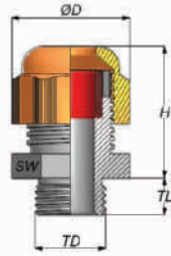


6 Wire and Cable Management



LUTZE TOP-T Fittings NPT

Plastic NPT



Characteristics

- Integrated strain relief
- Wide sealing and clamping range
- Easy to install
- Temperature range -20°C - +100°C/
-4°F - +212°F
- Max temporary temperature up to
+150°C/+300°F
- Protection class IP68

Specifications

Connecting thread	NPT
Material	Polyamide 6
Seal	CR Chloroprene Rubber
Color	Black RAL 9005 Gray RAL 7001

Item Specific Approvals

- UL Recognized (R) or UL Listed (L), as per table

Specifications are subject to change without prior notice

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	D/SW mm	TD mm	H mm	UL R / L
BLACK								
FPNPT38B	NPT 3/8"	0.197-0.394	5-10	15	22	17.14	29	R
FPNPT12B	NPT 1/2"	0.394-0.551	10-14	11	30.9	21.34	31	L
FPNPT34B	NPT 3/4"	0.511-0.709	13-18	15	33	26.67	37	L
FPNPT10B	NPT 1"	0.709-0.984	18-25	18	42	33.4	41	L
GRAY								
FPNPT38G	NPT 3/8"	0.197-0.394	5-10	15	22	17.14	29	R
FPNPT12G	NPT 1/2"	0.394-0.551	10-14	11	30.9	21.34	31	L
FPNPT34G	NPT 3/4"	0.511-0.709	13-18	15	33	26.67	37	L
FPNPT10G	NPT 1"	0.709-0.984	18-25	18	42	33.4	41	L
REDUCED CLAMPING RANGE								
FPNPT38B-R	NPT 3/8"	0.118-0.276	3-7	15	22	17.14	29	
FPNPT12B-R	NPT 1/2"	0.276-0.472	7-12	11	30.9	21.34	31	
FPNPT34B-R	NPT 3/4"	0.354-0.630	9-16	15	33	26.67	37	
FPNPT10B-R	NPT 1"	0.472-0.787	12-20	18	42	33.4	41	

LUTZE TOP-T Fittings PG



Characteristics

- Integrated strain relief
- Wide sealing and clamping range
- Easy to install
- Temperature range
-20°C - +100°C/
-4°F - +212°F
- Max temporary temperature
up to
+150°C/+300°F
- Protection class
IP68

Specifications

Connecting thread PG as per
DIN 40430

Material Polyamide 6

Seal CR Chloroprene
Rubber

Color Black RAL
9005
Gray RAL
7001

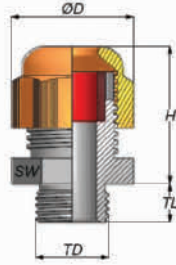
Item Specific Approvals

- UL Recognized (R) or UL Listed (L), as per table

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	D/SW mm	TD mm	H mm	UL R / L
BLACK								
FPPG7B	PG 7	0.118-0.256	3-6.5	8	15	12.5	22	R
FPPG9B	PG 9	0.157-0.315	4-8	8	19	15.2	26.5	R
FPPG11B	PG 11	0.197-0.394	5-10	8	22	18.6	29	R
FPPG13B	PG 13.5	0.236-0.472	6-12	10	24	20.4	29	L
FPPG16B	PG 16	0.394-0.551	10-14	10	27	22.5	31	L
FPPG21B	PG 21	0.512-0.709	13-18	11	33	28.3	37	L
FPPG29B	PG 29	0.709-0.984	18-25	11	42	37	41	L
FPPG36B	PG 36	0.866-1.260	22-32	13	53	47	51.5	L
FPPG42B	PG 42	1.181-1.496	30-38	13	60	54	53.5	L
FPPG48B	PG 48	1.339-1.732	34-44	14	65	59.3	53.5	L
GRAY								
FPPG7G	PG 7	0.118-0.256	3-6.5	8	15	12.5	22	R
FPPG9G	PG 9	0.157-0.315	4-8	8	19	15.2	26.5	R
FPPG11G	PG 11	0.197-0.394	5-10	8	22	18.6	29	R
FPPG13G	PG 13.5	0.236-0.472	6-12	10	24	20.4	29	L
FPPG16G	PG 16	0.394-0.551	10-14	10	27	22.5	31	L
FPPG21G	PG 21	0.512-0.709	13-18	11	33	28.3	37	L
FPPG29G	PG 29	0.709-0.984	18-25	11	42	37	41	L
FPPG36G	PG 36	0.866-1.260	22-32	13	53	47	51.5	L
FPPG42G	PG 42	1.181-1.496	30-38	13	60	54	53.5	L
FPPG48G	PG 48	1.339-1.732	34-44	14	65	59.3	53.5	L
REDUCED CLAMPING RANGE								
FPPG7G-R	PG 7	0.079-0.197	2-5	8	15	12.5	22	
FPPG9G-R	PG 9	0.079-0.236	2-6	8	19	15.2	26.5	
FPPG11G-R	PG 11	0.118-0.276	3-7	8	22	18.5	29	
FPPG13G-R	PG 13.5	0.197-0.354	5-9	10	24	20.4	29	
FPPG16G-R	PG 16	0.276-0.472	7-12	10	27	22.5	31	
FPPG21G-R	PG 21	0.354-0.630	9-16	11	33	28.3	37	
FPPG29G-R	PG 29	0.472-0.787	12-20	11	42	37	41	
FPPG36G-R	PG 36	0.787-1.024	20-26	13	53	47	51.5	

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings Metric



Characteristics

- Integrated strain relief
- Wide sealing and clamping range
- Easy to install
- Manufactured according to EN 50262 requirements
- Temperature range
-20°C - +100°C/
-4°F - +212°F
- Max temporary temperature
up to +150°C/
+300°F
- Protection class
IP68

