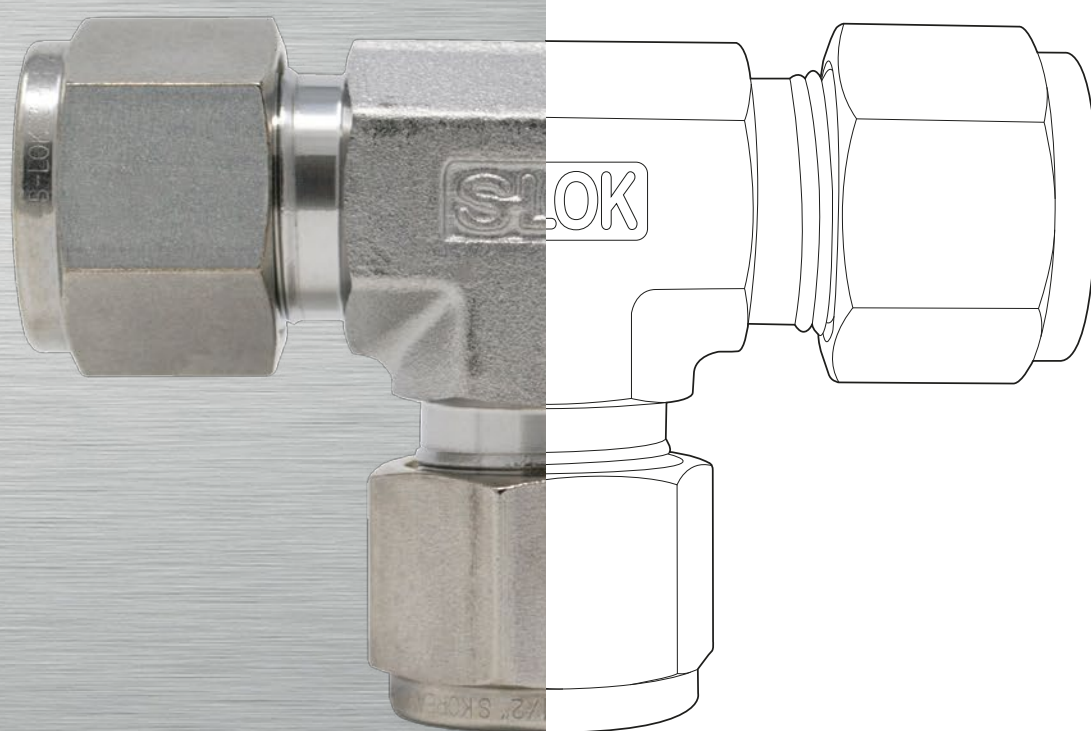




HYDROGEN COMPATIBLE PRODUCTS

CERTIFIED EC79
H35 PRESSURE CLASS





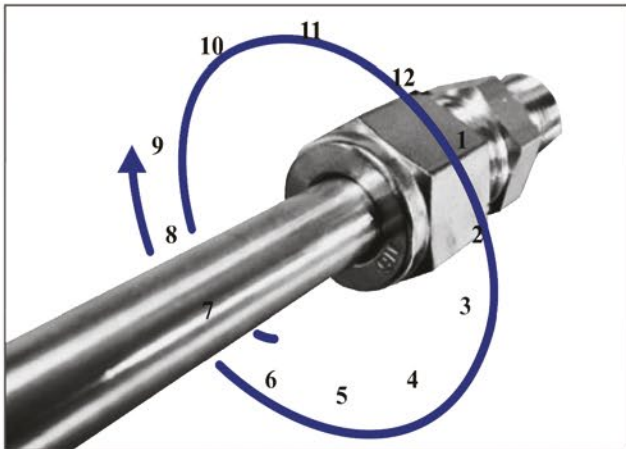
✚ Installation Instruction

- Fully insert the tube into the fitting and against the shoulder; tight the nut by finger-tightening.
- (Caution : The tube may be elliptical or have burrs; foreign material on the surface and/or inside of the tube fitting).



High-pressure applications and high safety factor system:
*- Snug up the nut with a wrench until the tubing does not rotate by hand or move along the axis in the fitting.
 - Consider this as starting point before 1 1/4 turn assembly.*

- Mark the nut at the 6 o'clock position before placing the spanner.



- While holding the fitting body steady, tight the nut with the spanner by turning 1-1/4 clockwise.
- Make sure that the spanner's starting point at 6 o'clock is being positioned at 9 o'clock after tightening 1-1/4 clockwise.
- Tighten the nut only 3/4 turn to the 3 o'clock position for 1/16", 1/8" and 3/16" (2mm, 3mm and 4mm) size tube fittings.
- When it was tightened 1-1/4 turn clockwise, the tube fitting has been designed to be durable even from the bursting pressure of the tube, therefore insufficient tightening against the regulation may cause the leakage and bursting while over-tightening makes the reassembly difficult due to deformity.

High-Pressure Gas Application:

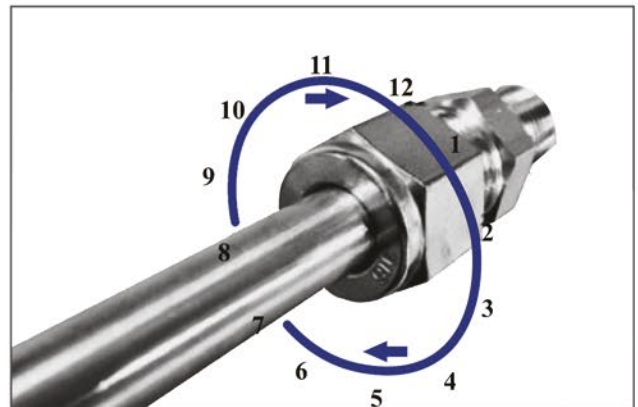
Common idea of high pressure gas application is considered the system pressurized 500 psig (34bar) or higher. Because the light gases (hydrogen, helium, nitrogen, air and etc.) have very small molecules which can escape through even the most minute leak-path. Any deformities on tube such as scratches, gouges, nicks can sometimes cause leak even use with high quality managed S-LOK Tube Fittings. For high pressure gas system, install the fittings with 1 1/4 turn from snug. It is a method to eliminate one cause of leak

✚ Gaugeability



- Gap inspection gauge assures the installer or the inspector that the instrument has been sufficiently tightened during the first installation inspection.
- Place gap inspection gauge at the gap between the nut and body.
- When the gauge does not fit into the gap, it means that the fitting is sufficiently tightened.
- When the gauge fits into the gap, it means that it needs to be tightened more.

✚ Reassembly Instruction



- S-LOK products can be disassembled and reassembled numerous.
- For reassembly, insert the tube with ferrules into the fitting until the front ferrule seats against the fitting body to avoid any damage from foreign objects at the disassembled area.
- After hand-tightening the nut while holding the fitting's body steady, tight the nut with a spanner to the previously pulled-up position.
- At this point, you would feel a significant increase in resistance.
- Then tight the nut slightly.

▲ Stainless Steel Tubing

Fully annealed 304 or 316 high quality seamless steel tube to ASTM A269 or equivalent. Recommended Hardness : HRB 90 or less

Stainless Steel Fractional Tubing

Tube O.D (inch)	Tube Wall Thickness (inch)															
	0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.156	0.188
1/16	5,600	6,800	8,100	9,400	12,000											
1/8						8,500	10,900					Working pressure (psig)				
3/16						5,400	7,000	10,200								
1/4						4,000	5,100	7,500	10,200							
5/16							4,000	5,800	8,000							
3/8							3,300	4,800	6,500	7500						
1/2							2,600	3,700	5,100	6,700						
5/8		For gas service, applying tube wall thickness should only be selected from the outside of the shaded boundary.						2,900	4,000	5,200	6,000					
3/4								2,400	3,300	4,200	4,900	5,800				
7/8								2,000	2,800	3,600	4,200	4,800				
1									2,400	3,100	3,600	4,200	4,700			
1-1/4										2,400	2,800	3,300	3,600	4,100	4,900	
1-1/2											2,300	2,700	3,000	3,400	4,000	4,900
2												2,000	2,200	2,500	2,900	3,600

Stainless Steel Metric Tubing

Tube O.D (mm)	Tube Wall Thickness (mm)														
	0.3	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	3.5	4.0	4.5	5.0
2	210	660													
3		670									Working pressure (bar)				
4		500	660												
6		310	420	540	710										
8			310	390	520										
10			240	300	400	510	580								
12			200	250	330	410	470								
14			160	200	270	340	380	430							
15			150	190	250	310	360	400							
16				170	230	290	330	370	400						
18				150	200	260	290	320	370						
20				140	180	230	260	290	330	380					
22				140	180	200	230	260	300	340					
25						180	200	230	260	290	320				
28							180	200	230	260	280	330			
30		For gas service, applying tube wall thickness should only be selected from the outside of the shaded boundary.					170	180	210	240	260	310			
32							160	170	200	220	240	290	330		
38								140	160	190	200	240	270	310	
50											150	180	210	240	270

- Working pressure are based on allowable stress value of 20,000psi (137,800kPa) as specified in ASME B31.3 within the temperature range of -29°C to 37°C (-20°F to 100°F), considering ultimate tensile strength 75,000psi (516,700kPa).

- Pressure calculation are based on Maximum O.D and minimum wall thickness and no allowance is made for corrosion and erosion.

- Welded tubing Based on ASME B31.3 for weld integrity, a de-rating factor must be applied to welded tubing.

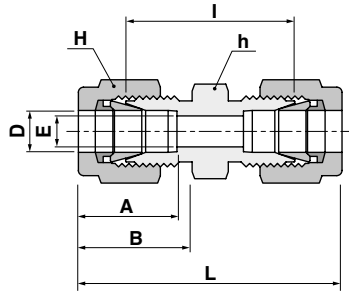
For double butt seam tubing, multiply by 0.85, For single butt seam tubing, multiply by 0.80.



TTU (Tube to Tube Union)

Union

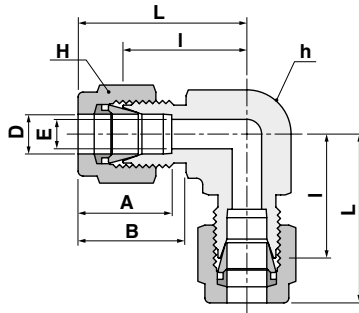
SU



Part No.	Tube O.D		E	Width across flat				A	B	I	L
	D			h		H					
	in	mm	Min	in	mm	in	mm				
SU-4-H35	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	26.16	40.89
SU-5-H35	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	28.19	42.92
SU-6-H35	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	30.22	44.95
SU-8-H35	1/2	12.70	10.41	13/16	20.64	7/8	22.22	22.86	21.84	30.98	51.30
SU-10-H35	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	31.75	52.07
SU-6M-H35	-	6	4.8	-	14	-	14	15.3	17.7	26.2	41.0
SU-8M-H35	-	8	6.4	-	15	-	16	16.2	18.6	28.2	43.2
SU-10M-H35	-	10	7.9	-	18	-	19	17.2	19.5	31.0	46.2
SU-12M-H35	-	12	9.5	-	22	-	22	22.8	22.0	31.0	51.2
SU-14M-H35	-	14	11.1	-	24	-	25	24.4	22.0	31.8	52.0
SU-15M-H35	-	15	11.9	-	24	-	25	24.4	22.0	31.8	52.0
SU-16M-H35	-	16	12.7	-	24	-	25	24.4	22.0	31.8	52.0

Union Elbow

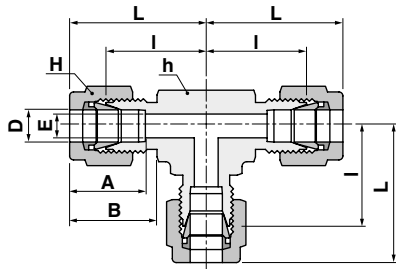
SL



Part No.	Tube O.D		E	Width across flat				A	B	I	L
	D			h		H					
	in	mm	Min	in	mm	in	mm				
SL-4-H35	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	26.16	40.89
SL-5-H35	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	28.19	42.92
SL-6-H35	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	30.22	44.95
SL-8-H35	1/2	12.70	10.41	13/16	20.64	7/8	22.22	22.86	21.84	30.98	51.30
SL-10-H35	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	31.75	52.07
SL-6M-H35	-	6	4.8	-	14	-	14	15.3	17.7	26.2	41.0
SL-8M-H35	-	8	6.4	-	15	-	16	16.2	18.6	28.2	43.2
SL-10M-H35	-	10	7.9	-	18	-	19	17.2	19.5	31.0	46.2
SL-12M-H35	-	12	9.5	-	22	-	22	22.8	22.0	31.0	51.2
SL-14M-H35	-	14	11.1	-	24	-	25	24.4	22.0	31.8	52.0
SL-15M-H35	-	15	11.9	-	24	-	25	24.4	22.0	31.8	52.0
SL-16M-H35	-	16	12.7	-	24	-	25	24.4	22.0	31.8	52.0

Union Tee

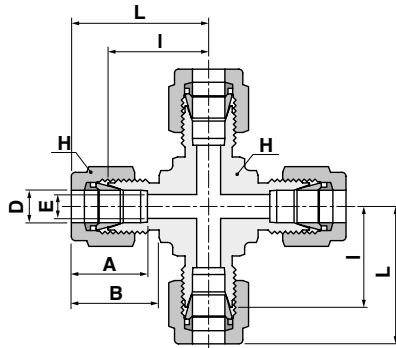
ST



Part No.	Tube O.D		E	Width across flat				A	B	I	L
	D			h		H					
	in	mm	Min	in	mm	in	mm				
ST-4-H35	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	26.16	40.89
ST-5-H35	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	28.19	42.92
ST-6-H35	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	30.22	44.95
ST-8-H35	1/2	12.70	10.41	13/16	20.64	7/8	22.22	22.86	21.84	30.98	51.30
ST-10-H35	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	31.75	52.07
ST-6M-H35	-	6	4.8	-	14	-	14	15.3	17.7	26.2	41.0
ST-8M-H35	-	8	6.4	-	15	-	16	16.2	18.6	28.2	43.2
ST-10M-H35	-	10	7.9	-	18	-	19	17.2	19.5	31.0	46.2
ST-12M-H35	-	12	9.5	-	22	-	22	22.8	22.0	31.0	51.2
ST-14M-H35	-	14	11.1	-	24	-	25	24.4	22.0	31.8	52.0
ST-15M-H35	-	15	11.9	-	24	-	25	24.4	22.0	31.8	52.0
ST-16M-H35	-	16	12.7	-	24	-	25	24.4	22.0	31.8	52.0

