

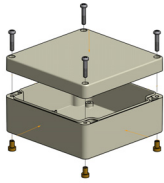
Electronics – Accessories and Service Parts

Overview of the standard range



Contents		Page
1	Enclosures	5
2	Front plates	5
3	Push-in cards	6
4	Switches	7
4.1	Toggle switches, single pole / double pole, 3 A - 6 A	7
4.2	Toggle switch, single pole, 10 A	7
4.3	Toggle switch, double pole, 10 A	8
5	Sensors and transmitters	9
5.1	Contact microphone, complete	9
5.2	Infrared sensor	9
5.3	Proximity switch, nominal sensing distance 4 mm	10
5.4	Rotary pulse encoder DIG360	11
5.5	Angle sensor with ball bearings 424 A 17 A120	12
6	Plugs	13
6.1	Solenoid plugs	13
6.2	Bulkhead housings	16
6.3	Line housings	17
6.4	Plug inserts	18
6.5	Socket inserts	18
6.6	Crimp contacts	19
7	Mounting components	20
7.1	Plug-in card holder	20
7.2	Snap-in retaining foot	20
7.3	Ball socket	21
8	Small components	22
8.1	Potentiometers	22

1 Enclosures

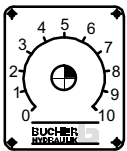


- Polycarbonate enclosure, light grey
- Protection class IP65
- Temperature stability: -40 °C to +100 °C

1.1 Ordering information

Item	Dimensions	Part number
Small enclosure, Makrolon®	L82 x W80 x H65	100232820
Small enclosure, Makrolon®	L122 x W120 x H55	100217463
Small enclosure, Makrolon®	L122 x W120 x H85	100228253
Small enclosure, Makrolon®	L160 x W120 x H55	100214177
Small enclosure, Makrolon®	L160 x W120 x H90	100228277
Small enclosure, Makrolon®	L160 x W120 x H120	100218755
Small enclosure, Makrolon®	L200 x W120 x H55	100217464
Small enclosure, Makrolon®	L200 x W120 x H70	100217176
Small enclosure, Makrolon®	L200 x W150 x H75	100232812
Small enclosure, Makrolon®	L200 x W150 x H100	100218752
Small enclosure, Makrolon®	L240 x W120 x H100	100218716

2 Front plates



- Suitable for proportional amplifier module ESKK 106
- Anodised aluminium

2.1 Ordering information

Item	Model code	Part number
Front plate	ELSK106-*** SCALA 0-10	100218778

3 Push-in cards

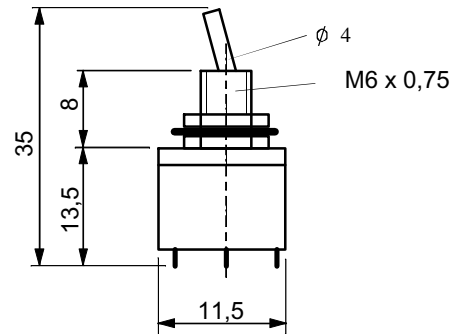


3.1 Ordering information

Item	Model code	Data sheet	Part number
Spread monitoring	ESKT101-91***	100-P-700046	100018886
Proportional amplifier module	ESSK103-91***	100-P-700007	100014781
Proportional amplifier module	ESSK106-91***X	100-P-700008	100021496
Proportional amplifier module	ESSK106-81***X	100-P-700008	100021497
Proportional amplifier	ESSK107-81***02 (2,5 ± 2 V)	100-P-700033	100030010
Proportional amplifier	ESSK107-91***02 (2,5 ± 2 V)	100-P-700033	100027336
Proportional amplifier module	ESSK108-81***	100-P-700008	100034012
Proportional amplifier	ESSK113-81***	100-P-700049	100025641
Proportional amplifier	ESSK113-91***	100-P-700049	100025642
Proportional amplifier module	EBM-300308-DS-MOBI	100-P-000146	100034752
Frequency divider	Push-in card ESFT152-***G12		100153935
Diodes board	Push-in card ESLT991-***		100154032
Datalogger	ELDL104		100035881

4 Switches

4.1 Toggle switches, single pole / double pole, 3 A - 6 A



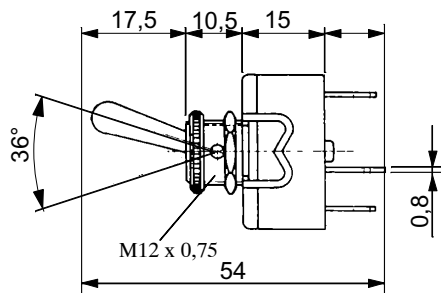
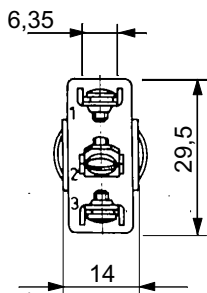
4.1.1 Ordering information

Item	Description	Part number
Toggle switch	MOM-OFF-MOM; two pole, 3 A, central mounting M6 x 0.75 F1W1SE	100607739
Toggle switch	ON - OFF, single pole, 3 A, central mounting M6 x 0.75, plain lever and solder connections	100606597
Toggle switch	ON - (ON), single pole, 6 A, central mounting M6 x 0.75, plain lever and solder connections	100607359

