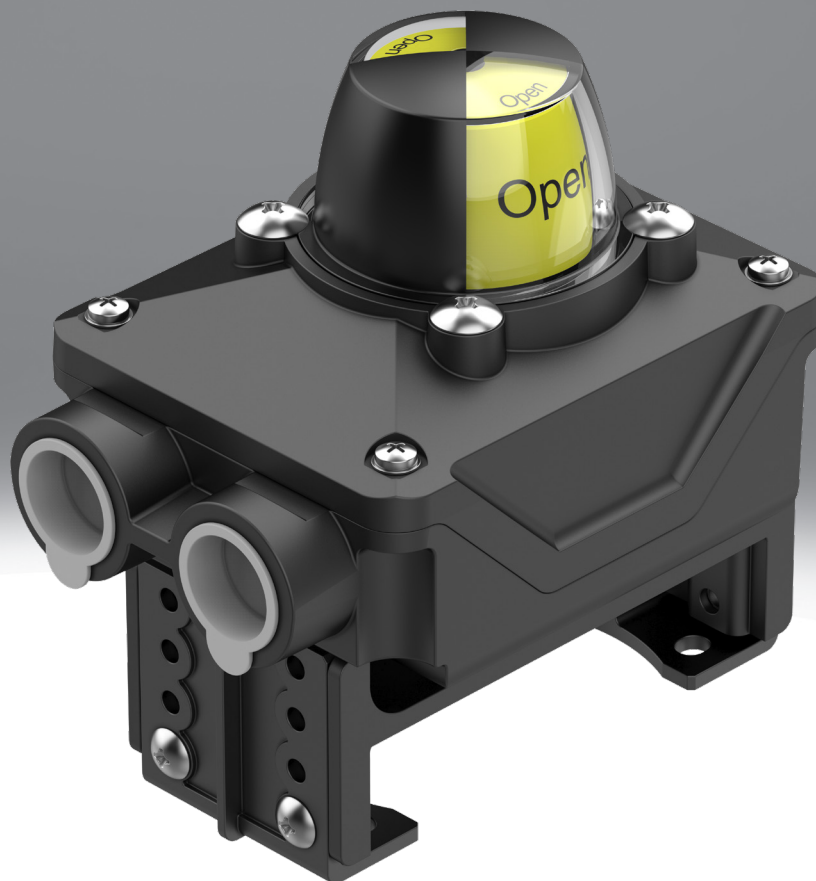


## Limit switch box SRBK

**FESTO**



## Type code

<b>001</b>	<b>Series</b>	
<b>SRBK</b>	Limit switch box SRBK	
<b>002</b>	<b>Design</b>	
<b>C</b>	Limit switch boxes	
<b>003</b>	<b>Mechanical interface</b>	
<b>A4</b>	Flexible mounting adapter to standard VDI/VDE 3845	
<b>A5</b>	EN ISO 5211 / F05	
<b>004</b>	<b>Display type</b>	
<b>YR</b>	Position indicator yellow/red	
<b>005</b>	<b>Measuring range</b>	
<b>90</b>	0 ... 90°	

<b>006</b>	<b>Sensor principle</b>	
<b>MW</b>	Floating contact, changeover contact	
<b>N</b>	Proximity sensor, inductive	
<b>R</b>	With contacts (reed)	
<b>007</b>	<b>Nominal operating voltage</b>	
<b>1</b>	24 V DC	
<b>2A</b>	110 V AC/50-60 Hz	
<b>22A</b>	250 V AC	
<b>008</b>	<b>Electrical output 1</b>	
<b>1W</b>	1-pin toggle switch	
<b>1WG</b>	1-pole changeover switch (gold contact)	
<b>P</b>	PNP	
<b>ZU</b>	2-wire N/O contact	
<b>009</b>	<b>Electrical connection</b>	
<b>C2</b>	Screw terminal	
<b>M12</b>	Plug M12, A-coded	

## Datasheet

General technical data						
Electrical connection	M12x1		Screw terminal			
Electrical output 1	1-pin toggle switch	PNP	1-pin toggle switch	1-pole changeover switch (gold contact)	PNP	2-wire N/O contact
Microswitch type	Omron SS-5	P&F NBB2-V3-E2	Hamlin 59140-030, Omron SS-5	Omron SS-01	P&F NBB2-V3-E2	P&F NBB3-V3-Z4
Type of mounting	–		On flange according to ISO 5211			
Connection point for positioner and position sensor conforms to standard	VDI/VDE 3845 size AA 1 VDI/VDE 3845 size AA 2 VDI/VDE 3845 size AA 3					
Mounting position	optional					
Housing colour	Black					
Switching status indication	Optical					
Position indicator	Yellow/red					
Setting range of angular detection	0 ... 90 deg					

Operating and environmental conditions						
Electrical connection	M12x1		Screw terminal			
Electrical output 1	1-pin toggle switch	PNP	1-pin toggle switch	1-pole changeover switch (gold contact)	PNP	2-wire N/O contact
Ambient temperature	-20 ... 70°C					
Storage temperature	-20 ... 50°C					
Degree of protection	IP66, IP67					
Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27					
Vibration resistance	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6					
Pollution degree	3					
Protection class	–		II	–		
Sensing range	0 ... 90 deg					
Corrosion resistance class CRC	3 - high corrosion stress			3 - High corrosion stress, 3 - high corrosion stress	3 - high corrosion stress	3 - High corrosion stress, 3 - high corrosion stress
CE mark (see declaration of conformity)	–	To EU EMC Directive, In accordance with EU RoHS Directive	–	To EU EMC Directive, In accordance with EU RoHS Directive		
CE marking (see declaration of conformity)	–	To UK instructions for EMC, To UK RoHS instructions	–	To UK instructions for EMC, To UK RoHS instructions		

## Datasheet

## Characteristic electrical data

Electrical connection	M12x1		Screw terminal			
Electrical output 1	1-pin toggle switch	PNP	1-pin toggle switch	1-pole changeover switch (gold contact)	PNP	2-wire N/O contact
Switching output	Contacting	PNP	Contacting	Contacting (gold)	PNP	Non-contacting, 2-wire
Measuring principle	Mechanical/electrical	Inductive	Mechanical/electrical		Inductive	
Measured variable	Position					
Switching element function	Toggle switch, single-pole	N/O contact	Toggle switch, single-pole		N/O contact	
Operational voltage range AC	–		0 ... 250 V	–		
Operational voltage range DC	0 ... 30 V	10 ... 30 V	0 ... 30 V		10 ... 30 V	5 ... 60 V
Max. output current AC	–		3,000 mA	–		
Max. output current DC	1,000 mA	100 mA	1,000 mA	100 mA		
Max. switching output voltage DC	30 V	–	30 V		–	
Max. switching capacity AC	–					
Max. switching capacity DC	30 W	–	3 W		–	
Voltage drop	–	≤3 V	–	–	≤3 V	≤4 V
Min. load current	–					4 mA
Off-state current	–	0 ... 0.5 mA	–	–	0 ... 0.5 mA	0.4 ... 0.55 mA
Short circuit current rating	–	Pulsed	–	–	Pulsed	–
No-load supply current	–	15 mA	–	–	15 mA	–
Reverse polarity protection	–	For all electrical connections	–	–	For all electrical connections	

