

BEISIT®

倍仕得电气科技(杭州)股份有限公司
BEISIT ELECTRIC TECH (HANGZHOU) CO.,LTD.



SELF-LOCKING TYPE Fluid Connector 自锁式流体连接器

HANGZHOU • CHINA

SL

自锁式流体连接器

SELF-LOCKING TYPE Fluid Connector



应用领域 Application Fields

- 军工防务、航空航天等领域 Military defense, Aerospace and other fields
- 医疗设备 Medical equipment
- 数据中心、超级计算机 Data center, Supercomputer
- 核能、风电、光伏（储能、变流器）等新能源领域
Nuclear energy, wind power, photovoltaic (energy storage, converters) and other new energy fields
- 轨道交通、新能源汽车 Rail transit, New energy vehicles
- 工业 Industry

流体 Fluid

- 冷却液 Coolant
- 去离子水 Deionized water
- 水-乙二醇 Water-ethylene glycol
- 导热油 Heat conducting oil
- 酯类 Ester
- 煤油 kerosene
- PAO
-

SL

自锁式流体连接器

SELF-LOCKING TYPE Fluid Connector



安全 Safety

- 双向密封，接通/断开无泄漏。
- 设备需要过压保护时，可选自卸压的系列，避免断开后设备压力过高。
- 工作时，平头的设计既方便清洁又防止污染物进入。
- 插头插座均配有保护套，在运输过程中防止污染物进入。
- Two-way sealing, Switch on/off without leakage .
- Please select pressure release version to avoid high pressure of the equipment after disconnection.
- Flush, flat face design is easy to clean and prevents contaminants from entering .
- Protective covers are provided to prevent contaminants from entering during transportation.

稳定 Stable

- 钢珠锁紧结构使连接稳定可靠，适合冲击、振动环境。
- 插头插座连接处的端面O型圈保证连接面始终密封。
- 独特的设计，紧凑的结构，最小的体积确保最大流量，实现最小的压降。
- 内部导向的结构设计插入时使连接器具有很高的机械强度，适用于更大的机械应力环境。
- The steel ball locking structure makes the connection extremely strong, suitable for impact and vibration environment.
- An O-ring on the end face of the plug and socket connection ensures that the connection surface is always sealed.
- Unique design, precise structure, minimal volume to ensure large flow and low pressure drop.
- The internal guide design when the plug and socket are inserted enables the connector to have high mechanical strength, which is suitable for the situation of high mechanical stress.

可靠 Reliability

- 产品适用温度范围根据不同O型圈可覆盖-40℃~+200℃，更大范围温度请咨询我司。
- 精选的材质配合独特的表面处理使产品坚固可靠的同时，实现高耐腐蚀性、高耐磨性。
- 有多种密封材质可选，可兼容各种流体。
- The Applicable temperature range of the product can over -40 C to 200 C according to different O-rings. For wide range of temperature, please consult our company.
- The selected material and unique surface treatment contribute strong and reliable connection, increasing performance of the corrosion resistance.
- Various sealing materials are available to all kinds of fluids .

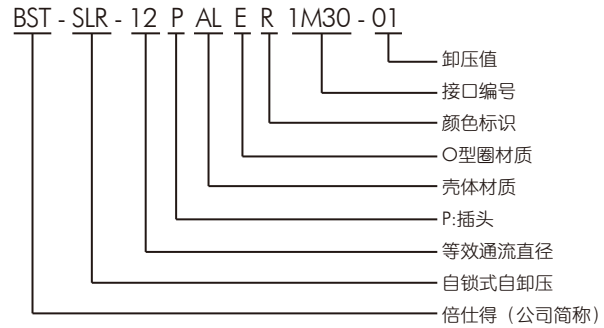
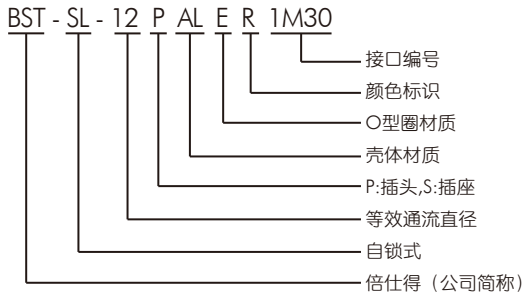
便捷 Convenient

- 自动锁紧功能，无需后拉推拉环，推入即可锁紧连接，操作轻松方便。
- 在视线不明处，实现无差别插合。
- 凸肩和滚花的长锁紧环方便抓握，使接通/断开轻松快捷。
- With automatic locking function, push to make a secure connection easy and convenient operation.
- Undifferentiated insertion in the absence of vision.
- Long lock ring with shoulder and knurled for easy grip , making connection/disconnection easier and faster.