Union Cross

SX

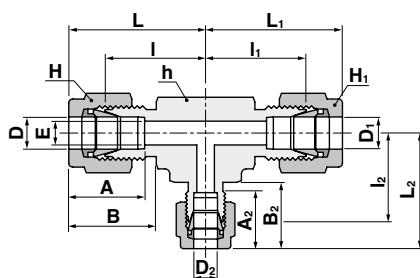


Part No.	Tube O.D		E	Width across flat				A	B	I	L
	D			h		H					
	in	mm	Min	in	mm	in	mm				
SX-4-H35	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	26.16	40.89
SX-5-H35	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	28.19	42.92
SX-6-H35	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	30.22	44.95
SX-8-H35	1/2	12.70	10.41	13/16	20.64	7/8	22.22	22.86	21.84	30.98	51.30
SX-10-H35	5/8	15.87	12.70	15/16	23.81	1	25.40	24.38	21.84	31.75	52.07
SX-6M-H35	-	6	4.8	-	14	-	14	15.3	17.7	26.2	41.0
SX-8M-H35	-	8	6.4	-	15	-	16	16.2	18.6	28.2	43.2
SX-10M-H35	-	10	7.9	-	18	-	19	17.2	19.5	31.0	46.2
SX-12M-H35	-	12	9.5	-	22	-	22	22.8	22.0	31.0	51.2
SX-14M-H35	-	14	11.1	-	24	-	25	24.4	22.0	31.8	52.0
SX-15M-H35	-	15	11.9	-	24	-	25	24.4	22.0	31.8	52.0
SX-16M-H35	-	16	12.7	-	24	-	25	24.4	22.0	31.8	52.0



Reducing Union Tee

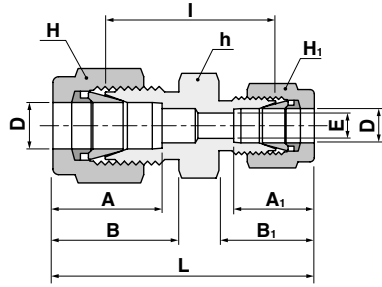
STR



Part No.	Tube O.D						E	Width across flat																					
	D			D ₁				A	A ₁	A ₂	B	B ₁	B ₂	h				H				H ₁	H ₂	I	ℓ ₁	ℓ ₂	L	L ₁	L ₂
	in	mm		in	mm									in	mm	Min.	in	mm	in	mm	in								
STR-4-6-H35	1/4	6.35		1/4	6.35	3/8	9.52	4.82	15.24	15.24	16.76	17.78	17.78	19.30	58	15.87	9/16	14.28	9/16	14.28	11/16	17.46	21.92	21.92	23.10	29.28	29.28	30.46	
STR-4-8-8-H35	1/4	6.35		1/2	12.70	1/2	12.70	4.82	15.24	22.86	22.86	17.78	21.84	21.84	13/16	20.64	9/16	14.28	7/8	22.22	7/8	22.22	24.40	25.90	25.90	31.76	36.06	36.06	
STR-6-4-6-H35	3/8	9.52		1/4	6.35	3/8	9.52	4.82	16.76	15.24	16.76	19.30	17.78	19.30	58	15.87	11/16	17.46	9/16	14.28	11/16	17.46	23.10	21.92	23.10	30.46	29.28	30.46	
STR-6-4-H35	3/8	9.52		3/8	9.52	1/4	6.35	4.82	16.76	16.76	15.24	19.30	19.30	17.78	58	15.87	11/16	17.46	11/16	17.46	9/16	14.28	23.10	23.10	21.92	30.46	30.46	29.28	
STR-6-8-H35	3/8	9.52		3/8	9.52	1/2	12.70	7.11	16.76	16.76	22.86	19.30	19.30	21.84	13/16	20.64	11/16	17.46	11/16	17.46	7/8	22.22	25.90	25.90	25.90	33.26	33.26	36.06	
STR-8-4-6-H35	1/2	12.70		1/4	6.35	3/8	9.52	4.82	22.86	15.24	16.76	21.84	17.78	19.30	13/16	20.64	7/8	22.22	9/16	14.28	11/16	17.46	25.90	25.90	25.90	36.06	33.26	33.26	
STR-8-4-8-H35	1/2	12.70		1/4	6.35	1/2	12.70	4.82	22.86	15.24	22.86	21.84	17.78	21.84	13/16	20.64	7/8	22.22	9/16	14.28	7/8	22.22	25.90	24.40	25.90	36.06	31.76	36.06	
STR-8-6-6-H35	1/2	12.70		3/8	9.52	3/8	9.52	7.11	22.86	16.76	16.76	21.84	19.30	19.30	13/16	20.64	7/8	22.22	11/16	17.46	11/16	17.46	25.90	25.90	25.90	36.06	33.26	33.26	
STR-8-4-H35	1/2	12.70		1/2	12.70	1/4	6.35	4.82	22.86	22.86	15.24	21.84	21.84	17.78	13/16	20.64	7/8	22.22	7/8	22.22	9/16	14.28	25.90	25.90	24.40	36.06	36.06	31.76	
STR-8-6-H35	1/2	12.70		1/2	12.70	3/8	9.52	7.11	22.86	22.86	16.76	21.84	21.84	19.30	13/16	20.64	7/8	22.22	7/8	22.22	11/16	17.46	25.90	25.90	25.90	36.06	36.06	33.26	
STR-10-6-H35	5/8	15.87		5/8	15.87	3/8	9.52	7.11	24.38	24.38	16.76	21.84	21.84	19.30	15/16	23.81	1	25.40	1	25.40	11/16	17.46	28.70	28.70	28.70	38.86	38.86	36.06	
STR-8M-6M-H35	-	8		-	8	-	6	4.8	16.2	16.2	15.3	18.6	18.6	17.7	-	15	-	16	-	16	-	14	21.3	21.3	20.5	28.8	28.8	28.0	
STR-10M-6M-H35	-	10		-	10	-	6	4.8	17.2	17.2	15.3	19.5	19.5	17.7	-	17.4	-	19	-	19	-	14	23.9	23.9	22.4	31.5	31.5	29.8	
STR-10M-12M-H35	-	10		-	10	-	12	7.9	17.2	17.2	22.8	19.5	19.5	22.0	-	20.6	-	19	-	19	-	22	25.9	25.9	25.9	33.5	33.5	36.0	
STR-12M-6M-10MH35	-	12		-	6	-	10	4.8	22.8	15.3	17.2	22.0	17.7	19.5	-	20.6	-	22	-	14	-	19	25.9	24.4	25.9	36.0	31.8	33.5	
STR-12M-6M-12MH35	-	12		-	6	-	12	4.8	22.8	15.3	22.8	22.0	17.7	22.0	-	20.6	-	22	-	14	-	22	25.9	24.4	25.9	36.0	31.8	36.0	
STR-12M-10M-10MH35	-	12		-	10	-	10	7.9	22.8	17.2	17.2	22.0	19.5	19.5	-	20.6	-	22	-	19	-	19	25.9	25.9	25.9	36.0	33.5	33.5	
STR-12M-10M-H35	-	12		-	12	-	10	7.9	22.8	22.8	17.2	22.0	22.0	19.5	-	20.6	-	22	-	22	-	19	25.9	25.9	25.9	36.0	36.0	33.5	
STR-12M-6M-H35	-	12		-	12	-	6	4.8	22.8	22.8	15.3	22.0	22.0	17.7	-	20.6	-	22	-	22	-	14	25.9	25.9	24.4	36.0	36.0	31.8	
STR-15M-12M-H35	-	15		-	15	-	12	9.8	24.4	24.4	22.8	28.7	28.7	22.0	-	23.8	-	25	-	25	-	22	28.7	28.7	28.7	38.8	38.8	38.8	
STR-16M-12M-H35	-	16		-	16	-	12	9.8	24.4	24.4	22.8	28.7	28.7	22.0	-	23.8	-	25	-	25	-	22	28.7	28.7	28.7	38.8	38.8	38.8	

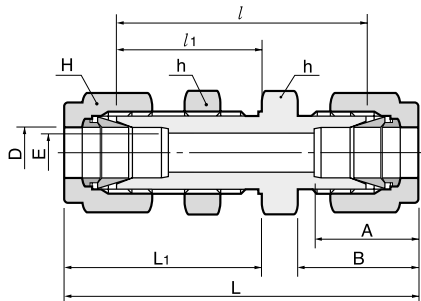


Reducing Union

SUR

Part No.	Tube O.D				E	Width across flat						A	A ₁	B	B ₁	I	L
	D		D ₁			h		H		H ₁							
	in	mm	in	mm		Min	in	mm	in	mm	in						
SUR-5-4-H35	5/16	7.93	1/4	6.35	4.82	9/16	14.28	5/8	15.87	9/16	14.28	16.25	15.24	18.54	17.78	27.43	42.16
SUR-6-4-H35	3/8	9.52	1/4	6.35	4.82	5/8	15.87	11/16	17.46	9/16	14.28	16.76	15.24	19.30	17.78	28.44	43.18
SUR-6-5-H35	3/8	9.52	5/16	7.93	6.35	5/8	15.87	11/16	17.46	5/8	15.87	16.76	16.25	19.30	18.54	29.46	44.19
SUR-8-4-H35	1/2	12.70	1/4	6.35	4.82	13/16	20.64	7/8	22.22	9/16	14.28	22.86	15.24	21.84	17.78	29.46	46.99
SUR-8-6-H35	1/2	12.70	3/8	9.52	7.11	13/16	20.64	7/8	22.22	11/16	17.46	22.86	16.76	21.84	19.30	30.98	48.51
SUR-10-6-H35	5/8	15.87	3/8	9.52	7.11	15/16	23.81	1	25.40	11/16	17.46	24.38	16.76	21.84	19.30	31.75	49.27
SUR-10-8-H35	5/8	15.87	1/2	12.70	10.41	15/16	23.81	1	25.40	7/8	22.22	24.38	22.86	21.84	21.84	31.75	52.07
SUR-8M-6M-H35	-	8	-	6	4.8	-	15	-	16	-	14	16.2	15.3	18.6	17.7	27.4	42.3
SUR-10M-6M-H35	-	10	-	6	4.8	-	18	-	19	-	14	17.2	15.3	19.5	17.7	29.5	44.5
SUR-10M-8M-H35	-	10	-	8	6.4	-	18	-	19	-	16	17.2	16.2	19.5	18.6	30.3	45.1
SUR-12M-6M-H35	-	12	-	6	4.8	-	22	-	22	-	14	22.8	15.3	22.0	17.7	29.5	47.0
SUR-12M-8M-H35	-	12	-	8	6.4	-	22	-	22	-	16	22.8	16.2	22.0	18.6	30.2	47.8
SUR-12M-10M-H35	-	12	-	10	7.9	-	22	-	22	-	19	22.8	17.2	22.0	19.5	31.0	48.7
SUR-16M-10M-H35	-	16	-	10	7.9	-	24	-	25	-	19	24.4	17.2	22.0	19.5	31.8	49.5
SUR-16M-12M-H35	-	16	-	12	9.5	-	24	-	25	-	22	24.4	22.8	22.0	22.0	31.8	52.0

Bulkhead Union

SUB

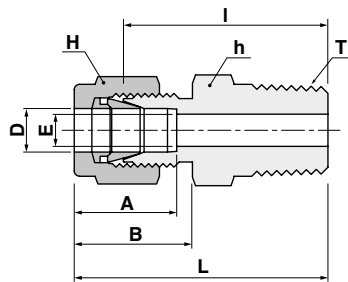
Part No.	Tube O.D		E	Width across flat				A	B	I	I ₁	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
	D			h		H									
	in	mm	Min.	in	mm	in	mm								
SUB-4-H35	1/4	6.35	4.82	5/8	15.87	9/16	14.28	15.24	17.78	42.92	26.16	57.65	33.52	11.50	10.16
SUB-5-H35	5/16	7.93	6.35	11/16	17.46	5/8	15.87	16.25	18.54	45.97	28.44	60.70	35.81	13.09	11.17
SUB-6-H35	3/8	9.52	7.11	3/4	19.05	11/16	17.46	16.76	19.30	47.49	29.46	62.23	36.83	14.68	11.17
SUB-8-H35	1/2	12.70	10.41	15/16	23.81	7/8	22.22	22.86	21.84	50.80	31.75	71.10	41.91	19.44	12.70
SUB-10-H35	5/8	15.87	12.70	1-1/16	26.98	1	25.40	24.38	21.84	52.32	32.51	72.64	42.67	22.62	12.70
SUB-6M-H35	-	6	4.8	-	16	-	14	15.3	17.7	42.9	26.2	57.7	33.6	11.5	10.2
SUB-8M-H35	-	8	6.4	-	18	-	16	16.2	18.6	46.0	28.6	61.0	36.1	13.1	11.2
SUB-10M-H35	-	10	7.9	-	22	-	19	17.2	19.5	48.5	29.4	63.7	37.0	16.2	11.2
SUB-12M-H35	-	12	9.5	-	24	-	22	22.8	22.0	50.8	31.8	71.0	41.9	19.5	12.7
SUB-14M-H35	-	14	11.1	-	27	-	25	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
SUB-15M-H35	-	15	11.9	-	27	-	25	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
SUB-16M-H35	-	16	12.7	-	27	-	25	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7



✧ TMP (Tube to Male Pipe)

