

Versatile, rugged, communications-capable:
SIRIUS signaling columns
and integrated signal lamps



sirius

COMMANDING & SIGNALING

SIEMENS



Continuous awareness of your process status: **SIRIUS commanding and signaling devices**

Dialog between man and machine demands special attention. System faults and interruptions must be reliably signaled in real time. If things start to get critical, you must be assured that machines and processes can be reliably and safely stopped. Our SIRIUS® commanding and signaling devices encompass an extensive range of products for almost any situation. In addition to modular and communications-capable signaling columns and rugged integrated signal lamps, our pushbuttons and indicator lights, two-hand operator panels, and foot and cable-operated switches ensure that you feel absolutely secure in almost any situation.



Flexible in design, versatile in use: **Technology in detail**

Small but on the ball: 50 mm SIRIUS 8WD42 signaling columns

With a diameter of only 50 mm, our small 8WD42 signaling columns can be mounted almost anywhere. With the ability to be installed in "out of the way" places their strong lumination will still make them visible. Up to four elements can be flexibly combined, and thanks to the practical bayonet catch, they can be installed with just a few manual operations. Just like all our signaling columns, our smallest member of the family offers you the complete range of visual and acoustic versatility – with continuous light, blinking light, LED or buzzer element – you always have the choice.

Widely proven: 70 mm SIRIUS 8WD44 signaling columns

Our 8WD44 signaling columns have proven themselves admirably in the widest range of applications. The modular design and the time-saving bayonet catch allow these devices to be simply configured and the lamps to be quickly changed. Up to 10 elements can be freely and flexibly combined. In addition, the new and advanced design ensures optimum illumination.

By the turn of the hand: Bayonet catch and simple mounting and installation

All the modules of the SIRIUS 8WD4 signaling columns are equipped with a practical bayonet catch as standard. A slight twist at the marker lines is all that is needed and the individual elements are reliably connected – both mechanically and electrically. Whether on the floor, mounted on pipes or on brackets, the different versions of the SIRIUS signaling columns can be simply, quickly and safely mounted. A wide range of practical adapters further simplify mounting.





For optimum acoustics: Sirens and buzzers can be individually adjusted

The acoustic elements of our 8WD42 and 8WD44 signaling columns hit the right note in most application. For the buzzer elements, a switch is used to select a continuous or pulsating tone of 85 dB. The volume of the siren elements can be continuously adjusted using a potentiometer. Eight additional tones are offered which means that you can always hit the right note.

Brilliant operational safety: Innovative LED technology

Innovative LED technology plays an essential role in achieving maximum operational safety. This is mainly due to the exceptionally long life of LEDs. A life expectancy of up to 100,000 h can be achieved by using the integrated LED, and up to 50,000 h for the LED BA 15 D in a base. In addition to long life, LEDs are especially resistant to shock and vibration and distinguish themselves thanks to their low current drain. Brilliant perspectives when it comes to safe and reliable operation.

Open dialog: Communications-capable using an AS-Interface connection

Using an adapter module, SIRIUS 8WD4 signaling columns can be easily connected to the AS-Interface bus system – without any significant wiring costs. The AS-Interface adapter module is integrated as the lowest element in the signaling column. This means that SIRIUS 8WD4 signaling columns are part of seamless and integrated communications from the supervisory level down to the actuator or sensor.



AS-Interface element 8WD44 in A/B technology with a selectable auxiliary voltage

Up to three light elements can be plugged onto this module. The voltage source (supplied externally or via the AS-Interface bus) can be selected using a shift switch. An LED display is used for diagnostics.

For even more efficient monitoring: The GSM radio element

Minimize downtimes, while increasing productivity: The new GSM radio element makes this possible. It signals any fault within a matter of seconds. Through your mobile phone; independent of the time or your location.



