

Suppression Technology - Motor suppression

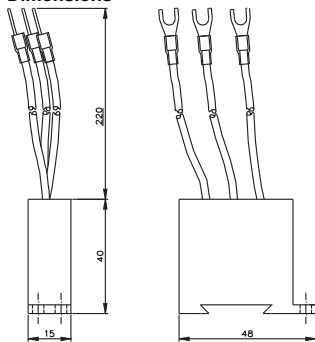
Motor suppression for the direct installation in the motor junction plate

7.5 kW, 3 AC x 500 V

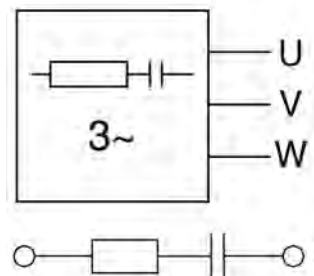
Protection device: RC module



Dimensions



PIN assignment



Description	Part-No.	Type	PU	
RC module				
Description	RC module	706115	LRC-VM1-6115 3 AC 500 V 7,5 kW	
			25	
Technical data		706115		
Function type	Motor suppression			
Protection device	RC module			
Nominal voltage	3 ACx500 V			
Shut-off points	-			
Rated frequency	50-60 Hz			
Motor performance	7.5 kW			
Inverse voltage/switching current	-			
Holding Capacity	-			
Type of connecting lead	H05V-K 1.0 mm ² ; black			
Length of connecting lead (M)	0.22			
Connecting lead	-			
Termination	3 wires with fork-type cable lug M4			
Fittings	-			
General				
Form	VM1			
Status Indication	-			
Conductor labelling	-			
Housing material	PPO			
Protection class	IP 67			
Pottant	2-components			
Field installation	For inserting in the motor junction plate, for the bolting on with mounting hole M4 or for attachment to hat profile TS35 with 2 snap-on sockets (accessory)			
Operation temperature range	-20 °C – 60 °C			
Storage temperature range	-40 °C – 90 °C			
Dimensions (w x h x d)	15.0 x 40.0 x 48.0 mm			
Weight (kg/piece)	0.049			
Standards	-			
Approvals	cURus			
Accessories	Colour	Article number	Description	PU
Snap-on socket for hat profile TS35		700499	Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails	10

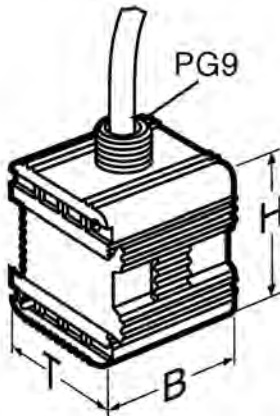
Suppression Technology - Motor suppression

Motor suppression for the screwing in in the motor terminal box
up to 7.5 kW, 3 AC x 575 V

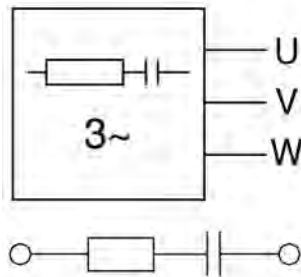
Protection device: RC module



Dimensions



PIN assignment



Description	Part-No.	Type	PU	
Description	RC module	700374	LRC-M5-0374 3 AC 500 V 4 kW	10
	RC module	700379	LRC-M5-0379 3 AC 575 V 7,5 kW	10

Technical data	700374	700379
Function type	Motor suppression	
Protection device	RC module	
Nominal voltage	3 ACx500 V	3 ACx575 V
Shut-off points	-	
Rated frequency	50-60 Hz	
Motor performance	4 kW	7.5 kW
Inverse voltage/switching current	-	
Holding Capacity	-	
Type of connecting lead	PVC 3 x 1.0 mm ²	
Length of connecting lead (M)	0.5	
Connecting lead	∅ 6.3 mm	
Termination	Ring terminal M5	Ring terminal M6
Fittings	PG 9	
General		
Form	M5	
Status Indication	-	
Conductor labelling	-	
Housing material	PA 6.6	
Protection class	IP 67	
Pottant	2-components	
Field installation	Can be screwed in directly in the terminal housing, with cable ties at the motor supply line for attachment or with 2 snap-on sockets (accessory)	
Operation temperature range	-20 °C – 60 °C	
Storage temperature range	-40 °C – 90 °C	
Dimensions (w x h x d)	40.0 x 40.0 x 40.0 mm	
Weight (kg/piece)	0.113	
Standards	-	
Approvals	cURus	

Accessories	Colour	Article number	Description	PU
Snap-on socket for hat profile TS35		700499	Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails	10

Suppression Technology - Motor suppression

Motor suppression in the M1, M2 and M3 enclosure
for AC motors up to 30 kW, 3 AC x 500 V
Protection device: RC module



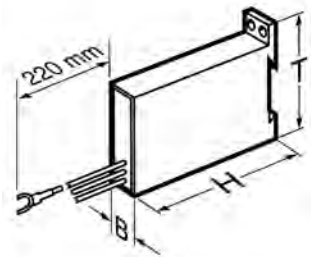
Description	Part-No.	Type	PU	
Description	RC module	700490	LRC-M1-0490 3 AC 500 V 4 kW	10
	RC module	700491	LRC-M2-0491 3 AC 500 V 7,5 kW	10
	RC module	700492	LRC-M2-0492 3 AC 500 V 15 kW	10
	RC module	700493	LRC-M3-0493 3 AC 500 V 30 kW	10

Technical data	700490	700491	700492	700493
Function type	Motor suppression			
Protection device	RC module			
Nominal voltage	3 ACx500 V			
Shut-off points	-			
Rated frequency	50-60 Hz			
Motor performance	4 kW	7.5 kW	15 kW	30 kW
Inverse voltage/switching current	-			
Holding Capacity	-			
Type of connecting lead	H05V-K 1.0 mm ²			
Length of connecting lead (M)	0.22			
Connecting lead	-			
Termination	Fork-type cable lug M4			
Fittings	-			
Suppression type	Motor connection delta			

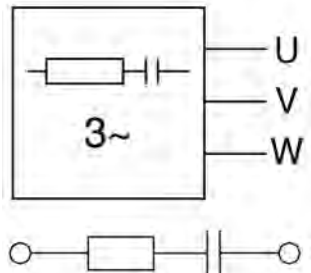
General	M1	M2	M3
Form	M1	M2	M3
Status Indication	-		
Conductor labelling	-		
Housing material	PPO		
Protection class	IP 67		
Pottant	2-components		
Field installation	with mounting hole M4 or attachable to TS 35 (EN 50022) with 2 snap-on sockets each		
Operation temperature range	-20 °C – 60 °C		
Storage temperature range	-40 °C – 90 °C		
Dimensions (w x h x d)	15.0 x 70.0 x 48.0 mm	20.0 x 80.0 x 58.0 mm	25.0 x 90.0 x 58.0 mm
Weight (kg/piece)	0.066	0.112	0.119
Standards	-		
Approvals	cURus		

Accessories	Colour	Article number	Description	PU
Snap-on socket for hat profile TS35		700499	Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails	10

Dimensions



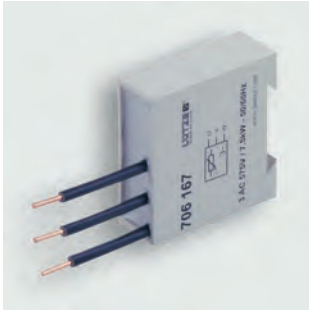
PIN assignment



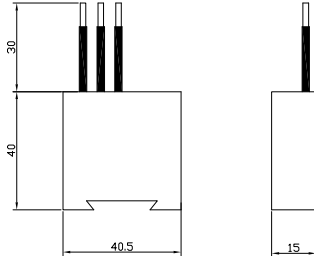
Suppression Technology - Motor suppression

Universal motor suppression: direct attachment to the switch (e.g. Siemens SIRIUS 3RT 10)
also suitable for frequency converters up to 7.5 kW, 3 AC x 575 V

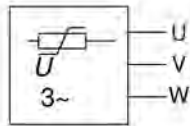
Protection device: Varistor



Dimensions



PIN assignment



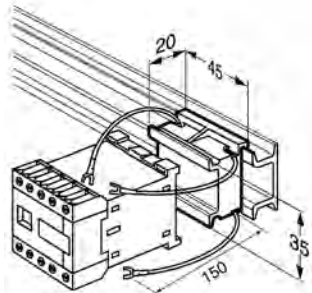
Description	Part-No.	Type	PU
varistor			
Description	varistor	706167	LV-VM1-6167 3 AC 575V 7,5KW
Technical data			
		706167	
Function type	Motor suppression		
Protection device	varistor		
Nominal voltage	3 ACx575 V		
Shut-off points	≤1075 V		
Rated frequency	10–400 Hz		
Motor performance	7.5 kW		
Inverse voltage/switching current	–		
Holding Capacity	–		
Type of connecting lead	H07V-U 1.5 mm ² , black		
Length of connecting lead (M)	0.03		
Connecting lead	–		
Termination	stripped cable ends		
Fittings	–		
General			
Form	VM1		
Status Indication	–		
Conductor labelling	–		
Housing material	PPO		
Protection class	IP 67		
Pottant	2-components		
Field installation	for direct attachment to switches		
Operation temperature range	-20 °C – 60 °C		
Storage temperature range	-40 °C – 90 °C		
Dimensions (w x h x d)	15.0 x 40.0 x 40.5 mm		
Weight (kg/piece)	0.015		
Standards	–		
Approvals	cURus		

Suppression Technology - Motor suppression

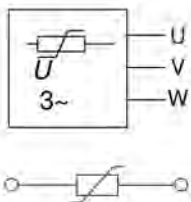
As substructure for protection types up to 45 mm wide
 2.5 kW, 3 AC x 400 V
 Protection device: Varistor



Dimensions



PIN assignment



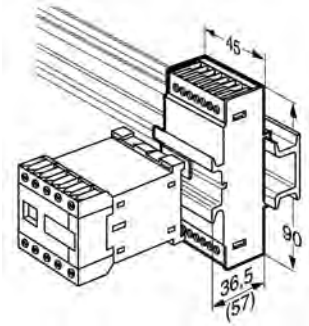
Description	Part-No.	Type	PU
varistor			
Description	varistor	700217	LV-S9-0217 3 AC 400 V 2,5 kW
Technical data			
		700217	
Function type	Motor suppression		
Protection device	varistor		
Nominal voltage	3 ACx400 V		
Shut-off points	≤745 V		
Rated frequency	10–400 Hz		
Motor performance	2.5 kW		
Inverse voltage/switching current	–		
Holding Capacity	–		
Type of connecting lead	H05V-K 1.0 mm ²		
Length of connecting lead (M)	0.15		
Connecting lead	–		
Termination	Fork-type cable lug M4		
Fittings	–		
General			
Form	S9		
Status Indication	–		
Conductor labelling	–		
Housing material	PC		
Protection class	IP 20		
Pottant	–		
Field installation	rail TS 35 (EN 50022)		
Operation temperature range	-20 °C – 60 °C		
Storage temperature range	-40 °C – 90 °C		
Dimensions (w x h x d)	40.0 x 20.0 x 35.0 mm		
Weight (kg/piece)	0.036		
Standards	–		
Approvals	–		

Suppression Technology - Motor suppression

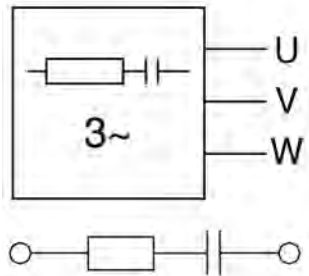
As substructure for protection types up to 45 mm wide
 up to 15 kW, 3 AC x 575 V
 Protection device: RC module



Dimensions



PIN assignment



Description	Part-No.	Type	PU	
Description	RC module	700190	LRC-UC-0190 3 AC 500 V 4 kW	10
	RC module	700191	LRC-UC-0191 3 AC 500 V 7,5 kW	10
	RC module	700192	LRC-UC-0192 3 AC 500 V 15 kW	10

Technical data	700190	700191	700192
Function type	Motor suppression		
Protection device	RC module		
Nominal voltage	3 ACx575 V		
Shut-off points	-		
Rated frequency	50-60 Hz		
Motor performance	4 kW	7.5 kW	15 kW
Inverse voltage/switching current	-		
Holding Capacity	-		
Type of connecting lead	H05V-K 1.0 mm ²		
Length of connecting lead (M)	0.2		
Connecting lead	-		
Termination	3 wires with fork-type cable lug M4		
Fittings	-		
Suppression type	-		
General			
Form	UC		
Status Indication	-		
Conductor labelling	-		
Housing material	PC		
Protection class	IP 20		
Pottant	-		
Field installation	rail TS 35 (EN 50022)		
Operation temperature range	-20 °C – 60 °C		
Storage temperature range	-40 °C – 90 °C		
Dimensions (w x h x d)	40.0 x 36.5 x 90.0 mm		
Weight (kg/piece)	0.086	0.110	0.120
Standards	-		
Approvals	-		

