



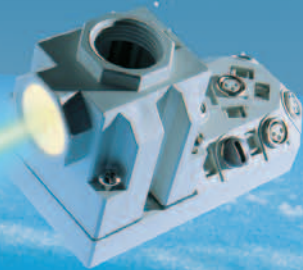
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CONDUFIX

Cable protection system

Protective conduits
Connection fittings
Connection manifold
90°-flange
System holder
Cable assemblies

Reaching new heights in automation



Contents:

- CONDUFIX - Advantages and design	Page 4 - 5
- Protective conduits	Page 6 - 9
- Conduit holder	Page 10 - 11
- Conduit glands	
- straight design	Page 12 - 15
- 90° angle design	Page 16 - 17
- 90° arc angle design	Page 18 - 19
- 45° angle design	Page 20 - 22
- straight design with internal thread	Page 23
- straight design with integrated cable strain relief	Page 24
- 90° flanged elbow design	Page 25
- Conduit manifold	Page 26 - 27
- Seals and O-rings	Page 28 - 29
- Accessories	Page 30 - 32
- Cable and harness assemblies	Page 33
- Declaration of protection class in accordance with EN 60529	Page 34
- Properties of the protective pipes based on DIN EN 61 386-1	Page 35
- Chemical resistance for polyamides	Page 35

Welcome to Lutze

Machine and System Installation Technology

1



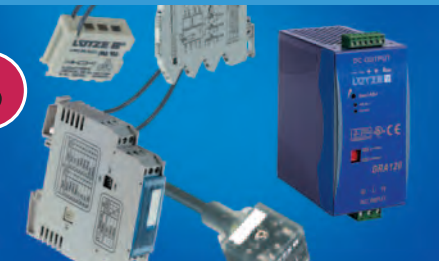
Control cabinet LSC wiring systems

2



Suppression technology, module and interface technology, power supplies

3



Railway engineering and automation

4



We have been developing and manufacturing electronic and electrical engineering solutions for controls and installations for more than 45 years.

Our basic concept as system suppliers, providing a comprehensive and well-matched product range with which we can generate innovative and customized solutions for our customers, has stood the test of time.

The close relationship between product development and customer requirements allows Lutze continuously to improve and develop our products for the various markets.

Lutze systems comply with the highest industrial standards; Lutze solutions mean improvement and innovation.

Our four product groups include components and concepts suitable for almost any control application. For more information on our products, please visit www.lutze.com.



Systematic Technology

CONDUFIX

An innovative patented system for the protection and routing of electrical cables and leads - provides a solution for almost any installation problem.

High mechanical strength and patented special profile:

Flexible, corrugated conduit in specially modified polyamide 6

High pliability due to special profile shape:

Prevents changes in the cross-section. Prevents kinks forming within the minimum bending radius and thus protects cables and leads.

12-edge surfaces for assembly with socket spanners

Releasing ring

Holder cam effective in the full radius of cable glands:

High resistance to pulling out for maximum safety. The conduit is held firmly independent of the direction in which it is pulled. If the tensile force is increased, the retaining force is automatically increased.

Declaration of the nominal width

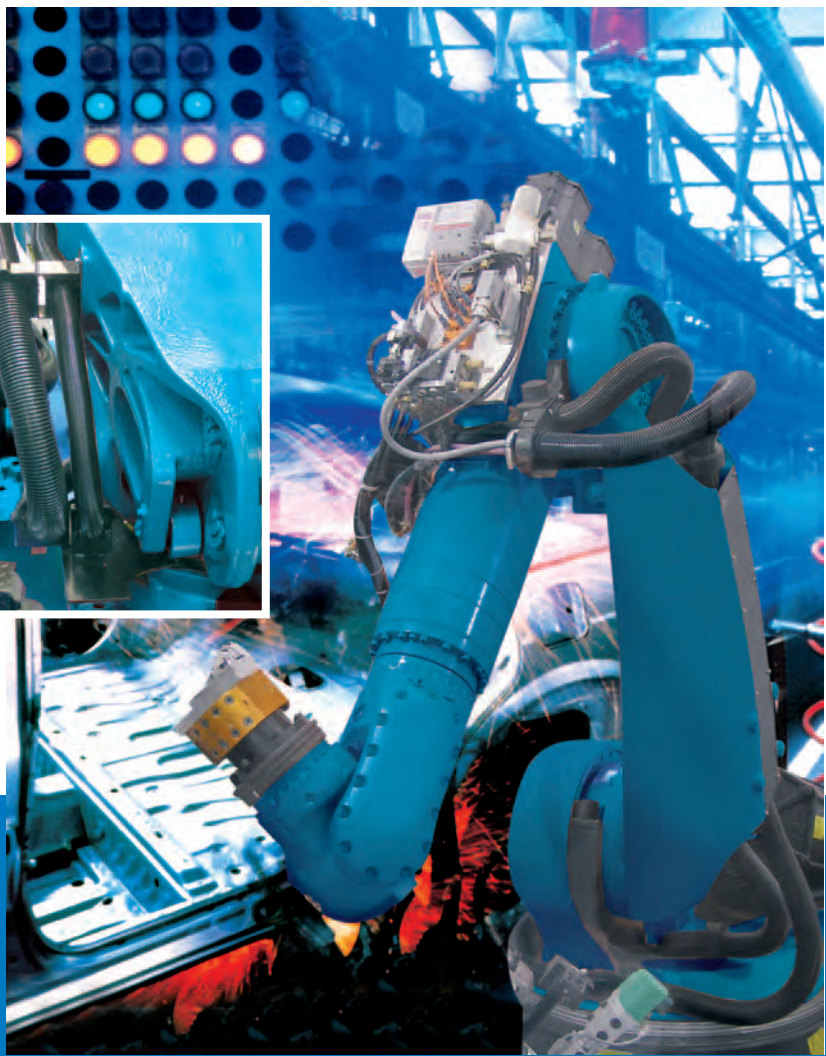
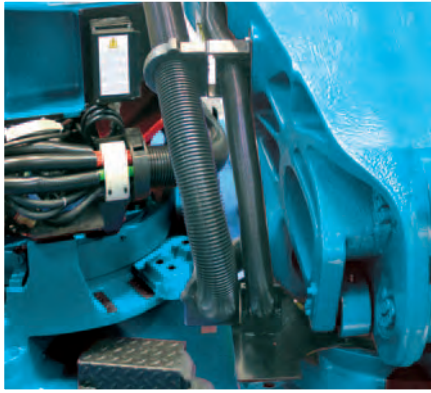
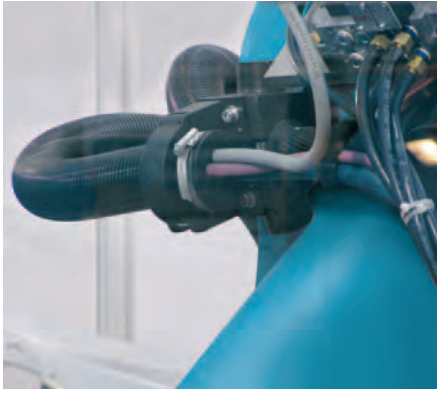
Conical socket for the conduit for protection class IP66