Just like all of the other modules, it can be easily integrated into the signaling column, is extremely easy to use, and is commissioned in no time at all. Simply insert a SIM card into the module, call the radio element with receiver mobile telephone and you enter a new era of effective monitoring. Each module can select up to three different call numbers. In addition to SMS, you are always up to speed about the state of your machines or plants with a call, fax or via e-mail through your service provider. To further simplify operations, you can carry-out remote diagnostics yourself using a mobile telephone. When required, the radio element can be switched-off using your mobile telephone.

Individually strong: SIRIUS 8WD5 integrated signal lamps

Thanks to their extremely rugged housing, high IP65 degree of protection, and especially strong illumination, SIRIUS integrated signal lamps are suitable for rugged ambient conditions as well as for use outdoors. They can be directly mounted onto the machine and attached from below through a 37 mm mounting hole. Lamps can be replaced in seconds from the inside of the control cabinet. Along with continuous light elements and flashing lights, we can also offer you maintenance-free LED elements. Five different color versions ensure colorful diversity.

SIRIUS 8WD signaling columns and integrated signal lamps

Modular and communications-capable

Whether machine mounted or in automated processes – if in-line reliable mounting is required for complex or sequenced operations, our SIRIUS 8WD signaling columns and integrated signal lamps are the best devices for visual and acoustic alarm.

Thanks to its degree of modularity, the SIRIUS 8WD product is flexible in design and versatile in use while allowing quick and secure mounting. As a result of the rugged design and high degree of protection, they are extremely resistant to shock and vibration. The devices have full communications capability via AS-Interface.

The new GSM radio elements are brand new additions to our SIRIUS range of signaling columns. They guarantee a real time benefit when it comes to effective monitoring. If a fault occurs, the module sends a signal, e.g. via SMS, directly to your mobile telephone. This means you stay up to speed with the current condition of your machines and plants. This level of communication allows you to quickly and accurately respond. Your operation will benefit from reduced downtimes with minimal and customizable monitoring while increasing overall productivity.



SIRIUS 8WD4 signaling columns and 8WD integrated signal lamps: The advantages at a glance

- Modules that can be flexibly combined: Can be stacked up to 4 high (for 8WD42); 5 to 10 elements (for 8WD44)
- Simple connection and fast lamp change using a mechanically and electrically secure and vibration-proof bayonet catch
- Communications-capable via an AS-Interface connection
- LEDs with an exceptionally long life
- Extremely resistant to shock and vibration
- 50 mm and 70 mm diameters
- Adjustable tone and volume of acoustic element
- Customizable options: continuous, blinking and flashing light, buzzers, sirens and LED elements
- Wide range colors: red, yellow, green, clear or blue
- Special features of the 8WD44: High IP65 degree of protection, spring loaded terminals, and optimized illumination thanks to an improved prismatic system
- 8WD5 integrated signal lamps: IP 65 degree of protection, with options of continuous, blinking or rotating beacon lights

8WD44 with AS-Interface

- A/B technology
- Addressing base
- LED status displays for diagnostics
- Manual changeover to an external auxiliary voltage

Engineering support 8WD42 signaling columns



Acoustic element

80 dB buzzer element,
either pulsating or continuous tone



Light elements

Continuous light element, blinking light
element, continuous LED light element



AS-I adapter element

with external auxiliary voltage



Connecting element including cover

for pipe, floor and bracket mounting

Accessories



Angle bracket

for wall mounting



Adapter

for single-hole mounting



Single foot

plastic for floor mounting
including rubber seal



Single pipe

100 mm, 150 mm, 250 mm, 400 mm,
1000 mm



Single foot

plastic for pipe
mounting including
rubber seal



Single foot

metal for pipe
mounting including
rubber seal



Connecting base

for cable entry at
the side



Connecting base

with magnetic
attachment and cable
entry at the side



Angle bracket

for foot mounting

8WD42 selection and ordering data

50 mm diameter, thermoplastic housing, degree of protection IP54

Type	Color	24 V rated voltage	115 V rated voltage	230 V rated voltage
		Order No.	Order No.	Order No.