Specifications

Connecting thread	Metric as per EN 60423
Material	Polyamide 6
Seal	CR Chloroprene Rubber
Color	Black RAL 9005 Gray RAL 7001

Item Specific Approvals

- UL Recognized (R) or UL Listed (L), as per table

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	D/SW mm	TD mm	H mm	UL R / L
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BLACK

FPM12B	M12x1.5	0.118-0.256	3-6.5	8	15.0	12	22.5	R
FPM16B	M16x1.5	0.197-0.394	5-10	10	22.0	16	30	R
FPM20B	M20x1.5	0.315-0.551	10-14	10	27.0	20	31	L
FPM25B	M25x1.5	0.512-0.709	13-18	10	33.0	25	37	L
FPM32B	M32x1.5	0.709-0.984	18-25	15	42.0	32	41	L
FPM40B	M40x1.5	0.866-1.260	22-32	18	53.0	40	51.5	L
FPM50B	M50x1.5	1.181-1.496	30-38	18	60.0	50	53	L
FPM63B	M63x1.5	1.339-1.732	34-44	18	65.0	63	53	L

GRAY

FPM12G	M12x1.5	0.118-0.256	3.0-6.5	8	15.0	12	22.5	R
FPM16G	M16x1.5	0.197-0.394	5-10	10	22.0	16	30	R
FPM20G	M20x1.5	0.315-0.551	10-14	10	27.0	20	31	L
FPM25G	M25x1.5	0.512-0.709	13-18	10	33.0	25	37	L
FPM32G	M32x1.5	0.709-0.984	18-25	15	42.0	32	41	L
FPM40G	M40x1.5	0.866-1.260	22-32	18	53.0	40	51.5	L
FPM50G	M50x1.5	1.181-1.496	30-38	18	60.0	50	53	L
FPM63G	M63x1.5	1.339-1.732	34-44	18	65.0	63	53	L

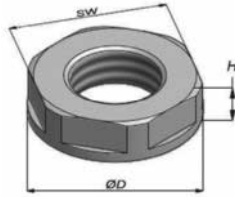
REDUCED CLAMPING RANGE

FPM12G-R	M12x1.5	0.079-0.197	2-5	8	15.0	12	22.5	
FPM16G-R	M16x1.5	0.118-0.276	3-7	10	22.0	16	30	
FPM20G-R	M20x1.5	0.276-0.472	7-12	10	27.0	20	31	
FPM25G-R	M25x1.5	0.354-0.630	9-16	10	33.0	25	37	
FPM32G-R	M32x1.5	0.472-0.787	12-20	15	42.0	32	41	
FPM40G-R	M40x1.5	0.787-1.024	20-26	18	53.0	40	51.5	
FPM50G-R	M50x1.5	0.984-1.220	25-31	18	60.0	50	53	
FPM63G-R	M63x1.5	1.142-1.378	29-35	18	65.0	63	53	

Specifications are subject to change without prior notice

LUTZE TOP-T Locknuts Plastic

Plastic NPT, PG and Metric



Characteristics

- Hexagonal locknut for secure tightening of plastic cable fittings and accessories
- Easy to install
- Temperature range -20°C - +100°C/
-4°F - +212°F
- Max temporary temperature up to +150°C/+300°F

Specifications

Material Polyamide 6, 30% glass fiber reinforced
Color Black RAL 9005
Gray RAL 7001

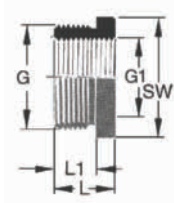
Flange is imprinted with locknut size for easy identification.

Part No.	Thread	OD - Ø mm	SW mm	H mm
NPT BLACK				
LPNPT38B	NPT 3/8"	25	22	6
LPNPT12B	NPT 1/2"	30.5	27	6
LPNPT34B	NPT 3/4"	37.5	33	6
LPNPT10B	NPT 1"	46.5	41	7
NPT GRAY				
LPNPT38G	NPT 3/8"	25	22	6
LPNPT12G	NPT 1/2"	30.5	27	6
LPNPT34G	NPT 3/4"	37.5	33	6
LPNPT10G	NPT 1"	46.5	41	7
PG BLACK				
LPPG7B	PG 7	21	19	5
LPPG9B	PG 9	24	22	5
LPPG11B	PG 11	26	24	5
LPPG13B	PG 13.5	29	27	6
LPPG16B	PG 16	33	30	6
LPPG21B	PG 21	39	36	7
LPPG29B	PG 29	50	46	7
LPPG36B	PG 36	66	60	8
LPPG42B	PG 42	73	65	8
LPPG48B	PG 48	78	70	8
PG GRAY				
LPPG7G	PG 7	21	19	5
LPPG9G	PG 9	24	22	5
LPPG11G	PG 11	26	24	5
LPPG13G	PG 13.5	29	27	6
LPPG16G	PG 16	33	30	6
LPPG21G	PG 21	39	36	7
LPPG29G	PG 29	50	46	7
LPPG36G	PG 36	66	60	8
LPPG42G	PG 42	73	65	8
LPPG48G	PG 48	78	70	8
METRIC BLACK				
LPM12B	M12x1.5	19.5	18	5
LPM16B	M16x1.5	24.2	22	5
LPM20B	M20x1.5	28.6	26	6
LPM25B	M25x1.5	35.0	32	6
LPM32B	M32x1.5	46.1	41	7
LPM40B	M40x1.5	55.3	50	7
LPM50B	M50x1.5	66.1	60	8
LPM63B	M63x1.5	82.5	75	8
METRIC GRAY				
LPM12G	M12x1.5	19.5	18	5
LPM16G	M16x1.5	24.2	22	5
LPM20G	M20x1.5	28.6	26	6
LPM25G	M25x1.5	35.0	32	6
LPM32G	M32x1.5	46.1	41	7
LPM40G	M40x1.5	55.3	50	7
LPM50G	M50x1.5	66.1	60	8
LPM63G	M63x1.5	82.5	75	8

