

	<b>Standard Straight-Through</b> <i>Polyamide</i> PG, Metric, NPT ..... 4		<b>Traction Relief</b> <i>Nickel-Plated Brass</i> PG, Metric ..... 27
	<b>Standard Straight-Through</b> <i>Nickel-Plated Brass</i> PG, Metric, NPT ..... 5		<i>Polyamide</i> PG, Metric ..... 28
	<b>Industrial</b> <i>Polystyrene</i> Straight-Through PG, Metric ..... 6		<b>According to DIN 46320</b> <i>Polystyrene</i> Straight-Through PG ..... 29
	Flat Cable PG, Metric ..... 7		<i>Nickel-Plated Brass</i> Straight-Through PG, Metric ..... 30-33
	Multi-Conductor PG ..... 8 Metric ..... 9		<b>Locknuts</b> <i>Polyamide</i> PG, Metric, NPT ..... 34
	<i>Polyamide</i> Straight-Through PG, Metric ..... 10		<i>Polystyrene</i> PG, Metric ..... 35
	Flat Cable PG, Metric ..... 11		<i>Nickel-Plated Brass</i> PG, Metric, NPT ..... 36
	Multi-Conductor PG ..... 12 Metric ..... 13		<i>EMC Type</i> PG, Metric ..... 37
	<i>PVDF</i> Straight-Through Metric ..... 14		<i>Stainless Steel</i> PG, Metric ..... 38
	<i>Nickel-Plated Brass</i> Straight-Through PG, Metric ..... 15		<b>Reducer</b> <i>Polyamide</i> ..... 39 <i>Nickel-Plated Brass</i> ..... 40-41
	Flat Cable PG, Metric ..... 16		<b>Enlarger</b> <i>Polycarbonate</i> ..... 42 <i>Polyamide</i> ..... 43 <i>Nickel-Plated Brass</i> ..... 44-45
	Multi-Conductor PG ..... 17 Metric ..... 18		<b>Adapter</b> <i>Nickel-Plated Brass</i> ..... 46-48
	<i>Stainless Steel</i> Straight-Through PG, Metric ..... 19		<b>Plugs</b> <i>Polystyrene</i> PG, Metric ..... 49
	Flat Cable PG, Metric ..... 20		<i>Polyamide</i> PG, Metric ..... 50
	Multi-Conductor PG ..... 21 Metric ..... 22		<i>Nickel-Plated Brass</i> PG, Metric ..... 51-52
	<i>EExe Polyamide</i> PG, Metric ..... 23		<b>O-Ring</b> PG, Metric ..... 53-54
	<i>EMC Nickel-Plated Brass</i> PG, Metric ..... 24-26		<b>Conduit</b> ..... 55
			<b>Conduit Glands</b> Straight-Through ..... 56 90° ..... 57
			<b>Technical Annex</b> ..... 58-61
			<b>Index</b> ..... 63-74
			<b>Terms and Conditions</b> ..... 76

# Cable Gland, Polyamide

## Material:

Body: Polyamide 6

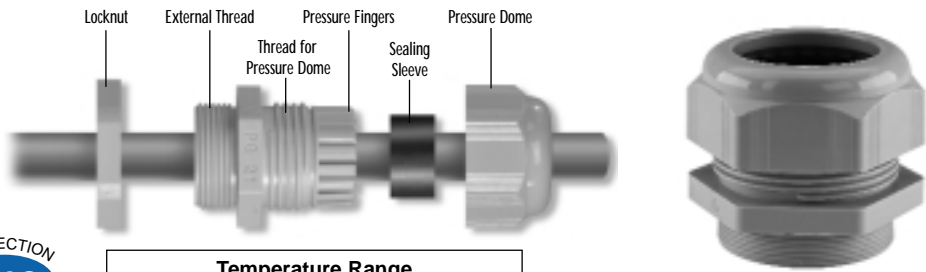
Seal: Neoprene

## Technical properties:

- Maximum strain relief through clamping range
- IP 68 achieved without seal rings
- Trapezoidal thread with high torque guarantees tight and permanent fit of the dome nut
- Gas and water-tight

## Application field:

- Machines and devices



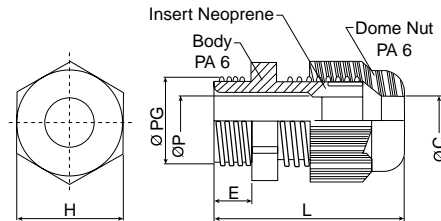
Temperature Range	
<b>PA6</b>	<b>Neoprene</b>
-40 to 100° C (-40 to 212° F)	-25 to 100° C (-13 to 212° F)



## PG Thread

Outer thread	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
PG 7	1.5-5	5309107	5309207	100
PG 7	2.5-6.5	5308707	5308507	100
PG 9	1.5-6	5309109	5309209	50
PG 9	2.5-8	5308709	5308509	50
PG 11	2-7	5309111	5309211	50
PG 11	3.5-10	5308711	5308511	50
PG 13.5	3-9	5309113	5309213	50
PG 13.5	5-12	5308713	5308513	50
PG 16	5-12	5309116	5309216	50
PG 16	7-14	5308716	5308516	50
PG 21	7-16	5309121	5309221	25
PG 21	9-18	5308721	5308521	25
PG 29	11-21	5309129	5309229	20
PG 29	14-25	5308729	5308529	20
PG 36	13-26	5309136	5309236	10
PG 36	18-32	5308736	5308536	10
PG 42	17-31	5309142	5309242	5
PG 42	24-38.5	5308737	5308537	5
PG 48	26-39	5309148	5309248	5
PG 48	35-48	5308738	5308538	5

Thread Size	H mm	PG Dimensions					
		E mm	L mm	ØC mm	ØP mm	ØPG mm	
PG7	15	8	32	6.7	6.8	12.5	
PG9	19	8	35	8.5	8.7	15.2	
PG11	22	8	37	10.5	10.5	18.6	
PG13.5	24	9	39	12.5	12.5	20.4	
PG16	27	10	43	14.5	14.5	22.5	
PG21	33	11	50	18.5	18.5	28.3	
PG29	42	11	53	25.5	25.5	37.0	
PG36	53	13	65	32.5	32.5	47.0	
PG42	60	13	68	39.0	39.0	54.0	
PG48	70	14	70	48.5	48.5	59.3	



## NPT Thread

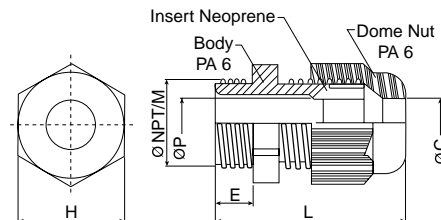
NPT	Clamping range mm	Cat. No.	Cat. No.	Std. Pk.
NPT 3/8"	1.5-6	5308904	5308924	50
NPT 3/8"	2.5-8	5308900	5308920	50
NPT 1/2"	3-9	5308905	5308925	50
NPT 1/2"	5-12	5308901	5308921	50
NPT 3/4"	7-16	5308906	5308926	20
NPT 3/4"	9-18	5308902	5308922	20
NPT 1"	11-21	5308907	5308927	20
NPT 1"	14-25	5308903	5308923	20

Thread Size	H mm	Metric/NPT Dimensions				
		E mm	L mm	ØC mm	ØP mm	ØNPT/M mm
NPT 3/8"	19	11	38	8.5	8.7	17.1
NPT 1/2"	24	14	44	12.5	12.5	21.2
NPT 3/4"	33	15	54	18.5	18.5	26.7
NPT 1"	42	18	60	25.5	25.5	33.3

## Metric Thread\*

Metric	Clamping range mm	Cat. No.	Cat. No.	Std. Pk.
M 12 x 1.5	1.5-5	5309612	5309712	100
M 12 x 1.5	2.5-6.5	5308950	5308940	100
M 16 x 1.5	2-7	5309616	5309716	50
M 16 x 1.5	2.5-8	5308958	5308948	50
M 16 x 1.5	3.5-10	5308951	5308941	50
M 20 x 1.5	5-12	5309620	5309720	50
M 20 x 1.5	5-12	5308959	5308949	50
M 20 x 1.5	7-14	5308952	5308942	50
M 25 x 1.5	7-16	5309625	5309725	25
M 25 x 1.5	7-14	5308960	5308962	50
M 25 x 1.5	9-18	5308953	5308943	25
M 32 x 1.5	11-21	5309632	5309732	20
M 32 x 1.5	14-25	5308954	5308944	20
M 40 x 1.5	13-26	5309640	5309740	10
M 40 x 1.5	18-32	5308955	5308945	10
M 50 x 1.5	17-31	5309650	5309750	5
M 50 x 1.5	24-38.5	5308956	5308946	5
M 63 x 1.5	26-39	5309663	5309763	5
M 63 x 1.5	35-48	5308957	5308947	5

M12	15	8	32	6.7	6.8	12.0
M16	22	10	39	10.5	10.5	16.0
M20	27	10	43	14.5	14.5	20.0
M25	33	10	49	18.5	18.5	25.0
M32	42	10	52	25.5	25.5	32.0
M40	53	10	62	32.5	32.5	40.0
M50	60	12	67	39.0	39.0	50.0
M63	70	12	68	48.5	48.5	63.0



\* Extended Thread available consult Altech

**Material:**

Body: Nickel-plated brass  
 Seal: Neoprene  
 Clamping insert: PA 6  
 Sealing ring for outer thread: Nitril

**Technical properties:**

- Seal rings included for PG and Metric sizes

**Technical properties:**

- Maximum strain relief through clamp range
- Gas and water-tight

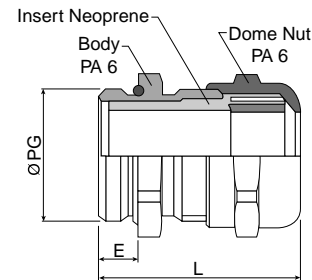
<b>Temperature Range Neoprene</b>
-25 to 100° C (-13 to 212° F)



**PG Thread\***

Outer thread	Clamping range mm	Cat. No.	Std. Pk.
PG 7	1.5-5	4220351	50
PG 7	2.5-6.5	4220307	50
PG 9	2.5-7	4220352	50
PG 9	4-9.5	4220309	50
PG 11	3-8.5	4220353	50
PG 11	6-11.5	4220311	50
PG 13	4-10	4220354	50
PG 13	7-13	4220313	50
PG 16	5-12	4220355	50
PG 16	8-15	4220316	50
PG 21	8-16	4220356	20
PG 21	11-19	4220321	20
PG 29	11-21	4220357	20
PG 29	16-26	4220329	20
PG 36	16-28	4220358	10
PG 36	22-34.5	4220336	10
PG 42	22-34	4220359	5
PG 42	27-40	4220342	5
PG 48	28-40	4220360	5
PG 48	35-48	4220348	5

Thread Size	H mm	PG Dimensions					
		E mm	L mm	ØC mm	ØP mm	ØPG mm	
PG7	14	5	32	6.7	6.8	12.5	
PG9	17	6	35	8.5	8.7	15.2	
PG11	20	6	37	10.5	10.5	18.6	
PG13	22	6.5	39	12.5	12.5	20.4	
PG16	24	6.5	43	14.5	14.5	22.5	
PG21	30	7	50	18.5	18.5	28.3	
PG29	40	8	53	25.5	25.5	37.0	
PG36	50	9	65	32.5	32.5	47.0	
PG42	58	10	68	39.0	39.0	54.0	
PG48	65	10	70	48.5	48.5	59.3	



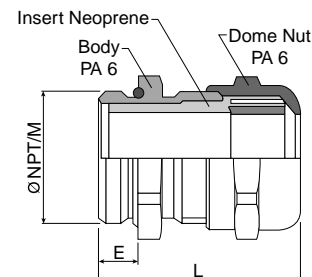
**NPT Thread**

NPT	Clamping range mm	Cat. No.	Std. Pk.
NPT 3/8"	2.5-7	4220810	50
NPT 3/8"	4-9.5	4220800	50
NPT 1/2"	4-10	4220811	50
NPT 1/2"	7-13	4220801	50
NPT 3/4"	5-13	4220812	20
NPT 3/4"	8-16	4220802	20
NPT 1"	7-17	4220813	5
NPT 1"	11-21	4220803	5

Thread Size	H mm	Metric/NPT Dimensions					
		E mm	L mm	ØC mm	ØP mm	ØNPT/M mm	
NPT 3/8	18	15	38	9.7	10	17.1	
NPT 1/2	23	20	46	13.2	13.5	21.2	
NPT 3/4	28	20	48	16.2	16.5	26.7	
NPT 1	36	25	55	21.5	22	33.3	
M12	14	5	25	6.6	6.6	12.0	
M16	17	5	28	9.7	10	16.0	
M20	22	6	32	13.2	13.5	20.0	
M25	27	7	35	16.2	16.5	25.0	
M32	34	8	38	21.5	22	32.0	
M40	42	8	41	27.5	28	40.0	
M50	55	9	46	35.5	36	50.0	
M63	65	10	54	48.5	50	63.0	

**Metric Thread\***

Metric	Clamping range mm	Cat. No.	Std. Pk.
M 12 x 1.5	1.5-5	4220712	100
M 12 x 1.5	2.5-6.5	4220612	100
M 16 x 1.5	2.5-7	4220716	50
M 16 x 1.5	4-9.5	4220616	50
M 20 x 1.5	4-10	4220720	50
M 20 x 1.5	7-13	4220620	50
M 25 x 1.5	5-13	4220725	25
M 25 x 1.5	8-16	4220625	25
M 32 x 1.5	7-17	4220732	20
M 32 x 1.5	11-21	4220632	20
M 40 x 1.5	10-22	4220740	10
M 40 x 1.5	15-27	4220640	10
M 50 x 1.5	17-29	4220750	5
M 50 x 1.5	22-35	4220650	5
M 63 x 1.5	28-40	4220763	5
M 63 x 1.5	35-48	4220663	5



\* Extended Thread available consult Altech

# Cable Gland Industrial, Polystyrene

## Material:

Body: Polystyrene  
 Seal: Tefabloc  
 ECA clamping ring: Polycarbonate  
**Characteristic feature:**  
 PG/metric thread  
 Extended thread available  
 ECA clamping ring

## Technical properties:

- Strain relief through ECA clamping ring
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Application field:

- Machines and devices
- Measuring and control engineering
- Plant installations

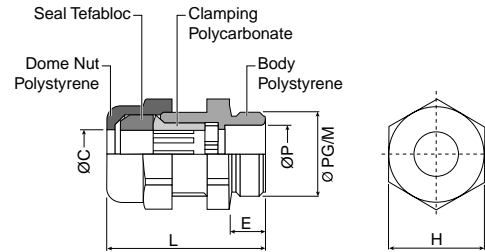
<b>Temperature Range</b> <b>PS</b> -20 to 70° C (-4 to 158° F)
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Thread Size	Dimensions					
	H mm	E mm	L mm	ØC mm	ØP mm	ØPG/M mm
PG7	15	8	31	6.5	7.0	12.5
PG9	19	8	32	8.5	9.0	15.2
PG11	22	8	35	11.5	11.0	18.6
PG13.5	24	9	36	12.5	13.5	20.4
PG16	27	10	40	14.5	15.0	22.5
PG21	33	11	44	18.5	19.0	28.3
PG29	42	12	55	25.0	25.0	37.0
PG36	55	18	65	35.0	37.0	47.0
PG42	65	18	67	43.0	44.0	54.0
PG48	70	18	67	51.0	51.0	59.3
M 16x1.5	19	8	32	8.5	9.0	16.0
M 20x1.5/13	24	9	36	12.5	13.5	20.0
M 20x1.5/16	27	10	40	14.5	15.0	20.0
M 25x1.5	33	11	44	18.5	19.0	25.0
M 32x1.5	42	12	55	25.0	25.0	32.0

## ECA Clamping Ring Polystyrene

Outer thread	Clamping range mm	Cat. No.		Std. Pk.
		Light Grey	Black	
<b>PG</b>				
PG 7	3-6	5216007	5218007	50
PG 9	5-8	5216009	5218009	50
PG 11	6-10	5216011	5218011	50
PG 13.5	8-12	5216013	5218013	50
PG 16	10-14	5216016	5218016	25
<b>Metric</b>				
M 16 x 1.5	5-8	5216216	5218216	50
M 20 x 1.5/13	8-12	5216220	5218220	50
M 20 x 1.5/16	10-14	5216221	5218221	50



## Material:

Body: Polystyrene  
 Seal: Tefabloc  
**Characteristic feature:**  
 PG/metric thread  
 Extended thread available

## Technical properties:

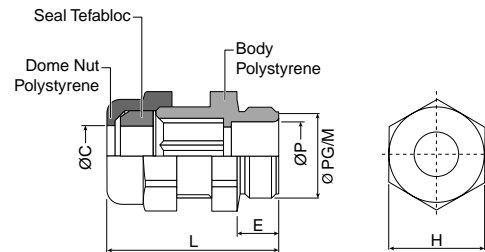
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Application field:

- Machines and devices
- Measuring and control engineering
- Plant installations

## Short Seal Polystyrene

<b>PG</b>				
PG 7	3-6	5210107	5210507	50
PG 9	4.5-8	5210109	5210509	50
PG 11	5.5-10.5	5210111	5210511	50
PG 13.5	7-12	5210113	5210513	50
PG 16	9-14	5210116	5210516	50
PG 21	11.5-18	5210121	5210521	20
PG 29	16-24.5	5210129	5210529	20
<b>Metric</b>				
M 16 x 1.5	4.5-8	5210816	5210616	50
M 20 x 1.5/13	7-12	5210820	5210620	50
M 20 x 1.5/16	9-14	5210821	5210621	50
M 25 x 1.5	11.5-18	5210825	5210625	20
M 32 x 1.5	16-24.5	5210832	5210632	20



## Material:

Body: Polystyrene  
 Seal: Santoprene/Nitril  
**Characteristic feature:**  
 PG/metric thread  
 Extended thread available

## Technical properties:

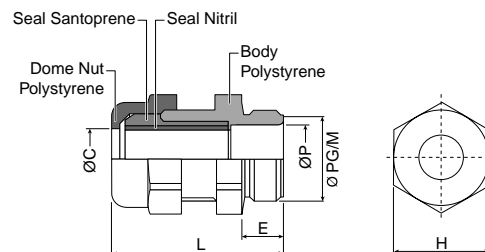
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Application field:

- Machines and devices
- Measuring and control engineering
- Plant installations

## Long Seal, Two Part Polystyrene

<b>PG</b>				
PG 9	3-8	5321001	5321101	50
PG 11	5-11	5321002	5321102	50
PG 13.5	5-12.5	5321003	5321103	50
PG 16	7-14.5	5321004	5321104	25
PG 21	10-18	5321005	5321105	20
PG 29	14-24	5321006	5321106	20
PG 36	22-32	5321007	5321107	20
PG 42	30-40	5321008	5321108	20
PG 48	34-46	5321009	5321109	20
<b>Metric</b>				
M 16 x 1.5	3-8	5321031	5321131	50
M 20 x 1.5/13	5-12.5	5321032	5321132	50
M 20 x 1.5/16	7-14.5	5321033	5321133	50
M 25 x 1.5	10-18	5321034	5321134	20
M 32 x 1.5	14-24	5321035	5321135	20



**Material:**

Body: Polystyrene

Seal: Tefabloc

**Characteristic feature:**

PG/metric thread

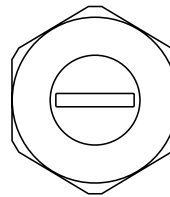
Seal for flat cable round, angular, oval

**Technical properties:**

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations



See page 6 for dimensions.

**Flat Cable, Rounded**



**Flat Cable, Angular**



**Flat Cable, Oval**



Outer thread	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
<b>PG</b>										
PG 9	3.5 x 5.5	5321300	5321500							50
PG 11	2.8 x 10.5	5321305	5321505							50
PG 11	3.5 x 9	5321306	5321506							50
PG 11	4 x 6	5321307	5321507							50
PG 13.5	3 x 12	5321310	5321510				5 x 8	5321375	5321575	50
PG 13.5	5 x 11	5321311	5321511				5 x 12	5321376	5321576	50
PG 16	5 x 12	5321315	5321515	8 x 12	5321351	5321551	5 x 12	5321377	5321577	50
PG 16	7.5 x 14	5321317	5321517				5 x 15	5321381	5321581	50
PG 16	5 x 16	5321316	5321516				5.5 x 8.5	5321380	5321580	50
PG 16							6 x 15	5321383	5321583	50
PG 16							7 x 14	5321384	5321584	50
PG 21	5 x 17	5321320	5321520	4 x 15	5321355	5321555	5 x 16	5321385	5321585	20
PG 21	7 x 18	5321321	5321521				7 x 16.5	5321386	5321586	20
PG 21	9 x 15	5321322	5321522				7 x 20	5321387	5321587	20
PG 29	8 x 25	5321326	5321526							20
PG 29	10 x 25	5321327	5321527							20
<b>Metric</b>										
M 16 x 1.5	3.5 x 5.5	5321600	5321800							50
M 20x1.5/13	3 x 12	5321605	5321805				5 x 8	5321650	5321850	50
M 20x1.5/13	5 x 11	5321606	5321806				5 x 12	5321651	5321851	50
M 20x1.5/16	5 x 12	5321610	5321810	8 x 12	5321680	5321880	5.5 x 8.5	5321655	5321855	50
M 20x1.5/16	7.5 x 14	5321611	5321811				7 x 14	5321656	5321856	50
M 25 x 1.5	5 x 16	5321620	5321820	4 x 15	5321685	5321885	5 x 15	5321660	5321860	20
M 25 x 1.5	5 x 17	5321621	5321821				5 x 16	5321662	5321862	20
M 25 x 1.5	7 x 18	5321622	5321822				6 x 15	5321661	5321861	20
M 25 x 1.5	9 x 15	5321623	5321823				7 x 16.5	5321663	5321863	20
M 25 x 1.5							7 x 20	5321670	5321870	20
M 32 x 1.5	8 x 25	5321624	5321824							20
M 32 x 1.5	10 x 25	5321625	5321825							20



# Cable Gland Industrial, Multi-Conductor Seal, Polystyrene, PG Thread

## Material:

Body: Polystyrene

Seal: Tefabloc

## Characteristic feature:

PG thread

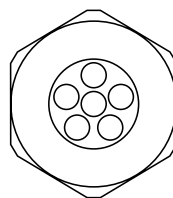
Multi-holed seal inserts

## Technical properties:

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Applications:

- Machines and devices
- Measuring and control engineering
- Plant installations



### Temperature Range

PS

-20 to 70° C

(-4 to 158° F)



See page 6 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No Black	Std. Pk.
PG 7	1	4	5212000	5212400	50
PG 7	1	5	5212001	5212401	50
PG 9	1	5	5212020	5212420	50
PG 9	2	1	5212021	5212421	50
PG 9	2	3	5212022	5212422	50
PG 9	2	3.5	5212023	5212423	50
PG 9	2	4	5212024	5212424	50
PG 9	3	3	5212025	5212425	50
PG 9	4	3	5212026	5212426	50
PG 9	4	4	5212027	5212427	50
PG 11	2	2.3	5212040	5212440	50
PG 11	2	3	5212041	5212441	50
PG 11	2	3.5	5212042	5212442	50
PG 11	2	4	5212043	5212443	50
PG 11	2	5	5212044	5212444	50
PG 11	2	6	5212045	5212445	50
PG 11	3	3	5212046	5212446	50
PG 11	3	3.5	5212047	5212447	50
PG 11	3	4	5212048	5212448	50
PG 11	3	5	5212049	5212449	50
PG 11	3	5.3	5212050	5212450	50
PG 11	4	1.5	5212051	5212451	50
PG 11	4	3.5	5212052	5212452	50
PG 11	6	2	5212053	5212453	50
PG 11	6	2.5	5212054	5212454	50
PG 13.5	2	3	5212070	5212470	50
PG 13.5	2	5	5212071	5212471	50
PG 13.5	2	6	5212072	5212472	50
PG 13.5	3	2	5212073	5212473	50
PG 13.5	3	3	5212074	5212474	50
PG 13.5	3	4	5212075	5212475	50
PG 13.5	3	5.3	5212076	5212476	50
PG 13.5	3	6	5212077	5212477	50
PG 13.5	4	3	5212078	5212478	50
PG 13.5	4	4	5212079	5212479	50
PG 13.5	4	5	5212080	5212480	50
PG 13.5	4	5.3	5212081	5212481	50
PG 13.5	6	3.5	5212082	5212482	50
PG 13.5	10	2	5212083	5212483	50
PG 16	2	4	5212100	5212500	25
PG 16	2	5	5212101	5212501	25
PG 16	2	6	5212102	5212502	25
PG 16	2	7	5212103	5212503	25
PG 16	2	8	5212104	5212504	25
PG 16	2	9	5212105	5212505	25
PG 16	3	3	5212106	5212506	25
PG 16	3	4	5212107	5212507	25
PG 16	3	5	5212108	5212508	25
PG 16	3	5.6	5212109	5212509	25
PG 16	3	6	5212110	5212510	25
PG 16	3	7	5212111	5212511	25
PG 16	3	8	5212112	5212512	25

Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No Black	Std. Pk.
PG 16	4	4	5212113	5212513	25
PG 16	4	5	5212114	5212514	25
PG 16	4	6	5212115	5212515	25
PG 16	5	4	5212116	5212516	25
PG 16	5	5	5212117	5212517	25
PG 16	6	4	5212118	5212518	25
PG 16	7	4	5212119	5212519	25
PG 21	2	4.5	5212130	5212530	20
PG 21	2	8	5212131	5212531	20
PG 21	2	8.7	5212132	5212532	20
PG 21	2	9	5212133	5212533	20
PG 21	2	11	5212134	5212534	20
PG 21	3	7	5212135	5212535	20
PG 21	3	8	5212136	5212536	20
PG 21	3	9	5212137	5212537	20
PG 21	4	5	5212138	5212538	20
PG 21	4	6	5212139	5212539	20
PG 21	4	7.5	5212140	5212540	20
PG 21	4	8	5212141	5212541	20
PG 21	5	5	5212142	5212542	20
PG 21	5	6	5212143	5212543	20
PG 21	5	6.5	5212144	5212544	20
PG 21	6	4	5212145	5212545	20
PG 21	6	5	5212146	5212546	20
PG 21	6	6	5212147	5212547	20
PG 21	6	6.5	5212148	5212548	20
PG 21	6	7	5212149	5212549	20
PG 21	7	6	5212150	5212550	20
PG 21	8	4	5212151	5212551	20
PG 21	8	5	5212152	5212552	20
PG 21	11	5	5212153	5212553	20
PG 21	21	2	5212154	5212554	20
PG 21	28	3	5212155	5212555	20
PG 29	2	9	5212170	5212570	20
PG 29	2	11	5212171	5212571	20
PG 29	2	12	5212172	5212572	20
PG 29	3	9	5212173	5212573	20
PG 29	3	11	5212174	5212574	20
PG 29	4	8	5212175	5212575	20
PG 29	4	9	5212176	5212576	20
PG 29	4	10	5212177	5212577	20
PG 29	6	6	5212178	5212578	20
PG 29	6	6.5	5212179	5212579	20
PG 29	6	7	5212180	5212580	20
PG 29	7	6	5212181	5212581	20
PG 29	7	7	5212182	5212582	20
PG 29	8	5	5212183	5212583	20
PG 29	8	6	5212184	5212584	20
PG 29	10	6	5212185	5212585	20
PG 29	11	5	5212186	5212586	20
PG 29	28	3	5212187	5212587	20