Hexagon wrench area

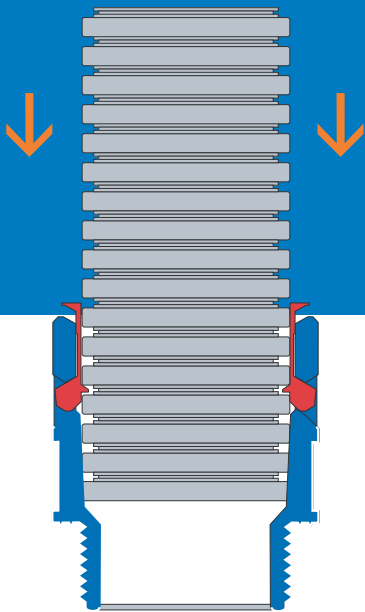
Thread type and size

Use of standardised O-rings for protection class IP68

Wide contact area with integrated sealing rings

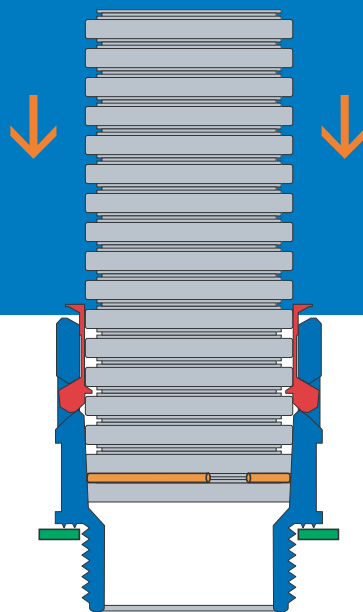


IP66

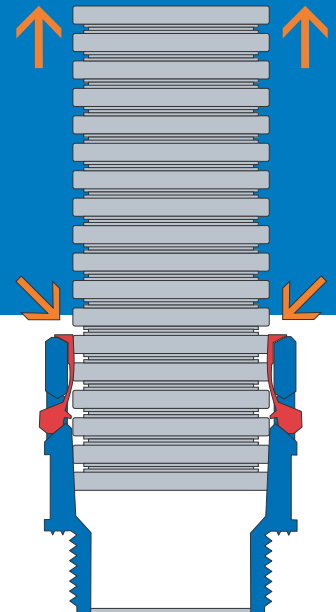


Extremely simple and very quick assembly:
Simply push the protective conduit firmly into the cable gland as far as it will go - that's all there is to it! Protection class IP 66 is provided as standard

IP68



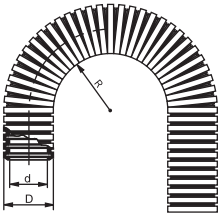
IP 68/IP69K
The simple insertion of an O-ring into the last groove (insert side) on the patented profile of the protective conduit and the insertion of a flat gasket on the thread side of the cable gland increases the protection to class IP 68 and for cleaning purposes to IP 69K at 100 bar water jet pressure



Simple dismantling:
Press the protective conduit into the screw joint, thus allowing the holding cams to move outwards. Hold the retaining ring firmly in this position and pull the protective conduit out of the gland by turning it slightly

Cable conduits and conduit fittings

Cable protective conduit Condufix OL PA, light weight type



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
- Free from halogen, phosphorus, cadmium
- Resistant to fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/2, 14434066(7)-21-
- UL file No.:E 22 59 13

Technical data

Temperature range	-25 °C to 105 °C
Filament control	850 °C CEI 60695
Oxygen index	>25% EN ISO 4589
Burning behaviour	V2 UL94

Application

- Light 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.

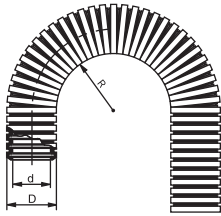
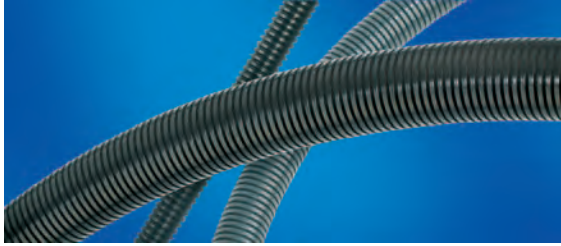
Design

- Polyamid 6, especially modified

Part-No.	Colour	Approvals	NW	d mm	D mm	Minimum bending radius (fixed)	Weight kg/100 m	PU M
grey								
272100	grey		7	6.3	10.0	10	1.81	50
272101	grey	2	10	9.7	13.0	14	2.48	50
272102	grey	2	12	12.2	15.8	22	3.32	50
272103	grey	2	17	16.8	21.2	30	5.59	50
272104	grey	2	23	22.6	28.5	41	9.02	50
272105	grey	2	29	28.3	34.5	48	12.24	50
272106	grey	2	36	36.3	42.5	59	15.23	30
272107	grey	2	48	47.4	54.5	68	21.18	30
272108	grey	2	70	69.1	80.7	160	42.33	10
272109	grey	2	95	91.7	106.0	212	66.04	10
black								
272120	black		7	6.3	10.0	10	1.81	50
272121	black	2	10	9.7	13.0	14	2.48	50
272122	black	2	12	12.2	15.8	22	3.32	50
272123	black	2	17	16.8	21.2	30	5.59	50
272124	black	2	23	22.6	28.5	41	9.02	50
272125	black	2	29	28.3	34.5	48	12.24	50
272126	black	2	36	36.3	42.5	59	15.23	30
272127	black	2	48	47.4	54.5	68	21.18	30
272128	black	2	70	69.1	80.7	160	42.33	10
272129	black	2	95	91.7	106.0	212	66.04	10

Cable conduits and conduit fittings

Cable conduit Condufix OS PA, standard style



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
- 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 CEI 60695
Oxygen index	>25% EN ISO 4589
Burning behaviour	V2 UL94

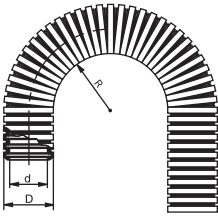
Design

- Polyamid 6, especially modified

Part-No.	Colour	Approvals	NW	d mm	D mm	Minimum bend- ing radius (fixed)	Weight kg/100 m	PU M
grey								
272140	grey		7	6.2	10.0	15	2.05	50
272141	grey	2	10	9.6	13.0	19	2.80	50
272142	grey	2	12	12.0	15.8	27	3.68	50
272143	grey	2	17	16.5	21.2	39	6.21	30
272144	grey	2	23	22.3	28.5	46	10.03	30
272145	grey	2	29	28.2	34.5	53	13.48	30
272146	grey	2	36	36.0	42.5	64	16.48	10
272147	grey	2	48	47.1	54.5	73	23.52	10
black								
272160	black		7	6.2	10.0	15	2.05	50
272161	black	2	10	9.6	13.0	19	2.80	50
272162	black	2	12	12.0	15.8	27	3.68	50
272163	black	2	17	16.5	21.2	39	6.21	30
272164	black	2	23	22.3	28.5	46	10.03	30
272165	black	2	29	28.2	34.5	53	13.48	30
272166	black	2	36	36.0	42.5	64	16.48	10
272167	black	2	48	47.1	54.5	73	23.52	10

Cable conduits and conduit fittings

Cable conduit Condufix OV PA, reinforced 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, no flame propagation
- Free from halogen, phosphorus, cadmium
- Resistant to fuels, mineral oils, greases, alkalies
- Classification according to EN 61386-1/23, 25434066(7)-31-

Technical data

Temperature range	-40°C to +105°C temporary 150°C
Filament control	960 °C CEI 60695
Oxygen index	>27% EN ISO 4589
Burning behaviour	V2 UL94

Application

- Medium 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

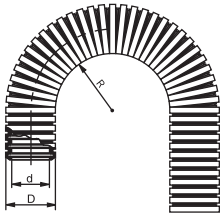
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	d mm	D mm	Minimum bending radius (fixed)	Weight kg/100 m	PU M
grey							
272170	grey	7	5.7	10.0	20	2.82	50
272171	grey	10	9.0	13.0	24	3.61	50
272172	grey	12	11.6	15.8	32	4.68	50
272173	grey	17	14.5	21.2	44	9.03	30
272174	grey	23	21.0	28.5	51	14.02	30
272175	grey	29	26.5	34.5	58	18.04	30
272176	grey	36	35.1	42.5	69	22.99	10
272177	grey	48	46.4	54.5	83	32.03	10
black							
272180	black	7	5.7	10.0	20	2.82	50
272181	black	10	9.0	13.0	24	3.61	50
272182	black	12	11.6	15.8	32	4.68	50
272183	black	17	14.5	21.2	44	9.03	30
272184	black	23	21.0	28.5	51	14.02	30
272185	black	29	26.5	34.5	58	18.04	30
272186	black	36	35.1	42.5	69	22.99	10
272187	black	48	46.4	54.5	83	32.03	10

Cable conduits and conduit fittings

Cable conduit Condufix OR PA, robot style



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

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 CEI 60695
Oxygen index	>24% EN ISO 4589
Burning behaviour	HB UL94