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings Reducer

Plastic Metric Reducer



Metric Reducer Characteristics

- Reduction of threaded or clearance holes to smaller thread size
- Temperature range -30°C - +100°C / -22°F - +212°F
- Material Polyamide PA6 GF30
- Internal/External thread Metric as per EN 60423
- Color Gray RAL 7035

Part No.	Thread G	Thread G1	SW mm	L mm	L1 mm
METRIC REDUCER					
600550	M20x1.5	M12x1.5	24	12	8
600551	M20x1.5	M16x1.5	24	12	8
600553	M25x1.5	M16x1.5	32	14	8
600554	M25x1.5	M20x1.5	32	14	8
600557	M32x1.5	M20x1.5	36	16	10
600558	M32x1.5	M25x1.5	36	16	10
600561	M40x1.5	M25x1.5	46	16	10
600562	M40x1.5	M32x1.5	46	16	10
600565	M50x1.5	M32x1.5	55	18	12
600566	M50x1.5	M40x1.5	55	18	12

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings NPT

Metal NPT



Characteristics

- Integrated strain relief
- Anti-twist design
- Wide sealing and clamping range
- Easy to install
- Temperature range -20°C - +100°C / -4°F - +212°F
- Protection class IP68

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	SW1 mm	SW2 mm	H mm	UL R / L
NPT								
FMNPT38	NPT 3/8"	0.157-0.315	4-8	11.5	17	19	23	R
FMNPT12	NPT 1/2"	0.236-0.472	6-12	13	22	22	25.5	L
FMNPT34	NPT 3/4"	0.512-0.709	13-18	13	30	30	35.5	L
FMNPT10	NPT 1"	0.709-0.984	18-25	13	40	43	43	L

Specifications

Design allows for shield termination	
Connecting thread	NPT
Material	Brass, nickel plated
Clamping insert	Polyamide 6
Seal	CR Chloroprene Rubber
O-ring	NBR

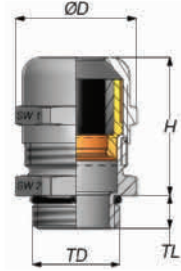
Item Specific Approvals

- UL Recognized (R) or UL Listed (L), as per table
- Type 4X for UL Recognized and UL Listed items

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings PG

Metal PG



Characteristics

- Integrated strain relief
- Anti-twist design
- Wide sealing and clamping range
- Easy to install
- Temperature range
-20°C - +100°C
-4°F - +212°F
- Protection class
IP68

Fitting Specifications

Connecting thread	PG as per DIN 40430
Material	Brass, nickel plated
Clamping insert	Polyamide 6
Seal	CR Chloroprene
O-ring	Rubber NBR

Item Specific Approvals

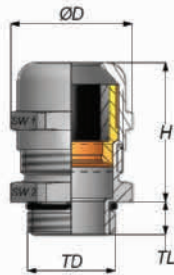
- UL Recognized (R) or UL Listed (L), as per table
- Type 4X for UL Recognized and UL Listed items

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	SW1 mm	SW2 mm	H mm	UL R / L
PG								
FMPG7	PG 7	0.118-0.256	3-6.5	6	14	14	22	R
FMPG9	PG 9	0.157-0.315	4-8	6	17	17	23.5	
FMPG11	PG 11	0.197-0.394	5-10	6	20	20	26	
FMPG13	PG 13.5	0.236-0.472	6-12	6.5	22	22	24.5	R
FMPG16	PG 16	0.394-0.551	10-14	6.5	24	24	28	
FMPG21	PG 21	0.512-0.709	13-18	7.2	30	30	32.5	L
FMPG29	PG 29	0.709-0.984	18-25	8	40	40	38.5	L
FMPG36	PG 36	0.866-1.260	22-32	9	50	50	48	L
FMPG42	PG 42	1.181-1.496	30-38	12	58	58	48.5	L
FMPG48	PG 48	1.339-1.732	34-44	14	64	64	53	L
LONG THREAD								
FMPG7-L	PG 7	0.118-0.256	3-6.5	10	14	14	22	R
FMPG9-L	PG 9	0.157-0.315	4-8	10	17	17	23.5	
FMPG11-L	PG 11	0.197-0.394	5-10	10	20	20	26	
FMPG13-L	PG 13.5	0.236-0.472	6-12	10	22	22	24.5	R
FMPG16-L	PG 16	0.394-0.551	10-14	10	24	24	28	L
FMPG21-L	PG 21	0.512-0.709	13-18	12	30	30	32.5	L
FMPG29-L	PG 29	0.709-0.984	18-25	12	40	40	38.5	L

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings Metric

Metal Metric



Characteristics

- Integrated strain relief
- Anti-twist design
- Wide sealing and clamping range
- Easy to install
- Temperature range -20°C - +100°C / -4°F - +212°F
- Protection class IP68

Fitting Specifications

Connecting thread	Metric as per EN 60423
Material	Brass, nickel plated
Clamping insert	Polyamide 6
Seal	CR Chloroprene Rubber
O-ring	NBR

Item Specific Approvals

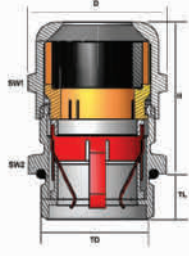
- UL Recognized (R) or UL Listed (L) as per table
- Type 4X for UL Recognized and UL Listed items

