One-Touch Couplings

■Male Connectors - Outlined with Hex

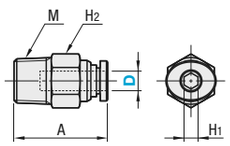
MSCNL Thread: EN CW614N Equiv. (Brass)
: Electroless Nickel Plating
MJCNLS Thread: EN 1.4301 Equiv.

MSCNL



MJCNLS





RoHS

Material: Ring: PBT (Polybutylene Terephthalate)
The drawing is for MSCNL. See the CAD data for MJCNLS.

Part Number Type	D	Nominal	A	Hex Socket H1	Wrench Flats H2	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	MSCNL Unit Price 1 ~ 9 pc(s).	MSCNL Volume Discount Rate 10~50	MJCNLS Unit Price 1 ~ 9 pc(s).	MJCNLS Volume Discount Rate 10~50
MSCNL MJCNLS	4	M5	20.1(21.5)	2	8(10)	M5x0.8	3.2(4)	4.5(6)				
		1	20.1(20.5)	3	10	R1 / 8		8.6(8)				
		2	20.1(19.5)	3	14	R1 / 4		17.3(15)				
	6	M5	21.8(23)	2	11(12)	M5x0.8	3.2(4.4)	8.3(9)				
		1	22.6(23)	4		R1 / 8	11.5(10.3)	9.2(11)				
		2	22.8(23.5)	4	14	R1 / 4		18.2(18)				
		3	22.8(21.5)	4	17	R3 / 8		28.4(26)				
	8	1	27.7(28)	5	13(14)	R1 / 8	18.7(17.5)	13.7(18)				
		2	25.7(27)	6	14	R1 / 4	26.9(22.4)	17.1(17)				
		3	23.7(22.5)	6		R3 / 8		27.3(24)				
	10	1	29.4(31)	5	17	R1 / 8	18.5(17.5)	22.2(26)				
		2	32.4(32.5)	6		R1 / 4	26.9(30.5)	27.6(22)				
		3	28.4(28.5)	8		R3 / 8	38.9(30.5)	29.3(26)				
		4	27.3(26.5)	8	21(22)	R1 / 2		48.5(49)				
	12	2	35.4(35.5)	6	19	R1 / 4	26.9(30.5)	34.2(37)				
		3	31.8(30.5)	8		R3 / 8	47.9(40)	33.5(32)				
		4	33.8(29.5)	8	21(22)	R1 / 2		54.8(51)				
	16	3	39.7(42)	8	24	R3 / 8	48.8(90)	58.7(60)			-	-
		4	42.2(37.5)	10		R1 / 2		58.2(66)			-	-

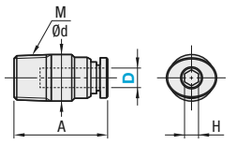
Value in ( ) are for MJCNLS. There is no hex portion (H1) in the inner circumference.

■Male Connectors - Outlined with Circle

MSCNC Thread: EN CW614N Equiv. (Brass)
: Electroless Nickel Plating



RoHS



Material: Ring: PBT (Polybutylene Terephthalate)

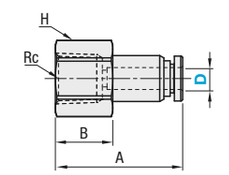
Part Number Type	D	Nominal	A	Hex Socket H	Od	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSCNC	4	M5	20.1	2	8.2	M5x0.8	3.2	4.2		
		1	20.1	3	10	R1 / 8		8		
	6	M5	21.8	2	11	M5x0.8	11.5	7.2		
		1	22	4	11	R1 / 8		8.6		
		2	22.8	4	13.5	R1 / 4		16.8		
	8	1	27.7	5	13	R1 / 8	18.7	13.1		
		2	25.7	6	13.5	R1 / 4	26.9	15.5		
		3	23.7	6	17	R3 / 8		25.9		
	10	1	29.4	5	15.5	R1 / 8	18.5	18		
		2	32.4	6	15.5	R1 / 4	26.9	23.3		
		3	28.4	8	17	R3 / 8	38.9	25.7		
		4	27.3	8	21	R1 / 2		46.7		
	12	2	35.4	6	18.8	R1 / 4	26.9	29.7		
		3	31.8	8	18.8	R3 / 8	47.9	30.2		
		4	33.8	8	21	R1 / 2		50.6		

■Female Connectors

MSCNF Thread: EN CW614N Equiv. (Brass)
: Electroless Nickel Plating



RoHS



Material: Ring: PBT (Polybutylene Terephthalate)

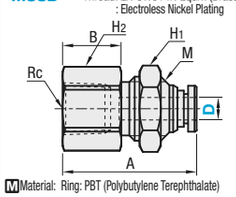
Part Number Type	D	Nominal	A	B	Wrench Flats H	Thread Size Rc	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSCNF	4	1	24.4	11	13	Rc1 / 8	3.2	13.5		
		2	27.4	14	17	Rc1 / 4		24.9		
	6	1	25.4	11	13	Rc1 / 8	11.0	14.8		
		2	28.4	14	17	Rc1 / 4		26.1		
		3	29.4	15	19	Rc3 / 8		27.6		
	8	1	27.7	10	13	Rc1 / 8	25.2	16.4		
		2	30.7	14	17	Rc1 / 4		27.7		
		3	31.7	15	19	Rc3 / 8		29.2		
	10	2	32.4	13	17	Rc1 / 4	38.7	30.3		
		3	33.4	15	19	Rc3 / 8		32.5		
		4	36.4	18	24	Rc1 / 2		53.6		
	12	2	35.4	12	19	Rc1 / 4	44.6	45.3		
		3	36.4	15	19	Rc3 / 8		39.4		
		4	39.4	18	24	Rc1 / 2		60.6		

■Female Threaded Bulkhead Unions

MSSB Thread: EN CW614N Equiv. (Brass)
: Electroless Nickel Plating



RoHS



Material: Ring: PBT (Polybutylene Terephthalate)

Part Number Type	D	Nominal	A	B	Wrench Flats H1	Wrench Flats H2	Thread Size MxPitch	Thread Size Rc	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSSB	4	1	25.1	11	14	14	M12x1.0	Rc1 / 8	3.2	18		
	6	1	26.3	9	17	17	M14x1.0	Rc1 / 8	11	26		
		2	31.3	14				Rc1 / 4		30		
	8	1	28.9	8	19	19	M16x1.0	Rc1 / 8	25.2	34.5		
		2	34.9	14				Rc1 / 4		42.5		
		3	35.9	15				Rc3 / 8		36		
	10	2	32.3	13	24	22	M20x1.0	Rc1 / 4	38.7	58.5		
		3	34.3	15				Rc3 / 8		55		
	12	3	37.4	14	26	24	M22x1.0	Rc3 / 8	44.6	71.5		
		4	41.4	18				Rc1 / 2		70.5		

■Male Elbows

MSELL Thread: EN CW614N Equiv. (Brass)
: Electroless Nickel Plating
MJELLS Thread: EN 1.4301 Equiv.

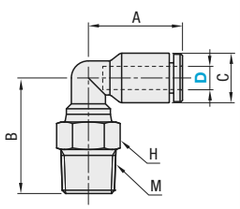
MSELL



MJELLS



RoHS



Material: Body: PBT (Polybutylene Terephthalate)
The drawing is for MSELL. See the CAD data for MJELLS.

Part Number Type	D	Nominal	Body Color	A	B	C	Wrench Flats H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	MSELL Unit Price 1 ~ 9 pc(s).	MSELL Volume Discount Rate 10~50	MJELLS Unit Price 1 ~ 9 pc(s).	MJELLS Volume Discount Rate 10~50
MSELL MJELLS	4	M5	B (Black)	17.1(18)	14.6(15)	9(10)	9(8)	M5x0.8	3.2	4.6(5)				
		1		17.1(18.5)	17.8(20.5)		10	R1 / 8	4.4(3.5)	7.9(8)				
		2		17.1(18.5)	20.8(24)		14	R1 / 4		17(15)				
	6	M5		18(20)	15.7(15)	11.2(12.5)	9(10)	M5x0.8	3.2(4.2)	5.4(7)				
		1		18(21)	18.9(24)		10(12)	R1 / 8	8.5(8)	8.7(13)				
		2		18(21)	21.9(28)		14	R1 / 4		17.8(18)				
		3		18(21)	22.9(30)		17	R3 / 8		27.2(26)				
	8	1		23.6	20.3(25.5)	13.6(14.5)	10(14)	R1 / 8	15(18)	10.4(17)				
		2		23.6	22.8(28.5)		14	R1 / 4		19.1(20)				
		3		23.6	23.8(30)		17	R3 / 8		28.4(28)				
	10	1	W (White)	25(27)	23.6(28)	16.3(17.5)	17	R1 / 8	22.1(24.3)	20.8(26)				
		2		25(27)	26.6(31)		17	R1 / 4	31.5(27)	25.5(28)				
		3		25(27)	26.1(32.5)		17	R3 / 8		27.5(33)				
		4		25(27)	29.1(35.5)		21(22)	R1 / 2		47.2(49)				
	12	2		32.2(29.5)	28.5(33)	19.7	17(19)	R1 / 4	41.7(33)	31.1(37)				
		3		32.2(29.5)	28(34.5)		17(19)	R3 / 8	42.6(35)	33.1(43)				
		4		32.2(29.5)	31(39.5)		21(22)	R1 / 2		52.8(56)				
	16	3		34(35.5)	36(41)	25.6(26.5)	20(22)	R3 / 8	77.8(80)	52.9(63)			-	-
		4		34(35.5)	38.5(44)		21(22)	R1 / 2		67.2(76)			-	-

Values in ( ) are for MJELLS. Body color of MSELL is black.
Body color selecyopm is available only for MJELLS.

Ordering Example: Part Number - Nominal - Body Color
MSCNL6 - 1
MJELLS8 - 1 - B

Specifications

	MJCNLS MJELLS		MJCNLS Other than MJELLS
Applicable Fluid	Compressed Air	Water	Compressed Air
Operating Temperature Range*	-15~60°C	5~40°C	0~60°C
Max. Operating Pressure	1MPa		0.9MPa
Operating Vacuum Level	-100kPa	-	-100kPa

* No Freezing

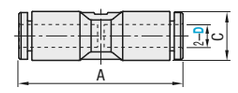
The entire threaded part EN CW614N Equiv. (brass) is plated with electroless nickel. It is also seal-coated and does not need sealant tape (except for M5).

■Union Straight

USSTL



RoHS



Material: PBT (Polybutylene Terephthalate)

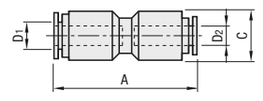
Part Number Type	D	A	C	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USSTL	4	30.2	9	3.2	3.1		
	6	32	11.2	11.0	4.8		
	8	40.2	13.6	25.2	8.8		
	10	40	16.3	38.7	10.6		
	12	54.8	19.7	44.6	20.9		
	16	52	25.6	85.0	32.8		

■Stepped Diameter Union Straight

UJDST



RoHS



Material: PBT (Polybutylene Terephthalate)

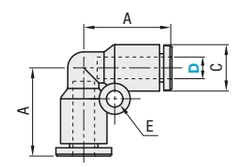
Part Number Type	Body Color No.	D1	D2	A	C	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
UJDST	4	4	6	36.5	12.5	3.5	6		
	B (Black) 4-8	4	8	39.5	14.5	4	8		
	B (Black) 6	6	8	39.5	14.5	10	8		
	W (White) 6-10	6	10	45	17.5	10	12		
	W (White) 8	8	10	45	17.5	22	12		
	10	10	12	47.5	20	30	17		

■Union Elbows

USEBL



RoHS



Material: PBT (Polybutylene Terephthalate)

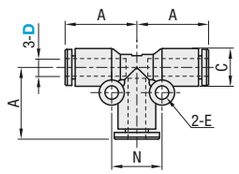
Part Number Type	D	A	C	E	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USEBL	4	17.1	9	3.2	3.2	3.2		
	6	19.0	11.2	3.2	9.3	4.9		
	8	23.6	13.6	3.2	20.3	9.4		
	10	25	16.3	4.2	27.0	11.8		
	12	32.2	19.7	4.2	40.6	22.5		
	16	34	25.6	4.2	78.7	36.5		

■Union Tees

USTEL



RoHS



Material: PBT (Polybutylene Terephthalate)

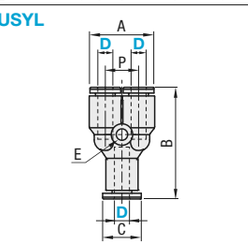
Part Number Type	D	A	C	E	N	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USTEL	4	17.1	9	3.2	12	3.2	5		
	6	19	11.2		13	10.9	7.3		
	8	23.6	13.6		18	24.8	14.1		
	10	25	16.3	4.2	24	39.5	17.7		
	12	32.2	19.7		28	44.2	33.5		
	16	34	25.6		30	83.5	53.8		

■Y Type

USYL



RoHS



Material: PBT (Polybutylene Terephthalate)

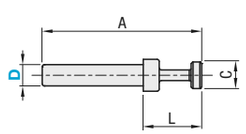
Part Number Type	D	A	B	C	E	P	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USYL	4	18.3	31.2	9	2.2	9.3	2.5	4.9		
	6	22.6	34.7	11.2	3.2	11.4	9.9	7.3		
	8	27.8	44.2	13.6		14.2	22.8	13.9		
	10	33.3	46	16.3	4.2	17	36.6	17.7		
	12	39.7	56.8	19.7		20	43.2	32.5		

■Blind Plugs

BSLG



RoHS



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	A	L	C	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
BSLG	4	30	11	6	0.5		
	6	34	14	8	1		
	8	38	16	10	2		
	10	41	16	12	3		
	12	43	16	14	4		

Ordering Example: Part Number - Body Color
UJDST6 - W
USYL10

Specifications

Applicable Fluid	Air
Operating Temperature Range*	0~60°C
Max. Operating Pressure	0.9MPa
Operating Vacuum Level	-100kPa

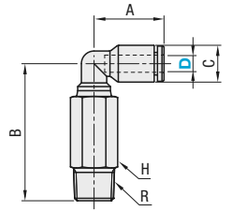
* No Freezing

One-Touch Couplings

■Long Elbows



MSELG Thread: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



RoHS

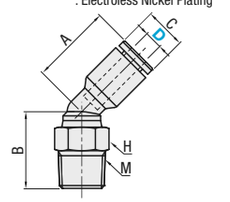
Material: Body: PBT (Polybutylene Terephthalate)