Acoustic elements



• Buzzer element
80 dB tone type: pulsating or continuous (can be selected using a wire jumper)

8WD42 20-0FA

8WD42 40-0FA

8WD42 50-0FA

Light elements

Filament lamp: base BA 15d, 5W, 24 V/115 V/230 V (not included); LED: base BA 15d



• Continuous light element

red
green
yellow
clear
blue

Rated voltage 24 to 230 V AC/DC

8WD42 00-1AB

8WD42 00-1AC

8WD42 00-1AD

8WD42 00-1AE

8WD42 00-1AF



• LED blinking light element

red
green
yellow
clear
blue

8WD42 20-5BB

8WD42 20-5BC

8WD42 20-5BD

8WD42 20-5BE

8WD42 20-5BF

8WD42 40-5BB

8WD42 40-5BC

8WD42 40-5BD

8WD42 40-5BE

8WD42 40-5BF

8WD42 50-5BB

8WD42 50-5BC

8WD42 50-5BD

8WD42 50-5BE

8WD42 50-5BF

LED version (integrated version)

• LED continuous light element

red
green
yellow

8WD42 20-5AB

8WD42 20-5AC

8WD42 20-5AD

–

–

AS-Interface adapter element



with external auxiliary voltage



24 V

8WD42-28-0BB

Connecting element incl. cover



• For pipe, floor and angle bracket mounting

8WD42 08-0AA

Accessories



Single foot

Plastic for pipe mounting incl. rubber seal
Metal for pipe mounting incl. rubber seal
Plastic for floor mounting incl. rubber seal

8WD43 08-0DB

8WD43 08-0DA

8WD42 08-0DE



Connecting base

Cable entry at the side
Cable entry at the side with magnetic attachment ¹⁾

8WD43 08-0DD

8WD43 08-0DE



Single pipe

Refer to 8WD44 accessories



Angle bracket for wall mounting

8WD42 08-0CA



Angle bracket for foot mounting

8WD44 03-0CC



Adapter for single-hole mounting

8WD42 08-0EH



Filament lamps
BA 15d base, 5 W
(10-pack)