Male Connector

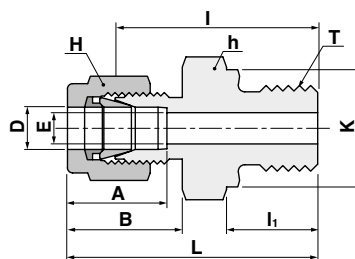
SMC



Part No.	Tube O.D		T	E	Width across flat				A	B	I	L
	D				h		H					
	in	mm			Thread	Min.	in	mm				
SMC-4-4N-H35	1/4	6.35	1/4NPT	4.82	9/16	14.28	9/16	14.28	15.24	17.78	30.48	37.84
SMC-5-4N-H35	5/16	7.93	1/4NPT	6.35	9/16	14.28	5/8	15.87	16.25	18.54	31.24	38.60
SMC-6-4N-H35	3/8	9.52	1/4NPT	7.11	5/8	15.87	11/16	17.46	16.76	19.30	32.51	39.87
SMC-8-4N-H35	1/2	12.70	1/4NPT	10.41	13/16	20.64	7/8	22.22	22.86	21.84	33.27	43.43
SMC-6M-4R-H35	-	6	1/4PT	4.8	-	14	-	14	15.3	17.7	30.2	37.6
SMC-8M-4R-H35	-	8	1/4PT	6.4	-	15	-	16	16.2	18.6	31.2	38.7
SMC-10M-4R-H35	-	10	1/4PT	7.9	-	18	-	19	17.2	19.5	33.3	40.9
SMC-12M-4R-H35	-	12	1/4PT	9.5	-	22	-	22	22.8	22.0	33.3	43.4
SMC-16M-4R-H35	-	16	1/4PT	12.7	-	24	-	25	24.4	22.0	34.0	44.1
SMC-6M-4N-H35	-	6	1/4NPT	4.8	-	14	-	14	15.3	17.7	30.2	37.6
SMC-8M-4N-H35	-	8	1/4NPT	6.4	-	15	-	16	16.2	18.6	31.2	38.7
SMC-10M-4N-H35	-	10	1/4NPT	7.9	-	18	-	19	17.2	19.5	33.3	40.9
SMC-12M-4N-H35	-	12	1/4NPT	9.5	-	22	-	22	22.8	22.0	33.3	43.4
SMC-16M-4N-H35	-	16	1/4NPT	12.7	-	24	-	25	24.4	22.0	34.0	44.1
SMC-4-4G-H35	1/4	6.35	1/4PF	4.82	3/4	19.05	9/16	14.28	15.24	17.78	30.23	37.59
SMC-6-4G-H35	3/8	9.52	1/4PF	7.11	3/4	19.05	11/16	17.46	16.76	19.30	31.75	39.12
SMC-8-4G-H35	1/2	12.70	1/4PF	10.41	13/16	20.64	7/8	22.22	22.86	21.84	32.51	42.67
SMC-6M-4G-H35	-	6	1/4PF	4.8	-	19	-	14	15.3	17.7	30.2	37.6
SMC-8M-4G-H35	-	8	1/4PF	6.4	-	19	-	16	16.2	18.6	31.0	38.5
SMC-10M-4G-H35	-	10	1/4PF	7.9	-	19	-	19	17.2	19.5	31.8	39.4
SMC-12M-4G-H35	-	12	1/4PF	9.5	-	22	-	22	22.8	22.0	32.5	42.6

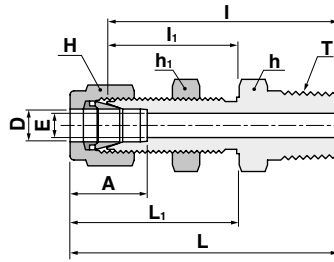
Male Connector
for Metal Gasket

SOM



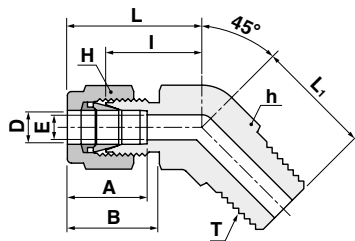
Part No.	Tube O.D		T	E	Width across flat				A	B	I	I ₁	L	K
	D				h		H							
	in	mm	G(PF)	Min.	in	mm	in	mm						
SOM-4-4G-H35	1/4	6.35	1/4	4.82	3/4	19.05	9/16	14.28	15.24	17.78	30.23	11.18	37.59	18.03
SOM-6-4G-H35	3/8	9.52	1/4	7.11	3/4	19.05	11/16	17.46	16.76	19.30	31.75	11.18	39.12	18.03
SOM-8-4G-H35	1/2	12.70	1/4	10.41	13/16	20.64	7/8	22.22	22.86	21.84	32.51	11.18	42.67	18.03
SOM-6M-4G-H35	-	6	1/4	4.8	-	19	-	14	15.3	17.7	30.2	11.2	37.6	18.0
SOM-8M-4G-H35	-	8	1/4	6.4	-	19	-	16	16.2	18.6	31.0	11.2	38.5	18.0
SOM-10M-4G-H35	-	10	1/4	7.9	-	19	-	19	17.2	19.5	31.8	11.2	39.4	18.0
SOM-12M-4G-H35	-	12	1/4	9.5	-	22	-	22	22.8	22.0	32.5	11.2	42.6	18.0

Bulkhead
Male Connector
SMCB



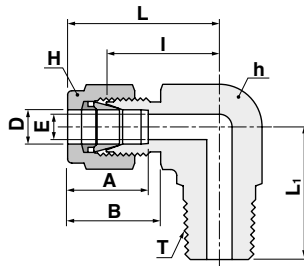
Part No.	Tube O.D		T	E	Width across flat						A	I	I ₁	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
	D				h				H								
	in	mm			Thread	Min.	in	mm	in	mm							
SMCB-4-4N-H35	1/4	6.35	1/4NPT	4.82	5/8	15.87	5/8	15.87	9/16	14.28	15.24	45.97	26.16	53.34	33.52	11.50	10.16
SMCB-6-4N-H35	3/8	9.52	1/4NPT	7.11	3/4	19.05	3/4	19.05	11/16	17.46	16.76	50.03	29.46	57.40	36.83	14.68	11.17

45° Male Elbow
SLBM



Part No.	Tube O.D		T	E	Width across flat				A	B	I	L	L ₁
	D				h		H						
	in	mm	Thread	Min.	in	mm	in	mm					
SLBM-4-4N-H35	1/4	6.35	1/4NPT	4.82	1/2	12.70	9/16	14.28	15.24	17.78	17.27	24.63	21.08
SLBM-6-4N-H35	3/8	9.52	1/4NPT	7.11	5/8	15.87	11/16	17.16	16.76	19.30	20.57	27.94	22.86

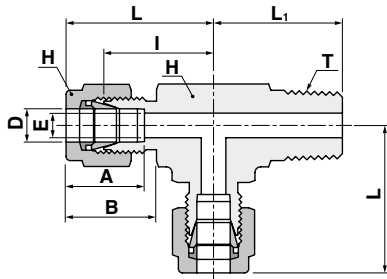
Male Elbow
SLM



Part No.	Tube O.D		T	E	Width across flat				A	B	I	L	L ₁
	D				h								
	in	mm	Thread	Min.	in	mm	in	mm					
SLM-4-4N-H35	1/4	6.35	1/4NPT	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.81	27.18	23.87
SLM-5-4N-H35	5/16	7.93	1/4NPT	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	29.77	24.50
SLM-6-4N-H35	3/8	9.52	1/4NPT	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	25.40
SLM-8-4N-H35	1/2	12.70	1/4NPT	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	28.30
SLM-6M-4R-H35	-	6	1/4PT	4.8	-	12.7	-	14	15.3	17.7	19.6	27.0	23.4
SLM-8M-4R-H35	-	8	1/4PT	6.4	-	14.3	-	16	16.2	18.6	21.3	28.8	24.4
SLM-10M-4R-H35	-	10	1/4PT	7.9	-	17.5	-	19	17.2	19.5	23.9	31.5	26.2
SLM-12M-4R-H35	-	12	1/4PT	9.5	-	20.6	-	22	22.8	22.0	25.9	36.0	28.2
SLM-6M-4N-H35	-	6	1/4NPT	4.8	-	12.7	-	14	15.3	17.7	19.6	27.0	23.4
SLM-8M-4N-H35	-	8	1/4NPT	6.4	-	14.3	-	16	16.2	18.6	21.3	28.8	24.4
SLM-10M-4N-H35	-	10	1/4NPT	7.9	-	17.5	-	19	17.2	19.5	23.9	31.5	26.2
SLM-12M-4N-H35	-	12	1/4NPT	9.5	-	20.6	-	22	22.8	22.0	25.9	36.0	28.2

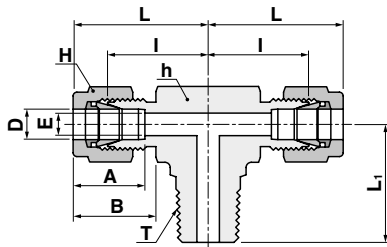


Male Run Tee

STRM

Part No.	Tube O.D		T	E	Width across flat				A	B	I	L	L ₁
	D				h		H						
	in	mm	Thread	Min.	in	mm	in	mm					
STRM-4-4N-H35	1/4	6.35	1/4NPT	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.81	27.18	23.87
STRM-5-4N-H35	5/16	7.93	1/4NPT	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	29.77	24.50
STRM-6-4N-H35	3/8	9.52	1/4NPT	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	25.40
STRM-8-4N-H35	1/2	12.70	1/4NPT	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	28.30
STRM-6M-4R-H35	-	6	1/4PT	4.8	-	12.7	-	14	15.3	17.7	19.6	27.0	23.4
STRM-8M-4R-H35	-	8	1/4PT	6.4	-	14.3	-	16	16.2	18.6	21.3	28.8	24.4
STRM-10M-4R-H35	-	10	1/4PT	7.9	-	17.5	-	19	17.2	19.5	23.9	31.5	26.2
STRM-12M-4R-H35	-	12	1/4PT	9.5	-	20.6	-	22	22.8	22.0	25.9	36.0	28.2
STRM-6M-4N-H35	-	6	1/4NPT	4.8	-	12.7	-	14	15.3	17.7	19.6	27.0	23.4
STRM-8M-4N-H35	-	8	1/4NPT	6.4	-	14.3	-	16	16.2	18.6	21.3	28.8	24.4
STRM-10M-4N-H35	-	10	1/4NPT	7.9	-	17.5	-	19	17.2	19.5	23.9	31.5	26.2
STRM-12M-4N-H35	-	12	1/4NPT	9.5	-	20.6	-	22	22.8	22.0	25.9	36.0	28.2

Male Branch Tee

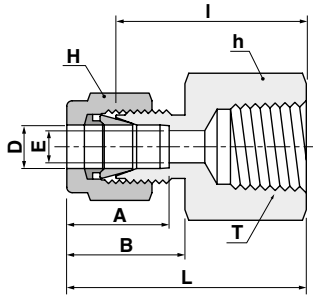
STBM

Part No.	Tube O.D		T	E	Width across flat				A	B	I	L	L ₁
	D				h		H						
	in	mm	Thread	Min.	in	mm	in	mm					
STBM-4-4N-H35	1/4	6.35	1/4NPT	4.82	1/2	12.70	9/16	14.28	15.24	17.78	19.81	27.18	23.87
STBM-5-4N-H35	5/16	7.93	1/4NPT	6.35	9/16	14.28	5/8	15.87	16.25	18.54	21.33	29.77	24.50
STBM-6-4N-H35	3/8	9.52	1/4NPT	7.11	5/8	15.87	11/16	17.46	16.76	19.30	23.11	30.48	25.40
STBM-8-4N-H35	1/2	12.70	1/4NPT	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	28.30
STBM-6M-4R-H35	-	6	1/4PT	4.8	-	12.7	-	14	15.3	17.7	19.6	27.0	23.4
STBM-8M-4R-H35	-	8	1/4PT	6.4	-	14.3	-	16	16.2	18.6	21.3	28.8	24.4
STBM-10M-4R-H35	-	10	1/4PT	7.9	-	17.5	-	19	17.2	19.5	23.9	31.5	26.2
STBM-12M-4R-H35	-	12	1/4PT	9.5	-	20.6	-	22	22.8	22.0	25.9	36.0	28.2
STBM-6M-4N-H35	-	6	1/4NPT	4.8	-	12.7	-	14	15.3	17.7	19.6	27.0	23.4
STBM-8M-4N-H35	-	8	1/4NPT	6.4	-	14.3	-	16	16.2	18.6	21.3	28.8	24.4
STBM-10M-4N-H35	-	10	1/4NPT	7.9	-	17.5	-	19	17.2	19.5	23.9	31.5	26.2
STBM-12M-4N-H35	-	12	1/4NPT	9.5	-	20.6	-	22	22.8	22.0	25.9	36.0	28.2

TFP (Tube to Female Pipe)

Female Connector

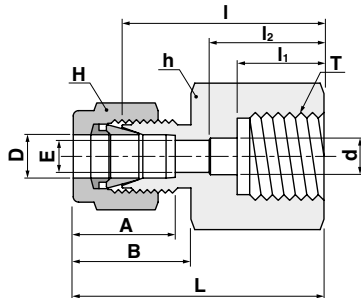
SCF



Part No.	Tube O.D		T	E	Width across flat				A	B	I	L
	D				h		H					
	in	mm	Thread	Min.	in	mm	in	mm				
SCF-4-4N-H35	1/4	6.35	1/4NPT	4.82	3/4	19.05	9/16	14.28	15.24	17.78	28.44	35.81
SCF-5-4N-H35	5/16	7.93	1/4NPT	6.35	3/4	19.05	5/8	15.87	16.25	18.54	29.46	36.83
SCF-6-4N-H35	3/8	9.52	1/4NPT	7.11	3/4	19.05	11/16	17.46	16.76	19.30	30.22	37.59
SCF-8-4N-H35	1/2	12.70	1/4NPT	10.41	1-3/16	20.64	7/8	22.22	22.86	21.84	30.22	40.38
SCF-6M-4R-H35	-	6	1/4PT	4.8	-	19	-	14	15.3	17.7	28.4	35.8
SCF-8M-4R-H35	-	8	1/4PT	6.4	-	19	-	16	16.2	18.6	29.5	37.0
SCF-10M-4R-H35	-	10	1/4PT	7.9	-	19	-	19	17.2	19.5	30.2	37.8
SCF-12M-4R-H35	-	12	1/4PT	9.5	-	22	-	22	22.8	22.0	30.2	40.3
SCF-6M-4N-H35	-	6	1/4NPT	4.8	-	19	-	14	15.3	17.7	28.4	35.8
SCF-8M-4N-H35	-	8	1/4NPT	6.4	-	19	-	16	16.2	18.6	29.5	37.0
SCF-10M-4N-H35	-	10	1/4NPT	7.9	-	19	-	19	17.2	19.5	30.2	37.8
SCF-12M-4N-H35	-	12	1/4NPT	9.5	-	22	-	22	22.8	22.0	30.2	40.3

