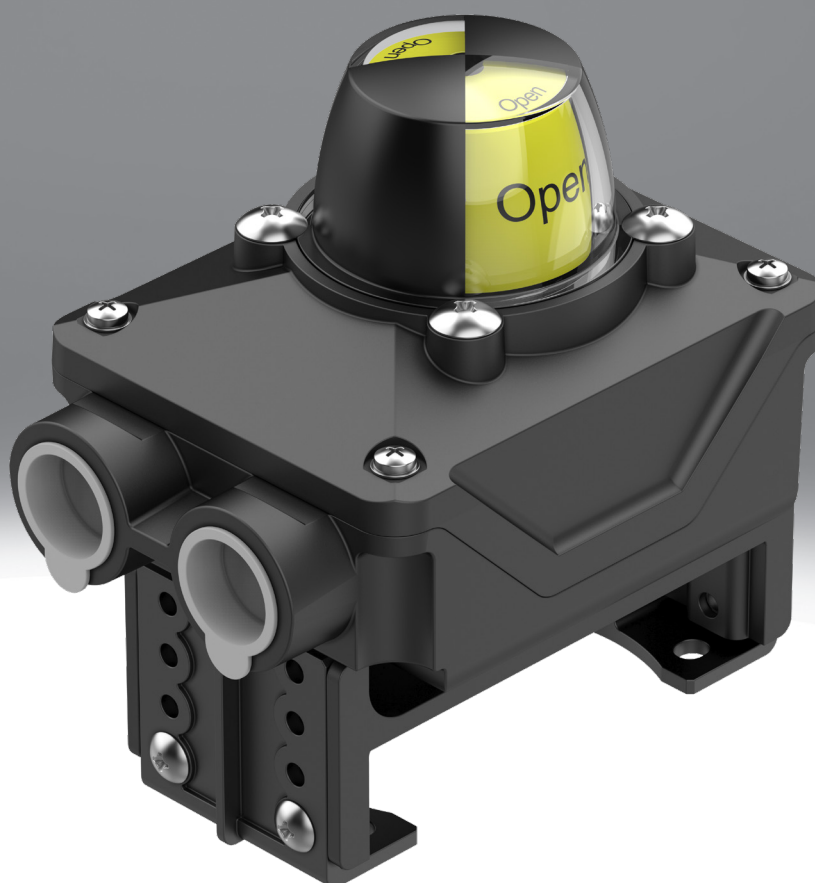


Limit switch box SRBK

FESTO



Type code

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

006	Sensor principle	
MW	Floating contact, changeover contact	
N	Proximity sensor, inductive	
R	With contacts (reed)	
007	Nominal operating voltage	
1	24 V DC	
2A	110 V AC/50-60 Hz	
22A	250 V AC	
008	Electrical output 1	
1W	1-pin toggle switch	
1WG	1-pole changeover switch (gold contact)	
P	PNP	
ZU	2-wire N/O contact	
009	Electrical connection	
C2	Screw terminal	
M12	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
Min. load current	–					4 mA
Off-state current	–	0 ... 0.5 mA	–			0 ... 0.5 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 ²		–	0.25 ... 2.5 mm ²	
Electrical connection 1, cable outlet	Straight					

