

Cable glands / General Accessories



Detailed product information
can be found on
www.bopla.de



- Pressure compensation elements
- Polyamide or brass cable glands
- EMC and EX cable glands
- Handles
- DIN rail holders
- Wall fittings
- Enclosure holders
- Enclosure feet
- Battery compartments
- Fixing material



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Universal accessories suitable for all BOPLA enclosures



BF / MBF / BFK / MBFK:

- Pg/Metric
- IP 66/68, 5 bar (30 min.) / DIN EN 60529
- Polyamide, light grey, similar to RAL 7035
- Integrated strain relief
- Temperature range: -20°C to +100°C
- VDE certificate (MBF only): no. 40047604
- Integrated anti-kink protection (BFK/MBFK)



POZ / MPOZ / POZB / MPOZB:

- Pg/Metric
- IP 65 / DIN EN 60529
- Polyamide, light grey, similar to RAL 7035
- Integrated strain relief
- Temperature range: -30°C to +100°C
- Integrated anti-kink protection (POZB/MPOZB)



MSBF:

- Metric
- IP 66 / 68, 5 bar (30 min.) / DIN EN 60529
- Brass, nickel-plated
- Integrated strain relief
- Anti-twist protection
- Temperature range: -20°C to +100°C



M-EX..PA:

- Metric
- IP 66 / DIN EN 60529
- Polyamide, black, similar to RAL 9005
- Integrated strain relief
- Temperature range : -30°C to +70°C
- Test standard: EN 60079-0/EN 60079-7/EN 61241-0/EN 61241-1
- EC test certificates: PTB 99 ATEX 3101 X (M12,M16), PTB 99 ATEX 3128 X (M 20 and higher)



M-EX..MS:

- Metric
- IP 66 / 68, 5 bar (30 min.) / DIN EN 60529
- Brass, nickel-plated
- Integrated strain relief
- Temperature range : -20°C to +80°C (MS)
- Test standard: EN 60079-0/EN 60079-7/EN 61241-0/EN 61241-1
- EC test certificates: DMT 99 ATEX E016



MEMV:

- Metric
- IP 66 / 68, 5 bar (30 min.) / DIN EN 60529
- Brass, nickel-plated
- Integrated strain relief
- Anti-twist protection
- Temperature range: -20°C to +100°C
- For leads with shielding
- Fast, easy EMC connection of the screen mesh via the contact spring and the intermediate connection with the enclosure potential.
- The protective shield is permanently formclosed over a large area of the enclosure

Universal accessories suitable for all BOPLA enclosures



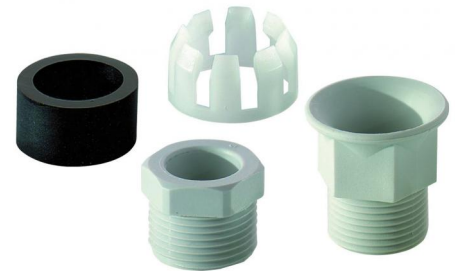
MSS / MSD / MSKBF:

- Pg
- IP 65 / DIN EN 60529 (MSD/MSK)
- IP 54 / DIN EN 60529 (MSS)
- Brass, nickel-plated
- Integrated strain relief (MSK)
- Temperature ranges:
 - 20°C to +100°C (MSK),
 - 30°C to +110°C (MSS/MSD)



MZI / PST:

- Pg
- IP 65 / DIN EN 60529
- Polyamide, light grey, similar to RAL 7035
- Integrated strain relief
- Temperature range: -20°C to +100°C
- MZI for internal mounting with a flat external assembly of 3 mm
- With the PST, pre-configured cables can be completely mounted in the enclosure



DZP / TZP / KK / GD:

- Half cable glands
- Pg
- IP 65 / DIN EN 60529
- Polyamide, light grey, similar to RAL 7035 (DZP/TZP)
- Hostaform (KK)

**MBL-EX..MS:**

- Blind plug, metric
- IP 66 / 68, 5 bar (30 min)/ DIN EN 60529
- Brass, nickel-plated
- Temperature range: -20°C to +80°C (MS)
- Test standard: EN 60079-0/EN 60079-7/EN 61241-0/EN 61241-1
- EC test certificate: DMT 99 ATEX E016

MBL-EX..PA:

- Blind plug
- Metric
- IP 66
- Polyamide, black, similar to RAL 9005
- Temperature range: -55°C to +95°C
- Test standard: EN 60079-0/EN 60079-7/EN 61241-0/EN 61241-1
- EC test certificate: PTB 98 ATEX 3130

Additional blind plugs, twisting nipples, counter nuts, sealing rings, rubber seals etc.

DAE: pressure compensation elements in light grey or black

Protection class:

- IP 66 / DIN EN 60529
- IP 68, 0,2 bar (60 min) / DIN EN 60529
- IP 69 / DIN EN 60529

THIS PRODUCT IS ONLY SUITABLE FOR USE IN INDUSTRIAL APPLICATIONS. It is not designed for the manufacture, processing or packing of foodstuffs, medicines or cosmetic and medical products.

Information on EX:

Cable glands and blind plugs for use in hazardous areas are tested independently of the unit enclosure and are certified as electrical material with EC type-examination certificates in accordance with EU directive 94/9/EC (ATEX). They are suitable for introducing cables and leads into hazardous areas in equipment group II, categories 2 and 3, with gas explosion protection G, and/or in some cases with dust explosion protection D, in ignition protection types EEx e "increased safety" (EN 60079-7) and EEx i "intrinsic safety" (EN 60079-11). For ignition protection type EEx i, we can also supply the polyamide cable glands for marking with a blue cap nut.