## Characteristic electrical data

Electrical connection	Screw terminal					
Electrical output 1	1-pin toggle switch					
Switching output	Contacting					
Measuring principle	Magnetic reed					
Measured variable	Position					
Switching element function	Toggle switch, single-pole					
Operational voltage range AC	0 ... 120 V					
Operational voltage range DC	0 ... 175 V					
Max. output current AC	180 mA					
Max. output current DC	250 mA					
Max. switching capacity AC	5 W					
Max. switching capacity DC	5 W					

## Electromechanics

Electrical output 1	1-pin toggle switch		1-pole changeover switch (gold contact)	PNP	2-wire N/O contact
Electrical connection	M12x1	Screw terminal		M12x1	Screw terminal
Electrical connection 1, connection type	Plugs	Terminal strip		Plugs	Terminal strip
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101	Screw terminal		M12x1, A-coded to EN 61076-2-101	Screw terminal
Electrical connection 1, number of connections/cores	8	10		8	10
Electrical connection 1, connection pattern	992,264	–		992,264	–
Connectable nominal cross section conductor	–	0.25 ... 2.5 mm <sup>2</sup>		–	0.25 ... 2.5 mm <sup>2</sup>
Electrical connection 1, cable outlet	Straight				

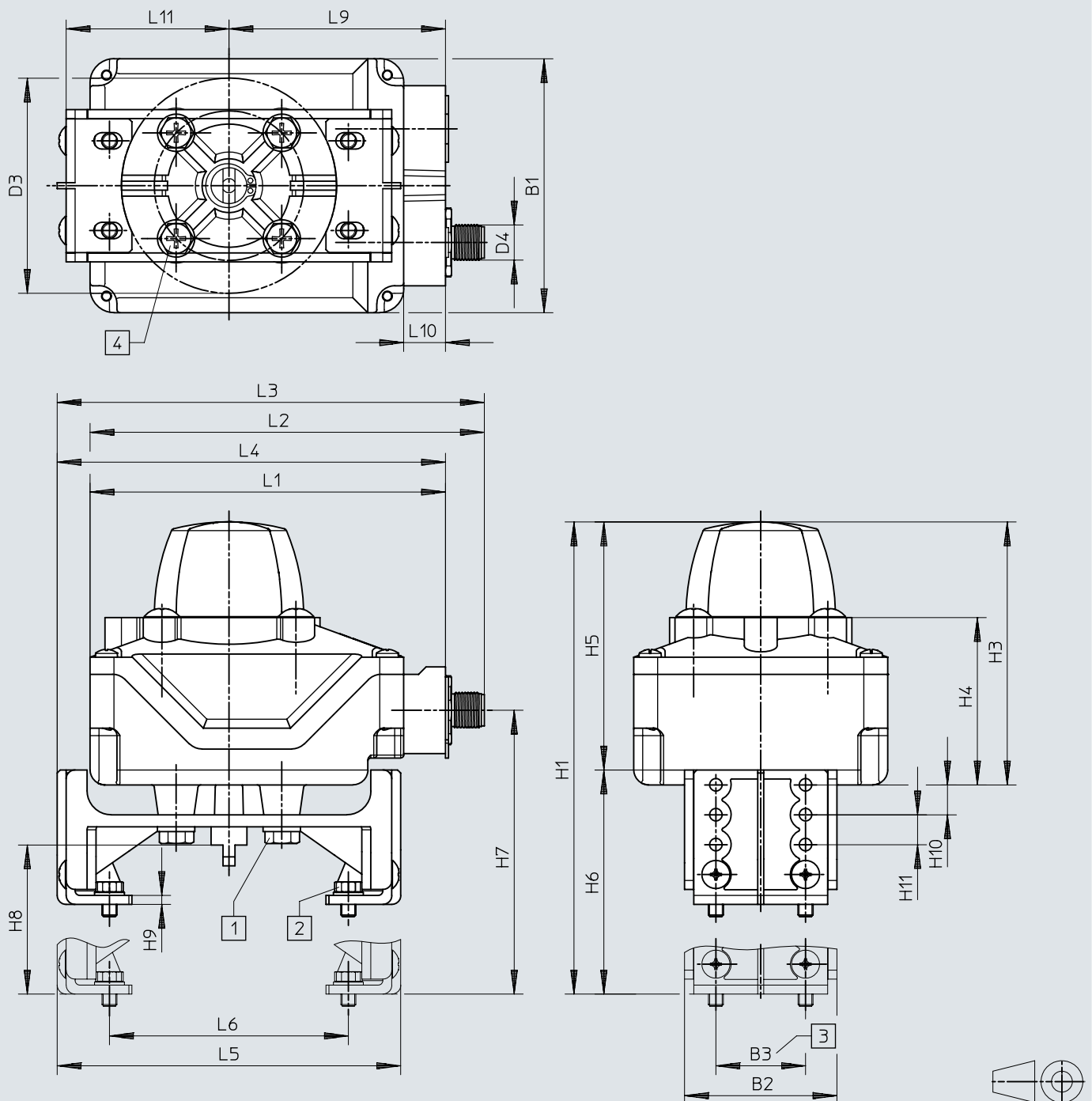
## Datasheet

Materials	
Note on materials	RoHS-compliant
Material housing	PA
Material seals	NBR
Material shaft	PA
Material screws	Stainless steel
Material mounting bracket	PA
Material snap ring	High-alloy stainless steel
Protective cap material	PC
LABS (PWIS) conformity	VDMA24364 zone III

## Dimensions

Dimensions – M12 variant with mounting adapter and mounting brackets fitted facing inwards

Download CAD data → [www.festo.com](http://www.festo.com)



- [1] M6x10 screw
- [2] M5x10 screw
- [3] Hole pattern to VDI/VDE 3845
- [4] Hole pattern F05 to EN ISO 5211

## Dimensions

	B1	B2	B3	D3 ∅	D4 ∅	H3	H4	H5	H9	H10	H11	L1	L2	L3
SRBK-CA4-YR90-MW-1-1W-M12	85	51	30	72	M12x1	88	56	83	3	10	10	119	132	143
SRBK-CA4-YR90-N-1-P-M12														