4.1.2 Accessories

Item	Description	Part number
Rubber sealing cover, 6.5	U1231 black	100607898

4.2 Toggle switch, single pole, 10 A



4.2.1 Ordering information

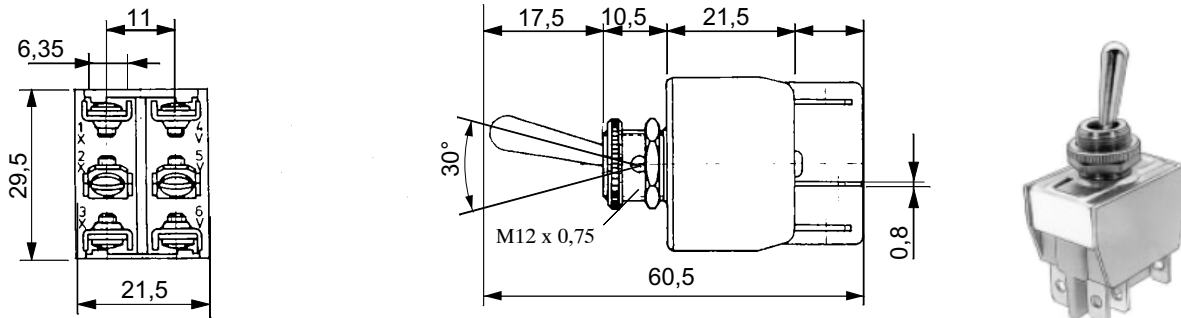
Item	Description	Part number
Toggle switch	ON - OFF, single pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100607681
Toggle switch	ON - ON, single pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100607703
Toggle switch	MOM - OFF - MOM, single pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100607691

Toggle switch	ON - OFF - ON, single pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100607692
Toggle switch	MOM - ON, single pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100609738
Toggle switch	ON - OFF - MOM, single pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100608915

4.2.2 Accessories

Item	Description	Part number
Rubber sealing cover, 12,5	U1151 black / nickel-plated	100607319

4.3 Toggle switch, double pole, 10 A



4.3.1 Ordering information

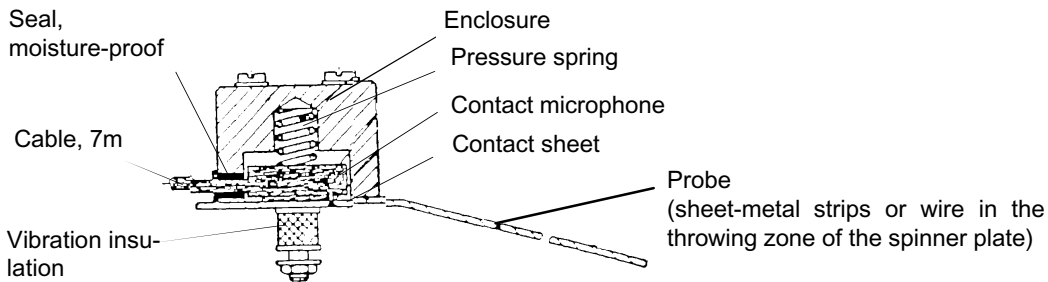
Item	Description	Part number
Toggle switch	ON - ON, double pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100607756
Toggle switch	ON - OFF - ON, double pole, 10 A; central mounting M12 x 0.75, standard lever 17.5 mm, nickel-plated brass and solder connections	100607665

4.3.2 Accessories

Item	Description	Part number
Rubber sealing cover, 12,5	U1151 black / nickel-plated	100607319

5 Sensors and transmitters

5.1 Contact microphone, complete



5.1.1 Ordering information

Item	Description	Part number
Contact microphone	MCL2, complete	100016148
Accessories	Probe wire	100232838

5.2 Infrared sensor



5.2.1 Technical data

Main characteristics	Unit	Description, value
Design		DC PNP
Supply voltage	V DC	10 ... 36
Power consumption	mA	25
Switch frequency	Hz	2000
Switching status display		red LED
Protection class		II
Reverse polarity protection		yes
Ambient temperature	°C	-25 ... +70

