

G80 Internal thread connectors

One-stop connection solution

Instant | Convenient | Standard | High quality



G80 series connectors are designed for internal threads and are widely applied to block and connect various threaded holes, such as high pressure testing of automobile spare parts, Leak testing of new energy motor controller shells, etc. This series of connectors supports various actuation methods, suitable for a variety of manual and pneumatic applications.



Internal threaded connection solution

- * Easy-to-replace surface seals
- * Lever actuated operation, easy to operate
- * Diversified actuation methods for various scenarios
- * Neck length customization to avoid space collisions

Features of G80 series quick connectors

1. Modular actuation part

Three actuation methods are provided: pneumatic, button valve and lever, meeting the requirements of various applications.

2. O-ring

The O-ring is simple, reliable, and easy to be replaced, and requires low maintenance cost. The O-ring materials can be selected to adapt to different applications.

3. SUS316 body

SUS316 has excellent mechanical properties. It is durable and wear-resistant, and can significantly extend the service life of the connector.

4. Different neck lengths available

Three neck lengths are available to meet the space requirements and prevent space collisions.

5. Standardized maintenance

The internal structure is modularized, which enables integrated replacement and simple maintenance.

Body sizes



Lever actuated



Button actuated



Pneumatic actuated

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Advantages of G80 quick connectors

Connect to female threaded bore, expandable locking thread collet, no damage to screw threads	Actuation modularity to meet customer requirements for manual and pneumatic operation	Customized neck length to avoid volume interference	Flow hole attached to the screw thread collet to enhance the flow rate and shorten	O-ring seal, simple to be replaced and easily maintained

Specifications of G80 quick connectors

Max operation pressure	From Vacuum to 350 Bar
Sealing range	See the specification sheet.
Minimum threaded depth	See the specification sheet.
Termination port	G1/8, G1/4, G3/8, G1/2
Material of main body	316 stainless steel
Main seal	Buna-N
Internal seal	Buna-N, fluoroelastomer
Operation temperature	-20°C - 120°C

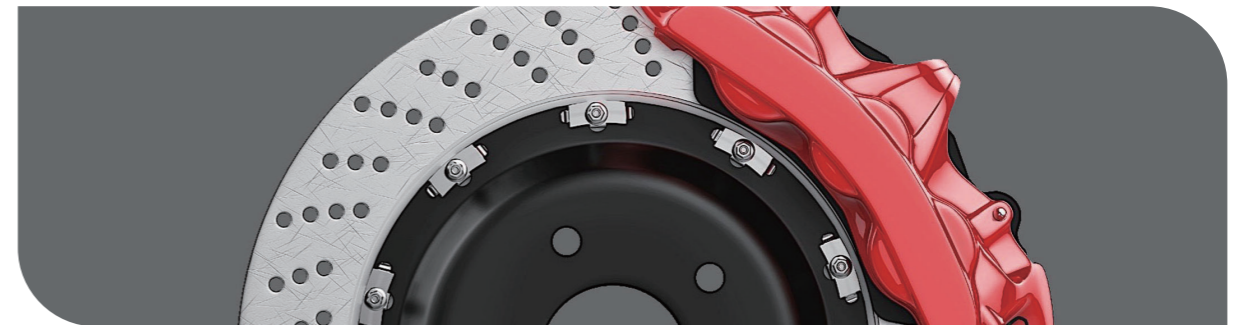
How to use G80

Step 1: Press down the lever.

Step 2: Insert the test piece into the threaded hole.

Step 3: Release the lever to complete the connection.