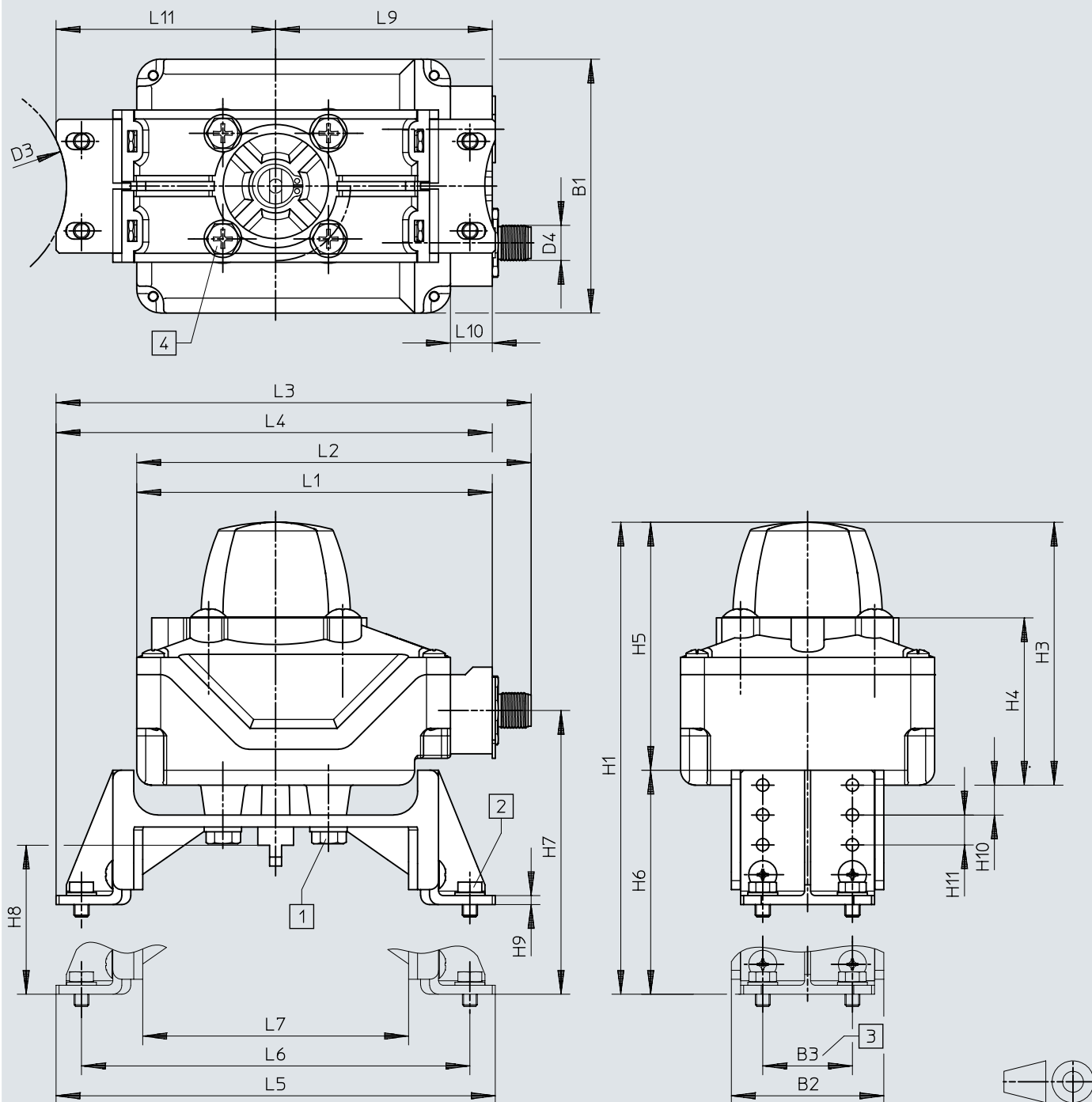
  

	L4	L5	L6	L9	L10	L11	H1	H6	H7	H8	H1	H6	H7	H8	H1	H6	H7	H8
								80x30x20			80x30x30			80x30x50				
SRBK-CA4-YR90-MW-1-1W-M12	130	115	80	72,5	14	57,5	128	45	65	20	138	55	75	30	158	75	95	50
SRBK-CA4-YR90-N-1-P-M12																		

## Dimensions

Dimensions – M12 variant with mounting adapter and mounting brackets fitted facing outwards

Download CAD data → [www.festo.com](http://www.festo.com)



- [1] M6x10 screw
- [2] M5x10 screw
- [3] Hole pattern to VDI/VDE 3845
- [4] Hole pattern F05 to EN ISO 5211



## Dimensions

	B1	B2	B3	D3 ∅	D4 ∅	H3	H4	H5	H9	H10	H11	L1	L2	L3
SRBK-CA4-YR90-MW-1-1W-M12	85	51	30	72	M12x1	88	56	83	3	10	10	119	132	159
SRBK-CA4-YR90-N-1-P-M12														