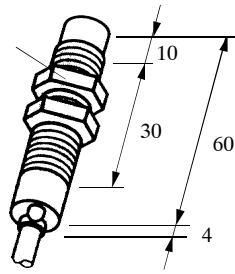
5.2.2 Ordering information

Item	Description	Part number
Spread monitoring	OGT301 Infrared sensor	100035709

5.3 Proximity switch, nominal sensing distance 4 mm



17 A/F
4 thick



M 12 x 1
 $M_A = 15 \text{ Nm}$

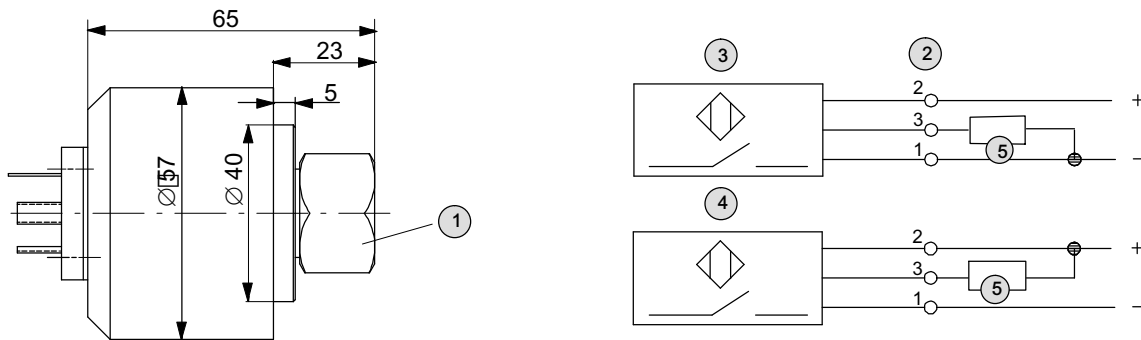
5.3.1 Technical data

Main characteristics	Unit	Description, value
Design		NO; NPN
Installation		not flush
Nominal switching distance	mm	4
Switch frequency	Hz	2000
Switching status display		red LED
Supply voltage	V DC	10 ... 30
Protection class		IP 67
Connecting cable		LiYY 3x0,5; 2 m
Permissible ambient temperature	°C	-25 ... 70

5.3.2 Ordering information

Item	Description	Part number
Proximity switch	NI4-M12-AN6X	100016979
Proximity switch	BJ5-P18-YOX incl. 4 m cable	100018782

5.4 Rotary pulse encoder DIG360



1	Connection dimensions suitable for drive pin to DIN 75532.E.2	4	Negative-switching NPN
2	Signal output	5	Load
3	Positive-switching PNP		

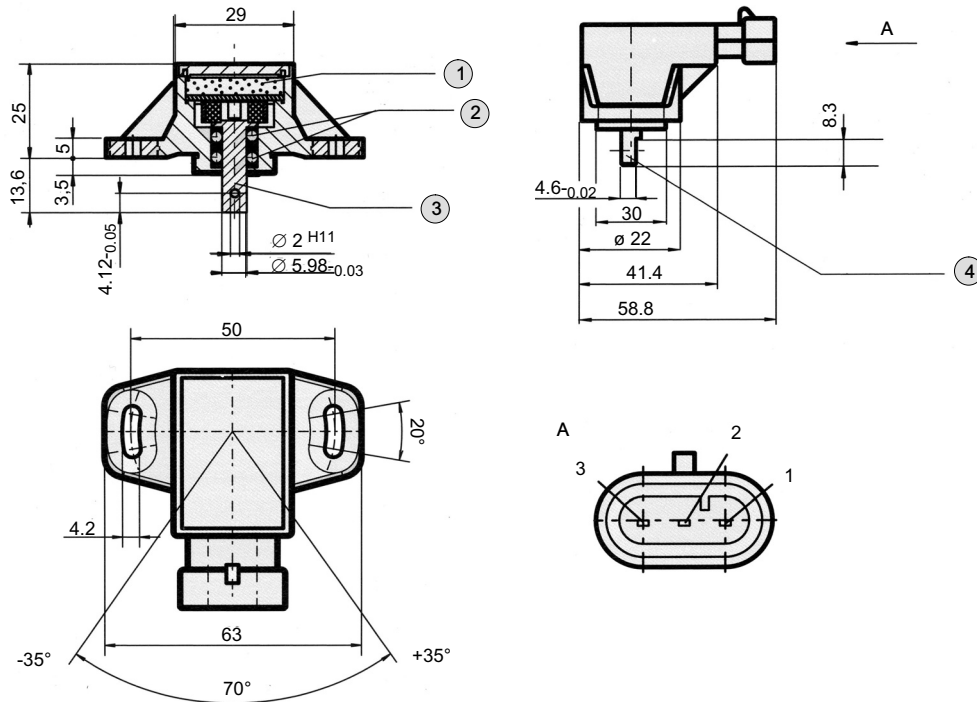
5.4.1 Technical data

Main characteristics	Unit	Description, value
Pulses per revolution		360
Protection class		IP 65
Temperature range	°C	-20 ... + 50
Shaft loading	N	(radial and axial) 10 N
Electrical connection		Plug base, DIN 43650
Supply voltage	V DC	8 ... 28
Allowable voltage with reverse polarity	V DC	30
Current consumption (internal consumption)	mA	max. 40 mA PNP, NPN, I _{max} = 50 mA
Maximum pulse frequency	kHz	20

5.4.2 Ordering information

Item	Description	Part number
Rotary pulse encoder	DIG360	100016803

5.5 Angle sensor with ball bearings 424 A 17 A120



1	Hermetically sealed/encapsulated	3	Shaft, stainless steel (1.4305 / 303)
2	Ball bearing	4	0 (zero position); the flat side of the shaft is parallel to the axis of the mounting slots

5.5.1 Technical data

Main characteristics	Unit	Value
Supply voltage	V DC	10...30
Output signal	V DC	0,5 ... 4,5
Current consumption (internal consumption)	V / mA	12 V / 10 mA
Resolution		0,01°
Load resistance	kΩ	> 20
Middle position	V	2,5
Reverse-polarity protection		yes
Delay time for the output signal	sec.	approx. 3 sec.
Temperature range	°C	-25 ... + 85
Protection class		IP 67
Angle-measurement range	°	120°

