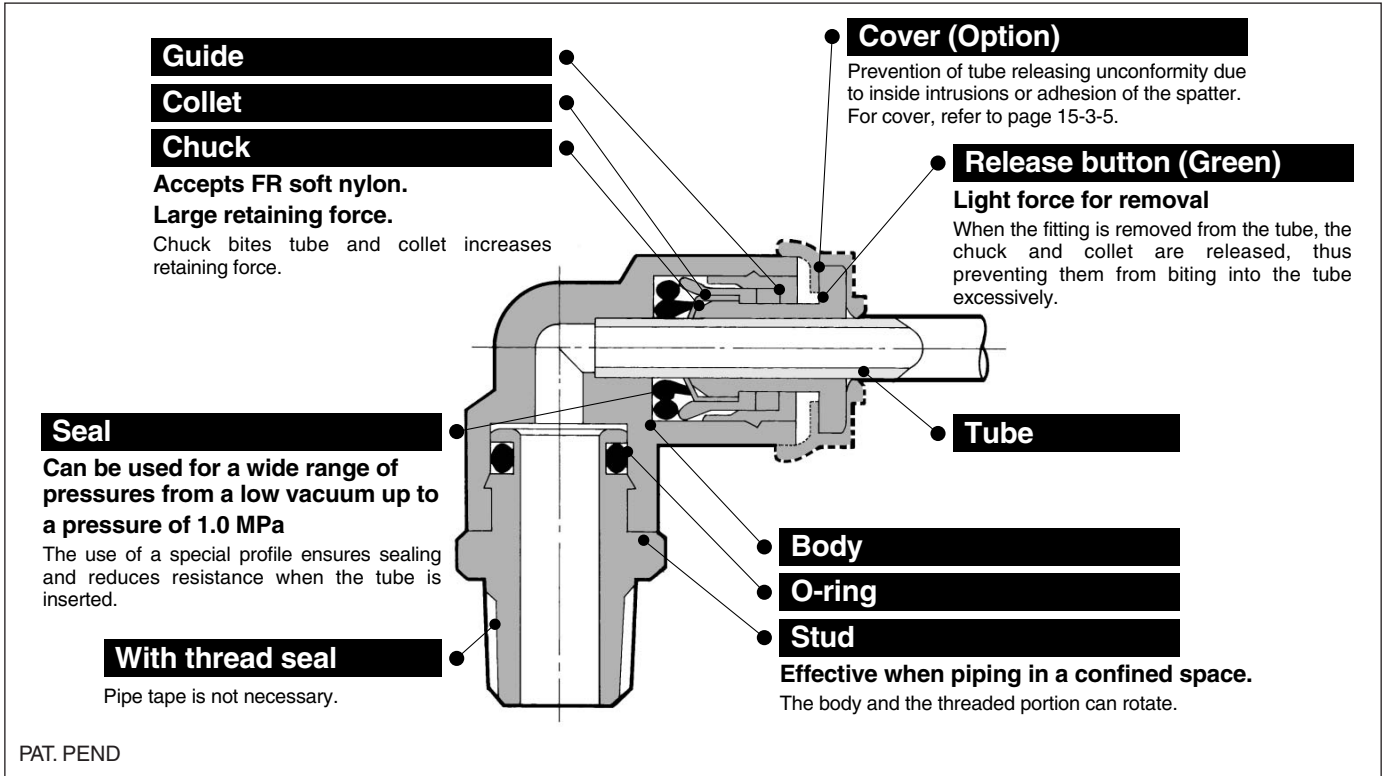


Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Series KR



- K
- M
- H
- D
- MS
- T
- VMG



Applicable Tubing

Tube material	FR double layer, FR soft nylon
Tube O.D.	ø6, ø8, ø10, ø12

Specifications

Fluid	Air/Water ^{Note)}	
Maximum operating pressure	1.0 MPa	
Proof pressure	3.0 MPa	
Ambient and fluid temperature	-5 to 60°C (Water: 0 to 60°C) (No freezing)	
Thread	Mounting section	JIS B 0203 (Taper thread for piping)
	Nut section	JIS B 0211 Class 2 (Metric fine thread)
Seal (Thread portion)	With seal (Standard)	

Note) Applicable for general industrial water. Please consult with SMC if using for other kinds of fluid. Also, the surge pressure must be under the maximum operating pressure.

