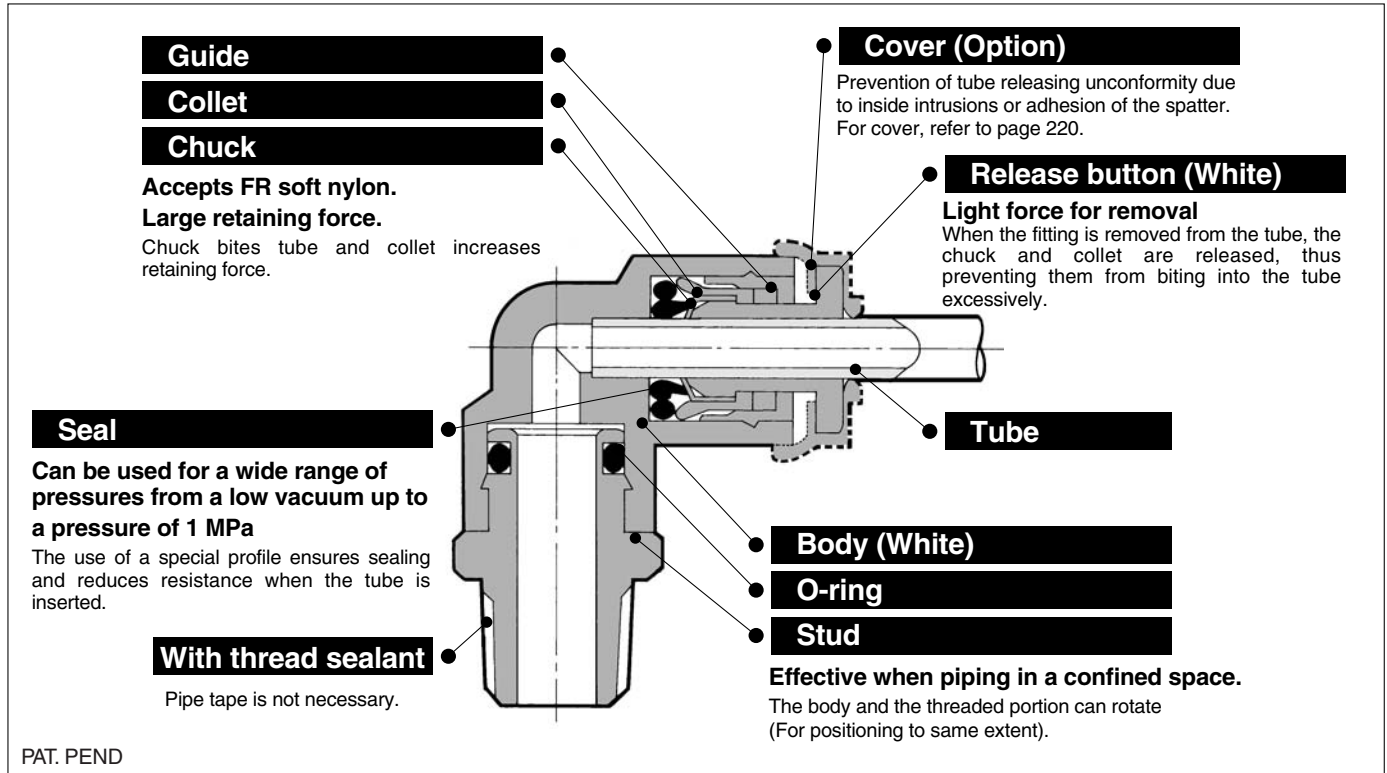


Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings Series **KR-W2**

RoHS



Made to Order

Symbol	Specifications
X2	Copper-free (With electroless nickel plated)

Suffix "-X2" to the end of part number.
Example) KRH06-01SW2-X2

Applicable Tubing

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

Specifications

Fluid		Air/Water ⁽¹⁾
Operating pressure range ⁽²⁾		−100kPa to 1MPa
Proof pressure		3MPa
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 0205 (Metric fine thread)
Seal on the threads		With sealant



Note 1) The surge pressure must be under the maximum operating pressure.