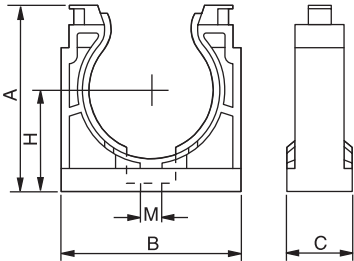
Design

- Polyamid 12, especially modified

Part-No.	Colour	NW	d mm	D mm	Minimum bending radius (fixed)	Minimum bending radius (moving)	Weight kg/100 m	PU M
grey								
272200	grey	7	6.5	10.0	20	45	2.23	50
272201	grey	10	9.5	13.0	29	59	2.81	50
272202	grey	12	12.0	15.8	32	72	3.79	50
272203	grey	17	16.4	21.2	40	89	6.18	30
272204	grey	23	22.6	28.5	50	116	10.03	30
272205	grey	29	28.1	34.5	68	138	13.52	30
272206	grey	36	36.0	42.5	79	199	16.78	10
272207	grey	48	47.5	54.5	98	228	12.53	10
272208	grey	70	67.2	80.0	190	390	46.04	10
272209	grey	95	91.3	106.0	222	497	75.03	10
black								
272210	black	7	6.5	10.0	20	45	2.23	50
272211	black	10	9.5	13.0	29	59	2.81	50
272212	black	12	12.0	15.8	32	72	3.79	50
272213	black	17	16.4	21.2	40	89	6.18	30
272214	black	23	22.6	28.5	50	116	10.03	30
272215	black	29	28.1	34.5	68	138	13.52	30
272216	black	36	36.0	42.5	79	199	16.78	10
272217	black	48	47.5	54.5	98	228	12.53	10
272218	black	70	67.2	80.0	190	390	46.04	10
272219	black	95	91.3	106.0	222	497	75.03	10

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, alkalis

Technical data

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

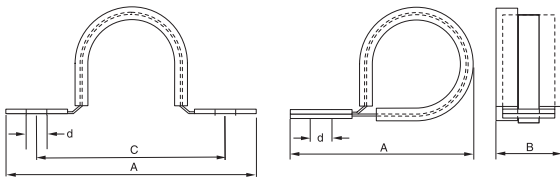
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	A mm	B mm	C mm	H mm	M mm	weight approx. kg/100 piece	PU piece	Cable tie Article number
grey										
272230	grey	7	20.0	17.0	20.0	12.0	M 4	0.22	100	680105
272231	grey	10	23.0	21.0	20.0	14.0	M 5	0.28	100	680105
272232	grey	12	26.0	25.0	20.0	15.0	M 5	0.36	100	680105
272233	grey	17	32.0	32.0	20.0	18.0	M 5	0.58	100	680105
272234	grey	23	41.0	40.0	20.0	23.0	M 6	0.94	50	680108
272235	grey	29	47.0	46.0	20.0	26.0	M 6	1.08	30	680108
272236	grey	36	57.0	56.0	20.0	32.0	M 6	1.54	20	680108
272237	grey	48	70.0	70.0	20.0	39.0	M 6	2.10	10	680108
black										
272240	black	7	20.0	17.0	20.0	12.0	M 4	0.22	100	680105
272241	black	10	23.0	21.0	20.0	14.0	M 5	0.28	100	680105
272242	black	12	26.0	25.0	20.0	15.0	M 5	0.36	100	680105
272243	black	17	32.0	32.0	20.0	18.0	M 5	0.58	100	680105
272244	black	23	41.0	40.0	20.0	23.0	M 6	0.94	50	680108
272245	black	29	47.0	46.0	20.0	26.0	M 6	1.08	30	680108
272246	black	36	57.0	56.0	20.0	32.0	M 6	1.54	20	680108
272247	black	48	70.0	70.0	20.0	39.0	M 6	2.10	10	680108

Cable conduits and cable fittings

Cable conduit-retainer Condufix OH St



Application

- For fast and secure mounting of Condufix protective conduit

Properties

- The integrated rubber profile protects and holds the conduit axially
- Impact-proof, highly flame-resistant
- Resistant to against fuels, mineral oils, greases, alkalies
- Rubber profile Shore hardness A 70 ±5

Technical data

Temperature range -35°C to +100°C
 temporary 130°C

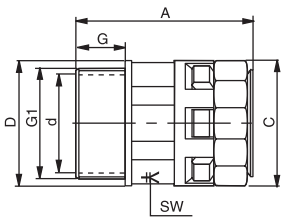
Design

- Zinc-plated, strong reinforced strip ends
- Elastomer profile

Part-No.	NW	d mm	A mm	B mm	C mm	weight approx. kg/100 piece	PU piece
Elastomer profile black							
272250	7	5.3	25.0	15.0		0.40	100
272251	10	5.3	27.0	15.0		0.45	100
272252	10	5.3	30.0	15.0		0.40	100
272253	17	5.3	40.0	15.0		0.95	100
272254	23	5.3	48.0	15.0		1.25	50
272255	29	5.3	60.0	15.0		2.30	30
272256	36	5.3	74.0	15.0		2.80	20
272257	48	5.3	86.0	15.0		3.30	20
272258	70	8.4	128.0	25.0	109.00	6.50	1
272259	95	8.4	140.0	25.0	120.00	8.30	1

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, alkalis
- Classification according to EN 61386-1/2, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

Design

- Polyamid 6, especially modified

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

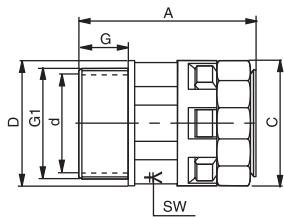
Properties

- 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

Part-No.	Colour	Approvals	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU M
metric												
272260	grey		7	M 12×1,5	6.5	35.0	19.0	17.0	15	11	0.46	100
272261	grey	2	10	M 16×1,5	10.0	37.0	21.0	21.0	18	11	0.60	100
272262	grey	2	12	M 16×1,5	10.0	37.0	26.0	25.0	20	11	0.76	100
272263	grey	2	12	M 20×1,5	14.0	37.0	26.0	25.0	20	11	0.78	100
272264	grey	2	17	M 20×1,5	14.5	44.0	31.0	30.0	27	11	1.24	100
272265	grey	2	17	M 25×1,5	18.5	45.0	31.0	34.0	27	12	1.35	100
272266	grey	2	23	M 25×1,5	18.5	48.0	37.0	37.0	34	12	1.75	50
272267	grey	2	23	M 32×1,5	25.5	51.0	37.0	42.0	34	15	1.96	50
272268	grey	2	29	M 32×1,5	25.5	52.0	46.0	46.0	42	15	2.86	30
272269	grey	2	29	M 40×1,5	32.0	56.0	46.0	52.0	42	19	3.24	30
272270	grey	2	36	M 40×1,5	32.0	60.0	54.0	54.0	50	19	4.22	20
272271	grey	2	36	M 50×1,5	42.0	60.0	54.0	62.0	50	19	4.59	20
272272	grey	2	48	M 50×1,5	42.0	61.0	69.0	69.0	66	19	6.69	10
272273	grey	2	48	M 63×1,5	54.0	61.0	69.0	75.0	66	19	7.27	10
metric												
272280	black		7	M 12×1,5	6.5	35.0	19.0	17.0	15	11	0.46	100
272281	black	2	10	M 16×1,5	10.0	37.0	21.0	21.0	18	11	0.60	100
272282	black	2	12	M 16×1,5	10.0	37.0	26.0	25.0	20	11	0.76	100
272283	black	2	12	M 20×1,5	14.0	37.0	26.0	25.0	20	11	0.78	100
272284	black	2	17	M 20×1,5	14.5	44.0	31.0	30.0	27	11	1.24	100
272285	black	2	17	M 25×1,5	18.5	45.0	31.0	34.0	27	12	1.35	100
272286	black	2	23	M 25×1,5	18.5	48.0	37.0	37.0	34	12	1.75	50
272287	black	2	23	M 32×1,5	25.5	51.0	37.0	42.0	34	15	1.96	50
272288	black	2	29	M 32×1,5	25.5	52.0	46.0	46.0	42	15	2.86	30
272289	black	2	29	M 40×1,5	32.0	56.0	46.0	52.0	42	19	3.24	30
272290	black	2	36	M 40×1,5	32.0	60.0	54.0	54.0	50	19	4.22	20
272291	black	2	36	M 50×1,5	42.0	60.0	54.0	62.0	50	19	4.59	20
272292	black	2	48	M 50×1,5	42.0	61.0	69.0	69.0	66	19	6.69	10
272293	black	2	48	M 63×1,5	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

