

# COUPLINGS Series IAC

## COMPRESSED AIR QUICK-FIT COUPLINGS

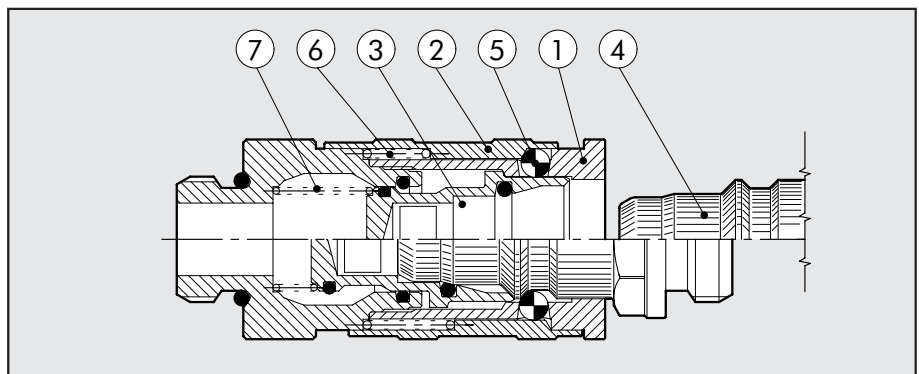
The compressed air quick-fit coupling by Metal Work allows quick replacement of pneumatic equipment (drills, milling machines, screwdrivers and actuators in general) without having to set the line pressure to zero each time. Rapid tool changeover can be easily obtained by fitting a female body on the branch under pressure and the male coupling on the actuator. The presence of a safety valve on the branch under pressure prevents air dispersion during disconnection.



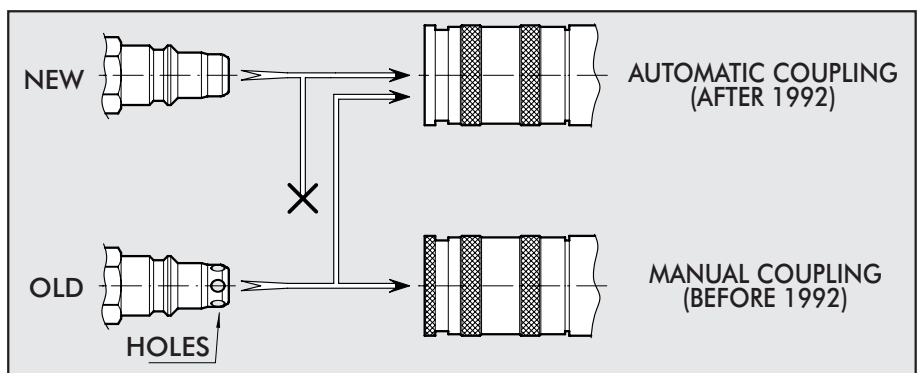
TECHNICAL DATA		MINI		100	200	300
Threaded coupling		1/8"	1/4"	1/4"	3/8"	1/2"
Maximum inlet pressure	MPa	3 MPa		3 MPa		
	bar	30 bar		30 bar		
	psi	435 psi		435 psi		
Flow rate at 6 bar (0.6 MPa - 87 psi)		480 NI/min		750 NI/min	1450 NI/min	1750 NI/min
$\Delta P = 1 \text{ bar (0.1 MPa - 14 psi)}$						
Maximum temperature	°C	80°		80°		
	°F	176		176		

## COMPONENTS

- ① Body: nickel-plated brass
- ② Ring nut: nickel-plated brass
- ③ Valve: nickel-plated brass
- ④ Coupling: carbonitrided and zinc-plated steel
- ⑤ Ball: stainless steel
- ⑥ Ring nut spring: AISI 302
- ⑦ Valve spring: AISI 302



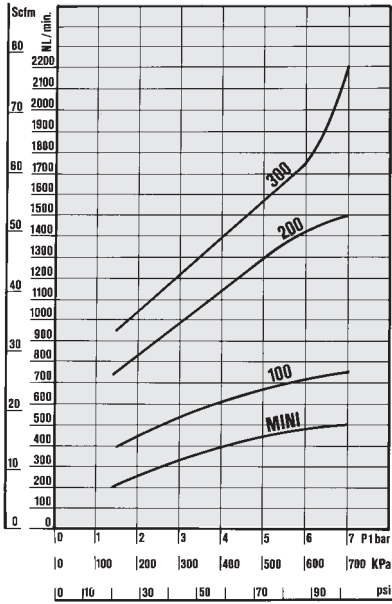
The actual male couplings don't have lateral holes. They cannot be coupled with the manual ports old production.