Gauge Connector

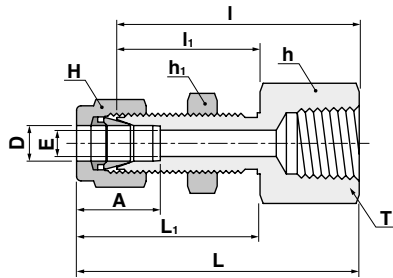
SCG



Part No.	Tube O.D		T	E	Width across flat				A	B	I	I ₁	I ₂	d	L
	D				h		H								
	in	mm	G(PF)	Min.	in	mm	in	mm							
SCG-4-4G-H35	1/4	6.35	1/4	4.82	3/4	19.05	9/16	14.28	15.24	17.78	30.22	12.95	17.00	5.60	37.59
SCG-5-4G-H35	5/16	7.93	1/4	6.35	3/4	19.05	5/8	15.87	16.25	18.54	30.98	12.95	-	-	38.60
SCG-6-4G-H35	3/8	9.52	1/4	7.11	3/4	19.05	11/16	17.46	16.76	19.30	31.75	12.95	-	-	39.12
SCG-8-4G-H35	1/2	12.70	1/4	10.41	1-3/16	20.64	7/8	22.22	22.86	21.84	31.80	12.95	-	-	41.95
SCG-6M-4G-H35	6	1/4	4.8	19	14	15.3	17.7	30.2	13	17.0	5.5	37.6	-	-	41.95
SCG-8M-4G-H35	-	8	1/4	6.4	-	19	-	16	16.2	18.6	31.0	13	-	5.5	38.5
SCG-10M-4G-H35	-	10	1/4	7.9	-	19	-	19	17.2	19.5	31.8	13	-	-	39.4
SCG-12M-4G-H35	-	12	1/4	9.5	-	22	-	22	22.8	22.0	31.8	13	-	-	41.9

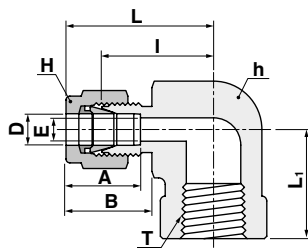


Bulkhead Female Connector

SCBF

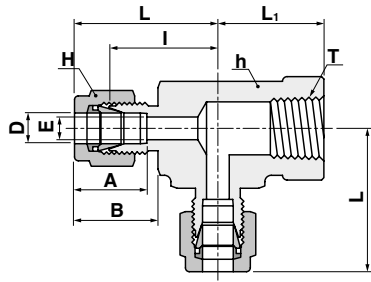
Part No.	Tube O.D		T	E	Width across flat						A	I	I ₁	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
	D				h		h ₁		H								
	in	mm			N(NPT)	Min.	in	mm	in	mm							
SCBF-4-4N-H35	1/4	6.35	1/4	4.82	3/4	19.05	5/8	15.87	9/16	14.28	15.24	44.45	26.16	51.81	33.52	11.50	10.16
SCBF-6-4N-H35	3/8	9.52	1/4	7.11	3/4	19.05	3/4	19.05	11/16	17.46	16.76	47.75	29.46	55.11	36.83	14.68	11.17

Female Elbow

SLF

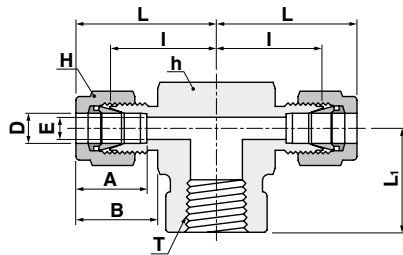
Part No.	Tube O.D		T	E	Width across flat				A	B	I	L	L ₁
	D				h		H						
	in	mm			N(NPT)	Min.	in	mm					
SLF-4-4N-H35	1/4	6.35	1/4	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	22.35
SLF-5-4N-H35	5/16	7.93	1/4	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	22.35
SLF-6-4N-H35	3/8	9.52	1/4	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	22.35
SLF-8-4N-H35	1/2	12.70	1/4	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	22.35
SLF-6M-4N-H35	-	6	1/4	4.8	-	17.46	-	14	15.3	17.7	22.4	29.8	22.40
SLF-8M-4N-H35	-	8	1/4	6.4	-	17.46	-	16	16.2	18.6	23.1	30.6	22.40
SLF-10M-4N-H35	-	10	1/4	7.9	-	20.64	-	19	17.2	19.5	25.9	33.5	22.40
SLF-12M-4N-H35	-	12	1/4	9.5	-	20.64	-	22	22.8	22.0	25.9	36.0	22.40

Female Run Tee

STRF

Part No.	Tube O.D		T	E	Width across flat				A	B	I	L	L ₁
	D				h		H						
	in	mm	N(NPT)	Min.	in	mm	in	mm					
STRF-4-4N-H35	1/4	6.35	1/4	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	22.35
STRF-5-4N-H35	5/16	7.93	1/4	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	22.35
STRF-6-4N-H35	3/8	9.52	1/4	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	22.35
STRF-8-4N-H35	1/2	12.70	1/4	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	22.35
STRF-6M-4N-H35	-	6	1/4	4.8	-	17.46	-	14	15.3	17.7	22.4	29.8	22.40
STRF-8M-4N-H35	-	8	1/4	6.4	-	17.46	-	16	16.2	18.6	23.1	30.6	22.40
STRF-10M-4N-H35	-	10	1/4	7.9	-	20.64	-	19	17.2	19.5	25.9	33.5	22.40
STRF-12M-4N-H35	-	12	1/4	9.5	-	20.64	-	22	22.8	22.0	25.9	36.0	22.40

Female Branch Tee

STBF

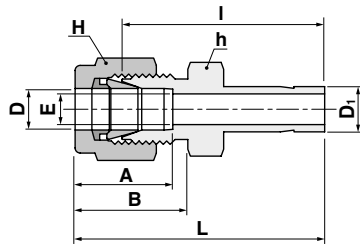
Part No.	Tube O.D		T	E	Width across flat				A	B	I	L	L ₁
	D				h		H						
	in	mm			N(NPT)	Min.	in	mm					
STBF-4-4N-H35	1/4	6.35	1/4	4.82	11/16	17.46	9/16	14.28	15.24	17.78	22.35	29.71	22.35
STBF-5-4N-H35	5/16	7.93	1/4	6.35	11/16	17.46	5/8	15.87	16.25	18.54	23.11	30.48	22.35
STBF-6-4N-H35	3/8	9.52	1/4	7.11	11/16	17.46	11/16	17.46	16.76	19.30	23.87	31.24	22.35
STBF-8-4N-H35	1/2	12.70	1/4	10.41	13/16	20.64	7/8	22.22	22.86	21.84	25.90	36.06	22.35
STBF-6M-4N-H35	-	6	1/4	4.8	-	17.46	-	14	15.3	17.7	22.4	29.8	22.40
STBF-8M-4N-H35	-	8	1/4	6.4	-	17.46	-	16	16.2	18.6	23.1	30.6	22.40
STBF-10M-4N-H35	-	10	1/4	7.9	-	20.64	-	19	17.2	19.5	25.9	33.5	22.40
STBF-12M-4N-H35	-	12	1/4	9.5	-	20.64	-	22	22.8	22.0	25.9	36.0	22.40



↗ STC (Stub Tube Connector)

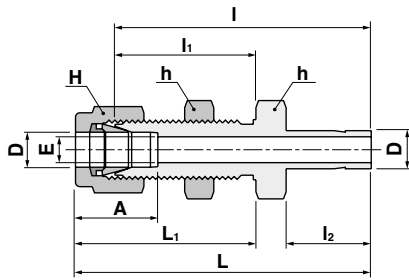
Reducer

SR



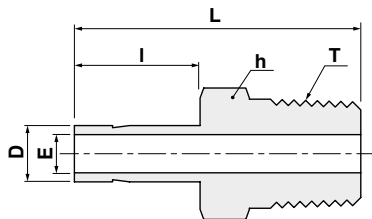
Part No.	Tube O.D				E	Width across flat				A	B	I	L
	D		D ₁			h		H					
	in	mm	in	mm	Min.	in	mm	in	mm				
SR-4-4-H35	1/4	6.35	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	31.75	39.11
SR-4-5-H35	1/4	6.35	1/4	6.35	4.82	1/2	12.70	9/16	14.28	15.24	17.78	32.51	39.87
SR-4-6-H35	1/4	6.35	3/8	9.52	4.82	1/2	12.70	9/16	14.28	15.24	17.78	33.27	40.64
SR-4-8-H35	1/4	6.35	1/2	12.70	4.82	9/16	14.28	9/16	14.28	15.24	17.78	38.86	46.22
SR-4-10-H35	1/4	6.35	5/8	15.87	4.82	11/16	17.46	9/16	14.28	15.24	17.78	40.64	48.00
SR-5-6-H35	5/16	7.93	3/8	9.52	6.35	9/16	14.28	5/8	15.87	16.25	18.54	34.54	41.91
SR-5-8-H35	5/16	7.93	5/16	7.93	6.35	9/16	14.28	5/8	15.87	16.25	18.54	40.13	47.49
SR-6-4-H35	3/8	9.52	1/4	6.35	4.82	5/8	15.87	11/16	17.46	16.76	19.30	34.03	41.40
SR-6-6-H35	3/8	9.52	3/8	9.52	7.11	5/8	15.87	11/16	17.46	16.76	19.30	35.81	43.18
SR-6-8-H35	3/8	9.52	1/2	12.70	7.11	5/8	15.87	11/16	17.46	16.76	19.30	41.14	48.51
SR-6-10-H35	3/8	9.52	5/8	15.87	7.11	11/16	17.46	11/16	17.46	16.76	19.30	42.92	50.29
SR-8-4-H35	1/2	12.70	1/4	6.35	4.82	13/16	20.64	7/8	22.22	22.86	21.84	34.79	44.95
SR-8-6-H35	1/2	12.70	1/2	12.70	7.11	13/16	20.64	7/8	22.22	22.86	21.84	36.57	46.73
SR-8-8-H35	1/2	12.70	1/2	12.70	9.90	13/16	20.64	7/8	22.22	22.86	21.84	42.16	52.32
SR-8-10-H35	1/2	12.70	5/8	15.87	10.41	13/16	20.64	7/8	22.22	22.86	21.84	43.68	53.84
SR-6M-4-H35	-	6	1/4	6.35	4.8	-	14	-	14	15.3	17.7	31.8	39.2
SR-6M-5-H35	-	6	1/4	6.35	4.8	-	14	-	14	15.3	17.7	32.5	39.9
SR-6M-6-H35	-	6	3/8	9.52	4.8	-	14	-	14	15.3	17.7	33.3	40.7
SR-6M-8-H35	-	6	1/2	12.70	4.8	-	14	-	14	15.3	17.7	38.9	46.3
SR-8M-6-H35	-	8	3/8	9.52	6.4	-	15	-	16	16.2	18.6	34.5	42.0
SR-8M-8-H35	-	8	5/16	7.93	6.4	-	15	-	16	16.2	18.6	40.1	47.6
SR-10M-6-H35	-	10	3/8	9.52	7.1	-	18	-	19	17.2	19.5	36.6	44.2
SR-10M-8-H35	-	10	1/2	12.70	7.9	-	18	-	19	17.2	19.5	42.2	49.8
SR-12M-8-H35	-	12	1/2	12.70	9.5	-	22	-	22	22.8	22.0	42.2	52.3
SR-6M-8M-H35	-	6	-	8	4.8	-	14	-	14	15.3	17.7	32.5	39.9
SR-6M-10M-H35	-	6	-	10	4.8	-	14	-	14	15.3	17.7	33.3	40.7
SR-6M-12M-H35	-	6	-	12	4.8	-	14	-	14	15.3	17.7	38.9	46.3
SR-8M-6M-H35	-	8	-	6	4.6	-	15	-	16	16.2	18.6	32.8	40.3
SR-8M-10M-H35	-	8	-	10	6.4	-	15	-	16	16.2	18.6	34.5	42.0
SR-8M-12M-H35	-	8	-	12	6.4	-	15	-	16	16.2	18.6	40.1	47.6
SR-10M-6M-H35	-	10	-	6	4.6	-	18	-	19	17.2	19.5	34.8	42.4
SR-10M-12M-H35	-	10	-	12	7.9	-	18	-	19	17.2	19.5	42.2	49.8
SR-10M-15M-H35	-	10	-	15	7.9	-	18	-	19	17.2	19.5	43.7	51.3
SR-12M-6M-H35	-	12	-	6	4.6	-	22	-	22	22.8	22.0	34.8	44.9
SR-12M-10M-H35	-	12	-	10	7.7	-	22	-	22	22.8	22.0	36.6	46.7
SR-12M-16M-H35	-	12	-	16	9.5	-	22	-	22	22.8	22.0	43.7	53.8
SR-16M-12M-H35	-	16	-	12	9.1	-	24	-	25	24.4	22.0	42.9	53.0

Bulkhead Adapter

SAB

Part No.	Tube O.D				E	Width across flat				A	I	I ₁	I ₂	L	L ₁	Panel Hole	Panel Max.
	D		D ₁			h		H									
	in	mm	in	mm		Min.	in	mm	in								
SAB-4-4-H35	1/4	6.35	1/4	6.35	4.82	5/8	15.87	9/16	14.28	15.24	48.51	26.16	15.74	55.88	33.52	11.50	10.16
SAB-6-6-H35	3/8	9.52	3/8	9.52	7.11	3/4	19.05	11/16	17.46	16.76	53.84	29.46	17.50	61.21	36.83	14.68	11.17
SAB-8-8-H35	1/2	12.70	1/2	12.70	10.41	15/16	23.81	7/8	22.22	22.86	62.73	31.75	23.11	72.89	41.91	19.44	12.70
SAB-10-10-H35	5/8	15.87	5/8	15.87	12.70	1-1/16	26.98	1	25.40	24.38	65.02	32.51	24.70	75.18	42.67	22.62	12.70