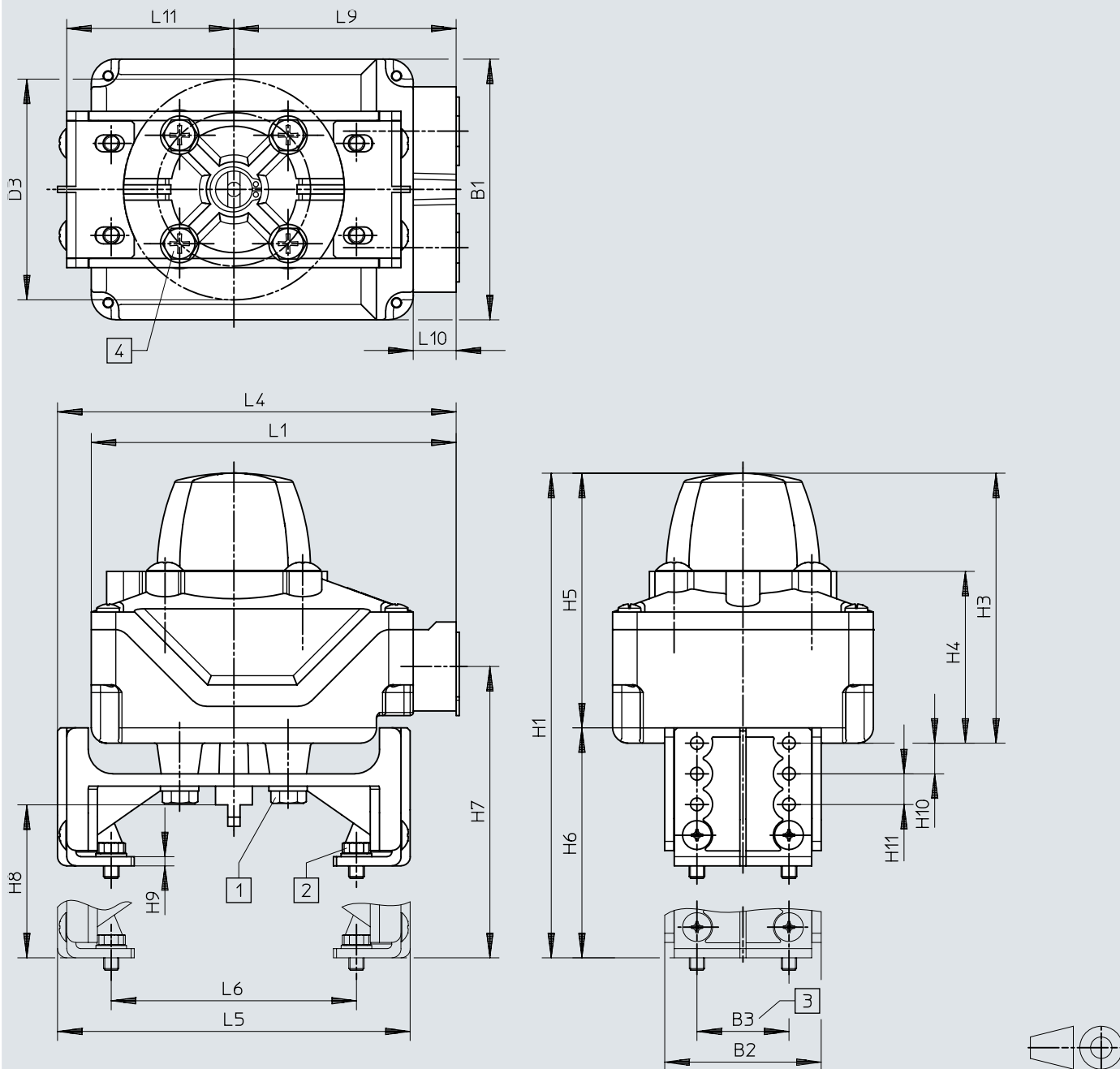
  

	L4	L5	L6	L7	L9	L10	L11	H1	H6	H7	H8	H1	H6	H7	H8	H1	H6	H7	H8
									130x30x20			130x30x30			130x30x50				
SRBK-CA4-YR90-MW-1-1W-M12	146	147	130	89	72,5	14	73,5	128	45	65	20	138	55	75	30	158	75	95	50
SRBK-CA4-YR90-N-1-P-M12																			

## Dimensions

Dimensions – Variant C2 with mounting flange adapter and mounting brackets installed facing inwards

Download CAD data → [www.festo.com](http://www.festo.com)



- [1] M6x10 screw
- [2] M5x10 screw
- [3] Hole pattern to VDI/VDE 3845
- [4] Hole pattern F05 to EN ISO 5211

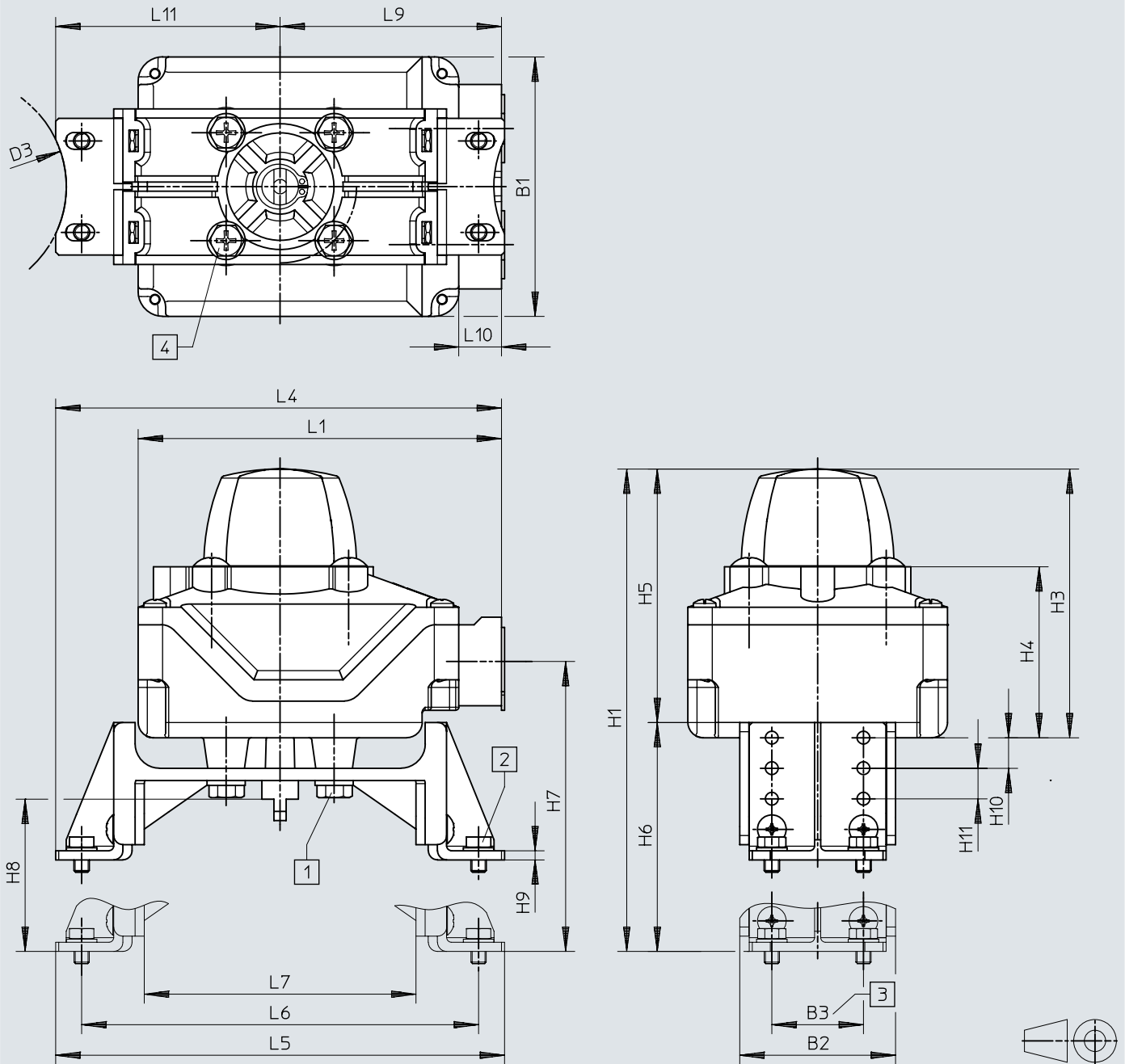
## Dimensions

	B1	B2	B3	D3 ∅	H3	H4	H5	H9	H10	H11	L1	L4	L5	L6	
SRBK-CA4-YR90-MW-1-1WG-C2	85	51	30	72	88	56	83	3	10	10	119	130	115	80	
SRBK-CA4-YR90-MW-22A-1W-C2															
SRBK-CA4-YR90-R-2A-1W-C2															
SRBK-CA4-YR90-N-1-P-C2															
SRBK-CA4-YR90-N-1-ZU-C2															
	L9	L10	L11	H1	H6	H7	H8	H1	H6	H7	H8	H1	H6	H7	H8
				80x30x20				80x30x30				80x30x50			
SRBK-CA4-YR90-MW-1-1WG-C2	72,5	14	57,5	128	45	65	20	138	55	75	30	158	75	95	50
SRBK-CA4-YR90-MW-22A-1W-C2															
SRBK-CA4-YR90-R-2A-1W-C2															
SRBK-CA4-YR90-N-1-P-C2															
SRBK-CA4-YR90-N-1-ZU-C2															

## Dimensions

Dimensions – SRBK-CA4-YR90-...-C2

Download CAD data → [www.festo.com](http://www.festo.com)



- [1] M6x10 screw
- [2] M5x10 screw
- [3] Hole pattern to VDI/VDE 3845
- [4] Hole pattern F05 to EN ISO 5211

