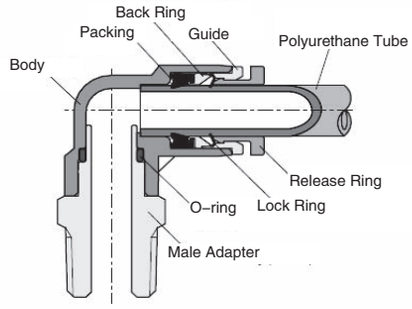
WP series



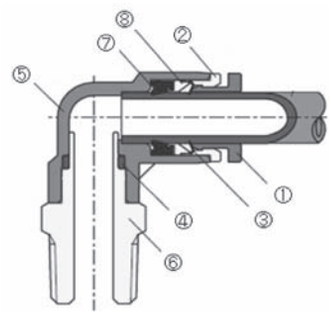
Main Features

- ◆ Touch connector is made of only six parts.
- ◆ A newly designed lock ring assures a tight tube connection and smooth insertion.
- ◆ Tube can be inserted with light force. Hight airtight reliability.
- ◆ Standard flame–resistant resin material PA and F/G (Polyamid).

Specifications

	unit	Push–in connectors
Fluid		Compressed Air
Ambient temperature	℃	0 ~ 60
Max. working pressure	Mpa	0 ~ 0.9
Min. working pressure	kPa	–100
Applicable tube		Polyurethane Tube

Note) Working pressure is the value when the temperature is 20℃ .



Part No.	Parts name	Material
①	Release ring	PA and F/G (Polyamid)
②	Guide	Zinc Die Casting
③	Lock ring	SUS (Stainless)
④	O–ring	NBR (Nitrile)
⑤	Body	PA and F/G (Polyamid)
⑥	Male adapter	Brass
⑦	Packing	NBR (Nitrile)
⑧	Back ring	Zinc Die Casting

How to order

10 pcs per 1 set

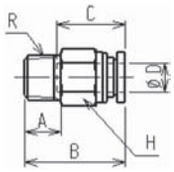
WPC 06 – 01

M5 :	M5 × 0.8	**03 :**	R3/8
01 :	R1/8	**04 :**	R1/2
02 :	R1/4		

Applicable Tube O.D			
04 :	4mm	**10 :**	10mm
06 :	6mm	**12 :**	12mm
08 :	8mm		

WPA :	Double banjo	WPUC :	Union
WPC :	Male connector	WPUL :	Union elbow
WPG :	Different diameter union	WPUT :	Union T
WPGJ :	Reducer	WPUG :	Different diameter union T
WPH :	Single banjo	WPW :	Different diameter union Y
WPL :	Male elbow	WPWJ :	Different diameter branch union Y
WPLGJ	Different diameter L type connector	WPWT :	Male branch Y
WPLJ :	L type connector	WPY :	Union Y
WPOC :	Hexagon male connector	WPY J :	Branch union Y
WPT :	Male branch Y		

Male connector



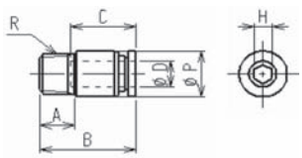
mm

Ref.	A	B	C	ϕD	H	R (Male)	Mass (g)
WPC04–M5	4	20.1	14.5	4	8	M5 × 0.8	4.5
WPC04–01	8	20.1	14.5		10	R1/8	8.6
WPC04–02	11	20.1	14.5		14	R1/4	17.3
WPC06–M5	4	21.8	15.5	6	11	M5 × 0.8	8.3
WPC06–01	8	22	15.5		11	R1/8	9.2
WPC06–02	11	22.8	15.5		14	R1/4	18.2
WPC06–03	12	22.8	15.5		17	R3/8	28.4
WPC08–01	8	27.7	17.8	8	13	R1/8	13.7
WPC08–02	11	25.7	17.8		14	R1/4	17.1
WPC08–03	12	23.7	17.8		17	R3/8	27.3
WPC10–01	8	29.4	19.4	10	17	R1/8	22.2
WPC10–02	11	32.4	19.4		17	R1/4	27.6
WPC10–03	12	28.4	19.4		17	R3/8	29.3
WPC10–04	15	27.3	19.4		21	R1/2	48.5
WPC12–02	11	35.4	22.4	12	19	R1/4	34.2
WPC12–03	12	31.8	22.4		19	R3/8	33.5
WPC12–04	15	33.8	22.4		21	R1/2	54.8

inch

Ref.	A	B	C	ϕD	H	R (Male)	Mass (g)
WPC04–M5	0.16	0.79	0.57	0.16	0.31	M5 × 0.03	4.5
WPC04–01	0.31	0.79	0.57		0.39	R1/8	8.6
WPC04–02	0.43	0.79	0.57		0.55	R1/4	17.3
WPC06–M5	0.16	0.86	0.61	0.24	0.43	M5 × 0.03	8.3
WPC06–01	0.31	0.87	0.61		0.43	R1/8	9.2
WPC06–02	0.43	0.9	0.61		0.55	R1/4	18.2
WPC06–03	0.47	0.9	0.61		0.67	R3/8	28.4
WPC08–01	0.31	1.09	0.7	0.31	0.51	R1/8	13.7
WPC08–02	0.43	1.01	0.7		0.55	R1/4	17.1
WPC08–03	0.47	0.93	0.7		0.67	R3/8	27.3
WPC10–01	0.31	1.16	0.76	0.39	0.67	R1/8	22.2
WPC10–02	0.43	1.28	0.76		0.67	R1/4	27.6
WPC10–03	0.47	1.12	0.76		0.67	R3/8	29.3
WPC10–04	0.59	1.07	0.76		0.83	R1/2	48.5
WPC12–02	0.43	1.39	0.88	0.47	0.75	R1/4	34.2
WPC12–03	0.47	1.25	0.88		0.75	R3/8	33.5
WPC12–04	0.59	1.33	0.88		0.83	R1/2	54.8