丰富 Wide range

- 根据流量大小8种口径任意选择。
- 尾部接口形式多样满足您各种需求。
- 四种颜色可选，快速辨别不同温度回路。
- 口径、接口、颜色均可以根据客户需求定制（各批次间颜色会存在一定差异）。
- There are 8 sizes for you to choose upon to the flow rate.
- Various forms of termination can meet your needs.
- Four colors to identify different temperature loops.
- Diameter, interface and color can be customized according to customer requirements (There are some color differences between batches).

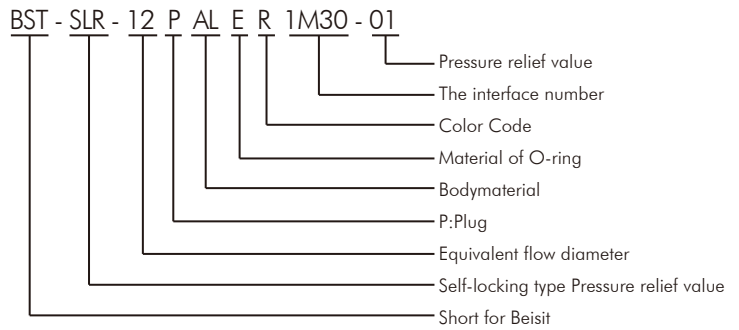
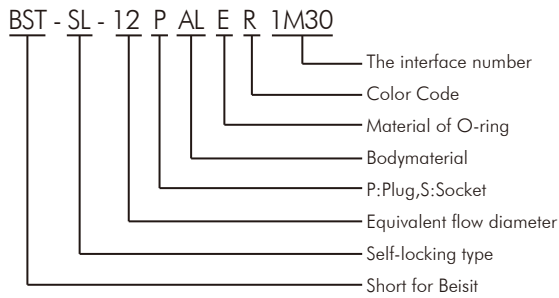
产品命名规则



颜色标识	R:红色； Y:黄色； G:绿色； B:蓝色
壳体材质	AL:铝； SS:不锈钢； BR:黄铜
O型圈材质	E:EPDM,三元乙丙橡胶,-20℃~+150℃ FV:FVMQ,氟硅橡胶,-40℃~+175℃ FP:FPM,氟碳橡胶, -10℃~+200℃ N:NBR,丁腈橡胶,-15℃~+100℃ FF:FFKM,全氟橡胶,0℃~+200℃
卸压值	01:卸压值0.2~0.7MPa,即自卸压插座断开时0~0.2MPa密封,卸压压力不大于0.7MPa。 02:卸压值0.8~1.6MPa,即自卸压插座断开时0~0.8MPa密封,卸压压力不大于1.6MPa。
等效通流直径	5:流体有效截面积与直径5mm的圆面积相等 8:流体有效截面积与直径8mm的圆面积相等 12:流体有效截面积与直径12mm的圆面积相等

接口编号	
1XXXX	-1:内螺纹,第二位便是螺纹类型(M:公制,G:G型螺纹,J:美制螺纹),后几位为螺纹大小,如1G12。
2XXXX	-2:外螺纹,第二位便是螺纹类型(M:公制,G:G型螺纹,J:美制螺纹),后几位为螺纹大小,如2G12。
3XX	-3:卡箍式,后两位为卡箍最小外径,如319。
4XXX	-4:法兰式,后几位为孔位尺寸,如43636。
5XXX	-5:为90°弯角,后几位为螺纹或法兰孔位尺寸,如51G12、53636。
6XXX	-6:无具体意义,特殊编号,或为定制接口。

