

SERIES KQ BLACK FITTINGS AND SERIES KQ2 WHITE FITTINGS



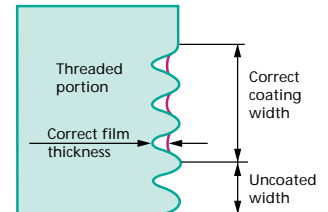
- ✓ Wide range of pressures – Low vacuum (10Torr) to 10 Bar (1.0MPa) pressure
- ✓ Wide range of tube systems (3.2mm – 16mm OD tube)
- ✓ Minimised resistance to air flow
- ✓ Widest range of configurations available to the market
- ✓ Choice of body colour to suit customer application



AVAILABLE IN BOTH COLOURS WITH SEALANT COATED TAPERED THREADS



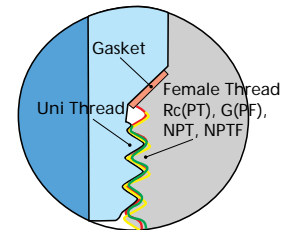
- ✓ Constant sealing capability
- ✓ Reduced possible contamination
- ✓ Reduced piping man-hours
- ✓ Market specified
- ✓ Thread: M5 • 1/8" • 1/4" • 3/8" • 1/2" R(PT)



ALSO AVAILABLE IN BOTH COLOURS WITH UNI THREAD



- ✓ Applicable to various female thread types on flat or curved surfaces
- ✓ No sealant/tape required
- ✓ Low flush fitting to save space
- ✓ Constant mounting height gives improved appearance and reduced assembly time (cuts fastening time by over 60%)
- ✓ Thread: 1/8" • 1/4" • 1/2" R(PT), G(PF), NPT, NPTF



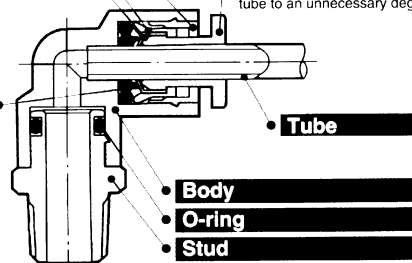
Fittings & Tubing

TECHNICAL SPECIFICATIONS

Guide
Collet
Chuck
Accepts nylon, soft nylon and polyurethane tubes.
Has large retaining force.

Release button (Blue)
Low disconnecting force.
When the fitting is removed from the tubing, the chuck and collet are released, thus preventing them from biting into the tube to an unnecessary degree.

Packing
Can be used for a wide range of pressure from a low vacuum up to a pressure of 1.0MPa {10.2kgf/cm²}
The use of a special profile ensures positive sealing and reduced resistance when the tube is being inserted.



Body
O-ring
Stud
Effective when piping in a confined space.
The body and threaded portion can turn independently.

APPLICABLE TUBE

Tube material	Nylon, Soft nylon, Polyurethane
Tube O. D.	Ø3.2, Ø4, Ø6, Ø8, Ø10, Ø12, Ø16

SPECIFICATIONS

Operating fluid	Air, Water ^{Note1)}
Max. operating pressure	1.0MPa {10.2kgf/cm ² }
Max. operating vacuum pressure	-100kPa {10Torr}
Proof pressure	3.0MPa {30.6kgf/cm ² }
Ambient and fluid temperature	0 to 60°C (Water: 5 to 40°C)

Note1) Applicable for general industry water.
Consult SMC if using for other kinds of fluid.
Surge pressure must be under the max. operating pressure.

PRINCIPAL ELEMENT MATERIAL

Body	C3604BD, PBT, PP
Stud	C3604BD (Thread portion)
Chuck	Stainless steel (SUS304)
Guide	SUS304, C3604BD, Polyacetal (POM)
Collet, Release button	Polyacetal (POM)
Packing, O-ring	NBR



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E501-B



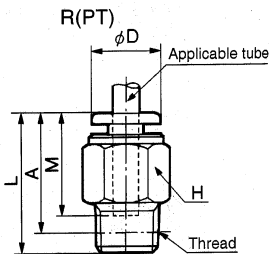
EXAMPLE OF ORDERING

KQH04-M5 Black Body
KQ2H04-M5 White Body

PRODUCT SELECTOR

MALE CONNECTOR: KQH (KQ2H)

Use to pipe in the same direction from female threaded portion.



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L	A*	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
3.2	M5 × 0.8	KQH23-M5	7	7	16.7	13.6	12.7	3.4	2.9	2
	1/8	KQH23-01S	10	—	22	18	9			
	1/4	KQH23-02S	14	—	19.5	13.5	16			
4	M5 × 0.8	KQH04-M5	8	8	17	13.9	12.7	4	4	2.4
	1/8	KQH04-M6	8	—	18	—	2.5			
	1/4	KQH04-01S	10	—	22	18	9			
6	M5 × 0.8	KQH06-M5	10	10	17.8	14.7	13.5	4	4	3.3
	1/8	KQH06-M6	10	—	19	14.9				3.4
	1/4	KQH06-01S	12	—	22.5	18.5				16
8	1/4	KQH06-02S	14	—	23	17	17	13.1	13.1	14
	3/8	KQH06-03S	17	—	22	15.5				27
	1/8	KQH08-01S	14	—	28	24				21
10	1/4	KQH08-02S	17	—	26.5	20.5	18.5	26.1	18.0	19
	3/8	KQH08-03S	17	—	22	15.5				26
	1/8	KQH10-01S	17	—	30	26				19
12	1/4	KQH10-02S	17	—	33.5	27.5	21	41.5	29.5	30
	3/8	KQH10-03S	17	—	29	22.5				30
	1/2	KQH10-04S	22	—	27	19				53
16	1/4	KQH12-02S	19	—	34.5	28.5	22	58.3	46.1	42
	3/8	KQH12-03S	19	—	30	23.5				34
	1/2	KQH12-04S	22	—	30	22.5				51
16	3/8	KQH16-03S	24	25.7	39.5	33	25	81	(81)	61
	1/2	KQH16-04S	24	—	35.5	27.5				113

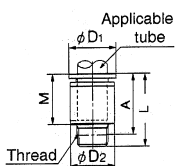
*Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon, øD: max. diameter

Fittings & Tubing

PRODUCT SELECTOR

HEXAGON SOCKET HEAD MALE CONNECTOR: KQS (KQ2S)

Internal hex allows thread connection by using an allen wrench, for confined space.



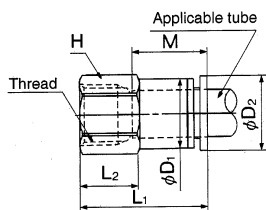
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD ₁	øD ₂	L	A*	M	Effective orifice(mm ²)		Weight (g)	
									Nylon	Urethane		
4	M5 × 0.8	KQS04-M5	2.5	8	—	18.7	15.6	12.7	2.7	2.7	2.7	
	M6 × 1.0	KQS04-M6	3			18.2	14.1				2.8	
	1/8	KQS04-01S	3			23	19				4.1	3.6
6	M5 × 0.8	KQS06-M5	2.5	10	—	19.5	16.4	13.5	2.7	2.7	3.3	
	M6 × 1.0	KQS06-M6	3			19.1	15				3.4	
	1/8	KQS06-01S	4			24	20				10.0	9.9
8	1/4	KQS06-02S	4	14	—	24	20	17	10.7	10.0	15	
	1/8	KQS08-01S	5			28	24				17.2	12
	1/4	KQS08-02S	6			25.5	19.5				18.5	23.3
10	3/8	KQS08-03S	6	17	—	27.5	21	21	17.2	10.0	18	
	1/8	KQS10-01S	5			30	26				12	
	1/4	KQS10-02S	8			27.5	21.5				39.0	26.6
12	3/8	KQS10-03S	8	22	—	28	20	22	46.0	44.5	23	
	1/2	KQS10-04S	10			28	20				30	
	1/4	KQS12-02S	8			33.5	27.5				60.0	44.5
16	3/8	KQS12-03S	10	25.7	24	29	22.5	25	81	(81)	42	
	1/2	KQS12-04S	10			28	20				30	
	3/8	KQS16-03S	10			39	32.5				113	(96)

*Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon, øD₁: max. diameter

PRODUCT SELECTOR

FEMALE UNION: KQF (KQ2F)

Use to pipe from male thread portion such as pressure gauge.



Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	H (Hex.)	øD ₁	øD ₂	L ₁	L ₂	M	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
4	1/8	KQF04-01	14	—	10	27	11	16	5.6	5.6	15
	1/4	KQF04-02	17			31	14				23
6	1/8	KQF06-01	14	—	12	27.5	11	17	13.1	13.1	15
	1/4	KQF06-02	17			31	13				22
	3/8	KQF06-03	19			33.5	15				25
8	1/8	KQF08-01	14	—	14	29	11	18.5	26.1	18.0	17
	1/4	KQF08-02	17			32.5	13				24
	3/8	KQF08-03	19			33.5	14				24
10	1/4	KQF10-02	17	—	17	34.5	14	21	41.5	18.0	27
	3/8	KQF10-03	19			36.5	15				30
	1/4	KQF12-02	19			35	14				36
12	3/8	KQF12-03	19	—	19	37	14	22	58.3	46.1	31
	1/2	KQF12-04	24			41	18				52
	3/8	KQF16-03	24			38	15				59
16	1/2	KQF16-04	24	24	25.7	43	19	25	81	(81)	59
	3/8	KQF16-03	24			43	19				113

Note) (): Values for soft nylon, øD₂: max. diameter



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E501-B

SERIES KQ, KQ2 SEALANT COATED THREAD

PRODUCT SELECTOR

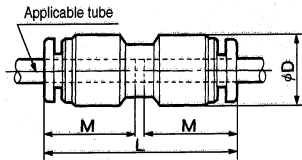
STRAIGHT UNION: KQH (KQ2H)

Use to connect tubes in the same direction.



EXAMPLE OF ORDERING

- KQH04-00 Black Body
- KQ2H04-00 White Body



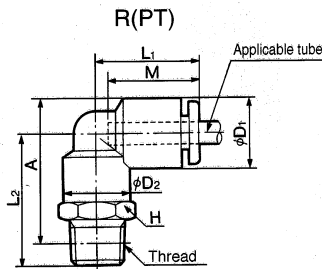
Applicable tube O.D. (mm)	Part No.	øD	L	M	Effective orifice(mm ²)		Weight (g)
					Nylon	Urethane	
3.2	KQH23-00	9.6	31.5	15.5	3.4	2.9	3
4	KQH04-00	10.4	32.5	16	5.6	5.6	3
6	KQH06-00	12.8	34.5	17	13.1	13.1	5
8	KQH08-00	15.2	38.5	18.5	26.1	18.0	7
10	KQH10-00	18.5	42.5	21	41.5	29.5	11
12	KQH12-00	20.9	44.5	22	58.3	46.1	14
16	KQH16-00	26.5	51	25	113	(96)	24

Note) (): Values for soft nylon.
øD: max. diameter

PRODUCT SELECTOR

MALE ELBOW: KQL (KQ2L)

Use to pipe in right angle to female threaded portion. Most general type.



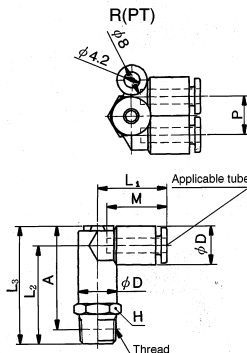
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L1	L2	A*	M	Effective orifice(mm ²)		Weight (g)			
										Nylon	Urethane				
3.2	M5×0.8	KQL23-M5	7	8.4	—	15.3	13.2	14.3	12.7	3	2.5	2.5			
	1/8	KQL23-01S	10	—	—	21.5	22.5	—	—				18		
	1/4	KQL23-02S	14	9.6	10	17.5	25.5	24.5	15.5					18	
4	M5×0.8	KQL04-M5	7	9.3	—	15.6	13.7	15.3	12.7	3.5	3.5	2.7			
	M6×1.0	KQL04-M6	8	—	8	—	16	17	—				5		
	1/8	KQL04-01S	10	10.4	10	18	22	23	16					10	
6	1/4	KQL04-02S	14	—	—	—	26	25	—	4.2	4.2	19			
	M5×0.8	KQL06-M5	7	11.6	—	16.1	14.7	17.4	13.5				3.5	3.5	3.2
	M6×1.0	KQL06-M6	8	—	8	—	16.5	18.5	—						
1/8	KQL06-01S	10	—	—	20	23	25.5	17	12						
8	1/4	KQL06-02S	14	12.8	10	20	27	27.5		—	11.4	11.4	22		
	3/8	KQL06-03S	17	—	—	—	29	29	—	33					
	1/8	KQL08-01S	12	—	—	—	24.5	28	—					13	
10	1/4	KQL08-02S	14	15.2	12	23	28.5	30	18.5	21.6	14.9	21			
	3/8	KQL08-03S	17	—	—	—	30.5	31.5	—				35		
	1/8	KQL10-01S	10	—	—	—	27	32	—					25	
12	1/4	KQL10-02S	14	18.5	17	26.5	32	33	21	35.2	25.0	36			
	3/8	KQL10-03S	17	—	—	—	32	34.5	—				63		
	1/2	KQL10-04S	22	—	—	—	36	37	—					28	
16	1/4	KQL12-02S	14	20.9	17	28.5	31	35.5	—	50.2	39.7	28			
	3/8	KQL12-03S	17	—	—	—	33	37	22				65		
	1/2	KQL12-04S	22	—	—	—	37	39.5	—					101	
16	3/8	KQL16-03S	22	26.5	20.9	34	38	44.5	25	71	(71)	101			
	1/2	KQL16-04S	22	—	—	—	41	46	—				100	(84)	105

*Reference dimensions after R(PT) thread installation.
Note) (): Values for soft nylon.
øD: max. diameter

PRODUCT SELECTOR

BRANCH UNION: KQLU (KQ2LU)

Used for branch connection at right angle from the female thread.