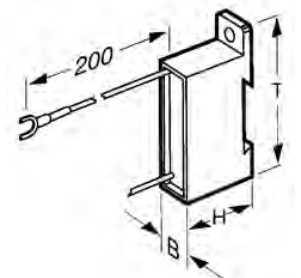
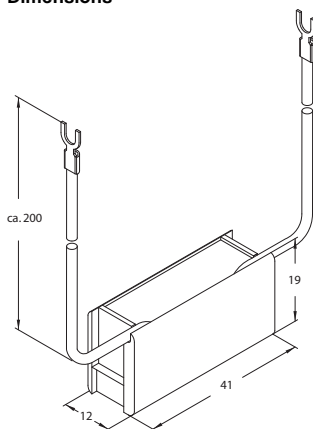
Suppression Technology - Components with special function

Adjustable switch-on delays, time range 0.5 s - 20 s

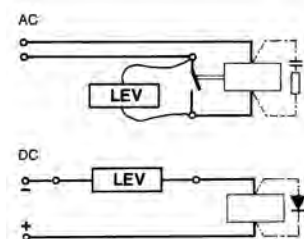
Enclosure type: S2, V1
for AC and DC operation



Dimensions



PIN assignment



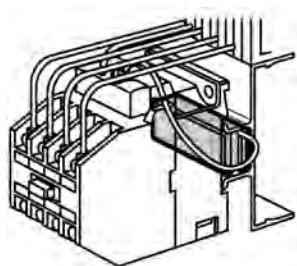
Description	Part-No.	Type	PU	
Nominal voltage	AC/DC 24–230 V	700527	LEV-S2-0527 AC/DC 24-230 V	10
	AC/DC 24–230 V	700529	LEV-V1-0529 AC/DC 24-230 V	10

Technical data	700527	700529
Function type	Switch-on delay	
Protection device	–	
Nominal voltage	AC/DC 24–230 V	
Rated frequency	50–60 Hz	
Voltage trim range	0.5 s–20 s over potentiometer	
Repeat accuracy	<15 %	
Type of connecting lead	PVC 0.5 mm ²	
Length of connecting lead (M)	0.2	
Connecting lead	–	
Termination	Fork-type cable lug M4	
General		
Form	S2	V1
Pottant	2-components	
Housing material	PPO	
Protection class	IP 20	
Field installation	insertable in top Din rail or with retaining clips (accessory)	with mounting hole M4 or attachable to hat profile TS 35 with snap-on socket (accessory)
Operation temperature range	-20 °C – 60 °C	
Storage temperature range	-40 °C – 90 °C	
Dimensions (w x h x d)	41.0 x 19.0 x 12.0 mm	12.5 x 48.0 x 25.0 mm
Weight (kg/piece)	0.016	0.020
Standards	–	
Approvals	–	

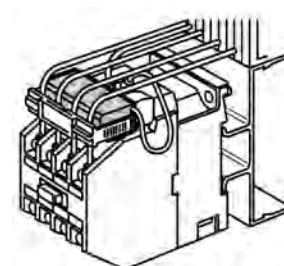
Accessories	Colour	Article number	Description	PU
Snap-on socket for hat profile TS35		700499	Socket for attaching of the suppressor module to hat profile TS35 (EN 50022) or G-rails	10
Retaining clip for type S2	transparent	700419	For the mounting of the suppressor module to the connection wires	10

Comments

Mounting diagram

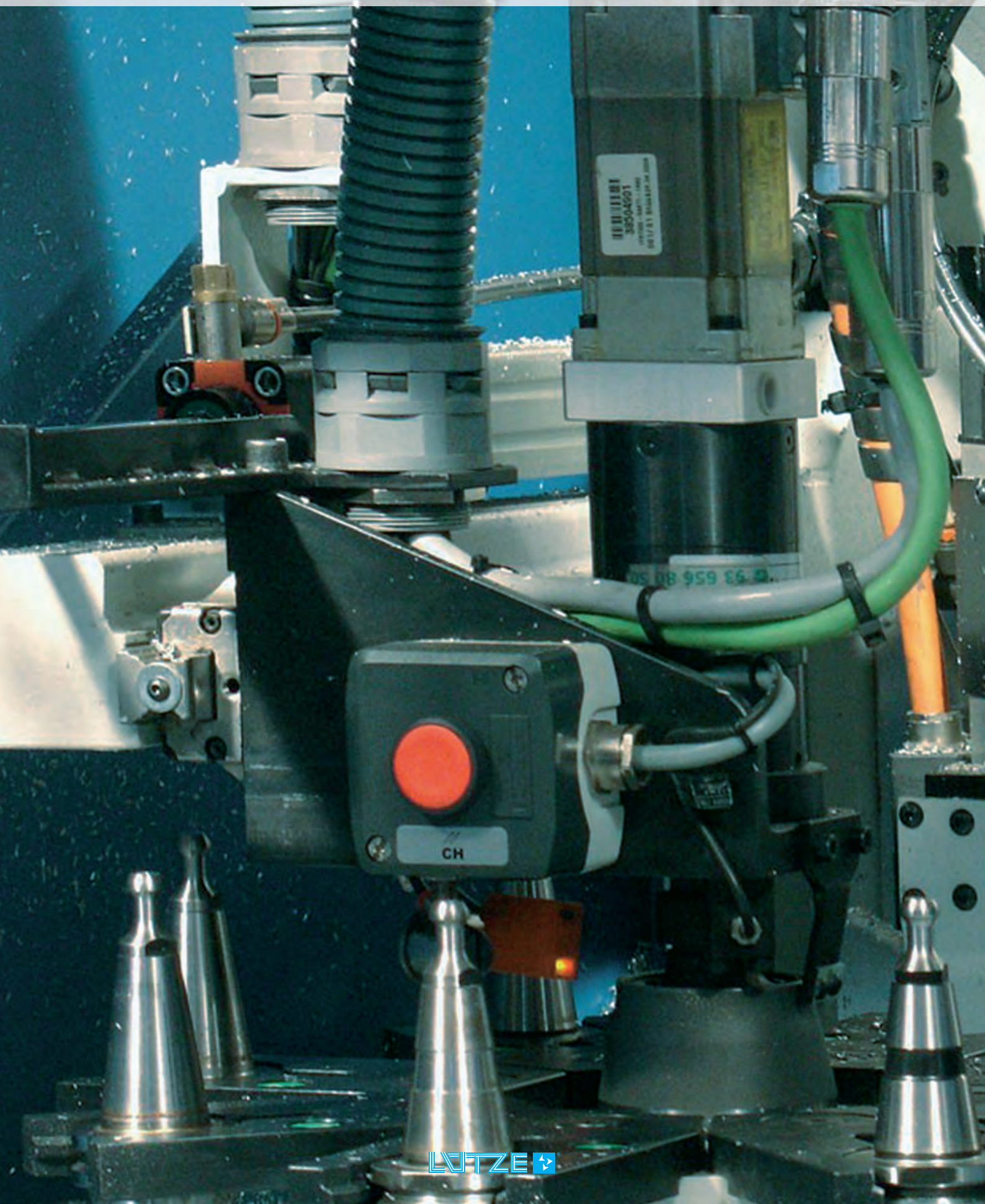


Mounting diagram



9. Cable fittings and accessories

Cable conduits and conduit fittings



9. Cable fittings, conduits and accessories

	Application	Chapter
Entry system		
Cablefix Vario, Cablefix	Cable entry system for connectorized cables	9.3 - 9.5
Plastic fittings		
TOP-T-P, TOP-TR-P	Cable fittings with strain relief and IP rated seal	9.6 - 9.8
Plastic accessories		
Locknuts GK	Accessories for use with plastic fittings	9.9 - 9.12
Reducer RR form 1		
Blanking plugs BL		
Metal fittings		
TOP-T, TOP-TR	Cable fittings with strain relief and IP rated seal	
TOP-T-S-EMV 1, TOP-T-S-EMV 2	Optional with shield termination	9.13 - 9.16
Metal accessories		
Locknuts GMS, Locknuts GMS EMV Reducer RR,	Accessories for use with metal fittings	9.17 - 9.21
Enlarger EW		
Blanking plugs BLMS		
Plastic and metal accessories		
Multiple hole inserts MFDE	Sealing insert for retroactive installation in plastic and metal fitting applications	9.22, 9.23
Seal insert ASI DE		
Cable conduits Condufix		
OS PA standard version	Flexible protective conduit for control cabinets and moving machine parts	9.25, 9.26
OR PA dynamic applications		
Cable conduit-retainer Condufix		
OH PA	Retainer for fast and secure mounting of conduits	9.27
Protective conduit fittings Condufix		
OG PA straight metric	Fittings for fixed conduit installations	9.28 - 9.38
OG PA straight PG		
OG PM straight with metal thread		
OW PA 90°- angle		
OB PA 90°-arch angle		
OB PM 90°- arch angle with metal thread		
OA PA 45°- angle		
OA PM 45°- angle with metal thread		
OI PM straight with inner metal thread		
OF PA 90°-flange angle		
OF PA for NW 70 and NW 95 straight and 90° flange angle		
Protective conduit splitter Condufix		
OY PA, Y-design	To reduce from one size into two small sizes	
OT PA, T-design	T-junction with three identical sizes	9.39, 9.40
Accessories Condufix		
Flat seal for Condufix screw connections FDNP	Optional flat seal between fitting and surface	9.41
O-rings for Condufix cable protective conduit and flange angle, OBNR and WNBR	O-ring seal between fitting and conduit	9.42
Protective conduit WELLFLEX		
WELLFLEX conduit WF	Flexible protective conduit for control cabinets	9.43
Accessories WELLFLEX		
Conduit holder WFH	Fixes the ends of the protective conduit on control cabinets and control units	9.44
Accessories		
Control panel installation	Socket for fully protected wire connections and integrated snap connection for simple and quick installation	9.45
Cable tie	For bundling of cables, conductors or conduits	9.46
Identification of hook-up wires and cables	Tags for labeling of cables and conduits	9.47
Laser labels	For the printing with laser printers	9.48
Marker strips	Marker strips flexible and self-adhesive	9.49

Cable fittings and accessories

Cablefix Vario

Feed-through for all prefabricated cables and wires with connectors



Application

- Electrotechnology, pneumatics, hydraulics, robotics, general machine and plant construction

Properties

- Feed through and terminal frames from high-quality solid
- Aluminium or polyamide GF30 with additional inner brass reinforcement
- High flexibility in the application
- Additional mounting to existing installation easily possible
- Even pressure effect on the feed through round material yields good strain relief and sealing
- Unused holes in the module can simply sealed with blank plugs
- Compact design i.e. space-saving
- 2 module sizes with slot and suspension principle
- Very good weathering resistance
- Resistant to UV radiation, ozone, oils, fuels, acids, bases, solvents and sea water

Part-No.	Type	Clamping range D mm	Number of holes	Diameter mm	Length mm	Height mm	suitable for Part-No.	PU piece
Rubber module, material TPE								
606150	VK0	Solid material	0		40	20		5
606151	VK4	4.0 – 4.5 mm	14		40	20		5
606152	VK5	4.5 – 5.5 mm	8		40	20		5
606153	VK6	5.5 – 6.5 mm	8		40	20		5
606154	VK7	6.5 – 7.5 mm	5		40	20		5
606155	VK8	7.5 – 8.5 mm	5		40	20		5
606156	VK9	8.5 – 9.5 mm	3		40	20		5
606157	VK10	9.5 – 10.5 mm	3		40	20		5
606158	VK12	10.5 – 12.5 mm	2		40	20		5
606159	VK14	12.5 – 14.5 mm	2		40	20		5
606160	VK16	14.5 – 16.5 mm	2		40	20		5
606200	VG0	Solid material	0		40	40		3
606201	VG18	16.5 – 18.5 mm	2		40	40		3
606202	VG20	18.5 – 20.5 mm	1		40	40		3
606203	VG22	20.5 – 22.5 mm	1		40	40		3
606204	VG24	22.5 – 24.5 mm	1		40	40		3
606205	VG26	24.5 – 26.5 mm	1		40	40		3
606206	VG28	26.5 – 28.5 mm	1		40	40		3
606207	VG30	28.5 – 30.5 mm	1		40	40		3
606208	VG32	30.5 – 32.5 mm	1		40	40		3
606209	VG34	32.5 – 34.5 mm	1		40	40		3
Matching blank plug, PA6 GF15								
606250	BL4			4	30		606151	50
606251	BL5			5	30		606152	50
606252	BL6			6	30		606153	50
606253	BL7			7	30		606154	50
606254	BL8			8	30		606155	50
606255	BL9			9	30		606156	50
606256	BL10			10	30		606157	50
606257	BL12			12	30		606158	50
606258	BL14			14	30		606159	50
606259	BL16			16	30		606160	50
606260	BL18			18	30		606201	50

