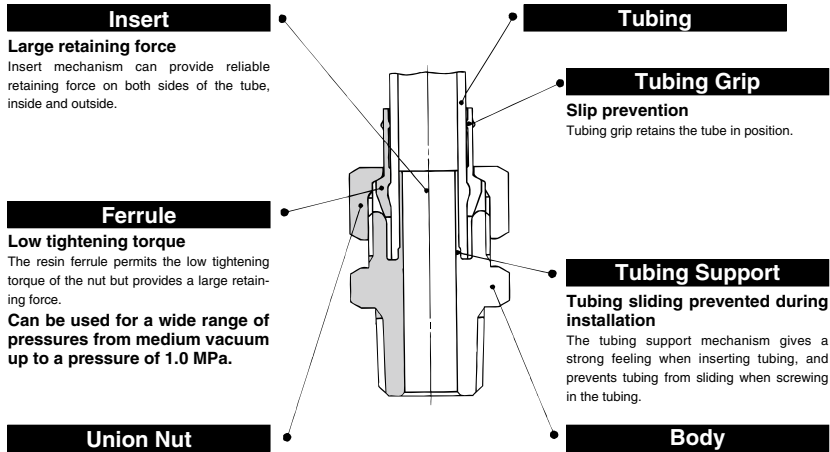


Series 10-KF

Insert Fittings

RoHS

Construction



Specifications

Fluid	Air, Water <small>Note 3)</small>
Operating pressure range <small>Note 1)</small>	-101.3 kPa to 1.0 MPa
Proof pressure	7.0 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Seal (Thread portion) <small>Note 2)</small>	None or with sealant
Cleanliness class (ISO class)	Class 3

Note 1) Do not use the fittings with a leak tester or for vacuum retention because they are not guaranteed for zero leakage.

Note 2) Male elbow, Male branch tee and Male run tee with seal are manufactured upon receipt of order.

Note 3) Swivel type is not compatible with water.

Applicable Tubing

Tubing size	O.D.	4	6	8	10	12
	I.D.	2.5	4	5	6.5	8
Material Polyurethane tubing		●	●	●	●	●

Principal Parts Material

Body	Electroless nickel plated C3371BE, C3604BD
Nut	Electroless nickel plated C360BD
Ferrule	Nylon 66

Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Air Preparation Equipment

Modular F. R.

Pressure Control Equipment

Fittings & Tubing

Flow Control Equipment

Pressure Switches/ Pressure Sensors

Model

Male connector

10-KFH



Use to connect tubes in the same direction from female thread.
Most general model.

Female connector

10-KFF



Use to pipe from male thread such as pressure gauge.

Straight union

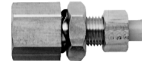
10-KFH



Use to connect tubes in the same direction.

Bulkhead connector

10-KFE



Use to connect male thread and tube through a panel.

Male elbow

10-KFL



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

Bulkhead union

10-KFE



Use to connect tubes through a panel.

Union tee

10-KFT



Use to connect tubes in both 90° directions.

Male run tee

10-KFY



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

Male branch tee

10-KFT



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

Plug

10-KFP



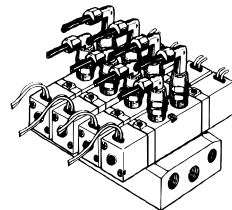
Use to plug unused fittings.

Swivel elbow

10-KFV



Use to pipe at right angles to female thread.
Swiveled at any direction.

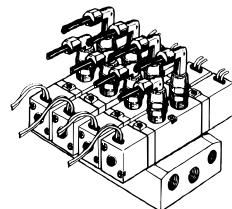


Swivel extended elbow

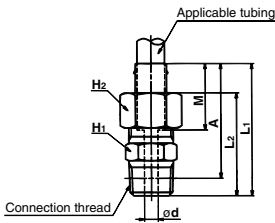
10-KFW



Use to pipe at right angles to female thread.
Swiveled at any direction.
Solid piece moves fittings up from workpiece.