PART NUMBERS



Color Code	R: red; Y: Yellow; G: Green; B: blue
Body material	AL: aluminum; SS: Stainless steel; BR: brass
Material of O-ring	E: EPDM, EPDM rubber, -20 C ~ +150 C FV: FVMQ, fluorine silicone rubber, -40 C ~ +175 C FP: FPM, fluorocarbon rubber, -10 C ~ +200 C N: NBR, Nitrile rubber, -15 C ~ +100 C FF: FFKM, The fluorine rubber, 0 C ~ +200 C
Pressure relief value	01: The pressure relief value is 0.2~ 0.7Mpa, that is, 0~ 0.2Mpa is sealed when the self-unloading socket is disconnected, and the pressure relief is not greater than 0.7Mpa. 02: The pressure relief value is 0.8~ 1.6Mpa, that is, 0~ 0.8Mpa is sealed when the self-unloading socket is disconnected, and the pressure relief is not greater than 1.6Mpa.
Equivalent flow diameter	5: The effective cross-sectional area of the fluid is equal to the area of a circle with a diameter of 5mm 8: The effective cross-sectional area of the fluid is equal to the area of a circle with a diameter of 8mm 12: The effective cross-sectional area of the fluid is equal to the area of a circle with a diameter of 12mm

The interface number	
1XXXX	-1: internal thread, followed by thread type (M: metric, G: G thread, J: American thread), followed by thread size, such as 1G12.
2XXXX	-2: external thread, followed by thread type (M: metric, G: G thread, J: American thread), followed by thread size, such as 2G12.
3XX	-3: clamp, followed by the minimum outer diameter of the clamping, such as 319.
4XXX	-4: Flange, followed by the hole size, such as 43636.
5XXX	-5: right angle, followed by the thread or flange hole size, such as 51G12 53636.
6XXX	-6: customer specific.

技术参数

工作温度	-55°C-+95°C	壳体材料种类	黄铜镀镍、铝合金、不锈钢可选
交变湿热	240h	密封件材料种类	丁腈橡胶、三元乙丙橡胶、氟硅橡胶、氟碳橡胶可选
盐雾测试	≥168h	振动测试	按GJB360B-2009方法214, 连接器承受1MPa压力无泄漏
机械寿命	1000次插拔	冲击测试	按GJB360B-2009方法213, 连接器承受1MPa压力无泄漏



普通型

产品型号	BST-SL-5	BST-SL-8	BST-SL-10	BST-SL-12	BST-SL-15	BST-SL-17	BST-SL-20	BST-SL-25
最大工作压力 (bar)	16	16	16	16	16	16	16	16
最小爆破压力 (MPa)	6	6	6	6	6	6	6	6
流量系数 (m³/h)	0.91	2.90	4.93	7.45	7.2	8.61	14.91	23.35
最大工作流量 (L/Min)	5.88	15.07	23.55	33.90	52.98	68.05	94.2	147.18
单次插拔最大泄露量 (ml)	0.02	0.02	0.03	0.05	0.09	0.10	0.12	0.15
最大插合力 (N)	50	85	110	135	150	180	180	180



自卸压型

产品型号	BST-SLR-5P	BST-SLR-12P
最大工作压力 (bar)	16	16
流量系数 (m³/h)	0.79	6.36
最大工作流量 (L/Min)	5.88	33.90
最大插合力 (N)	50	135

Technical Parameter

Working temperature	-55°C-+95°C	Body material	brass nickel plating, aluminum alloy, stainless steel
Alternating humidity and heat	240h	Sealing material	nitrile rubber, EPDM rubber, fluorosilicone rubber, fluorine-carbon rubber
Salt spray test	≥168h	Vibration test	according to GJB360B-2009 method 214, the connector is subjected to 1MPa pressure without leakage
Mating cycle	1000 times of plugging	Impact test	according to GJB360B-2009 method 213, the connector is subjected to 1MPa pressure without leakage



