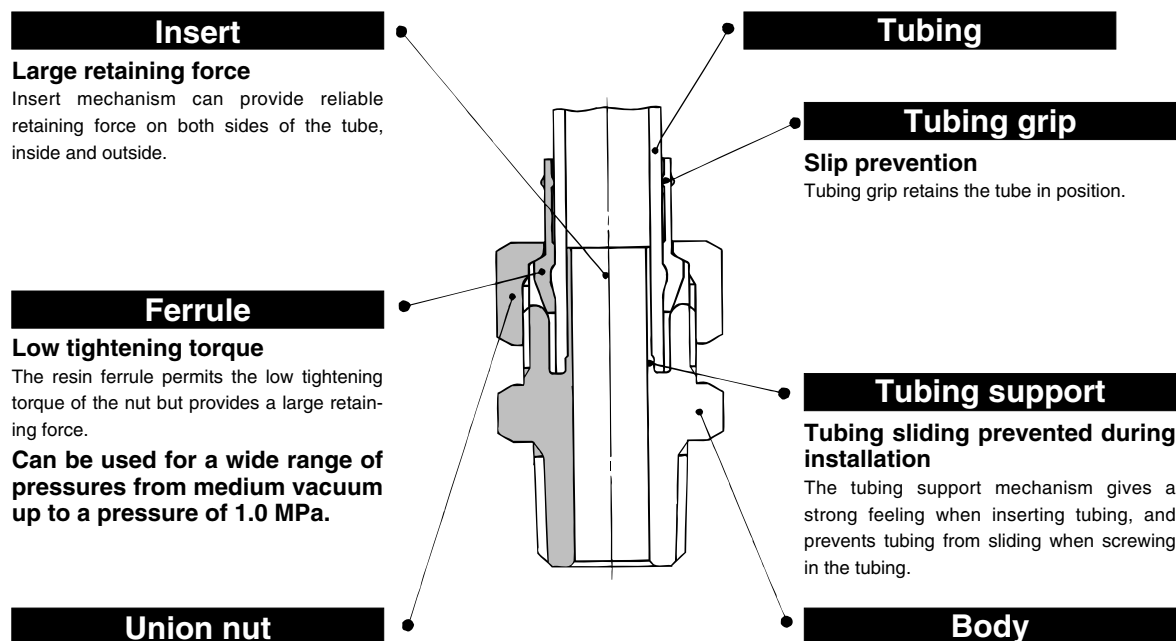


Series 10-KF Insert fittings

Construction



Specifications

Fluid	Air
Maximum operating pressure	1.0MPa
Operating vacuum pressure	-101.3kPa
Proof pressure	7.0MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Seal (Thread portion) (Note)	None or with seal
Grease	Fluorine grease
Particle generation grade (Refer to front matter pages 13 to 22 for details.)	Grade 1

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

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

Model

Male connector 10-KFH



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

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 style

Bulkhead union 10-KFF



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

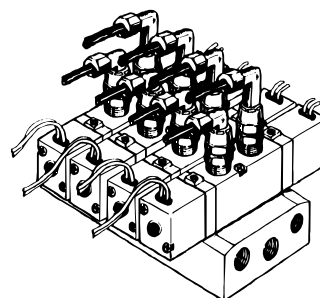


Use to plug unused fittings.

Swivel elbow 10-KFV



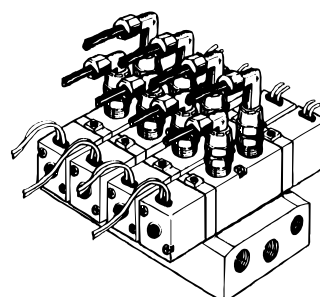
Use to pipe at right angles to female thread.
Swiveled at any direction.



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.