Note 2) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Principal Parts Material

Body	C3604, Flame resistant PBT (UL-94 standard V-0)
Stud	C3604 (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)

Model

Male connector

KRH-W2

P.216



Use to pipe in the same direction from female thread. Most general style.

Union elbow

KRL-W2

P.217



Use to connect tubes at right angles.

Plug-in reducer

KRR-W2

P.219



Use to size down One-touch fittings.

Straight union

KRH-W2

P.216



Use to connect tubes in the same direction.

Extended male elbow

KRW-W2

P.217



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-W2

P.218



Use to branch line in the same direction.

Male elbow

KRL-W2

P.216



Use to pipe at right angles to female thread. Most general style.

Extended plug-in elbow

KRW-W2

P.219



Use to change by 90° in a tube fetching direction from One-touch fittings. Can be used with the plug-in elbow for three-dimensional pipe arrangement.

Plug-in "Y"

KRU-W2

P.218



Use to branch line in the same direction from One-touch fittings.

45° male elbow

KRK-W2

P.216



Use to pipe in 45° angle direction from female thread. Model in-between of male connector and male elbow.

Male branch tee

KRT-W2

P.217



Use to branch line from female thread in both 90° directions.

Branch

KRU-W2

P.218



Use to branch line in the same direction from female thread.

Universal male elbow

KRV-W2

P.217



Universal male elbow allows thread connection by using a socket wrench for confined spaces.

Union tee

KRT-W2

P.217



Use to connect tubes in both 90° directions.

Bulkhead union

KRE-W2

P.219



Use to connect tubes through a panel.

Plug-in elbow

KRL-W2

P.219



Use to change by 90° in a tube fetching direction from One-touch fittings.

Male run tee

KRY-W2

P.218



Use to branch line in the same direction from female thread and in 90° direction.

Bulkhead Connector

KRE-W2

P.219



Use to connect male thread and tube through a panel.

Spatter cover

KR

P.220



Prevention of tube releasing unconformity due to an inside intrusion or adhesion of the spatter.

Spatter cover

KR-□ C1

P.220



Prevention of tube releasing unconformity due to an inside intrusion or adhesion of the spatter.

Plug

KRP

P.220



Use to plug unused One-touch fittings.

K□

M□

H□

KK

D□

MS

LQ

MQR

T□

Series KR-W2

Dimensions

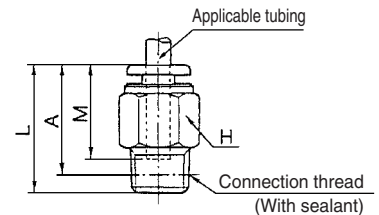
Male Connector: KRH-W2



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	L	A*	M	Effective area (mm ²)		Mass (g)
							FR double layer	FR soft nylon	
6	1/8	KRH06-01SW2	12	21.6	18.5	17	10.4	5.6	16
	1/4	KRH06-02SW2	14	22.5	17				14
	3/8	KRH06-03SW2	17	20.9	15.5				27
8	1/8	KRH08-01SW2	14	27.1	24	18.5	26.1	18.0	21
	1/4	KRH08-02SW2		26	20.5				19
	3/8	KRH08-03SW2		20.9	15.5				26
10	1/8	KRH10-01SW2	17	29.1	26	21	26.1	26.1	19
	1/4	KRH10-02SW2		33	27.5				30
	3/8	KRH10-03SW2		27.9	22.5		41.5	29.5	53
	1/2	KRH10-04SW2		26.1	19				42
12	1/4	KRH12-02SW2	19	34	28.5	22	58.3	46.1	34
	3/8	KRH12-03SW2		28.9	23.5				51
	1/2	KRH12-04SW2		29.1	22				



* Reference dimensions after R thread installation.



