

Limit switch attachments DAPZ



Limit switch attachments DAPZ

Type codes



Type	
DAPZ	Limit switch attachment

Specification	
SB	Sensor box

Measuring principle	
I	Inductive
M	Electrical, micro switch

Operating voltage	
25DC	25 V DC
30DC	30 V DC
250AC	250 V AC

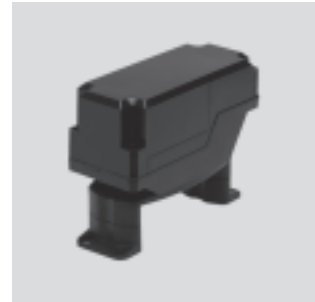
Design	
EX	Explosion-proof
D	Display
S	Square design
R	Round design
A	AS-interface connection
M	Solenoid plug

Variant	
RO	Foot height fixed
AR	Foot height adjustable

Limit switch attachments DAPZ, square design

Technical data

- Drive interface to Namur VDI/VDE 3845
- Simple and quick assembly and connection
- Integrated solenoid valve actuation
- DAPZ-SB-I-... with AS-interface



General technical data			
Sensing type	Mechanical		Contactless
Variant	Basic version	Explosion-proof	Basic version
Measuring principle	Electrical	Electrical	Inductive
Operating voltage range	[V AC]	0 ... 250	–
	[V DC]	–	10 ... 30
Max. switching capacity	16 A, 250 V AC	4 A, 250 V AC	–
Switching element function	Changeover switch	Changeover switch	Normally closed contact
Electrical connection	M20x1.5	M20x1.5	AS-interface flat cable plug
Display	Yes	No	Yes
Ambient temperature [°C]	–25 ... +85	–25 ... +85	–25 ... +85
Protection class	Housing IP65	Housing IP65	Housing IP65
ATEX category gas	–	II 2G	–
Explosion ignition protection type gas	–	Ex ed IIC T6	–
Explosion-proof ambient temperature	–	–20°C ≤ Ta ≤ +60°C	–
CE marking symbol (see conformity declaration)	As per EU low voltage directive	As per EU explosion protection directive (ATEX)	–
Certificate issuing office	–	PTB 05 ATEX 1087	–
Corrosion resistance class CRC ¹⁾	2	3	2

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents
 Corrosion resistance class 3 according to Festo standard 940 070
 Components with heavy corrosion exposure. Externally visible components in direct contact with normal industrial atmosphere or media such as solvents and cleaning agents, where the surface requirement is predominantly functional

Materials			
Sensing type	Mechanical		Contactless
Variant	Basic version	Explosion-proof	Basic version
Housing socket	Polyamide, black	Polyamide, black	Polyamide, black
Housing cover	Polycarbonate, transparent	Polyamide, black	Polycarbonate, transparent
Seal	Silicone, ethylene propylene rubber or nitrile rubber	Ethylene propylene rubber	Silicone, ethylene propylene rubber or nitrile rubber

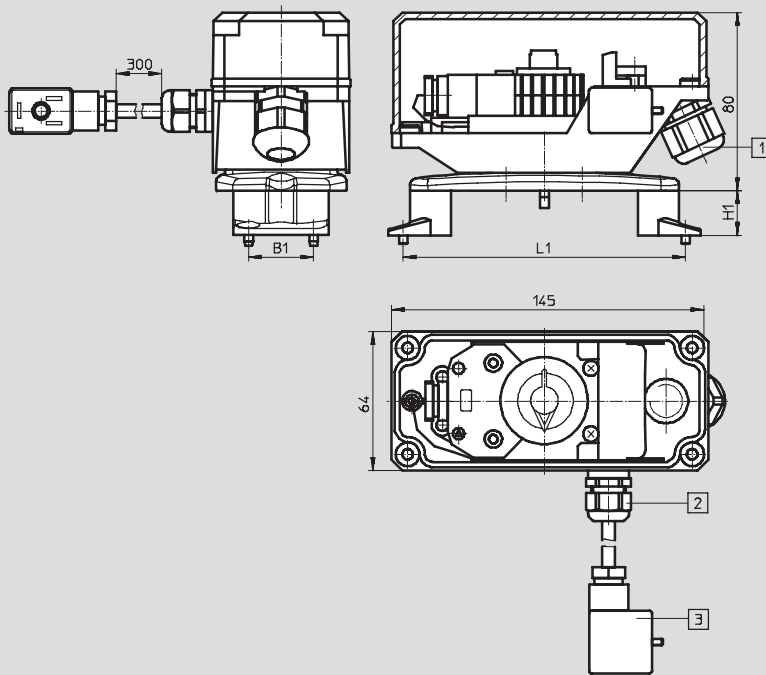
Limit switch attachments DAPZ, square design

