9,6 mm, h. 10,4 mm Low, flat caps perfect for foil overlay 7 standard color options for solid

1XS	1PS	1QS	1RS	1A/1H/1M/1ZA	1B/1C + 2C/2D	1ZW CONTROLMEC	1Z CONTROLMEC
Solid or illuminated 7,4 x 9,4 mm, h. 18,5 mm Rectangular cap 18 standard solid color options	Solid or illuminated 12,5 x 6,5 mm, h. 15,7 mm Rectangular, concave cap Multiple color options	Illuminated, with oblong lens 12,5 x 6,5 mm, h. 15,7 mm Rectangular concave cap Multiple color options	Illuminated, with round lens 12,5 x 6,5 mm, h. 15,7 mm Rectangular, concave cap Multiple color options	Solid or illuminated 1A/1H: 12,5 x 10,1mm, h. 12,2 mm 1M: 25 x 10,1 mm, h. 12,2mm 1ZA: 18,65 x 10,1 mm, h. 12,2mm Rectangular, rocker-style cap Multiple color & legend options	Solid or illuminated 15,1 x 15,1 mm, h. 12,2 mm (solution) Rectangular, rocker-style cap Multiple color & legend options	Solid or illuminated Ø 29,5 mm, h. 12,3 mm Single cap panel sealed for display navigation 7 solid cap color options Standard & custom legend codes available	Solid or illuminated Ø 29,5mm, h. 12,0 mm Single cap for display navigation 7 solid cap color options Standard & custom legends available

1ZB/1ZCS NAVIMEC	1NS	1WAS/1WPS	1WDS	16300 UNIMEC	16700 UNIMEC	10R/10RF/10RM	10Q/10QM
Solid or illuminated 1ZB: 90°, R. 17,5 mm, h. 12,2 mm 1ZCS: Ø 14,3 mm, h. 11,7 mm Designed for display navigation Standard & custom legends available	Solid or illuminated 13,3 x 11 mm, h. 14,9 mm Teardrop-shaped cap Multiple solid & illuminated colors available	Solid or illuminated 6,5 x 12,5 mm, h. 15 - 15,7 mm Ellipse-shaped, convex or concave Multiple solid colors available	Solid or illuminated 8 x 15,3 mm, h. 15 mm Ellipse-shaped, convex top cap Multiple solid colors available	Rectangular solid cap & square solid or illuminated bezel Cap: 6,1 x 12,4 mm Bezel: 15,1 x 15,1 mm, h. 16 - 20,5 mm Several color options Standard keycap legends available	Square cap 14,9 x 14,9 mm, h. 14,6 mm Several color options Standard keycap legends available	Solid or illuminated Ø 30 mm, h. 11 mm Large round cap 7 standard solid color options Standard metal legend	Solid or illuminated 22 x 22 mm, h. 11 mm Large square cap 7 standard solid color options Standard metal legend

SLIDE SWITCHES



APEM
BEST SELLER

TG SERIES
TOTALLY SEALED

APEM
EXCLUSIVE

WASHABLE.
A totally sealed boot protects the switch during the PCB cleaning process.

- DESIGNED FOR SURFACE MOUNT
- RESISTANT TO VIBRATIONS

OUR RANGE

For more information, see APEM website



SERIES	NK	SMT TG	TG	G	25000N
Approvals					UL
Poles	1	1	1	1,2	1,2
Maximum ratings	500mA 12VDC	0,4VA 20V AC/DC	0,5A 48V AC/DC	3A 30VDC	(2A 250VAC)* 1A 30VDC
Mounting options					
Horizontal SMT		X			
Vertical Through hole	X		X	X	X
Horizontal Through hole	X		X	X	X
Vert. right angle TH				X	
Panel				X	
Terminal options					
PCB	X	X	X	X	X
Solder lugs				X	
Sealing	No	Process	Process	No	No

DIP AND CODED ROTARY SWITCHES

APEM
DESIGN



IKN SERIES
MINIMAL SPACE
REQUIRED

APEM
EXCLUSIVE

**LOW PROFILE: OVERALL
HEIGHT FROM PCB
LESS THAN 3 MM**

- FRENCH PRODUCTION & QUALITY
- WASHABLE BY CONSTRUCTION
- UP TO 8 POLES

OUR RANGE

For more information, see APEM website



SERIES	P25	P36	PT65	NDS-NDSR	DP-DPL	DA	IKN	IKD	IKH
Type	Coded rotary	Coded rotary	Coded rotary	DIP	DIP	DIP	DIP	DIP	Half pitch DIP
Number of positions	10 & 16	10 & 16	10 & 16	1-12 (except 11)	2-12 (except 11)	2-12 (except 11)	2-8 (even only)	1-12	2-10 (even only)
Maximum ratings	100mA 42VDC	400mA 24VDC	400mA 24VDC	25mA 24VDC	100mA 50VDC	100mA 50VDC	100mA 48VDC	25mA 50VDC	100mA 50VDC
Process sealed	W. optional tape	Yes	Yes	W. optional tape	W. optional tape	W. optional tape	W. optional tape	Yes	W. optional tape
Profile off PCB	25mm	Through hole: 3.65 mm SMT: 3.85mm	6.5 mm	5.85 mm	10.3 mm	9.9 mm	Through hole: 4 mm SMT: 2.85mm	3mm	1.6 mm
Mounting options									
SMT	X	X					X	X	X
Through hole		X	X	X	X	X	X	X	
Right angle - Through hole			X						



