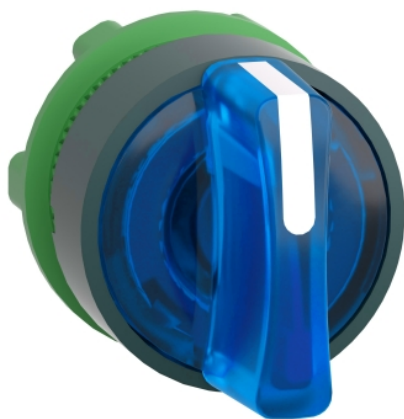




Hauptmerkmale

Baureihe	Harmony XB5
Produkt- oder Komponententyp	Frontelement für Leuchtwahlschalter
Produktkompatibilität	Universal-LED
Kurzbezeichnung des Geräts	ZB5
Blendenmaterial	Dunkelgrauer Kunststoff
Montagedurchmesser	22 mm
Typ des Frontelements	Standard
Verkauf je unteilbare Menge	1
Form des Signaleinheitkopfes	Rund
Operatortyp	Zu Mitte Rückstellung
Betriebsprofil	Blau Standardgriff
Betriebs-Positionsinformation	3 Positionen +/- 45°

Zusatzmerkmale

CAD-Gesamtbreite	29 mm
CAD-Gesamthöhe	29 mm
CAD-Gesamttiefe	43 mm
Produktgewicht	0,016 kg
Mechanische Lebensdauer	500000 Zyklen
Stationsname	XALD 1-5 Aussparungen XALK 2 - 5 Aussparungen
Code für den elektrischen Aufbau	M3 für <4 Kontakte mit einfach Blöcke in Frontmontage mit LED-Modul M6 für <2 Kontakte mit einfach Blöcke in Frontmontage mit LED-Modul und Transformator M10 für <2 Kontakte mit einfach Blöcke in Frontmontage mit LED-Modul MF1 für <2 Kontakte mit einfach Blöcke in Frontmontage mit LED-Modul MR1 für <2 Kontakte mit einfach Blöcke in rückseitige Montage mit LED-Modul M4 für <4 Kontakte mit einfach und doppelt Blöcke in Frontmontage mit LED-Modul
Gerätedarstellung	Grundelement

Montage

Beschichtung	TH
Umgebungstemperatur bei Lagerung	-40...70 °C
Umgebungstemperatur bei Betrieb	-40...70 °C
Überspannungskategorie	Klasse II entspricht IEC 60536
Schutzart (IP)	IP66 entspricht IEC 60529 IP67 IP69 IP69K
Schutzart (NEMA)	NEMA 13 NEMA 4X
Widerstandsfähigkeit gegen Hochdruckreiniger	7000000 Pa bei 55 °C, Entfernung: 0,1 m
Schutzart (IK)	IK04 entspricht IEC 50102

Normen	EN/IEC 60947-5-4 EN/IEC 60947-5-1 JIS C8201-5-1 CSA C22.2 Nr. 14 EN/IEC 60947-1 EN/IEC 60947-5-5 UL 508 JIS C8201-1
Produktzertifizierungen	UL-gelistet[RETURN]LROS (Lloyds register of shipping) [RETURN]DNV[RETURN]BV[RETURN]GL[RETURN]CSA
Vibrationsfestigkeit	5 gn (f= 2...500 Hz) entspricht IEC 60068-2-6
Stoßfestigkeit	30 gn (Dauer = 18 ms) für Sinushalbwellenbeschleunigung entspricht IEC 60068-2-27 50 gn (Dauer = 11 ms) für Sinushalbwellenbeschleunigung entspricht IEC 60068-2-27

Verpackungseinheiten

VPE 1 Art	PCE
VPE 1 Menge	1
VPE 1 Höhe	3,500 cm
VPE 1 Breite	4,500 cm
VPE 1 Länge	5,000 cm
VPE 1 Gewicht	23,000 g
VPE 2 Art	S02
VPE 2 Menge	50
VPE 2 Höhe	15,000 cm
VPE 2 Breite	30,000 cm
VPE 2 Länge	40,000 cm
VPE 2 Gewicht	1,394 kg
VPE 3 Art	P06
VPE 3 Menge	800
VPE 3 Höhe	75,000 cm
VPE 3 Breite	80,000 cm
VPE 3 Länge	60,000 cm
VPE 3 Gewicht	30,304 kg