**Material:**

Body: Polystyrene

Seal: Tefabloc

**Characteristic feature:**

Metric thread

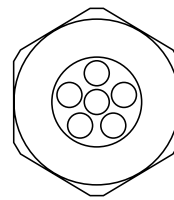
Multi-holed seal inserts

**Technical properties:**

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations



<b>Temperature Range</b> <b>PS</b> -20 to 70° C (-4 to 158° F)
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See page 6 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.	Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
M 16 x 1.5	2	1	5213100	5215100	50	M 25 x 1.5	4	6	5213305	5215305	20
M 16 x 1.5	2	3	5213101	5215101	50	M 25 x 1.5	5	5	5213306	5215306	20
M 16 x 1.5	2	3.5	5213102	5215102	50	M 25 x 1.5	5	6	5213307	5215307	20
M 16 x 1.5	2	4	5213103	5215103	50	M 25 x 1.5	5	6.5	5213308	5215308	20
M 16 x 1.5	3	3	5213104	5215104	50	M 25 x 1.5	6	4	5213309	5215309	20
M 20 x 1.5	2	3	5213200	5215200	50	M 25 x 1.5	6	5	5213310	5215310	20
M 20 x 1.5	2	4	5213201	5215201	50	M 25 x 1.5	8	4	5213311	5215311	20
M 20 x 1.5	2	5	5213202	5215202	50	M 25 x 1.5	8	5	5213312	5215312	20
M 20 x 1.5	2	6	5213203	5215203	50	M 25 x 1.5	21	2	5213313	5215313	20
M 20 x 1.5	2	7	5213204	5215204	50	M 32 x 1.5	2	9	5213400	5215400	20
M 20 x 1.5	3	2	5213205	5215205	50	M 32 x 1.5	2	11	5213401	5215401	20
M 20 x 1.5	3	3	5213206	5215206	50	M 32 x 1.5	2	12	5213402	5215402	20
M 20 x 1.5	3	4	5213207	5215207	50	M 32 x 1.5	3	9	5213403	5215403	20
M 20 x 1.5	3	5	5213208	5215208	50	M 32 x 1.5	3	11	5213404	5215404	20
M 20 x 1.5	3	5.6	5213209	5215209	50	M 32 x 1.5	4	8	5213405	5215405	20
M 20 x 1.5	3	6	5213210	5215210	50	M 32 x 1.5	4	9	5213406	5215406	20
M 20 x 1.5	4	3	5213211	5215211	50	M 32 x 1.5	4	10	5213407	5215407	20
M 20 x 1.5	4	4	5213212	5215212	50	M 32 x 1.5	6	6	5213408	5215408	20
M 20 x 1.5	5	4	5213213	5215213	50	M 32 x 1.5	6	6.5	5213409	5215409	20
M 20 x 1.5	5	5	5213214	5215214	50	M 32 x 1.5	6	7	5213410	5215410	20
M 20 x 1.5	6	3.5	5213215	5215215	50	M 32 x 1.5	7	6	5213411	5215411	20
M 20 x 1.5	6	4	5213216	5215216	50	M 32 x 1.5	7	7	5213412	5215412	20
M 20 x 1.5	10	2	5213217	5215217	50	M 32 x 1.5	8	5	5213413	5215413	20
M 25 x 1.5	2	4.5	5213300	5215300	20	M 32 x 1.5	8	6	5213414	5215414	20
M 25 x 1.5	2	8	5213301	5215301	20	M 32 x 1.5	10	6	5213415	5215415	20
M 25 x 1.5	3	7	5213302	5215302	20	M 32 x 1.5	11	5	5213416	5215416	20
M 25 x 1.5	3	8	5213303	5215303	20	M 32 x 1.5	28	3	5213417	5215417	20
M 25 x 1.5	4	5	5213304	5215304	20						

# Cable gland Industrial, Polyamide

**Material:**  
 Body: Polyamide PA 6  
 25 % Glass-fiber Reinforced  
 Seal: Tefabloc  
 ECA clamping ring: Polycarbonate  
**Characteristic feature:**  
 PG/metric thread  
 ECA clamping ring  
 Extended thread available

**Technical properties:**  
 • Strain relief through clamping ring  
 • Gas and water-tight  
 • Completely twist protected  
 • Combinable with various sealing inserts

**Applications:**  
 • Machines and devices  
 • Measuring and control engineering  
 • Plant installations

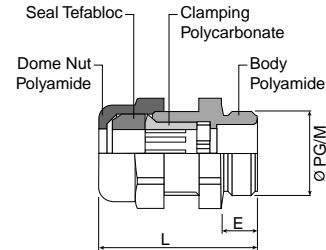
Thread Size	Dimensions					
	H mm	E mm	L mm	ØC mm	ØP mm	ØPG/M mm
PG7	15	8	31	6.5	7.0	12.5
PG9	19	8	32	8.5	9.0	15.2
PG11	22	8	35	11.5	11.0	18.6
PG13.5	24	9	36	12.5	13.5	20.4
PG16	27	10	40	14.5	15.0	22.5
PG21	33	11	44	18.5	19.0	28.3
PG29	42	12	55	25.0	25.0	37.0
PG36	55	18	65	35.0	37.0	47.0
PG42	65	18	67	43.0	44.0	54.0
PG48	70	18	67	51.0	51.0	59.3
M 16x1.5	19	8	32	8.5	9.0	16.0
M 20x1.5/13	24	9	36	12.5	13.5	20.0
M 20x1.5/16	27	9	39	14.5	15.0	20.0
M 25x1.5	33	11	44	18.5	19.0	25.0
M 32x1.5	42	12	55	25.0	25.0	32.0
M 40x1.5	55	15	63	35.0	34.5	40.0
M 50x1.5	65	15	65	43.0	42.5	50.0
M 63x1.5	70	15	65	51.0	51.0	63.0

**Temperature Range PA**  
 -30 to 120° C (-22 to 248° F)



## ECA Clamping Ring Polyamide

Outer thread	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
<b>PG</b>				
PG 7	3-6	5313610	5313620	50
PG 9	5-8	5313611	5313621	50
PG 11	6-10	5313612	5313622	50
PG 13.5	8-12	5313613	5313623	50
PG 16	10-14	5313614	5313624	50
PG 21	11.5-18	5313615	5313625	20
PG 29	15-24	5313616	5313626	20
<b>Metric</b>				
M 16 x 1.5	5-8	5313640	5313650	50
M 20 x 1.5/13	8-12	5313641	5313651	50
M 20 x 1.5/16	10-14	5313644	5313654	50
M 25 x 1.5	11.5-18	5313642	5313652	20
M 32 x 1.5	15-24	5313643	5313653	20



**Material:**  
 Body: Polyamide PA 6  
 25 % glass-fiber reinforced  
 Seal: Tefabloc

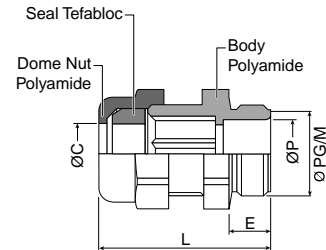
**Characteristic feature:**  
 PG/metric thread  
 ECA clamping ring  
 Extended thread available

**Technical properties:**  
 • Gas and water-tight  
 • Completely twist protected  
 • Combinable with various sealing inserts

**Applications:**  
 • Machines and devices  
 • Measuring and control engineering  
 • Plant installations

## Short Seal Polyamide

PG	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
<b>PG</b>				
PG 7	3-6	5211107	5211307	50
PG 9	4.5-8	5211109	5211309	50
PG 11	6.5-10.5	5211111	5211311	50
PG 13.5	7-12	5211113	5211313	50
PG 16	9-14	5211116	5211316	50
PG 21	11.5-18	5211121	5211321	20
PG 29	15-24.5	5211129	5211329	20
<b>Metric</b>				
M 16 x 1.5	4.5-8	5211416	5211616	50
M 20 x 1.5/13	7-12	5211420	5211620	50
M 20 x 1.5/16	9-14	5211421	5211621	50
M 25 x 1.5	11.5-18	5211425	5211625	20
M 32 x 1.5	15-24.5	5211432	5211632	20



**Material:**  
 Body: Polyamide PA 6  
 25 % glass-fiber reinforced  
 Seal: Santoprene/Nitril

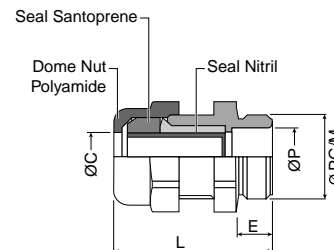
**Characteristic feature:**  
 PG/metric thread  
 Extended thread available

**Technical properties:**  
 • Gas and water-tight  
 • Completely twist protected  
 • Combinable with various sealing inserts

**Applications:**  
 • Machines and devices  
 • Measuring and control engineering  
 • Plant installations

## Long Seal, Two Part Polyamide

PG	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
<b>PG</b>				
PG 9	3-8	5320001	5320051	50
PG 11	5-11	5320002	5320052	50
PG 13.5	5-12.5	5320003	5320053	50
PG 16	7-14.5	5320004	5320054	50
PG 21	10-18	5320005	5320055	20
PG 29	14-24	5320006	5320056	20
PG 36	22-32	5320007	5320057	10
PG 42	30-40	5320008	5320058	10
PG 48	34-46	5320009	5320059	5
<b>Metric</b>				
M 16 x 1.5	3-8	5320100	5320160	50
M 20 x 1.5/13	5-12.5	5320101	5320161	50
M 20 x 1.5/16	7-14.5	5320104	5320164	50
M 25 x 1.5	10-18	5320102	5320162	20
M 32 x 1.5	14-24	5320103	5320163	20
M 40 x 1.5	22-32	5320105	5320165	20
M 50 x 1.5	30-40	5320106	5320166	20
M 63 x 1.5	34-46	5320107	5320167	20





**Material:**

Body: Polyamide PA 6  
25 % Glass-fiber Reinforced  
Seal: Tefabloc

**Characteristic feature:**

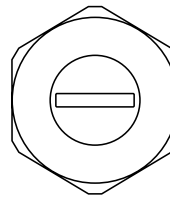
PG/metric thread  
Seal for flat cable round, angular, oval

**Technical properties:**

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations



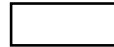
See page 10 for dimensions.



**Flat Cable, Rounded**



**Flat Cable, Angular**



**Flat Cable, Oval**



Outer thread	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Clamping range mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
<b>PG</b>										
PG 9	3.5 x 5.5	5320300	5320500							50
PG 11	2.8 x 10.5	5320305	5320505							50
PG 11	3.5 x 9	5320306	5320506							50
PG 11	4 x 6	5320307	5320507							50
PG 13.5	3 x 12	5320310	5320510				5 x 8	5320375	5320575	50
PG 13.5	5 x 11	5320311	5320511				5 x 12	5320376	5320576	50
PG 16	5 x 12	5320315	5320515	8 x 12	5320351	5320551	5 x 12	5320380	5320580	50
PG 16	5 x 16	5320316	5320516				5.5 x 8.5	5320381	5320581	50
PG 16	7.5 x 14	5320317	5320517				5 x 15	5320382	5320582	50
PG 16							6 x 15	5320383	5320583	50
PG 16							7 x 14	5320384	5320584	50
PG 21	5 x 17	5320320	5320520	4 x 15	5320355	5320555	5 x 16	5320385	5320585	20
PG 21	7 x 18	5320321	5320521				7 x 16.5	5320386	5320586	20
PG 21	9 x 15	5320322	5320522				7 x 20	5320387	5320587	20
PG 29	6 x 29	5320325	5320525	6 x 26	5320360	5320560	10 x 27	5320390	5320590	20
PG 29	8 x 25	5320326	5320526	7 x 26	5320361	5320561				20
PG 29	10 x 25	5320327	5320527							20
PG 29	13 x 28	5320328	5320528							20
PG 36	6 x 30	5320330	5320530	5 x 36	5320365	5320565	6.5 x 32	5320393	5320593	20
PG 36	6 x 36	5320331	5320531	8 x 30	5320366	5320566	11 x 35	5320394	5320594	20
PG 36	8 x 36	5320332	5320532							20
PG 36	11 x 34	5320333	5320533							20
PG 36	12 x 35	5320334	5320534							20
PG 42	10 x 38	5320335	5320535	5.5 x 37	5320370	5320570	6 x 41	5320396	5320596	20
PG 42	13 x 35	5320336	5320536	6 x 39	5320371	5320571	9 x 38	5320397	5320597	20
PG 42	14 x 37	5320337	5320537							20
PG 48	6.5 x 47	5320342	5320542							20
PG 48	9 x 43	5320343	5320543							20
PG 48	14.5 x 39	5320344	5320544							20
PG 48	15 x 45	5320345	5320545							20
<b>Metric</b>										
M 16 x 1.5	3.5 x 5.5	5320710	5320810							50
M 20x1.5/13	3 x 12	5320715	5320815				5 x 8	5320770	5320870	50
M 20x1.5/13	5 x 11	5320716	5320816				5 x 12	5320771	5320871	50
M 20x1.5/16	5 x 12	5320717	5320817	8 x 12	5320785	5320885	5.5 x 8.5	5320772	5320872	50
M 20x1.5/16	7.5 x 14	5320718	5320818				7 x 14	5320773	5320873	50
M 25 x 1.5	5 x 16	5320720	5320820	4 x 15	5320786	5320886	5 x 15	5320774	5320874	20
M 25 x 1.5	5 x 17	5320721	5320821				5 x 16	5320775	5320875	20
M 25 x 1.5	7 x 18	5320722	5320822				6 x 15	5320776	5320876	20
M 25 x 1.5	9 x 15	5320723	5320823				7 x 16.5	5320777	5320877	20
M 32 x 1.5	8 x 25	5320730	5320830				7 x 20	5320780	5320880	20
M 32 x 1.5	10 x 25	5320731	5320831							20

# Cable Gland Industrial, Multi-conductor Seal, Polyamide, PG Thread

**Material:**

Body: Polyamide PA 6  
 25 % Glass-fiber Reinforced  
 Seal: Tefabloc

**Characteristic feature:**

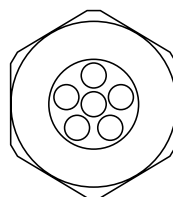
PG thread  
 Multi-holed seal inserts

**Technical properties:**

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations



**Temperature Range**  
**PA 6**  
 -30 to 120° C  
 (-22 to 248° F)



See page 10 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
PG 7	1	4	5315800	5315600	50
PG 7	1	5	5315801	5315601	50
PG 9	1	5	5315810	5315610	50
PG 9	2	1	5315811	5315611	50
PG 9	2	3	5315812	5315612	50
PG 9	2	3.5	5315813	5315613	50
PG 9	2	4	5315814	5315614	50
PG 9	3	3	5315815	5315615	50
PG 9	4	3	5315816	5315616	50
PG 9	4	4	5315817	5315617	50
PG 11	2	2.3	5315820	5315620	50
PG 11	2	3	5315821	5315621	50
PG 11	2	3.5	5315110	5315500	50
PG 11	2	4	5315822	5315622	50
PG 11	2	5	5315111	5315501	50
PG 11	2	6	5315112	5315502	50
PG 11	3	3	5315823	5315623	50
PG 11	3	3.5	5315113	5315503	50
PG 11	3	4	5315824	5315624	50
PG 11	3	5	5315114	5315504	50
PG 11	3	5.3	5315825	5315625	50
PG 11	4	1.5	5315826	5315626	50
PG 11	4	3.5	5315827	5315627	50
PG 11	6	2	5315828	5315628	50
PG 11	6	2.5	5315829	5315629	50
PG 13.5	2	3	5315830	5315630	50
PG 13.5	2	5	5315831	5315631	50
PG 13.5	2	6	5315130	5315510	50
PG 13.5	3	2	5315832	5315632	50
PG 13.5	3	3	5315833	5315633	50
PG 13.5	3	4	5315834	5315634	50
PG 13.5	3	5.3	5315835	5315635	50
PG 13.5	3	6	5315836	5315636	50
PG 13.5	4	3	5315837	5315637	50
PG 13.5	4	4	5315838	5315638	50
PG 13.5	4	5	5315839	5315639	50
PG 13.5	4	5.3	5315840	5315640	50
PG 13.5	6	3.5	5315841	5315641	50
PG 13.5	10	2	5315842	5315642	50
PG 16	2	4	5315850	5315650	50
PG 16	2	5	5315851	5315651	50
PG 16	2	6	5315852	5315652	50
PG 16	2	7	5315160	5315515	50
PG 16	2	8	5315853	5315653	50
PG 16	2	9	5315854	5315654	50
PG 16	3	3	5315855	5315655	50
PG 16	3	4	5315856	5315656	50
PG 16	3	5	5315857	5315516	50
PG 16	3	5.6	5315858	5315658	50
PG 16	3	6	5315859	5315659	50
PG 16	3	7	5315860	5315660	50
PG 16	3	8	5315861	5315661	50

Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
PG 16	4	4	5315862	5315662	50
PG 16	4	5	5315863	5315663	50
PG 16	4	6	5315864	5315664	50
PG 16	5	4	5315865	5315665	50
PG 16	5	5	5315866	5315666	50
PG 16	6	4	5315867	5315667	50
PG 16	7	4	5315868	5315668	50
PG 21	2	4.5	5315869	5315669	20
PG 21	2	8	5315870	5315670	20
PG 21	2	8.7	5315871	5315671	20
PG 21	2	9	5315872	5315672	20
PG 21	2	11	5315873	5315673	20
PG 21	3	7	5315210	5315520	20
PG 21	3	8	5315211	5315521	20
PG 21	3	9	5315874	5315674	20
PG 21	4	5	5315875	5315685	20
PG 21	4	6	5315212	5315522	20
PG 21	4	7.5	5315876	5315676	20
PG 21	4	8	5315213	5315523	20
PG 21	5	5	5315877	5315677	20
PG 21	5	6	5315214	5315524	20
PG 21	5	6.5	5315215	5315525	20
PG 21	6	4	5315878	5315678	20
PG 21	6	5	5315879	5315679	20
PG 21	6	6	5315216	5315526	20
PG 21	6	6.5	5315217	5315527	20
PG 21	6	7	5315218	5315528	20
PG 21	7	6	5315219	5315529	20
PG 21	8	4	5315880	5315683	20
PG 21	8	5	5315220	5315530	20
PG 21	11	5	5315221	5315531	20
PG 21	21	2	5315881	5315684	20
PG 21	28	3	5315222	5315532	20
PG 29	2	9	5315289	5315690	20
PG 29	2	11	5315891	5315691	20
PG 29	2	12	5315892	5315692	20
PG 29	3	9	5315893	5315693	20
PG 29	3	11	5315894	5315694	20
PG 29	4	8	5315290	5315540	20
PG 29	4	9	5315895	5315695	20
PG 29	4	10	5315896	5315696	20
PG 29	6	6	5315897	5315697	20
PG 29	6	6.5	5315292	5315542	20
PG 29	6	7	5315293	5315543	20
PG 29	7	6	5315294	5315544	20
PG 29	7	7	5315898	5315698	20
PG 29	8	5	5315899	5315699	20
PG 29	8	6	5315295	5315545	20
PG 29	10	6	5315900	5315700	20
PG 29	11	5	5315296	5315546	20
PG 29	28	3	5315297	5315547	20

**Material:**

Body: polyamide PA 6  
 25 % Glass-fiber Reinforced  
 Seal: Tefabloc

**Characteristic feature:**

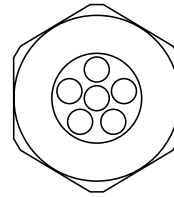
Metric Thread  
 Multi-holed seal inserts

**Technical properties:**

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations



**Temperature Range**  
**PA 6**  
 -30 to 120° C  
 (-22 to 248° F)



See page 10 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
M 16 x 1.5	2	1	5316100	5318100	50
M 16 x 1.5	2	3	5316101	5318101	50
M 16 x 1.5	2	3.5	5316102	5318102	50
M 16 x 1.5	2	4	5316103	5318103	50
M 16 x 1.5	3	3	5316104	5318104	50
M 20 x 1.5	2	3	5316200	5318200	50
M 20 x 1.5	2	4	5316201	5318201	50
M 20 x 1.5	2	5	5316202	5318202	50
M 20 x 1.5	2	6	5316203	5318203	50
M 20 x 1.5	2	7	5316204	5318204	50
M 20 x 1.5	3	2	5316205	5318205	50
M 20 x 1.5	3	3	5316206	5318206	50
M 20 x 1.5	3	4	5316207	5318207	50
M 20 x 1.5	3	5	5316208	5318208	50
M 20 x 1.5	3	5.6	5316209	5318209	50
M 20 x 1.5	3	6	5316210	5318210	50
M 20 x 1.5	4	3	5316211	5318211	50
M 20 x 1.5	4	4	5316212	5318212	50
M 20 x 1.5	5	4	5316213	5318213	50
M 20 x 1.5	5	5	5316214	5318214	50
M 20 x 1.5	6	3.5	5316215	5318215	50
M 20 x 1.5	6	4	5316216	5318216	50
M 20 x 1.5	10	2	5316217	5318217	50
M 25 x 1.5	2	4.5	5316300	5318300	20
M 25 x 1.5	2	8	5316310	5318301	20
M 25 x 1.5	3	7	5316302	5318302	20
M 25 x 1.5	3	8	5316303	5318303	20
M 25 x 1.5	4	5	5316304	5318304	20
M 25 x 1.5	4	6	5316305	5318305	20
M 25 x 1.5	5	5	5316306	5318306	20
M 25 x 1.5	5	6	5316307	5318307	20
M 25 x 1.5	5	6.5	5316308	5318308	20
M 25 x 1.5	6	4	5316309	5318309	20
M 25 x 1.5	6	5	5316310	5318310	20
M 25 x 1.5	8	4	5316311	5318311	20
M 25 x 1.5	8	5	5316312	5318312	20
M 25 x 1.5	21	2	5316313	5318313	20
M 32 x 1.5	2	9	5316400	5318400	20
M 32 x 1.5	2	11	5316401	5318401	20
M 32 x 1.5	2	12	5316402	5318402	20
M 32 x 1.5	3	9	5316403	5318403	20
M 32 x 1.5	3	11	5316404	5318404	20
M 32 x 1.5	4	8	5316405	5318405	20
M 32 x 1.5	4	9	5316406	5318406	20
M 32 x 1.5	4	10	5316407	5318407	20
M 32 x 1.5	6	6	5316408	5318408	20
M 32 x 1.5	6	6.5	5316409	5318409	20
M 32 x 1.5	6	7	5316410	5318410	20
M 32 x 1.5	7	6	5316411	5318411	20
M 32 x 1.5	7	7	5316412	5318412	20
M 32 x 1.5	8	5	5316413	5318413	20

Outer thread	Hole Quantity	Hole diameter mm	Cat. No. Light Grey	Cat. No. Black	Std. Pk.
M 32 x 1.5	8	6	5316414	5318414	20
M 32 x 1.5	10	6	5316415	5318415	20
M 32 x 1.5	11	5	5316416	5318416	20
M 32 x 1.5	28	3	5316417	5318417	20

# Cable Gland Industrial, PVDF

## Material:

Body: Polyvinylidene fluoride

Seal: Santoprene/Nitril

ECA clamping ring: Polycarbonate

## Characteristic feature:

Metric thread

ECA clamping ring

Short and long seal

## Technical properties:

- No halogen
- Strain relief through clamping ring
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts
- Chemical resistant

## Applications:

- Machines and devices
- Measuring and control engineering
- Plant installations
- Food sector

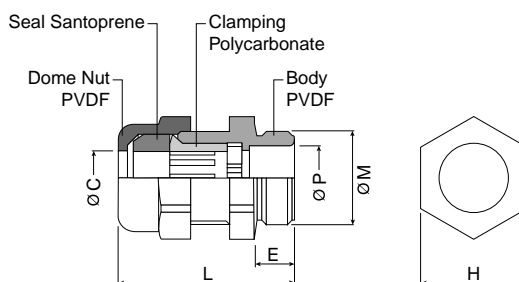


<b>Temperature Range</b> <b>PVDF</b> -40 to 105° C (-40 to 221° F)
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## Metric Thread

Outer thread	ECA		Short Seal		Long Seal		Std. Pk.
	Clamping range mm	Cat. No.	Clamping range mm	Cat. No.	Clamping range mm	Cat. No.	
M 16 x 1.5	5-8	5330016	4.5-8	5330116	3-8	5330216	50
M 20 x 1.5/13	8-12	5330020	7-12	5330120	5-12.5	5330220	50
M 20 x 1.5/16	10-14	5330021	9-14	5330121	7-14.5	5330221	50
M 25 x 1.5	11.5-18	5330025	11.5-18	5330125	10-18	5330225	20
M 32 x 1.5	15-24	5330032	15-24.5	5330132	14-24	5330232	20
M 40 x 1.5	24-34	5330040	24-34	5330140	22-32	5330240	10
M 50 x 1.5	34-42	5330050	34-42	5330150	30-40	5330250	10
M 63 x 1.5	40-48	5330063	40-48	5330163	34-46	5330263	5



## PG Dimensions

Thread Size	H mm	E mm	L mm	ØC mm	ØP mm	ØM mm
M 16x1.5	19	15	39	8.5	9	16
M 20x1.5/13	24	15	42	12.5	13.5	20
M 20x1.5/16	27	15	45	14.5	15	20
M 25x1.5	33	15	48	18.5	19	25
M 32x1.5	42	15	58	25	25	32
M 40x1.5	55	15	63	35	34.5	40
M 50x1.5	65	15	65	43	42.5	50
M 63x1.5	70	15	65	51	51	63

**Material:**  
 Body: Nickel-plated brass  
 Seal: Tefabloc or Santoprene/Nitril  
 ECA clamping ring: Polycarbonate  
 Sealing ring for outer thread: Nitril

**Technical properties:**  
 • Strain relief through clamping ring  
 • Gas and water-tight  
 • Completely twist protected  
 • Combinable with various sealing inserts

**Applications:**  
 • Machines and devices  
 • Measuring and control engineering  
 • Plant installations

**Characteristic feature:**  
 PG/Metric thread  
 Extended Thread available

**Temperature Range MS**  
 -25 to 120° C (-13 to 248° F)



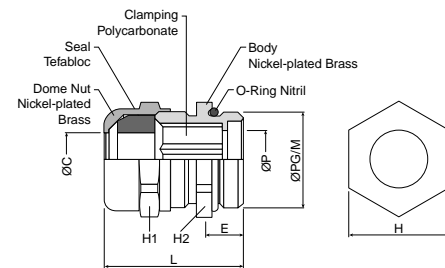
Thread Size	Dimensions						
	H1 mm	H2 mm	E mm	L mm	ØC mm	ØP mm	ØPG/M mm
PG7	14	14	5	24	6.5	7.2	12.5
PG9	17	17	6	25	8.5	9.2	15.2
PG11	20	20	6	26	10.5	11.2	18.6
PG13.5	22	22	6.5	28	12.5	13.1	20.4
PG16	24	24	6.5	30	15.2	15.6	22.5
PG21	30	30	7	35	18.5	20.1	28.3
PG29	40	40	8	43	25.0	26.2	37.0
PG36	50	50	9	50	30.5	33.0	47.0
PG42	58	58	10	57	35.5	40.0	54.0
PG48	64	64	10	59	40.5	47.5	59.3
M 12x1.5	14	14	7	27	6.5	7.2	12
M 16x1.5/7	14	17	7	27	6.5	7.2	16
M 16x1.5/9	17	17	7	27	8.5	9.2	16
M 20x1.5/11	20	22	7	28	10.5	11.2	20
M 20x1.5/13	22	22	7	29	12.5	13.1	20
M 25x1.5/16	24	26	8	31	15.2	15.6	25
M 25x1.5/21	30	30	8	37	18.5	20.1	25
M 32x1.5/21	30	33	8.5	38	18.5	20.1	32
M 32x1.5/29	40	40	8.5	45	25.0	26.2	32
M 40x1.5	40	42	8.5	45	25.0	26.2	40
M 50x1.5	50	55	9.5	51	30.5	33.0	50
M 63x1.5	58	70	10.5	58	30.5	40.0	63

**ECA Clamping Ring Nickel-Plated Brass**

Outer thread	Clamping range mm	Cat. No.	Std. Pk.
<b>PG</b>			
PG 7	3-6	4221079	50
PG 9	5-8	4221095	50
PG 11	6-10	4221117	50
PG 13.5	8-12	4221133	50
PG 16	9.5-14	4221168	20
PG 21	11.5-18	4221214	20
PG 29	15-24	4221290	20
PG 36*	23-30	4221362	10
PG 42*	26-35	4221427	5
PG 48*	35-40	4221486	5
<b>Metric</b>			
M 12 x 1.5	3-6	4221714	50
M 16 x 5/7	3-6	4221716	50
M 16 x 5/9	5-8	4221717	50
M 20 x 1.5/11	6-10	4221720	50
M 20 x 1.5/13	8-12	4221721	50
M 25 x 1.5/16	9.5-14	4221725	20
M 25 x 1.5/21	11.5-18	4221726	20
M 32 x 1.5/21	11.5-18	4221732	10
M 32 x 1.5/29	15-24	4221733	10
M 40 x 1.5	15-24	4221740	5
M 50* x 1.5	23-30	4221750	5
M 63* x 1.5	26-35	4221760	5

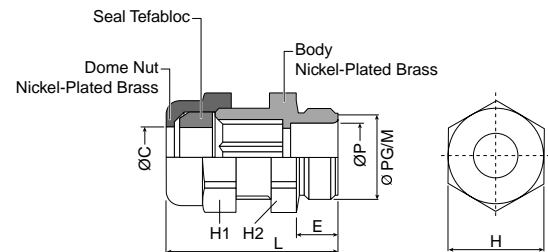


\*Clamping ring made of polyoxymethylene (POM), temperature range -30°C to +95°C



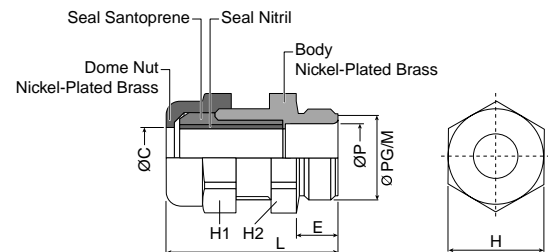
**Short Seal Nickel-Plated Brass**

<b>PG</b>			
PG 7	3-6	4221000	50
PG 9	5-8	4221001	50
PG 11	6-10	4221002	50
PG 13.5	8-12	4221003	50
PG 16	9.5-14	4221004	20
PG 21	11.5-18	4221005	20
PG 29	15-24	4221006	20
PG 36	23-30	4221007	10
PG 42	26-35	4221008	5
PG 48	35-40	4221009	5
<b>Metric</b>			
M 12 x 1.5	3-6	4221039	50
M 16 x 5/7	3-6	4221040	50
M 16 x 5/9	5-8	4221041	50
M 20 x 1.5/11	6-10	4221042	50
M 20 x 1.5/13	8-12	4221043	50
M 25 x 1.5/16	9.5-14	4221044	20
M 25 x 1.5/21	11.5-18	4221045	20
M 32 x 1.5/21	11.5-18	4221046	10
M 32 x 1.5/29	15-24	4221047	10
M 40 x 1.5	15-24	4221048	5
M 50 x 1.5	23-30	4221049	5
M 63 x 1.5	26-35	4221050	5



**Long Seal, Two Part Nickel-Plated Brass**

<b>PG</b>			
PG 9	5-8	4224001	50
PG 11	6-10	4224002	50
PG 13.5	8-12	4224003	50
PG 16	9.5-14	4224004	20
PG 21	11.5-18	4224005	20
PG 29	15-24	4224006	20
PG 36	23-30	4224007	10
PG 42	26-35	4224008	5
PG 48	35-40	4224009	5
<b>Metric</b>			
M 16 x 5/7	3-6	4224100	50
M 16 x 5/9	5-8	4224101	50
M 20 x 1.5/11	6-10	4224102	50
M 20 x 1.5/13	8-12	4224103	50
M 25 x 1.5/16	9.5-14	4224104	20
M 25 x 1.5/21	11.5-18	4224105	20
M 32 x 1.5/21	11.5-18	4224106	10
M 32 x 1.5/29	15-24	4224107	10



# Cable Gland Industrial, Flat Seal, Nickel-Plated Brass

## Material:

Body: Nickel-Plated Brass  
 Seal: Tefabloc  
 Sealing ring for outer thread: Nitril

## Characteristic feature:

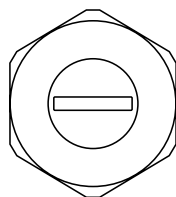
PG/metric thread  
 Seal for flat cable round, angular, oval  
 Extended thread available

## Technical properties:

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Applications:

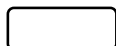
- Machines and devices
- Measuring and control engineering
- Plant installations



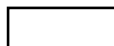
See page 15 for dimensions.