Part Number Type	D	Nominal	A	B	C	Wrench Flats H	Thread Size R	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSELG	4	1	17.1	30.3	9	10	R1 / 8	4.4	14.7		
	6	1	18.0	31.4	11.2	10	R1 / 8	8.5	15.5		
		2	18.0	34.4	11.2	14	R1 / 4		31.8		
	8	1	23.6	35.3	13.6	10	R1 / 8	15.0	18.6		
		2	23.6	37.8	13.6	14	R1 / 4		35.8		
		3	23.6	38.8	13.6	17	R3 / 8		50		
	10	2	25	47.8	16.3	17	R1 / 4	31.5	59.4		
		3	25	47.3	16.3	17	R3 / 8		58.2		
		4	25	50.3	16.3	21	R1 / 2		94.4		
	12	2	32.2	49.7	19.7	17	R1 / 4	41.7	65		
		3	32.2	49.2	19.7	17	R3 / 8	42.6	63.8		

■Male Threaded 45° Elbows



MSEFE Thread: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



RoHS

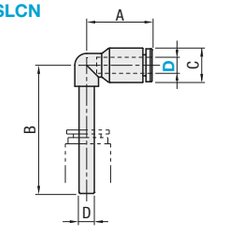
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	Nominal	A	B	C	Wrench Flats H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSEFE	4	1	17.1	16.3	9	10	R1 / 8	4.4	6.5		
		2	17.1	19.3		14	R1 / 4		14.5		
	6	M5	18.0	13.7	11.2	9	M5x0.8	3.2	5		
		1	18.0	16.9		10	R1 / 8	8.5	7.5		
		2	18.0	19.9		14	R1 / 4		15		
		3	18.0	20.9		17	R3 / 8		24		
	8	1	23.6	17.5	13.6	10	R1 / 8	15.0	8		
		2	23.6	20		14	R1 / 4		15		
		3	23.6	21		17	R3 / 8		23		
	10	1	25	19.6	16.3	17	R1 / 8	22.1	18		
		2	25	22.6		17	R1 / 4	31.5	22		
		3	25	22.1		17	R3 / 8		23		
		4	25	25.1		21	R1 / 2		39.5		
	12	2	32.2	24.1	19.7	17	R1 / 4	41.7	27		
		3	32.2	23.6		17	R3 / 8	42.6	28		
		4	32.2	26.6		21	R1 / 2		44.5		

■L-Connectors



USLCN



RoHS

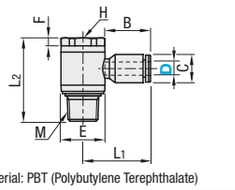
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	A	B	C	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USLCN	4	17.1	33.5	9	3.2	1.5		
	6	18.0	42.1	11.2	6.3	3		
	8	23.6	47.8	13.6	20.3	5		
	10	25	53.7	16.3	27.0	7		
	12	32.2	60.9	19.7	40.6	13.5		

■Turn Elbow Unions



USYELN Thread: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



RoHS

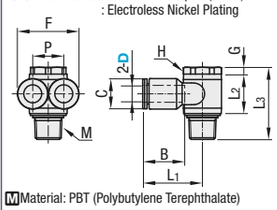
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	Nominal	L1	B	F	E	L2	C	Wrench Flats H	Thread Size M	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USYELN	4	1	21.5	14.5	2.5	14	26.5	9	13	R1 / 8	15.5		
	6	M5	20.5	15.5	2.5	10	17.8	11.2	8	M5x0.8	8.2		
		1	22.5		2.5	14	26.5		13	R1 / 8	16.5		
		2	25		3	19	34		17	R1 / 4	30.5		
		3	26.7		4	22.4	39.8		21	R3 / 8	50.5		
	8	1	25.6	17.8	2.5	14	26.5	13.6	13	R1 / 8	17.5		
		2	28.1		3	19	34		17	R1 / 4	31.5		
		3	29.8		4	22.4	39.8		21	R3 / 8	51		
	10	2	28.9	19.4	3	19	34	16.3	17	R1 / 4	33		
		3	30.6		4	22.4	39.8		21	R3 / 8	52.5		
		4	32.9		5	27	44.8		24	R1 / 2	84.5		
	12	2	36.5	24.5	4.5	18.4	28.9	21.2	14	R1 / 4	64		
		3	35.9	22.4	4	22.4	39.8	19.7	21	R3 / 8	57		

■2-Port Swivel Elbows



USTE Thread: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



RoHS

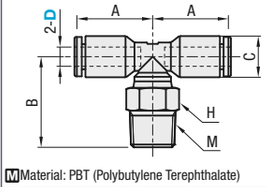
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	L1	L2	L3	B	C	G	F	P	Wrench Flats H	Thread Size M	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USTE	4	18.6	11.8	17.8	14.5	9	2.5	18.3	9.3	8	M5x0.8	7.4		
	6	22	14.5	26.5	15.5	11.2	2.5	22.6	13	13	R1 / 8	18.5		
	8	28.1	18	34	17.8	13.6	3	27.8	17	17	R1 / 4	35		
	10	27.5	18	34	19.4	16.3	3	33.3	17	17	R1 / 4	57.5		
	12	34.9	22	44.8	22.4	19.7	5	39.7	20	24	R1 / 2	98		

■Union Tees



MSTEL Thread: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



RoHS

Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	Nominal	A	B	C	Wrench Flats H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSTEL	4	M5	17.1	16.6	9	9	M5x0.8	4.4	6.2		
		1		19.8		10	R1 / 8		9.5		
		2		22.8		14	R1 / 4		18.7		
	6	M5	18	17.7	11.2	9	M5x0.8	8.5	7.7		
		1		20.9		10	R1 / 8		11		
		2		23.9		14	R1 / 4		20.2		
		3		24.9		17	R3 / 8		29.5		
	8	1	23.6	23.5	13.6	10	R1 / 8	15	14.9		
		2		26		14	R1 / 4		23.6		
	10	1	25	25.8	16.3	17	R1 / 8	31.5	26.3		
		2		28.8			R1 / 4		31		
		3		28.3			R3 / 8		33		
	12	2	32.2	30.5	19.7	17	R1 / 4	42.6	41.7		
		3		30			R3 / 8		43.7		
		4		33		21	R1 / 2		63.4		

Specifications

Applicable Fluid	Air
Operating Temperature Range*	0~60°C
Max. Operating Pressure	0.9MPa
Operating Vacuum Level	-100kPa

* No Freezing

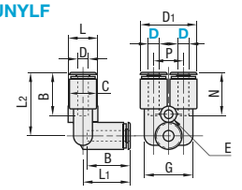
The whole of the threaded part EN CW614N Equiv. (brass) is plated with electroless nickel. It is also seal-coated and does not need sealant tape (except for M5).

Ordering Example: Part Number **MSTEL6** / **USTE4** - Nominal **1**

■FY Type Elbow Unions



UNYLF



RoHS

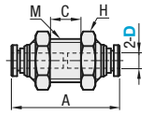
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	L1	L2	B	C	D1	E	L	G	N	P	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
UNYLF	4	17.5	23.5	16	10	21	3.2	11	18	15.5	11	8		
	6	19.5	27	17.5	12.5	26	4.2	13.5	22.5	17	13.5	12		
	8	22	29	19	14.5	30	4.2	15.5	26.5	18	15.5	16		
	10	25.5	33	21.5	17.5	36	4.2	18.5	31.5	20	18.5	25		
	12	28	35.5	23	20	41	4.2	21	37	21.5	21	34		

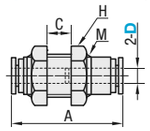
■Bulkhead Unions



MSBUL Threads: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



MJBULS Thread: EN 1.4301 Equiv.



RoHS

Material: Ring: PBT (Polybutylene Terephthalate)

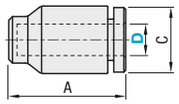
Part Number Type	D	A	Wrench Flats H	Thread Size MxPitch	C(max)	Effective Sectional Area (mm²)	Mass (g)	MSBUL Unit Price 1 ~ 9 pc(s).	MSBUL Volume Discount Rate 10~50	MJBULS Unit Price 1 ~ 9 pc(s).	MJBULS Volume Discount Rate 10~50
MSBUL MJBULS	4	30 (33)	14	M12x1	8.6 (7.5)	3.2 (4)	16 (20)				
	6	31.9 (36)	17	M14x1	9.4 (9.5)	11.0 (10)	22(33)				
	8	37 (39)	19	M16x1	10.6 (12.5)	25.2 (22)	31.5 (42)				
	10	40.1 (44.5)	24	M20x1	12.9 (18)	38.7 (30)	54.5 (75)				
	12	45.8 (47)	26	M22x1	15.4 (21)	44.6 (35)	70.5 (92)				

Values in ( ) are for MJBULS.

■Caps



MSCAP



RoHS

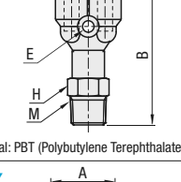
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	A	C	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSCAP	4	15.6	9	1.5		
	6	17	11.2	2		
	8	19.8	13.6	3.5		
	10	21	16.3	5		
	12	25.4	19.7	9.5		

■Y Type



MSYL Thread: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



RoHS

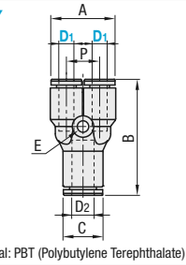
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	Nominal	A	B	E	Wrench Flats H	P	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSYL	4	M5	18.3	37.4	3.2	9	9.3	M5x0.8	3.2	8.9		
		1		40.6		10		R1 / 8	5.3	11.6		
		2		43.6		14		R1 / 4		20.5		
	6	M5	22.6	40.5		11	11.4	M5x0.8	3.2	12.9		
		1		43.7		11		R1 / 8	12.6	15.2		
		2		46.7		14		R1 / 4		23.1		
		3		47.7		17		R3 / 8		35.2		
	8	1	27.3	52.6		13	14.2	R1 / 8	20.7	23.3		
		2		55.1		14		R1 / 4		27.9		
		3		56.1		17		R3 / 8		36.2		
	10	2	33.3	56		17	17	R1 / 4	42.1	35.2		
		3		58		17		R3 / 8	46.9	40.8		
	12	2	39.7	65.9	4.2	19	20	R1 / 4	42.3	53.7		
		3		67.9		19		R3 / 8		59.5		
		4		70.9		21		R1 / 2	58.7	74.9		

■Stepped Diameter Union-Y



USDY



RoHS

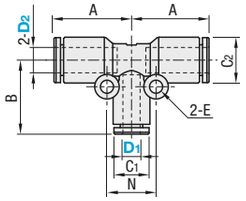
Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	A	D2	B	C	E	P	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USDY	4	18.3	6	32.5	11.2	3.2	9.3	7.1	5		
	6	22.6	8	38.1	13.6		11.4	18.9	8		
	8	27.8	10	43.2	16.3		14.2	32.9	12.5		
	10	33.3	12	50.9	19.7	4.2	17	43.4	20		

■Stepped Unions Tees



USDTE



RoHS

Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	D2	A	C1	E	C2	N	B	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USDTE	4	6	19	9	3.2	11.2	12	18.1	3.2	6.5		
	6	8	23.6	11.2		13.6	16	20	10.9	10		
	8	10	25	13.6	4.2	16.3	19	24.1	24.8	14.5		
	10	12	32.2	16.3		19.7	20	25.5	39.5	25		

Ordering Example: Part Number **MSYL6** / **USDY4** - Nominal **1**

Specifications

Applicable Fluid	MJBULS Air	MJBULS Water	MJBULS Other than Air
Operating Temperature Range*	-15~60°C	5~40°C	0~60°C
Max. Operating Pressure	1MPa		0.9MPa
Operating Vacuum Level	-100kPa	-	-100kPa

* No Freezing

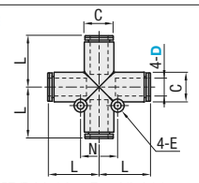
One-Touch Couplings

■Cross Unions



RoHS

USCRS



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	L	C	E	N	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USCRS	8	23.6	13.6	3.2	17	14.5		
	10	25	16.3	4.2	20	20.5		
	12	32.2	19.7	4.2	24	38		

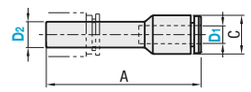
For orders larger than indicated quantity, please check with WOS.

■Reducers



RoHS

USRDS



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	D2	A	C	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
USRDS	4	6	36.1	9	3.2	2		
		8	36.9	9		2		
	6	8	39.5	11.2	11.0	3		
		10	40.3	11.2		3.5		
	8	10	45.6	13.6	25.2	4.5		
		12	46.6	13.6		5.5		
	10	12	46.6	16.3	38.7	6.5		

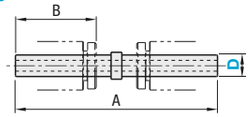
For orders larger than indicated quantity, please check with WOS.

■Nipples



RoHS

MSPJ



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	A	B	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MSPJ	4	37.5	16	3.2	2		
	6	39.5	17	12.6	3		
	8	43.2	18.5	19.6	4		
	10	47	21	31.2	6		
	12	52.8	22.5	50.2	8		

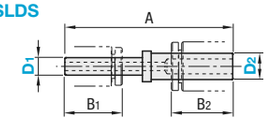
For orders larger than indicated quantity, please check with WOS.

■Unequal DIA. Connection Plugs



RoHS

BSLDS



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	D2	A	B1	B2	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
BSLDS	4	6	38.3	16	17	3.2	3		
	6	8	41.2	17	18.5	12.6	3		
	8	10	45	18.5	21	18.8	5		
	10	12	49.8	21	22.5	31.2	8		

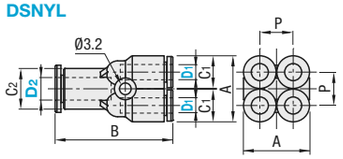
For orders larger than indicated quantity, please check with WOS.

■Double Y-Shaped



RoHS

DSNYL



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	D2	A	B	C1	C2	P	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
DSNYL	4	6	18.2	32.5	9	11.2	9.2		
	6	8	22.6	36.6	11.2	13.6	11.4		

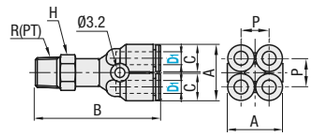
For orders larger than indicated quantity, please check with WOS.

■R (PT) Double Y-Shaped



RoHS

DSLYL Thread: EN CW614N Equiv. (Brass) : Electroless Nickel Plating



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	Nominal Dia.	A	B	C	Wrench Flats H	P	Thread Size R (PT)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
DSLYL	4	1	18.2	41.5	9	11	9.2	R1 / 8		
		2	18.2	44.5	9	14	9.2	R1 / 4		
	6	1	22.6	45	11.2	13	11.4	R1 / 8		

For orders larger than indicated quantity, please check with WOS.

