

8WD4 signaling columns

General data

Two product series are available:

- 8WD42
 - Thermoplast enclosure, diameter 50 mm
 - Degree of protection IP54
 - Up to 4 elements can be mounted between the connection element and the cover
- 8WD44
 - Thermoplast enclosure, diameter 70 mm
 - Advanced design and significantly improved illumination
 - Fast and flexible connection using spring-type terminals
 - Integrated degree of protection IP65
 - Up to 5 elements can be mounted between the connection element and the cover



Signaling columns, mounting examples

The illustrated examples are from the left:

- 8WD42: Cover (no No.), four light elements ②, connection element ④, pipe ⑧, foot ⑨
- 8WD44: Acoustic element with cover ①, two light elements ②, connection element ⑤, foot with pipe ⑪
- 8WD44: Cover (no No.), four light elements ②, AS-Interface adapter element ③, connection element ④, bracket for wall mounting ⑥
- 8WD44: Cover (no No.), three light elements ②, AS-Interface adapter element ③, connection element ⑤, foot with pipe ⑪

Note:

The cover is supplied with the connection element.

Benefits

- Choice of various light and acoustic elements with different functions: continuous light, blinklight, flashlight and rotating light; buzzer and siren
- Light elements with particularly long-lasting LEDs
- Variety of colors: red, yellow, green, white or blue
- Optimized illumination through improved prism technology with the 8WD44
- Acoustic elements can be adjusted in tone and volume
- Extremely resistant to shock and vibrations
- Easy connection and quick lamp change with secure bayonet mechanism
- Communication capability through connection to AS-Interface

Application

8WD4 signaling columns are used in machines or in automatic processes for monitoring complex procedures or as visual or acoustic warning devices in emergency situations, e.g. for displaying individual assembly stages.

Communication capability

Connection to AS-Interface

The 8WD4 signaling columns can be directly connected to the AS-Interface bus system through an adapter element that can be integrated in the column. Wiring outlay is reduced as the result. The two-wire bus cable is fixed to the terminals in the connection element. Up to four signaling elements can be mounted on it using an adapter element.

A/B technology enables the connection of up to 62 slaves on one AS-Interface system.

Connection

The signaling elements are wired up using the screw terminals in the connection element, screw terminals on the 8WD42 and screw or spring-type terminals on the 8WD44.

Cable outlet

The connecting cables can be guided either downwards or sideways through the cable gland using an adapter that can be screwed under the foot. This makes wiring easier if there is no access from below.

Connection to AS-Interface

8WD42:

The two-wire bus cable is fixed to the screw terminals in the connection element. The adapter element must be the first module to be mounted on the connection element. A maximum of four signaling elements can then be mounted on it.

The 8WD4228-0BB adapter element is a standard slave.

8WD44:

The two-wire bus cable is fixed to the screw or spring-type terminals in the connection element. The adapter element must be the first module to be mounted on the connection element. The signaling elements can then be mounted on it.

The 8WD4428-0BE adapter element is a standard slave. A maximum of four signaling elements can be mounted on it.

The 8WD4428-0BD adapter element with A/B technology enables the connection of up to 62 slaves on one AS-Interface system. The addressing socket provides user-friendly parameterization of the AS-Interface elements. A maximum of three signaling elements can be mounted on it.