### Flat Cable, Rounded



### Flat Cable, Angular



### Flat Cable, Oval



Outer thread	Clamping range mm	Cat. No.	Clamping range mm	Cat. No.	Clamping range mm	Cat. No.	Std. Pks.
<b>PG</b>							
PG 9	3.5 x 5.5	4224300					50
PG 11	2.8 x 10.5	4224305					50
PG 11	3.5 x 9	4224306					50
PG 11	4 x 6	4224307					50
PG 13.5	3 x 12	4224310			5 x 8	4224375	50
PG 13.5	5 x 11	4224311			5 x 12	4224376	50
PG 16	5 x 12	4224315	8 x 12	4224351	5 x 12	4224390	25
PG 16	7.5 x 14	4224317			5.5 x 8.5	4224380	25
PG 16					6 x 10	4224382	25
PG 16					7 x 14	4224384	25
PG 16/21	5 x 16	4224316			5 x 15	4224381	20
PG 16/21					6 x 15	4224383	20
PG 21	5 x 17	4224320	4 x 15	4224355	5 x 16	4224385	20
PG 21	7 x 18	4224321			7 x 16.5	4224386	20
PG 21	9 x 15	4224322					20
PG 21/29					7 x 20	4224387	10
PG 29	8 x 25	4224326					10
PG 29	10 x 25	4224327					10
<b>Metric</b>							
M 16 x 1.5/9	3.5 x 5.5	4224700					50
M 20 x 1.5/11	2.8 x 10.5	4224705					50
M 20 x 1.5/11	3.5 x 9	4224706					50
M 20 x 1.5/11	4 x 6	4224707					50
M 20 x 1.5/13	3 x 12	4224710			5 x 8	4224775	50
M 20 x 1.5/13	5 x 11	4224711			5 x 12	4224776	50
M 25 x 1.5/16	5 x 12	4224715	8 x 12	4224751	5 x 12	4224790	20
M 25 x 1.5/16	7.5 x 14	4224717			5.5 x 8.5	4224780	20
M 25 x 1.5/16					6 x 10	4224781	20
M 25 x 1.5/16					7 x 14	4224782	20
M 25 x 1.5/21	5 x 16	4224716	4 x 15	4224755	5 x 15	4224784	20
M 25 x 1.5/21	5 x 17	4224720			5 x 16	4224785	20
M 25 x 1.5/21	7 x 18	4224721			6 x 15	4224783	20
M 25 x 1.5/21	9 x 15	4224722			7 x 16.5	4224786	20
M 32 x 1.5/29	8 x 25	4224726			7 x 20	4224787	10
M 32 x 1.5/29	10 x 25	4224727					10



**Material:**  
 Body: Nickel-Plated Brass  
 Seal: Tefabloc  
 Sealing ring for outer thread: Nitril

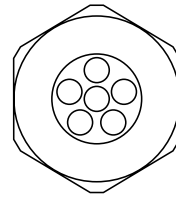
**Characteristic feature:**  
 PG thread  
 Multi-holed seal inserts

**Technical properties:**

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations



<b>Temperature Range</b> <b>MS</b> -25 to 120° C (-13 to 248° F)
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See page 15 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.	Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.
PG 7	1	4	4248640	50	PG 16	4	4	4248688	50
PG 7	1	5	4248641	50	PG 16	4	5	4248689	50
PG 9	1	5	4248642	50	PG 16	4	6	4248694	50
PG 9	2	1	4248643	50	PG 16	5	4	4248690	50
PG 9	2	3	4248644	50	PG 16	5	5	4248691	50
PG 9	2	3.5	4248645	50	PG 16	6	4	4248692	50
PG 9	2	4	4248646	50	PG 16	7	4	4248693	50
PG 9	3	3	4248647	50	PG 21	2	4.5	4248696	20
PG 9	4	3	4248648	50	PG 21	2	8	4248697	20
PG 9	4	4	4248649	50	PG 21	2	8.7	4248698	20
PG 11	2	2.3	4248650	50	PG 21	2	9	4248699	20
PG 11	2	3	4248651	50	PG 21	2	11	4248700	20
PG 11	2	3.5	4248405	50	PG 21	3	7	4248542	20
PG 11	2	4	4248652	50	PG 21	3	8	4248531	20
PG 11	2	5	4248660	50	PG 21	3	9	4248701	20
PG 11	2	6	4248661	50	PG 21	4	5	4248702	20
PG 11	3	3	4248653	50	PG 21	4	6	4248529	20
PG 11	3	3.5	4248407	50	PG 21	4	7.5	4248709	20
PG 11	3	4	4248654	50	PG 21	4	8	4248703	20
PG 11	3	5	4248662	50	PG 21	5	5	4248704	20
PG 11	3	5.3	4248655	50	PG 21	5	6	4248539	20
PG 11	4	1.5	4248656	50	PG 21	5	6.5	4248541	20
PG 11	4	3.5	4248657	50	PG 21	6	4	4248705	20
PG 11	6	2	4248658	50	PG 21	6	5	4248706	20
PG 11	6	2.5	4248659	50	PG 21	6	6	4248713	20
PG 13	2	3	4248663	50	PG 21	6	6.5	4248710	20
PG 13	2	5	4248664	50	PG 21	6	7	4248715	20
PG 13	2	6	4248404	50	PG 21	7	6	4248714	20
PG 13	3	2	4248665	50	PG 21	8	4	4248707	20
PG 13	3	3	4248666	50	PG 21	8	5	4248543	20
PG 13	3	4	4248667	50	PG 21	11	5	4248712	20
PG 13	3	5.3	4248668	50	PG 21	21	2	4248708	20
PG 13	3	6	4248669	50	PG 21	28	3	4248711	20
PG 13	4	3	4248670	50	PG 29	2	9	4248716	20
PG 13	4	4	4248671	50	PG 29	2	11	4248717	20
PG 13	4	5	4248673	50	PG 29	2	12	4248718	20
PG 13	4	5.3	4248672	50	PG 29	3	9	4248719	20
PG 13	6	3.5	4248674	50	PG 29	3	11	4248720	20
PG 13	10	2	4248675	50	PG 29	4	8	4248629	20
PG 16	2	4	4248678	50	PG 29	4	9	4248721	20
PG 16	2	5	4248679	50	PG 29	4	10	4248722	20
PG 16	2	6	4248680	50	PG 29	6	6	4248627	20
PG 16	2	7	4248409	50	PG 29	6	6.5	4248610	20
PG 16	2	8	4248681	50	PG 29	6	7	4248614	20
PG 16	2	9	4248682	50	PG 29	7	6	4248631	20
PG 16	3	3	4248683	50	PG 29	7	7	4248723	20
PG 16	3	4	4248684	50	PG 29	8	5	4248724	20
PG 16	3	5	4248677	50	PG 29	8	6	4248632	20
PG 16	3	5.6	4248685	50	PG 29	10	6	4248725	20
PG 16	3	6	4248686	50	PG 29	11	5	4248634	20
PG 16	3	7	4248695	50	PG 29	28	3	4248612	20
PG 16	3	8	4248687	50					

# Cable Gland Industrial, Multi-Conductor Seal, Nickel-Plated Brass, Metric Thread

## Material:

Body: Nickel-Plated Brass  
 Seal: Tefabloc  
 Sealing ring for outer thread: Nitril

## Characteristic feature:

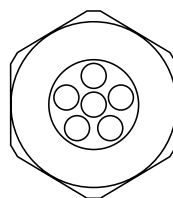
Metric thread  
 Multi-holed seal inserts  
 Extended thread available

## Technical properties:

- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Applications:

- Machines and devices
- Measuring and control engineering
- Plant installations



<b>Temperature Range</b> <b>MS</b> -25 to 120° C (-13 to 248° F)
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See page 15 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.
M 16 x 1.5	2	1	4249600	50
M 16 x 1.5	2	3	4249601	50
M 16 x 1.5	2	3.5	4249602	50
M 16 x 1.5	2	4	4249603	50
M 16 x 1.5	3	3	4249604	50
M 20 x 1.5	2	2.3	4249610	50
M 20 x 1.5	2	3	4249611	50
M 20 x 1.5	2	3.5	4249612	50
M 20 x 1.5	2	4	4249613	50
M 20 x 1.5	2	5	4249614	50
M 20 x 1.5	2	6	4249615	50
M 20 x 1.5	3	2	4249616	50
M 20 x 1.5	3	3	4249617	50
M 20 x 1.5	3	3.5	4249618	50
M 20 x 1.5	3	4	4249619	50
M 20 x 1.5	3	5.3	4249620	50
M 20 x 1.5	4	1.5	4249621	50
M 20 x 1.5	4	3	4249622	50
M 20 x 1.5	4	3.5	4249623	50
M 20 x 1.5	4	4	4249624	50
M 20 x 1.5	6	2	4249625	50
M 20 x 1.5	6	2.5	4249626	50
M 20 x 1.5	6	3.5	4249627	50
M 20 x 1.5	10	2	4249628	50
M 25 x 1.5	2	4	4249640	20
M 25 x 1.5	2	4.5	4249641	20
M 25 x 1.5	2	5	4249642	20
M 25 x 1.5	2	6	4249643	20
M 25 x 1.5	2	7	4249644	20
M 25 x 1.5	2	8	4249645	20
M 25 x 1.5	3	3	4249646	20
M 25 x 1.5	3	4	4249647	20
M 25 x 1.5	3	5	4249648	20
M 25 x 1.5	3	5.6	4249649	20
M 25 x 1.5	3	6	4249650	20
M 25 x 1.5	3	7	4249651	20
M 25 x 1.5	3	8	4249652	20
M 25 x 1.5	4	4	4249653	20
M 25 x 1.5	4	5	4249654	20
M 25 x 1.5	4	6	4249655	20
M 25 x 1.5	5	4	4249656	20
M 25 x 1.5	5	5	4249657	20
M 25 x 1.5	5	6	4249658	20
M 25 x 1.5	5	6.5	4249659	20
M 25 x 1.5	6	4	4249660	20
M 25 x 1.5	6	5	4249661	20
M 25 x 1.5	8	4	4249662	20
M 25 x 1.5	8	5	4249663	20
M 25 x 1.5	21	2	4249664	20
M 32 x 1.5	2	4.5	4249670	20
M 32 x 1.5	2	8	4249671	20
M 32 x 1.5	2	9	4249672	20
M 32 x 1.5	2	11	4249673	20
M 32 x 1.5	2	12	4249674	20
M 32 x 1.5	3	7	4249675	20
M 32 x 1.5	3	8	4249676	20

Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.
M 32 x 1.5	3	9	4249677	20
M 32 x 1.5	3	11	4249678	20
M 32 x 1.5	4	5	4249679	20
M 32 x 1.5	4	6	4249680	20
M 32 x 1.5	4	8	4249681	20
M 32 x 1.5	4	9	4249682	20
M 32 x 1.5	4	10	4249683	20
M 32 x 1.5	5	5	4249684	20
M 32 x 1.5	5	6	4249685	20
M 32 x 1.5	5	6.5	4249686	20
M 32 x 1.5	6	4	4249687	20
M 32 x 1.5	6	5	4249688	20
M 32 x 1.5	6	6	4249689	20
M 32 x 1.5	6	6.5	4249690	20
M 32 x 1.5	6	7	4249691	20
M 32 x 1.5	7	6	4249692	20
M 32 x 1.5	7	7	4249693	20
M 32 x 1.5	8	4	4249694	20
M 32 x 1.5	8	5	4249695	20
M 32 x 1.5	8	6	4249696	20
M 32 x 1.5	10	6	4249697	20
M 32 x 1.5	11	5	4249698	20
M 32 x 1.5	21	2	4249699	20
M 32 x 1.5	28	3	4249700	20

**Material:**  
 Body: Stainless Steel INOX 316L  
 Seal: Tefabloc or Santoprene/Nitril  
 ECA clamping ring: Polycarbonate  
 Sealing ring for outer thread: Nitril

**Technical properties:**  
 • Acid and lye resistant  
 • Gas and water-tight  
 • Completely twist protected  
 • Combinable with various sealing inserts

**Applications:**  
 • Machines and devices  
 • Measuring and control engineering  
 • Plant installations

**Characteristic feature:**  
 PG/Metric extended thread

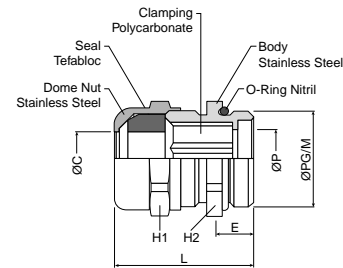
**Temperature Range EST**  
 -25 to 120° C (-13 to 248° F)

Thread Size	Dimensions						
	H1 mm	H2 mm	E mm	L mm	ØC mm	ØP mm	ØPG/M mm
PG7	14	14	15	34	6.5	7.2	12.5
PG9	17	17	15	34	8.5	9.2	15.2
PG11	20	20	15	35	10.5	11.2	18.6
PG13.5	22	22	15	36.5	12.5	13.1	20.4
PG16	24	24	15	36.5	15.2	15.6	22.5
PG21	30	30	15	43	18.5	20.1	28.3
PG29	40	40	15	50	25.0	26.2	37.0
PG36	50	50	18	59	30.5	33.0	47.0
PG42	58	58	18	65	35.5	40.0	54.0
PG48	64	64	18	67	40.5	47.5	59.3
M 12x1.5	14	14	13	33	6.5	7.2	12
M 16x1.5/7	14	17	13	33	6.5	7.2	16
M 16x1.5/9	17	17	13	33	8.5	9.2	16
M 20x1.5/11	20	22	13	34	10.5	11.2	20
M 20x1.5/13	22	22	13	35	12.5	13.1	20
M 25x1.5/16	24	26	14	37	15.2	15.6	25
M 25x1.5/21	30	30	14	43	18.5	20.1	25
M 32x1.5/21	30	33	14.5	44	18.5	20.1	32
M 32x1.5/29	40	40	14.5	51	25.0	26.2	32



**ECA Clamping Ring Stainless Steel**

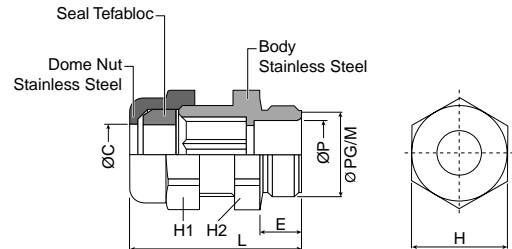
Outer thread	Clamping range mm	Cat. No.	Std. Pk.
<b>PG</b>			
PG 7	3-6	4222075	20
PG 9	5-8	4222091	20
PG 11	6-10	4222113	20
PG 13.5	8-12	4222130	10
PG 16	9.5-14	4222164	10
PG 21	11.5-18	4222210	5
PG 29	15-24	4222296	5
PG 36*	23-30	4222369	1
PG 42*	26-35	4222423	1
PG 48*	35-40	4222482	1
<b>Metric</b>			
M 12 x 1.5	3-6	4222012	20
M 16 x 5/7	3-6	4222016	20
M 16 x 5/9	5-8	4222017	20
M 20 x 1.5/11	6-10	4222020	10
M 20 x 1.5/13	8-12	4222021	10
M 25 x 1.5/16	9.5-14	4222025	5
M 25 x 1.5/21	11.5-18	4222026	5
M 32 x 1.5/21	11.5-18	4222032	1
M 32 x 1.5/29	15-24	4222033	1



\*Clamping ring made of polyoxymethylene (POM), temperature range -30°C to +95°C

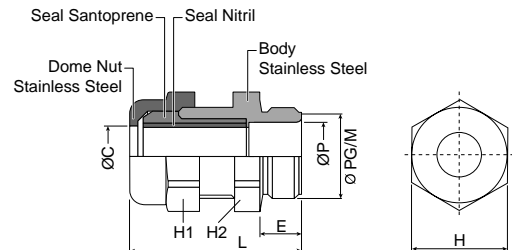
**Short Seal Stainless Steel**

PG	Clamping range mm	Cat. No.	Std. Pk.
PG 7	3-6	4222000	20
PG 9	4.5-8	4222001	20
PG 11	6.5-10.5	4222002	20
PG 13.5	7-12	4222003	10
PG 16	9-14	4222004	10
PG 21	11.5-18	4222005	5
PG 29	15-24.5	4222006	5
PG 36	24-34	4222007	1
PG 42	31-42	4222008	1
PG 48	40-48	4222009	1
<b>Metric</b>			
M 12 x 1.5	3-6	4222029	20
M 16 x 5/7	3-6	4222023	20
M 16 x 5/9	5-8	4222024	20
M 20 x 1.5/11	6-10	4222027	10
M 20 x 1.5/13	8-12	4222028	10
M 25 x 1.5/16	9.5-14	4222032	5
M 25 x 1.5/21	11.5-18	4222030	5
M 32 x 1.5/21	11.5-18	4222037	1
M 32 x 1.5/29	15-24	4222040	1



**Long Seal, Two Part Stainless Steel**

PG	Clamping range mm	Cat. No.	Std. Pk.
PG 9	5-8	4223001	20
PG 11	6-10	4223002	20
PG 13.5	8-12	4223003	10
PG 16	9.5-14	4223004	10
PG 21	11.5-18	4223005	5
PG 29	15-24	4223006	5
PG 36	23-30	4223007	1
PG 42	26-35	4223008	1
PG 48	35-40	4223009	1
<b>Metric</b>			
M 16 x 5/7	3-6	4223101	20
M 16 x 5/9	5-8	4223102	20
M 20 x 1.5/11	6-10	4223103	10
M 20 x 1.5/13	8-12	4223104	10
M 25 x 1.5/16	9.5-14	4223105	5
M 25 x 1.5/21	11.5-18	4223106	5
M 32 x 1.5/21	11.5-18	4223107	1
M 32 x 1.5/29	15-24	4223108	1



# Cable Gland Industrial, Flat Seal, Stainless Steel INOX 316L

## Material:

Body: Stainless Steel INOX 316L  
 Seal: Tefabloc  
 Sealing ring for outer thread: Nitril

## Characteristic feature:

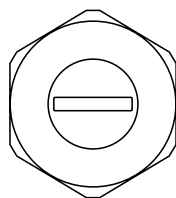
PG/metric extended thread  
 Seal for flat cables, (rounded, angular, oval)

## Technical properties:

- Acid and lye resistant
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Applications:

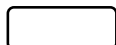
- Machines and devices
- Measuring and control engineering
- Plant installations



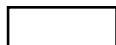
See page 19 for dimensions.



### Flat Cable, Rounded



### Flat Cable, Angular



### Flat Cable, Oval



Outer thread	Clamping range mm	Cat. No.	Clamping range mm	Cat. No.	Clamping range mm	Cat. No.	Std. Pk.
<b>PG</b>							
PG 9	3.5 x 5.5	4223300					50
PG 11	2.8 x 10.5	4223305					50
PG 11	3.5 x 9	4223306					50
PG 11	4 x 6	4223307					50
PG 13.5	3 x 12	4223310			5 x 8	4223375	50
PG 13.5	5 x 11	4223311			5 x 12	4223376	50
PG 16	5 x 12	4223315	8 x 12	4223351	5 x 12	4223381	20
PG 16	7.5 x 14	4223317			5.5 x 8.5	4223380	20
PG 16					6 x 10	4223383	20
PG 16					7 x 14	4223382	20
PG 21	5 x 16	4223316	4 x 15	4223355	5 x 15	4223384	20
PG 21	5 x 17	4223320			5 x 16	4223385	20
PG 21	7 x 18	4223321			6 x 15	4223387	20
PG 21	9 x 15	4223322			7 x 16.5	4223386	20
PG 29	8 x 25	4223326			7 x 20	4223390	10
PG 29	10 x 25	4223327					10
<b>Metric</b>							
M 16 x 1.5/9	3.5 x 5	4223400					50
M 20 x 1.5/11	2.8 x 10.5	4223405					50
M 20 x 1.5/11	3.5 x 9	4223406					50
M 20 x 1.5/11	4 x 6	4223407					50
M 20 x 1.5/13	3 x 12	4223410			5 x 8	4223475	50
M 20 x 1.5/13	5 x 11	4223411			5 x 12	4223476	50
M 25 x 1.5/16	5 x 12	4223415	8 x 12	4223451	5 x 12	4223481	20
M 25 x 1.5/16	7.5 x 14	4223417			5.5 x 8.5	4223480	20
M 25 x 1.5/16					6 x 10	4223483	20
M 25 x 1.5/16					7 x 14	4223482	20
M 25 x 1.5/21	5 x 16	4223416	4 x 15	4223455	5 x 15	4223484	20
M 25 x 1.5/21	5 x 17	4223420			5 x 16	4223485	20
M 25 x 1.5/21	7 x 18	4223421			6 x 15	4223487	20
M 25 x 1.5/21	9 x 15	4223422			7 x 16.5	4223486	20
M 32 x 1.5/29	8 x 25	4223426			7 x 20	4223490	10
M 32 x 1.5/29	10 x 25	4223427					10

**Material:**

Body: Stainless Steel INOX 316L  
 Seal: Tefabloc  
 Sealing ring for outer thread: Nitril

**Characteristic feature:**

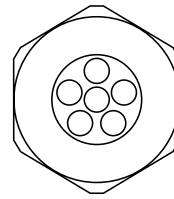
PG extended thread  
 Multi-conductor seal inserts

**Technical properties:**

- Acid and lye resistant
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations



**Temperature Range  
EST**  
 -25 to 120° C  
 (-13 to 248° F)



See page 19 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.	Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.
PG 7	1	4	4223600	50	PG 16	4	4	4223713	20
PG 7	1	5	4223601	50	PG 16	4	5	4223714	20
PG 9	1	5	4223620	50	PG 16	4	6	4223715	20
PG 9	2	1	4223621	50	PG 16	5	4	4223716	20
PG 9	2	3	4223622	50	PG 16	5	5	4223717	20
PG 9	2	3.5	4223623	50	PG 16	6	4	4223718	20
PG 9	2	4	4223624	50	PG 16	7	4	4223719	20
PG 9	3	3	4223625	50	PG 21	2	4.5	4223730	20
PG 9	4	3	4223626	50	PG 21	2	8	4223731	20
PG 9	4	4	4223627	50	PG 21	2	8.7	4223732	20
PG 11	2	2.3	4223640	50	PG 21	2	9	4223733	20
PG 11	2	3	4223641	50	PG 21	2	11	4223734	20
PG 11	2	3.5	4223642	50	PG 21	3	7	4223735	20
PG 11	2	4	4223643	50	PG 21	3	8	4223736	20
PG 11	2	5	4223644	50	PG 21	3	9	4223737	20
PG 11	2	6	4223645	50	PG 21	4	5	4223738	20
PG 11	3	3	4223646	50	PG 21	4	6	4223739	20
PG 11	3	3.5	4223647	50	PG 21	4	7.5	4223740	20
PG 11	3	4	4223648	50	PG 21	4	8	4223741	20
PG 11	3	5	4223649	50	PG 21	5	5	4223742	20
PG 11	3	5.3	4223650	50	PG 21	5	6	4223743	20
PG 11	4	1.5	4223651	50	PG 21	5	6.5	4223744	20
PG 11	4	3.5	4223652	50	PG 21	6	4	4223745	20
PG 11	6	2	4223653	50	PG 21	6	5	4223746	20
PG 11	6	2.5	4223654	50	PG 21	6	6	4223747	20
PG 13	2	3	4223670	50	PG 21	6	6.5	4223748	20
PG 13	2	5	4223671	50	PG 21	6	7	4223749	20
PG 13	2	6	4223672	50	PG 21	7	6	4223750	20
PG 13	3	2	4223673	50	PG 21	8	4	4223751	20
PG 13	3	3	4223674	50	PG 21	8	5	4223752	20
PG 13	3	4	4223675	50	PG 21	11	5	4223753	20
PG 13	3	5.3	4223676	50	PG 21	21	2	4223754	20
PG 13	3	6	4223677	50	PG 21	28	3	4223755	20
PG 13	4	3	4223678	50	PG 29	2	9	4223770	10
PG 13	4	4	4223679	50	PG 29	2	11	4223771	10
PG 13	4	5	4223680	50	PG 29	2	12	4223772	10
PG 13	4	5.3	4223681	50	PG 29	3	9	4223773	10
PG 13	6	3.5	4223682	50	PG 29	3	11	4223774	10
PG 13	10	2	4223683	50	PG 29	4	8	4223775	10
PG 16	2	4	4223700	20	PG 29	4	9	4223776	10
PG 16	2	5	4223701	20	PG 29	4	10	4223777	10
PG 16	2	6	4223702	20	PG 29	6	6	4223778	10
PG 16	2	7	4223703	20	PG 29	6	6.5	4223779	10
PG 16	2	8	4223704	20	PG 29	6	7	4223780	10
PG 16	2	9	4223705	20	PG 29	7	6	4223781	10
PG 16	3	3	4223706	20	PG 29	7	7	4223782	10
PG 16	3	4	4223707	20	PG 29	8	5	4223783	10
PG 16	3	5	4223708	20	PG 29	8	6	4223784	10
PG 16	3	5.6	4223709	20	PG 29	10	6	4223785	10
PG 16	3	6	4223710	20	PG 29	11	5	4223786	10
PG 16	3	7	4223711	20	PG 29	28	3	4223787	10
PG 16	3	8	4223712	20					

# Cable Gland Industrial, Multi-Conductor Seal, Stainless Steel INOX 316L, Metric thread

## Material:

Body: Stainless Steel INOX 316L  
 Seal: Tefabloc  
 Sealing ring for outer thread: Nitril

## Characteristic feature:

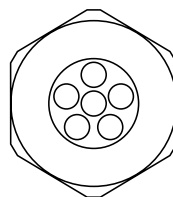
Metric extended thread  
 Multi-conductor seal inserts

## Technical properties:

- Acid and lye resistant
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Applications:

- Machines and devices
- Measuring and control engineering
- Plant installations



<b>Temperature Range</b> <b>EST</b> -25 to 120° C (-13 to 248° F)
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See page 19 for dimensions.

Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.	Outer thread	Hole Quantity	Hole diameter mm	Cat. No.	Std. Pk.
M 16 x 1.5	2	1	4223800	50	M 32 x 1.5	3	9	4223867	10
M 16 x 1.5	2	3	4223801	50	M 32 x 1.5	3	11	4223868	10
M 16 x 1.5	2	3.5	4223802	50	M 32 x 1.5	4	5	4223869	10
M 16 x 1.5	2	4	4223803	50	M 32 x 1.5	4	6	4223870	10
M 16 x 1.5	3	3	4223804	50	M 32 x 1.5	4	8	4223871	10
M 20 x 1.5	2	2.3	4223810	50	M 32 x 1.5	4	9	4223872	10
M 20 x 1.5	2	3	4223811	50	M 32 x 1.5	4	10	4223873	10
M 20 x 1.5	2	3.5	4223812	50	M 32 x 1.5	5	5	4223874	10
M 20 x 1.5	2	4	4223813	50	M 32 x 1.5	5	6	4223875	10
M 20 x 1.5	2	5	4223814	50	M 32 x 1.5	5	6.5	4223876	10
M 20 x 1.5	2	6	4223815	50	M 32 x 1.5	6	4	4223877	10
M 20 x 1.5	3	2	4223816	50	M 32 x 1.5	6	5	4223878	10
M 20 x 1.5	3	3	4223817	50	M 32 x 1.5	6	6	4223879	10
M 20 x 1.5	3	3.5	4223818	50	M 32 x 1.5	6	6.5	4223880	10
M 20 x 1.5	3	4	4223819	50	M 32 x 1.5	6	7	4223881	10
M 20 x 1.5	3	5.3	4223820	50	M 32 x 1.5	7	6	4223882	10
M 20 x 1.5	4	1.5	4223821	50	M 32 x 1.5	7	7	4223883	10
M 20 x 1.5	4	3	4223822	50	M 32 x 1.5	8	4	4223884	10
M 20 x 1.5	4	3.5	4223823	50	M 32 x 1.5	8	5	4223885	10
M 20 x 1.5	4	4	4223824	50	M 32 x 1.5	8	6	4223886	10
M 20 x 1.5	6	2	4223825	50	M 32 x 1.5	10	6	4223887	10
M 20 x 1.5	6	2.5	4223826	50	M 32 x 1.5	11	5	4223888	10
M 20 x 1.5	6	3.5	4223827	50	M 32 x 1.5	21	2	4223889	10
M 20 x 1.5	10	2	4223828	50	M 32 x 1.5	28	3	4223890	10
M 25 x 1.5	2	4	4223830	20					
M 25 x 1.5	2	4.5	4223831	20					
M 25 x 1.5	2	5	4223832	20					
M 25 x 1.5	2	6	4223833	20					
M 25 x 1.5	2	7	4223834	20					
M 25 x 1.5	2	8	4223835	20					
M 25 x 1.5	3	3	4223836	20					
M 25 x 1.5	3	4	4223837	20					
M 25 x 1.5	3	5	4223838	20					
M 25 x 1.5	3	5.6	4223839	20					
M 25 x 1.5	3	6	4223840	20					
M 25 x 1.5	3	7	4223841	20					
M 25 x 1.5	3	8	4223842	20					
M 25 x 1.5	4	4	4223843	20					
M 25 x 1.5	4	5	4223844	20					
M 25 x 1.5	4	6	4223845	20					
M 25 x 1.5	5	4	4223846	20					
M 25 x 1.5	5	5	4223847	20					
M 25 x 1.5	5	6	4223848	20					
M 25 x 1.5	5	6.5	4223849	20					
M 25 x 1.5	6	4	4223850	20					
M 25 x 1.5	6	5	4223851	20					
M 25 x 1.5	8	4	4223852	20					
M 25 x 1.5	8	5	4223853	20					
M 25 x 1.5	21	2	4223854	20					
M 32 x 1.5	2	4.5	4223860	10					
M 32 x 1.5	2	8	4223861	10					
M 32 x 1.5	2	9	4223862	10					
M 32 x 1.5	2	11	4223863	10					
M 32 x 1.5	2	12	4223864	10					
M 32 x 1.5	3	7	4223865	10					
M 32 x 1.5	3	8	4223866	10					



**Material:**  
 Body: Polyamide PA 6  
 25 % Glass fiber Reinforced  
 Seal: Neoprene  
 ECA clamping ring: Polycarbonate

**Characteristic feature:**  
 PG/Metric thread  
 Extended thread available  
 Strain relief through clamping ring

**Applications:**

- For explosion endangered areas according to EN 50014 and EN 50019
- Machines and devices
- Measuring and control engineering
- Plant installations



<b>Temperature Range PA 6</b> -20 to 55° C (-4 to 131 ° F)
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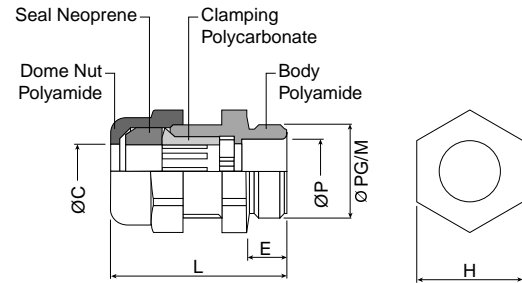
Thread Size	Dimensions					
	H mm	E mm	L mm	ØC mm	ØP mm	ØPG/M mm
PG7	15	8	31	6.5	7.0	12.5
PG9	19	8	32	8.5	9.0	15.2
PG11	22	8	35	11.5	11.0	18.6
PG13.5	24	9	36	12.5	13.5	20.4
PG16	27	10	40	14.5	15.0	22.5
PG21	33	11	44	18.5	19.0	28.3
PG29	42	12	55	25.0	25.0	37.0
M 16x1.5	19	8	32	8.5	9.0	16.0
M 20x1.5/13	24	9	36	12.5	13.5	20.0
M 20x1.5/16	27	9	39	14.5	15.0	20.0
M 25x1.5	33	11	44	18.5	19.0	25.0
M 32x1.5	42	12	55	25.0	25.0	32.0



**ECA Clamping Ring**

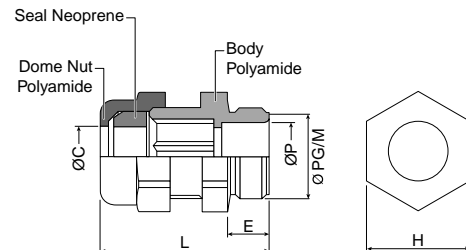


Outer thread	Clamping range mm	Cat. No. Dark Grey	Cat. No. Black	Std. Pk.
<b>PG</b>				
PG 9	5.5 - 8.5	5507009	5507050	50
PG 11	6.5 - 10.5	5507011	5507051	50
PG 13.5	8.0 - 12.5	5507013	5507052	50
PG 16	10.0 - 14.0	5507016	5507053	50
PG 21	12.5 - 18.5	5507021	5507054	20
PG 29	18.0 - 25.0	5507029	5507055	20
<b>Metric</b>				
M 16 x 1.5	5.5 - 8.5	5507216	5507250	50
M 20 x 1.5/13	8.0 - 12.5	5507220	5507251	50
M 20 x 1.5/16	10.0 - 14.0	5507221	5507252	50
M 25 x 1.5	12.5 - 18.5	5507225	5507253	20
M 32 x 1.5	18.0 - 25.0	5507232	5507254	20



**Short Seal**

Outer thread	Clamping range mm	Cat. No. Dark Grey	Cat. No. Black	Std. Pk.
<b>PG</b>				
PG 9	4.5 - 8.0	5508009	5508050	50
PG 11	5.5 - 10.5	5508011	5508051	50
PG 13.5	7.0 - 12.0	5508013	5508052	50
PG 16	9.0 - 14.0	5508016	5508053	50
PG 21	11.5 - 18.0	5508021	5508054	20
PG 29	16.0 - 24.5	5508029	5508055	20
<b>Metric</b>				
M 16 x 1.5	4.5 - 8.0	5808216	5808250	50
M 20 x 1.5/13	7.0 - 12.0	5808220	5808251	50
M 20 x 1.5/16	9.0 - 14.0	5808221	5808252	50
M 25 x 1.5	11.5 - 18.0	5808225	5808253	20
M 32 x 1.5	16.0 - 24.5	5808232	5808254	20



# Cable Gland Industrial, EMC, Nickel-Plated Brass

## Material:

Body: Nickel-plated brass  
 Seal: Tefabloc  
 Clamping ring  
 for grounding connection:  
 Tin-plated plastic  
 Seal ring for outer thread: Nitril

## Technical properties:

- Continuous EMC protection due to tin-plated plastic
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

## Applications:

- Machines and devices
- Measuring and control engineering
- Plant installations

## Characteristic feature:

PG/Metric thread

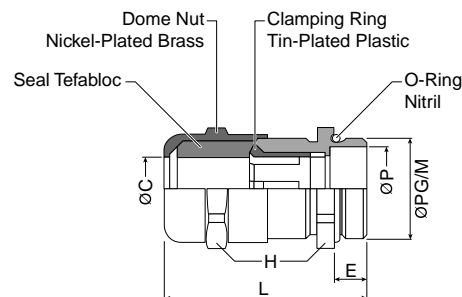


**Temperature Range MS**  
 -25 to 120° C (-13 to 248° F)



Thread Size	H mm	E mm	Dimensions			
			L mm	ØC mm	ØP mm	ØPG/M mm
PG7	14	5	31	6.5	7.0	12.5
PG9	17	6	32	8.5	9.0	15.2
PG11	20	6	35	11.5	11.0	18.6
PG13.5	22	6.5	36	12.5	13.5	20.4
PG16	24	6.5	40	14.5	15.0	22.5
PG21	30	7	44	18.5	19.0	28.3
PG29	40	8	55	25.0	25.0	37.0
M 12x1.5/7	14	7	32	8.5	9.0	12.0
M 16x1.5/7	14	7	32	8.5	9.0	16.0
M 16x1.5/9	17	7	32	8.5	9.0	16.0
M 20x1.5/11	20	7	36	12.5	13.5	20.0
M 20x1.5/13	22	7	40	14.5	15.0	20.0
M 25x1.5/16	24	8	44	18.5	19.0	25.0
M 25x1.5/21	30	8	44	18.5	19.0	25.0
M 32x1.5/21	30	8.5	44	18.5	19.0	32.0
M 32x1.5/29	40	8.5	44	18.5	19.0	32.0

Outer thread	Cable Clamping range mm	Shield Clamping range mm	Cat. No.	Std. Pk.
<b>PG</b>				
PG 7	4 - 6.5	3 - 6.5	4264007	50
PG 9	5 - 8.5	4.5 - 8.5	4264009	50
PG 11	7 - 11	6 - 10.5	4264011	50
PG 13	8 - 12.5	8 - 12.5	4264013	50
PG 16	10 - 14.5	10 - 14.5	4264016	20
PG 21	12.5 - 18	11.5 - 18	4264021	20
PG 29	16 - 24	15 - 24	4264029	10
<b>Metric</b>				
M 12 x 1.5/7	4 - 6.5	3 - 6.5	4264112	50
M 16 x 1.5/7	4 - 6.5	3 - 6.5	4264116	50
M 16 x 1.5/9	5 - 8.5	4.5 - 8.5	4264117	50
M 20 x 1.5/11	7 - 11	6 - 10.5	4264120	50
M 20 x 1.5/13	8 - 12.5	8 - 12.5	4264121	50
M 25 x 1.5/16	10 - 14.5	10 - 14.5	4264125	20
M 25 x 1.5/21	12.5 - 18	11.5 - 18	4264126	20
M 32 x 1.5/21	12.5 - 18	11.5 - 18	4264132	10
M 32 x 1.5/29	16 - 24	15 - 24	4264133	10



**Material:**

Body: Nickel-plated brass  
 Seal: Santoprene  
 O-ring: Perbunan

**Characteristic feature:**

PG thread

**Technical properties:**

- EMC protection due to pressure rings and circular spring
- Gas and water-tight
- Completely twist protected

**Applications:**

- Machines and devices
- Measuring and control engineering
- Plant installations

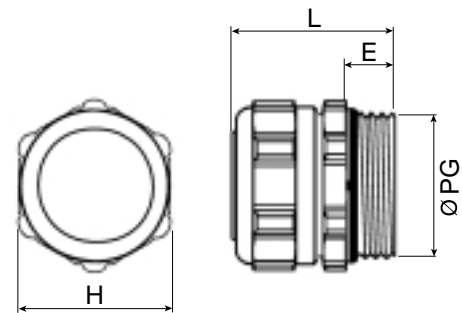


Thread Size	Dimensions			ØPG mm
	H mm	E mm	L mm	
PG9	20	6	34	15.2
PG11	24	10	41	18.6
PG13.5	24	10	41	20.4
PG16	30	11	43	22.5
PG21	30	12	44	28.3
PG29	40	13	53	37.0
PG36	50	14	61	47.0
PG42	60	15	65	54.0

**Temperature Range MS**  
 -40 to 135° C (-40 to 275° F)



Outer thread	Cable Clamping range mm	Shield Clamping range mm	Cat. No.	Std. Pk.
PG				
PG 9	4 - 6	2.5 - 6	4266003	25
PG 9	6.5 - 9.5	2.5 - 8.5	4266004	25
PG 11	4 - 6	3 - 6	4266006	25
PG 11	6 - 9	3.5 - 7.5	4266007	25
PG 11	7 - 10.5	4 - 8.5	4266008	25
PG 13.5	4 - 6	4 - 6	4266010	25
PG 13.5	6 - 9	3.5 - 7.5	4266011	25
PG 13.5	7 - 10.5	4 - 8	4266013	25
PG 16	6 - 9.5	6 - 9	4266015	25
PG 16	6 - 10.5	6 - 9	4266014	25
PG 16	8 - 12	6 - 10	4266018	25
PG 16	10 - 14	9 - 13	4266016	25
PG 16	14 - 18	9 - 13	4266020	25
PG 21	6 - 10.5	6 - 10	4266023	20
PG 21	10 - 14	9 - 13	4266021	20
PG 21	14 - 18	9 - 13	4266024	20
PG 21	14 - 18	12.5 - 17.5	4266025	20
PG 21	17 - 20	12 - 18	4266022	20
PG 29	19 - 23	15 - 21	4266028	20
PG 29	22 - 27	15 - 21	4266029	20
PG 36	25 - 29	18 - 25.5	4266031	10
PG 36	29 - 32	24 - 31	4266033	10
PG 42	37 - 41	29 - 33	4266035	10



## Cable Gland, EMC, Nickel-Plated Brass

### Material:

Body: Nickel-plated brass

Seal: Perbunan N

Sealing ring for outer thread: Nitril

### Characteristic feature:

PG thread

### Technical properties:

- Shield contact through clamping chuck with integrated clamp protection
- Gas and water-tight
- Completely twist protected
- Combinable with various sealing inserts

### Applications:

- Machines and devices
- Measuring and control engineering
- Plant installations

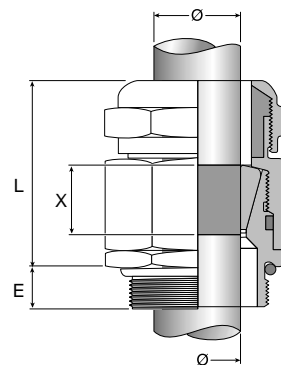
**Temperature Range MS**  
-20 to 100° C (-4 to 212° F)

PROTECTION  
**IP68**  
RATING



Outer thread	Cable Clamping range mm	Shield Clamping range mm	Cat. No.	Std. Pk.
PG				
PG 9	6 - 8	3.1 - 4	4276040	25
PG 9	7.5 - 10	4.1 - 5	4276050	25
PG 9	7.5 - 10	5.1 - 6	4276060	25
PG 11	7 - 10	6.1 - 7	4276070	25
PG 11	8 - 12	7.1 - 8	4276080	25
PG 11	8 - 12	8.1 - 9	4276090	25
PG 16	11 - 15	9.1 - 10	4276100	25
PG 16	11 - 15	10.1 - 11	4276110	25
PG 16	14 - 17	11.1 - 12	4276120	25
PG 16	14 - 17	12.1 - 13	4276130	25
PG 21	15 - 20.5	13.1 - 14	4276140	25
PG 21	15 - 20.5	14.1 - 15	4276150	25
PG 21	15 - 20.5	15.1 - 16	4276160	25
PG 21	19 - 22	16.1 - 17	4276170	25
PG 21	19 - 22	17.1 - 18	4276180	25
PG 29	20 - 26	18.1 - 19.5	4276195	20
PG 29	20 - 26	19.6 - 21	4276210	20
PG 29	22 - 28	21.1 - 22.5	4276225	20
PG 29	26 - 32	22.6 - 24	4276240	20
PG 36	25 - 35	23.1 - 25	4276250	10
PG 36	25 - 35	25.1 - 27	4276270	10
PG 36	30 - 35	27.1 - 29	4276290	10
PG 48	31 - 35	29.1 - 31	4276310	10
PG 48	35 - 45	31.1 - 33	4276330	10
PG 48	35 - 45	33.1 - 35	4276350	10
PG 48	35 - 45	35.1 - 37	4276370	10

Thread Size	Dimensions			
	L mm	E mm	H mm	X mm
PG9	18	6	26	13
PG11	20/22	8	30	13
PG16	24	8	33	13
PG21	32	8	38	16
PG29	38	10	43	16
PG36	50	12	55	22
PG48	64	15	63	27



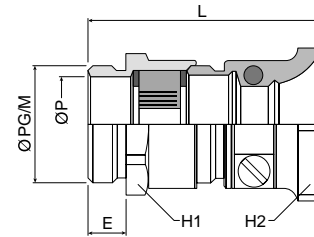
**Material:**  
 Nickel-plated brass  
 Sealing ring: Neoprene

**Characteristic feature:**  
 PG/Metric thread  
 Sealing ring, punchable

- Applications:**
- Tension proof grip
  - Grounding connection possible
  - Protects bent cable

**Temperature Range PA**  
 -25 to 100° C (-13 to 212° F)

PROTECTION  
**IP65**  
 RATING



**Type ZEVB Nickel-Plated Brass**  
 with traction relief and kink protection

Outer thread	Clamping range Seal mm	Clamping range traction relief mm	Cat. No.	Std. Pk.
<b>PG</b>				
PG 9	2 - 9	6 - 9.5	4308093	50
PG 11	4 - 11	8 - 11.5	4308115	50
PG 13.5	4.5 - 12	9 - 13	4308131	50
PG 16	5.5 - 14.5	10 - 15	4308166	25
PG 21	8 - 19	14 - 20	4308212	25
PG 29	12 - 27	19 - 30	4308298	10
<b>Metric</b>				
M 16 x 1.5	2 - 9	6 - 9.5	4308516	100
M 20 x 1.5	4 - 11	8 - 11.5	4308520	100
M 20 x 1.5	4.5 - 12	9 - 13	4308521	100
M 25 x 1.5	5.5 - 14.5	10 - 15	4308525	50
M 25 x 1.5	8 - 18	14 - 20	4308526	25
M 32 x 1.5	8 - 19	14 - 20	4308532	25
M 32 x 1.5	12 - 27	19 - 30	4308533	25

**Dimensions**

Thread Size	H1 mm	H2 mm	E mm	L mm	ØP mm	ØPG/M mm
PG9	17	22	6	34	12.5	15.2
PG11	20	24	6	36	15	18.6
PG13	22	28	6.5	37	17	20.4
PG16	24	30	6.5	40	18.5	22.5
PG21	30	38	7	43	24	28.3
PG29	40	50	8	48	32	37
M16	17	22	7	35	12.5	16
M20	20	24	7	37	15	20
M20	22	28	7	37.5	16	20
M25	26	30	8	41.5	18.5	25
M25	32	38	8	44	18.5	25
M32	32	38	8.5	44.5	24	32
M32	40	50	8.5	48.5	28	32

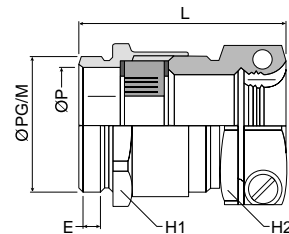
**Material:**  
 Nickel-plated brass  
 Sealing ring: Neoprene

**Characteristic feature:**  
 PG/Metric thread

- Applications:**
- Centered traction relief
  - No cable twisting while clamping
  - Tension proof grip
  - Grounding connection possible

**Temperature Range PA**  
 -25 to 100° C (-13 to 212° F)

PROTECTION  
**IP65**  
 RATING



**Type ZA Nickel-Plated Brass**  
 with centered traction relief and kink protection

Outer thread	Clamping range Seal mm	Clamping range traction relief mm	Cat. No.	Std. Pk.
<b>PG</b>				
PG 7	4 - 6	5.5 - 7.5	4305078	100
Pg 9	2 - 9	6.5 - 9.5	4305094	50
PG 11	4 - 11	7.5 - 11.5	4305116	50
PG 13	4.5 - 12	8.5 - 13.5	4305132	50
PG 16	5.5 - 14.5	10.5 - 16.5	4305167	25
PG 21	8 - 19	12 - 20.5	4305213	25
PG 29	12 - 27	19 - 29.5	4305299	10
PG 36	22 - 33	24 - 36.5	4305361	10
PG 42	25 - 40	33 - 42.5	4305426	5
PG 48	30 - 45	36 - 47.5	4305485	5
<b>Metric</b>				
M 12 x 1.5	4 - 6	5.5 - 7.5	4305500	50
M 16 x 1.5	2 - 9	6.6 - 9.5	4305501	50
M 16 x 1.5	4 - 11	7.5 - 11.5	4305502	50
M 16 x 1.5	4.5 - 12	8.5 - 13.5	4305503	50
M 20 x 1.5	4 - 11	7.5 - 11.5	4305504	50
M 20 x 1.5	4.5 - 12	8.5 - 13.5	4305505	50
M 20 x 1.5	5.5 - 14.5	10.5 - 16.5	4305506	50
M 25 x 1.5	5.5 - 14.5	10.5 - 16.5	4305507	20
M 32 x 1.5	8 - 19	12 - 20.5	4305508	20
M 32 x 1.5	12 - 27	19 - 29.5	4305509	20
M 40 x 1.5	12 - 27	19 - 29.5	4305510	20
M 50 x 1.5	22 - 33	24 - 36.5	4305511	10
M 50 x 1.5	25 - 40	33 - 42.5	4305512	10
M 63 x 1.5	25 - 40	33 - 42.6	4305513	5
M 63 x 1.5	30 - 45	36 - 47.5	4305514	5
M 75 x 1.5	30 - 45	36 - 47.5	4305515	1

**Dimensions**

Thread Size	H1 mm	H2 mm	E mm	L mm	ØP mm	ØPG/M mm
PG7	14	16	5	29	10	12.5
PG9	17	19	6	34	12.5	15.2
PG11	20	22	6	35	15	18.6
PG13	22	24	6.5	36	17	20.4
PG16	24	27	6.5	36	18.5	22.5
PG21	30	33	7	42	24	28.3
PG29	40	42	8	47	32	37
PG36	50	52	9	53	42	47
PG42	57	60	10	65	48	54
PG48	64	64	10	68	52.5	59.3
M12	14	16	7	29	8	12
M16	17	19	7	34	12.5	16
M16	20	22	7	34	12.5	16
M16	22	24	7	35	12.5	16
M20	20	22	7	34	15	20
M20	22	24	7	39	16	20
M20	24	27	7	34	16	20
M25	26	27	8	40	18.5	25
M32	32	33	8.5	43	24	32
M32	40	42	8.5	46	28	32
M40	40	42	8.5	45	32	40
M50	50	52	9.5	50	42	50
M50	58	60	9.5	54	42	50
M63	64	60	10.5	55	48	63
M63	64	64	10.5	56	48	63
M75	80	64	11.5	56	52.5	75

# Cable Gland Industrial, with traction relief and kink protection, Polyamide

**Material:**

Body: Polyamide 6

Seal: Neoprene

**Characteristic feature:**

PG/Metric/NPT threads



**Temperature Range PA**  
-20 to 100° C (-4 to 212° F)

**Technical properties:**

- Optimal strain relief through clamping range
- Seals against housing through sealing lip
- Trapezoidal threading with high torque guarantees tight and permanent fit of the dome nut
- also available with reduction insert
- Gas and water tight

**Applications:**

- Machines and devices



Outer thread	Clamping range mm	Cat. No. Dark Grey	Cat. No. Black	Std. Pk.
<b>PG</b>				
PG 7	2.5 - 6.5	5306007	5306107	50
PG 9	3 - 8	5306009	5306109	50
PG 11/1	4 - 10	5306011	5306111	50
PG 11/2	2 - 7	5306012	5306112	50
PG 13/1	5.5 - 12	5306013	5306113	50
PG 13/2	3 - 7	5306014	5306114	50
PG 16/1	8.5 - 14	5306016	5306116	25
PG 16/2	5 - 11	5306017	5306117	25
<b>Metric</b>				
M 12 x 1.5/K/6.5	2.5 - 6.5	5306030	5306130	50
M 16 x 1.5/K/8	3 - 8	5306031	5306131	50
M 20 x 1.5/K/7	3 - 7	5306032	5306132	50
M 20 x 1.5/K/12	5.5 - 12	5306033	5306133	50
<b>NPT</b>				
NPT 3/8"/8	3 - 8	5306050	5306150	50
NPT 1/2"/7	3 - 7	5306051	5306151	50
NPT 1/2"/12	5.5 - 12	5306052	5306152	50

Thread Size	Dimensions			ØPG/M/NPT mm
	H mm	E mm	L mm	
PG7	15	8	54	12.5
PG9	19	8	64	15.2
PG11/1	22	8	77	18.6
PG11/2	22	8	77	18.6
PG13/1	24	9	88	20.4
PG13/2	24	9	88	20.4
PG16/1	27	10	102	22.5
PG16/2	27	10	102	22.5
M 12x1.5/K/6.5	15	6	54	12
M 16x1.5/K/8	19	6	64	16
M 20x1.5/K/7	24	8	88	20
M 20x1.5/K/12	24	8	88	20
NPT 3/8"/8	19/22	15	64	17.1
NPT 1/2"/7	24	15	88	21.2
NPT 1/2"/12	24	15	88	21.2



**Material:**  
Polystyrene  
**Seal:**  
Neoprene

**Characteristic feature:**  
Hexagon base  
PG Thread

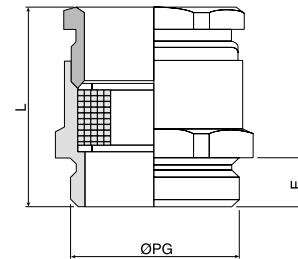


**Temperature Range PS**  
-20 to 70° C (-4 to 158° F)

according to DIN 46320

Outer thread	Clamping range mm	Cat. No. Lt. Gray	Std. Pk.
<b>PG</b>			
PG 7	3.5 - 6	5202078	50
PG 9	4.5 - 7	5202094	50
PG 11	6 - 9	5202116	50
PG 13.5	9 - 12	5202132	50
PG 16	11 - 14	5202167	50
PG 21	14 - 18	5202213	25
PG 29	18 - 25	5202299	25
PG 36	25 - 32	5202361	10
PG 42	30 - 38	5202434	10
PG 48	36 - 44	5202485	10

Thread Size	Dimensions	
	E mm	L mm
PG7	8	29
PG9	8	31.5
PG11	8	33
PG13.5	9.5	36
PG16	10	40.5
PG21	11	43.5
PG29	11	46
PG36	13	57
PG42	13	61
PG48	14	60



# Cable Gland, with round intermediate part, Nickel-Plated Brass

**Material:**  
Nickel-plated brass

**Seal:**  
Neoprene

**Characteristic feature:**  
Simple sealing ring  
PG/Metric thread  
Extended thread available



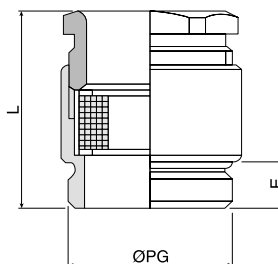
**Temperature Range MS**  
-25 to 100° C (-13 to 212° F)

