

Fitting ZW-FP1 Series

- Port size M3 to R1/2, $\phi 4$ to $\phi 12$
- Compatible tube $\phi 3.2$ to $\phi 12$

Pneumatic, Vacuum and Auxiliary Components
Catalog No. CB-024SA



Specifications

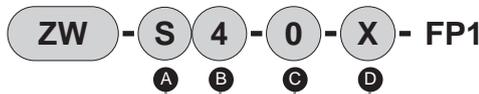
Item	ZW
Working fluid	Air
Max. working pressure MPa	1.0
Working vacuum pressure kPa	-100
Ambient temperature °C	0 to 60 (no freezing. *1)
Tube used	Soft nylon tube (F-15**) / urethane tube (U-92**, U-95**, NU-**)

*1: Freezing may occur due to adiabatic expansion depending on the air quality (dew point).

*2: Use an insert ring when using urethane tube (U-92**, U-95**, NU-**) under vacuum pressure.

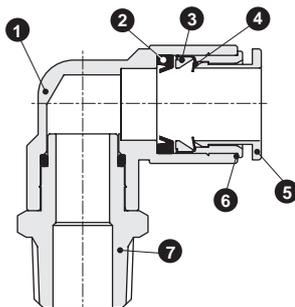
How to order

* Refer to (Pneumatic, Vacuum and Auxiliary Components (CB-024SA)) for model combinations.



A Shape		B Applicable tube bore		C Port size		D Other combinations	
S	Straight	4	$\phi 4$	M5	M 5 x 0.8	D	D type
L	Elbow	6	$\phi 6$	6	R 1/8	X	Bulkhead
T	Tee	8	$\phi 8$	8	R 1/4	Note: Sales unit is one piece.	
TR	Tetrapod	10	$\phi 10$	10	R 3/8		
Y	Y tee	12	$\phi 12$	15	R 1/2		
FY	FY	44	$\phi 4/\phi 4$	0	No thread		
WY	Double Y	46	$\phi 4/\phi 6$	4P	Plug for $\phi 4$		
C	Cap	48	$\phi 4/\phi 8$	6P	Plug for $\phi 6$		
MF	Manifold	64	$\phi 6/\phi 4$	8P	Plug for $\phi 8$		
		66	$\phi 6/\phi 6$	10P	Plug for $\phi 10$		
		68	$\phi 6/\phi 8$	12P	Plug for $\phi 12$		
		610	$\phi 6/\phi 10$				
		86	$\phi 8/\phi 6$				
		88	$\phi 8/\phi 8$				
		810	$\phi 8/\phi 10$				
		108	$\phi 10/\phi 8$				
		1010	$\phi 10/\phi 10$				
		1012	$\phi 10/\phi 12$				
		1210	$\phi 12/\phi 10$				
		1212	$\phi 12/\phi 12$				

Internal structure and main parts list



Part number	Part name	Material
1	Body *1	Stainless steel (SUS303)
2	Packing	Polybutylene terephthalate (flame-resistant resin *2)
3	Chuck holder	Nitrile rubber
4	Chuck	Polyacetal
5	Push ring *3	Stainless steel (SUS301)
6	Outer ring	Polybutylene terephthalate (flame-resistant resin *2)
7	Drive-in nipple	Stainless steel (SUS303)

*1: The single straight body is stainless steel (SUS303).

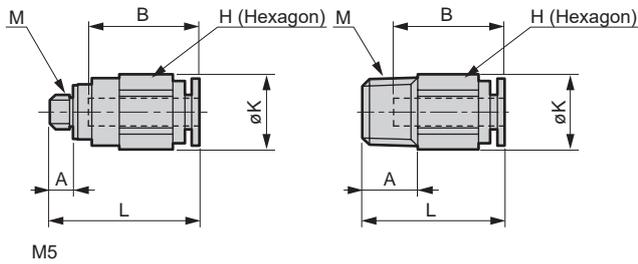
*2: Equivalent to UL94 standards V-0

*3: The push ring color is light blue.

Dimensions: Single straight/bulkhead/straight/different diameter straight

Single straight

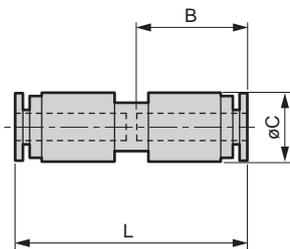
●ZW-S □ - □ -FP1



Model No.	Compatible tube O.D. ø	M	H	K	L	A	B	Min. bore size	Effective cross-sectional area mm ²
ZW-S 4-M5-FP1	4	M5x0.8	10	11	21.5	3.4	16	2.5	4
ZW-S 4-6-FP1		R 1/8	10	11	20.5	8	16	2.5	4
ZW-S 4-8-FP1		R 1/4	14	15.8	19.5	11	16	2.5	4
ZW-S 6-M5-FP1	6	M5x0.8	12	13.5	23	3.4	17.5	2.5	4.4
ZW-S 6-6-FP1		R 1/8	12	13.5	23	8	17.5	4	10.3
ZW-S 6-8-FP1		R 1/4	14	15.8	23.5	11	17.5	4	10.3
ZW-S 6-10-FP1	R 3/8	17	19.1	21.5	12	17.5	4	10.3	
ZW-S 8-6-FP1	8	R 1/8	14	15.8	28	8	19	5	17.5
ZW-S 8-8-FP1		R 1/4	14	15.8	27	11	19	6	22.4
ZW-S 8-10-FP1		R 3/8	17	19.1	22.5	12	19	6	22.4
ZW-S10-6-FP1	10	R 1/8	17	19.1	31	8	21.5	5	17.5
ZW-S10-8-FP1		R 1/4	17	19.1	32.5	11	21.5	8	30.5
ZW-S10-10-FP1		R 3/8	17	19.1	28.5	12	21.5	8	30.5
ZW-S10-15-FP1	R 1/2	22	24	26.5	15	21.5	8	30.5	
ZW-S12-8-FP1	12	R 1/4	19	21.4	35.5	11	23	8	35.5
ZW-S12-10-FP1		R 3/8	19	21.4	30.5	12	23	10	40
ZW-S12-15-FP1		R 1/2	22	24	29.5	15	23	10	40