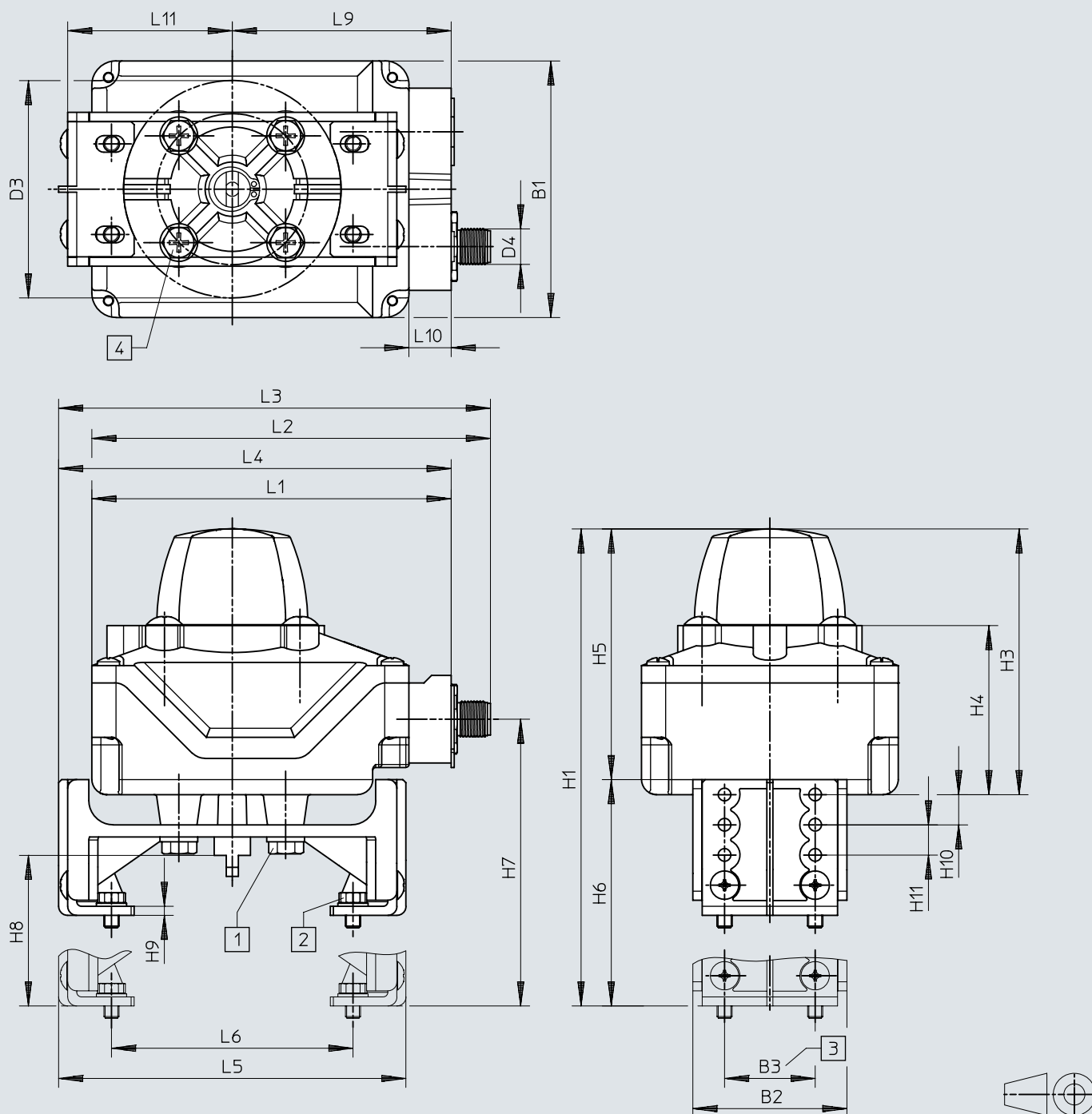
Datasheet

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



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

Dimensions

