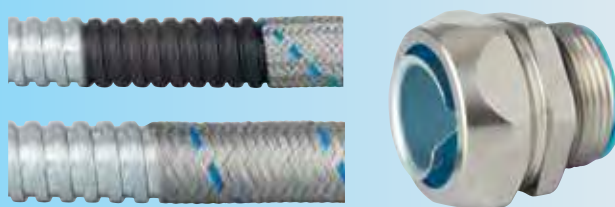




Much More Variety

Electric Components – Made in Germany

- // Cable Glands
- // Conduit Systems
- // Enclosure Solutions
- // Circular Connectors

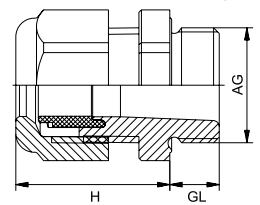
Cable Glands**▶ 2-8****Cable Glands for Special Applications****▶ 9****Industrial Glands for Special Applications****▶ 10-12****Accessories****▶ 13-14****Polyamide Conduit & Fittings****▶ 15-19****Metal Conduit & Fittings****▶ 20-24****Metal Conduits for Special Applications****▶ 25-28****Fittings - Metal Conduits for Special Applications****▶ 29-30****Enclosure Solutions****▶ 31****Circular Connectors****▶ 32**



Material	Polyamide VO according to UL 94
Seal	Buna-N
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG) with additional O-Ring
Operating Temperature	- 40 °C – 100 °C (-40 °F - 212 °F)
Colors	Grey (RAL 7035), Black (RAL 9005), Blue (RAL 5012) for the intrinsic safety "if"

Advice:

- // With additional pre-assembled O-Ring upon request
- // Other sealing material e.g. Silicone upon request



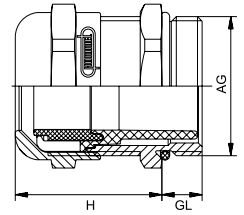
AG	Ø mm	GL mm	H mm	mm	Number grey	Number black	GL mm	Elongated Number grey	Elongated Number black
PG 7	3 – 6,5	8	21	15	1.209.0700.14	1.209.0701.14	15	1.209.0700.60	1.209.0701.60
PG 7	2 – 5	8	21	15	1.209.0700.15	1.209.0701.15	15	1.209.0700.61	1.209.0701.61
PG 9	4 – 8	8	22	19	1.209.0900.14	1.209.0901.14	15	1.209.0900.60	1.209.0901.60
PG 9	2 – 6	8	22	19	1.209.0900.15	1.209.0901.15	15	1.209.0900.61	1.209.0901.61
PG 11	5 – 10	8	25	22	1.209.1100.14	1.209.1101.14	15	1.209.1100.60	1.209.1101.60
PG 11	3 – 7	8	25	22	1.209.1100.15	1.209.1101.15	15	1.209.1100.61	1.209.1101.61
PG 13.5	6 – 12	9	27	24	1.209.1300.14	1.209.1301.14	15	1.209.1300.60	1.209.1301.60
PG 13.5	5 – 9	9	27	24	1.209.1300.15	1.209.1301.15	15	1.209.1300.61	1.209.1301.61
PG 16	10 – 14	10	28	27	1.209.1600.14	1.209.1601.14	15	1.209.1600.60	1.209.1601.60
PG 16	7 – 12	10	28	27	1.209.1600.15	1.209.1601.15	15	1.209.1600.61	1.209.1601.61
PG 21	13 – 18	11	31	33	1.209.2100.14	1.209.2101.14	15	1.209.2100.60	1.209.2101.60
PG 21	9 – 16	11	31	33	1.209.2100.15	1.209.2101.15	15	1.209.2100.61	1.209.2101.61
PG 29	18 – 25	11	39	42	1.209.2900.14	1.209.2901.14	15	1.209.2900.60	1.209.2901.60
PG 29	13 – 20	11	39	42	1.209.2900.15	1.209.2901.15	15	1.209.2900.61	1.209.2901.61
PG 36	22 – 32	13	48	53	1.209.3600.14	1.209.3601.14	18	1.209.3600.60	1.209.3601.60
PG 36	20 – 26	13	48	53	1.209.3600.15	1.209.3601.15	18	1.209.3600.61	1.209.3601.61
PG 42	32 – 38	13	49	60	1.209.4200.14	1.209.4201.14	18	1.209.4200.60	1.209.4201.60
PG 42	25 – 31	13	49	60	1.209.4200.15	1.209.4201.15	18	1.209.4200.61	1.209.4201.61
PG 48	37 – 44	14	49	65	1.209.4800.14	1.209.4801.14	18	1.209.4800.60	1.209.4801.60
PG 48	29 – 35	14	49	65	1.209.4800.15	1.209.4801.15	18	1.209.4800.61	1.209.4801.61
M 12 x 1,5	3 – 6,5	8	21	15	1.209.1200.50	1.209.1201.50	18	1.209.1200.30	1.209.1201.30
M 12 x 1,5	2 – 5	8	21	15	1.209.1200.51	1.209.1201.51	15	1.209.1200.31	1.209.1201.31
M 16 x 1,5	4 – 8	8	22	19	1.209.1600.50	1.209.1601.50	15	1.209.1600.30	1.209.1601.30
M 16 x 1,5	2 – 6	8	22	19	1.209.1600.51	1.209.1601.51	15	1.209.1600.31	1.209.1601.31
M 16 x 1,5	5 – 10	8	25	22	1.219.1600.50	1.219.1601.50	15	1.219.1600.30	1.219.1601.30
M 20 x 1,5	6 – 12	8	27	24	1.209.2000.50	1.209.2001.50	15	1.209.2000.30	1.209.2001.30
M 20 x 1,5	5 – 9	9	27	24	1.209.2000.51	1.209.2001.51	15	1.209.2000.31	1.209.2001.31
M 20 x 1,5	10 – 14	9	28	27	1.219.2000.50	1.219.2001.50	15	1.219.2000.30	1.219.2001.30
M 25 x 1,5	13 – 18	9	31	30	1.219.2500.50	1.219.2501.50	15	1.209.2500.30	1.209.2501.30
M 25 x 1,5	13 – 18	11	31	33	1.209.2500.50	1.209.2501.50	15	1.209.2500.31	1.209.2501.31
M 25 x 1,5	9 – 16	11	31	33	1.209.2500.51	1.209.2501.51	15		
M 32 x 1,5	15 – 21	11	39	36	1.219.3200.50	1.219.3201.50	15	1.209.3200.30	1.209.3201.30
M 32 x 1,5	18 – 25	11	39	42	1.209.3200.50	1.209.3201.50	15	1.209.3200.31	1.209.3201.31
M 32 x 1,5	13 – 20	11	39	42	1.209.3200.51	1.209.3201.51	15		
M 40 x 1,5	19 – 27	13	47	46	1.219.4000.50	1.219.4001.50	15	1.209.4000.30	1.209.4001.30
M 40 x 1,5	22 – 32	13	48	53	1.209.4000.50	1.209.4001.50	15	1.209.4000.31	1.209.4001.31
M 40 x 1,5	20 – 26	13	48	53	1.209.4000.51	1.209.4001.51	18		
M 50 x 1,5	32 – 38	13	49	60	1.209.5000.50	1.209.5001.50	18	1.209.5000.30	1.209.5001.30
M 50 x 1,5	25 – 31	13	49	60	1.209.5000.51	1.209.5001.51	18	1.209.5000.31	1.209.5001.31
M 63 x 1,5	37 – 44	14	49	65 / 68	1.209.6300.50	1.209.6301.50	18	1.209.6300.30	1.209.6301.30
M 63 x 1,5	29 – 35	14	49	65 / 68	1.209.6300.51	1.209.6301.51	18	1.209.6300.31	1.209.6301.31



Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG)
Operating Temperature	- 40 °C – 100 °C (-40 °F - 212 °F) [PA] - 35 °C – 150 °C (-31 °F - 302 °F) [PVDF]

Advice:

// Other sealing material e.g. Silicone upon request

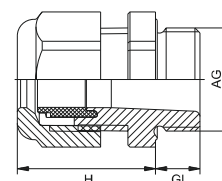
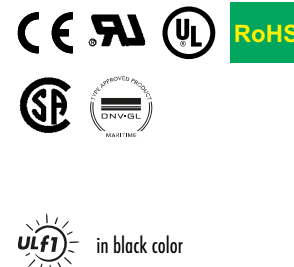


AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M -40 °C – 100 °C -40 °F – 215 °F	Number HSK-M PVDF -35 °C – 150 °C -31 °F – 302 °F	GL mm	Elongated Number HSK-M	Elongated Number HSK-M PVDF
PG 7	3 – 6,5	5	19	14	1.609.0700.01	1.699.0700.01	10	1.609.0700.60	1.699.0700.60
PG 7	2 – 5	5	19	14	1.609.0700.15	1.699.0700.15	10	1.609.0700.61	1.699.0700.61
PG 9	4 – 8	6	21	17	1.609.0900.01	1.699.0900.01	10	1.609.0900.60	1.699.0900.60
PG 9	2 – 6	6	21	17	1.609.0900.15	1.699.0900.15	10	1.609.0900.61	1.699.0900.61
PG 11	5 – 10	6	22	20	1.609.1100.01	1.699.1100.01	10	1.609.1100.60	1.699.1100.60
PG 11	3 – 7	6	22	20	1.609.1100.15	1.699.1100.15	10	1.609.1100.61	1.699.1100.61
PG 13.5	6 – 12	6,5	24	22	1.609.1300.01	1.699.1300.01	10	1.609.1300.60	1.699.1300.60
PG 13.5	5 – 9	6,5	24	22	1.609.1300.15	1.699.1300.15	10	1.609.1300.61	1.699.1300.61
PG 16	10 – 14	6,5	23	24	1.609.1600.01	1.699.1600.01	10	1.609.1600.60	1.699.1600.60
PG 16	7 – 12	6,5	23	24	1.609.1600.15	1.699.1600.15	10	1.609.1600.61	1.699.1600.61
PG 21	13 – 18	7	24	30	1.609.2100.01	1.699.2100.01	12	1.609.2100.60	1.699.2100.60
PG 21	9 – 16	7	24	30	1.609.2100.15	1.699.2100.15	12	1.609.2100.61	1.699.2100.61
PG 29	18 – 25	8	29	40	1.609.2900.01	1.699.2900.01	12	1.609.2900.60	1.699.2900.60
PG 29	13 – 20	8	29	40	1.609.2900.15	1.699.2900.15	15	1.609.2900.61	1.699.2900.61
PG 36	22 – 32	8	35	50	1.609.3600.01	1.699.3600.01	15	1.609.3600.60	1.699.3600.60
PG 36	20 – 26	8	35	50	1.609.3600.15	1.699.3600.15	15	1.609.3600.61	1.699.3600.61
PG 42	32 – 38	9	37	57	1.609.4200.01	1.699.4200.01	15	1.609.4200.60	1.699.4200.60
PG 42	25 – 31	9	37	57	1.609.4200.15	1.699.4200.15	15	1.609.4200.61	1.699.4200.61
PG 48	37 – 44	10	38	64	1.609.4800.01	1.699.4800.01	15	1.609.4800.60	1.699.4800.60
PG 48	29 – 35	10	38	64	1.609.4800.15	1.699.4800.15	15	1.609.4800.61	1.699.4800.61
M 12 x 1,5	3 – 6,5	6,5	19	14	1.609.1200.50	1.699.1200.50	10	1.609.1200.30	1.699.1200.30
M 12 x 1,5	2 – 5	6,5	19	14	1.609.1200.51	1.699.1200.51	10	1.609.1200.31	1.699.1200.31
M 16 x 1,5	4 – 8	6	21	17 / 19	1.609.1600.50	1.699.1600.50	10	1.609.1600.30	1.699.1600.30
M 16 x 1,5	2 – 6	6	21	17 / 19	1.609.1600.51	1.699.1600.51	10	1.609.1600.31	1.699.1600.31
M 16 x 1,5	5 – 10	6	22	20	1.609.1611.50	1.699.1611.50	10	1.609.1611.30	1.699.1611.30
M 20 x 1,5	6 – 12	6	23	22	1.609.2000.50	1.699.2000.50	10	1.609.2000.30	1.699.2000.30
M 20 x 1,5	5 – 9	6	23	22	1.609.2000.51	1.699.2000.51	10	1.609.2000.31	1.699.2000.31
M 20 x 1,5	10 – 14	6	24	24	1.609.2016.50	1.699.2016.50	10	1.609.2016.30	1.699.2016.30
M 25 x 1,5	13 – 18	7	26	30	1.609.2500.50	1.699.2500.50	12	1.609.2500.30	1.699.2500.30
M 25 x 1,5	9 – 16	7	26	30	1.609.2500.51	1.699.2500.51	12	1.609.2500.31	1.699.2500.31
M 32 x 1,5	18 – 25	8	31	40	1.609.3200.50	1.699.3200.50	12	1.609.3200.30	1.699.3200.30
M 32 x 1,5	13 – 20	8	31	40	1.609.3200.51	1.699.3200.51	12	1.609.3200.31	1.699.3200.31
M 32 x 1,5	15 – 21	8	33	36	1.609.3200.52		12	1.609.3200.32	
M 40 x 1,5	22 – 32	8	37	50	1.609.4000.50	1.699.4000.50	15	1.609.4000.30	1.699.4000.30
M 40 x 1,5	20 – 26	8	37	50	1.609.4000.51	1.699.4000.51	15	1.609.4000.31	1.699.4000.31
M 40 x 1,5	19 – 27	8	33	46	1.609.4000.52		15	1.609.4000.32	
M 50 x 1,5	32 – 38	9	37	57	1.609.5000.50		15	1.609.5000.30	
M 50 x 1,5	25 – 31	9	37	57	1.609.5000.51		15	1.609.5000.31	
M 63 x 1,5	37 – 44	10	38	64 / 68	1.609.6300.50		15	1.609.6300.30	
M 63 x 1,5	29 – 35	10	38	64 / 68	1.609.6300.51		15	1.609.6300.31	