Principal Parts Material

Body	C3604BD, Flame resistant PBT (UL-94 standard V-0)
Stud	C3604BD (Thread portion)
Chuck	Stainless steel 304
Guide	Stainless steel 304, Flame resistant PBT (UL-94 standard V-0)
Collet	POM
Release button	Flame resistant PBT (UL-94 standard V-0)
Seal, O-ring	NBR
Cover (Option)	Flame resistant PBT, Flame resistant CR (UL-94 standard V-0)

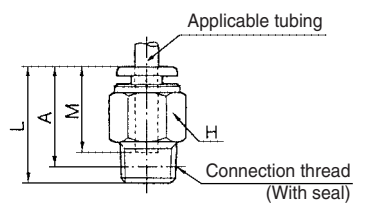
Series KR

Model		
Male connector KRH P. 2  Use to pipe in the same direction from female thread. Most general style.	Union elbow KRL P. 3  Use to connect tubes at right angles.	Plug-in reducer KRR P. 5  Use to size down One-touch fittings.
Straight union KRH P. 2  Use to connect tubes in the same direction.	Extended male elbow KRW P. 3  Basically, it is used together with male elbow. Different point is that it is used for fittings to avoid from interfering with each other by making the piping two-level.	Union "Y" KRU P. 4  Use to branch line in the same direction.
Male elbow KRL P. 3  Use to pipe at right angles to female thread. Most general style.	Male branch tee KRT P. 4  Use to branch line from female thread in both 90° directions.	Plug-in "Y" KRU P. 4  Use to branch line in the same direction from One-touch fittings.
45° male elbow KRK P. 3  Use to pipe in 45° angle direction from female thread. Model in-between of male connector and male elbow.	Union tee KRT P. 4  Use to connect tubes in both 90° directions.	Branch KRU P. 5  Use to branch line in the same direction from female thread.
Universal male elbow KRV P. 3  Universal male elbow allows thread connection by using a socket wrench for confined spaces.	Male run tee KRY P. 4  Use to branch line in the same direction from female thread and in 90° direction.	Bulkhead union KRE P. 5  Use to connect tubes through a panel.
Spatter cover KR P. 5  Prevention of tube releasing unconformity due to an inside intrusion or adhesion of the spatter.	Spatter cover KR-□C1 P. 5  Prevention of tube releasing unconformity due to an inside intrusion or adhesion of the spatter.	Plug KRP P. 5  Use to plug unused One-touch fittings.

Dimensions

Male Connector: KRH

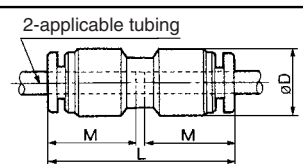
Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	L	A*	M	Effective area (mm ²)		Weight (g)
							FR double layer	FR soft nylon	
6	1/8	KRH06-01S	12	22.5	18.5	17	10.4	5.6	16
	1/4	KRH06-02S	14	23	17				14
	3/8	KRH06-03S	17	22	15.5				27
8	1/8	KRH08-01S	14	28	24	18.5	26.1	18.0	21
	1/4	KRH08-02S		26.5	20.5				19
	3/8	KRH08-03S		17	22				15.5
10	1/8	KRH10-01S	17	30	26	21	26.1	26.1	19
	1/4	KRH10-02S		33.5	27.5				30
	3/8	KRH10-03S		29	22.5				53
	1/2	KRH10-04S		22	27				19
12	1/4	KRH12-02S	19	34.5	28.5	22	58.3	46.1	42
	3/8	KRH12-03S		30	23.5				34
	1/2	KRH12-04S		22	30				22



* Reference dimensions after R thread installation.