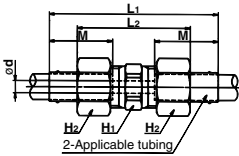
Male Connector: 10-KFH



Applicable tubing size (mm)		Connection thread R	Model	H ₁ (width across flats)	H ₂ (width across flats)	L ₁	L ₂	M	d	A *	Effective area (mm ²)	Weight (g)		
O.D.	I.D.													
4	2.5	1/8	10-KFH04-01	10	29.6	22.9	17	13	15.5	1.5	26.5	13		
		1/4	10-KFH04-02	14	34	27.3							28.5	23
6	4	1/8	10-KFH06-01	10	29.3	22.6	12	27	15.2	3	26.2	14		
		1/4	10-KFH06-02	14	33.7	27.1							28.2	25
		3/8	10-KFH06-03	17	34.1	27.4							28.9	36
8	5	1/8	10-KFH08U-01	12	29.3	22.6	14	27	16.2	4	26.2	16		
		1/4	10-KFH08U-02	14	33.7	27.1							28.2	25
		3/8	10-KFH08U-03	17	34.1	27.4							28.9	37
10	6.5	1/4	10-KFH10U-02	17	35.3	28	17	28.4	18.8	5.5	29.8	32		
		3/8	10-KFH10U-03	17	35.7	28.4							30.5	40
		1/2	10-KFH10U-04	22	38.9	31.6							31.6	65
12	8	1/4	10-KFH12U-02	17	35.8	29	19	29.4	19.3	7	30.3	33		
		3/8	10-KFH12U-03	17	36.2	29.4							31	35
		1/2	10-KFH12U-04	22	39.4	32.6							32.1	65

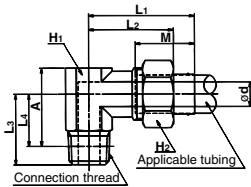
* Reference dimensions after R thread installation.

Straight Union: 10-KFH



Applicable tubing size (mm)		Model	H ₁ (width across flats)	H ₂ (width across flats)	L ₁	L ₂	M	d	Effective area (mm ²)	Weight (g)
O.D.	I.D.									
4	2.5	10-KFH04-00	8	10	40.9	27.6	15.5	1.5	1.6	13
6	4	10-KFH06-00	10	12	40.3	27	15.2	3	6	17
8	5	10-KFH08U-00	12	14	41.3	28	16.2	4	11	23
10	6.5	10-KFH10U-00	17	17	44.6	30	18.8	5.5	21	36
12	8	10-KFH12U-00	17	19	45.5	32	19.3	7	35	42

Male Elbow: 10-KFL



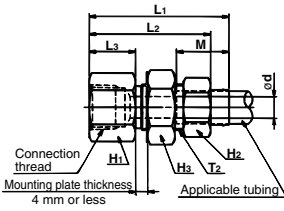
Applicable tubing size (mm)		Connection thread R	Model	H ₁ (width across flats)	H ₂ (width across flats)	L ₁	L ₂	L ₃	L ₄ *	M	d	A *	Effective area (mm ²)	Weight (g)						
O.D.	I.D.																			
4	2.5	1/8	10-KFL04-01	10	10	27.5	20.8	17	13	15.5	1.5	19.3	1.6	21						
		1/4	10-KFL04-02												19	25				
6	4	1/8	10-KFL06-01	10	12	27.2	20.5	17	13	15.2	3	19.3	6	22						
		1/4	10-KFL06-02												19	27				
		3/8	10-KFL06-03												12	30.2	23.5	20	13.7	21
8	5	1/8	10-KFL08U-01	12	14	28.2	21.5	18	14	16.2	4	21.3	9.5	30						
		1/4	10-KFL08U-02												21	15	21	32		
		3/8	10-KFL08U-03												12	30.2	23.5	20	13.7	21
10	6.5	1/4	10-KFL10U-02	12	17	31.8	24.5	22	16	18.8	5.5	23.3	18	38						
		3/8	10-KFL10U-03												17	21	14.7	22	44	
		1/2	10-KFL10U-04												14	33.8	26.5	25	16.8	25.3
12	8	1/4	10-KFL12U-02	14	19	34.3	27.5	23	17	19.3	7	25.5	24	53						
		3/8	10-KFL12U-03												17	22	15.7	24.2	24	53
		1/2	10-KFL12U-04												14	33.8	26.5	25	16.8	25.3

* Reference dimensions after R thread installation.