Hexagon male connector



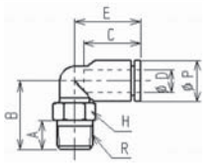
mm

Ref.	A	B	C	ϕD	H	ϕP	R (Male)	Mass (g)
WPOC04–M5	4	20.1	14.5	4	2	8.2	M5 × 0.8	4.2
WPOC04–01	8	20.1	14.5		3	10	R1/8	8
WPOC06–M5	4	21.8	15.5	6	2	11	M5 × 0.8	7.2
WPOC06–01	8	22	15.5		4	11	R1/8	8.6
WPOC06–02	11	22.8	15.5		4	13.5	R1/4	16.8
WPOC08–01	8	27.7	17.8	8	5	13	R1/8	13.1
WPOC08–02	11	25.7	17.8		6	13.5	R1/4	15.5
WPOC08–03	12	23.7	17.8		6	17	R3/8	25.9
WPOC10–01	8	29.4	19.4	10	5	15.5	R1/8	18
WPOC10–02	11	32.4	19.4		6	15.5	R1/4	23.3
WPOC10–03	12	28.4	19.4		8	17	R3/8	25.7
WPOC10–04	15	27.3	19.4		8	21	R1/2	46.7
WPOC12–02	11	35.4	22.4	12	6	18.8	R1/4	29.7
WPOC12–03	12	31.8	22.4		8	18.8	R3/8	30.2
WPOC12–04	15	33.8	22.4		8	21	R1/2	50.6

inch

Ref.	A	B	C	ϕD	H	ϕP	R (Male)	Mass (g)
WPOC04–M5	0.16	0.79	0.57	0.16	0.08	0.32	M5 × 0.03	4.2
WPOC04–01	0.31	0.79	0.57		0.12	0.39	R1/8	8
WPOC06–M5	0.16	0.86	0.61	0.24	0.08	0.43	M5 × 0.03	7.2
WPOC06–01	0.31	0.87	0.61		0.16	0.43	R1/8	8.6
WPOC06–02	0.43	0.9	0.61		0.16	0.53	R1/4	16.8
WPOC08–01	0.31	1.09	0.7	0.31	0.2	0.51	R1/8	13.1
WPOC08–02	0.43	1.01	0.7		0.24	0.53	R1/4	15.5
WPOC08–03	0.47	0.93	0.7		0.24	0.67	R3/8	25.9
WPOC10–01	0.31	1.16	0.76	0.39	0.2	0.61	R1/8	18
WPOC10–02	0.43	1.28	0.76		0.24	0.61	R1/4	23.3
WPOC10–03	0.47	1.12	0.76		0.31	0.67	R3/8	25.7
WPOC10–04	0.59	1.07	0.76		0.31	0.83	R1/2	46.7
WPOC12–02	0.43	1.39	0.88	0.47	0.24	0.74	R1/4	29.7
WPOC12–03	0.47	1.25	0.88		0.31	0.74	R3/8	30.2
WPOC12–04	0.59	1.33	0.88		0.31	0.83	R1/2	50.6

Male elbow



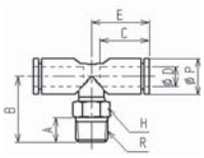
mm

Ref.	A	B	C	ϕD	E	H	ϕP	R (Male)	Mass (g)
WPL04–M5	4	14.6	14.5	4	17.1	9	9	M5 × 0.8	3.9
WPL04–01	8	17.8	14.5		17.1	10	9	R1/8	4.8
WPL04–02	11	20.8	14.5		17.1	14	9	R1/4	6.8
WPL06–M5	4	15.7	15.5	6	18	9	11.2	M5 × 0.8	7.3
WPL06–01	8	18.9	15.5		18	10	11.2	R1/8	7.6
WPL06–02	11	21.9	15.5		18	14	11.2	R1/4	15
WPL06–03	12	22.9	15.5		18	17	11.2	R3/8	22.4
WPL08–01	8	20.3	17.8	8	23.6	10	13.6	R1/8	8.4
WPL08–02	11	22.8	17.8		23.6	14	13.6	R1/4	15.9
WPL08–03	12	23.8	17.8		23.6	17	13.6	R3/8	22.5
WPL10–01	8	23.6	19.4	10	25	17	16.3	R1/8	18.2
WPL10–02	11	26.6	19.4		25	17	16.3	R1/4	20.2
WPL10–03	12	26.1	19.4		25	17	16.3	R3/8	22.8
WPL10–04	15	29.1	19.4		25	21	16.3	R1/2	37.5
WPL12–02	11	28.5	22.4	12	32.2	17	19.7	R1/4	26.7
WPL12–03	12	28	22.4		32.2	17	19.7	R3/8	28.4
WPL12–04	15	31	22.4		32.2	21	19.7	R1/2	43.1