24 V

115 V

230 V

8WD43 28-1XX

8WD43 48-1XX

8WD43 58-1XX

LEDs BA 15d base

Refer to 8WD44 accessories






Designation plate

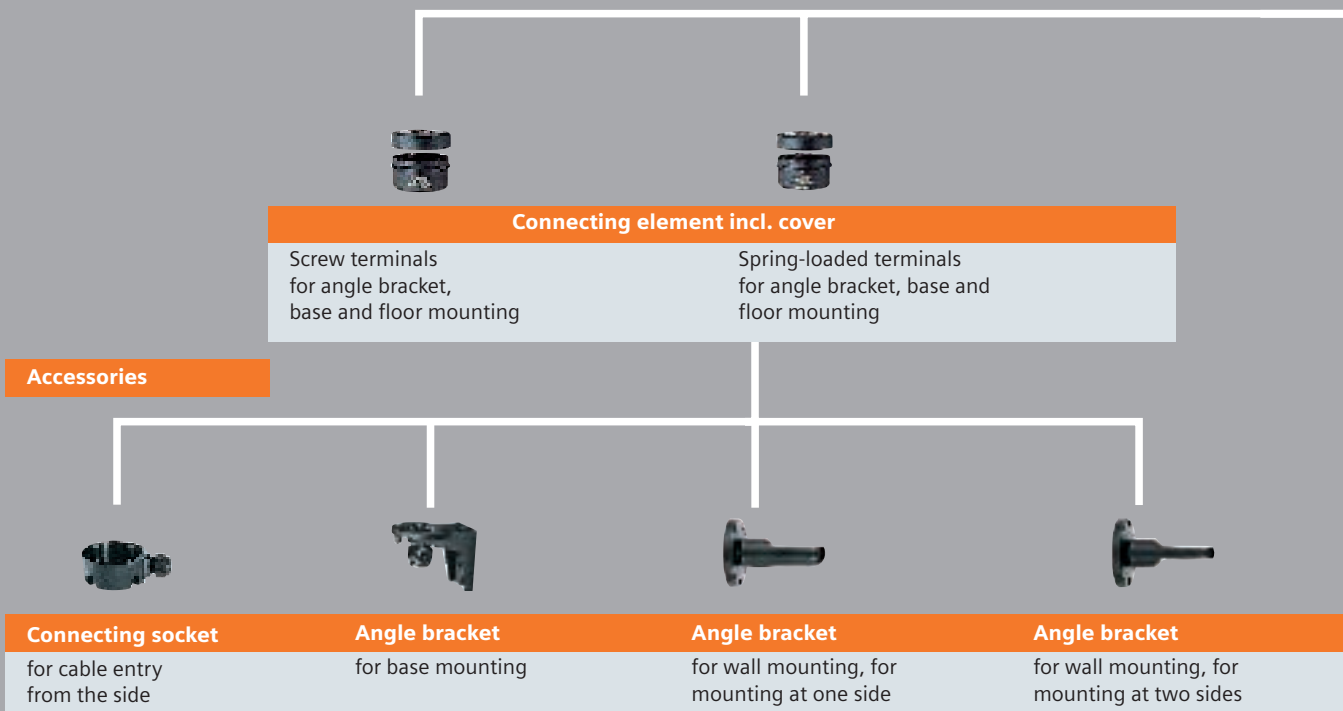
Refer to 8WD44 accessories

1) We recommend only 1 element when mounting horizontally

Engineering support

8WD44 signaling columns

Color	Significance	Explanation	Response	Possible applications
Red 	Emergency	Hazard	Immediate clarification and urgent need to take action	To indicate a fault in/on an important part of the machine
Yellow 	Abnormal	Imminent critical state	Observe and/or intervene	To trigger a protective device of an auxiliary unit
Green 	Normal	Normal state	No response necessary	<ul style="list-style-type: none"> To enable power-on To display normal operating conditions
Blue 	Regulation	Indicates a condition that requires action	Prescribed activity	Instruction to the operator to set pre-selected values
White/clear 	No special meaning defined	Can be used to signify anything – if there is any doubt regarding the colors red, yellow, green and blue	Prescribed activity	Instruction to the operator to set pre-selected values





Acoustic element

Buzzer element, siren element, multi-tone siren



Light elements

Blinking light element with integrated flashing light electronics, continuous LED light element, blinking light LED element, rotating beacon light LED element



