

FITTINGS



AP SERIES

PRESS FITTING FOR MULTILAYER PIPES

Site
BRESCIA

1964

**APE RACCORDERIE
IS FOUNDED**

with the name
"Minuterie Metalliche
di Pe Angelo"

Commercial
presence
in over

50
COUNTRIES

Today, with

52,000 m²

it is one of the few
manufacturing companies

APE[®]
RACCORDERIE

on the national
and international market for

almost 60 years

**MANUFACTURERS OF ENTIRE
HEATING AND SANITARY SYSTEMS**

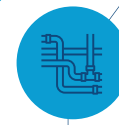
Fittings that
can be tightened
or crimped



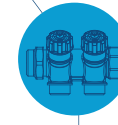
All products
and systems are
certified by major
international bodies



Multilayer
pipe



Distribution
manifolds



Floor, wall and ceiling
radiant systems



FITTINGS

PIPES

GAS

THERM

FITTINGS



AP
SERIES

Press fittings
for multilayer pipes



Certificates valid for diameters Ø16- Ø20- Ø26- Ø32



Certificates valid for diameters Ø26- Ø32



AP SERIES

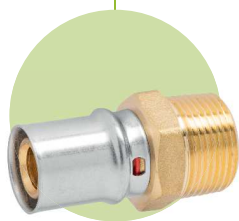
Press fittings for multilayer pipes

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AP SERIES

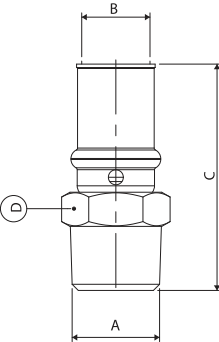
Press fittings for multilayer pipes

MALE STRAIGHT
ART. AP 101



Code	Size (mm)	Bag (nr)	Box (nr)
3AP1011216	1/2" x Ø16 (2.0)	10	140
3AP1011218	1/2" x Ø18 (2.0)	10	100
3AP1011220	1/2" x Ø20 (2.0)	10	100
3AP1013416	3/4" x Ø16 (2.0)	10	100
3AP1013418	3/4" x Ø18 (2.0)	10	90
3AP1013420	3/4" x Ø20 (2.0)	10	90
3AP1013426	3/4" x Ø26 (3.0)	5	60
3AP1010126	1" x Ø26 (3.0)	5	50
3AP1010132	1" x Ø32 (3.0)	5	40

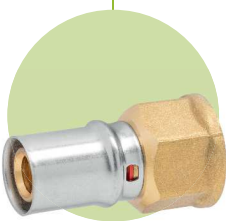
Code	A (mm)	B (mm)	C (mm)	D (mm)
3AP1011216	R 1/2" ISO 7	Ø16 (2.0)	53	CH 22
3AP1011218	R 1/2" ISO 7	Ø18 (2.0)	53	CH 22
3AP1011220	R 1/2" ISO 7	Ø20 (2.0)	53	CH 22
3AP1013416	R 3/4" ISO 7	Ø16 (2.0)	55	CH 27
3AP1013418	R 3/4" ISO 7	Ø18 (2.0)	55	CH 27
3AP1013420	R 3/4" ISO 7	Ø20 (2.0)	55	CH 27
3AP1013426	R 3/4" ISO 7	Ø26 (3.0)	55,30	CH 28
3AP1010126	R 1" ISO 7	Ø26 (3.0)	58,20	CH 34
3AP1010132	R 1" ISO 7	Ø32 (3.0)	58,20	CH 34



AP SERIES

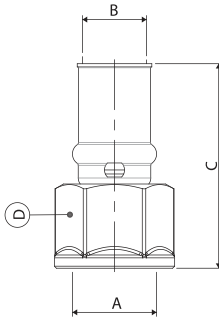
Press fittings for multilayer pipes

FEMALE STRAIGHT
ART. AP 102



Code	Size (mm)	Bag (nr)	Box (nr)
3AP1021216	1/2" Ø 16 (2.0)	10	100
3AP1021218	1/2" x Ø 18 (2.0)	10	100
3AP1021220	1/2" x Ø 20 (2.0)	10	90
3AP1023418	3/4" x Ø 18 (2.0)	10	80
3AP1023420	3/4" x Ø20 (2.0)	10	80
3AP1023426	3/4" x Ø26 (3.0)	5	50
3AP1020126	1" x Ø26 (3.0)	5	45
3AP1020132	1" x Ø32 (3.0)	5	40