inch

Ref.	A	B	C	ϕD	E	H	ϕP	R (Male)	Mass (g)
WPL04–M5	0.16	0.57	0.57	0.16	0.67	0.35	0.35	M5 × 0.03	3.9
WPL04–01	0.31	0.7	0.57		0.67	0.39	0.35	R1/8	4.8
WPL04–02	0.43	0.82	0.57		0.67	0.55	0.35	R1/4	6.8
WPL06–M5	0.16	0.62	0.61	0.24	0.71	0.35	0.44	M5 × 0.03	7.3
WPL06–01	0.31	0.74	0.61		0.71	0.39	0.44	R1/8	7.6
WPL06–02	0.43	0.86	0.61		0.71	0.55	0.44	R1/4	15
WPL06–03	0.47	0.9	0.61		0.71	0.67	0.44	R3/8	22.4
WPL08–01	0.31	0.8	0.7	0.31	0.93	0.39	0.54	R1/8	8.4
WPL08–02	0.43	0.9	0.7		0.93	0.55	0.54	R1/4	15.9
WPL08–03	0.47	0.94	0.7		0.93	0.67	0.54	R3/8	22.5
WPL10–01	0.31	0.93	0.76	0.39	0.98	0.67	0.64	R1/8	18.2
WPL10–02	0.43	1.05	0.76		0.98	0.67	0.64	R1/4	20.2
WPL10–03	0.47	1.03	0.76		0.98	0.67	0.64	R3/8	22.8
WPL10–04	0.59	1.15	0.76		0.98	0.83	0.64	R1/2	37.5
WPL12–02	0.43	1.12	0.88	0.47	1.27	0.67	0.78	R1/4	26.7
WPL12–03	0.47	1.1	0.88		1.27	0.67	0.78	R3/8	28.4
WPL12–04	0.59	1.22	0.88		1.27	0.83	0.78	R1/2	43.1

Male branch T



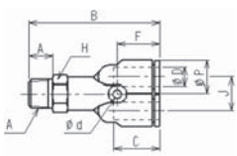
mm

Ref.	A	B	C	ϕD	E	H	ϕP	R (Male)	Mass (g)
WPT04–M5	4	16.6	14.5	4	17.1	9	9	M5 × 0.8	6.2
WPT04–01	8	19.8	14.5		17.1	10	9	R1/8	8.4
WPT04–02	11	22.8	14.5		17.1	14	9	R1/4	15.8
WPT06–M5	4	17.7	15.5	6	18	9	11.2	M5 × 0.8	7.7
WPT06–01	8	20.9	15.5		18	10	11.2	R1/8	9.5
WPT06–02	11	23.9	15.5		18	14	11.2	R1/4	17.3
WPT06–03	12	24.9	15.5		18	17	11.2	R3/8	24.7
WPT08–01	8	23.5	17.8	8	23.6	10	13.6	R1/8	14.5
WPT08–02	11	26	17.8		23.6	14	13.6	R1/4	21.3
WPT08–03	12	27	17.8		23.6	17	13.6	R3/8	28.9
WPT10–01	8	25.8	19.4	10	25	17	16.3	R1/8	22.2
WPT10–02	11	28.8	19.4		25	17	16.3	R1/4	25.7
WPT10–03	12	28.3	19.4		25	17	16.3	R3/8	28.3
WPT10–04	15	31.3	19.4		25	21	16.3	R1/2	43
WPT12–02	11	30.5	22.4	12	32.2	17	19.7	R1/4	36.4
WPT12–03	12	30	22.4		32.2	17	19.7	R3/8	39
WPT12–04	15	33	22.4		32.2	21	19.7	R1/2	53.7

inch

Ref.	A	B	C	ϕD	E	H	ϕP	R (Male)	Mass (g)
WPT04–M5	0.16	0.65	0.57	0.16	0.67	0.35	0.35	M5 × 0.03	6.2
WPT04–01	0.31	0.78	0.57		0.67	0.39	0.35	R1/8	8.4
WPT04–02	0.43	0.9	0.57		0.67	0.55	0.35	R1/4	15.8
WPT06–M5	0.16	0.7	0.61	0.24	0.71	0.35	0.44	M5 × 0.03	7.7
WPT06–01	0.31	0.82	0.61		0.71	0.39	0.44	R1/8	9.5
WPT06–02	0.43	0.94	0.61		0.71	0.55	0.44	R1/4	17.3
WPT06–03	0.47	0.98	0.61		0.71	0.67	0.44	R3/8	24.7
WPT08–01	0.31	0.93	0.7	0.31	0.93	0.39	0.54	R1/8	14.5
WPT08–02	0.43	1.02	0.7		0.93	0.55	0.54	R1/4	21.3
WPT08–03	0.47	1.06	0.7		0.93	0.67	0.54	R3/8	28.9
WPT10–01	0.31	1.02	0.76	0.39	0.98	0.67	0.64	R1/8	22.2
WPT10–02	0.43	1.13	0.76		0.98	0.67	0.64	R1/4	25.7
WPT10–03	0.47	1.11	0.76		0.98	0.67	0.64	R3/8	28.3
WPT10–04	0.59	1.23	0.76		0.98	0.83	0.64	R1/2	43
WPT12–02	0.43	1.2	0.88	0.47	1.27	0.67	0.78	R1/4	36.4
WPT12–03	0.47	1.18	0.88		1.27	0.67	0.78	R3/8	39
WPT12–04	0.59	1.3	0.88		1.27	0.83	0.78	R1/2	53.7