Straight

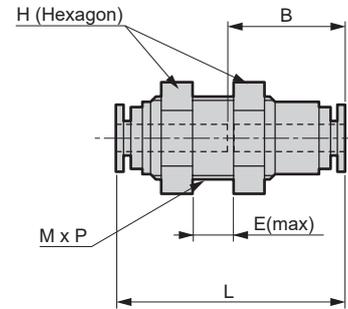
●ZW-S □ -0-FP1



Model No.	Compatible tube O.D. ø	L	B	C	Min. bore size	Effective cross-sectional area mm ²
ZW-S 4-0-FP1	4	33.5	16	10	2.5	4
ZW-S 6-0-FP1	6	36.5	17.5	12.5	4	10
ZW-S 8-0-FP1	8	39.5	19	14.5	6	22
ZW-S10-0-FP1	10	45	21.5	17.5	8	30
ZW-S12-0-FP1	12	47.5	23	20	10	35

Bulkhead

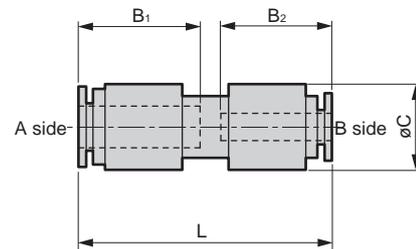
●ZW-S □ - □ -X-FP1



Model No.	Compatible tube O.D. ø	H	L	B	E	M x P	Mounting hole diameter	Min. bore size	Effective cross-sectional area mm ²
ZW-S 4-0-X-FP1	4	14	33	16	7.5	M 12 x 1	13	2.5	4
ZW-S 6-0-X-FP1	6	17	36	17.5	9.5	M 14 x 1	15	4	10
ZW-S 8-0-X-FP1	8	19	39	19	12.5	M 16 x 1	17	6	22
ZW-S10-0-X-FP1	10	23	44.5	21.5	18	M 20 x 1	21	8	30
ZW-S12-0-X-FP1	12	26	47	23	20.5	M 22 x 1	23	9	35

Different diameter straight

●ZW-S □ -0-FP1



Model No.	Compatible tube O.D. ø		L	B ₁	B ₂	C	Min. bore size	Effective cross-sectional area mm ²
	A side	B side						
ZW-S 46-0-FP1	6	4	36.5	17.5	16	12.5	2.5	4
ZW-S 68-0-FP1	8	6	39.5	19	17.5	14.5	4	10
ZW-S 810-0-FP1	10	8	45	21.5	19	17.5	6	22
ZW-S1012-0-FP1	12	10	47.5	23	21.5	20	8	30

Electric actuator
 Pneumatic cylinders
 Assistive device
 Pneumatic valves
 FRL/Auxiliary Components
 Electronic Component
 Vacuum components
 Main line components
 Fluid control valves
 Main line components
 Anti-bacterial/bacteria-removing filter
 Vacuum components
 Fluid control valves

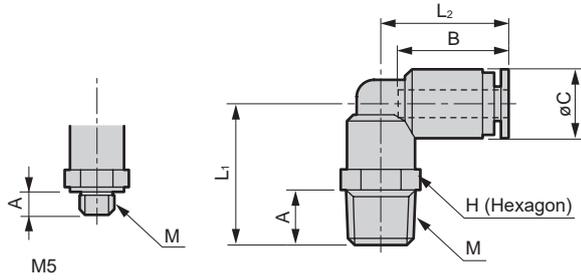
FP1

FP2

ZW-FP1 Series

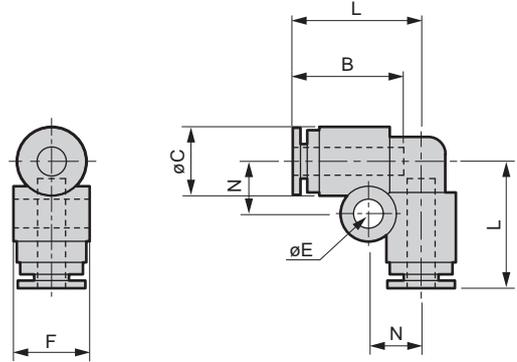
Dimensions: Single elbow/elbow/double tee/D type tee