Cable fittings and accessories

Cablefix Vario

Feed-through for all prefabricated cables and wires with connectors



Technical data

Temperature range	-40 °C to +135 °C
Fire performance	Flame-retardant
Module type	VG=40x43.5 VK=40x22.9 for cable and wire diameters from 4 mm to 34.5 mm, see ordering information
Protection class	IP 65

Design

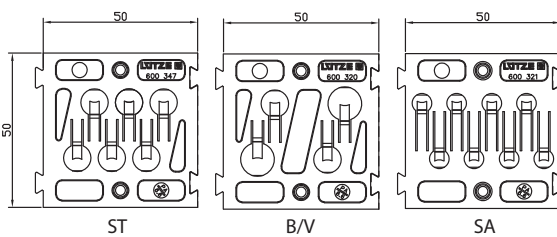
- Frame AKLR from smooth ground aluminum
- Frame KCLR from polyamide GF30 glass fibre reinforced
- Modules slotted to the right from the borings

Part-No.	Type	Dimension (LxHxT)	Unit VK/VG	PU piece	With flat seal and drilling template	Comments
Terminal frame as feed-through system with strain relief						
606052	KKLR 1	136 x 71 x 30	4/2	3	Yes	Master gauge for holes HAN 16 B attachment housing
606053	KKLR 2	164 x 71 x 30	6/3	2	Yes	Master gauge for holes HAN 24 B attachment housing
Aluminium smooth-ground, also available as anodised						
606038	AKLR0	68 x 68 x 30	2/1	1	Yes	Hole ø 6.5 hole dimensions 30 x 55 with flat seal
606001	AKLR 1	108 x 68 x 30	4/2	1	Yes	
606002	AKLR 2	148 x 68 x 30	6/3	1	Yes	
606003	AKLR 3	148 x 88 x 30	9/3+3	1	Yes	
606004	AKLR 4	148 x 108 x 30	12/6	1	Yes	
606005	AKLR 5	188 x 78 x 30	8/4	1	Yes	
606006	AKLR 6	188 x 98 x 30	12/4+4	1	Yes	
606007	AKLR 7	188 x 118 x 30	16/8	1	Yes	
606040	AKLW 2	148 x 68 x 30	6/3	1	Yes	Master gauge for holes HAN 24 B attachment housing

Unit corresponds to the number of required rubber modules type VK or VG

Cable fittings and accessories

Cablefix flanges



Properties

- With the dovetail guide, the Cablefix flanges can be lined up with each other. This means that various flange combinations can be realized to suit specific requirements.
- Flanges can be used to suit specific requirements
- The integrated strain relief closes automatically when the cables and wires are pushed through.
- An integrated formed rubber part seals off the cables and wires by means of sealing lips.
- For troubleshooting, maintenance or retrofitting, the individual cables can be easily loosened from the spring clamp using a screwdriver and replaced.
- Unused inputs can be closed off using the plugs supplied with the product.
- Resistant to fuels, mineral oils, greases, alkalis
- Halogen- and silicone-free.

Technical data

Protection class	IP 55 (mounting orientation from below)
Temperature range	-30 °C to +70 °C
Fire performance	Flange UL 94 V2
max. metal gauge	3 mm
Breakthrough with standard sheet metal hole punch	46 x 46mm

Application

Cablefix flanges are used to introduce cables and wires into a housing. They are used in light to medium-weight machine and plant construction.

Part-No.	Type	Dimensions (w x h x d) mm	Cut-out W x H mm	Number of cables x cable diameter	Material	PU piece
Cablefix Control cable flange (ST)						
600347	1xST	50.0 x 50.0 x 11.5	46 x 46	6 x 6.3 – 8.9	Flange: PA 6.6 Seal: TPE Plugs: PA 6 Retaining plates and screws: galvanised steel	5
Cablefix Bus flange (B/V)						
600320	1xB/V	50.0 x 50.0 x 11.5	46 x 46	2 x 6.1 - 8.8 + 2 x 7.8 - 10.7 mm	Flange: PA 6.6 Seal: TPE Plugs: PA 6 Retaining plates and screws: galvanised steel	5
Cablefix Sensor/Actuator flange (S/A)						
600321	1xS/A	50.0 x 50.0 x 11.5	46 x 46	8 x 3.8 - 6.3 mm	Flange: PA 6.6 Seal: TPE Plugs: PA 6 Retaining plates and screws: galvanised steel	5

Note:

50 mm must be allotted for each flange mounted side by side.

Cable fittings and accessories

Plastic fittings TOP-T-P, metric version



Properties

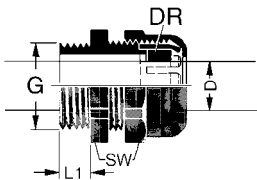
- – metric –
- Cable fitting with hexagon base
- Strain relief and seal

Technical data

Protection class IP 68 to 5 bar

Design

- Material Polyamide PA 6.6-V-2
- Colour grey RAL 7001
black RAL 9005
- Gasket Neoprene



Part-No.	Type	G	Approvals	Clamping range D mm	SW mm	L 1 mm	weight approx. kg/100 piece	PU piece
TOP-T-P metric grey RAL 7001								
600790	TOP-T-P M 12x1,5	M 12x1.5	UR	2.0 – 6.5 mm	15	8.0	0.32	100
600680	TOP-T-P M 16x1,5	M 16x1.5	UR	4.0 – 10.0 mm	20	8.0	0.57	100
600681	TOP-T-P M 20x1,5	M 20x1.5	UL	6.0 – 12.0 mm	24	9.0	0.96	100
600682	TOP-T-P M 25x1,5	M 25x1.5	UL	9.0 – 16.0 mm	28	11.0	1.55	50
600683	TOP-T-P M 32x1,5	M 32x1.5	UL	11.0 – 21.0 mm	36	11.0	2.65	25
600791	TOP-T-P M 40x1,5	M 40x1.5	UL	16.0 – 28.0 mm	46	11.0	4.34	10
600792	TOP-T-P M 50x1,5	M 50x1.5	UR	27.0 – 35.0 mm	55	13.0	6.80	5
600684	TOP-T-P M 63x1,5	M 63x1.5		32.0 – 42.0 mm	68	14.0	9.60	5
TOP-T-P metric black RAL 9005								
600840	TOP-T-P M 12x1,5	M 12x1.5	UR	2.0 – 6.5 mm	15	8.0	0.32	100
600841	TOP-T-P M 16x1,5	M 16x1.5	UR	4.0 – 10.0 mm	20	8.0	0.57	100
600842	TOP-T-P M 20x1,5	M 20x1.5	UL	6.0 – 12.0 mm	24	9.0	0.96	100
600843	TOP-T-P M 25x1,5	M 25x1.5	UL	9.0 – 16.0 mm	28	11.0	1.55	50
600844	TOP-T-P M 32x1,5	M 32x1.5	UL	10.0 – 21.0 mm	36	11.0	2.65	25
600845	TOP-T-P M 40x1,5	M 40x1.5	UL	16.0 – 28.0 mm	46	11.0	4.40	10
600846	TOP-T-P M 50x1,5	M 50x1.5	UL	21.0 – 34.5 mm	53	13.0	7.37	5
600847	TOP-T-P M 63x1,5	M 63x1.5		30.0 – 44.5 mm	65	14.0	10.26	5

Cable fittings and accessories

Plastic fittings TOP-T-P, PG version



Properties

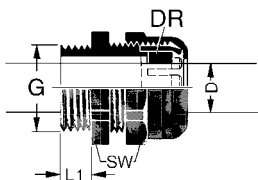
- – PG –
- Cable fitting with hexagon base
- Strain relief and seal

Technical data

Protection class IP 68 to 5 bar

Design

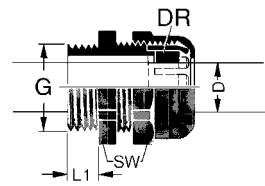
- Material polyamide PA 6.6-V-2
- Colour Grey RAL 7001 and Black RAL 9005
- Gasket Neoprene



Part-No.	Type	G	Approvals	Clamping range D mm	SW mm	L 1 mm	weight approx. kg/100 piece	PU piece
TOP-T-P PG grey RAL 7001								
600660	TOP-T-P PG 7	PG 7		3.0 – 6.5 mm	15	8.0	0.33	100
600661	TOP-T-P PG 9	PG 9		4.0 – 8.0 mm	19	8.0	0.52	100
600662	TOP-T-P PG 11	PG 11	UR	5.0 – 10.0 mm	22	8.0	0.87	100
600663	TOP-T-P PG 13,5	PG 13,5	UL	6.0 – 12.0 mm	24	9.0	0.96	100
600664	TOP-T-P PG 16	PG 16	UL	10.0 – 14.0 mm	27	10.0	1.37	50
600665	TOP-T-P PG 21	PG 21	UL	13.0 – 18.0 mm	33	11.0	2.04	50
600666	TOP-T-P PG 29	PG 29	UL	18.0 – 25.0 mm	42	11.0	3.88	25
600667	TOP-T-P PG 36	PG 36	UL	22.0 – 34.0 mm	53	13.0	6.90	10
600668	TOP-T-P PG 42	PG 42	UL	30.0 – 38.0 mm	60	13.0	8.80	5
600669	TOP-T-P PG 48	PG 48	UL	34.0 – 44.0 mm	65	14.0	9.79	5
TOP-T-P PG black RAL 7005								
600860	TOP-T-P PG 7	PG 7		3.0 – 6.5 mm	15	8.0	0.33	100
600861	TOP-T-P PG 9	PG 9		4.0 – 8.0 mm	19	8.0	0.52	50
600862	TOP-T-P PG 11	PG 11	UR	5.0 – 10.0 mm	22	8.0	0.87	100
600863	TOP-T-P PG 13,5	PG 13,5	UL	6.0 – 12.0 mm	24	9.0	0.96	50
600864	TOP-T-P PG 16	PG 16	UL	10.0 – 14.0 mm	27	10.0	1.37	50
600865	TOP-T-P PG 21	PG 21	UL	13.0 – 18.0 mm	33	11.0	2.04	50
600866	TOP-T-P PG 29	PG 29	UL	18.0 – 25.0 mm	42	11.0	3.98	25
600867	TOP-T-P PG 36	PG 36	UL	22.0 – 34.0 mm	53	13.0	6.90	10
600868	TOP-T-P PG 42	PG 42	UL	30.0 – 38.0 mm	60	13.0	8.80	5
600869	TOP-T-P PG 48	PG 48	UL	34.0 – 44.0 mm	65	14.0	9.79	5

Cable fittings and accessories

Plastic fitting TOP-TR-P



Properties

- Cable fitting with hexagon base
- Strain relief and gasket
- Reduced sealing insert
- Reduced clamping range

Technical data

Protection class IP 68 to 5 bar
 Approvals on request

Design

- Material Polyamide PA 6-V-2
- Colour grey RAL 7001
other colours upon request
- Gasket NBR

Part-No.	Type	G	Approvals	Clamping range D mm	SW mm	L 1 mm	weight approx. kg/100 piece	PU piece
TOP-TR-P metric								
600690	TOP-TR-P M 16x1,5	M 16x1.5	on request	2.0 – 7.0 mm	20	8.0	0.62	100
600691	TOP-TR-P M 20x1,5	M 20x1.5	on request	4.0 – 10.0 mm	24	8.0	1.34	100
600692	TOP-TR-P M 25x1,5	M 25x1.5	on request	5.0 – 14.0 mm	29	8.0	1.63	50
600693	TOP-TR-P M 32x1,5	M 32x1.5	on request	8.0 – 18.0 mm	36	10.0	2.72	25
600794	TOP-TR-P M 12x1,5	M 12x1.5	on request	2.0 – 5.0 mm	15	8.0	0.33	100

Cable fittings and accessories

Plastic accessories locknut GK, metric version

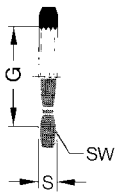


Properties

- – metric –
- Counter nut, hexagonal, with metric thread according to DIN 46320

Design

- Material Polyamide 6 GF 30
- Colour grey RAL 7001
black RAL 9005
other colour upon request



Part-No.	Type	G	SW mm	S mm	weight approx. kg/100 piece	PU piece
GK metric grey RAL 7001						
600398	GK M 12x1,5	M 12x1.5	17	5.0	0.10	100
600391	GK M 16x1,5	M 16x1.5	22	5.0	0.16	100
600392	GK M 20x1,5	M 20x1.5	26	6.0	0.23	100
600393	GK M 25x1,5	M 25x1.5	32	6.0	0.28	100
600394	GK M 32x1,5	M 32x1.5	41	7.0	0.41	100
600395	GK M 40x1,5	M 40x1.5	50	7.0	0.67	50
600396	GK M 50x1,5	M 50x1.5	60	8.0	1.14	50
600698	GK M 63x1,5	M 63x1.5	75	8.0	1.95	50
GK metric black RAL 9005						
600850	GK M 12x1,5	M 12x1.5	17	5.0	0.10	100
600851	GK M 16x1,5	M 16x1.5	22	5.0	0.14	100
600852	GK M 20x1,5	M 20x1.5	26	6.0	0.22	100
600853	GK M 25x1,5	M 25x1.5	32	6.0	0.26	100
600854	GK M 32x1,5	M 32x1.5	41	7.0	0.38	100
600855	GK M 40x1,5	M 40x1.5	50	7.0	0.63	50
600856	GK M 50x1,5	M 50x1.5	60	8.0	1.14	50
600857	GK M 63x1,5	M 63x1.5	75	8.0	1.78	50

Cable fittings and accessories

Plastic accessory locknut GK, PG version

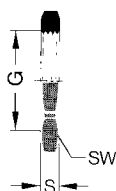


Properties

- – PG –
- Counter nut, hexagonal, with armour threads according to DIN 46320.