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L1	L2	L3	A*	M	P	Effective orifice(mm ²)		Weight (g)	
											Nylon	Urethane		
4	M5×0.8	KQLU04-M5	11	10.4	18.5	24	29.5	25.5	16	10.4	4.3	4.3	10	
	M6×1.0	KQLU04-M6				24.5	30	—						
	1/8	KQLU04-01S				26.5	32	27.5						—
	1/4	KQLU04-02S				30.5	36	30						—
6	M5×0.8	KQLU06-M5	13	12.8	21	26.5	33	29.5	17	12.8	4.3	4.3	14	
	M6×1.0	KQLU06-M6				27	33.5	—						
	1/8	KQLU06-01S				29.5	36	32						—
	1/4	KQLU06-02S				33	39.5	33.5						—
8	3/8	KQLU06-03S	17	—	—	35	41.5	35	18.5	15.2	26.3	18.2	28	
	1/8	KQLU08-01S	—	—	—	34	41.5	38						
	1/4	KQLU08-02S	17	15.2	24	37	44.5	38.5						
10	3/8	KQLU08-03S	17	—	—	38	45.5	39	21	18.5	40.8	29.0	36	
	1/4	KQLU10-02S	19	—	—	40	49.5	43.5						
	3/8	KQLU10-03S	19	18.5	27	41	50.5	44						
12	1/2	KQLU10-04S	22	—	—	44.5	54	45.5	22	20.9	57.2	45.2	58	
	1/4	KQLU12-02S	—	—	—	42.5	53	47						
	3/8	KQLU12-03S	22	20.9	29	43.5	54	47.5						
12	1/2	KQLU12-04S	22	—	—	46.5	57	49	—	—	—	—	65	

*Reference dimensions after R(PT) thread installation.
Note) øD: max. diameter



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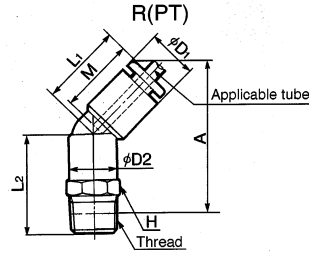
PRODUCT SELECTOR

45° MALE ELBOW: KQK (KQ2K)

Used in applications where a 45° elbow or male connector stresses the tubing.



EXAMPLE OF ORDERING
KQK04-M6 Black Body
KQ2K04-M6 White Body



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD ₁	øD ₂	L ₁	L ₂	A*	M	Effective orifice(mm ²)		Weight (g)			
										Nylon	Urethane				
4	M5 × 0.8	KQK04-M5	8	10.4	8	17	14.5	26	16	3.4	3.4	4			
	M6 × 1.0	KQK04-M6										5			
	1/8	KQK04-01S										10	20.5	32	10
	1/4	KQK04-02S										14	24.5	34	19
6	M5 × 0.8	KQK06-M5	8	12.8	8	18	14.5	27.5	17	3.4	3.4	6			
	M6 × 1.0	KQK06-M6										12			
	1/8	KQK06-01S										10	20.5	33	12
	1/4	KQK06-02S										14	24.5	35	10
8	3/8	KQK06-03S	17	26.5	36.5	33	8.7	8.7	10	33	13				
	1/2	KQK08-01S	12	22	37	13	18.5	19.7	19.7	21	35				
	3/8	KQK08-03S	17	28	41	25	28	41	25	26	31				
	1/2	KQK10-01S	12	24	42	26	27	43.5	21	30.9	23.2	25			
10	3/8	KQK10-03S	17	29	45	33	33	47.5	21	30.9	23.2	26			
	1/2	KQK10-04S	22	33	47.5	33	47.5	21	30.9	23.2	36				
	3/8	KQK12-03S	17	27.5	45.5	28	28	41	22	44.5	35.1	38			
	1/2	KQK12-04S	22	33.5	49.5	28	28	41	22	44.5	35.1	65			
16	3/8	KQK16-03S	22	32	55	35	35	56.5	25	65.8	(65.8)	52			
	1/2	KQK16-04S	22	35	56.5	35	56.5	25	65.8	(65.8)	58				

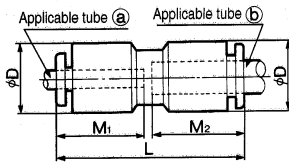
* Reference dimensions after R(PT) thread installation.
Note) () : Values for soft nylon.
øD₁: max. diameter

Fittings & Tubing

PRODUCT SELECTOR

DIFFERENT DIA. STRAIGHT: KQH (KQ2H)

Use to connect different size tubes.



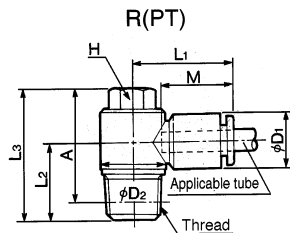
Applicable tube O.D. (mm)	Part No.	øD	L	M ₁	M ₂	Effective orifice(mm ²)		Weight (g)	
						Nylon	Urethane		
3.2	4	KQH23-04	10.4	32.5	15.5	16	3.2	2.7	3
4	6	KQH04-06	12.8	34.5	16	17	4.2	4.2	5
6	8	KQH06-08	15.2	38.5	17	18.5	10.7	10.7	7
8	10	KQH08-10	18.5	42	18.5	21	24.1	16.7	11
10	12	KQH10-12	20.9	44.5	21	22	37.6	28.2	14
12	16	KQH12-16	26.5	56.5	22	25	58.3	46.1	47

Note) øD: max. diameter

PRODUCT SELECTOR

UNIVERSAL MALE ELBOW: KQV (KQ2V)

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



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	Effective orifice(mm ²)		Weight (g)
											Nylon	Urethane	
4	M5 × 0.8	KQV04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9	2.9	6
	1/8	KQV04-01S											13.4
6	M5 × 0.8	KQV06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8	3.8	7
	1/8	KQV06-01S											15.4
8	1/4	KQV06-02S	10	15.4	23.5	18.5	31	25	17	7.5	7.5	15	
	1/8	KQV08-01S	12	15.2	17.6	28.5	15.5	28.5	24.5	16	11.2	24	
10	1/4	KQV08-02S	14	20.6	27.5	20.5	36.5	30	18.5	20.5	14.3	47	
	3/8	KQV08-03S	14	18.5	20.6	31	19.5	35.5	29.5	21	27	20.3	40
12	3/8	KQV10-02S	14	18.5	20.6	31	20.5	36.5	30	21	27	20.3	49
	1/2	KQV10-03S	17	20.9	25.2	34	22	38.5	32	22	39	30.8	63
16	3/8	KQV12-03S	17	20.9	25.2	34	25	41.5	33.5	22	39	30.8	80
	1/2	KQV12-04S	22	26.5	32.3	39	26.5	46.5	40.5	25	55	(55)	103
16	3/8	KQV16-03S	21	26.5	32.3	39	29.5	49.5	41.5	25	78	(65)	110
	1/2	KQV16-04S	21	26.5	32.3	39	29.5	49.5	41.5	25	78	(65)	110

* Reference dimensions after R(PT) thread installation.
Note) () : Values for soft nylon.
øD₁: max. diameter

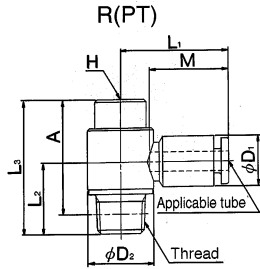
SERIES KQ, KQ2 SEALANT COATED THREAD

PRODUCT SELECTOR

EXAMPLE OF ORDERING
 KQVS04-015 Black Body
 KQ2VS04-015 White Body

HEXAGON SOCKET HEAD UNIVERSAL MALE ELBOW: KQVS (KQ2VS)

Hex on the top allows thread connection by using an allen wrench, for confined space.



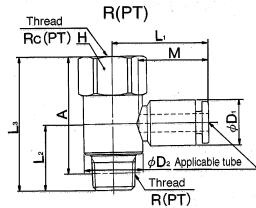
Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	Effective orifice (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5	KQVS04-M5	4	10.4	9.8	20.5	10.5	18	15	16	2.9	2.9	6
	1/8	KQVS04-01S	6		13.4	22	14.5	26.5	22.5		3.8	3.8	7
6	M5	KQVS06-M5	4	12.8	9.8	23.5	12	18	15	17	7.5	7.5	15
	1/8	KQVS06-01S	6		13.4	24	14.5	26.5	22.5		7.5	7.5	22
8	1/8	KQVS08-01S	8	15.2	17.6	28.5	15.5	27	23	18.5	16	11.2	24
	1/4	KQVS08-02S			20.6	27.5	20.5	32.5	26		20.5	14.3	47
10	1/4	KQVS10-02S	8	18.5	20.6	31	19.5	31.5	25	21	27	20.3	32
	3/8	KQVS10-03S			20.5	32.5	26	20.5	32.5		26	39	
12	3/8	KQVS12-03S	10	20.9	25.2	34	22	36	30	22	39	30.8	48
	1/2	KQVS12-04S			25	39	31	25	39		31	67	

* Reference dimensions after R(PT) thread installation.
 Note) øD₁: max. diameter

PRODUCT SELECTOR

UNIVERSAL FEMALE ELBOW: KQVF (KQ2VF)

Used for branch line in the same direction or in right angle from the male or female thread. Multiplex connections possible.



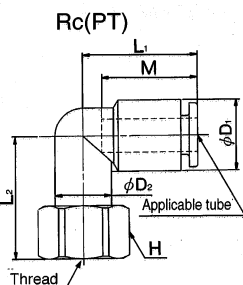
Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	Effective orifice (mm ²)		Weight (g)
											Nylon	Urethane	
4	M5 × 0.8	KQVF04-M5	8	10.4	9.8	20.5	11	20	16	16	6	6	19
	1/8	KQVF04-01S	14		13.4	22	15.5	29.5	25.5		17	19	
6	M5 × 0.8	KQVF06-M5	8	12.8	9.8	23.5	12.5	20	16	17	7	7	36
	1/8	KQVF06-01S	14		13.4	24.5	15.5	29.5	25.5		17	19	
8	1/8	KQVF08-01S	17	15.2	17.6	28.5	17	31	27	18.5	29	29	66
	1/4	KQVF08-02S			20	38.5	32.5	20	38.5		32.5	66	
10	3/8	KQVF08-03S	22	25.2	29.5	25.5	45.5	39	39	21	48	48	68
	1/4	KQVF10-02S			19	20.6	31.5	22	41		35	21	68
12	3/8	KQVF10-03S	22	20.9	25.2	34	24.5	45.5	39	22	70	70	93
	1/2	KQVF12-04S			24	27	35	25.5	50		42	93	

* Reference dimensions after R(PT) thread installation.
 Note) øD₁: max. diameter

PRODUCT SELECTOR

FEMALE ELBOW: KQLF (KQ2LF)

Used to pipe the tube at right angle to the male thread.



Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	M	Effective orifice (mm ²)		Weight (g)	
									Nylon	Urethane		
4	M5 × 0.8	KQLF04-M5	8	10.4	8	18.5	14.5	16	3.5	3.5	5	
	M6 × 1.0	KQLF04-M6	14						15.5	15.5	13	
	1/8	KQLF04-01	17						24.5	24.5	20	
6	M5 × 0.8	KQLF06-M5	8	12.8	8	20.5	15	17	3.5	3.5	5	
	M6 × 1.0	KQLF06-M6	14						16	16	6	
	1/8	KQLF06-01	17						25.5	25.5	13	
8	1/4	KQLF06-02	19	15.2	12	23.5	26	18.5	11.4	11.4	20	
	3/8	KQLF06-03							26	26	16	
	1/8	KQLF08-01							14	23	23	16
10	1/4	KQLF08-02	19	18.5	17	26.5	28	21	21.6	14.9	22	
	3/8	KQLF08-03							27	27	23	
	1/4	KQLF10-02							17	28	28	27
12	3/8	KQLF10-03	24	20.9	17	28.5	29.5	22	35.2	25.0	46	
	1/2	KQLF10-04							24	32.5	32.5	29
	1/4	KQLF12-02							17	29.5	29.5	29
12	3/8	KQLF12-03	24	20.9	17	28.5	30	22	50.2	39.7	48	
	1/2	KQLF12-04							34	34	34	48

Note) øD₁: max. diameter



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PRODUCT SELECTOR

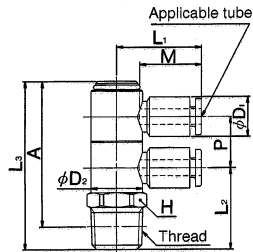
DOUBLE UNIVERSAL MALE ELBOW: KQVD (KQ2VD)

Use for branch piping in the right angle from the male thread.