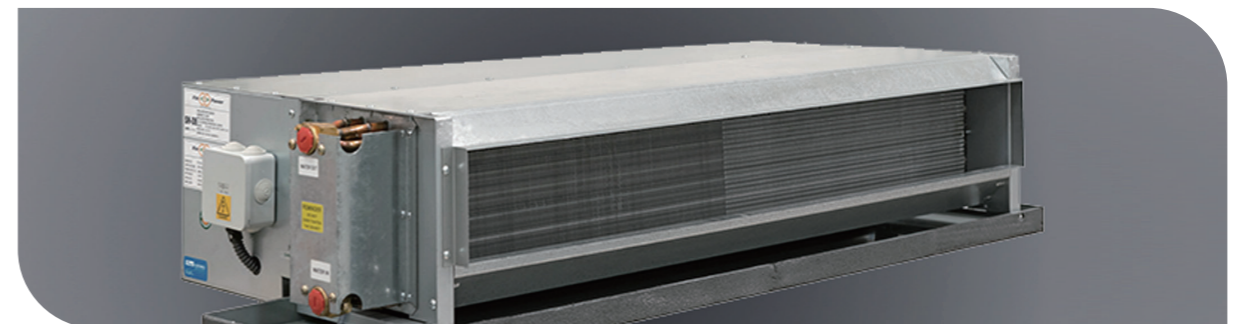
Applications



Brake caliper



Motor controller shell



HVAC industry

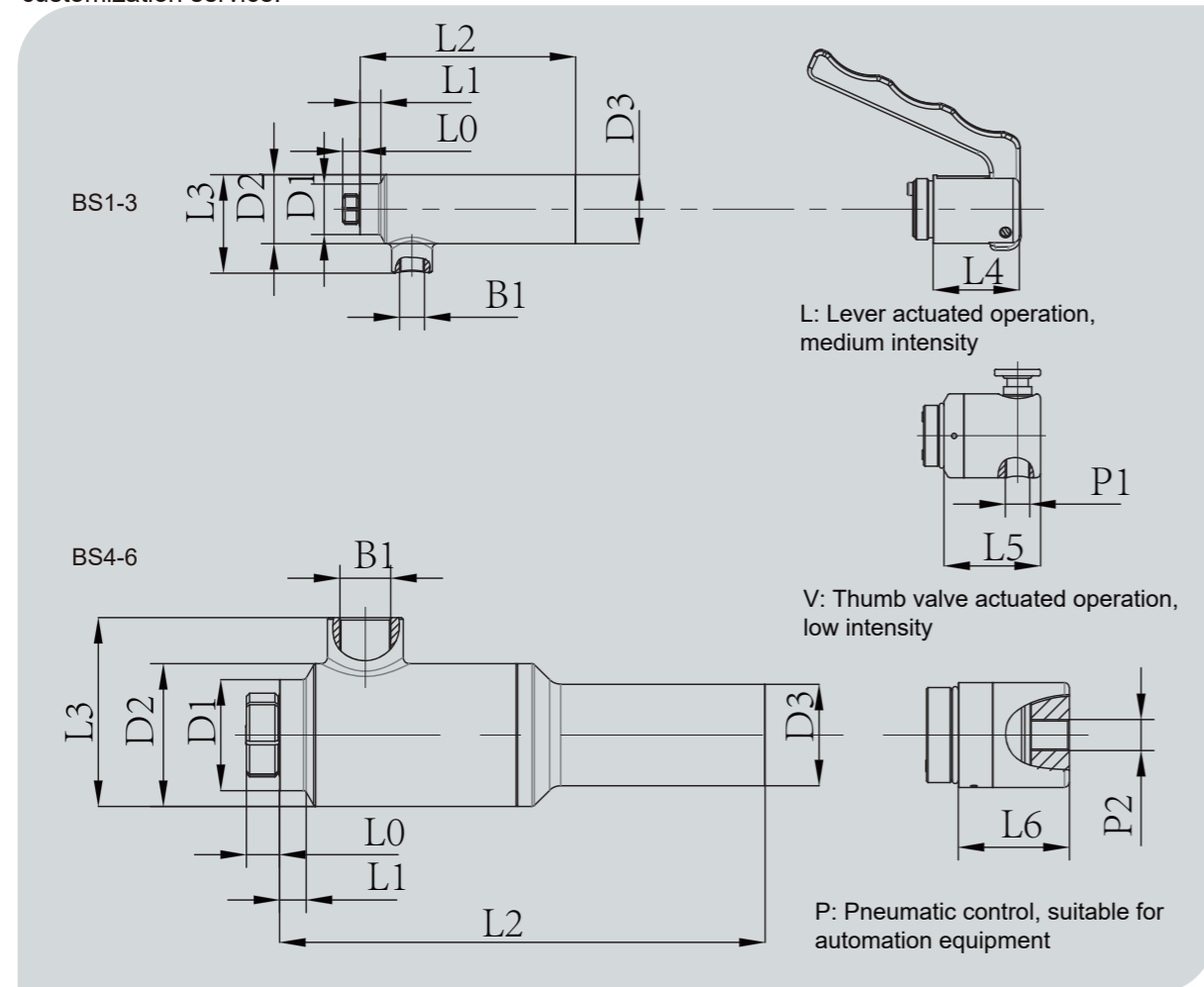
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Modularization of actuation methods: level-actuated G80L, pneumatic-actuated G80P, button-actuated G80V. These actuation methods are interchangeable to reduce the transformation cost and provide the customization service.



