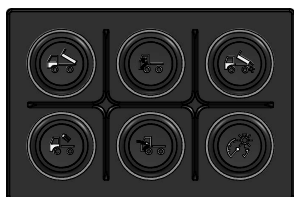
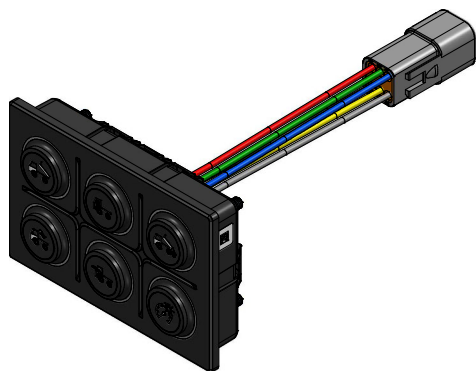
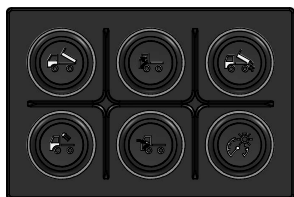
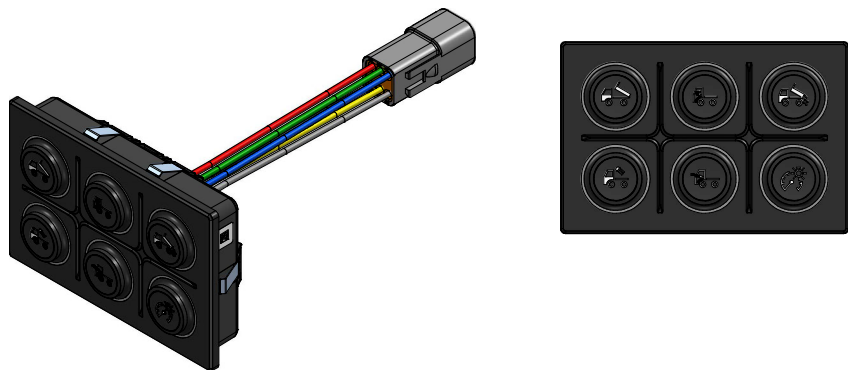


# Series 09 Rugged Keypads

revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
04	-	20.01.2022	nut DIN 985, change label EOL, change minimum bending radius, change descriptions	1023
-	-	-	-	-
-	-	-	-	-



- sheet 1: cover
- sheet 2: product dimensions
- sheet 3: mounting specifications - panel cutout
- sheet 4: mounting specifications - assembly CAN
- sheet 5: mounting specifications - assembly hardwired
- sheet 6: illumination specification
- sheet 7: circuit diagrams - electrical connection
- sheet 8: product labeling

description				S09 Rugged Keypad 6 Pushbuttons		drawing no.	1707940001	revision	04
<b>eao</b>		scale	1:2	format	A 3	weight	s. BOM	document type	product information
EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY		1st angle projection		all dimensions are in millimeters [inches]		status		only for information	
						date	20.01.2022	name	RAD
						drawn	20.01.2022	SCR	sheet no.
						approved	20.01.2022	SCR	1/8

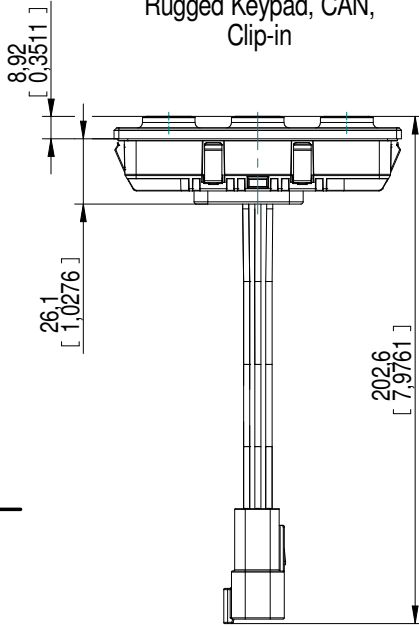
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# product dimensions