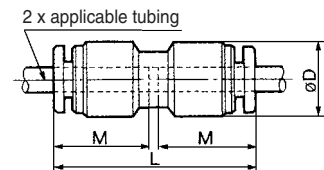
Straight Union: KRH-W2



Applicable tubing O.D. (mm)	Model	øD ^{Note}	L	M	Effective area (mm ²)		Mass (g)
6	KRH06-00W2	12.8	34.5	17	10.4	5.6	4
8	KRH08-00W2	15.2	38.5	18.5	26.1	18.0	6
10	KRH10-00W2	18.5	42.5	21	41.5	29.5	11
12	KRH12-00W2	20.9	44.5	22	58.3	46.1	14



Note) øD: Max. diameter



Male Elbow: KRL-W2

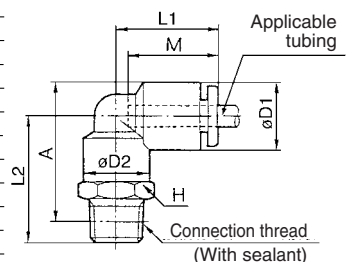


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ⁽¹⁾	øD2	L1	L2	A*	M	Effective area (mm ²)		Mass (g)
										FR double layer	FR soft nylon	
6	1/8	KRL06-01SW2	10	12.8	10	20	22.1	25.5	19	9.0	4.2	12
	1/4	KRL06-02SW2	14				26.5	27.5				22
	3/8	KRL06-03SW2	17				27.9	29				33
8	1/8	KRL08-01SW2	12	15.2	12	23	23.6	28	20.5	21.6	14.9	13
	1/4	KRL08-02SW2	14				28	30				21
	3/8	KRL08-03SW2	17				29.4	31.5				35
10	1/8	KRL10-01SW2	17	18.5	17	26.5	26.1	32	23	21.6	14.9	25
	1/4	KRL10-02SW2					29.5	33				26
	3/8	KRL10-03SW2					30.9	34.5		35.2	25.0	36
	1/2	KRL10-04SW2					35.1	37				63
12	1/4	KRL12-02SW2	17	20.9	17	28.5	30.5	35.5	24	50.2	39.7	28
	3/8	KRL12-03SW2					31.9	37				38
	1/2	KRL12-04SW2					36.1	39.5				65

* Reference dimensions after R thread installation.



Note 1) øD1: Max. diameter



45° Male Elbow: KRK-W2

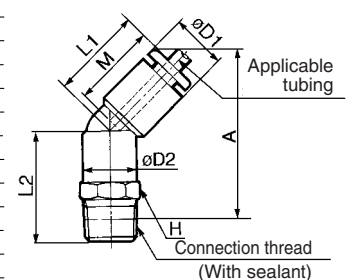


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	øD ⁽¹⁾	øD2	L1	L2	A*	M	Effective area (mm ²)		Mass (g)
										FR double layer	FR soft nylon	
6	1/8	KRK06-01SW2	10	12.8	10	18	19.6	33	19	6.9	3.4	12
	1/4	KRK06-02SW2	14				24	35				10
	3/8	KRK06-03SW2	17				25.4	36.5				33
8	1/8	KRK08-01SW2	12	15.2	12	20.5	21.1	37	20.5	19.7		13
	1/4	KRK08-02SW2	14				25.5	39				21
	3/8	KRK08-03SW2	17				26.9	41				35
10	1/8	KRK10-01SW2	17	18.5	17	24	23.1	42	23	30.9	23.2	25
	1/4	KRK10-02SW2					26.5	43.5				26
	3/8	KRK10-03SW2					27.9	45				36
	1/2	KRK10-04SW2					32.1	47.5				63
12	1/4	KRK12-02SW2	17	20.9	17	25	27	45.5	24	44.5	35.1	28
	3/8	KRK12-03SW2					28.4	47.5				38
	1/2	KRK12-04SW2					32.6	49.5				65

* Reference dimensions after R thread installation.



