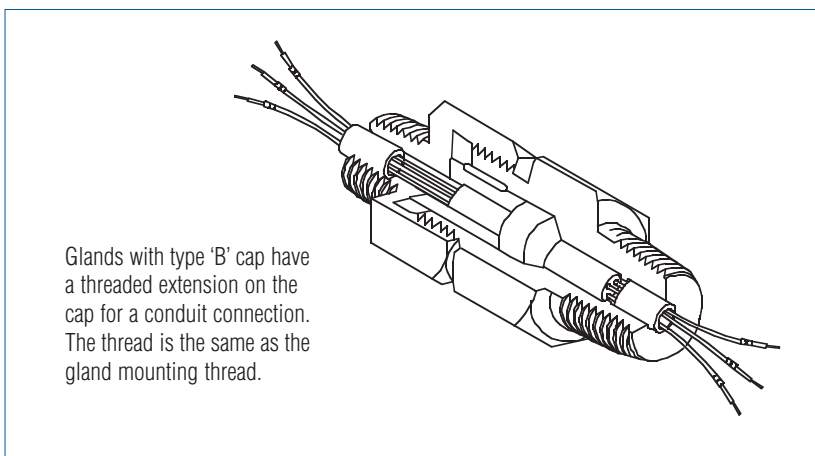


- **SEALS 1 to 12 WIRES
SIZES 8 to 18 AWG**
- **AVAILABLE WITH OR WITHOUT
KAPTON-INSULATED COPPER
OR THERMOCOUPLE MATERIAL
CONDUCTORS**
- **PRESSURE:
Vacuum to 690 bar**
- **TEMPERATURE:
-240°C to +232°C**
- **RATED 600Vac / 850Vdc
@ 55A MAX.**
- **EASILY ASSEMBLED IN THE
FIELD, WIRES CAN BE
INDIVIDUALLY REPLACED**
- **WIRE IDENTIFICATION
MARKERS APPLIED**
- **EASY INSTALLATION -
NO POTTING**



PL glands carry from 1 up to 12 wires in 8 AWG to 18 AWG wire sizes. Standard glands are supplied with Kapton insulated copper or thermocouple material wires pre-installed in the gland that is torqued ready for installation. PL glands can also be supplied untorqued and without wires.

Applications for PL glands include:

Safety seals for transformers and motor power supplies, conduit and junction box feedthroughs, power and instrumentation feedthroughs in pressure vessels and vacuum chambers, autoclaves and ovens.

PL gland bodies, followers and caps are manufactured from Stainless Steel AISI grades 316L (W.-Nr. 1.4404) and 303 (1.4305). Other materials may be specified. PL insulators are Alumina. Body and cap sleeves are Teflon.

Conax pressure and vacuum sealing assemblies can be specified for use in a range of temperature, pressure and environmental situations by choosing a sealant that is suitable for the application. Replacement sealants and replacement packing sets (sealant and insulators) are available to enable repeated use of fittings.

SEALANT SELECTION GUIDE

Sealant (Sealant Code)	Temperature range	Pressure range @ 20°C
Teflon (T)	-185°C to +232°C	Vacuum to 345 bar
Grafoil (G)	-240°C to +232°C	Vacuum to 690 bar

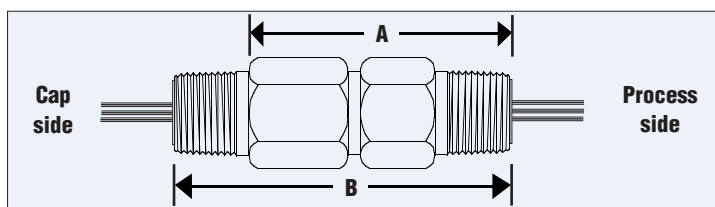
Kapton is a polyamide film with an FEP binder that is hermetically wrapped on wires with a 50% overlap. It is abrasion resistant and has excellent dielectric and insulation properties. It does not readily absorb moisture but should not be used in environments where pH>12.