EXAMPLE OF ORDERING

KQVD04-015 Black Body
KQ2VD04-015 White Body



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	P	Weight (g)
4	1/8	KQVD04-01S	14	10.4	13.4	22	18.5	41	37	16	13.4	23
	1/4	KQVD04-02S	17				21.5	44	38			29
	3/8	KQVD04-03S	17				23.5	46	40			42
6	1/8	KQVD06-01S	14	12.8	13.4	24.5	18.5	41	37	17	13.4	25
	1/4	KQVD06-02S	17				21.5	44	38			31
	3/8	KQVD06-03S	17				23.5	46	40			43
8	1/8	KQVD08-01S	19	15.2	17.6	28.5	21	48	44	18.5	15.9	54
	1/4	KQVD08-02S	21				24	51	45			52
	3/8	KQVD08-03S	21				25	52	45.5			61
10	1/2	KQVD08-04S	21				28.5	55.5	47.5			83
	1/4	KQVD10-02S	21	18.5	20.6	31.5	26.5	58	52	21	19.2	71
	3/8	KQVD10-03S	21				27.5	59	53			74
12	1/2	KQVD10-04S	21				30.5	62	54			91
	1/4	KQVD12-02S	26	20.9	25.2	34	28.5	64.5	58.5	22	21.6	118
	3/8	KQVD12-03S	26				29.5	65.5	59			113
12	1/2	KQVD12-04S	26				32.5	68.5	60			125

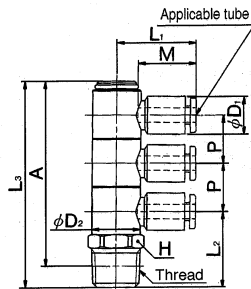
* Reference dimensions after R(PT) thread installation.
Note) øD₁: max. diameter

Fittings & Tubing

PRODUCT SELECTOR

TRIPLE UNIVERSAL MALE ELBOW: KQVT (KQ2VT)

Used for branch piping in the right angle from the female thread. Three individual parts rotate 360°.



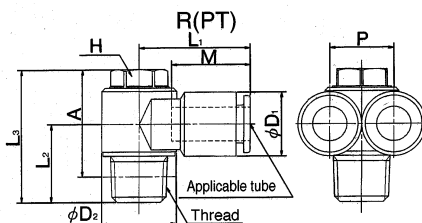
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	P	Weight (g)
4	1/8	KQVT04-01S	14	10.4	13.4	22	18.5	54.5	50.5	16	13.4	30
	1/4	KQVT04-02S	17				21.5	57.5	51.5			35
	3/8	KQVT04-03S	17				23.5	59.5	53.5			49
6	1/8	KQVT06-01S	14	12.8	13.4	24.5	18.5	54.5	50.5	17	13.4	32
	1/4	KQVT06-02S	17				21.5	57.5	51.5			38
	3/8	KQVT06-03S	17				23.5	59.5	53.5			51
8	1/8	KQVT08-01S	19	15.2	17.6	28.5	21	64	60	18.5	15.9	72
	1/4	KQVT08-02S	21				24	67	61			67
	3/8	KQVT08-03S	21				25	68	61.5			76
10	1/2	KQVT08-04S	21				28.5	71.5	63.5			97
	1/4	KQVT10-02S	21	18.5	20.6	31.5	26.5	77.5	71.5	21	19.2	94
	3/8	KQVT10-03S	21				27.5	78.5	72			111
12	1/2	KQVT10-04S	21				30.5	81.5	73.5			111
	1/4	KQVT12-02S	26	20.9	25.2	34	28.5	86	80	22	21.6	153
	3/8	KQVT12-03S	26				29.5	87	80.5			142
12	1/2	KQVT12-04S	26				32.5	90	82			154

* Reference dimensions after R(PT) thread installation.
Note) øD₁: max. diameter

PRODUCT SELECTOR

BRANCH UNIVERSAL MALE ELBOW: KQZ (KQ2Z)

Hexagonal head allows thread connection by using a box wrench. Used for branch connection.



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	P	Effective orifice (mm)	Weight (g)	
4	M5×0.8	KQZ04-M5	8	10.4	9.8	19.5	11	18.5	15	16	10.4	3.4	3.4	8
	1/8	KQZ04-01S	8		13.4	21	14.5	26.5	22.5			4.7	4.7	16
6	1/8	KQZ06-01S	8		13.4	22	14.5	26.5	22.5					18
	1/4	KQZ06-02S	14	12.8	20.6	25.5	19.5	35.5	29.5	17	12.8	10.8	10.8	40
6	3/8	KQZ06-03S	14		20.6	25.5	20.5	36.5	30					48
	1/2	KQZ06-04S	14		20.6	25.5	20.5	36.5	30					28
8	1/4	KQZ08-02S	12	15.2	17.6	26	18.5	31.5	25.5	18.5	15.2	20.5	14.2	34
	3/8	KQZ08-03S	14		20.6	27	20.5	36.5	30					50
10	1/4	KQZ10-02S	14	18.5	20.6	29	19.5	35.5	29.5	21	18.5	31.8	22.6	46
	3/8	KQZ10-03S	14		20.6	29	20.5	36.5	30					54
12	3/8	KQZ12-03S	17	20.9	25.2	32.5	22	39	32.5	22	20.9	44.6	35.3	71
	1/2	KQZ12-04S	17		25.2	32.5	25	42	34					88

* Reference dimensions after R(PT) thread installation.
Note) øD₁: max. diameter



FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT REQUEST
CATALOGUE REFERENCE
E501-B

SERIES KQ, KQ2 SEALANT COATED THREAD

PRODUCT SELECTOR

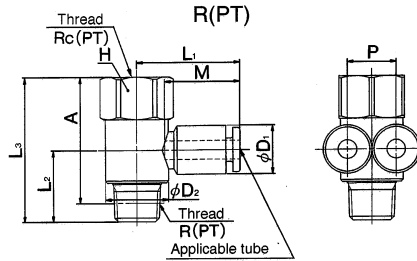
EXAMPLE OF ORDERING

KQZF04-M5 Black Body

KQZF04-M5 White Body

BRANCH UNIVERSAL FEMALE ELBOW: KQZF (KQ2ZF)

Used for branch line in the same direction or at right angle to the male or female thread. Multiplex connection possible.



Applicable tube O.D. (mm)	Thread R(PT) Rc(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	P	Weight (g)
4	M5×0.8	KQZF04-M5	8	9.8	19.5	11	20	16.5				8
	1/8	KQZF04-01S	14	10.4	13.4	21	15.5	29.5	25.5	16	10.4	21
6	1/8	KQZF06-01S	14	12.8	13.4	22	15.5	29.5	25.5		17	22
	1/4	KQZF06-02S	19		20.6	25.5	22	41	35			48
8	1/8	KQZF08-01S	17	15.2	17.6	25.5	17	31	27			33
	1/4	KQZF08-02S	19		20.6	27	22	41	35	18.5	15.2	50
10	1/4	KQZF10-02S	19	18.5	20.6	29	22	41	35		21	54
	3/8	KQZF10-03S	22		25.2	31.5	24.5	45.5	39			74
12	3/8	KQZF12-03S	22	20.9	25.2	32.5	24.5	45.5	39		22	77
	1/2	KQZF12-04S	24		27	33	25	50	42			101

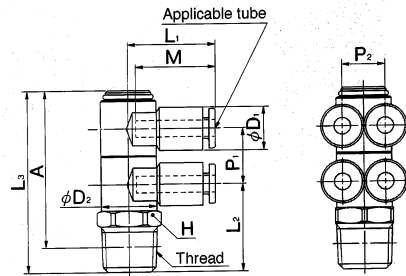
*Reference dimensions after R(PT) thread installation.

Note) øD₁: max. diameter

PRODUCT SELECTOR

DOUBLE BRANCH UNIVERSAL MALE ELBOW: KQZD (KQ2ZD)

Used for four branch connection at right angle to the female thread. Two individual parts rotate 360°.



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	P ₁	P ₂	Weight (g)
4	1/8	KQZD04-01S	14	10.4	13.4	21	18.5	41	37				35
	1/4	KQZD04-02S	17		21.5	44	38	16	13.4	10.4			41
	3/8	KQZD04-03S	17		23.5	46	40						54
6	1/8	KQZD06-01S	14	12.8	13.4	22	18.5	41	37				40
	1/4	KQZD06-02S	17		21.5	44	38	17	13.4	12.8			45
	3/8	KQZD06-03S	17		23.5	46	40						59
8	1/8	KQZD08-01S	19	15.2	17.6	26	21	48	44				78
	1/4	KQZD08-02S	19		24	51	45						74
	3/8	KQZD08-03S	21		25	52	45.5	18.5	15.9	15.2			83
10	1/2	KQZD08-04S	21		28.5	55.5	47.5						104
	1/4	KQZD10-02S	19	18.5	20.6	29	26.5	58	52				111
	3/8	KQZD10-03S	21		27.5	59	53	21	19.2	18.5			128
12	1/2	KQZD10-04S	21		30.5	62	54						128
	1/4	KQZD12-02S	26	20.9	25.2	32	28.5	64.5	58.5				178
	3/8	KQZD12-03S	26		29.5	65.5	59	22	21.6	20.9			167
1/2	KQZD12-04S	26		32.5	68.5	60						179	

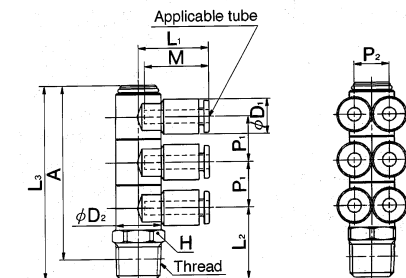
*Reference dimensions after R(PT) thread installation.

Note) øD₁: max. diameter

PRODUCT SELECTOR

TRIPLE BRANCH UNIVERSAL MALE ELBOW: KQZT (KQ2ZT)

Used for six branch piping at right angle to the female thread. Three individual parts rotate 360°.



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	P ₁	P ₂	Weight (g)
4	1/8	KQZT04-01S	14	10.4	13.4	21	18.5	54.5	50.5				27
	1/4	KQZT04-02S	17		21.5	57.5	51.5	16	13.4	10.4			33
	3/8	KQZT04-03S	17		23.5	59.5	53.5						46
6	1/8	KQZT06-01S	14	12.8	13.4	22	18.5	54.5	50.5				30
	1/4	KQZT06-02S	17		21.5	57.5	51.5	17	13.4	12.8			36
	3/8	KQZT06-03S	17		23.5	59.5	53.5						49
8	1/8	KQZT08-01S	19	15.2	17.6	26	21	64	60				59
	1/4	KQZT08-02S	19		24	67	61						57
	3/8	KQZT08-03S	21		25	68	61.5	18.5	15.9	15.2			65
10	1/2	KQZT08-04S	21		28.5	71.5	63.5						88
	1/4	KQZT10-02S	19	18.5	20.6	29	26.5	77.5	71.5				83
	3/8	KQZT10-03S	21		27.5	78.5	72	21	19.2	18.5			102
12	1/2	KQZT10-04S	21		30.5	81.5	73.5						134
	1/4	KQZT12-02S	26	20.9	25.2	32	28.5	86	80				134
	3/8	KQZT12-03S	26		29.5	87	80.5	22	21.6	20.9			130
1/2	KQZT12-04S	26		32.5	90	82						141	

*Reference dimensions after R(PT) thread installation.

Note) øD₁: max. diameter



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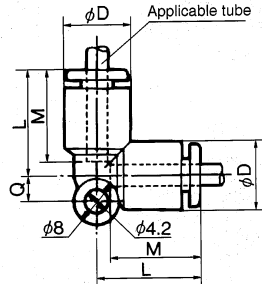
PRODUCT
 SELECTOR

UNION ELBOW: KQL (KQ2L)
 Use to connect tubes at right angle.



EXAMPLE OF ORDERING

KQL23-00 Black Body
 KQL23-00 White Body



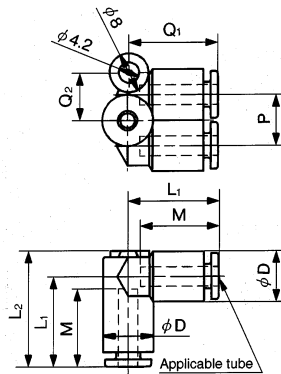
Applicable tube O.D. (mm)	Part No.	øD	L	Q	M	Effective orifice(mm ²)		Weight (g)
						Nylon	Urethane	
3.2	KQL23-00	9.6	17.5	4.3	15.5	3	2.5	3
4	KQL04-00	10.4	18	4.5	16	4.2	4.2	6
6	KQL06-00	12.8	20	5.3	17	11.4	11.4	7
8	KQL08-00	15.2	23	6	18.5	21.6	14.9	11
10	KQL10-00	18.5	26.5	6.8	21	35.2	25.0	17
12	KQL12-00	20.9	28.5	7.5	22	50.2	39.7	21
16	KQL16-00	26.5	34	10	25	100	(84)	29

Note) () : Values for soft nylon.
 øD: max. diameter

Fittings & Tubing

PRODUCT
 SELECTOR

BRANCH UNION ELBOW: KQLU (KQ2LU)
 Used for branch connection of tubes in right angle.