Air cylinder

Rotary actuator

Air gripper

Directional control valve

Flow control equipment

Filter, Pressure control equipment

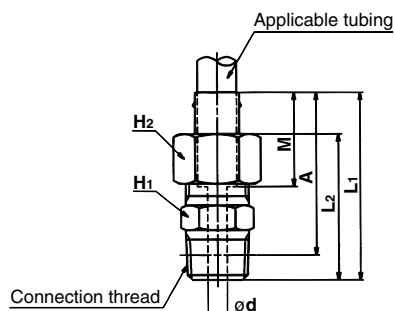
Fittings & Tubing

Air preparation equipment

Pressure switch

Clean gas filter

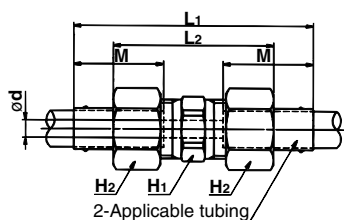
Male connector: 10-KFH



Applicable tubing (mm)		Connection thread R	Model	H1 (width across flats)	H2 (width across flats)	L1	L2	M	d	A *	Effective area (mm ²)	Weight (g)
O.D.	I.D.											
4	2.5	1/8	10-KFH04-01	10	10	30.5	23.8	15.5	1.5	26.5	1.6	13
		1/4	10-KFH04-02	14		34.5	27.8			28.5		23
6	4	1/8	10-KFH06-01	10	12	30.2	23.5	15.2	3	26.2	6	14
		1/4	10-KFH06-02	14		34.2	27.5			28.2		25
		3/8	10-KFH06-03	17		35.2	28.5			28.9		36
8	5	1/8	10-KFH08U-01	12	14	30.2	23.5	16.2	4	26.2	11	16
		1/4	10-KFH08U-02	14		34.2	27.5			28.2		25
		3/8	10-KFH08U-03	17		35.2	28.5			28.9		37
10	6.5	1/4	10-KFH10U-02	17	17	35.8	28.5	18.8	5.5	29.8	21	32
		3/8	10-KFH10U-03			36.8	29.5			30.5		40
		1/2	10-KFH10U-04			39.8	32.5			31.6		65
12	8	1/4	10-KFH12U-02	17	19	36.3	29.5	19.3	7	30.3	35	33
		3/8	10-KFH12U-03			37.3	30.5			31		41
		1/2	10-KFH12U-04			40.3	33.5			32.1		65

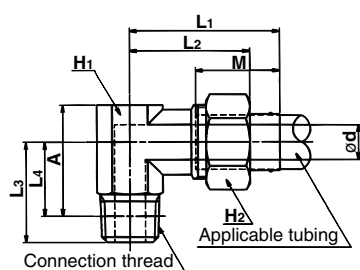
* Reference dimensions after R thread installation.

Straight union: 10-KFH



Applicable tubing (mm)		Model	H1 (width across flats)	H2 (width across flats)	L1	L2	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

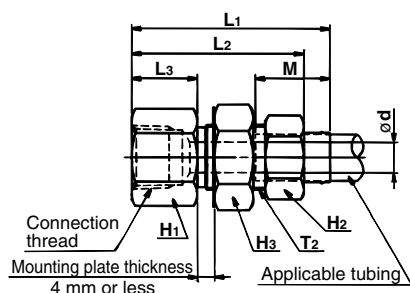
Male elbow: 10-KFL



Applicable tubing (mm)		Connection thread R	Model	H1 (width across flats)	H2 (width across flats)	L1	L2	L3	L4 *	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											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											27
		3/8	10-KFL06-03											38
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											32
		3/8	10-KFL08U-03											39
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											44
		1/2	10-KFL10U-04											66
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											53
		1/2	10-KFL12U-04											68

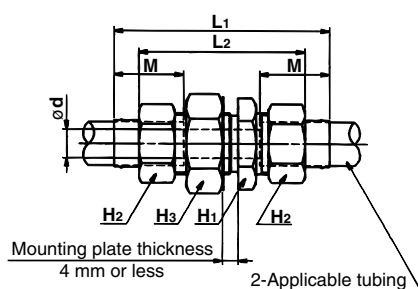
* Reference dimensions after R thread installation.