Male Adapter

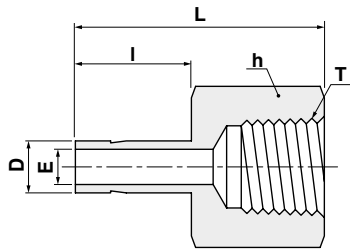
SAM

Part No.	Tube O.D		T	E	Width across flat		I	L
	D				h			
	in	mm			Thread	Min.		
SAM-4-4N-H35	1/4	6.35	1/4NPT	4.31	9/16	14.28	15.75	37.08
SAM-5-4N-H35	5/16	7.93	1/4NPT	5.58	9/16	14.28	16.80	38.10
SAM-6-4N-H35	3/8	9.52	1/4NPT	6.86	9/16	14.28	17.50	38.90
SAM-8-4N-H35	1/2	12.70	1/4NPT	9.40	9/16	14.28	23.20	44.50
SAM-6M-4R-H35		6	1/4PT	4.1		14	15.75	38.1
SAM-8M-4R-H35		8	1/4PT	5.6		14	16.50	39.1
SAM-10M-4R-H35		10	1/4PT	7.1		14	17.50	39.9
SAM-12M-4R-H35		12	1/4PT	8.8		14	23.50	46.5
SAM-6M-4N-H35		6	1/4NPT	4.1		14	15.75	38.1
SAM-8M-4N-H35		8	1/4NPT	5.6		14	16.50	39.1
SAM-10M-4N-H35		10	1/4NPT	7.1		14	17.50	39.9
SAM-12M-4N-H35		12	1/4NPT	8.8		14	23.50	46.5



Female Adapter

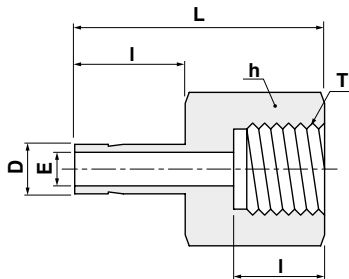
SAF



Part No.	Tube O.D		T	E	Width across flat		I	L
	D				h			
	in	mm			Thread	Min.		
SAF-4-4N-H35	1/4	6.35	1/4NPT	4.31	3/4	19.05	15.75	37.10
SAF-5-4N-H35	5/16	7.93	1/4NPT	5.58	3/4	19.05	16.80	37.59
SAF-6-4N-H35	3/8	9.52	1/4NPT	6.86	3/4	19.05	17.50	38.10
SAF-8-4N-H35	1/2	12.70	1/4NPT	9.40	3/4	19.05	23.20	43.43
SAF-6M-4R-H35	-	6	1/4PT	4.1	-	19	15.75	37.10
SAF-8M-4R-H35	-	8	1/4PT	5.6	-	19	16.50	37.60
SAF-10M-4R-H35	-	10	1/4PT	7.1	-	19	17.50	38.10
SAF-12M-4R-H35	-	12	1/4PT	8.8	-	19	23.50	43.70
SAF-6M-4N-H35	-	6	1/4NPT	4.1	-	19	15.75	37.10
SAF-8M-4N-H35	-	8	1/4NPT	5.6	-	19	16.50	37.60
SAF-10M-4N-H35	-	10	1/4NPT	7.1	-	19	17.50	38.10
SAF-12M-4N-H35	-	12	1/4NPT	8.8	-	19	23.50	43.70

Gauge Adapter

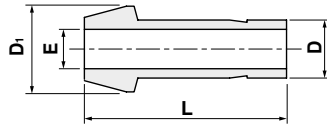
SAG



Part No.	Tube O.D		T	E	E ₁	Width across flat		I	I ₁	L
	D					h				
	in	mm	G(PF)	Min.			in			
SAF-4-4G-H35	1/4	6.35	1/4	4.31	5.50	3/4	19.05	15.75	12.9	35.30
SAG-6M-4G-H35	-	6	1/4	4.1	5.5	-	19	15.75	13.0	35.3
SAG-8M-4G-H35	-	8	1/4	5.6	5.5	-	19	16.5	13.0	33.0
SAG-10M-4G-H35	-	10	1/4	7.1	5.5	-	19	17.5	13.0	34.5
SAG-12M-4G-H35	-	12	1/4	8.8	5.5	-	19	23.5	13.0	40.1

Port Connector

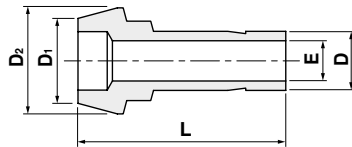
SCP



Part No.	Tube O.D		E	D ₁	L
	D				
	in	mm	Min		
SCP-4-H35	1/4	6.35	4.31	9.39	24.64
SCP-5-H35	5/16	7.93	5.58	10.92	25.90
SCP-6-H35	3/8	9.52	6.86	12.70	26.16
SCP-8-H35	1/2	12.70	9.40	15.74	35.81
SCP-6M-H35	6	4.1	9.0	24.6	26.16
SCP-8M-H35	8	5.6	11.0	27.2	35.81
SCP-10M-H35	-	10	7.1	13.1	26.1
SCP-12M-H35	-	12	8.8	15.0	35.8
SCP-15M-H35	-	15	11.2	19.0	37.4
SCP-16M-H35	-	16	12.0	19.0	37.4

Reducing
Port Connector

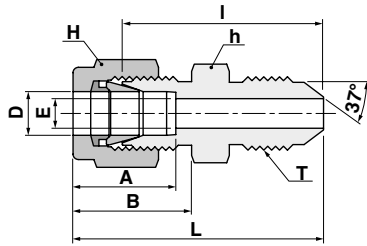
SCRP



Part No.	Tube O.D				E	D ₂	L
	D ₁		D				
	in	mm	in	mm	Min		
SCRP-6-4-H35	3/8	9.52	1/4	6.35	4.31	12.70	24.89
SCRP-8-4-H35	1/2	12.70	1/4	6.35	4.31	15.74	29.21
SCRP-8-6-H35	1/2	12.70	3/8	9.52	6.86	15.74	30.48
SCRP-8M-6M-H35	-	8	-	6	4.1	11.0	24.7
SCRP-10M-6M-H35	-	10	-	6	4.1	13.1	25.0
SCRP-10M-8M-H35	-	10	-	8	5.6	13.1	26.0
SCRP-12M-6M-H35	-	12	-	6	4.1	15.0	29.1
SCRP-12M-8M-H35	-	12	-	8	5.6	15.0	29.8
SCRP-12M-10M-H35	-	12	-	10	7.1	15.0	30.4
SCRP-16M-6M-H35	-	16	-	6	4.1	19.0	30.4
SCRP-16M-12M-H35	-	16	-	12	8.8	19.0	36.2

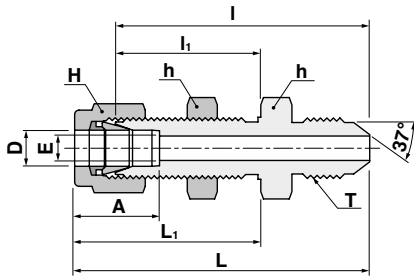


AN Union

SUA

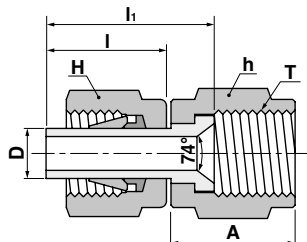
Part No.	Tube O.D		AN Tube Flare Size		Straight Thread	E	Width across flat				A	B	I	L
	D						h		H					
	in	mm	in	mm	T	Min.	in	mm	in	mm				
SUA-4-4-H35	1/4	6.35	1/4	6.35	7/16-20	4.31	1/2	12.70	9/16	14.28	15.24	17.78	30.22	37.59
SUA-5-5-H35	5/16	7.93	5/16	7.93	1/2-20	5.84	9/16	14.28	5/8	15.87	16.25	18.54	30.98	38.35
SUA-6-4-H35	3/8	9.52	1/4	6.35	7/16-20	4.31	5/8	15.87	11/16	17.46	16.76	19.30	32.25	39.62
SUA-6-6-H35	3/8	9.52	3/8	9.52	9/16-18	7.11	5/8	15.87	11/16	17.46	16.76	19.30	32.25	39.62
SUA-8-8-H35	1/2	12.70	1/2	12.70	3/4-16	9.90	13/16	20.64	7/8	22.22	22.86	21.84	35.81	45.97

AN Bulkhead Union

SUBA

Part No.	Tube O.D		AN Tube Flare Size		Straight Thread	E	Width across flat				A	I	I ₁	L	L ₁	Panel Hole Drill Size	Panel Max. Thickness
	D						h		H								
	in	mm	in	mm	T	Min.	in	mm	in	mm							
SUBA-4-4-H35	1/4	6.35	1/4	6.35	7/16-20	4.31	5/8	15.87	9/16	14.28	15.24	46.48	26.16	53.84	33.52	11.50	10.16
SUBA-6-6-H35	3/8	9.52	3/8	9.52	9/16-18	7.11	3/4	19.05	11/16	17.46	16.76	49.78	29.46	57.15	36.83	14.68	11.17
SUBA-8-8-H35	1/2	12.70	1/2	12.70	3/4-16	9.90	5/16	23.81	7/8	22.22	22.86	55.62	31.75	65.78	41.91	19.44	12.70

AN Adapter

SAA

Part No.	Tube O.D		AN Tube Flare Size		Straight Thread	Width across flat				A	I	I ₁
	D					h		H				
	in	mm	in	mm	T	in	mm	in	mm			
SAA-4-4-H35	1/4	6.35	1/4	6.35	7/16-20	9/16	14.28	9/16	14.28	15.74	15.74	21.33
SAA-6-6-H35	3/8	9.52	3/8	9.52	9/16-18	11/16	17.46	11/16	17.46	18.28	17.52	24.89
SAA-8-8-H35	1/2	12.70	1/2	12.70	3/4-16	7/8	22.22	7/8	22.22	21.59	23.11	31.75

*Gap Gauge for Pull-up Inspection***SIG**

S-LOK maintains unbelievably tight tolerance on its each and every part.

S-LOK tube fittings are monitored and gauged throughout process.

This assures S-LOK consistency and makes S-LOK fittings gaugable.

This no-go gauge is the useful tool to inspect if the fittings are pulled up 1-1/4 turns from the finger-tight position. When the gauge doesn't fit the gap between the nut and body hex, the fitting is tightened 1-1/4 turns from the finger-tight position.

If the gauge fits the gap, the fittings is not fully tightened.

Multiple Size Gap Gauge

Part No.	Applicable S-LOK Tube O.D.
SIG-45810M-S410	1/4", 5/16", 1/2", 6mm, 8mm, 10mm, 12mm
SIG-46810M-S410	1/4", 3/8", 1/2", 6mm, 10mm, 12mm



INSTRUMENT PIPE FITTINGS

Features

- All instrument thread fittings are designed in accordance with ASME B31.3 for instrument and process.
- Male thread are protected with cap.
- Burr-free internal and outside surfaces.
- NPT threads are based on requirement of ASME B1.20.1

Material Standards & Temperature Ratings

Material	Bar Stock	Forgings	Temperature
SS316	ASTM A479, ASTM A276	ASTM A182	-325°F to 1200°F (-198°C to 648°C)

Pressure Ratings

Size Designator	NPT Size	316 Stainless Steel				Brass				Carbon steel			
		Male		Female		Male		Female		Male		Female	
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
1	1/16	11,000	758	6,700	462	5,500	379	3,300	227	11,000	758	6,700	462
2	1/8	10,000	689	6,500	448	5,000	345	3,200	221	10,000	689	6,500	448
4	1/4	8,000	551	6,600	455	4,000	276	3,300	227	8,000	551	6,600	455
6	3/8	7,800	538	5,300	365	3,900	269	2,600	179	7,800	538	5,300	365
8	1/2	7,700	531	4,900	338	3,800	262	2,400	165	7,700	531	4,900	338

- Pressure ratings listed are for temperature up to 37.8C (100 °F).
- Based on Pressure Pipe Code ASME B31.3 pressure rating is calculated with an allowable stress value of 20,000psi for SS316,
- To determine the working pressure in accordance with Power Pipe Code ASME B31.1, multiply psig by 0.94.
- Due to larger outer diameter of female threads rating of female are lower than male threads.
- To determine kPa rating, multiply psig by 6.89.
- Reducing Hex Bushing (P-SHB) pressure rating is not covered in this table. See the pressure rating in the dimensional data chart.