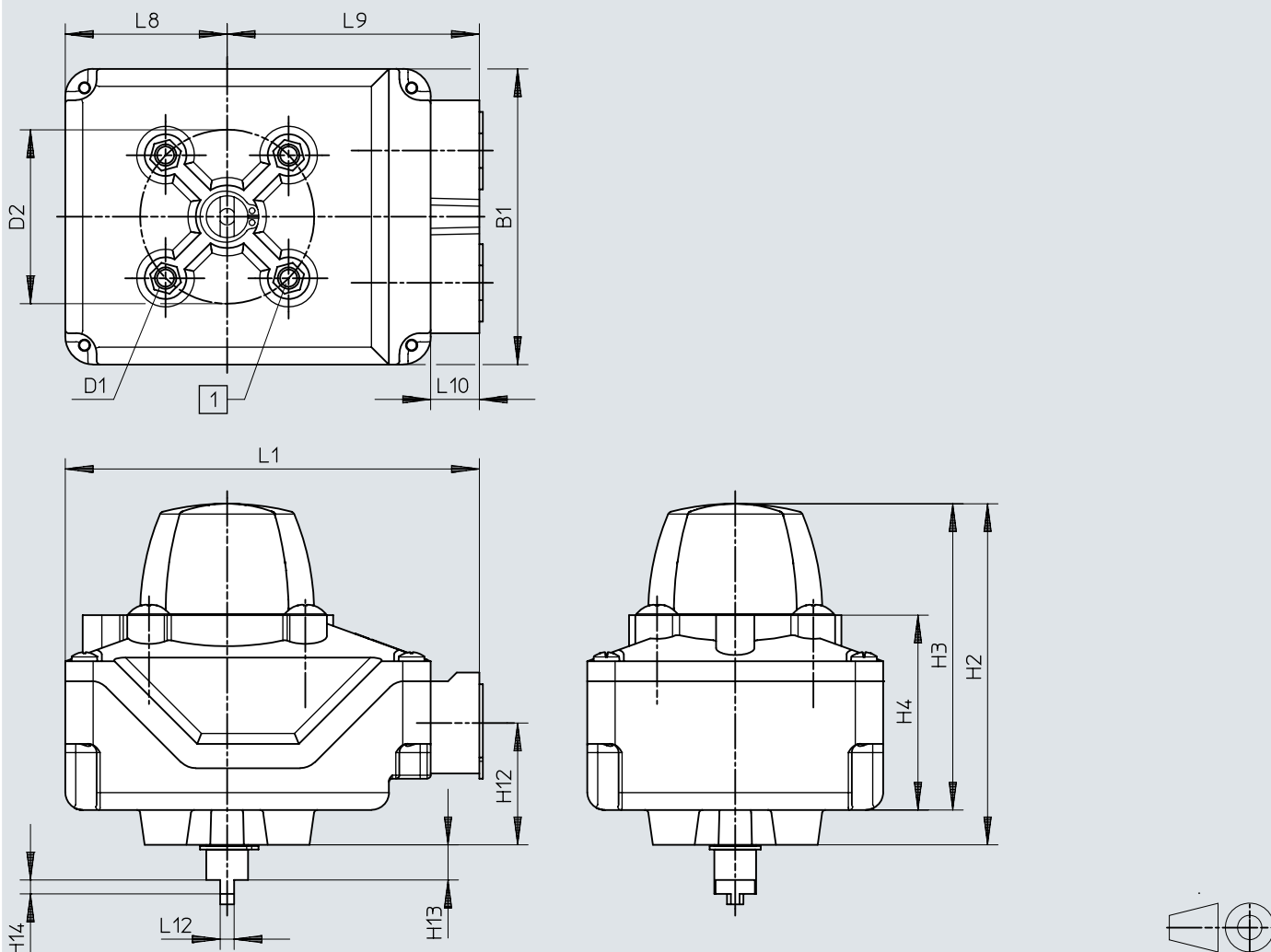
## Dimensions

	B1	B2	B3	D3 ∅	H3	H4	H5	H9	H10	H11	L1	L4	L5	L6	L7
SRBK-CA4-YR90-MW-1-1WG-C2	85	51	30	72	88	56	83	3	10	10	119	146	147	130	89
SRBK-CA4-YR90-MW-22A-1W-C2															
SRBK-CA4-YR90-R-2A-1W-C2															
SRBK-CA4-YR90-N-1-P-C2															
SRBK-CA4-YR90-N-1-ZU-C2															
	L9	L10	L11	H1	H6	H7	H8	H1	H6	H7	H8	H1	H6	H7	H8
					130x30x20				130x30x30				130x30x50		
SRBK-CA4-YR90-MW-1-1WG-C2	72,5	14	73,5	128	45	65	20	138	55	75	30	158	75	95	50
SRBK-CA4-YR90-MW-22A-1W-C2															
SRBK-CA4-YR90-R-2A-1W-C2															
SRBK-CA4-YR90-N-1-P-C2															
SRBK-CA4-YR90-N-1-ZU-C2															

## Dimensions

Dimensions – SRBK-CA5-..., Mechanical interface according to ISO 5211/  
flange hole pattern F05

Download CAD data → [www.festo.com](http://www.festo.com)