Bulkhead connector: 10-KFE



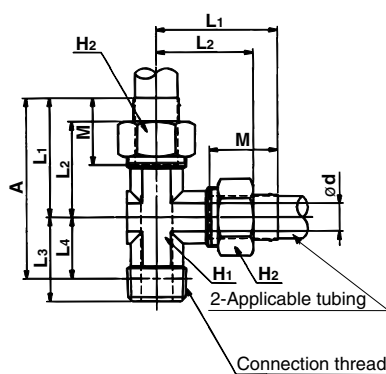
Applicable tubing (mm)		Connection thread Rc	Model	H ₁ (width across flats)	H ₂ (width across flats)	H ₃ (width across flats)	L ₁	L ₂	L ₃	M	d	T ₂	Mounting hole	Effective area (mm ²)	Weight (g)
O.D.	I.D.														
6	4	1/4	10-KFE06-02	17	12	17	44.2	37.5	16	15.2	3	M10 x 1	11	6	41
8	5	3/8	10-KFE08U-03	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 (mm)		Model	H ₁ (width across flats)	H ₂ (width across flats)	H ₃ (width across flats)	L ₁	L ₂	M	d	Mounting hole	Effective area (mm ²)	Weight (g)
O.D.	I.D.											
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

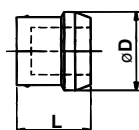
Male run tee: 10-KFY



Applicable tubing (mm)		Connection thread Rc	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						
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						
		3/8	10-KFY06-03	12	30.2	23.5	22	15.7	45.8	13	51			
8	5	1/8	10-KFY08U-01	12	14	30.2	23.5	20	16	16.2	4	46.2	15	48
		1/4	10-KFY08U-02					23	17			47.2	21	50
		3/8	10-KFY08U-03	22	15.7	45.8	55							
10	6.5	1/4	10-KFY10U-02	12	17	31.8	24.5	23	17	18.8	5.5	48.8	30	58
		3/8	10-KFY10U-03					22	15.7			47.4	63	
		1/2	10-KFY10U-04	14	33.8	26.5	27	18.8	52.6	38	89			
12	8	1/4	10-KFY12U-02	14	19	34.3	27.5	25	19	19.3	7	53.3	34	79
		3/8	10-KFY12U-03					24	17.7			51.9	49	79
		1/2	10-KFY12U-04	27	18.8	53.1	93							

* Reference dimensions after R thread installation.

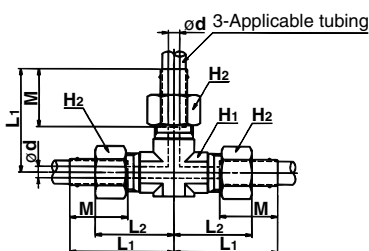
Plug: 10-KFP



Applicable tubing (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

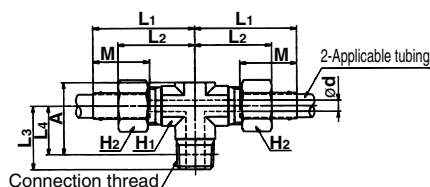
Insert fittings 10-KF

Union tee: 10-KFT



Applicable tubing (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-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

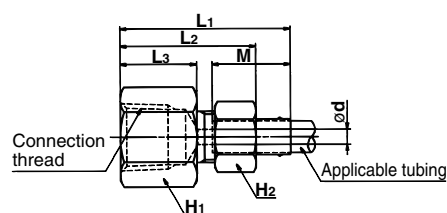
Male branch tee: 10-KFT



Applicable tubing (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-KFT04-01	10	10	27.5	20.8	17	13	15.5	1.5	19.3	3	29
		1/4	10-KFT04-02					19						34
6	4	1/8	10-KFT06-01	10	12	27.2	20.5	17	13	15.2	3	19.3	10	32
		1/4	10-KFT06-02					19						37
		3/8	10-KFT06-03	12		30.2	23.5	22	15.7			23	12	53
8	5	1/8	10-KFT08U-01	12	14	30.2	23.5	20	16	16.2	4	23.3	14	49
		1/4	10-KFT08U-02					23						50
		3/8	10-KFT08U-03			30.2	23.5	22	15.7			23	19	56
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						63
		1/2	10-KFT10U-04	14		33.8	26.5	27	18.8			27.3	34	90
12	8	1/4	10-KFT12U-02	14	19	34.3	27.5	25	19	19.3	7	27.5	31	79
		3/8	10-KFT12U-03					24						81
		1/2	10-KFT12U-04					27	18.8			27.3	44	94

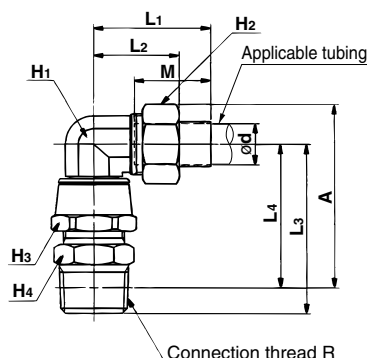
* Reference dimensions after R thread installation.