LED INDICATORS



Q SERIES UNLIMITED DESIGN POSSIBILITIES

- SUPER BRIGHT LEDs for good visibility even in strong daylight
- LONG LIFE EXPECTANCY
- A LARGE CHOICE OF MODELS: DIAMETERS, BEZEL SHAPES, FINISHES, COLORS, TERMINALS, POWER SUPPLY...
- CUSTOM ENGRAVING

APEM EXCLUSIVE

OUR RANGE

For more information, see APEM website



SERIES	Q6	Q8	Q12	Q14	Q16
Panel cut-out	6 mm	8 mm	12 mm	14 mm	16 mm
Voltage range	2VDC - 28VDC	2VDC - 220VAC	2VDC - 220VAC	2VDC - 220VAC	2VDC - 220VAC
Sealing	IP67	IP67	IP67	IP67	IP67
Bezel style					
Prominent	X	X	X	X	X
Recessed	X	X			
Flush	X	X		X	X
Terminal options					
Solder lugs / fastons	X	X	X	X	X
Pins	X	X	X	X	X
Wires	X	X	X	X	X
Bezel finish					
Bright chrome	X	X	X	X	X
Satin chrome	X	X	X	X	X
Black chrome	X	X	X	X	X
Type of illumination					
Fixed light	X	X	X	X	X
Flashing	X	X	X	X	X
Bi-color	X	X	X	X	X
Tri-color		X	X	X	X
Night vision					
LED colors					
5 standard colors	X	X	X	X	X
5 superbright colors	X	X	X	X	X



SERIES	Q19	Q22	QRM	QRM-NV	QS
Panel cut-out	19 mm	22 mm	8 mm	8 mm	6/8/10/12 mm
Voltage range	2VDC - 220VAC	5VDC - 220VAC	2VDC - 28VDC	2VDC - 28VDC	2VDC - 220VAC
Sealing	IP67	IP67	IP67	IP67	
Bezel style					
Prominent	X	X		Night vision	
Recessed			Rear mounting	Rear mounting	
Flush		X			X
Terminal options					
Solder lugs / fastons	X	X			X
Pins	X	X	X	X	
Wires	X	X	X	X	X
Bezel finish					
Bright chrome	X	X			Colored plastic
Satin chrome	X	X			
Black chrome	X	X	X	X	
Type of illumination					
Fixed light	X	X	X		X
Flashing	X	X			
Bi-color	X	X	X		X
Tri-color	X	X	X		
Night vision				X	
LED colors					
5 standard colors	X	X	X	6 NVIS colors	6 colors
5 superbright colors	X	X	X		6 colors



JOYSTICKS



HF SERIES PRECISION FINGER-TIP CONTROL

- ★ ERGONOMICALLY DESIGNED FOR REPETITIVE OPERATION OVER EXTENDED PERIODS
- ★ EASY TO OPERATE

🔹 HIGHLY RELIABLE :
UP TO IP67 SEALED,
HALL EFFECT TECHNOLOGY

🔹 AVAILABLE IN 2 & 3 AXIS : ANALOG,
DIGITAL USB & CANBUS OUTPUT

🔹 ERGONOMIC: SEVERAL HANDLE
OPTIONS AVAILABLE

APEM
EXCLUSIVE

OUR RANGE

For more information,
see APEM website



	THUMB CONTROLS				FINGERTIP		
SERIES	CW	TS	TW	HS	3000	HF	HT
Sealing		IP67 & IP69K	IP67	IP67 & IP69K	IP65	IP67	IP68
Mechanical lifecycle	1 million	1 million	5 million	100 000	10 million	5 million	10 million
Technology							
Hall effect	X	X	X		X	X	X
Potentiometer							
Switching				X			
Axis							
Single	X		X				
1 to 2 axis		X		X			
Up to 3 axis					X	X	X



	FINGERTIP					HAND GRIP		
SERIES	BF	1000HE	M	4000	8000	MS	CJ	HG
Sealing	IP67	IP67	IP65	IP65		IP68	IP68	IP68
Mechanical lifecycle	5 million	1 million	7 million	5 million	1 million	10 million	10 million	10 million
Technology								
Hall effect	X					X	X	X
Potentiometer			X	X				
Switching		X			X			
Axis								
Single	X							
1 to 2 axis		X			X		X	
Up to 3 axis			X	X		X		X

SWITCH PANELS



ELECTRONIC & SOFTWARE DESIGN

★ INTEGRATION OF COMMUNICATION PROTOCOL SUCH AS CANOPEN, CAN J1939, ISOBUS, USB & RS432

APEM EXCLUSIVE



FRONT EASY MOUNTING



CONSISTENT BACKLIGHTING, NO VISUAL FATIGUE



FRONT MOUNTED EXTRA SLIM BACKLIT KEYBOARD

3.24mm +0,4/-0,2 | 2.94mm +0,4/-0,2

OUR RANGE

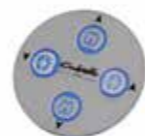
For more information, see APEM website

EQUIPMENT

APEM designs and manufactures custom panels incorporating keyboards, switches, joysticks and other discrete components from our extensive range of products or qualified suppliers.