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	SW1 mm	SW2 mm	H mm	UL R / L
METRIC								
FMM12	M12x1.5	0.118-0.256	3-6.5	6	14	14	22	R
FMM16	M16x1.5	0.157-0.315	4-8	7	17	18	23	R
FMM20	M20x1.5	0.236-0.472	6-12	8	22	22	26.5	L
FMM25	M25x1.5	0.394-0.551	10-14	8	24	27	27.7	L
FMM32	M32x1.5	0.512-0.709	13-18	9	30	34	33	L
FMM40	M40x1.5	0.709-0.984	18-25	9	40	43	38	L
FMM50	M50x1.5	0.866-1.260	22-32	9	50	55	48	L
FMM63	M63x1.5	1.339-1.732	34-44	14	64	68	53	L
LONG THREAD								
FMM12-L	M12x1.5	0.118-0.256	3-6.5	12	14	14	22	
FMM16-L	M16x1.5	0.157-0.315	4-8	12	17	18	23	
FMM20-L	M20x1.5	0.236-0.472	6-12	12	22	22	26.5	
FMM25-L	M25x1.5	0.394-0.551	10-14	12	24	27	27.7	
FMM32-L	M32x1.5	0.512-0.709	13-18	15	30	34	33	
FMM40-L	M40x1.5	0.709-0.984	18-25	15	40	43	38	
FMM50-L	M50x1.5	0.866-1.260	22-32	15	50	55	48	
FMM63-L	M63x1.5	1.339-1.732	34-44	18	64	68	53	

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings EMC2 Metric and NPT

Metal EMC2 (Electro Magnetic Compatibility), Quick Installation



Characteristics

- Adapts to different size cable shields
- 360° shield termination
- Integrated strain relief
- Wide sealing and clamping range
- Fast and easy to install
- Temperature range -20°C - +100°C / -4°F - +212°F
- Protection class IP68

Fitting Specifications

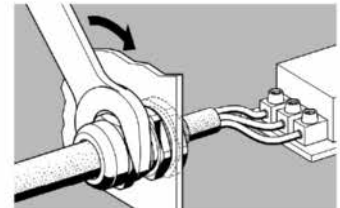
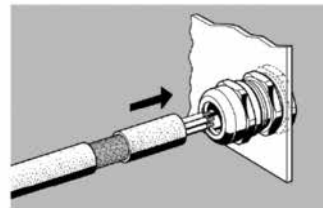
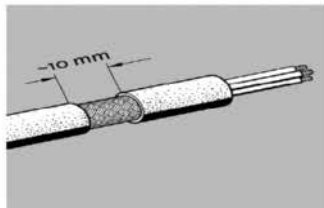
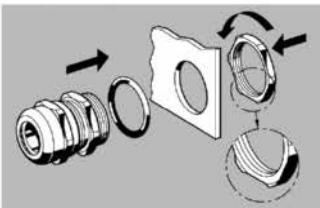
Connecting thread	Metric as per EN 60423
	NPT per ANSI ASME B1.21.1
Material	Brass, nickel plated
Clamping insert	Polyamide 6
Seal	CR Chloroprene Rubber
O-ring	NBR

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	SW1 mm	SW2 mm	H mm	UL R/L
METRIC								
FMM12-C2	M12x1.5	0.118-0.256	3-6.5	6	14	14	22.0	R/L
FMM16-C2	M16x1.5	0.197-0.394	5-10	7	20	20	29.0	R/L
FMM20-C2	M20x1.5	0.236-0.472	6-12	8	22	22	27.5	R/L
FMM25-C2	M25x1.5	0.433-0.669	11-17	8	27	27	30.7	R/L
FMM32-C2	M32x1.5	0.590-0.827	15-21	8	34	34	38.0	L
FMM40-C2	M40x1.5	0.748-1.102	19-28	9	43	43	43.0	L
FMM50-C2	M50x1.5	1.063-1.496	27-38	9	58	58	54.5	L
FMM63-C2	M63x1.5	1.339-1.732	34-44	14	64	68	57.0	L
NPT								
FMNPT38-C2	NPT 3/8"	0.197-0.394	5-10	11.5	20	20	29.5	R
FMNPT12-C2	NPT 1/2"	0.236-0.472	6-12	13	22	22	25.5	L
FMNPT34-C2	NPT 3/4"	0.512-0.709	13-18	13	30	30	35.5	L
FMNPT10-C2	NPT 1"	0.709-0.984	18-25	13	40	43	43	L

Approvals

- UL Recognized (R) or UL Listed (L), as per table
- Type 4X UL Recognized and UL Listed items
- UL Listed acc. to UL514

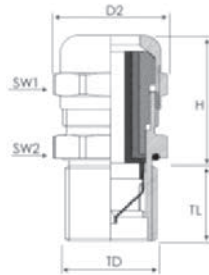
Long thread EMC2 fittings available through special order. Please contact us.



Specifications are subject to change without prior notice

LUTZE TOP-T Fittings EMC Metric and NPT

Large Diameter Metal EMC (Electro Magnetic Compatibility), Quick Installation



Characteristics

- Designed for large diameter cables
- Two seal inserts for clamping range adjustment
- Adapts to different size cable shields
- 360° shield termination
- Integrated strain relief
- Wide sealing and clamping range
- Fast and easy to install
- Temperature range -40°C - +80°C / -40°F - +176°F
- Protection class IP68

Fitting Specifications

Connecting thread	Metric per EN 60423 NPT per ANSI ASME B1.21.1
Material	Brass, nickel plated
Clamping insert	Polyamide 6
Seal	CR Chloroprene Rubber
O-ring	NBR

Approvals

- UL Listed as per UL2225

Specifications are subject to change without prior notice

Part No.	Thread	Clamping Range Ø inches	Clamping Range Ø mm	TL mm	SW1 mm	SW2 mm	H mm	UL R/L
METRIC								
FMM63-CEX	M63x1.5	1.378-1.771	35-45	20	68	64	43.5	L
FMM75-CEX	M75x1.5	1.812-2.440	46-62	20	80	80	51.0	L
FMM90-CEX	M90x1.5	2.363-2.952	60-75	20	95	95	55.0	L
NPT								
FMNPT2-CEX	NPT 2"	1.378-1.771	35-45	20	68	64	43.5	L
FMNPT212-CEX	NPT 2-1/2"	1.812-2.440	46-62	21	80	80	55.0	L
FMNPT3-CEX	NPT 3"	2.363-2.952	60-75	21	95	95	63.0	L

"These fittings are designed to provide strain relief and shield termination for large diameter VFD cables. They offer a wide sealing range with three removeable sealing rings".