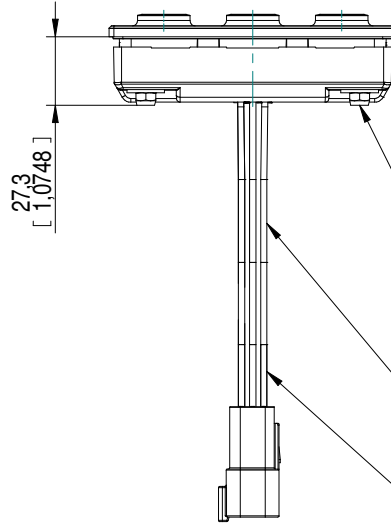
exemplary representation of the symbols

revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
04	-	20.01.2022	nut DIN 985, change label EOL, change minimum bending radius, change descriptions	1023
-	-	-	-	-
-	-	-	-	-

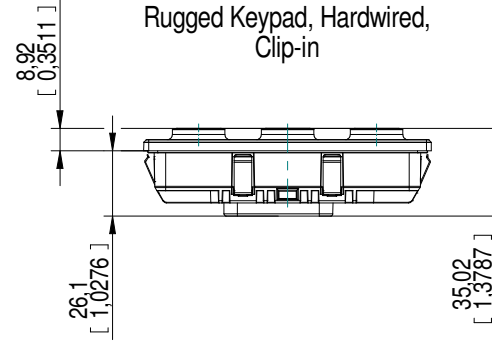
Rugged Keypad, CAN, Clip-in



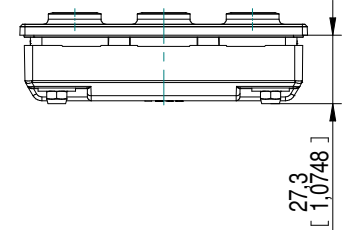
Rugged Keypad, CAN, Screw-in



Rugged Keypad, Hardwired, Clip-in



Rugged Keypad, Hardwired, Screw-in



Nuts thread: 4x M5 self-locking nut acc. DIN 985

Typical tightening torque: 0,9 Nm  
Maximum tightening torque: 1,2 Nm

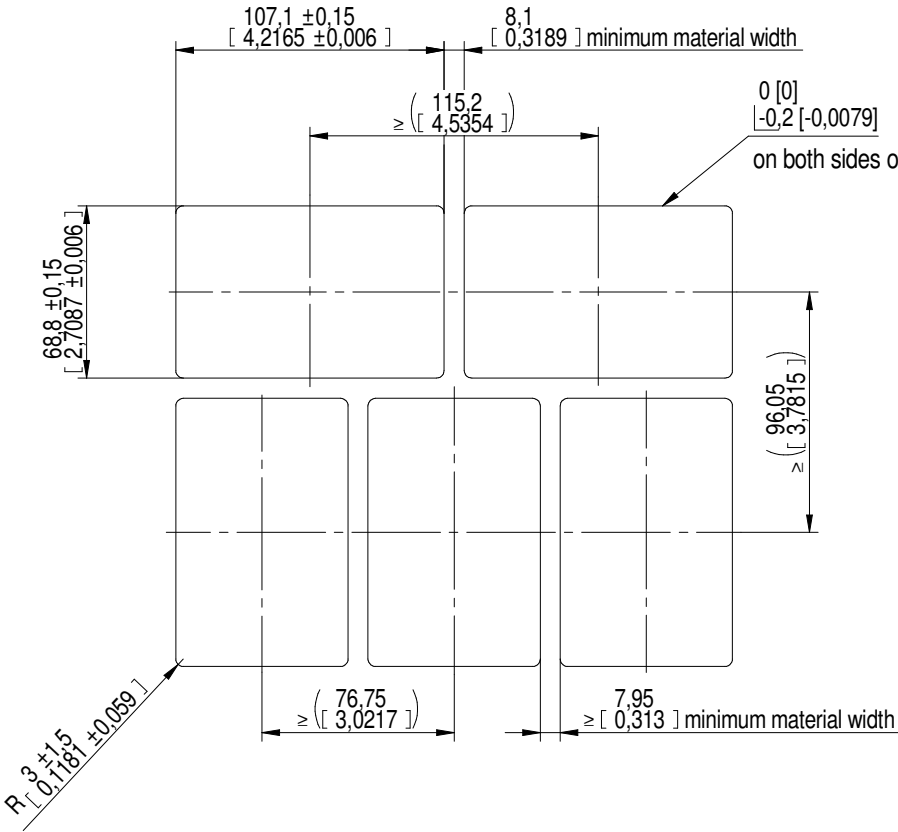
Minimum bending radius with a single bend: R10 mm  
Minimum bending radius with repeated bending (max. 10x): R18 mm