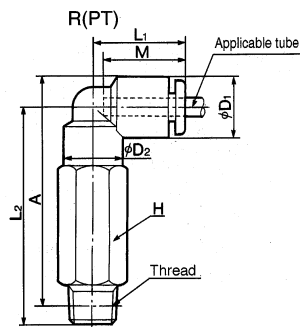


Applicable tube O.D. (mm)	Part No.	øD	L ₁	L ₂	Q ₁	Q ₂	M	P	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
4	KQLU04-00	10.4	18.5	24	18.5	10	16	10.4	6.0	6.0	7
6	KQLU06-00	12.8	21	27.5	20.5	12	17	12.8	13.9	13.9	9
8	KQLU08-00	15.2	24	32	24.5	14	18.5	15.2	26.3	18.2	16
10	KQLU10-00	18.5	27	36.5	28	16	21	18.5	40.8	29.0	25
12	KQLU12-00	20.9	29	40	30	18	22	20.9	57.2	45.2	32

Note) øD: max. diameter

PRODUCT
 SELECTOR

EXTENDED MALE ELBOW: KQW (KQ2W)
 The most appropriate use is when the elbow extends over a standard elbow for ease of connection/ disconnection of tubing.



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD ₁	øD ₂	L ₁	L ₂	A*	M	Effective orifice(mm ²)		Weight (g)		
										Nylon	Urethane			
3.2	M5×0.8	KQW23-M5	8	9.6	8	17.5	30	31	15.5	2.8	2.4	10		
	1/8	KQW23-01S	10									37	38	19
	1/4	KQW23-02S	14									43	42	41
4	M5×0.8	KQW04-M5	8	10.4	8	18	30	32	16	4.0	4.0	23		
	1/8	KQW04-01S	10									37.5	38.5	23
	1/4	KQW04-02S	14									43.5	42.5	38
6	M5×0.8	KQW06-M5	8	12.8	8	20	30.5	33.5	17	3	3	11		
	1/8	KQW06-01S	10									40	42.5	26
	1/4	KQW06-02S	14									46	46.5	41
8	3/8	KQW06-03S	17	15.2	12	23	48	48	18.5	20.5	14.2	67		
	1/8	KQW08-01S	12									43.5	47	30
	1/4	KQW08-02S	14									49.5	51	47
10	3/8	KQW08-03S	17	18.5	17	26.5	51.5	52.5	21	33.5	23.8	74		
	1/4	KQW10-02S	17									56.5	59.5	66
	3/8	KQW10-03S	22									65	66	76
12	1/2	KQW10-04S	22	20.9	17	28.5	57.5	62	22	47.7	37.7	145		
	3/8	KQW12-03S	17									66	68.5	68
	1/2	KQW12-04S	22									69.5	76	78
16	3/8	KQW16-03S	22	26.5	20.9	34	75	80	25	71	(71)	101		
	1/2	KQW16-04S	22									100	(84)	105

*Reference dimensions after R(PT) thread installation.
 Note) () : Values for soft nylon.
 øD: max. diameter

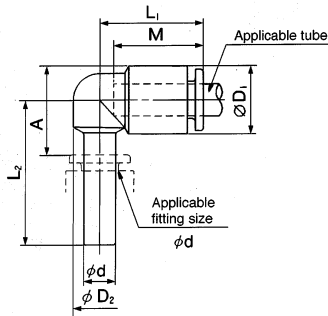
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 DETAILS ON THIS
 PRODUCT REQUEST
 CATALOGUE REFERENCE
 E501-B

PRODUCT
SELECTOR

EXAMPLE OF ORDERING
KQL04-99 Black Body
KQ2L04-99 White Body

PLUG-IN ELBOW: KQL (KQ2L)

Use to direct tube at 90° from one-touch fitting of same size.



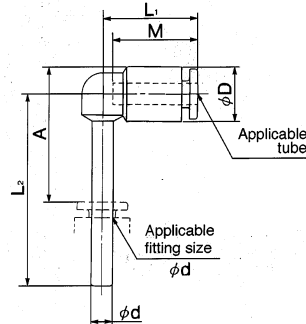
Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD ₁	øD ₂	L ₁	L ₂	A	M	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
3.2	3.2	KQL23-99	9.6	7	17	24.5	14	15.5	3	2.5	2
4	4	KQL04-99	10.4	8	18	25	14.5	16	4.2	4.2	3
6	6	KQL06-99	12.8	10	20	27.5	17	17	11.4	11.4	3
8	8	KQL08-99	15.2	12	22.5	31.5	21	18.5	21.6	14.9	5
10	10	KQL10-99	18.5	14	25.5	35.5	23.5	21	35.2	25.0	9
12	12	KQL12-99	20.9	16	27	37.5	26	22	50.2	39.7	10
16	16	KQL16-99	26.5	20.9	34	53	41	25	100	(84)	42

Note (): Values for soft nylon.
øD: max. diameter

PRODUCT
SELECTOR

EXTENDED PLUG-IN ELBOW: KQW (KQ2W)

The most appropriate use is when the elbow extends over a standard elbow for ease of connection/disconnection of tubing.



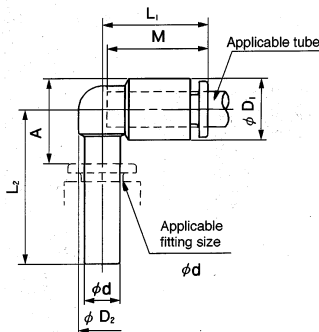
Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD	L ₁	L ₂	A	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
3.2	3.2	KQW03-99	9.6	17.5	35	24.5	15.5	3	2.5	2
4	4	KQW04-99	10.4	18	37	26	16	4.2	4.2	3
6	6	KQW06-99	12.8	20	41.5	31	17	11.4	11.4	4
8	8	KQW08-99	15.2	22.5	48	37	18.5	21.6	14.9	6
10	10	KQW10-99	18.5	25.5	55	43.5	21	35.2	25.0	9
12	12	KQW12-99	20.9	27	59.5	48	22	50.2	39.7	13

Note) øD: max. diameter

PRODUCT
SELECTOR

REDUCER ELBOW: KQL (KQ2L)

Use to direct smaller size tubing at 90° from one touch fitting.



Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD ₁	øD ₂	L ₁	L ₂	A	M	Effective orifice(mm ²)		Weight (g)
									Nylon	Urethane	
3.2	4	KQL23-04	9.6	7	17	25	13.5	15.5	3	2.5	2
4	6	KQL04-06	10.4	8	18	26	14.5	16	4.2	4.2	3
	8	KQL04-08				35	22				
6	8	KQL06-08	12.8	10	20	36.5	24.5	17	11.4	11.4	12
	10	KQL06-10				38.5	24				
8	10	KQL08-10	15.2	12	23	39.5	26	18.5	21.6	14.9	20
	12	KQL08-12				40.5	26				
10	12	KQL10-12	18.5	17	26.5	42	30	21	35.2	25.0	29
12	16	KQL12-16	20.9	17	28.5	49.5	34.5	22	50.2	39.7	53

Note) øD: max. diameter

Fittings & Tubing



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PRODUCT SELECTOR

BRANCH TEE: KQT (KQ2T)

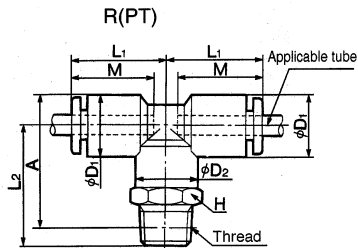
Use to branch line from female thread to both sides in 90° direction.



EXAMPLE OF ORDERING

KQT23-M5 Black Body

KQ2T23-M5 White Body



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	φD ₁	φD ₂	L ₁	L ₂	A*	M	Effective orifice (mm ²)		Weight (g)
										Nylon	Urethane	
3.2	M5×0.8	KQT23-M5	7	8.4	—	15.3	13.2	14.3	12.7	3.4	2.9	3.2
	1/8	KQT23-01S	10	—	—	17.5	21.5	22.5	15.5			10
	1/4	KQT23-02S	14	9.6	10	—	25.5	24.5				20
4	M5×0.8	KQT04-M5	7	9.3	—	15.6	13.7	15.3	12.7	4.3	4.3	3.5
	M6×1.0	KQT04-M6	8	—	—	—	16	17	16			6
	1/8	KQT04-01S	10	10.4	10	18	22	23				13
6	M5×0.8	KQT06-M5	7	11.6	—	16.1	14.7	17.4	13.5	4.3	4.4	4.4
	M6×1.0	KQT06-M6	8	12.8	8	20	16.5	18.5	17			8
	1/8	KQT06-01S	10	—	—	—	23	25.5				13
8	M6×1.0	KQT06-02S	14	12.8	10	20	27	27.5	18.5	26.3	18.2	13.9
	3/8	KQT06-03S	17	—	—	—	29	29				35
	1/2	KQT06-04S	22	—	—	—	31	35.5				15
10	M6×1.0	KQT08-01S	12	—	—	—	24.5	28	21	40.8	29.0	15
	1/4	KQT08-02S	14	15.2	12	23	28.5	30				37
	3/8	KQT08-03S	17	—	—	—	30.5	31.5				31
12	M6×1.0	KQT10-01S	14	—	—	—	27	32	22	57.2	45.2	31
	1/4	KQT10-02S	17	18.5	17	26.5	32	34.5				39
	3/8	KQT10-03S	22	—	—	—	36	37				36
16	M6×1.0	KQT10-04S	22	—	—	—	37	39.5	25	71	(71)	68
	1/2	KQT12-02S	17	20.9	17	28.5	33	37				41
	3/8	KQT12-03S	22	—	—	—	38	44.5				37
16	M6×1.0	KQT16-03S	22	26.5	20.9	34	40.5	46	100	(100)	112	116
	1/2	KQT16-04S	22	—	—	—	—	—				—

* Reference dimensions after R(PT) thread installation.

Note) (): Values for soft nylon.

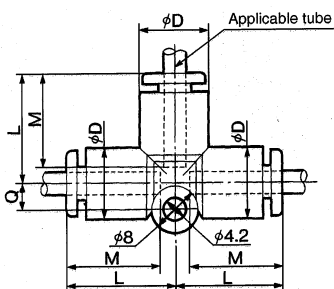
φD₁: max. diameter

Fittings & Tubing

PRODUCT SELECTOR

UNION TEE: KQT (KQ2T)

Use to branch connect tube to three 90° directions.



Applicable tube O.D. (mm)	Part No.	φD	L	Q	M	Effective orifice (mm ²)		Weight (g)
						Nylon	Urethane	
3.2	KQT23-00	9.6	17.5	4.3	15.5	3.4	2.9	5
4	KQT04-00	10.4	18	4.5	16	6.4	6.4	8
6	KQT06-00	12.8	20	5.3	17	13.4	13.4	11
8	KQT08-00	15.2	23	6	18.5	25.6	17.7	16
10	KQT10-00	18.5	26.5	6.8	21	40	28.4	25
12	KQT12-00	20.9	28.5	7.5	22	57.4	45.4	29
16	KQT16-00	26.5	34	10	25	100	(84)	40

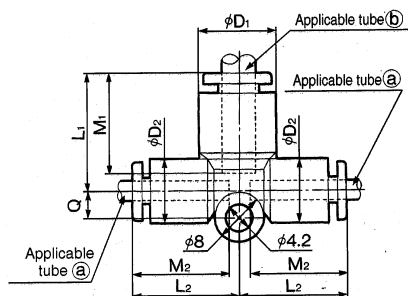
Note) (): Values for soft nylon.

φD: max. diameter

PRODUCT SELECTOR

DIFFERENT DIA. TEE: KQT (KQ2T)

Use to branch connect tubes with smaller tubes at 90° to larger dimension tube.