Ordinary Type

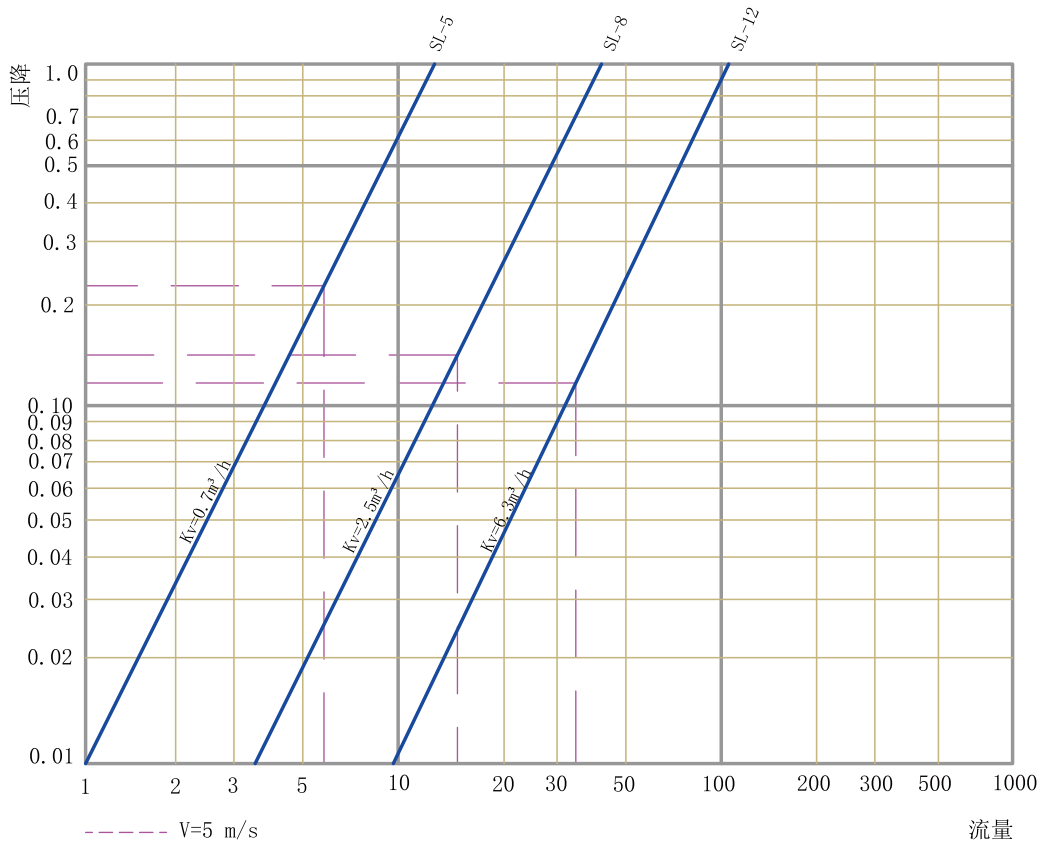
Product model	BST-BT-3	BST-BT-5	BST-BT-8	BST-BT-10	BST-BT-12	BST-BT-15	BST-BT-16	BST-BT-20
Maximum working pressure (bar)	16	16	16	16	16	16	16	16
Minimum burst pressure (MPa)	6	6	6	6	6	6	6	6
Flow coefficient (m ³ /h)	0.91	2.90	4.93	7.45	7.2	8.61	14.91	23.35
Maximum working flow (L/Min)	5.88	15.07	23.55	33.90	52.98	68.05	94.2	147.18
Maximum leakage (ml)	0.02	0.02	0.03	0.05	0.09	0.10	0.12	0.15
Maximum insertion force (N)	50	85	110	135	150	180	180	180