Note: All connection wires are the same length

description				S09 Rugged Keypad 6 Pushbuttons		drawing no.	1707940001	revision	04
 EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY		scale	1:2	format	A 3	weight	s. BOM	document type	product information
1st angle projection		all dimensions are in millimeters [inches]			status		only for information		
		date		name		sheet no.			
		20.01.2022		RAD		2/8			
		approved		SCR					

# mounting specifications - panel cutout

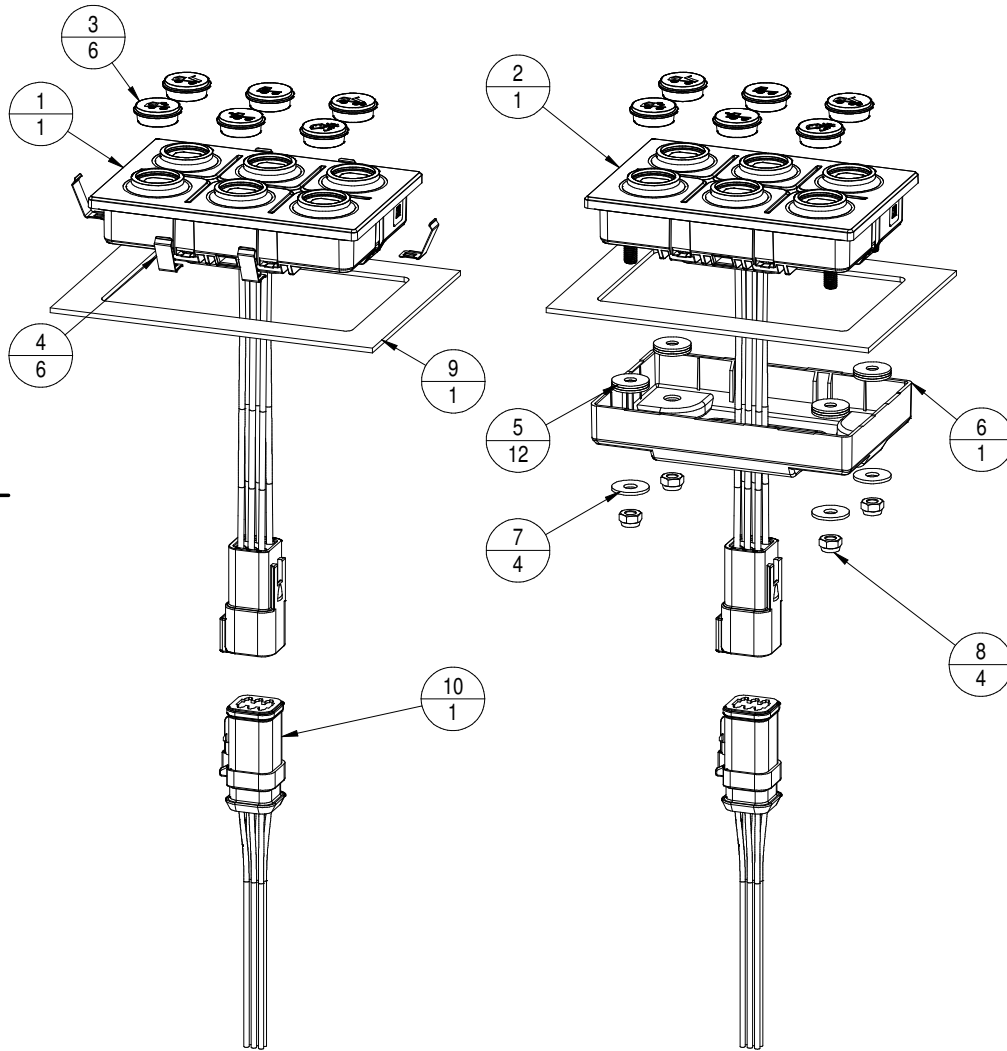
Panel cutout  
 (panel thickness 1,0 mm [0,0394 inch]; 2,0 mm [0,0787 inch];  
 3,0 mm [0,1181 inch]; 4,0 mm [0,1575 inch])



revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
04	-	20.01.2022	nut DIN 985, change label EOL, change minimum bending radius, change descriptions	1023
-	-	-	-	-
-	-	-	-	-

description				drawing no.		revision	
S09 Rugged Keypad 6 Pushbuttons				1707940001		04	
		scale	format	weight	document type	status	
EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY		1:2	A 3	s. BOM	product information	only for information	
1st angle projection		all dimensions are in millimeters [inches]			date	name	sheet no.
					drawn	approved	
					20.01.2022	RAD	3/8
					20.01.2022	SCR	

# mounting specifications - assembly Rugged Keypads, CAN



mounting and demounting of the symbol inserts with insert tool 09-0A00.0001

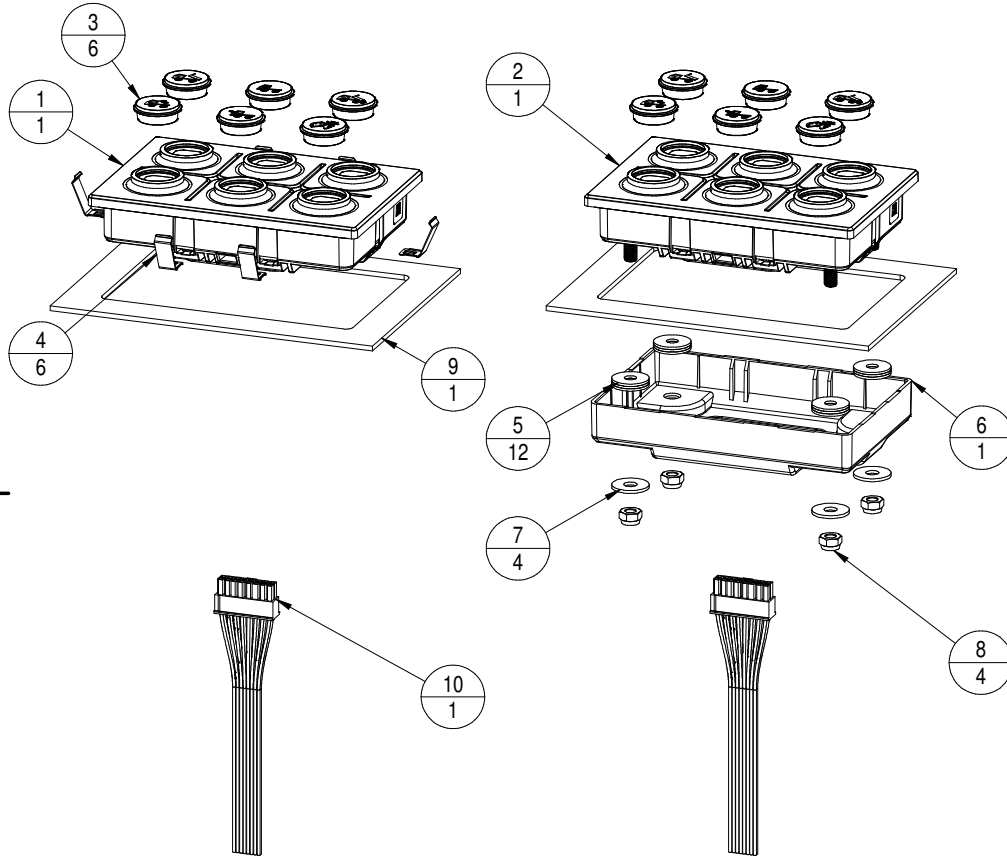
revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
04	-	20.01.2022	nut DIN 985, change label EOL, change minimum bending radius, change descriptions	1023
-	-	-	-	-
-	-	-	-	-