Universal accessories suitable for all BOPLA enclosures



Every hand-held enclosure can be fitted with a universal holding clip.



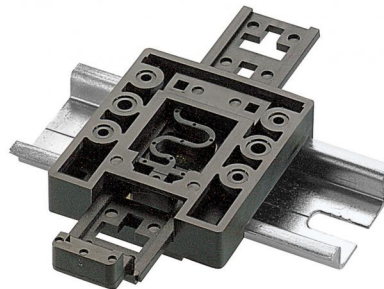
The universal clip and tip-up clip can be retrofitted to all enclosures. It can be used as a wall hanging unit or belt clip or, if swivelled by 90°, as a tip-up bow.



By using the universal screw-on lanyard loop, hand-held enclosures can easily be carried round the neck.



The swivelling handle allows the flexible-width handle to be used both as a carrying handle and a tip-up bow.



The universal DIN rail holders consist of a base and a bolt which can be snapped into the base in different positions. Fitting is approximately in the middle of the enclosure so that the protruding bolt can be released by means of a screwdriver.



Because of the various settings (fixed detent position every 10°), the universal wall fitting can be used on a wall or as a foot. The length of the profiles can be adapted to every enclosure.



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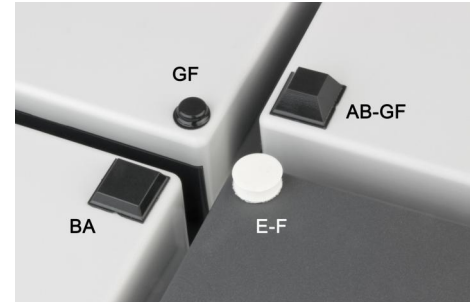
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The different universal adapters / universal holders allow the enclosures to be swivelled, turned and inclined when fitted.



The different battery compartments allow almost every enclosure type to be used as a hand-held enclosure.



Universal enclosure feet ensure stability on all surfaces.

Accessories | Cable glands



Metric EMC cable glands MEMV, brass, nickel-plated, IP 68 (5 bar, 30 min)

Model	Order no.	Note
MEMV 16	12102200*	M16 x 1.5; cable diameter 5-9 mm
MEMV 20	12102300*	M20 x 1.5; cable diameter 9-13 mm
MEMV 25	12102400*	M25 x 1.5; cable diameter 11-16 mm
MEMV 32	12102500*	M32 x 1.5; cable diameter 14-21 mm
MEMV 40	12102600	M40 x 1.5; cable diameter 19-27 mm



Pressure compensation gland MBF, polyamide light grey, IP 66/67

Model	Order no.	Colour	Note
DAE-MBF 12	12004100	Light grey	M12 x 1,5; cable diameter 4-7 mm
DAE-MBF 16	12004200	Light grey	M16 x 1,5; cable diameter 4-7 mm
DAE-MBF 20	12004300	Light grey	M20 x 1.5; cable diameter 6-11 mm



Pressure compensation gland MSBF, nickel-plated brass, IP 66/67

Model	Order no.	Note
DAE-MSBF 12	13004100	M12 x 1,5; cable diameter 4-7 mm
DAE-MSBF 16-1	13004200	M16 x 1,5; cable diameter 4-7 mm
DAE-MSBF 16-2	13004250	M16 x 1.5; cable diameter 5-9 mm
DAE-MSBF 20	13004300	M20 x 1.5; cable diameter 6-11 mm



Plug-in cable gland, polyamide light grey, IP 66/68

Model	Order no.	Note
S-MBF 16	12003200	Drill hole ø 16.3; cable diameter 5-10 mm
S-MBF 20	12003300	Drill hole ø 20.3; cable diameter 6-12 mm
S-MBF 25	12003400	Drill hole ø 25.3; cable diameter 11-17 mm
S-MBF 32	12003500	Drill hole ø 32.3; cable diameter 15-21 mm
S-MBF WZ16	12003201	Dismantling tool for S-MBF 16
S-MBF WZ20	12003301	Dismantling tool for S-MBF 20
S-MBF WZ25	12003401	Dismantling tool for S-MBF 25
S-MBF WZ32	12003501	Dismantling tool for S-MBF 32



Metric cable glands MBF, polyamide, light grey, IP 68 (5 bar, 30 min)

Model	Order no.	Note
MBF 12-7035	12002100	M12 x 1.5; cable diameter 3-6 mm
MBF 16-7035	12002200	M16 x 1.5; cable diameter 5-10 mm
MBF 20-7035	12002300	M20 x 1.5; cable diameter 8-13 mm
MBF 25-7035	12002400	M25 x 1.5; cable diameter 11-17 mm
MBF 32-7035	12002500	M32 x 1.5; cable diameter 15-21 mm
MBF 40-7035	12002600	M40 x 1.5; cable diameter 19-28 mm



Metric cable glands MBF, polyamide, black, IP 68 (5 bar, 30 min)

Model	Order no.	Note
MBF 12-9005	12002101	M12 x 1.5; cable diameter 3-6 mm
MBF 16-9005	12002204	M16 x 1.5; cable diameter 5-10 mm
MBF 20-9005	12002301	M20 x 1.5; cable diameter 8-13 mm
MBF 25-9005	12002402	M25 x 1.5; cable diameter 11-17 mm
MBF 32-9005	12002501	M32 x 1.5; cable diameter 15-21 mm
MBF 40-9005	12002601	M40 x 1.5; cable diameter 19-28 mm

Accessories | Cable glands

Metric cable glands with anti-kink protection MBFK, polyamide, light grey, IP 68 (5 bar, 30 min)