Directional Control Valves
Air Cylinders
Rotary Actuators
Air Grippers
Air Preparation Equipment
Modular F. R.
Pressure Control Equipment
Flow Control Equipment
Pressure Switches/ Pressure Sensors

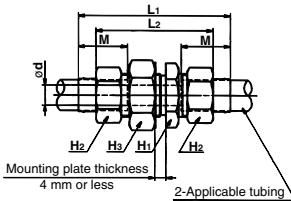
Insert Fittings 10-KF

Bulkhead Connector: 10-KFE



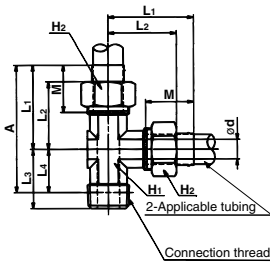
Applicable tubing size (mm)		Connection thread Rc	Model	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	M	d	T ₂	Mounting hole	Effective area (mm ²)	Weight (g)
O.D.	I.D.			(width across flats)	(width across flats)	(width across flats)									
6	4	1/4	10-KFE06-02	17	12	17	44.2	37.5	16	15.2	3	M10 x 1	11	6	41
8	5	3/8	10-KFE08U-03	19	14	19	46.2	39.5	17	16.2	4	M12 x 1	13	11	49
10	6.5	3/8	10-KFE10U-03	19	17	22	48.8	41.5	17	18.8	5.5	M15 x 1	16	21	63
12	8	3/8	10-KFE12U-03	22	19	24	51.3	44.5	17	19.3	7	M17 x 1	18	35	93

Bulkhead Union: 10-KFE



Applicable tubing size (mm)		Model	H ₁	H ₂	H ₃	L ₁	L ₂	M	d	Mounting hole	Effective area (mm ²)	Weight (g)
O.D.	I.D.		(width across flats)	(width across flats)	(width across flats)							
4	2.5	10-KFE04-00	12	10	13	50.9	37.6	15.5	1.5	9	1.6	23
6	4	10-KFE06-00	14	12	17	51.3	38	15.2	3	11	6	34
8	5	10-KFE08U-00	17	14	19	52.3	39	16.2	4	13	11	47
10	6.5	10-KFE10U-00	19	17	22	56.6	42	18.8	5.5	16	21	67
12	8	10-KFE12U-00	22	19	24	59.5	46	19.3	7	18	35	87

Male Run Tee: 10-KFY



Applicable tubing size (mm)		Connection thread R	Model	H ₁	H ₂	L ₁	L ₂	L ₃	L ₄ *	M	d	A*	Effective area (mm ²)	Weight (g)							
O.D.	I.D.			(width across flats)	(width across flats)																
4	2.5	1/8	10-KFY04-01	10	10	27.5	20.8	17	13	15.5	1.5	40.5	3.5	28							
	1/4	10-KFY04-02	19												32						
6	4	1/8	10-KFY06-01	10	12	27.2	20.5	17	13	15.2	3	40.2	11	31							
	1/4	10-KFY06-02	19												37						
	3/8	10-KFY06-03	12												30.2	23.5	22	15.7	45.8	13	51
	1/8	10-KFY08U-01	20												16	46.2	15	48			
8	5	1/4	10-KFY08U-02	12	14	30.2	23.5	23	17	16.2	4	47.2	21	50							
	3/8	10-KFY08U-03	22												15.7	48.8	21	55			
	1/4	10-KFY10U-02	23												17	48.8	21	58			
10	6.5	3/8	10-KFY10U-03	12	17	31.8	24.5	22	15.7	18.8	5.5	47.4	30	63							
	1/2	10-KFY10U-04	14												33.8	26.5	27	18.8	52.6	38	89
	1/4	10-KFY12U-02	25												19	53.3	34	79			
12	8	3/8	10-KFY12U-03	14	19	34.3	27.5	24	17.7	19.3	7	51.9	49	79							
	1/2	10-KFY12U-04	27												18.8	53.1	49	93			

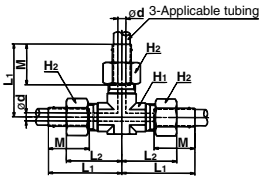
* Reference dimensions after R thread installation.