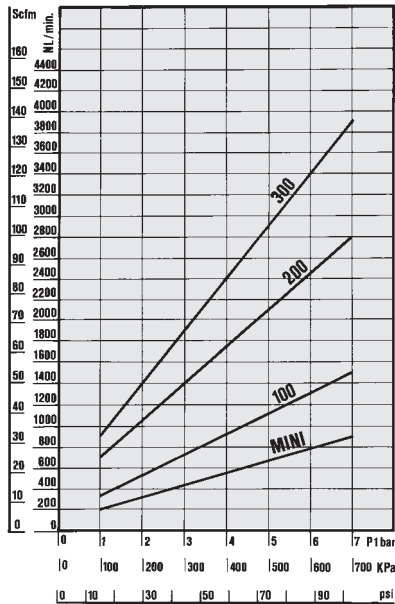


## FLOW CHARTS

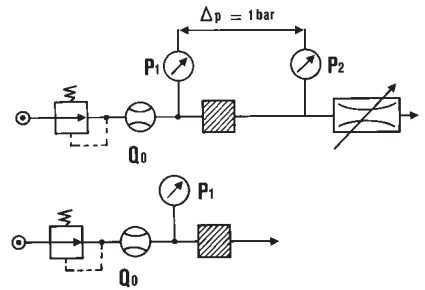
CURVE WITH  $\Delta P = 1$  bar



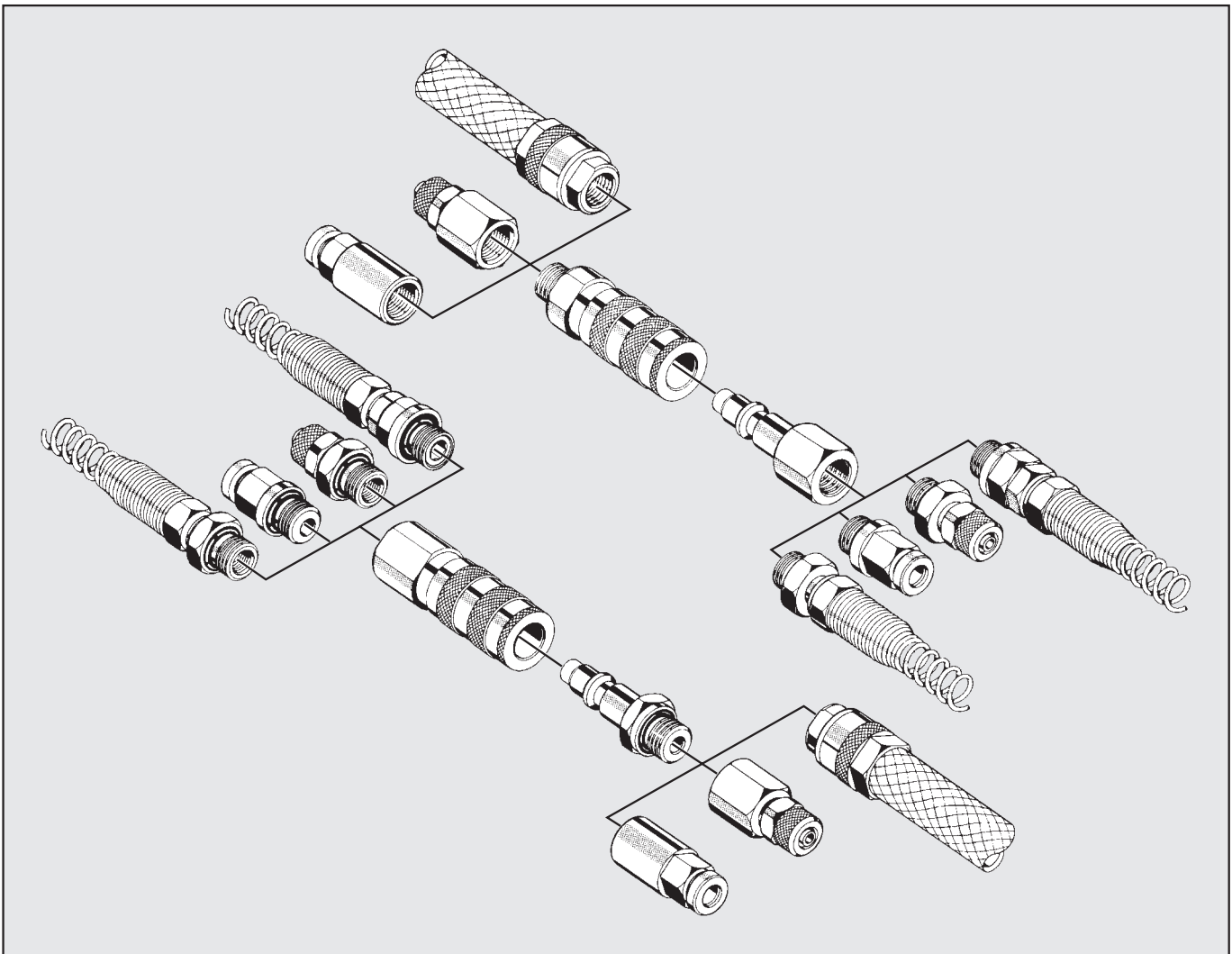
CURVE WITH FREE EXHAUST



FLOW TEST DIAGRAMS

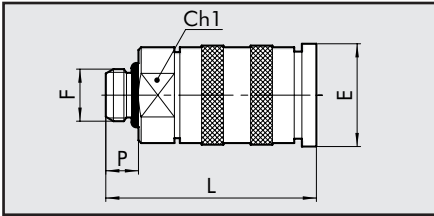


## TYPICAL ASSEMBLIES



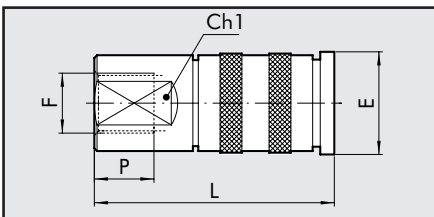
## OVERALL DIMENSIONS AND ORDERING CODES

### QUICK-FIT PORT, MALE



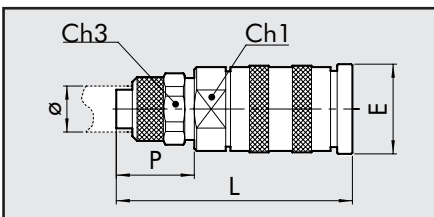
Code	Ref.	Mod.	F	Ch1	P	L	E	O-ring
0101001	01	mini	1/8	16	6.0	38.0	18.8	2031
0101002	02	mini	1/4	16	8.0	40.0	18.8	2043
0201101	101	100	1/4	21	8.0	50.0	24.4	2043
0301201	201	200	3/8	23	9.0	57.6	26.4	2056
0300202	201/A	200	1/4	23	8.0	56.6	26.4	2043