Design

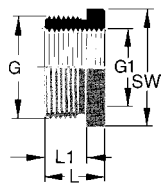
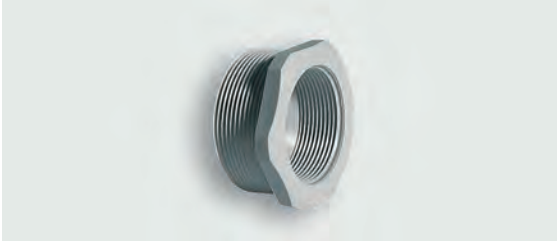
- Material Polyamide 6 GF 30
- Colour grey RAL 7001
black RAL 9005
other colors available on request



Part-No.	Type	G	SW mm	S mm	weight approx. kg/100 piece	PU piece
GK PG grey RAL 7001						
600430	GK PG 7	PG 7	19	5.0	0.13	100
600431	GK PG 9	PG 9	22	5.0	0.14	100
600432	GK PG 11	PG 11	24	5.0	0.15	100
600433	GK PG 13,5	PG 13.5	27	6.0	0.24	100
600434	GK PG 16	PG 16	30	6.0	0.31	100
600435	GK PG 21	PG 21	36	7.0	0.45	100
600436	GK PG 29	PG 29	46	7.5	0.68	50
600437	GK PG 36	PG 36	60	8.0	1.47	50
600438	GK PG 42	PG 42	65	8.0	1.53	50
600439	GK PG 48	PG 48	70	8.0	1.71	50
GK PG black RAL 9005						
600830	GK SW PG 7	PG 7	19	5.0	0.13	100
600831	GK SW PG 9	PG 9	22	5.0	0.14	100
600832	GK SW PG 11	PG 11	24	5.0	0.15	100
600833	GK SW PG 13,5	PG 13.5	27	6.0	0.24	100
600834	GK SW PG 16	PG 16	30	6.0	0.31	100
600835	GK SW PG 21	PG 21	36	7.0	0.45	100
600836	GK SW PG 29	PG 29	46	7.5	0.68	100
600837	GK SW PG 36	PG 36	60	8.0	1.47	50
600838	GK SW PG 42	PG 42	65	8.0	1.53	50
600839	GK SW PG 48	PG 48	70	8.0	1.71	50

Cable fittings and accessories

Plastic accessory reducing ring RR form 1, metric



Properties

- - metric -
- - Form 1 -
- Reducing ring from plastic with large outer thread and small inner thread

Design

- Material Polyamide PA 6 GF 30
- Colour Grey RAL 7035
- other colours upon request

Part-No.	Type	G	G1	SW mm	L mm	L 1 mm	weight approx. kg/100 piece	PU piece
RR-PA metric								
600550	RR-PA M 20/M 12	M 20x1.5	M 12x1.5	24	12.0	8.0	0.39	100
600551	RR-PA M 20/M 16	M 20x1.5	M 16x1.5	24	12.0	8.0	0.26	100
600552	RR-PA M 25/M 12	M 25x1.5	M 12x1.5	29	14.0	8.0	0.70	100
600553	RR-PA M 25/M 16	M 25x1.5	M 16x1.5	29	14.0	8.0	0.67	100
600554	RR-PA M 25/M 20	M 25x1.5	M 20x1.5	29	14.0	8.0	0.50	50
600555	RR-PA M 32/M 12	M 32x1.5	M 12x1.5	36	16.0	10.0	1.06	50
600556	RR-PA M 32/M 16	M 32x1.5	M 16x1.5	36	16.0	10.0	1.06	50
600557	RR-PA M 32/M 20	M 32x1.5	M 20x1.5	36	16.0	10.0	1.20	50
600558	RR-PA M 32/M 25	M 32x1.5	M 25x1.5	36	16.0	10.0	0.88	50
600559	RR-PA M 40/M 16	M 40x1.5	M 16x1.5	46	16.0	10.0	1.59	50
600560	RR-PA M 40/M 20	M 40x1.5	M 20x1.5	46	16.0	10.0	1.68	50
600561	RR-PA M 40/M 25	M 40x1.5	M 25x1.5	46	16.0	10.0	1.36	50
600562	RR-PA M 40/M 32	M 40x1.5	M 32x1.5	46	16.0	10.0	1.35	50
600563	RR-PA M 50/M 20	M 50x1.5	M 20x1.5	55	18.0	12.0	2.15	25
600564	RR-PA M 50/M 25	M 50x1.5	M 25x1.5	55	18.0	12.0	2.16	25
600565	RR-PA M 50/M 32	M 50x1.5	M 32x1.5	55	18.0	12.0	2.06	25
600566	RR-PA M 50/M 40	M 50x1.5	M 40x1.5	55	18.0	12.0	1.97	25
600567	RR-PA M 63/M 25	M 63x1.5	M 25x1.5	68	18.0	12.0	2.65	25
600568	RR-PA M 63/M 32	M 63x1.5	M 32x1.5	68	18.0	12.0	2.95	25
600569	RR-PA M 63/M 40	M 63x1.5	M 40x1.5	68	18.0	12.0	3.08	25
600570	RR-PA M 63/M 50	M 63x1.5	M 50x1.5	68	18.0	12.0	3.05	25

Cable fittings and accessories

Plastic accessory Blank plug BL

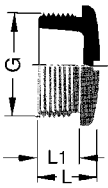


Properties

- Blank plug according to DIN 46320

Design

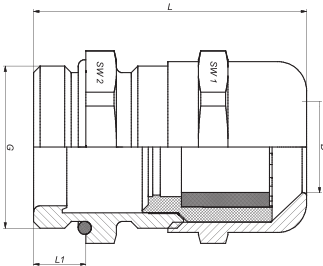
- Material Polyamide PA 6 or polystyrene SB
- Colour grey RAL 7035
- other colours upon request



Part-No.	Type	G	L mm	L 1 mm	weight approx. kg/100 piece	PU piece
BL metric PA						
600870	BL M 12	M 12×1.5	8.0	6.0	0.05	100
600871	BL M 16	M 16×1.5	9.0	6.0	0.09	100
600872	BL M 20	M 20×1.5	9.0	6.0	0.19	100
600873	BL M 25	M 25×1.5	10.5	7.0	0.20	100
600874	BL M 32	M 32×1.5	12.0	8.0	0.48	100
600875	BL M 40	M 40×1.5	13.0	9.0	0.66	50
600876	BL M 50	M 50×1.5	14.0	10.0	1.57	25
600877	BL M 63	M 63×1.5	17.0	12.0	2.26	25
BL PG PA						
601490	BL PG 7	PG 7	8.0	6.0	0.07	100
601491	BL PG 9	PG 9	9.0	6.0	0.13	100
601492	BL PG 11	PG 11	9.0	6.0	0.16	100
601493	BL PG 13,5	PG 13.5	9.5	6.0	0.20	100
601494	BL PG 16	PG 16	9.5	6.0	0.25	100
601495	BL PG 21	PG 21	11.0	8.0	0.38	100
601496	BL PG 29	PG 29	12.0	8.0	0.72	50
601497	BL PG 36	PG 36	15.0	10.0	1.15	25

Cable fittings and accessories

Metal fitting TOP-T



Properties

- Cable fitting with hexagon base
- Strain relief
- Gasket and O-Ring

Technical data

Protection class IP 68 to 5 bar

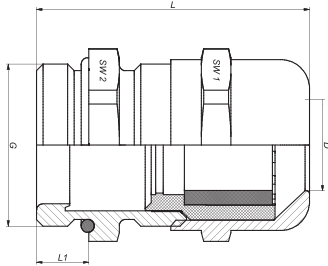
Design

- Material Brass nickel-plated
- Gasket Neoprene
- O-ring (OR) Perbunan®

Part-No.	Type	G	Clamping range D mm	SW 1 = across flats mm	SW 2 = across flats mm	L 1 mm	L mm	weight approx. kg/100 piece	PU piece
TOP-T metric									
600701	TOP-T M 12x1,5	M 12x1.5	3.0 – 6.5	14	14	6.0	27.5	1.12	50
600760	TOP-T M 16x1,5	M 16x1.5	5.5 – 10.0	17	18	7.0	30.0	1.46	50
600761	TOP-T M 20x1,5	M 20x1.5	8.0 – 13.0	22	22	8.0	32.3	2.63	50
600762	TOP-T M 25x1,5	M 25x1.5	11.0 – 18.0	24	27	8.0	35.6	5.43	25
600763	TOP-T M 32x1,5	M 32x1.5	15.0 – 21.0	30	34	9.0	40.2	7.12	25
600702	TOP-T M 40x1,5	M 40x1.5	19.0 – 27.0	40	43	9.0	47.5	15.90	20
600703	TOP-T M 50x1,5	M 50x1.5	26.0 – 35.0	50	55	9.0	56.3	27.21	15
600704	TOP-T M 63x1,5	M 63x1.5	34.0 – 42.0	64	68	14.0	64.3	31.78	12
TOP-T PG									
600710	TOP-T PG 7	PG 7	3.0 – 6.5	14	14	6.0	27.8	1.13	50
600711	TOP-T PG 9	PG 9	4.0 – 8.0	17	17	6.0	28.6	1.51	50
600712	TOP-T PG 11	PG 11	5.0 – 10.0	20	20	6.0	31.3	3.12	50
600713	TOP-T PG 13,5	PG 13.5	6.0 – 12.0	22	22	6.5	30.6	2.86	50
600714	TOP-T PG 16	PG 16	10.0 – 14.0	24	24	6.5	34.0	3.34	25
600715	TOP-T PG 21	PG 21	13.0 – 18.0	30	30	7.2	38.4	6.40	25
600716	TOP-T PG 29	PG 29	18.0 – 25.0	40	40	8.0	47.3	11.20	20
600717	TOP-T PG 36	PG 36	22.0 – 32.0	50	50	9.0	56.2	18.82	15
600718	TOP-T PG 42	PG 42	30.0 – 38.0	58	58	12.0	59.7	31.58	12
600719	TOP-T PG 48	PG 48	34.0 – 44.0	64	64	14.0	66.0	37.00	12

Cable fittings and accessories

Metal fitting TOP-TR



Properties

- Cable fitting with hexagon base
- Strain relief
- Gasket and O-Ring
- Reduced sealing insert
- Reduced Clamping range

