PUSH-IN FITTINGS FOR THE PRODUCTION OF BATTERIES

SERIES BTY FITTINGS

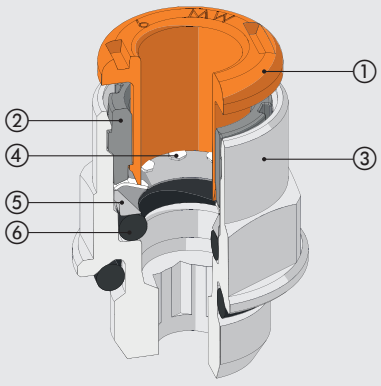
The BTY Series is designed to meet the requirements of the battery production process, which requires to avoid any copper (Cu) and zinc (Zn) contamination.
The design of the BTY series fittings features either a stainless steel or technopolymer casing, inner technopolymer components, stainless steel springs and NBR seals, which make them the perfect choice for battery production lines.
Metal Work automatic fittings are generally lightly lubricated in the area where the tube is inserted.
Dedicated solutions are required if no lubricant is to be used at all.

TECHNICAL DATA		STEEL	TECHNOPOLYMER
Threaded port		G (BSP)*: 1/8 - 1/4	
Diameter	mm	Ø 4 - Ø 6 - Ø 8	
Temperature range	°C	– 20 to 80	– 20 to 60
	°F	– 4 to 176	– 4 to 140
Pressure range	bar	– 0.99 to 16	– 0.99 to 12
	MPa	– 0.099 to 1.6	– 0.099 to 1.2
Recommended pipe		Rilsan PA 11 - Nylon 6 - Polyamide 12 - Polypropylene	
Fluid		Vacuum - Compressed air	

N.B.: Given the possible presence of aggressive substances, we suggest consulting the compatibility table available on our website.
* Cylindrical threads according to ISO 228-1, identified with a letter G. They also correspond to BSP or more precisely to BSPP designation (P stands for Parallel).

COMPONENTS

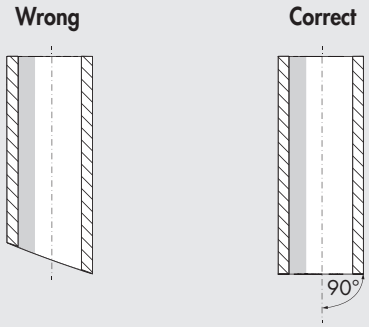
① Release bushing: technopolymer
② Locking bushing: technopolymer
③ Body: AISI 316L stainless steel
④ Clamping spring: stainless steel
⑤ Spring supporting ring: technopolymer
⑥ Seal: NBR NBR (FKM or EPDM on request)



INSTALLING THE PIPE

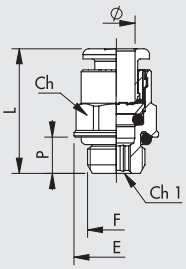
Compressed air pipes must be used in compliance with some basic criteria in order to ensure long life and proper operation of the fitting:
- check that the conditions for the installation and use (e.g. temperature and fluid used) comply with the characteristics stated by the pipe manufacturer;
- check the pipe size; oversized pipes could not fit properly, undersized ones could not ensure pipe retention and air tightness.

The cut should be as accurate as possible at a right angle with the pipe axis.



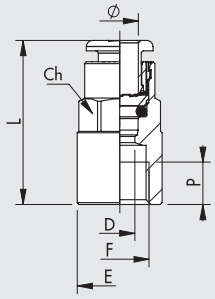
- the bending radius of the pipe installed must be as wide as possible. The fittings have been designed to ensure axial seal of the pipe; excessive curvature could considerably shorten the life of the pipe.
- the pipe must not be subjected to excessive axial stress and it must be of the right length for snugly fitting (not too long or too short).
- correct insertion of the pipe into the fitting is essential for air tightness and pipe retention. Make sure that the pipe is pushed right into the seat.
- check that the pipe does not encounter any obstacles or blockages along its way, which could cause tensile stress of the pipe in the fitting.

STRAIGHT, CYLINDRICAL, MALE R1 BTY



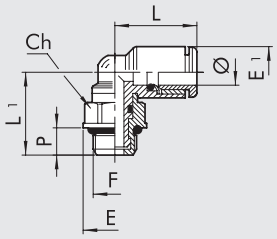
Code	Ref.	Ø	F	Ch	Ch1	P	L	D	E
2Y01002	R1 BTY	4	1/8	10	3	6	18	3.1	14
2Y01003	R1 BTY	4	1/4	10	3	8	19.8	3.1	18
2Y01007	R1 BTY	6	1/8	12	4	6	21.6	4.1	14
2Y01008	R1 BTY	6	1/4	12	4	8	20.3	4.1	18
2Y01009	R1 BTY	8	1/8	13	5	6	25.4	5.2	14
2Y01010	R1 BTY	8	1/4	14	6	8	24.4	6.2	18

STRAIGHT, FEMALE R2 BTY



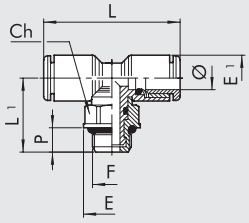
Code	Ref.	Ø	F	Ch	P	L	D	E
2Y02001	R2 BTY	4	1/8	10	7	26.2	3	14
2Y02002	R2 BTY	4	1/4	10	8	28.6	3	17
2Y02005	R2 BTY	6	1/8	12	7	27.1	5	14
2Y02006	R2 BTY	6	1/4	12	8	29.3	5	17
2Y02007	R2 BTY	8	1/8	13	7	28.1	7	14
2Y02008	R2 BTY	8	1/4	14	8	30	7	17