Single straight
 ● ZW-S □ - □ -FP1



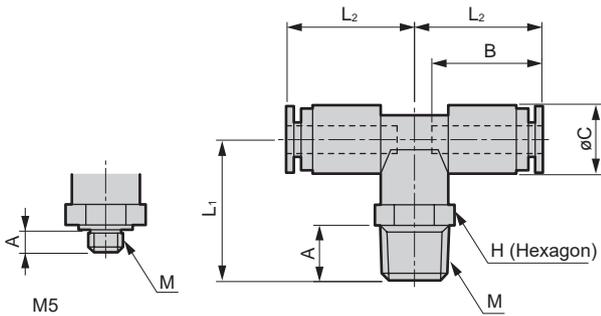
Model No.	Compatible tube O.D. φ	M	H	L ₁	L ₂	A	B	C	Min. bore size	Effective cross-sectional area (mm ²)
ZW-L 4-M5-FP1	M5x0.8	8	15	18	3.4	16	10	2.5	3.2	
ZW-L 4-6-FP1	R 1/8	10	20.5	18.5	8	16	10	2.5	3.2	
ZW-L 4-8-FP1	R 1/4	14	24	18.5	11	16	10	2.5	3.2	
ZW-L 6-M5-FP1	M5x0.8	10	15	20	3.4	17.5	12.5	2.5	4.2	
ZW-L 6-6-FP1	R 1/8	12	24	21	8	17.5	12.5	4	8	
ZW-L 6-8-FP1	R 1/4	14	27.5	21	11	17.5	12.5	4	8	
ZW-L 6-10-FP1	R 3/8	17	29	21	12	17.5	12.5	4	8	
ZW-L 8-6-FP1	R 1/8	14	25.5	23.5	8	19	14.5	6	18	
ZW-L 8-8-FP1	R 1/4	14	28.5	23.5	11	19	14.5	6	18	
ZW-L 8-10-FP1	R 3/8	17	30	23.5	12	19	14.5	6	18	
ZW-L10-6-FP1	R 1/8	17	28	27	8	21.5	17.5	6.5	24.3	
ZW-L10-8-FP1	R 1/4	17	31	27	11	21.5	17.5	8	27	
ZW-L10-10-FP1	R 3/8	17	32.5	27	12	21.5	17.5	8	27	
ZW-L10-15-FP1	R 1/2	22	35.5	27	15	21.5	17.5	8	27	
ZW-L12-8-FP1	R 1/4	19	33	29.5	11	23	20	8.5	33	
ZW-L12-10-FP1	R 3/8	19	34.5	29.5	12	23	20	9	35	
ZW-L12-15-FP1	R 1/2	22	37.5	29.5	15	23	20	9	35.5	

Bulkhead
 ● ZW-S □ - □ -X-FP1



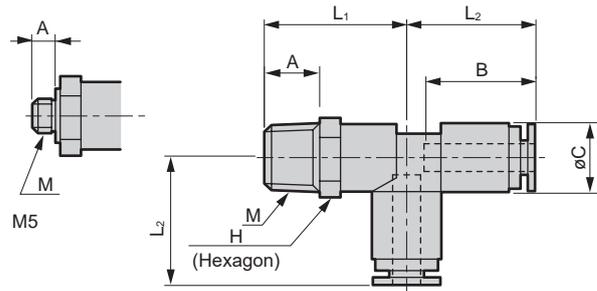
Model No.	Compatible tube O.D. φ	L	B	C	N	E	F	Min. bore size	Effective cross-sectional area (mm ²)
ZW-L 4-0-FP1	4	18.5	16	10	7.5	4.2	11	2.5	3
ZW-L 6-0-FP1	6	21	17.5	12.5	8.5	4.2	13.5	4	7.5
ZW-L 8-0-FP1	8	23.5	19	14.5	9.5	4.2	15.5	6	17
ZW-L10-0-FP1	10	27	21.5	17.5	11	4.2	18.5	8	25.5
ZW-L12-0-FP1	12	29.5	23	20	12	4.2	21	10	34

Double tee
 ● ZW-T □ - □ -FP1



Model No.	Compatible tube O.D. φ	M	H	L ₁	L ₂	A	B	C	Min. bore size	Effective cross-sectional area (mm ²)
ZW-T 4-M5-FP1	M5x0.8	10	16.5	18.5	3.4	16	10	2.5	4.3	
ZW-T 4-6-FP1	R 1/8	10	20.5	18.5	8	16	10	2.5	4.3	
ZW-T 4-8-FP1	R 1/4	14	24	18.5	11	16	10	2.5	4.3	
ZW-T 6-M5-FP1	M5x0.8	12	20	21	3.4	17.5	12.5	2.5	4.3	
ZW-T 6-6-FP1	R 1/8	12	24	21	8	17.5	12.5	4	10.5	
ZW-T 6-8-FP1	R 1/4	14	27.5	21	11	17.5	12.5	4	10.5	
ZW-T 6-10-FP1	R 3/8	17	29	21	12	17.5	12.5	4	10.5	
ZW-T 8-6-FP1	R 1/8	14	25.5	23.5	8	19	14.5	6	23.5	
ZW-T 8-8-FP1	R 1/4	14	28.5	23.5	11	19	14.5	6	23.5	
ZW-T 8-10-FP1	R 3/8	17	30	23.5	12	19	14.5	6	23.5	
ZW-T10-8-FP1	R 1/8	17	31	27	11	21.5	17.5	8	33.5	
ZW-T10-10-FP1	R 1/4	17	32.5	27	12	21.5	17.5	8	33.5	
ZW-T10-15-FP1	R 3/8	22	35.5	27	15	21.5	17.5	8	33.5	
ZW-T12-8-FP1	R 1/2	19	33	29.5	11	23	20	8.5	37	
ZW-T12-10-FP1	R 1/4	19	34.5	29.5	12	23	20	9	41	
ZW-T12-15-FP1	R 3/8	22	37.5	29.5	15	23	20	9	41	