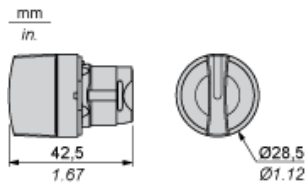
Nachhaltigkeit

Angebotsstatus nachhaltiges Produkt	Green Premium Produkt
REACH-Verordnung	 REACH-Deklaration
Frei von REACH-SVHC	Ja
EU-RoHS-Richtlinie	Übererfüllung der Konformität (außerhalb EU RoHS-Scope)  EU-RoHS-Deklaration
Frei von giftigen Schwermetallen	Ja
Quecksilberfrei	Ja
RoHS-Richtlinie für China	 RoHS-Erklärung Für China
Informationen zu RoHS-Ausnahmen	 Ja
Umweltproduktdeklaration	 Produktumweltprofil
Kreislaufwirtschafts-Profil	 Entsorgungsinformationen

Vertragliche Gewährleistung

Garantie	18 months
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Abmessungen



Schalttafelausschnitte für Drucktaster, Schalter und Meldeleuchten (fertige Bohrungen, installationsbereit)

Anschluss per Schraubklemmen oder Leiterplatte



- (1) Durchmesser auf fertiger Schalttafel oder Montagehalterung
- (2) Für Wahlschalter und Notausschalter wird eine verdrehsichere Platte des Typs ZB5AZ902 empfohlen.
- (3) $\varnothing 22,5 \text{ mm}$ empfohlen ($\varnothing 22,3 \text{ }_0^{+0,4}$) / $\varnothing 0.89 \text{ in.}$ empfohlen ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

Anschlüsse	a in mm	a in in.	b in mm	b in in.
Per Schraubklemmen oder Steckanschluss	40	1.57	30	1.18
Per Faston-Steckverbinder	45	1.77	32	1.26
Auf Leiterplatte	30	1.18	30	1.18

Details zur Aussparung der Haltevorrichtung



- (1) Durchmesser auf fertiger Schalttafel oder Montagehalterung
- (2) Für Wahlschalter und Notausschalter wird eine verdrehsichere Platte des Typs ZB5AZ902 empfohlen.
- (3) $\varnothing 22,5 \text{ mm}$ empfohlen ($\varnothing 22,3 \text{ }_0^{+0,4}$) / $\varnothing 0.89 \text{ in.}$ empfohlen ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

Drucktaster, Schalter und Leuchtmelder für den Leiterplattenanschluss

Schalttafelausschnitte (Ansicht anwenderseitig)



A : 30 mm min. / 1,18 in. min.

B : 40 mm min. / 1,57 in. min.

Bohrungen der Leiterplatte (Ansicht Elektroblock)

Abmessungen in mm



A : 30 mm min.

B : 40 mm min.

Technical drawing of a mechanical part, showing a top view and a cross-section view. The part is a rectangular plate with a central horizontal slot and a vertical slot. The drawing includes various dimensions and tolerances.

Top View Dimensions:

- Overall width: $B \pm T2$
- Overall height: $B1 \pm T2$
- Central horizontal slot width: 0.11 ± 0.002
- Central horizontal slot depth: 0.71 ± 0.004
- Vertical slot width: 0.16
- Vertical slot depth: 0.21
- Horizontal distance from left edge to vertical slot center: 0.16
- Horizontal distance from vertical slot center to right edge: 0.16
- Horizontal distance from left edge to first hole center: 0.5
- Horizontal distance between first and second hole centers: 0.25
- Horizontal distance between second and third hole centers: 0.2
- Horizontal distance from third hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to fourth hole center: 0.16
- Horizontal distance from fourth hole center to right edge: 0.16
- Horizontal distance from left edge to fifth hole center: 0.5
- Horizontal distance between fifth and sixth hole centers: 0.25
- Horizontal distance between sixth and seventh hole centers: 0.2
- Horizontal distance from seventh hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to eighth hole center: 0.16
- Horizontal distance from eighth hole center to right edge: 0.16
- Horizontal distance from left edge to ninth hole center: 0.5
- Horizontal distance between ninth and tenth hole centers: 0.25
- Horizontal distance between tenth and eleventh hole centers: 0.2
- Horizontal distance from eleventh hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to twelfth hole center: 0.16
- Horizontal distance from twelfth hole center to right edge: 0.16
- Horizontal distance from left edge to thirteenth hole center: 0.5
- Horizontal distance between thirteenth and fourteenth hole centers: 0.25
- Horizontal distance between fourteenth and fifteenth hole centers: 0.2
- Horizontal distance from fifteenth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to sixteenth hole center: 0.16
- Horizontal distance from sixteenth hole center to right edge: 0.16
- Horizontal distance from left edge to seventeenth hole center: 0.5
- Horizontal distance between seventeenth and eighteenth hole centers: 0.25
- Horizontal distance between eighteenth and nineteenth hole centers: 0.2
- Horizontal distance from nineteenth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to twentieth hole center: 0.16
- Horizontal distance from twentieth hole center to right edge: 0.16
- Horizontal distance from left edge to twenty-first hole center: 0.5
- Horizontal distance between twenty-first and twenty-second hole centers: 0.25
- Horizontal distance between twenty-second and twenty-third hole centers: 0.2
- Horizontal distance from twenty-third hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to twenty-fourth hole center: 0.16
- Horizontal distance from twenty-fourth hole center to right edge: 0.16
- Horizontal distance from left edge to twenty-fifth hole center: 0.5
- Horizontal distance between twenty-fifth and twenty-sixth hole centers: 0.25
- Horizontal distance between twenty-sixth and twenty-seventh hole centers: 0.2
- Horizontal distance from twenty-seventh hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to twenty-eighth hole center: 0.16
- Horizontal distance from twenty-eighth hole center to right edge: 0.16
- Horizontal distance from left edge to twenty-ninth hole center: 0.5
- Horizontal distance between twenty-ninth and thirtieth hole centers: 0.25
- Horizontal distance between thirtieth and thirty-first hole centers: 0.2
- Horizontal distance from thirty-first hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to thirty-second hole center: 0.16
- Horizontal distance from thirty-second hole center to right edge: 0.16
- Horizontal distance from left edge to thirty-third hole center: 0.5
- Horizontal distance between thirty-third and thirty-fourth hole centers: 0.25
- Horizontal distance between thirty-fourth and thirty-fifth hole centers: 0.2
- Horizontal distance from thirty-fifth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to thirty-sixth hole center: 0.16
- Horizontal distance from thirty-sixth hole center to right edge: 0.16
- Horizontal distance from left edge to thirty-seventh hole center: 0.5
- Horizontal distance between thirty-seventh and thirty-eighth hole centers: 0.25
- Horizontal distance between thirty-eighth and thirty-ninth hole centers: 0.2
- Horizontal distance from thirty-ninth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to fortieth hole center: 0.16
- Horizontal distance from fortieth hole center to right edge: 0.16
- Horizontal distance from left edge to forty-first hole center: 0.5
- Horizontal distance between forty-first and forty-second hole centers: 0.25
- Horizontal distance between forty-second and forty-third hole centers: 0.2
- Horizontal distance from forty-third hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to forty-fourth hole center: 0.16
- Horizontal distance from forty-fourth hole center to right edge: 0.16
- Horizontal distance from left edge to forty-fifth hole center: 0.5
- Horizontal distance between forty-fifth and forty-sixth hole centers: 0.25
- Horizontal distance between forty-sixth and forty-seventh hole centers: 0.2