Ordering Example: Part Number — USCRS8

Specifications

Applicable Fluid	Air
Operating Temperature Range*	0~60°C
Max. Operating Pressure	0.9MPa
Operating Vacuum Level	-100kPa

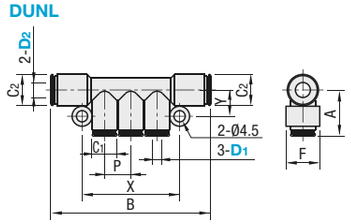
* No Freezing

■3x1



RoHS

DUNL



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	D2	A	B	C1	C2	P	F	X	Y	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
DUNL	4	6	18.5	64	10	12.5	10.5	13.5	39	10.5		
		8	19.5	66	10	14.5	10.5	15.5	39	11.5		
	6	8	21	73	12.5	14.5	13	15.5	46.5	11.5		
		10	22	78.5	12.5	17.5	13	18.5	46.5	13		
	8	10	23.5	84.5	14.5	17.5	15	18.5	52.5	13		

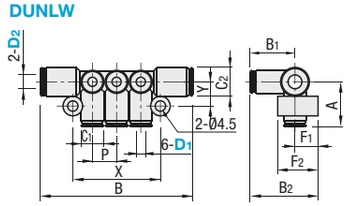
For orders larger than indicated quantity, please check with WOS.

■3x2



RoHS

DUNLW



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D1	D2	A	B	B1	B2	C1	C2	P	F1	F2	X	Y	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
DUNLW	4	8	19.5	66	19.5	29.5	10	14.5	10.5	10	17.5	38	10.5		
	6	10	22	78.5	22	32	12.5	17.5	13	10	19.5	45	12		
	8	12	24.5	87	24.5	36	14.5	20	15	11.5	22	51	13		

For orders larger than indicated quantity, please check with WOS.

Ordering Example: Part Number — D2 — DUNLW4 - 8

Specifications

Applicable Fluid	Air
Operating Temperature Range*	-15~60°C
Max. Operating Pressure	1MPa
Operating Vacuum Level	-100kPa

* No Freezing

Compact Air Fittings

Tubes, One-Touch Couplings, Speed Controllers

■Tubes



Material: Polyurethane

RoHS

Part Number Type	O.D. (mm)	Length (m)	Tube Color	I.D. (mm)	Min. Bending Radius (mm)	O.D. Accuracy (mm)	Max. Operating Pressure (MPa)	Mass (kg / m)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
MPUT	1.8	5	B (Black) C (Transparent) W (White)	1.2	4	±0.1	0.8	0.0017		
		10								

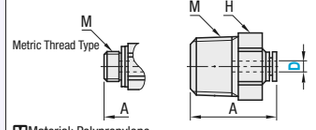
Ordering Example: Part Number — MPUT1.8 - Length — 10 - Color — B

■Male Connectors



RoHS

JCNL Thread: EN CW614N Equiv. (Brass)



Material: Polypropylene

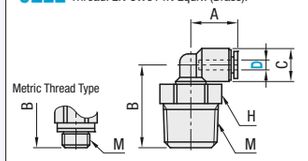
Part Number Type	D	Nominal	A	Wrench Flats H	Thread Size MxPitch	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
JCNL	1.8	M3	10.7	5.5	M3x0.5	0.92	3.9		
		M5	10.4	7	M5x0.8	0.92	4.6		
		1	14.4	10	R1/8	0.97	5.9		

■Male Elbows



RoHS

JELL Thread: EN CW614N Equiv. (Brass).



Material: Polypropylene

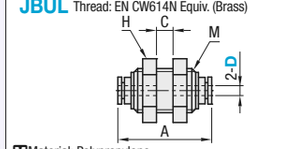
Part Number Type	D	Nominal	A	B	C	Wrench Flats H	Thread Size MxPitch	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
JELL	1.8	M3	8.5	11	6	5.5	M3x0.5	0.83	4.0		
		M5	8.5	11.5	6	7	M5x0.8	0.83	4.8		
		1	8.5	15	6	10	R1 / 8	0.7	8.6		

■Bulkhead Unions



RoHS

JBUL Thread: EN CW614N Equiv. (Brass)



Material: Polypropylene

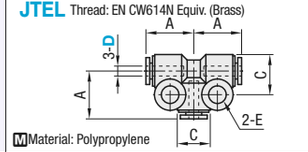
Part Number Type	D	A	Wrench Flats H	Thread Size MxPitch	C(max)	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
JBUL	1.8	17	10	M8x1	4	0.85	5.3		

■Union Tees



RoHS

JTEL Thread: EN CW614N Equiv. (Brass)



Material: Polypropylene

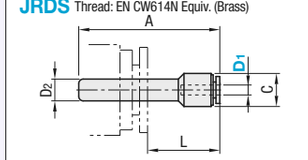
Part Number Type	D	A	C	E	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
JTEL	1.8	8.7	7.3	3.2	0.9	3.9		

■Reducers



RoHS

JRDS Thread: EN CW614N Equiv. (Brass)



Material: Polypropylene

Part Number Type	D1	D2	A	C	L	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
JRDS	1.8	4	25.6	6	9.6	0.97	0.5		

Specifications

One-Touch Couplings

Applicable Fluid	Air
Operating Temperature Range*	-10~60°C
Operating Pressure Range	-100kPa~0.8MPa

* No Freezing

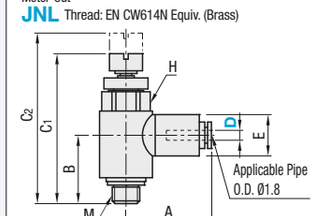
■Flow Rate Controllers



RoHS

Meter-Out

JNL Thread: EN CW614N Equiv. (Brass)



Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	Nominal	A	B	C1	C2	E	Wrench Flats H	Thread Size MxPitch	Mass (g)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
JNL	1.8	M3	15.3	11.4	25.1	27.6	7.5	7	M3x0.5	6.1		
		M5	15.5	12.4	27.2	30.2	7.5	8	M5x0.8	9.4		

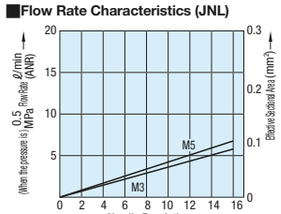
Ordering Example: Part Number — JCNL1.8 - Nominal — M5

Specifications

Flow Rate Controllers

Applicable Fluid	Air
Operating Temperature Range	5 ~ 60°C (No Freezing)
Max. Operating Pressure	1.0 MPa
Min. Operating Pressure	0.05 MPa

■Flow Rate Characteristics (JNL)



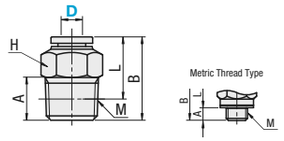
Miniature One-Touch Coupling Connectors

■Connectors



RoHS

MNCN



M Material: PBT (Polybutylene Terephthalate)
Thread: Brass (Electroless Nickel Plating)

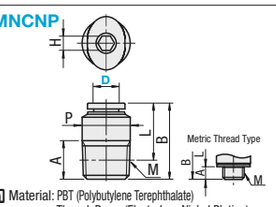
Part Number Type	D	Nominal Dia.	A	B	L	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MNCN	4	M3	2.5	15.1	12.6	8	M3x0.5	0.9	2.4		
		M5	3	15.6			M5x0.8	3.8	3.2		
		1	8		11.6	10	R1 / 8	6.4	6.6		
	6	M5	3	17	14	10	M5x0.8	3.6	4.5		
		1	8	17.6	13.6		R1 / 8	6.3	6		

■Connectors with Hex Socket



RoHS

MNCNP



M Material: PBT (Polybutylene Terephthalate)
Thread: Brass (Electroless Nickel Plating)

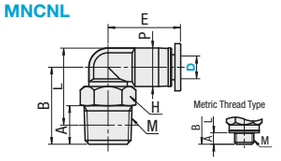
Part Number Type	D	Nominal Dia.	A	B	L	Width Across H	P	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MNCNP	4	M3	2.5	15.1	12.6	1.5	8	M3x0.5	1.8	2.2		
		M5	3	15.6	12.6	2.5	8	M5x0.8	5.1	3		
		1	8	15.8	11.8	3	10	R1 / 8	7.4	6.2		
	6	M5	3	17.5	14.5	2.5	10	M5x0.8	5.2	4.4		
		1	8	17.9	13.9	4	10	R1 / 8	13	5.6		

■Elbows



RoHS

MNCNL



M Material: PBT (Polybutylene Terephthalate)
Thread: Brass (Electroless Nickel Plating)

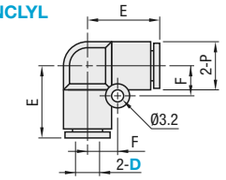
Part Number Type	D	Nominal Dia.	A	B	L	P	E	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MNCNL	4	M3	2.5	14	15.5	8	15.1	8	M3x0.5	1.3	3		
		M5	3	14	14.5				M5x0.8	2.2	3.4		
		1	8	16	16				10 R1 / 8	4.8	6.2		
	6	M5	3	14.5	16.8	10.5	16		8 M5x0.8	3.5	4.1		
		1	8	17	18.3				10 R1 / 8	8.5	6		

■Union Elbows



RoHS

MNCLYL



M Material: PBT (Polybutylene Terephthalate)

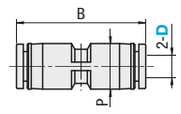
Part Number Type	D	P	E	F	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MNCLYL	4	8	13.1	5.6	2.3		
	6	10.5	15	6.6	3.6		

■Unions



RoHS

MNUN



M Material: PBT (Polybutylene Terephthalate)

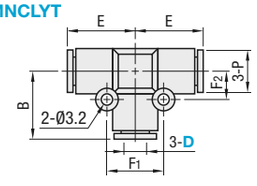
Part Number Type	D	B	P	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MNUN	4	22.7	8	5.4	2		
	6	24.4	10.4	11	3.1		

■Union Tees



RoHS

MNCLYT



M Material: PBT (Polybutylene Terephthalate)

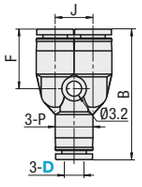
Part Number Type	D	B	P	E	F1	F2	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MNCLYT	4	13.1	8	13.1	11.2	5.6	3.3		
	6	15	10.5	14.95	13.2	6.6	5.3		

■Union Y



RoHS

MNUNY



M Material: PBT (Polybutylene Terephthalate)

Part Number Type	D	B	P	J	F	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~50
MNUNY	4	27.6	8	8	12.6	2.3	3.4		
	6	31	10.5	10.5	14	6.8	5.5		

Ordering Example

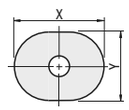
Part Number	-	Nominal Dia.
MNCN4 MNUN6	-	M5

Specifications

Applicable Fluid	Air
Operating Temperature Range*	0~60°C
Max. Operating Pressure	1MPa
Operating Vacuum Level	-100kPa

* No Freezing

■Release Ring Shape of Miniature One-Touch Couplings



D	X	Y
4	9.8	7.8
6	11.8	9.8

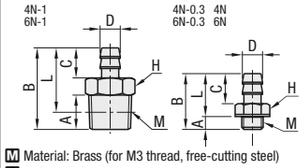
Miniature Couplings

■Barbed Couplers



RoHS

SRTG□N
BOX-SRTG□N (50 pcs. / pack)



M Material: Brass (for M3 thread, free-cutting steel)
S Surface Treatment: Electroless Nickel Plating
A Accessory: Gasket: EN 1.4301 Equiv., NBR (M3, M5)

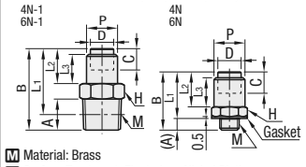
Part Number Type	No.	Tube I.D. ØD	Tube O.D.	M	A	B	L	C	Width Across H	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 49 pc(s).	Volume Discount Rate (50 pcs.) / pack
SRTG BOX-SRTG	4N-0.3	2.5	4	M3x0.5	2.5	12	9.5	7	5.5	0.8	0.9		
	6N-0.3	4	6		2.5	13	10		5.5	1.3	0.9		
	4N	2.5	4	M5x0.8	3	13	10		7	1.5	1.7		
	6N	4	6		3	13	10		7	1.5	3.8		
	4N-1	2.5	4	R1 / 8	8	19	15		10	1.9	1.7		
	6N-1	4	6		8	19	15		10	7.5	3.8		

■Hose Nipples



RoHS

SRTN□N
BOX-SRTN□N (50 pcs. / pack)



M Material: Brass
S Surface Treatment: Electroless Nickel Plating
A Accessory: Gasket: EN 1.4301 Equiv., NBR (M5 only)

Part Number Type	No.	Tube I.D. ØD	Tube O.D. (mm) D	M	A	B	C	L1	L2	L3	P	Width Across H	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 49 pc(s).	Volume Discount Rate (50 pcs.) / pack
SRTN BOX-SRTN	4N	2.5	4	M5x0.8	3	14.5	5	11.5	8.5	7	6.5	7	2.5	2		
	6N	4	6		3	15	5.5	12	9	7.5	8	8	3.4	3.8		
	4N-1	2.5	4	R1 / 8	8	20.5	5	16.5	8.5	7	6.5	10	7.9	2		
	6N-1	4	6		8	21	5.5	17	9	7.5	8	10	8.9	3.8		

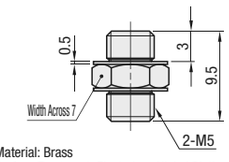
When SRT□□N-1 is selected, seal adhesive is applied to thread portion.
For combination with a tube, select the same number as that of the tube O.D.

■Nipples



RoHS

MNPLN



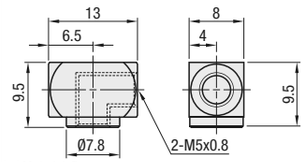
M Material: Brass
S Surface Treatment: Electroless Nickel Plating
A Accessory: Gasket: EN 1.4301 Equiv., NBR

■Elbows



RoHS

MELBN



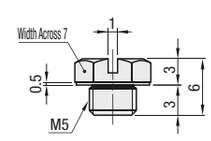
M Material: Brass
S Surface Treatment: Electroless Nickel Plating

■Plugs



RoHS

MPLGN



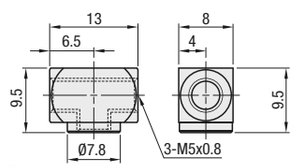
M Material: Brass
S Surface Treatment: Electroless Nickel Plating
A Accessory: Gasket: EN 1.4301 Equiv., NBR

■Tees



RoHS

MTEN



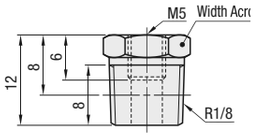
M Material: Brass
S Surface Treatment: Electroless Nickel Plating

■Bushings



RoHS

MBSGN



Seal adhesive is applied to R1/8 thread portion.