Material	Polyamide VO according to UL 94
Seal	Buna-N
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG) with additional O-Ring
Operating Temperature	- 40 °C – 100 °C (-40 °F – 212 °F)
Colors	Grey (RAL 7035), Black (RAL 9005), Blue (RAL 5012) for the intrinsic safety "i"

- // With additional pre-assembled O-Ring upon request
- // Suitable O-Ring
- // Other sealing materials e.g. silicone upon request
- // Other colors upon request



AG	$\varnothing$ mm	GL mm	H mm	mm	Number grey	Number black	Number blue
NPT 3/8"	4 – 8	15	22	19 / 22	1.209.3800.70	1.209.3801.70	1.209.3802.70
NPT 3/8"	2 – 6	15	22	19 / 22	1.209.3800.71	1.209.3801.71	1.209.3802.71
NPT 1/2"	6 – 12	13	27	24	1.209.1200.70	1.209.1201.70	1.209.1202.70
NPT 1/2"	5 – 9	13	27	24	1.209.1200.71	1.209.1201.71	1.209.1202.71
NPT 1/2" (16)	10 – 14	13	28	27	1.209.1216.70	1.209.1217.70	1.209.1218.70
NPT 1/2" (16)	7 – 12	13	28	27	1.209.1216.71	1.209.1217.71	1.209.1218.71
NPT 3/4"	13 – 18	14	31	33	1.209.3400.70	1.209.3401.70	1.209.3402.70
NPT 3/4"	9 – 16	14	31	33	1.209.3400.71	1.209.3401.71	1.209.3402.71
NPT 1"	18 – 25	19	39	42	1.209.1000.70	1.209.1001.70	1.209.1002.70
NPT 1"	13 – 20	19	39	42	1.209.1000.71	1.209.1001.71	1.209.1002.71
NPT 1" 1/4"	18 – 25	16	39	42 / 46	1.209.5400.70	1.209.5401.70	1.209.5402.70
NPT 1" 1/4"	13 – 20	16	39	42 / 46	1.209.5400.71	1.209.5401.71	1.209.5402.71
NPT 1" 1/2"	22 – 32	20	48	53	1.209.6400.70	1.209.6401.70	1.209.6402.70
NPT 1" 1/2"	20 – 26	20	48	53	1.209.6400.71	1.209.6401.71	1.209.6402.71

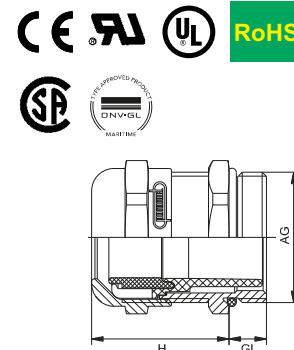
HSK-M / HSK-M-PVDF

NPT



Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG)
Operating Temperature	- 40 °C – 100 °C (-40 °F – 212 °F) (PA) - 35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

- // Other sealing materials e.g. silicone upon request



AG	$\varnothing$ mm	GL mm	H mm	mm	Number HSK-M -40 °C – 100 °C	Number HSK-M-PVDF -35 °C – 150 °C
NPT 3/8"	4 – 8	15	21	17 / 19	1.609.3800.70	1.699.3800.70
NPT 3/8"	2 – 6	15	21	17 / 19	1.609.3800.71	1.699.3800.71
NPT 1/2"	6 – 12	13	24	22 / 24	1.609.1200.70	1.699.1200.70
NPT 1/2"	5 – 9	13	24	22 / 24	1.609.1200.71	1.699.1200.71
NPT 3/4"	13 – 18	13	25	30	1.609.3400.70	1.699.3400.70
NPT 3/4"	9 – 16	13	25	30	1.609.3400.71	1.699.3400.71
NPT 1"	18 – 25	19	29	40	1.609.1000.70	
NPT 1"	13 – 20	19	29	40	1.609.1000.71	

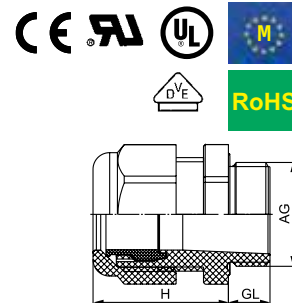
METRICA - P



Material	Polyamide
Seal	Buna-N
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG) with additional O-Ring
Operating Temperature	- 40 °C – 100 °C (-40 °F - 212 °F)
Colors	Grey (RAL 7035), Black (RAL 9005), Blue (RAL 5012) for the intrinsic safety "i"

Advice: // With additional pre-assembled O-Ring upon request

// Other sealing material e.g. Silicone upon request

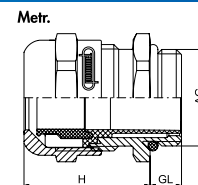


AG	$\varnothing$ mm	GL mm	H mm	 mm	Number grey	Number black
M 12 x 1,5	4 – 7	8	22	15	1.218.1200.50	1.218.1201.50
M 12 x 1,5	2 – 5	8	22	15	1.218.1200.51	1.218.1201.51
M 16 x 1,5	6 – 10	8	26	19	1.218.1600.50	1.218.1601.50
M 16 x 1,5	3 – 7	8	26	19	1.218.1600.51	1.218.1601.51
M 20 x 1,5	8 – 13	9	29	24	1.218.2000.50	1.218.2001.50
M 20 x 1,5	7 – 10	9	29	24	1.218.2000.51	1.218.2001.51
M 25 x 1,5	11 – 17	10	33	30	1.218.2500.50	1.218.2501.50
M 25 x 1,5	8 – 13	10	33	30	1.218.2500.51	1.218.2501.51
M 32 x 1,5	11 – 21	10	41	36	1.218.3200.50	1.218.3201.50
M 32 x 1,5	10 – 15	10	41	36	1.218.3200.51	1.218.3201.51
M 40 x 1,5	19 – 28	12	46	46	1.218.4000.50	1.218.4001.50
M 40 x 1,5	15 – 23	12	46	46	1.218.4000.51	1.218.4001.51
M 50 x 1,5	27 – 35	12	52	55	1.218.5000.50	1.218.5001.50
M 50 x 1,5	22 – 29	12	52	55	1.218.5000.51	1.218.5001.51
M 63 x 1,5	36 – 48	12	57	68	1.218.6300.50	1.218.6301.50
M 63 x 1,5	28 – 39	12	57	68	1.218.6300.51	1.218.6301.51

METRICA - M



Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG)
Operating Temperature	- 40 °C – 100 °C (-40 °F - 212 °F)



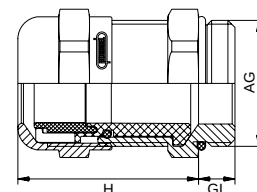
AG	mm	GL mm	H mm	 mm	Number
M 12 x 1,5	4 – 7	6	20	14	1.618.1200.50
M 12 x 1,5	2 – 5	6	20	14	1.618.1200.51
M 16 x 1,5	6 – 10	6	25	19	1.618.1600.50
M 16 x 1,5	3 – 7	6	25	19	1.618.1600.51
M 20 x 1,5	8 – 13	6.5	26	24	1.618.2000.50
M 20 x 1,5	7 – 10	6.5	26	24	1.618.2000.51
M 25 x 1,5	11 – 17	7	29	29	1.618.2500.50
M 25 x 1,5	8 – 13	7	29	29	1.618.2500.51
M 32 x 1,5	11 – 21	8	37	34	1.618.3200.50
M 32 x 1,5	10 – 15	8	37	34	1.618.3200.51
M 40 x 1,5	19 – 28	8	40,5	44	1.618.4000.50
M 40 x 1,5	15 – 23	8	40,5	44	1.618.4000.51
M 50 x 1,5	27 – 35	9	49,5	55	1.618.5000.50
M 50 x 1,5	22 – 29	9	49,5	55	1.618.5000.51
M 63 x 1,5	34 – 48	10	49	68	1.618.6300.50
M 63 x 1,5	28 – 39	10	49	68	1.618.6300.51



Material	Nickel plated brass
Clamping insert	Metalised polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG)
Operating Temperature	-40 °C - 100 °C (-40 °F - 212 °F)

Advice:

// Other sealing material e.g. Silicone upon request



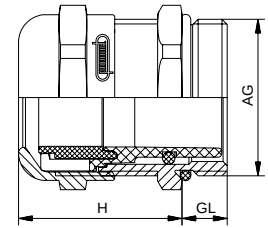
AG	$\varnothing$ mm	H mm	$\varnothing$ mm	GL mm	Number	GL mm	Number elongated
M 12 x 1,5	3-6,5	25	14	6,5	1.631.1200.50	10	1.631.1200.30
M 16 x 1,5	4-8	29	17/19	6	1.631.1609.50	10	1.631.1609.30
M 16 x 1,5	5-10	32	20	6	1.631.1600.50	10	1.631.1600.30
M 20 x 1,5	6-12	32,5	22	6	1.631.2013.50	10	1.631.2013.30
M 20 x 1,5	10-14	33	24	6	1.631.2000.50	10	1.631.2000.30
M 25 x 1,5	13-18	39	30	7	1.631.2500.50	12	1.631.2500.30
M 32 x 1,5	18-25	45	40	8	1.631.3200.50	12	1.631.3200.30
M 40 x 1,5	24-32	51	50	8	1.631.4000.50	15	1.631.4000.30
M 50 x 1,5	32-38	57,5	57	9	1.631.5000.50	15	1.631.5000.30
M 63 x 1,5	37-44	52	64/68	10	1.631.6300.50	15	1.631.6300.30
PG 7	3-6,5	24	14	5	1.631.0700.01		
PG 9	4-8	28	17	6	1.631.0900.01		
PG 11	5-10	29	20	6	1.631.1100.01		
PG 13,5	6-12	31	22	6,5	1.631.1300.01		
PG 16	10-14	32	24	6,5	1.631.1600.01		
PG 21	13-18	38	30	7	1.631.2100.01		
PG 29	18-25	43	40	8	1.631.2900.01		
PG 36	24-32	48	50	8	1.631.3600.01		
PG 42	32-38	45	57	9	1.631.4200.01		
PG 48	37-44	46	64	10	1.631.4800.01		
NPT 3/8"	4-8	29	17/19	15	1.631.3800.70		
NPT 1/2"	6-12	32,5	22/24	13	1.631.1200.70		
NPT 3/4"	13-18	39	30	13	1.631.3400.70		