bill of material					
pos.	description	comment	qty	clip-in	screw-in
1	Rugged Keypad, CAN, Clip-in	-	1	x	
2	Rugged Keypad, CAN, Screw-in	-	1		x
3	symbol insert	for further informations see illumination specification	6	x	x
4	retaining clip *		6	x	
5	rubber washer	4,8 x 15 x 1	12 **		x
6	coupler		1		x
7	washer	DIN9021 stainless A2	4		x
8	nut	DIN 985 similar to ISO 10511, ISO 10512 M5 self-locking stainless A4	4		x
9	panel ***		1	x	x
10	mating plug ***	for further informations see circuit diagrams - electrical connection	1	x	x
*weight				~ 216 g - 217 g	~ 263 g - 267 g

\* depending on the panel thickness  
 \*\* quantity depending on the panel thickness (12 rubber washers used for 4 mm panel)  
 \*\*\* not included

description			S09 Rugged Keypad 6 Pushbuttons		drawing no.	1707940001	revision	04
			scale	1:2	format	A 3	weight	s. BOM
EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY			document type	product information	status		only for information	
1st angle projection			all dimensions are in millimeters [inches]		date	20.01.2022	name	RAD
					drawn	20.01.2022	SCR	sheet no.
					approved	20.01.2022		4/8

# mounting specifications - assembly Rugged Keypads, Hardwired



mounting and demounting of the symbol inserts with insert tool 09-0A00.0001

revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
04	-	20.01.2022	nut DIN 985, change label EOL, change minimum bending radius, change descriptions	1023
-	-	-	-	-
-	-	-	-	-

bill of material					
pos.	description	comment	qty	clip-in	screw-in
1	Rugged Keypad, CAN, Clip-in	-	1	x	
2	Rugged Keypad, CAN, Screw-in	-	1		x
3	symbol insert	for further informations see illumination specification	6	x	x
4	retaining clip *		6	x	
5	rubber washer	4,8 x 15 x 1	12 **		x
6	coupler		1		x
7	washer	DIN9021 stainless A2	4		x
8	nut	DIN 985 similar to ISO 10511, ISO 10512 M5 self-locking stainless A4	4		x
9	panel ***		1	x	x
10	mating plug ***	for further informations see circuit diagrams - electrical connection	1	x	x
*weight				~ 164 g - 165 g	~ 211 g - 215 g