Note 1) øD1: Max. diameter



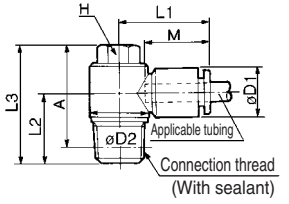
Universal Male Elbow: KRV-W2


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	(1)		L1	L2	L3	A*	M	Effective area (mm²)		Mass (g)			
				øD1	øD2						FR double layer	FR soft nylon				
6	1/8	KRV06-01SW2	8	12.8	13.4	24	13.6	25.6	22.5	17	5.9	2.9	15			
	1/4	KRV06-02SW2	10		15.4	23.5	18	30.5	25				26			
8	1/8	KRV08-01SW2	12	15.2	17.6	28.5	18	14.6	27.6	24.5	18.5	16	11.2	24		
	1/4	KRV08-02SW2	14					20.6	27.5	19.4				35.4	30	30
	3/8	KRV08-03SW2	14					20.6	27.5	19.4				35.4	30	20.5
10	1/4	KRV10-02SW2	14	18.5	20.6	31	19	35	29.5	21	27	20.3	40			
	3/8	KRV10-03SW2	17					20.9	37.4				32	49		
12	3/8	KRV12-03SW2	17	20.9	25.2	34	20.9	37.4	32	22	39	30.8	63			
	1/2	KRV12-04SW2	17					24.1	40.6				33.5	80		

* Reference dimensions after R thread installation.



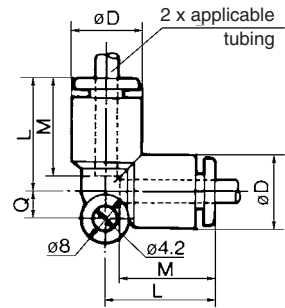
Note 1) øD1: Max. diameter


Union Elbow: KRL-W2


Applicable tubing O.D. (mm)	Model	øD ⁽¹⁾	L	Q	M	Effective area (mm ²)		Mass (g)
6	KRL06-00W2	12.8	20	5.3	17	9.0	4.2	6
8	KRL08-00W2	15.2	23	6	18	21.6	14.9	10
10	KRL10-00W2	18.5	26.5	6.8	21	35.2	25.0	17
12	KRL12-00W2	20.9	28.5	7.5	22	50.2	39.7	21



Note 1) øD: Max. diameter

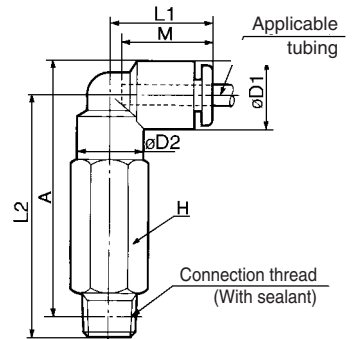

Extended Male Elbow: KRW-W2


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	⁽¹⁾		L1	L2	A*	M	Effective area (mm ²)		Mass (g)
				øD1	øD2					FR double layer	FR soft nylon	
6	1/8	KRW06-01SW2	10	12.8	10	20	39.1	42.5	17	8.6	4.0	26
	1/4	KRW06-02SW2	14				45.5	46.5				41
	3/8	KRW06-03SW2	17				46.9	48				67
8	1/8	KRW08-01SW2	12	15.2	12	23	42.6	47	18.5	20.5	14.2	30
	1/4	KRW08-02SW2	14				49	51				47
	3/8	KRW08-03SW2	17				50.4	52.5				74
10	1/4	KRW10-02SW2	17	18.5	17	26.5	56	59.5	21	33.5	23.8	66
	3/8	KRW10-03SW2	17				57.4	61				76
	1/2	KRW10-04SW2	22				64.1	66				145
12	1/4	KRW12-02SW2	17	20.9	17	28.5	57	62	22	47.7	37.7	68
	3/8	KRW12-03SW2	17				58.4	63.5				78
	1/2	KRW12-04SW2	22				65.1	68.5				147

* Reference dimensions after R thread installation.