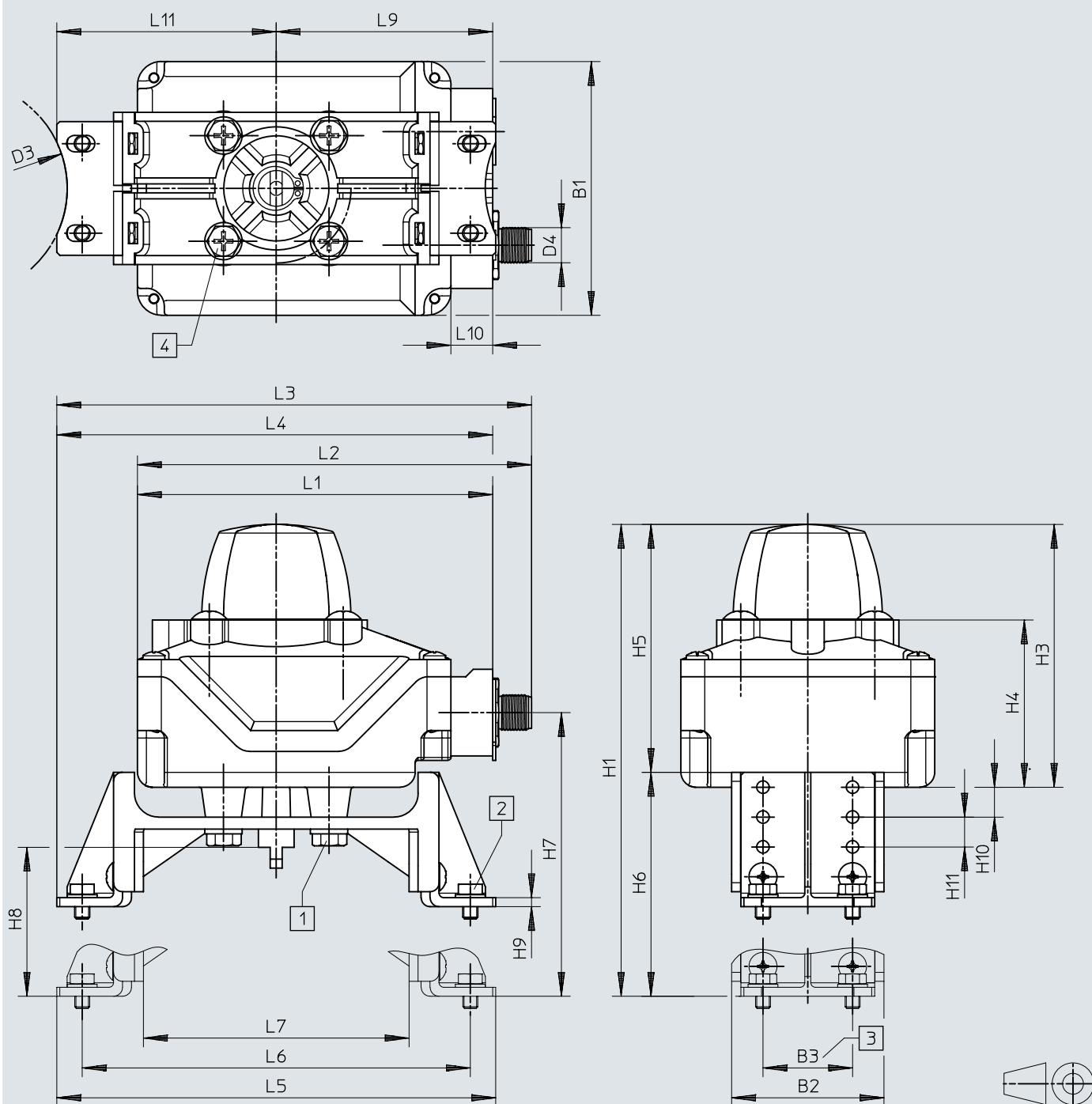
	B1	B2	B3	D3 Ø	D4 Ø	H3	H4	H5	H9	H10	H11	L1	L2	L3
SRBK-CA4-YR90-MW-1-1W-M12	85	51	30	72	M12x1	88	56	83	3	10	10	119	132	143
SRBK-CA4-YR90-N-1-P-M12														