0401301	301	300	1/2	30	11.0	70.8	33.0	3068

### QUICK-FIT PORT, FEMALE



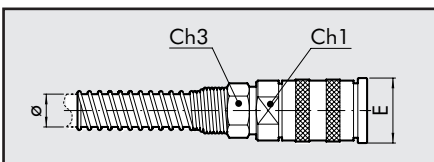
Code	Ref.	Mod.	F	Ch1	P	L	E
0101003	03	mini	1/8	16	7.0	40.5	18.8
0101004	04	mini	1/4	16	8.0	42.0	18.8
0201102	102	100	1/4	21	8.0	52.0	24.4
0301202	202	200	3/8	23	10.0	60.7	26.4
0401302	302	300	1/2	30	11.0	73.8	33.0

### QUICK-FIT PORT, NYLON PIPE



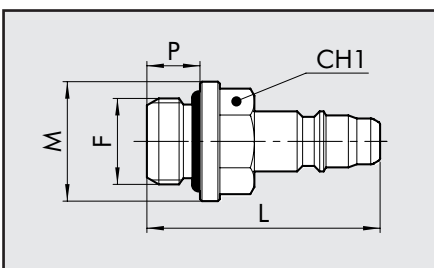
Code	Ref.	Mod.	Ø	Ch1	Ch3	P	L	E
0101005	05	mini	6/4	16	12	14.0	46.0	18.8
0101006	06	mini	8/6	16	14	14.0	46.0	18.8

### QUICK-FIT PORT, NYLON PIPE WITH SPRING



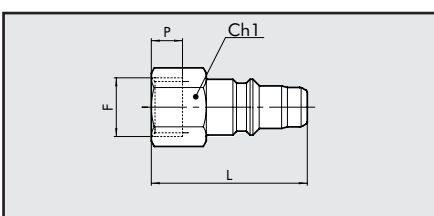
Code	Ref.	Mod.	Ø	Ch1	Ch3	E
0101007	07	mini	6/4	16	12	18.8
0101008	08	mini	8/6	16	14	18.8