HSK-M-EMC / HSK-M-PVDF-EMC

METR., METR.-ELONGATED



Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG)
Operating Temperature	-40 °C - 100 °C (-40 °F - 212 °F) (PA) -35 °C - 150 °C (-31 °F - 302 °F) (PVDF)



Advice:

- // Other sealing material e.g. Silicone upon request
- // Stainless steel on request



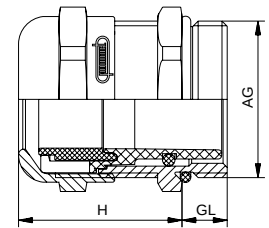
AG	Ø mm	H mm	mm	GL mm	Number HSK-M-EMC -40 °C - 100 °C -40 °F - 212 °F	Number HSK-M-PVDF-EMC -40 °C - 100 °C -40 °F - 212 °F	GL mm	Number HSK-M-EMC elongated -40 °C - 100 °C -40 °F - 212 °F
M 12 x 1,5	3-6,5	19	14	6,5	1.691.1200.50	1.698.1200.50	10	1.691.1200.30
M 12 x 1,5	2-5	19	14	6,5	1.691.1200.51	1.698.1200.51	10	1.691.1200.31
M 16 x 1,5	5-10	22	20	6	1.691.1600.50	1.698.1611.50	10	1.691.1600.30
M 16 x 1,5	3-7	22	20	6	1.691.1600.51	1.698.1611.51	10	1.691.1600.31
M 20 x 1,5	10-14	24	24	6	1.691.2000.50	1.698.2000.50	10	1.691.2000.30
M 20 x 1,5	7-12	24	24	6	1.691.2000.51	1.698.2000.51	10	1.691.2000.31
M 25 x 1,5	13-18	26	30	7	1.691.2500.50	1.698.2500.50	12	1.691.2500.30
M 25 x 1,5	9-16	26	30	7	1.691.2500.51	1.698.2500.51	12	1.691.2500.31
M 32 x 1,5	18-25	31	40	8	1.691.3200.50		12	1.691.3200.30
M 32 x 1,5	13-20	31	40	8	1.691.3200.51		12	1.691.3200.31
M 32 x 1,5	15-21	33	36	8	1.691.3200.52		12	1.691.3200.32
M 40 x 1,5	22-32	37	50	8	1.691.4000.50		15	1.691.4000.30
M 40 x 1,5	20-26	37	50	8	1.691.4000.51		15	1.691.4000.31
M 40 x 1,5	19-27	33	46	8	1.691.4000.52		15	1.691.4000.32
M 50 x 1,5	32-38	37	57	9	1.691.5000.50		15	1.691.5000.30
M 50 x 1,5	25-31	37	57	9	1.691.5000.51		15	1.691.5000.31
M 63 x 1,5	37-44	38	64 / 68	10	1.691.6300.50		15	1.691.6300.30
M 63 x 1,5	29-35	38	64 / 68	10	1.691.6300.51		15	1.691.6300.31



Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 - 10 bar / IP 69K (NEMA 6 - 150 PSIG)
Operating Temperature	-40 °C - 100 °C (-40 °F - 212 °F) (PA) -35 °C - 150 °C (-31 °F - 302 °F) (PVDF)

Advice:

- // Other sealing material e.g. Silicone upon request
- // Stainless steel on request



AG	$\varnothing$ mm	H mm	$\varnothing$ mm	GL mm	Number HSK-M-EMC -40 °C - 100 °C -40 °F - 212 °F	Number HSK-M-PVDF-EMC -40 °C - 100 °C -40 °F - 212 °F	GL mm	Number HSK-M-EMC elongated -40 °C - 100 °C -40 °F - 212 °F
PG 7	3-6,5	19	14	5	1.691.0700.01	1.698.0700.01	10	1.691.0700.60
PG 7	2-5	19	14	5	1.691.0700.15	1.698.0700.15	10	1.691.0700.61
PG 9	4-8	21	17	6	1.691.0900.01	1.698.0900.01	10	1.691.0900.60
PG 9	2-6	21	17	6	1.691.0900.15	1.698.0900.15	10	1.691.0900.61
PG 11	5-10	22	20	6	1.691.1100.01	1.698.1100.01	10	1.691.1100.60
PG 11	3-7	22	20	6	1.691.1100.15	1.698.1100.15	10	1.691.1100.61
PG 13,5	6-12	24	22	6,5	1.691.1300.01	1.698.1300.01	10	1.691.1300.60
PG 13,5	5-9	24	22	6,5	1.691.1300.15	1.698.1300.15	10	1.691.1300.61
PG 16	10-14	23	24	6,5	1.691.1600.01	1.698.1600.01	10	1.691.1600.60
PG 16	7-12	23	24	6,5	1.691.1600.15	1.698.1600.15	10	1.691.1600.61
PG 21	13-18	24	30	7	1.691.2100.01	1.698.2100.01	12	1.691.2100.60
PG 21	9-16	24	30	7	1.691.2100.15	1.698.2100.15	12	1.691.2100.61
PG 29	18-25	29	40	8	1.691.2900.01	1.698.2900.01	12	1.691.2900.60
PG 29	13-20	29	40	8	1.691.2900.15	1.698.2900.15	12	1.691.2900.61
PG 36	22-32	35	50	8	1.691.3600.01	1.698.3600.01	15	1.691.3600.60
PG 36	20-26	35	50	8	1.691.3600.15	1.698.3600.15	15	1.691.3600.61
PG 42	32-38	37	57	9	1.691.4200.01		15	1.691.4200.60
PG 42	25-31	37	57	9	1.691.4200.15		15	1.691.4200.61
PG 48	37-44	38	64	10	1.691.4800.01		15	1.691.4800.60
PG 48	29-35	38	64	10	1.691.4800.15		15	1.691.4800.61

NPT 3/8"	4-8	21	17 / 19	15	1.691.3800.70			
NPT 3/8"	2-6	21	17 / 19	15	1.691.3800.71			
NPT 1/2"	6-12	24	22 / 24	13	1.691.1200.70			
NPT 1/2"	5-9	24	22 / 24	13	1.691.1200.71			
NPT 3/4"	13-18	25	30	13	1.691.3400.70			
NPT 3/4"	9-16	25	30	13	1.691.3400.71			

HSK-INOX-HD PRO

METR.



Material	1.4404 / AISI 316 L
Seal	VMQ (Silicone), blue (similar RAL 5017)
Protection	IP 66, IP 68 to 10 bar, IP 69K
Operating Temperature	- 40 °C – 120 °C (-40 °F – 248 °F)

Advice: // EMC connection integrated
 // VDMA Riboflavin cleaning test passed
 // EHEDG 01 cleaning test passed
 // EHEDG certified EL class | AUX approved

AG	mm	GL	H	D	mm	Number
M 12 x 1,5	8	21	15	21	15	1.209.1200.50
M 16 x 1,5	8	21	15	21	15	1.209.1200.51
M 20 x 1,5	8	22	19	22	19	1.209.1600.50
M 20 x 1,5	8	22	19	22	19	1.209.1600.51
M 25 x 1,5	8	27	24	27	24	1.209.2000.50
M 25 x 1,5	9	27	24	27	24	1.209.2000.51
M 32 x 1,5	9	31	30	31	30	1.219.2500.50
M 32 x 1,5	11	31	33	31	33	1.209.2500.50

HSK-INOX-HD

METR.



Material	1.4404 / AISI 316 L
Seal	VMQ (Silicone), blue (similar RAL 5017)
Protection	IP 68
Operating Temperature	- 40 °C – 120 °C (-40 °F – 248 °F)

Advice: // EMC integrated
 // Elongated threads on request
 // other sizes upon request
 // temp. range -31 °F – 302 °F (PVDF Version) on request
 // ideal for foam-cleaning

AG	mm	GL	H	D	mm	Number
M 12 x 1,5	8	21	15	21	15	1.209.1200.50
M 16 x 1,5	8	21	15	21	15	1.209.1200.51
M 20 x 1,5	8	22	19	22	19	1.209.1600.50
M 20 x 1,5	8	22	19	22	19	1.209.1600.51
M 25 x 1,5	8	27	24	27	24	1.209.2000.50

INDUSTRIAL CABLE GLANDS FOR HAZARDOUS AREAS

EXIOS

EXIOS+ STANDARD + MZ + BARRIER + A2F



// material: brass, nickel plated brass, INOX 316L
 // sizes: M 16 – M 75, NPT 3/8" – NPT 3"
 // types: Standard, Barrier, MZ, A2F
 // group: I, II, III
 // type of protection: Ex d, Ex e, Ex ta
 // certified according to the latest IECEx & ATEX certification



HSK Ex-e Standard cable glands



ATEK IECEx ATEX IECEx ATEX IECEx ATEX

HSK-EMC-Ex e safety cable glands



ATEK IECEx ATEX IECEx ATEX IECEx ATEX

HSK Ex-e cable glands for special applications

HSK-Ex d safety cable glands

Ex accessories



ATEK IECEx ATEX IECEx ATEX IECEx ATEX

FLEXIBLE CABLE GLANDS

HSK-Flex



- // Material: polyamide and nickel plated brass (with steel spring made of INOX)
- // PVDF versions available
- // EMC versions available
- // Colors: black and grey, other colors upon request

ELBOW CABLE GLANDS

HSK-W



- // Material: polyamide, zinc die-cast / nickel plated brass
- // Quick and easy assembly
- // Elbow-Flex version available

MINI AND XL

HSK



- // Material: nickel plated brass
- // Sizes: Mini and XL, M 6 - M 10, M 63 - M 110, G 2 1/2" - G 4"
- // High-temperature version
- // Various seals
- // Various thread lengths
- // EMC connections

MULTI AND FLAT CABLE SEALS

HSK-ME and HSK-Flaka



- // Material: TPE, FKM, VMQ
- // Customized versions
- // Various seals with membrane
- // For polyamide-, brass- and stainless steel Cable Glands

STAINLESS STEEL CABLE GLANDS

HSK-Inox



- // Material: INOX AISI 303 & 316L
- // Sizes: M 12 - M 63, PG 7 - PG 48, NPT 3/8" - NPT 1"
- // Flexible overlapping clamping splines
- // Form seal
- // Various thread lengths
- // PVDF-version available
- // The internal sealing edge results in a superior seal

SUITABLE FOR USE IN RAILWAY TRANSPORT

VariaPro Rail meets all requirements for use in rail transport. It has successfully passed the tests of the fire protection standards DIN EN 45545-2 and DIN EN 45545-3. VariaPro Rail can be used without restriction in all trains on the European rail network. The slim structure meets the requirement for space saving installation. Added to this is the ease of installation of the cable gland.

- // EMC connection as standard
- // High fire protection
- // Fire resistance E30
- // Seal: EPDM
- // Extremely high strain relief
- // Impact resistance 7 Joule according DIN IEC 62444



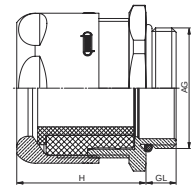
VARIAPRO RAIL

METR.



Material	Nickel plated brass
Seal / O-Ring	EPDM
Protection	IP 68 - 10 bar within the specified clamping range
Operating Temperature	- 40 °C - 100 °C (- 40 °F - 212 °F)

- // DIN EN 45545-2 and DIN EN 45545-3
- // Fire resistance E30



AG	Ø mm	GL	H mm	mm Done Nut	mm Body	Number
M 20 x 1,5	7,0 – 14,0	6	27	22	24	1.750.2000.50*
M 20 x 1,5	10,0 – 14,0	6	27	22	24	1.750.2000.51
M 25 x 1,5	11,0 – 18,0	7	29	27	30	1.750.2500.50*
M 25 x 1,5	14,5 – 18,0	7	29	27	30	1.750.2500.51
M 32 x 1,5	16,0 – 25,0	8	34	36	40	1.750.3200.50*
M 32 x 1,5	20,5 – 25,0	8	34	36	40	1.750.3200.51
M 40 x 1,5	21,0 – 32,0	8	40	46	50	1.750.4000.50*
M 40 x 1,5	26,5 – 32,0	8	40	46	50	1.750.4000.51

* Versions with removable reducers

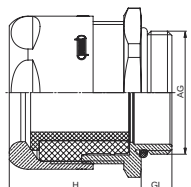
VARIAPRO TEMP

METR.