Technical specifications

Type	8WD42	8WD44
General data		
Approvals	UL, CSA	UL, CSA
Light and acoustic elements		
Rated voltage, power consumption		
Light elements with incandescent lamp	(AC values for 50/60 Hz)	(AC values for 50/60 Hz)
• Continuous light	12 V, 24 V, 115 V, 230 V AC/DC	12 V, 24 V, 115 V, 230 V AC/DC
• Blinklight	24 V AC/DC/125 mA; 115 V AC/20 mA; 230 V AC/15 mA	24 V AC/DC/125 mA; 115 V AC/20 mA; 230 V AC/15 mA
• Flashlights	--	24 V DC/125 mA; 115 V AC/20 mA; 230 V AC/35 mA
• Max. inrush current, blinklight/flashlight	--	500 mA
Light elements with integrated LED		
• Continuous light	24 V AC/DC/60 mA	24 V AC/DC/25 mA; 115 V AC/25 mA; 230 V AC/25 mA
• Blinklight	24 V AC/DC/60 mA; 115 V AC/60 mA; 230 V AC/60 mA	24 V AC/DC/40 mA
• Rotating light	--	24 V AC/DC/70 mA
Acoustic elements		
• Buzzer element (tone: pulsating or continuous tone)	80 dB: 24 V AC/DC/25 mA; 115 V AC/DC/25 mA; 230 V AC/25 mA	85 dB: 24 V AC/DC/25 mA; 115 V AC/25 mA; 230 V AC/25 mA
• Siren element (8 tones + amplification can be set, 100 dB)	--	24 V AC/DC/80 mA; 115 V AC/30 mA; 230 V AC/16 mA
• Siren element (108 dB)	--	24 V DC/100 mA
Power consumption		
• Incandescent lamps, base BA 15d	W	7
• Flashlight, flash energy	Ws	2
Endurance		
• Flashlights	--	4 × 10 ⁶ flashes
AS-Interface adapter elements		
IO code/ID code	8/F	8/E
Power supply		
• Operational voltage	V	Through bus cable
• Power consumption $I_{\max}$	mA	18.5 ... 31.6
		100
Protective measures		
• Watchdog	✓	✓
• Short-circuit/overload protection	External back-up fuse M 1.6 A	✓
• Reverse polarity protection	✓	✓
• Induction protection	N/A	✓
Outputs		
• Load voltage	V	4 relay outputs
	V	External auxiliary voltage
		0 ... 30 DC
		0 ... 230 AC
• Current carrying capacity $\Sigma I_{\max}$		3 solid-state outputs
- With external auxiliary voltage	A	Through bus cable or external auxiliary voltage, switch-selectable
- Without external auxiliary voltage	A	
		0.3
		0.2
Operating temperature	°C	-20 ... +50
		-20 ... +50
Enclosures		
Enclosure material	Thermoplast (polyamide), impact-resistant, black	Thermoplast (polyamide), impact-resistant, black
Light elements	Thermoplast (polycarbonate)	Thermoplast (polycarbonate)
Mounting		
• Horizontal (for base mounting, foot with 25 mm Ø pipe)	✓	✓
• Horizontal (single-hole mounting)	✓	--
• Vertical with bracket	✓	✓
Degree of protection		
• Light elements	IP54	IP65 (seal premounted with every module)
• Acoustic elements, AS-i adapter elements	IP54	IP65
Operating temperature	°C	-20 ... +50
		-20 ... +50
Connection		
• Conductor cross-sections	mm ²	Spring-type terminals/M3 screw terminals
• Tightening torque	Nm	Max. 2.5
		- / max. 0.5

8WD4 signaling columns

8WD44 signaling columns, 70 mm diameter

Version	Rated voltage	Color	DT	Article No.		
V						
Light elements with integrated LED						
      	Continuous light elements	24 AC/DC	Red	A	8WD4420-5AB	
			Green	A	8WD4420-5AC	
			Yellow	A	8WD4420-5AD	
			Clear	A	8WD4420-5AE	
			Blue	A	8WD4420-5AF	
			115 AC	Red	A	8WD4440-5AB
				Green	A	8WD4440-5AC
				Yellow	A	8WD4440-5AD
				Clear	A	8WD4440-5AE
				Blue	A	8WD4440-5AF
			230 AC	Red	A	8WD4450-5AB
				Green	A	8WD4450-5AC
				Yellow	A	8WD4450-5AD
				Clear	A	8WD4450-5AE
				Blue	A	8WD4450-5AF
	Blinklight elements	24 AC/DC	Red	A	8WD4420-5BB	
			Green	A	8WD4420-5BC	
			Yellow	A	8WD4420-5BD	
			Clear	A	8WD4420-5BE	
			Blue	A	8WD4420-5BF	
			115 AC	Red	A	8WD4440-5BB
				Green	A	8WD4440-5BC
				Yellow	A	8WD4440-5BD
				Clear	A	8WD4440-5BE
				Blue	A	8WD4440-5BF
			230 AC	Red	A	8WD4450-5BB
				Green	A	8WD4450-5BC
				Yellow	A	8WD4450-5BD
				Clear	A	8WD4450-5BE
				Blue	A	8WD4450-5BF
	Rotating light elements	24 AC/DC	Red	A	8WD4420-5DB	
			Green	A	8WD4420-5DC	
			Yellow	A	8WD4420-5DD	
			Clear	A	8WD4420-5DE	
			Blue	A	8WD4420-5DF	
Adapter elements for AS-Interface						
	AS-Interface adapter elements					
	With/without external auxiliary voltage, switchable					
	• A/B technology	For 3 signaling elements 24 V DC	Black	A	8WD4428-0BD	
	• Standard AS-i	For 4 signaling elements 24 V DC	Black	A	8WD4428-0BE	
Connection elements ¹⁾						
	Connection elements with cover		Black			
	Screw terminals					
	• For mounting on pipes			A	8WD4408-0AA	
	• For mounting on brackets and floors			A	8WD4408-0AB	
	Spring-type terminals					
	• For mounting on pipes			A	8WD4408-0AD	
	• For mounting on brackets and floors			A	8WD4408-0AE	
	Cover (replacement)			A	8WD4408-0XA	

¹⁾ The connection element with cover is an essential part for assembling the signaling columns.