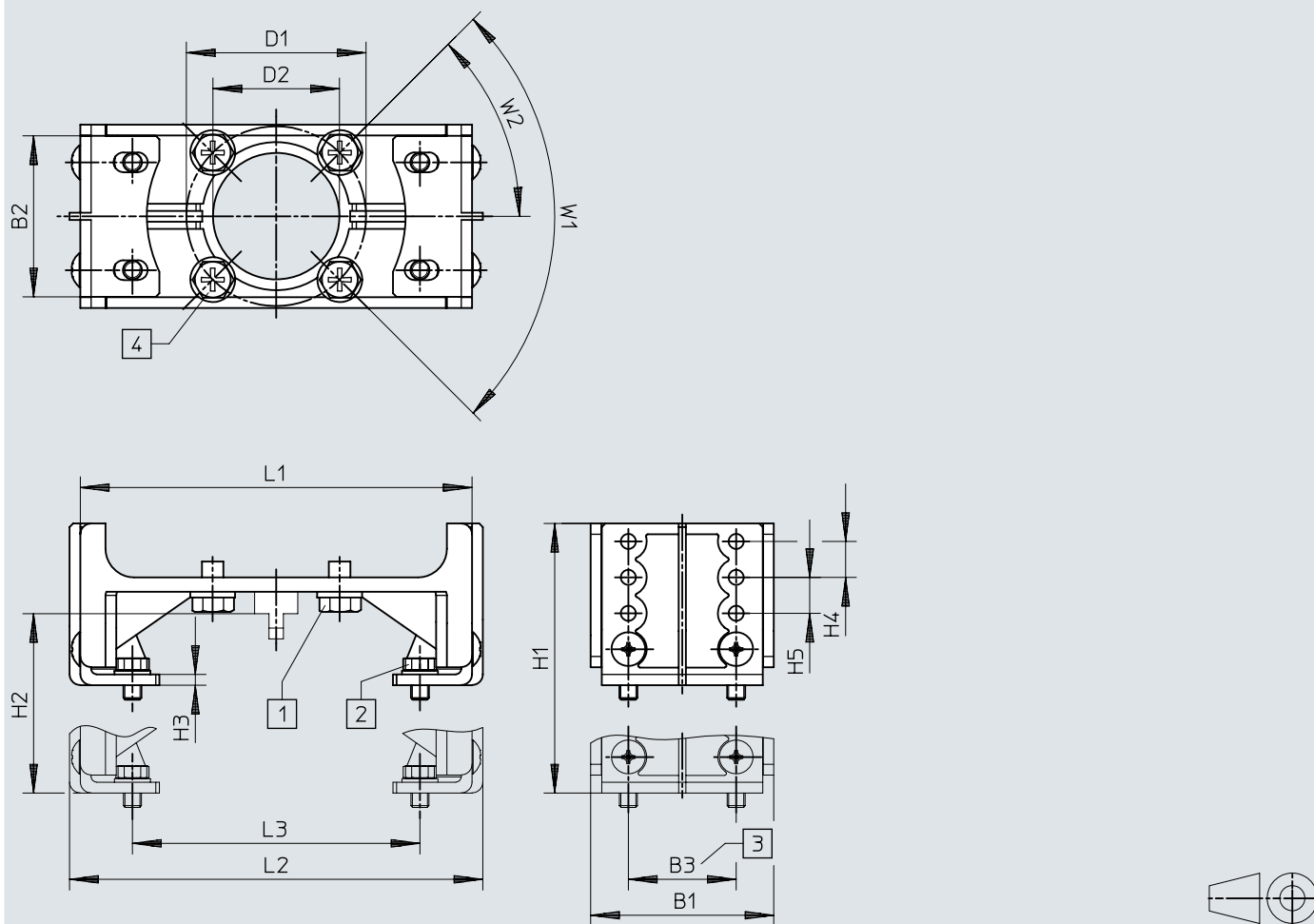
[1] Hole pattern F05 to EN ISO 5211

	B1	D1	D2 ∅	H2	H3	H4	H12	H13	H14	L1	L8	L9	L10	L12
SRBK-CA5-YR90-MW-1-1WG-C2	85	M6	50	98	88	56	35	10	4	119	46,5	72,5	14	4
SRBK-CA5-YR90-MW-22A-1W-C2														
SRBK-CA5-YR90-R-2A-1W-C2														
SRBK-CA5-YR90-N-1-P-C2														
SRBK-CA5-YR90-N-1-ZU-C2														

## Dimensions

Dimensions – Mounting adapter DARQ with mounting brackets fitted facing inwards

Download CAD data → [www.festo.com](http://www.festo.com)



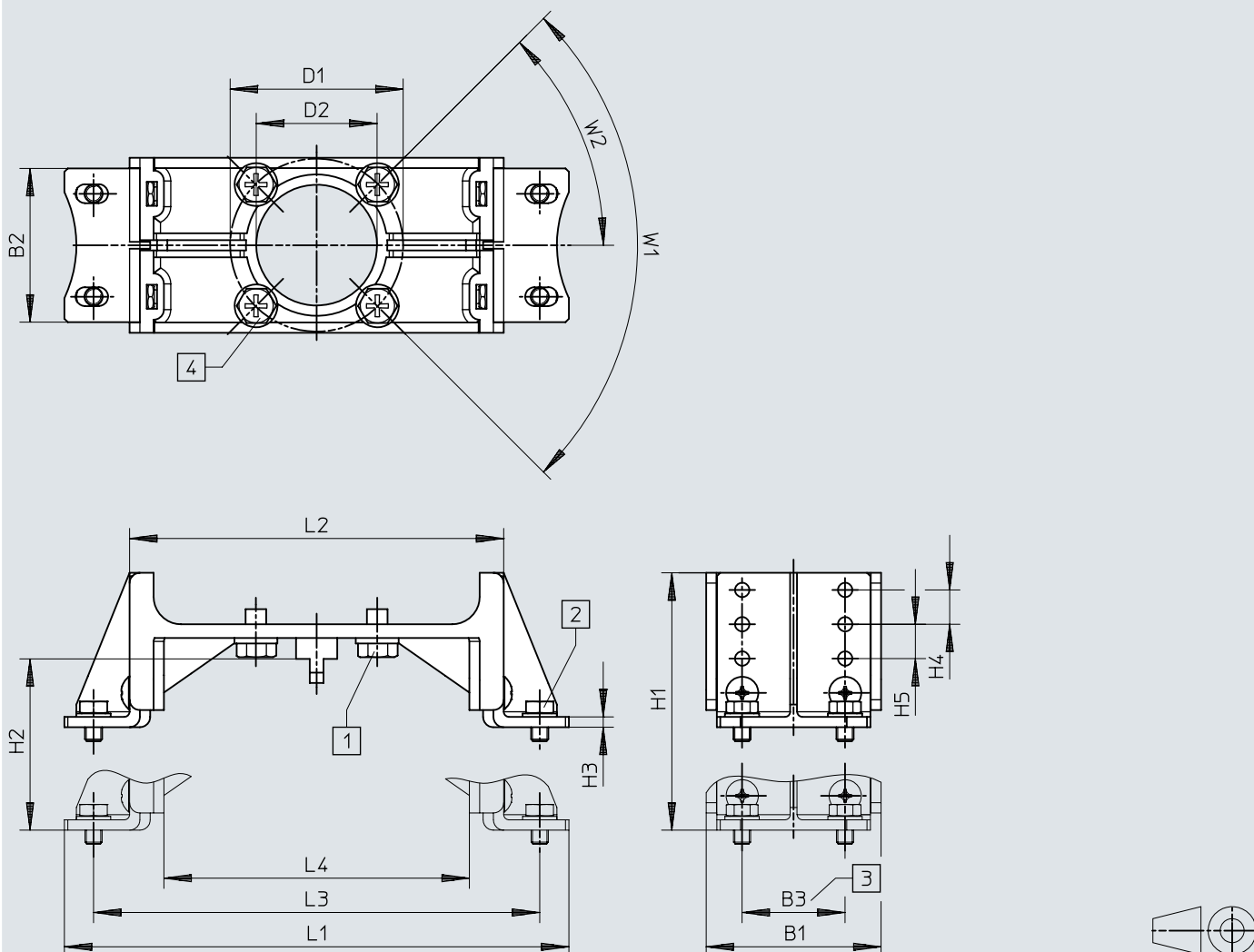
- [1] M6x10 screw
- [2] M5x10 screw
- [3] Hole pattern to VDI/VDE 3845
- [4] Hole pattern F05 to EN ISO 5211

	B1	B2	B3	D1 ∅	D2 ∅	H3	H4	H5	L1	L2
DARQ-K-X1-A3-F05-R14	51	44,8	30	50	35,2	3	10	10	109	115
	L3	W1	W2	H1	H2	H1	H2	H1	H2	
				80x30x20		80x30x30		80x30x50		
DARQ-K-X1-A3-F05-R14	80	90°	45°	45	20	55	30	75	50	