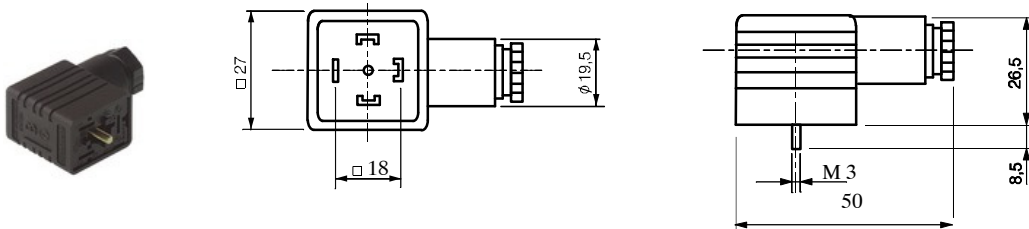
5.5.2 Ordering information

Item	Description	Part number
Angle sensor	Sensor UB10-30V/UA0,5-4,5V/W120G	100232818

6 Plugs

6.1 Solenoid plugs

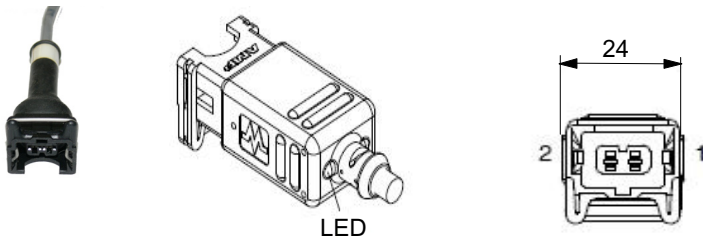
6.1.1 GDM 309 plug



6.1.1.1 Ordering information

Item	Description	Part number
Solenoid plug GDM 309	Plastic, PG 9 cable gland for cable dia. 4.7 mm to 7 mm Note: if connected devices malfunction as a result of long solenoid leads, then type GDM 209D connector plugs should be used instead.	100064970
Solenoid plug GDM 209D	like GDM 309 plug, with suppressor diode	100014130
Connection cable for solenoid	ELSK106, M12, GDM309, 5 m	100153211
Connection cable for solenoid	ELSK106, M12, GDM309, 8 m	100153213

6.1.2 AMP Plug



6.1.2.1 Technical data

Main characteristics	Unit	Value
Supply voltage	V DC	10...30
Output signal	A	max. 4 per contact
Current consumption (internal consumption)	kV	0,8
Degree of contamination		3
Protection class		IP65
Insulation group		category 1 IEC 60664-1

6.1.2.2 Ordering information

Item	Description	Part number
Junior Timer plug	2-pin, straight, with 2 m cable, LED	100152575
Plug	3-pole AMP plug ECONOSEAL III	100131943

Crimp contact (pin)	AMP CPC Serie 1 0,25 - 0,5mm ²	100609805
Crimp contact (pin)	AMP CPC Serie 1 0,8 - 1,5mm ²	100609806
Cable strain relief	AMP for plug CPC 1	100609808
Cable plug crimp	AMP coupling 16-pole CPC	100609807
cable seal	AMP for plug CPC 1	100609811
Sealing	AMP for	100609803
Mounting connector (crimp)	AMP CPC Serie 1 16-pole Gr17	100609802
Protection cap	AMP for mounting plug CPC Serie 1	100609804
Socket housing	AMP Superseal 2-pole	100608903
Socket contact	AMP Superseal 0,75 - 1	100608905
Single-wire sealing	AMP Superseal	100608906

6.1.3 Deutsch plug



6.1.3.1 Ordering information

Item	Description	Part number
Deutsch plug	Deutsch DT06-2S-CE04	100154096
Cable extension	Cable Deutsch DT, 2-pole, 5,5 m	100152600
Plug housing (female)	Deutsch DT06-2S-CE04	100609875
Plug cover (female)	Deutsch W2S	100609876
Crimp contact (female)	Deutsch 0462-201-16141	100609877
Plug housing (male))	Deutsch DT04-2P	100609878
Plug cover (male)	Deutsch W2S	100609879
Crimp contact (male)	Deutsch 0460-202-16141 (11810)	100609880
Plug housing (female)	Deutsch DT06-4S-CE04 (17905)	100609953
Plug cover (female)	Deutsch W4S	100609952
Dummy plug	Deutsch plug, 6-pole	100609957
Plug housing (male)	Deutsch DT04-4P-CE09	100608468
Plug cover (male)	Deutsch W4P	100608469
Cable connection line	for ELMR210, 3m	100154290
Cable connection	for wiring harness ELMR210, 0,12 m	100153222
Cable (CAN-termination/120 Ohm)	for wiring harness ELMR210	100153223
Deutsch plug	Pilot head CAN-diagnostic, 6-pole CD	100154185
Deutsch plug complete	Pilot head digital connector set, 6-pole	100153228