Model	Order no.	Note
MBFK 12-7035	12002103	M12 x 1.5; cable diameter 3-6.5 mm
MBFK 16-7035	12002210	M16 x 1.5; cable diameter 5-10 mm
MBFK 20-1-7035	12002303	M20 x 1.5; cable diameter 6-12 mm
MBFK 20-2-7035	12002306	M20 x 1.5; cable diameter 10-14 mm
MBFK 25-7035	12002401	M25 x 1.5; cable diameter 13-18 mm



Metric cable glands with anti-kink protection MBFK, polyamide, black, IP 68 (5 bar, 30 min)

Model	Order no.	Note
MBFK 12-9005	12002104	M12 x 1.5; cable diameter 3-6.5 mm
MBFK 16-9005	12002212	M16 x 1.5; cable diameter 5-10 mm
MBFK 20-1-9005	12002307	M20 x 1.5; cable diameter 6-12 mm



Cable gland with slotted sealing insert, polyamide light grey, IP 66/68

Model	Order no.	Note
MBF 20-RJ45	12002418	Max. connector \varnothing 14.5 mm, cable \varnothing 3-6 mm
MBF 25C-USB	12002414	Max. connector \varnothing 17.0 mm, cable \varnothing 3-8 mm
MBF 25-USB	12002404	Max. connector \varnothing 18.5 mm, cable \varnothing 3-8 mm

Notes: With slitted sealing insert for mounting cables with a connector.



Cable gland with slotted sealing insert, nickel-plated brass, IP 66/68

Model	Order no.	Note
MSBF 32-USB	13002504	Max. connector \varnothing 18.5 mm, cable \varnothing 3-8 mm

Notes: With slitted sealing insert for mounting cables with a connector.



Metric counter nuts MGM, polyamide

Model	Order no.	Colour	Note
MGM 12	52090100	Light grey	M12 x 1.5
MGM 16	52090200	Light grey	M16 x 1.5
MGM 20	52090300	Light grey	M20 x 1.5
MGM 25	52090400	Light grey	M25 x 1.5
MGM 32	52090500	Light grey	M32 x 1.5
MGM 40	52090600	Light grey	M40 x 1.5
MGM 12-9005	52090101	Black	M12 x 1.5
MGM 16-9005	52090201	Black	M16 x 1.5
MGM 20-9005	52090301	Black	M20 x 1.5
MGM 25-9005	52090401	Black	M25 x 1.5
MGM 32-9005	52090501	Black	M32 x 1.5
MGM 40-9005	52090601	Black	M40 x 1.5



Accessories | Cable glands



Metric blind plugs MBL with sealing ring, IP 65, polyamide, light grey

Model	Order no.	Colour	Note
MBL 12	52011120	Light grey	M12 x 1.5
MBL 16	52011220	Light grey	M16 x 1.5
MBL 20	52011320	Light grey	M20 x 1.5
MBL 25	52011420	Light grey	M25 x 1.5
MBL 32	52011520	Light grey	M32 x 1.5
MBL 40	52011620	Light grey	M40 x 1.5



Pg cable glands BF, polyamide, light grey, IP 68 (5 bar, 30 min)

Model	Order no.	Note
BF 7	10000100	Pg 7; cable diameter 3-6.5 mm
BF 9	10000200	Pg 9; cable diameter 4-8 mm
BF 11	10000300	Pg 11; cable diameter 5-10 mm
BF 13	10000400	Pg 13.5; cable diameter 6-12 mm
BF 16	10000500	Pg 16; cable diameter 10-14 mm
BF 21	10000600	Pg 21; cable diameter 13-18 mm
BF 29	10000700	Pg 29; cable diameter 18-25 mm
BF 36	10000800*	Pg 36; cable diameter 22-32 mm



Pg cable glands with anti-kink protection BFK, polyamide, light grey, IP 68 (5 bar, 30 min)

Model	Order no.	Note
BFK 7	10001100	Pg 7; cable diameter 3-6.5 mm
BFK 9	10001200	Pg 9; cable diameter 4-8 mm
BFK 11	10001300	Pg 11; cable diameter 5-10 mm
BFK 13	10001400	Pg 13.5; cable diameter 6-12 mm
BFK 16	10001500	Pg 16; cable diameter 10-14 mm
BFK 21	10001600	Pg 21; cable diameter 13-18 mm



Pg cable glands POZ, polyamide, light grey, IP 65

Model	Order no.	Note
POZ 7	12051809	Pg 7; cable diameter 4-6 mm
POZ 9	12051909	Pg 9; cable diameter 6-8 mm
POZ 11	12052009	Pg 11; cable diameter 8-10 mm
POZ 13	12052109	Pg 13.5; cable diameter 10-12 mm
POZ 16	12052209	Pg 16; cable diameter 12-14 mm



Pg cable glands with anti-kink protection POZB, polyamide, light grey, IP 65

Model	Order no.	Note
POZB 7	12052609	Pg 7; cable diameter 4-6 mm
POZB 9	12052709	Pg 9; cable diameter 6-8 mm
POZB 11	12052809	Pg 11; cable diameter 8-10 mm
POZB 13	12052909	Pg 13.5; cable diameter 10-12 mm



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Accessories | Cable glands

Pg counter nuts GM, polyamide, light grey

Model	Order no.	Note
GM 7	52080100	Pg 7
GM 9	52080200	Pg 9
GM 11	52080300	Pg 11
GM 13	52080400	Pg 13.5
GM 16	52080500	Pg 16
GM 21	52080600	Pg 21
GM 29	52080700	Pg 29
GM 36	52080800	Pg 36