### QUICK-FIT COUPLING, MALE



Code	Ref.	Mod.	F	Ch1	P	L	M	O-ring
0102011	11	mini	1/8	13	6.0	29.3	15	2031
0102012	12	mini	1/4	14	8.0	32.7	18	2043
0202111	111	100	1/4	14	8.0	42.2	18	2043
0302211	211	200	3/8	17	9.0	45.8	20	2056
0303205	211/A	200	1/4	16	8.0	46.2	18	2043
0402311	311	300	1/2	22	11.0	55.2	26	3068

### QUICK-FIT COUPLING, FEMALE

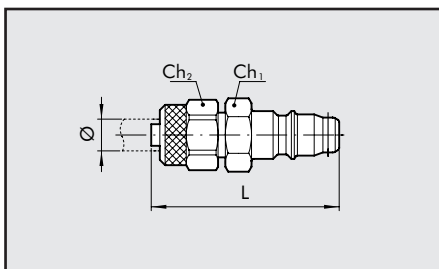


Code	Ref.	Mod.	F	Ch1	P	L
0102013	13	mini	1/8	14	7.0	29.5
0102014	14	mini	1/4	17	8.0	30.5
0202112	112	100	1/4	17	8.0	42.0
0302212	212	200	3/8	20	10.0	48.0
0402312	312	300	1/2	24	11.0	55.0



### QUICK-FIT COUPLING, NYLON PIPE

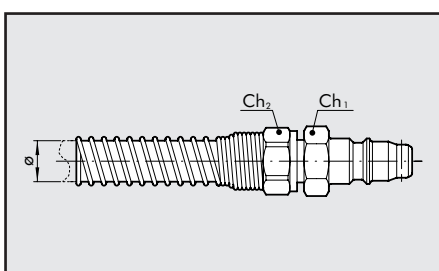
Code Ref. Mod. Ø Ch1 Ch2 L



0102015	15	mini	6/4	12	12	35.5
0102016	16	mini	8/6	14	14	35.5

### QUICK-FIT COUPLING, NYLON PIPE WITH SPRING

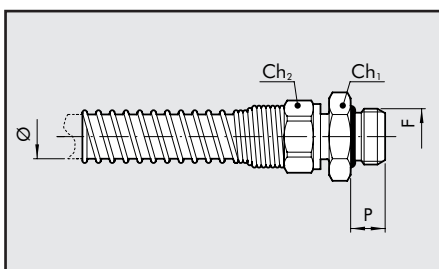
Code Ref. Mod. Ø Ch1 Ch2



0102017	17	mini	6/4	12	12
0102018	18	mini	8/6	14	14

### NYLON PIPE FITTING WITH SPRING

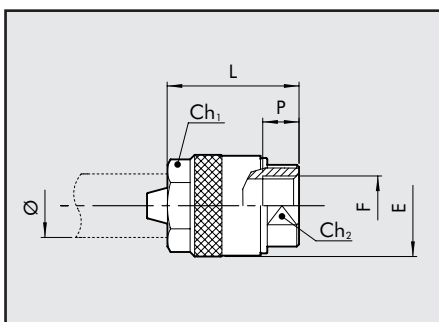
Code Ref. F Ø Ch1 Ch2 P



0010001	C1/Z	1/4	8	18	14	8
0010002	C1/Z	3/8	8	21	14	9
0010003	C1/Z	1/4	10	18	17	8
0010004	C1/Z	3/8	10	21	17	9
0010005	C1/Z	3/8	12	21	19	9

### HOSE FITTING

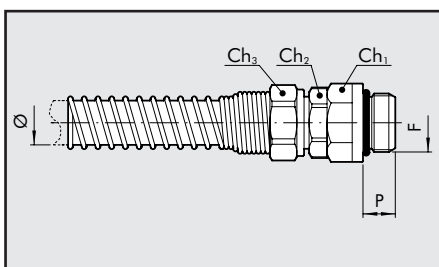
Code Ref. F Ø Ch1 Ch2 P L E



2601001	40	1/4	6x14	18	16	8.0	29.0	23.0
2601002	41	1/4	8x17	21	16	8.0	31.0	25.0
2601003	42	1/4	10x19	23	17	8.0	31.0	27.0
2601004	43	1/2	13x23	27	24	11.0	35.5	31.0

### SWIVEL NYLON PIPE FITTING WITH SPRING

Code Ref. F Ø Ch1 Ch2 Ch3 P O-ring



2501010	50	1/4	6/4	16	14	12	8.0	2043
2501011	51	1/4	8/6	16	14	14	8.0	2043
2501012	52	3/8	10/8	19	17	17	9.0	2056
2501013	53	3/8	12/10	19	17	19	9.0	2056