AS-Interface adapter element

A/B technology, manual changeover to an external auxiliary voltage

GSM radio element



Connecting element incl. cover

Screw terminals for pipe mounting

Spring-loaded terminals for pipe mounting

Single pipe

100 mm, 150 mm, 250 mm, 400 mm, 1.000 mm

Single foot with pipe

plastic, pipe length 100 mm



Single foot

plastic for pipe mounting incl. rubber seal

Single foot

metal for pipe mounting incl. rubber seal



Connecting socket

for cable entry from the side

Connecting socket

with magnetic attachment and cable entry from the side

Angle bracket

for foot mounting

8WD44 selection and ordering data

70 mm diameter, thermoplastic housing, degree of protection IP65

	Type	Color	24 V rated voltage	115 V rated voltage	230 V rated voltage
			Order No.	Order No.	Order No.
Acoustic elements					
	• Buzzer element 85 dB tone type, pulsating or continuous (can be selected using a wire jumper)		8WD44 20-0FA	8WD44 40-0FA	8WD44 50-0FA
	• 108 dB siren element		8WD44 20-0EA	–	–
	• 100 dB multi-tone siren (8 tones and volume can be adjusted), IP40		8WD44 20-0EA2	8WD44 40-0EA2	8WD44 50-0EA2
Light elements					
Filament lamp: base BA 15d, 5W, 24 V/115 V/230 V (not included); LED: base BA 15d					
	• Continuous light element	red green yellow clear blue	Rated voltage 12 to 230 V AC/DC 8WD44 00-1AB 8WD44 00-1AC 8WD44 00-1AD 8WD44 00-1AE 8WD44 00-1AF		
	• Blinking light element	red green yellow clear blue	8WD44 20-1BB 8WD44 20-1BC 8WD44 20-1BD 8WD44 20-1BE 8WD44 20-1BF	8WD44 40-1BB 8WD44 40-1BC 8WD44 40-1BD 8WD44 40-1BE 8WD44 40-1BF	8WD44 50-1BB 8WD44 50-1BC 8WD44 50-1BD 8WD44 50-1BE 8WD44 50-1BF
	• Flashing light element with integrated flashing light electronics (an additional filament lamp or LED is not required)	red green yellow clear blue	8WD44 20-0CB 8WD44 20-0CC 8WD44 20-0CD 8WD44 20-0CE 8WD44 20-0CF	8WD44 40-0CB 8WD44 40-0CC 8WD44 40-0CD 8WD44 40-0CE 8WD44 40-0CF	8WD44 50-0CB 8WD44 50-0CC 8WD44 50-0CD 8WD44 50-0CE 8WD44 50-0CF
LED version (integrated version)					
	• LED continuous light element	red green yellow clear blue	8WD44 20-5AB 8WD44 20-5AC 8WD44 20-5AD 8WD44 20-5AE 8WD44 20-5AF	8WD44 40-5AB 8WD44 40-5AC 8WD44 40-5AD 8WD44 40-5AE 8WD44 40-5AF	8WD44 50-5AB 8WD44 50-5AC 8WD44 50-5AD 8WD44 50-5AE 8WD44 50-5AF
	• LED blinking light element	red green yellow	8WD44 20-5BB 8WD44 20-5BC 8WD44 20-5BD	–	–
	• LED rotating beacon light element	red green yellow	8WD44 20-5DB 8WD44 20-5DC 8WD44 20-5DD	–	–
AS-Interface adapter element					
	A/B technology Manual changeover between voltage supply via bus or external 24 V auxiliary voltage		8WD44 28-0BD (available from 12/2005)		
GSM radio element					
			8WD44 28-0BC (available from 12/2005)		

Accessories

70 mm diameter, thermoplastic housing, degree of protection IP65

	Type	Color	24 V rated voltage	115 V rated voltage	230 V rated voltage
			Order No.	Order No.	Order No.
Connecting element incl. cover, screw terminals					
	• For pipe mounting		8WD44 08-0AA		
	• For angle bracket, base or floor mounting		8WD44 08-0AB		
Connecting element incl. connecting cover, spring-loaded terminals					
	• For pipe mounting		8WD44 08-0AD		
	• For angle bracket, base or floor mounting		8WD44 08-0AE		
	LED base BA 15d, 5W	red	8WD44 28-6XB	8WD44 48-6XB	8WD44 58-6XB
		green	8WD44 28-6XC	8WD44 48-6XC	8WD44 58-6XC
		yellow	8WD44 28-6XD	8WD44 48-6XD	8WD44 58-6XD
		clear	8WD44 28-6XE	8WD44 48-6XE	8WD44 58-6XE
		blue	8WD44 28-6XF	8WD44 48-6XF	8WD44 58-6XF
	Filament lamps base BA 15d, 5 W		8WD43 28-1XX	8WD43 48-1XX	8WD43 58-1XX
        	Single foot		Plastic for pipe mounting incl. rubber seal		8WD43 08-0DB
	Single foot with pipe		Plastic, pipe length 100 mm incl. rubber seal		8WD43 08-0DA
	Single foot		Metal for pipe mounting incl. rubber seal For pipe lengths > 400 mm		8WD43 08-0DC
	Connecting socket		Cable entry at the side		8WD43 08-0DD
			Cable entry at the side with magnetic attachment		8WD43 08-0DE
	Single pipe		100 mm		8WD42 08-0EF
			150 mm		8WD43 08-0EE
			250 mm		8WD43 08-0EA
			400 mm		8WD43 08-0EB
			1.000 mm		8WD43 08-0ED
Angle bracket for wall mounting for mounting on one side				8WD43 08-0CA	
	for mounting on two sides			8WD43 08-0CB	
Angle bracket for foot mounting				8WD44 08-0CC	
Angle bracket for base mounting				8WD44 08-0CD	
Designation plate* with retaining materials for mounting onto a 25 mm diameter pipe					8WD44 08-0FA*
	• labeling surface/step 50 x 140 mm				
	• suitable for standard labels e.g. Zweckform 3425, Herma 4457				