Male branch Y



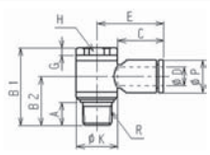
mm

Ref.	A	B	C	ϕD	ϕd	F	H	J	ϕP	R (Male)	Mass (g)
WPWT04–M5	4	37.4	14.5	4	3.2	13.2	9	9.3	9	M5 × 0.8	8.9
WPWT04–01	8	40.6	14.5		3.2	13.2	10	9.3	9	R1/8	11.6
WPWT04–02	11	43.6	14.5		3.2	13.2	14	9.3	9	R1/4	20.5
WPWT06–M5	4	40.5	15.5	6	3.2	14.1	11	11.4	11.2	M5 × 0.8	12.9
WPWT06–01	8	43.7	15.5		3.2	14.1	11	11.4	11.2	R1/8	9.5
WPWT06–02	11	46.7	15.5		3.2	14.1	14	11.4	11.2	R1/4	23.1
WPWT06–03	12	47.7	15.5		3.2	14.1	17	11.4	11.2	R3/8	35.2
WPWT08–01	8	52.6	17.8	8	3.2	18.6	13	14.2	13.6	R1/8	21.9
WPWT08–02	11	55.1	17.8		3.2	18.6	14	14.2	13.6	R1/4	25.1
WPWT08–03	12	56.1	17.8		3.2	18.6	17	14.2	13.6	R3/8	31.7
WPWT10–01	8	53	19.4	10	4.2	18	17	17	16.3	R1/8	30.6
WPWT10–02	11	56	19.4		4.2	18	17	17	16.3	R1/4	35.2
WPWT10–03	12	58	19.4		4.2	18	17	17	16.3	R3/8	40.8
WPWT10–04	15	61	19.4		4.2	18	21	17	16.3	R1/2	59.8
WPWT12–02	11	65.9	22.4	12	4.2	23.9	19	20	19.7	R1/4	53.7
WPWT12–03	12	66.9	22.4		4.2	23.9	19	20	19.7	R3/8	59.5
WPWT12–04	15	70.9	22.4		4.2	23.9	21	20	19.7	R1/2	74.9

inch

Ref.	A	B	C	ϕD	ϕd	F	H	J	ϕP	R (Male)	Mass (g)
WPWT04–M5	0.16	1.47	0.57	0.16	0.13	0.52	0.35	0.37	0.35	M5 × 0.03	8.9
WPWT04–01	0.31	1.6	0.57		0.13	0.52	0.39	0.37	0.35	R1/8	11.6
WPWT04–02	0.43	1.72	0.57		0.13	0.52	0.55	0.37	0.35	R1/4	20.5
WPWT06–M5	0.16	1.59	0.61	0.24	0.13	0.56	0.43	0.45	0.44	M5 × 0.03	12.9
WPWT06–01	0.31	1.72	0.61		0.13	0.56	0.43	0.45	0.44	R1/8	9.5
WPWT06–02	0.43	1.84	0.61		0.13	0.56	0.55	0.45	0.44	R1/4	23.1
WPWT06–03	0.47	1.88	0.61		0.13	0.56	0.67	0.45	0.44	R3/8	35.2
WPWT08–01	0.31	2.07	0.7	0.31	0.13	0.73	0.51	0.56	0.54	R1/8	21.9
WPWT08–02	0.43	2.17	0.7		0.13	0.73	0.55	0.56	0.54	R1/4	25.1
WPWT08–03	0.47	2.21	0.7		0.13	0.73	0.67	0.56	0.54	R3/8	31.7
WPWT10–01	0.31	2.09	0.76	0.39	0.17	0.71	0.67	0.67	0.64	R1/8	30.6
WPWT10–02	0.43	2.2	0.76		0.17	0.71	0.67	0.67	0.64	R1/4	35.2
WPWT10–03	0.47	2.28	0.76		0.17	0.71	0.67	0.67	0.64	R3/8	40.8
WPWT10–04	0.59	2.4	0.76		0.17	0.71	0.83	0.67	0.64	R1/2	59.8
WPWT12–02	0.43	2.59	0.88	0.47	0.17	0.94	0.75	0.79	0.78	R1/4	53.7
WPWT12–03	0.47	2.63	0.88		0.17	0.94	0.75	0.79	0.78	R3/8	59.5
WPWT12–04	0.59	2.79	0.88		0.17	0.94	0.83	0.79	0.78	R1/2	74.9