\* depending on the panel thickness

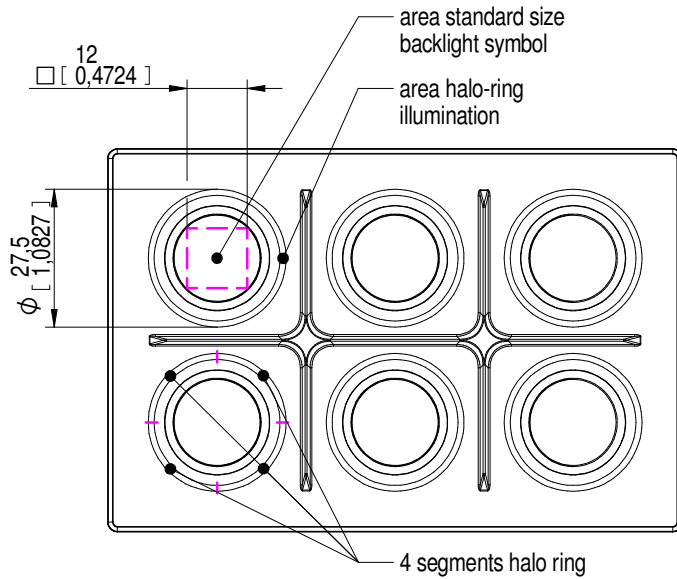
\*\* quantity depending on the panel thickness (12 rubber washers used for 4 mm panel)

\*\*\* not included

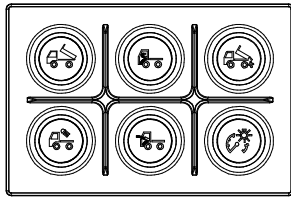
description				drawing no.		revision	
S09 Rugged Keypad 6 Pushbuttons				1707940001		04	
 EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY	scale	format	weight	document type	status		
	1:2	A 3	s. BOM	product information	only for information		
1st angle projection		all dimensions are in millimeters [inches]		date	name	sheet no.	
				drawn	20.01.2022	RAD	5/8
				approved	20.01.2022	SCR	

# illumination specification

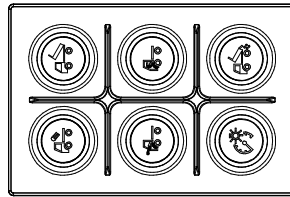
exemplary representation of the symbols



mounting options symbol inserts  
1:2



symbol orientation 0°



symbol orientation 90°

mounting and demounting of the symbol inserts with insert tool 09-0A00.0001

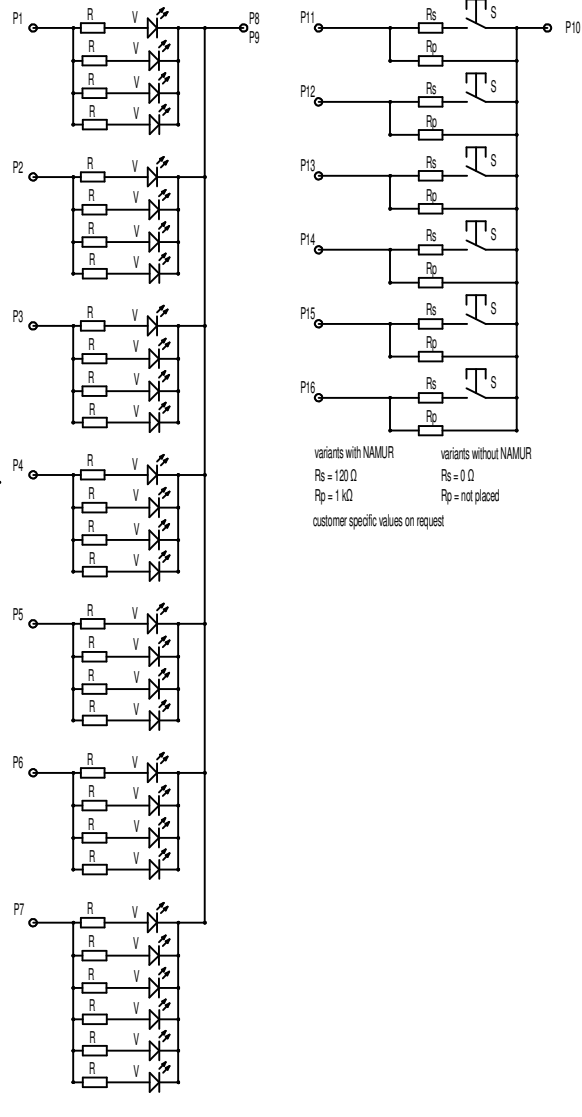
revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
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-	-	-	-	-
-	-	-	-	-