Applicable tube O.D. (mm)	Part No.	φD ₁	φD ₂	L ₁	L ₂	Q	M ₁	M ₂	Effective orifice (mm ²)		Weight (g)	
									Nylon	Urethane		
3.2	4	KQT23-04	10.4	9.6	18	17.5	4.3	16	15.5	3.8	3.5	5
4	6	KQT04-06	12.8	10.4	19.5	18	4.5	17	16	7.1	6.5	6
6	8	KQT06-08	15.2	12.8	22.5	20	5.3	18.5	17	16.4	16.4	9
8	10	KQT08-10	18.5	15.2	26.5	23	6	21	18.5	36	27.2	14
10	12	KQT10-12	20.9	18.5	28.5	26.5	6.8	22	21	56	44.5	21
12	16	KQT12-16	26.5	26.5	34	39	10	25	22	108.5	92.2	88

Note) φD₁: max. diameter



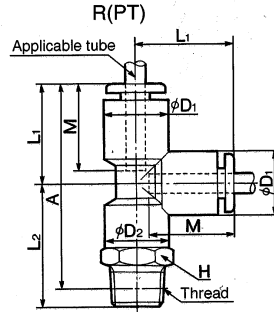
SERIES KQ, KQ2 SEALANT COATED THREAD

PRODUCT SELECTOR

EXAMPLE OF ORDERING
 KQY04-M5 Black Body
 KQ2Y04-M5 White Body

MALE RUN TEE: KQY (KQ2Y)

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



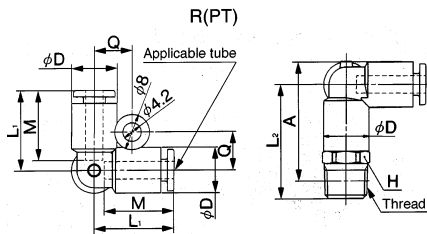
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD ₁	øD ₂	L ₁	L ₂	L ₃	A*	M	Effective orifice (mm ²)		Weight (g)
											Nylon	Urethane	
3.2	M5×0.8	KQY23-M5	7	8.4	—	15.4	13.2	14.8	24.9	12.7	—	—	3.2
	1/8	KQY23-01S	10	9.6	10	17.5	21.5	—	35	15.5	3.4	2.9	10
	1/4	KQY23-02S	14	—	—	25.5	—	37	—	—	—	—	20
4	M5×0.8	KQY04-M5	7	9.3	—	15.6	13.7	14.8	25.4	12.7	4.6	4.6	3.5
	M6×1.0	KQY04-M6	8	—	8	18.5	16	—	30	—	—	6	6
	1/8	KQY04-01S	10	10.4	10	18	22	—	36	16	6.4	6.4	13
	1/4	KQY04-02S	14	—	—	26	—	38	—	—	—	—	19
6	M5×0.8	KQY06-M5	7	11.6	—	17.1	14.7	17.1	28.7	13.5	4.6	4.6	4.5
	M6×1.0	KQY06-M6	8	—	8	20.5	16.5	—	32.5	—	—	8	8
	1/8	KQY06-01S	10	12.8	10	20	23	—	39	17	13.4	13.4	13
	1/4	KQY06-02S	14	—	—	27	—	41	—	—	—	—	21
8	3/8	KQY06-03S	17	—	—	29	—	42.5	—	—	—	—	35
	1/8	KQY08-01S	12	—	—	24.5	—	43.5	—	—	—	—	15
	1/4	KQY08-02S	14	15.2	12	23	28.5	—	45.5	18.5	25.6	17.7	23
	3/8	KQY08-03S	17	—	—	30.5	—	47	—	—	—	—	37
10	1/8	KQY10-01S	—	—	—	—	27	—	49.5	—	—	—	31
	1/4	KQY10-02S	17	18.5	17	26.5	30	—	50.5	21	40.0	28.4	29
	3/8	KQY10-03S	—	—	—	—	32	—	52	—	—	—	39
	1/2	KQY10-04S	22	—	—	—	36	—	54.5	—	—	—	66
12	1/4	KQY12-02S	17	—	—	31	—	53.5	—	—	—	—	31
	3/8	KQY12-03S	—	20.9	17	28.5	33	—	55	22	57.4	45.4	41
	1/2	KQY12-04S	22	—	—	—	37	—	57.5	—	—	—	68
16	3/8	KQY16-03S	—	26.5	20.9	34	—	65.5	—	—	81	(81)	112
	1/2	KQY16-04S	22	—	—	41	—	67	—	25	113	(113)	116

*Reference dimensions after R(PT) thread installation.
 Note) (): Values for soft nylon.
 øD₁: max. diameter

PRODUCT SELECTOR

DELTA UNION: KQD (KQ2D)

Used for two branch piping in the right angle from the female/thread.



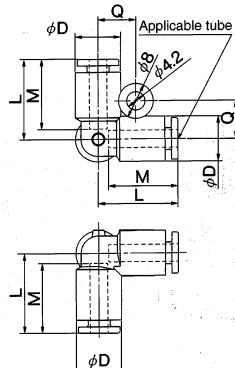
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L ₁	L ₂	A*	M	Q	Effective orifice (mm ²)		Weight (g)
										Nylon	Urethane	
4	M5×0.8	KQD04-M5	—	—	24	25.5	—	—	—	2.2	2.2	10
	M6×1.0	KQD04-M6	11	10.4	18.5	26.5	27.5	—	—	4.3	4.3	12
	1/8	KQD04-01S	—	—	—	30.5	29.5	—	—	6.0	6.0	21
6	M5×0.8	KQD06-M5	—	—	26	28.5	—	—	—	4.3	4.3	13
	M6×1.0	KQD06-M6	13	—	—	28.5	—	—	—	—	—	—
	1/8	KQD06-01S	12.8	20.5	29	31.5	17	9.9	—	13.9	13.9	22
	1/4	KQD06-02S	14	—	—	32.5	33	—	—	—	—	35
8	3/8	KQD06-03S	17	—	—	34.5	34.5	—	—	—	—	—
	1/8	KQD08-01S	—	—	—	33.5	37	—	—	—	—	27
	1/4	KQD08-02S	17	15.2	23.5	36.5	38	18.5	11.1	26.3	18.2	36
10	3/8	KQD08-03S	—	—	—	37.5	38.5	—	—	—	—	—
	1/4	KQD10-02S	19	—	—	39.5	43	—	—	—	—	39
	3/8	KQD10-03S	18.5	26.5	40.5	43.5	21	12.8	40.8	29.0	40	
	1/2	KQD10-04S	22	—	—	44	45	—	—	—	—	62
12	1/4	KQD12-02S	—	—	—	42	46.5	—	—	—	—	55
	3/8	KQD12-03S	22	20.9	28.5	43	47	22	13.9	57.2	45.2	56
	1/2	KQD12-04S	—	—	—	46	48.5	—	—	—	—	63

*Reference dimensions after R(PT) thread installation.
 Note) øD: max. diameter

PRODUCT SELECTOR

DELTA: KQD (KQ2D)

Used for three branch connection of tubes in the right angle.



Applicable tube O.D. (mm)	Part No.	øD	L	Q	M	Effective orifice (mm ²)		Weight (g)
						Nylon	Urethane	
4	KQD04-00	10.4	18.5	8.7	16	6.0	6.0	6
6	KQD06-00	12.8	20.5	9.9	17	13.9	13.9	8
8	KQD08-00	15.2	23.5	11.1	18.5	26.3	18.2	12
10	KQD10-00	18.5	26.5	12.8	21	40.8	29.0	19
12	KQD12-00	20.9	28.5	13.9	22	57.2	45.2	24

Note) øD: max. diameter



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PRODUCT
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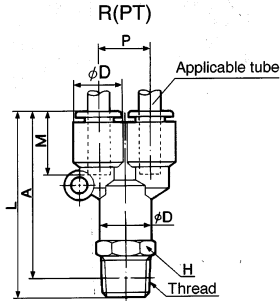
BRANCH "Y": KQU (KQ2U)

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



EXAMPLE OF ORDERING

KQU04-M5 Black Body
 KQ2U04-M5 White Body



Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD	L	P	A*	M	Effective orifice(mm ²)		Weight (g)		
									Nylon	Urethane			
3.2	M5×0.8	KQU23-M5	10	9.6	38	9.6	34.5	15.5	2.2	2.2	9		
	1/8	KQU23-01S	11						41	37	3.4	2.9	14
	1/4	KQU23-02S	14						44	38			
4	M5×0.8	KQU04-M5	11	10.4	39.5	10.4	36	16	2.2	2.2	4		
	M6×1.0	KQU04-M6							40	42	4.2	4.2	11
	1/8	KQU04-01S							42	38			
6	M5×0.8	KQU06-M5	13	12.8	42.5	12.8	39	17	2.2	2.2	13		
	M6×1.0	KQU06-M6							43	49	13.4	13.4	12
	1/8	KQU06-01S							14	41	43		
8	3/8	KQU06-03S	17	51	51	44.5					35		
	1/8	KQU08-01S		52.5	52.5	48.5					16		
	1/4	KQU08-02S	17	55.2	55.2	49.5	18.5	25.6	17.7	24			
10	3/8	KQU08-03S		56.5	56.5	50					36		
	1/4	KQU10-02S	19	61	61	55					30		
	3/8	KQU10-03S		62	62	55.5	21	40	28.4	40			
12	1/2	KQU10-04S	22	65	65	57					65		
	1/4	KQU12-02S		64.5	64.5	58.5					32		
	3/8	KQU12-03S	22	65.5	65.5	59	22	57.4	45.4	40			
16	1/2	KQU12-04S		68.5	68.5	60.5					65		
	3/8	KQU16-03S	27	76	76	69.5	25	81	(81)	106			
	1/2	KQU16-04S		79	79	71				113 (113)	111		

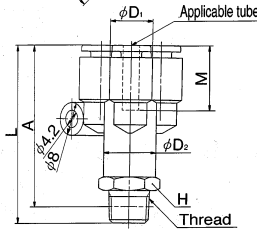
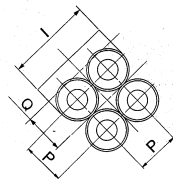
* Reference dimensions after R(PT) thread installation.
 Note) (): Values for soft nylon.
 øD: max. diameter

Fittings & Tubing

PRODUCT
 SELECTOR

DELTA BRANCH: KQUD (KQ2UD)

Used for four branch piping in the same direction from the female thread.



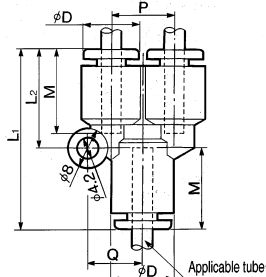
Applicable tube O.D. (mm)	Thread R(PT)	Part No.	H (Hex.)	øD1	øD2	L	I	A*	Q	M	P	Effective orifice(mm ²)		Weight (g)
												Nylon	Urethane	
4	1/8	KQUD04-01S	13	10.4	12.8	43.5	21	39.5	9.7	16	10.4	4.2	4.2	18
	1/4	KQUD04-02S	14			47		41						26
6	1/8	KQUD06-01S	17	12.8	15.2	50.5	26	46.5	11.7	17	12.8	13.4	13.4	31
	1/4	KQUD06-02S				53.5		47.5						

* Reference dimensions after R(PT) thread installation.
 Note) øD1: max. diameter

PRODUCT
 SELECTOR

UNION "Y": KQU (KQ2U)

Use to branch connect tubes in the same direction.



Applicable tube O.D. (mm)	Part No.	øD	L1	L2	P	Q	M	Effective orifice(mm ²)		Weight (g)
								Nylon	Urethane	
3.2	KQU23-00	9.6	33	17.5	9.6	9	15.5	3.4	2.9	5
4	KQU04-00	10.4	34	18	10.4	9.7	16	4.2	4.2	8
6	KQU06-00	12.8	37	20	12.8	11.7	17	13.4	13.4	10
8	KQU08-00	15.2	42.5	24.5	15.2	13.7	18.5	25.6	17.7	12
10	KQU10-00	18.5	48	27.5	18.5	16.1	21	40	28.4	16
12	KQU12-00	20.9	51	30	20.9	18.1	22	57.4	45.4	23
16	KQU16-00	26.5	61.5	36.5	26.5	23	25	113	(113)	54

Note) (): Values for soft nylon.
 øD: max. diameter



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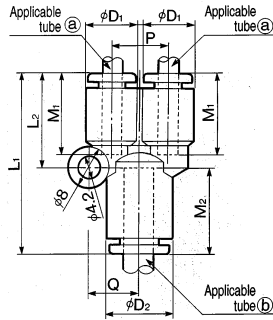
PRODUCT
SELECTOR

EXAMPLE OF ORDERING

KQU04-06 Black Body
KQ2U04-06 White Body

DIFFERENT DIA. UNION "Y": KQU (KQ2U)

Use to branch connect tubes with size down in the same direction.



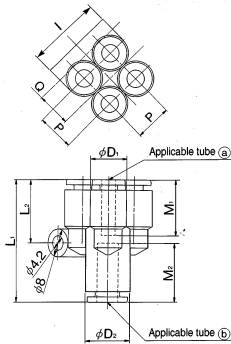
Applicable tube O.D. (mm)		Part No.	ϕD_1	ϕD_2	L_1	L_2	P	Q	M_1	M_2	Effective orifice (mm ²)		Weight (g)
(a)	(b)										Nylon	Urethane	
3.2	4	KQU23-04	9.6	10.4	33.5	17.5	9.6	9	15.5	16	3.2	2.7	5
4	6	KQU04-06	10.4	12.8	35	18	10.4	9.7	16	17	4.2	4.2	7
6	8	KQU06-08	12.8	15.2	39.5	20	12.8	11.7	17	18.5	13.4	13.4	12
8	10	KQU08-10	15.2	18.5	45	24.5	15.2	13.7	18.5	21	25.6	17.7	19
10	12	KQU10-12	18.5	20.9	49	27.5	18.5	16.1	21	22	40	28.4	27
12	16	KQU12-16	26.5	26.5	66.5	41.5	26.5	23	22	25	57.4	45.4	100

Note) $\phi D_1, \phi D_2$: max. diameter

PRODUCT
SELECTOR

DIFFERENT DIA. DOUBLE UNION "Y": KQUD (KQ2UD)

Used to four branch connect tubes in the same direction reducing the size of the tubes.