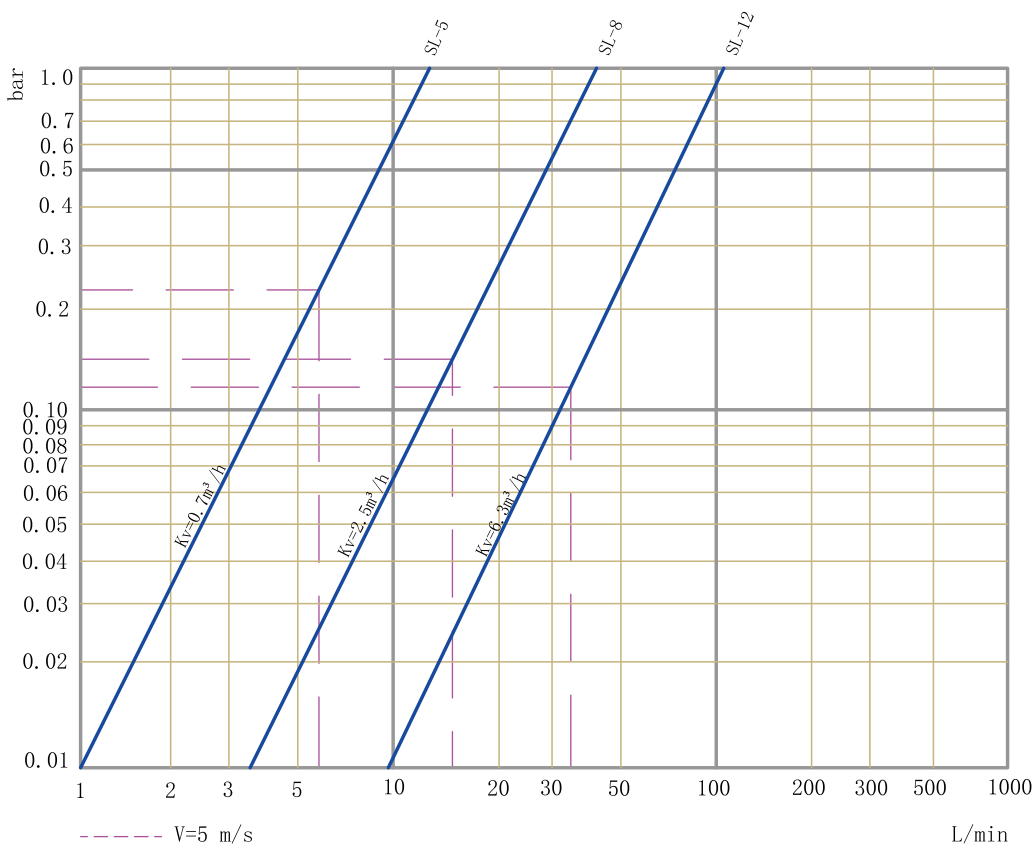
Pressure Relief Type

Product model	BST-SLR-5P	BST-SLR-12P
Maximum working pressure (bar)	16	16
Flow coefficient (m ³ /h)	0.79	6.36
Maximum working flow (L/Min)	5.88	33.90
Maximum insertion force (N)	50	135