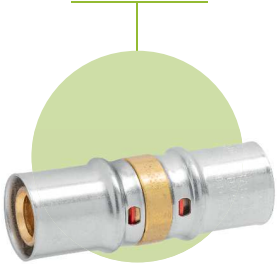
Code	A (mm)	B (mm)	C (mm)	D (mm)
3AP1021216	Rp 1/2" ISO 7	Ø16 (2.0)	51	CH 26
3AP1021218	Rp 1/2" ISO 7	Ø18 (2.0)	51	CH 26
3AP1021220	Rp 1/2" ISO 7	Ø20 (2.0)	51	CH 26
3AP1023418	Rp 3/4" ISO 7	Ø18 (2.0)	52,50	CH 31
3AP1023420	Rp 3/4" ISO 7	Ø20 (2.0)	52	CH 31
3AP1023426	Rp 3/4" ISO 7	Ø26 (3.0)	52	CH 31
3AP1020126	Rp 1" ISO 7	Ø26 (3.0)	55,30	CH 38
3AP1020132	Rp 1" ISO 7	Ø32 (3.0)	54,50	CH 38



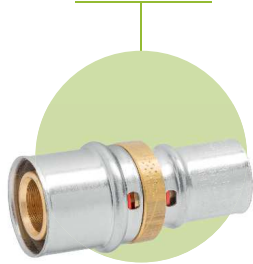
AP SERIES

Press fittings for multilayer pipes

STRAIGHT COUPLING
ART. AP 103

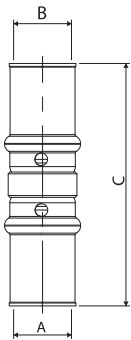


STRAIGHT REDUCER COUPLING
ART. AP 103



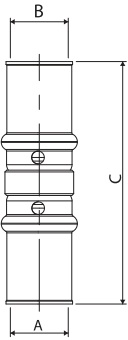
Code	Size (mm)	Bag (nr)	Box (nr)
3AP1031616	Ø16 (2.0) x Ø16 (2.0)	10	120
3AP1031818	Ø18 (2.0) x Ø18 (2.0)	10	90
3AP1032020	Ø20 (2.0) x Ø20 (2.0)	10	90
3AP1032626	Ø26 (3.0) x Ø26 (3.0)	5	60
3AP1033232	Ø32 (3.0) x Ø32 (3.0)	5	40

Product code	A (mm)	B (mm)	C (mm)
3AP1031616	Ø16 (2.0)	Ø16 (2.0)	67
3AP1031818	Ø18 (2.0)	Ø18 (2.0)	67
3AP1032020	Ø20 (2.0)	Ø20 (2.0)	67
3AP1032626	Ø26 (3.0)	Ø26 (3.0)	67
3AP1033232	Ø32 (3.0)	Ø32 (3.0)	67

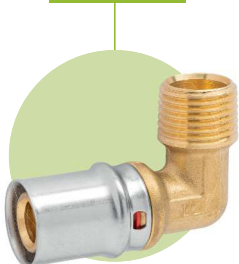


Code	Size (mm)	Bag (nr)	Box (nr)
3AP1032016	Ø20 (2.0) x Ø16 (2.0)	10	90
3AP1032018	Ø20 (2.0) x Ø18 (2.0)	10	100
3AP1032620	Ø26 (3.0) x Ø20 (2.0)	5	50
3AP1033226	Ø32 (3.0) x Ø26 (3.0)	5	50

Code	A (mm)	B (mm)	C (mm)
3AP1032016	Ø20 (2.0)	Ø16 (2.0)	67
3AP1032018	Ø20 (2.0)	Ø18 (2.0)	67
3AP1032620	Ø26 (3.0)	Ø20 (2.0)	67
3AP1033226	Ø32 (3.0)	Ø26 (3.0)	67

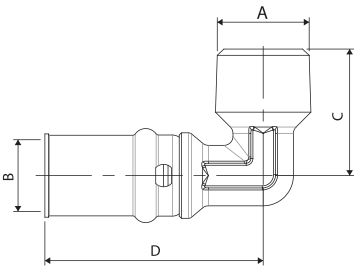


MALE ELBOW
ART. AP 153



Code	Size (mm)	Bag (nr)	Box (nr)
3AP1531216	1/2" x Ø16 (2.0)	10	100
3AP1531218	1/2" x Ø18 (2.0)	10	90
3AP1531220	1/2" x Ø20 (2.0)	10	90
3AP1533420	3/4" x Ø20 (2.0)	10	60
3AP1533426	3/4" x Ø26 (3.0)	5	50
3AP1530126	1" x Ø26 (3.0)	5	30
3AP1530132	1" x Ø32 (3.0)	5	25