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

Design

- Polyamid 6, especially modified

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

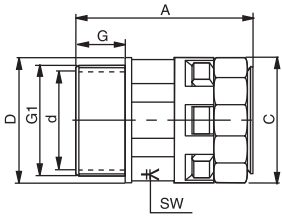
Properties

- 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

Part-No.	Colour	Approvals	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU M
PG												
272300	grey		7	PG 7	8.0	35.0	19.0	17.0	15	11	0.47	100
272301	grey	2	10	PG 7	8.0	37.0	21.0	21.0	18	11	0.56	50
272302	grey	2	10	PG 9	10.3	37.0	21.0	21.0	18	11	0.58	100
272303	grey	2	12	PG 9	10.3	37.0	26.0	25.0	20	11	0.75	50
272304	grey	2	12	PG 11	14.0	37.0	26.0	25.0	20	11	0.75	100
272305	grey	2	12	PG 13,5	14.0	37.0	26.0	25.0	20	11	0.81	50
272306	grey	2	17	PG 13,5	14.0	44.0	31.0	28.0	27	11	1.27	100
272307	grey	2	17	PG 16	17.0	44.0	31.0	29.0	27	11,5	1.25	100
272308	grey	2	23	PG 21	22.0	48.0	37.0	36.0	34	12,5	1.79	50
272309	grey	2	29	PG 29	30.0	49.0	46.0	46.0	42	12,5	2.89	30
272310	grey	2	36	PG 36	37.5	55.0	54.0	56.0	50	14	4.29	20
272311	grey	2	48	PG 48	50.0	56.0	69.0	69.0	66	14	6.74	10
PG												
272320	black		7	PG 7	8.0	35.0	19.0	17.0	15	11	0.47	100
272321	black	2	10	PG 7	8.0	37.0	21.0	21.0	18	11	0.56	50
272322	black	2	10	PG 9	10.3	37.0	21.0	21.0	18	11	0.58	100
272323	black	2	12	PG 9	10.3	37.0	26.0	25.0	20	11	0.75	50
272324	black	2	12	PG 11	14.0	37.0	26.0	25.0	20	11	0.75	100
272325	black	2	12	PG 13,5	14.0	37.0	26.0	25.0	20	11	0.81	50
272326	black	2	17	PG 13,5	14.0	44.0	31.0	28.0	27	11	1.27	100
272327	black	2	17	PG 16	17.0	44.0	31.0	29.0	27	11,5	1.25	100
272328	black	2	23	PG 21	22.0	48.0	37.0	36.0	34	12,5	1.79	50
272329	black	2	29	PG 29	30.0	49.0	46.0	46.0	42	12,5	2.89	30
272330	black	2	36	PG 36	37.5	55.0	54.0	56.0	50	14	4.29	20
272331	black	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

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

Design

- Polyamid 6, especially modified

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

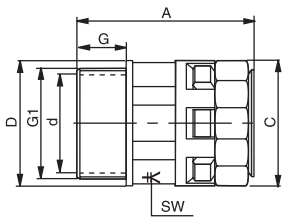
Properties

- 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

Part-No.	Colour	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU M
metric											
272700	grey	7	M 12x1,5	6.6	43.0	18.0	20.0	15	10	1.50	50
272701	grey	10	M 16x1,5	10.3	43.0	21.0	24.0	18	10	1.98	50
272702	grey	12	M 16x1,5	10.3	43.0	25.0	25.0	20	10	2.14	50
272703	grey	12	M 20x1,5	14.5	43.0	25.0	29.0	20	10	2.53	50
272704	grey	17	M 20x1,5	14.5	47.0	30.0	29.0	27	10	2.88	30
272705	grey	17	M 25x1,5	18.8	49.0	30.0	35.0	27	11	3.70	30
272706	grey	23	M 25x1,5	18.8	55.0	36.0	35.0	34	11	4.08	30
272707	grey	23	M 32x1,5	25.8	57.0	36.0	43.0	34	13	5.30	30
272708	grey	29	M 32x1,5	25.8	56.0	44.0	43.0	42	13	6.06	20
272709	grey	29	M 40x1,5	32.5	56.0	44.0	54.0	42	13	9.00	20
272710	grey	36	M 40x1,5	32.5	61.0	52.0	55.0	50	13	10.33	10
272711	grey	36	M 50x1,5	41.1	64.0	52.0	67.0	50	14	13.60	10
272712	grey	48	M 50x1,5	42.0	62.0	69.0	67.0	66	14	15.92	10
272713	grey	48	M 63x1,5	53.4	62.0	69.0	76.0	66	14	17.18	10
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 OG PM Straight design with metal threads



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, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

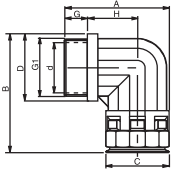
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	G1	d mm	A mm	C mm	D mm	SW mm	G mm	weight approx. kg/100 piece	PU M
PG											
272742	grey	12	PG 11	13.1	45.0	25.0	29.0	20	12	2.52	50
272744	grey	17	PG 16	17.0	50.0	30.0	34.0	27	13	3.60	30
272745	grey	23	PG 21	22.2	58.0	36.0	40.0	34	14	4.60	30
272746	grey	29	PG 29	30.2	59.0	46.0	52.0	42	14	8.72	20
272747	grey	36	PG 36	37.6	67.0	54.0	63.0	50	17	13.72	10
272748	grey	48	PG 48	50.1	68.0	69.0	73.0	66	17	16.76	5
PG											
272752	black	12	PG 11	13.1	45.0	25.0	29.0	20	12	2.52	50
272754	black	17	PG 16	17.0	50.0	30.0	34.0	27	13	3.60	30
272755	black	23	PG 21	22.2	58.0	36.0	40.0	34	14	4.60	30
272756	black	29	PG 29	30.2	59.0	46.0	52.0	42	14	8.72	20
272757	black	36	PG 36	37.6	67.0	54.0	63.0	50	17	13.72	10
272758	black	48	PG 48	50.1	68.0	69.0	73.0	66	17	16.76	5

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

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

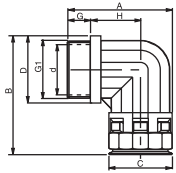
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	G1	d mm	A mm	B mm	C mm	D mm	H mm	G mm	weight approx. kg/100 piece	PU M
metric												
272360	grey	10	M 16x1,5	10.0	35.0	42.0	21.0	21.0	11.0	11	0.89	50
272361	grey	12	M 16x1,5	10.5	39.0	44.0	25.0	23.0	15.0	11	1.37	50
272362	grey	12	M 20x1,5	12.3	39.0	45.0	25.0	26.0	15.0	11	1.33	50
272363	grey	17	M 20x1,5	14.5	45.0	58.0	30.0	30.0	18.0	11	2.24	50
272364	grey	23	M 25x1,5	18.5	53.0	66.0	36.0	37.0	23.0	12	3.42	30
272365	grey	29	M 32x1,5	25.5	66.0	76.0	45.0	46.0	27.0	15	5.70	20
272366	grey	36	M 40x1,5	32.0	79.0	89.0	54.0	55.0	33.0	19	9.30	10
272367	grey	48	M 50x1,5	42.0	92.0	103.0	68.0	69.0	39.0	19	15.32	10
metric												
272370	black	10	M 16x1,5	10.0	35.0	42.0	21.0	21.0	11.0	11	0.89	50
272371	black	12	M 16x1,5	10.5	39.0	44.0	25.0	23.0	15.0	11	1.37	50
272372	black	12	M 20x1,5	12.3	39.0	45.0	25.0	26.0	15.0	11	1.33	50
272373	black	17	M 20x1,5	14.5	45.0	58.0	30.0	30.0	18.0	11	2.24	50
272374	black	23	M 25x1,5	18.5	53.0	66.0	36.0	37.0	23.0	12	3.42	30
272375	black	29	M 32x1,5	25.5	66.0	76.0	45.0	46.0	27.0	15	5.70	20
272376	black	36	M 40x1,5	32.0	79.0	89.0	54.0	55.0	33.0	19	9.30	10
272377	black	48	M 50x1,5	42.0	92.0	103.0	68.0	69.0	39.0	19	15.32	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, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