Straight Union: KRH

Applicable tubing O.D. (mm)	Model	øD (Note)	L	M	Effective area (mm ²)		Weight (g)
					FR double layer	FR soft nylon	
6	KRH06-00	12.8	34.5	17	10.4	5.6	4
8	KRH08-00	15.2	38.5	18.5	26.1	18.0	6
10	KRH10-00	18.5	42.5	21	41.5	29.5	11
12	KRH12-00	20.9	44.5	22	58.3	46.1	14



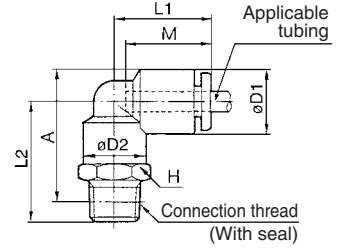
Note) øD: Max. diameter

Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Series KR

Male Elbow: KRL



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (mm ²)		Weight (g)
										FR double layer	FR soft nylon	
6	1/8	KRL06-01S	10	12.8	10	20	23	25.5	19	9.0	4.2	12
	1/4	KRL06-02S	14				27	27.5				22
	3/8	KRL06-03S	17				29	29				33
8	1/8	KRL08-01S	12	15.2	12	23	24.5	28	20.5	21.6	14.9	13
	1/4	KRL08-02S	14				28.5	30				21
	3/8	KRL08-03S	17				30.5	31.5				35
10	1/8	KRL10-01S	17	18.5	17	26.5	27	32	23	21.6	14.9	25
	1/4	KRL10-02S					30	33				26
	3/8	KRL10-03S					32	34.5				36
	1/2	KRL10-04S					22	36				37
12	1/4	KRL12-02S	17	20.9	17	28.5	31	35.5	24	50.2	39.7	28
	3/8	KRL12-03S					33	37				38
	1/2	KRL12-04S					22	37				39.5

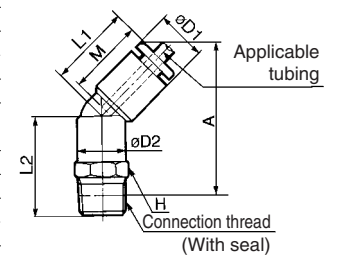


* Reference dimensions after R thread installation. Note) $\phi D1$: Max. diameter

45° Male Elbow: KRK



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (mm ²)		Weight (g)
										FR double layer	FR soft nylon	
6	1/8	KRK06-01S	10	12.8	10	18	20.5	33	19	6.9	3.4	12
	1/4	KRK06-02S	14				24.5	35				10
	3/8	KRK06-03S	17				26.5	36.5				33
8	1/8	KRK08-01S	12	15.2	12	20.5	22	37	20.5	19.7		13
	1/4	KRK08-02S	14				26	39				21
	3/8	KRK08-03S	17				28	41				35
10	1/8	KRK10-01S	17	18.5	17	24	24	42	23	30.9	23.2	25
	1/4	KRK10-02S					27	43.5				26
	3/8	KRK10-03S					29	45				36
	1/2	KRK10-04S					22	33				47.5
12	1/4	KRK12-02S	17	20.9	17	25	27.5	45.5	24	44.5	35.1	28
	3/8	KRK12-03S					29.5	47.5				38
	1/2	KRK12-04S					22	33.5				49.5

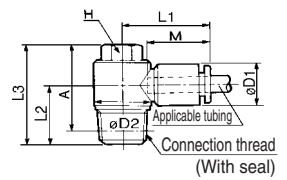


* Reference dimensions after R thread installation. Note) $\phi D1$: Max. diameter

Universal Male Elbow: KRV



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	L3	A*	M	Effective area (mm ²)		Weight (g)			
											FR double layer	FR soft nylon				
6	1/8	KRV06-01S	8	12.8	13.4	24	14.5	26.5	22.5	17	5.9	2.9	15			
	1/4	KRV06-02S	10										15.4	23.5	18.5	31
8	1/8	KRV08-01S	12	15.2	17.6	28.5	18.5	28.5	24.5	18.5	16	11.2	24			
	1/4	KRV08-02S											18.5	31.5	25.5	30
	3/8	KRV08-03S											14	20.6	27.5	20.5
10	1/4	KRV10-02S	14	18.5	20.6	31	19.5	35.5	29.5	21	27	20.3	40			
	3/8	KRV10-03S											20.5	36.5	30	49
12	3/8	KRV12-03S	17	20.9	25.2	34	22	38.5	32	22	39	30.8	63			
	1/2	KRV12-04S					25	41.5	33.5				80			

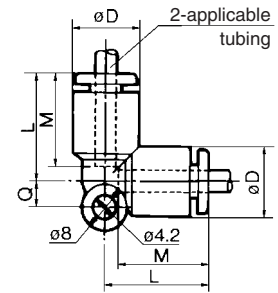


* Reference dimensions after R thread installation. Note) $\phi D1$: Max. diameter