ROTARY ELBOW, MALE, TECHNOPOLYMER R34 BTY



Code	Ref.	Ø	F	Ch	P	L	L1	E	E1
2Y34002	R34 BTY	4	1/8	12	6	16.4	17.2	14	9.2
2Y34003	R34 BTY	4	1/4	14	8	16.4	20.1	18	9.2
2Y34007	R34 BTY	6	1/8	12	6	19	18.3	14	11.3
2Y34008	R34 BTY	6	1/4	14	8	19	21.2	18	11.3
2Y34009	R34 BTY	8	1/8	12	6	20.2	19.5	14	13.8
2Y34010	R34 BTY	8	1/4	14	8	20.2	22.4	18	13.8

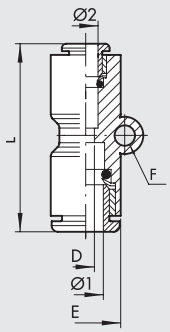
ROTARY CENTRAL TEE, MALE, TECHNOPOLYMER R35 BTY



Code	Ref.	Ø	F	Ch	P	L	L1	E	E1
2Y35002	R35 BTY	4	1/8	12	6	32.8	17.2	14	9.2
2Y35003	R35 BTY	4	1/4	14	8	32.8	20.1	18	9.2
2Y35007	R35 BTY	6	1/8	12	6	38	18.3	14	11.3
2Y35008	R35 BTY	6	1/4	14	8	38	21.2	18	11.3
2Y35009	R35 BTY	8	1/8	12	6	40.4	19.5	14	13.8
2Y35010	R35 BTY	8	1/4	14	8	40.4	22.4	18	13.8

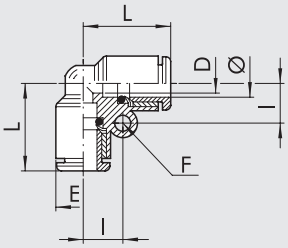
To complete the proposal, the following list of standard fittings can be used in this sector.

STRAIGHT, INTERMEDIATE, TECHNOPOLYMER R19



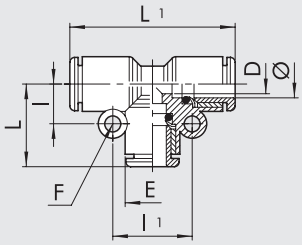
Code	Ref.	Ø1	Ø2	E	L	D	F
2019001	RL19	4	4	9.2	30.4	3	3.3
2019003	R19	6	6	11.3	33	5	3.3
2019004	RL19	8	8	13.8	36.2	6.5	3.3
2019303	RL19	6	4	11.3	32.7	3	3.3
2019304	RL19	8	6	13.8	36.1	5	3.3

ELBOW, INTERMEDIATE, TECHNOPOLYMER R21



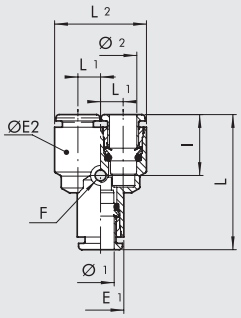
Code	Ref.	Ø	L	D	E	I	F
2L21001	RL21	4	16.7	2.5	9.2	7.2	3.3
2L21003	RL21	6	19	4.2	11.3	8.2	3.3
2L21004	RL21	8	21.4	6.2	13.8	9.6	3.3

INTERMEDIATE TEE, TECHNOPOLYMER R22



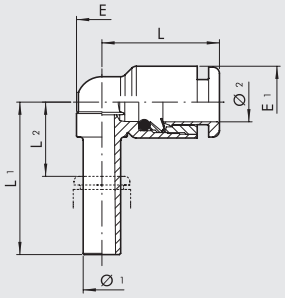
Code	Ref.	Ø	L	L1	D	E	I	I1	F
2L22001	RL22	4	16.7	33.4	2.5	9.2	7.2	14.4	3.3
2L22003	RL22	6	19	38	4.2	11.3	8.2	16.4	3.3
2L22004	RL22	8	21.4	42.8	6.2	13.8	9.6	19.2	3.3

Y TECHNOPOLYMER R23



Code	Ref.	Ø1	Ø2	L	L1	E1	ØE2	I	F	L2
2023001	RL23	4	4	32.9	5	9.2	9.2	14.8	3.3	19.2
2023003	RL23	6	6	35.5	5.8	11.3	11.3	15	3.3	22.8
2023004	RL23	8	8	39.5	7.2	13.8	13.8	15.8	3.3	28.2
2L23301	RL23	6	4	34.2	5	11.3	9.2	14.8	3.3	19.2
2L23303	RL23	8	6	37.8	5.8	13.8	11.3	15	3.3	22.8

PLUG-IN ELBOWS R46



Code	Ref.	Ø1	Ø2	L	L1	L2	E	E1
2L46001	RL46	4	4	16	22.5	8.1	6.8	9.2
2L46002	RL46	6	6	18.5	24	8.4	8	11.3
2L46003	RL46	8	8	21.2	28.5	11.3	10	13.8

NOTES