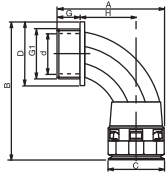
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	G1	d mm	A mm	B mm	C mm	D mm	H mm	G mm	weight approx. kg/100 piece	PU M
PG												
272380	grey	10	PG 9	10.3	35.0	42.0	21.0	21.0	11.0	11,5	0.87	50
272381	grey	12	PG 11	14.0	39.0	45.0	25.0	25.0	15.0	11,5	1.22	50
272382	grey	17	PG 13,5	14.0	45.0	56.0	30.0	27.0	18.0	11,5	2.42	50
272383	grey	17	PG 16	17.0	45.0	57.0	30.0	29.0	18.0	11,5	2.21	50
272384	grey	23	PG 21	22.0	53.0	65.0	37.0	36.0	23.0	12,5	3.17	30
272385	grey	29	PG 29	30.0	65.0	76.0	45.0	46.0	28.0	12,5	5.16	20
272386	grey	36	PG 36	37.5	79.0	89.0	54.0	56.0	33.0	14	8.25	10
272387	grey	48	PG 48	50.0	92.0	103.0	68.0	69.0	39.0	14	12.26	10
PG												
272390	black	10	PG 9	10.3	35.0	42.0	21.0	21.0	11.0	11,5	0.87	50
272391	black	12	PG 11	14.0	39.0	45.0	25.0	25.0	15.0	11,5	1.22	50
272392	black	17	PG 13,5	14.0	45.0	56.0	30.0	27.0	18.0	11,5	2.42	50
272393	black	17	PG 16	17.0	45.0	57.0	30.0	29.0	18.0	11,5	2.21	50
272394	black	23	PG 21	22.0	53.0	65.0	37.0	36.0	23.0	12,5	3.17	30
272395	black	29	PG 29	30.0	65.0	76.0	45.0	46.0	28.0	12,5	5.16	20
272396	black	36	PG 36	37.5	79.0	89.0	54.0	56.0	33.0	14	8.25	10
272397	black	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



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

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

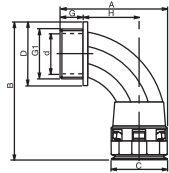
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	G1	d mm	A mm	B mm	C mm	D mm	H mm	G mm	weight approx. kg/100 piece	PU M
metric												
272414	grey	17	M 25x1,5	17.5	52.0	75.0	28.0	34.0	26.0	12	1.88	50
272415	grey	23	M 32x1,5	25.7	69.0	89.0	36.0	40.0	36.0	15	3.25	30
272416	grey	29	M 40x1,5	32.3	81.0	101.0	43.0	50.0	40.0	19	5.14	10
272417	grey	36	M 50x1,5	40.0	98.0	124.0	51.0	60.0	53.0	19	8.53	10
272418	grey	48	M 63x1,5	53.6	106.0	141.0	66.0	75.0	54.0	19	12.86	5
metric												
272424	black	17	M 25x1,5	17.5	52.0	75.0	28.0	34.0	26.0	12	1.88	50
272425	black	23	M 32x1,5	25.7	69.0	89.0	36.0	40.0	36.0	15	3.25	30
272426	black	29	M 40x1,5	32.3	81.0	101.0	43.0	50.0	40.0	19	5.14	10
272427	black	36	M 50x1,5	40.0	98.0	124.0	51.0	60.0	53.0	19	8.53	10
272428	black	48	M 63x1,5	53.6	106.0	141.0	66.0	75.0	54.0	19	12.86	5
PG												
272434	grey	17	PG 16	14.7	51.0	72.0	28.0	30.0	25.5	11,5	1.74	50
272435	grey	23	PG 21	18.5	65.0	84.0	36.0	36.0	36.0	11	2.99	30
272436	grey	29	PG 29	25.5	75.0	99.0	43.0	46.0	39.5	13	4.76	10
272437	grey	36	PG 36	32.0	92.0	120.0	51.0	56.0	53.5	13	7.88	10
272438	grey	48	PG 48	42.0	102.0	135.0	66.0	69.0	56.0	13	11.96	5
PG												
272444	black	17	PG 16	14.7	51.0	72.0	28.0	30.0	25.5	11,5	1.74	50
272445	black	23	PG 21	18.5	65.0	84.0	36.0	36.0	36.0	11	2.99	30
272446	black	29	PG 29	25.5	75.0	99.0	43.0	46.0	39.5	13	4.76	10
272447	black	36	PG 36	32.0	92.0	120.0	51.0	56.0	53.5	13	7.88	10
272448	black	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°-arc angle design with metal threads



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, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

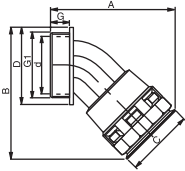
Design

- Polyamid 6, especially modified, thread MS58, galv. vern.

Part-No.	Colour	NW	G1	d mm	A mm	B mm	C mm	D mm	H mm	G mm	weight approx. kg/100 piece	PU M
metric												
272814	grey	17	M 25×1,5	16.3	56.0	76.0	28.0	35.0	30.0	11	4.34	50
272815	grey	23	M 32×1,5	23.0	72.0	88.0	36.0	44.0	41.0	13	6.80	30
272816	grey	29	M 40×1,5	30.5	81.0	104.0	43.0	55.0	46.0	13	11.20	10
272817	grey	36	M 50×1,5	37.3	100.0	127.0	51.0	67.0	59.0	14	18.40	10
272818	grey	48	M 63×1,5	52.1	110.0	141.0	66.0	76.0	63.0	14	23.00	5
metric												
272824	black	17	M 25×1,5	16.3	56.0	76.0	28.0	35.0	30.0	11	4.34	50
272825	black	23	M 32×1,5	23.0	72.0	88.0	36.0	44.0	41.0	13	6.80	30
272826	black	29	M 40×1,5	30.5	81.0	104.0	43.0	55.0	46.0	13	11.20	10
272827	black	36	M 50×1,5	37.3	100.0	127.0	51.0	67.0	59.0	14	18.40	10
272828	black	48	M 63×1,5	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



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, alkalis
- Classification according to EN 61386-1/2/3, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

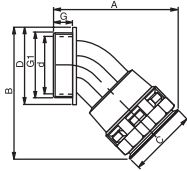
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	G1	d mm	A mm	B mm	C mm	D mm	G mm	weight ap- prox. kg/100 piece	PU piece
metric											
272553	grey	12	M 16x1,5	10.5	50.0	45.0	24.0	23.0	11	0.85	50
272554	grey	17	M 20x1,5	11.5	60.0	56.0	29.0	27.0	11	1.42	50
272555	grey	23	M 25x1,5	18.5	70.0	67.0	37.0	34.0	12	2.14	30
272556	grey	29	M 32x1,5	25.7	80.0	76.0	45.0	41.0	15	3.52	10
272557	grey	36	M 40x1,5	32.0	96.0	90.0	53.0	50.0	15	5.33	10
272558	grey	48	M 50x1,5	42.0	109.0	106.0	67.0	60.0	19	7.98	5
metric											
272573	black	12	M 16x1,5	10.5	50.0	45.0	24.0	23.0	11	0.85	50
272574	black	17	M 20x1,5	11.5	60.0	56.0	29.0	27.0	11	1.42	50
272575	black	23	M 25x1,5	18.5	70.0	67.0	37.0	34.0	12	2.14	30
272576	black	29	M 32x1,5	25.7	80.0	76.0	45.0	41.0	15	3.52	10
272577	black	36	M 40x1,5	32.0	96.0	90.0	53.0	50.0	19	5.33	10
272578	black	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 PA 45°-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, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