Technical data

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Dimensions

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- 1 Connection for AS-interface flat cable
- 2 Cable conduit fitting M12x1.5
- 3 Solenoid plug

	B1	L1	H1
Feet mounted inwards			
Foot 20	30	80	20
Foot 30	30	80	30
Foot 50 (order accessories separately)	30	80	50
Feet mounted outwards			
Foot 20	30	130	20
Foot 30	30	130	30
Foot 50 (order accessories separately)	30	130	50
Mounting with adapter (order accessories separately) → 9			
DAPZ-SBZ-K0-RO	25	50	20
DAPZ-SBZ-K3-RO	30	150	30

Ordering data

Sensing type	Variant	Measuring principle	Operating voltage	Part No.	Type
Mechanical	Basic version	Electrical	250 V AC	534 468	DAPZ-SB-M-250AC-DSM-RO
Mechanical	Explosion-proof	Electrical	250 V AC	534 470	DAPZ-SB-M-250AC-EXS-RO
Contactless	Basic version	Inductive	30 V DC	534 473	DAPZ-SB-I-30DC-DSAM-RO

Limit switch attachments DAPZ, round design, variant RO

Technical data

- Drive interface to Namur VDI/VDE 3845
- Simple and quick assembly and connection
- Integrated solenoid valve actuation