6.1.4 Vehicle Plug



6.1.4.1 Ordering information

Item	Description	Part number
Plug	Vehicle plug 3-pole COBO	100609986
Plug	to fit cigarette-lighter socket	100604329

6.1.5 Connection cables and cable accessories

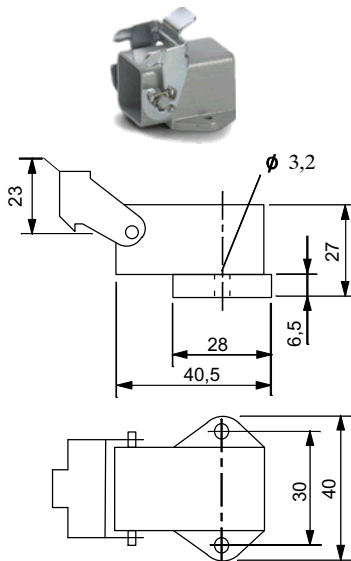


6.1.5.1 Ordering information

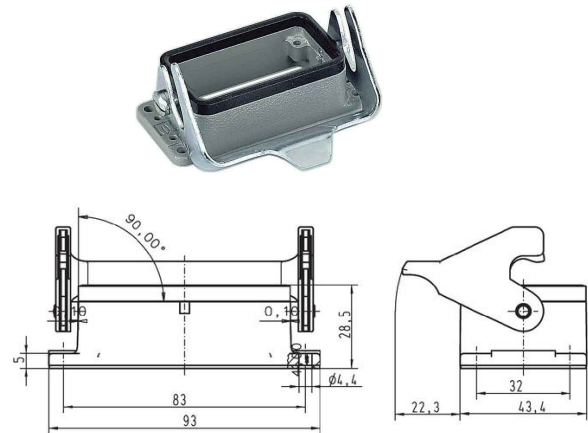
Item	Description	Part number
Plug-in connector female	M12 BU, 2 m, angled; open cable end 4-pole	100018988
Plug-in connector female	M12 BU, 2 m, angled; open cable end 5-pole	100153231
Plug-in connector female	M12 BU, 2 m, straight; open cable end 4-pole	100151868
Plug-in connector female	M12 BU, 5 m, straight; open cable end 4-pole	100151866
Plug-in connector male	M12 S, 5 m, straight, open cable end 4-pole	100152582
Cable EBT-330190	Connection cable 0,5 m	100154450
Cable	AMP-55 POL. 1,20M for wiring harness ELMR223	100152546
Wiring harness	EBM-8	100037706
Connector set ELMR225/228	Connector set EC0456 PLUG+CONTACT	100035994
Socket AMP	Plug complete, 22-pole (EBM-300)	100235935
Cable	Connection cable, M12 BU GER, 4-pole	100152509
Y-splitter	Y-connector 0812 04emf 00001, M12, 4-pole	100609793
Wiring harness	EBT-400	100035274

6.2 Bulkhead housings

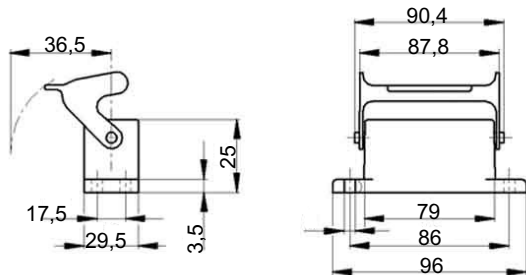
6.2.1 Bulkhead housing H-A3 AGS



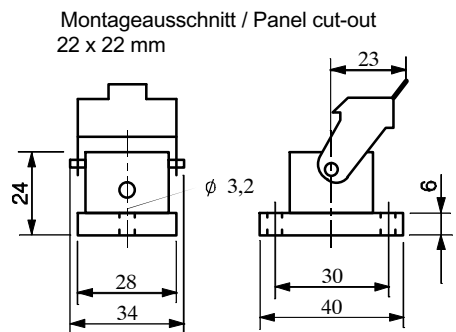
6.2.2 Bulkhead housing HAN-DD42



6.2.3 Bulkhead housing H-A16 AG



6.2.4 Bulkhead housing H-A3 Ag



6.2.5 Ordering information

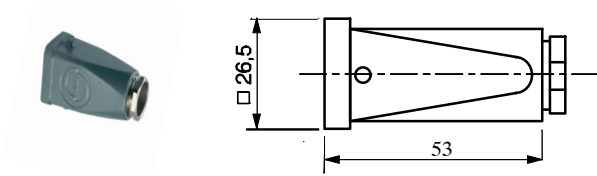
Item	Description	Part number
Bulkhead housing	H-A3 AGS	100214661
Bulkhead housing	H-A3 AG	100607297
Bulkhead housing	HAN-DD42	100607760
Bulkhead housing	H-A16 AG	100217328

6.2.6 Accessories

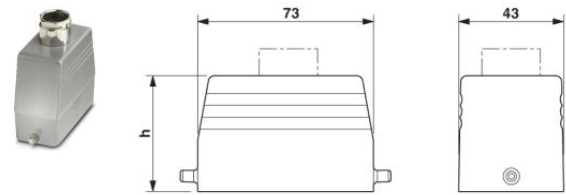
Item	Description	Part number
Protective cover	H-A16KD	100607750
Protective cover	H-A16KDB	100607751