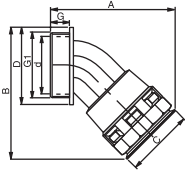
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	G1	d mm	A mm	B mm	C mm	D mm	G mm	weight approx. kg/100 piece	PU piece
PG											
272593	grey	12	PG 11	11.5	50.0	47.0	24.0	26.0	11	0.91	50
272594	grey	17	PG 16	14.7	60.0	58.0	29.0	30.0	11	1.49	50
272595	grey	23	PG 21	18.5	69.0	69.0	37.0	37.0	11	2.22	30
272596	grey	29	PG 29	25.5	78.0	79.0	45.0	46.0	12	3.65	10
272597	grey	36	PG 36	32.0	90.0	94.0	53.0	56.0	13	5.47	10
272598	grey	48	PG 48	42.0	102.0	112.0	67.0	69.0	13	8.56	5
PG											
272613	black	12	PG 11	11.5	50.0	47.0	24.0	26.0	11	0.91	50
272614	black	17	PG 16	14.7	60.0	58.0	29.0	30.0	11	1.49	50
272615	black	23	PG 21	18.5	69.0	69.0	37.0	37.0	11	2.22	30
272616	black	29	PG 29	25.5	78.0	79.0	45.0	46.0	12	3.65	10
272617	black	36	PG 36	32.0	90.0	94.0	53.0	56.0	13	5.47	10
272618	black	48	PG 48	42.0	102.0	112.0	67.0	69.0	13	8.56	5

Cable conduits and conduit fittings

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



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, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

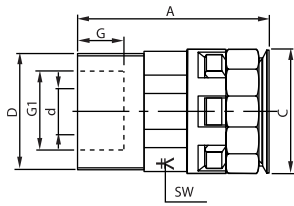
Design

- Polyamid 6, especially modified, thread MS58, galv. vern.

Part-No.	Colour	NW	G1	d mm	A mm	B mm	C mm	D mm	G mm	weight ap- prox. kg/100 piece	PU piece
metric											
272763	grey	12	M 16x1,5	10.5	53.0	45.0	24.0	24.0	10	2.16	50
272764	grey	17	M 20x1,5	11.5	63.0	57.0	29.0	29.0	10	3.02	50
272765	grey	23	M 25x1,5	18.5	74.0	67.0	37.0	35.0	11	4.44	30
272766	grey	29	M 32x1,5	25.7	82.0	72.0	45.0	43.0	13	6.78	10
272767	grey	36	M 40x1,5	32.0	97.0	93.0	53.0	56.0	13	11.08	10
272768	grey	48	M 50x1,5	42.0	111.0	110.0	67.0	67.0	14	17.56	5
metric											
272773	black	12	M 16x1,5	10.5	53.0	45.0	24.0	24.0	10	2.16	50
272774	black	17	M 20x1,5	11.5	63.0	57.0	29.0	29.0	10	3.02	50
272775	black	23	M 25x1,5	18.5	74.0	67.0	37.0	35.0	11	4.44	30
272776	black	29	M 32x1,5	25.7	82.0	72.0	45.0	43.0	13	6.78	10
272777	black	36	M 40x1,5	32.0	97.0	93.0	53.0	56.0	13	11.08	10
272778	black	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 internal thread out of metal



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

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

Design

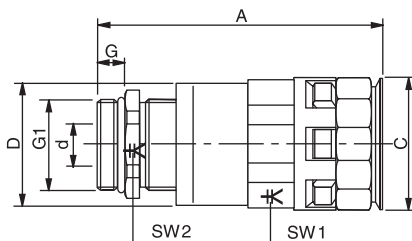
- Polyamid 6, especially modified, thread MS58, galv. vern.

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											
272912	grey	10	M 16x1,5	9.2	41.0	21.0	25.0	18	9	1.52	50
272914	grey	17	M 20x1,5	13.7	46.0	31.0	27.0	27	11,5	2.76	50
272915	grey	23	M 25x1,5	16.5	53.0	37.0	36.0	34	11,5	3.78	30
272916	grey	29	M 32x1,5	21.4	56.0	46.0	42.0	42	10	6.12	10
metric											
272922	black	10	M 16x1,5	9.2	41.0	21.0	25.0	18	9	1.52	50
272924	black	17	M 20x1,5	13.7	46.0	31.0	27.0	27	11,5	2.76	50
272925	black	23	M 25x1,5	16.5	53.0	37.0	36.0	34	11,5	3.78	30
272926	black	29	M 32x1,5	21.4	56.0	46.0	42.0	42	10	6.12	10

Cable conduits and conduit fittings

Protective conduit fitting Condufix OZ PM

Straight design with integrated cable nontension out of metal



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, alkalis
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

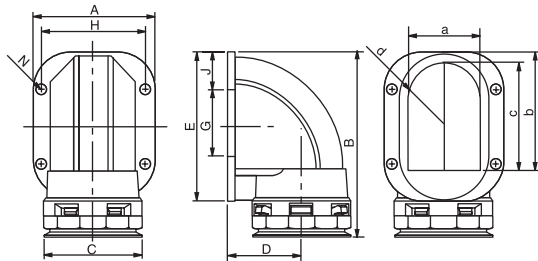
Design

- Polyamid 6, especially modified, thread MS58, galv. vern.

Part-No.	Colour	NW	G1	d mm	Clamping range D mm	A mm	C mm	D mm	SW 1 = across flats mm	SW 2 = across flats mm	G mm	weight approx. kg/100 piece	PU piece
metric													
272962	grey	10	M 16x1,5	9.2	5.0 – 9.0	56.0	21.0	25.0	18	17	5	2.52	50
272963	grey	17	M 20x1,5	13.7	9.0 – 13.0	62.0	31.0	27.0	27	22	6	4.46	50
272964	grey	23	M 25x1,5	16.5	11.0 – 16.0	71.0	37.0	36.0	34	27	7	6.36	30
272965	grey	29	M 32x1,5	21.4	14.0 – 21.0	75.0	46.0	42.0	42	34	8	10.42	10
metric													
272972	black	10	M 16x1,5	9.2	5.0 – 9.0	56.0	21.0	25.0	18	17	5	2.52	50
272973	black	17	M 20x1,5	13.7	9.0 – 13.0	62.0	31.0	27.0	27	22	6	4.46	50
272974	black	23	M 25x1,5	16.5	11.0 – 16.0	71.0	37.0	36.0	34	27	7	6.36	30
272975	black	29	M 32x1,5	21.4	14.0 – 21.0	75.0	46.0	42.0	42	34	8	10.42	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

IP rating	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 CEI 60695
Temperature range	-25 °C to 105 °C
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

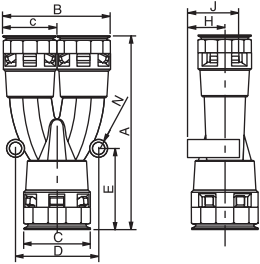
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	A mm	B mm	C mm	D mm	E mm	H mm	G mm	J mm	a mm	b mm	c mm	d mm	N mm	weight approx. kg/100 piece	PU piece
flange																	
272634	grey	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
272635	grey	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
272636	grey	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
272637	grey	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
272638	grey	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
flange																	
272644	black	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	black	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	black	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	black	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	black	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 splitter Condufix OY PA, Y design



- 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

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

Design

- Polyamid 6, especially modified

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

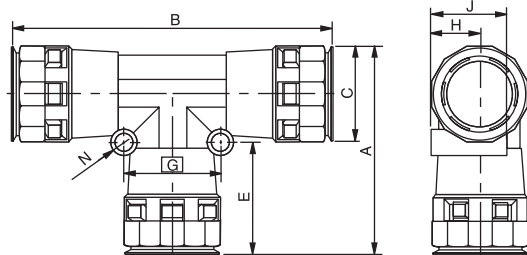
Properties

- To reduce one protective conduit size into two small sizes
- Particularly rapid and safe assembly: the protective conduit is