Plug: 10-KFP



Applicable fitting size (mm)	Model	L	D	Weight (g)
4	10-KFP-04	12	6.5	0.3
6	10-KFP-06	12	8.5	0.5
8	10-KFP-08	12	10.4	0.7
10	10-KFP-10	13.5	13	1.0
12	10-KFP-12	14	15	1.4

Union Tee: 10-KFT

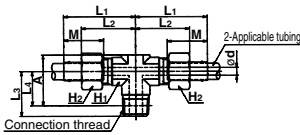


Applicable tubing size (mm)		Model	H ₁	H ₂	L ₁	L ₂	M	d	Effective area (mm ²)	Weight (g)
O.D.	I.D.		(width across flats)	(width across flats)						
4	2.5	10-KFT04-00	10	10	27.5	20.8	15.5	1.5	1.6	33
6	4	10-KFT06-00		12	27.2	20.5	15.2	3	6	37
8	5	10-KFT08U-00	12	14	30.2	23.5	16.2	4	11	54
10	6.5	10-KFT10U-00	12	17	31.8	24.5	18.8	5.5	21	65
12	8	10-KFT12U-00	14	19	34.3	27.5	19.3	7	35	89

Directional Control Valves

Air Cylinders

Male Branch Tee: 10-KFT



Applicable tubing size (mm)		Connection thread R	Model	H ₁	H ₂	L ₁	L ₂	L ₃	L ₄ *	M	d	A*	Effective area (mm ²)	Weight (g)
O.D.	I.D.			(width across flats)	(width across flats)									
4	2.5	1/8	10-KFT04-01	10	10	27.5	20.8	17	13	15.5	1.5	19.3	3	29
		1/4	10-KFT04-02											19
6	4	1/8	10-KFT06-01	10	12	27.2	20.5	17	13	15.2	3	19.3	10	37
		1/4	10-KFT06-02											19
8	5	3/8	10-KFT06-03	12	14	30.2	23.5	22	15.7	16.2	4	23	12	57
		1/8	10-KFT08U-01											20
8	5	1/4	10-KFT08U-02	12	14	30.2	23.5	23	17	16.2	4	24.3	19	50
		3/8	10-KFT08U-03											23
10	6.5	1/4	10-KFT10U-02	12	17	31.8	24.5	23	17	18.8	5.5	24.3	27	46
		3/8	10-KFT10U-03											22
10	6.5	1/2	10-KFT10U-04	14	17	33.8	26.5	27	18.8	18.8	5.5	23	34	90
		1/4	10-KFT12U-02											25
12	8	3/8	10-KFT12U-03	14	19	34.3	27.5	24	17.7	19.3	7	26.2	44	81
		1/2	10-KFT12U-04											27

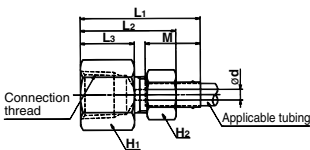
* Reference dimensions after R thread installation.

Rotary Actuators

Air Grippers

Air Preparation Equipment

Female Connector: 10-KFF



Applicable tubing size (mm)		Connection thread Rc	Model	H ₁	H ₂	L ₁	L ₂	L ₃	M	d	Effective area (mm ²)	Weight (g)
O.D.	I.D.			(width across flats)	(width across flats)							
4	2.5	1/4	10-KFF04-02	17	10	33.5	26.8	15	15.5	1.5	1.6	25
6	4	1/4	10-KFF06-02	17	12	33.2	26.5	15	15.2	3	6	27
		3/8	10-KFF06-03									19
8	5	1/4	10-KFF08U-02	17	14	33.2	26.5	15	16.2	4	11	28
10	6.5	1/4	10-KFF10U-02	17	17	34.8	27.5	15	18.8	5.5	21	32
12	8	1/4	10-KFF12U-02	17	19	35.3	28.5	15	19.3	7	35	35

Modular F. R.