LUTZE TOP-T Locknuts Metal

Metal PG, Metric and EMC Metric



Characteristics

- Hexagonal locknut for secure tightening of cable fittings and accessories
- Temperature range up to +200°C/+392°F

Locknut Specifications

Material Brass, nickel plated

Part No.	Thread	OD - Ø mm	SW mm	H mm
PG				
LMPG7	PG 7	16.6	15	2.8
LMPG9	PG 9	20	18	2.8
LMPG11	PG 11	23.5	21	3
LMPG13	PG 13.5	25.5	23	3
LMPG16	PG 16	29	26	3
LMPG21	PG 21	35.5	32	3.5
LMPG29	PG 29	45	41	4.0
LMPG36	PG 36	56	51	5.0
LMPG42	PG 42	66.0	60	5.0
LMPG48	PG 48	70.5	64	5.5

Due to tapered NPT thread, we recommend using plastic locknuts with metal NPT fittings if locknut is required.

METRIC				
LMM12	M12x1.5	16.6	15	2.8
LMM16	M16x1.5	21	19	3.0
LMM20	M20x1.5	26.5	24	3.5
LMM25	M25x1.5	33	30	4.0
LMM32	M32x1.5	39.5	36	5.0
LMM40	M40x1.5	51	46	5.0
LMM50	M50x1.5	66	60	5.0
LMM63	M63x1.5	77	70	6.0

EMC Cutting Teeth Metric

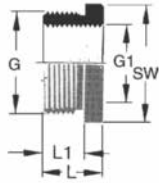
- For secure tightening of EMC cable fittings
- To cut through paint layers or powder coatings ensuring optimal contact
- Increased vibration resistance

EMC - CUTTING TEETH METRIC				
600460	M12x1.5	16.5	15	4.5
600461	M16x1.5	20.9	19	4.5
600462	M20x1.5	26.4	24	5.5
600463	M25x1.5	33	30	5.5
600464	M32x1.5	39.7	36	5.5
600465	M40x1.5	50.6	46	6.0
600466	M50x1.5	66	60	6.0

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings Reducer

Metal PG and Metric Reducer



PG Reducer Characteristics

- Reduction of threaded or clearance holes to smaller thread size
- Temperature range -30°C - +100°C / -22°F - +212°F
- Reduction Brass, nickel plated
- Internal/External thread PG as per DIN 40430

Metric Reducer Characteristics

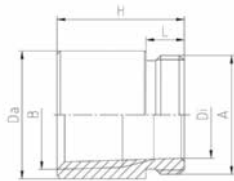
- Reduction of threaded or clearance holes to smaller thread size
- Temperature range -30°C - +100°C / -22°F - +212°F
- Reduction Brass, nickel plated
- Internal/External thread Metric as per EN 60423

Part No.	Thread G	Thread G1	SW mm	L mm	L1 mm
PG					
600400	PG 9	PG 7	17	8.5	6
600411	PG 11	PG 7	20	8.5	6
600401	PG 11	PG 9	20	8.5	6
600408	PG 13.5	PG 9	22	9	6.5
600402	PG 13.5	PG 11	22	9	6.5
600409	PG 16	PG 9	24	9.5	6.5
600410	PG 16	PG 11	24	9.5	6.5
600403	PG 16	PG 13.5	24	9.5	6.5
600413	PG 21	PG 11	30	10	7
600414	PG 21	PG 13.5	30	10	7
600404	PG 21	PG 16	30	10	7
600407	PG 29	PG 16	39	11.5	8
600405	PG 29	PG 21	39	11.5	8
600412	PG 36	PG 21	50	12.5	9
600406	PG 36	PG 29	50	12.5	9
600416	PG 42	PG 36	57	14	10
METRIC					
600220	M16x1.5	M12x1.5	18	8.5	6.0
600221	M20x1.5	M12x1.5	24	9	6.5
600222	M20x1.5	M16x1.5	24	9	6.5
600223	M25x1.5	M16x1.5	28	10	7
600224	M25x1.5	M20x1.5	28	10	7
600225	M32x1.5	M20x1.5	34	11.5	8
600226	M32x1.5	M25x1.5	34	11.5	8
600227	M40x1.5	M25x1.5	45	11.5	8
600228	M40x1.5	M32x1.5	45	11.5	8
600229	M50x1.5	M32x1.5	55	14	10
600230	M50x1.5	M40x1.5	55	14	10

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings Adapter

Metric to NPT Adapters



Adapter METRIC to NPT Characteristics

- Adapter from metric to NPT thread
- Temperature range up to +200°C/+392°F
- Adapter Brass CuZn39Pb3, nickel-plated
- External thread Metric as per EN 60423
- Internal thread NPT

Part No.	Thread A	Thread B	L mm	H mm	Da mm	Di mm
METRIC TO NPT						
AMM16-12	M16x1.5	NPT 1/2"	6.5	25	24	11
AMM20-12	M20x1.5	NPT 1/2"	6.5	25	24	15
AMM25-34	M25x1.5	NPT 3/4"	7	28	30	18
AMM32-34	M32x1.5	NPT 3/4"	8	26	37	23
AMM32-10	M32x1.5	NPT 1"	8	33	38	27

Specifications are subject to change without prior notice

LUTZE TOP-T Fittings Accessories

Multihole Insert TPE PG, Metric, NPT



Characteristics

- Multiple hole insert for two or more cables in one fitting
- Replaces the existing rubber insert to offer multiple hole installation
- Suitable for plastic and metal fittings
- Solid inserts can be drilled to suit any application
- Minimum quantity 100 pcs/package