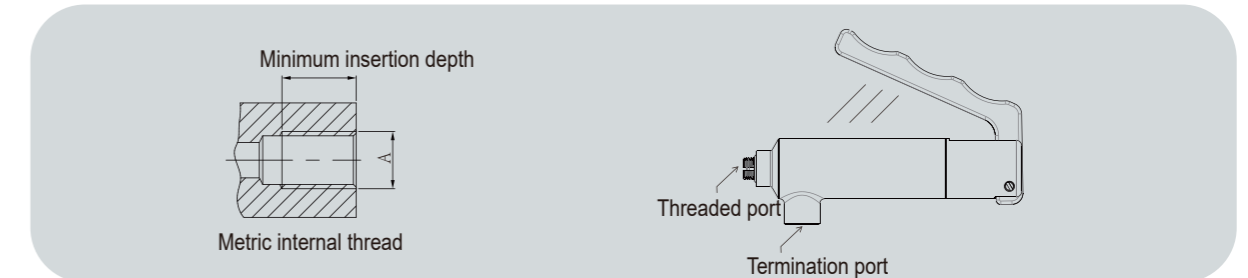
Part Number	B1 (Media Port)	D1	D2	D3	L0	L1	L2	L3	L4	L5	L6
1	G1/8"	16	27	27	7	6.5	85	38.5	34	38	32
1A	G1/8"	16	27	27	7	12.5	90	38.5	34	38	32
1B	G1/8"	16	27	27	7	25.5	105	38.5	34	38	32
2	G1/8"	20	27	27	7.5	6.5	85	38.5	34	38	32
2A	G1/8"	20	27	27	7.5	12.5	90	38.5	34	38	32
2B	G1/8"	20	27	27	7.5	25.5	110	38.5	34	38	32
3	G1/4"	25	32	32	10	9.5	100	46	35	41	35
4	G1/4"	30	38	32	11.5	8.5	123	54	35	41	35
5	G3/8"	35	45	32	12	7.5	153	60	35	41	35
6	G3/8"	40	50	32	12	7.5	153	67	35	41	35

Unit: mm

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G80 specification sheet for metric threads

Part Number	Internal Thread Diameter A	Body Size	Minimum Insertion Depth	Termination Port	Maximum Pressure	Material of main body	Seal Material	Main Seals Package
G80L-M8C	M8x1.0	1	7	G 1/8	200 Bar	316 Stainless Steel	Buna-N	SG80M10
G80L-M8D	M8x1.25	1						
G80L-M10C	M10 x 1.0	1						
G80L-M10D	M10 x 1.25	1						
G80L-M10E	M10 x 1.5	1						
G80L-M10C-12	M10 x 1.0	1A*						
G80L-M10D-12	M10 x 1.25	1A						
G80L-M10E-12	M10 x 1.5	1A						
G80L-M10C-25	M10 x 1.0	1B*						
G80L-M10D-25	M10 x 1.25	1B						
G80L-M10E-25	M10 x 1.5	1B						
G80L-M12C	M12 x 1.0	2	7.5	G 1/8	200 Bar	316 Stainless Steel	Buna-N	SG80M12
G80L-M12D	M12 x 1.25	2						
G80L-M12E	M12 x 1.5	2						
G80L-M12C-12	M12 x 1.0	2A*						
G80L-M12D-12	M12 x 1.25	2A						
G80L-M12E-12	M12 x 1.5	2A						
G80L-M12C-25	M12 x 1.0	2B*						
G80L-M12D-25	M12 x 1.25	2B						
G80L-M12E-25	M12 x 1.5	2B						
G80L-M14C	M14x1.0	2						
G80L-M14D	M14x1.25	2						
G80L-M14E	M14x1.5	2						
G80L-M16B	M16x0.8	3						
G80L-M16C	M16x1.0	3						
G80L-M16E	M16x1.5	3						
G80L-M18E	M18x1.5	3						
G80L-M20E	M20x1.5	4						
G80L-M22E	M22x1.5	4						
G80L-M24E	M24x1.5	5						
G80L-M26E	M26x1.5	5	12	G 3/8	200 Bar	316 Stainless Steel	Buna-N	SG80M24
G80L-M27F	M27x2.0	5						
G80L-M28E	M28x1.5	6						
G80L-M30E	M30x1.5	6						
G80L-M33F	M33x2.0	6						