Material	Nickel plated brass
Seal / O-Ring	VMQ (Silikon)
Protection	IP 68 - 10 bar within the specified clamping range
Operating Temperature	-60 °C - 200 °C

- // Suitable for absolute low temperature applications
- // Also ideal for high temperatures up to 200 °C



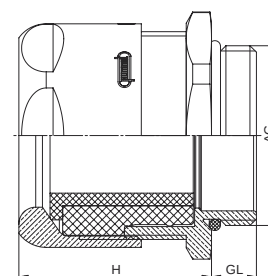
AG	Ø mm	GL	H mm	mm Done Nut	mm Body	Number
M 20 x 1,5	7,0 – 14,0	6	27	22	24	1.750.2000.50*
M 20 x 1,5	10,0 – 14,0	6	27	22	24	1.750.2000.51
M 25 x 1,5	11,0 – 18,0	7	29	27	30	1.750.2500.50*
M 25 x 1,5	14,5 – 18,0	7	29	27	30	1.750.2500.51
M 32 x 1,5	16,0 – 25,0	8	34	36	40	1.750.3200.50*
M 32 x 1,5	20,5 – 25,0	8	34	36	40	1.750.3200.51
M 40 x 1,5	21,0 – 32,0	8	40	46	50	1.750.4000.50*
M 40 x 1,5	26,5 – 32,0	8	40	46	50	1.750.4000.51

* Versions with removable reducers



Material	Nickel plated brass
Seal / O-Ring	FKM
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	- 20 °C – 180 °C (- 4 °F – 356 °F)

// High resistance to acids and chemicals
// Suitable for the process industry



AG	$\varnothing$ mm	GL	H mm	$\varnothing$ mm Done Nut	$\varnothing$ mm Body	Number
M 20 x 1,5	7,0 – 14,0	6	27	22	24	1.752.2000.50*
M 20 x 1,5	10,0 – 14,0	6	27	22	24	1.752.2000.51
M 25 x 1,5	11,0 – 18,0	7	29	27	30	1.752.2500.50*
M 25 x 1,5	14,5 – 18,0	7	29	27	30	1.752.2500.51
M 32 x 1,5	16,0 – 25,0	8	34	36	40	1.752.3200.50*
M 32 x 1,5	20,5 – 25,0	8	34	36	40	1.752.3200.51
M 40 x 1,5	21,0 – 32,0	8	40	46	50	1.752.4000.50*
M 40 x 1,5	26,5 – 32,0	8	40	46	50	1.752.4000.51

* Versions with removable reducers

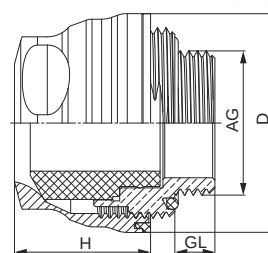
VARIAPRO TEMP

METR.



Material HD-enclosure	INOX 1.4404
Sealing HD-enclosure	VMQ (Silicone), blue (similar RAL 5012)
Protection	IP 66, IP 68 to 10 bar, IP 69K
Operating Temperature	- 40 °C – 120 °C (- 40 °F – 248 °F)

// EHEDG certified
// Successful VDMA riboflavin test



AG	$\varnothing$ mm	GL	H mm	D mm	$\varnothing$ mm	Number
M 12 x 1,5	5–6,5	6	19	21	14	1.740.1203.50
M 16 x 1,5	7,5–10	6	20	27	19 / 21	1.740.1603.50
M 16 x 1,5	6–7,5	6	20	27	19 / 21	1.740.1603.51
M 20 x 1,5	11–13,5	6	22,5	33	24 / 27	1.740.2003.50
M 20 x 1,5	9–12	6	22,5	33	24 / 27	1.740.2003.51
M 25 x 1,5	15–18	7	23,5	38	30	1.740.2503.50
M 25 x 1,5	14–16	7	23,5	38	30	1.740.2503.52
M 32 x 1,5	21–25	8	26,5	45	36	1.740.3203.50
M 32 x 1,5	18–21	8	26,5	45	36	1.740.3203.51

* Versions with removable reducers

V-N-FS

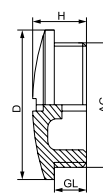
METR., PG



Material	Polyamide
Protection	IP 54
Operating Temperature	- 40 °C – 100 °C (–40 °F - 212 °F)
Colors	Grey (RAL 7035), Black (RAL 9005)

Advice:

// Other colors upon request



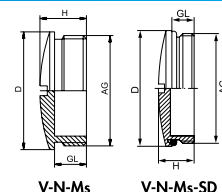
AG	Number PA grey	Number PA black
M 12 x 1,5	1.251.1200.50	1.251.1201.50
M 16 x 1,5	1.251.1600.50	1.251.1601.50
M 20 x 1,5	1.251.2000.50	1.251.2001.50
M 25 x 1,5	1.251.2500.50	1.251.2501.50
M 32 x 1,5	1.251.3200.50	1.251.3201.50
M 40 x 1,5	1.251.4000.50	1.251.4001.50
M 50 x 1,5	1.251.5000.50	1.251.5001.50
M 63 x 1,5	1.251.6300.50	1.251.6301.50
PG 7	1.251.0700.11	1.251.0701.11
PG 9	1.251.0900.11	1.251.0901.11
PG 11	1.251.1100.11	1.251.1101.11
PG 13,5	1.251.1300.11	1.251.1301.11
PG 16	1.251.1600.11	1.251.1601.11
PG 21	1.251.2100.11	1.251.2101.11
PG 29	1.251.2900.11	1.251.2901.11
PG 36	1.251.3600.11	1.251.3601.11
PG 42	1.251.4200.11	1.251.4201.11
PG 48	1.251.4800.11	1.251.4801.11

V-N-MS | V-N-MS-SD

METR., PG



Material	Nickel plated brass
Protection	IP 54 (V-N-MS), IP 68 (V-N-MS-SD)



V - N - MS

AG	Number
M 12 x 1,5	1.052.1200.50
M 16 x 1,5	1.052.1600.50
M 20 x 1,5	1.052.2000.50
M 25 x 1,5	1.052.2500.50
M 32 x 1,5	1.052.3200.50
M 40 x 1,5	1.052.4000.50
M 50 x 1,5	1.052.5000.50
M 63 x 1,5	1.052.6300.50
PG 7	1.052.0700.01
PG 9	1.052.0900.01
PG 11	1.052.1100.01
PG 13,5	1.052.1300.01
PG 16	1.052.1600.01
PG 21	1.052.2100.01
PG 29	1.052.2900.01
PG 36	1.052.3600.01
PG 42	1.052.4200.01
PG 48	1.052.4800.01

V - N - MS - SD

AG	Number
M 12 x 1,5	1.052.1201.50
M 16 x 1,5	1.052.1601.50
M 20 x 1,5	1.052.2001.50
M 25 x 1,5	1.052.2501.50
M 32 x 1,5	1.052.3201.50
M 40 x 1,5	1.052.4001.50
M 50 x 1,5	1.052.5001.50
M 63 x 1,5	1.052.6301.50
PG 7	1.052.0701.01
PG 9	1.052.0901.01
PG 11	1.052.1101.01
PG 13,5	1.052.1301.01
PG 16	1.052.1601.01
PG 21	1.052.2101.01
PG 29	1.052.2901.01
PG 36	1.052.3601.01
PG 42	1.052.4201.01
PG 48	1.052.4801.01

GM - FS

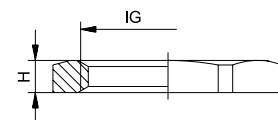
METR., PG



Material	Polyamide
Operating Temperature	- 40 °C – 100 °C (-40 °F - 212 °F)
Colors	Grey (RAL 7035), Black (RAL 9005)

Advice:

// Other colors upon request



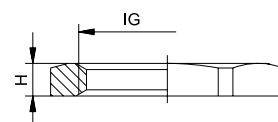
AG	Number PA VO grey	Number PA VO black
M 12 x 1,5	1.262.1200.50	1.262.1201.50
M 16 x 1,5	1.262.1600.50	1.262.1601.50
M 20 x 1,5	1.262.2000.50	1.262.2001.50
M 25 x 1,5	1.262.2500.50	1.262.2501.50
M 32 x 1,5	1.262.3200.50	1.262.3201.50
M 40 x 1,5	1.262.4000.50	1.262.4001.50
M 50 x 1,5	1.262.5000.50	1.262.5001.50
M 63 x 1,5	1.262.6300.50	1.262.6301.50
PG 7	1.262.0700.11	1.262.0701.11
PG 9	1.262.0900.11	1.262.0901.11
PG 11	1.262.1100.11	1.262.1101.11
PG 13,5	1.262.1300.11	1.262.1301.11
PG 16	1.262.1600.11	1.262.1601.11
PG 21	1.262.2100.11	1.262.2101.11
PG 29	1.262.2900.11	1.262.2901.11
PG 36	1.262.3600.11	1.262.3601.11
PG 42	1.262.4200.11	1.262.4201.11
PG 48	1.262.4800.11	1.262.4801.11

GM - MS

METR., PG



Material	Nickel plated brass
----------	---------------------



IG	Number
M 12 x 1,5	1.161.1200.50
M 16 x 1,5	1.161.1600.50
M 20 x 1,5	1.161.2000.50
M 25 x 1,5	1.161.2500.50
M 32 x 1,5	1.161.3200.50
M 40 x 1,5	1.161.4000.50
M 50 x 1,5	1.161.5000.50
M 63 x 1,5	1.161.6300.50
M 75 x 1,5	1.161.7500.50
M 80 x 2	1.161.8000.50
M 90 x 2	1.161.9000.50
M 100 x 2	1.161.1000.50
M 110 x 2	1.161.1100.50

IG	Number
PG 7	1.161.0700.01
PG 9	1.161.0900.01
PG 11	1.161.1100.01
PG 13,5	1.161.1300.01
PG 16	1.161.1600.01
PG 21	1.161.2100.01
PG 29	1.161.2900.01
PG 36	1.161.3600.01
PG 42	1.161.4200.01
PG 48	1.161.4800.01

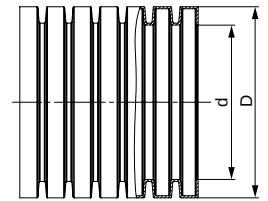
POLEON



Material	Polyamide
Operating Temperature	- 40 °C - + 120 °C (- 40 °F - + 248 °F)
Properties	Flexible, Medium wall thickness, Glossy surface. Anti friction black conduit are UV Resistant. Free of halogen, Phosphor & Cadmium
Applications	Machine Tool, Machine Building, Electric Control System, etc.
Colours	grey (RAL 7031), black (RAL 9005)

Advice:
// raw material according to UL 94

RoHS



Size DN	d mm	D mm	R mm	Number grey	Number black
6	6,5	10	15	1.510.0600.14	1.510.0601.14
10	10	13	25	1.510.0900.14	1.510.0901.14
12	12	15,8	35	1.510.1100.14	1.510.1101.14
14	14,2	18,4	35	1.510.1300.14	1.510.1301.14
17	16,5	21,2	40	1.510.1600.14	1.510.1601.14
23	23	28,4	45	1.510.2100.14	1.510.2101.14
29	29	34,5	55	1.510.2900.14	1.510.2901.14
37	36	42,5	65	1.510.3600.14	1.510.3601.14
50	48	54,5	80	1.510.4800.14	1.510.4801.14

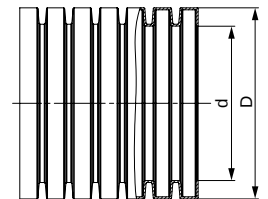
POLEON SLIT



Material	Polyamide
Operating Temperature	- 40 °C - + 120 °C (- 40 °F - + 248 °F)
Properties	Flexible, Medium wall thickness, Glossy surface. Anti friction black conduit are UV Resistant. Free of halogen, Phosphor & Cadmium
Applications	Machine Tool, Machine Building, Electric Control System, etc.
Colours	grey (RAL 7031), black (RAL 9005)

Advice:
// raw material according to UL 94

RoHS



Size DN	d mm	D mm	R mm	Number grey	Number black
6	6,5	10	15	1.527.0600.00	1.527.0601.00
10	10	13	25	1.527.0900.00	1.527.0901.00
12	12	15,8	35	1.527.1100.00	1.527.1101.00
14	14,2	18,4	35	1.527.1300.00	1.527.1301.00
17	16,5	21,2	40	1.527.1600.00	1.527.1601.00
23	23	28,4	45	1.527.2100.00	1.527.2101.00
29	29	34,5	55	1.527.2900.00	1.527.2901.00
37	36	42,5	65	1.527.3600.00	1.527.3601.00
50	48	54,5	80	1.527.4800.00	1.527.4801.00

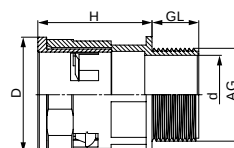
// Specification/Dimension/Certification of products mentioned are subject to change without prior intimation.