Ordering Information

Material	S.Steel 316	S.Steel 316L
Identifier	S6	S6L

• Example : P - SHN - 8N - S6

Pipe fitting

Name of fitting

Pipe thread Size

Material

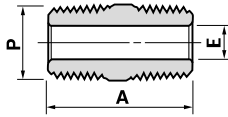
Pipe Thread Symbol & Designator

Pipe Size	Designator	NPT	Tapered (PT)	Parallel (PF)
			ISO 7/1, JIS B0203	ISO 228/1, JIS B0202
1/8	2	2N	2R	2G
1/4	4	4N	4R	4G
3/8	6	6N	6R	6G
1/2	8	8N	8R	8G

✧ IPF (Instrument Pipe Fittings)

Close Nipple
(Male thread both ends)

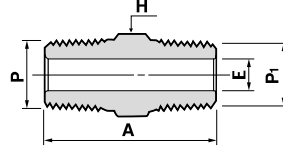
P-SCN



Part No.	Thread		A	E
	P			
P-SCN-4N-H35	1/4NPT		28.4	7.1
P-SCN-4R-H35	1/4PT		28.4	7.1

Hex Nipple
(Male thread both ends)

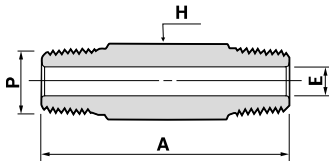
P-SHN



Part No.	Thread		A	E	Hex H
	P	P ₁			
P-SHN-4N-H35	1/4NPT	1/4NPT	35.3	7.1	14.2
P-SHN-4R-H35	1/4PT	1/4PT	35.3	7.1	14.2
P-SHN-4NR-H35	1/4NPT	1/4PT	35.3	7.1	14.2
P-SHN-4NG-H35	1/4NPT	1/4PF	36.8	5.8	19.05

Hex Long Nipple
(Male thread both ends)

P-SHLN

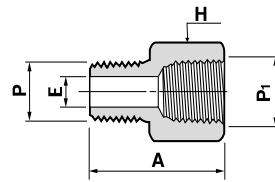


Part Number	Thread		A	E	Hex H
	P				
P-SHLN-4NL★-H35	1/4NPT	★	7.1	14.2	
P-SHLN-4RL★-H35	1/4PT	★	7.1	14.2	

★: Configure to order

Adapter
(Male to female thread)

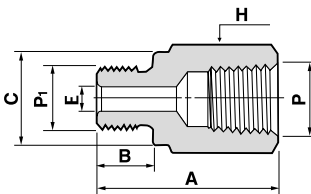
P-MFAA



Part No.	Thread		A	E	Hex H
	P				
P-MFAA-4N-H35	1/4NPT	1/4NPT	35.6	7.1	19.05
P-MFAA-4R-H35	1/4PT	1/4PT	35.6	7.1	19.05
P-MFAA-4RN-H35	1/4PT	1/4NPT	35.6	7.1	19.05
P-MFAA-4GN-H35	1/4PF	1/4NPT	33.3	5.8	19.05

Adapter
(Male ISO paralled to female thread)

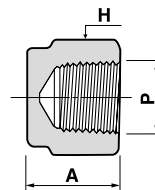
P-MFAB



Part No.	Thread		A	B	C	E	Hex H
	P ₁	P					
P-MFAB-4GN-H35	1/4PF	1/4NPT	33.3	11.2	17.8	5.8	19.05
P-MFAB-4GR-H35	1/4PF	1/4PT	33.3	11.2	17.8	5.8	19.05

Pipe Cap
(Female thread)

P-SC

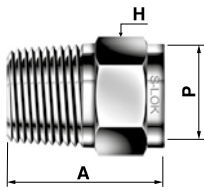


Part No.	Thread		A	Hex H
	P			
P-SC-4N-H35	1/4NPT		22.9	19.05
P-SC-4R-H35	1/4PT		22.9	19.05



Pipe Plug
(Male thread)

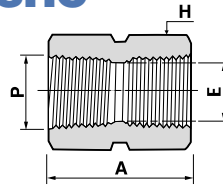
P-SP



Part No.	Thread P	A	Hex H
P-SP-4N-H35	1/4NPT	24.1	14.2
P-SP-4R-H35	1/4PT	24.1	14.2

Hex Coupling
(Female thread both ends)

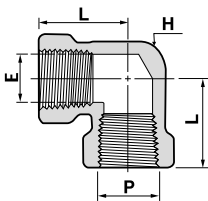
P-SHC



Part No.	Thread P	A	E	Hex H
P-SHC-4N-H35	1/4NPT	30.0	11	19.05
P-SHC-4R-H35	1/4PT	30.0	11	19.05

Elbow
(Female thread both ends)

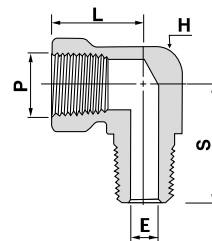
P-SL



Part No.	Thread P	L	E	Hex H
P-SL-4N-H35	1/4NPT	29.0	11	17.5
P-SL-4R-H35	1/4PT	29.0	11	17.5

Street Elbow
(Female to male thread)

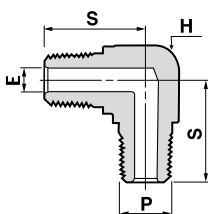
P-SSL



Part No.	Thread P	L	S	E	Hex H
P-SSL-4N-H35	1/4NPT	29.0	26.5	7.1	17.5
P-SSL-4R-H35	1/4PT	29.0	26.5	7.1	17.5

Male Elbow
(Male thread both ends)

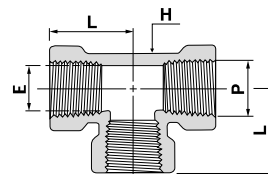
P-SML



Part No.	Thread P	L	E	Hex H
P-SML-4N-H35	1/4NPT	24.5	7.1	12.7
P-SML-4R-H35	1/4PT	24.5	7.1	12.7

Tee
(Female thread)

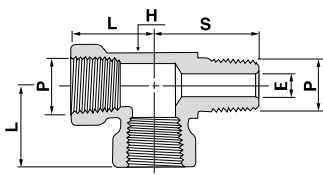
P-ST



Part No.	Thread P	L	E	Hex H
P-ST-4N-H35	1/4NPT	29.0	11	17.5
P-ST-4R-H35	1/4PT	29.0	11	17.5

Run Tee
(Female to male to Female thread)

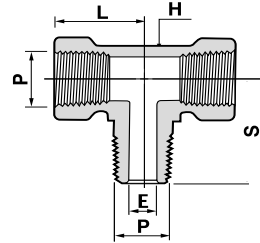
P-SRT



Part No.	Thread P	L	S	E	Hex H
P-SRT-4N-H35	1/4NPT	29.0	26.5	7.1	17.5
P-SRT-4R-H35	1/4PT	29.0	26.5	7.1	17.5

Branch Tee
(Female to male to male thread)

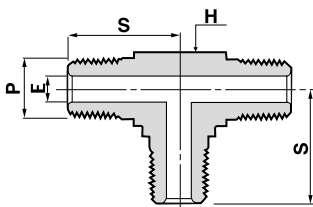
P-SBT



Part No.	Thread P	L	S	E	Hex H
P-SBT-4N-H35	1/4NPT	29.0	26.5	7.1	17.5
P-SBT-4R-H35	1/4PT	29.0	26.5	7.1	17.5

Male Tee
(Male thread)

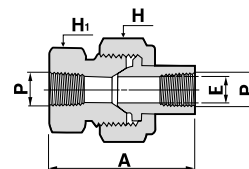
P-SMT



Part No.	Thread P	S	E	Hex H
P-SMT-4N-H35	1/4NPT	24.5	7.1	12.7
P-SMT-4R-H35	1/4PT	24.5	7.1	12.7

Union Ball Joint
(Female thread both ends)

P-SUJ



Part No.	Thread P	A	E	Hex H	Hex H ₁
P-SUJ-F-4N-H35	1/4NPT	59.4	9.1	34.9	30.2
P-SUJ-F-4R-H35	1/4PT	59.4	9.1	34.9	30.2



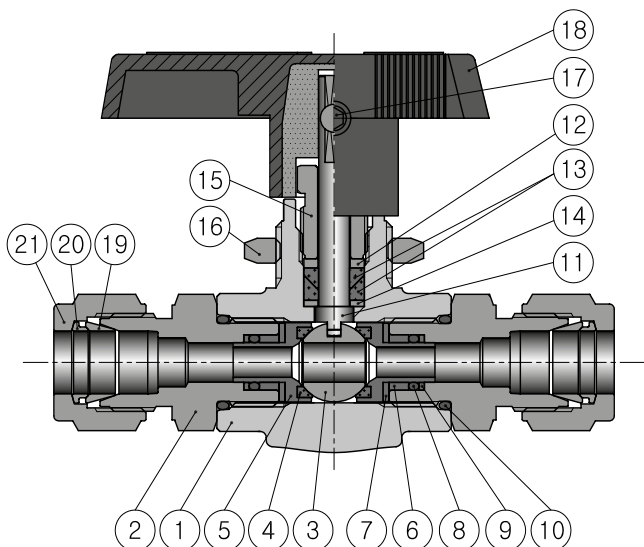
SBV (S-LOK Ball Valves)

Features

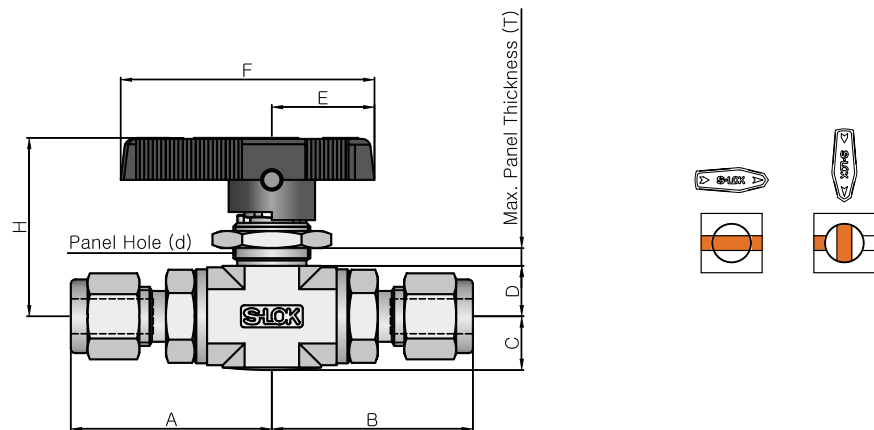
- Pressure rating up to 35Mpa @ 21°C.
- Temperature rating from -40°C to 85°C with standard PEEK seat.
- Free floating ball design provides seat wear compensation, therefore ensures leak proof shut-off at high pressure.
- High flow in a compact design.
- Panel mountable as standard.
- Blow out proof design with internally loaded stem.
- Micro-finished ball provides a positive seal.
- Low operating torques and positive handle stops.
- Handle indicates flow direction.
- Straight through flow path for minimum pressure drop.
- Bi-directional flow.
- Chevron packing standard for positive leak tight.
- 90 degree actuation.
- Every valve is 100% factory tested with the Nitrogen @ 1000psi (69bar).
- Variety of end connections include reliable S-LOK tube fittings Male/Female NPT threads.



Materials of Construction

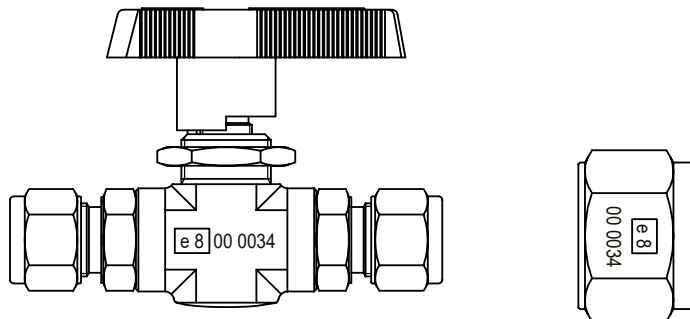


No	Component	Material
1	Body	A182 F316
2	Connector	SS316 / A479 or A276
3	Ball	SS316 / A479 or A276
4	Ball Seat	PEEK
5	Retainer	SS316 / A479 or A276
6	Seat Carrier Guide	SS316 / A479 or A276
7	Disc Spring	Stainless Steel
8	O-ring	EPDM
9	Backup Ring	PTFE
10	O-ring	EPDM
11	Stem	SS316 / A479 or A276
12	Stem Washer	SS316 / A479 or A276
13	Stem Packing (Low)	PTFE
	Stem Packing (Upper)	PTFE
14	Thrust Washer	PEEK
15	Packing Bolt	SS316 / A479 or A276
16	Lock Nut	Stainless Steel
17	Set Screw	Stainless Steel
18	Handle	Black Nylon
19	Front Ferrule	Stainless Steel
20	Back Ferrule	Stainless Steel
21	Nut	SS316 / A479 or A276



Ordering Number		Orifice		End Connections		Dimensions (mm)							
		mm	inch	Inlet	Outlet	A	B	C	D	E	F	H	d
SFBVC2	S-4T-H35	4.8	0.189	1/4" S-LOK		44.2	10.7	11.9	25.6	78.0	49.6	19.6	6.4
	F-4N-H35	6.4	0.25	1/4" Female NPT		38.4							
	M-4N-H35			1/4" Male NPT		41.1							
	S-6T-H35	3/8" S-LOK		45.7									
	S-6M-H35	4.8	0.189	6mm S-LOK		44.5							
	S-8M-H35	6.4	0.25	8mm S-LOK		45.2							
	S-10M-H35			10mm S-LOK		46.0							
SFBVC3	S-8T-H35	10.3	0.406	1/2" S-LOK		59.4	17.5	17.8	38.1	99.0	62.9	22.9	9.7
	S-10T-H35			5/8" S-LOK		59.4							
	S-12T-H35			3/4" S-LOK		59.2							
	S-12M-H35	9.5	0.375	12mm S-LOK									
	S-14M-H35	10.3	0.406	14mm S-LOK									
	S-15M-H35			15mm S-LOK									
	S-16M-H35			16mm S-LOK									

Marking Detail (EC-79 Certification)



EC79 CERTIFICATION - TUBE TO TUBE UNION FITTINGS

* Full certification available on request.