Technical data

Protection class IP 68 to 5 bar

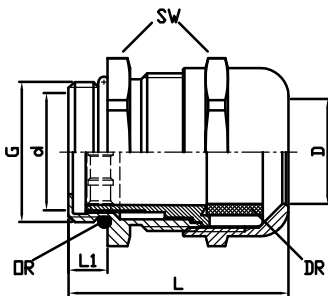
Design

- Material Brass nickel-plated
- Gasket Neoprene
- O-ring (OR) Perbunan®

Part-No.	Type	G	Clamping range D mm	SW 1 = across flats mm	SW 2 = across flats mm	L 1 mm	L mm	weight approx. kg/100 piece	PU piece
TOP-TR metric									
600705	TOP-TR M 12x1,5	M 12x1.5	2.0 – 5.0	14	14	6.0	27.5	1.07	50
600780	TOP-TR M 16x1,5	M 16x1.5	3.0 – 8.0	17	17	7.0	30.0	1.50	50
600781	TOP-TR M 20x1,5	M 20x1.5	6.0 – 12.0	22	22	8.0	32.3	2.73	50
600782	TOP-TR M 25x1,5	M 25x1.5	8.0 – 15.0	24	30	8.0	35.6	5.55	25
600783	TOP-TR M 32x1,5	M 32x1.5	13.0 – 19.0	30	34	9.0	40.2	7.40	25
600706	TOP-TR M 40x1,5	M 40x1.5	16.0 – 23.0	40	44	9.0	47.5	16.72	20
600707	TOP-TR M 50x1,5	M 50x1.5	21.0 – 29.0	50	55	9.0	56.3	27.95	15
600708	TOP-TR M 63x1,5	M 63x1.5	27.0 – 38.0	64	66	14.0	64.3	34.48	12

Cable fittings and accessories

Metal fitting with shield termination TOP-T-S-EMV1



Properties

- Cable fitting with hexagon base
- Strain relief
- Gasket
- O-Ring and EMC compliant shield termination
- Simple installation - the shield braiding with plastic insert is pressed against fitting base

Technical data

Protection class IP 68 to 5 bar

Design

- Material Brass nickel-plated
- Gasket Neoprene
- O-ring (OR) Perbunan®

Part-No.	Type	G	Clamping range D mm	SW mm	L 1 mm	d mm	weight approx. kg/100 piece	PU piece
TOP-T-S-EMV1 metric								
600170	TOP-T-S-EMV1 M 12x1,5	M 12x1.5	3.0 – 6.5	14	5.0	5.2	1.21	100
600171	TOP-T-S-EMV1 M 16x1,5	M 16x1.5	5.5 – 10.0	17	5.5	8.2	1.67	100
600172	TOP-T-S-EMV1 M 20x1,5	M 20x1.5	8.0 – 13.0	22	6.0	11.5	2.88	100
600173	TOP-T-S-EMV1 M 25x1,5	M 25x1.5	11.0 – 18.0	30	7.0	15.2	6.03	25
600174	TOP-T-S-EMV1 M 32x1,5	M 32x1.5	15.0 – 21.0	34	8.0	18.0	7.86	25
600175	TOP-T-S-EMV1 M 40x1,5	M 40x1.5	19.0 – 27.0	44	8.0	23.0	17.57	10
600176	TOP-T-S-EMV1 M 50x1,5	M 50x1.5	26.0 – 35.0	55	9.0	31.0	28.82	5
600177	TOP-T-S-EMV1 M 63x1,5	M 63x1.5	39.0 – 48.0	66	10.0	31.0	35.88	5
TOP-T-S-EMV1 PG								
600520	TOP-T-S-EMV1 PG 7	PG 7	3.0 – 6.5	14	5.0	5.0	1.20	100
600521	TOP-T-S-EMV1 PG 9	PG 9	5.5 – 10.0	17	6.0	7.5	1.70	100
600522	TOP-T-S-EMV1 PG 11	PG 11	5.5 – 10.0	20	6.0	9.5	3.37	50
600523	TOP-T-S-EMV1 PG 13,5	PG 13.5	8.0 – 13.0	22	6.5	11.5	3.52	50
600524	TOP-T-S-EMV1 PG 16	PG 16	8.0 – 14.0	24	6.5	12.0	3.64	50
600525	TOP-T-S-EMV1 PG 21	PG 21	11.0 – 18.0	30	7.0	17.5	7.10	25
600526	TOP-T-S-EMV1 PG 29	PG 29	19.0 – 27.0	40	8.0	25.0	12.20	25
600527	TOP-T-S-EMV1 PG 36	PG 36	24.0 – 32.0	50	9.0	31.5	15.10	10
600528	TOP-T-S-EMV1 PG 42	PG 42	30.0 – 38.0	57	10.0	37.5	21.10	5
600529	TOP-T-S-EMV1 PG 48	PG 48	34.0 – 44.0	64	10.0	43.5	30.00	5

Cable fittings and accessories

Metal fitting with shield termination TOP-T-S-EMV2



Properties

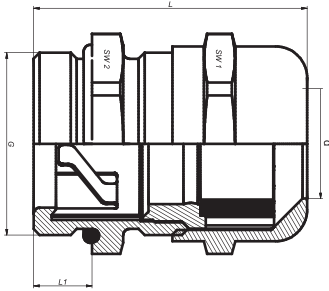
- Cable fitting with hexagon base
- Strain relief
- Gasket
- O-Ring and EMC compliant shield termination
- Simple mounting, where by 4 contact strips are used to connect the braided shield to the fitting enclosure

Technical data

Protection class IP 68 to 5 bar

Design

- Material Brass nickel-plated
- Gasket Neoprene
- O-ring (OR) Perbunan®



Part-No.	Type	G	Clamping range D mm	SW 1 = across flats mm	SW 2 = across flats mm	L 1 mm	L mm	d mm	weight approx. kg/100 piece	PU piece
TOP-T-S-EMV2 metric										
600370	TOP-T-S-EMV2 M 12x1,5	M 12x1.5	3.0 – 6.5	14	14	6.0	27.5	6.5	1.21	50
600371	TOP-T-S-EMV2 M 16x1,5	M 16x1.5	4.0 – 8.0	17	18	7.0	30.0	8.0	1.67	50
600372	TOP-T-S-EMV2 M 20x1,5	M 20x1.5	6.0 – 12.0	22	22	8.0	32.3	12.0	2.88	50
600373	TOP-T-S-EMV2 M 25x1,5	M 25x1.5	10.0 – 14.0	24	27	8.0	35.6	14.0	6.03	25
600374	TOP-T-S-EMV2 M 32x1,5	M 32x1.5	13.0 – 18.0	30	34	9.0	40.2	18.0	7.86	25
600375	TOP-T-S-EMV2 M 40x1,5	M 40x1.5	18.0 – 25.0	40	43	9.0	47.5	25.0	17.57	20
600376	TOP-T-S-EMV2 M 50x1,5	M 50x1.5	22.0 – 32.0	50	55	9.0	56.3	32.0	28.82	15
600377	TOP-T-S-EMV2 M 63x1,5	M 63x1.5	34.0 – 44.0	64	68	14.0	64.3	44.0	35.88	12

Cable fittings and accessories

Metal accessory Locknut GMS

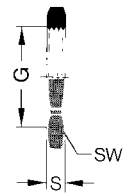


Properties

- Counter nut according to DIN 46320, hexagonal

Design

- Material Brass nickel-plated



Part-No.	Type	G	SW mm	S mm	weight approx. kg/100 piece	PU piece
GMS metric						
600368	GMS M 12 × 1.5	M 12×1.5	15	2.8	0.22	100
600361	GMS M 16 × 1.5	M 16×1.5	19	2.8	0.30	100
600362	GMS M 20 × 1.5	M 20×1.5	24	3.0	0.48	100
600363	GMS M 25 × 1.5	M 25×1.5	30	3.5	0.90	100
600364	GMS M 32 × 1.5	M 32×1.5	36	4.0	1.08	100
600365	GMS M 40 × 1.5	M 40×1.5	46	5.0	2.40	50
600366	GMS M 50 × 1.5	M 50×1.5	60	5.0	3.25	25
600367	GMS M 63 × 1.5	M 60×1.5	70	6.0	4.62	25
GMS PG						
600420	GMS PG 7	PG 7	15	2.8	0.18	100
600421	GMS PG 9	PG 9	18	2.8	0.23	100
600422	GMS PG 11	PG 11	21	3.0	0.30	100
600423	GMS PG 13.5	PG 13.5	23	3.0	0.36	100
600424	GMS PG 16	PG 16	26	3.0	0.50	100
600425	GMS PG 21	PG 21	32	3.5	0.79	100
600426	GMS PG 29	PG 29	41	4.0	1.30	50
600427	GMS PG 36	PG 36	51	5.0	2.10	50
600428	GMS PG 42	PG 42	60	5.0	3.45	25
600429	GMS PG 48	PG 48	64	5.5	3.50	25

Cable fittings and accessories

Metal accessory Locknut GMS EMC

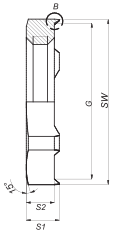


Properties

- Hexagonal nut for potential equalisation
- With cutting edges for cutting through layers of paint or power coating for optimal contact

Design

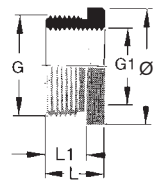
- Material Brass nickel-plated



Part-No.	Type	G	SW mm	S1 mm	S2 mm	weight approx. kg/100 piece	PU piece
GMS EMV metric							
600460	GMS EMV M 12 × 1.5	M 12×1.5	15	3.3	2.8	0.26	50
600461	GMS EMV M 16 × 1.5	M 16×1.5	19	3.5	3.0	0.37	50
600462	GMS EMV M 20 × 1.5	M 20×1.5	24	3.5	3.0	0.65	50
600463	GMS EMV M 25 × 1.5	M 25×1.5	30	3.5	3.0	1.06	25
600464	GMS EMV M 32 × 1.5	M 32×1.5	36	4.0	3.5	1.35	25
600465	GMS EMV M 40 × 1.5	M 40×1.5	46	4.6	4.0	2.85	20
600466	GMS EMV M 50 × 1.5	M 50×1.5	60	5.6	5.0	5.46	15
600467	GMS EMV M 63 × 1.5	M 63×1.5	70	6.7	6.0	5.92	12
GMS EMV PG							
600530	GMS EMV PG 7	PG 7	15	3.3	2.8	0.25	50
600531	GMS EMV PG 9	PG 9	18	3.3	2.8	0.33	50
600532	GMS EMV PG 11	PG 11	21	3.5	3.0	0.38	50
600533	GMS EMV PG 13.5	PG 13.5	23	3.5	3.0	0.45	50
600534	GMS EMV PG 16	PG 16	26	3.5	3.0	0.63	25
600535	GMS EMV PG 21	PG 21	32	4.0	3.5	0.98	25
600536	GMS EMV PG 29	PG 29	41	4.6	4.0	1.58	20
600537	GMS EMV PG 36	PG 36	51	5.6	5.0	2.58	15
600538	GMS EMV PG 42	PG 42	60	5.6	5.0	3.12	12
600539	GMS EMC PG 48	PG 48	64	6.1	5.5	3.74	12

Cable fittings and accessories

Metal accessories reducing ring RR



Properties

- Reducing ring from **metric to metric** or **PG to PG**
- with large outer thread and small inner thread

Design

- Material Brass nickel-plated

Part-No.	Type	G	G1	Outer- \varnothing mm	L mm	L 1 mm	weight approx. kg/100 piece	PU piece
RR metric metric/metric								
600220	RR M 16/M 12	M 16x1.5	M 12x1.5	18.0	7.5	6.0	0.64	100
600221	RR M 20/M 12	M 20x1.5	M 12x1.5	24.0	8.5	6.5	1.57	100
600222	RR M 20/M 16	M 20x1.5	M 16x1.5	24.0	9.0	6.5	0.95	100
600223	RR M 25/M 16	M 25x1.5	M 16x1.5	28.0	10.0	7.0	2.70	100
600224	RR M 25/M 20	M 25x1.5	M 20x1.5	28.0	10.0	7.0	1.81	100
600225	RR M 32/M 20	M 32x1.5	M 20x1.5	34.0	11.5	8.0	4.62	50
600226	RR M 32/M 25	M 32x1.5	M 25x1.5	34.0	11.5	8.0	3.00	50
600227	RR M 40/M 25	M 40x1.5	M 25x1.5	45.0	11.5	8.0	7.60	25
600228	RR M 40/M 32	M 40x1.5	M 32x1.5	45.0	11.5	8.0	4.50	25
600229	RR M 50/M 32	M 50x1.5	M 32x1.5	55.0	14.0	10.0	13.00	10
600230	RR M 50/M 40	M 50x1.5	M 40x1.5	55.0	14.0	10.0	7.50	10
600231	RR M 63/M 40	M 63x1.5	M 40x1.5	64.0	14.0	10.0	21.50	10
600232	RR M 63/M 50	M 63x1.5	M 50x1.5	64.0	14.0	10.0	12.50	10
RR PG PG/PG								
600400	RR PG 9/PG 7	PG 9	PG 7	17.0	8.5	6.0	0.45	100
600411	RR PG 11/PG 7	PG 11	PG 7	20.0	8.5	6.0	1.20	100
600401	RR PG 11/PG 9	PG 11	PG 9	20.0	8.5	6.0	0.65	100
600408	RR PG 13.5/PG 9	PG 13.5	PG 9	22.0	9.0	6.5	1.01	100
600402	RR PG 13.5/PG 11	PG 13.5	PG 11	22.0	9.0	6.5	0.47	100
600409	RR PG 16/PG 9	PG 16	PG 9	24.0	9.5	6.5	0.85	100
600410	RR PG 16/PG 11	PG 16	PG 11	24.0	9.5	6.5	1.01	100
600403	RR PG 16/PG 13.5	PG 16	PG 13.5	24.0	9.5	6.5	0.59	100
600413	RR PG 21/PG 11	PG 21	PG 11	30.0	10.0	7.0	2.90	50
600414	RR PG 21/PG 13.5	PG 21	PG 13.5	30.0	10.0	7.0	1.23	50
600404	RR PG 21/PG 16	PG 21	PG 16	30.0	10.0	7.0	1.95	50
600407	RR PG 29/PG 16	PG 29	PG 16	39.0	11.5	8.0	6.42	50
600405	RR PG 29/PG 21	PG 29	PG 21	39.0	11.5	8.0	4.34	50
600412	RR PG 36/PG 21	PG 36	PG 21	50.0	12.5	9.0	11.40	25
600406	RR PG 36/PG 29	PG 36	PG 29	50.0	12.5	9.0	3.42	25
600416	RR PG 42/PG 36	PG 42	PG 36	57.0	14.0	10.0	7.00	10
600417	RR PG 48/PG 36	PG 48	PG 36	64.0	14.0	10.0	12.80	10
600415	RR PG 48/PG 42	PG 48	PG 42	64.0	14.0	10.0	6.40	10