Insert Specifications

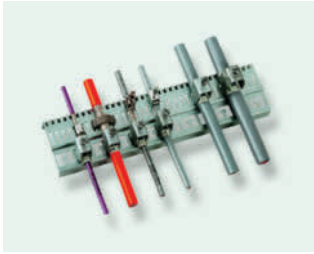
Material TPE

Part No.	Fits Size PG	Fits Size Metric	Fits Size NPT	Outer - Ø mm	Number of Cables x OD - Ø mm
600626	PG 9	M16 (metal only)		10	2 x 3.0
600627	PG 9	M16 (metal only)		10	4 x 3.0
600541	PG 9	M16 (metal only)		10	0 x 0.0
600628	PG 11	M16 (plastic only)	3/8"	13	2 x 4.0
600629	PG 11	M16 (plastic only)	3/8"	13	2 x 4.5
600635	PG 11	M16 (plastic only)	3/8"	13	3 x 4.0
600636	PG 11	M16 (plastic only)	3/8"	13	3 x 5.0
600542	PG 11	M16 (plastic only)	3/8"	13	0 x 0.0
600638	PG 13.5	M20		15	2 x 4.5
600639	PG 13.5	M20		15	2 x 5.0
600640	PG 13.5	M20		15	2 x 6.0
600637	PG 13.5	M20		15	3 x 4.0
600630	PG 13.5	M20		15	3 x 5.0
600543	PG 13.5	M20		15	0 x 0.0
600641	PG 16		1/2"	17	2 x 4.0
600644	PG 16		1/2"	17	2 x 6.0
600631	PG 16		1/2"	17	3 x 4.0
600643	PG 16		1/2"	17	3 x 5.0
600646	PG 16		1/2"	17	4 x 6.0
600633	PG 16		1/2"	17	5 x 4.0
600544	PG 16		1/2"	17	0 x 0.0
600645	PG 16		1/2"	17	3 x 6.0
600647	PG 16		1/2"	17	3 x 6.5
600642	PG 16		1/2"	17	4 x 4.0
600632	PG 16		1/2"	17	4 x 5.0
600648	PG 21	M25	3/4"	22	2 x 7.0
600651	PG 21	M25	3/4"	22	2 x 8.0
600653	PG 21	M25	3/4"	22	2 x 9.0
600649	PG 21	M25	3/4"	22	3 x 7.0
600652	PG 21	M25	3/4"	22	3 x 8.0
600634	PG 21	M25	3/4"	22	4 x 7.0
600545	PG 21	M25	3/4"	22	0 x 0.0
600656	PG 29	M32	1"	29.5	5 x 8.5
600654	PG 29	M32	1"	29.5	6 x 5.0
600655	PG 29	M32	1"	29.5	8 x 5.0
600546	PG 29	M32	1"	29.5	0 x 0.0

Specifications are subject to change without prior notice

LUTZE EMC Cabinet Accessories

EMC rails with shield termination and strain relief options within the control cabinet



Part No.	EMC Rail Type	Dimensions WxHxL mm	No. of shield points	Weight grams
346813	EMVS 04-55813	15x32x1,155	55	466
346812	EMVS 03-46812	21.5x75x1,173	46	1,169

EMC Rail Characteristics

- Material
 - Storage Temperature
 - Operational Temperature
- Formed sheet metal
-30°C - +90°C,
-22°F - +194°F
-5°C - +80°C,
+23°F - +176°F

Mounting Bracket Characteristics

- 346814
 - 346860
- Standard M5 thread
Standard M8 thread

Part No.	Mounting bracket Type	Dimensions WxHxL mm	Suitable for Rail	Weight grams
346814.0010	HW-EMVS 04	29.8x14x24	346813	8
346860.0002	HW-EMVS 03	18x80x65	346812	98

Shield Clamp Characteristics

- Material
 - Temperature range
- Sheet steel
0°C - +60°C,
+32°F - +140°F

Part No.	Shield Clamp Type	Cable Clamping Range Ø mm	Length mm	Weight grams
330089.0100	EMVSK 12	0-12	36	2.5
330071.0010	EMVFSK1	12 - 20	42	3
330072.0010	EMVFSK2	20 - 30	55	5
330073.0010	EMVFSK3	30 - 50	74	7

Strain Relief Characteristics

- Fits rails
 - Material
 - Hexagon screw
 - Bottom clip use is optional
- 346812, 346813
Galvanized Steel
Slotted

Part No.	Strain Relief Type	Cable Clamping Range Ø mm	Thread	Weight grams
331000.0010	KS0	8 - 12	M6	30
331001.0010	KS1	12 - 16	M6	32
331002.0010	KS2	16 - 22	M6	35
331003.0010	KS3	34 - 40	M6	68
331004.0010	KS4	52 - 58	M8	60

Metal Tie Wrap Characteristics

Stainless Steel

Part No.	Metal Tie Wrap Type	Length mm	Material	Weight grams
330060.0010	KSE	250	Stainless Steel	30

Specifications are subject to change without prior notice

LUTZE EMC Cabinet Accessories

Assembly of EMC rails with shield termination and strain relief options



346813



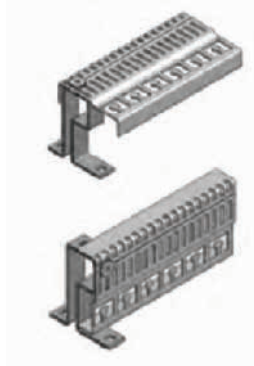
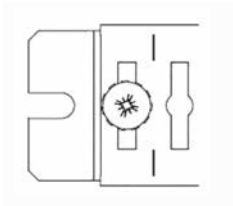
346814.0010



346812



346860.0002



System advantages at a glance:

- Provides shield termination and strain relief within the control cabinet
- Easy to install
- Zip ties can be used with both rails if desired

1. Choose EMC rail based on application requirements.

Lutze EMC rails can be used in any control cabinet either with traditional set up or together with Lutze LSC-Wiring system.

Determine application requirements:

- EMC shielding required only, choose narrower rail 346813
- For both EMC shielding and strain relief needs, choose wider rail 346812
- Cut rail to desired length to fit your cabinet

2. Choose appropriate brackets to install the rail inside the cabinet.

- Use mounting brackets 346814 to secure rail 346813. Uses standard M5 bolts.
- Use mounting brackets 346860 to secure rail 346812. Rail can be mounted into the cabinet in two different ways: see pictures to the left. Mounting holes, 8.5 mm, to be made by the user.