ČESKÁ REPUBLIKA/CZECH REPUBLIC
MINISTERSTVO DOPRAVY/MINISTRY OF TRANSPORT
nábřeží Ludvíka Svobody 12
P. O. BOX 9
110 15 PRAHA 1

CERTIFIKÁT ES SCHVÁLENÍ TYPU / EC TYPE-APPROVAL CERTIFICATE

Sdělení o: ⁽¹⁾

Communication concerning the: ⁽¹⁾

- ES schválení typu
- EC type-approval
- rozšíření ES schválení typu
- extension of EC type-approval
- odmítnutí ES schválení typu
- refusal of EC type-approval
- odejmutí schválení typu
- withdrawal of EC type-approval

**pro typ vodíkové konstrukční části s ohledem na nařízení (ES) č. 79/2009
provedené nařízením (EU) č. 406/2010
naposledy pozměněné nařízením (EU) č. 519/2013**

**of a type of a hydrogen component with regard to Regulation (EC) No. 79/2009,
as implemented by Regulation (EU) No. 406/2010
as last amended by Regulation (EU) No. 519/2013**

Číslo ES schválení typu:
EC type-approval number:

e8*79/2009*519/2013*0039*00

Důvod rozšíření:
Reason for extension:

N/A

ČÁST / SECTION I

0.1 Značka (obchodní název výrobce):
Make (trade name of manufacturer):

S-LOK[®], HanSun nebo / or S

0.2 Typ:
Type:

TTU

0.3 Způsob označení typu, je-li na konstrukční části
vyznačen ⁽²⁾:
Means of identification of type if marked
on the component ⁽²⁾:

**Písmena a číslice
Letters and digits**

0.3.1 Umístění tohoto označení:
Location of that marking:

**Laserové značení na výrobku
Laser marking on the product**

0.5 Název a adresa výrobce:
Name and address of manufacturer:

**HANSUN ENGINEERING CO., LTD.
27, Noksansandan 361-ro
Gangseo-gu
46754 Busan
Republic of Korea**

EC79 CERTIFICATION - TUBE TO MALE PIPE FITTINGS

* Full certification available on request.



ČESKÁ REPUBLIKA/CZECH REPUBLIC
MINISTERSTVO DOPRAVY/MINISTRY OF TRANSPORT
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**pro typ vodíkové konstrukční části s ohledem na nařízení (ES) č. 79/2009
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as last amended by Regulation (EU) No. 519/2013**

Číslo ES schválení typu:
EC type-approval number:

e8*79/2009*519/2013*0038*00

Důvod rozšíření:
Reason for extension:

N/A

ČÁST / SECTION I

0.1 Značka (obchodní název výrobce):
Make (trade name of manufacturer):

S-LOK[®], HanSun nebo / or S

0.2 Typ:
Type:

TMP

0.3 Způsob označení typu, je-li na konstrukční části
vyznačen ⁽²⁾:
Means of identification of type if marked
on the component ⁽²⁾:

**Písmena a číslice
Letters and digits**

0.3.1 Umístění tohoto označení:
Location of that marking:

**Laserové značení na výrobku
Laser marking on the product**

0.5 Název a adresa výrobce:
Name and address of manufacturer:

**HANSUN ENGINEERING CO., LTD.
27, Noksansandan 361-ro
Gangseo-gu
46754 Busan
Republic of Korea**



EC79 CERTIFICATION - TUBE TO FEMALE PIPE FITTINGS

* Full certification available on request.



ČESKÁ REPUBLIKA/CZECH REPUBLIC
MINISTERSTVO DOPRAVY/MINISTRY OF TRANSPORT
nábřeží Ludvíka Svobody 12
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110 15 PRAHA 1

CERTIFIKÁT ES SCHVÁLENÍ TYPU / EC TYPE-APPROVAL CERTIFICATE

Sdělení o: ⁽¹⁾

Communication concerning the: ⁽¹⁾

- ES schválení typu
- EC type-approval
- rozšíření ES schválení typu
- extension of EC type-approval
- odmítnutí ES schválení typu
- refusal of EC type-approval
- odejmutí schválení typu
- withdrawal of EC type-approval

**pro typ vodíkové konstrukční části s ohledem na nařízení (ES) č. 79/2009
provedené nařízením (EU) č. 406/2010
naposledy pozměněné nařízením (EU) č. 519/2013**

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as last amended by Regulation (EU) No. 519/2013**

Číslo ES schválení typu:
EC type-approval number:

e8*79/2009*519/2013*0035*00

Důvod rozšíření:
Reason for extension:

N/A

ČÁST / SECTION I

0.1 Značka (obchodní název výrobce):
Make (trade name of manufacturer):

S-LOK[®], HanSun nebo / or S

0.2 Typ:
Type:

TFP

0.3 Způsob označení typu, je-li na konstrukční části
vyznačen ⁽²⁾:
Means of identification of type if marked
on the component ⁽²⁾:

**Písmena a číslice
Letters and digits**

0.3.1 Umístění tohoto označení:
Location of that marking:

**Laserové značení na výrobku
Laser marking on the product**

0.5 Název a adresa výrobce:
Name and address of manufacturer:

**HANSUN ENGINEERING CO., LTD.
27, Noksansandan 361-ro
Gangseo-gu
46754 Busan
Republic of Korea**

EC79 CERTIFICATION - STUB TUBE CONNECTOR

* Full certification available on request.



ČESKÁ REPUBLIKA/CZECH REPUBLIC
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 nábřeží Ludvíka Svobody 12
 P. O. BOX 9
 110 15 PRAHA 1

CERTIFIKÁT ES SCHVÁLENÍ TYPU / EC TYPE-APPROVAL CERTIFICATESdělení o: ⁽¹⁾Communication concerning the: ⁽¹⁾

- ES schválení typu
- EC type-approval
- rozšíření ES schválení typu
- extension of EC type-approval
- odmítnutí ES schválení typu
- refusal of EC type-approval
- odejmutí schválení typu
- withdrawal of EC type-approval

**pro typ vodíkové konstrukční části s ohledem na nařízení (ES) č. 79/2009
 provedené nařízením (EU) č. 406/2010
 naposledy pozměněné nařízením (EU) č. 519/2013**

**of a type of a hydrogen component with regard to Regulation (EC) No. 79/2009,
 as implemented by Regulation (EU) No. 406/2010
 as last amended by Regulation (EU) No. 519/2013**

Číslo ES schválení typu:

EC type-approval number:

e8*79/2009*519/2013*0037*00

Důvod rozšíření:

Reason for extension:

N/A

ČÁST / SECTION I

0.1 Značka (obchodní název výrobce):
 Make (trade name of manufacturer):

S-LOK[®], HanSun nebo / or **S**

0.2 Typ:
 Type:

STC

0.3 Způsob označení typu, je-li na konstrukční části
 vyznačen ⁽²⁾:
 Means of identification of type if marked
 on the component ⁽²⁾:

Písmena a číslice
Letters and digits

0.3.1 Umístění tohoto označení:
 Location of that marking:

Laserové značení na výrobku
Laser marking on the product

0.5 Název a adresa výrobce:
 Name and address of manufacturer:

HANSUN ENGINEERING CO., LTD.
27, Noksansandan 361-ro
Gangseo-gu
46754 Busan
Republic of Korea



EC79 CERTIFICATION - INSTRUMENT PIPE FITTINGS

* Full certification available on request.



ČESKÁ REPUBLIKA/CZECH REPUBLIC
 MINISTERSTVO DOPRAVY/MINISTRY OF TRANSPORT
 nábřeží Ludvíka Svobody 12
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 110 15 PRAHA 1

CERTIFIKÁT ES SCHVÁLENÍ TYPU / EC TYPE-APPROVAL CERTIFICATE

Sdělení o: ⁽¹⁾Communication concerning the: ⁽¹⁾

- ES schválení typu
- EC type-approval
- rozšíření ES schválení typu
- extension of EC type-approval
- odmítnutí ES schválení typu
- refusal of EC type-approval
- odejmutí schválení typu
- withdrawal of EC type-approval

pro typ vodíkové konstrukční části s ohledem na nařízení (ES) č. 79/2009
 provedené nařízením (EU) č. 406/2010
 naposledy pozměněné nařízením (EU) č. 519/2013

of a type of a hydrogen component with regard to Regulation (EC) No. 79/2009,
 as implemented by Regulation (EU) No. 406/2010
 as last amended by Regulation (EU) No. 519/2013

Číslo ES schválení typu:
 EC type-approval number:

e8*79/2009*519/2013*0036*00

Důvod rozšíření:
 Reason for extension:

N/A

ČÁST / SECTION I

0.1 Značka (obchodní název výrobce):
 Make (trade name of manufacturer):

S-LOK®, HanSun nebo / or S

0.2 Typ:
 Type:

IPF

0.3 Způsob označení typu, je-li na konstrukční části
 vyznačen ⁽²⁾:
 Means of identification of type if marked
 on the component ⁽²⁾:

Písmena a číslice
 Letters and digits

0.3.1 Umístění tohoto označení:
 Location of that marking:

Laserové značení na výrobku
 Laser marking on the product

0.5 Název a adresa výrobce:
 Name and address of manufacturer:

HANSUN ENGINEERING CO., LTD.
 27, Noksansandan 361-ro
 Gangseo-gu
 46754 Busan
 Republic of Korea

EC79 CERTIFICATION - S-LOK BALL VALVES

* Full certification available on request.



ČESKÁ REPUBLIKA/CZECH REPUBLIC
 MINISTERSTVO DOPRAVY/MINISTRY OF TRANSPORT
 nábřeží Ludvíka Svobody 12
 P. O. BOX 9
 110 15 PRAHA 1

CERTIFIKÁT ES SCHVÁLENÍ TYPU / EC TYPE-APPROVAL CERTIFICATESdělení o: ⁽¹⁾Communication concerning the: ⁽¹⁾

- ES schválení typu
- EC type-approval
- rozšíření ES schválení typu
- extension of EC type-approval
- odmítnutí ES schválení typu
- refusal of EC type-approval
- odejmutí schválení typu
- withdrawal of EC type-approval

**pro typ vodíkové konstrukční části s ohledem na nařízení (ES) č. 79/2009
 provedené nařízením (EU) č. 406/2010
 naposledy pozměněné nařízením (EU) č. 519/2013**

**of a type of a hydrogen component with regard to Regulation (EC) No. 79/2009,
 as implemented by Regulation (EU) No. 406/2010
 as last amended by Regulation (EU) No. 519/2013**

Číslo ES schválení typu:

e8*79/2009*519/2013*0034*00

EC type-approval number:

Důvod rozšíření:

N/A

Reason for extension:

ČÁST / SECTION I

0.1 Značka (obchodní název výrobce):
 Make (trade name of manufacturer):

S-LOK[®], HanSun nebo / or **S**

0.2 Typ:
 Type:

SBV

0.3 Způsob označení typu, je-li na konstrukční části
 vyznačen ⁽²⁾:
 Means of identification of type if marked
 on the component ⁽²⁾:

**Písmena a číslice
 Letters and digits**

0.3.1 Umístění tohoto označení:
 Location of that marking:

**Laserové značení na boční straně výrobku
 Laser marking on the side of the product**

0.5 Název a adresa výrobce:
 Name and address of manufacturer:

**HANSUN ENGINEERING CO., LTD.
 27, Noksansandan 361-ro
 Gangseo-gu
 46754 Busan
 Republic of Korea**



TÜV SÜD CZECH S.R.O. TEST REPORT - TUBE TO TUBE UNION FITTINGS

* Full test report available on request.

Technical Report No.: 120982 – 22 – TAC
 Regulation: EC/EU 79/2019*519/2013
 Manufacturer: HANSUN ENGINEERING CO., LTD., Republic of Korea
 Type: TTU



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EU Technical Service No. e8 and e27

TECHNICAL REPORT
No. 120982 – 22 – TAC

Test according to Regulation (EC) No 79/2009 of the European Parliament and of the Council
 as implemented by the Commission Regulation (EU) No 406/2010

on type-approval of hydrogen-powered motor vehicles

Regulation (EC) No. 79/2009 of 2009-01-14
 including all amendments up to and including:
 Regulation (EU) No. 406/2010 of 2010-04-26
 Regulation (EU) No. 519/2013 of 2013-02-21

Objectives: Document for issue of approval certificate

I. Technical data

0.1. Make (trade name of manufacturer):

S-LOK®, HanSun or

0.2. Type:

TTU

0.2.1. Variants:

SU-4-H35-S6, SU-5-H35-S6, SU-6-H35-S6, SU-8-H35-S6, SU-10-H35-S6, SU-6M-H35-S6, SU-8M-H35-S6, SU-10M-H35-S6, SU-12M-H35-S6, SU-14M-H35-S6, SU-15M-H35-S6, SU-16M-H35-S6, SL-4-H35-S6, SL-5-H35-S6, SL-6-H35-S6, SL-8-H35-S6, SL-10-H35-S6, SL-6M-H35-S6, SL-8M-H35-S6, SL-10M-H35-S6, SL-12M-H35-S6, SL-14M-H35-S6, SL-15M-H35-S6, SL-16M-H35-S6, SUR-5-4-H35-S6, SUR-6-4-H35-S6, SUR-6-5-H35-S6, SUR-8-4-H35-S6, SUR-8-6-H35-S6, SUR-10-6-H35-S6, SUR-10-8-H35-S6, SUR-8M-6M-H35-S6, SUR-10M-6M-H35-S6, SUR-10M-8M-H35-S6, SUR-12M-6M-H35-S6, SUR-12M-8M-H35-S6, SUR-12M-10M-H35-S6, SUR-16M-10M-H35-S6, SUR-16M-12M-H35-S6, ST-4-H35-S6, ST-5-H35-S6, ST-6-H35-S6, ST-8-H35-S6, ST-10-H35-S6, ST-6M-H35-S6, ST-8M-H35-S6, ST-10M-H35-S6, ST-12M-H35-S6, ST-14M-H35-S6, ST-15M-H35-S6, ST-16M-H35-S6, SX-4-H35-S6, SX-5-H35-S6, SX-6-H35-S6, SX-8-H35-S6, SX-10-H35-S6, SX-6M-H35-S6, SX-8M-H35-S6, SX-10M-H35-S6, SX-12M-H35-S6, SX-14M-H35-S6, SX-15M-H35-S6, SX-16M-H35-S6, STR-4-6-H35-S6, STR-4-8-H35-S6, STR-6-4-6-H35-S6, STR-6-4-H35-S6, STR-6-8-H35-S6, STR-8-

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TÜV SÜD CZECH S.R.O. TEST REPORT - TUBE TO MALE PIPE FITTINGS

* Full test report available on request.