1. Other thread specifications can be customized, and the max size is 2 inches.
2. For the 1A and 2A body sizes, the neck length is 12.5mm.
3. For the 1B and 2B body sizes, the neck length is 25.5mm, which is applicable to some applications with location restrictions.

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G80 thread specification sheet

Part Number	Internal Thread Diameter A	Body Size	Minimum Insertion Depth	Termination Port	Maximum Pressure	Material of main body	Seal Material	Main Seals Package
G80L-G01	G1/8"	1	7	G 1/8	200 Bar	316 Stainless Steel	Buna-N	SG8001
G80L-G02	G1/4"	2	7.5					SG8002
G80L-G03	G3/8"	3	10	G 1/4				SG8003
G80L-G04	G1/2"	4	11.5					SG8004
G80L-G06	G3/4"	5	12	G 3/8				SG8006
G80L-G08	G1"	6	12					SG8008

G80 specification sheet for BSPT threads

Part Number	Internal Thread Diameter A	Body Size	Minimum Insertion Depth	Termination Port	Maximum Pressure	Material of main body	Seal Material	Main Seals Package
G80L-R01	R1/8" (BSPT)	1	7	G 1/8	200 Bar	316 Stainless Steel	Buna-N	SG8001
G80L-R02	R1/4" (BSPT)	2	7.5					SG8002
G80L-R03	R3/8" (BSPT)	3	10	G 1/4				SG8003
G80L-R04	R1/2" (BSPT)	4	11.5					SG8004
G80L-R06	R3/4" (BSPT)	5	12	G 3/8				SG8006
G80L-R08	R1" (BSPT)	6	12					SG8008

G80 specification sheet for NPT threads

Part Number	Internal Thread Diameter A	Body Size	Minimum Insertion Depth	Termination Port	Maximum Pressure	Material of main body	Seal Material	Main Seals Package
G80L-N01	NPT1/8"	1	7	G 1/8	200 Bar	316 Stainless Steel	Buna-N	SG8001
G80L-N02	NPT1/4"	2	7.5					SG8002
G80L-N03	NPT3/8"	3	10	G 1/4				SG8003
G80L-N04	NPT1/2"	4	11.5					SG8004
G80L-N06	NPT3/4"	5	12	G 3/8				SG8006
G80L-N08	NPT1"	6	12					SG8008

G80 specification sheet for UNF threads

Part Number	Internal Thread Diameter A	Body Size	Minimum Insertion Depth	Termination Port	Maximum Pressure	Material of main body	Seal Material	Main Seals Package	
G80L-U02	UNF5/16-24	1	7	G 1/8	200 Bar	316 Stainless Steel	Buna-N	SG80UN02	
G80L-U03	UNF3/8-24	1	7					SG80UN03	
G80L-U04	UNF7/16-20	2	7.5					SG80UN04	
G80L-U05	UNF1/2-20	2	7.5					SG80UN05	
G80L-U06	UNF9/16-18	2	7.5					SG80UN06	
G80L-U08	UNF3/4-16	4	11.5					G 1/4	SG80UN08
G80L-U10	UNF 7/8-14	4	11.5	SG80UN10					
G80L-U12	UNF 1-1/16-12	5	12	G 3/8					SG80UN12
G80L-U14	UNF1-3/16-12	6	12						SG80UN14
G80L-U16	UNF 1-5/16-12	6	12						SG80UN16