	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



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

Dimensions

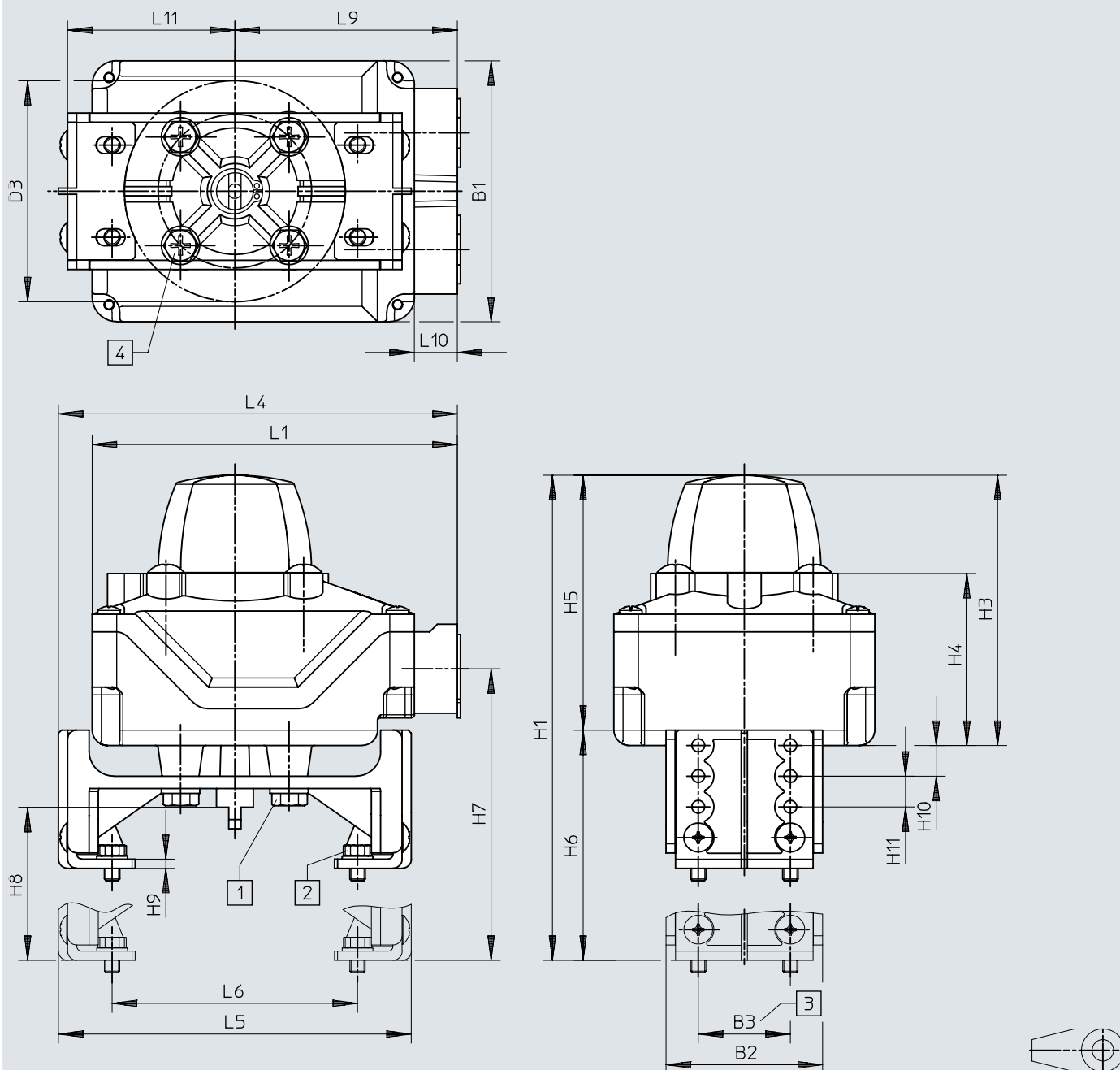
	B1	B2	B3	D3 Ø	D4 Ø	H3	H4	H5	H9	H10	H11	L1	L2	L3
SRBK-CA4-YR90-MW-1-1W-M12	85	51	30	72	M12x1	88	56	83	3	10	10	119	132	159
SRBK-CA4-YR90-N-1-P-M12														