- Horizontal distance from forty-seventh hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to forty-eighth hole center: 0.16
- Horizontal distance from forty-eighth hole center to right edge: 0.16
- Horizontal distance from left edge to forty-ninth hole center: 0.5
- Horizontal distance between forty-ninth and fiftieth hole centers: 0.25
- Horizontal distance between fiftieth and fifty-first hole centers: 0.2
- Horizontal distance from fifty-first hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to fifty-second hole center: 0.16
- Horizontal distance from fifty-second hole center to right edge: 0.16
- Horizontal distance from left edge to fifty-third hole center: 0.5
- Horizontal distance between fifty-third and fifty-fourth hole centers: 0.25
- Horizontal distance between fifty-fourth and fifty-fifth hole centers: 0.2
- Horizontal distance from fifty-fifth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to fifty-sixth hole center: 0.16
- Horizontal distance from fifty-sixth hole center to right edge: 0.16
- Horizontal distance from left edge to fifty-seventh hole center: 0.5
- Horizontal distance between fifty-seventh and fifty-eighth hole centers: 0.25
- Horizontal distance between fifty-eighth and fifty-ninth hole centers: 0.2
- Horizontal distance from fifty-ninth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to sixtyth hole center: 0.16
- Horizontal distance from sixtyth hole center to right edge: 0.16
- Horizontal distance from left edge to sixty-first hole center: 0.5
- Horizontal distance between sixty-first and sixty-second hole centers: 0.25
- Horizontal distance between sixty-second and sixty-third hole centers: 0.2
- Horizontal distance from sixty-third hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to sixty-fourth hole center: 0.16
- Horizontal distance from sixty-fourth hole center to right edge: 0.16
- Horizontal distance from left edge to sixty-fifth hole center: 0.5
- Horizontal distance between sixty-fifth and sixty-sixth hole centers: 0.25
- Horizontal distance between sixty-sixth and sixty-seventh hole centers: 0.2
- Horizontal distance from sixty-seventh hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to sixty-eighth hole center: 0.16
- Horizontal distance from sixty-eighth hole center to right edge: 0.16
- Horizontal distance from left edge to sixty-ninth hole center: 0.5
- Horizontal distance between sixty-ninth and seventieth hole centers: 0.25
- Horizontal distance between seventieth and seventy-first hole centers: 0.2
- Horizontal distance from seventy-first hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to seventy-second hole center: 0.16
- Horizontal distance from seventy-second hole center to right edge: 0.16
- Horizontal distance from left edge to seventy-third hole center: 0.5
- Horizontal distance between seventy-third and seventy-fourth hole centers: 0.25
- Horizontal distance between seventy-fourth and seventy-fifth hole centers: 0.2
- Horizontal distance from seventy-fifth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to seventy-sixth hole center: 0.16
- Horizontal distance from seventy-sixth hole center to right edge: 0.16
- Horizontal distance from left edge to seventy-seventh hole center: 0.5
- Horizontal distance between seventy-seventh and seventy-eighth hole centers: 0.25
- Horizontal distance between seventy-eighth and seventy-ninth hole centers: 0.2
- Horizontal distance from seventy-ninth hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to eightieth hole center: 0.16
- Horizontal distance from eightieth hole center to right edge: 0.16
- Horizontal distance from left edge to eighty-first hole center: 0.5
- Horizontal distance between eighty-first and eighty-second hole centers: 0.25
- Horizontal distance between eighty-second and eighty-third hole centers: 0.2
- Horizontal distance from eighty-third hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to eighty-fourth hole center: 0.16
- Horizontal distance from eighty-fourth hole center to right edge: 0.16
- Horizontal distance from left edge to eighty-fifth hole center: 0.5
- Horizontal distance between eighty-fifth and eighty-sixth hole centers: 0.25
- Horizontal distance between eighty-sixth and eighty-seventh hole centers: 0.2
- Horizontal distance from eighty-seventh hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to eighty-eighth hole center: 0.16
- Horizontal distance from eighty-eighth hole center to right edge: 0.16
- Horizontal distance from left edge to eighty-ninth hole center: 0.5
- Horizontal distance between eighty-ninth and ninetieth hole centers: 0.25
- Horizontal distance between ninetieth and ninety-first hole centers: 0.2
- Horizontal distance from ninety-first hole center to vertical slot center: 0.16
- Horizontal distance from vertical slot center to ninety-second hole center: 0.16
- Horizontal distance from ninety-second hole center to right edge: 0.16
- Horizontal distance from left edge to ninety-third hole center: 0.5
- Horizontal distance between ninety-third and ninety-fourth hole centers: 0.25
- Horizontal distance between ninety-fourth and ninety-fifth hole centers: 0.2
-