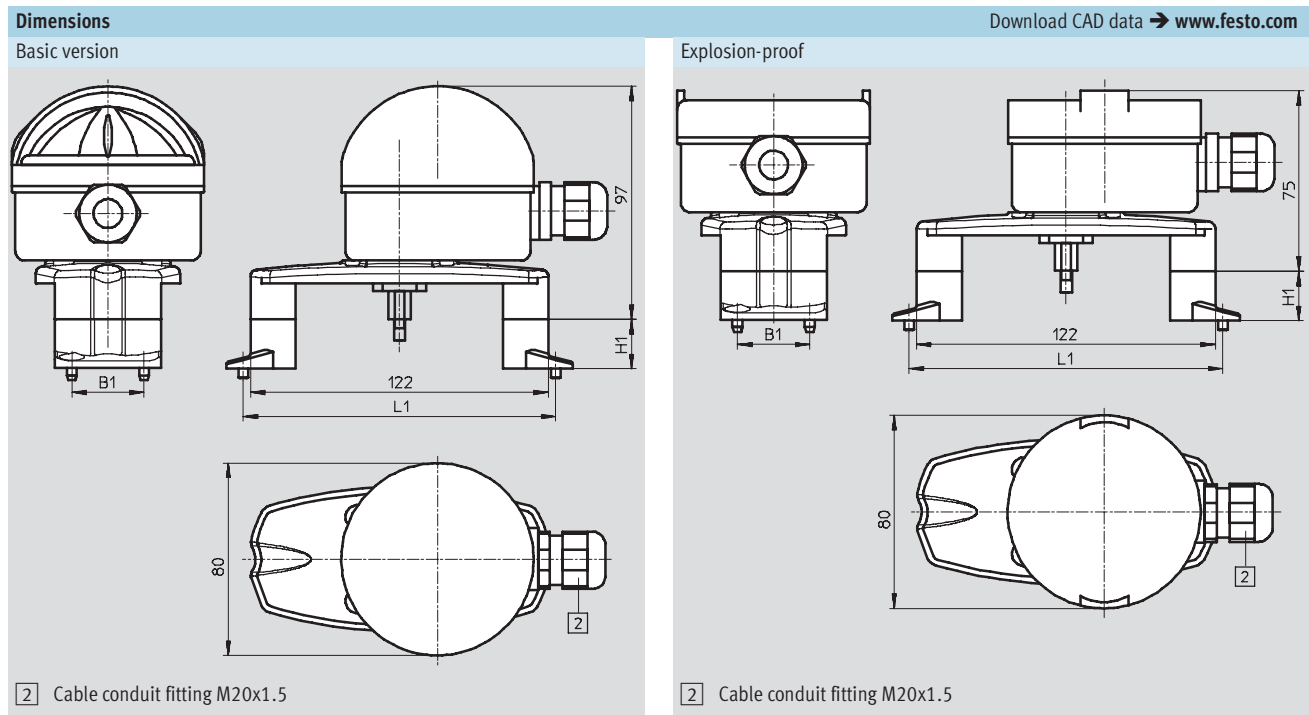
General technical data			
Sensing type	Mechanical	Contactless	
Variant	Basic version	Basic version	Explosion-proof
Measuring principle	Electrical	Inductive	Inductive
Operating voltage range	[V AC]	0 ... 250	–
	[V DC]	–	10 ... 30
Max. switching capacity	16 A, 250 V AC	–	5 ... 25
Switching element function	Changeover switch	NO contact, PNP	NC contact, Namur
Electrical connection	M20x1.5	M20x1.5	M20x1.5
Display	Yes	Yes	No
Ambient temperature [°C]	–25 ... +100	–25 ... +70	–25 ... +70
Protection class	Housing IP65	Housing IP65	Housing IP65
ATEX category gas	–	–	II 2G
Explosion ignition protection type gas	–	–	EEx ia IIc T6
Explosion-proof ambient temperature	–	–	–25°C ≤ Ta ≤ +70°C
CE marking symbol (see conformity declaration)	As per EU low voltage directive	–	As per EU explosion protection directive (ATEX)
Certificate issuing office	–	–	TÜV 99 ATEX 1479 X
Corrosion resistance class CRC ¹⁾	2	2	2

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

Materials			
Sensing type	Mechanical	Contactless	
Variant	Basic version	Basic version	Explosion-proof
Housing socket	Polyamide, black	Polyamide, black	Polyamide, black
Housing cover	Polycarbonate, transparent	Polycarbonate, transparent	Polyamide, black
Seal	Silicone, ethylene propylene rubber or nitrile rubber	Silicone, ethylene propylene rubber or nitrile rubber	Silicone, ethylene propylene rubber or nitrile rubber

Limit switch attachments DAPZ, round design, variant RO

Technical data



	B1	L1	H1
Feet mounted inwards			
Foot 20	30	80	20
Foot 30	30	80	30
Foot 50 (order accessories separately)	30	80	50
Feet mounted outwards			
Foot 20	30	130	20
Foot 30	30	130	30
Foot 50 (order accessories separately)	30	130	50
Mounting with adapter (order accessories separately) → 9			
DAPZ-SBZ-K0-RO	25	50	20
DAPZ-SBZ-K3-RO	30	150	30

Ordering data					
Sensing type	Variant	Measuring principle	Operating voltage	Part No.	Type
Mechanical	Basic version	Electrical	250 V AC	534 469	DAPZ-SB-M-250AC-DR-RO
Contactless	Basic version	Inductive	30 V DC	534 471	DAPZ-SB-I-30DC-DR-RO
Contactless	Explosion-proof	Inductive	25 V DC	534 472	DAPZ-SB-I-25DC-R-RO

Limit switch attachments DAPZ, round design, variant AR

Technical data

- Drive interface to Namur
VDI/VDE 3845
- Simple and quick assembly and connection
- Integrated solenoid valve actuation