D tee
 ● ZW-T □ - □ -D-FP1

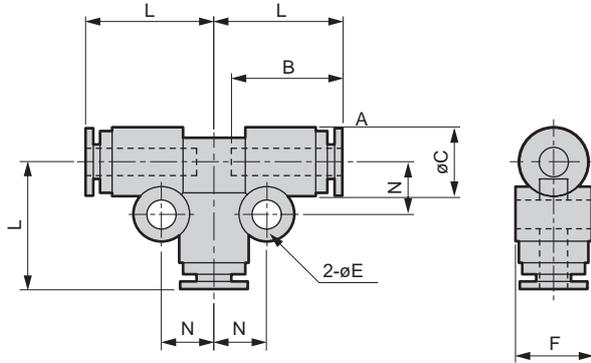


Model No.	Compatible tube O.D. φ	M	H	L ₁	L ₂	A	B	C	Min. bore size	Effective cross-sectional area (mm ²)
ZW-T 4-M5-D-FP1	M5x0.8	10	16.5	18.5	3.4	16	10	2.5	4.3	
ZW-T 4-6-D-FP1	R 1/8	10	20.5	18.5	8	16	10	2.5	4.3	
ZW-T 4-8-D-FP1	R 1/4	14	24	18.5	11	16	10	2.5	4.3	
ZW-T 6-M5-D-FP1	M5x0.8	12	19.5	21	3.4	17.5	12.5	2.5	4.3	
ZW-T 6-6-D-FP1	R 1/8	12	24	21	8	17.5	12.5	4	10.5	
ZW-T 6-8-D-FP1	R 1/4	14	27.5	21	11	17.5	12.5	4	10.5	
ZW-T 6-10-D-FP1	R 3/8	17	29	21	12	17.5	12.5	4	10.5	
ZW-T 8-6-D-FP1	R 1/8	14	25.5	23.5	8	19	14.5	6	23.5	
ZW-T 8-8-D-FP1	R 1/4	14	28.5	23.5	11	19	14.5	6	23.5	
ZW-T 8-10-D-FP1	R 3/8	17	30	23.5	12	19	14.5	6	23.5	
ZW-T10-8-D-FP1	R 1/8	17	31	27	11	21.5	17.5	8	33.5	
ZW-T10-10-D-FP1	R 1/4	17	32.5	27	12	21.5	17.5	8	33.5	
ZW-T10-15-D-FP1	R 3/8	22	35.5	27	15	21.5	17.5	8	33.5	
ZW-T12-8-D-FP1	R 1/2	19	33	29.5	11	23	20	8.5	37	
ZW-T12-10-D-FP1	R 1/4	19	34.5	29.5	12	23	20	9	41	
ZW-T12-15-D-FP1	R 3/8	22	37.5	29.5	15	23	20	9	41	

Dimensions: Tee/different diameter tee/Y type tee/double Y tee

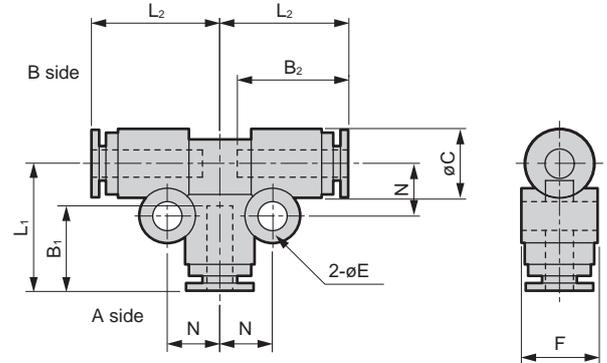
Tee

●ZW-T □ -0-FP1



Different diameter tee

●ZW-T □ -0-FP1

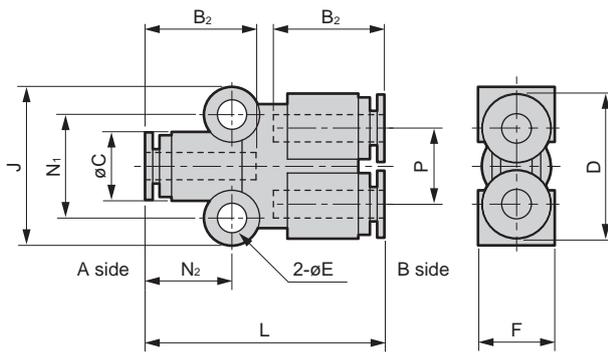


Model No.	Compatible tube O.D. ø	L	B	C	E	F	N	Min. bore size	Effective cross-sectional area mm ²
ZW-T 4-0-FP1	4	18.5	16	10	4.2	11	7.5	2.5	3.6
ZW-T 6-0-FP1	6	21	17.5	12.5	4.2	13.5	8.5	4	9.7
ZW-T 8-0-FP1	8	23.5	19	14.5	4.2	15.5	9.5	6	22
ZW-T10-0-FP1	10	27	21.5	17.5	4.2	18.5	11	8	30
ZW-T12-0-FP1	12	29.5	23	20	4.2	21	12	10	35.5

Model No.	Compatible tube O.D. ø		L ₁	L ₂	B ₁	B ₂	C	E	F	N	Min. bore size	Effective cross-sectional area mm ²
	A side	B side										
ZW-T 46-0-FP1	4	6	21	21	16	17.5	12.5	4.2	13.5	8.5	2.5	3.6
ZW-T 68-0-FP1	6	8	23.5	23.5	17.5	19	14.5	4.2	15.5	9.5	4	9.7
ZW-T 810-0-FP1	8	10	27.5	27	19	21.5	17.5	4.2	18.5	11	6	22
ZW-T1012-0-FP1	10	12	29.5	29.5	21.5	23	20	4.2	21	12	8	30