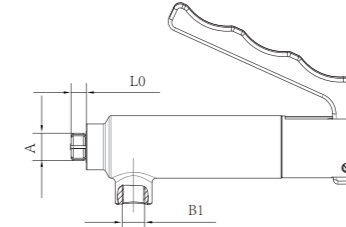
Note: The letter after "G80" indicates the actuation method of the connector:

G80L indicates lever actuated operation, G80V indicates button actuated operation, and G80P indicates pneumatic actuated operation. Both G80V and G80P must be connected to a pneumatic pipe with a pilot pressure of 4-6 bar.

G80 Internal thread connectors

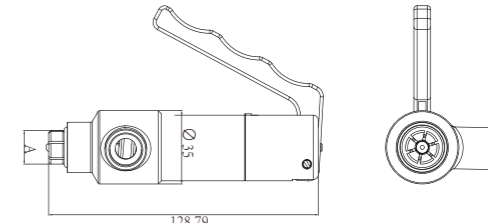
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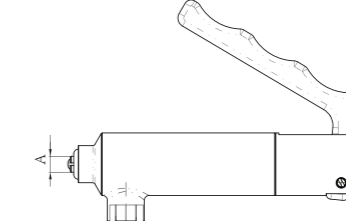
G80H high pressure version (For hydraulic application)

Part Number	Dim A	Body Size	Minimum Insertion Depth	Termination Port	Maximum Pressure	Material of main body	Seal Material	Main Seals Package
G80HL-G01	G1/8"	1	12	G1/8"	350 Bar	316 Stainless Steel	Buna-N	SG80G01
G80HL-G01-12	G1/8"	1A	12	G1/8"				SG80G01
G80HL-G02	G1/4"	2	7.5	G1/8"				SG80G02
G80HL-G02-12	G1/4"	2A	13	G1/8"				SG80G02
G80HL-G03	G3/8"	3	8	G1/4"				SG80G03
G80HL-M10C	M10x1.0	1	12	G1/8"				SG80M10
G80HL-M10C-12	M10x1.0	1A	12	G1/8"				SG80M10
G80HL-M14E	M14x1.5	2	7.5	G1/8"				SG80M14
G80HL-M16E	M16x1.5	3	10	G1/4"				SG80M16
G80HL-M18E	M18x1.5	3	10	G1/4"				SG80M18
G80HL-M20E	M20x1.5	4	11.5	G1/4"				SG80M20
G80HL-M22E	M22x1.5	4	11.5	G1/4"				SG80M22
G80HL-M27F	M27x2.0	5	12	G3/8"				SG80M27



G80S low pressure specification (Short version)

Part Number	Dim A	Body Size	Minimum Insertion Depth	Termination Port	Maximum Pressure	Material of main body	Seal Material	Main Seals Package
G80L-M16ES	M16*1.5	3S	10	G3/8"	50 Bar	316 Stainless Steel	Buna-N	SG80M16
G80L-M18ES	M18*1.5	3S	10	G3/8"				SG80M18
G80L-G03S	G3/8"	3S	10	G3/8"				SG80G03
G80L-R03S	R3/8"	3S	10	G3/8"				SG80R03



G80L - T thin-walled hole connector

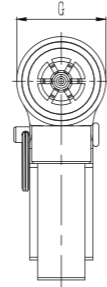
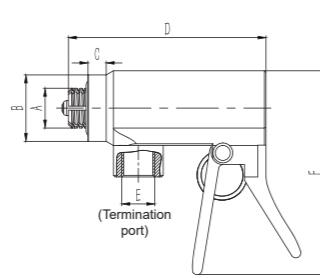
Part Number	Dim A	Body Size	Thin-Walled Plate Thickness	Termination Port	Maximum Pressure	Material of main body	Main Seals Package
G80L-T065	6.5	1	0.5-4	G1/8	10Bar	Stainless Steel	SG80T065
G80L-T065-H040	6.5	1	0.5-4	G1/8			SG80T065
G80L-T090	9	1	0.5-4	G1/8			SG80T090
G80L-T10-12	10	1A	0.5-4	G1/8			SG80T10
G80L-T105-12	10.5	1A	0.5-4	G1/8			SG80T105

1. For the 1A and 2A body sizes, the neck length is extended to 12.5mm.
2. For the 1B and 2B body sizes, the neck length is extended to 25.5mm.