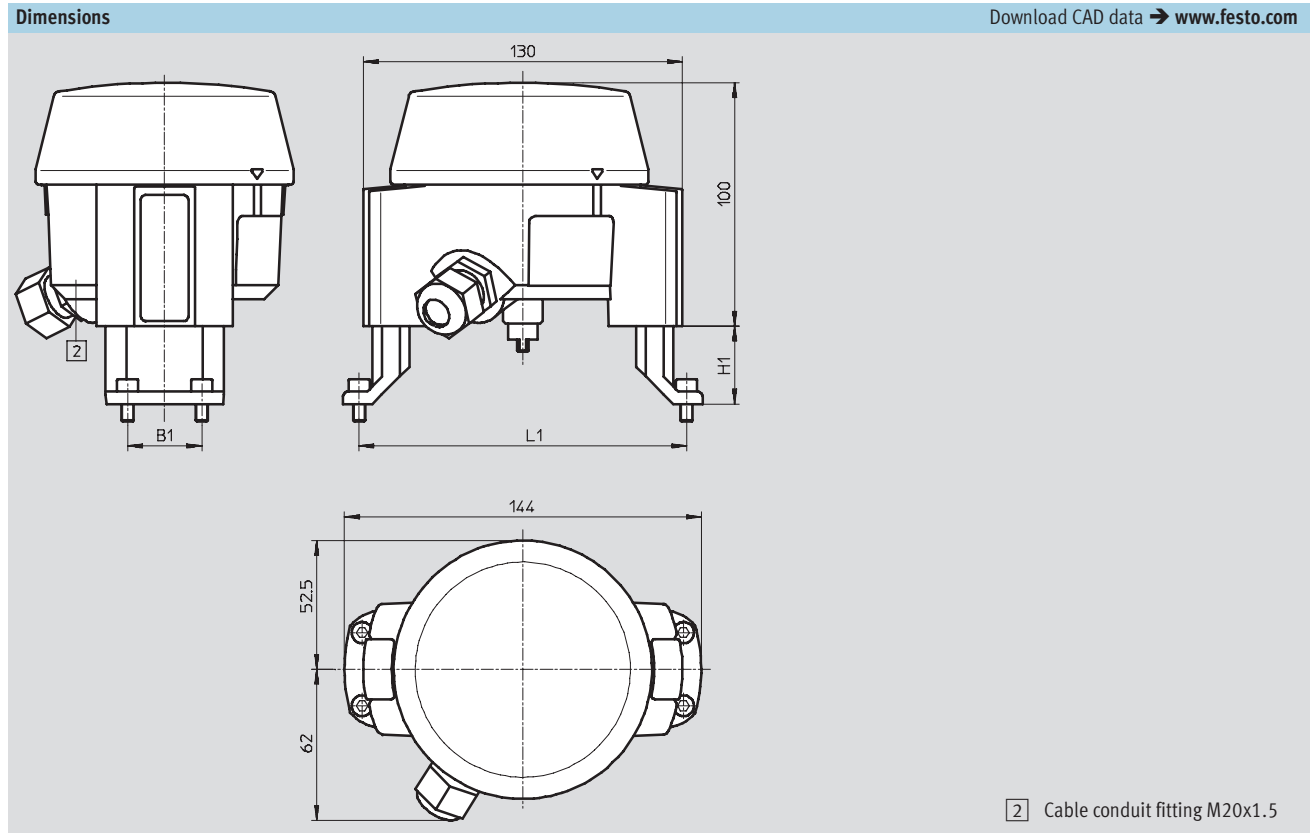
General technical data			
Sensing type	Mechanical	Contactless	
Version	Basic version	Basic version	Explosion-proof
Sensing principle	Electrical	Inductive	Inductive
Operating voltage range	[V AC]	4 ... 250	–
	[V DC]	4 ... 250	10 ... 30
Nominal operating voltage	[V DC]	–	8
Insulation voltage	[V]	250	50
Surge strength	[kV]	2.5	0.5
Protection against short circuit	None	Pulsed	None
Intrinsic current consumption at operating voltage	1 mA ... 5 A	0 ... 100 mA	–
Switching current	attenuated [mA]	–	≤ 1
	non-attenuated [mA]	–	≥ 3
Switching element function	Changeover switch	NO contact, PNP	NC contact, Namur
Electrical connection	M20x1.5	M20x1.5	M20x1.5
Display	Yes	Yes	Yes
Ambient temperature	[°C]	–20 ... +70	–20 ... +70
Design	Round	Round	Round
Mounting position	Any	Any	Any
Type of mounting	Via through-holes	Via through-holes	Via through-holes
Connectable nominal conductor cross section	[mm ²]	< 2.5	< 2.5
Cable diameter	[mm]	7 ... 13	7 ... 13
Protection class	IP67	IP67	IP67
Degree of contamination	3	3	3
ATEX symbol	–	–	II 2 G EEx ia IIB T6
ATEX ambient temperature	–	–	–20°C ≤ Ta ≤ +70°C
CE mark (see declaration of conformity)	In accordance with EU Low Voltage Directive	–	In accordance with EU explosion protection directive (ATEX)
Corrosion resistance class CRC ¹⁾	2	2	2
Protection against polarity reversal	–	For all electrical connections	–
Based on standard	EN 60947-5-1	EN 60947-5-2	EN 60947-5-2, EN 60947-5-6