	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

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Dimensions

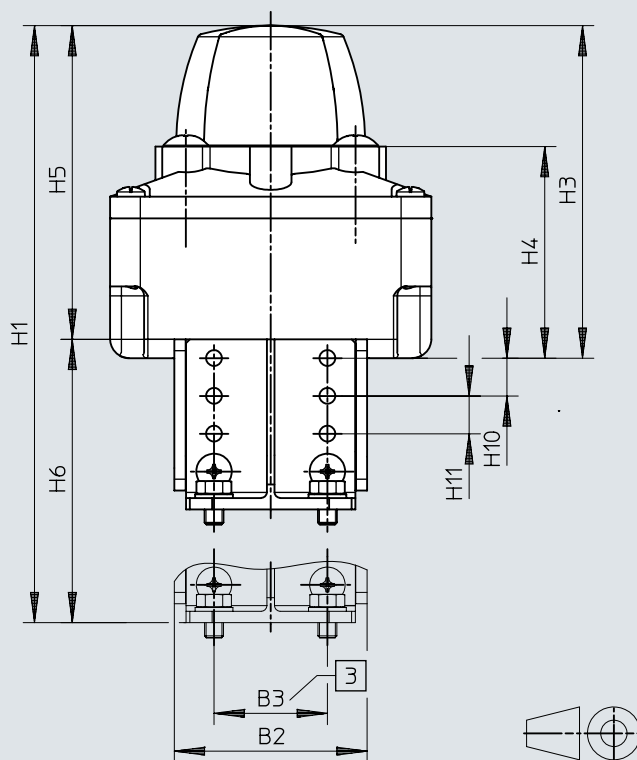
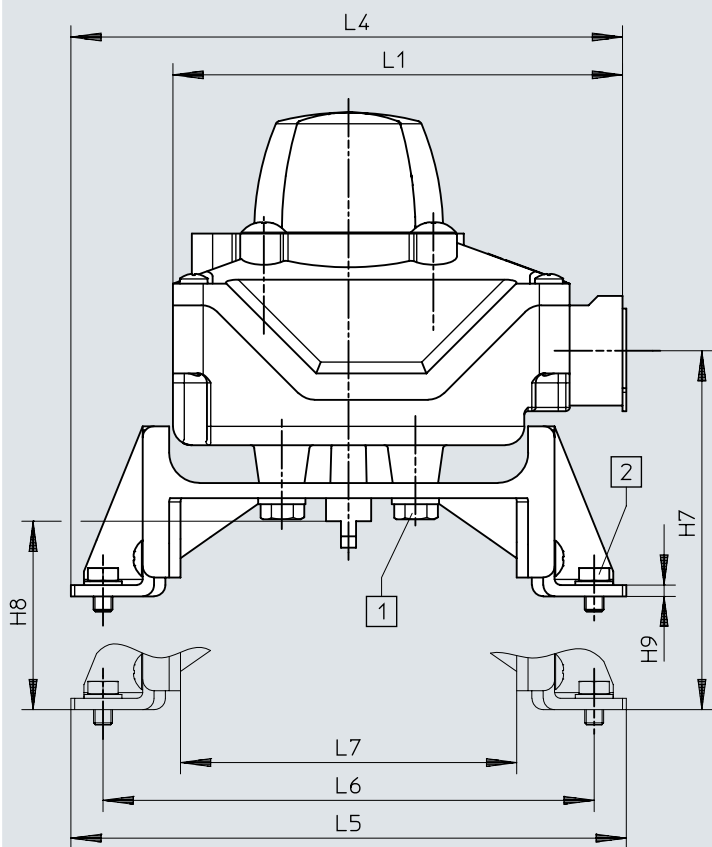
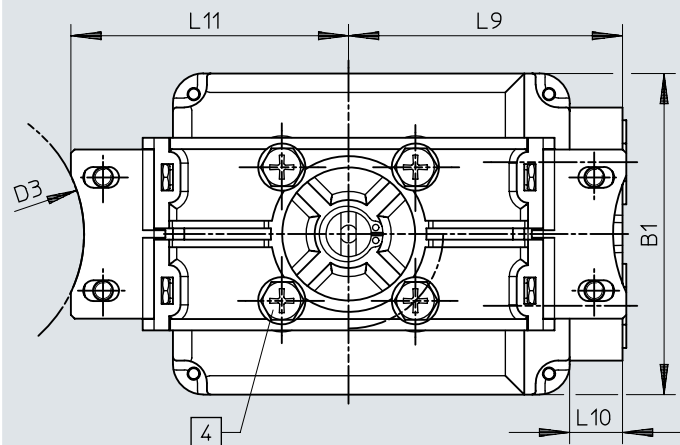
	B1	B2	B3	D3 Ø	H3	H4	H5	H9	H10	H11	L1	L4	L5	L6
SRBK-CA4-YR90-MW-1-1WG-C2	85	51	30	72	88	56	83	3	10	10	119	130	115	80
SRBK-CA4-YR90-MW-22A-1W-C2														
SRBK-CA4-YR90-R-2A-1W-C2														
SRBK-CA4-YR90-N-1-P-C2														
SRBK-CA4-YR90-N-1-ZU-C2														