POLEONFIT

METR., PG



Material	Polyamide
Protection category	IP 55
Operating Temperature	- 30 °C – + 80 °C (– 22 °F – + 176 °F)
Colours	grey (RAL 7031), black (RAL 9005)



Advice:
// raw material according to UL 94

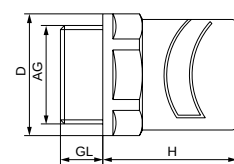
AG	d mm	D mm	GL mm	H mm	 mm	fits to Poleon DN	Number grey	Number black
M 12	6,9	18,7	11	26	15	6	1.533.1200.50	1.533.1201.50
M 16	10,8	21,7	11	26	18	10	1.533.1600.51	1.533.1601.51
M 16	10,9	26	11	26,5	20	12	1.533.1600.50	1.533.1601.50
M 20	14,7	28	11	31	23	14	1.533.2000.51	1.533.2001.51
M 20	15,2	32	13	33	27	17	1.533.2000.50	1.533.2001.50
M 25	18,7	39,5	16	39	34	23	1.533.2500.50	1.533.2501.50
M 32	25,7	46,5	16	43	40	29	1.533.3200.50	1.533.3201.50
M 40	32,7	55,5	16	45,5	50	37	1.533.4000.50	1.533.4001.50
M 50	51,4	67,5	16	47,5	62	50	1.533.5000.50	1.533.5001.50
PG 7	6,9	18,7	11	26	15	6	1.533.0700.14	1.533.0701.14
PG 9	10,3	21,7	11	26	18	10	1.533.0900.14	1.533.0901.14
PG 11	13,3	26	11	26,5	20	12	1.533.1100.14	1.533.1101.14
PG 13,5	15,3	28	11	31	23	14	1.533.1300.14	1.533.1301.14
PG 16	16,6	32	13	33	27	17	1.533.1600.14	1.533.1601.14
PG 21	22,3	39,5	16	39	34	23	1.533.2100.14	1.533.2101.14
PG 29	31,7	46,5	16	43	40	29	1.533.2900.14	1.533.2901.14
PG 36	40,5	55,5	16	45,5	50	37	1.533.3600.14	1.533.3601.14
PG 48	51,7	67,5	16	47,5	62	50	1.533.4800.14	1.533.4801.14

POLEONFIT N

METR., PG, NPT



Material	Polyamide
Protection category	IP 54 with O-Ring with fixed conduit mounting IP 65
Operating Temperature	- 20 °C – + 80 °C (– 4 °F – + 176 °F)
Colours	grey (RAL 7031), black (RAL 9005)



AG	D mm	GL mm	H mm	mm	fits to Poleon DN	Number grey	Number black
M 16 x 1,5	20	8	23	17	10	1.511.1600.50	1.511.1601.50
M 20 x 1,5	26,5	9	28	24	14	1.511.2000.50	1.511.2001.50
M 25 x 1,5	38,5	11	32	35	23	1.511.2500.50	1.511.2501.50
M 32 x 1,5	46	11	35	42	29	1.511.3200.50	1.511.3201.50
PG 9	19	8	23	17	10	1.511.0900.14	1.511.0901.14
PG 11	23	8	25	21	12	1.511.1100.14	1.511.1101.14
PG 13,5	26,5	9	28	24	14	1.511.1300.14	1.511.1301.14
PG 16	30	10	29	27	17	1.511.1600.14	1.511.1601.14
PG 21	38,5	11	32	35	23	1.511.2100.14	1.511.2101.14
PG 29	46	11	35	42	29	1.511.2900.14	1.511.2901.14
PG 36	54,5	13	41	50	37	1.511.3600.14	1.511.3601.14
PG 48	70	14	46	64	50	1.511.4800.14	1.511.4801.14
NPT 3/8"	19	15	23	17	10	1.511.3800.70	1.511.3801.70
NPT 1/2"	30	13	29	27	17	1.511.1216.70	1.511.1217.70
NPT 3/4"	38,5	13	32	35	23	1.511.3400.70	1.511.3401.70
NPT 1"	46	15	35	42	29	1.511.1000.70	1.511.1001.70

POLYAMIDE-FITTING DUO-PA

METR., PG



Material	Polyamide / Also available in Nickel Plated Brass
Seal	NBR
Protection category	IP 68 - I Obar/ IP 69K (NEMA 6 - 150 PSIG) on the cable gland
Operating Temperature	-40 °C (+ 100 °C) (-40 °F + 212 °F)
Colours	black (RAL 9005)



RoHS

Advice:

// 2 in 1 cable gland and conduit fitting // easy disassembly without tools

AG	Ø mm	GL mm	H mm	D mm	mm	fits to Polyamide- Conduit DN	Number
M 16	05-10	8	40	23	22	10	1.542.1610.50
M 16	03-07	8	40	23	22	10	1.542.1610.51
M 20	06-12	10	44	25	24	12	1.542.2012.50
M 20	05-09	10	44	25	24	12	1.542.2012.51
M 20	10-14	10	46	29	27	14	1.542.2014.50
M 20	07-12	10	46	29	27	14	1.542.2014.51
M 25	13-18	11	50	30	33	17	1.542.2517.50
M 25	09-16	11	50	30	33	17	1.542.2517.51
M 32	18-24	11	60	39	42	23	1.542.3223.50
M 32	13-20	11	60	39	42	23	1.542.3223.51
M 40	22-31	13	69	45	53	29	1.542.4029.50
M 40	20-26	13	69	45	53	29	1.542.4029.51
M 50	32-36	13	74	52	60	37	1.542.5037.50
M 50	25-31	13	74	52	60	37	1.542.5037.51
M 63	37-44	14	79	52	68	50	1.542.6350.50
M 63	29-35	14	79	52	68	50	1.542.6350.51
PG 11	05-10	8	40	23	22	10	1.543.1110.14
PG 11	03-07	8	40	23	22	10	1.543.1110.15
PG 13,5	06-12	9	44	25	24	12	1.543.1312.14
PG 13,5	05-09	9	44	25	24	12	1.543.1312.15
PG 16	10-14	10	47	29	27	14	1.543.1614.14
PG 16	07-12	10	47	29	27	14	1.543.1614.15
PG 21	13-16	11	50	30	33	17	1.543.2117.14
PG 21	09-16	11	50	30	33	17	1.543.2117.15
PG 29	18-22	11	60	39	42	23	1.543.2923.14
PG 29	13-20	11	60	39	42	23	1.543.2923.15
PG 36	22-31	13	69	45	53	29	1.543.3629.14
PG 36	20-26	13	69	45	53	29	1.543.3629.15
PG 42	32-36	13	74	52	60	37	1.543.4237.14
PG 42	25-31	13	74	52	60	37	1.543.4237.15
PG 48	37-44	14	79	52	68	50	1.543.6350.14

QUICK CONNECTOR

PG



Material	Polyamide - 6
Operating Temperature	Min -40 °C, Max 100 °C, Short term 150 °C

Size DN	Type	Size	PU	Number black
6.5	PA	PG 7	100	SCAD 10.0
10	PA	PG 9	100	SCAD 13.0
12	PA	PG 11	100	SCAD 15.8
14	PA	PG 13.5	100	SCAD 18.5
17	PA	PG 16	50	SCAD 21.2

Size DN	Type	Size	PU	Number black
23	PA	PG 21	25	SCAD 28.5
29	PA	PG 29	25	SCAD 34.5
37	PA	PG 36	10	SCAD 42.5
50	PA	PG 48	5	SCAD 54.5

// Specification/Dimension/Certification of products mentioned are subject to change without prior intimation.

POLYAMIDE-FITTING 90

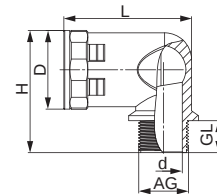
METR., PG



Material	Polyamide
Protection category	IP 55
Operating Temperature	- 30 °C – + 80 °C (- 22 °F – + 176 °F)
Colours	grey (RAL 7031), black (RAL 9005)

Advice:

- // raw material according to UL 94
- // locknut optional
- // easy disassembly without tools



RoHS

AG	d mm	D mm	GL mm	H mm	L mm	fits to Polyamide- Conduit DN	Number grey	Number black
M 12	8,2	18,7	11	36,3	35,7	6	1.535.1200.50	1.535.1201.50
M 16	10,8	21,7	11	37,3	38,5	10	1.535.1600.51	1.535.1601.51
M 16	10,9	26	11	41	43,8	12	1.535.1600.50	1.535.1601.50
M 20	14,7	28	11	44	46	14	1.535.2000.51	1.535.2001.51
M 20	15,2	32	13	51,5	51	17	1.535.2000.50	1.535.2001.50
M 25	18,7	39,5	16	64,2	64,3	23	1.535.2500.50	1.535.2501.50
PG 7	8,2	18,7	11	36,3	35,7	6	1.535.0700.14	1.535.0701.14
PG 9	10,3	21,7	11	37,3	38,5	10	1.535.0900.14	1.535.0901.14
PG 11	13,3	26	11	41	43,8	12	1.535.1100.14	1.535.1101.14
PG 13,5	15,3	28	11	44	46	14	1.535.1300.14	1.535.1301.14
PG 16	16,6	32	13	51,5	51	17	1.535.1600.14	1.535.1601.14
PG 21	22,4	39,5	16	61,2	64,3	23	1.535.2100.14	1.535.2101.14

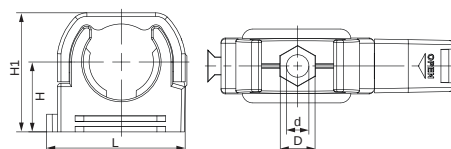
POLYAMIDE-FITTING CLIP



Material	Polyamide
Operating Temperature	- 30 °C – + 80 °C (- 22 °F – + 176 °F)
Colours	black (RAL 9005)

Advice:

- // raw material according to UL 94



RoHS

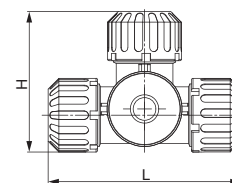
Size DN	d mm	D mm	L mm	H mm	H 1 mm	fits to Polyamide- Conduit DN	Number black
DN10	5	7	28,7	15,75	27,5	10	1.534.0901.00
DN12	5,3	8,3	29,8	13,1	24	12	1.534.1101.00
DN14	5,3	8,5	35,2	17,75	29,3	14	1.534.1401.00
DN17	5,3	8,5	40,2	19,75	33,2	17	1.534.1601.00
DN23	5,3	8,7	52,6	40,5	40,5	23	1.534.2101.00
DN29	6,5	11	60,7	48	48	29	1.534.2901.00
DN37	6,5	11	69	57	57	37	1.534.3601.00
DN50	6,5	11	87	71	71	50	1.534.4801.00

POLYAMIDE-FITTING T



Material	Polyamide
Protection category	IP 67
Operating Temperature	- 40 °C – + 120 °C (- 40 °F – + 248 °F)
Colours	black

Advice:
 // easy disassembly without tools



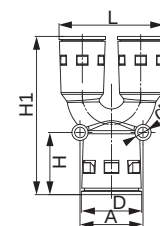
Size DN	L mm	H mm	fits to Polyamide- Conduit DN	Number black
DN10	50	68,5	10	1.536.0901.00
DN12	50,5	69,5	12	1.536.1101.00
DN17	58	80	17	1.536.1601.00
DN23	71	95	23	1.536.2101.01
DN29	84	109	29	1.536.2901.00

POLYAMIDE-FITTING Y



Material	Polyamide
Protection category	IP 65
Operating Temperature	- 40 °C – + 120 °C (- 40 °F – + 248 °F)
Colours	black