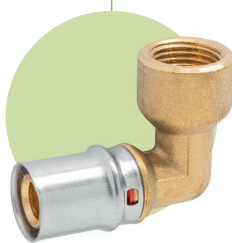
Code	A (mm)	B (mm)	C (mm)	D (mm)
3AP1531216	R 1/2" ISO 7	Ø16 (2.0)	28,25	48,75
3AP1531218	R 1/2" ISO 7	Ø18 (2.0)	30,75	49,25
3AP1531220	R 1/2" ISO 7	Ø20 (2.0)	30,75	49,25
3AP1533420	R 3/4" ISO 7	Ø20 (2.0)	34	53,50
3AP1533426	R 3/4" ISO 7	Ø26 (3.0)	34	52,80
3AP1530126	Rp 1" ISO 7	Ø26 (3.0)	40,50	56,30
3AP1530132	R 1" ISO 7	Ø32 (3.0)	40,50	56,30



AP SERIES

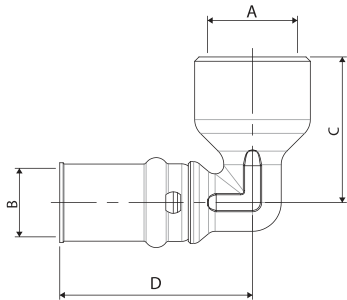
Press fittings for multilayer pipes

FEMALE ELBOW
ART. AP 152



Code	Size (mm)	Bag (nr)	Box (nr)
3AP1521216	1/2" x Ø16 (2.0)	10	90
3AP1521218	1/2" x Ø18 (2.0)	10	70
3AP1521220	1/2" x Ø20 (2.0)	10	70
3AP1523420	3/4" x Ø20 (2.0)	10	50
3AP1523426	3/4" x Ø26 (3.0)	5	40
3AP1520126	1" x Ø26 (3.0)	5	25
3AP1520132	1" x Ø32 (3.0)	5	25

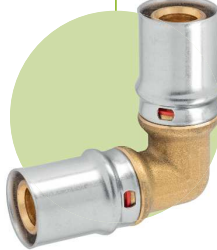
Code	A (mm)	B (mm)	C (mm)	D (mm)
3AP1521216	Rp 1/2" ISO 7	Ø16 (2.0)	34	45
3AP1521218	Rp 1/2" ISO 7	Ø18 (2.0)	36,50	48,50
3AP1521220	Rp 1/2" ISO 7	Ø20 (2.0)	36,50	48,50
3AP1523420	Rp 3/4" ISO 7	Ø20 (2.0)	40	52
3AP1523426	Rp 3/4" ISO 7	Ø26 (3.0)	40	51,80
3AP1520126	Rp 1" ISO 7	Ø26 (3.0)	46	56,30
3AP1520132	Rp 1" ISO 7	Ø32 (3.0)	46	56,30



AP SERIES

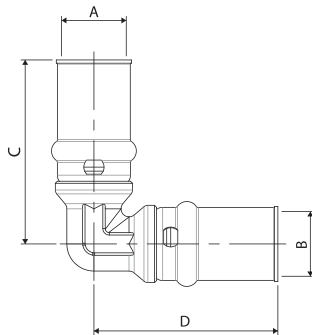
Press fittings for multilayer pipes

90° EQUAL ELBOW
ART. AP 151

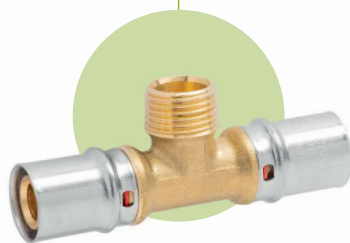


Code	Size (mm)	Bag (nr)	Box (nr)
3AP1510016	Ø16 (2.0) x Ø16 (2.0)	10	90
3AP1510018	Ø18 (2.0) x Ø18 (2.0)	10	70
3AP1510020	Ø20 (2.0) x Ø20 (2.0)	10	60
3AP1510026	Ø26 (3.0) x Ø26 (3.0)	5	40
3AP1510032	Ø32 (3.0) x Ø32 (3.0)	5	20