Part-No.	Colour	NW	A mm	B mm	C mm	c mm	D mm	E mm	N mm	H mm	J mm	weight approx. kg/100 piece	PU piece
272674	grey	171212	89.0	47.0	18.00	14.0	34.0	37	5.0	9.0	24	2.70	20
272675	grey	231717	106.0	58.0	24.00	18.0	45.0	44	6.0	12.0	28	4.38	20
272676	grey	292323	118.0	74.0	30.00	24.0	52.0	45	6.0	15.0	35	6.86	10
272677	grey	362929	141.0	89.0	38.00	30.0	60.0	52	6.0	19.0	41	11.00	5
272678	grey	483636	153.0	106.0	49.00	38.0	76.0	54	7.0	25.0	50	16.76	5
272684	black	171212	89.0	47.0	18.00	14.0	34.0	37	5.0	9.0	24	2.70	20
272685	black	231717	106.0	58.0	24.00	18.0	45.0	44	6.0	12.0	28	4.38	20
272686	black	292323	118.0	74.0	30.00	24.0	52.0	45	6.0	15.0	35	6.86	10
272687	black	362929	141.0	89.0	38.00	30.0	60.0	52	6.0	19.0	41	11.00	5
272688	black	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



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
- 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, alkalies
- Classification according to EN 61386-1/23, -43-066(7)-31

Technical data

IP rating	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 CEI 60695
Oxygen index	>30% EN ISO 4589
Burning behaviour	V2 UL94

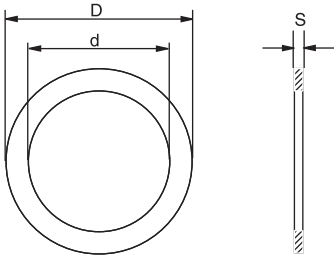
Design

- Polyamid 6, especially modified

Part-No.	Colour	NW	A mm	B mm	C mm	E mm	G mm	H mm	J mm	N mm	weight approx. kg/100 piece	PU piece
272651	grey	101010	46.0	72.0	20.00	27	19	10.0	18	5.0	1.44	20
272652	grey	121212	52.0	81.0	23.00	30	20	12.0	20	5.0	2.08	20
272653	grey	171717	63.0	96.0	29.00	35	28	14.0	25	6.0	3.37	20
272654	grey	232323	76.0	117.0	37.00	40	36	18.0	30	6.0	5.20	10
272655	grey	292929	85.0	128.0	45.00	41	41	22.0	36	6.0	8.42	5
272656	grey	363636	97.0	144.0	53.00	46	50	26.0	44	7.0	11.52	5
272661	black	101010	46.0	72.0	20.00	27	19	10.0	18	5.0	1.44	20
272662	black	121212	52.0	81.0	23.00	30	20	12.0	20	5.0	2.08	20
272663	black	171717	63.0	96.0	29.00	35	28	14.0	25	6.0	3.37	20
272664	black	232323	76.0	117.0	37.00	40	36	18.0	30	6.0	5.20	10
272665	black	292929	85.0	128.0	45.00	41	41	22.0	36	6.0	8.42	5
272666	black	363636	97.0	144.0	53.00	46	50	26.0	44	7.0	11.52	5

Cable conduits and conduit fittings

Flat seal for Condufix screw connections, FDNP



Application

- Seals for screw connections with outer thread

Properties

- Asbestos-free
- Resistant to against fuels, mineral oils, greases, alkalies

Technical data

IP rating IP 68
 Temperature range -40 °C to +200 °C

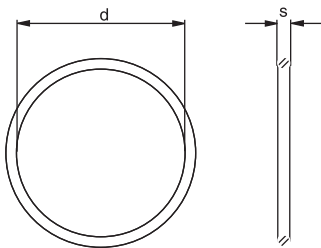
Design

- Aramid fibre composite

Part-No.	Thread	d mm	D mm	S mm	weight approx. kg/100 piece	PU piece
for metric threads						
274500	M 12×1,5	12.0	18.0	1.5	0.03	100
274501	M 16×1,5	16.0	22.0	1.5	0.04	100
274502	M 20×1,5	20.0	27.0	1.5	0.06	100
274503	M 25×1,5	25.0	35.0	1.5	0.13	50
274504	M 32×1,5	32.0	43.0	1.5	0.16	30
274505	M 40×1,5	40.0	55.0	1.5	0.29	20
274506	M 50×1,5	50.0	69.0	1.5	0.33	10
274507	M 63×1,5	63.0	82.0	1.5	0.48	10
for PG- threads						
274510	PG 7	12.4	18.0	1.5	0.04	100
274511	PG 9	15.2	21.0	1.5	0.04	100
274512	PG 11	18.6	26.0	1.5	0.06	100
274513	PG 13.5	20.4	29.0	1.5	0.07	100
274514	PG 16	22.5	33.0	1.5	0.12	100
274515	PG 21	28.3	39.0	1.5	0.12	50
274516	PG 29	37.0	49.0	1.5	0.16	30
274517	PG 36	47.0	59.0	1.5	0.22	20
274518	PG 48	59.3	71.0	1.5	0.26	10

Cable conduits and conduit fittings

O-rings for Condufix cable protective conduits and flange angle, OBNR and WNBR



Application

- Seals for mounting in the last groove of the protective conduit (insertion area) as well as for flange sealing

Properties

- Resistant to mineral oils, greases, water and glycols

Technical data

IP rating	IP 68
Temperature range	-35°C to +100°C temporary 130°C

Design

- NBR 70

Part-No.	NW	d mm	S mm	weight approx. kg/100 piece	PU piece
for cable conduits; ONBR					
274520	7	6.4	1.3	0.01	100
274521	10	10.0	1.3	0.01	100
274522	12	11.5	1.5	0.01	100
274523	17	16.0	1.8	0.02	100
274524	23	22.0	2.0	0.03	50
274525	29	29.0	2.0	0.04	30
274526	36	34.0	2.3	0.06	20
274527	48	44.6	2.4	0.09	10
274528	70	70.0	4.0	0.37	5
274529	95	98.0	4.5	0.65	5
for flange angle; WNBR					
274533	17	32.0	2.5	0.07	50
274534	23	41.0	2.5	0.08	30
274535	29	51.0	2.5	0.10	10
274536	36	60.0	2.5	0.13	10
274537	48	66.0	2.5	0.14	5
274538	70	70.0	4.0	0.36	5
274539	95	98.0	4.5	0.66	5

Cable fittings and accessories

Plastic accessory GK metric

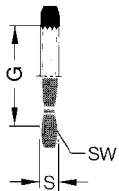


Properties

- – 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 12 × 1.5	M 12	17	5.0	0.10	100
600391	GK M 16 × 1.5	M 16	22	5.0	0.16	100
600392	GK M 20 × 1.5	M 20	26	6.0	0.23	100
600393	GK M 25 × 1.5	M 25	32	6.0	0.28	100
600394	GK M 32 × 1.5	M 32	41	7.0	0.41	100
600395	GK M 40 × 1.5	M 40	50	7.0	0.67	50
600396	GK M 50 × 1.5	M 50	60	8.0	1.14	50
600698	GK M 63 × 1.5	M 63	75	8.0	1.95	50
GK metric black RAL 9005						
600850	GK M 12 × 1.5	M 12	17	5.0	0.10	100
600851	GK M 16 × 1.5	M 16	22	5.0	0.14	100
600852	GK M 20 × 1.5	M 20	26	6.0	0.22	100
600853	GK M 25 × 1.5	M 25	32	6.0	0.26	100
600854	GK M 32 × 1.5	M 32	41	7.0	0.38	100
600855	GK M 40 × 1.5	M 40	50	7.0	0.63	50
600856	GK M 50 × 1.5	M 50	60	8.0	1.14	50
600857	GK M 63 × 1.5	M 63	75	8.0	1.78	50

Cable fittings and accessories

Plastic accessory GK

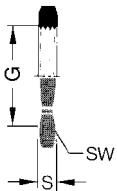


Properties

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

Design

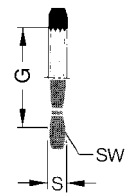
- Material Polyamide 6 GF 30
- Colour grey RAL 7001
black RAL 9005
other colors available on request