G80N Miniature internal thread connectors

One-stop connection solution

Instant | Convenient | Standard | High quality | Compact size



G80NL miniature low pressure version – Metric thread (M thread)

Part Number	Dim A	Body Size	Minimum Insertion Depth	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Maximum Pressure	Material of main body	Main Seals Package
G80NL-M10C	M10X1.0	1NL	7	16	6	58.5	G1/8	58	18.2	50Bar	Stainless Steel	SG80NLM10
G80NL-M10D	M10X1.25	1NL	7	16	6	58.5	G1/8	58	18.2			
G80NL-M10E	M10X1.5	1NL	7	16	6	58.5	G1/8	58	18.2			
G80NL-M10C-12	M10X1.0	1NLA	6	16	18.5	71	G1/8	58	18.2			
G80NL-M10D-12	M10X1.25	1NLA	6	16	18.5	71	G1/8	58	18.2			
G80NL-M10E-12	M10X1.5	1NLA	6	16	18.5	71	G1/8	58	18.2			
G80NL-M10C-25	M10X1.0	1NLB	6	16	31.5	84	G1/8	58	18.2			
G80NL-M10D-25	M10X1.25	1NLB	6	16	31.5	84	G1/8	58	18.2			
G80NL-M10E-25	M10X1.5	1NLB	6	16	31.5	84	G1/8	58	18.2			
G80NL-M12C	M12X1.0	2NL	8	20	6	60.5	G1/8	60	22.5			
G80NL-M12D	M12X1.25	2NL	8	20	6	60.5	G1/8	60	22.5			
G80NL-M12E	M12X1.5	2NL	8	20	6	60.5	G1/8	60	22.5			
G80NL-M12C-12	M12X1.0	2NLA	8	20	18.5	73	G1/8	60	22.5			
G80NL-M12D-12	M12X1.25	2NLA	8	20	18.5	73	G1/8	60	22.5			
G80NL-M12E-12	M12X1.5	2NLA	8	20	18.5	73	G1/8	60	22.5			
G80NL-M12C-25	M12X1.0	2NLB	8	20	31.5	86	G1/8	60	22.5			
G80NL-M12D-25	M12X1.25	2NLB	8	20	31.5	86	G1/8	60	22.5			
G80NL-M12E-25	M12X1.5	2NLB	8	20	31.5	86	G1/8	60	22.5			
G80NL-M14E	M14X1.5	2NL	8	20	6	60.5	G1/8	60	22.5			SG80NLM14
G80NL-M16E	M16X1.5	3NL	8	24	6	65	G1/8	65	27			SG80NLM16
G80NL-M18E	M18X1.5	3NL	8	24	6	65	G1/8	65	27	SG80NLM18		
G80NL-M20E	M20X1.5	4NL	11.5	29	6.2	70.4	G1/8	71.9	32	SG80NLM20		
G80NL-M22E	M22X1.5	4NL	11.5	29	6.2	70.4	G1/8	71.9	32	SG80NLM22		
G80NL-M24E	M24X1.5	5NL	12	33.7	7.5	80.2	G3/8	114.9	40.7	SG80NLM24		
G80NL-M24F	M24X2.0	5NL	12	33.7	7.5	80.2	G3/8	114.9	40.7	SG80NLM24		
G80NL-M26E	M26X1.5	5NL	12	33.7	7.5	80.2	G3/8	114.9	40.7	SG80NLM26		
G80NL-M27F	M27X2.0	5NL	12	33.7	7.5	80.2	G3/8	114.9	40.7	SG80NLM27		