Product code	A (mm)	B (mm)	C (mm)	D (mm)
3AP1510016	Ø16 (2.0)	Ø16 (2.0)	45,50	45,50
3AP1510018	Ø18 (2.0)	Ø18 (2.0)	49,50	49,50
3AP1510020	Ø20 (2.0)	Ø20 (2.0)	48,50	48,50
3AP1510026	Ø26 (3.0)	Ø26 (3.0)	51,30	51,30
3AP1510032	Ø32 (3.0)	Ø32 (3.0)	56,30	56,30

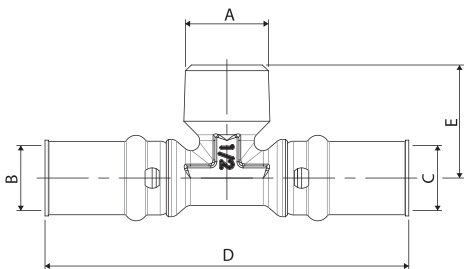


MALE TEE
ART. AP 133



Code	Size (mm)	Bag (nr)	Box (nr)
3AP1331216	Ø16 (2.0) x 1/2" x Ø16 (2.0)	10	50
3AP1331220	Ø20 (2.0) x 1/2" x Ø20 (2.0)	10	50
3AP1333420	Ø20 (2.0) x 3/4" x Ø20 (2.0)	10	30
3AP1333426	Ø26 (3.0) x 3/4" x Ø26 (3.0)	5	30
3AP1330132	Ø32 (3.0) x 1" x Ø32 (3.0)	5	15

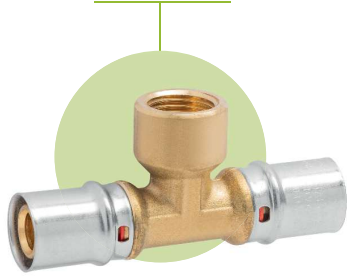
Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
3AP1331216	R 1/2" ISO 7	Ø16 (2.0)	Ø16 (2.0)	90	27
3AP1331220	R 1/2" ISO 7	Ø20 (2.0)	Ø20 (2.0)	99	27
3AP1333420	R 3/4" ISO 7	Ø20 (2.0)	Ø20 (2.0)	103	34
3AP1333426	R 3/4" ISO 7	Ø26 (3.0)	Ø26 (3.0)	102,60	34
3AP1330132	R 1" ISO 7	Ø32 (3.0)	Ø32 (3.0)	112,60	46



AP SERIES

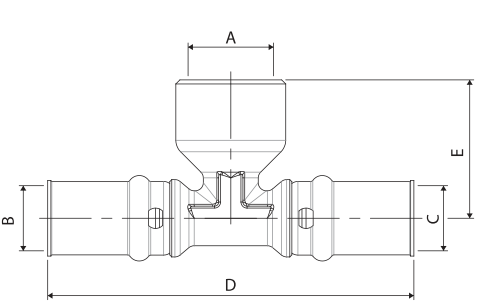
Press fittings for multilayer pipes

FEMALE TEE
ART. AP 132

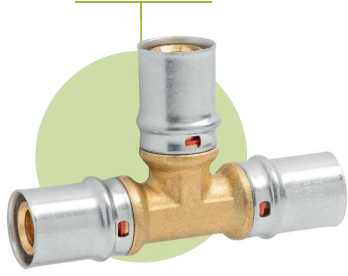


Code	Size (mm)	Bag (nr)	Box (nr)
3AP1321216	1/2" x Ø16 (2.0)	10	50
3AP1321218	1/2" x Ø18 (2.0)	10	40
3AP1321220	1/2" x Ø20 (2.0)	10	40
3AP1323420	3/4" x Ø20 (2.0)	10	30
3AP1323426	3/4" x Ø26 (3.0)	5	25
3AP1320132	1" x Ø32 (3.0)	5	15

Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
3AP1321216	Rp 1/2" ISO7	Ø16 (2.0)	Ø16 (2.0)	90	34
3AP1321218	Rp 1/2" ISO7	Ø18 (2.0)	Ø18 (2.0)	97	33,70
3AP1321220	Rp 1/2" ISO7	Ø20 (2.0)	Ø20 (2.0)	97	33,70
3AP1323420	Rp 3/4" ISO7	Ø20 (2.0)	Ø20 (2.0)	104	40
3AP1323426	Rp 3/4" ISO7	Ø26 (3.0)	Ø26 (3.0)	103,60	40
3AP1320132	Rp 1" ISO7	Ø32 (3.0)	Ø32 (3.0)	112,60	46