6.3 Line housings

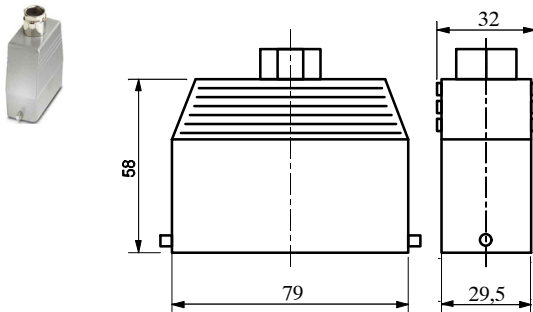
6.3.1 Line housing H-A3 MTGV



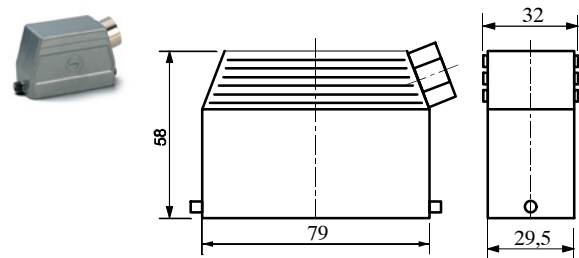
6.3.4 Line housing H-DD42



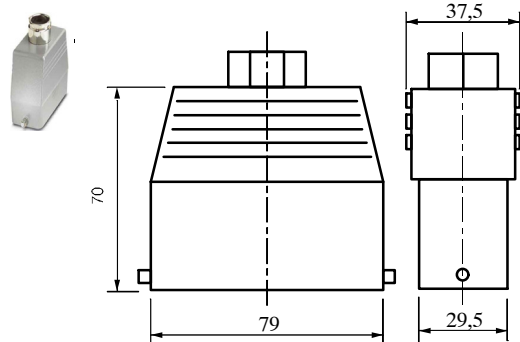
6.3.2 Line housing H-A16 KT straight PG14



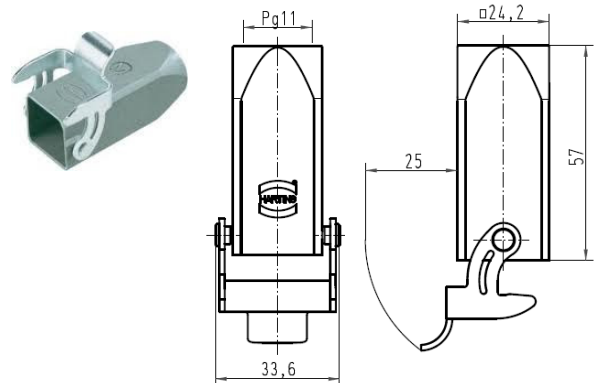
6.3.5 Line housing H-A16 KT, angled, PG16



6.3.3 Line housing H-A16 KT straight PG21



6.3.6 Line housing and PG11 cable gland

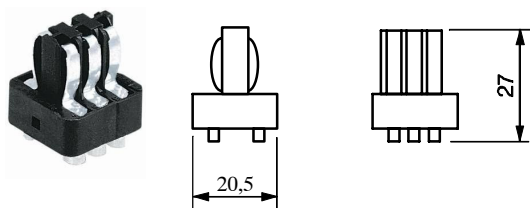


6.3.7 Ordering information

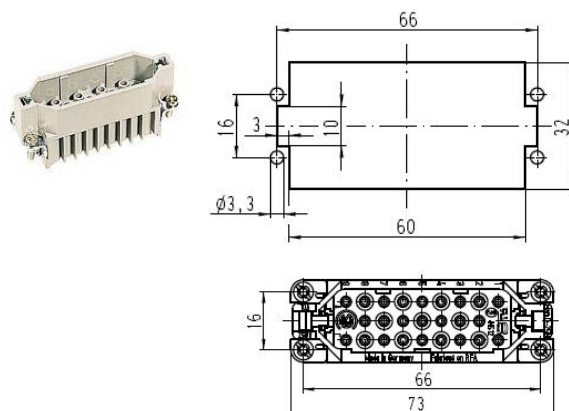
Item	Description	Part number
Line housing	H-A3 MTGV, aluminium, PG11, for 6- and 8-pole plug or socket inserts	100209472
Line housing	H-A16 KT, straight, PG16, for 20- and 25-pole plug or socket inserts	100209521
Line housing	H-A16 KT, angled, PG16, side-entry, for 20- and 25-pole plug or socket inserts	100607668
Line housing	H-A16 TG21, straight, PG21, for 20- and 25-pole plug or socket inserts	100607419
Line housing	H-DD42, high, PG21, straight, for 42-pole plug or socket inserts	100607910
Line housing and PG11 cable gland	Coupling (metal) H-D7/8, for 6- or 8-pole socket inserts	100607928