## Dimensions

Dimensions – Mounting adapter DARQ with mounting brackets fitted facing outwards

Download CAD data → [www.festo.com](http://www.festo.com)





- [1] M6x10 screw
- [2] M5x10 screw
- [3] Hole pattern to VDI/VDE 3845
- [4] Hole pattern F05 to EN ISO 5211


	B1	B2	B3	D1 ∅	D2 ∅	H3	H4	H5	L1	L2
DARQ-K-X1-A3-F05-R14	51	44,8	30	50	35,2	3	10	10	147	115
	L3	L4	W1	W2	H1	H2	H1	H2	H1	H2
					130x30x20		130x30x30		130x30x50	
DARQ-K-X1-A3-F05-R14	130	89	90°	45°	45	20	55	30	75	50



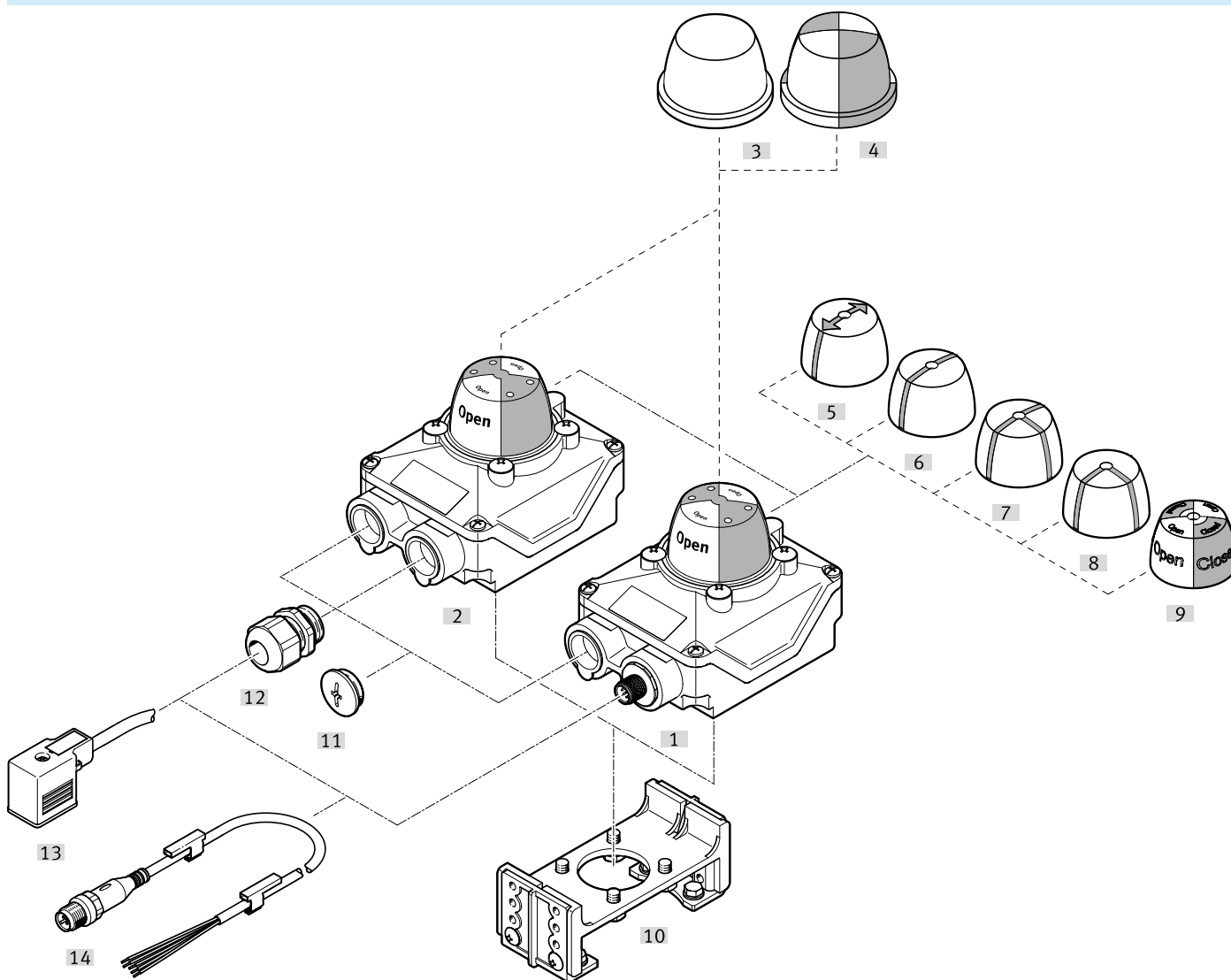
## Ordering data

	Nominal operating voltage	Electrical output 1	Cable connector	Product weight	Part no.	Type
	24 V DC	1-pole changeover switch (gold contact)	Without	460 g	8191214	SRBK-CA4-YR90-MW-1-1WG-C2
		PNP			8182178	SRBK-CA4-YR90-N-1-P-C2
		2-wire N/O contact			8182179	SRBK-CA4-YR90-N-1-ZU-C2
	110 V AC/50-60 Hz	1-pin toggle switch			8182180	SRBK-CA4-YR90-R-2A-1W-C2
	250 V AC				8182177	SRBK-CA4-YR90-MW-22A-1W-C2

	Nominal operating voltage	Electrical output 1	Cable connector	Product weight	Part no.	Type
	24 V DC	1-pole changeover switch (gold contact)	Without	360 g	8191215	SRBK-CA5-YR90-MW-1-1WG-C2
		PNP			8182184	SRBK-CA5-YR90-N-1-P-C2
		2-wire N/O contact			8182185	SRBK-CA5-YR90-N-1-ZU-C2
	110 V AC/50-60 Hz	1-pin toggle switch			8182186	SRBK-CA5-YR90-R-2A-1W-C2
	250 V AC				8182183	SRBK-CA5-YR90-MW-22A-1W-C2

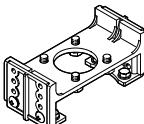
	Nominal operating voltage	Electrical output 1	Cable connector	Product weight	Part no.	Type
	24 V DC	1-pin toggle switch	Without	500 g	8182181	SRBK-CA4-YR90-MW-1-1W-M12
		PNP			8182182	SRBK-CA4-YR90-N-1-P-M12