Single banjo



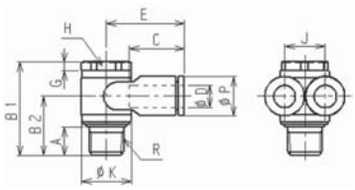
mm

Ref.	A	B1	B2	C	ϕD	E	G	H	ϕK	ϕP	R (Male)	Mass (g)
WPH04–M5	3.5	17.8	10.1	14.5	4	19.5	2.5	8	10	9	M5 × 0.8	7
WPH04–01	8	26.5	16.8	14.5		21.5	2.5	13	14	9	R1/8	14.7
WPH04–02	11	34	22	14.5		24	3	17	19	9	R1/4	27
WPH06–M5	3.5	17.8	10.6	15.5	6	20.5	2.5	8	10	11.2	M5 × 0.8	7.8
WPH06–01	8	26.5	16.8	15.5		22.5	2.5	13	14	11.2	R1/8	16.1
WPH06–02	11	34	22	15.5		25	3	17	19	11.2	R1/4	28.7
WPH06–03	12	39.8	25.3	15.5		26.7	4	21	22.4	11.2	R3/8	51.4
WPH08–01	8	26.5	17.5	17.8	8	25.6	2.5	13	14	13.6	R1/8	16.4
WPH08–02	11	34	22	17.8		28.1	3	17	19	13.6	Rl/4	29.4
WPH08–03	12	39.8	25.3	17.8		29.8	4	21	22.4	13.6	R3/8	52.7
WPH10–02	11	34	22.7	19.4	10	28.9	3	17	19	16.3	R1/4	32.7
WPH10–03	12	39.8	25.3	19.4		30.6	4	21	22.4	16.3	R3/8	55.7
WPH10–04	15	44.8	28.8	19.4		32.9	5	24	27	16.3	R1/2	90.7
WPH12–03	12	39.8	26.7	22.4	12	35.9	4	21	22.4	19.7	R3/8	57.6
WPH12–04	15	44.8	29.7	22.4		38.2	5	24	27	19.7	R1/2	92.8

mm

Ref.	A	B1	B2	C	ϕD	E	G	H	ϕK	ϕP	R (Male)	Mass (g)
WPH04–M5	0.14	0.7	0.4	0.57	0.16	0.77	0.1	0.31	0.39	0.35	M5 × 0.03	7
WPH04–01	0.31	1.04	0.66	0.57		0.85	0.1	0.51	0.55	0.35	R1/8	14.7
WPH04–02	0.43	1.34	0.87	0.57		0.94	0.12	0.67	0.75	0.35	R1/4	27
WPH06–M5	0.14	0.7	0.42	0.61	0.24	0.81	0.1	0.31	0.39	0.44	M5 × 0.03	7.8
WPH06–01	0.31	1.04	0.66	0.61		0.89	0.1	0.51	0.55	0.44	R1/8	16.1
WPH06–02	0.43	1.34	0.87	0.61		0.98	0.12	0.67	0.75	0.44	R1/4	28.7
WPH06–03	0.47	1.57	1	0.61		1.05	0.16	0.83	0.88	0.44	R3/8	51.4
WPH08–01	0.31	1.04	0.69	0.7	0.31	1.01	0.1	0.51	0.55	0.54	R1/8	16.4
WPH08–02	0.43	1.34	0.87	0.7		1.11	0.12	0.67	0.75	0.54	Rl/4	29.4
WPH08–03	0.47	1.57	1	0.7		1.17	0.16	0.83	0.88	0.54	R3/8	52.7
WPH10–02	0.43	1.34	0.89	0.76	0.39	1.14	0.12	0.67	0.75	0.64	R1/4	32.7
WPH10–03	0.47	1.57	1	0.76		1.2	0.16	0.83	0.88	0.64	R3/8	55.7
WPH10–04	0.59	1.76	1.13	0.76		1.3	0.2	0.94	1.06	0.64	R1/2	90.7
WPH12–03	0.47	1.57	1.05	0.88	0.47	1.41	0.16	0.83	0.88	0.78	R3/8	57.6
WPH12–04	0.59	1.76	1.17	0.88		1.5	0.2	0.94	1.06	0.78	R1/2	92.8

Double banjo



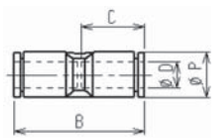
mm

Ref.	A	B1	B2	C	ϕD	E	G	H	J	ϕK	ϕP	R (Male)	Mass (g)
WPA04–M5	3.5	17.8	10.1	14.5	4	18.6	2.5	8	9.3	10	9	M5 × 0.8	9.2
WPA06–01	8	26.5	16.8	15.5	6	22	2.5	13	11.4	14	11.2	R1/8	18.4
WPA08–02	11	34	22	17.8	8	28.1	3	17	14.2	19	13.6	R1/4	46.6
WPA10–02	11	34	22.7	19.4	10	27.5	3	17	17	19	16.3	R1/4	72
WPA10–03	12	39.8	25.3	19.4		29.6	4	21	17	22.4	16.3	R3/8	76.7
WPA12–04	15	44.8	29.7	22.4	12	34.9	5	24	20	27	19.7	R1/2	118

inch

Ref.	A	B1	B2	C	ϕD	E	G	H	J	ϕK	ϕP	R (Male)	Mass (g)
WPA04–M5	0.14	0.7	0.4	0.57	0.16	0.73	0.1	0.31	0.37	0.39	0.35	M5 × 0.03	9.2
WPA06–01	0.31	1.04	0.66	0.61	0.24	0.87	0.1	0.51	0.45	0.55	0.44	R1/8	18.4
WPA08–02	0.43	1.34	0.87	0.7	0.31	1.11	0.12	0.67	0.56	0.75	0.54	R1/4	46.6
WPA10–02	0.43	1.34	0.89	0.76	0.39	1.08	0.12	0.67	0.67	0.75	0.64	R1/4	72
WPA10–03	0.47	1.57	1	0.76		1.17	0.16	0.83	0.67	0.88	0.64	R3/8	76.7
WPA12–04	0.59	1.76	1.17	0.88	0.47	1.37	0.2	0.94	0.79	1.06	0.78	R1/2	118