Advice:
 // easy disassembly without tools



Size DN	d mm	D mm	A mm	H mm	H1 mm	L mm	fits to Polyamide- Conduit DN	Number black
DN12/10/10	5,5	22,3	25	31	74	42	12/10/10	1.537.1101.00
DN12/10/10	6,5	28	32	32	85	51	17/12/12	1.537.1601.00
DN12/10/10	6,5	36,4	38	38	90,5	63,8	23/17/17	1.537.2101.00
DN12/10/10	6,5	43	45	37	106	76,8	29/23/23	1.537.2901.00

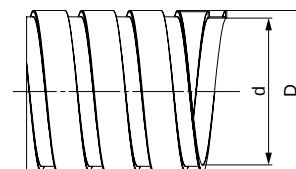
METAL CABLE CONDUIT

MELEON A



Material	Galvanised steel
Protection category	IP 40
Operating Temperature	- 100 °C - + 300 °C (- 148 °F - + 572 °F)

RoHS



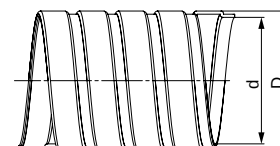
Size DN	d mm	D mm	R mm	Number
7	7,5	10,5	25	1.560.0760.00
9	9	12	30	1.560.0960.00
11	11	14	30	1.560.1160.00
14	14	17	40	1.560.1460.00
16	16	19	45	1.560.1660.00
21	21	24	55	1.560.2160.00
26	26	30	55	1.560.2660.00
37	37	41	80	1.560.3760.00
40	40	44	80	1.560.4060.00
51	51	55	90	1.560.5160.00

MELEON B



Material	Galvanised steel, PVC coating
Protection category	IP 65
Operating Temperature	- 15 °C - + 70 °C (5 °F - + 158 °F)

RoHS



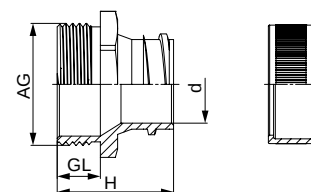
Size DN	d mm	D mm	R mm	Number
7	7,5	11,5	25	1.561.0761.00
9	9	13	30	1.561.0961.00
11	11	15	30	1.561.1161.00
14	14	18	40	1.561.1461.00
16	16	20	45	1.561.1661.00
21	21	25	55	1.561.2161.00
26	26	31	55	1.561.2661.00
37	37	42	80	1.561.3761.00
40	40	45	80	1.561.4061.00
51	51	56	90	1.561.5161.00

MELEON FIT SERIES (SUITABLE FOR MELEON A & B SERIES)



Material	Nickel plated brass
Protection category	IP 54
Operating Temperature	-20 °C - +80 °C (-4 °F - +176 °F)

// fixed mounted conduit fitting
// locknut optional



RoHS

AG	D mm	GL mm	H mm	 mm	fits to Meleon DN	Number
M 12	6	8	27	15	7	1.570.1260.50
M 16	7	8	27	20	9	1.570.1660.51
M 16	9	10	29	20	11	1.570.1660.50
M 20	12	10	29	22	14	1.570.2060.51
M 20	14	10	29	22	16	1.570.2060.50
M 25	18	10	31	28	21	1.570.2560.50
M 32	23	12	35	35	26	1.570.3260.50
M 40	33,5	14	41	45	37	1.570.4060.50
M 50	37	14	41	55	40	1.570.5060.50
M 63	46	14	41	65	51	1.570.6360.50

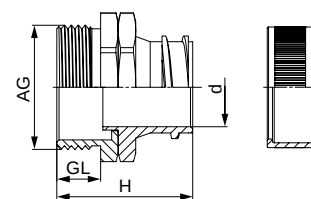
AG	D mm	GL mm	H mm	 mm	fits to Meleon DN	Number
PG 7	6	8	24	15	7	1.570.0760.14
PG 9	7	8	24	17	9	1.570.0960.14
PG 11	9	10	26	20	11	1.570.1160.14
PG 13.5	12	10	26	22	14	1.570.1360.14
PG 16	14	10	26	24	16	1.570.1660.14
PG 21	18	10	27	30	21	1.570.2160.14
PG 29	23	12	31	40	26	1.570.2960.14
PG 36	33,5	14	36	50	37	1.570.3660.14
PG 42	37	14	36	60	40	1.570.4260.14
PG 48	46	14	36	65	51	1.570.4860.14

MELEON FIT S SERIES (SUITABLE FOR MELEON A & B SERIES)



Material	Nickel plated brass
Protection category	IP 54
Operating Temperature	-20 °C - +80 °C (-4 °F - +176 °F)

// swivel conduit fitting
// locknut optional



RoHS

AG	D mm	GL mm	H mm	 mm	fits to Meleon DN	Number
M 12	6	8	27	15	7	1.571.1260.50
M 16	7	8	27	20	9	1.571.1660.51
M 16	9	10	29	20	11	1.571.1660.50
M 20	12	10	29	22	14	1.571.2060.51
M 20	14	10	29	22	16	1.571.2060.50
M 25	18	10	31	28	21	1.571.2560.50
M 32	23	12	35	35	26	1.571.3260.50
M 40	33,5	14	41	45	37	1.571.4060.50
M 50	37	14	41	55	40	1.571.5060.50
M 63	46	14	41	65	51	1.571.6360.50

AG	D mm	GL mm	H mm	 mm	fits to Meleon DN	Number
PG 7	6	8	24	15	7	1.571.0760.14
PG 9	7	8	24	17	9	1.571.0960.14
PG 11	9	10	26	20	11	1.571.1160.14
PG 13.5	12	10	26	22	14	1.571.1360.14
PG 16	14	10	26	24	16	1.571.1660.14
PG 21	18	10	27	30	21	1.571.2160.14
PG 29	23	12	31	40	26	1.571.2960.14
PG 36	33,5	14	36	50	37	1.571.3660.14
PG 42	37	14	36	60	40	1.571.4260.14
PG 48	46	14	36	65	51	1.571.4860.14

// Specification/Dimension/Certification of products mentioned are subject to change without prior intimation.

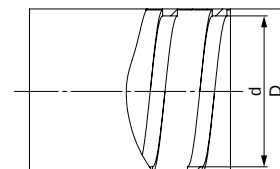
METAL CABLE CONDUIT

MELEON PRO A



Material	Galvanised steel, PVC coating
Protection category	IP 66
Operating Temperature	-20 °C - 105 °C (- 4 °F - 221 °F)

RoHS



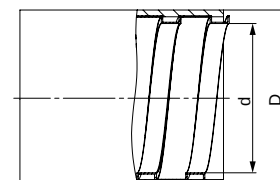
Size DN	d mm	D mm	 R mm	Number
10	10,3	16	40	1.562.1061.00
12	12,3	18	45	1.562.1261.00
16	15,5	21	65	1.562.1661.00
21	20,9	26,5	100	1.562.2161.00
27	26,5	33,3	135	1.562.2761.00
35	35	42	175	1.562.3561.00
40	40	48,2	230	1.562.4061.00
51	51,5	60	280	1.562.5161.00

MELEON PRO B

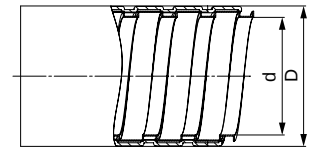


Material	Galvanised steel
Protection category	IP 40
Operating Temperature	-100 °C - 300 °C (- 148 °F - 572 °F)

RoHS



Size DN	d mm	D mm	 R mm	Number
9	9	14	30	1.563.0960.00
11	11	16	35	1.563.1160.00
13	13	17,5	40	1.563.1360.00
16	16	21	45	1.563.1660.00
21	21	26	55	1.563.2160.00
26	26	32	70	1.563.2660.00
35	35	41	80	1.563.3560.00
40	40	46	90	1.563.4060.00
51	51	57	90	1.563.5160.00

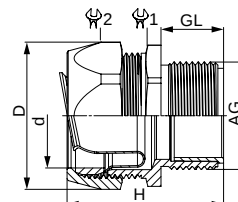
[illegible]

MELEON PRO FIT SERIES (SUITABLE FOR MELEON PRO A, B & C SERIES)



Material	Nickel plated brass
Protection category	IP 67
Operating Temperature	-20 °C - +80 °C (-4 °F - +176 °F)

// fixed mounted conduit fitting
// locknut optional



RoHS

AG	d mm	D mm	GL mm	H mm	1 mm	2 mm	fits to Polyamid- conduit Pro DN	Number
M 12	16,5	24,5	10	31	20	22	—/09	1.572.1260.50
M 16	19	29,2	10	35	24	26	11/12	1.572.1660.51
M 16	22	32,6	11,5	39	27	29	12/13	1.572.1660.50
M 20	22	32,6	13	38,7	27	29	16	1.572.2060.51
M 25	27,5	38,8	15	41	33	35	21	1.572.2560.50
M 32	34,5	50	15	49	43	45	26/27	1.572.3260.50
M 40	43,5	60	16	51	52	54	35	1.572.4060.50
M 50	49,5	69,3	18	61	60	63	40	1.572.5060.50
M 63	62	85	20	73	74	77	51	1.572.6360.50

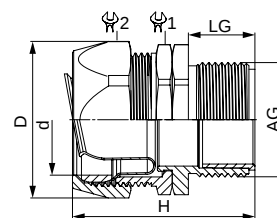
AG	d mm	D mm	GL mm	H mm	1 mm	2 mm	fits to Polyamid- conduit Pro DN	Number
PG 7	16,5	24,5	10	31	20	22	—/09	1.572.0760.14
PG 9	16,5	24,5	10	31	20	22	11/12	1.572.0960.14
PG 11	19	29,2	11,5	35	24	26	12/13	1.572.1160.14
PG 13.5	22	32,6	13	39	27	29	16	1.572.1360.14
PG 16	22	32,6	13	38,7	27	29	16	1.572.1660.14
PG 21	27,5	38,8	15	41	33	35	21	1.572.2160.14
PG 29	34,5	50	15	49	43	45	26/27	1.572.2960.14
PG 36	43,5	60	16	51	52	54	35	1.572.3660.14
PG 42	49,5	69,3	18	61	60	63	40	1.572.4260.14
PG 48	62	85	20	73	74	77	51	1.572.4860.14

MELEON PRO FIT S SERIES (SUITABLE FOR MELEON PRO A, B & C SERIES)



Material	Nickel plated brass
Protection category	IP 67
Operating Temperature	-20 °C - +80 °C (-4 °F - +176 °F)

// swivel conduit fitting
// locknut optional

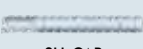
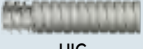
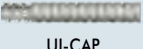
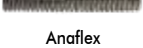
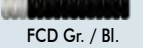
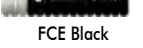
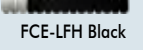
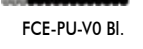
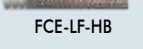
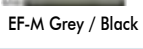
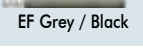
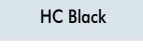


RoHS

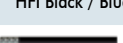
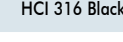
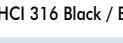
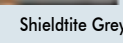
AG	d mm	D mm	GL mm	H mm	1 mm	2 mm	fits to Polyamid- conduit Pro DN	Number
M 12	16,5	24,5	10	34	20	22	—/09	1.573.1260.50
M 16	16,5	24,5	10	35	20	22	10/11	1.573.1660.51
M 16	19	29,2	10	37	20	22	12/13	1.573.1660.50
M 20	22	32,6	13	41	27	29	16	1.573.2060.51
M 25	27,5	38,8	15	44	33	35	21	1.573.2560.50
M 32	34,5	50	15	51	43	45	27/26	1.573.3260.50
M 40	43,5	60	16	54	52	54	35	1.573.4060.50
M 50	49,5	69,3	18	64	60	63	40	1.573.5060.50
M 63	62	85	20	76	74	77	51	1.573.6360.50