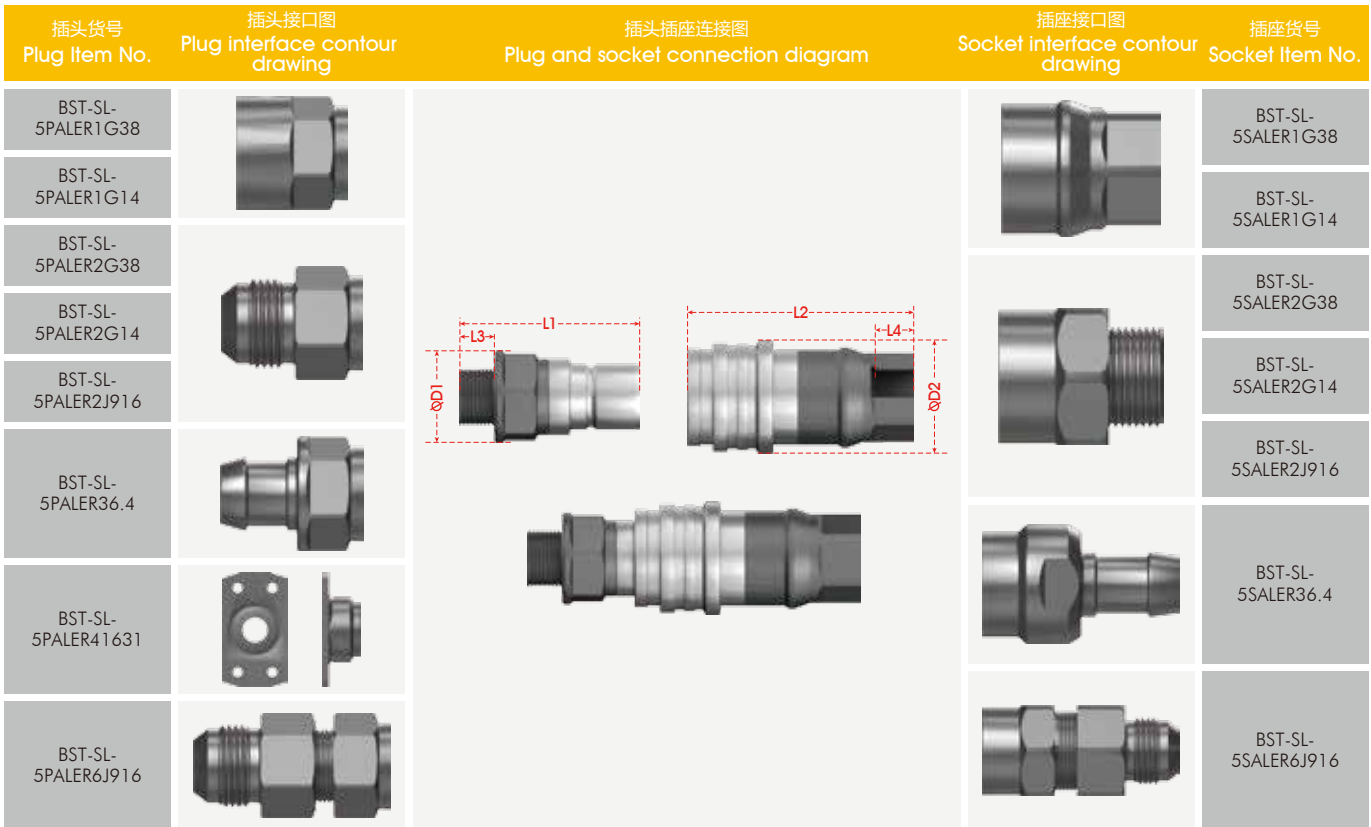
SL 流量曲线



SL Flow curve



→ SL-5



插头货号 Plug Item No.	插头接口编号 Plug interface number	总长L1 Total length L1 (mm)	接口长度L3 Interface length L3 (mm)	最大直径φD1 Maximum diameter ΦD1 (mm)	接口形式 Interface form
BST-SL-5PALER1G38	1G38	56	12	24	G3/8内螺纹
BST-SL-5PALER1G14	1G14	55.5	11	21	G1/4内螺纹
BST-SL-5PALER2G38	2G38	44.5	12	20.8	G3/8外螺纹
BST-SL-5PALER2G14	2G14	55.5	11	20.8	G1/4外螺纹
BST-SL-5PALER2J916	2J916	40.5	14	19	JIC 9/16-18外螺纹
BST-SL-5PALER36.4	36.4	51.5	18	21	接6.4mm内径软管卡箍
BST-SL-5PALER41631	41631	30	-	-	法兰接口螺丝孔位16x31
BST-SL-5PALER6J916	6J916	52.5+板厚 (1-4.5)	15.7	19	JIC 9/16-18外螺纹穿板式

插座货号 Socket Item No.	插座接口编号 Socket interface number	总长L2 Total length L2 (mm)	接口长度L4 Interface length L4 (mm)	最大直径φD2 Maximum diameter ΦD2 (mm)	接口形式 Interface form
BST-SL-5SALER1G38	1G38	56	12	26	G3/8内螺纹
BST-SL-5SALER1G14	1G14	51.5	11	26	G1/4内螺纹
BST-SL-5SALER2G38	2G38	53.5	12	26	G3/8外螺纹
BST-SL-5SALER2G14	2G14	53.5	11	26	G1/4外螺纹
BST-SL-5SALER2J916	2J916	53.5	14	26	JIC 9/16-18外螺纹
BST-SL-5SALER36.4	36.4	61.5	22	26	接6.4mm内径软管卡箍
BST-SL-5SALER6J916	6J916	64.9+板厚 (1-4.5)	25.4	26	JIC 9/16-18外螺纹穿板式

温馨提示 Warm Tips

1. 以上插头插座可任意组合成套，组合成套货号如：BST-SL-5PALER1G38+BST-SL-5SALER2J916。
2. 根据接口形式选择对应货号。
3. 因结构、接口、流体介质不同，流量系数存在差异，流量系数仅供参考。
4. 如需详细尺寸数据，可联系我司技术人员获取。
5. 如无合适接口，可联系我司根据客户特殊定制。

1. The above plugs and sockets can be combined in any way, and the combined article number can be combined in two terms, such as BST-SL-5PALER1G38+BST-SL-5SALER2J916.
2. Select the corresponding article number according to the form of interface.
3. Due to different structure, interface and fluid medium, the flow coefficient is different. Flow coefficient is for reference only.
4. For detailed size data, please contact our technical staff to obtain.
5. If there is no appropriate interface, you can contact our company according to the customer's special customization.