Union



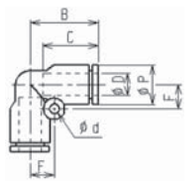
mm

Ref.	B	C	ϕD	ϕP	Mass (g)
WPUC04	30.2	14.5	4	9	3.1
WPUC06	32	15.5	6	11.2	4.8
WPUC08	40.2	17.8	8	13.6	8.8
WPUC10	40	19.4	10	16.3	10.6
WPUC12	54.8	22.4	12	19.7	20.9

inch

Ref.	B	C	ϕD	ϕP	Mass (g)
WPUC04	1.19	0.57	0.16	0.35	3.1
WPUC06	1.26	0.61	0.24	0.44	4.8
WPUC08	1.58	0.7	0.31	0.54	8.8
WPUC10	1.57	0.76	0.39	0.64	10.6
WPUC12	2.16	0.88	0.47	0.78	20.9

Union elbow



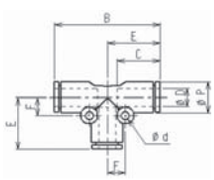
mm

Ref.	B	C	ϕD	ϕd	F	ϕP	Mass (g)
WPUL04	17.1	14.5	4	3.2	6	9	3.2
WPUL06	19	15.5	6	3.2	6.7	11.2	4.9
WPUL08	23.6	17.8	8	3.2	8.5	13.6	9.4
WPUL10	25	19.4	10	4.2	10	16.3	11.8
WPUL12	32.2	22.4	12	4.2	12	19.7	22.5

inch

Ref.	B	C	ϕD	ϕd	F	ϕP	Mass (g)
WPUL04	0.67	0.57	0.16	0.13	0.24	0.35	3.2
WPUL06	0.75	0.61	0.24	0.13	0.26	0.44	4.9
WPUL08	0.93	0.7	0.31	0.13	0.33	0.54	9.4
WPUL10	0.98	0.76	0.39	0.17	0.39	0.64	11.8
WPUL12	1.27	0.88	0.47	0.17	0.47	0.78	22.5

Union T



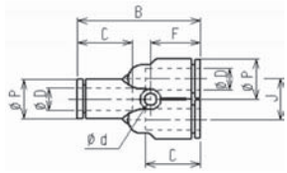
mm

Ref.	B	C	ϕD	ϕd	E	F	ϕP	Mass (g)
WPUT04	34.2	14.5	4	3.2	17.1	6	9	4.6
WPUT06	38	15.5	6	3.2	19	6.5	11.2	7
WPUT08	47.2	17.8	8	3.2	23.6	9	13.6	11.1
WPUT10	50	19.4	10	4.2	25	12	16.3	15.3
WPUT12	64.4	22.4	12	4.2	32.2	14	19.7	29.8

inch

Ref.	B	C	ϕD	ϕd	E	F	ϕP	Mass (g)
WPUT04	1.35	0.57	0.16	0.13	0.67	0.24	0.35	4.6
WPUT06	1.5	0.61	0.24	0.13	0.75	0.26	0.44	7
WPUT08	1.86	0.7	0.31	0.13	0.93	0.35	0.54	11.1
WPUT10	1.97	0.76	0.39	0.17	0.98	0.47	0.64	15.3
WPUT12	2.54	0.88	0.47	0.17	1.27	0.55	0.78	29.8

Union Y



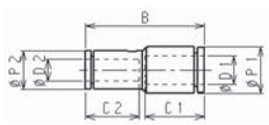
mm

Ref.	B	C	ϕD	ϕd	F	J	ϕP	Mass (g)
WPY04	31.2	14.5	4	3.2	13.2	9.3	9	4.9
WPY06	34.7	15.5	6	3.2	14.1	11.4	11.2	7.3
WPY08	44.2	17.8	8	3.2	18.6	14.2	13.6	13.9
WPY10	46	19.4	10	4.2	18	17	16.3	17.7
WPY12	56.8	22.4	12	4.2	23.9	20	19.7	32.5

inch

Ref.	B	C	ϕD	ϕd	F	F	ϕP	Mass (g)
WPY04	1.23	0.57	0.16	0.13	0.52	0.37	0.35	4.9
WPY06	1.37	0.61	0.24	0.13	0.56	0.45	0.44	7.3
WPY08	1.74	0.7	0.31	0.13	0.73	0.56	0.54	13.9
WPY10	1.81	0.76	0.39	0.17	0.71	0.67	0.64	17.7
WPY12	2.24	0.88	0.47	0.17	0.94	0.79	0.78	32.5