6.4 Plug inserts

6.4.1 Plug insert 6-pole



6.4.2 Plug insert 25-pole

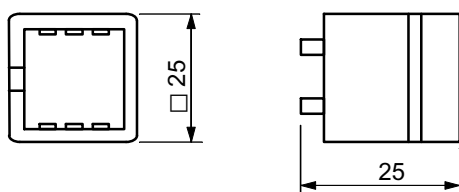


6.4.3 Ordering information

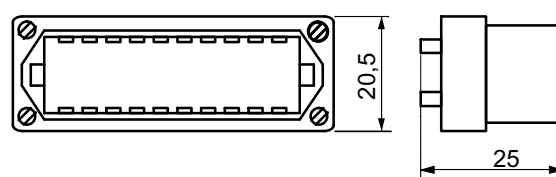
Item	Description	Part number
Plug insert	6-pole, STA 6 F, solder	100209336
Plug insert	HAN-D25 S, 25-pole	100607797
Plug insert	STE H-A16, STAF20, 20-pole	100209522
Plug insert	H-D7S, 8-pole	100607392
Plug insert	H-DD42, 42-pole	100607909
Plug insert	HAN Q12-M, 12-pole, 09120123001	100604103
Plug insert STAFF14	Plug 09700142810	100609977

6.5 Socket inserts

6.5.1 Socket insert 6-pole



6.5.2 Socket insert 20-pole



6.5.3 Ordering information

Item	Description	Part number
Socket insert	6-pole, H-A3, STA 6S, solder	100209471
Socket insert	6-pole, H-A3, STA 6S, screw	100223581
Socket insert	8-pole, H-D7B	100607391
Socket insert	20-pole	100217331
Socket insert	HAN-D25 B, 25-pole	100607796
Socket insert	HAN 42DD, 42-pole	100607761
Socket insert	STAF14, 14-pole, socket 09700142613	100609978
Socket insert	HAN Q12-F, 12-pole, 09120123101	100604104

6.6 Crimp contacts

6.6.1 Crimp contacts (female)



6.6.1.1 Ordering information

Item	Description	Part number
Crimp contact (female)	KONT 0,14 - 0,37	100217466
Crimp contact (female)	KONT 0,5	100217467
Crimp contact (female)	KONT 0,75 - 1	100217468
Crimp contact (female)	KONT 1,5	100217469

6.6.2 Crimp contacts (male)

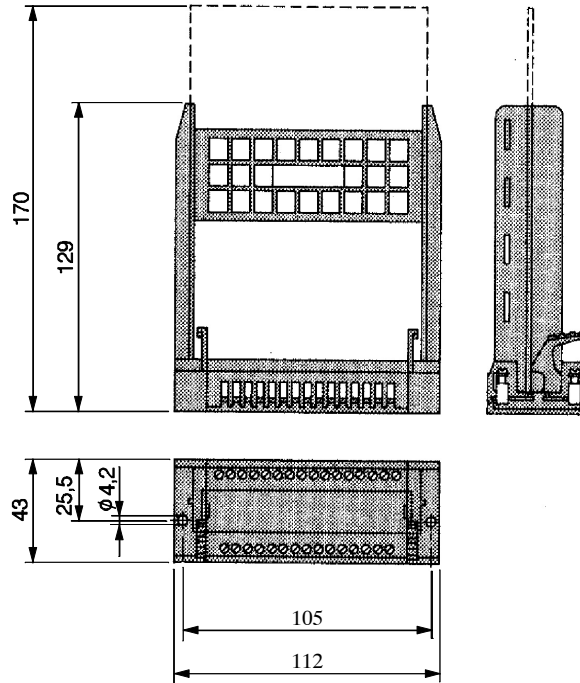


6.6.2.1 Ordering information

Item	Description	Part number
Crimp contact (male)	KONT 0,14 - 0,37	100217472
Crimp contact (male)	KONT 0,5	100217473
Crimp contact (male)	KONT 0,75 - 1	100217474
Crimp contact (male)	KONT 1,5	100217475

7 Mounting components

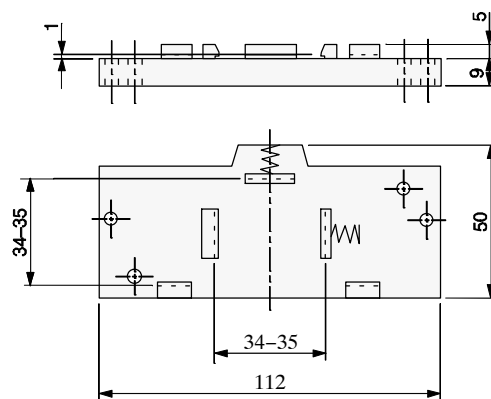
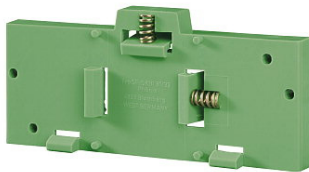
7.1 Plug-in card holder



7.1.1 Ordering information

Item	Description	Part number
Holder for plug-in cards	DIN 41617; the cardholder is suitable for card types ES*****-90.	100606201