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 PG 7	PG 7	19	5.0	0.13	100
600831	GK PG 9	PG 9	22	5.0	0.14	100
600832	GK PG 11	PG 11	24	5.0	0.15	100
600833	GK PG 13.5	PG 13,5	27	6.0	0.24	100
600834	GK PG 16	PG 16	30	6.0	0.31	100
600835	GK PG 21	PG 21	36	7.0	0.45	100
600836	GK PG 29	PG 29	46	7.5	0.68	100
600837	GK PG 36	PG 36	60	8.0	1.47	50
600838	GK PG 42	PG 42	65	8.0	1.53	50
600839	GK PG 48	PG 48	70	8.0	1.71	50

Cable fittings and accessories

Metal accessory 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	15	2.8	0.22	100
600361	GMS M 16 × 1.5	M 16	19	2.8	0.30	100
600362	GMS M 20 × 1.5	M 20	24	3.0	0.48	100
600363	GMS M 25 × 1.5	M 25	30	3.5	0.90	100
600364	GMS M 32 × 1.5	M 32	36	4.0	1.08	100
600365	GMS M 40 × 1.5	M 40	46	5.0	2.40	50
600366	GMS M 50 × 1.5	M 50	60	5.0	3.25	25
600367	GMS M 63 × 1.5	M 60	70	6.0	4.62	50
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	50



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Declaration of protection class in accordance with EN 60529

The protection provided for electrical operating equipment by means of corresponding enclosure is shown by corresponding code letters and figures. This protection class designation consists of the letters "IP" and two digits from 0 to 8. The first digit indicates the protection against contact and foreign bodies, the second digit indicates the degree of protection against water. The higher the digit, the higher the degree of protection offered. The technical data shows the type of protection valid for each product.

For example, the code:

IP 65	Code letters	IP	
	The first digit	6	indicates: Protection against the ingress of dust
	The second digit	5	indicates: Protection against water jets

For protection against contact and foreign bodies

First digit	Degree of protection Designation	Explanation
0	No protection	No special protection to prevent persons unintentionally touching live or moving parts. No special protection to prevent solid foreign bodies penetrating the operating equipment.
1	Protection against foreign bodies > 50 mm	Protection against persons unintentionally touching large areas of live parts and internal moving parts, e. g. with their hands, but no protection against deliberate access to these parts. Protection against the ingress of solid foreign bodies with a diameter greater than 50 mm.
2	Protection against foreign bodies > 12 mm	Protection against persons touching live parts or internal moving parts with their fingers. Protection against the ingress of solid foreign bodies with a diameter greater than 12 mm.
3	Protection against foreign bodies > 2,5 mm	Protection against persons touching live parts or internal moving parts with tools, wires or similar objects thicker than 2.5 mm. Protection against the ingress of solid foreign bodies with a diameter greater than 2.5 mm.
4	Protection against foreign bodies > 1 mm	Protection against persons touching live parts or internal moving parts with tools, wires or similar objects thicker than 1 mm. Protection against the ingress of solid foreign bodies with a diameter greater than 1 mm.
5	Protection against dust deposits	Full protection against persons touching live parts or internal moving parts. Protection against dust deposits. It is not entirely impossible for dust to penetrate the equipment, but it must be ensured that the quantity of dust which can penetrate does not prevent the equipment functioning correctly.
6	Protection against dust ingress	Full protection against persons touching live parts or internal moving parts. Protection against the ingress of dust.

For protection against water

Second digit	Degree of protection; Designation	Explanation
0	No protection	No special protection.
1	Protection against drops of water falling vertically	Drops of water falling vertically must not have any adverse effect.
2	Protection against drops of water falling obliquely	Drops of water falling obliquely at any angle up to 15° from the vertical must not have any adverse effect.
3	Protection against water spray	Sprayed water falling at any angle up to 60° from the vertical must not have any adverse effect.
4	Protection against water splashes	Water splashing onto the equipment from all directions must not have any adverse effect.
5	Protection against water jets	Water sprayed from a jet directed at the equipment from any direction must not have any adverse effect.
6	Protection against flooding	In the event of temporary flooding (e. g. as a result of heavy seas) water must not be able to penetrate into the equipment in quantities sufficient to cause damage.
7	Immersion protection	If the equipment is immersed in water under fixed pressure and time conditions, water must not be able to penetrate into the equipment in sufficient quantities to cause damage.
8	Protection under water	If the equipment is placed under water under fixed pressure and for an indefinite length of time, water must not be able to penetrate into the equipment in sufficient quantities to cause damage.

You can find details of the protection class valid for each product in the technical data.

Chemical resistance for polyamides

Substance	Resistance	Substance	Resistance
Acetone	+	- ASTM oil No. 3, 20° C	+
Ammonia	+	- animal	+
Arsenic acid, aqueous	+	- vegetable	+
Beer	+	- Transformer oils (pyranols)	+
Benzene	+	- silicone-based	+
Benzine	+	- Diesel oil	+
Boracic acid, aqueous	O	- Heating oil	+
Borax, aqueous	+	- Hydraulic oils on	
Butane, gaseous	+	- mineral-oil-based	+
Calcium chloride, aqueous	+	- glycol-based	+
Carbon disulphide	+	- phosphate-ester-based	+
Carbonic acid	+	- bore oil	+
Caustic potash solution	+	- cutting oil	+
Caustic soda solution	+	Ozone	O
Copper sulphate, aqueous	O	Perchloroethylene	O
Dextrose, aqueous	+	Petroleum	+
Diesel oil	+	Phosphoric acid, aqueous	-
Ethyl acetate	+	Potassium cyanide, aqueous	+
Ethyl alcohol, aqueous	O	Propane, liquid	+
Ethyl ether	+	Saline solution	+
Fatty acids	O	Seawater	+
Formic acid, aqueous	-	Silica, aqueous	+
Fruit juices	+	Skydrol	O
Glycerine, aqueous	+	Soap solution	+
Heating oil	+	Sodium chloride	+
Hydraulic oils	+	Spark erosion liquids	+
Hydrogen	+	Starch, white	+
Hydrogen sulphide	+	Stearic acid	+
Iron chloride, aqueous	O	Sulphuric acid, aqueous	-
Lactic acid, aqueous	O	Tallow	+
Lead acetate, aqueous	O	Tartaric acid, aqueous	-
Methyl acetate	+	Terpentine	+
Methyl alcohol	+	Toluene	+
Methylethylketon	+	Transformer oil	+
Mineral oils	+	Trichloroethylene	O
Nitric acid, hydrochloric acid, aqueous	-	Urine	+
Nitrol	+	Vinegar and acetic acid, aqueous	+
Oils and greases		Xylol	+
- mineral, without additives, at 20° C	+	Zink sulphate, aqueous	O
- ASTM oil No. 1, 20° C	+		
- ASTM oil No. 2, 20° C	+		

Explanation of symbols: + = resistant / O = moderately resistant /
- = non-resistant

Properties of the protective pipes based on DIN EN 61 386-1

Code no.	Properties	OL PA	OS PA	OV PA	OR PA
1	Resistance to pressure	>250 N	>350N	>600N	>200N
2	Impact strength	6 J	6 J	6 J	6 J
3	Min. temperature resistance	-40°C	-40°C	-40°C	-50°C
4	Max. temperature resistance	+105°C	+105°C	+105°C	+90°C
5	Resistance to bending	>5000 cycles	>5000 cycles	>5000 cycles	>5000 cycles
6	Electrical characteristics	-	-	-	-
7	Resistance to solid bodies	IP 6X	IP 6X	IP 6X	IP 6X
8	Resistance to penetration by water	IP X6(7)	IP X6(7)	IP X6(7)	IP X6(7)
9	Resistance to corrosion	-	-	-	-
10	Tensile strength	>300N	>300N	>500N	>250N
11	Flame-spreading		Non-flame-spreading		
12	Bearing capacity for hanging loads	-	-	-	-

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