Different diameter union



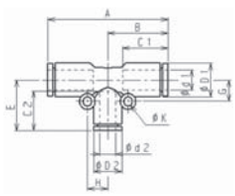
mm

Ref.	B	C1	C2	ϕD1	ϕD2	ϕP1	ϕP2	Mass (g)
WPG06–04	31.1	15.5	14.5	6	4	11.2	9	4.1
WPG08–06	34.3	17.8	15.5	8	6	13.6	11.2	5.7
WPG10–08	38.2	19.4	17.8	10	8	16.3	13.6	9.7
WPG12–10	42.8	22.4	19.4	12	10	19.7	16.3	15.4

inch

Ref.	B	C1	C2	ϕD1	ϕD2	ϕP1	ϕP2	Mass (g)
WPG06–04	1.22	0.61	0.57	0.24	0.16	0.44	0.35	4.1
WPG08–06	1.35	0.7	0.61	0.31	0.24	0.54	0.44	5.7
WPG10–08	1.5	0.76	0.7	0.39	0.31	0.64	0.54	9.7
WPG12–10	1.69	0.88	0.76	0.47	0.39	0.78	0.64	15.4

Different diameter union T



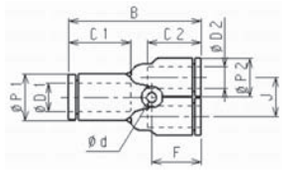
mm

Ref.	A	B	C1	C2	ϕd1	ϕd2	ϕD1	ϕD2	E	G	H	ϕK	Mass (g)
WPUG06–04	38	19	15.5	14.5	6	4	11.2	9	18.1	6.5	6	3.2	6.7
WPUG08–06	47.2	23.6	17.8	15.5	8	6	13.6	11.2	20	8.5	8	3.2	9.6
WPUG10–08	50	25	19.4	17.8	10	8	16.3	13.6	24.1	10	9.5	4.2	16.6
WPUG12–10	64.4	32.2	22.4	19.4	12	10	19.7	16.3	25.5	12	10	4.2	28.1

inch

Ref.	A	B	C1	C2	ϕd1	ϕd2	ϕD1	ϕD2	E	G	H	ϕK	Mass (g)
WPUG06–04	1.5	0.75	0.61	0.57	0.24	0.16	0.44	0.35	0.71	0.26	0.24	0.13	6.7
WPUG08–06	1.86	0.93	0.7	0.61	0.31	0.24	0.54	0.44	0.79	0.33	0.31	0.13	9.6
WPUG10–08	1.97	0.98	0.76	0.7	0.39	0.31	0.64	0.54	0.95	0.39	0.37	0.17	16.6
WPUG12–10	2.54	1.27	0.88	0.76	0.47	0.39	0.78	0.64	1	0.47	0.39	0.17	28.1

Different diameter union Y



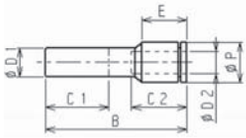
mm

Ref.	B	C1	C2	ϕD1	ϕD2	ϕd	F	J	ϕP1	ϕP2	Mass (g)
WPW06–04	32.5	15.5	14.5	6	4	3.2	13.2	9.3	11.2	9	5
WPW08–04	37.7	17.8	14.5	8	4	3.2	13.7	11.4	13.6	11.2	8
WPW08–06	38.1	17.8	15.5	8	6	3.2	14.1	11.4	13.6	11.2	14.3
WPW10–06	42.6	19.4	15.5	10	6	3.2	17.2	14.2	16.3	13.6	22.8
WPW10–08	43.2	19.4	17.8	10	8	3.2	17.8	14.2	16.3	13.6	14.8
WPW12–08	50.5	22.4	17.8	12	8	4.2	17.6	17	19.7	16.3	33.1
WPW12–10	50.9	22.4	19.4	12	10	4.2	18	17	19.7	16.3	25.5

inch

Ref.	B	C1	C2	ϕD1	ϕD2	ϕd	F	J	ϕP1	ϕP2	Mass (g)
WPW06–04	1.28	0.61	0.57	0.24	0.16	0.13	0.52	0.37	0.44	0.35	5
WPW08–04	1.48	0.7	0.57	0.31	0.16	0.13	0.54	0.45	0.54	0.44	8
WPW08–06	1.5	0.7	0.61	0.31	0.24	0.13	0.56	0.45	0.54	0.44	14.3
WPW10–06	1.68	0.76	0.61	0.39	0.24	0.13	0.68	0.56	0.64	0.54	22.8
WPW10–08	1.7	0.76	0.7	0.39	0.31	0.13	0.7	0.56	0.64	0.54	14.8
WPW12–08	1.99	0.88	0.7	0.47	0.31	0.17	0.69	0.67	0.78	0.64	33.1
WPW12–10	2	0.88	0.76	0.47	0.39	0.17	0.71	0.67	0.78	0.64	25.5