Accessories | Cable glands



Pg cable glands MZI, polyamide, light grey, flat design for internal assembly, IP 65

Model	Order no.	Note
MZI 9	12060200	Pg 13.5; cable diameter 6-8 mm



Pg plug-in cable glands PST, polyamide, light grey, IP 65

Model	Order no.	Note
PST 13 IP	12060600	Pg 13.5; cable diameter 10-12 mm
PST 16 IP	12060700	Pg 16; cable diameter 12-14 mm



Pg twisting nipples WN, polyethylene, light grey

Model	Order no.	Note
WN 9	52020100	Pg 9
WN 11	52020200	Pg 11
WN 13	52020300	Pg 13.5
WN 16	52020400	Pg 16
WN 21	52020500*	Pg 21
WN 29	52020600*	Pg 29

Notes: Max. IP 54 with correct installation. Metric designs on request.



Metrische Würgenippel MWN, Polyäthylen lichtgrau

Model	Order no.	Note
MWN 12	52060100	M12 x 1,5
MWN 16	52060200	M16 x 1.5
MWN 20	52060300	M20 x 1.5
MWN 25	52060400*	M25 x 1.5
MWN 32	52060500*	M32 x 1.5
MWN 40	52060600*	M40 x 1.5



Pg blind plugs BL, IP 54, polyamide, light grey

Model	Order no.	Note
BL 7	52010000	Pg 7
BL 9	52010100	Pg 9
BL 11	52010200	Pg 11
BL 13	52010300	Pg 13.5
BL 16	52010400	Pg 16
BL 21	52010500	Pg 21
BL 29	52010600	Pg 29
BL 36	52010700*	Pg 36

Notes: For increased protection up to IP 65, fit sealing ring DR to connection thread.

Accessories | Cable glands

Metric cable glands MSBF, brass, nickel-plated, IP 68 (5 bar, 30 min)

Model	Order no.	Note
MSBF 12	13002100	M12 x 1.5; cable diameter 3-6 mm
MSBF 16	13002200	M16 x 1.5; cable diameter 5-9 mm
MSBF 20	13002300	M20 x 1.5; cable diameter 9-13 mm
MSBF 25	13002400	M25 x 1.5; cable diameter 11-16 mm
MSBF 32	13002500	M32 x 1.5; cable diameter 14-21 mm
MSBF 40	13002600*	M40 x 1.5; cable diameter 19-27 mm



Metric counter nuts MGMS, brass, nickel-plated

Model	Order no.	Note
MGMS 12	13160100	M12 x 1.5
MGMS 16	13160200	M16 x 1.5
MGMS 20	13160300	M20 x 1.5
MGMS 25	13160400	M25 x 1.5
MGMS 32	13160500	M32 x 1.5
MGMS 40	13160600	M40 x 1.5



Metric EX blind plugs MBL-EX..MS, brass, nickel-plated

Model	Order no.	Note
MBL-EX 12 MS	52014100*	M12 x 1.5
MBL-EX 16 MS	52014200*	M16 x 1.5
MBL-EX 20 MS	52014300*	M20 x 1.5
MBL-EX 25 MS	52014400*	M25 x 1.5
MBL-EX 32 MS	52014500*	M32 x 1.5
MBL-EX 40 MS	52014600*	M40 x 1.5



Pg cable glands MSS, brass, nickel-plated, IP 54

Model	Order no.	Note
MSS 7	13020100*	Pg 7; cable diameter 4-6 mm
MSS 9	13020200*	Pg 9; cable diameter 6-8 mm
MSS 11	13020300*	Pg 11; cable diameter 8-10 mm
MSS 13	13020400*	Pg 13.5; cable diameter 10-12 mm
MSS 16	13020500*	Pg 16; cable diameter 12-14 mm
MSS 21	13020600*	Pg 21; cable diameter 15-17 mm



Pg cable glands MSD, brass, nickel-plated, IP 65

Model	Order no.	Note
MSD 7	13040100	Pg 7; cable diameter 4-6.5 mm
MSD 9	13040200	Pg 9; cable diameter 5-10 mm
MSD 11	13040300	Pg 11; cable diameter 7-11.5 mm
MSD 13	13040400	Pg 13; cable diameter 8-15 mm
MSD 16	13040500	Pg 16; cable diameter 8-15 mm



Accessories | Cable glands



Pg cable glands MSK, brass, nickel-plated, IP 65

Model	Order no.	Note
MSK 7	13050100	Pg 7; cable diameter 4-6 mm
MSK 9	13050200	Pg 9; cable diameter 6-8 mm
MSK 11	13050300	Pg 11; cable diameter 8-10 mm
MSK 13	13050400	Pg 13.5; cable diameter 10-12 mm
MSK 16	13050500	Pg 16; cable diameter 12-14 mm
MSK 21	13050600	Pg 21; cable diameter 14-18 mm
MSK 29	13050700	Pg 29; cable diameter 18-24 mm



Pg counter nuts GMS, brass, nickel-plated

Model	Order no.	Note
GMS 7	13150100	Pg 7
GMS 9	13150200	Pg 9
GMS 11	13150300	Pg 11
GMS 13	13150400	Pg 13.5
GMS 16	13150500	Pg 16
GMS 21	13150600	Pg 21
GMS 29	13150700	Pg 29
GMS 36	13150800	Pg 36