	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

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

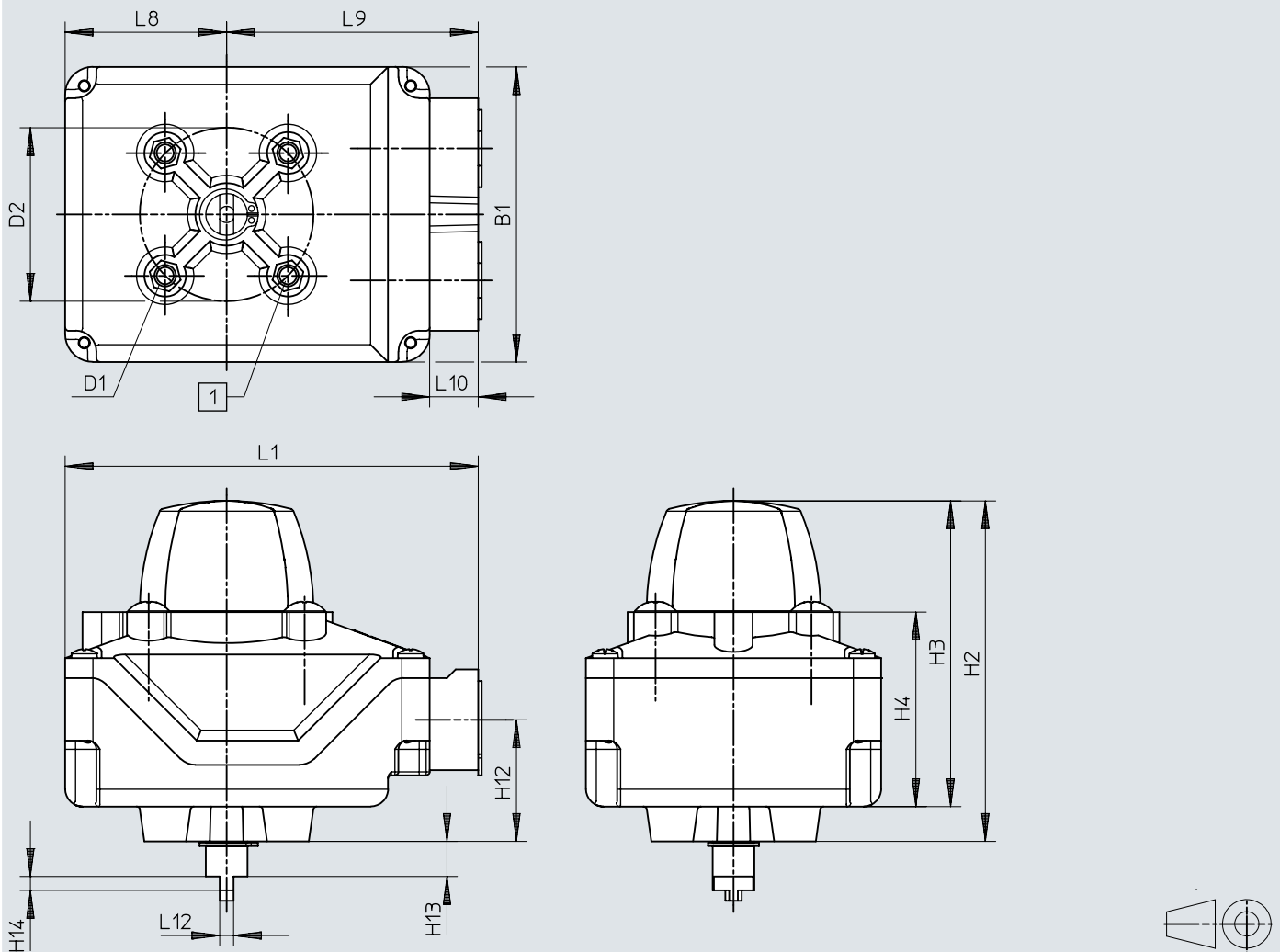
Dimensions

	B1	B2	B3	D3 Ø	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

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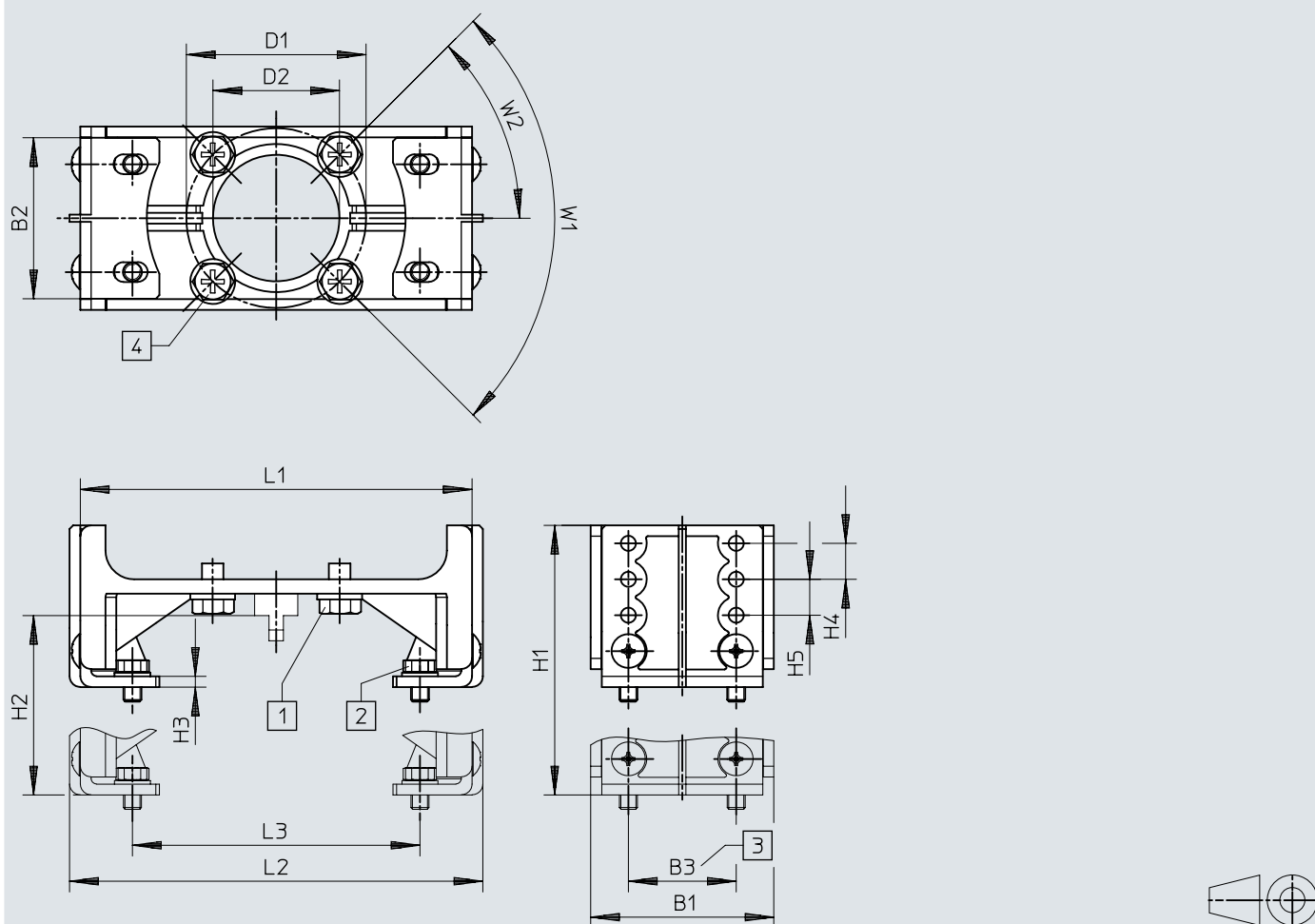
[1] Hole pattern F05 to EN ISO 5211