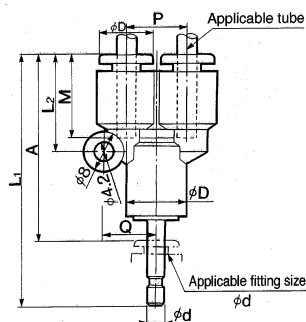
Applicable tube O.D. (mm)		Part No.	ϕD_1	ϕD_2	L_1	L_2	P	I	Q	M_1	M_2	Effective orifice (mm ²)		Weight (g)
(a)	(b)											Nylon	Urethane	
4	6	KQUD04-06	10.4	12.8	35.5	18.2	10.4	21	9.7	16	17	4.2	4.2	11
6	8	KQUD06-08	12.8	15.2	40.5	20.3	12.8	26	11.7	17	18.5	13.4	13.4	19

Note) $\phi D_1, \phi D_2$: max. diameter

PRODUCT
SELECTOR

PLUG-IN "Y": KQU (KQ2U)

Use to branch connect tubing in the same direction from a one touch fitting.



Applicable tube O.D. (mm)	Applicable fitting size ϕd	Part No.	ϕD	L_1	L_2	P	Q	A	M	Effective orifice (mm ²)		Weight (g)
										Nylon	Urethane	
3.2	3.2	KQU23-99	9.6	50	17.5	9.6	9	35	15.5	3.4	2.9	6
4	4	KQU04-99	10.4	51.5	18	10.4	9.7	35.5	16	4.2	4.2	12
6	6	KQU06-99	12.8	55.5	20	12.8	11.7	38.5	17	13.4	13.4	19
8	8	KQU08-99	15.2	64.5	24.5	15.2	13.7	46	18.5	25.6	17.7	22
10	10	KQU10-99	18.5	71.5	27.5	18.5	16.1	50.5	21	40	28.4	26
12	12	KQU12-99	20.9	75.5	30	20.9	18.1	53.5	22	57.4	45.4	32
16	16	KQU16-99	26.5	90	36.5	26.5	23	65	25	113	(113)	78

Note) (): Values for soft nylon.
 ϕD : max. diameter



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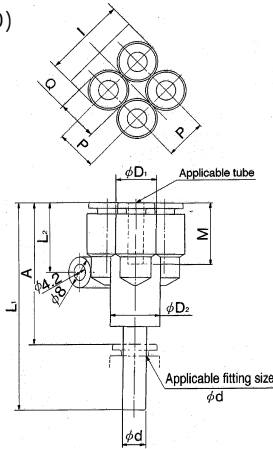
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PRODUCT SELECTOR

EXAMPLE OF ORDERING

KQXD04-06 Black Body
KQ2XD04-06 White Body

DOUBLE PLUG-IN "Y": KQXD (KQ2XD)
Used for four branch connection from the f fitting.



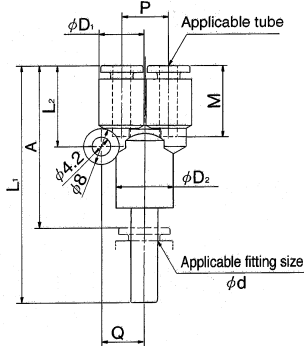
Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD ₁	øD ₂	L ₁	L ₂	I	Q	A	P	M	Effective orifice(mm ²)		Weight (g)
												Nylon	Urethane	
4	6	KQXD04-06	10.4	12.8	54	18.2	21	9.7	37	10.4	16	4.2	4.2	11
6	8	KQXD06-08	12.8	15.2	62.5	20.3	26	11.7	44	12.8	17	13.4	13.4	25

Note) øD₁: max. diameter

Fittings & Tubing

PRODUCT SELECTOR

DIFFERENT DIA. PLUG-IN "Y": KQX (KQ2X)
Used for branch connection from the fitting reducing the size of tubes.

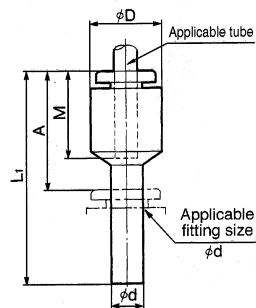


Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD ₁	øD ₂	L ₁	L ₂	A	P	Q	M	Effective orifice(mm ²)		Weight (g)
											Nylon	Urethane	
4	6	KQX04-06	10.4	12.8	53.5	18.5	36.5	10.4	9.7	16	4.2	4.2	7
6	8	KQX06-08	12.8	15.2	61.5	20.5	43	12.8	11.7	17	13.4	13.4	19
8	10	KQX08-10	15.2	18.5	68.5	24.5	47.5	15.2	13.7	18.5	25.6	17.7	29
10	12	KQX10-12	18.5	20.9	73.5	27.5	51.5	18.5	16.1	21	40	28.4	42

Note) øD₁: max. diameter

PRODUCT SELECTOR

PLUG-IN REDUCER: KQR (KQ2R)
Use to change size of One-touch fittings.



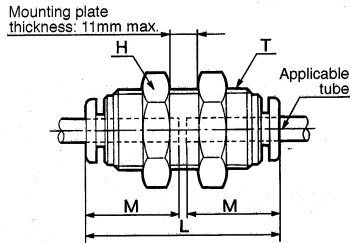
Applicable tube O.D. (mm)	Applicable fitting size ød	Part No.	øD	L	A	M	Effective orifice(mm ²)		Weight (g)
							Nylon	Urethane	
3.2	4	KQR23-04	9.6	33.5	18.5	15.5	3.4	2.9	2
	6	KQR04-06		34.5	17.5				2.1
	8	KQR04-08		36.5	18		5.6	5.6	2.3
4	10	KQR04-10	12.8	39.5	18.5				3.6
	4	KQR06-04	12.8	37	21		4	4	3
	8	KQR06-08		37	18.5				3
6	10	KQR06-10	12.8	39.5	18.5		13.1	13.1	3.5
	12	KQR06-12	15.2	42	20				5.2
	10	KQR08-10		41					4.5
8	12	KQR08-12	15.2	42	20	18.5	26.1	18.0	5.1
	16	KQR10-12	17	42	20				32.8
10	12	KQR10-12	20.9	50.5	25.5		41.5		(29.5)
	16	KQR10-16	20.9	50.5	25.5	21			42
12	16	KQR12-16	20.9	50.5	25.5	22	58.3	(46.1)	37

Note) (): Values for soft nylon.
øD: max. diameter

PRODUCT
SELECTOR

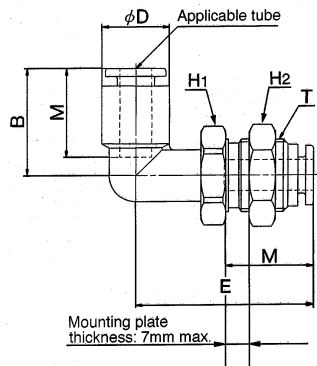
EXAMPLE OF ORDERING
KQE04-00 Black Body
KQ2E04-00 White Body

BULKHEAD UNION: KQE (KQ2E)
Used to connect two tubes through a panel.



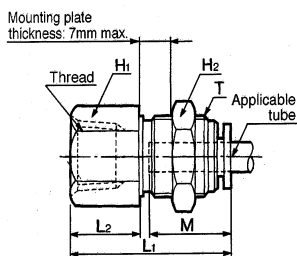
PRODUCT
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BULKHEAD MALE ELBOW: KQLE (KQ2LE)
Used to connect two tubes through a panel changing direction of tube by 90°.



PRODUCT
SELECTOR

BULKHEAD CONNECTOR: KQE (KQ2E)
The best use is for connection of a gauge through a panel.



Applicable tube O.D. (mm)	Part No.	T (M)	H (Hex.)	L	Mounting hole	M	Effective orifice (mm ²)		Weight (g)
							Nylon	Urethane	
3.2	KQE23-00	M12×1	14	31.5	13	15.5	3.4	2.9	26
4	KQE04-00	M12×1	14	32.5	13	16	5.6	5.6	26
6	KQE06-00	M14×1	17	34.5	15	17	13.1	13.1	33
8	KQE08-00	M16×1	19	38	17	18.5	26.1	18.0	52
10	KQE10-00	M20×1	24	42.5	21	21	41.5	29.5	70
12	KQE12-00	M22×1	27	44	23	22	58.3	46.1	90
16	KQE16-00	M28×1.5	32	51	29	25	113	(96)	115

Note) (): Values for soft nylon.

Applicable tube O.D. (mm)	Part No.	T	H ₁ (Hex.)	H ₂ (Hex.)	B	E	øD	Mounting hole	M	Effective orifice (mm ²)		Weight (g)
										Nylon	Urethane	
4	KQLE04-00	M12×1	14	14	18.5	31	10.4	13	16	4.2	4.2	18
6	KQLE06-00	M14×1	17	17	20.5	34	12.8	15	17	11.4	11.4	25
8	KQLE08-00	M16×1	19	19	23.5	38.5	15.2	17	18.5	21.6	14.9	33
10	KQLE10-00	M20×1	22	24	26.5	43.5	18.5	21	21	35.2	25.0	63
12	KQLE12-00	M22×1	24	27	28.5	45.5	20.9	23	22	50.2	39.7	77

Note) øD: max. diameter

Applicable tube O.D. (mm)	Thread Rc(PT)	Part No.	T (M)	H ₁ (Hex.)	H ₂ (Hex.)	L ₁	L ₂	Mounting hole	M	Effective orifice (mm ²)		Weight (g)
										Nylon	Urethane	
3.2	1/4	KQE23-02	M12×1	17	14	31.5	15	13	15.5	3.4	2.9	13
	1/8	KQE04-01	M12×1	14	14	27.5	11	13	16	5.6	5.6	16
4	1/4	KQE04-02	M12×1	17	14	31	15	13	16	5.6	5.6	35
	1/8	KQE06-01	M12×1	17	14	28	11	13	16	5.6	5.6	25
6	1/4	KQE06-02	M14×1	17	17	31.5	15	15	17	13.1	13.1	40
	3/8	KQE06-03	M14×1	19	17	33.5	17	15	17	13.1	13.1	29
8	1/8	KQE08-01	M16×1	17	17	27.5	7.5	17	18.5	26.1	18.0	28
	1/4	KQE08-02	M16×1	19	19	33	13	17	18.5	26.1	18.0	27
10	3/8	KQE08-03	M16×1	19	19	35	15	17	18.5	26.1	18.0	48
	1/4	KQE10-02	M20×1	22	24	34.5	12.5	21	21	41.5	29.5	53
12	3/8	KQE10-03	M20×1	22	24	36.5	15	21	21	41.5	29.5	67
	1/2	KQE12-03	M22×1	24	27	37	14	23	22	58.3	46.1	92
16	1/2	KQE12-04	M22×1	24	27	41	18	23	22	58.3	46.1	59
	3/8	KQE16-03	M28×1.5	30	32	40	14	29	25	96	(96)	127
	1/2	KQE16-04	M28×1.5	30	32	44	18	29	25	113	(96)	132

Note) (): Values for soft nylon.

Fittings & Tubing



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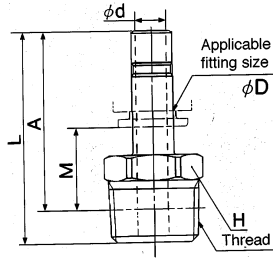
PRODUCT
SELECTOR

EXAMPLE OF ORDERING

KQN04-015 Black Body
KQ2N04-015 White Body

ADAPTOR: KQN (KQ2N)

Used to connect the fitting and R(PT) female thread.



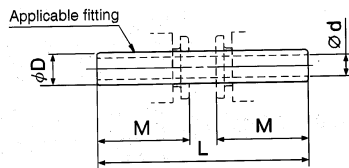
Applicable fitting size ød	Thread R(PT)	Part No.	H (Hex)	L	A	M	ød	Weight (g)
4	M5×0.8	KQN04-M5	7	32	29	13	2.5	2
	1/8	KQN04-01S	10	34	30	14		6
6	M5×0.8	KQN06-M5	7	33	30	13	4.5	2
	1/8	KQN06-01S	10	35	31	14		5
	1/4	KQN06-02S	14	37.5	31.5	14.5		14
8	1/4	KQN08-02S	14	39	33	14.5	6	17
	3/8	KQN08-03S	17	41	34.5	16		30
10	3/8	KQN10-03S	17	46	39.5	18.5	7.5	31

Fittings & Tubing

PRODUCT
SELECTOR

NIPPLE: KQN (KQ2N)

Used for connection of two One-touch fittings.

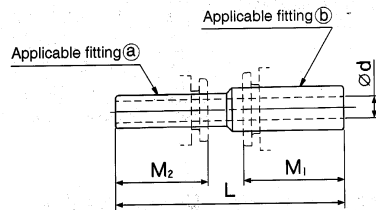


Applicable fitting øD	Part No.	L	M	ød	Weight (g)
4	KQN04-99	37	16	2.5	1
6	KQN06-99	39	17	4	2
8	KQN08-99	43	18.5	6	2
10	KQN10-99	49	21	7.5	4
12	KQN12-99	52	22	9	20.6
16	KQN16-99	57	25	13	31

PRODUCT
SELECTOR

REDUCER NIPPLE: KQN (KQ2N)

Used for connection of two One-touch fitting that are different tube O.D.s.