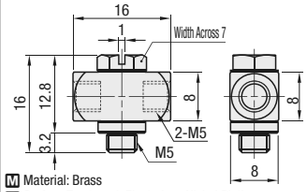
M Material: Brass
S Surface Treatment: Electroless Nickel Plating

■Universal Tees



RoHS

MUTEN



M Material: Brass
S Surface Treatment: Electroless Nickel Plating
A Accessory: Gasket: Polyacetal

Part Number	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 49 pc(s).	Volume Discount Rate 50~100
MNPLN	3.9	1.5		
MPLGN	-	1.5		
MBSGN	12	5.7		
MELBN	-	5.5		
MTEN	-	5.5		
MUTEN	1.5	6.5		

Ordering Example

Part Number
SRTG4N BOX-SRTG4N

Specifications (SRTG)

Applicable Fluid	Air
Max. Operating Pressure	0.5MPa
Operating Vacuum Level	-100kPa
Operating Temperature Range	0~50°C

(SRTN, MNPLN, MELBN, MPLGN MTEN, MBSGN, MUTEN)

Applicable Fluid	Air
Max. Operating Pressure	1MPa
Operating Vacuum Level	-100kPa
Operating Temperature Range	0~50°C

Couplings for Tubes

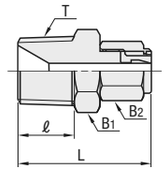
Nut and Sleeve Integrated Type

■Straight



RoHS

MCPTK



Material: EN 1.4401 Equiv.

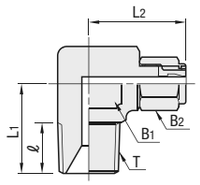
Part Number Type	Applicable Tube O.D. (mm)	T Selection	T R(PT)	Applicable Tube I.D. (mm)	L	ℓ	B1 (Wrench Flats)	B2 (Wrench Flats)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
MCPTK	3.2	1	1 / 8	1.6	24	9	10	10		
	4	1	1 / 8	2	24	9	10	10		
		2	1 / 4		26	11	14			
	6	1	1 / 8	4	26	9	12	12		
		2	1 / 4		28.5	11	14			
		3	3 / 8		30	12	17			
	8	1	1 / 8	6	28	9	14	14		
		2	1 / 4		30	11	14			
		3	3 / 8		31	12	17			
	10	2	1 / 4	8	32	11	17	17		
		3	3 / 8		33	12	17			
		4	1 / 2		36	15	22			
	12	2	1 / 4	10	34	11	17	19		
		3	3 / 8		35	12	17			
		4	1 / 2		38	15	22			

■Elbows



RoHS

MCLPTK



Material: EN 1.4401 Equiv.

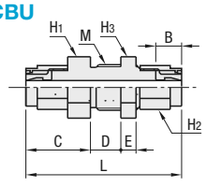
Part Number Type	Applicable Tube O.D. (mm)	T Selection	T R(PT)	Applicable Tube I.D. (mm)	L1	L2	ℓ	B1 (Wrench Flats)	B2 (Wrench Flats)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
MCLPTK	3.2	1	1 / 8	1.6	18	20	9	12	10		
	4	1	1 / 8	2	18	20	9	12	10		
		2	1 / 4		21	21	11	14			
	6	1	1 / 8	4	18	21.5	9	12	12		
		2	1 / 4		21	22.5	11	14			
		3	3 / 8		23	23.5	12	17			
	8	1	1 / 8	6	19	24	9	14	14		
		2	1 / 4		21	24	11	14			
		3	3 / 8		23	25	12	17			
	10	2	1 / 4	8	22	26.5	11	17	17		
		3	3 / 8		23	26.5	12	17			
		4	1 / 2		29	28.5	15	22			
	12	2	1 / 4	10	23	27.5	11	17	19		
		3	3 / 8		27	30	12	22			
		4	1 / 2		30	30	15	22			

■Panel Mount



RoHS

MCBU



Material: EN 1.4401 Equiv.

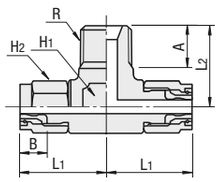
Part Number Type	No.	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L	B	Wrench Flats H1	Wrench Flats H2	Wrench Flats H3	C	D	E	M	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
MCBU	4	4	2.5	41	6	14	10	14	17	8	4	M12x1.0		
	6	6	4	44	7	17	12	17	18.5	8	4	M14x1.0		
	8	8	6	47	7.5	19	14	19	20	8	4	M16x1.0		
	10	10	8	50	8	22	17	22	21.5	8	4	M18x1.0		
	12	12	10	54	9.5	24	19	24	23	8	5	M20x1.0		

■Tees



RoHS

MCTPT



Material: EN 1.4401 Equiv.

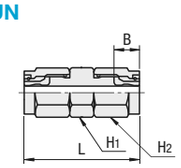
Part Number Type	No.	Thread Size R (PT)	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L1	L2	A	B	Wrench Flats H1	Wrench Flats H2	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
MCTPT	4-1	1 / 8	4	2.5	20	18	9	6	12	10		
	4-2	1 / 4			21	21	11	6	14	10		
	6-1	1 / 8	6	4	21.5	18	9	7	12	12		
	6-2	1 / 4			22.5	21	11	7	14	12		
	8-15	1 / 8	8	5	23.5	19	9	7.5	14	14		
	8-1	1 / 8		6	23.5	19	9	7.5	14	14		
	8-2	1 / 4		6	23.5	21	11	7.5	14	14		
	8-3	3 / 8		5	25	23	12	7.5	17	14		
	8-36	3 / 8		6	25	23	12	7.5	17	14		
	10-2	1 / 4	10	8	28.5	25	11	8	22	17		
	10-36	3 / 8		6.5	28.5	26	12	8	22	17		
	10-3	3 / 8		8	28.5	26	12	8	22	17		
	12-28	1 / 4	12	8	30	26	11	9.5	22	19		
	12-2	1 / 4		10	30	26	11	9.5	22	19		
	12-3	3 / 8		10	30	27	12	9.5	22	19		

■Unions



RoHS

MCUN



Material: EN 1.4401 Equiv.

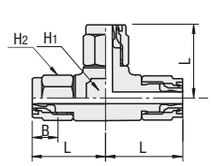
Part Number Type	No.	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L	B	Wrench Flats H1	Wrench Flats H2	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
MCUN	4	4	2.5	28	6	10	10		
	6	6	4	32	7	12	12		
	8	8	6	36	7.5	14	14		
	10-6	10	6.5	40	8	17	17		
	10	10	8	40	8	17	17		
	12-8	12	8	44	9.5	17	19		
	12-9	12	9	44	9.5	17	19		
	12	12	10	44	9.5	17	19		

■Union Tees



RoHS

MCUT



Material: EN 1.4401 Equiv.

Part Number Type	No.	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L	B	Wrench Flats H1	Wrench Flats H2	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
MCUT	4	4	2.5	20	6	12	10		
	6	6	4	21.5	7	12	12		
	8-5	8	5	23.5	7.5	14	14		
	8	8	6	23.5	7.5	14	14		
	10	10	8	28.5	8	22	17		
	12-8	12	8	30	9.5	22	19		
	12-9	12	9	30	9.5	22	19		
	12	12	10	30	9.5	22	19		

Ordering Example: Part Number - T

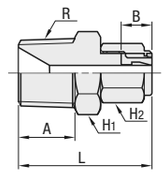
MCPTK4 - 1

■Half Unions



RoHS

MCTPTY



Material: EN 1.4401 Equiv.

Part Number Type	No.	Thread Size R (PT)	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L	A	B	Wrench Flats H1	Wrench Flats H2	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
MCTPTY	4-1	1 / 8	4	2.5	24	9	6	10	10		
	4-2	1 / 4			26	11	6	14	10		
	8-1	1 / 8	8	5	28	9	7.5	14	14		
	8-2	1 / 4			30	11	7.5	14	14		
	8-3	3 / 8			31	12	7.5	17	14		
	10-2	1 / 4	10	6.5	32	11	8	17	17		
	10-3	3 / 8			33	12	8	17	17		
	10-4	1 / 2			36	15	8	22	17		
	12-2	1 / 4	12	8	34	11	9.5	17	19		
	12-3	3 / 8			35	12	9.5	17	19		
	12-4	1 / 2			38	15	9.5	22	19		

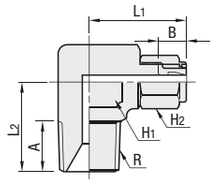
The difference between MCPTK and MCTPTY is the tube I.D.
Select parts according to the tube to be used.

■Half Elbows



RoHS

MCUNE



Material: EN 1.4401 Equiv.

Part Number Type	No.	Thread Size R (PT)	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L1	L2	A	B	Wrench Flats H1	Wrench Flats H2	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
MCUNE	4-1	1 / 8	4	2.5	20	18	9	6	12	10		
	4-2	1 / 4			21	21	11	6	14	10		
	8-1	1 / 8	8	5	24	19	9	7.5	14	14		
	8-2	1 / 4			24	21	11	7.5	14	14		
	8-3	3 / 8			25	23	12	7.5	17	14		
	10-2	1 / 4	10	6.5	26.5	22	11	8	17	17		
	10-3	3 / 8			26.5	23	12	8	17	17		
	10-4	1 / 2			28.5	29	15	8	22	17		
	12-2	1 / 4	12	8	27.5	23	11	9.5	17	19		
	12-3	3 / 8			30	27	12	9.5	22	19		
	12-4	1 / 2			30	30	15	9.5	22	19		

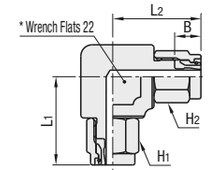
The difference between MCLPTK and MCUNE is the tube I.D.
Select parts according to the tube to be used.

■Union Elbows



RoHS

MCUE



* Wrench flats of No. 6 is 17. Material: EN 1.4401 Equiv.

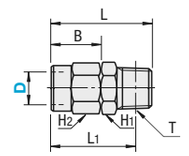
Part Number Type	No.	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L1	L2	B	Wrench Flats H1	Wrench Flats H2	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~10
MCUE	6	6	4	23.5	23.5	7	12	12		
	8	8	6	27	27	7.5	14	14		
	10	10	8	28.5	28.5	8	17	17		
	12	12	10	30	30	9.5	19	19		

■Nipples



RoHS

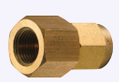
TJBNC



Material: Brass

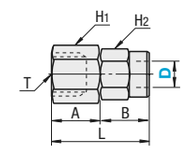
Part Number Type	D (Hose O.D.)	Nominal	Tube I.D. (mm)	L	L1	B	H1	H2	T R(PT)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
TJBNC	6	1	4	26	22	12.5	12	12	R1 / 8	18		
		2		28.5	22.5		14	12	R1 / 4	26		
	8	1	5	28	24	14	14	14	R1 / 8	25		
		2		30	24		14	14	R1 / 4	30		
		3		31	24.6		17	14	R3 / 8	41		
	10	2	6.5	32	26	15.5	17	17	R1 / 4	43		
		3		33	26.6		17	17	R3 / 8	50		
	12	2	8	34	28	17	17	19	R1 / 4	49		
		3		35	28.6		17	19	R3 / 8	57		

■Sockets



RoHS

TJBSC



Material: Brass

Part Number Type	D (Hose O.D.)	Nominal	Tube I.D. (mm)	L	A	B	H1	H2	T Rc(PT), G(PF)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
TJBSC	6	1	4	23.5	11	12.5	14	12	Rc1 / 8	20		
		2		26.5	14		17	12	Rc1 / 4	31		
	8	2	5	28	14	14	17	14	Rc1 / 4	33		
		2F		28	14		17	14	G1 / 4	33		
		3		30	16		22	14	Rc3 / 8	51		
	10	2F	6.5	29.5	14	15.5	17	17	G1 / 4	42		
		3		31.5	16		22	17	Rc3 / 8	59		
	12	2	8	31	14	17	19	19	Rc1 / 4	55		
		2F		31	14		19	19	G1 / 4	55		
		3		33	16		22	19	Rc3 / 8	66		

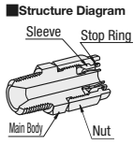
Ordering Example: Part Number

MCUE6

Specifications

Material	EN 1.4401 Equiv.	Brass
Applicable Fluid	Air, Water	
Operating Temperature Range	-65 ~ 260°C (Air) 0 ~ 100°C (Water)	-40~80°C
Max. Operating Pressure	It applies to Maximum Operating Pressure of tubes.	
Operating Vacuum Level	-100kPa	

■Structure Diagram



■Features

With nut and sleeve in one piece, coupling does not twist the tube being connected.