## Peripherals

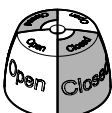


Accessories		→ Page/Internet
Type/order code	Description	
[1] Limit switch box SRBK...-M12	Electrical connection M12 plug, A-coded	srbk
[2] Limit switch box SRBK...-C2	Electrical connection with screw terminal	srbk
[3] Protective cap SACC-S4-T-T	Is mounted on the SBRK and protects the position indicator SASF	20
[4] Protective cap SACC-S4-T	Is mounted on the SBRK and protects the position indicator SASF	20
[5] Position indicator SASF-S4-EN-A1	Arrow, 180°	19
[6] Position indicator SASF-S4-EN-A2	I-version	19
[7] Position indicator SASF-S4-EN-A3	T-version	19
[8] Position indicator SASF-S4-EN-A4	L-version	19
[9] Position indicator SASF-S4-EN	Yellow/red	19
[10] Mounting adapter DARQ-KX1-A3-F05-R14	For limit switch box variants SRBK-CA4-...	19
[11] Plug screw NETC	The plug screw is not included in the scope of delivery	
[12] Cable connector NETC	<ul style="list-style-type: none"> <li>For limit switch box variants SRBK...-M12</li> <li>Polymer cable connector M20x1.5 included in the scope of delivery of the limit switch box</li> </ul>	20
[13] Connecting cables NEBV	<ul style="list-style-type: none"> <li>For valve connection for limit switch boxes with terminal rail connection</li> <li>Angled socket, plug pattern type A, EN 175301-803 or plug pattern type B, according to industrial standard 11 mm</li> <li>Can be ordered separately as an accessory</li> </ul>	20
[14] Connecting cables NEBU	<ul style="list-style-type: none"> <li>For valve connection for limit switch boxes with terminal rail connection</li> <li>Angled socket, plug pattern type B according to industry standard, 11 mm</li> <li>Can be ordered separately as an accessory</li> </ul>	21


## Accessories

	Connection point for positioner and position sensor conforms to standard	Ambient temperature	Type of mounting	Note on materials	Part no.	Type
	VDI/VDE 3845 size AA 1, VDI/VDE 3845 size AA 2, VDI/VDE 3845 size AA 3	-20 ... 70 °C	On flange according to ISO 5211	RoHS-compliant	<b>8183116</b>	<b>DARQ-K-X1-A3-F05-R14</b>

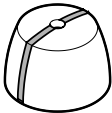
## Position indicator SASF-S4-EN

	Position indicator	Ambient temperature	Material cap	Note on materials	Part no.	Type
	Yellow/red	-40 ... 80 °C	PA	RoHS-compliant	<b>8137192</b>	<b>SASF-S4-DE</b>

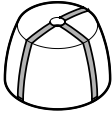
## Position indicator SASF-S4-EN-A1

	Position indicator	Ambient temperature	Material cap	Note on materials	Part no.	Type
	Arrow, 180°	-40 ... 80 °C	PA	RoHS-compliant	<b>8137191</b>	<b>SASF-S4-DE-A1</b>


## Position indicator SASF-S4-EN-A2

	Position indicator	Ambient temperature	Material cap	Note on materials	Part no.	Type
	I-version	-40 ... 80 °C	PA	RoHS-compliant	<b>8137190</b>	<b>SASF-S4-DE-A2</b>

## Position indicator SASF-S4-EN-A3

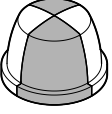
	Position indicator	Ambient temperature	Material cap	Note on materials	Part no.	Type
	T-version	-40 ... 80 °C	PA	RoHS-compliant	<b>8137195</b>	<b>SASF-S4-DE-A3</b>

## Position indicator SASF-S4-EN-A4

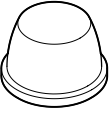
	Position indicator	Ambient temperature	Material cap	Note on materials	Part no.	Type
	L-version	-40 ... 80 °C	PA	RoHS-compliant	<b>8137189</b>	<b>SASF-S4-DE-A4</b>

## Accessories

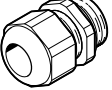
### Protective cap SACC-S4-T


	Colour	Ambient temperature	Material cover cap	Note on materials	Part no.	Type
	Transparent black	-40 ... 80 °C	PC	RoHS-compliant	<b>8137193</b>	<b>SACC-S4-T</b>

### Protective cap SACC-S4-T-T

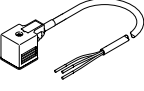
	Colour	Ambient temperature	Material cover cap	Note on materials	Part no.	Type
	Transparent	-40 ... 80 °C	PC	RoHS-compliant	<b>8137194</b>	<b>SACC-S4-T-T</b>

### Cable connector NETC


	Connection technology 1	Ambient temperature	Note on materials	Part no.	Type
	M20x1.5	-40 ... 75 °C	RoHS-compliant	<b>8151588</b>	<b>NETC-M20-PBK-T26-EX4-E</b>

	Connection technology 1	Ambient temperature	Note on materials	Part no.	Type
	M20x1.5	-40 ... 75 °C	RoHS-compliant	<b>8151589</b>	<b>NETC-P-M20-PBK-T26-EX4-E</b>


### Connecting cables NEBV

	Electrical connection 1, connector system	Cable length	Additional functions	Ambient temperature	Note on materials	Part no.	Type
	Connection pattern type A based on EN 175301-803	0.6 m	Protective circuit	-25 ... 80 °C	RoHS-compliant	<b>3579466</b>	<b>NEBV-A1W3-K-0.6-N-LE3</b>
						<b>3679776</b>	<b>NEBV-A1W3F-P-K-0.6-N-LE3</b>
	Plug pattern type B to industry standard, 11 mm		Protective circuit			<b>3579468</b>	<b>NEBV-B2W3-K-0.6-N-LE3</b>
						<b>3679778</b>	<b>NEBV-B2W3F-P-K-0.6-N-LE3</b>

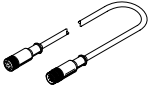
### Plug socket with cable 8-pin, M12 – open cable end, 8-core

	Cable characteristic	Cable length	Electrical connection 1, cable outlet <sup>1)</sup>	Ambient temperature	Note on materials	Part no.	Type
	Standard	2 m	Straight	-25 ... 80 °C	RoHS-compliant	<b>525616</b>	<b>SIM-M12-8GD-2-PU</b>

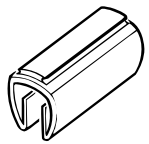
## Accessories

Plug socket with cable 8-pin, M12 – open cable end, 8-core							
	Cable characteristic	Cable length	Electrical connection 1, cable outlet <sup>1)</sup>	Ambient temperature	Note on materials	Part no.	Type
	Standard	2 m	Angled	-25 ... 80 °C	RoHS-compliant	542256	NEBU-M12W8-K-2-N-LE8
		5 m	Straight			525618	SIM-M12-8GD-5-PU
			Angled			542257	NEBU-M12W8-K-5-N-LE8
		10 m	Straight			570008	SIM-M12-8GD-10-PU
			Angled			570007	NEBU-M12W8-K-10-N-LE8
		15 m	Straight			5105631	SIM-M12-8GD-15-PU
			Angled			8048086	NEBU-M12W8-K-15-N-LE8
		20 m	Straight			5105632	SIM-M12-8GD-20-PU
25 m		5105633	SIM-M12-8GD-25-PU				

1) Observe operating voltage range and ambient temperature!

Plug socket with cable 8-pin, M12 - plug, 8-pin, M12							
	Cable length	Electrical connection 1, cable outlet <sup>1)</sup>	Ambient temperature	Note on materials	Part no.	Type	
	2 m	Straight	-25 ... 80 °C	RoHS-compliant	525617	KM12-8GD8GS-2-PU	

1) Observe operating voltage range and ambient temperature!

Inscription label KM			
	Description	Part no.	Type
	For attaching to a cable with diameter 5 ... 8 mm	33361	KM-BZ