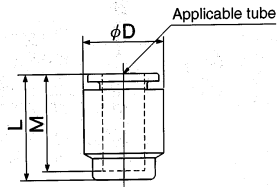


Applicable fitting		Part No.	L	M ₁	M ₂	ød	Weight (g)
(a)	(b)						
4	6	KQN04-06	38	17	16	2.5	2
6	8	KQN06-08	42	18.5	17	4	2
8	10	KQN08-10	47	21	18.5	6	13.2
10	12	KQN10-12	51	22	21	8	18.2
12	16	KQN12-16	55	25	22	9	29



PRODUCT
SELECTOR

TUBE CAP: KQC (KQ2C)
Used to plug the unused tube.

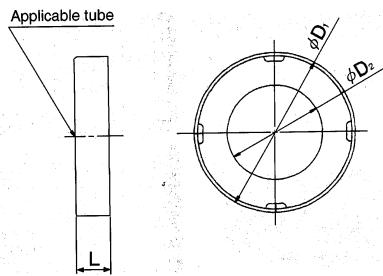


Applicable tube O.D. (mm)	Part No.	φD	L	M	Weight (g)
4	KQC04-00	10.4	17	16	3
6	KQC06-00	12.8	18.5	17	3
8	KQC08-00	15.2	20.5	18.5	4
10	KQC10-00	18.5	23	21	6
12	KQC12-00	20.9	24	22	8
16	KQC16-00	26.5	28	25	13

Note) φD: max. diameter

PRODUCT
SELECTOR

COLOUR CAP: KQC
Mounted on the release button corresponding to its applications. Distinguished by colour.



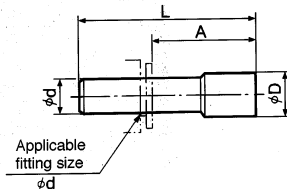
Applicable tube O.D. (mm)	Part No.	φD ₁	φD ₂	L	Weight (g)
4	KQC-04	10.1	5.2	2.9	0.1
6	KQC-06	12.1	7.2		0.1
8	KQC-08	14.1	9.2	2.9	0.1
10	KQC-10	17.1	11.2		0.2
12	KQC-12	19.1	13.2	3.9	0.2
16	KQC-16	26.3	17.2		0.3

■ B(black), R(red), YR(orange), BR(brown), Y(yellow), G(green), CB(sky blue), GR(gray), W(white)

NOTE: Colour caps are now also available for KQ fittings of M5 and M6 sizes - contact your SMC Regional Centre for further information.
-ref Prod. Update issue 83.

PRODUCT
SELECTOR

PLUG: KQP (KQ2P)
Use to shut unused One-touch fittings.



Applicable fitting size φd	Part No.	φD	L	A	Weight (g)
3.2	KQP-23	5	31.5	16	1
4	KQP-04	6	32	16	1
6	KQP-06	8	35	18	1
8	KQP-08	10	39	20.5	2
10	KQP-10	12	43	22	3.5
12	KQP-12	14	45.5	24	5
16	KQP-16	20.9	47	22	8

Fittings & Tubing



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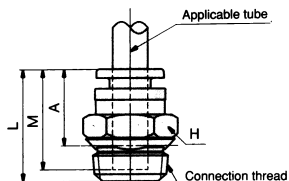
PRODUCT SELECTOR

EXAMPLE OF ORDERING

KQH04-U01 Black Body
KQ2H04-U01 White Body

MALE CONNECTOR : KQH (KQ2H)

Use to pipe in the same direction from female threaded portion. Most general type.

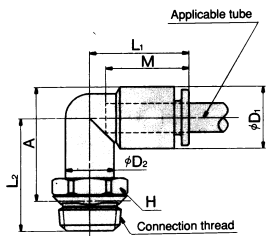


Applicable tube O.D (mm)	Connection thread	Model	H (width across flats)	L	A	M	Effective orifice (mm ²)
4	M5	KQH04-M5	8	17	14	13	4
4	1/8"	KQH04-U01	10	18.5	14.5	16	5.6
4	1/8"	KQH04-U02	14	18	12	16	5.6
6	M5	KQH06-M5	10	18.5	15	14	4
6	1/8"	KQH06-U01	12	19.5	15.5	17	13.1
6	1/8"	KQH06-U02	14	19.5	13	17	13.1
6	1/8"	KQH06-U03	17	18.5	12.5	17	13.1
8	1/8"	KQH08-U01	14	25	21	18.5	26.1
8	1/8"	KQH08-U02	14	21.5	15.5	18.5	26.1
8	1/8"	KQH08-U03	17	21	15	18.5	26.1
10	1/8"	KQH10-U01	17	28	23	21	41.5
10	1/8"	KQH10-U02	17	28	22	21	41.5
10	1/8"	KQH10-U03	17	24	18	21	41.5
10	1/2"	KQH10-U04	22	22	14	21	41.5
12	1/8"	KQH12-U02	19	30.5	24.5	22	58.3
12	1/8"	KQH12-U03	19	25.5	19.5	22	58.3
12	1/2"	KQH12-U04	22	24.5	16.5	22	58.3
16	1/8"	KQH16-U03	24	33.5	27.5	24	81
16	1/2"	KQH16-U04	24	28.5	20.5	24	113

PRODUCT SELECTOR

MALE ELBOW : KQL (KQ2L)

Use to pipe in right angle to female threaded portion. Most general type.

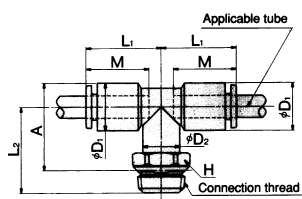


Applicable tube O.Dmm	Connection thread	Model	Dia D1	Dia D2	L1	L2	A	M	Effective orifice (mm ²) Nylon
4	M5x0.8	KQL04-M5	9.5		16	13.5	15	13	3.5
4	1/8"	KQL04-U01	10.4	10	18	20	21.5	16	4.2
4	1/8"	KQL04-U02	10.4	10	18	22	21.5	16	4.2
6	M5x0.8	KQL06-M5	11.5		16	14.5	17	14	3.5
6	1/8"	KQL06-U01	12.8	10	20	21.5	23.5	17	11.4
6	1/8"	KQL06-U02	12.8	10	20	23	23.5	17	11.4
6	1/8"	KQL06-U03	12.8	10	20	24	23.5	17	11.4
8	1/8"	KQL08-U01	15.2	12	23	22.5	26	18.5	21.6
8	1/8"	KQL08-U02	15.2	12	23	24.5	26	18.5	21.6
8	1/8"	KQL08-U03	15.2	12	23	25.5	27	18.5	21.6
10	1/8"	KQL10-U01	18.5	17	26.5	25	29.5	21	21.6
10	1/8"	KQL10-U02	18.5	17	26.5	26.5	30	21	35.2
10	1/8"	KQL10-U03	18.5	17	26.5	27	30.5	21	35.2
10	1/2"	KQL10-U04	18.5	17	26.5	30	31.5	21	35.2
12	1/8"	KQL12-U02	20.9	17	28.5	27	31.5	22	50.2
12	1/8"	KQL12-U03	20.9	17	28.5	28	32.5	22	50.2
12	1/2"	KQL12-U04	20.9	17	28.5	31	33.5	22	50.2
16	1/8"	KQL16-U03	26.5	21	33	40.5	33	24	71
16	1/2"	KQL16-U04	26.5	21	33	40.5	35	24	100

PRODUCT SELECTOR

BRANCH TEE : KQT (KQ2T)

Use to branch line from female thread to both sides at 90° direction.

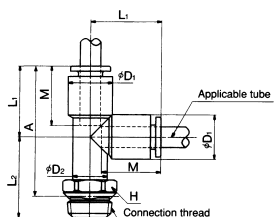


Applicable tube O.Dmm	Connection thread	Model	Dia D1	Dia D2	L1	L2	A	M	Effective orifice (mm ²) Nylon
4	M5x0.8	KQT04-M5	9.5		15.5	14	15.5	13	4.5
4	1/8"	KQT04-U01	10.4	10	18	20	21.5	16	6.0
4	1/8"	KQT04-U02	10.4	10	18	22	21.5	16	6.0
6	M5x0.8	KQT06-M5	11.5		16	15	17.5	14	4.5
6	1/8"	KQT06-U01	12.8	10	20	21.5	23.5	17	13.9
6	1/8"	KQT06-U02	12.8	10	20	23	23.5	17	13.9
6	1/8"	KQT06-U03	12.8	10	20	24	23.5	17	13.9
8	1/8"	KQT08-U01	15.2	12	23	22.5	26	18.5	26.3
8	1/8"	KQT08-U02	15.2	12	23	24.5	26	18.5	26.3
8	1/2"	KQT08-U03	15.2	12	23	25.5	27	18.5	26.3
10	1/8"	KQT10-U01	18.5	17	26.5	25	29.5	21	40.8
10	1/8"	KQT10-U02	18.5	17	26.5	26.5	30	21	40.8
10	1/8"	KQT10-U03	18.5	17	26.5	27	30.5	21	40.8
10	1/2"	KQT10-U04	18.5	17	26.5	30	31.5	21	40.8
12	1/8"	KQT12-U02	20.9	17	28.5	27	31.5	22	57.2
12	1/8"	KQT12-U03	20.9	17	28.5	28	32.5	22	57.2
12	1/2"	KQT12-U04	20.9	17	28.5	31	33.5	22	57.2
16	1/8"	KQT16-U03	26.5	21	33	40.5	33	24	71
16	1/2"	KQT16-U04	26.5	21	33	40.5	35	24	100

PRODUCT SELECTOR

MALE RUN TEE : KQY (KQ2Y)

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



Applicable tube O.D mm	Connection thread Uni thread	Model	H (Width across flats)	Dia D1	L1	L2	A	M	Effective orifice (mm ²)
4	M5	KQY04-M5	7	9.5	16	13.5	25.5	13	4.5
4	1/8"	KQY04-U01	10	10.4	18	20	34	16	6.4
4	1/8"	KQY04-U02	14	10.4	18	22	34.5	16	6.4
6	M5	KQY06-M5	7	11.5	17.5	14.5	29	14	4.5
6	1/8"	KQY06-U01	10	12.8	20	21.5	37.5	17	13.4
6	1/8"	KQY06-U02	14	12.8	20	23	37	17	13.4
6	1/8"	KQY06-U03	17	12.8	20	24	38	17	13.4
8	1/8"	KQY08-U01	12	15.2	23	22.5	41.5	18.5	25.6
8	1/8"	KQY08-U02	14	15.2	23	24.5	41.5	18.5	25.6
8	1/2"	KQY08-U03	17	15.2	23	25.5	42.5	18.5	25.6
10	1/8"	KQY10-U01	17	18.5	26.5	25	46.5	21	40
10	1/8"	KQY10-U02	17	18.5	26.5	26.5	47.5	21	40
10	1/8"	KQY10-U03	17	18.5	26.5	27	48	21	40
10	1/2"	KQY10-U04	22	18.5	26.5	30	49	21	40
12	1/8"	KQY12-U02	17	20.9	28.5	27	49.5	22	57.4
12	1/8"	KQY12-U03	17	20.9	28.5	28	50.5	22	57.4
12	1/2"	KQY12-U04	22	20.9	28.5	31	51.5	22	57.4
16	1/8"	KQY16-U03	22	26.5	33	40.5	66	24	81
16	1/2"	KQY16-U04	22	26.5	33	40.5	63	24	113

FOR FURTHER TECHNICAL DETAILS ON THIS PRODUCT REQUEST CATALOGUE REFERENCE E501-B

SERIES KQ, KQ2 UNITHREAD

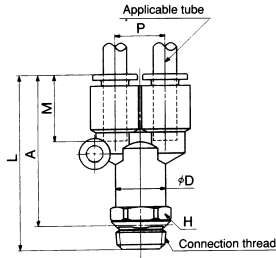
PRODUCT SELECTOR

EXAMPLE OF ORDERING

KQU04-U01 Black Body
KQ2U04-U01 White Body

BRANCH "Y" : KQU (KQ2U)

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

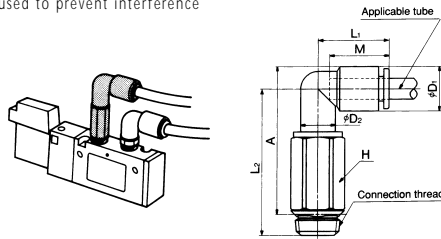


Applicable tube O.D mm	Connection thread Uni Thread	Model	H (Width across flats)	Dia D	L	P	A	M	Effective orifice (mm ²)
4	M5	KQU04-M5	11	9.6	38	10.4	36	16	2.2
4	1/8"	KQU04-U01	11	10.4	40	10.4	36	16	4.2
4	1/8"	KQU04-U02	14	10.4	42	10.4	36	16	4.2
6	M5	KQU06-M5	13	10.4	39.5	12.8	39	17	2.2
6	1/8"	KQU06-U01	13	12.8	43.5	12.8	39.5	17	13.4
6	1/8"	KQU06-U02	14	12.8	45	12.8	39	17	13.4
6	1/8"	KQU06-U03	17	12.8	46	12.8	40	17	13.4
8	1/8"	KQU08-U01	17	15.2	50.5	15.2	46.5	18.5	25.6
8	1/8"	KQU08-U02	17	15.2	52	15.2	46	18.5	25.6
8	1/8"	KQU08-U03	17	15.2	51.5	15.2	45.5	18.5	25.6
10	1/8"	KQU10-U02	19	18.5	57.5	18.5	51.5	21	40
10	1/8"	KQU10-U03	19	18.5	57.5	18.5	51.5	21	40
10	1/8"	KQU10-U04	22	18.5	59	18.5	51	21	40
12	1/8"	KQU12-U02	22	20.9	61	20.9	55	22	57.4
12	1/8"	KQU12-U03	22	20.9	61	20.9	55	22	57.4
12	1/8"	KQU12-U04	22	20.9	62.5	20.9	54.5	22	57.4

PRODUCT SELECTOR

EXTENDED MALE ELBOW : KQW (KQ2W)

Basically use in the same way as elbow union.
Point of difference is that it is used to prevent interference of joints for stereotyping.