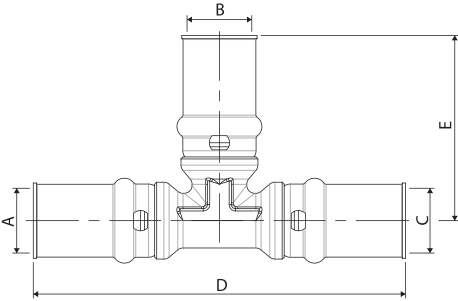


EQUAL TEE
ART. AP 131



Code	Size (mm)	Bag (nr)	Box (nr)
3APT161616	Ø16 (2.0) x Ø16 (2.0) x Ø16 (2.0)	10	50
3APT181818	Ø18 (2.0) x Ø18 (2.0) x Ø18 (2.0)	10	40
3APT202020	Ø20 (2.0) x Ø20 (2.0) x Ø20 (2.0)	10	40
3APT262626	Ø26 (3.0) x Ø26 (3.0) x Ø26 (3.0)	5	25
3APT323232	Ø32 (3.0) x Ø32 (3.0) x Ø32 (3.0)	5	15

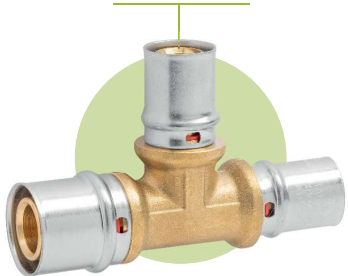
Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
3APT161616	Ø16 (2.0)	Ø16 (2.0)	Ø16 (2.0)	92	45,75
3APT181818	Ø18 (2.0)	Ø18 (2.0)	Ø18 (2.0)	97	48,50
3APT202020	Ø20 (2.0)	Ø20 (2.0)	Ø20 (2.0)	97	48,50
3APT262626	Ø26 (3.0)	Ø26 (3.0)	Ø26 (3.0)	104,60	53,50
3APT323232	Ø32 (3.0)	Ø32 (3.0)	Ø32 (3.0)	112,60	58



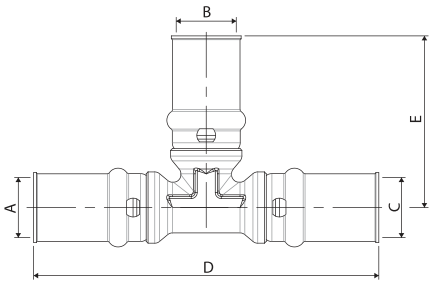
AP SERIES

Press fittings for multilayer pipes

REDUCING TEE
ART. AP 131



Product code	Size (mm)	Bag (nr)	Box (nr)
3APT162016	Ø16 (2.0) x Ø20 (2.0) x Ø16 (2.0)	10	40
3APT181616	Ø18 (2.0) x Ø16 (2.0) x Ø16 (2.0)	10	40
3APT201616	Ø20 (2.0) x Ø16 (2.0) x Ø16 (2.0)	10	40
3APT201620	Ø20 (2.0) x Ø16 (2.0) x Ø20 (2.0)	10	40
3APT201818	Ø20 (2.0) x Ø18 (2.0) x Ø18 (2.0)	10	40
3APT201820	Ø20 (2.0) x Ø18 (2.0) x Ø20 (2.0)	10	40
3APT202016	Ø20 (2.0) x Ø20 (2.0) x Ø16 (2.0)	10	40
3APT202620	Ø20 (2.0) x Ø26 (3.0) x Ø20 (2.0)	5	25
3APT261620	Ø26 (3.0) x Ø16 (2.0) x Ø20 (2.0)	5	30
3APT261626	Ø26 (3.0) x Ø16 (2.0) x Ø26 (3.0)	5	25
3APT261826	Ø26 (3.0) x Ø18 (2.0) x Ø26 (3.0)	5	25
3APT262016	Ø26 (3.0) x Ø20 (2.0) x Ø16 (2.0)	5	30
3APT262020	Ø26 (3.0) x Ø20 (2.0) x Ø20 (2.0)	5	30
3APT262026	Ø26 (3.0) x Ø20 (2.0) x Ø26 (3.0)	5	25
3APT262616	Ø26 (3.0) x Ø26 (3.0) x Ø16 (2.0)	5	25
3APT262620	Ø26 (3.0) x Ø26 (3.0) x Ø20 (2.0)	5	25
3APT263226	Ø26 (3.0) x Ø32 (3.0) x Ø26 (3.0)	5	15
3APT321832	Ø32 (3.0) x Ø18 (2.0) x Ø32 (3.0)	5	15
3APT322026	Ø32 (3.0) x Ø20 (2.0) x Ø26 (3.0)	5	20
3APT322032	Ø32 (3.0) x Ø20 (2.0) x Ø32 (3.0)	5	15
3APT322626	Ø32 (3.0) x Ø26 (3.0) x Ø26 (3.0)	5	20
3APT322632	Ø32 (3.0) x Ø26 (3.0) x Ø32 (3.0)	5	15
3APT323226	Ø32 (3.0) x Ø32 (3.0) x Ø26 (3.0)	5	15