G80N Miniature internal thread connectors

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G80NL miniature low pressure version – thread (G thread)

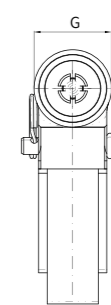
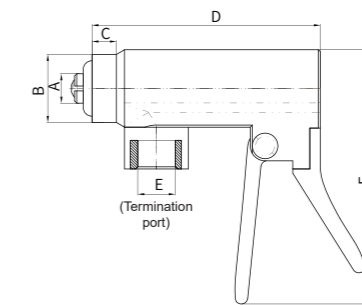
Part Number	Dim A	Body Size	Minimum Insertion Depth	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Maximum Pressure	Material of main body	Main Seals Package
G80NL-G01	G1/8"	1NL	7	16	6	58.5	G1/8	58	18.2	50Bar	Stainless Steel	SG80NL001
G80NL-G02	G1/4"	2NL	8	20	6	60.5	G1/8	60	22.5			SG80NL002
G80NL-G03	G3/8"	3NL	8	24	6	65	G1/8	65	27			SG80NL003
G80NL-G04	G1/2"	4NL	11.5	29	6.2	70.4	G1/8	71.9	32			SG80NL004
G80NL-G06	G3/4"	5NL	12	33.7	7.5	80.2	G3/8	114.9	40.7			SG80NL006

G80NL miniature low pressure version – BSPT thread

Part Number	Dim A	Body Size	Minimum Insertion Depth	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Maximum Pressure	Material of main body	Main Seals Package
G80NL-R01	R1/8"(BSPT)	1NL	7	16	6	58.5	G1/8	58	18.2	50Bar	Stainless Steel	SG80NL001
G80NL-R02	R1/4"(BSPT)	2NL	8	20	6	60.5	G1/8	60	22.5			SG80NL002
G80NL-R03	R3/8"(BSPT)	3NL	8	24	6	65	G1/8	65	27			SG80NL003
G80NL-R04	R1/2"(BSPT)	4NL	11.5	29	6.2	70.4	G1/8	71.9	32			SG80NL004
G80NL-R06	R3/4"(BSPT)	5NL	12	33.7	7.5	80.2	G3/8	114.9	40.7			SG80NL006

G80NL miniature low pressure version – NPT thread

Part Number	Dim A	Body Size	Minimum Insertion Depth	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Maximum Pressure	Material of main body	Main Seals Package
G80NL-N01	NPT1/8"	1NL	7	16	6	58.5	G1/8	58	18.2	50Bar	Stainless Steel	SG80NL001
G80NL-N02	NPT1/4"	2NL	8	20	6	60.5	G1/8	60	22.5			SG80NL002
G80NL-N03	NPT3/8"	3NL	8	24	6	65	G1/8	65	27			SG80NL003
G80NL-N04	NPT1/2"	4NL	11.5	29	6.2	70.4	G1/8	71.9	32			SG80NL004
G80NL-N06	NPT3/4"	5NL	12	33.7	7.5	80.2	G3/8	114.9	40.7			SG80NL006



G80L - T thin-walled hole connector (Miniature version)

Part Number	Dim A	Body Size	Thin-Walled Plate Thickness	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Maximum Pressure	Material of main body	Main Seals Package
G80NL-T065	6.5	1NL	0.5-4	16	6	58.5	G1/8	58	18.2	50Bar	Stainless Steel	SG80T065
G80NL-T065-H040	6.5	1NL	0.5-4	16	6	58.5	G1/8	58	18.2			SG80T065
G80NL-T090	9	1NL	0.5-4	16	6	58.5	G1/8	58	18.2			SG80T090
G80NL-T10-12	10	1NLA	0.5-4	16	18.5	71	G1/8	58	18.2			SG80T10
G80NL-T105-12	10.5	1NLA	0.5-4	16	18.5	71	G1/8	58	18.2			SG80T105

1. For the 1NLA and 2NLA body sizes, the neck length is extended to 12.5mm.

2. For the 1NLB and 2NLB body sizes, the neck length is extended to 25.5mm.