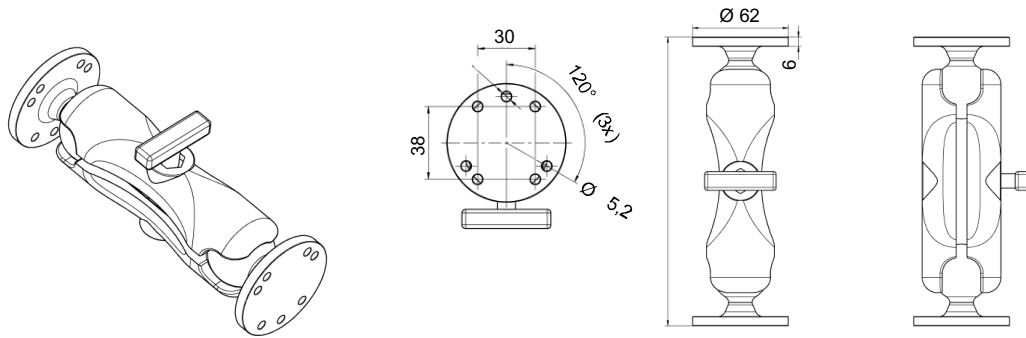
7.2 Snap-in retaining foot



7.2.1 Ordering information

Item	Description	Part number
Snap-in retaining foot	for the holder 100606201 for plug-in cards	100606202

7.3 Ball socket



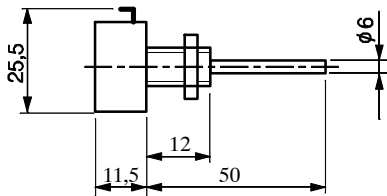
7.3.1 Ordering information

Item	Description	Part number
KGZ ball socket	Small enclosure	100235447
KGZ ball socket complete	Small enclosure SMART	100116602
KGZ clamp arm	Small enclosure SMART	100235487
Mounting kit EBT-4	Mounting kit	100117064

8 Small components

8.1 Potentiometers

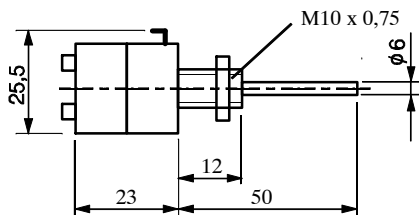
8.1.1 Rotary potentiometers



8.1.1.1 Ordering information

Item	Description	Part number
Rotary potentiometer	1,0 k Ω ; linear 270°, D6, M9	100214662
Rotary potentiometer	2,2 k Ω , linear 270°, D6, M10	100214663
Rotary potentiometer	4,7 k Ω ; linear 270° ,D6, M12	100214664

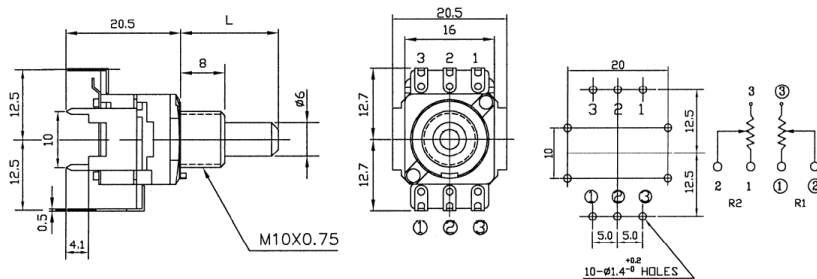
8.1.2 Potentiometer with switch



8.1.2.1 Ordering information

Item	Description	Order number
Potentiometer with switch	4,7 k Ω ; 4 A, G9, A30 mm	100607501

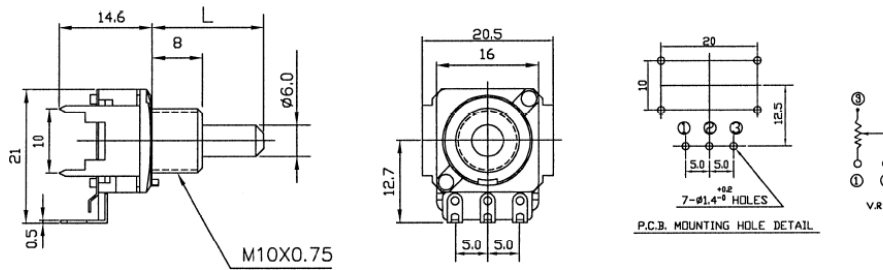
8.1.3 Tandem potentiometer



8.1.3.1 Ordering information

Item	Description	Order number
Tandem potentiometer	2 x 4,7k Ω linear; 69E532 RoHS, with solder connections	100607900

8.1.4 Potentiometer center click



8.1.4.1 Ordering information

Item	Description	Order number
Potentiometer center click	TYP6325021610.3204 4,7k, linear	100609739

8.1.5 Accessories



8.1.5.1 Ordering information

Item	Description	Part number
Potentiometer indicator knob, black	223-742 RoHS Mounting by means of clamping disc on Ø 6 mm spindle	100604397
Potentiometer indicator knob, black	23 mm / clamp mounting for Ø 6 mm spindle	100607800
Front cap with line	for potentiometer indicator knob; 23 mm	100607805
Nut cover	for potentiometer indicator knob	100607811
Fuse holder, complete	PTF 30	100609646

info.kl@bucherhydraulics.com

www.bucherhydraulics.com

© 2018 by Bucher Hydraulics GmbH, D-79771 Klettgau

All rights reserved.

Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense. The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.

Classification: 470.710..