Technical Report No.: 120981 – 22 – TAC
 Regulation: EC/EU 79/2019*519/2013
 Manufacturer: HANSUN ENGINEERING CO., LTD., Republic of Korea
 Type: TMP



1/8

EU Technical Service No. e8 and e27

TECHNICAL REPORT
No. 120981 – 22 – TAC

Test according to Regulation (EC) No 79/2009 of the European Parliament and of the Council
 as implemented by the Commission Regulation (EU) No 406/2010

on type-approval of hydrogen-powered motor vehicles

Regulation (EC) No. 79/2009 of 2009-01-14
 including all amendments up to and including:
 Regulation (EU) No. 406/2010 of 2010-04-26
 Regulation (EU) No. 519/2013 of 2013-02-21

Objectives: Document for issue of approval certificate

I. Technical data

0.1. Make (trade name of manufacturer):

S-LOK, **HanSun** or 

0.2. Type:

TMP

0.2.1. Variants:

SMC-4-4N-H35-S6, SMC-5-4N-H35-S6, SMC-6-4N-H35-S6, SMC-8-4N-H35-S6, SMC-6M-4R-H35-S6, SMC-8M-4R-H35-S6, SMC-10M-4R-H35-S6, SMC-12M-4R-H35-S6, SMC-16M-4R-H35-S6, SMC-6M-4N-H35-S6, SMC-8M-4N-H35-S6, SMC-10M-4N-H35-S6, SMC-12M-4N-H35-S6, SMC-16M-4N-H35-S6, SMC-4-4G-H35-S6, SMC-6-4G-H35-S6, SMC-8-4G-H35-S6, SMC-6M-4G-H35-S6, SMC-8M-4G-H35-S6, SMC-10M-4G-H35-S6, SMC-12M-4G-H35-S6, SOM-4-4G-H35-S6, SOM-6-4G-H35-S6, SOM-8-4G-H35-S6, SOM-6M-4G-H35-S6, SOM-8M-4G-H35-S6, SOM-10M-4G-H35-S6, SOM-12-4G-H35-S6, SMCB-4-4N-H35-S6, SMCB-6-4N-H35-S6, SLBM-4-4N-H35-S6, SLBM-6-4N-H35-S6, SLM-4-4N-H35-S6, SLM-5-4N-H35-S6, SLM-6-4N-H35-S6, SLM-8-4N-H35-S6, SLM-6M-4R-H35-S6, SLM-8M-4R-H35-S6, SLM-10M-4R-H35-S6, SLM-12M-4R-H35-S6, SLM-6M-4N-H35-S6, SLM-8M-4N-H35-S6, SLM-10M-4N-H35-S6, SLM-12M-4N-H35-S6, STRM-4-4N-H35-S6, STRM-5-4N-H35-S6, STRM-6-4N-H35-S6, STRM-8-4N-H35-S6, STRM-6M-4R-H35-S6, STRM-8M-4R-H35-S6, STRM-10M-4R-H35-S6, STRM-12M-4R-H35-S6, STRM-6M-4N-H35-S6, STRM-8M-4N-H35-S6, STRM-10M-4N-

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TUV[®]



TÜV SÜD CZECH S.R.O. TEST REPORT - TUBE TO FEMALE PIPE FITTINGS

* Full test report available on request.

Technical Report No.: 120980 – 22 – TAC
 Regulation: EC/EU 79/2019*519/2013
 Manufacturer: HANSUN ENGINEERING CO., LTD., Republic of Korea
 Type: TFP



1/8

EU Technical Service No. e8 and e27

TECHNICAL REPORT
No. 120980 – 22 – TAC

Test according to Regulation (EC) No 79/2009 of the European Parliament and of the Council
 as implemented by the Commission Regulation (EU) No 406/2010

on type-approval of hydrogen-powered motor vehicles

Regulation (EC) No. 79/2009 of 2009-01-14
 including all amendments up to and including:
 Regulation (EU) No. 406/2010 of 2010-04-26
 Regulation (EU) No. 519/2013 of 2013-02-21

Objectives: Document for issue of approval certificate

I. Technical data

0.1. Make (trade name of manufacturer):

S-LOK®, **HanSun** or 

0.2. Type:

TFP

0.2.1. Variants:

SCF-4-4N-H35-S6, SCF-5-4N-H35-S6, SCF-6-4N-H35-S6, SCF-8-4N-H35-S6, SCF-6M-4R-H35-S6, SCF-8M-4R-H35-S6, SCF-10M-4R-H35-S6, SCF-12M-4R-H35-S6, SCF-6M-4N-H35-S6, SCF-8M-4N-H35-S6, SCF-10M-4N-H35-S6, SCF-12M-4N-H35-S6, SCG-4-4G-H35-S6, SCG-5-4G-H35-S6, SCG-6-4G-H35-S6, SCG-8-4G-H35-S6, SCG-6M-4G-H35-S6, SCG-8M-4G-H35-S6, SCG-10M-4G-H35-S6, SCG-12M-4G-H35-S6, SCBF-4-4N-H35-S6, SCBF-6-4N-H35-S6, SLF-4-4N-H35-S6, SLF-5-4N-H35-S6, SLF-6-4N-H35-S6, SLF-8-4N-H35-S6, SLF-6M-4N-H35-S6, SLF-8M-4N-H35-S6, SLF-10M-4N-H35-S6, SLF-12M-4N-H35-S6, STRF-4-4N-H35-S6, STRF-5-4N-H35-S6, STRF-6-4N-H35-S6, STRF-8-4N-H35-S6, STRF-6M-4N-H35-S6, STRF-8M-4N-H35-S6, STRF-10M-4N-H35-S6, STRF-12M-4N-H35-S6, STBF-4-4N-H35-S6, STBF-5-4N-H35-S6, STBF-6-4N-H35-S6, STBF-8-4N-H35-S6, STBF-6M-4N-H35-S6, STBF-8M-4N-H35-S6, STBF-10M-4N-H35-S6, STBF-12M-4N-H35-S6

0.2.2. Commercial name: S-LOK Tube fittings

0.3. Means of identification of type: By letters and digits

TÜV SÜD Czech s.r.o., Testing Laboratory, Novodvorská 994/138, 142 21 Prague 4, Czech Republic
 Phone: +420 239 046 700, Fax: +420 239 046 805, info.cz@tuvsud.com, www.tuvsud.com/cz
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TÜV SÜD CZECH S.R.O. TEST REPORT - STUB TUBE CONNECTOR

* Full test report available on request.

Technical Report No.: 120979 – 22 – TAC
 Regulation: EC/EU 79/2019*519/2013
 Manufacturer: HANSUN ENGINEERING CO., LTD., Republic of Korea
 Type: STC



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EU Technical Service No. e8 and e27

TECHNICAL REPORT
No. 120979 – 22 – TAC

Test according to Regulation (EC) No 79/2009 of the European Parliament and of the Council
 as implemented by the Commission Regulation (EU) No 406/2010

on type-approval of hydrogen-powered motor vehicles

Regulation (EC) No. 79/2009 of 2009-01-14
 including all amendments up to and including:
 Regulation (EU) No. 406/2010 of 2010-04-26
 Regulation (EU) No. 519/2013 of 2013-02-21

Objectives: Document for issue of approval certificate

I. Technical data

0.1. Make (trade name of manufacturer):

S-LOK, **HanSun** or **S**

0.2. Type:

STC

0.2.1. Variants:

SR-4-4-H35-S6, SR-4-5-H35-S6, SR-4-6-H35-S6, SR-4-8-H35-S6, SR-4-10-H35-S6, SR-5-6-H35-S6, SR-5-8-H35-S6, SR-6-4-H35-S6, SR-6-6-H35-S6, SR-6-8-H35-S6, SR-6-10-H35-S6, SR-8-4-H35-S6, SR-8-10-H35-S6, SR-8-6-H35-S6, SR-8-8-H35-S6, SR-6M-4-H35-S6, SR-6M-5-H35-S6, SR-6M-6-H35-S6, SR-6M-8-H35-S6, SR-8M-6-H35-S6, SR-8M-8-H35-S6, SR-10M-6-H35-S6, SR-10M-8-H35-S6, SR-12M-8-H35-S6, SR-6M-8M-H35-S6, SR-6M-10M-H35-S6, SR-6M-12M-H35-S6, SR-8M-6M-H35-S6, SR-8M-10M-H35-S6, SR-8M-12M-H35-S6, SR-10M-6M-H35-S6, SR-10M-12M-H35-S6, SR-10M-15M-H35-S6, SR-12M-6M-H35-S6, SR-12M-10M-H35-S6, SR-12M-16M-H35-S6, SR-16M-12M-H35-S6, SAB-4-4-H35-S6, SAB-6-6-H35-S6, SAB-8-8-H35-S6, SAB-10-10-H35-S6, SAM-4-4N-H35-S6, SAM-5-4N-H35-S6, SAM-6-4N-H35-S6, SAM-8-4N-H35-S6, SAM-6M-4R-H35-S6, SAM-8M-4R-H35-S6, SAM-10M-4R-H35-S6, SAM-12M-4R-H35-S6, SAM-6M-4N-H35-S6, SAM-8M-4N-H35-S6, SAM-10M-4N-H35-S6, SAM-12M-4N-H35-S6, SAF-4-4N-H35-S6, SAF-5-4N-H35-S6, SAF-6-4N-H35-S6, SAF-8-4N-H35-S6, SAF-6M-4R-H35-S6, SAF-8M-4R-H35-S6, SAF-10M-4R-H35-S6, SAF-

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TÜV[®]



TÜV SÜD CZECH S.R.O. TEST REPORT - INSTRUMENT PIPE FITTINGS

* Full test report available on request.

Technical Report No.: 120978 – 22 – TAC
 Regulation: EC/EU 79/2019*519/2013
 Manufacturer: HANSUN ENGINEERING CO., LTD., Republic of Korea
 Type: IPF



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EU Technical Service No. e8 and e27

TECHNICAL REPORT
No. 120978 – 22 – TAC

Test according to Regulation (EC) No 79/2009 of the European Parliament and of the Council
 as implemented by the Commission Regulation (EU) No 406/2010

on type-approval of hydrogen-powered motor vehicles

Regulation (EC) No. 79/2009 of 2009-01-14
 including all amendments up to and including:
 Regulation (EU) No. 406/2010 of 2010-04-26
 Regulation (EU) No. 519/2013 of 2013-02-21

Objectives: Document for issue of approval certificate

I. Technical data

0.1. Make (trade name of manufacturer):

S-LOK®, **HanSun** or 

0.2. Type:

IPF

0.2.1. Variants:

P-SCN-4R-H35-S6, P-SCN-4N-H35-S6, P-SHN-4NG-H35-S6, P-SHN-4NR-H35-S6, P-SHN-4R-H35-S6, P-SHN-4N-H35-S6, P-SHLN-4R-H35-S6, P-SHLN-4N-H35-S6, P-MFAA-4GN-H35-S6, P-MFAA-4RN-H35-S6, P-MFAA-4R-H35-S6, P-MFAA-4N-H35-S6, P-MFAB-4GR-H35-S6, P-MFAB-4GN-H35-S6, P-SC-4R-H35-S6, P-SC-4N-H35-S6, P-SP-4R-H35-S6, P-SP-4N-H35-S6, P-SHC-4R-H35-S6, P-SHC-4N-H35-S6, P-SL-4R-H35-S6, P-SL-4N-H35-S6, P-SSL-4R-H35-S6, P-SSL-4N-H35-S6, P-SML-4R-H35-S6, P-SML-4N-H35-S6, P-ST-4R-H35-S6, P-ST-4N-H35-S6, P-SRT-4R-H35-S6, P-SRT-4N-H35-S6, P-SBT-4R-H35-S6, P-SBT-4N-H35-S6, P-SMT-4R-H35-S6, P-SMT-4N-H35-S6, P-SUJ-F-4R-H35-S6, P-SUJ-F-4N-H35-S6

0.2.2. Commercial name: Instrument thread fitting

0.3. Means of identification of type: By letters and digits

0.3.1. Location of that marking: On the body

0.4. Maximum working pressure: 43.75 MPa

TÜV SÜD Czech s.r.o., Testing Laboratory, Novodvorská 994/138, 142 21 Prague 4, Czech Republic
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 F 540-075-01EN (2021-05-03) (F540_075_01EN)

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TÜV SÜD CZECH S.R.O. TEST REPORT - S-LOK BALL VALVES

* Full test report available on request.

Technical Report No.: 120977 – 22 – TAC
 Regulation: EC/EU 79/2019*519/2013
 Manufacturer: HANSUN ENGINEERING CO., LTD., Republic of Korea
 Type: SBV



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EU Technical Service No. e8 and e27

TECHNICAL REPORT
No. 120977 – 22 – TAC

Test according to Regulation (EC) No 79/2009 of the European Parliament and of the Council
 as implemented by the Commission Regulation (EU) No 406/2010

on type-approval of hydrogen-powered motor vehicles

Regulation (EC) No. 79/2009 of 2009-01-14
 including all amendments up to and including:
 Regulation (EU) No. 406/2010 of 2010-04-26
 Regulation (EU) No. 519/2013 of 2013-02-21

Objectives: Document for issue of approval certificate

I. Technical data

- 0.1. Make (trade name of manufacturer): **S-LOK[®], HanSun or **
- 0.2. Type: SBV
- 0.2.1. Variants: SFBVC2-S-10M-H35-S6, SFBVC2-S-8M-H35-S6, SFBVC2-S-6M-H35-S6, SFBVC2-S-6T-H35-S6, SFBVC2-S-4T-H35-S6, SFBVC2-F-4N-H35-S6, SFBVC2-M-4N-H35-S6, SFBVC3-S-16M-H35-S6, SFBVC3-S-15M-H35-S6, SFBVC3-S-14M-H35-S6, SFBVC3-S-12M-H35-S6, SFBVC3-S-10T-H35-S6, SFBVC3-S-8T-H35-S6
- 0.2.2. Commercial name: H2 Forged ball valve
- 0.3. Means of identification of type: By letters and digits
- 0.3.1. Location of that marking: On the body
- 0.4. Maximum working pressure: 43.75 MPa
- 0.4.1. Hydrogen propulsion: Hydrogen component designed to use compressed (gaseous) hydrogen
- 0.5. Name and address of manufacturer: HANSUN ENGINEERING CO., LTD.
27, Noksansandan 361-ro, Gangseo-gu, Busan, Republic of Korea

TÜV SÜD Czech s.r.o., Testing Laboratory, Novodvorská 994/138, 142 21 Prague 4, Czech Republic
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