330089.0100



330071.0010 –
330073.0010



331000.0010 –
331004.0010

3. Choose appropriate shield clamps.

- Determine the desired shielding clamp

4. Select optional strain relief if required in the application.

- Rail 346813 provides shield termination or strain relief
- Rail 346812 provides combined shield termination and strain relief

Specifications are subject to change without prior notice

LUTZE Cablefix Vario

Modular Strain Relief System with Plastic or Aluminum Frame for Cable Assemblies



Part No.	Frame Type	Dimensions WxHxD mm	No. of Small VK Inserts	No. of Large VG Inserts
PLASTIC				
606052	KKLR1	136 x 71 x 30	4	2
606053	KKLR2	164 x 71 x 30	6	3
ALUMINUM				
606001	AKLR1	108 x 68 x 30	4	2
606002	AKLR2	148 x 68 x 30	6	3
606004	AKLR4	148 x 108 x 30	12	6
606005	AKLR5	188 x 78 x 30	8	4
606007	AKLR7	188 x 118 x 30	16	8

Characteristics

- Frame material
- Protection class

Polished Aluminum or
Polyamide 66 (GF30)
IP65

Small (VK) Insert Characteristics

- Material
- Temperature range
- Resistance

TPE
-40°C - +135°C,
-40°F - +275°F
UV, ozone, oils and fuels,
acids and dyes, solvents
and salt water

Part No.	Type Small VK	Clamping Range Ø mm	No of Holes
606150	VK0	SOLID	0
606151	VK4	4 – 4.5	14
606152	VK5	4.5 – 5.5	8
606153	VK6	5.5 – 6.5	8
606154	VK7	6.5 – 7.5	5
606155	VK8	7.5 – 8.5	5
606156	VK9	8.5 – 9.5	3
606157	VK10	9.5 – 10.5	3
606158	VK12	10.5 – 12.5	2
606159	VK14	12.5 – 14.5	2
606160	VK16	14.5 – 16.5	2

Large (VG) Insert Characteristics

- Material
- Temperature range
- Resistance

TPE
-40°C - +135°C,
-40°F - +275°F
UV, ozone, oils and fuels,
acids and dyes, solvents
and salt water

Part No.	Type Large VG	Clamping Range Ø mm	No of Holes
606200	VG0	SOLID	0
606201	VG18	16.5 – 18.5	2
606202	VG20	18.5 – 20.5	1
606203	VG22	20.5 – 22.5	1
606204	VG24	22.5 – 24.5	1
606205	VG26	24.5 – 26.5	1
606206	VG28	26.5 – 28.5	1
606207	VG30	28.5 – 30.5	1
606208	VG32	30.5 – 32.5	1
606209	VG34	32.5 – 34.5	1

Blanking Plug Characteristics

- Material

PA6 (GF15)
Gray

Part No.	Fits Insert Part No.	Type	OD - Ø mm	Length mm
606250	606151	BL4	4	30
606251	606152	BL5	5	30
606252	606153	BL6	6	30
606253	606154	BL7	7	30
606254	606155	BL8	8	30
606255	606156	BL9	9	30
606256	606157	BL10	10	30
606257	606158	BL12	12	30
606258	606159	BL14	14	30
606259	606160	BL16	16	30
606260	606201	BL18	18	30

Specifications are subject to change without prior notice

LUTZE Cablefix Vario

Assembly of Modular Strain Relief System



1. Choose aluminum or plastic frame.

The Cablefix Vario features outstanding material characteristics for harsh industrial environments and a high sealing protection of IP65. Every frame ships with an included drill pattern for proper mounting to the cabinet.

The plastic frames are made of reinforced polyamide 66 with brass support. The aluminum version is made entirely of solid polished aluminum.

Cablefix Vario offers strain relief options for cable ranges from 4.5 to 34.5mm in diameter. The versatile system is ideal for installations and retrofitting, and offers proper strain relief for already connectorized cables. This is a great advantage over conventional solutions with standard cable fittings.



2. Choose appropriate inserts for the selected frame.

Example:

606052 can hold either

- 4 inserts type VK or
- 2 inserts type VG
- 2 VK inserts replace 1 VG insert

VK small	VK small	VG large	VG large	VG large	VK small
VK small	VK small				VK small

- The tongue and groove design makes combining different inserts quick and easy.
- The slotted design allows easy installation by sliding the assembled cables in from the side.

3. Select appropriately sized blanking plugs for unused holes.

Once all unused holes are plugged, the system provides a protection rating IP65. The rubber components do not require the use of grease, which is advantageous over other similar systems.

The advantages at a glance:

- Minimum space requirement
- Simple insertion of rubber inserts due to tongue and groove design
- Very versatile
- Allows future expansion
- Ideal for retrofitting of existing cabinets



LUTZE Fittings Cablefix

Cablefix



Characteristics

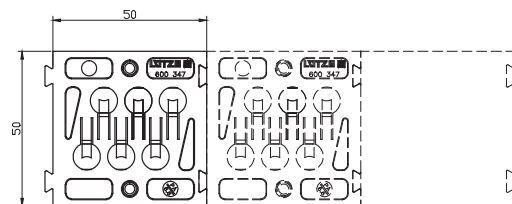
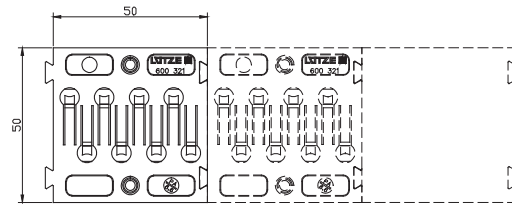
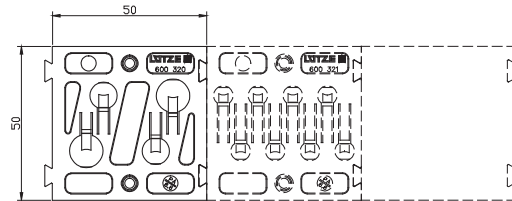
- Integrated strain relief in one direction
- Easy to install: cable pushes easily into position, locks itself and it can no longer be pulled out unless the clamp is released
- An integrated seal protects up to IP55
- Individual cables can be easily loosened and replaced for troubleshooting, maintenance or retrofitting
- Mix & Match: interlocking seal allows for any combination of the three different cablefix versions to custom fit it to your application
- Blanking plugs are supplied to seal unused holes