Metric sealing rings MDR, polyethylene

Model	Order no.	Note
MDR 12	52050100	For M12 x 1.5
MDR 16	52050200	For M16 x 1.5
MDR 20	52050300	For M20 x 1.5
MDR 25	52050400	For M25 x 1.5
MDR 32	52050500	For M32 x 1.5
MDR 40	52050600	For M40 x 1.5

Notes: Cannot be used with MBL



Pg sealing rings DR, polyethylene

Model	Order no.	Note
DR 7	52030000	For Pg 7
DR 9	52030100	For Pg 9
DR 11	52030200	For Pg 11
DR 13	52030300	For Pg 13.5
DR 16	52030400	For Pg 16
DR 21	52030500	For Pg 21
DR 29	52030600	For Pg 29
DR 36	52030700	For Pg 36

Accessories | Cable glands

Blanking plugs VS BF, polyethylene, red

Model	Order no.	Note
VS BF 7	10000110	For BF 7 / MBF 12
VS BF 9	10000210	For BF 9 / MBF 16
VS BF 11	10000310	For BF 11
VS BF 13	10000410	For BF 13 / MBF 20
VS BF 16	10000510	For BF 16
VS BF 21	10000610	For BF 21 / MBF 25
VS BF 29	10000710	For BF 29
VS BF 32	10000715*	For MBF 32
VS BF 36	10000810	For BF 36
VS BF 40	10000815*	For MBF 40

Notes: For BF cable glands which are unused, to achieve protection class IP 65.



Pressure screws DZP, polyamide, light grey, for half cable glands

Model	Order no.	Note
DZP 7	12091129	Pg 7
DZP 9	12091229	Pg 9
DZP 11	12091329	Pg 11
DZP 13	12091429	Pg 13.5
DZP 16	12091529	Pg 16

Notes: Only for use with clamping cage KK and rubber seal GD.



Anti-kink protection pressure screws TZP, polyamide, light grey, for half cable glands

Model	Order no.	Note
TZP 7	12091139*	Pg 7
TZP 9	12091239*	Pg 9
TZP 11	12091339*	Pg 11
TZP 13	12091439*	Pg 13.5
TZP 16	12091539*	Pg 16
TZP 21	12091639*	Pg 21
TZP 29	12091739*	Pg 29

Notes: Only for use with clamping cage KK and rubber seal GD.



Clamping cages KK, Hostaform, for optimal strain relief with half cable glands

Model	Order no.	Note
KK 7	52040039	For Pg 7
KK 9	52040139	For Pg 9
KK 11	52040219	For Pg 11
KK 13	52040319	For Pg 13.5
KK 16	52040449	For Pg 16

Notes: For use in connection with sealing rings (GD), pressure screws (DZP) or anti-kink protection pressure screws (TZP)



Accessories | Cable glands



Sealing rings GD, nitrite-rubber, for clamping cages KK

Model	Order no.	Note
GD 7	52040029	For Pg 7
GD 9	52040119	For Pg 9
GD 11	52040229	For Pg 11
GD 13	52040329	For Pg 13.5
GD 16	52040429	For Pg 16

Notes: Nitrite-rubber seal for clamping cage KK to provide your half cable gland with a certain degree of IP protection.

Accessories | Pressure compensation elements

Pressure compensation element DAE, up to IP 69

Model	Order no.	Colour	Note
DAE M12	52041000	Light grey	M12 x 1.5; plastic
DAE M12 9005	52042000	Black	M12 x 1.5; plastic
DAE M6 7035	52041060	Light grey	M6 x 0.75; plastic
DAE M6 9005	52042060	Black	M6 x 0.75; plastic
DAE M12 Metall	52042505		M12 x 1,5; metal

Scope Of Delivery: 5 piece (DAE Metall 1 piece)

Notes: Air, which may create a vacuum in the enclosure when it cools, can suck in water etc. through the seal into the enclosure, which means that ingress protection can no longer be guaranteed. BOPLA's product range includes the pressure compensation element to compensate such variations in pressure caused by differences in temperature. When installed, protection classes IP 66, IP 68 (0.2 bar, 60 min) and IP 69 can be achieved.



Pressure compensation gland MBF, polyamide light grey, IP 66/67

Model	Order no.	Colour	Note
DAE-MBF 12	12004100	Light grey	M12 x 1,5; cable diameter 4-7 mm
DAE-MBF 16	12004200	Light grey	M16 x 1,5; cable diameter 4-7 mm
DAE-MBF 20	12004300	Light grey	M20 x 1.5; cable diameter 6-11 mm



Pressure compensation gland MSBF, nickel-plated brass, IP 66/67

Model	Order no.	Note
DAE-MSBF 12	13004100	M12 x 1,5; cable diameter 4-7 mm
DAE-MSBF 16-1	13004200	M16 x 1,5; cable diameter 4-7 mm
DAE-MSBF 16-2	13004250	M16 x 1.5; cable diameter 5-9 mm
DAE-MSBF 20	13004300	M20 x 1.5; cable diameter 6-11 mm



Accessories | General Accessories



Universal clip

Model	Order no.	Colour
UC1 - 7024	34197024	Graphite grey, similar to RAL 7024
UC1 - 7035	34197035	Light grey
UC1 - 7038	34197038	Agate grey, similar to RAL 7038
UC1 - 9005	34199005	Black, similar to RAL 9005

Scope Of Delivery: 1 clip incl. fixing material

Notes: Mechanical processing and mounting on request. The fitting of the clip does not affect the protection class of the enclosure (IP 65).



Universal clip and tip-up clip

Model	Order no.	Colour
ASC 1	34090010	Agate grey, similar to RAL 7038
ASC 1	34090000	Black, similar to RAL 9005

Scope Of Delivery: 1 clip (polyamide), incl. screws

Notes: Can be fitted subsequently to all enclosure. Processing of the enclosure on request. For use as a wall hanging unit when in closed position. Unlock the tip-up bow to swivel it by 90°.