→ SL-8

插头货号 Plug Item No.	插头接口图 Plug interface contour drawing	插头插座连接图 Plug and socket connection diagram	插座接口图 Socket interface contour drawing	插座货号 Socket Item No.
BST-SL-8PALER1G12				BST-SL-8SALER1G12
BST-SL-8PALER1G38				BST-SL-8SALER1G38
BST-SL-8PALER2G12				BST-SL-8SALER2G12
BST-SL-8PALER2G38				BST-SL-8SALER2G38
BST-SL-8PALER2J34				BST-SL-8SALER2J34
BST-SL-8PALER316				BST-SL-8SALER316
BST-SL-8PALER6J34				BST-SL-8SALER5316
				BST-SL-8SALER52G12
				BST-SL-8SALER52G38
				BST-SL-8SALER6J34

插头货号 Plug Item No.	插头接口编号 Plug interface number	总长L1 Total length L1 (mm)	接口长度L3 Interface length L3 (mm)	最大直径φD1 Maximum diameter ΦD1 (mm)	接口形式 Interface form
BST-SL-8PALER1G12	1G12	48.9	11	23.5	G1/2内螺纹
BST-SL-8PALER1G38	1G38	44.9	11	23.5	G3/8内螺纹
BST-SL-8PALER2G12	2G12	44.5	14.5	23.5	G1/2外螺纹
BST-SL-8PALER2G38	2G38	42	12	23.5	G3/8外螺纹
BST-SL-8PALER2J34	2J34	46.7	16.7	23.5	JIC 3/4-16外螺纹
BST-SL-8PALER316	316	51	21	23.5	接16mm内径软管卡箍
BST-SL-8PALER6J34	6J34	59.5+板厚 (1-4.5)	16.7	23.5	JIC 3/4-16外螺纹穿板式

插座货号 Socket Item No.	插座接口编号 Socket interface number	总长L2 Total length L2 (mm)	接口长度L4 Interface length L4 (mm)	最大直径φD2 Maximum diameter ΦD2 (mm)	接口形式 Interface form
BST-SL-8SALER1G12	1G12	52.5	11	31	G1/2内螺纹
BST-SL-8SALER1G38	1G38	52.5	10	31	G3/8内螺纹
BST-SL-8SALER2G12	2G12	54	14.5	31	G1/2外螺纹
BST-SL-8SALER2G38	2G38	52.5	12	31	G3/8外螺纹
BST-SL-8SALER2J34	2J34	56.2	16.7	31	JIC 3/4-16外螺纹
BST-SL-8SALER316	316	61.5	21	31	接16mm内径软管卡箍
BST-SL-8SALER5316	5316	65	21	31	90°弯角+16mm内径软管卡箍
BST-SL-8SALER52G12	52G12	72	14.5	31	90°弯角+G1/2外螺纹
BST-SL-8SALER52G38	52G38	65	11.2	31	90°弯角+G3/8外螺纹
BST-SL-8SALER6J34	6J34	63.8+板厚 (1-4.5)	16.7	31	JIC 3/4-16外螺纹穿板式

温馨提示 Warm Tips

- 以上插头插座可任意组合成套，组合成套货号如：BST-SL-8PALER1G38+BST-SL-8SALER2J34。
- 根据接口形式选择对应货号。
- 因结构、接口、流体介质不同，流量系数存在差异，流量系数仅供参考。
- 如需详细尺寸数据，可联系我司技术人员获取。
- 如无合适接口，可联系我司根据客户特殊定制。

- The above plugs and sockets can be combined in any way, and the combined article number can be combined in two terms, such as BST-SL-8PALER1G38+BST-SL-8SALER2J34.
- Select the corresponding article number according to the form of interface.
- Due to different structure, interface and fluid medium, the flow coefficient is different. Flow coefficient is for reference only.
- For detailed size data, please contact our technical staff to obtain.
- If there is no appropriate interface, you can contact our company according to the customer's special customization.