1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Materials			
Sensing type	Mechanical	Contactless	
Variant	Basic version	Basic version	Explosion-proof
Housing socket	Acrylic butadiene styrene	Acrylic butadiene styrene	Acrylic butadiene styrene
Housing cover	Polycarbonate, transparent	Polycarbonate, transparent	Polycarbonate, transparent
Seal	Nitrile rubber	Nitrile rubber	Nitrile rubber

Limit switch attachments DAPZ, round design, variant AR

Technical data



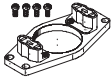
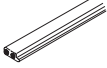




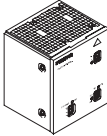
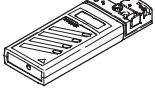
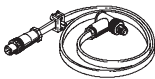


	B1	L1	H1
Feet mounted inwards			
Foot height adjustable	30	80	20, 30, 50
Feet mounted outwards			
Foot height adjustable	30	130	20, 30, 50

Ordering data					
Sensing type	Variant	Measuring principle	Operating voltage	Part No.	Type
Mechanical	Basic version	Electrical	250 V AC	534 474	DAPZ-SB-M-250AC-DR-AR
Contactless	Basic version	Inductive	30 V DC	534 475	DAPZ-SB-I-30DC-DR-AR
Contactless	Explosion-proof	Inductive	25 V DC	534 476	DAPZ-SB-I-25DC-EXDR-AR

Limit switch attachments DAPZ

Accessories

Ordering data		
	Brief description	Part No. Type
Foot		
	Kit for limit switch attachment DAPZ-...-RO Shaft height 50 mm, port pattern 130 x 30 mm	534 477 DAPZ-SBZ-F50-RO
Adapter for foot mounting		
	Kit for limit switch attachment DAPZ-...-RO on the quarter turn actuator DRD/DRE sizes 1 and 2 Foot connection L50 x B25 x H20 mm	534 478 DAPZ-SBZ-K0-RO
	Kit for limit switch attachment DAPZ-...-RO on the quarter turn actuator DRD/DRE sizes 375 ... 880 Foot connection L150 x B30 x H30 mm	534 479 DAPZ-SBZ-K3-RO
Bus connection		
	Flat cable for AS-interface components, yellow, 100 m	18 940 KASI-1,5-Y-100
	Cable distributor for flat cable, cable parallel, rotatable	18 786 ASI-KVT-FK
	Cable distributor for flat cables, cables symmetrical	18 797 ASI-KVT-FK-S
	Cable cap for flat cable (50 included in scope of delivery)	18 787 ASI-KK-FK
	Cable sleeve (20 included in scope of delivery)	165 593 ASI-KT-FK
Other		
	Combi power pack for AS-interface	191 082 ASI-CNT-115/230-VAC-B
	Addressing device for AS-interface stations	18 959 ASI-PRG-ADR
	Addressing cable for addressing device	18 960 KASI-ADR