Union Elbow: KRL



Applicable tubing O.D. (mm)	Model	ϕD Note)	L	Q	M	Effective area (mm ²)		Weight (g)
						FR double layer	FR soft nylon	
6	KRL06-00	12.8	20	5.3	17	9.0	4.2	6
8	KRL08-00	15.2	23	6	18	21.6	14.9	10
10	KRL10-00	18.5	26.5	6.8	21	35.2	25.0	17
12	KRL12-00	20.9	28.5	7.5	22	50.2	39.7	21

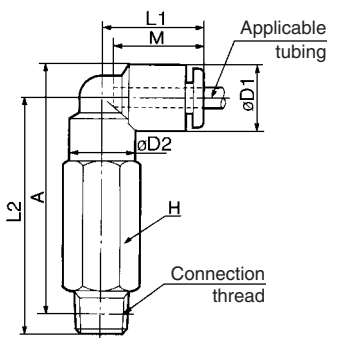


Note) ϕD : Max. diameter

Extended Male Elbow: KRW



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note) $\phi D1$	$\phi D2$	L1	L2	A*	M	Effective area (mm ²)		Weight (g)
										FR double layer	FR soft nylon	
6	1/8	KRW06-01S	10	12.8	10	20	40	42.5	17	8.6	4.0	26
	1/4	KRW06-02S	14				46	46.5				41
	3/8	KRW06-03S	17				48	48				67
8	1/8	KRW08-01S	12	15.2	12	23	43.5	47	18.5	20.5	14.2	30
	1/4	KRW08-02S	14				49.5	51				47
	3/8	KRW08-03S	17				51.5	52.5				74
10	1/4	KRW10-02S	17	18.5	17	26.5	56.5	59.5	21	33.5	23.8	66
	3/8	KRW10-03S					58.5	61				76
	1/2	KRW10-04S					22	65				66
12	1/4	KRW12-02S	17	20.9	17	28.5	57.5	62	22	47.7	37.7	68
	3/8	KRW12-03S					59.5	63.5				78
	1/2	KRW12-04S					22	66				68.5



* Reference dimensions after R thread installation. Note) $\phi D1$: Max. diameter

- K
- M
- H
- D
- MS
- T
- VMG

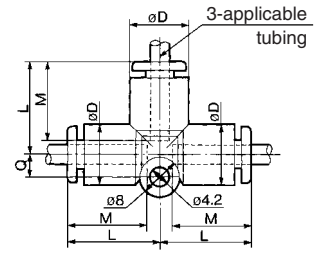
Series KR

Union Tee: KRT



Applicable tubing O.D. (mm)	Model	øD ^(Note)	L	Q	M	Effective area (mm ²)		Weight (g)
						FR double layer	FR soft nylon	
6	KRT06-00	12.8	20	5.3	17	10.6	6.4	10
8	KRT08-00	15.2	23	6	18.5	25.6	17.7	15
10	KRT10-00	18.5	26.5	6.8	21	40	28.4	25
12	KRT12-00	20.9	28.5	7.5	22	57.4	45.4	29

Note) øD: Max. diameter

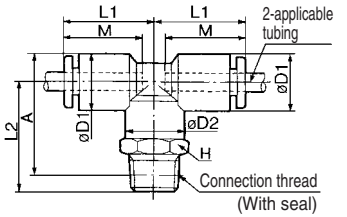


Male Branch Tee: KRT



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note ⁽¹⁾		L1	L2	A*	M	Effective area (mm ²)		Weight (g)
				øD1	øD2					FR double layer	FR soft nylon	
6	1/8	KRT06-01S	10	12.8	10	20	23	25.5	17	11.0	6.0	12
	1/4	KRT06-02S	14				27	27.5				20
	3/8	KRT06-03S	17				29	29				34
8	1/8	KRT08-01S	12	15.2	12	23	24.5	28	18.5	26.3	18.2	14
	1/4	KRT08-02S	14				28.5	30				22
	3/8	KRT08-03S	17				30.5	31.5				36
10	1/8	KRT10-01S	17	18.5	17	26.5	27	32	21	40.8	29.0	31
	1/4	KRT10-02S					30	33				29
	3/8	KRT10-03S					32	34.5				39
12	1/2	KRT10-04S	22	20.9	17	28.5	36	37	22	57.2	45.2	66
	1/4	KRT12-02S	31				35.5	31				
	3/8	KRT12-03S	33				37	41				
	1/2	KRT12-04S	22				37	39.5				68