Reducer



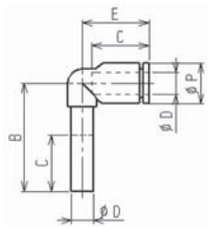
mm

Ref.	B	C1	C2	E	ϕD1	ϕD2	ϕP	Mass (g)
WPGJ06–04	36.1	15.5	14.5	11.3	6	4	9	2.8
WPGJ08–04	36.9	17.8	14.5	11.3	8	4	9	3.2
WPGJ08–06	39.5	17.8	15.5	12.6		6	11.2	3.5
WPGJ10–06	40.3	19.4	15.5	12.6	10	6	11.2	3.8
WPGJ10–08	45.6	19.4	17.8	16.6		8	13.6	5.5
WPGJ12–08	46.6	22.4	17.8	16.6	12	8	13.6	6.5
WPGJ12–10	46.6	22.4	19.4	15		10	16.3	7.3

inch

Ref.	B	C1	C2	E	ϕD1	ϕD2	ϕP	Mass (g)
WPGJ06–04	1.42	0.61	0.57	0.44	0.24	0.16	0.35	2.8
WPGJ08–04	1.45	0.7	0.57	0.44	0.31	0.16	0.35	3.2
WPGJ08–06	1.56	0.7	0.61	0.5		0.24	0.44	3.5
WPGJ10–06	1.59	0.76	0.61	0.5	0.39	0.24	0.44	3.8
WPGJ10–08	1.8	0.76	0.7	0.65		0.31	0.54	5.5
WPGJ12–08	1.83	0.88	0.7	0.65	0.47	0.31	0.54	6.5
WPGJ12–10	1.83	0.88	0.76	0.59		0.39	0.64	7.3

L type connector



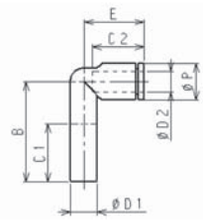
mm

Ref.	B	C	ϕD	E	ϕP	Mass (g)
WPLJ04	23.5	14.5	4	17.1	9	3
WPLJ06	29.6	15.5	6	18	11.2	4.7
WPLJ08	32.8	17.8	8	23.6	13.6	6
WPLJ10	36.2	19.4	10	25	16.3	7.9
WPLJ12	39.9	22.4	12	32.2	19.7	21.4

inch

Ref.	B	C	ϕD	E	ϕP	Mass (g)
WPLJ04	0.93	0.57	0.16	0.67	0.35	3
WPLJ06	1.17	0.61	0.24	0.71	0.44	4.7
WPLJ08	1.29	0.7	0.31	0.93	0.54	6
WPLJ10	1.43	0.76	0.39	0.98	0.64	7.9
WPLJ12	1.57	0.88	0.47	1.27	0.78	21.4

Different diameter L type connector



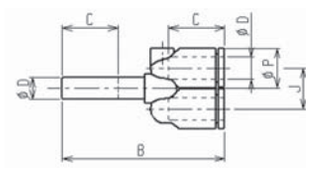
mm

Ref.	B	C1	C2	ϕD1	ϕD2	E	ϕP	Mass (g)
WPLGJ06–04	28.5	15.5	14.5	6	4	17.1	9	3.3
WPLGJ08–06	30.6	17.8	15.5	8	6	18	11.2	5.5
WPLGJ10–08	33.8	19.4	17.8	10	8	23.6	13.6	11
WPLGJ12–10	38.2	22.4	19.4	12	10	25	16.3	17

inch

Ref.	B	C1	C2	ϕD1	ϕD2	E	ϕP	Mass (g)
WPLGJ06–04	1.12	0.61	0.57	0.24	0.16	0.67	0.35	3.3
WPLGJ08–06	1.2	0.7	0.61	0.31	0.24	0.71	0.44	5.5
WPLGJ10–08	1.33	0.76	0.7	0.39	0.31	0.93	0.54	11
WPLGJ12–10	1.5	0.88	0.76	0.47	0.39	0.98	0.64	17

Branch union Y



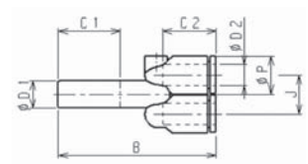
mm

Ref.	B	C	ϕD	J	ϕP	Mass (g)
WPYJ04	37.8	14.5	4	9.3	9	5.5
WPYJ06	45	15.5	6	11.4	11.2	7.2
WPYJ08	53.1	17.8	8	14.2	13.6	9.1
WPYJ10	56	19.4	10	17	16.3	23.1
WPYJ12	63.4	22.4	12	20	19.7	30.8

inch

Ref.	B	C	ϕD	J	ϕP	Mass (g)
WPYJ04	1.49	0.57	0.16	0.37	0.35	5.5
WPYJ06	1.77	0.61	0.24	0.45	0.44	7.2
WPYJ08	2.09	0.7	0.31	0.56	0.54	9.1
WPYJ10	2.2	0.76	0.39	0.67	0.64	23.1
WPYJ12	2.5	0.88	0.47	0.79	0.78	30.8

Different diameter branch union Y



mm

Ref.	B	C1	C2	ϕD1	ϕD2	J	ϕP	Mass (g)
WPWJ06–04	42.8	15.5	14.5	6	4	9.3	9	5.7
WPWJ08–06	45.5	17.8	15.5	8	6	11.4	11.2	7.3
WPWJ10–08	53.1	19.4	17.8	10	8	14.2	13.6	9.1
WPWJ12–10	58	22.4	19.4	12	10	17	16.3	24.1

inch

Ref.	B	C1	C2	ϕD1	ϕD2	J	ϕP	Mass (g)
WPWJ06–04	1.69	0.61	0.57	0.24	0.16	0.37	0.35	5.7
WPWJ08–06	1.79	0.7	0.61	0.31	0.24	0.45	0.44	7.3
WPWJ10–08	2.09	0.76	0.7	0.39	0.31	0.56	0.54	9.1
WPWJ12–10	2.28	0.88	0.76	0.47	0.39	0.67	0.64	24.1