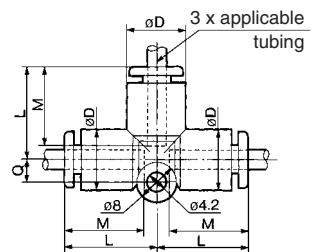
Note 1) øD1: Max. diameter


Union Tee: KRT-W2


Applicable tubing O.D. (mm)	Model	øD ⁽¹⁾	L	Q	M	Effective area (mm ²)		Mass (g)
6	KRT06-00W2	12.8	20	5.3	17	10.6	6.4	10
8	KRT08-00W2	15.2	23	6	18.5	25.6	17.7	15
10	KRT10-00W2	18.5	26.5	6.8	21	40	28.4	25
12	KRT12-00W2	20.9	28.5	7.5	22	57.4	45.4	29



Note 1) øD: Max. diameter

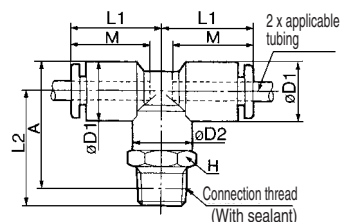

Male Branch Tee: KRT-W2


Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	⁽¹⁾		L1	L2	A*	M	Effective area (mm²)		Mass (g)
				øD1	øD2					FR double layer	FR soft nylon	
6	1/8	KRT06-01SW2	10	12.8	10	20	22.1	25.5	17	11.0	6.0	12
	1/4	KRT06-02SW2	14				26.5	27.5				20
	3/8	KRT06-03SW2	17				27.9	29				34
8	1/8	KRT08-01SW2	12	15.2	12	23	23.6	28	18.5	26.3	18.2	14
	1/4	KRT08-02SW2	14				28	30				22
	3/8	KRT08-03SW2	17				29.4	31.5				36
10	1/8	KRT10-01SW2	17	18.5	17	26.5	26.1	32	21	40.8	29.0	31
	1/4	KRT10-02SW2	17				29.5	33				29
	3/8	KRT10-03SW2	17				30.9	34.5				39
12	1/2	KRT10-04SW2	22	20.9	17	28.5	35.1	37	22	57.2	45.2	66
	1/4	KRT12-02SW2	17				30.5	35.5				31
	3/8	KRT12-03SW2	17				31.9	37				41
	1/2	KRT12-04SW2	22				36.1	39.5				68

* Reference dimensions after R thread installation.



Note 1) øD1: Max. diameter



Series KR-W2

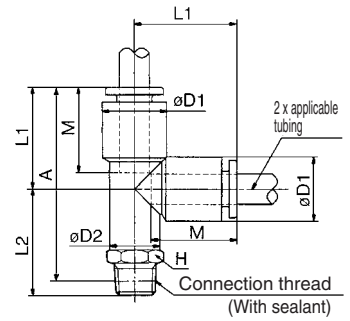
Male Run Tee: KRY-W2



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	⁽¹⁾ øD1	øD2	L1	L2	A *	M	Effective area (mm ²)		Mass (g)
										FR double layer	FR soft nylon	
6	1/8	KRY06-01SW2	10	12.8	10	20	22.1	39	19	10.6	6.4	12
	1/4	KRY06-02SW2	14				26.5	41				20
	3/8	KRY06-03SW2	17				27.9	42.5				34
8	1/8	KRY08-01SW2	12	15.2	12	23	23.6	43.5	20.5	25.6	17.7	14
	1/4	KRY08-02SW2	14				28	45.5				22
	3/8	KRY08-03SW2	17				29.4	47				36
10	1/8	KRY10-01SW2	17	18.5	17	26.5	26.1	49.5	23	40.0	28.4	31
	1/4	KRY10-02SW2					29.5	50.5				29
	3/8	KRY10-03SW2					30.9	52				39
	1/2	KRY10-04SW2					35.1	54.5				66
12	1/4	KRY12-02SW2	17	20.9	17	28.5	30.5	53.5	24	57.4	45.4	31
	3/8	KRY12-03SW2					31.9	55				41
	1/2	KRY12-04SW2					36.1	57.5				68

* Reference dimensions after R thread installation.