* Reference dimensions after R thread installation. Note) øD1: Max. diameter

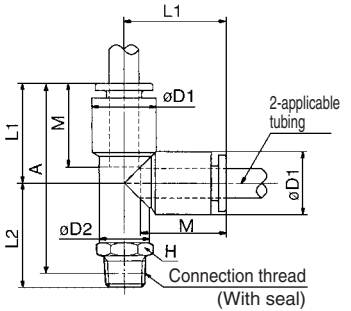


Male Run Tee: KRY



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note		L1	L2	A*	M	Effective area (mm ²)		Weight (g)
				øD1	øD2					FR double layer	FR soft nylon	
6	1/8	KRY06-01S	10	12.8	10	20	23	39	19	10.6	6.4	12
	1/4	KRY06-02S	14				27	41				20
	3/8	KRY06-03S	17				29	42.5				34
8	1/8	KRY08-01S	12	15.2	12	23	24.5	43.5	20.5	25.6	17.7	14
	1/4	KRY08-02S	14				28.5	45.5				22
	3/8	KRY08-03S	17				30.5	47				36
10	1/8	KRY10-01S	17	18.5	17	26.5	27	49.5	23	40.0	28.4	31
	1/4	KRY10-02S					30	50.5				29
	3/8	KRY10-03S					32	52				39
12	1/2	KRY10-04S	22	20.9	17	28.5	36	54.5	24	57.4	45.4	66
	1/4	KRY12-02S	31				53.5	31				
	3/8	KRY12-03S	33				55	41				
	1/2	KRY12-04S	22				37	57.5				68

* Reference dimensions after R thread installation. Note) øD1: Max. diameter

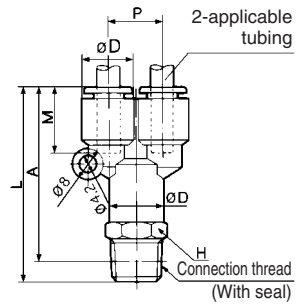


Branch: KRU



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	Note	L	P	A*	M	Effective area (mm ²)		Weight (g)		
									FR double layer	FR soft nylon			
6	1/8	KRU06-01S	13	12.8	45.5	12.8	41.5	17	10.4	4.2	12		
	1/4	KRU06-02S	14								49	43	22
	3/8	KRU06-03S	17								51	44.5	35
8	1/8	KRU08-01S	17	15.2	52.5	15.2	48.5	18.5	25.6	17.7	16		
	1/4	KRU08-02S									55.5	49.5	24
	3/8	KRU08-03S									56.5	50	36
10	1/4	KRU10-02S	19	18.5	61	18.5	55	21	40	28.4	30		
	3/8	KRU10-03S									62	55.5	40
	1/2	KRU10-04S									65	57	65
12	1/4	KRU12-02S	22	20.9	64.5	20.9	58.5	22	57.4	45.4	32		
	3/8	KRU12-03S									65.5	59	40
	1/2	KRU12-04S									68.5	60.5	65

* Reference dimensions after R thread installation. Note) øD1: Max. diameter

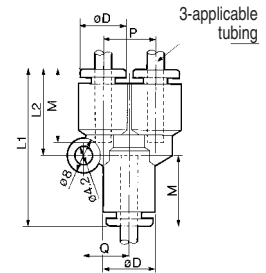


Union "Y": KRU



Applicable tubing O.D. (mm)	Model	Note	øD	L1	L2	P	Q	M	Effective area (mm ²)		Weight (g)
									FR double layer	FR soft nylon	
6	KRU06-00	12.8	37	20	12.8	11.7	17	10.4	4.2	10	
8	KRU08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	12	
10	KRU10-00	18.5	48	27.5	18.5	16.1	21	40	28.4	16	
12	KRU12-00	20.9	51	30	20.9	18.1	22	57.4	45.4	23	