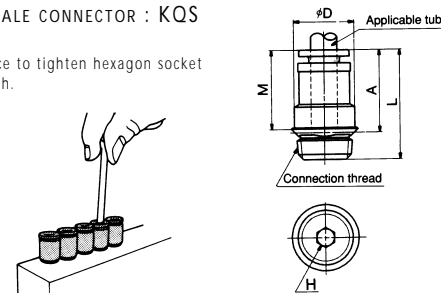


Applicable tube O.D mm	Connection Thread Uni thread	Model	H (width across flats)	Dia D1	Dia D2	L1	L2	A	M	Effective orifice (mm ²)
4	M5	KQW04-M5	8	9.6	8	17.5	30	31	15.5	2.8
4	1/8"	KQW04-U01	10	10.4	10	18	34.5	35.5	16	4
4	1/8"	KQW04-U02	14	10.4	10	18	37	38.5	16	4
6	M5	KQW06-M5	8	10.4	8	18	30	32	16	3
6	1/8"	KQW06-U01	10	12.8	10	20	38.5	41	17	10.9
6	1/8"	KQW06-U02	14	12.8	10	20	40.5	41	17	10.9
6	1/8"	KQW06-U03	17	12.8	10	20	41.5	42	17	10.9
8	1/8"	KQW08-U01	12	15.2	12	23	43.5	47.5	18	20.5
8	1/8"	KQW08-U02	14	15.2	12	23	45.5	47	18	20.5
8	1/8"	KQW08-U03	17	15.2	12	23	46.5	48	18	20.5
10	1/8"	KQW10-U02	17	18.5	17	26.5	52.5	56	21	33.5
10	1/8"	KQW10-U03	17	18.5	17	26.5	52.5	56	21	33.5
10	1/8"	KQW10-U04	22	18.5	17	26.5	54.5	56	21	33.5
12	1/8"	KQW12-U02	17	20.9	17	28.5	54	58.5	22	47.7
12	1/8"	KQW12-U03	17	20.9	17	28.5	54	58.5	22	47.7
12	1/8"	KQW12-U04	22	20.9	17	28.5	56	58.5	22	47.7

PRODUCT SELECTOR

HEXAGON SOCKET HEAD MALE CONNECTOR : KQS (KQ2S)

Male connector for narrow space to tighten hexagon socket head in body by hexagon wrench.



Applicable tube O.D mm	Connection thread Uni thread	Model	H (width across flats)	dia D	L	A	M	Effective orifice (mm ²)
4	M5	KQS04-M5	2.5	9.5	19	15.5	13	4
4	1/8"	KQS04-U01	3	10	23	18	16	4.1
6	M5	KQS06-M5	2.5	11.5	20	16.5	14	4
6	1/8"	KQS06-U01	4	11.8	24	19	17	10
6	1/8"	KQS06-U02	4	13.5	25	18.5	17	10.7
8	1/8"	KQS08-U01	5	14	29	22	18.5	17.2
8	1/8"	KQS08-U02	6	14	28	21.5	18.5	23.3
8	1/8"	KQS08-U03	6	17	26.5	20	18.5	23.3
10	1/8"	KQS10-U01	5	17	31.5	24.5	21	17.2
10	1/8"	KQS10-U02	8	17	28.5	22	21	39
10	1/8"	KQS10-U03	8	17	26.5	20	21	39
10	1/8"	KQS10-U04	8	21	27	19	21	39
12	1/8"	KQS12-U02	8	19	35	25.5	22	46
12	1/8"	KQS12-U03	9	19	28	19	22	60
12	1/8"	KQS12-U04	9	21	27	19	22	60



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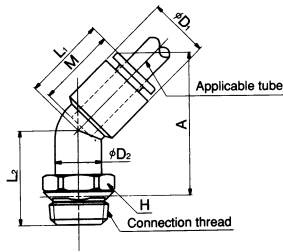
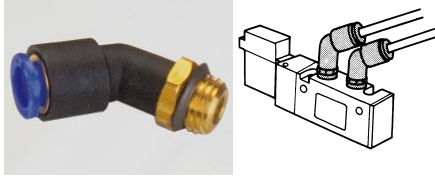
PRODUCT
SELECTOR

EXAMPLE OF ORDERING

- KQK04-M5 Black Body
- KQ2K04-M5 White Body

45° MALE ELBOW : KQK (KQ2K)

Use to connect tubing at 45° from the thread part.
Intermediate type between the male connector and the male elbow.



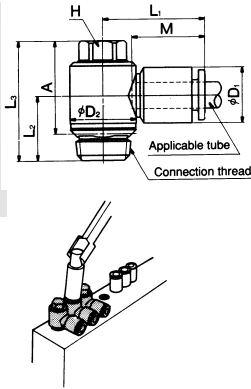
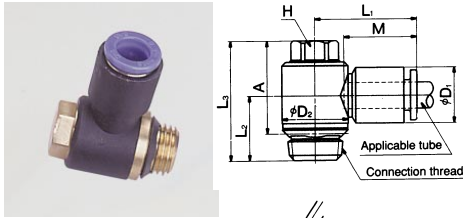
Applicable tube O.D mm	Connection thread Uni thread	Model	H (width across flats)	Dia D1	Dia D2	L1	L2	A	M	Effective orifice (mm ²)
4	M5	KQK04-M5	8	10.4	8	17	14.5	26	16	3.4
4	1/8	KQK04-U01	10	10.4	10	17	18.5	30	16	3.4
4	1/8	KQK04-U02	14	10.4	10	17	20.5	30.5	16	3.4
6	M5	KQK06-M5	8	12.8	8	18	14.5	26	17	3.4
6	1/8	KQK06-U01	10	12.8	10	18	18.5	31	17	8.7
6	1/8	KQK06-U02	14	12.8	10	18	20.5	31	17	8.7
6	1/8	KQK06-U03	17	12.8	10	18	21.5	32	17	8.7
8	1/8	KQK08-U01	12	15.2	12	20.5	20	35	18.5	19.7
8	1/8	KQK08-U02	14	15.2	12	20.5	22	35	18.5	19.7
8	1/8	KQK08-U03	17	15.2	12	20.5	23	36	18.5	19.7
10	1/8	KQK10-U01	17	18.5	17	24	22	38	21	30.9
10	1/8	KQK10-U02	17	18.5	17	24	23.5	40.5	21	30.9
10	1/8	KQK10-U03	17	18.5	17	24	24	41	21	30.9
10	1/8	KQK10-U04	22	18.5	17	24	27	42	21	30.9
12	1/8	KQK12-U02	17	20.9	17	25	24	42	22	44.5
12	1/8	KQK12-U03	17	20.9	17	25	24.5	42.5	22	44.5
12	1/8	KQK12-U04	22	20.9	17	25	27.5	43.5	22	44.5

Fittings & Tubing

PRODUCT
SELECTOR

UNIVERSAL MALE ELBOW : KQV (KQ2V)

Elbow union for a narrow space to clamp the hexagon head of body with box wrench.

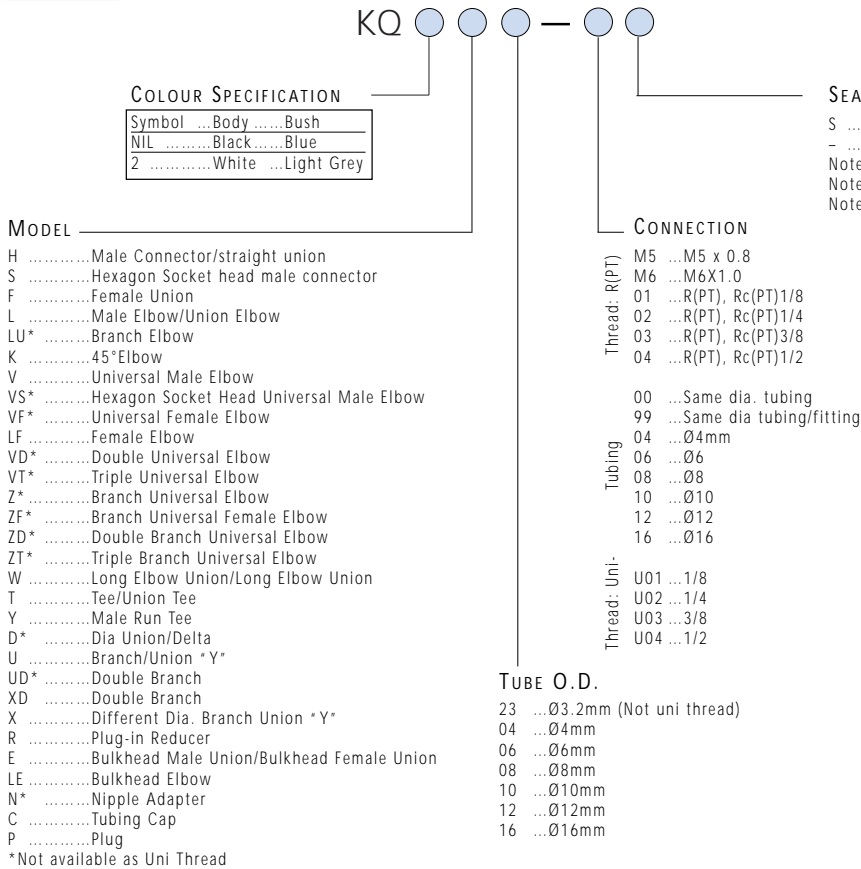


Applicable tube O.D mm	Connection thread Uni thread	Model	H (width across flats)	Dia D1	Dia D2	L1	L2	L3	A	M	Effective orifice (mm ²)
4	M5	KQV04-M5	8	10.4	9.8	20.5	11	18.5	15	16	2.9
4	1/8	KQV04-U01	8	10.4	13.4	22	13.5	25.5	21.5	16	2.9
6	M5	KQV06-M5	8	12.8	9.8	23.5	12	18.5	15	17	3.8
6	1/8	KQV06-U01	8	12.8	13.4	24	13.5	25.5	21.5	17	7.5
6	1/8	KQV06-U02	10	12.8	15.4	23.5	15.5	28	22	17	7.5
8	1/8	KQV08-U01	12	15.2	17.6	28.5	14.5	27.5	23.5	18.5	11.2
8	1/8	KQV08-U02	12	15.2	17.6	28.5	16.5	29.5	23.5	18.5	11.2
8	1/8	KQV08-U03	14	15.2	20.6	27.5	18.5	34	28	18.5	14.3
10	1/8	KQV10-U02	14	18.5	20.6	31	18.5	34	28	21	27
10	1/8	KQV10-U03	14	18.5	20.6	31	18.5	34	28	21	27
12	1/8	KQV12-U03	17	20.9	25.2	34	20	36.5	30.5	22	39
12	1/8	KQV12-U04	17	20.9	25.2	34	22.5	39.5	31.5	22	39



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CATALOGUE REFERENCE
E501-B

How To
ORDER
KQ(2)



SEAL

S Standard: with sealant
- Optional: Without seal

Note 1) With gasket for all M5 & M6 sizes
Note 2) Without seal for female thread
Note 3) Does not apply to uni thread

ACCESSORIES

GASKETS FOR METRIC & UNI THREAD
ONE TOUCH FITTINGS

Applicable Metric & Uni Thread	Model
M5	M-5G2
M6	M-6G
1/8	KQG-U01
1/4	KQG-U02
3/8	KQG-U03
1/2	KQG-U04

OTHER OPTIONS

SPECIAL TYPES OF ONE TOUCH
FITTINGS ALSO AVAILABLE

for inch tube/R(PT) threads	Series IQ black/KQ2 white*
for inch tube/inch NPT threads	Series KQ black/KQ2 white*
for copper free environments	-X2*
for clean rooms	10-*
(oil free) with vaseline	ADD* -X12* *
for anti-static applications	Series KA □
For flame resistant	Series KR ■

* Contact SMC
□ See page 4-34
■ See page 4-69



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E501-B