AG	d mm	D mm	GL mm	H mm	1 mm	2 mm	fits to Polyamid- conduit Pro DN	Number
PG 7	16,5	24,5	10	34	20	22	—/09	1.573.0760.14
PG 9	16,5	24,5	10	34	20	22	10/11	1.573.0960.14
PG 11	19	29,2	11,5	35	24	26	12/13	1.573.1160.14
PG 13.5	22	32,6	13	37	27	29	16	1.573.1360.14
PG 16	22	32,6	13	41	27	29	16	1.573.1660.14
PG 21	27,5	38,8	15	44	33	35	21	1.573.2160.14
PG 29	34,5	50	15	51	43	45	27/26	1.573.2960.14
PG 36	43,5	60	16	54	52	54	35	1.573.3660.14
PG 42	49,5	69,3	18	64	60	63	40	1.573.4260.14
PG 48	62	85	20	76	74	77	51	1.573.4860.14

METAL CONDUIT

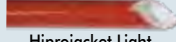
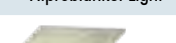
Metal Conduit	Material	Material	Temp (°C)		Resistance (NEN-EN-IEC 61386)			Flexibility	Resistance		Approvals	Protection
Type	Innercover	Cover	Min.	Max.	Compr.	Impact	Tensile		UV	Oil		Class
 FCEN / SL	Galvanised Steel	–	-55	+300	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 SLI / SLI-316	Stainless Steel AISI-304	–	-100	+600	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 SLI-CAP	Stainless Steel AISI-304	–	-100	+600	3 (750N)	3 (2J)	3 (500N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 SLB	Galvanised Steel with Stainless Steel Braid	–	-55	+300	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 UIG	Galvanised Steel	–	-55	+300	5 (4000N)	4 (6J)	4 (1000N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 UI	Stainless Steel AISI-304	–	-100	+600	5 (4000N)	4 (6J)	4 (1000N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 UI-CAP	Stainless Steel AISI-304	–	-100	+600	5 (4000N)	4 (6J)	4 (1000N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 RWS	Galvanised Steel	–	-40	+230	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 RWA	Aluminium	–	-45	+260	4 (1250N)	4 (6J)	3 (500N)	++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 40
 Anaflex	Stainless Steel AISI-316L	–	-70	+250	3 (750N)	3 (2J)	4 (1000N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 69K
 FCD Gr. / Bl.	Galvanised Steel	PVC - RoHS	-20	+80	3 (750N)	3 (2J)	3 (500N)	+++	++	++	PG GOST-R	IP 67
 FCE Black	Galvanised Steel	PVC - RoHS	-20	+80	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++	PG GOST-R	IP 67
 FCE-LFH Black	Galvanised Steel	TPO Halogen - free RoHS	-25	+80	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++	PG GOST-R	IP 67
 FCE-PU-V0 Bl.	Galvanised Steel	TPO Halogen - free RoHS	-50	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++	BS 6853 EN 45545-2 PG GOST-R	IP 67
 FCE-LF-HB	Galvanised Steel	TPO Inax braided Halogen free RoHS	-25	+80	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++	BS 6853 EN 45545-2 PG GOST-R	IP 67
 EF-M Grey / Black	Galvanised Steel	PVC - RoHS	-20	+70	3 (750N)	4 (6J)	4 (1000N)	++	+++	+++	PG GOST-R	IP 66 IP 67
 EF Grey / Black	Galvanised Steel	PVC - RoHS	-25	+70	4 (1250N)	4 (6J)	4 (1000N)	+++	+++	+++	PG GOST-R	IP 66 IP 67
 OR Black/Blue	Galvanised Steel	PVC - RoHS	-15	+100	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	PG GOST-R	IP 66 IP 67
 HC Black	Galvanised Steel	PVC - RoHS	-45	+105	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	PG GOST-R	IP 66 IP 67
 HCX Black	Galvanised Steel	TPE- RoHS	-55	+145	4 (1250N)	4 (6J)	4 (1000N)	++++	+++	++	PG GOST-R	IP 66 IP 67

METAL CONDUIT

Metal Conduit	Material	Material	Temp (°C)		Resistance (NEN-EN-IEC 61386)			Flexibility	Resistance		Approvals	Protection
Type	Innercover	Cover	Min.	Max.	Compr.	Impact	Tensile		UV	Oil		Class
 HFX Black/Blue	Galvanised Steel	TPU Halogen free RoHS	-55	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++		IP 66 IP 67
 HFX-V0 Black	Galvanised Steel	TPU Halogen free RoHS	-50	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++	 	IP 66 IP 67
 ZHLS Black	Galvanised Steel	TPU Halogen free RoHS	-25	+80	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++	  	IP 66 IP 67
 HTDL Black	Galvanised Steel	PVC - RoHS	-45	+105	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	 	IP 66 IP 67
 HTUA Grey	Galvanised Steel	PVC - RoHS	-45	+105	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	 	IP 66 IP 67
 ZHUA Black	Galvanised Steel	TPU Halogen free RoHS	-50	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++	 	IP 66 IP 67
 CW Blue	Galvanised Steel	PVC - RoHS	-40	+80	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	 	IP 66 IP 67
 HCI Black / Blue	Stainless Steel AISI-304	PVC - RoHS	-45	+105	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++		IP 66 IP 67
 HFI Black / Blue	Stainless Steel AISI-304	TPU Halogen free RoHS	-55	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++		IP 66 IP 67
 HCXI Black	Stainless Steel AISI-304	TPE - RoHS	-55	+145	4 (1250N)	4 (6J)	4 (1000N)	++++	+++	++		IP 66 IP 67
 HCI 316 Black	Stainless Steel AISI-304	PVC - RoHS	-45	+105	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++		IP 66 IP 67
 HCI 316 Black / Blue	Stainless Steel AISI-316	TPU Halogen free RoHS	-55	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++		IP 66 IP 67
 EF-L Grey	Aluminium	PVC - RoHS	-20	+80	3 (750N)	3 (2J)	3 (500N)	+++	+++	+++		IP 66 IP 67
 AS Black	Galvanised Steel	PVC - RoHS	-25	+70	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	+++		IP 66 IP 67
 Shieldtite Grey	Bronze	PVC - RoHS	-45	+105	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	 	IP 66 IP 67
 Shieldtite ZI	Bronze	Polyurethane Halogen free RoHS	-45	+105	4 (1250N)	4 (6J)	4 (1000N)	+++	++++	++++	 	IP 66 IP 67
 FG White / Blue	Galvanised Steel	PVC - RoHS	-20	+60	4 (1250N)	4 (6J)	4 (1000N)	+++	++	+++		IP 66 IP 67
 HTFG White / Blue	Galvanised Steel	TPU Halogen -free RoHS	-55	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++		IP 66 IP 67
 HTFG - 316 / Blue	Stainless Steel AISI-304	TPU Halogen -free RoHS	-55	+105	4 (1250N)	4 (6J)	4 (1000N)	++++	++++	++++		IP 66 IP 67
 XTHF Grey	Galvanised Steel	Silicone Halogen free RoHS	-70	+200	4 (1250N)	4 (6J)	4 (1000N)	+++	+++	++++		IP 66 IP 67

Metal Conduit	Material	Material	Temp (°C)		Resistance (NEN-EN-IEC 61386)			Flexibility	Resistance		Approvals	Protection
Type	Innercover	Cover	Min.	Max.	Compr.	Impact	Tensile		UV	Oil		Class
 CNP Orange / Grey	PVC Nylon reinforced RoHS	PVC RoHS	-20	+60	1 (125N)	3 (2J)	4 (1000N)	++	++++	++++	   GOST-R	IP 66 IP 67
 NMUA Grey	PVC, PVC reinforced RoHS	PVC RoHS	-20	+80	2 (320N)	3 (2J)	4 (1000N)	+++	++++	+++	   GOST-R	IP 66 IP 67
 NMSF Grey	PVC, PVC reinforced RoHS	-	-20	+80	1 (125N)	3 (2J)	4 (1000N)	++++	+++	+++	 GOST-R	IP 66 IP 67
 NMFG Blue	PVC, PVC reinforced RoHS	-	-35	+60	1 (125N)	3 (2J)	4 (1000N)	++++	+++	+++	 GOST-R 	IP 66 IP 67
 MPC Grey	Metal Spiral	PVC RoHS	-20	+70	3 (750N)	2 (2J)	1 (100N)	++++	+++	++		IP 66 IP 67
 MPU Blue	Metal Spiral	TPU Halogen free RoHS	-40	+90	3 (750N)	3 (2J)	1 (100N)	++++	+++	++++		IP 66 IP 67
 PA6L Black	Polyamide PA6 Halogen free	-	-40	+120	1 (125N)	1 (0.5J)	1 (100N)	++++	++++	++++	UL-94 HB 	IP 67
 PA6S Black / Grey	Polyamide PA6 Halogen free	-	-40	+120	2 (320N)	2 (1J)	2 (250N)	++++	+++	++++	UL-94 HB 	IP 67
 PA6SU Black	Polyamide PA6 Halogen free	-	-40	+120	2 (320N)	2 (1J)	2 (250N)	++++	++++	++++	UL-94 HB 	IP 67
 PA6VO Black	Polyamide PA6 Halogen free	-	-40	+120	3 (750N)	3 (2J)	3 (500N)	++++	++++	++++	UL-94 V0  	IP 67
 PA12S Black	Polyamide PA12 Halogen free	-	-40	+120	2 (320N)	2 (1J)	2 (250N)	++++	++++	++++	UL-94 HB 	IP 67
 PP-Mod Black	Polypropylene PP-Mod	-	-40	+135	1 (125N)	1 (0.5J)	1 (100N)	++++	++++	++++	UL-94 V2 	IP 54
 PA6S DUO	Polyamide PA6 Halogen free	-	-40	+120	3 (750N)	3 (2J)	3 (500N)	++++	++++	++++	UL-94 HB 	IP 54
 PP-Mod DUO	Polypropylene PP-Mod	-	-40	+135	2 (320N)	2 (1J)	2 (250N)	++++	++	++++	UL-94 V2 	IP 54
 PP-UV DUO	Polypropylene PP-Mod	-	-40	+135	2 (320N)	2 (1J)	2 (250N)	++++	++++	++++	UL-94 V2 	IP 67
 GIG PA6 Black / Grey	Polyamide PA6 Halogen free	-	-40	+120	2 (320N)	2 (1J)	2 (250N)	+++	++++	++++	UL-94 HB 	IP 67
 GIG PP Black	Polypropylene PP-Mod	-	-40	+135	1 (125N)	1 (0.5J)	1 (100N)	++++	++++	++++	UL-94 V2 	IP 67
 GIG PUR Black	Polyurethane TPU Halogen free	-	-40	+125	1 (125N)	1 (0.5J)	1 (100N)	+++	++++	++++	UL-94 HB 	IP 67

HEAT PROTECTION PRODUCTS

Product	Material	Material	Temp (°C) Continue		Temp (°C) Short Term		Resistance		Approvals
Type	Core	Cover	Min.	Max.	20 min.	15-30 sec	Oil	Splash	
 Hiprojacket Aero	Glass fibre	Silicone Halogen free RoHS	-55	+260	+800	+1640	++++	++++	EN 45545-2 SAE PG GOST-R
 Hiprojacket Industrial	Glass fibre	Silicone Halogen free RoHS	-55	+260	+800	+1640	++++	++++	PG GOST-R
 Hiprojacket Light	Glass fibre	Silicone Halogen free RoHS	-55	+260	+538	+1200	++++	++	PG GOST-R
 Hiprosiltape	Silicone	Silicone Halogen free RoHS	-55	+260	-	-	++++	++	PG GOST-R
 Hiprotape	Glass fibre	Silicone Halogen free RoHS	-55	+230	+800	+1640	++++	++++	PG GOST-R
 Hiproblanket Wrap H	Glass fibre	Silicone Halogen free RoHS	-55	+260	+800	+1640	++++	++++	PG GOST-R
 Hiproblanket Wrap M	Glass fibre	Silicone Halogen free RoHS	-55	+230	+800	+1640	++++	++	RoHS
 Hiproblanket Wrap Light	Glass fibre	Silicone Halogen free RoHS	-55	+260	+538	+1200	++++	++	PG GOST-R
 Thermojet	Glass fibre saturated	-	-55	+538	-	-	-	-	PG GOST-R
 Silcaket	Silica fibre	-	-55	+980	-	-	-	-	RoHS
 Basaltjet	Knitted basalt yarn	-	-260	+750	-	+980	-	-	RoHS
 Hiproblanket Heavy	Glass fibre	Silicone Halogen free RoHS	-55	+260	+800	+1640	++++	++++	PG GOST-R
 Hiproblanket Medium	Glass fibre	Silicone Halogen free RoHS	-55	+260	+800	+1640	++++	++++	RoHS
 Hiproblanket M Aluminum	Glass fibre	Aluminium	-55	+200	+600	-	-	-	RoHS
 Hiproblanket Light	Glass fibre	Silicone Halogen free RoHS	-55	+260	+800	+1200	++++	++	PG GOST-R
 Silicablanket	Silica fibre	-	-55	+1090	-	-	-	-	PG GOST-R