Fitting Specifications

Material	Polyamide PA
Temperature range	-30°C - +70°C / 22°F - +212°F
Halogen free	Yes
Burning behavior	Polyamide plate according to UL 94 V2
Silicone free	Yes
Enclosure wall thickness	maximum 3 mm
Protection class	IP55
Seal	NBR60 oil resistant

Specifications are subject to change without prior notice

Part No.	Type	Dimensions (WxHxD) mm	Cut out W x H mm	Number of Cables x Cable OD - Ø mm
600320	1xB/V	50.0 x 50.0 x 10.0	46 x 46	2 x 6.1-8.8 + 2 x 7.8-10.7
600321	1xS/A	50.0 x 50.0 x 10.0	46 x 46	8 x 3.8-6.3
600347	1xST	50.0 x 50.0 x 10.0	46 x 46	6 x 6.3-8.9



7 Network Connectivity

Industrial Connectors and Panel Pass Through Devices



LUTZE Network Connectivity Products

Industrial Network Connectors



Application

- Industrial USB connectivity

Characteristics

- Available with or without cord
- 7 different cord lengths
- Female / Female 1:1 or Female / Male 1:1
- Backwards compatible with USB 2.0
- Standard 22.5 mm cut out
- Easy to install

Technical Data

Temperature	-25°C - +70°C/ -13°F - +158°F
Protection class	Type 12 IP65 cap closed, IP20 in inserted operation
Shielding	yes
Transmission	5 Gigabit/sec
Performance	
Contact material	CuSN, gold-plated
Rated current	900 mA per contact
Bending radius	15 x cable OD
Dimensions (DxD)	29.5 mm x 29 mm
Approvals	UL

USB 3.0 “SuperSpeed” Panel Connector



Part No.	Description	Cord Length
490112	USB 3.0 A/A F/F	N/A
490113.0030	USB 3.0 A/A F/M	0.3 m / 11.8"
490113.0060	USB 3.0 A/A F/M	0.6 m / 23.6"
490113.0080	USB 3.0 A/A F/M	0.8 m / 31.5"
490113.0150	USB 3.0 A/A F/M	1.5 m / 59.0"
490113.0200	USB 3.0 A/A F/M	2.0 m / 78.7"
490113.0300	USB 3.0 A/A F/M	3.0 m / 118.0"
490113.0500	USB 3.0 A/A F/M	5.0 m / 196.8"

Application

- Industrial Ethernet connectivity
- Cat5e or Cat6 available

Characteristics

- Female / Female 1:1
- Gold-plated 8 pin (4 pair) connection
- Standard 22.5 mm cut out installation
- Easy to install

Technical Data

Temperature	-25°C - +70°C/ -13°F - +158°F
Protection class	Type 12 IP65 cap closed, IP20 in inserted operation
Shielding	360°
Contact material	CuSN, gold-plated
Rated current	1.5A
Dimensions (DxD)	29.5 mm x 29 mm
Approvals	UL

RJ45 Panel Pass Through



Part No.	Description	Category	Transmission Performance
492075	RJ45 F/F 8/8	Cat5e	100 MHz
491075	RJ45 F/F 8/8	Cat6	250 MHz



Specifications are subject to change without prior notice

LUTZE Network Connectivity Products

Industrial Network Connectors

Application

- Industrial Ethernet connectivity
- Power over Ethernet
- Cat6a

Characteristics

- IDC - Insulation Displacement Connector
- Cable entry: straight or 90°
- Zinc die-cast housing
- Quick connect technology
- Field wireable
- Easy to install

Technical Data

Temperature	-40°C - +85°C/ -40°F - +185°F
Protection class	IP20
Transmission frequency	10 Gigabits/s
Rated current	Max 1.0A per contact
Shielding	360°
Contact material	Spring steel 0.8 µm gold-plated
Conductor OD	AWG 27-22
Cable OD	5 – 9 mm, straight 5.5 – 10 mm, 90°
Approvals	UL
Item specific certification:	490128, 490129, 490151 CC-link IE Field

RJ45 IDC Industrial Connector Cat6a



CC-Link IE
Field

Part No.	Description	Cable Cross section	Color Code
490128	RJ45 – M 8 pol. Cat6a	Solid 24/1-22/1 Stranded 27/7-22/7	T568B
490129	RJ45 – M 8 pol. Cat6a	Solid 24/1-22/1 Stranded 27/7-22/7	T568A
490138	RJ45 – M 8 pol. Cat6a	Solid 26/1-24/1 Stranded 27/7-24/7	T568B
490151	RJ45 – 4x90° 8 pol. Cat6a	Solid 24/1-22/1 Stranded 27/7-22/7	T568B

Application

- Industrial Ethernet connectivity

Characteristics

- 17 mm cut out installation
- Female / Female 4:4 or 8:8
- Easy to install

Technical Data

Temperature	-25°C - +85°C/ -13°F - +185°F
Protection class	IP 67 in inserted operation
Rated current	Max 1.0A per contact
Shielding	360°
Contact material	gold-plated phosphor bronze
Dimensions	29.5 x 29 mm

M12 / RJ45 Panel Pass Through



Part No.	Description	No. Poles	Transmission Performance
490105	M12 / RJ45 F/F 90° Cat5	4	100 Megabit/sec
490106	M12 / RJ45 F/F 180° Cat5	4	100 Megabit/sec
490107	M12 / RJ45 F/F 90° Cat5e	8	1 Gigabit/sec
490108	M12 / RJ45 F/F 180° Cat5e	8	1 Gigabit/sec