description				drawing no.		revision	
S09 Rugged Keypad 6 Pushbuttons				1707940001		04	
<b>eao</b>		scale	format	weight	document type	status	
EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY		1:1	A 3	s. BOM	product information	only for information	
1st angle projection		all dimensions are in millimeters [inches]			date	name	sheet no.
					drawn approved	20.01.2022 20.01.2022	RAD SCR
							6/8

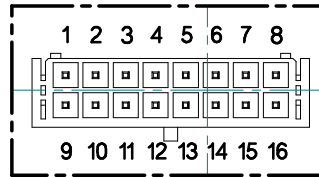
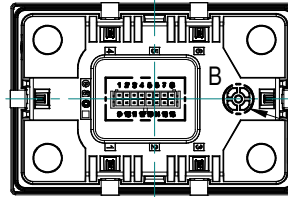
# circuit diagrams - electrical connection

revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
04	-	20.01.2022	nut DIN 985, change label EOL, change minimum bending radius, change descriptions	1023
-	-	-	-	-
-	-	-	-	-

circuit diagram Rugged Keypads, Hardwired

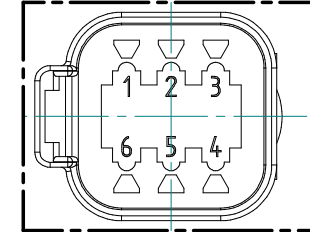
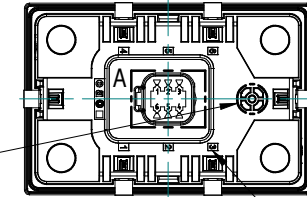


Rugged Keypad, Hardwired



detail B  
2:1

Rugged Keypad, CAN



detail A  
2:1

vent hole and pressure compensation do not puncture or plug

pushbutton number

connections WR-MPC3 16

mating plug: Wuerth 662 016 113 322  
matching contacts: 20 - 24 AWG 662 001 137 22 DEC

pin no.	signal	comment
pin 1	supply voltage haloring button 1	12 VDC / 24 VDC
pin 2	supply voltage haloring button 2	12 VDC / 24 VDC
pin 3	supply voltage haloring button 3	12 VDC / 24 VDC
pin 4	supply voltage haloring button 4	12 VDC / 24 VDC
pin 5	supply voltage haloring button 5	12 VDC / 24 VDC
pin 6	supply voltage haloring button 6	12 VDC / 24 VDC
pin 7	supply voltage symbol lighting	12 VDC / 24 VDC
pin 8	GND lighting	
pin 9	GND lighting	
pin 10	common potential buttons	
pin 11	signal button 1	max. current 30 mA
pin 12	signal button 2	max. current 30 mA
pin 13	signal button 3	max. current 30 mA
pin 14	signal button 4	max. current 30 mA
pin 15	signal button 5	max. current 30 mA
pin 16	signal button 6	max. current 30 mA

connections 6 - DT ( DT04-6P)

mating plug: Deutsch DT06-6S  
matching contacts: e.g. 1062-16-0122  
matching wedge: W6-S

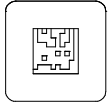
pin no.	signal	wire	comment
pin 1	GND	black	
pin 2	CAN High	yellow	
pin 3	WakeUp Out	grey	
pin 4	WakeUp In	blue	
pin 5	CAN Low	green	
pin 6	Vcc	red	8 - 32 VDC

description				drawing no.	revision
S09 Rugged Keypad 6 Pushbuttons				1707940001	04
 EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY	scale	format	weight	status	
	1:2	A 3	s. BOM	only for information	
1st angle projection	all dimensions are in millimeters [inches]			date	name
				20.01.2022	RAD
				drawn	sheet no.
				approved	7/8
				20.01.2022	SCR