Dimensions		
Thread Size	E mm	L mm
PG7	5	21
PG9	6	23
PG11	6	23
PG13.5	6.5	26
PG16	6.5	27
PG21	7	30
PG29	8	33
PG36	9	40
PG42	10	44
PG48	10	46

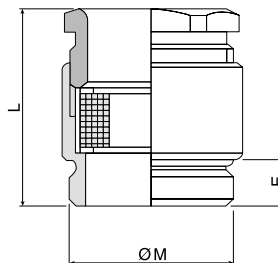
Dimensions		
Thread Size	E mm	L mm
M 12x1.5	7	24
M 16x1.5	7	25
M 20x1.5	7	26
M 20x1.5	7	28
M 25x1.5	8	30
M 32x1.5	8.5	34
M 40x1.5	8.5	35
M 50x1.5	9.5	41
M 63x1.5	10.5	40

according to DIN 46320

Outer thread	Clamping range mm	Cat. No.	Std. Pk.
<b>PG</b>			
PG 7	5 - 7	4000005	100
PG 9	6 - 8	4000102	50
PG 11	8 - 10	4000200	50
PG 13.5	10 - 12	4000307	50
PG 16	12 - 14	4000404	25
PG 21	15 - 17	4000501	25
PG 29	24 - 26	4000552	10
PG 36	31 - 33	4000609	10
PG 42	39 - 41	4000650	5
PG 48	44 - 46	4000706	5



Outer thread	Clamping range mm	Cat. No.	Std. Pk.
<b>Metric</b>			
M 12 x 1.5	5 - 7	4104312	50
M 16 x 1.5	6 - 8	4104316	50
M 20 x 1.5	8 - 10	4104320	50
M 20 x 1.5	10 - 12	4104321	25
M 25 x 1.5	12 - 14	4104325	25
M 32 x 1.5	15 - 17	4104332	25
M 40 x 1.5	24 - 26	4104340	10
M 50 x 1.5	32 - 34	4104350	10
M 63 x 1.5	39 - 41	4104363	5



# Cable Gland, with round intermediate part, Nickel-Plated Brass



**Material:**  
Nickel-plated brass

**Seal:**  
Neoprene

**Characteristic feature:**  
Punchable sealing  
PG/Metric thread

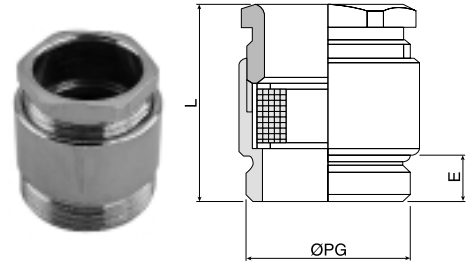
Dimensions			Dimensions		
Thread Size	E	L	Thread Size	E	L
	mm	mm		mm	mm
PG9	6	23	M 16x1.5	7	25
PG11	6	23	M 20x1.5	7	26
PG13.5	6.5	26	M 20x1.5	7	28
PG16	6.5	27	M 25x1.5	8	30
PG21	7	30	M 32x1.5	8.5	34
PG29	8	33	M 40x1.5	8.5	35
PG36	9	40	M 50x1.5	9.5	41
PG42	10	44	M 63x1.5	10.5	40
PG48	10	46			



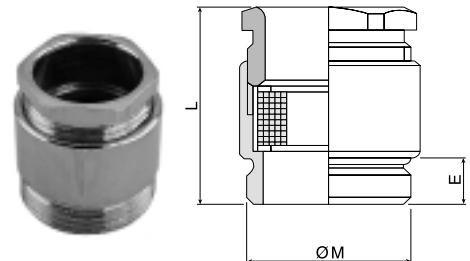
**Temperature Range MS**  
-25 to 100° C (-13 to 212° F)

according to DIN 46320

Outer thread	Clamping Range mm	Graded dimensions for sealing ring mm	Cat. No.	Std. Pk.
<b>PG</b>				
PG 9	2-9	5 - 7.5 - 10	4006100	50
PG 11	2-9	5 - 7.5 - 10	4006208	50
PG 13.5	4.5-12	7.5 - 10 - 12.5	4006305	50
PG 16	5.5-14.5	7.5 - 10 - 12 - 15	4006402	25
PG 21	8-19	10 - 13 - 16 - 19	4006500	25
PG 29	12-27	18 - 21 - 24 - 27	4006550	10
PG 36	22-23	24 - 27 - 30 - 33	4006607	10
PG 42	25-40	30 - 33 - 36 - 39	4006658	5
PG 48	35-44	36 - 39 - 42 - 45	4006704	5



Outer thread	Clamping Range mm	Graded dimensions for sealing ring mm	Cat. No.	Std. Pk.
<b>Metric</b>				
M 16 x 1.5	2-9	5 - 7.5 - 10	4104516	50
M 20 x 1.5	4-11	5 - 7.5 - 10 - 12	4104520	50
M 20 x 1.5	4.5-12	7.5 - 10 - 12.5	4104521	25
M 25 x 1.5	5.5-14.5	7.5 - 10 - 12 - 15	4104525	25
M 32 x 1.5	8-19	10 - 13 - 16 - 19	4104532	25
M 40 x 1.5	12-27	18 - 21 - 24 - 27	4104540	10
M 50 x 1.5	22-23	24 - 27 - 30 - 33	4104550	5
M 63 x 1.5	25-40	30 - 33 - 36 - 39	4104563	5



# Cable Gland, with hexagon intermediate part, Nickel-Plated Brass

**Material:**  
Nickel-plated brass

**Characteristic feature:**  
Simple sealing ring  
PG/Metric thread  
Extended thread available

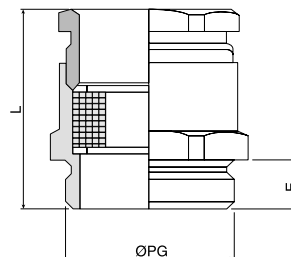


**Temperature Range MS**  
-25 to 100° C (-13 to 212° F)

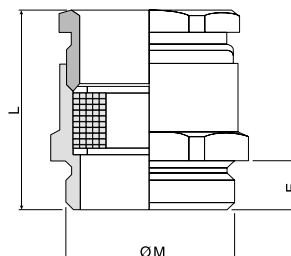
Thread Size	Dimensions		Thread Size	Dimensions	
	E mm	L mm		E mm	L mm
PG7	5	21	M 12x1.5	7	23
PG9	6	23	M 16x1.5	7	25
PG11	6	23	M 20x1.5	7	25
PG13.5	6.5	26	M 20x1.5	7	28
PG16	6.5	27	M 25x1.5	8	29
PG21	7	30	M 32x1.5	8.5	32
PG29	8	33	M 40x1.5	8.5	34
PG36	9	40	M 50x1.5	9.5	40
PG42	10	44	M 63x1.5	10.5	45
PG48	10	46			

according to DIN 46320

Outer thread	Clamping range mm	Cat. No.	Std. Pk.
<b>PG</b>			
PG 7	5-7	4001001	100
PG 9	6-8	4001109	50
PG 11	8-10	4001206	50
PG 13.5	10-12	4001303	50
PG 16	12-14	4001400	25
PG 21	15-17	4001508	25
PG 29	24-26	4001559	10
PG 36	31-33	4001605	10
PG 42	39-41	4001656	5
PG 48	44-46	4001702	5



Outer thread	Clamping range mm	Cat. No.	Std. Pk.
<b>Metric</b>			
M 12 x 1.5	5-7	4103312	50
M 16 x 1.5	6-8	4103316	50
M 20 x 1.5	8-10	4103320	50
M 20 x 1.5	10-12	4103321	25
M 25 x 1.5	12-14	4103325	25
M 32 x 1.5	15-17	4103332	25
M 40 x 1.5	24-26	4103340	10
M 50 x 1.5	31-33	4103350	10
M 63 x 1.5	39-41	4103363	5



# Cable Gland, with hexagon intermediate part, Nickel-Plated Brass



**Material:**  
Nickel-plated brass

**Characteristic feature:**  
Punchable sealing ring  
PG/Metric thread

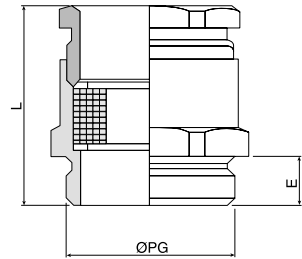


**Temperature Range MS**  
-25 to 100° C (-13 to 212° F)

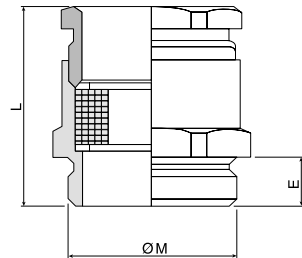
Dimensions			Dimensions		
Thread Size	E mm	L mm	Thread Size	E mm	L mm
PG9	6	23	M 16x1.5	7	25
PG11	6	23	M 20x1.5	7	25
PG13.5	6.5	26	M 20x1.5	7	28
PG16	6.5	27	M 25x1.5	8	29
PG21	7	30	M 32x1.5	8.5	32
PG29	8	33	M 40x1.5	8.5	34
PG36	9	40	M 50x1.5	9.5	40
PG42	10	44	M 63x1.5	10.5	45
PG48	10	46			

according to standard DIN 46320

Outer thread	Clamping range mm	graded dimensions for sealing ring mm	Cat. No.	Std. Pk.
<b>PG</b>				
PG 9	4 - 9.5	5 - 7.5 - 10	4009100	50
PG 11	4 - 9.5	5 - 7.5 - 10	4009207	50
PG 13.5	6 - 13	7.5 - 10 - 12.5	4009304	50
PG 16	6 - 15	7.5 - 10 - 12 - 15	4009401	25
PG 21	9 - 20	10 - 13 - 16 - 19	4009509	25
PG 29	15 - 27	18 - 21 - 24 - 27	4009550	10
PG 36	21 - 33	24 - 27 - 30 - 33	4009606	10
PG 42	27 - 40	30 - 33 - 36 - 39	4009658	5
PG 48	35 - 44	36 - 39 - 42 - 45	4009695	5



Outer thread	Clamping range mm	graded dimensions for sealing ring mm	Cat. No.	Std. Pk.
<b>Metric</b>				
M 16 x 1.5	4 - 9.5	5 - 7.5 - 10	4103516	50
M 20 x 1.5	4 - 11.5	5 - 7.5 - 10 - 12	4103520	50
M 20 x 1.5	6 - 13	7.5 - 10 - 12.5	4103521	25
M 25 x 1.5	6 - 15	7.5 - 10 - 12 - 15	4103525	25
M 32 x 1.5	9 - 20	10 - 13 - 16 - 19	4103532	25
M 40 x 1.5	15 - 27	18 - 21 - 24 - 27	4103540	10
M 50 x 1.5	21 - 33	24 - 27 - 30 - 33	4103550	5
M 63 x 1.5	27 - 40	30 - 33 - 36 - 39	4103563	5

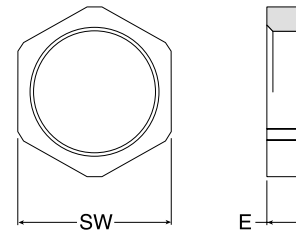


## Lock Nuts, Polyamide

**Material:**  
Polyamide 6  
25 % Glass fiber Reinforced

**Characteristic feature:**  
PG / metric and NPT thread

**Temperature Range PA**  
-30 to 120° C (-22 to 248° F)



Thread	Thickness (E) mm	SW mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
<b>PG (DIN 46 320)</b>					
PG 7	5	19	7211881	7211851	50
PG 9	5	22	7211882	7211852	50
PG 11	5	24	7211883	7211853	50
PG 13.5	6	27	7211884	7211854	50
PG 16	6	30	7211885	7211855	50
PG 21	6.5	36	7211886	7211856	20
PG 29	7.5	46	7211887	7211857	20
PG 36	8	60	7211888	7211858	10
PG 42	9	65	7211889	7211859	5
PG 48	9.5	70	7211890	7211860	5
<b>Metric</b>					
M 12 x 1.5	5	19	7211979	7211974	50
M 16 x 1.5	5	22	7211980	7211975	50
M 20 x 1.5	5	24	7211981	7211976	50
M 25 x 1.5	6	30	7211982	7211977	50
M 32 x 1.5	7.5	38	7211983	7211978	50
M 40 x 1.5	8	50	7211984	7211990	20
M 50 x 1.5	9	60	7211985	7211991	10
M 63 x 1.5	10	75	7211986	7211992	5
<b>NPT</b>					
NPT 3/8"	5	22	7211485	7211495	50
NPT 1/2"	6	27	7211486	7211496	20
NPT 3/4"	7	36	7211487	7211497	20
NPT 1"	7	41	7211488	7211498	20



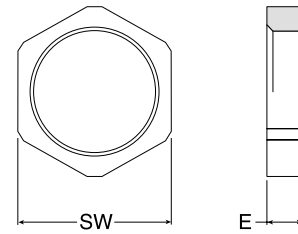
Material:  
Polystyrene

Characteristic feature:  
PG and Metric thread

**Temperature Range PS**  
-20 to 70° C (-4 to 158° F)



Thread	Thickness (E) mm	SW mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
<b>PG (DIN 46 320)</b>					
PG 7	5	19	7211107	7211060	50
PG 9	5	22	7211109	7211061	50
PG 11	5	24	7211111	7211062	50
PG 13	6	27	7211113	7211063	50
PG 16	6	30	7211116	7211064	50
PG 21	6.5	36	7211121	7211065	20
PG 29	7.5	46	7211129	7211066	20
PG 36	8	60	7211130	7211067	10
PG 42	9	65	7211131	7211068	5
PG 48	9.5	70	7211132	7211069	5
<b>Metric</b>					
M 12 x 1.5	5	19	7212212	7212112	50
M 16 x 1.5	5	22	7212216	7212116	50
M 20 x 1.5	5	24	7212220	7212120	50
M 25 x 1.5	6	30	7212225	7212125	20
M 32 x 1.5	7.5	38	7212232	7212132	20
M 40 x 1.5	8	50	7212240	7212140	20
M 50 x 1.5	9	60	7212250	7212150	10
M 63 x 1.5	10	75	7212263	7212163	5



## Lock Nuts, Nickel-Plated Brass

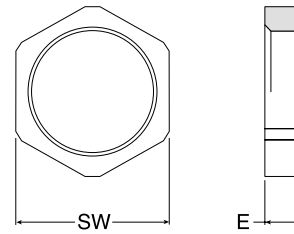
**Material:**  
Nickel-plated brass

**Characteristic feature:**  
PG and Metric thread



<b>Temperature Range MS</b> -40 to 300° C (-40 to 572° F)
--

Thread	Thickness (E) mm	SW mm	Cat. No.	Std. Pk.
<b>PG (DIN 46 320)</b>				
PG 7	2.9	15	6000070	100
PG 9	2.9	18	6000096	100
PG 11	3.1	21	6000118	100
PG 13.5	3.1	23	6000134	100
PG 16	3.1	26	6000169	100
PG 21	3.6	32	6000215	100
PG 29	4.1	41	6000290	100
PG 36	5.1	51	6000363	50
PG 42	5.1	60	6000428	25
PG 48	5.6	64	6000487	25
<b>Metric</b>				
M 12 x 1.5	3	15	6004121	50
M 16 x 1.5	3	19	6004164	50
M 20 x 1.5	3.5	24	6004202	50
M 25 x 1.5	3.5	30	6004253	25
M 32 x 1.5	4.5	36	6004326	20
M 40 x 1.5	5	46	6004407	10
M 50 x 1.5	5.5	55	6004504	10
M 63 x 1.5	6	70	6004636	5



**Material:**  
Nickel-plated brass

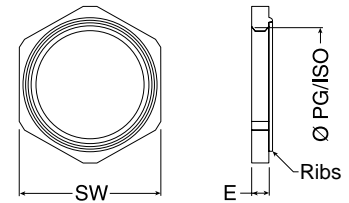
**Characteristic feature:**  
PG and Metric thread

**Applications:**  
EMC applications



**Temperature Range MS**  
-40 to 300° C (-40 to 572° F)

Thread	Thickness (E) mm	SW mm	Cat. No.	Std. Pk.
<b>PG</b>				
PG 7	2.9	15	6011007	50
PG 9	2.9	18	6011009	50
PG 11	3.1	21	6011011	50
PG 13.5	3.1	23	6011013	50
PG 16	3.1	26	6011016	50
PG 21	3.6	32	6011021	20
PG 29	4.1	41	6011029	20
PG 36	5.1	51	6011036	10
PG 42	5.1	60	6011042	10
PG 48	5.6	64	6011048	10
<b>Metric</b>				
M 12 x 1.5	3	15	6011112	50
M 16 x 1.5	3	20	6011116	50
M 20 x 1.5	3.5	24	6011120	50
M 25 x 1.5	3.5	30	6011125	25
M 32 x 1.5	4.5	35	6011132	20
M 40 x 1.5	4.5	45	6011140	10
M 50 x 1.5	5.5	55	6011150	10
M 63 x 1.5	6	70	6011163	10

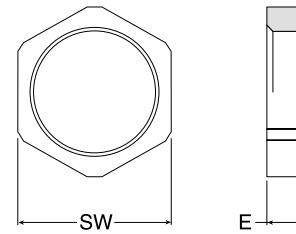


## Lock Nuts, Stainless Steel

**Material:**  
Stainless Steel INOX 316 L

**Characteristic feature:**  
PG and Metric thread

<b>Temperature Range EST</b> -20 to 70° C (-4 to 158° F)
---



Thread	Thickness (E) mm	SW mm	Cat. No.	Std. Pk.
<b>PG</b>				
PG 7	2.9	15	6008207	50
PG 9	2.9	19	6008209	50
PG 11	3.1	21	6008211	50
PG 13.5	3.1	23	6008213	50
PG 16	3.1	26	6008216	25
PG 21	3.6	32	6008221	20
PG 29	4.1	42	6008229	15
PG 36	5.1	57	6008236	10
PG 42	5.1	60	6008242	10
PG 48	5.6	65	6008248	10
<b>Metric</b>				
M 12 x 1.5	3	15	6010112	50
M 16 x 1.5	3	20	6010116	50
M 20 x 1.5	3.5	24	6010120	50
M 25 x 1.5	3.5	30	6010125	25
M 32 x 1.5	4.5	35	6010132	20
M 40 x 1.5	4.5	45	6010140	1
M 50 x 1.5	5.5	55	6010150	1
M 63 x 1.5	6	70	6010163	1

**Material:**  
Polyamide  
Glass fiber reinforced

**Characteristic feature:**  
PG/  
Metric Thread

<b>Temperature Range PA</b> -40 to 100° C (-40 to 212° F)
--

External thread	Internal thread	SW mm	Thread length mm	Complete Length mm	Cat. No. Light Grey	Std. Pk.
<b>Type B</b>						
<b>PG</b>						
PG 11	PG 7	22	8	14	7005302	100
PG 13.5	PG 7	24	9	15	7005304	100
PG 13.5	PG 9	24	9	15	7005305	100
PG 16	PG 9	27	10	16	7005307	100
PG 16	PG 11	27	10	16	7005308	100
PG 21	PG 11	32	10.5	16	7005310	100
PG 21	PG 13.5	32	10.5	16	7005311	100
PG 21	PG 16	32	10.5	16	7005312	100
PG 29	PG 13.5	39	12	17	7005313	50
PG 29	PG 16	39	12	17	7005314	50
PG 29	PG 21	40	12	17	7005315	50
PG 36	PG 16	50	13	19	7005316	50
PG 36	PG 21	50	13	19	7005317	50
PG 36	PG 29	50	13	24	7005318	50
PG 42	PG 21	55	16	24	7005319	25
PG 42	PG 29	55	16	24	7005320	25
PG 42	PG 36	55	17	24	7005321	25
PG 48	PG 29	60	17	24	7005322	25
PG 48	PG 36	60	17	20	7005323	25
PG 48	PG 42	60	17	23	7005324	25
<b>Type A</b>						
PG 9	PG 7	19	8	20.5	7005301	100
PG 11	PG 9	22	8	22.5	7005303	100
PG 13	PG 11	24	9	24	7005306	100
PG 16	PG 13	27	10	27	7005309	100



Type B



Type A

External thread	Internal thread	SW mm	Thread length mm	Complete Length mm	Cat. No. Light Grey	Std. Pk.
<b>Metric</b>						
M 16 x 1.5	M 12 x 1.5	24	8	12	7008018	100
M 20 x 1.5	M 12 x 1.5	24	8	12	7008020	100
M 20 x 1.5	M 16 x 1.5	24	8	12	7008021	100
M 25 x 1.5	M 12 x 1.5	29	8	14	7008030	100
M 25 x 1.5	M 16 x 1.5	29	8	14	7008031	100
M 25 x 1.5	M 20 x 1.5	29	8	14	7008032	100
M 32 x 1.5	M 12 x 1.5	36	10	16	7008040	50
M 32 x 1.5	M 16 x 1.5	36	10	16	7008041	50
M 32 x 1.5	M 20 x 1.5	36	10	16	7008042	50
M 32 x 1.5	M 25 x 1.5	36	10	16	7008043	50
M 40 x 1.5	M 16 x 1.5	46	10	16	7008044	50
M 40 x 1.5	M 20 x 1.5	46	10	16	7008045	50
M 40 x 1.5	M 25 x 1.5	46	10	16	7008046	50
M 40 x 1.5	M 32 x 1.5	46	10	16	7008047	50
M 50 x 1.5	M 20 x 1.5	55	12	18	7008050	25
M 50 x 1.5	M 25 x 1.5	55	12	18	7008051	25
M 50 x 1.5	M 32 x 1.5	55	12	18	7008052	25
M 50 x 1.5	M 40 x 1.5	55	12	18	7008053	25
M 63 x 1.5	M 25 x 1.5	68	12	18	7008060	25
M 63 x 1.5	M 32 x 1.5	68	12	18	7008061	25
M 63 x 1.5	M 40 x 1.5	68	12	18	7008062	25
M 63 x 1.5	M 50 x 1.5	68	12	18	7008063	25



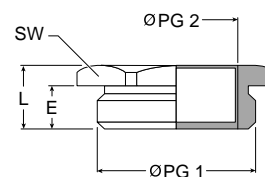
## Reducer, Nickel-Plated Brass

**Material:**  
Nickel-plated brass

**Characteristic feature:**  
PG thread  
Metric thread  
Hexagon

**Temperature Range MS**  
-40 to 300° C (-40 to 572° F)

External thread	Internal thread	SW mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
PG 1	PG 2					
PG 9	PG 7	17	5	8	6102018	100
PG 11	PG 9	19	6	9	6102034	100
PG 11	PG 7	19	6	9	6102030	100
PG 13.5	PG 11	21	6	9	6102077	100
PG 13.5	PG 9	21	6	9	6102042	100
PG 13.5	PG 7	21	6	8.5	6102026	100
PG 16	PG 13.5	23	6	9	6102115	100
PG 16	PG 11	23	6	9	6102085	100
PG 16	PG 9	23	6	9	6102050	100
PG 21	PG 16	29	7	10	6102158	50
PG 21	PG 13.5	29	7	10	6102123	50
PG 21	PG 11	29	7	10	6102093	20
PG 21	PG 9	29	7	10	6102069	50
PG 29	PG 21	39	8	11	6102190	25
PG 29	PG 16	39	8	11	6102166	25
PG 29	PG 13.5	39	8	11	6102131	25
PG 29	PG 11	39	8	11	6102107	25
PG 36	PG 29	50	8	11	6102220	25
PG 36	PG 21	50	8	11	6102204	25
PG 36	PG 13.5	50	8	11	6102140	25
PG 42	PG 36	64	10	14	6102241	25
PG 42	PG 29	64	10	14	6102239	25
PG 48	PG 42	64	10	14	6102258	25
PG 48	PG 36	64	10	14	6102255	25
PG 48	PG 29	64	10	14	6102247	25
PG 48	PG 21	64	10	14	6102212	25
PG 48	PG 16	64	10	14	6102182	25

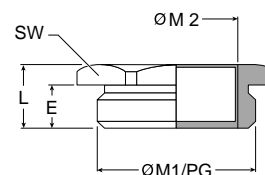


**Material:**  
Nickel-plated brass

**Characteristic feature:**  
Metric/PG thread  
Metric thread  
Hexagon

**Temperature Range PA**  
-40 to 300° C (-40 to 572° F)

External thread	Internal thread	SW mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
Metric 1	Metric 2					
M 16 x 1.5	M 12 x 1.5	20	7	10	6102400	50
M 20 x 1.5	M 12 x 1.5	24	7	10	6102404	50
M 20 x 1.5	M 16 x 1.5	24	7	10	6102405	50
M 25 x 1.5	M 20 x 1.5	30	8	11.5	6102410	20
M 32 x 1.5	M 25 x 1.5	36	8.5	12.5	6102415	20
M 40 x 1.5	M 32 x 1.5	42	8.5	12.5	6102420	10
M 50 x 1.5	M 40 x 1.5	55	9.5	14.5	6102425	5
M 63 x 1.5	M 50 x 1.5	70	10.5	17.5	6102430	1
M 75 x 1.5	M 63 x 1.5	80	11.5	19.5	6102435	1
PG	Metric 2					
PG 9	M 6 x 1	18	6.5	9.5	6104106	50
PG 9	M 8 x 1.25	18	6.5	9.5	6104108	50
PG 9	M 10 x 1.5	18	6.5	9.5	6104110	50
PG 11	M 6 x 1	20	6.5	9.5	6104206	50
PG 11	M 8 x 1.25	20	6.5	9.5	6104208	50
PG 11	M 10 x 1.5	20	6.5	9.5	6104210	50
PG 11	M 12 x 1.5	20	5	8	6104212	50
PG 16	M 16 x 1.5	24	7	10	6104416	50
PG 21	M 25 x 1.5	30	7.5	11	6104525	50
PG 29	M 32 x 1.5	38	8	12	6104632	50

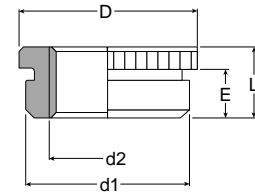


**Material:**  
Nickel-plated brass

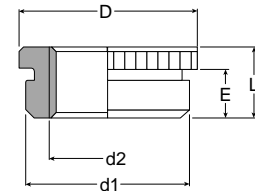
**Characteristic feature:**  
PG/Metric external thread  
PG/Metric internal thread  
Round ribbed

<b>Temperature Range MS</b> -40 to 300° C (-40 to 572° F)
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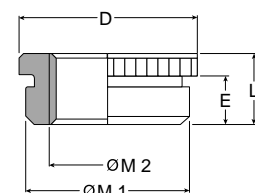
External thread	Internal thread	Diameter mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
<b>PG</b>						
PG 9	PG 7	17	6	8.5	6100015	50
PG 11	PG 7	20	6	8.5	6100023	50
PG 11	PG 9	20	6	9	6100031	50
PG 13.5	PG 7	22	6.5	9	6100040	50
PG 13.5	PG 9	22	6.5	9	6100058	50
PG 13.5	PG 11	22	6.5	9	6100066	50
PG 16	PG 7	24	6.5	9.5	6100074	25
PG 16	PG 9	24	6.5	9.5	6100082	25
PG 16	PG 11	24	6.5	9.5	6100090	25
PG 16	PG 13.5	24	6.5	9.5	6100104	25
PG 21	PG 11	30	7	10	6100112	20
PG 21	PG 13.5	30	7	10	6100120	20
PG 21	PG 16	30	7	10	6100139	20
PG 29	PG 16	39	8	11.5	6100147	15
PG 29	PG 21	39	8	11.5	6100155	15
PG 36	PG 21	50	9	12.5	6100163	10
PG 36	PG 29	50	9	12.5	6100171	10
PG 42	PG 29	57	10	14	6100180	10
PG 42	PG 36	57	10	14	6100198	10
PG 48	PG 36	64	10	14	6100201	10
PG 48	PG 42	64	10	14	6100210	10



Metric	PG	Diameter mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
M 16 x 1.5	PG 7	20	6	9	6104716	50
M 20 x 1.5	PG 9	24	6.5	9.5	6104720	50
M 25 x 1.5	PG 11	30	7	10	6104725	50
M 25 x 1.5	PG 13.5	30	7	10	6104726	50
M 25 x 1.5	PG 16	30	7	10	6104727	50
M 32 x 1.5	PG 16	36	8	11.5	6104732	20
M 32 x 1.5	PG 21	36	8	11.5	6104733	20
M 40 x 1.5	PG 21	45	9	12	6104740	10
M 50 x 1.5	PG 29	57	9	12	6104750	5
M 63 x 1.5	PG 36	70	10.5	14	6104763	1
M 63 x 1.5	PG 42	70	10.5	14	6104764	1