Note 1) øD: Max. diameter



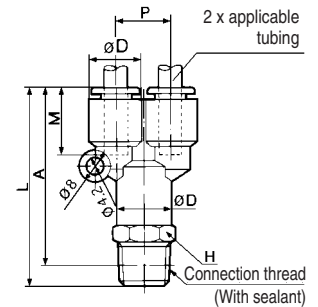
Branch: KRU-W2



Applicable tubing O.D. (mm)	Connection thread R	Model	H (width across flats)	⁽¹⁾ øD	L	P	A *	M	Effective area (mm ²)		Mass (g)
									FR double layer	FR soft nylon	
6	1/8	KRU06-01SW2	13	12.8	12.8	12.8	41.5	17	10.4	4.2	12
	1/4	KRU06-02SW2	14				43				22
	3/8	KRU06-03SW2	17				44.5				35
8	1/8	KRU08-01SW2	17	15.2	15.2	15.2	48.5	18.5	25.6	17.7	16
	1/4	KRU08-02SW2					49.5				24
	3/8	KRU08-03SW2					50				36
10	1/4	KRU10-02SW2	19	18.5	18.5	18.5	55	21	40	28.4	30
	3/8	KRU10-03SW2					60.9				40
	1/2	KRU10-04SW2					64.1				65
	1/4	KRU12-02SW2					64				32
12	3/8	KRU12-03SW2	22	20.9	20.9	20.9	59	22	57.4	45.4	40
	1/2	KRU12-04SW2					67.6				65

* Reference dimensions after R thread installation.

Note 1) øD: Max. diameter

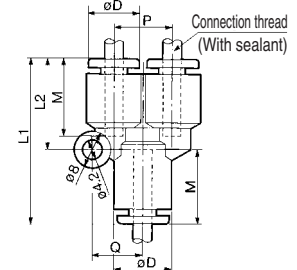


Union "Y": KRU-W2



Applicable tubing O.D. (mm)	Model	⁽¹⁾ øD	L1	L2	P	Q	M	Effective area (mm ²)		Mass (g)
								FR double layer	FR soft nylon	
6	KRU06-00W2	12.8	37	20	12.8	11.7	17	10.4	4.2	10
8	KRU08-00W2	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	12
10	KRU10-00W2	18.5	48	27.5	18.5	16.1	21	40	28.4	16
12	KRU12-00W2	20.9	51	30	20.9	18.1	22	57.4	45.4	23