Couplings with Tube Insert

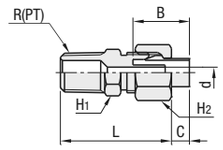
Nut and Sleeve Integrated Type

■Connectors

TCRH



RoHS



Material: Brass

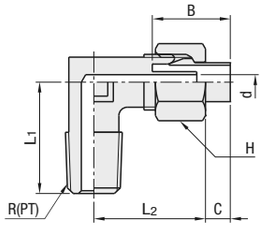
Part Number Type	Applicable Tube O.D. (mm)	Nominal	R(PT)	Applicable Tube I.D. (mm)	L	B	C	d	H1 Wrench Flats	H2 Wrench Flats	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
TCRH	4	1	1 / 8	2.5	28	13.5	3.5	1.3	10	10	13		
		2	1 / 4		28.5	13.5	3.5	1.3	14	10	18		
	6	1	1 / 8	4	27.5	14	4.5	2.7	10	12	14		
		2	1 / 4		28	14	4.5	2.7	14	12	21		
	8	1	1 / 8	6	28	16	5.5	4.7	12	14	17		
		2	1 / 4		28	16	5.5	4.7	14	14	23		
		3	3 / 8		29.5	16	5.5	4.7	17	14	31		
	10	2	1 / 4	7.5	30.5	19	5.5	6	17	17	30		
		3	3 / 8		31.5	19	5.5	6	17	17	36		
		4	1 / 2		34.5	19	5.5	6	22	17	54		

■Elbows

TCRL



RoHS



Material: Brass

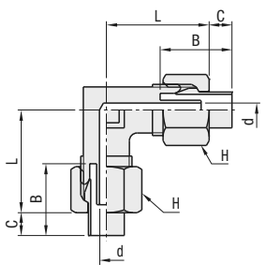
Part Number Type	Applicable Tube O.D. (mm)	Nominal	R(PT)	Applicable Tube I.D. (mm)	L1	L2	B	C	d	H Wrench Flats	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
TCRL	4	1	1 / 8	2.5	20	22	13.5	3.5	1.3	10	20		
		2	1 / 4		21	23	13.5	3.5	1.3	10	29		
	6	1	1 / 8	4	20	20	14	4.5	2.7	12	21		
		2	1 / 4		21	22.5	14	4.5	2.7	12	31		
	8	1	1 / 8	6	21	21	16	5.5	4.7	14	26		
		2	1 / 4		21	21	16	5.5	4.7	14	30		
		3	3 / 8		24	24.5	16	5.5	4.7	14	51		
	10	2	1 / 4	7.5	23	25	19	5.5	6	17	45		
		3	3 / 8		24	25	19	5.5	6	17	53		
		4	1 / 2		29	28.5	19	5.5	6	17	88		

■Union Elbows

TCRF



RoHS



Material: Brass

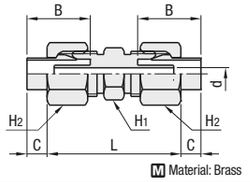
Part Number Type	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L	B	C	d	H Wrench Flats	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
TCRF	4	2.5	22	13.5	3.5	1.3	10	22		
	6	4	20	14	4.5	2.7	12	24		
	8	6	21	16	5.5	4.7	14	31		
	10	7.5	25	19	5.5	6	17	54		

■Union Connectors

TCRS



RoHS



Material: Brass

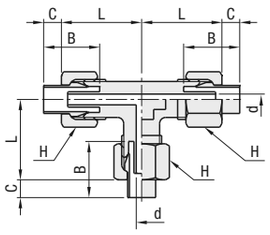
Part Number Type	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L	B	C	d	H1 Wrench Flats	H2 Wrench Flats	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
TCRS	4	2.5	30.5	13.5	3.5	1.3	8	10	14		
	6	4	29.5	14	4.5	2.7	10	12	19		
	8	6	30	16	5.5	4.7	12	14	24		
	10	7.5	34	19	5.5	6	17	17	40		

■Union Tees

TCRT



RoHS



Material: Brass

Part Number Type	Applicable Tube O.D. (mm)	Applicable Tube I.D. (mm)	L	B	C	d	H Wrench Flats	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
TCRT	4	2.5	22	13.5	3.5	1.3	10	30		
	6	4	20	14	4.5	2.7	12	33		
	8	6	21	16	5.5	4.7	14	44		
	10	7.5	25	19	5.5	6	17	74		

Ordering Example: Part Number TCRH4 - Nominal 1

Specifications

Applicable Fluid	Air, Water, Oil
Operating Temperature Range*	Air : -20 ~ 60°C Water: 0 ~ 60°C Oil: -20 ~ 60°C
Max. Operating Pressure	It applies to Maximum Operating Pressure of tubes.
Operating Vacuum Level	-100kPa

* No Freezing

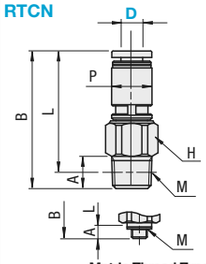
Rotary Joints / High Rotary Joints

■Rotary Joints Connectors

RTCN



RoHS



Metric Thread Type

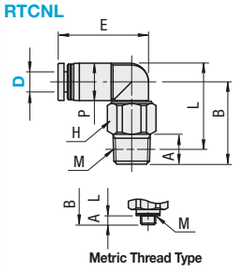
Part Number Type	D	Nominal	Thread Size M	A	B	L	P	Width Across H	Allowable Revolutions (min⁻¹)	Rotary torque (N · cm)	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
RTCN	4	M5	M5	3	32.6	29.6	10	12	500	0.6	1.9	13		
		1	R1 / 8	8	34.1	30.1					3.6	14		
	6	M5	M5	3	36.2	33.2	12.5	14	500	1.2	-	19		
		1	R1 / 8	8	36.9	32.9					9	18		
		2	R1 / 4	11	38.9	32.8						23		
	8	1	R1 / 8	8	45.3	41.3	14.5	17	400	1.5	20	34		
		2	R1 / 4	11	44.3	38.3						32		
		3	R3 / 8	12		38						39		
	10	2	R1 / 4	11	58.8	52.8	17.8	22	300	2.0	35	74		
		3	R3 / 8	12	56.8	50.5						70		

■Rotary Joints Elbows

RTCNL



RoHS



Metric Thread Type

Part Number Type	D	Nominal	Thread Size M	A	B	L	P	E	Width Across H	Allowable Revolutions (min⁻¹)	Rotary torque (N · cm)	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
RTCNL	4	M5	M5	3	20.5	22.5	10	19.7	12	500	0.6	1.5	13		
		1	R1 / 8	8	22	23						2.9	15		
	6	M5	M5	3	23.3	26.5	12.5	22.8	14	500	1.2	-	20		
		1	R1 / 8	8	24	26.2						7.5	19		
		2	R1 / 4	11	26								24		
	8	1	R1 / 8	8	31.5	34.7	14.5	25.7	17	400	1.5	16.5	35		
		2	R1 / 4	11	30.5	31.7							33		
		3	R3 / 8	12	30.5	31.4							41		
	10	2	R1 / 4	11	38.3	41	17.5	29.5	22	300	2.0	21	67		
		3	R3 / 8	12	36.3	38.7						30	63		

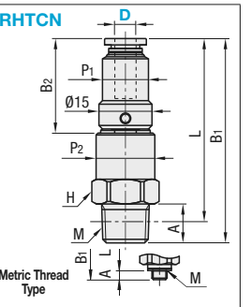
Turning torque is the torque necessary for the joint to turn when it is free of compressed air pressure.

■High Rotary Joints Straight

RHTCN



RoHS



Metric Thread Type

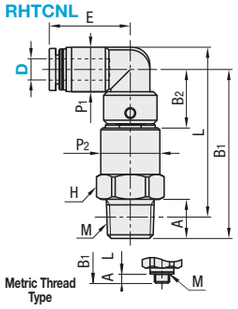
Part Number Type	D	Nominal	Thread Size M	A	B1	B2	L	P1	P2	Width Across H	Allowable Revolutions (min⁻¹)	Rotary torque (N · cm)	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
RHTCN	4	M5	M5	3	43.2	22.7	40.2	11	11.6	12	1500	1.5	2.2	24		
		1	R1 / 8	8	47.7		43.7						3.4	28		
	6	1	R1 / 8	8	54.8	26.8	50.8	13	16.6	17	1200	1.5	12	51		
		2	R1 / 4	11	57.8		51.7						11.5	56		
	8	1	R1 / 8	8	58.1	30.1	54.1	15	16.6	17	1200	1.5	12	57		
		2	R1 / 4	11	61.1		55.1						12.5	63		

■High Rotary Joints Elbows

RHTCNL



RoHS



Metric Thread Type

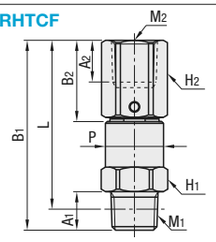
Part Number Type	D	Nominal	Thread Size M	A	B1	B2	E	L	P1	P2	Width Across H	Allowable Revolutions (min⁻¹)	Rotary torque (N · cm)	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
RHTCNL	4	M5	M5	3	33.7	13.2	19.7	35.7	10	11.6	12	1500	1.5	2.2	21		
		1	R1 / 8	8	38.2		19.7	39.2						4.1	26		
	6	1	R1 / 8	8	44.5	16.5	22.8	46.7	12.5	16.6	17	1200	1.5	10	47		
		2	R1 / 4	11	47.5		22.8	47.7						10.5	53		
	8	1	R1 / 8	8	45.5	17.5	25.7	48.7	14.5	16.6	17	1200	1.5	11.5	50		
		2	R1 / 4	11	48.5		25.7	49.7						13	56		

■High Rotary Joints Bushing

RHTCF



RoHS



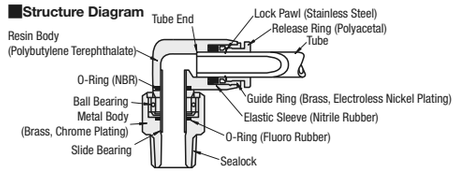
Part Number Type	No.	M1	M2	A1	A2	B1	B2	L	P	Width Across H1	Width Across H2	Allowable Revolutions (min⁻¹)	Rotary torque (N · cm)	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
RHTCF	11	R1 / 8	Rc1 / 8	8	9.5	47.2	19.2	43.2	16.6	17	14	1200	1.5	13.9	50		
	22	R1 / 4	Rc1 / 4	11	13.5	54.2	23.2	48.2	16.6	17	17	1200	1.5	11.2	68		
	33	R3 / 8	Rc3 / 8	12	14.5	62.1	26.6	55.8	23.6	24	22	900	2.5	47.2	133		

Ordering Example: Part Number RTCN4 - Nominal M5; RHTCN6 - 2

■Features

- Use as handy couplings for connecting tubes to swivel and rotary parts of general pneumatic equipment.
- With ball bearings used at the rotary part, rotary joints offer suitable use for tube connecting to swivel and rotary equipment parts.

■Structure Diagram



■Specifications

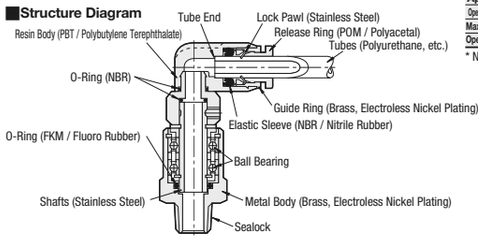
Applicable Fluid	Air
Operating Temperature Range*	0~60°C
Max. Operating Pressure	1MPa
Operating Vacuum Level	-100kPa

* No Freezing

■Features

- Use as handy couplings for connecting tubes to swivel and fast rotary parts of general pneumatic equipment.
- With two ball bearings used at the rotary part, rotary joints offer suitable use for tube connecting to fast-moving swivel and rotary equipment parts.

■Structure Diagram



■Specifications

Applicable Fluid	Air
Operating Temperature Range*	0~60°C
Max. Operating Pressure	1MPa
Operating Vacuum Level	-100kPa

* No Freezing

All Stainless Steel One-Touch Couplings

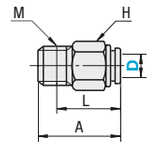
Plugging / Unplugging of tubes becomes much easier than ever.

■Male Connectors — MLCNLSS



RoHS

Ⓜ Material: EN 1.4401 Equiv. (Gasket: Fluoro Rubber)



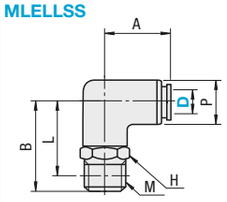
Part Number Type	D	Nominal	A	Wrench Flats H	L	Thread Size M	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
MLCNLSS	4	M5	21.5	10	18.5	M5x0.8	26.8		
		1	21	10	17	R1 / 8	27.6		
		2	19.5	14	14	R1 / 4	33.9		
	6	M5	23.5	12	21.5	M5x0.8	26.7		
		1	23	12	19	R1 / 8	27.5		
		2	23.5	14	17	R1 / 4	35.0		
		3	21	17	15	R3 / 8	45.0		
	8	1	27.5	14	23.5	R1 / 8	38.0		
		2	26.5	14	21	R1 / 4	41.7		
		3	22	17	16	R3 / 8	53.5		
	10	2	32.5	17	24	R1 / 4	60.1		
		3	28.5	17	22.5	R3 / 8	68.6		
		4	26.5	22	19	R1 / 2	91.4		
	12	3	30.5	19	24.5	R3 / 8	116.2		
		4	29.5	22	22.5	R1 / 2	131.8		

■Male Elbows — MLELLSS



RoHS

Ⓜ Material: EN 1.4401 Equiv. (Gasket: Fluoro Rubber)



Part Number Type	D	Nominal	A	B	P	Wrench Flats H	L	Thread Size M	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
MLELLSS	4	M5	18	22.5	12	12	20.5	M5x0.8	6.5		
		1		24.5		12	20.5	R1 / 8	8.9		
		2		27.5		14	22	R1 / 4	14.8		
	6	M5	20.5	23.5		12	21.5	M5x0.8	9.8		
		1		25.5		12	21.5	R1 / 8	10.9		
		2		28.5		14	23	R1 / 4	16.0		
		3		29.5		17	23.5	R3 / 8	23.9		
	8	1	23.5	26.5	14	14	22.5	R1 / 8	17.6		
		2		29.5		14	24	R1 / 4	18.4		
		3		31.5		17	25.5	R3 / 8	23.1		
	10	2	27	31.5	17	17	26	R1 / 4	23.6		
		3		33		17	27	R3 / 8	28.4		
		4		36		22	28.5	R1 / 2	44.8		
	12	3	29	34.5	22	22	28.5	R3 / 8	30.3		
		4		37.5		22	30	R1 / 2	46.4		

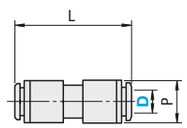
Ordering Example: Part Number - Nominal — MLELLSS4 - 2

■Union Straight — UNSTLS



RoHS

Ⓜ Material: EN 1.4401 Equiv. (Gasket: Fluoro-rubber)



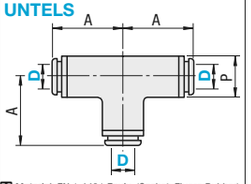
Part Number Type	D	L	P	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
UNSTLS	4	34	10	11.5		
	6	37	12	15.8		
	8	40	14	21.3		
	10	45	17	34.3		
	12	48	20	47.0		

■Union Tees — UNTELS



RoHS

Ⓜ Material: EN 1.4401 Equiv. (Gasket: Fluoro Rubber)



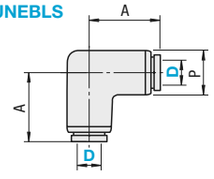
Part Number Type	D	A	P	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
UNTELS	4	19	12	29.8		
	6	21.5	12	29.7		
	8	24	14	42.3		
	10	27.5	17	66.4		
	12	30	22	124.6		

■Union Elbows — UNEBLS



RoHS

Ⓜ Material: EN 1.4401 Equiv. (Gasket: Fluoro Rubber)



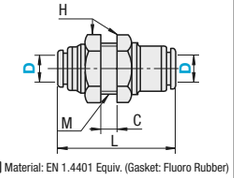
Part Number Type	D	A	P	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
UNEBLS	4	19	12	23.2		
	6	21.5	12	23.1		
	8	24	14	32.5		
	10	27.5	17	57.1		
	12	30	22	107.0		

■Bulkhead Unions — MLBULSS



RoHS

Ⓜ Material: EN 1.4401 Equiv. (Gasket: Fluoro Rubber)



Part Number Type	D	L	Wrench Flats H	Thread Size M	C (max)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
MLBULSS	4	33.5	14	M12x1.0	4	18.8		
	6	36.5	17	M14x1.0	6	29.3		
	8	40.5	19	M16x1.0	9	38.0		
	10	45.5	23	M20x1.0	11.5	63.5		
	12	48.5	26	M22x1.0	11.5	79.3		

Ordering Example: Part Number — UNSTLS8

Specifications

Applicable Fluid	Air, Water
Max. Operating Pressure	1.0MPa
Operating Vacuum Level	-100kPa
Operating Temperature	-15~120°C (No Freezing)

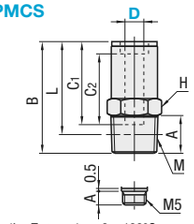
*When using with water, keep the surge pressure to below max. pressure rating. For water, inserts for Soft Tubes (**P.1390** PUIT / PUSIT) must be used.