Our internal electronic team allows the integration of:

- Communication protocols: LIN, CAN, RS4xx, USB, ...
- Displays management: LCDs graphics, 5 segments & NVIS LEDs
- Extrem ambient conditions : ESD, EMI, hot & cold
- Power supply: power converter, filter and protection of power network



HARSH ENVIRONMENT KEYBOARD

Our military keyboards combine critical electronic and software design expertise, along with our core knowledge of milling, printing and discrete switch integration. APEM's extensive development process allows us to meet critical military specifications such as MIL, STANAG, GAM...

MEMBRANE KEYPAD

Our ISO9001 and ISO14000 qualified facilities allow the supply of high quality membrane keypads, meeting the expectations of demanding applications, markets and customers, at a competitive price..

THIN BACKLIGHTED

The APEM thin backlit panel enables the use of front mounted interface products with a high quality backlit design and status LED indicators. This 3mm thick keyboard will easily allow membrane keypad users to bring backlit features to their products.

FILM IN MOLD

The APEM Film In Mold (FIM) technology features molded pushbuttons designed into a printed plastic film. The FIM technology combines an extremely low profile keypad with durable markings at a competitive price for large quantities.

METAL KEYBOARD

APEM's stainless steel keyboards meet the highest level of vandal resistant specifications (IK10) with a visually appealing design. Resistant to the harshest environments, our stainless steel keyboards are weather proof and can withstand most corrosive agents.

CAPACITIVE

APEM designs and manufactures capacitive keyboards to compliment its range of capacitive buttons. Made with either polycarbonate or glass based materials, the APEM capacitive keyboards meet the strict requirements necessary in critical applications including shock resistance.

ELASTOMER KEYBOARD

The APEM elastomer keyboards offer a low cost, customizable solution for harsh environments with sealing up to IP69K and standard communication protocols including CAN, USB & RS432. Designs may include detailed backlighting options and custom actuation travel up to 3.5mm.

PIEZO KEYBOARD

The APEM Piezo keyboards couple a highly reliable pressure sensitive keypad in a visually appealing package. With the highest level of sealing, the Piezo keyboards consume no power when idle.

MEC BASED KEYBOARD

MEC based keyboards offer high end features including extreme sealing, exceptional illumination, durability and elegance. In the event of machine upgrades or accidental damage, the foil overlay is easily exchangeable.

CUSTOM CAPABILITIES

APEM
FULLY CUSTOM

CUSTOMER EXCLUSIVITY
CUSTOM PRODUCTS
CO-DEVELOPED
WITH CUSTOMERS

★ SWITCHES, MEMBRANE
KEYPADS & CANBUS
CONNECTIVITY

★ APEM'S EXPERTISE WITH
COMPLETE INTERFACE
SOLUTIONS

5 UP TO 5 EASILY
CUSTOMIZABLE SWITCHES

ERGONOMIC DESIGN

APEM EXCLUSIVE

A GLOBAL APPROACH

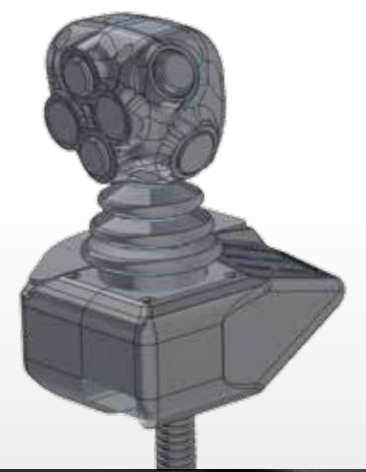
- UNLIMITED HMI COMBINATIONS
- COMPLETE INTERFACE SOLUTIONS
- ELECTRONIC & SOFTWARE DESIGN

APEM offers a large range of more than 30,000 part numbers consisting of switches, indicators, joysticks and keypads in different colors, markings, finishes, shapes and dimensions ... creating unlimited combination of possibilities.

APEM can develop complete interface solutions

combining components (switches, keypads, indicators, joysticks), standard electronic boards and programming.

An APEM team professional is happy to assist you in the development of these complete turnkey solutions meeting your specific requirements, with responsiveness and flexibility.



WORLDWIDE SALES & CUSTOMER SUPPORT

PANEL SWITCHES

PCB SWITCHES

LED INDICATORS

JOYSTICKS

SWITCH PANELS

CUSTOM

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