SPECIFICATIONS, ORDERING INFORMATION

Wire size (AWG) (See note 2)	Number of wires	Current rating per wire (A)	Gland mounting thread (NPT)	Gland Description [Order Code] (See note 1)	Pressure rating by sealant (bar) (See note 3)	
					Teflon (T)	Grafoil (G)
18	1	5	1/8"	PL-18-*1-***-¶	345	690
	2, 3 or 4		1/2"	PL-18-* -***-¶	275	690
	6 or 8		3/4"	PL-18-* -***-¶	185	690
	10 or 12			PL-18-* -***-¶	145	690
16	2, 3 or 4	10	1/2"	PL-16-* -***-¶	205	690
	6 or 8		3/4"	PL-16-* -***-¶	185	690
	10 or 12			PL-16-* -***-¶	115	690
14	1	20	1/2"	PL-14-*1-***-¶	205	690
	2			PL-14-*2-***-¶	100	690
	3			PL-14-*3-***-¶	135	690
	4			PL-14-*4-***-¶	110	690
	6 or 8		3/4"	PL-14-* -***-¶	110	690
	10 or 12			PL-14-* -***-¶	95	690
12	2, 3, 4 or 6	25	3/4"	PL-12-* -***-¶	80	600
10	2, 3 or 4	40	3/4"	PL-10-* -***-¶	80	-
8	2	55	3/4"	PL-8-*2-***-¶	55	550
	3			PL-8-*3-***-¶	55	550

DIMENSIONS

Size of gland	Gland mounting thread (NPT)	Body Hex size (in.)	Cap Hex size (in.)	Length of gland with type A cap Dim. A (mm)	Length of gland with type B cap Dim. B (mm)
PL-18-*1 PL-14-*1	1/8"	1/2	9/16	37.30	46.83
PL-18-*2, 3 & 4 PL-16-*2,3 & 4 PL-14-*2	1/2"	1	1	66.68	85.73
PL-14-*3 & 4	1/2"	1 1/8	1 1/4	73.03	92.08
PL-18-*6 & 8 PL-14-*6 & 8 PL-12 PL-10 PL-8-*2	3/4"				
PL-18-*10 & 12 PL-16-*10 & 12 PL-14-*10 & 12 PL-8-*3	3/4"				



NOTES

Note 1:

The Gland Description [Order Code] shown in the table, is completed by selecting the type of cap required - A or B is inserted at * followed by the number of wires required. The code letter for the sealant selected is inserted at **.

The length of wire required is inserted at ¶ in the following way: xz/yz, where
x = wire length on cap side of gland,
y = wire length on process side,
z = units of measurement (m. - metres to the nearest 0.1m., or, in. - inches)
Minimum wire length: 600mm (0.6m.) total.
Bulk wire in selected sizes is available.

Example: PL-18-A4-G-1m/2m
describes a PL-18 size gland with 4 x 18AWG copper wires (1/2" NPT mounting thread), with type A cap and Grafoil sealant. 1 metre of wire is required on the cap side of the gland and 2 metres of wire on the process side.

When thermocouple material wires are required, the type of T/C wire (18AWG size, types E, J, K & T available) is added after the wire size in the order code.

Example: PL-18(J)-A4-G-1m/2m
describes a PL-18 size gland with 2 x J-type thermocouple pairs.

When no wires are required the wire length information is omitted and XX is placed after the sealant code.

Example: PL-18-A4-G-XX

Replacement Sealant Order Code

Example: RS-PL-18-4-G

Replacement Packing Set Order Code

Example: RPS-PL-18-4-G

Note 2:

Customer-supplied insulated wire or other elements of equivalent o.d. may be used when PL glands are supplied without wire. An allowance of 0.48mm dia. should be made for the thickness of the Kapton insulation. Glands with Kapton insulated wire can be supplied with solderless (crimped) terminals fitted to wire ends - at additional cost.

Note 3:

All pressure and vacuum ratings are determined at 20°C with Kapton insulated copper wire as the element.



thermo-electra

measurement and control technics

P.O. box 73
2640 AB Pijnacker, The Netherlands
Phone: +31 15 362 12 00
Fax: +31 15 369 40 82
E-mail: mail@thermo.nl
Internet: www.thermo-electra.com