Limit switch attachments QH-DR-E

Technical data

Limit switch attachment with choice of

3 sensing methods:

- Pneumatic
 - with micro stem actuated valve
 - S-3-PK-3-B
- Electrical
 - with micro switch with roller lever,
 - IP 67 (splash-proof) S-3-E-SW-B
- Inductive
 - with proximity sensor
 - SIEN-M12-NB-B



Technical data	
Pneumatic sensing	
Medium	Filtered compressed air, lubricated or unlubricated
Function	3/2-way valve, directly actuated, normally closed
Pneumatic connection	Barbed fitting for 3 mm plastic tubing
Nominal size	1.8 mm
Operating pressure range	-1 ... +8 bar
Connection	Pg13.5
Temperature range	-10 ... +60 °C
Electrical sensing	
Utilisation category	AC 15/AC 12; DC 13/DC 12
Operating voltage range	0 ... 250 V AC; 0 ... 250 V DC
Rated operating current at rated operating voltage	Ohmic load (AC 12 / DC 12): 230 V DC: 0.3 A, 230 V AC: 10 A
	Inductive load (AC 12 / DC 12): 230 V DC: 0.2 A, 230 V AC: 4 A
Rated surge voltage	2.5 kV
Cross-section of connectable cables	0.2 ... 2.5 mm ²
Electrical connection	Cable gland connector Pg13.5
Temperature range	-25 ... +80 °C
Protection class	Housing IP65
CE symbol	Yes, to EN 60 947-5-1: 1991
Inductive sensing	
Operating voltage range	10 ... 30 V DC
Rated operating current	200 mA
Idle current	≤1 mA
Output	Short circuit proof, reverse polarity protected
	Voltage drop: ≤ 3.2 V, residual current: ≤ 0.01 mA
Cross-section of connectable cables	0.2 ... 2.5 mm ²
Electrical connection	Cable gland connector Pg13.5
Temperature range	-25 ... +85 °C
Display	Yellow LED
Protection class	Housing IP65
CE symbol	Yes, to EN 50 947-5-2:1995

Materials	
Housing base	Polymer
Cover	Transparent polymer
Seal	Ethylene propylene rubber

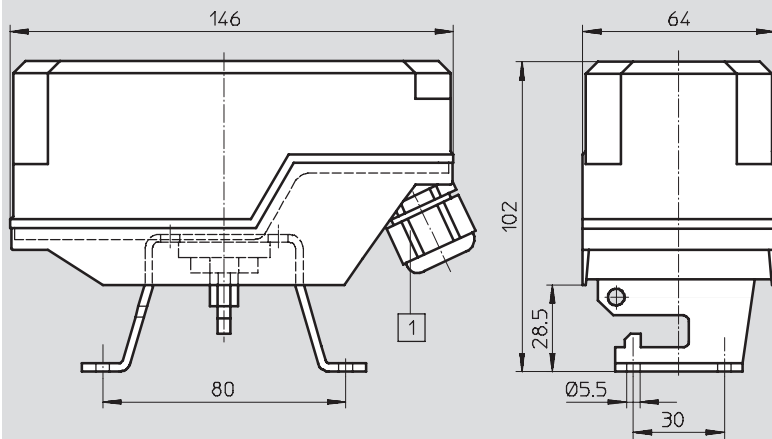
Limit switch attachments QH-DR-E

Technical data

FESTO

Dimensions

Download CAD data → www.festo.com



1 Cable gland connector Pg13.5

Ordering data

Sensing principle	Part No.	Type
Pneumatic with S3-PK-3-B	164 855	QH-DR-E-S3-PK-3-B-B
Electrical with S3-E-SW-B	164 854	QH-DR-E-S3-E-SW-B
Inductive with SIE-M12-NB-B	164 853	QH-DR-E-SIEN-M12-NB-B