Metric	Metric	Diameter mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
M 16 x 1.5	M 12 x 1.5	20	7	10	6104816	50
M 20 x 1.5	M 12 x 1.5	24	7	10	6104819	50
M 20 x 1.5	M 16 x 1.5	24	7	10	6104820	50
M 25 x 1.5	M 16 x 1.5	30	8	11.5	6104824	50
M 25 x 1.5	M 20 x 1.5	30	8	11.5	6104825	50
M 32 x 1.5	M 20 x 1.5	39	8.5	12.5	6104831	20
M 32 x 1.5	M 25 x 1.5	39	8.5	12.5	6104832	20
M 40 x 1.5	M 25 x 1.5	50	8.5	12.5	6104839	20
M 40 x 1.5	M 32 x 1.5	50	8.5	12.5	6104840	20
M 50 x 1.5	M 32 x 1.5	57	9.5	14.5	6104849	10
M 50 x 1.5	M 40 x 1.5	57	9.5	14.5	6104850	10
M 63 x 1.5	M 40 x 1.5	70	10.5	17.5	6104862	5
M 63 x 1.5	M 50 x 1.5	70	10.5	17.5	6104863	5
M 75 x 1.5	M 63 x 1.5	80	11.5	19.5	6104875	1
<b>PG</b>						
PG 16	M 20 x 1.5	24	7	10	6100416	50
PG 21	M 25 x 1.5	30	8	11.5	6100421	20
PG 29	M 25 x 1.5	39	9	12.5	6100429	20





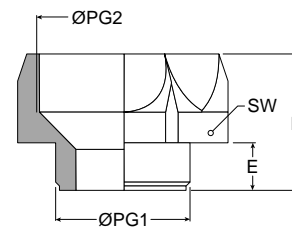
# Enlarger, Polycarbonate

Material:  
Polycarbonate

Characteristic feature:  
PG external thread  
PG internal thread

**Temperature Range PC**  
-40 to 135° C (-40 to 275° F)

External thread	Internal thread	SW mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
<b>PG 1</b>	<b>PG 2</b>					
PG 7	PG 9	19	6.5	19	7004010	50
PG 9	PG 11	22	7	21.5	7004028	50
PG 11	PG 13.5	24	9	21.5	7004036	50
PG 13.5	PG 16	27	9	23	7004044	50
PG 16	PG 21	32	10	25.5	7004052	25
PG 21	PG 29	41	8.5	28.5	7004060	25
PG 29	PG 36	55	12	38	7004079	1
PG 36	PG 42	60	14	45	7004087	1
PG 42	PG 48	65	16	39	7004095	1



**Material:**  
Polyamide glass fiber reinforced

**Characteristic feature:**  
PG external thread  
PG internal thread

**Temperature Range PA**  
-40 to 100° C (-40 to 212° F)

External thread	Internal thread	SW mm	Thread length mm	Complete length mm	Cat. No.	Std. Pk.
<b>PG</b>	<b>PG</b>					
PG 7	PG 9	13	7	20	7004200	100
PG 9	PG 11	22	8	23	7004201	100
PG 11	PG 13.5	24	8	23	7004202	100
PG 13.5	PG 16	27	9	26	7004203	100
PG 16	PG 21	32	9	29	7004204	100
PG 21	PG 29	42	10	32	7004205	50
PG 29	PG 36	53	11	35.5	7004206	25
PG 36	PG 42	60	13	40.5	7004207	10
PG 42	PG 48	65	13	41	7004208	10



## Enlarger, Nickel-Plated Brass

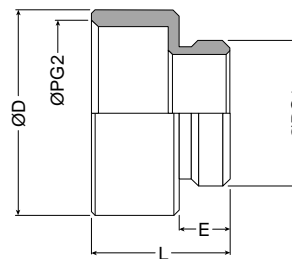
**Material:**  
Nickel-plated brass

**Characteristic feature:**  
PG external thread  
PG internal thread  
Round

**Temperature Range MS**  
-40 to 300° C (-40 to 572° F)

According to DIN 46 320 and DIN 259

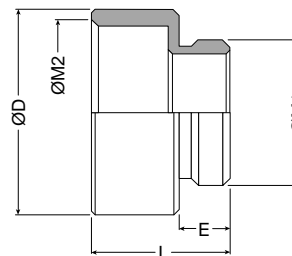
External thread	Internal thread	Diameter mm (D)	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
<b>To DIN 46320 PG 1</b>	<b>PG 2</b>					
PG 7	PG 9	17	5	15	6200010	50
PG 9	PG 11	20	6	16.5	6200028	50
PG 9	PG 13.5	22	6	17.5	6200036	50
PG 11	PG 13.5	22	6	17.5	6200044	50
PG 11	PG 16	24	6	18.5	6200052	25
PG 13.5	PG 16	24	6.5	19	6200060	25
PG 13.5	PG 21	30	6.5	21	6200079	20
PG 16	PG 21	30	6.5	21	6200087	20
PG 21	PG 29	39	7	23	6200095	15
PG 29	PG 36	50	8	27.5	6200109	10
PG 36	PG 42	57	9	31	6200117	10
PG 42	PG 48	64	10	33	6200125	10



**Material:**  
Nickel-plated brass

**Characteristic feature:**  
Metric external thread  
Metric internal thread  
Round

External thread	Internal thread	Diameter mm (D)	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
<b>Metric 1</b>	<b>Metric 2</b>					
M 12 x 1.5	M 16 x 1.5	18	7	18	6200212	50
M 16 x 1.5	M 20 x 1.5	22	7	18	6200216	50
M 20 x 1.5	M 25 x 1.5	28	7	19	6200220	50
M 25 x 1.5	M 32 x 1.5	34	8	20.5	6200225	20
M 32 x 1.5	M 40 x 1.5	43	8.5	21	6200232	20
M 40 x 1.5	M 50 x 1.5	54	8.5	22	6200240	10
M 50 x 1.5	M 63 x 1.5	65	9.5	24	6200250	5
M 63 x 1.5	M 75 x 1.5	80	10.5	26	6200263	1

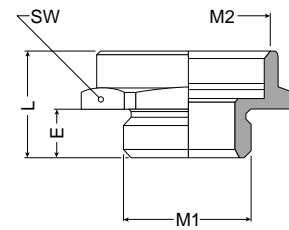


**Material:**  
Nickel-plated brass

**Characteristic feature:**  
Metric external thread  
Metric internal thread  
Hexagon

**Temperature Range MS**  
-40 to 300° C (-40 to 572° F)

External thread	Internal thread	SW mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
<b>Metric 1</b>	<b>Metric 2</b>					
M12 x 1.5	M16 x 1.5	18	7	18	6200312	50
M16 x 1.5	M20 x 1.5	22	7	18	6200316	50
M20 x 1.5	M25 x 1.5	28	7	19	6200320	50
M25 x 1.5	M32 x 1.5	36	8	20.5	6200325	20
M32 x 1.5	M40 x 1.5	42	8.5	21	6200332	20
M40 x 1.5	M50 x 1.5	52	8.5	22	6200340	10
M50 x 1.5	M63 x 1.5	65	9.5	24	6200350	5
M63 x 1.5	M75 x 1.5	80	10.5	26	6200363	1



## Adapter, PG to Metric Thread, Nickel-Plated Brass

**Material:**  
Nickel-plated brass

**Characteristic feature:**  
PG external thread  
Metric internal thread  
Hexagon

<b>Temperature Range MS</b> -40 to 300° C (-40 to 572° F)
--

External thread	Internal thread	SW mm	Thread length mm	Complete length mm	Cat. No.	Std. Pk.
<b>Form A</b>						
<b>PG</b>	<b>Metric</b>					
PG 7	M 12	17	6.5	16.5	6604807	50
PG 7	M 16	19	6.5	16.5	6604808	50
PG 9	M 16	19	6.5	16.5	6604810	50
PG 9	M 20	22	6.5	18.5	6604811	50
PG 11	M 20	22	7	17	6604813	50
PG 11	M 25	27	7	18	6604814	50
PG 13.5	M 20	24	7	17	6604816	50
PG 13.5	M 25	27	7	18	6604817	50
PG 16	M 20	27	7	16	6604818	50
PG 16	M 25	27	7	18	6604819	50
PG 16	M 32	36	7	18.5	6604820	50
PG 21	M 32	36	8	19.5	6604822	20
PG 21	M 40	42	8	19.5	6604823	20
PG 29	M 40	42	8.5	20	6604831	20
PG 29	M 50	55	8.5	21	6604832	20
PG 36	M 50	55	8.5	21	6604837	10
PG 42	M 63	65	10	23.5	6604843	5
PG 48	M 63	65	10	23.5	6604849	5
PG 48	M 75	80	10	24.5	6604850	5
<b>Form B</b>						
PG 9	M 12	19	6.5	16.5	6604809	50
PG 11	M 16	22	7	11	6604812	50
PG 13.5	M 16	24	7	11	6604815	50
PG 21	M 25	32	8	13	6604821	20
PG 29	M 25	40	8.5	14	6604829	20
PG 29	M 32	40	8.5	14	6604830	20
PG 36	M 40	55	8.5	15	6604836	10
PG 42	M 50	58	10	16.5	6604842	5
PG 48	M 50	65	10	17	6604848	5



**Form A**



**Form B**

**Material:**  
Nickel-plated brass

**Characteristic feature:**  
Metric external thread  
PG internal thread  
Hexagon

**Temperature Range MS**  
-40 to 300° C (-40 to 572° F)

External thread	Internal thread	SW mm	Thread length mm	Complete length mm	Cat. No.	Std. Pk.
<b>Form A</b>						
<b>Metric</b>	<b>PG</b>					
M 12	PG 7	14	7	17	6604712	100
M 16	PG 9	17	7	17.5	6604716	50
M 16	PG 11	20	7	18	6604715	50
M 16	PG 13	22	7	19.5	6604709	50
M 16	PG 16	24	7	20.5	6604717	50
M 20	PG 11	22	7	18	6604720	50
M 20	PG 13	22	7	19.5	6604721	50
M 20	PG 16	24	7	20.5	6604722	50
M 20	PG 21	32	7	22	6604708	50
M 25	PG 16	26	8	21.5	6604726	50
M 25	PG 21	32	8	23.5	6604725	50
M 25	PG 29	40	8	25	6604727	20
M 32	PG 21	34	8.5	23.5	6604729	20
M 32	PG 29	40	8.5	25.5	6604732	10
M 40	PG 29	42	8.5	25	6604734	10
M 40	PG 36	50	8.5	28.5	6604740	10
M 50	PG 36	55	9.5	29	6604742	10
M 50	PG 42	58	9.5	32.5	6604750	5
M 63	PG 42	70	10.5	32.5	6604752	1
M 63	PG 48	70	10.5	33.5	6604763	1
M 75	PG 48	80	11.5	34.5	6604764	1
<b>Form B</b>						
M 16	PG 7	17	7	10.5	6604713	100
M 20	PG 9	22	7	11	6604719	50
M 25	PG 9	26	8	12	6604707	50
M 25	PG 11	26	8	12	6604723	50
M 25	PG 13	26	8	12	6604724	50
M 32	PG 13	32	8.5	12.5	6604706	20
M 32	PG 16	34	8.5	12.5	6604728	20
M 40	PG 16	40	8.5	13.5	6604705	10
M 40	PG 21	42	8.5	13.5	6604733	10
M 50	PG 21	50	9.5	15.5	6604704	10
M 50	PG 29	55	9.5	15.5	6604741	10
M 63	PG 29	64	10.5	17.5	6604703	5
M 63	PG 36	70	10.5	17.5	6604751	5



**Form A**



**Form B**

## Adapter, PG to NPT Thread, Nickel-Plated Brass

**Material:**  
Nickel-Plated Brass

**Characteristic feature:**  
PG external thread  
NPT internal thread  
Hexagon

<b>Temperature Range MS</b> -40 to 300° C (-40 to 572° F)
--

External thread	Internal thread	SW mm	Thread length mm	Complete length mm	Cat. No.	Std. Pk.
<b>Form A</b>						
<b>PG</b>	<b>NPT</b>					
PG 29	NPT 1"	40	8	18	6400409	20
PG 36	NPT 1 1/4"	50	9	18.5	6400411	10
PG 42	NPT 1 1/2"	60	10	19.5	6400413	5
PG 48	NPT 1 1/2"	64	10	19.5	6400414	5
<b>Form B</b>						
PG 7	NPT 3/8"	19	5	19.5	6400400	50
PG 9	NPT 1/2"	24	6	24	6400401	50
PG 11	NPT 1/2"	24	6	24	6400402	50
PG 13.5	NPT 1/2"	24	6.5	24.5	6400403	50
PG 13.5	NPT 3/4"	30	6.5	25	6400404	50
PG 16	NPT 1/2"	24	6.5	24.5	6400405	50
PG 16	NPT 3/4"	30	6.5	25	6400406	50
PG 21	NPT 3/4"	30	7	23	6400407	20
PG 21	NPT 1"	36	7	30	6400408	20
PG 29	NPT 1 1/4"	50	8	32	6400410	20
PG 36	NPT 1 1/2"	55	9	34	6400412	10
PG 48	NPT 2"	64	10	35	6400415	5



**Form A**



**Form B**

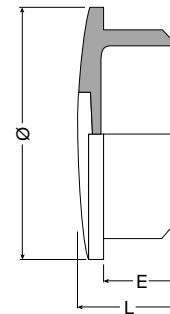


**Material:**  
Polystyrene

**Characteristic feature:**  
PG / Metric  
Round, with slot

**Temperature Range PS**  
-20 to 70° C (-4 to 158° F)

External thread	Diameter mm	Thread length mm (E)	Complete length mm (L)	Cat. No. Light Grey	Std. Pk.
<b>PG</b>					
PG 7	15	6	8	7215070	100
PG 9	19	6	8	7215096	100
PG 11	22	6	9	7215118	100
PG 13.5	25	6	10	7215134	100
PG 16	27	6	10	7215169	100
PG 21	33	8	12	7215215	100
PG 29	44	8	12	7215290	100
PG 36	55	10	15	7215363	50
PG 42	62	10	15	7215428	50
PG 48	69	12	17	7215487	50
<b>Metric</b>					
M 12 x 1.5	16	6	8	7217012	50
M 16 x 1.5	20	6	8	7217016	50
M 20 x 1.5	26	8	10.5	7217020	50
M 25 x 1.5	32	8	11	7217025	20
M 32 x 1.5	40	10	13.5	7217032	20
M 40 x 1.5	48	10	14	7217040	20
M 50 x 1.5	55	12	17	7217050	10
M 63 x 1.5	70	12	18	7217063	5



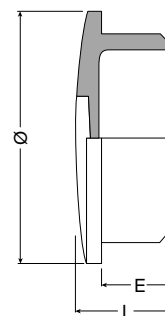
## Plug, Polyamide, Round

**Material:**  
Polyamide  
25 % glass fiber reinforced

**Characteristic feature:**  
PG/Metric  
Round, with slot

<b>Temperature Range PA</b> -30 to 120° C (-22 to 248° F)
--

External thread	Diameter mm	Thread length mm (E)	Complete length mm (L)	Cat. No. Light Grey	Std. Pk.
<b>PG</b>					
PG 7	15	6	8	7215517	100
PG 9	19	6	8	7215525	100
PG 11	22	6	9	7215533	100
PG 13.5	25	6	10	7215541	100
PG 16	27	6	10	7215550	100
PG 21	33	8	12	7215568	100
PG 29	44	8	12	7215576	100
PG 36	55	10	15	7215584	50
PG 42	62	10	15	7215592	50
PG 48	69	12	17	7215606	50
<b>Metric</b>					
M 12 x 1.5	16	6	8	7217312	50
M 16 x 1.5	20	6	8	7217316	50
M 20 x 1.5	26	8	10.5	7217320	50
M 25 x 1.5	32	8	11	7217325	20
M 32 x 1.5	40	10	13.5	7217332	20
M 40 x 1.5	48	10	14	7217340	20
M 50 x 1.5	55	12	17	7217350	10
M 63 x 1.5	70	12	18	7217363	5



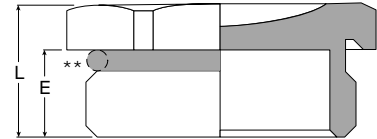
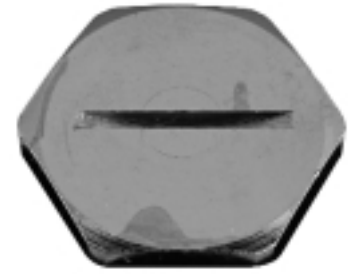
# Plug, Nickel-Plated Brass, Hexagon

**Material:**  
Nickel-plated brass

**Characteristic feature:**  
PG  
Hexagon, with slot

<b>Temperature Range MS</b> -25 to 120° C (-13 to 248° F)
--

External thread	SW mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
<b>PG</b>					
PG 7	14	5	8	6702507	50
PG 9	17	6	9	6702509	50
PG 11	19	6	9	6702511	50
PG 13.5	21	6.5	9.5	6702513	50
PG 16	23	6.5	9.5	6702516	25
PG 21	29	7	11	6702521	20
PG 29	39	8	12	6702529	15
PG 36*	50	9	13.5	6702536	10
PG 42*	58	10	15	6702542	10
PG 48*	64	10	16	6702548	10



\* PG 36-48 without slot.

\*\* O-Ring available upon request; see page 53 for ordering information.

## Plug, Nickel-Plated Brass, Round

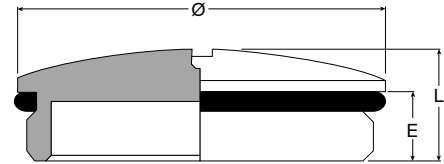
**Material:**  
Nickel-plated brass  
O-ring, Nitril

**Characteristic feature:**  
PG/Metric thread  
Round, with slot

**Temperature Range MS**  
-25 to 120° C (-13 to 248° F)

PROTECTION  
**IP68**  
RATING

External thread	Diameter mm	Thread length mm (E)	Complete length mm (L)	Cat. No.	Std. Pk.
<b>PG</b>					
PG 7	14	5	8	6700507	50
PG 9	17	6	9	6700509	50
PG 11	20	6	9	6700511	50
PG 13.5	22	6.5	9.5	6700513	50
PG 16	24	6.5	9.5	6700516	25
PG 21	30	7	11	6700521	20
PG 29	39	8	12	6700529	15
PG 36	50	9	15	6700536	10
PG 42	57	10	16	6700542	10
PG 48	64	10	16	6700548	10
<b>Metric</b>					
M 12 x 1.5	14	7.2	8	6700612	100
M 16 x 1.5	18	7.2	9	6700616	100
M 20 x 1.5	22	7.2	9.5	6700620	100
M 25 x 1.5	27	8.2	11	6700625	100
M 32 x 1.5	34	8.7	12	6700632	50
M 40 x 1.5	44	8.7	14	6700640	50
M 50 x 1.5	54	9.7	15.5	6700650	25
M 63 x 1.5	67	10.7	16	6700663	25

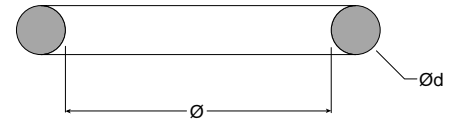


Material:  
Perbunan

Characteristic feature:  
PG and metric thread

**Temperature Range**  
-25 to 120° C (-13 to 248° F)

Connecting thread		Internal Diameter mm	Thickness mm (d)	Cat. No.	Std. Pk.
PG	metric				
PG 7	M 12	11	1.5	8112070	1000
PG 9	M 16	13	1.5	8112096	1000
PG 11		15	1.5	8112118	1000
PG 13.5	M 20	17	1.5	8112134	1000
PG 16		19	1.5	8112169	1000
PG 21		20.35	1.78	8112215	1000
	M 25	21.98	1.78	8112250	100
	M 32	28	2	8112320	100
PG 29		34	2	8112290	1000
	M 40	37	2	8112400	100
PG 36		42	2	8112363	1000
	M 50	48	2	8112500	100
PG 42		48	2.5	8112428	1000
PG 48	M 63	55	2.5	8112630	1000
	M 75	67.95	2.62	8112675	100



## Flat Packing, Neoprene

**Material:**  
Neoprene, black

**Characteristic feature:**  
PG and metric thread

<b>Temperature Range</b> -25 to 100° C (-13 to 212° F)
---

Connecting thread	External diameter mm	Internal diameter mm	Thickness mm	Cat. No.	Std. Pk.
<b>PG</b>					
PG 7	17	11.3	1.2	8113301	100
PG 9	20	13.9	1.2	8113302	100
PG 11	23	17.1	1.2	8113303	100
PG 13.5	25	19	1.2	8113304	100
PG 16	27	21	1.2	8113305	100
PG 21	34	26.6	1.5	8113306	50
PG 29	45	35.2	1.5	8113307	50
PG 36	56	45.2	1.5	8113308	50
PG 42	67	52.2	1.5	8113309	50
PG 48	72	57.7	1.5	8113310	50
<b>Metric</b>					
M 12	15	10	1.2	8113490	100
M 16	20	14	1.2	8113491	100
M 20	24	18	1.2	8113492	100
M 25	30	23	1.2	8113493	100
M 32	40	30	1.5	8113494	100
M 40	48	38	1.5	8113495	100
M 50	58	48	1.5	8113496	100
M 63	75	61	1.5	8113497	100
M 75	90	73	1.5	8113498	100



**Material:**  
Polyamide 6

**Upper temperature range:**  
Short-term: 150°C

**Characteristic feature:**  
Parallel corrugated

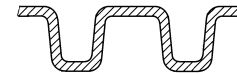
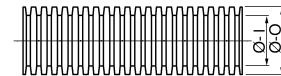
**Technical properties:**

- Flame retardant according to standard V-DIN 75 200

- No halogen
- Durable

**Application fields:**  
Engine compartment, car body and interior, machines, instruments, devices, ship and train building, switch cabinet and movable machine parts.

**Temperature Range PA 6**  
-40 to 120° C (-40 to 248° F)



NW	Ø-I mm	Ø-O mm	Bending Radius mm	Cat. No. Non-Slotted Black	Cat. No. Slotted Black	Std. Pk. m
3	2.8	5.1	6	1200073	1205030	200
4.5	5.0	7.1	8	1200068	1205045	100
6	6.0	9.2	16	1200069	1205060	100
7.5	6.7	10.0	13	1200070	1205072	50
8.5	8.4	11.7	15	1200089	1205080	50
10	9.9	13.0	20	1200100	1205102	50
12	12.2	15.7	30	1200127	1205129	50
13	12.7	15.8	35	1200135	1205137	50
14	14.2	18.5	40	1200143	1205145	50
16	15.0	18.9	45	1200160	1205161	50
17	16.6	21.2	45	1200178	1205170	50
19	19.3	24.3	50	1200194	1205196	50
22	21.3	25.4	50	1200224	1205226	50
23	23.2	28.3	55	1200232	1205234	50
26	25.8	31.2	60	1200267	1205269	25
29	29.0	34.5	65	1200291	1205290	25
37	36.0	42.4	90	1200372	1205374	25
50	47.7	54.0	100	1200500	1205501	25

according to standard EN 60 423

M 12	9.5	12.0	20	1280412		50
M 16	11.5	16.0	35	1280416		50
M 20	14.6	20.0	45	1280420		50
M 25	18.8	25.0	55	1280425		25
M 32	26.0	32.0	65	1280432		25

**Fitting conduit glands:**  
SEM, on page 55-56



# Conduit Gland SEM Straight, quick-mounting system for corrugated tubes Polyflex PA 6

**Material:**  
Polyamide 66

- Technical properties:**
- Easy and tight mounting
  - Special click- in system
  - Grasps from the outside

- Corrugated pipe can be rotated within the mounting gland
- No halogen

**Application fields:**  
All fields using corrugated tubes

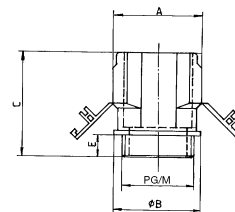
**Mounting instructions:**  
Insert the corrugated tube with a short twist all the way into the end of the SEM conduit gland.

PROTECTION \*  
**IP54** / **IP67** \*\*  
RATING



**Temperature Range PA 6**  
-25 to 100° C (-13 to 212° F)

Thread	Fits for NW	E mm	SW mm	A mm	B mm	C mm	Cat. No. Black	Std. Pk.
<b>PG</b>								
PG 7	8.5	10	15	20.2	16	39	3800075	50
PG 7	12	10	19	24	21	40.3	3802070	50
PG 9	10	10	18	21.3	20	39.5	3800091	50
PG 9	12	10	19	24	21	40.3	3802091	50
PG 11	12	10	19	24	20.8	40.5	3800113	50
PG 11	13	10	20	2.8	22	40	3800114	50
PG 11	17	10	26	29.6	29	40.6	3802112	100
PG 13.5	10	7	22	26.7	23.6	40	3802132	50
PG 13.5	14	10	22	26.7	23.6	40	3800130	50
PG 16	17	10	26	29.6	28.9	40.6	3800164	50
PG 21	22	11	30	35	34	46	3800211	25
PG 21	23	11	32	37.6	35	47.7	3800210	25
PG 29	29	12	41	45.2	45	53.8	3800296	20
PG 36	37	12	50	54	56.8	57.4	3800369	10
PG 48	50	12	64	65.3	72.2	57.7	3800482	5
<b>Metric</b>								
M 12 x 1.5	10	10	18	21.9	20	40	3803410	50
M 16 x 1.5	10	15	18	21.8	19.8	45	3803413	50
M 16 x 1.5	13	10	19	24	20.9	40	3803412	50
M 20 x 1.5	17	10	26	29.6	28.9	40	3803418	50
M 25 x 1.5	22	15	30	34.7	33.8	50	3803434	25
M 25 x 1.5	23	10	30	38.2	35	45	3803424	25
M 32 x 1.5	29	12	41	45	44.6	54	3803429	20



according to EN 60 423

M 12 x 1.5	M 12	11	16	20.2	16	39	3803120	50
M 16 x 1.5	M 16	10	19	23.9	20.3	41	3803163	50
M 20 x 1.5	M 20	10	24	28	25.5	41	3803201	25
M 25 x 1.5	M 25	11	30	33.3	32.2	48	3803252	50
M 32 x 1.5	M 32	10	41	45.2	45	54	3803325	20

**Notes:**

- \* Without sealing ring
- \*\* With sealing ring, see page 52.

**Material:**

Polyamide 66

**Technical properties:**

- Easy and tight mounting
- Special click-in system
- Grasps from the outside

- Corrugated pipe can be rotated within the mounting gland
- No halogen

**Application fields:**

All fields using corrugated tubes

**Mounting instructions:**

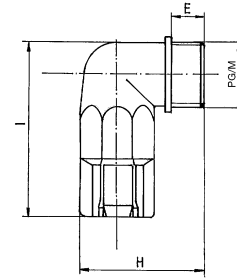
Insert the corrugated tube with a short twist all the way into the end of the SEM conduit gland.



**Temperature Range PA 6**  
-25 to 100° C (-13 to 212° F)



Thread	Fits NW	E mm	l mm	H mm	Cat. No. Black	Std. Pk.
<b>PG</b>						
PG 7	8.5	10	46	32	7303076	25
PG 9	10	10	53	35	7303092	25
PG 11	12	10	54.5	35.5	7303114	25
PG 13.5	14	10	58.5	39.5	7303130	25
PG 16	17	11	59	42.5	7303165	25
PG 21	23	11	74	49.5	7303211	25
PG 21	22				7303212	
PG 29	29	12	89	59	7303297	10
PG 36	37	12	107	70	7303360	5
PG 48	50	13	121	85	7303483	5
<b>Metric</b>						
M 16 x 1.5	10	10	55	40	7303717	25
M 16 x 1.5	13	15	56	40.5	7303718	25
M 20 x 1.5	17	15	62	47	7303721	25
M 25 x 1.5	22	15	77	53.5	7303726	25
M 32 x 1.5	29	15	93	62.5	7303733	10



according to EN 60 423

M 12 x 1.5	M 12	10	52	33.5	7303712	25
M 16 x 1.5	M 16	10	56	35	7303716	25
M 20 x 1.5	M 20	10	62	40	7303720	25
M 25 x 1.5	M 25	11	77	49	7303725	25
M 32 x 1.5	M 32	15	93	58	7303732	10

**Notes:**

\* Without sealing ring

\*\* With sealing ring, see page 52.