Wall fitting for ASC 1, ABS

Model	Order no.	Colour
WH-ASC 1-7038	34090011	Agate grey, similar to RAL 7038
WH-ASC 1-9005	34090001	Black, similar to RAL 9005

Scope Of Delivery: 1 wall fitting



Universal screw-on lanyard loop, plastic

Model	Order no.	Colour
OE-7035	59907035	Light grey
OE-7024	59907024	Graphite grey, similar to RAL 7024
OE-7038	59907038	Agate grey, similar to RAL 7038
OE-9005	59909005	Black, similar to RAL 9005

Scope Of Delivery: 5 loops including screws

Notes: Mechanical processing of the enclosure is required. Load capacity: Max. 15 kg (150 N). Up to IP 65/DIN EN 60529 possible.

Accessories | General Accessories

Handle HS 1; side parts: black plastic; handle profile: natural-coloured anodised aluminium

Model	Order no.	Colour	Note
HS 1-9005	20008073	Black, similar to RAL 9005	Side parts
HSP 1-1000	20008075	Natural-coloured anodised	Handle profile, length: 1000 mm

Scope Of Delivery: Handle side parts (PA6), seals, screws

Scope of delivery HSP: profile (aluminium)

Notes: Because it swivels (fixed latching position every 30°), the handle can be used both for carrying purposes or as a set-up bow for desktop use. Handles HS1 and HS2 consist of 2 side parts and 1 profile. In order to guarantee customer-specific usage, side parts and profile are ordered separately. In this way, the handle lengths can be adjusted to fit any enclosure. On request we can supply the required profile length and carry out the necessary processing on the enclosure. The maximum load is 300 N; ingress protection max. IP 65 / DIN EN 60529, depending on installation arrangement.



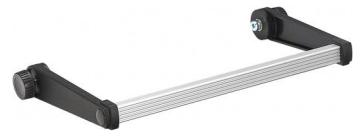
Handle HS 2; side parts: black plastic; handle profiles: natural-coloured anodised aluminium (AE) / black anodised (SE)

Model	Order no.	Colour	Note
HS 2-9005	20008074	Black, similar to RAL 9005	Side parts
HSP 2-1000-AE	20008076	Natural-coloured anodised	Handle profile, length: 1000 mm
HSP 2-1000-SE	20008077	Black anodised	Handle profile, length: 1000 mm

Scope Of Delivery: 2 side parts, screws

Scope of delivery HSP: 1m profile

Notes: Because the handle swivels (fixed detent position every 15°), it can be used as a carrying handle and also as a tip-up bow for console use. Handles HS1 and HS2 consist of two side parts and a profile. In order to guarantee customer-specific application, the side parts and profile can be ordered separately. This makes it possible to adapt the length of the handles to any enclosure. On request we can supply the required profile length and carry out the necessary processing on the enclosure. The maximum load is 150 N; protection class IP 40 / DIN EN 60529 - depending on installation situation, higher protection class is available on request.

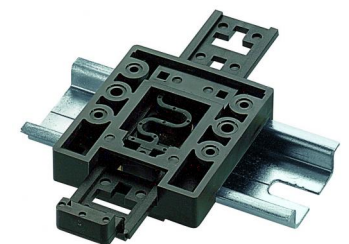


Universal DIN rail holder TSH 35, polyamide

Model	Order no.	Colour
TSH 35	22035000	Black, similar to RAL 9005

Scope Of Delivery: 1 DIN rail holder, screws for enclosure mounting

Notes: This DIN rail holder consists of a base and a bolt. The bolt can be snapped into the base in different positions. This makes it ideal for use with enclosure heights between 70 mm and 160 mm. It is fitted approximately in the middle of the enclosure, and the bolt projecting from the enclosure base can be disconnected from the rail by means of a screwdriver in the normal way. For assembly, insert the screws (enclosed) from the inside of the enclosure. This guarantees full insulation protection. On small enclosures, the part of the bolt which projects upwards can be pinched off. In the case of very wide enclosures, it may be necessary to fit two DIN rail holders.



Universal DIN rail holder TSH 35-2, polyamide

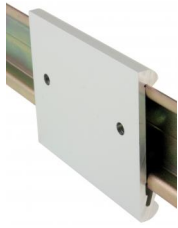
Model	Order no.	Colour
TSH 35-2	20035000	Black, similar to RAL 9005

Scope Of Delivery: 2 DIN rail holders, 4 screws for enclosure mounting

Notes: You can use this universal DIN rail holder to clip or unclip enclosures with an extremely wide range of dimensions onto or from the DIN rail. This DIN rail holder can be screwed universally to every enclosure. It is necessary to process the enclosure.



Accessories | General Accessories



Metal top hat rail adapter for DIN rail DIN EN 60715 TH 35

Model	Order no.	A	B	Note
TSH 35 AL - 50	34035050	52	50	Width 50 mm, natural colour anodised
TSH 35 AL - 100	34035100	52	100	Width 100 mm, natural colour anodised

Scope Of Delivery: 1 adapter

Notes: Use for DIN rail acc. to DIN EN 60715 TH35.