METAL FITTINGS

Fitting	Material	Temperature (°C)		Thread Size Range		Shielding	Approvals		Protection
Type	Housing	Min.	Max.	ISO	NPT	EMP			Class
 Straight compact	Nickel plated brass	-45	+105	M16 to M90	1/2" to 3"	++++	 	 GOST-R	IP 66 IP 67
 45° compact	Nickel plated brass	-45	+105	M16 to M75	1/2" to 3"	+++	 	 GOST-R	IP 66 IP 67
 90° compact	Nickel plated brass	-45	+105	M16 to M75	1/2" to 3"	+++	 	 GOST-R	IP 66 IP 67
 Cable hose	Nickel plated brass	-45	+105	M16 to M40	-	+++	 GOST-R		IP 66 IP 67
 Str / 45° / 90° Swivel	Nickel plated brass	-45	+105	M16 to M63	1/2" to 1"	+++	 GOST-R		IP 67
 Straight	Nickel plated brass	-45	+105	M12 to M63	1/2" to 2"	+++	 	 GOST-R	IP 67
 45°	Nickel plated brass	-45	+105	M16 to M63	1/2" to 2"	+++	 	 GOST-R	IP 67
 90°	Nickel plated brass	-45	+105	M16 to M63	1/2" to 2"	+++	 	 GOST-R	IP 67
 Female	Nickel plated brass	-45	+260	M16 to M63	1/2" to 2"	+++	 GOST-R		IP 67
 Cable-hose (EMC)	Nickel plated brass	-40	+100	M16 to M63	1/2" to 3/4"	+++	 GOST-R		IP 67 IP 68
 Str / 45° / 90° / Compact	Stainless Steel AISI-304	-45	+105	M16 to M63	1/2" to 3"	+++	 	 GOST-R	IP 67 IP 68
 Straight / 45° / 90°	Stainless Steel AISI-304	-45	+105	M16 to M63	1/2" to 1"	+++	 	 GOST-R	IP 67
 Str / 45° / 90° / Compact	Stainless Steel AISI-316	-45	+105	M16 to M63	1/2" to 3"	+++	 	 GOST-R	IP 66 IP 67
 Food Compact	Stainless Steel AISI-316	-45	+105	M16 to M63	-	+++	 GOST-R		IP 68 IP 69
 Straight 90°	Aluminium	-55	+300	-	1/2" to 2"	+++	 	 GOST-R	IP 67
 Straight / 45° / 90°	Galvanised Steel	-55	+300	M16 to M32	1/2" to 4"	+++	 	 GOST-R	IP 67
 Hummel adapter	Nickel plated brass	-45 °C	+105 °C	M25 x 1 M42 x 1	-	+++	 GOST-R		IP 67
 Other makes	Nickel plated brass	-45	+105	M24 x 1	-	+++	 GOST-R		IP 67
 Sensor adapter	Nickel plated brass	-45	+105	M8 x 1, M12 x 1 M18 x 1, M30 x 1.5	-	+++	 GOST-R		IP 65
 Sensor adapter	Nickel plated brass / Polycarbonate	-45	+105	M8 x 1 M12 x 1 M18 x 1	-	-	 GOST-R		IP 65

/// Specification / Dimension / Certification of products mentioned are subject to change without prior intimation.

FITTINGS SELECTION TABLE

METAL FITTINGS

Fitting	Material	Temperature (°C)		Thread Size Range		Shielding	Approvals	Protection
Type	Housing	Min.	Max.	ISO	NPT	EMP		Class
 Sensor adapter	Polyamide PA6	-45	+105	M8 x 1, M12 x 1 M18 x 1, M30 x 1.5	-	-	 GOST-R	IP 65
 Accessories	Accessories for nickel plated brass fittings	-55	+105	-	-	-	 GOST-R	-
 Accessories	Accessories for stainless steel AISI-304 fittings	-55	+105	-	-	-	 GOST-R	-
 Accessories	Accessories for stainless steel AISI-316 fittings	-55	+105	-	-	-	 GOST-R	-
 Accessories	Accessories for galvanised steel fittings	-55	+300	-	-	-	 GOST-R	-
 Pipe Fittings	Nickel plated brass fittings	-45	+105	DN16 to DN32	-	+++	 GOST-R	IP 67
 Cable Glands	Nickel plated brass	-55	+125	M16 to MSO	-	+++	  EN 45545-2 GOST-R	IP 68
 Cable Glands	Nickel plated brass or stainless steel AISI-316	-55	+105	M16 to MSO	1/2" to 1.1/2"	+++	   UL SP GOST-R	IP 68



Pressure Die Cast Aluminum Enclosure(s) made in India by HUMMEL as per European norms and quality. The enclosures are manufactured using high grade Aluminum alloy keeping in mind the demands of OEM & Industrial applications. The powder coated boxes are IP rated & resist numerous alkalis, chemicals, Oil & gasoline and are impact resistant.

S.No.	Part Number	Size (WxLxH)
1	3150065450	45x50x30 mm
2	3150065771	64x58x36 mm
3	3150065788	64x98x36 mm
4	3150065795	64x150x36 mm
5	3150065801	80x75x57 mm
6	3150065818	80x125x57 mm
7	3150065825	80x175x57 mm
8	3150065832	80x250x57 mm
9	3150065850S	120x122x80 mm
10	3150065850	120x122x90 mm
11	3150065857S	120x220x80 mm
12	3150065857	120x220x90 mm

S.No.	Part Number	Size (WxLxH)
13	3150065864S	120x360x80 mm
14	3150065864	120x360x90 mm
15	3150065870	160x160x90 mm
16	3150065887	160x260x90 mm
17	3150065894	160x360x90 mm
18	3150065900	160x560x90 mm
19	3150065917	230x200x110 mm
20	3150065924	230x200x180 mm
21	3150065931	230x280x110 mm
22	3150065948	230x330x110 mm
23	3150065955	230x330x180 mm
24	3150065962	230x400x110 mm

Technical Information

Protection according to EN 60529	IP 66 IP 67 / 68 upon request
Impact EN 50102	IK 08 (+35 °C/-25 °C)
Temperature Range	-30 °C...+80 °C
Standard Colour	Grey RAL 7001 / 7035
Gasket	Neoprene
Cover Screws	Captive Screws in SS
Aluminium Grade	ADC 12
Salt Spray Test	Tested upto 750 hours

- ❑ Facility of customization & machining on Enclosure(s) possible based upon requirement/request.
- ❑ Facility of special/different colour shade based upon requirement/request.



M 12 Power

// S, T, K & L coding



Circular Connectors M 16

// 3, 8 (320V), 8 (600V),
7, 10, 15 & 18 pole



M 23 Fast Ethernet PoE



M 23 Hybrid

// Availability on request
// Subject to technical alterations



Circular Connectors M 23 RJ45



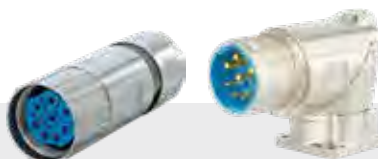
Circular Connectors Signal M 23

// 6, 7, 9, 12, 16, 17 & 19 pole



Circular Connectors M 27

// 26 & 28 pole



Circular Connectors Power M 23

// 6 (5+PE), 8 (4 +3+PE),
9 (5+3+PE) & 10 pole



Connectors Power Size 1,5 M 40

// 6 (2+3+PE), & 8 (4+3+PE) pole



Connectors INOX

Circular Connectors made
of Stainless Steel (AISI 316)



Circular Connectors Moulded



Metric Connector Series



Standard Connector Series



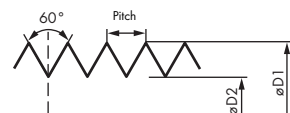
Connectors Contacts & Accessories



INTERNATIONAL PROTECTION, EN 60529

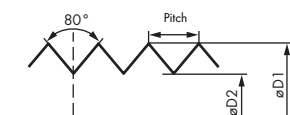
1. Code		2. Code	Penetration of water	Non-protected	protection against dripping water	Protected against vertically falling water drops when device is tilted up to 15°	Water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effects	Water splashed from any direction shall have no harmful effects	Water projected in jets from any direction shall have no harmful effects	Water projected in powerful jets from any direction shall have no harmful effects	protection against temporary submersion	protection against permanent submersion
Protection against human access to hazardous parts	Protection of equipment against penetration of solid foreign objects			IP 0	IP 1	IP 2	IP 3	IP 4	IP 5	IP 6	IP 7	IP 8
Non-protected	Non-protected	IP 0 x		IP 00								
Protected against access to hazardous parts with the back of the hand	Protected against solid foreign objects larger in diameter than 50mm	IP 1 x		IP 10	IP 11	IP 12						
Protected against access to hazardous parts with a finger	Protected against solid foreign object larger in diameter than 12,5mm	IP 2 x		IP 20	IP 21	IP 22	IP 23					
Protected against access to hazardous parts with a tool larger in diameter than 2,5mm	Protected against solid foreign objects larger in diameter than 2,5mm	IP 3 x		IP 30	IP 31	IP 32	IP 33	IP 34				
Protected against access to hazardous parts with a wire larger in diameter than 1,0mm	Protected against solid foreign objects larger in diameter than 1mm	IP 4 x		IP 40	IP 41	IP 42	IP 43	IP 44				
Protected against access to hazardous parts with a wire larger in diameter than 1,0mm	Prevents penetration of dust sufficient to cause damage inside the equipment.	IP 5 x		IP 50				IP 54	IP 55			
Protected against access to hazardous parts with a wire larger in diameter than 1,0mm	Dust proof	IP 6 x		IP 60					IP 65	IP 66	IP 67	IP 68

Metric ISO Thread Specifications



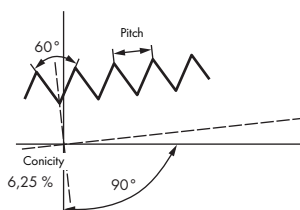
Size	Pitch mm	Outside-Ø (D1) mm	Inside-Ø (D2) mm	Thru-hole mm
M 12 x 1,5	1,5	12	10,38	12,2
M 16 x 1,5	1,5	16	14,38	16,2
M 20 x 1,5	1,5	20	18,38	20,2
M 25 x 1,5	1,5	25	23,38	25,2
M 32 x 1,5	1,5	32	30,38	32,2
M 40 x 1,5	1,5	40	38,38	40,2
M 50 x 1,5	1,5	50	48,38	50,2
M 63 x 1,5	1,5	63	61,38	63,2

PG Thread Specifications



Size	Pitch mm	Outside-Ø (D1) mm	Inside-Ø (D2) mm	Thru-hole mm
PG 7	1,270	12,5	11,28	12,7
PG 9	1,410	15,2	13,86	15,4
PG 11	1,410	18,6	17,26	18,8
PG 13,5	1,410	20,4	19,06	20,7
PG 16	1,410	22,5	21,16	22,8
PG 21	1,588	28,3	26,78	28,6
PG 29	1,588	37,0	35,48	37,4
PG 36	1,588	47,0	45,48	47,5
PG 42	1,588	54,0	52,48	54,5
PG 48	1,588	59,3	57,78	59,8

NPT Thread Specifications



Size	Pitch mm	Outside-Ø mm	Number of pitches n
1/4" NPT	1,411	13,716	18
3/8" NPT	1,411	17,145	18
1/2" NPT	1,814	21,336	14
3/4" NPT	1,814	26,67	14
1" NPT	2,208	33,4	11 1/2
1 1/4" NPT	2,208	42,164	11 1/2
1 1/2" NPT	2,208	48,26	11 1/2
2" NPT	2,208	60,325	11 1/2
2 1/2" NPT	3,175	73,025	8
3" NPT	3,175	88,9	8
3 1/2" NPT	3,175	101,6	8