Note 1) øD: Max. diameter

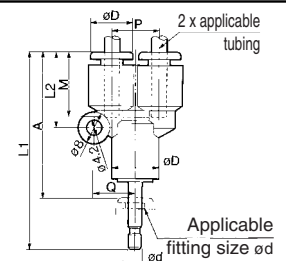


Plug-in "Y": KRU-W2



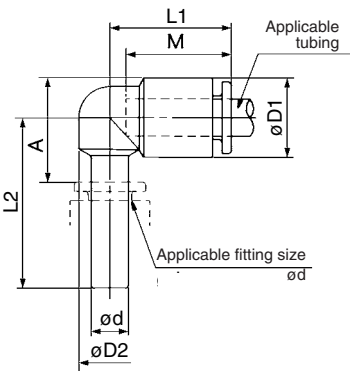
Applicable tubing O.D. (mm)	Applicable fitting size ød	Model	⁽¹⁾ øD	L1	L2	P	Q	A	M	Effective area (mm ²)		Mass (g)
										FR double layer	FR soft nylon	
6	6	KRU06-99W2	12.8	55.5	20	12.8	11.7	38.5	17	10.4	4.2	19
8	8	KRU08-99W2	15.2	64.5	24.5	15.2	13.7	46	18.5	25.6	17.7	22
10	10	KRU10-99W2	18.5	71.5	27.5	18.5	16.1	50.5	21	40	28.4	26
12	12	KRU12-99W2	20.9	75.5	30	20.9	18.1	53.5	22	57.4	45.4	32

Note 1) øD: Max. diameter

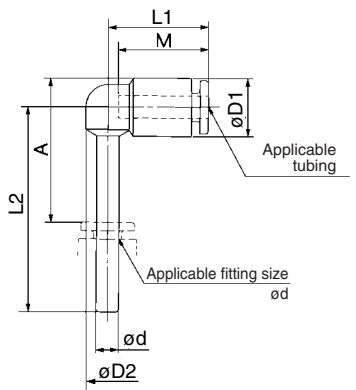


Plug-in elbow: KRL-W2

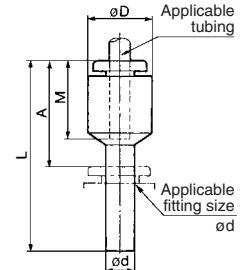

Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	$\phi D^{(1)}$	$\phi D2$	L_1	L_2	A	M	Effective area (mm ²)		Mass (g)
									FR double layer	FR soft nylon	
6	6	KRL06-99W2	12.8	10	20	27.5	17	17	9.0	4.2	3
8	8	KRL08-99W2	15.2	12	22.5	31.5	21	18.5	21.6	14.9	5
10	10	KRL10-99W2	18.5	14	25.5	35.5	23.5	21	35.2	25.0	9
12	12	KRL12-99W2	20.9	16	27	37.5	26	22	50.2	39.7	10


Note 1) $\phi D1$: Max. diameter

Extended plug-in elbow: KRW-W2

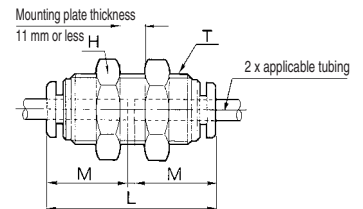

Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	$\phi D^{(1)}$	$\phi D2$	L_1	L_2	A	M	Effective area (mm ²)		Mass (g)
									FR double layer	FR soft nylon	
6	6	KRW06-99W2	12.8	10	20	41.5	31	17	9.0	4.2	4
8	8	KRW08-99W2	15.2	10	22.5	48	37	18.5	21.6	14.9	6
10	10	KRW10-99W2	18.5	14	25.5	55	43.5	21	35.2	25.0	9
12	12	KRW12-99W2	20.9	16	27	59.5	48	22	50.2	39.7	13


Note 1) $\phi D1$: Max. diameter

Plug-in Reducer: KRR-W2

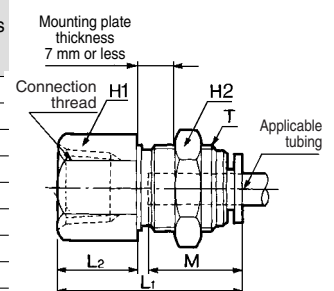

Applicable tubing O.D. (mm)	Applicable fitting size ϕd	Model	$\phi D^{(1)}$	L	A	M	Effective area (mm ²)		Mass (g)
							FR double layer	FR soft nylon	
6	8	KRR06-08W2	12.8	37	18.5	17	10.4	5.6	2.5
	10	KRR06-10W2		39.5					9.3
8	10	KRR08-10W2	15.2	41	20	18.5	26.1	18.0	4.0
	12	KRR08-12W2		42					4.6
10	12	KRR10-12W2	18.5	44.5	23	21	41.5	32.8	33