Universal wall fitting UWB

Model	Order no.	Colour
UWB 7024	94800024	Graphite grey, similar to RAL 7024
UWB 7035	94800035	Light grey
UWB 7038	94800038	Agate grey, similar to RAL 7038
UWB 9005	94800005	Black, similar to RAL 9005
UWB-Profil	94801000	Natural-coloured anodised

Scope Of Delivery: 2 side parts, mounting material; scope of delivery for UWB profile: 1 m profile

Notes: Because of the various settings (fixed detent position every 10°), can be used as a wall fitting and also as a foot. Side elements and profiles can be ordered separately to ensure a customer-specific application. This allows the length of the profiles to be adapted to every enclosure. On request we can supply the required profile length and carry out the necessary processing of the enclosure. Protection class up to IP 65 / DIN EN 60529

Universal holder with screw fitting and swan neck, black



Model	Order no.
UH-2	22015660

Scope Of Delivery: 1 holder including screws

Notes: Matches universal adapter UGA-1/4.

Universal holder, can be turned and inclined, with screw fitting, black



Model	Order no.
UH-3	22015800

Scope Of Delivery: 1 holder including screws

Notes: Screwless fitting possible by means of rear adhesive layer. Can be turned by 360°. Matches universal adapter UGA-1/4.



Universal holder with self-adhesive foil, black

Model	Order no.	Note
UH-4	22014830	With self-adhesive foil

Scope Of Delivery: 1 holder

Notes: Matches universal adapter UGA-1/4.

Accessories | General Accessories

Universal adapter with self-adhesive foil, black

Model	Order no.	Note
UGA-1	22014710	With self-adhesive foil

Scope Of Delivery: 1 adapter
Notes: Matches universal holder UH-2 up to -4.



Tip-up feet, polyamide

Model	Order no.	Note
AB 1230	39603000	Including 4 sheet metal screws
AB 1230-M4	64116000	With 4 metric screws and nuts

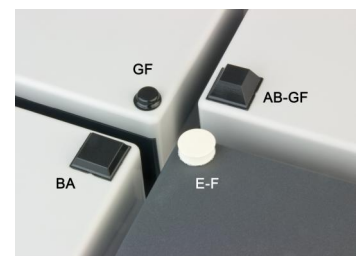
Scope Of Delivery: Set-up foot set (2 fixed and 2 hinged feet), fixing material
Notes: With its front collapsible feet, the universal set-up foot set AB 1230 enables you to stand the enclosure either parallel or at an angle (easier access to the operating front).



Universal rubber feet for stability of the enclosures on all surfaces

Model	Order no.	Colour	Note
GF	22009000	Black	Polyurethane, 65-75 Shore
AB - GF	84006700	Black	Polyurethane, 65-75 Shore
E-F	25002200	White	Rubber, 67 Shore, for E 440-E 470, for E 434 S
BA-Füßchen	35002410*	Black	Polyurethane, 65-75 Shore

Scope Of Delivery: 4 rubber feet



Battery compartments, plastic, IP 65 / DIN EN 60529

Model	Order no.	Colour	Note
BE-3MN-IP-7024	58317024	Graphite grey	For 3 mignon batteries (LR6, R06, AM3, E 91, AA)
BE-3MN-IP-7035	58317035	Light grey	For 3 mignon batteries (LR6, R06, AM3, E 91, AA)
BE-3MN-IP-7038	58317038	Agate grey	For 3 mignon batteries (LR6, R06, AM3, E 91, AA)
BE-3MN-IP-9005	58319005	Black	For 3 mignon batteries (LR6, R06, AM3, E 91, AA)
BE-4MN-IP-7024	58417024	Graphite grey	For 4 mignon batteries (LR6, R06, AM3, E 91, AA)
BE-4MN-IP-7035	58417035	Light grey	For 4 mignon batteries (LR6, R06, AM3, E 91, AA)
BE-4MN-IP-7038	58417038	Agate grey	For 4 mignon batteries (LR6, R06, AM3, E 91, AA)
BE-4MN-IP-9005	58419005	Black	For 4 mignon batteries (LR6, R06, AM3, E 91, AA)

Scope Of Delivery: 1 battery compartment including battery contacts

Notes: Processing of the enclosure and mounting of the battery compartment on request. Use the adhesive film (included in scope of delivery) to seal the battery compartment IP-tight.



Battery compartments, black plastic, IP 40 / DIN EN 60529

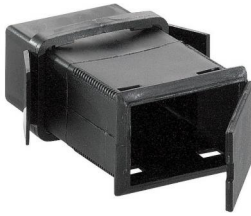
Model	Order no.	Note
BE 30	46300000	For one 9V block battery (6LR61, 6AM6,522) or 2 mignon batteries (LR6, R06, AM3, E91, AA)
BE 60	46600000	For two 9V block batteries (6LR61, 6AM6,522) or 4 mignon batteries (LR6, R06, AM3, E91, AA)

Scope Of Delivery: 1 battery compartment including 4 (BE 30) or 8 (BE 60) battery contacts

Notes: Processing of the enclosure and mounting of the battery compartment on request. The battery compartment is snapped into the cut-out provided by means of moulded-on snap-on devices.



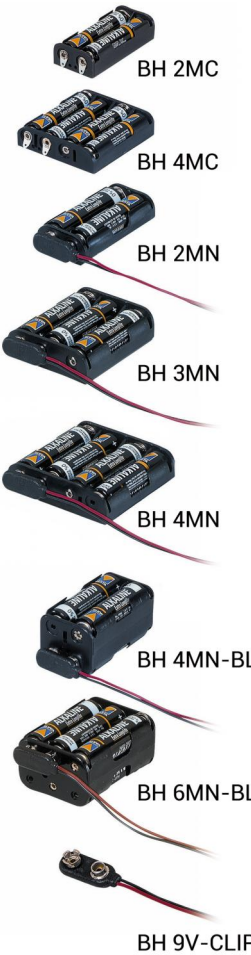
Accessories | General Accessories



Battery compartment for 9V block battery, black plastic

Model	Order no.
BE 40	46400000

Scope Of Delivery: 1 battery compartment including tension frame
 Notes: Processing of the enclosure and mounting of the battery compartment on request. Battery clip BH 9V-Clip [34165578](#) as accessory.