## Technical Annex, Chemical resistance of plastic materials

Reagents	Concentration %	at temp. +°C	Poly-amide	Poly-amide	Poly-amide	Thermo-plastic Polyurethane	Poly-propylene	Poly-ethylene	Poly-ethylene	Poly-styrene	Thermo-plastic elastomere	Nitrile-butadiene-rubber
			PA 6	PA 66	PA 12	PU	PP	HD-PE	LD-PE	PS	TPE	NBR
Acetaldehyde	40	20	o	o	+		+					20°C o
Acetic acid	100	20					+	+	+			o
Acetone	100	20	+	+	+	-	+	o	o			-
Acrylic acid	100	> 30	-	-	-							-
Allyl alcohol	96	20	o	o	+		+	+	+	20% +		
Alum, hydrous	dilute	40					+	+	+	+		20°C +
Aluminium chloride, hydrous	dilute	40					+	+	+	+		20°C +
Aluminium sulphate, hydrous	dilute	40					+	+	+	+		20°C +
Ammonia solution, hydrous	saturated	20	20% +	20% +	20% +		+	+	+	20% +		
Ammonium chloride, hydrous	saturated	60				3% o	+	+	+			20% +
Ammonium nitrate, hydrous	dilute	40					+	+	+	+		20% +
Ammonium sulphate, hydrous	dilute	40					+	+	+			-
Aniline hydrochloride, hydrous	saturated	20					+	o	o			
Aniline, pure	100	20	o	o	o		+	+	+	-	+	
Benzaldehyde, hydrous	saturated	20	pure o	pure o	pure o		+			-		-
Benzine	100	20	+	+	+		o	+	o	-	o	+
Benzoic acid, hydrous	any	40	20% o	20% o			+	+	+	+		-
Benzole	100	20	+	+	+		o	o	o	-		-
Bleaching liquor	12,5 Cl	20	-	-	o	3% -	+	+	+	+		-
Borax, hydrous	dilute	40					+	+	+	+		20% o
Boric acid, hydrous	dilute	40	o	o	o	3% o	+	+	+			20% +
Bromine, liquid	100	20	-	-	-		-	-	-	-	-	-
Butanediol, hydrous	to 10	20	pure +	pure +			+	+	+			
Butanol	to 100	20					+	+	+	+		+
Butylacetate	100	20	+	+	+		o	o	o	-		-
Calcium chloride, hydrous	saturated	40	+	+	+		+	+	+	+		20% +
Carbon bisulphide	100	20	+	+	+		+	o	o	-		-
Carbon dioxide	100	60	+	+	+							20% +
Carbon dioxide, dry	100	60					+	+	+	50°C +		20% +
Carbon tetrachloride	100	20	+	+	+		-	o	-	-		
Caustic potash solution, hydrous	50	20	+	+	+		+	+	+	+	10% +	
Caustic soda lye, hydrous	10	20	+	+	+	3% o	+	+	+	+	50% +	
Chlorine	any	20	-	-	-		-	-	-	-		-
Chrome alum, hydrous	dilute	40					+	+	+			20% +
Citric Acid	to 10	40	20% +	20% +	20% +	3% o	+	+	+	+		20% +
Cooling liquids DIN 53521		120	o	o								
Copper monochloride, hydrous	saturated	20					+	+	+			+
Copper sulphate, hydrous	saturated	60					+	+	+			20% +
Cresol, hydrous	to 90	20	pure -	pure -			+	+	o	o		-
Cyclohexanol	-	20	+	+	+		+	+	+	+		+
Diesel fuel		85	+	+	+	20% +	20% +	20% +	20% +			
Drilling oil			+	+	+							
Ethanoic acid	10	20	o	o	+	3% o	+	+	+	o	+	
Ethyl alcohol, hydrous	10	20	40 Vol.%+	40 Vol.%+	40 Vol.%+		+				+	+
Ethyl dichloride	100	20					o	-	-			-
Ethyl ether	100	20					o					o
Ethylene oxide, liquid	100	20					o					
Ferric cyanide, hydrous	saturated	60					+	+	+			
Ferrous chloride, hydrous, indiff.	10	20	+	+		+	+	+	+		+	
Fluorine	50	40	pure -	pure -	pure -		-	-	-			
Formaldehyde, hydrous	dilute	40	pure +	pure +	pure +		40% +	40% +	40% +	30% +		20°C o
Formic acid, hydrous	10	20	o	o	+		+	+		+		
Glucose, hydrous	any	50					+	+	+			
Hydraulic fluid, hardly inflammable		80	+	+	+							
Hydraulic oil H and HL (DIN 51524)		100	+	+	+							

	Concentration %	at temp. +°C	Poly-amide	Poly-amide	Poly-amide	Thermo-plastic Polyurethane	Poly-propylene	Poly-ethylene	Poly-ethylene	Poly-styrene	Thermo-plastic elastomere	Nitrile-butadiene-rubber
Reagens			PA 6	PA 66	PA 12	PU	PP	HD-PE	LD-PE	PS	TPE	NBR
Hydrobromic acid, hydrous	to 10	40	-	-	-		+	+	+			-
Hydrochloric acid, hydrous	30	20	20% -	20% -	20% -	3% -	+	+	+	15% +	10% +	o
Hydrogen	100	60	20°C +	20°C +	20°C +		+	+	+			20°C +
Hydrosilicofluoric acid, hydrous	to 30	20	-	-			+	+	+			
Hydroxylamine sulphate, hydrous	to 12	30					+					
Kerosine	100	80	+	+	+		20°C +	20°C +	20°C o	-		
Lactic acid, hydrous	to 90	20	10% +	10% +	10% +	3% o	+	+	+	80% +		+
Lubricating grease, base diester oil		110	o	o								
Lubricating grease (base polyphenyle ester)		110	+	+	+							
Lubricating grease, base silicone oil		110	+	+	+							
Magnesium carbonate, hydrous	saturated	100					+			50°C +		
Magnesium chloride, hydrous	saturated	20	10% +	10% +	10% +		+	+	+	+		+
Mercury	pure	20	+	+	+		+	+	+	+		+
Methyl alcohol	100	20	+	+	+		40°C +	+	+	+	+	+
Methylene chloride	100	20	o	o	o		o	o	-			
Mineral oil			+	+	+		20°C +	20°C +	20°C +			
Nickel chloride, hydrous	saturated	20	10% o	10% o	10% o		+			+		+
Nickel sulphate, hydrous	saturated	20	10% o	10% o	10% o		+	+	+			+
Nitric acid, hydrous	50	20	-	-	-	3% -	o	o	o	30% +		-
Nitro glycerin	dilute	20						-	-			
Oil and grease		20	+	+	+		o				o	
Oleic acid	-	20	+	+	+		+	+	+	+		o
Oxalic acid	any	20	10% o	10% o	10% o	3% o	+	+	+	+		o
Ozone	pure		-	-	-		o	o	o			
Phosgene, gaeous	100	20					o	o	o			
Phoshoric acid, hydrous	dilute	20	10% -	10% -	10% -	3% o	+	+	+	86% +		-
Phosphorus pentoxide	100	20					+					
Potassium bromide, hydrous	any	20	10% +	10% +	10% +		+	+	+	+		
Potassium chloride, hydrous	10	20	+	+	+		+	+	+	+		+
Potassium dichromate, hydrous	40	20	5% o	5% o	5% o		+	+	+			+
Potassium nitrate, hydrous	any	20	10% +	10% +	10% +		+	+	+	+		+
Potassium permanganate, hydrous	saturated	20					+			+		
Sea water		40	+	+	+	20°C +	+	+	+	+	+	20°C +
Soap solution, hydrous	any	20	dilute +	dilute +	dilute +		+	+	+			+
Sodium chlorate, hydrous	saturated	20	10% o	10% o	10% o		+	+	+			
Sodium sulphide, hydrous	dilute	40					+	+	+			
Sulphuric acid, hydrous	10	20	-	-	-	3% -	50% +	50% +	50% +	+	98% +	-
Tin dichloride, hydrous	dilute	40					+	+	+	-	10% +	20°C +
Toluene	100	20	+	+	+	-		o	o	o		-
Trichloroethylene	100	20	o	o	o		o	o	-			
Urea, hydrous	to 10	40	20% +	20% +	20% +		+	+	+	+		
Vinyl acetate	100	20					+					
Waste gas, containing carbon dioxide	any	60						+	+			
Waste gas, containing SO2	low	60						+	+			
Xylene	100	20	+	+	+		-	o	o	-		-
Zinc chloride, hydrous	dilute	60	10% o	10% o			+	+	+	50°C +		20°C +
Zinc sulphate, hydrous	dilute	60					+	+	+			20°C +

Quelle: Kunststoff-Tabellen, B. Carlowitz, Carl Hanser Verlag, and others

The above mentioned data enable a preselection. However it is not the use of the data, to promise definite properties of the products or their suitability for a concrete application purpose. The data don't realise the purchaser to control the quality conformance.

**CHART I International Protection (IP) Ratings to IEC 529**

Protection Modes to EN 60529 DIN VDE 0470 Part 1			Second Digit – Degree of Water Protection								
			IP X0 No Protection	IP X1 Protection against dripping water falling vertically	IP X2 Protection against dripping water even when tilted 15° vertically	IP X3 Protection against dripping water even when tilted 60°	IP X4 Protection against splashing water from any direction	IP X5 Protection against water jets from any direction	IP X6 Protection against heavy seas from any direction	IP X7 Protection against effects of immersion	IP X8 Protection against submersion
First Digit	Person touching	Protection against penetration of foreign bodies									
	IP 0X	No protection	No protection	IP 00							
IP 1X	Protection against touching with the hand	Protection against large solid bodies > 50mm Ø	IP 10	IP 11	IP 12						
IP 2X	Protection against touching with the finger	Protect. against med., solid bodies > 12.5 mm Ø	IP 20	IP 21	IP 22	IP 23					
IP 3X	Protection against touching with tools, wires, etc., > 2.5 mm Ø	Protection against small, solid bodies > 2.5 mm Ø	IP 30	IP 31	IP 32	IP 33	IP 34				
IP 4X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against small, solid bodies > 1 mm Ø	IP 40	IP 41	IP 42	IP 43	IP 44				
IP 5X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against internal dust accumulation	IP 50				IP 54	IP 55			
IP 6X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against all dust penetration	IP 60					IP 65	IP 66	IP 67	IP 68

In some countries a third digit is added. It gives information about the mechanical properties of the equipment. This designation has not yet been standardized according to current DIN and IEC regulations. Devices in this catalogue correspond to digit IP .7.

**CHART II NEMA / IP Cross Reference**

The chart below provides a cross-reference from NEMA to International Protection (IP) Ratings. This cross-reference is an approximation based on the most current information available. It is not sanctioned by NEMA, IEC, or any other regulatory body. This chart should be used only as a guideline.

IEC 529 Protection Ratings	NEMA Ratings									
	1	2	3	3R	4	4X	5	6	12	13
IP 00	↓									
IP 10		↓								
IP 11										
IP 20										
IP 21										
IP 22										
IP 23										
IP 30										
IP 31				↓						
IP 32										
IP 33										
IP 40										
IP 41										
IP 42										
IP 43										
IP 50										
IP 51							↓			
IP 52										
IP 53										
IP 54										
IP 55										
IP 56										
IP 60										
IP 61										
IP 62			↓							
IP 63										
IP 64										
IP 65										
IP 66					↓	↓				
IP 67								↓		
IP 68									↓	

### CHART III International Protection (IP) Ratings to IEC 262

The standard EN 50 262 was issued on 01.04.1998 and published in April 1999 in Germany as DIN-EN 50 262/VDE 0619. The well-known standards for cable glands, such as DIN VDE 0619 (VDE 0619): 1987-09, DIN 46 319: 1989-12, DIN 46 320-1: 1985-09 and DIN 46 320-2...-4: 1973-01 etc, are only applicable until 31.12.1999. Approved technical drawings using these standards are valid until 01.03.2001.

- 1.) Fields of application for standard EN 50 262: This European standard contains the requirements and tests for the construction and design of metric cable glands. This standard covers the cable gland as a complete part, but not the parts of cable glands.
- 2.) The screw-in thread of cable glands must be constructed according to chart 1 of EN 60 423. The dimensions of the thread are M6x0,75; M8x1; M10x1; M12x1,5; M16x1,5; M20x1,5; M25x1,5; M32x1,5; M40x1,5; M50x1,5; M63x1,5 and M75x1,5.
- 3.) The mounting holes must be dimensioned according to **Chart A**.
- 4.) Cable glands must be able to guarantee the retaining power for cables and conduits for the complete sealing section. Cable glands with traction relief for cables and conduits must free the conduits from the load of tension and twist. The tests are carried out, with in each case the smallest and largest mentioned value of the seal resp. tension relief section of the according loads and torque values in **Chart B**.

These tests are performed with test pins reproducing the outer diameters of the cables and conduits. The test pins consist of a metal rod with an elastomere sheath.

- 5.) Cable glands must be impact resistant. A test pin according to the smallest value of the sealing section is fastened to the test probe and then the test is carried out a lowest temperature according to the energy in accordance with category of **Chart C**. All specifications, charts and values are excerpts from standard DIN 50 262. Obviously further tests (electric properties, IP-Code etc.), which are necessary to classify and mark cable glands are described in this standard. It would although go beyond the scope of this catalogue.

Chart A: Mounting holes for cable glands								
Thread size	12	16	20	25	32	40	50	63
Diameter of	M12	M16	M20	M25	M32	M40	M50	M63
Mounting hole								
+ 0,2/- 0,4 mm	12,5	16,5	20,5	25,5	32,5	40,5	50,5	63,5

Chart B: Tensile load for retaining power and tension relief, torque for turning tests				
Cable and Conduit diameter	Retaining Power	Tensile relief Type A	Tensile relief Type B	Torque Type A and B
[mm]	[N]	[N]	[N]	[Nm]
bis 4	5	-	-	-
> 4 bis 8	10	30	75	0,10
> 8 bis 11	15	42	120	0,15
> 11 bis 16	20	55	130	0,35
>16 bis 23	25	70	140	0,60
> 23 bis 31	30	80	250	0,80
> 31 bis 43	45	90	350	0,90
> 43 bis 55	55	100	400	1,00
> 55	70	115	450	1,20

Chart C: Value for impact test								
Categorie	1	2	3	4	5	6	7	8
Load [N]	2	2	2	2	10	10	10	20
Weight [Kg]	0,2	0,2	0,2	0,2	1,0	1,0	1,0	2,0
Energy [J]	0,2	0,5	1,0	2,0	4,0	7,0	10,0	20,0
Height [m]	0,1	0,25	0,5	1,0	0,4	0,7	1,0	1,0

### CHART IV Tightening torque for cable glands according to standard DIN VDE 0619

In casing with female thread respectively hole with lock nut.

Pressure screws may be tightened with max 21/43 of the tightening torque according to the chart.

Note:

The values in the chart serve as a general guideline, the exact procedure depends upon the material.

Nominal size	Metal	Plastic moulded parts
	Tightening torque [Nm]	Tightening torque [Nm]
Pg 7	6,25	2,5
Pg 9	6,25	3,75
Pg 11	6,25	3,75
Pg 13,5	6,25	3,75
Pg 16	7,5	5,0
Pg 21	10,0	7,5
Pg 29	10,0	7,5
Pg 36	10,0	7,5
Pg 42	10,0	7,5
Pg 48	10,0	7,5

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Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
1200068	55	3803163	56	4103363	32	4220725	5
1200069	55	3803201	56	4103516	33	4220732	5
1200070	55	3803252	56	4103520	33	4220740	5
1200073	55	3803325	56	4103521	33	4220750	5
1200089	55	3803410	56	4103525	33	4220763	5
1200100	55	3803412	56	4103532	33	4220800	5
1200127	55	3803413	56	4103540	33	4220801	5
1200135	55	3803418	56	4103550	33	4220802	5
1200143	55	3803424	56	4103563	33	4220803	5
1200160	55	3803429	56	4104312	30	4220810	5
1200178	55	3803434	56	4104316	30	4220811	5
1200194	55	4000005	30	4104320	30	4220812	5
1200224	55	4000102	30	4104321	30	4220813	5
1200232	55	4000200	30	4104325	30	4221000	15
1200267	55	4000307	30	4104332	30	4221001	15
1200291	55	4000404	30	4104340	30	4221002	15
1200372	55	4000501	30	4104350	30	4221003	15
1200500	55	4000552	30	4104363	30	4221004	15
1205030	55	4000609	30	4104516	31	4221005	15
1205045	55	4000650	30	4104520	31	4221006	15
1205060	55	4000706	30	4104521	31	4221007	15
1205072	55	4001001	32	4104525	31	4221008	15
1205080	55	4001109	32	4104532	31	4221009	15
1205102	55	4001206	32	4104540	31	4221039	15
1205129	55	4001303	32	4104550	31	4221040	15
1205137	55	4001400	32	4104563	31	4221041	15
1205145	55	4001508	32	4220307	5	4221042	15
1205161	55	4001559	32	4220309	5	4221043	15
1205170	55	4001605	32	4220311	5	4221044	15
1205196	55	4001656	32	4220313	5	4221045	15
1205226	55	4001702	32	4220316	5	4221046	15
1205234	55	4006100	31	4220321	5	4221047	15
1205269	55	4006208	31	4220329	5	4221048	15
1205290	55	4006305	31	4220336	5	4221049	15
1205374	55	4006402	31	4220342	5	4221050	15
1205501	55	4006500	31	4220348	5	4221079	15
1280412	55	4006550	31	4220351	5	4221095	15
1280416	55	4006607	31	4220352	5	4221117	15
1280420	55	4006658	31	4220353	5	4221133	15
1280425	55	4006704	31	4220354	5	4221168	15
1280432	55	4009100	33	4220355	5	4221214	15
3800075	56	4009207	33	4220356	5	4221290	15
3800091	56	4009304	33	4220357	5	4221362	15
3800113	56	4009401	33	4220358	5	4221427	15
3800114	56	4009509	33	4220359	5	4221486	15
3800130	56	4009550	33	4220360	5	4221714	15
3800164	56	4009606	33	4220612	5	4221716	15
3800210	56	4009658	33	4220616	5	4221717	15
3800211	56	4009695	33	4220620	5	4221720	15
3800296	56	4103312	32	4220625	5	4221721	15
3800369	56	4103316	32	4220632	5	4221725	15
3800482	56	4103320	32	4220640	5	4221726	15
3802070	56	4103321	32	4220650	5	4221732	15
3802091	56	4103325	32	4220663	5	4221733	15
3802112	56	4103332	32	4220712	5	4221740	15
3802132	56	4103340	32	4220716	5	4221750	15
3803120	56	4103350	32	4220720	5	4221760	15

## Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
4222000	19	4223307	20	4223640	21	4223738	21
4222001	19	4223310	20	4223641	21	4223739	21
4222002	19	4223311	20	4223642	21	4223740	21
4222003	19	4223315	20	4223643	21	4223741	21
4222004	19	4223316	20	4223644	21	4223742	21
4222005	19	4223317	20	4223645	21	4223743	21
4222006	19	4223320	20	4223646	21	4223744	21
4222007	19	4223321	20	4223647	21	4223745	21
4222008	19	4223322	20	4223648	21	4223746	21
4222009	19	4223326	20	4223649	21	4223747	21
4222012	19	4223327	20	4223650	21	4223748	21
4222016	19	4223375	20	4223651	21	4223749	21
4222017	19	4223376	20	4223652	21	4223750	21
4222020	19	4223380	20	4223653	21	4223751	21
4222021	19	4223381	20	4223654	21	4223752	21
4222023	19	4223382	20	4223670	21	4223753	21
4222024	19	4223383	20	4223671	21	4223754	21
4222025	19	4223384	20	4223672	21	4223755	21
4222026	19	4223385	20	4223673	21	4223770	21
4222027	19	4223386	20	4223674	21	4223771	21
4222028	19	4223387	20	4223675	21	4223772	21
4222029	19	4223390	20	4223676	21	4223773	21
4222030	19	4223400	20	4223677	21	4223774	21
4222032	19	4223405	20	4223678	21	4223775	21
4222033	19	4223406	20	4223679	21	4223776	21
4222037	19	4223407	20	4223680	21	4223777	21
4222040	19	4223410	20	4223681	21	4223778	21
4222075	19	4223411	20	4223682	21	4223779	21
4222091	19	4223415	20	4223683	21	4223780	21
4222113	19	4223416	20	4223700	21	4223781	21
4222130	19	4223417	20	4223701	21	4223782	21
4222164	19	4223420	20	4223702	21	4223783	21
4222210	19	4223421	20	4223703	21	4223784	21
4222296	19	4223422	20	4223704	21	4223785	21
4222369	19	4223426	20	4223705	21	4223786	21
4222423	19	4223427	20	4223706	21	4223787	21
4222482	19	4223475	20	4223707	21	4223800	22
4223001	19	4223476	20	4223708	21	4223801	22
4223002	19	4223480	20	4223709	21	4223802	22
4223003	19	4223481	20	4223710	21	4223803	22
4223004	19	4223482	20	4223711	21	4223804	22
4223005	19	4223483	20	4223712	21	4223810	22
4223006	19	4223484	20	4223713	21	4223811	22
4223007	19	4223485	20	4223714	21	4223812	22
4223008	19	4223486	20	4223715	21	4223813	22
4223009	19	4223487	20	4223716	21	4223814	22
4223101	19	4223490	20	4223717	21	4223815	22
4223102	19	4223600	21	4223718	21	4223816	22
4223103	19	4223601	21	4223719	21	4223817	22
4223104	19	4223620	21	4223730	21	4223818	22
4223105	19	4223621	21	4223731	21	4223819	22
4223106	19	4223622	21	4223732	21	4223820	22
4223107	19	4223623	21	4223733	21	4223821	22
4223108	19	4223624	21	4223734	21	4223822	22
4223300	20	4223625	21	4223735	21	4223823	22
4223305	20	4223626	21	4223736	21	4223824	22
4223306	20	4223627	21	4223737	21	4223825	22

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
4223826	22	4223888	22	4224722	16	4248666	17
4223827	22	4223889	22	4224726	16	4248667	17
4223828	22	4223890	22	4224727	16	4248668	17
4223829	22	4224001	15	4224775	16	4248669	17
4223830	22	4224002	15	4224776	16	4248670	17
4223831	22	4224003	15	4224780	16	4248671	17
4223832	22	4224004	15	4224781	16	4248672	17
4223833	22	4224005	15	4224782	16	4248673	17
4223834	22	4224006	15	4224783	16	4248674	17
4223835	22	4224007	15	4224784	16	4248675	17
4223836	22	4224008	15	4224785	16	4248677	17
4223837	22	4224009	15	4224786	16	4248678	17
4223838	22	4224101	15	4224787	16	4248679	17
4223839	22	4224102	15	4224790	16	4248680	17
4223840	22	4224103	15	4248404	17	4248681	17
4223841	22	4224104	15	4248405	17	4248682	17
4223842	22	4224105	15	4248407	17	4248683	17
4223843	22	4224106	15	4248409	17	4248684	17
4223844	22	4224107	15	4248529	17	4248685	17
4223845	22	4224108	15	4248531	17	4248686	17
4223846	22	4224109	15	4248539	17	4248687	17
4223847	22	4224300	16	4248541	17	4248688	17
4223848	22	4224305	16	4248543	17	4248689	17
4223849	22	4224306	16	4248610	17	4248690	17
4223850	22	4224307	16	4248612	17	4248691	17
4223851	22	4224310	16	4248614	17	4248692	17
4223852	22	4224311	16	4248627	17	4248693	17
4223853	22	4224315	16	4248629	17	4248694	17
4223854	22	4224316	16	4248631	17	4248695	17
4223860	22	4224317	16	4248632	17	4248696	17
4223861	22	4224320	16	4248634	17	4248697	17
4223862	22	4224321	16	4248640	17	4248698	17
4223863	22	4224322	16	4248641	17	4248699	17
4223864	22	4224326	16	4248642	17	4248700	17
4223865	22	4224327	16	4248643	17	4248701	17
4223866	22	4224375	16	4248644	17	4248702	17
4223867	22	4224376	16	4248645	17	4248703	17
4223868	22	4224380	16	4248646	17	4248704	17
4223869	22	4224381	16	4248647	17	4248705	17
4223870	22	4224382	16	4248648	17	4248706	17
4223871	22	4224383	16	4248649	17	4248707	17
4223872	22	4224384	16	4248650	17	4248708	17
4223873	22	4224385	16	4248651	17	4248709	17
4223874	22	4224386	16	4248652	17	4248710	17
4223875	22	4224387	16	4248653	17	4248711	17
4223876	22	4224390	16	4248654	17	4248712	17
4223877	22	4224700	16	4248655	17	4248713	17
4223878	22	4224705	16	4248656	17	4248714	17
4223879	22	4224706	16	4248657	17	4248715	17
4223880	22	4224707	16	4248658	17	4248716	17
4223881	22	4224710	16	4248659	17	4248717	17
4223882	22	4224711	16	4248660	17	4248718	17
4223883	22	4224715	16	4248661	17	4248719	17
4223884	22	4224716	16	4248662	17	4248720	17
4223885	22	4224717	16	4248663	17	4248721	17
4223886	22	4224720	16	4248664	17	4248722	17
4223887	22	4224721	16	4248665	17	4248723	17

## Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
4248724	17	4249676	18	4266025	25	4305514	27
4248725	17	4249677	18	4266022	25	4305515	27
4249600	18	4249678	18	4266028	25	4308093	27
4249601	18	4249679	18	4266029	25	4308115	27
4249602	18	4249680	18	4266031	25	4308131	27
4249603	18	4249681	18	4266033	25	4308166	27
4249604	18	4249682	18	4266035	25	4308212	27
4249610	18	4249683	18	4276040	26	4308298	27
4249611	18	4249684	18	4276050	26	4308516	27
4249612	18	4249685	18	4276060	26	4308520	27
4249613	18	4249686	18	4276070	26	4308521	27
4249614	18	4249687	18	4276080	26	4308525	27
4249615	18	4249688	18	4276090	26	4308526	27
4249616	18	4249689	18	4276100	26	4308532	27
4249617	18	4249690	18	4276110	26	4308533	27
4249618	18	4249691	18	4276120	26	5202078	29
4249619	18	4249692	18	4276130	26	5202094	29
4249620	18	4249693	18	4276140	26	5202116	29
4249621	18	4249694	18	4276150	26	5202132	29
4249622	18	4249695	18	4276160	26	5202167	29
4249623	18	4249696	18	4276170	26	5202213	29
4249624	18	4249697	18	4276180	26	5202299	29
4249625	18	4249698	18	4276195	26	5202361	29
4249626	18	4249699	18	4276210	26	5202434	29
4249627	18	4249700	18	4276225	26	5202485	29
4249628	18	4264007	24	4276240	26	5210107	6
4249640	18	4264009	24	4276250	26	5210109	6
4249641	18	4264011	24	4276270	26	5210111	6
4249642	18	4264013	24	4276290	26	5210113	6
4249643	18	4264016	24	4276310	26	5210116	6
4249644	18	4264021	24	4276330	26	5210121	6
4249645	18	4264029	24	4276350	26	5210129	6
4249646	18	4264112	24	4276370	26	5210507	6
4249647	18	4264116	24	4305078	27	5210509	6
4249648	18	4264117	24	4305094	27	5210511	6
4249649	18	4264120	24	4305116	27	5210513	6
4249650	18	4264121	24	4305132	27	5210516	6
4249651	18	4264125	24	4305167	27	5210521	6
4249652	18	4264126	24	4305213	27	5210529	6
4249653	18	4264132	24	4305299	27	5210616	6
4249654	18	4264133	24	4305361	27	5210620	6
4249655	18	4266003	25	4305426	27	5210621	6
4249656	18	4266004	25	4305485	27	5210625	6
4249657	18	4266006	25	4305500	27	5210632	6
4249658	18	4266007	25	4305501	27	5210816	6
4249659	18	4266008	25	4305502	27	5210820	6
4249660	18	4266010	25	4305503	27	5210821	6
4249661	18	4266011	25	4305504	27	5210825	6
4249662	18	4266013	25	4305505	27	5210832	6
4249663	18	4266015	25	4305506	27	5211107	10
4249664	18	4266014	25	4305507	27	5211109	10
4249670	18	4266018	25	4305508	27	5211111	10
4249671	18	4266016	25	4305509	27	5211113	10
4249672	18	4266020	25	4305510	27	5211116	10
4249673	18	4266023	25	4305511	27	5211121	10
4249674	18	4266021	25	4305512	27	5211129	10
4249675	18	4266024	25	4305513	27	5211307	10

