

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	Max. 5	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 18.5 ... 31.6	Through bus cable 18.5 ... 31.6
• Power consumption $I_{\max}$	mA	50	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 External auxiliary voltage 0 ... 30 DC 0 ... 230 AC	3 solid-state outputs Through bus cable or external auxiliary voltage, switch-selectable
• Current carrying capacity $\Sigma I_{\max}$			
- With external auxiliary voltage	A	1.5	0.3
- Without external auxiliary voltage	A	--	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	M3 screw terminal Max. 2.5	Spring-type terminals/M3 screw terminals Max. 2.5
• Tightening torque	Nm	Max. 0.5	-- / max. 0.5

8WD4 signaling columns

8WD42 signaling columns, 50 mm diameter

Version	Rated voltage	Color	DT	Article No.	
V					
Connection elements					
	Connection elements with cover For mounting on pipes, floors and angles Essential part for assembling the signaling columns	Black	A	8WD4208-0AA	
Mounting					
	Feet, single	Plastic, for mounting on pipes Metal, for pipe lengths > 400 mm Plastic, for base mounting (without pipe)	A A A	8WD4308-0DB 8WD4308-0DC 8WD4208-0DE	
	Adjustable-angle feet for positioning in 7.5° increments ¹⁾	Plastic, for mounting on pipes, incl. rubber seal	A	8WD4408-0DF	
	Pipes, single	Length 100 mm Length 150 mm Length 250 mm Length 400 mm Length 1 000 mm	A A A A A	8WD4208-0EF 8WD4308-0EE 8WD4308-0EA 8WD4308-0EB 8WD4308-0ED	
	Sockets for feet	Side cable outlet Side cable outlet, with magnetic fixing ²⁾	A A	8WD4308-0DD 8WD4308-0DE	
	Brackets for mounting with foot		A	8WD4408-0CC	
	Brackets for wall mounting (plastic)	Mounting without feet and pipe	A	8WD4208-0CD	
	Adapters for single-hole mounting	Mounting without feet and pipe, with M18 thread and fixing nut	A	8WD4208-0EH	
Lamps					
	Incandescent lamps, 5 W				
	Base BA 15d	24 AC/DC 115 AC 230 AC	Clear Clear Clear	A A A	8WD4328-1XX 8WD4348-1XX 8WD4358-1XX
	LEDs				
	Base BA 15d	24 AC/DC 115 AC 230 AC	Red Green Yellow Clear Blue Red Green Yellow Clear Blue Red Green Yellow Clear Blue	A A A A A A A A A A A A A A A	8WD4428-6XB 8WD4428-6XC 8WD4428-6XD 8WD4428-6XE 8WD4428-6XF 8WD4448-6XB 8WD4448-6XC 8WD4448-6XD 8WD4448-6XE 8WD4448-6XF 8WD4458-6XB 8WD4458-6XC 8WD4458-6XD 8WD4458-6XE 8WD4458-6XF

For labeling panels see 8WD44, page 2/148.

¹⁾ Markings for 30°, 45°, 60° and 90°.²⁾ For horizontal mounting, only 1 element is recommended.