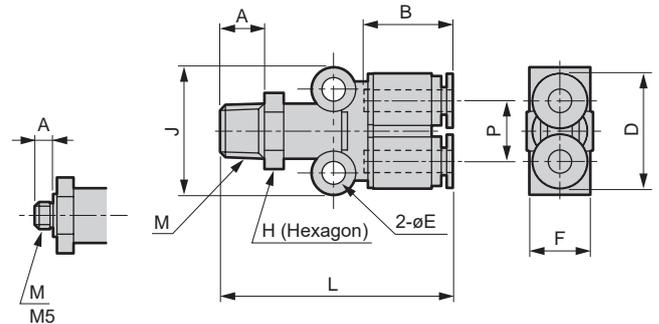
Y tee

●ZW-Y □ -0-FP1



Double Y tee

●ZW-Y □ - □ -FP1



Model No.	Compatible tube O.D. ø		L	B ₁	B ₂	C	D	E	F	J	N ₁	N ₂	P	Effective cross-sectional area mm ²
	A side	B side												
ZW-Y 44-0-FP1	4	4	34.5	16	16	10	21	4.2	11	23	15	12.5	11	3.6
ZW-Y 66-0-FP1	6	6	37.5	17.5	17.5	12.5	26	4.2	13.5	25.5	17.5	14	13.5	10.5
ZW-Y 88-0-FP1	8	8	40.5	19	19	14.5	30	4.2	15.5	27	19	15	15.5	23
ZW-Y1010-0-FP1	10	10	48	21.5	21.5	17.5	36	4.2	18.5	30	22	18	18.5	38
ZW-Y1212-0-FP1	12	12	53	23	23	20	41	4.2	21	32	24	19.5	21	50
ZW-Y 64-0-FP1	6	4	37.5	17.5	16	12.5	26	4.2	13.5	25.5	17.5	14	13.5	5.4
ZW-Y 86-0-FP1	8	6	40.5	19	17.5	14.5	30	4.2	15.5	27	19	15	15.5	14.3
ZW-Y 108-0-FP1	10	8	48	21.5	19	17.5	36	4.2	18.5	30	22	18	18.5	21.1
ZW-Y1210-0-FP1	12	10	53	23	21.5	20	41	4.2	21	32	24	19.5	21	35.5

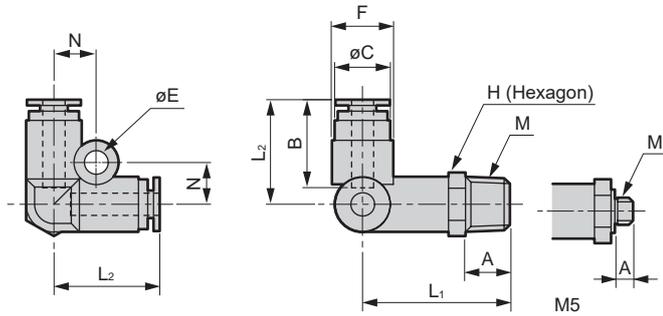
Model No.	Compatible tube O.D. ø	M	H	L	A	B	D	E	F	J	P	Effective cross-sectional area mm ²
ZW-Y 4-M5-FP1	4	M5x0.8	12	38	3.4	16	21	4.2	11	23	11	4.5
ZW-Y 4-R 1/8-FP1		R 1/8	12	42	8	16	21	4.2	11	23	11	5.5
ZW-Y 4-R 1/4-FP1		R 1/4	14	45.5	11	16	21	4.2	11	23	11	5.5
ZW-Y 6-M5-FP1	6	M5x0.8	14	41	3.4	17.5	26	4.2	13.5	25.5	13.5	4.5
ZW-Y 6-R 1/8-FP1		R 1/8	14	46	8	17.5	26	4.2	13.5	25.5	13.5	17.5
ZW-Y 6-R 1/4-FP1		R 1/4	14	49	11	17.5	26	4.2	13.5	25.5	13.5	17.5
ZW-Y 8-M5-FP1	8	M5x0.8	17	50.5	12	17.5	26	4.2	13.5	25.5	13.5	17.5
ZW-Y 8-R 1/8-FP1		R 1/8	17	49	8	19	30	4.2	15.5	27	15.5	25.5
ZW-Y 8-R 3/8-FP1		R 3/8	17	53.5	12	19	30	4.2	15.5	27	15.5	25.5
ZW-Y 10-M5-FP1	10	M5x0.8	19	59.5	11	21.5	36	4.2	18.5	30	18.5	35
ZW-Y 10-R 1/8-FP1		R 1/8	19	61	12	21.5	36	4.2	18.5	30	18.5	38.5
ZW-Y 10-R 1/2-FP1		R 1/2	22	64	15	21.5	36	4.2	18.5	30	18.5	38
ZW-Y 12-M5-FP1	12	M5x0.8	22	64.5	11	23	41	4.2	21	32	21	37
ZW-Y 12-R 1/4-FP1		R 1/4	22	64.5	11	23	41	4.2	21	32	21	37
ZW-Y 12-R 3/8-FP1		R 3/8	22	66	12	23	41	4.2	21	32	21	37
ZW-Y 12-R 1/2-FP1	R 1/2	22	69	15	23	41	4.2	21	32	21	40.5	

FP1
Electric actuator
Pneumatic cylinders
Assistive device
Pneumatic valves
FRL/Auxiliary Components
Electronic Component
Vacuum components
Main line components
Fluid control valves
Main line components
Anti-bacterial/bacteria-removing filter
FP2
Vacuum components
Fluid control valves