B: 1.57 in. min.

Die Summe der Toleranzen darf 0,3 mm / 0,012 in. nicht überschreiten. $T_1 + T_2 = \max. 0,3 \text{ mm}$

- Minimale Stärke der Leiterplatte: 1,6 mm / 0,06 in.
- Durchmesser der Bohrung: 22,4 mm $\pm$ 0,1 / 0,88 in. $\pm$ 0,004
- Orientierung des Befestigungsflansches ZB5AZ009: $\pm 2^\circ 30'$ (außer den mit a und b gekennzeichneten Bohrungen).
- Maximales Anzugsmoment der Schrauben ZBZ006: max. 0,6 Nm (5,3 lbf-in)
- Es ist ein Befestigungsflansch ZB5AZ079 mit Befestigungsschrauben vorzusehen:
 - alle 90 mm / 3,54 in. in der Horizontalen (X) und alle 120 mm / 4,72 in. in der Vertikalen (Y).
 - mit jedem Auswahlshalterkopf (ZB5AD•, ZB5AJ•, ZB5AG•).

Technical drawing of the ZB5 AZ079 assembly. The drawing shows a side view of the assembly with various components labeled. The dimensions are as follows:

- Overall length: 49.75 ± 0.3
- Distance from front face to start of last thread: 1.96 ± 0.012
- Distance from front face to end of last thread: 55.4 max
- Distance from front face to end of last thread (including tolerance): 2.18 max

Component labels and callouts:

- (1) ZB5 AZ079
- (2) ZBE 70●/ZBV B●7
- (3) ZBZ 01●
- (4) ZBZ 006

Scale: mm / in.

- (1) Kopf ZB5AD•
- (2) Schalttafel
- (2) Mutter
- (4) Leiterplatte

Montage des Adapters (Sockel) ZBZ01•

- 1 2 Langlochbohrungen für Befestigungsschrauben ZBZ006
- 2 1 Bohrung $\varnothing 2,4 \text{ mm} \pm 0,05 / 0,09 \text{ in.} \pm 0,002$ für die Zentrierung des Adapters ZBZ01•
- 3 8 × Bohrungen $\varnothing 1,2 \text{ mm} / 0,05 \text{ in.}$
- 4 1 Bohrung $\varnothing 2,9 \text{ mm} \pm 0,05 / 0,11 \text{ in.} \pm 0,002$ zur Ausrichtung der Leiterplatte (mit Bohrung a)
- 5 1 Langlochbohrung zur Ausrichtung der Leiterplatte (mit Bohrung b)
- 6 4 Bohrungen $\varnothing 2,4 \text{ mm} / 0,09 \text{ in.}$ zum Aufrasten des Adapters ZBZ01•

Die Abmessungen An + 18,1 gehören zu den Bohrungen $\varnothing 2,4 \text{ mm} \pm 0,05 / 0,09 \text{ in.} \pm 0,002$ für die Zentrierung des Adapters ZBZ01•.

Elektrische Zusammensetzung entsprechend dem Code M3



Elektrische Zusammensetzung entsprechend dem Code M4



Elektrische Zusammensetzung entsprechend den Codes M6 und P2



Elektrische Zusammensetzung entsprechend den Codes M5, M10, MF1, MR1 und MF2



Legende

Einzelkontakt



Doppelkontakt



Leuchtbereich



Mögliche Position



Sequenz von Kontakten an einem Wahlschaltergehäuse mit 3 Positionen

Position 315°



Push	Position	Oberseite			
Unterseite					
Position		Linke Seite	Rechte Seite		
Zustand		1	0		
Kontakte	N/O		Zustand	Offen	
N/C		Offen	Zustand		

Position 0°



Push	Position	Oberseite			
Unterseite					
Position		Linke Seite	Rechte Seite		
Zustand		0	0		
Kontakte	N/O		Offen	Offen	
N/C		Zustand	Zustand		

Position 45°



Push	Position	Oberseite			
Unterseite					
Position		Linke Seite	Rechte Seite		
Zustand		0	1		
Kontakte	N/O		Offen	Zustand	
N/C		Zustand	Offen		