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
5211309	10	5212102	8	5212183	8	5212513	8
5211311	10	5212103	8	5212184	8	5212514	8
5211313	10	5212104	8	5212185	8	5212515	8
5211316	10	5212105	8	5212186	8	5212516	8
5211321	10	5212106	8	5212187	8	5212517	8
5211329	10	5212107	8	5212400	8	5212518	8
5211416	10	5212108	8	5212401	8	5212519	8
5211420	10	5212109	8	5212420	8	5212530	8
5211421	10	5212110	8	5212421	8	5212531	8
5211425	10	5212111	8	5212422	8	5212532	8
5211432	10	5212112	8	5212423	8	5212533	8
5211616	10	5212113	8	5212424	8	5212534	8
5211620	10	5212114	8	5212425	8	5212535	8
5211621	10	5212115	8	5212426	8	5212536	8
5211625	10	5212116	8	5212427	8	5212537	8
5211632	10	5212117	8	5212440	8	5212538	8
5212000	8	5212118	8	5212441	8	5212539	8
5212001	8	5212119	8	5212442	8	5212540	8
5212020	8	5212130	8	5212443	8	5212541	8
5212021	8	5212131	8	5212444	8	5212542	8
5212022	8	5212132	8	5212445	8	5212543	8
5212023	8	5212133	8	5212446	8	5212544	8
5212024	8	5212134	8	5212447	8	5212545	8
5212025	8	5212135	8	5212448	8	5212546	8
5212026	8	5212136	8	5212449	8	5212547	8
5212027	8	5212137	8	5212450	8	5212548	8
5212040	8	5212138	8	5212451	8	5212549	8
5212041	8	5212139	8	5212452	8	5212550	8
5212042	8	5212140	8	5212453	8	5212551	8
5212043	8	5212141	8	5212454	8	5212552	8
5212044	8	5212142	8	5212470	8	5212553	8
5212045	8	5212143	8	5212471	8	5212554	8
5212046	8	5212144	8	5212472	8	5212555	8
5212047	8	5212145	8	5212473	8	5212570	8
5212048	8	5212146	8	5212474	8	5212571	8
5212049	8	5212147	8	5212475	8	5212572	8
5212050	8	5212148	8	5212476	8	5212573	8
5212051	8	5212149	8	5212477	8	5212574	8
5212052	8	5212150	8	5212478	8	5212575	8
5212053	8	5212151	8	5212479	8	5212576	8
5212054	8	5212152	8	5212480	8	5212577	8
5212070	8	5212153	8	5212481	8	5212578	8
5212071	8	5212154	8	5212482	8	5212579	8
5212072	8	5212155	8	5212483	8	5212580	8
5212073	8	5212170	8	5212500	8	5212581	8
5212074	8	5212171	8	5212501	8	5212582	8
5212075	8	5212172	8	5212502	8	5212583	8
5212076	8	5212173	8	5212503	8	5212584	8
5212077	8	5212174	8	5212504	8	5212585	8
5212078	8	5212175	8	5212505	8	5212586	8
5212079	8	5212176	8	5212506	8	5212587	8
5212080	8	5212177	8	5212507	8	5213100	9
5212081	8	5212178	8	5212508	8	5213101	9
5212082	8	5212179	8	5212509	8	5213102	9
5212083	8	5212180	8	5212510	8	5213103	9
5212100	8	5212181	8	5212511	8	5213104	9
5212101	8	5212182	8	5212512	8	5213200	9

## Index

<b>Part No.</b>	<b>Page</b>	<b>Part No.</b>	<b>Page</b>	<b>Part No.</b>	<b>Page</b>	<b>Part No.</b>	<b>Page</b>
5213201	9	5215203	9	5218011	6	5308901	4
5213202	9	5215204	9	5218013	6	5308902	4
5213203	9	5215205	9	5218016	6	5308903	4
5213204	9	5215206	9	5218216	6	5308904	4
5213205	9	5215207	9	5218220	6	5308905	4
5213206	9	5215208	9	5218221	6	5308906	4
5213207	9	5215209	9	5306007	28	5308907	4
5213208	9	5215210	9	5306009	28	5308910	4
5213209	9	5215211	9	5306011	28	5308911	4
5213210	9	5215212	9	5306012	28	5308912	4
5213211	9	5215213	9	5306013	28	5308913	4
5213212	9	5215214	9	5306014	28	5308914	4
5213213	9	5215215	9	5306016	28	5308915	4
5213214	9	5215216	9	5306017	28	5308916	4
5213215	9	5215217	9	5306030	28	5308917	4
5213216	9	5215300	9	5306031	28	5308940	4
5213217	9	5215301	9	5306032	28	5308941	4
5213300	9	5215302	9	5306033	28	5308942	4
5213301	9	5215303	9	5306050	28	5308943	4
5213302	9	5215304	9	5306051	28	5308944	4
5213303	9	5215305	9	5306052	28	5308945	4
5213304	9	5215306	9	5306107	28	5308946	4
5213305	9	5215307	9	5306109	28	5308947	4
5213306	9	5215308	9	5306111	28	5308948	4
5213307	9	5215309	9	5306112	28	5308949	4
5213308	9	5215310	9	5306113	28	5308950	4
5213309	9	5215311	9	5306114	28	5308951	4
5213310	9	5215312	9	5306116	28	5308952	4
5213311	9	5215313	9	5306117	28	5308953	4
5213312	9	5215400	9	5306130	28	5308954	4
5213313	9	5215401	9	5306131	28	5308955	4
5213400	9	5215402	9	5306132	28	5308956	4
5213401	9	5215403	9	5306133	28	5308957	4
5213402	9	5215404	9	5306150	28	5308958	4
5213403	9	5215405	9	5306151	28	5308959	4
5213404	9	5215406	9	5306152	28	5308960	4
5213405	9	5215407	9	5308507	4	5308962	4
5213406	9	5215408	9	5308509	4	5309107	4
5213407	9	5215409	9	5308511	4	5309109	4
5213408	9	5215410	9	5308513	4	5309111	4
5213409	9	5215411	9	5308516	4	5309113	4
5213410	9	5215412	9	5308521	4	5309116	4
5213411	9	5215413	9	5308529	4	5309121	4
5213412	9	5215414	9	5308536	4	5309129	4
5213413	9	5215415	9	5308537	4	5309136	4
5213414	9	5215416	9	5308538	4	5309142	4
5213415	9	5215417	9	5308707	4	5309148	4
5213416	9	5216007	6	5308709	4	5309207	4
5213417	9	5216009	6	5308711	4	5309209	4
5215100	9	5216011	6	5308713	4	5309211	4
5215101	9	5216013	6	5308716	4	5309213	4
5215102	9	5216016	6	5308721	4	5309216	4
5215103	9	5216216	6	5308729	4	5309221	4
5215104	9	5216220	6	5308736	4	5309229	4
5215200	9	5216221	6	5308737	4	5309236	4
5215201	9	5218007	6	5308738	4	5309242	4
5215202	9	5218009	6	5308900	4	5309248	4

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
5309612	4	5315220	12	5315627	12	5315800	12
5309616	4	5315221	12	5315628	12	5315801	12
5309620	4	5315222	12	5315629	12	5315810	12
5309625	4	5315289	12	5315630	12	5315811	12
5309632	4	5315290	12	5315631	12	5315812	12
5309640	4	5315291	12	5315632	12	5315813	12
5309650	4	5315292	12	5315633	12	5315814	12
5309663	4	5315293	12	5315634	12	5315815	12
5309712	4	5315294	12	5315635	12	5315816	12
5309716	4	5315295	12	5315636	12	5315817	12
5309720	4	5315296	12	5315637	12	5315820	12
5309725	4	5315297	12	5315638	12	5315821	12
5309732	4	5315500	12	5315639	12	5315822	12
5309740	4	5315501	12	5315640	12	5315823	12
5309750	4	5315502	12	5315641	12	5315824	12
5309763	4	5315503	12	5315642	12	5315825	12
5313610	10	5315504	12	5315650	12	5315826	12
5313611	10	5315510	12	5315651	12	5315827	12
5313612	10	5315515	12	5315652	12	5315828	12
5313613	10	5315516	12	5315653	12	5315829	12
5313614	10	5315520	12	5315654	12	5315830	12
5313615	10	5315521	12	5315655	12	5315831	12
5313616	10	5315522	12	5315656	12	5315832	12
5313620	10	5315523	12	5315658	12	5315833	12
5313621	10	5315524	12	5315659	12	5315834	12
5313622	10	5315525	12	5315660	12	5315835	12
5313623	10	5315526	12	5315661	12	5315836	12
5313624	10	5315527	12	5315662	12	5315837	12
5313625	10	5315528	12	5315663	12	5315838	12
5313626	10	5315529	12	5315664	12	5315839	12
5313640	10	5315530	12	5315665	12	5315840	12
5313641	10	5315531	12	5315666	12	5315841	12
5313642	10	5315532	12	5315667	12	5315842	12
5313643	10	5315540	12	5315668	12	5315850	12
5313644	10	5315542	12	5315670	12	5315851	12
5313650	10	5315543	12	5315671	12	5315852	12
5313651	10	5315544	12	5315672	12	5315853	12
5313652	10	5315545	12	5315673	12	5315854	12
5313653	10	5315546	12	5315674	12	5315855	12
5313654	10	5315547	12	5315676	12	5315856	12
5315110	12	5315600	12	5315677	12	5315857	12
5315111	12	5315601	12	5315678	12	5315858	12
5315112	12	5315610	12	5315679	12	5315859	12
5315113	12	5315611	12	5315683	12	5315860	12
5315114	12	5315612	12	5315684	12	5315861	12
5315130	12	5315613	12	5315685	12	5315862	12
5315160	12	5315614	12	5315690	12	5315863	12
5315210	12	5315615	12	5315691	12	5315864	12
5315211	12	5315616	12	5315692	12	5315865	12
5315212	12	5315617	12	5315693	12	5315866	12
5315213	12	5315620	12	5315694	12	5315867	12
5315214	12	5315621	12	5315695	12	5315868	12
5315215	12	5315622	12	5315696	12	5315869	12
5315216	12	5315623	12	5315697	12	5315870	12
5315217	12	5315624	12	5315698	12	5315871	12
5315218	12	5315625	12	5315699	12	5315872	12
5315219	12	5315626	12	5315700	12	5315873	12



## Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
5315874	12	5316402	13	5318404	13	5320320	11
5315875	12	5316403	13	5318405	13	5320321	11
5315876	12	5316404	13	5318406	13	5320322	11
5315877	12	5316405	13	5318407	13	5320325	11
5315878	12	5316406	13	5318408	13	5320326	11
5315879	12	5316407	13	5318409	13	5320327	11
5315880	12	5316408	13	5318410	13	5320328	11
5315881	12	5316409	13	5318411	13	5320330	11
5315891	12	5316410	13	5318412	13	5320331	11
5315892	12	5316411	13	5318413	13	5320332	11
5315893	12	5316412	13	5318414	13	5320333	11
5315894	12	5316413	13	5318415	13	5320334	11
5315895	12	5316414	13	5318416	13	5320335	11
5315896	12	5316415	13	5318417	13	5320336	11
5315897	12	5316416	13	5320001	10	5320337	11
5315898	12	5316417	13	5320002	10	5320342	11
5315899	12	5318100	13	5320003	10	5320343	11
5315900	12	5318101	13	5320004	10	5320344	11
5316100	13	5318102	13	5320005	10	5320345	11
5316101	13	5318103	13	5320006	10	5320375	11
5316102	13	5318104	13	5320007	10	5320376	11
5316103	13	5318200	13	5320008	10	5320380	11
5316104	13	5318201	13	5320009	10	5320381	11
5316200	13	5318202	13	5320051	10	5320382	11
5316201	13	5318203	13	5320052	10	5320383	11
5316202	13	5318204	13	5320053	10	5320384	11
5316203	13	5318205	13	5320054	10	5320385	11
5316204	13	5318206	13	5320055	10	5320386	11
5316205	13	5318207	13	5320056	10	5320387	11
5316206	13	5318208	13	5320057	10	5320390	11
5316207	13	5318209	13	5320058	10	5320393	11
5316208	13	5318210	13	5320059	10	5320394	11
5316209	13	5318211	13	5320100	10	5320396	11
5316210	13	5318212	13	5320101	10	5320397	11
5316211	13	5318213	13	5320102	10	5320500	11
5316212	13	5318214	13	5320103	10	5320505	11
5316213	13	5318215	13	5320104	10	5320506	11
5316214	13	5318216	13	5320105	10	5320507	11
5316215	13	5318217	13	5320106	10	5320510	11
5316216	13	5318300	13	5320107	10	5320511	11
5316217	13	5318301	13	5320160	10	5320515	11
5316300	13	5318302	13	5320161	10	5320516	11
5316301	13	5318303	13	5320162	10	5320517	11
5316302	13	5318304	13	5320163	10	5320520	11
5316303	13	5318305	13	5320164	10	5320521	11
5316304	13	5318306	13	5320165	10	5320522	11
5316305	13	5318307	13	5320166	10	5320525	11
5316306	13	5318308	13	5320167	10	5320526	11
5316307	13	5318309	13	5320300	11	5320527	11
5316308	13	5318310	13	5320305	11	5320528	11
5316309	13	5318311	13	5320306	11	5320530	11
5316310	13	5318312	13	5320307	11	5320531	11
5316311	13	5318313	13	5320310	11	5320532	11
5316312	13	5318400	13	5320311	11	5320533	11
5316313	13	5318401	13	5320315	11	5320534	11
5316400	13	5318402	13	5320316	11	5320535	11
5316401	13	5318403	13	5320317	11	5320536	11



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
5320537	11	5321009	6	5321527	7	5330050	14
5320542	11	5321031	6	5321575	7	5330063	14
5320543	11	5321032	6	5321576	7	5330116	14
5320544	11	5321033	6	5321577	7	5330120	14
5320545	11	5321034	6	5321580	7	5330121	14
5320575	11	5321035	6	5321581	7	5330125	14
5320576	11	5321101	6	5321583	7	5330132	14
5320580	11	5321102	6	5321584	7	5330140	14
5320581	11	5321103	6	5321585	7	5330150	14
5320582	11	5321104	6	5321586	7	5330163	14
5320583	11	5321105	6	5321587	7	5330216	14
5320584	11	5321106	6	5321600	7	5330220	14
5320585	11	5321107	6	5321605	7	5330221	14
5320586	11	5321108	6	5321606	7	5330225	14
5320587	11	5321109	6	5321610	7	5330232	14
5320390	11	5321131	6	5321611	7	5330240	14
5320593	11	5321132	6	5321620	7	5330250	14
5320594	11	5321133	6	5321621	7	5330263	14
5320596	11	5321134	6	5321622	7	5507009	23
5320597	11	5321135	6	5321623	7	5507011	23
5320710	11	5321300	7	5321624	7	5507013	23
5320715	11	5321305	7	5321625	7	5507016	23
5320716	11	5321306	7	5321650	7	5507021	23
5320717	11	5321307	7	5321651	7	5507029	23
5320718	11	5321310	7	5321655	7	5507050	23
5320720	11	5321311	7	5321656	7	5507051	23
5320721	11	5321315	7	5321660	7	5507052	23
5320722	11	5321316	7	5321661	7	5507053	23
5320723	11	5321317	7	5321662	7	5507054	23
5320730	11	5321320	7	5321663	7	5507055	23
5320731	11	5321321	7	5321670	7	5507216	23
5320770	11	5321322	7	5321800	7	5507220	23
5320771	11	5321326	7	5321805	7	5507221	23
5320772	11	5321327	7	5321806	7	5507225	23
5320773	11	5321375	7	5321810	7	5507232	23
5320774	11	5321376	7	5321811	7	5507250	23
5320775	11	5321377	7	5321820	7	5507251	23
5320776	11	5321380	7	5321821	7	5507252	23
5320777	11	5321381	7	5321822	7	5507253	23
5320780	11	5321383	7	5321823	7	5507254	23
5320870	11	5321384	7	5321824	7	5508009	23
5320871	11	5321385	7	5321825	7	5508011	23
5320872	11	5321386	7	5321850	7	5508013	23
5320873	11	5321387	7	5321851	7	5508016	23
5320874	11	5321500	7	5321855	7	5508021	23
5320875	11	5321505	7	5321856	7	5508029	23
5320876	11	5321506	7	5321860	7	5508050	23
5320877	11	5321507	7	5321861	7	5508051	23
5320880	11	5321510	7	5321862	7	5508052	23
5321001	6	5321511	7	5321863	7	5508053	23
5321002	6	5321515	7	5321870	7	5508054	23
5321003	6	5321516	7	5330016	14	5508055	23
5321004	6	5321517	7	5330020	14	5808216	23
5321005	6	5321520	7	5330021	14	5808220	23
5321006	6	5321521	7	5330025	14	5808221	23
5321007	6	5321522	7	5330032	14	5808225	23
5321008	6	5321526	7	5330040	14	5808232	23

## Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
5808250	23	6011150	35	6102425	40	6200263	44
5808251	23	6011163	35	6102430	40	6200312	45
5808252	23	6100015	41	6102435	40	6200316	45
5808253	23	6100023	41	6104106	40	6200320	45
5808254	23	6100031	41	6104108	40	6200325	45
6000070	36	6100040	41	6104110	40	6200332	45
6000096	36	6100058	41	6104206	40	6200340	45
6000118	36	6100066	41	6104208	40	6200350	45
6000134	36	6100074	41	6104210	40	6200363	45
6000169	36	6100082	41	6104212	40	6400400	48
6000215	36	6100090	41	6104416	40	6400401	48
6000290	36	6100104	41	6104525	40	6400402	48
6000363	36	6100112	41	6104632	40	6400403	48
6000428	36	6100120	41	6104716	41	6400404	48
6000487	36	6100139	41	6104720	41	6400405	48
6004121	36	6100147	41	6104725	41	6400406	48
6004164	36	6100155	41	6104726	41	6400407	48
6004202	36	6100163	41	6104727	41	6400408	48
6004253	36	6100171	41	6104732	41	6400409	48
6004326	36	6100180	41	6104733	41	6400410	48
6004407	36	6100198	41	6104740	41	6400411	48
6004504	36	6100201	41	6104750	41	6400412	48
6004636	36	6100210	41	6104763	41	6400413	48
6008207	38	6100416	41	6104764	41	6400414	48
6008209	38	6100421	41	6104816	41	6400415	48
6008211	38	6100429	41	6104819	41	6604703	47
6008213	38	6102018	40	6104820	41	6604704	47
6008216	38	6102026	40	6104824	41	6604705	47
6008221	38	6102030	40	6104825	41	6604706	47
6008229	38	6102034	40	6104831	41	6604707	47
6008236	38	6102042	40	6104832	41	6604708	47
6008242	38	6102050	40	6104839	41	6604709	47
6008248	38	6102069	40	6104840	41	6604712	47
6010112	38	6102077	40	6104849	41	6604713	47
6010116	38	6102085	40	6104850	41	6604715	47
6010120	38	6102093	40	6104862	41	6604716	47
6010125	38	6102107	40	6104863	41	6604717	47
6010132	38	6102115	40	6104875	41	6604719	47
6010140	38	6102123	40	6200010	44	6604720	47
6010150	38	6102131	40	6200028	44	6604721	47
6010163	38	6102140	40	6200036	44	6604722	47
6011007	35	6102158	40	6200044	44	6604723	47
6011009	35	6102166	40	6200052	44	6604724	47
6011011	35	6102182	40	6200060	44	6604725	47
6011013	35	6102190	40	6200079	44	6604726	47
6011016	35	6102204	40	6200087	44	6604727	47
6011021	35	6102212	40	6200095	44	6604728	47
6011029	35	6102220	40	6200109	44	6604729	47
6011036	35	6102239	40	6200117	44	6604732	47
6011042	35	6102247	40	6200125	44	6604733	47
6011048	35	6102255	40	6200212	44	6604734	47
6011112	35	6102400	40	6200216	44	6604740	47
6011116	35	6102404	40	6200220	44	6604741	47
6011120	35	6102405	40	6200225	44	6604742	47
6011125	35	6102410	40	6200232	44	6604750	47
6011132	35	6102415	40	6200240	44	6604751	47
6011140	35	6102420	40	6200250	44	6604752	47

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
6604763	47	6702548	51	7008050	39	7211975	34
6604764	47	7004010	42	7008051	39	7211976	34
6604807	46	7004028	42	7008052	39	7211977	34
6604808	46	7004036	42	7008053	39	7211978	34
6604809	46	7004044	42	7008060	39	7211979	34
6604810	46	7004052	42	7008061	39	7211980	34
6604811	46	7004060	42	7008062	39	7211981	34
6604812	46	7004079	42	7008063	39	7211982	34
6604813	46	7004087	42	7211060	35	7211983	34
6604814	46	7004095	42	7211061	35	7211984	34
6604815	46	7004200	43	7211062	35	7211985	34
6604816	46	7004201	43	7211063	35	7211986	34
6604817	46	7004202	43	7211064	35	7211990	34
6604818	46	7004203	43	7211065	35	7211991	34
6604819	46	7004204	43	7211066	35	7211992	34
6604820	46	7004205	43	7211067	35	7212112	35
6604821	46	7004206	43	7211068	35	7212116	35
6604822	46	7004207	43	7211069	35	7212120	35
6604823	46	7004208	43	7211107	35	7212125	35
6604829	46	7005301	39	7211109	35	7212132	35
6604830	46	7005302	39	7211111	35	7212140	35
6604831	46	7005303	39	7211113	35	7212150	35
6604832	46	7005304	39	7211116	35	7212163	35
6604836	46	7005305	39	7211121	35	7212212	35
6604837	46	7005306	39	7211129	35	7212216	35
6604842	46	7005307	39	7211130	35	7212220	35
6604843	46	7005308	39	7211131	35	7212225	35
6604848	46	7005309	39	7211132	35	7212232	35
6604849	46	7005310	39	7211485	34	7212240	35
6604850	46	7005311	39	7211486	34	7212250	35
6700507	52	7005312	39	7211487	34	7212263	35
6700509	52	7005313	39	7211488	34	7215070	49
6700511	52	7005314	39	7211495	34	7215096	49
6700513	52	7005315	39	7211496	34	7215118	49
6700516	52	7005316	39	7211497	34	7215134	49
6700521	52	7005317	39	7211498	34	7215169	49
6700529	52	7005318	39	7211851	34	7215215	49
6700536	52	7005319	39	7211852	34	7215290	49
6700542	52	7005320	39	7211853	34	7215363	49
6700548	52	7005321	39	7211854	34	7215428	49
6700612	52	7005322	39	7211855	34	7215487	49
6700616	52	7005323	39	7211856	34	7215517	50
6700620	52	7005324	39	7211857	34	7215525	50
6700625	52	7008018	39	7211858	34	7215533	50
6700632	52	7008020	39	7211859	34	7215541	50
6700640	52	7008021	39	7211860	34	7215550	50
6700650	52	7008030	39	7211881	34	7215568	50
6700663	52	7008031	39	7211882	34	7215576	50
6702507	51	7008032	39	7211883	34	7215584	50
6702509	51	7008040	39	7211884	34	7215592	50
6702511	51	7008041	39	7211885	34	7215606	50
6702513	51	7008042	39	7211886	34	7217012	49
6702516	51	7008043	39	7211887	34	7217016	49
6702521	51	7008044	39	7211888	34	7217020	49
6702529	51	7008045	39	7211889	34	7217025	49
6702536	51	7008046	39	7211890	34	7217032	49
6702542	51	7008047	39	7211974	34	7217040	49

## Index

---

<b>Part No.</b>	<b>Page</b>	<b>Part No.</b>	<b>Page</b>
7217050	49	8113494	54
7217063	49	8113495	54
7217312	50	8113496	54
7217316	50	8113497	54
7217320	50	8113498	54
7217325	50		
7217332	50		
7217340	50		
7217350	50		
7217363	50		
7303076	57		
7303092	57		
7303114	57		
7303130	57		
7303165	57		
7303211	57		
7303212	57		
7303297	57		
7303360	57		
7303483	57		
7303712	57		
7303716	57		
7303717	57		
7303718	57		
7303720	57		
7303721	57		
7303725	57		
7303726	57		
7303732	57		
7303733	57		
8112070	53		
8112096	53		
8112118	53		
8112134	53		
8112169	53		
8112215	53		
8112250	53		
8112290	53		
8112320	53		
8112363	53		
8112428	53		
8112500	53		
8112675	53		
8113301	54		
8113302	54		
8113303	54		
8113304	54		
8113305	54		
8113306	54		
8113307	54		
8113308	54		
8113309	54		
8113310	54		
8113490	54		
8113491	54		
8113492	54		
8113493	54		

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*Our enclosures provide needed protection in a functional and creative way, while enhancing the value of your product with their appealing designs.*

*Whatever your application may be, you can rely on our enclosures to meet the most demanding requirements.*

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Polycarbonate/Polystyrene enclosures will last indefinitely without corrosion

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## **Impact Resistant**

Non-metallic enclosures withstand bumps and blows, they will not dent

## **Maintenance Free**

Surface finish does not deteriorate and requires no special painting or refinishing

## **Chemical resistant**

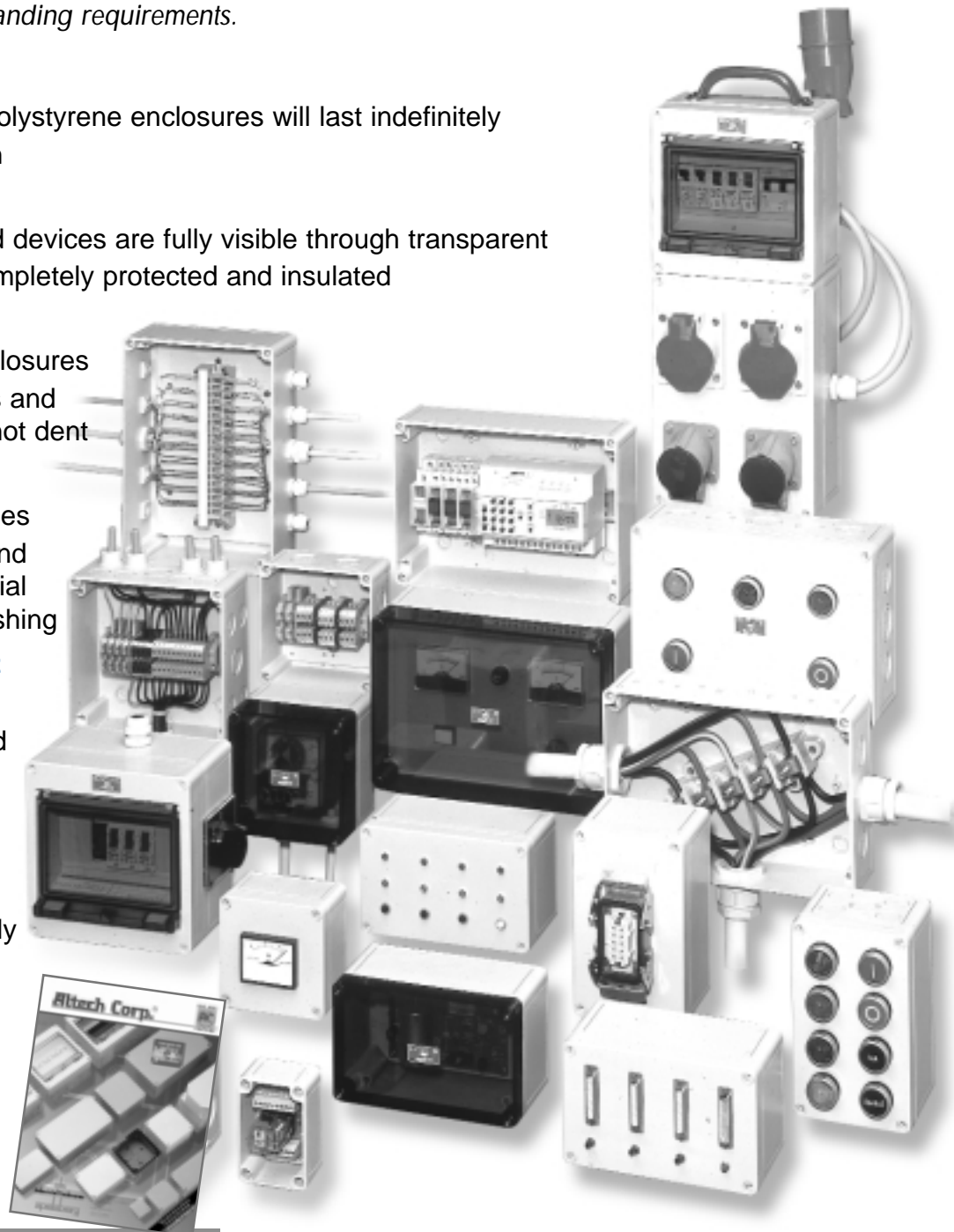
Resist weak and strong bases and acids

## **Lightweight**

Non-metallic enclosures weigh significantly less than metal, simplifying handling

## **Flexibility**

Enclosures can be easily customized



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*Illustrated are just a few of the applications for our enclosures.*