Female connector: 10-KFF



Applicable tubing (mm)		Connection thread Rc	Model	H ₁ (width across flats)	H ₂ (width across flats)	L ₁	L ₂	L ₃	M	d	Effective area (mm ²)	Weight (g)
O.D.	I.D.											
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		35.2	28.5	17				30
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

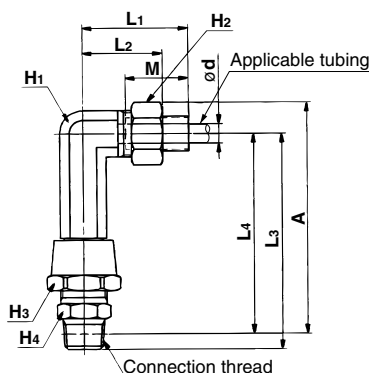
Swivel elbow: 10-KFV



Applicable tubing (mm) O.D. I.D.	Connection thread R	Model	H ₁ (width across flats)	H ₂ (width across flats)	H ₃ (width across flats)	H ₄ (width across flats)	L ₁	L ₂	L ₃	L ₄ *	M	d	A *	Effective area (mm ²)	Weight (g)
4	2.5	1/8 10-KFV04-01	10	10	14	10	26	19.3	33.7	29.7	15.5	1.5	35.5	1.4	40
	1/4	10-KFV04-02				14									
6	4	1/8 10-KFV06-01	10	12	14	10	25.7	19	33.7	31.7	15.2	3	37.5	5	52
	1/4	10-KFV06-02				14									
	3/8	10-KFV06-03				17									
8	5	1/8 10-KFV08U-01	12	14	17	12	27.2	20.5	34.7	30.7	16.2	4	37.6	9.4	61
	1/4	10-KFV08U-02				14									
	3/8	10-KFV08U-03				17									
10	6.5	1/4 10-KFV10U-02	14	17	19	12	28.8	21.5	40.7	34.7	18.8	5.5	42.8	18	73
	3/8	10-KFV10U-03				17									
	1/2	10-KFV10U-04				22									
12	8	1/4 10-KFV12U-02	17	19	22	17	30.3	23.5	41.7	35.7	19.3	7	45.7	30	92
	3/8	10-KFV12U-03				22									
	1/2	10-KFV12U-04				22									

* Reference dimensions after R thread installation.

Swivel extended elbow: 10-KFW



Applicable tubing (mm) O.D. I.D.	Connection thread R	Model	H ₁ (width across flats)	H ₂ (width across flats)	H ₃ (width across flats)	H ₄ (width across flats)	L ₁	L ₂	L ₃	L ₄ *	M	d	A *	Effective area (mm ²)	Weight (g)
4	2.5	1/8 10-KFW04-01	10	10	14	10	26	19.3	53.7	49.7	15.5	1.5	55.5	1.4	58
	1/4	10-KFW04-02				14									
6	4	1/8 10-KFW06-01	10	12	14	10	25.7	19	54.7	50.7	15.2	3	56.5	5	61
	1/4	10-KFW06-02				14									
	3/8	10-KFW06-03				17									
8	5	1/8 10-KFW08U-01	12	14	17	12	27.2	20.5	55.7	51.7	16.2	4	58.6	9.4	81
	1/4	10-KFW08U-02				14									
	3/8	10-KFW08U-03				17									
10	6.5	1/4 10-KFW10U-02	14	17	19	12	28.8	21.5	61.7	55.7	18.8	5.5	63.8	18	100
	3/8	10-KFW10U-03				17									
	1/2	10-KFW10U-04				22									
12	8	1/4 10-KFW12U-02	17	19	22	17	30.3	23.5	64.7	58.7	19.3	7	68.7	30	146
	3/8	10-KFW12U-03				22									
	1/2	10-KFW12U-04				22									

* Reference dimensions after R thread installation.