Note 1) ϕD : Max. diameter

Bulkhead Union: KRE-W2


Applicable tubing O.D. (mm)	Model	T (M)	H (width across flats)	L	Mounting hole	M	Effective area (mm ²)		Mass (g)
							FR double layer	FR soft nylon	
6	KRE06-00W2	M14 x 1	17	34.5	15	17	10.4	5.6	33
8	KRE08-00W2	M16 x 1	19	38	17	18.5	26.1	18.0	52
10	KRE10-00W2	M20 x 1	24	42.5	21	21	41.5	29.5	70
12	KRE12-00W2	M22 x 1	27	44	23	22	58.3	46.1	90


Bulkhead Connector: KRE-W2


Applicable tubing O.D. (mm)	Connection thread Rc	Model	T (M)	H_1 (width across flats)	H_2 (width across flats)	L_1	L_2	Mounting hole	M	Effective area (mm ²)		Mass (g)
										FR double layer	FR soft nylon	
6	1/8	KRE06-01W2	M14 x 1	17	17	28	11	15	17	10.4	5.6	25
	1/4	KRE06-02W2		17	17	31.5	15					40
	3/8	KRE06-03W2		19	19	33.5	17					29
8	1/8	KRE08-01W2	M16 x 1	17	17	27.5	7.5	17	18.5	26.1	18.0	28
	1/4	KRE08-02W2		17	19	33	13					27
	3/8	KRE08-03W2		19	19	35	15					48
10	1/4	KRE10-02W2	M20 x 1	22	24	34.5	12.5	21	21	41.5	29.5	53
	3/8	KRE10-03W2		22	24	36.5	15					67
	3/8	KRE10-03W2		22	24	36.5	15					67
12	3/8	KRE12-03W2	M22 x 1	24	27	37	14	23	22	58.3	46.1	92
	1/2	KRE12-04W2		24	27	41	18					59



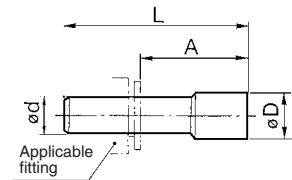
Series KR-W2

Plug: KRP



Applicable fitting size ϕD	Model	ϕD	L	A	Mass (g)
6	KRP-06	8	35	18	1
8	KRP-08	10	39	20.5	2
10	KRP-10	12	43	22	3.5
12	KRP-12	14	45.5	24	5

* Color: Green



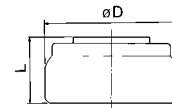
Spatter Cover 1: KR (Applicable tube: FR soft nylon)



Applicable fitting size	Model	ϕD	L	Mass (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.

* Color: Gray

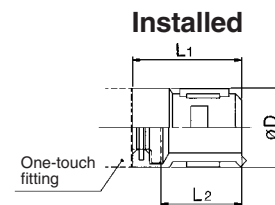


Spatter Cover 2: KR (Applicable tube: FR soft nylon, FR double layer)

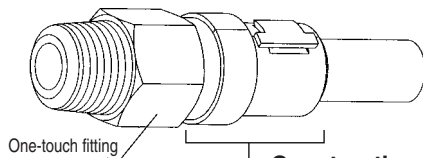


Applicable fitting size	Model	L ₁	L ₂	ϕD
6	KR-06C1	18	13.7	12.8
8	KR-08C1	20	15.7	15
10	KR-10C1	22	17.2	18
12	KR-12C1	22	17.2	20

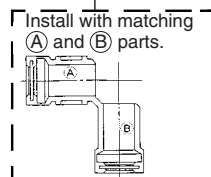
* Color: Gray



How to install



Construction of spatter cover



Made to Order

Spatter Cover 2-Metal Type (Applicable tube: FR double layer)

Applicable fitting size	Model
6	KR-06C2
8	KR-08C2
10	KR-10C2
12	KR-12C2