Cable fittings and accessories

Metal accessory expansion EW

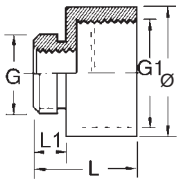


Properties

- Expansion from **metric to metric** or **PG to PG**
- with small outer thread and large inner thread

Design

- Material Brass nickel-plated



Part-No.	Type	G	G1	Outer- \varnothing mm	L mm	L 1 mm	weight approx. kg/100 piece	PU piece
EW metric metric/metric								
600280	EW M 12/M 16	M 12x1.5	M 16x1.5	18.0	15.5	9.0	0.93	100
600281	EW M 16/M 20	M 16x1.5	M 20x1.5	22.0	17.5	10.0	1.39	100
600282	EW M 20/M 25	M 20x1.5	M 25x1.5	27.0	20.0	6.0	2.14	100
600283	EW M 25/M 32	M 25x1.5	M 32x1.5	34.0	21.0	7.0	3.10	100
600284	EW M 32/M 40	M 32x1.5	M 40x1.5	42.0	23.0	8.0	13.00	50
600285	EW M 40/M 50	M 40x1.5	M 50x1.5	52.0	27.5	8.0	16.30	50
600286	EW M 50/M 63	M 50x1.5	M 63x1.5	65.0	31.0	9.0	12.15	25
EW PG PG/PG								
600500	EW PG 7/PG 9	PG 7	PG 9	17.0	15.0	3.0	0.68	100
600501	EW PG 9/PG 11	PG 9	PG 11	20.0	16.5	6.0	0.84	100
600502	EW PG 11/PG 13.5	PG 9	PG 13.5	22.0	17.5	6.0	1.02	100
600503	EW PG 11/PG 13.5	PG 11	PG 13.5	22.0	17.5	6.0	1.18	100
600504	EW PG 11/PG 16	PG 11	PG 16	24.0	18.5	6.0	1.30	100
600506	EW PG 13.5/PG 16	PG 13.5	PG 16	24.0	19.0	6.5	1.34	100
600507	EW PG 13.5/PG 21	PG 13.5	PG 12	30.0	21.0	6.5	2.15	50
600508	EW PG 16/PG 21	PG 16	PG 21	30.0	21.0	6.5	2.44	50
600510	EW PG 21/PG 29	PG 21	PG 29	39.0	23.0	7.0	3.60	50
600511	EW PG 29/PG 36	PG 29	PG 36	50.0	27.5	8.0	7.44	50
600512	EW PG 36/PG 42	PG 36	PG 42	57.0	31.0	9.0	9.20	10
600513	EW PG 42/PG 48	PG 42	PG 48	64.0	33.0	10.0	14.40	10

Cable fittings and accessories

Metal accessory blank plug BLMS

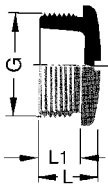


Properties

- Blank plug according to DIN 46320

Design

- Material Brass nickel-plated



Part-No.	Type	G	L mm	L 1 mm	weight approx. kg/100 piece	PU piece
BLMS metric						
600090	BLMS M 12	M 12x1.5	7.5	5.0	0.38	100
600091	BLMS M 16	M 16x1.5	8.0	6.0	0.55	100
600092	BLMS M 20	M 20x1.5	9.5	6.0	0.91	100
600093	BLMS M 25	M 25x1.5	11.0	7.0	1.56	100
600094	BLMS M 32	M 32x1.5	12.0	8.0	2.50	50
600095	BLMS M 40	M 40x1.5	13.0	8.0	3.96	50
600096	BLMS M 50	M 50x1.5	15.0	9.0	7.90	25
600097	BLMS M 63	M 63x1.5	16.0	10.0	10.19	10
BLMS metr. with O ring						
600201	BLMS M 12	M 12x1.5	7.5	5.0	0.32	100
600202	BLMS M 16	M 16x1.5	8.0	5.0	0.82	100
600203	BLMS M 20	M 20x1.5	9.5	6.0	0.87	100
600204	BLMS M 25	M 25x1.5	11.0	7.0	1.57	100
600205	BLMS M 32	M 32x1.5	12.0	8.0	2.42	50
600206	BLMS M 40	M 40x1.5	13.0	8.0	3.90	50
600207	BLMS M 50	M 50x1.5	15.0	9.0	7.25	25
600208	BLMS M 63	M 63x1.5	16.0	10.0	12.03	10
BLMS PG						
600590	BLMS PG 7	PG 7	8.0	5.0	0.34	100
600591	BLMS PG 9	PG 9	9.0	6.0	0.53	100
600592	BLMS PG 11	PG 11	9.0	6.0	0.73	100
600593	BLMS PG 13.5	PG 13.5	9.5	6.5	0.86	100
600594	BLMS PG 16	PG 16	9.5	6.5	1.13	100
600595	BLMS PG 21	PG 21	11.0	7.0	2.06	50
600596	BLMS PG 29	PG 29	12.0	8.0	3.78	25
600597	BLMS PG 36	PG 36	15.0	9.0	8.10	25

Cable fittings and accessories

Plastic and metal accessories multiple sealing insert MFDE



Application

- For retroactive installation in our cable fittings Type Top T in plastic and brass, if necessary these are to be drilled yourself depending on needs
- PG 11 suitable for M 16
PG 13.5 suitable for M 20
PG 16 suitable for M 25
PG 21 suitable for M 32

Properties

- Multiple sealing insert for two or more cables in a fitting

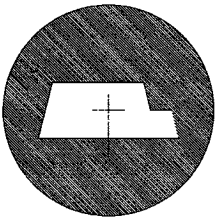
Design

- Material TPE

Part-No.	Type	Outer-Ø mm	Number of cables x Ø mm	weight approx. kg/100 piece	PU piece
MFDE PG					
600626	MFDE PG 9	10.0	2 x 3.0	0.57	100
600627	MFDE PG 9	10.0	4 x 3.0	0.46	100
600541	MFDE PG 9	10.0	0 x 0.0	0.70	100
600628	MFDE PG 11	13.0	2 x 4.0	1.00	100
600629	MFDE PG 11	13.0	2 x 4.5	0.80	100
600635	MFDE PG 11	13.0	3 x 4.0	0.10	100
600636	MFDE PG 11	13.0	3 x 5.0	0.70	100
600542	MFDE PG 11	13.0	0 x 0.0	0.11	100
600638	MFDE PG 13.5	15.0	2 x 4.5	1.32	100
600639	MFDE PG 13.5	15.0	2 x 5.0	1.20	100
600640	MFDE PG 13.5	15.0	2 x 6.0	1.20	100
600637	MFDE PG 13.5	15.0	3 x 4.0	1.40	100
600630	MFDE PG 13.5	15.0	3 x 5.0	1.20	100
600543	MFDE PG 13.5	15.0	0 x 0.0	1.60	100
600641	MFDE PG 16	17.0	2 x 4.0	2.00	100
600644	MFDE PG 16	17.0	2 x 6.0	1.78	100
600631	MFDE PG 16	17.0	3 x 4.0	1.92	100
600643	MFDE PG 16	17.0	3 x 5.0	1.60	100
600646	MFDE PG 16	17.0	4 x 6.0	1.20	100
600633	MFDE PG 16	17.0	5 x 4.0	1.62	100
600544	MFDE PG 16	17.0	0 x 0.0	2.30	100
600645	MFDE PG 16	17.0	3 x 6.0	1.00	100
600647	MFDE PG 16	17.0	3 x 6.5	1.20	100
600642	MFDE PG 16	17.0	4 x 4.0	1.73	100
600632	MFDE PG 16	17.0	4 x 5.0	1.20	100
600648	MFDE PG 21	22.0	2 x 7.0	3.60	100
600651	MFDE PG 21	22.0	2 x 8.0	3.20	100
600653	MFDE PG 21	22.0	2 x 9.0	3.20	100
600649	MFDE PG 21	22.0	3 x 7.0	3.00	100
600652	MFDE PG 21	22.0	3 x 8.0	2.65	100
600634	MFDE PG 21	22.0	4 x 7.0	2.60	100
600545	MFDE PG 21	22.0	0 x 0.0	5.60	100
600656	MFDE PG 29	29.5	5 x 8.5	6.00	100
600654	MFDE PG 29	29.5	6 x 5.0	7.70	100
600655	MFDE PG 29	29.5	8 x 5.0	7.40	100
600546	MFDE PG 29	29.5	0 x 0.0	9.80	100

Cable fittings and accessories

Plastic and metal accessory sealing insert ASI DE



Application

- For retroactive installation of our cable fittings
- **Cable dimensions:** 4.0 mm x 10.0 mm +/- 0.2 mm
- **Suitable for installation with the following types:**
 - TOP TP PG 13.5
 - TOP TP M 20
 - TOP T PG 13.5
 - TOP T M 20

Properties

- Seal insert for ASI bus cables

Design

- Material TPE

Part-No.	Type	Outer-Ø mm	weight approx. kg/100 piece	PU piece
ASI DE				
600120	ASI DE PG 13.5	14.8	0.15	1

Cable conduit - Technical data

General

The cable connections between fixed and moving parts are the weak points in machine and plant engineering and construction. They are (among others) supports, boring carriages, spreader bars, lifting carriages and grippers. The tightly-sitting single conductors have no freedom of movement whatsoever when the cable bends. They are subject to high and strong alternating tensile loading – especially for multiple-conductor control cables and conductor breakage is inevitable at the peripheral equipment. The results are costly standstill periods, expensive repairs and production downtimes for the user as well as a loss of image for the machine manufacturer. Because the machines are only as reliable as the supply cables, security should be planned for in advance: with LÜTZE cable conduits and the matching fittings.

Advantages of cable conduit compared with cables

- The single conductors have enough play. They can move freely against each other. This prevents strong alternating tensile loading when bending.
- The flexible conduit is populated with conductors according to requirements– in the required quantity with the necessary cross section.
- It can be retrofitted without difficulties.
- The connections offer secure protection against fluids and are can handle tension loads.

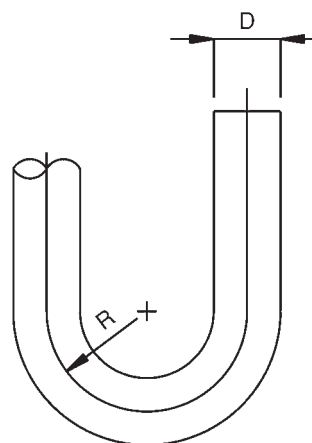
LÜTZE cable conduits from soft PVC and LÜTZE fittings have been proven thousands of times in machine and device construction. With their added reinforcement (hard PVC spiral, steel wire braiding), they are suitable for practically all conditions and every application case. The combination of LÜTZE cable conduits and LÜTZE fittings guarantees extremely simple and time-saving installation.