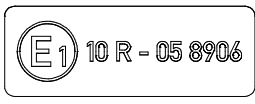
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# product labeling

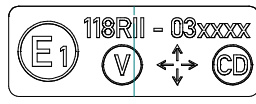
revision	zone	date	description	RP - no.
01	-	25.11.2020	initial edition	-
02	-	12.05.2021	drawing revised	918
03	-	14.07.2021	sheet 4 and 5: pos. 8 changed to stainless A4	968
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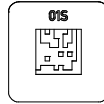
label traceability  
detail C  
2:1



label ECE R10  
detail D  
2:1

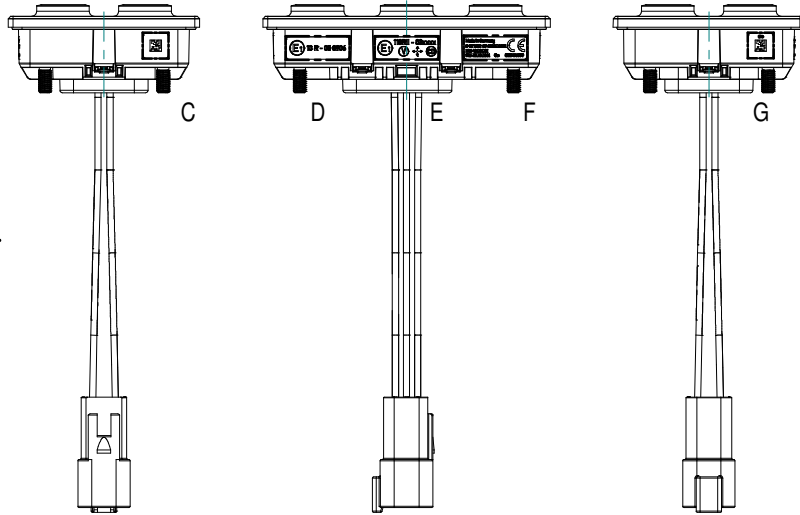


label ECE R118  
detail E  
2:1

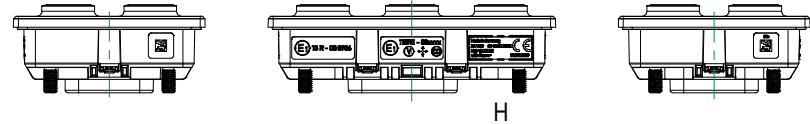


label End of Line Test  
detail G  
2:1

exemplary representation  
Rugged Keypad, CAN, Screw-in



exemplary representation  
Rugged Keypad, Hardwired, Screw-in



operating voltage

with or without  
NAMUR circuit



product label/CE Rugged Keypad, Hardwired  
detail H  
5:1

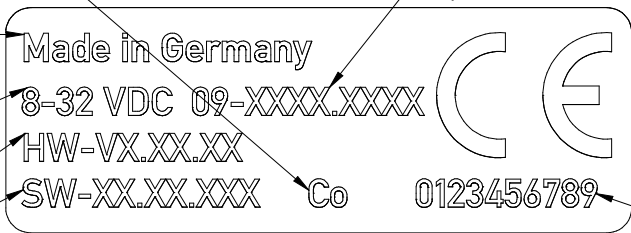
communication protocol

country of  
manufacture

voltage range

hardware level

software level



product label/CE Rugged Keypad, CAN  
detail F  
5:1

description				drawing no.	revision
S09 Rugged Keypad 6 Pushbuttons				1707940001	04
 EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 08209 Auerbach GERMANY	scale	format	weight	status	
	1:2	A 3	s. BOM	only for information	
1st angle projection		all dimensions are in millimeters [inches]		date	name
				20.01.2022	RAD
				drawn	sheet no.
				approved	8/8
				20.01.2022	SCR