	B1	D1	D2 ø	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



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

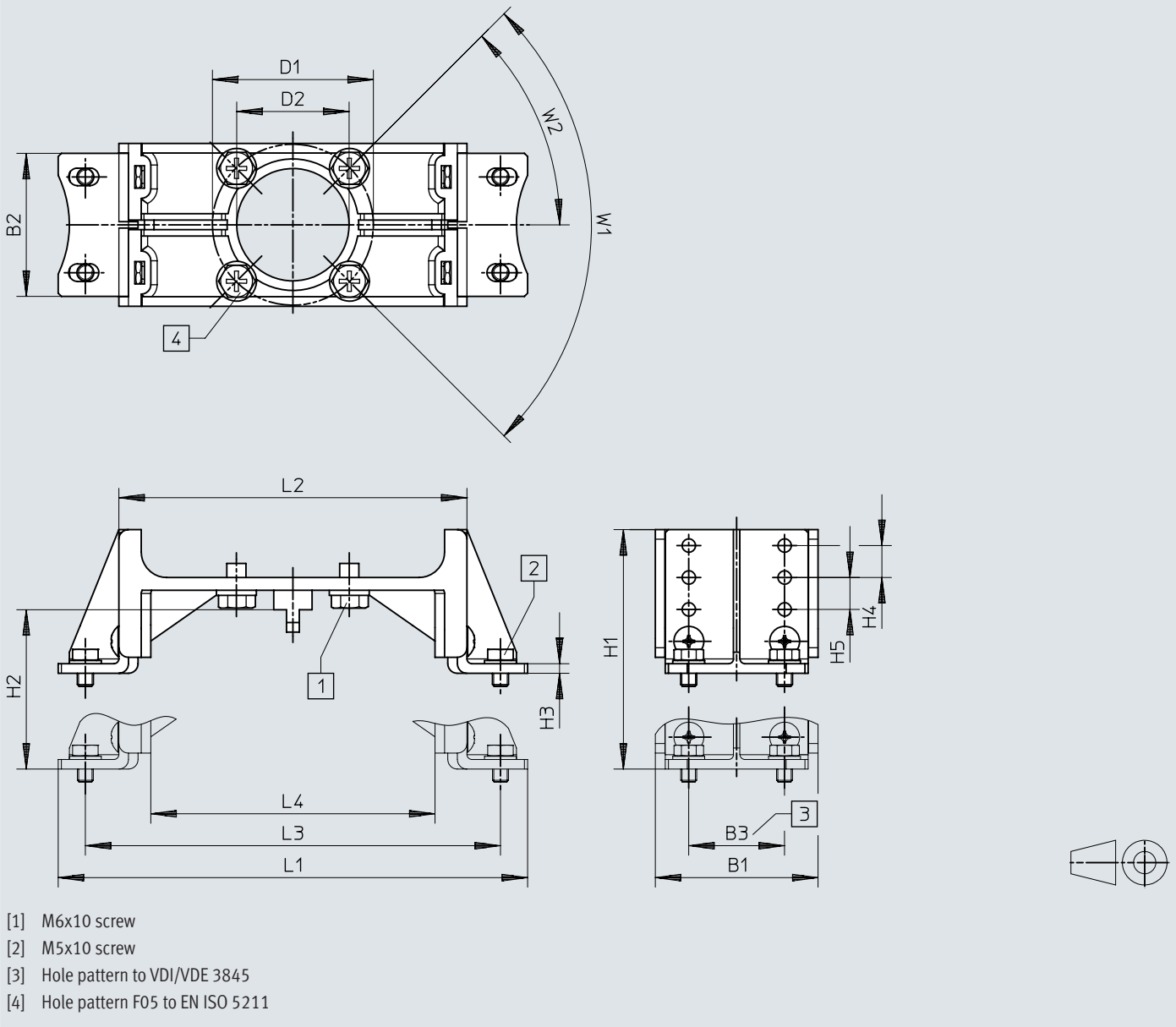
	B1	B2	B3	D1 Ø	D2 Ø	H3	H4	H5	L1	L2
DARQ-K-X1-A3-F05-R14	51	44,8	30	50	35,2	3	10	10	109	115

	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

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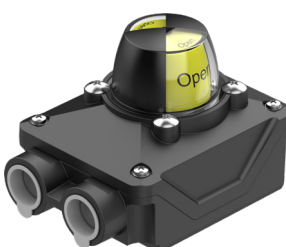


	B1	B2	B3	D1 ø	D2 ø	H3	H4	H5	L1	L2
DARQ-K-X1-A3-F05-R14	51	44,8	30	50	35,2	3	10	10	147	115

	L3	L4	W1	W2	H1 130x30x20	H2 130x30x30	H1 130x30x30	H2 130x30x50	H1 130x30x50	H2 130x30x50
DARQ-K-X1-A3-F05-R14	130	89	90°	45°	45	20	55	30	75	50