Technical data for cable conduit

CONDUFLEX	PVC
CONDUFIX	Polyamide
Breaking elongation at 20 °C	350 %
Tensile strength	2500 N/cm ²
Dielectric constant	approx. 3
Dielectric strength: approx.	20 kV/mm

Technical data for fittings and accessories

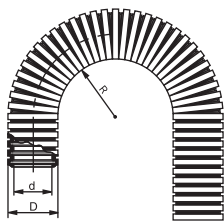
Turning parts:	MS 58, nickel-plated
Fitting CFK:	Ultramid®, grey, oil- and benzine-resistant, shock-resistant, temperature-resistant from – 20 °C to + 110 °C
Chuck cone:	Makrolon, grey
Hose connection:	shock-resistant, temperature-resistant from – 30 °C to + 130 °C
O-Rings	Perbunan®, oil- and benzine-resistant



Dimension diagram for the specification of the smallest bending radius

Cable conduits and conduit fittings

Cable conduit Condufix OS PA, standard style



- Free from halogen, phosphorus, cadmium
- Resistant to fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/23, 24434066(7)-21-
- UL file No.: E 22 59 13

Technical data

Temperature range	-40 °C to +105 °C temporary 150 °C
Filament control	850 °C IEC 60695
Oxygen index	>25 % EN ISO 4589
Fire performance	V2 UL94

Design

- Polyamid 6, especially modified
- Colour black

Application

- Light up to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets and moving machine parts.

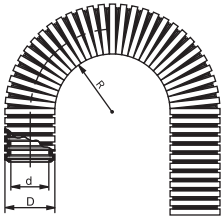
Properties

- Flexible protective conduit, parallel corrugation, special shape for inclusion of an O-ring for high degree of protection in conjunction with Condufix fittings
- Heat stabilized, no flame propagation

Part-No.	Approvals	NW	Capacity N	d mm	D mm	Minimum bending radius (fixed)	Weight kg/100 m	PU M
black								
272160		7	350	6.2	10.0	15	2.1	50
272161	2	10	350	9.6	13.0	19	2.8	50
272162	2	12	350	12.0	15.8	27	3.7	50
272163	2	17	350	16.5	21.2	39	6.2	50
272164	2	23	350	22.3	28.5	46	10.0	50
272165	2	29	350	28.2	34.5	53	13.5	50
272166	2	36	350	36.0	42.5	64	16.5	30
272167	2	48	350	47.1	54.5	73	23.5	30
272168		70	250					
272169		95	250					

Cable conduits and conduit fittings

Cable conduit Condufix OR PA, robot style



Properties

- Flexible protective conduit, parallel corrugation, special shape for inclusion of an O-ring for high degree of protection in conjunction with Condufix fittings
- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/23, 14524066(7)-21-

Technical data

Temperature range	-45 °C to +90 °C temporary 110 °C
Filament control	750 °C IEC 60695
Oxygen index	>24 % EN ISO 4589
Fire performance	HB UL94

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Shipbuilding and railroad construction / rail transportation technology, vehicle manufacturing as well as control cabinets and especially flexible machine parts

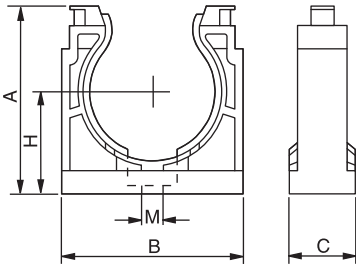
Design

- Polyamid 12, especially modified
- Colour black

Part-No.	NW	d mm	D mm	Minimum bending radius (fixed)	Minimum bending radius (moving)	Weight kg/100 m	PU M
black							
272210	7	6.5	10.0	20	45	2.23	50
272211	10	9.5	13.0	29	59	2.81	50
272212	12	12.0	15.8	32	72	3.79	50
272213	17	16.4	21.2	40	89	6.18	50
272214	23	22.6	28.5	50	116	10.03	50
272215	29	28.1	34.5	68	138	13.52	50
272216	36	36.0	42.5	79	199	16.78	30
272217	48	47.5	54.5	98	228	12.53	30

Cable conduits and cable fittings

Cable conduit-retainer Condufix OH PA



Application

- For fast and secure mounting of Condufix protective conduit

Properties

- The integrated bar fixes the protective conduit axially, thus allowing the protective conduit to rotate within its own axis within the holder
- With collet for cable ties for heavy suspended load
- Impact-resistant, no flame propagation
- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalies

Technical data

Temperature range	-30 °C to +105 °C temporary 150 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

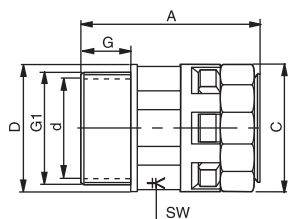
Design

- Polyamid 6, especially modified
- Colour black

Part-No.	NW	A mm	B mm	C mm	H mm	M mm	weight approx. kg/100 piece	PU piece	Cable tie Article number
black									
272240	7	20.0	17.0	20.0	12.0	M 4	0.22	100	680105
272241	10	23.0	21.0	20.0	14.0	M 5	0.28	100	680105
272242	12	26.0	25.0	20.0	15.0	M 5	0.36	100	680105
272243	17	32.0	32.0	20.0	18.0	M 5	0.58	100	680105
272244	23	41.0	40.0	20.0	23.0	M 6	0.94	50	680108
272245	29	47.0	46.0	20.0	26.0	M 6	1.08	30	680108
272246	36	57.0	56.0	20.0	32.0	M 6	1.54	20	680108
272247	48	70.0	70.0	20.0	39.0	M 6	2.10	10	680108

Cable conduits and conduit fittings

Protective conduit fitting Condufix OG PA Straight design



- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/2, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost

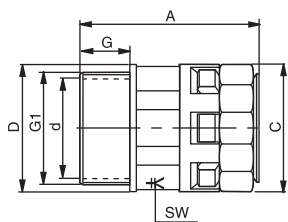
Design

- Polyamid 6, especially modified
- Colour black

Part-No.	Approvals	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU piece
metric											
272280		7	M 12x1.5	6.5	35.0	19.0	17.0	15	11	0.46	100
272281	2	10	M 16x1.5	10.0	37.0	21.0	21.0	18	11	0.60	100
272282	2	12	M 16x1.5	10.0	37.0	26.0	25.0	20	11	0.76	100
272283	2	12	M 20x1.5	14.0	37.0	26.0	25.0	20	11	0.78	100
272284	2	17	M 20x1.5	14.5	44.0	31.0	30.0	27	11	1.24	100
272285	2	17	M 25x1.5	18.5	45.0	31.0	34.0	27	12	1.35	100
272286	2	23	M 25x1.5	18.5	48.0	37.0	37.0	34	12	1.75	50
272287	2	23	M 32x1.5	25.5	51.0	37.0	42.0	34	15	1.96	50
272288	2	29	M 32x1.5	25.5	52.0	46.0	46.0	42	15	2.86	30
272289	2	29	M 40x1.5	32.0	56.0	46.0	52.0	42	19	3.24	30
272290	2	36	M 40x1.5	32.0	60.0	54.0	54.0	50	19	4.22	20
272291	2	36	M 50x1.5	42.0	60.0	54.0	62.0	50	19	4.59	20
272292	2	48	M 50x1.5	42.0	61.0	69.0	69.0	66	19	6.69	10
272293	2	48	M 63x1.5	54.0	61.0	69.0	75.0	66	19	7.27	10

Cable conduits and conduit fittings

Protective conduit fitting Condufix OG PA Straight design



- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/2, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost

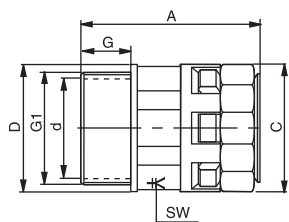
Design

- Polyamid 6, especially modified
- Colour black

Part-No.	Approvals	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU piece
PG											
272320		7	PG 7	8.0	35.0	19.0	17.0	15	11	0.47	100
272321	2	10	PG 7	8.0	37.0	21.0	21.0	18	11	0.56	50
272322	2	10	PG 9	10.3	37.0	21.0	21.0	18	11	0.58	100
272323	2	12	PG 9	10.3	37.0	26.0	25.0	20	11	0.75	50
272324	2	12	PG 11	14.0	37.0	26.0	25.0	20	11	0.75	100
272325	2	12	PG 13.5	14.0	37.0	26.0	25.0	20	11	0.81	50
272326	2	17	PG 13.5	14.0	44.0	31.0	28.0	27	11	1.27	100
272327	2	17	PG 16	17.0	44.0	31.0	29.0	27	11.5	1.25	100
272328	2	23	PG 21	22.0	48.0	37.0	36.0	34	12.5	1.79	50
272329	2	29	PG 29	30.0	49.0	46.0	46.0	42	12.5	2.89	30
272330	2	36	PG 36	37.5	55.0	54.0	56.0	50	14	4.29	20
272331	2	48	PG 48	50.0	56.0	69.0	69.0	66	14	6.74	10

Cable conduits and conduit fittings

Protective conduit fitting Condufix OG PM Straight design with metal threads



- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost

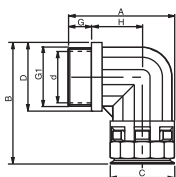
Design

- Polyamid 6, especially modified
- Colour black

Part-No.	Colour	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU piece
metric											
272720	black	7	M 12x1.5	6.6	43.0	18.0	20.0	15	10	1.50	50
272721	black	10	M 16x1.5	10.3	43.0	21.0	24.0	18	10	1.98	50
272722	black	12	M 16x1.5	10.3	43.0	25.0	25.0	20	10	2.14	50
272723	black	12	M 20x1.5	14.5	43.0	25.0	29.0	20	10	2.53	50
272724	black	17	M 20x1.5	14.5	47.0	30.0	29.0	27	10	2.88	30
272725	black	17	M 25x1.5	18.8	49.0	30.0	35.0	27	11	3.70	30
272726	black	23	M 25x1.5	18.8	55.0	36.0	35.0	34	11	4.08	30
272727	black	23	M 32x1.5	25.8	57.0	36.0	43.0	34	13	5.30	30
272728	black	29	M 32x1.5	25.8	56.0	44.0	43.0	42	13	6.06	20
272729	black	29	M 40x1.5	32.5	56.0	44.0	54.0	42	13	9.00	20
272730	black	36	M 40x1.5	32.5	61.0	52.0	55.0	50	13	10.33	10
272731	black	36	M 50x1.5	41.1	64.0	52.0	67.0	50	14	13.60	10
272732	black	48	M 50x1.5	42.0	62.0	69.0	67.0	66	14	15.92	10
272733	black	48	M 63x1.5	53.4	62.0	69.0	76.0	66	14	17.18	10

Cable conduits and conduit fittings

Protective conduit fitting Condufix OW PA 90°-angle design



Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost
- Heat stabilized
- Free from halogen, phosphorus, cadmium

- Resistant to against fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/2/3, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

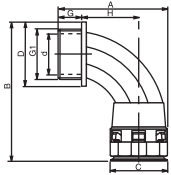
Design

- Polyamid 6, especially modified
- Colour black

Part-No.	NW	G1	d mm	A mm	B mm	C mm	D mm	H mm	G mm	weight approx. kg/100 piece	PU piece
metric											
272370	10	M 16x1.5	10.0	35.0	42.0	21.0	21.0	11.0	11	0.89	50
272371	12	M 16x1.5	10.5	39.0	44.0	25.0	23.0	15.0	11	1.37	50
272372	12	M 20x1.5	12.3	39.0	45.0	25.0	26.0	15.0	11	1.33	50
272373	17	M 20x1.5	14.5	45.0	58.0	30.0	30.0	18.0	11	2.24	50
272374	23	M 25x1.5	18.5	53.0	66.0	36.0	37.0	23.0	12	3.42	30
272375	29	M 32x1.5	25.5	66.0	76.0	45.0	46.0	27.0	15	5.70	20
272376	36	M 40x1.5	32.0	79.0	89.0	54.0	55.0	33.0	19	9.30	10
272377	48	M 50x1.5	42.0	92.0	103.0	68.0	69.0	39.0	19	15.32	10
PG											
272390	10	PG 9	10.3	35.0	42.0	21.0	21.0	11.0	11.5	0.87	50
272391	12	PG 11	14.0	39.0	45.0	25.0	25.0	15.0	11.5	1.22	50
272392	17	PG 13.5	14.0	45.0	56.0	30.0	27.0	18.0	11.5	2.42	50
272393	17	PG 16	17.0	45.0	57.0	30.0	29.0	18.0	11.5	2.21	50
272394	23	PG 21	22.0	53.0	65.0	37.0	36.0	23.0	12.5	3.17	30
272395	29	PG 29	30.0	65.0	76.0	45.0	46.0	28.0	12.5	5.16	20
272396	36	PG 36	37.5	79.0	89.0	54.0	56.0	33.0	14	8.25	10
272397	48	PG 48	50.0	92.0	103.0	68.0	69.0	39.0	14	12.26	10