Heat-Resistant One-Touch Fittings

■Heat-Resistant One-Touch Fittings Straight — KPMCS



RoHS



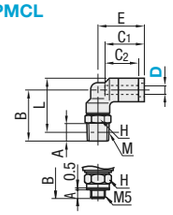
Operating Temperature: 0 ~ 100°C

Ⓜ Material: Gasket: Hydrogenated Nitrile Rubber

■Heat-Resistant One-Touch Fittings Elbows — KPMCL



RoHS



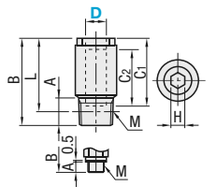
Operating Temperature: 0 ~ 100°C

Ⓜ Material: Gasket: Hydrogenated Nitrile Rubber

■Heat-Resistant One-Touch Fittings Hex Socket Straight — KPMCC



RoHS



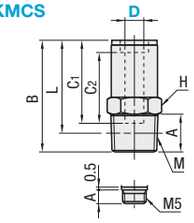
Operating Temperature: 0 ~ 100°C

Ⓜ Material: Gasket: Hydrogenated Nitrile Rubber

■High Heat-Resistant One-Touch Fittings Straight — KKMCS



RoHS



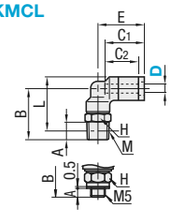
Operating Temperature: 0 ~ 120°C

Ⓜ Material: Gasket: Fluoro Rubber

■High Heat-Resistant One-Touch Fittings Elbows — KKMCL



RoHS



Operating Temperature: 0 ~ 120°C

Ⓜ Material: Gasket: Fluoro Rubber

Part Number Type	D	Nominal	Thread Size M	B	C1	C2	A	L	Width Across H	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
KPMCS	4	M5	M5x0.8	22.7	17.6	15	3	19.7	10	2	12		
		1	R1 / 8	23.7			8	19.7		4.5	13		
		2	R1 / 4	26.7			11	20.7	14		22		
	6	M5	M5x0.8	25.5	19.5	16	3	22.5	12	2	17		
		1	R1 / 8	25.1			8	21.1		11	14		
		2	R1 / 4	29.1			11	23.0	14		23		
		3	R3 / 8				12	22.7	17		34		
	8	1	R1 / 8	29.9	20.2	17	8	25.9	14	20	27		
		2	R1 / 4	28.6			11	22.6			25		
		3	R3 / 8	28.9			12	22.6	17		32		
	10	1	R1 / 8	33.3	23.2	19.5	8	29.3	17	23	40		
		2	R1 / 4				11	27.3		35	39		
		3	R3 / 8	31.8			12	25.5			46		
		4	R1 / 2	35.8			15	27.6	22		67		
	12	2	R1 / 4	38.9	26.3	23	11	32.9	21	47	61		
		3	R3 / 8	34.9			12	28.6		50	62		
		4	R1 / 2	36.9			15	28.7	22		74		

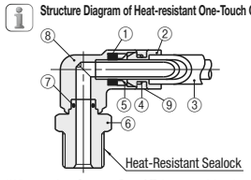
Part Number Type	D	Nominal	Thread Size M	A	B	L	C1	C2	E	Width Across H	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
KPMCL	4	M5	M5x0.8	3	19.8	22	17.6	15	20.7	10	1.5	18		
		1	R1 / 8	8	22.8	24.1					3.5	21		
		2	R1 / 4	11	25.8	25				14		31		
	6	M5	M5x0.8	3	22	25.3	19.4	16	23	12	1.9	26		
		1	R1 / 8	8	25	27.3					9	28		
		2	R1 / 4	11	28	28.2				14		36		
		3	R3 / 8	12	29.8	29.7				17		49		
	8	1	R1 / 8	8	28	31.3	20.2	17	24.8	14	16	36		
		2	R1 / 4	11	31	32.2						41		
		3	R3 / 8	12	32.8	33.7				17		55		
	10	1	R1 / 8	8	32.5	37.8	23.2	19.5	29.3	17	22.5	67		
		2	R1 / 4	11	35.5	38.8					30	69		
		3	R3 / 8	12	38.5	39.5						78		
		4	R1 / 2	15	39.5	40.6				22		104		
	12	2	R1 / 4	11	37.5	42.3	26.3	23	33.4	21	38	107		
		3	R3 / 8	12	38.5	43					39	113		
		4	R1 / 2	15	41.5	44.1				22		129		

Part Number Type	D	Nominal	Thread Size M	B	C1	C2	A	L	Width Across H	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
KPMCC	4	M5	M5x0.8	22.6	17.6	15	3	19.6	2	2	11		
		1	R1 / 8	23.7			8	19.7	2.5	5.2	12		
		2	R1 / 4	24.7			11	18.7	2.5		19		
	6	M5	M5x0.8	25.5	19.5	16	3	22.5	2	2	15		
		1	R1 / 8	25.1			8	21.1	4	11	13		
		2	R1 / 4				11	19	4		18		
		3	R3 / 8	26.1			12	19.7	4		27		
	8	1	R1 / 8	29.9	20.2	17	8	25.9	5	17	20		
		2	R1 / 4	28.6			11	22.6	6	23	20		
		3	R3 / 8	25.9			12	19.6			26		
	10	1	R1 / 8	33.3	23.2	19.5	8	29.3	5	17	35		
		2	R1 / 4	32.3			11	26.3	6	20	33		
		3	R3 / 8	31.8			12	25.4			38		
		4	R1 / 2	32.8			15	24.6			56		
	12	2	R1 / 4	38.9	26.3	23	11	32.9	8	40	56		
		3	R3 / 8	34.9			12	28.6			49		
		4	R1 / 2	36.9			15	28.7			64		

Part Number Type	D	Nominal	Thread Size M	B	C1	C2	A	L	Width Across H	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
KKMCS	4	M5	M5x0.8	22.7	17.6	15	2.9	19.7	10	2	12		
		1	R1 / 8	23.7			8	19.7		4.5	13		
	6	M5	M5x0.8	25.5	19.5	16	2.9	22.5	12	2	17		
		1	R1 / 8	25.1			8	21.1		11	14		
		2	R1 / 4	29.1			11	23.0	14		23		
	8	1	R1 / 8	29.9	20.2	17	8	25.9	14	20	27		
		2	R1 / 4	28.6			11	22.6			25		
	10	1	R1 / 8	33.3	23.2	19.5	8	29.3	17	23	40		
		2	R1 / 4				11	27.3		35	39		
		3	R3 / 8	31.8			12	25.5			46		
	12	3	R3 / 8	34.9	26.3	23	12	28.6	21	50	62		
		4	R1 / 2	36.9			15	28.6	22		74		

Part Number Type	D	Nominal	Thread Size M	A	B	L	C1	C2	E	Width Across H	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
KKMCL	4	M5	M5x0.8	3	19.8	22	17.6	15	20.7	10	1.5	18		
		1	R1 / 8	8	22.8	24.1					3.5	21		
	6	M5	M5x0.8	3	22	25.3	19.4	16	23	12	1.9	26		
		1	R1 / 8	8	25	27.3					9	28		
		2	R1 / 4	11	28	28.2				14		36		
	8	1	R1 / 8	8	28	31.3	20.2	17	24.8	14	16	36		
		2	R1 / 4	11	31	32.2						41		
	10	1	R1 / 8	8	32.5	37.8	23.2	19.5	29.3	17	22.5	67		
		2	R1 / 4	11	35.5	38.8					30	69		
		3	R3 / 8	12	38.5	39.5						78		
	12	3	R3 / 8	12	38.5	43	26.3	23	33.4	21	39	113		
		4	R1 / 2	15	41.5	44.1				22		129		

Structure Diagram of Heat-resistant One-Touch Couplings



*When using Sputter Proof Tubes, peel back outer insulation to C2 dimension. Non-insulated tubes can be also used.

Ordering Example: Part Number - Nominal — KPMCS6 - 1

No.	Name of Parts	Ⓜ Material
①	Elastic Sleeve	HNBR, FKM
②	Release Ring	Brass - Electroless Nickel Plating
③	Tubes	Sputtering Resistant Tubes
④	Guide Ring	Brass - Electroless Nickel Plating
⑤	Lock Pawl	Stainless Steel
⑥	Thread Body	Brass - Electroless Nickel Plating
⑦	O-Rings	H-NBR, FKM
⑧	Metal Body	Brass - Electroless Nickel Plating
⑨	Cover	Brass - Electroless Nickel Plating

Specifications

Type	Heat Resistant	Super Heat Resistant
Applicable Fluid	Air, Water	
Operating Temperature Range*	0~100°C	0~120°C
Max. Operating Pressure	1.0MPa	
Operating Vacuum Level	-100kPa	

* No Freezing

*When using with water, keep the surge pressure to below max. pressure rating. For water, inserts for Soft Tubes (**P.1390** PUIT / PUSIT) must be used.

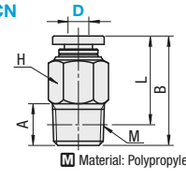
One-Touch Couplings for Clean Applications

■Connectors



RoHS

PPCN



M Material: Polypropylene

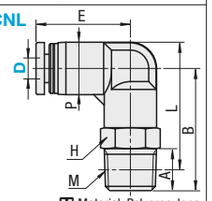
Part Number Type	D	Nominal	A	B	L	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPCN	4	1	8	21.1	17.1	12	R1 / 8	3.4	2.5		
	6	1	8	22.8	18.8	14	R1 / 8	9.1	3		
		2	11	24.8			R1 / 4		3.5		
	8	1	8	27.9	23.9	17	R1 / 8	22.1	4.5		
		2	11	26.6	20.6		R1 / 4				
		3	12	27.5	21.2		R3 / 8		6		
	10	2	11	32.6	26.6	19	R1 / 4	30.5	7		
		3	12	33.6	27.3		R3 / 8		8		
	12	3	12	37.6	31.3	22	R3 / 8	40.7	12		

■Elbows



RoHS

PPCNL



M Material: Polypropylene

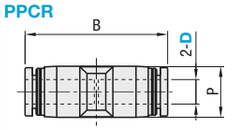
Part Number Type	D	Nominal	A	B	L	P	E	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPCNL	4	1	8	23.3	24.3	10	18.1	10	R1 / 8	3.4	4		
	6	1	8	25	27.3	12.5	19.9	12	R1 / 8	8.7	5		
		2	11	28	28.2			14	R1 / 4		5.5		
	8	1	8	28	31.3	14.5	22.7	14	R1 / 8	17.2	7		
		2	11	31	32.2				R1 / 4		7.5		
		3	12	32.8	33.7			17	R3 / 8		8.5		
	10	2	11	36	38.7	17.5	26.4	17	R1 / 4	25.9	12		
		3	12	37	39.4				R3 / 8		13		
	12	3	12	39	43.2	21	29.6	22	R3 / 8	37.6	18		

■Union Straight



RoHS

PPCR



M Material: Polypropylene

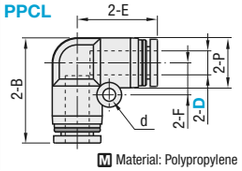
Part Number Type	D	B	P	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPCR	4	31	10	4	5.3		
	6	35.2	12.5	5.5	12.5		
	8	37.8	14.5	8	20		
	10	43.8	17.5	13	35		
	12	48.2	21	19	59		

■Union Elbows



RoHS

PPCL



M Material: Polypropylene

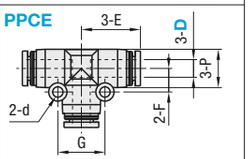
Part Number Type	D	B	P	E	d	F	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPCL	4	22	10	17	3.2	6.5	4.5	4.2		
	6	26.5	12.5	20.2	3.2	8	6	10		
	8	30	15	22.4	4.2	10	9	16.5		
	10	35.2	17.5	26.4	4.2	12	14	30		
	12	40.1	21	29.6	4.2	14	20	47		

■Union Tees



RoHS

PPCE



M Material: Polypropylene

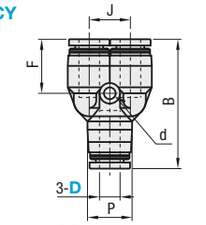
Part Number Type	D	P	E	d	F	G	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPCE	4	10	17	3.2	6.5	13	6.5	5.3		
	6	13	20.2	3.5	8	16	9	12.5		
	8	15	22.2	3.5	9	18	13	20		
	10	17.5	25.4	4.2	12	24	21	35		
	12	21	28.6	4.2	14	28	30	59		

■Union Y



RoHS

PPCY



M Material: Polypropylene

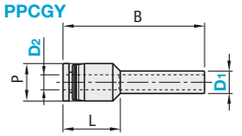
Part Number Type	D	B	P	J	d	F	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPCY	4	33	10	11	3.4	14.2	6.5	4.2		
	6	38	13	12	3.4	15.9	9	10		
	8	42.4	15	14	3.4	17.2	13	16.5		
	10	48.8	18	18	4.5	19.7	22	27		
	12	55.2	21.5	20	4.2	22.4	31	38		

■Reducers



RoHS

PPCGY



M Material: Polypropylene

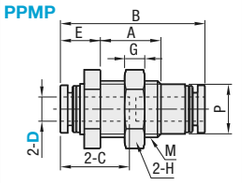
Part Number Type	D1	D2	B	L	P	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPCGY	6	4	37.8	15.3	10	3.5	5.3		
	8	4	40.3	16.8	12.5	4	5.3		
		6	40.9	17.4		4.5	9		
	10	6	43.9	18.9	12.5	5.5	9		
		8	43.7	18.7	14.5	6.5	20		
	12	8	49.7	20.7	14.5	8.5	20		
		10	50.2	21.2	17.5	10	35		

■Panel Mount



RoHS

PPMP



M Material: Body: Polypropylene
Metal Part: EN 1.4301 Equiv.