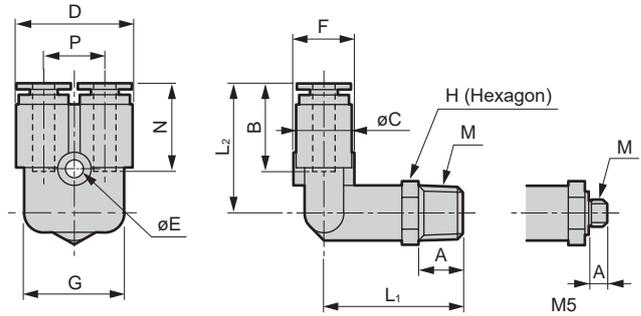
ZW-FP1 Series

Dimensions: Tetrapod (with R)/FY type (with R)/double Y type (with R)/tetrapod

Tetrapod (with R)
● ZW-TR □ - □ -FP1



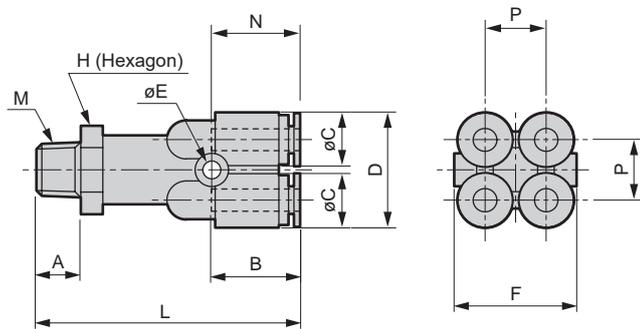
FY (with R)
● ZW-FY □ - □ -FP1



Model No.	Compatible tube O.D. φ	M	H	L ₁	L ₂	A	B	C	E	F	N	Min. bore size	Effective cross-sectional area mm ²
ZW-TR 4-M5-FP1	M5x0.8	10	22.5	19	3.4	16	10	4.2	11	7.5	2.5	4.3	
ZW-TR 4-6-FP1	R 1/8	10	26.5	19	8	16	10	4.2	11	7.5	2.5	4.5	
ZW-TR 4-8-FP1	R 1/4	14	30	19	11	16	10	4.2	11	7.5	2.5	4.5	
ZW-TR 6-M5-FP1	M5x0.8	14	25	21.5	3.4	17.5	12.5	4.2	13.5	8.5	2.5	4.3	
ZW-TR 6-6-FP1	R 1/8	14	30	21.5	8	17.5	12.5	4.2	13.5	8.5	4	10.5	
ZW-TR 6-8-FP1	R 1/4	14	33	21.5	11	17.5	12.5	4.2	13.5	8.5	4	10.5	
ZW-TR 6-10-FP1	R 3/8	17	34.5	21.5	12	17.5	12.5	4.2	13.5	8.5	4	10.5	
ZW-TR 8-6-FP1	R 1/8	17	32.5	24	8	19	14.5	4.2	15.5	9.5	6	23.5	
ZW-TR 8-8-FP1	R 1/4	17	35.5	24	11	19	14.5	4.2	15.5	9.5	6	23.5	
ZW-TR 8-10-FP1	R 3/8	17	37	24	12	19	14.5	4.2	15.5	9.5	6	23.5	
ZW-TR10-8-FP1	R 1/4	19	39.5	27.5	11	21.5	17.5	4.2	18.5	13	8	35.5	
ZW-TR10-10-FP1	R 3/8	19	41	27.5	12	21.5	17.5	4.2	18.5	13	8	35.5	
ZW-TR10-15-FP1	R 1/2	22	44	27.5	15	21.5	17.5	4.2	18.5	13	8	35.5	
ZW-TR12-8-FP1	R 1/4	22	41.5	30	11	23	20	4.2	21	14	8.5	37.5	
ZW-TR12-10-FP1	R 3/8	22	43	30	12	23	20	4.2	21	14	8.5	37.5	
ZW-TR12-15-FP1	R 1/2	22	46	30	15	23	20	4.2	21	14	8.5	37.5	