→ SL-12

插头货号 Plug Item No.	插头接口图 Plug interface contour drawing	插头插座连接图 Plug and socket connection diagram	插座接口图 Socket interface contour drawing	插座货号 Socket Item No.
BST-SL-12PALER1G34				BST-SL-12SALER1G34
BST-SL-12PALER1G12				BST-SL-12SALER1G12
BST-SL-12PALER2G34				BST-SL-12SALER2G34
BST-SL-12PALER2G12				BST-SL-12SALER2G12
BST-SL-12PALER2M26				BST-SL-12SALER2M26
BST-SL-12PALER2J1116				BST-SL-12SALER2J1116
BST-SL-12PALER319				BST-SL-12SALER319
BST-SL-12PALER319				BST-SL-12SALER5319
BST-SL-12PALER5319				BST-SL-12SALER52M22
BST-SL-12PALER5319				BST-SL-12SALER52G34
BST-SL-12PALER6J1116				BST-SL-12SALER6J1116

插头货号 Plug Item No.	插头接口编号 Plug interface number	总长L1 Total length L1 (mm)	接口长度L3 Interface length L3 (mm)	最大直径φD1 Maximum diameter ΦD1 (mm)	接口形式 Interface form
BST-SL-12PALER1G34	1G34	66.8	14	34	G3/4内螺纹
BST-SL-12PALER1G12	1G12	66.8	14	34	G1/2内螺纹
BST-SL-12PALER2G34	2G34	66.8	13	34	G3/4外螺纹
BST-SL-12PALER2G12	2G12	66.8	13	34	G1/2外螺纹
BST-SL-12PALER2J1116	2J1116	75.7	21.9	34	JIC 1 1/16-12外螺纹
BST-SL-12PALER319	319	76.8	23	34	接19mm内径软管卡箍
BST-SL-12PALER6J1116	6J1116	92+板厚 (1~5.5)	21.9	34	JIC 1 1/16-12外螺纹穿板式

插座货号 Socket Item No.	插座接口编号 Socket interface number	总长L2 Total length L2 (mm)	接口长度L4 Interface length L4 (mm)	最大直径φD2 Maximum diameter ΦD2 (mm)	接口形式 Interface form
BST-SL-12SALER1G34	1G34	83.1	14	41.6	G3/4内螺纹
BST-SL-12SALER1G12	1G12	83.1	14	41.6	G1/2内螺纹
BST-SL-12SALER2G34	2G34	83.6	14.5	41.6	G3/4外螺纹
BST-SL-12SALER2G12	2G12	83.1	14	41.6	G1/2外螺纹
BST-SL-12SALER2M26	2M26	85.1	16	41.6	M26x1.5外螺纹
BST-SL-12SALER2J1116	2J1116	91	21.9	41.6	JIC 1 1/16-12
BST-SL-12SALER319	319	106	33	41.6	外螺纹接19mm内径软管卡箍
BST-SL-12SALER5319	5319	102.5	31	41.6	90°弯角+接19mm内径软管卡箍
BST-SL-12SALER5319	5319	103.8	23	41.6	90°弯角+接19mm内径软管卡箍
BST-SL-12SALER52M22	5M22	83.1	12	41.6	90°弯角+M22x1.5外螺纹
BST-SL-12SALER52G34	52G34	103.8	14.5	41.6	90°弯角+G3/4外螺纹
BST-SL-12SALER6J1116	6J1116	110.2+板厚 (1~5.5)	21.9	41.6	JIC 1 1/16-12外螺纹穿板式

温馨提示 Warm Tips

- 以上插头插座可任意组合成套，组合成套货号如：BST-SL-12PALER1G34+BST-SL-12SALER2M26。
- 根据接口形式选择对应货号。
- 因结构、接口、流体介质不同，流量系数存在差异，流量系数仅供参考。
- 如需详细尺寸数据，可联系我司技术人员获取。
- 如无合适接口，可联系我司根据客户特殊定制。

- The above plugs and sockets can be combined in any way, and the combined article number can be combined in two terms, such as BST-SL-12PALER1G34+BST-SL-12SALER2M26.
- Select the corresponding article number according to the form of interface.
- Due to different structure, interface and fluid medium, the flow coefficient is different. Flow coefficient is for reference only.
- For detailed size data, please contact our technical staff to obtain.
- If there is no appropriate interface, you can contact our company according to the customer's special customization.

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