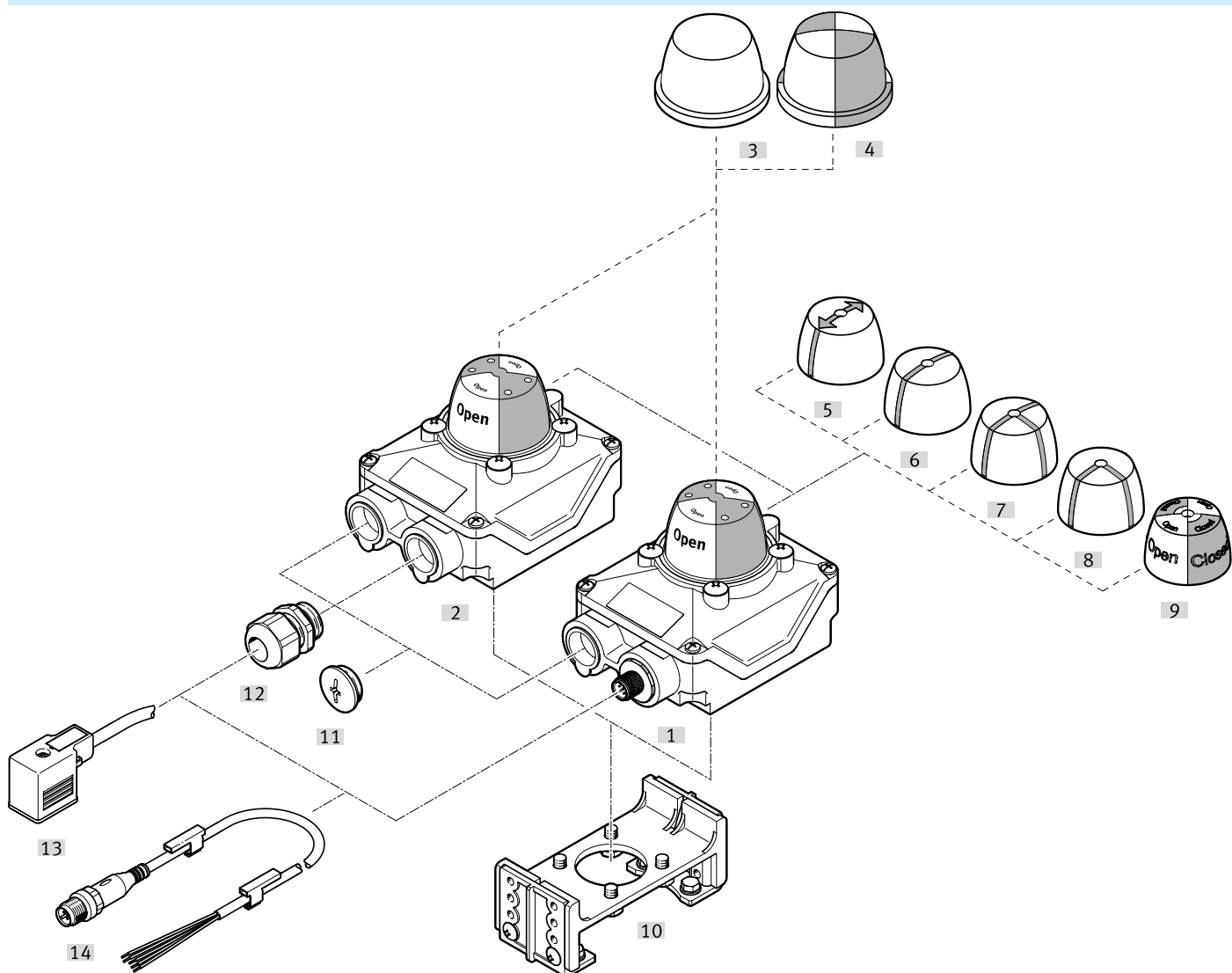
Ordering data

	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		

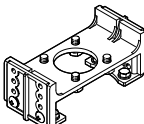
	Nominal operating voltage	Electrical output 1	Cable connector	Product weight	Part no.	Type
	24 V DC	1-pin toggle switch	Without	500 g	8182181	SRBK-CA4-YR90-MW-1-1W-M12
		PNP			8182182	SRBK-CA4-YR90-N-1-P-M12

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-K-X1-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	- For limit switch box variants SRBK...-M12 - Polymer cable connector M20x1.5 included in the scope of delivery of the limit switch box		20
[13] Connecting cables NEBV	- For valve connection for limit switch boxes with terminal rail connection - Angled socket, plug pattern type A, EN 175301-803 or plug pattern type B, according to industrial standard 11 mm - Can be ordered separately as an accessory		20
[14] Connecting cables NEBU	- For valve connection for limit switch boxes with terminal rail connection - Angled socket, plug pattern type B according to industry standard, 11 mm - Can be ordered separately as an accessory		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	8183116	DARQ-K-X1-A3-F05-R14

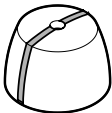
Position indicator SASF-S4-EN

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

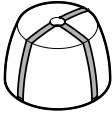
Position indicator SASF-S4-EN-A1

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

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	8137190	SASF-S4-DE-A2

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	8137195	SASF-S4-DE-A3

Position indicator SASF-S4-EN-A4

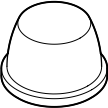
	Position indicator	Ambient temperature	Material cap	Note on materials	Part no.	Type
	L-version	-40 ... 80 °C	PA	RoHS-compliant	8137189	SASF-S4-DE-A4

Accessories

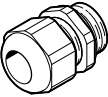
Protective cap SACC-S4-T

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

Protective cap SACC-S4-T-T

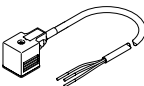
	Colour	Ambient temperature	Material cover cap	Note on materials	Part no.	Type
	Transparent	-40 ... 80 °C	PC	RoHS-compliant	8137194	SACC-S4-T-T

Cable connector NETC

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

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

Connecting cables NEBV

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		-25 ... 80 °C	RoHS-compliant	3579466	NEBV-A1W3-K-0.6-N-LE3
			Protective circuit			3679776	NEBV-A1W3F-P-K-0.6-N-LE3
	Plug pattern type B to industry standard, 11 mm					3579468	NEBV-B2W3-K-0.6-N-LE3
			Protective circuit			3679778	NEBV-B2W3F-P-K-0.6-N-LE3

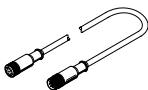
Plug socket with cable 8-pin, M12 – open cable end, 8-core

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

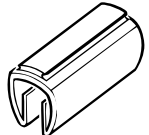
Accessories

Plug socket with cable 8-pin, M12 – open cable end, 8-core							
	Cable characteristic	Cable length	Electrical connection 1, cable outlet ¹⁾	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 ¹⁾	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