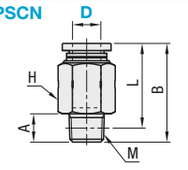
Part Number Type	D	B	E	A	P	C	H	G	Thread Size M	Mass (g)	Effective Sectional Area (mm²)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPMP	4	31.6	9.3	12	10	15	14	5	M12x1.5	7.2	4.2		
	6	35.8	9.9	15	12.3	17.1	17	5	M14x1.5	10.2	10.7		
	8	38.4	10.7	15.5	14.2	18.4	19	6	M16x1.5	14.3	19.1		
	10	43.4	13.2	18.5	17.5	20.9	24	6	M20x1.5	24.4	39.6		
	12	38.8	13.4	20.5	21	23.6	27	6	M24x1.5	30.4	47.6		

■Straight



RoHS

PPSCN



M Material: Body: Polypropylene
Thread: EN 1.4301 Equiv.

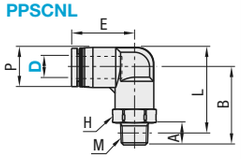
Part Number Type	D	Nominal	A	B	L	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPSCN	4	1	8	21.1	17.1	10	R1 / 8	5.3	8		
	6	1	8	22.7	18.7	12	R1 / 8	12.5	8.5		
		2	11	24.7		14	R1 / 4		16		
	8	1	8	27.9	23.9	14	R1 / 8	20	14.5		
		2	11	26.6	20.6		R1 / 4				
		3	12	23.9	17.6	17	R3 / 8		21.5		
	10	2	11	30	24	17	R1 / 4	35	18.5		
		3	12	29.5	23.2		R3 / 8		24		
	12	3	12	32.1	25.8	21	R3 / 8	59	32.5		

■Elbows



RoHS

PPSCNL



M Material: Body: Polypropylene
Thread: EN 1.4301 Equiv.

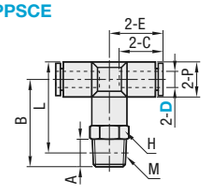
Part Number Type	D	Nominal	A	B	L	P	E	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPSCNL	4	1	8	23.3	24.3	10	18.1	10	R1 / 8	4.2	10		
	6	1	8	25	27.3	12.5	19.9	12	R1 / 8	10	12.5		
		2	11	28	28.2			14	R1 / 4		20		
	8	1	8	28	31.3	14.5	22.7	14	R1 / 8	16.5	16		
		2	11	31	32.2				R1 / 4		21.5		
		3	12	32.8	33.7			17	R3 / 8		35		
	10	2	11	36	38.7	17.5	26.4	17	R1 / 4	30	30.5		
		3	12	37	39.4				R3 / 8		38		
	12	3	12	39	43.2	21	29.6	21	R3 / 8	47	45.5		

■Tees



RoHS

PPSCE



M Material: Body: Polypropylene
Thread: EN 1.4301 Equiv.

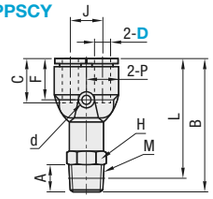
Part Number Type	D	Nominal	A	B	L	P	C	E	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPSCE	4	1	8	23.3	24.3	10	15	17	10	R1 / 8	4.1	12		
	6	1	8	26	28.5	13	17.1	20.3	12	R1 / 8	10	15.5		
		2	11	29	29.5				14	R1 / 4		23		
	8	1	8	26.3	29.8	15	18.4	22.4	14	R1 / 8	16.5	19.5		
		2	11	29.3	30.8					R1 / 4		25		
		3	12	31.1	32.3				17	R3 / 8		37.5		
	10	2	11	36	38.7	17.5	20.4	25.4	17	R1 / 4	30	36.5		
		3	12	37	39.4					R3 / 8		44		
	12	3	12	39	43.2	21	23.1	28.6	21	R3 / 8	47	54.5		

■Branch Y



RoHS

PPSCY



M Material: Body: Polypropylene
Thread: EN 1.4301 Equiv.

Part Number Type	D	Nominal	A	B	L	P	C	J	d	F	Width Across H	Thread Size M	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
PPSCY	4	1	3	40.7	36.7	10	15	11	3.4	14.2	10	R1 / 8	4.2	12.5		
	6	1	8	44.5	40.5	12.5	17.1	12	3.2	15.9	12	R1 / 8	10	15.5		
		2	11	47.5	41.5						14	R1 / 4		23		
	8	1	8	48.7	44.7	14.5	18.1	14	3.2	17.2	14	R1 / 8	16.5	20.5		
		2	11	51.7	45.7							R1 / 4		25.5		
		3	12	53.5	47.2						17	R3 / 8		24.5		
	10	2	11	58.5	52.5	18	20.9	18	4.5	19.7	17	R1 / 4	30	38		
		3	12	59.5	53.2							R3 / 8		45.5		
	12	3	12	64.7	58.4	21	23.6	20	4.2	22.4	22	R3 / 8	37	56.5		

Ordering Example

Part Number	-	Nominal
PPSCN4	-	1
PPSCY6	-	1

Specifications

Applicable Fluid	Air, Water, Chemicals
Operating Temperature Range*	0~80°C
Max. Operating Pressure	0.9MPa(20°C)
Operating Vacuum Level	-100kPa

* No Freezing

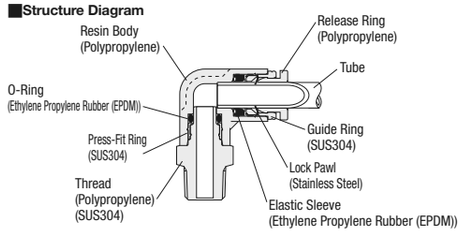
■Features

- Clean environment compatible polypropylene (PP) is used for the main body.
- Plastic body is semitransparent so that fluid is recognizable from the outside.

■Precautions for Use

- For water or fluid, inserts for Soft Tubes (**P.1390** PUIT / PUSIT) must be used. Keep the surge pressure to below max. pressure rating.
- If threaded portion is made of PP, tighten coupling by screwing hand tight, then giving 2 or 3 turns with a wrench. Over tightening may damage threads. Insufficient tightening may cause loosening or leaking.
- Due to creep deformation, screws may become loose and minute leakages may occur. Periodical tightening maintenance is recommended. If retightening does not work, then replace the coupling in use.
- When possibilities of machine and equipment damages exist due to fluid medium leakages, consider providing protective measures such as covers prior to use.
- No oil permitted.

■Structure Diagram



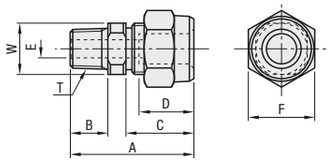
<Recommended Tightening Torque>
Thread Body: Polypropylene
R1/8:0.5N-m R1/4:0.7N-m R3/8:1.0N-m
Thread: EN 1.4301 Equiv.
R1/8:7~9N-m R1/4:12~14N-m R3/8:22~24N-m
(The values are for seal tape 2 rotations. Retighten by up to 2 additional rotations if required.)

Fluororesin Couplings / Fluororesin Valves

■Male Connectors ■Bore-Through Connectors

FENL (Male Connectors)
FECT (Bore-Through Connectors * Through Fitting)





RoHS

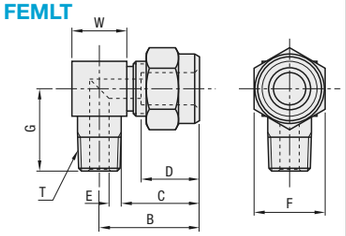
Part Number Type	Applicable Tube O.D. (mm)	Nominal	T R(PT)	A	B	C	D	E	F	W	FENL Unit Price 1 ~ 4 pc(s).	FENL Volume Discount Rate 5~20	FECT Unit Price 1 ~ 4 pc(s).	FECT Volume Discount Rate 5~20
FENL FECT	4	1	1 / 8	26	9	11	7	3	10	10				
		2	1 / 4	30	13					14				
	6	1	1 / 8	29	9	14	10	4	12	10				
		2	1 / 4	33	13					14				
		3	3 / 8	33						17				
	8	1	1 / 8	33	9	18	12	4	17	14			-	-
		2	1 / 4	36	13			6		14				
		3	3 / 8	37				6		17				
	10	2	1 / 4	40	13	21	16	6	22	17				
		3	3 / 8	40				8		17				
		4	1 / 2	43	17			8		22				

FECT has I.D. penetrated. Tube can be set at any desired portion by passing it through the body.
Size 8-1 is applicable only for FENL.

■Male Elbows

FEMLT





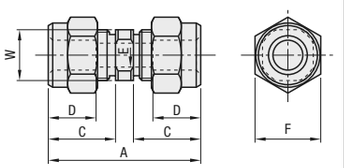
RoHS

Part Number Type	Applicable Tube O.D. (mm)	Nominal	T R(PT)	B	C	D	E	F	G	W	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
FEMLT	4	1	1 / 8	17	11	7	3	10	16	11		
		2	1 / 4	18					20	14		
	6	1	1 / 8	20	14	10	4	12	17	11		
		2	1 / 4	21					21	14		
		3	3 / 8	23					22	17		
	8	1	1 / 8	25	18	12	4	17	20	14		
		2	1 / 4	25			6		24	14		
		3	3 / 8	27			6		25	17		
	10	2	1 / 4	30	21	16	6	22	26	17		
		3	3 / 8	30			8		27	17		
		4	1 / 2	32			8		31	22		

■Unions

FETP





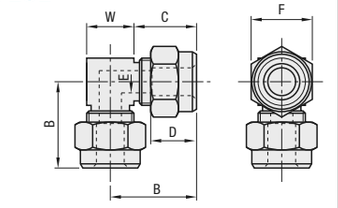
RoHS

Part Number Type	Applicable Tube O.D. (mm)	A	C	D	E	F	W	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
FETP	4	27	11	7	3	10	8		
	6	33	14	10	4	12	10		
	8	42	18	12	6	17	14		
	10	48	21	16	8	22	17		

■Union Elbows

FEUE





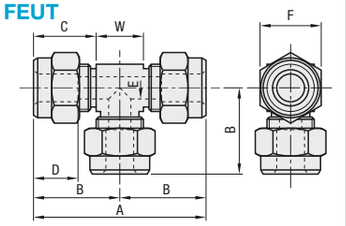
RoHS

Part Number Type	Applicable Tube O.D. (mm)	B	C	D	E	F	W	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
FEUE	4	15	11	7	3	10	8		
	6	19	14	10	4	12	10		
	8	25	18	12	6	17	14		
	10	30	21	16	8	22	17		

■Union Tees

FEUT



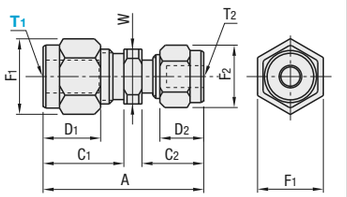


RoHS

Part Number Type	Applicable Tube O.D. (mm)	A	B	C	D	E	F	W	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
FEUT	4	30	15	11	7	3	10	8		
	6	38	19	14	10	4	12	10		
	8	50	25	18	12	6	17	14		
	10	60	30	21	16	8	22	17		

■Stepped Unions

FEUR



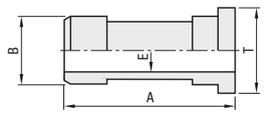
RoHS

Part Number Type	Applicable Tube O.D. (mm) T1	Applicable Tube O.D. (mm) T2	A	C1	C2	D1	D2	W	F1	F2	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
FEUR	6	4	31	14	11	10	7	10	12	10		
	8	6	37	18	14	12	10	14	17	12		
	10	8	45	21	18	16	12	17	22	17		
	12	10	53	25	21	18	16	19	26	22		

■Fluororesin Couplings Tube Insert

FETBS



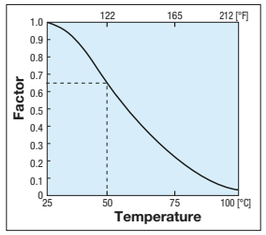


RoHS

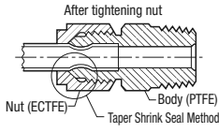
Part Number Type	Applicable Tube O.D. (mm)	T	A	B	E	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5~20
FETBS	4	4	10	3	2		
	6	6	12	4	2.5		
	8	8	16	6	4.3		
	10	10	20	8	6.8		

It is not required for PTFE and PFA Type.

Temperature-Pressure Curve



■Structure Diagram



■Specifications

Applicable Fluid	Super Pure Water, Acid, Alkali, Organic Solvent
Operating Temperature Range	0~100°C
Max. Operating Pressure	Nominal Dia. 4 ~ 8: 0.8MPa Nominal Dia. 10: 0.6MPa

■Tightening Torque of Nut (Reference Value)

Tube Size mm		Tightening Torque N·m	Tightening Torque kgf·cm	Number of Revolution
4x3	-	0.12	1.2	1
6x4	6.35x4.3	0.23	2.3	1-1 / 4
8x6	-	0.45	4.6	1-1 / 4
10x8	9.53x6.3	0.8	8.2	1-1 / 2

(Note) 1. PFA tube is used in the measurement.
2.General tolerance of tube is absorbed if the nut is tightened by the above torque value.
3.Number of revolution is begun to count up when tightening becomes fixed suddenly after lightly tightened by hand.

■Features

Excellent in chemical resistance.
Possible to tighten the nut with a spanner without using special tools.

For Tubes, refer to "Fluororesin Tubes" on P.1388 and "Fluoro Rubber Tubes" on P.1389.

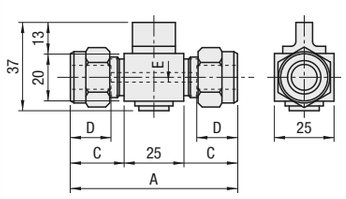
Ordering Example

Part Number	-	Nominal
FENL4	-	1

■Fluororesin Valves 2-Way Valve

FBT





RoHS

Part Number Type	Applicable Tube O.D. (mm)	A	C	D	E	Unit Price 1 pc.	Volume Discount Rate 2~5
FBT	4	47	11	7	4		
	6	53	14	10	4		
	8	61	18	12	4		
	10	67	21	16	4		

■Specifications

Applicable Fluid	Super Pure Water, Acid, Alkali, Organic Solvent
Operating Temperature Range	Room Temperature
Max. Operating Pressure	0.2MPa
Applicable Material	PTFE, ECTFE, Fluoro Rubber

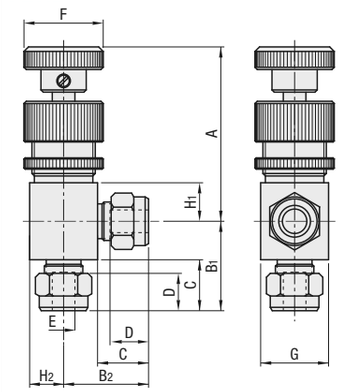
■Features

- Excellent in chemical and corrosion resistance.
- Can be used in limited space because of its compact size.