* Plate for self inscription

Engineering support 8WD53 integrated signal lamps

Applications

70 mm diameter, thermoplastic housing, degree of protection IP54

SIRIUS 8WD53 integrated signal lamps can be mounted directly at any position on/in the machine for visual signaling purposes. These signal lamps are attached using a Pg-29 threaded base with nut. Optimum illumination in every direction (to the side and to the top) is achieved thanks to the special design of the SIRIUS integrated signal lamps. SIRIUS integrated signal lamps have a high IP65 degree of protection across the complete range and are manufactured from an extremely tough material.


Red, green, yellow, clear and blue are available as continuous light (filament lamp version and flashing light).

The LED integrated signal lamps have a significantly higher lifetime than a filament lamp.

In addition to the continuous light, blinking lights and rotating beacon lights are also available.

Selection and ordering data*

70 mm diameter, thermoplastic housing, degree of protection IP65

	Type	Color	24 V rated voltage	115 V rated voltage	230 V rated voltage
			Order No.	Order No.	Order No.
Filament lamp: base BA 15d, 5W; LED base BA 15d (not included in the scope of supply)					
	• Continuous light	red green yellow clear blue	8WD53 00-1AB 8WD53 00-1AC 8WD53 00-1AD 8WD53 00-1AE 8WD53 00-1AF		
	• Flashing light (with integrated flashing light electronics)	red green yellow clear blue	8WD53 20-0CB 8WD53 20-0CC 8WD53 20-0CD 8WD53 20-0CE 8WD53 20-0CF	8WD53 40-0CB 8WD53 40-0CC 8WD53 40-0CD 8WD53 40-0CE 8WD53 40-0CF	8WD53 50-0CB 8WD53 50-0CC 8WD53 50-0CD 8WD53 50-0CE 8WD53 50-0CF
LED version (integrated version)					
	• LED continuous light	red green yellow	8WD53 20-5AB 8WD53 20-5AC 8WD53 20-5AD		
	• LED flashing light	red green yellow	8WD53 20-5BB 8WD53 20-5BC 8WD53 20-5BD		
	• LED rotating beacon	red green yellow	8WD53 20-5DB 8WD53 20-5DC 8WD53 20-0DD		

* Accessories: filament lamps and LEDs, refer to 8WD44

Technical data

Housing	PC/ABS shield, shock-proof, black	Operating voltage (AC values at 50 Hz) Continuous light 24 V/115 V/230 V AC/DC (filament lamp/LED) Flashing light 24 V/125 mA AC/DC; 115 V/20 mA; 230 V/15 mA LED light 24 V/70 mA AC/DC
Spherical cap	Thermoplastic (polycarbonate), shock-proof up to 20 J	
Fastening	37 mm diameter hole (Pg 29)	
Cable outlet	Radial or axial	
Ambient temperature	-20 °C to +60 °C Flashing LED up to +50 °C	
Degree of protection	IP65	Flash power 2 Ws/approx. 1 Hz
Certification	UL/CSA	LED lights Blinking lights Flash frequency, approx. 1 Hz Rotating beacon light Rotating frequency, approx. 120 RPM
		Inrush current LED light < 0.5 A Flashing light 24 V/115 V < 0.5 A; 230 V < 0.5 A