Cable conduits and conduit fittings

Protective conduit fitting Condufix OB PA 90°-arc angle design



- Resistant to against fuels, mineral oils, greases, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Design

- Polyamid 6, especially modified
- Colour black

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

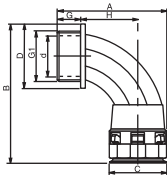
Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost
- Heat stabilized
- Free from halogen, phosphorus, cadmium

Part-No.	NW	G1	d mm	A mm	B mm	C mm	D mm	H mm	G mm	weight approx. kg/100 piece	PU piece
metric											
272424	17	M 25x1.5	17.5	52.0	75.0	28.0	34.0	26.0	12	1.88	50
272425	23	M 32x1.5	25.7	69.0	89.0	36.0	40.0	36.0	15	3.25	30
272426	29	M 40x1.5	32.3	81.0	101.0	43.0	50.0	40.0	19	5.14	10
272427	36	M 50x1.5	40.0	98.0	124.0	51.0	60.0	53.0	19	8.53	10
272428	48	M 63x1.5	53.6	106.0	141.0	66.0	75.0	54.0	19	12.86	5
PG											
272444	17	PG 16	14.7	51.0	72.0	28.0	30.0	25.5	11.5	1.74	50
272445	23	PG 21	18.5	65.0	84.0	36.0	36.0	36.0	11	2.99	30
272446	29	PG 29	25.5	75.0	99.0	43.0	46.0	39.5	13	4.76	10
272447	36	PG 36	32.0	92.0	120.0	51.0	56.0	53.5	13	7.88	10
272448	48	PG 48	42.0	102.0	135.0	66.0	69.0	56.0	13	11.96	5

Cable conduits and conduit fittings

Protective conduit fitting Condufix OB PM 90°-arch angle design with metal threads



- Resistant to against fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost.
- Heat stabilized
- Free from halogen, phosphorus, cadmium

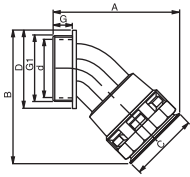
Design

- Polyamid 6, especially modified, thread MS58, nickel plated
- Colour black

Part-No.	NW	G1	d mm	A mm	B mm	C mm	D mm	H mm	G mm	weight approx. kg/100 piece	PU piece
metric											
272824	17	M 25x1.5	16.3	56.0	76.0	28.0	35.0	30.0	11	4.34	50
272825	23	M 32x1.5	23.0	72.0	88.0	36.0	44.0	41.0	13	6.80	30
272826	29	M 40x1.5	30.5	81.0	104.0	43.0	55.0	46.0	13	11.20	10
272827	36	M 50x1.5	37.3	100.0	127.0	51.0	67.0	59.0	14	18.40	10
272828	48	M 63x1.5	52.1	110.0	141.0	66.0	76.0	63.0	14	23.00	5

Cable conduits and conduit fittings

Protective conduit fitting Condufix OA PA 45°-angle design



- Resistant to against fuels, mineral oils, greases, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Design

- Polyamid 6, especially modified
- Colour black

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

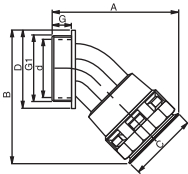
Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost.
- Heat stabilized
- Free from halogen, phosphorus, cadmium

Part-No.	NW	G1	d mm	A mm	B mm	C mm	D mm	G mm	weight approx. kg/100 piece	PU piece
metric										
272573	12	M 16x1.5	10.5	50.0	45.0	24.0	23.0	11	0.85	50
272574	17	M 20x1.5	11.5	60.0	56.0	29.0	27.0	11	1.42	50
272575	23	M 25x1.5	18.5	70.0	67.0	37.0	34.0	12	2.14	30
272576	29	M 32x1.5	25.7	80.0	76.0	45.0	41.0	15	3.52	10
272577	36	M 40x1.5	32.0	96.0	90.0	53.0	50.0	19	5.33	10
272578	48	M 50x1.5	42.0	109.0	106.0	67.0	60.0	19	7.98	5

Cable conduits and conduit fittings

Protective conduit fitting Condufix OA PM 45°-angle design with metal threads



- Resistant to against fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Design

- Polyamid 6, especially modified, thread MS58, nickel plated
- Colour black

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

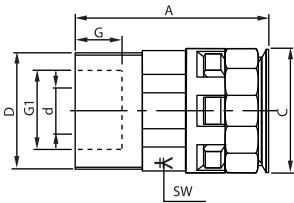
Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost.
- Heat stabilized
- Free from halogen, phosphorus, cadmium

Part-No.	NW	G1	d mm	A mm	B mm	C mm	D mm	G mm	weight approx. kg/100 piece	PU piece
metric										
272773	12	M 16x1.5	10.5	53.0	45.0	24.0	24.0	10	2.16	50
272774	17	M 20x1.5	11.5	63.0	57.0	29.0	29.0	10	3.02	50
272775	23	M 25x1.5	18.5	74.0	67.0	37.0	35.0	11	4.44	30
272776	29	M 32x1.5	25.7	82.0	72.0	45.0	43.0	13	6.78	10
272777	36	M 40x1.5	32.0	97.0	93.0	53.0	56.0	13	11.08	10
272778	48	M 50x1.5	42.0	111.0	110.0	67.0	67.0	14	17.56	5

Cable conduits and conduit fittings

Protective conduit fitting Condufix OI PM Straight design with metal thread



- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Design

- Polyamid 6, especially modified, thread MS58, nickel plated
- Colour black

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

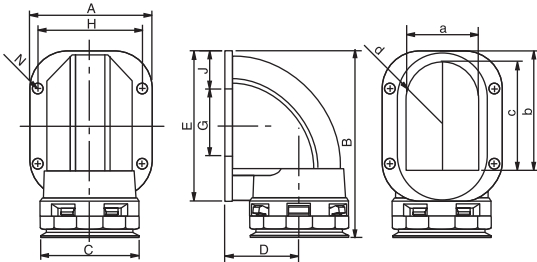
Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost.
- Heat stabilized

Part-No.	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU piece
metric										
272922	10	M 16x1.5	9.2	41.0	21.0	25.0	18	9	1.52	50
272924	17	M 20x1.5	13.7	46.0	31.0	27.0	27	11.5	2.76	50
272923	12	M 20x1.5	13.7	42.0	25.0	27.0	20	11.5	2.50	50
272921	17	M 25x1.5	16.5	46.0	31.0	33.0	27	11.5	3.50	50
272929	23	M 32x1.5	21.4	56.0	37.0	39.0	34	11.5	5.00	30
272930	29	M 40x1.5	27.3	58.0	46.0	49.0	42	13	8.50	10

Cable conduits and conduit fittings

Protective conduit fitting Condufix OF PA 90°-flange angle design



Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

- Fixes the ends of the protective conduit in the entering guides for cables on control cabinets, control units etc. Very fast and simple

- installation, the protective conduit is simply inserted into the fitting as far as it will go
- The product has no parts that can get lost.
- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Filament control	960 °C IEC 60695
Temperature range	-25 °C to +105 °C
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

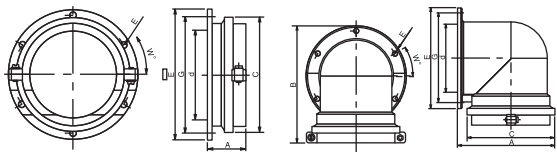
Design

- Polyamid 6, especially modified
- Colour black

Part-No.	NW	A mm	B mm	C mm	D mm	E mm	H mm	G mm	J mm	mm	b mm	c mm	d mm	N mm	weight approx. kg/100 piece	PU piece
flange																
272644	17	44.0	67.0	29.0	24.0	48.4	34.3		24	17.0	33.0	25.0	8.0	5.5	1.82	50
272645	23	53.0	81.0	37.0	42.0	27.0	43.2		21	24.0	42.0	37.0	12.0	5.5	2.76	30
272646	29	60.0	87.0	45.0	32.0	66.0	48.2	24.0	21	30.0	49.0	45.0	15.0	6.5	4.76	10
272647	36	70.0	103.0	53.0	39.0	75.6	57.2	30.0	24	36.5	60.0	54.0	18.0	6.5	6.90	10
272648	48	80.0	107.0	67.0	45.0	81.0	68.2	54.1	12	47.0	61.0	55.0	24.0	6.5	11.10	5

Cable conduits and conduit fittings

Protective conduit fitting Condufix OF PA for NW 70 and NW 95 Straight and 90°-flange angle design



Protection class	IP IP 54
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Design

- Polyamid 6, especially modified
- Colour black

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

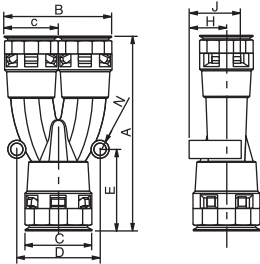
- Screw-type conduit to mount conduit onto cabinets, control devices, etc
- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to fuels, mineral oils, greases, alkalkies
- Classification according EN 61386-1/23, -43-066(7)-31

Technical data

Part-No.	NW	d mm	A mm	B mm	C mm	E mm	G mm	W °	weight approx. kg/100 piece	PU piece
straight										
272278	70	71.0	42.0		101.0	119	105	30	10.84	5
272279	95	99.0	43.0		130.0	146	132	30	15.54	5
90° flange elbow										
272649	70	71.0	111.0	142.0	101.0	119	105	30	19.50	5
272650	95	99.0	143.0	99.0	130.0	146	132	30	33.50	5

Cable conduits and conduit fittings

Protective conduit splitter Condufix OY PA, Y design



- Particularly rapid and safe assembly: the protective conduit is simply pushed into the conduit splitter as far as it will go. The product has no parts that can get lost.
- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Design

- Polyamid 6, especially modified
- Colour black

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

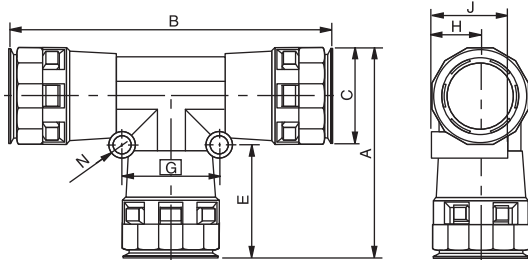
Properties

- To reduce one protective conduit size into two small sizes

Part-No.	NW	A mm	B mm	C mm	c mm	D mm	E mm	N mm	H mm	J mm	weight ap- prox. kg/100 piece	PU piece
272684	171212	89.0	47.0	18.00	14.0	34.0	37	5.0	9.0	24	2.70	20
272685	231717	106.0	58.0	24.00	18.0	45.0	44	6.0	12.0	28	4.38	20
272686	292323	118.0	74.0	30.00	24.0	52.0	45	6.0	15.0	35	6.86	10
272687	362929	141.0	89.0	38.00	30.0	60.0	52	6.0	19.0	41	11.00	5
272688	483636	153.0	106.0	49.00	38.0	76.0	54	7.0	25.0	50	16.76	5

Cable conduits and conduit fittings

Protective conduit splitter Condufix OT PA, T design



- Particularly rapid and safe assembly: the protective conduit is simply pushed into the conduit splitter as far as it will go. The product has no parts that can get lost.
- Heat stabilized
- Free from halogen, phosphorus, cadmium
- Resistant to against fuels, mineral oils, greases, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

Protection class	IP 66 (Standard) resp. IP 68 (20m water column) in conjunction with an O-ring in the protective conduit profile (insert area last groove) and flat seal at threads
Temperature range	-25 °C to +105 °C
Filament control	960 °C IEC 60695
Oxygen index	>30 % EN ISO 4589
Fire performance	V2 UL94

Application

- Robotics, light to heavy machine and plant construction
- Machines, apparatuses, devices
- Ship and railroad construction / rail transportation technology, vehicle construction as well as control cabinets

Properties

- To split one protective conduit size into two identical sizes

Design

- Polyamid 6, especially modified
- Colour black

Part-No.	NW	A mm	B mm	C mm	E mm	G mm	H mm	J mm	N mm	weight approx. kg/100 piece	PU piece
272661	101010	46.0	72.0	20.00	27	19	10.0	18	5.0	1.44	20
272662	121212	52.0	81.0	23.00	30	20	12.0	20	5.0	2.08	20
272663	171717	63.0	96.0	29.00	35	28	14.0	25	6.0	3.37	20
272664	232323	76.0	117.0	37.00	40	36	18.0	30	6.0	5.20	10
272665	292929	85.0	128.0	45.00	41	41	22.0	36	6.0	8.42	5
272666	363636	97.0	144.0	53.00	46	50	26.0	44	7.0	11.52	5