■Fluororesin Valves Needle Valve

FBNB





RoHS

Part Number Type	Applicable Tube O.D. (mm)	A Max.	A Min.	B1	B2	C	D	E	F	G	H1	H2	Unit Price 1 pc.	Volume Discount Rate 2~5
FBNB	4	76	67	23	22.5	11	7	3	30	23	12	11.5		
	6	76	67	26	25.5	14	10	4	30	23	12	11.5		
	8	76	67	30	29.5	18	12	6	30	23	12	11.5		
	10	87	77	38	36	21	16	8	35	30	17	15		

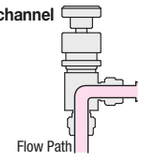
■Specifications

Applicable Fluid	Super Pure Water, Acid, Alkali, Organic Solvent
Operating Temperature Range	0~100°C
Max. Operating Pressure	0.5MPa
Applicable Material	PTFE, PCTFE, ECTFE, PP

■Features

- Excellent in chemical and corrosion resistance.
- Possible to finely adjust flow rate by turning the handle.

■Flow channel



Ordering Example

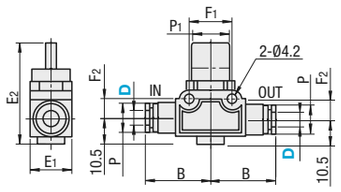
Part Number
FBT8

Hand Valves

Comparison points with similar parts | **RoHS Compliant. Cap Lever color is selectable.**

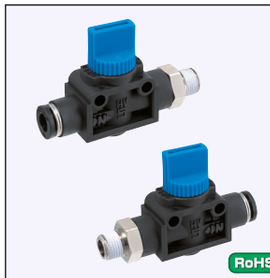


BVHVU

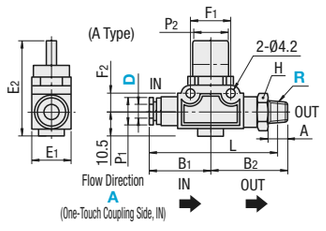


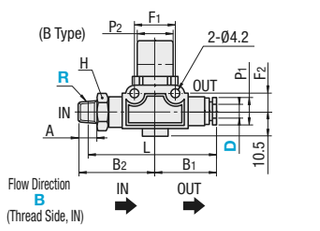
Marked inside body.

Part Number		2-Way / 3-Way Valve Selection	Handle Color	E_1	E_2	P	P_1	B	F_1	F_2	Effective Sectional Area (mm^2)	Mass (g)	Unit Price	Volume Discount Rate
Type	Tube O.D. (mm) D												1 ~ 9 pc(s).	10~30
BVHVU	4	2 (2-Way Valve) 3 (3-Way Valve)	Not Specified (Blue)	17	40.5	10	16.5	25.8	18	8	3.4	24		
	6			17	40.5	12.5	16.5	26.4	18	8	7.2	25		
	8			17	40.5	15	16.5	27.7	18	8	8.7	28		
	10		R (Red)	21.7	41	17.5	19.5	32.2	24	11	17.4	45		
	12			21.7	41	21	19.5	34.9	24	11	18.1	51		



BVHV



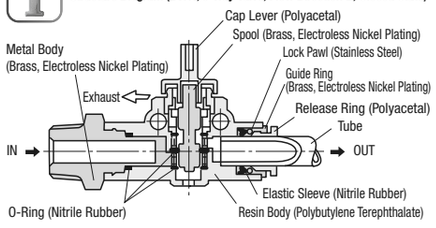


Part Number		R (PT) Selection	2-Way / 3-Way Valve Selection	Flow Direction	A	E_1	E_2	L	P_1	P_2	B_1	B_2	H (Wrench Flats)	F_1	F_2	Effective Sectional Area (mm^2)		Mass (g)	Unit Price	Volume Discount Rate
Type	Tube O.D. (mm) D															A Type	B Type		1 ~ 9 pc(s).	10~30
BVHV	6	1 (R1/8)	2 (2-Way Valve) 3 (3-Way Valve)	A B	8	17	40.5	55.9	12.5	16.5	26.4	33.5	14	18	8	7.5	8.3	34		
		2 (R1/4)			11			56.8				36.5				7.7	8.5	40		
		3 (R3/8)			12			58.3				38.3	17			7.5	8.2	53		
	8	1 (R1/8)			8	17	40.5	57.2	15	16.5	27.7	33.5	14	18	8	8.7	8.9	35		
		2 (R1/4)			11			58.2				36.5				8.9	8.9	41		
		3 (R3/8)			12			59.7				38.3	17			8.6	8.9	54		
	10	2 (R1/4)			11	21.7	41	68.7	17.5	19.5	32.2	42.5	17	24	11	16.2	16.6	62		
		3 (R3/8)			12			69.4				43.5				16	16.9	71		
		4 (R1/2)			15			70.5				46.5	21			15.7	16.5	93		
	12	2 (R1/4)			11	21.7	41	71.4	21	19.5	34.9	42.5	17	24	11	16.3	17	66		
		3 (R3/8)			12			72.1				43.5				16.3	17.1	74		
		4 (R1/2)			15			73.2				46.5	21			16.1	16.8	96		

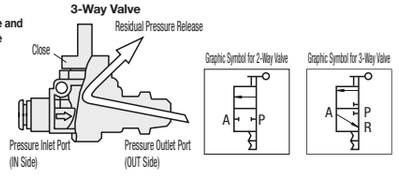
Ordering Example

Part Number	-	2-Way / 3-Way Valve Selection, R (RT) Selection	-	Handle Color Selection, 2-Way / 3-Way Valve Selection	-	Flow Direction
BVHVU6	-	2	-	R		
BVHV8	-	1	-	3	-	A

Structure Diagram (BVHV, 3-Way Valve, Flow Direction B, Closed State)



3-Way Valve and 2-Way Valve



- 3-Way Valve exhausts residual pressure from outlet side (equipment) when air is shut off and ensures safety during adjustment and repair of equipment.
- 2-Way Valve has no function to exhaust residual pressure and is suitable for use with air supply lines of equipment where residual pressure release is not desired, such as a tank and etc. Also suitable for vacuum plumbing.

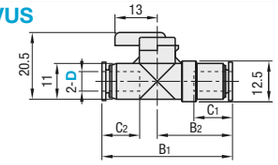
Ball Valves
One-Touch Couplings

■Union Straight - Single Handle



RoHS

BVUS



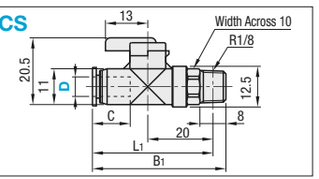
Part Number Type	D	B1	B2	C1	C2	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
BVUS	4	36.9	20.3	10.9	11	3.4	13		
	6	40.1	23.1	11.7	11.6	10.3	13		

■Straight - Single Handle



RoHS

BVCS



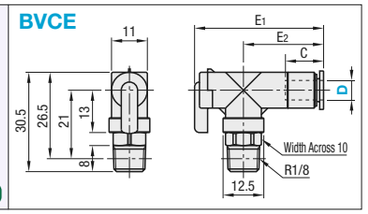
Part Number Type	D	B1	L1	C	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
BVCS	4	40.6	36.6	11	3.8	15		
	6	41	37	11.6	10.5	15		

■Elbows - Single Handle



RoHS

BVCE



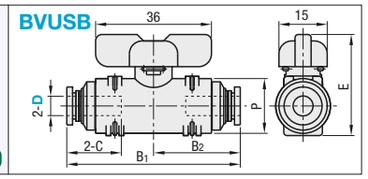
Part Number Type	D	C	E1	E2	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
BVCE	4	10.9	36.8	21.8	4	21		
	6	11.7	39.6	24.6	8	21		

■Union Straight - Double Handle



RoHS

BVUSB



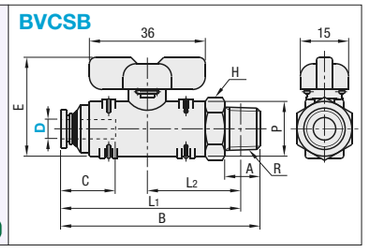
Part Number Type	D	B1	B2	P	C	E	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
BVUSB	6	53.9	27	17	17	31.4	10.5	45		
	8	55.4	27.7	17	18.2	31.4	20.5	41		
	10	65.4	32.7	24	20.7	37.8	41	104		
	12	68.6	34.3	24	23.3	37.8	55.5	100		

■Straight - Double Handle



RoHS

BVCSB



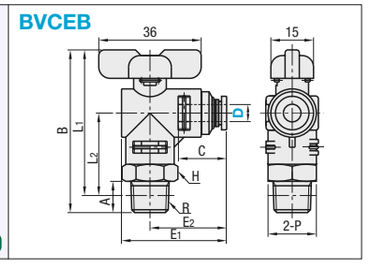
Part Number Type	D	Nominal	R	A	B	L1	L2	P	C	E	Width Across H	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
BVCSB	6	1	1/8	8	59	55	28	17	17	31.4	17	12.5	56		
		2	1/4	11	62	55.9	29						59		
	8	1	1/8	8	59.7	55.7	28	17	18.2	31.4	17	22	54		
		2	1/4	11	62.7	56.7	29					23	57		
	10	2	1/4	11	73.7	67.7	35	24	20.7	37.8	24	39.5	131		
		3	3/8	12	74.7	68.4	35.7					41	134		

■Elbows - Double Handle



RoHS

BVCEB

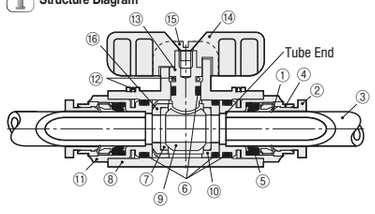


Part Number Type	D	Nominal	R	A	B	L1	L2	P	C	E1	E2	Width Across H	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
BVCEB	6	1	1/8	8	54.2	50.2	28	17	17	37	27	17	11.5	57		
		2	1/4	11	57.2	51.2	29							60		
	8	1	1/8	8	54.2	50.2	28	17	18.2	37.7	27.7	17	17.5	54		
		2	1/4	11	57.2	51.2	29						18.5	58		
	10	2	1/4	11	68.7	62.7	37.5	24	20.7	44.7	32.7	24	35.5	134		
		3	3/8	12	69.7	63.4	38.2						36	136		

Ordering Example

Part Number	-	Nominal
BVUS6		
BVCSB6	-	2

Structure Diagram



No.	Name of Parts	Material
①	Lock Pawl	Stainless Steel
②	Release Ring	POM / Polyacetal
③	Tube	Polyurethane or Nylon
④	Guide Ring	Brass (Electroless Nickel Plating)
⑤	Elastic Sleeve	NBR, Nitrile Rubber
⑥	O-Rings	NBR, Nitrile Rubber
⑦	Ball Seal	Teflon Resin
⑧	Resin Body	Single Handle Type: PBT, Polybutylene Terephthalate Double Handle Type: PPS, Polyphenylene Sulfide
⑨	Ball	Brass (Electroless Nickel Plating)
⑩	Ball Holder	Brass (Electroless Nickel Plating)
⑪	Coupling Metal Body	Brass (Electroless Nickel Plating)
⑫	Lock Pin	Stainless Steel
⑬	Stem	Brass (Electroless Nickel Plating)
⑭	Handle	POM / Polyacetal
⑮	Flat Pan-Head Screw	Steel
⑯	Ball Holder	Brass (Electroless Nickel Plating)

■Features

- Single handle type has a scale on lever and is able to control the flow.
- Double handle type is possible to flow water.

■Specifications

Type	Single Handle	Double Handle
Applicable Fluid	Air	Air, Water (*)
Operating Temperature Range	0 ~ 60°C (No Freezing)	
Operating Pressure Range	0~0.7MPa	0~0.9MPa
Operating Vacuum Level	-100kPa	

* Observe following conditions when water is the applicable fluid.
1. Operating Pressure: 0 ~ 0.3MPa
2. No water hammer (impulsive flow)
3. Attach Insert for Soft Tubes (**P.1390**) to plumbing tube.

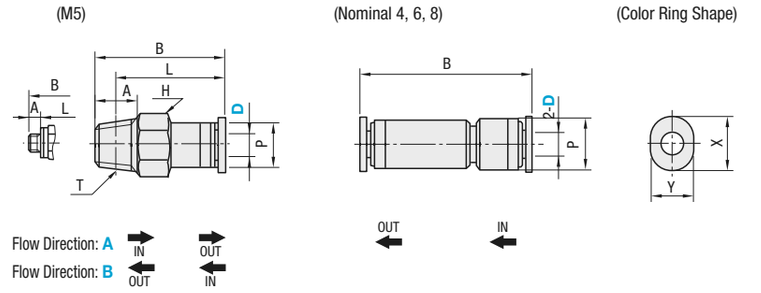
Check Valves

■Check Valves



RoHS

BVCVP



Part Number Type	Tube O.D. (mm) D	Nominal Selection	Flow Direction	Thread Size T	A	B	L	P	H (Wrench Flats)	X	Y	Effective Sectional Area (mm²)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~30
BVCVP	4	M5	A B	M5x0.8	3	24.2	21.2	9	8	9.8	7.8	2.6	4.3		
		1		R1 / 8	8	23.9	19.9	9	10			2.7	7.7		
		4	-	-	-	31.5	-	9	-			2.9	3.7		
	6	1	A B	R1 / 8	8	30.5	26.5	11	10	11.8	9.8	7.2	9.0		
		2		R1 / 4	11	27.8	21.8		14			7.3	16.1		
		6	-	-	-	34	-	11	-			7.5	5.4		
	8	1	A B	R1 / 8	8	35.5	31.5	14	14	-	-	7.3	19.3		
		2		R1 / 4	11	39.5	33.5					14.5	21.7		
		8	-	-	-	47.3	-	15	-			15.5	13.0		

Name of Parts	Material	Surface Treatment
Resin Body	PBT	-
O-Rings	NBR	-
Valve Body	POM	-
Valve Retainer	POM	-
Valve Gasket	NBR	-
Release Ring	POM	-
Guide Ring	Brass	Electroless Nickel Plating
Spring	Stainless Steel	
Elastic Sleeve	NBR	-
Metal Part	Brass	Electroless Nickel Plating

■Features

- Capable of maintaining OUT pressure unchanged to prevent a back flow of air.
- Suitable for holding vacuum and for low-pressure plumbing.
- Lightweight due to resin material.

■Specifications

Applicable Fluid	Air
Operating Pressure Range	0.1~0.9MPa
Min. Operating Pressure*	0.01MPa
Operating Temperature Range	0 ~ 60°C (No Freezing)
Minimum reverse differential pressure	0.04MPa

*The minimum differential pressure is the initial pressure on the secondary (OUT) side when air flows from the free flow side.

Ordering Example

Part Number	-	Nominal	-	Flow Direction
BVCVP4	-	M5	-	B
BVCVP6	-	6		