Technical data, 8WD signaling columns

According to DIN VDE 0660 and IEC 60047-5-7-5-1 947-5-7-1

Type	8WD42 signaling columns	8WD44 signaling columns
Housing	Thermoplastic (polyamide), shock-proof, black	Thermoplastic (polyamide), shock-proof, black
Light elements	Thermoplastic (polycarbonate)	Thermoplastic (polycarbonate)
Fastening	<ul style="list-style-type: none"> horizontal (floor mounting, foot with pipe, 25 mm diameter) horizontal (single-hole mounting) vertical with angle bracket 	<ul style="list-style-type: none"> horizontal (floor mounting, foot with pipe, 25 mm diameter) vertical with angle bracket
Ambient temperature	-20°C to +50°C	-30°C to +50°C
Connection	Screw terminals M3 $\leq 2.5 \text{ mm}^2 \leq 0.5 \text{ Nm}$	Screw or spring-loaded terminals M3 $\leq 2.5 \text{ mm}^2 \leq 0.5 \text{ Nm}$
Degree of protection		
Light elements	IP54	IP65 (seal is pre-installed as standard for every module)
Acoustic elements	IP54	IP65 (8WD44 20-OEA – IP40)
Operating voltage, current drain		
Filament lamp (AC values at 50/60 Hz)		
• continuous light	12 V/24 V/115 V AC/230 V AC AC/DC	12 V AC/DC/24 V/115 V AC/230 V AC
• blinking light *	–	24 V AC/DC/125 mA; 115 V AC/20 mA; 230 V AC/15 mA
• flashing light *	–	24 V DC/125 mA; 115 V AC/25 mA; 230 V AC/15 mA
LED version (integrated version)		
• continuous light	24 V AC/DC/60 mA	24 V AC/DC/45 mA; 115 V AC/25 mA; 230 V AC/25 mA
• blinking light	24 V AC/DC/ 25 mA; 115 V AC/ 25 mA; 230 V AC/ 25 mA	24 V AC/DC/40 mA
• rotating beacon light	–	24 V AC/DC/70 mA
Acoustic elements		
• buzzer element (tone type: pulsating or continuous tone, 80 dB)	24 V AC/DC/25 mA; 115 V AC/25 mA; 230 V AC /25 mA	24 V AC/DC/25 mA; 115 V AC/25 mA; 230 V AC/25 mA
• siren element (8 tones + volume 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 drain		
Filament lamps	Base BA 15d, max. 5 W	Base BA 15d, 7 W
Flashing light	–	Flash energy 2 Ws
Certification		
CSA (not for 8WD44 20-OEA)		



Technical data, AS-Interface adapter element

According to DIN VDE 0660 and IEC 60047-5-7-5-1 947-5-7-1

Type	8WD42 with external auxiliary voltage	8WD44 28 (load voltage can be switched over via bus or external)
IQ code/ID code/ID2 code	8/F/–	8/A/E
Power supply	Via bus cable	Via bus cable or external
Operating voltage	18.5 V to 31.6 V	18.5 V to 31.6 V
Current drain I_{\max}	50 mA	210 mA
Watchdog	Integrated	Integrated
Short-circuit/overload protection	Series fuse M 1.6 A	Integrated
Incorrect polarity protection	Integrated	Integrated
Induction protection	Not applicable	Integrated
Load voltage	External auxiliary voltage 0 V to 30 V DC 0 V to 230 V AC	Via bus cable or external 24 V
Outputs	4, relay	3, electronic
Current load capability ΣI_{\max}	1.5 A	0.2 A via bus/0.3 A per stage for an external 24 V auxiliary voltage
Operating temperature	-20°C to +50°C	-25°C to +50°C
Degree of protection	IP54	IP65

* max. inrush current 500 mA

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AS-Interface

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