Battery holders

Model	Order no.	Note
BH 2MC	34165572	For 2 micro batteries (LR03, R03, AM4, E92, AAA), connection with soldering tags
BH 4MC	34165573	For 4 micro batteries (LR03, R03, AM4, E92, AAA), connection with soldering tags
BH 2MN	34165574	For 2 mignon batteries (LR6, R06, AM3, E91, AA), connection clip included in scope of delivery
BH 3MN	34165575	For 3 x mignon (LR6, R06, AM3, E91, AA), connection clip included in scope of delivery
BH 4MN-BL	34165576	For 4 mignon batteries (LR6, R06, AM3, E91, AA), connection clip included in scope of delivery
BH 6MN-BL	34165577	For 6 mignon batteries (LR6, R06, AM3, E91, AA), connection clip included in scope of delivery
BH 9V-CLIP	34165578	Clip for 9 V block (6LR61, 6AM6, 522), Connection with soldering tags
BH 4MN	34165579	For 4 mignon batteries (LR6, R06, AM3, E91, AA), connection clip included in scope of delivery

Scope Of Delivery: 5 battery holders or 5 clips

Accessories | General Accessories

Screws (SHR) and distance bolts (DIBLZ) for mounting bosses in plastic enclosures

Model	Order no.	Note
DIBLZ AK 30x5/IM3/10	59006986	ND = 2,4-2,6, length 10mm, SW 5,5
SHR Z KA22x6	59006195	SD = 2.2 / ND = 1.7-1.8 / KD = 3.9
SHR Z KA25x6	59006190	SD = 2.5 / ND = 2.0 / KD = 4.4
SHR Z KA30x6	59006219	SD = 3.0 / ND = 2.4-2.6 / KD = 5.3
SHR Z KA30x8	59006217	SD = 3,0 / ND = 2,4-2,6 / KD = 6,0
SHR Z KA35x6	59006209	SD = 3.5 / ND = 2.8 / KD = 7.0
SHR Z KA35x8	59006210	SD = 3.5 / ND = 2.8 / KD = 6.1
SHR Z KA35x10	59006220	SD = 3.5 / ND = 2.8 / KD = 6.1
SHR Z B4,5x7,8	59006101	SD = 4.5 / ND = 4.0 / KD = 7.5
SHR Z KA50x10	59006240	SD = 5.0 / ND = 4.3 / KD = 8.2
SHR Z B6,3x9,5	59006110	SD = 7.0 / ND = 5.5 / KD = 12.5
SHR Z M4x8	59005049	KD = 8
DIBLZ AK 30x5/IM3/8	59006985	ND = 2,4-2,6, length 8mm, SW 5,5
DIBLZ AK 30x7/IM3/8	59006987	ND = 2,4-2,6, length 8mm, SW 5,5
DIBLZ AK 30x7/IM3/10	59006988	ND = 2,4-2,6, length 10mm, SW 5,5
DIBLZ AK30x7/IM3/26	59006922	ND = 2,4-2,6, length 26mm, SW 5,5
DIBLZ AK30x5/IM3/28	59006921	ND = 2,4-2,6, length 28mm, SW 5,5
DIBLZ AK30x7/IM3/36	59006998	ND = 2,4-2,6, length 36mm, SW 6
DIBLZ AK30x7/IM3/56	59006924	ND = 2,4-2,6, length 56mm, SW 5,5
DIBLZ AK30x5/IM3/58	59006923	ND = 2,4-2,6, length 58mm, SW 5,5
DIBLZ AK30x7/IM3/74	59006926	ND = 2,4-2,6, length 74mm, SW 5,5
DIBLZ AK30x5/IM3/76	59006925	ND = 2,4-2,6, length 76mm, SW 5,5
DIBLZ AK30x7/IM3/86	59006927	ND = 2,4-2,6, length 86mm, SW 5,5
DIBLZ AK30x5/IM3/88	59006928	ND = 2,4-2,6, length 88mm, SW 5,5

Scope Of Delivery: 1 piece

Notes: Explanation of the table: SD = screw diameter; ND = boss internal diameter; KD = screw head diameter. All dimensions in mm. In most BOPLA plastic enclosures, mounting bosses without threaded bushings are provided as mounting points. Screws with a self-tapping thread must be selected accordingly. When selecting screws, note the details of the boss internal diameters (see drawings on internet) and the drilling depth. The tightening torques for plastic depend on screw-in depth, screw-in speed, accuracy of torque switch-off of the power screwdriver, etc., so it is not possible to provide general data about the tightening torques.



Threaded inserts, brass, for mounting bosses in plastic enclosures

Model	Order no.	Note
DODGE M3x6,5	59002810	ND = 4.0 x 6.5
DODGE M4x9,5	59002820	ND = 5.4 x 9.5

Scope Of Delivery: 1 threaded insert

Notes: Explanation of the table: ND = boss internal diameter Mounting instructions: Insert the connector into the boss until it reaches the bottom. Then flatten the plate using a pin. It is very difficult to remove fitted threaded connectors. With reference to the directive relating to electronic scrap, recycling of the enclosure is very expensive. For this reason, it is not possible for us to take back enclosures which have subsequently been processed in this way.