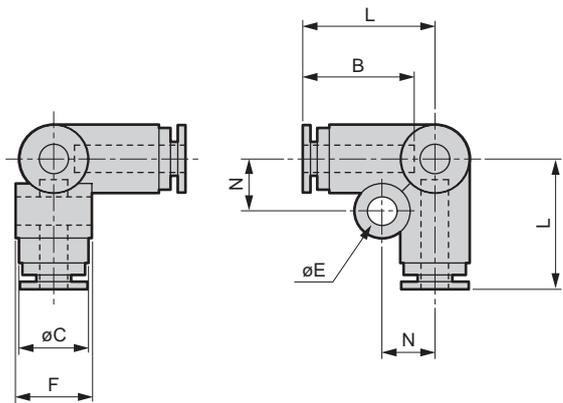
Model No.	Compatible tube O.D. φ	M	H	L ₁	L ₂	A	B	C	D	E	F	G	N	P	Min. bore size	Effective cross-sectional area mm ²
ZW-FY 4-M5-FP1	M5x0.8	10	21	23.5	3.4	16	10	21	3.2	11	18	15.5	11	2.5	4.5	
ZW-FY 4-6-FP1	R 1/8	10	25	23.5	8	16	10	21	3.2	11	18	15.5	11	2.5	4.6	
ZW-FY 4-8-FP1	R 1/4	14	28.5	23.5	11	16	10	21	3.2	11	18	15.5	11	2.5	4.6	
ZW-FY 6-M5-FP1	M5x0.8	14	23	27	3.4	17.5	12.5	26	4.2	13.5	22.5	17	13.5	2.5	4.5	
ZW-FY 6-6-FP1	R 1/8	14	28	27	8	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10.5	
ZW-FY 6-8-FP1	R 1/4	14	31	27	11	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10.5	
ZW-FY 6-10-FP1	R 3/8	17	32.5	27	12	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10.5	
ZW-FY 8-6-FP1	R 1/8	17	30.5	29	8	19	14.5	30	4.2	15.5	26.5	18	15.5	6	23	
ZW-FY 8-8-FP1	R 1/4	17	33.5	29	11	19	14.5	30	4.2	15.5	26.5	18	15.5	6	23	
ZW-FY 8-10-FP1	R 3/8	17	35	29	12	19	14.5	30	4.2	15.5	26.5	18	15.5	6	23	
ZW-FY10-8-FP1	R 1/4	19	37.5	33	11	21.5	17.5	36	4.2	18.5	31.5	20	18.5	8	34.4	
ZW-FY10-10-FP1	R 3/8	19	39	33	12	21.5	17.5	36	4.2	18.5	31.5	20	18.5	8	34.4	
ZW-FY10-15-FP1	R 1/2	22	42	33	15	21.5	17.5	36	4.2	18.5	32.5	20	18.5	8	34.4	
ZW-FY12-8-FP1	R 1/4	22	39.5	35.5	11	23	20	41	4.2	21	37	21.5	21	8.5	37.5	
ZW-FY12-10-FP1	R 3/8	22	41	35.5	12	23	20	41	4.2	21	37	21.5	21	8.5	37.5	
ZW-FY12-15-FP1	R 1/2	22	44	35.5	15	23	20	41	4.2	21	37	21.5	21	8.5	37.5	

Double Y (with R)
● ZW-WY □ - □ -FP1



Model No.	Compatible tube O.D. φ	M	H	L	A	B	C	D	E	F	N	P	Min. bore size	Effective cross-sectional area mm ²
ZW-WY4-6-FP1	R 1/8	14	47.5	8	16	10	21	3.2	22	15.5	11	9.7		
ZW-WY4-8-FP1	R 1/4	14	50.5	11	16	10	21	3.2	22	15.5	11	9.7		
ZW-WY6-6-FP1	R 1/8	17	51.5	8	17.5	12.5	26	3.2	27	17	13.5	23		

Tetrapod
● ZW-TR □ -0-FP1

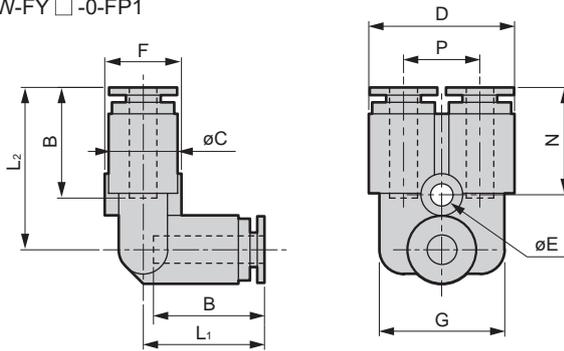


Model No.	Compatible tube O.D. φ	L	B	C	E	F	N	Min. bore size	Effective cross-sectional area mm ²
ZW-TR 4-0-FP1	4	19	16	10	4.2	11	7.5	2.5	4
ZW-TR 6-0-FP1	6	21.5	17.5	12.5	4.2	13.5	8.5	4	9.5
ZW-TR 8-0-FP1	8	24	19	14.5	4.2	15.5	9.5	6	12.5
ZW-TR10-0-FP1	10	27.5	21.5	17.5	4.2	18.5	13	8	29.5
ZW-TR12-0-FP1	12	30	23	20	4.2	21	14	10	35.5

Dimensions: FY type/double Y type/cap/manifold (single/with R)

FY

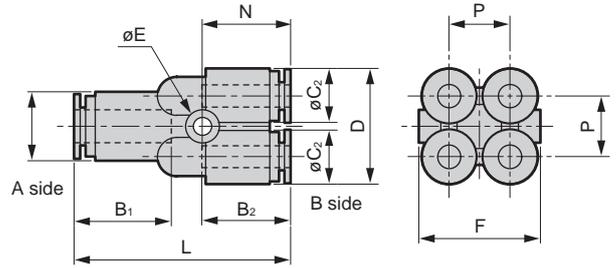
●ZW-FY □ -0-FP1



Model No.	Compatible tube O.D. ø	L ₁	L ₂	B	C	D	E	F	G	N	P	Min. bore size	Effective cross-sectional area mm ²
ZW-FY 4-0-FP1	4	17.5	23.5	16	10	21	3.2	11	18	15.5	11	2.5	4
ZW-FY 6-0-FP1	6	19.5	27	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10
ZW-FY 8-0-FP1	8	22	29	19	14.5	30	4.2	15.5	26.5	18	15.5	6	21
ZW-FY10-0-FP1	10	25.5	33	21.5	17.5	36	4.2	18.5	31.5	20	18.5	8	29
ZW-FY12-0-FP1	12	28	35.5	23	20	41	4.2	21	37	21.5	21	10	35.5