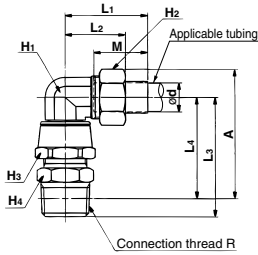
Pressure Control Equipment

Fittings & Tubing

Flow Control Equipment

Pressure Switches/ Pressure Sensors

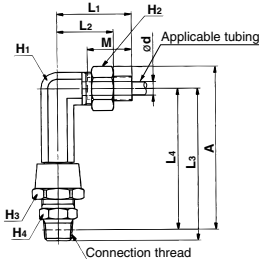
Swivel Elbow: 10-KFV



Applicable tubing size (mm) O.D., I.D.	Connection thread R	Model	H1 (inch)	H2 (inch)	H3 (inch)	H4 (inch)	L1	L2	L3	L4 *	M	d	A *	Effective area (mm ²)	Weight (g)
4 2.5	1/8	10-KFV04-01	10	10	14	10	26	19.3	32.8	29.7	15.5	1.5	35.5	1.4	40
	1/4	10-KFV04-02				14			37.2	31.7			37.5		
6 4	1/8	10-KFV06-01	10	12	14	10	25.7	19	32.8	29.7	15.2	3	36.6	5	42
	1/4	10-KFV06-02				14			37.2	31.7			38.6		
	3/8	10-KFV06-03				17			37.6	32.4			39.3		
8 5	1/8	10-KFV08U-01	12	14	17	12	27.2	20.5	33.8	30.7	16.2	4	38.8	9.4	52
	1/4	10-KFV08U-02				14			38.2	32.7			40.8		
	3/8	10-KFV08U-03				17			38.6	33.4			41.5		
10 6.5	1/4	10-KFV10U-02	14	17	19	17	28.8	21.5	40.2	34.7	18.8	5.5	44.5	18	81
	3/8	10-KFV10U-03				22			40.6	35.4			45.2		
	1/2	10-KFV10U-04				22			43.8	36.5			46.3		
12 8	1/4	10-KFV12U-02	17	19	22	17	30.3	23.5	41.2	35.7	19.3	7	46.7	30	100
	3/8	10-KFV12U-03				22			41.6	36.4			47.4		
	1/2	10-KFV12U-04				22			44.8	37.5			48.5		

* Reference dimensions after R thread installation.

Swivel Extended Elbow: 10-KFW



Applicable tubing size (mm) O.D., I.D.	Connection thread R	Model	H1 (inch)	H2 (inch)	H3 (inch)	H4 (inch)	L1	L2	L3	L4 *	M	d	A *	Effective area (mm ²)	Weight (g)
4 2.5	1/8	10-KFW04-01	10	10	14	10	26	19.3	52.8	49.7	15.5	1.5	55.5	1.4	58
	1/4	10-KFW04-02				14			57.2	51.7			57.5		
6 4	1/8	10-KFW06-01	10	12	14	10	25.7	19	53.8	50.7	15.2	3	57.6	5	61
	1/4	10-KFW06-02				14			58.2	52.7			59.6		
	3/8	10-KFW06-03				17			58.6	53.4			60.3		
8 5	1/8	10-KFW08U-01	12	14	17	12	27.2	20.5	54.8	51.7	16.2	4	59.8	9.4	83
	1/4	10-KFW08U-02				14			59.2	53.7			61.8		
	3/8	10-KFW08U-03				17			59.6	54.4			62.5		
10 6.5	1/4	10-KFW10U-02	14	17	19	17	28.8	21.5	61.2	55.7	18.8	5.5	65.5	18	106
	3/8	10-KFW10U-03				22			61.6	56.4			66.2		
	1/2	10-KFW10U-04				22			64.8	57.5			67.3		
12 8	1/4	10-KFW12U-02	17	19	22	17	30.3	23.5	64.2	58.7	19.3	7	69.7	30	146
	3/8	10-KFW12U-03				22			64.6	59.4			70.4		
	1/2	10-KFW12U-04				22			67.8	60.5			71.5		

* Reference dimensions after R thread installation.