Note) øD: Max. diameter

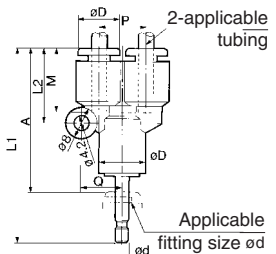


Plug-in "Y": KRU



Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	Note	øD	L1	L2	P	Q	A	M	Effective area (mm ²)		Weight (g)
											FR double layer	FR soft nylon	
6	6	KRU06-99	12.8	55.5	20	12.8	11.7	17	38.5	17	10.4	4.2	19
8	8	KRU08-99	15.2	64.5	24.5	15.2	13.7	18.5	46	18.5	25.6	17.7	22
10	10	KRU10-99	18.5	71.5	27.5	18.5	16.1	21	50.5	21	40	28.4	26
12	12	KRU12-99	20.9	75.5	30	20.9	18.1	22	53.5	22	57.4	45.4	32

Note) øD: Max. diameter



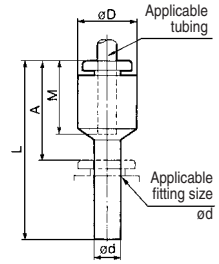
Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Series KR

Plug-in Reducer: KRR



Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	ϕD ^(Note)	L	A	M	Effective area (mm ²)		Weight (g)
							FR double layer	FR soft nylon	
6	8	KRR06-08	12.8	37	18.5	17	10.4	5.6	2.5
	10	KRR06-10		39.5					9.3
8	10	KRR08-10	15.2	41	18.5	18.5	26.1	18.0	4.0
	12	KRR08-12		42					20
10	12	KRR10-12	18.5	44.5	23	21	41.5	32.8	33

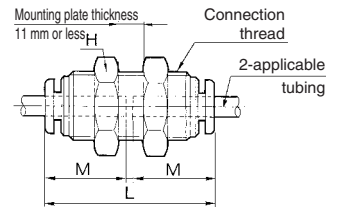
Note) ϕD : Max. diameter



Bulkhead Union: KRE



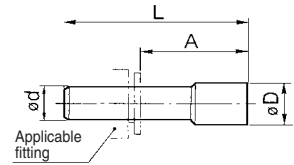
Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M	Effective area (mm ²)		Weight (g)
							FR double layer	FR soft nylon	
6	KRE06-00	M14 x 1	17	34.5	15	17	10.4	5.6	33
8	KRE08-00	M16 x 1	19	38	17	18.5	26.1	18.0	52
10	KRE10-00	M20 x 1	24	42.5	21	21	41.5	29.5	70
12	KRE12-00	M22 x 1	27	44	23	22	58.3	46.1	90



Plug: KRP



Applicable fitting size ϕd	Model	ϕD	L	A	Weight (g)
6	KRP-06	8	35	16	1
8	KRP-08	10	39	18.5	2
10	KRP-10	12	43	20	3.5
12	KRP-12	14	46	22	5

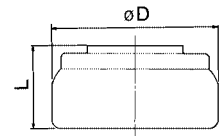


Spatter Cover 1: KR (Applicable tube: FR soft nylon)



Applicable fitting size	Model	ϕD	L	Weight (g)
6	KR-06C	15.5	9	0.9
8	KR-08C	17	9	1.0
10	KR-10C	20.8	10.5	1.5
12	KR-12C	22.8	10.5	1.6

* When tube insert parts are in line as KQU Union "Y", use KR-□□C1.

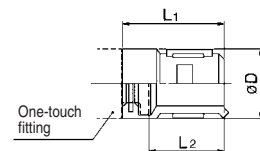


Spatter Cover 2: KR (Applicable tube: FR soft nylon, FR double layer)

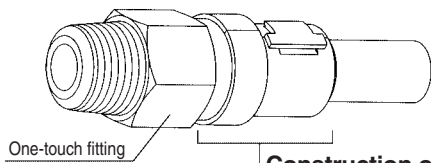


Applicable fitting size	Model	L ₁	L ₂	ϕD
6	KR-06C1	18	13.7	12.8
8	KR-08C1	20	15.7	15
10	KR-10C1	22	17.2	18
12	KR-12C1	22	17.2	20

Installed



How to install



Construction of spatter cover