Double Y

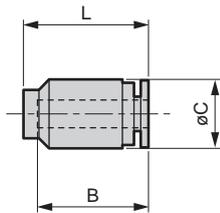
●ZW-WY □ -0-FP1



Model No.	Compatible tube O.D. ø		L	B ₁	B ₂	C ₁	C ₂	D	E	F	N	P	Effective cross-sectional area mm ²
	A side	B side											
ZW-WY64-0-FP1	6	4	39	17.5	16	12.5	10	21	3.2	22	15.5	11	9
ZW-WY86-0-FP1	8	6	43	19	17.5	14.5	12.5	26	3.2	27	17	13.5	22

Cap

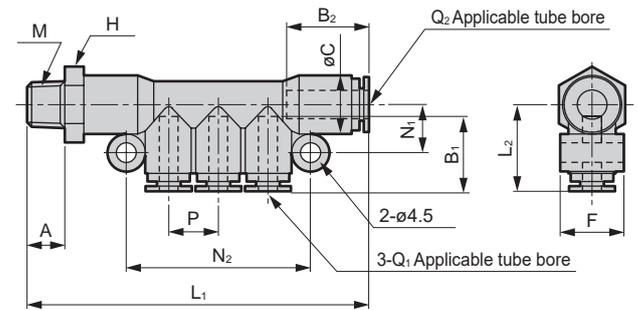
●ZW-C □ -FP1



Model No.	Compatible tube O.D. ø	B	øC	L
ZW-C 4-FP1	4	16	10	18
ZW-C 6-FP1	6	17.5	12.5	19.5
ZW-C 8-FP1	8	19	14.5	21
ZW-C10-FP1	10	21.5	17.5	24
ZW-C12-FP1	12	23	20	26

Manifold (single/with R)

●ZW-MF □ - □ -FP1

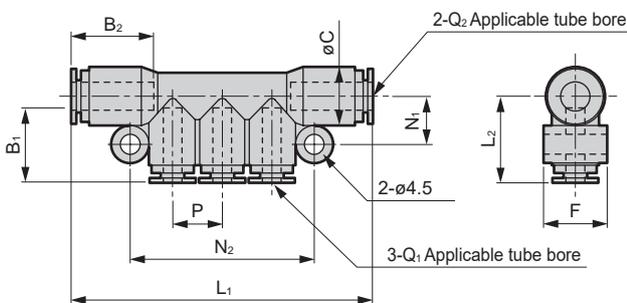


Model No.	Compatible tube O.D. ø		M	H	L ₁	L ₂	A	B ₁	B ₂	C	F	N ₁	N ₂	P	Effective cross-sectional area mm ²
	Q1	Q2													
ZW-MF 46-6-FP1	4	6	R 1/8	14	72.5	18.5	8	16	17.5	12.5	13.5	10.5	39	10.5	8.3
ZW-MF 48-8-FP1	4	8	R 1/4	17	77.5	19.5	11	16	19	14.5	15.5	11.5	39	10.5	24.2
ZW-MF 68-8-FP1	6	8	R 1/4	17	84.5	21	11	17.5	19	14.5	15.5	11.5	46.5	13	24.2
ZW-MF810-10-FP1	8	10	R 3/8	19	97.5	23.5	12	19	21.5	17.5	18.5	13	52.5	15	35.5

Dimensions: Manifold (single)/plug reducer

Manifold (single)

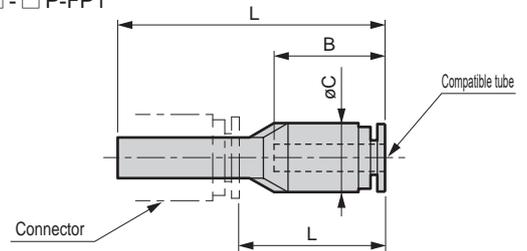
●ZW-MF □ -0-FP1



Model No.	Compatible tube O.D. ø		L ₁	L ₂	B ₁	B ₂	C	F	N ₁	N ₂	P	Effective cross-sectional area mm ²
	Q1	Q2										
ZW-MF 46-0-FP1	4	6	64	18.5	16	17.5	12.5	13.5	10.5	39	10.5	7.9
ZW-MF 48-0-FP1	4	8	66	19.5	16	19	14.5	15.5	11.5	39	10.5	22
ZW-MF 68-0-FP1	6	8	73	21	17.5	19	14.5	15.5	11.5	46.5	13	22
ZW-MF610-0-FP1	6	10	78.5	22	17.5	21.5	17.5	18.5	13	46.5	13	30
ZW-MF810-0-FP1	8	10	84.5	23.5	19	21.5	17.5	18.5	13	52.5	15	30

Plug reducer

●ZW-S □ - □ -FP1



Model No.	Compatible tube O.D. ø	Connector Diameter ø	L	L'	B	C	Min. bore size	Effective cross-sectional area mm ²
ZW-S 4-6P-FP1	4	6	38.5	21	16	10	2.3	3.5
ZW-S 4-8P-FP1		8	40.4	21.5	16	10	3	5.6
ZW-S 4-10P-FP1		10	42	20.5	16	12.5	3	5.6
ZW-S 6-4P-FP1	6	4	42	26	17.5	12.5	2.3	3.5
ZW-S 6-8P-FP1		8	41	22	17.5	12.5	4	10
ZW-S 6-10P-FP1		10	42	20	17.5	12.5	4	10
ZW-S 8-12P-FP1	8	12	44	21	17.5	14.5	4	10
ZW-S 8-10P-FP1		10	44.5	22.5	19	14.5	6	22
ZW-S 8-12P-FP1		12	44	21	19	14.5	6	22
ZW-S10-12P-FP1	10	12	48	25	21.5	17.5	8	30

* Dimensions for connecting fitting are for CKD (ZW-FP1 Series)