A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
Ø16 (2.0)	Ø20 (2.0)	Ø16 (2.0)	97	48,50
Ø18 (2.0)	Ø16 (2.0)	Ø16 (2.0)	97	48,50
Ø20 (2.0)	Ø16 (2.0)	Ø16 (2.0)	97	48,50
Ø20 (2.0)	Ø16 (2.0)	Ø20 (2.0)	97	48,50
Ø20 (2.0)	Ø18 (2.0)	Ø18 (2.0)	97	48,50
Ø20 (2.0)	Ø18 (2.0)	Ø20 (2.0)	97	48,50
Ø20 (2.0)	Ø20 (2.0)	Ø16 (2.0)	97	48,50
Ø20 (2.0)	Ø26 (3.0)	Ø20 (2.0)	105	52,30
Ø26 (3.0)	Ø16 (2.0)	Ø20 (2.0)	104,80	52,50
Ø26 (3.0)	Ø16 (2.0)	Ø26 (3.0)	104,60	52,50
Ø26 (3.0)	Ø18 (2.0)	Ø26 (3.0)	104,60	52,50
Ø26 (3.0)	Ø20 (2.0)	Ø16 (2.0)	104,80	52,50
Ø26 (3.0)	Ø20 (2.0)	Ø20 (2.0)	104,60	52,50
Ø26 (3.0)	Ø20 (2.0)	Ø26 (3.0)	104,60	52,50
Ø26 (3.0)	Ø26 (3.0)	Ø16 (2.0)	104,80	52,30
Ø26 (3.0)	Ø26 (3.0)	Ø20 (2.0)	104,80	52,30
Ø26 (3.0)	Ø32 (3.0)	Ø26 (3.0)	112,60	56,30
Ø32 (3.0)	Ø18 (2.0)	Ø32 (3.0)	112,60	56,50
Ø32 (3.0)	Ø20 (2.0)	Ø26 (3.0)	112,60	56,50
Ø32 (3.0)	Ø20 (2.0)	Ø32 (3.0)	112,60	56,50
Ø32 (3.0)	Ø26 (3.0)	Ø26 (3.0)	112,60	56,50
Ø32 (3.0)	Ø26 (3.0)	Ø32 (3.0)	112,60	56,30
Ø32 (3.0)	Ø32 (3.0)	Ø26 (3.0)	112,60	56,50

AP SERIES

Press fittings for multilayer pipes

ELBOW WITH FLANGE
ART. AP 154

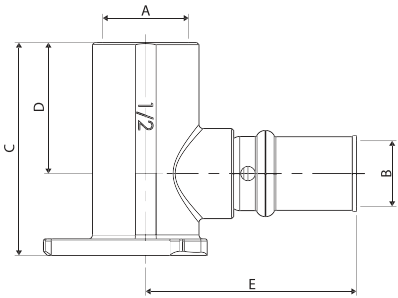


ELBOW WITH SHORT FLANGE
ART. AP 154 L



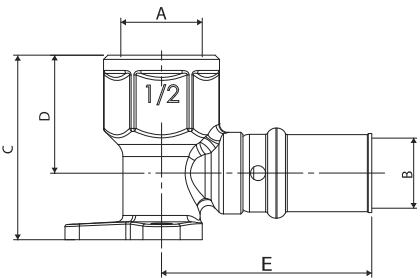
Code	Size (mm)	Bag (nr)	Box (nr)
3AP1541216	1/2" x Ø16 (2.0)	5	40
3AP1541218	1/2" x Ø18 (2.0)	5	40
3AP1541220	1/2" x Ø20 (2.0)	5	35

Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
3AP1541216	Rp 1/2" ISO 7	Ø16 (2.0)	52	32	51,50
3AP1541218	Rp 1/2" ISO 7	Ø18 (2.0)	52	32	51,50
3AP1541220	Rp 1/2" ISO 7	Ø20 (2.0)	52	32	51,50



Code	Size (mm)	Bag (nr)	Box (nr)
3AP154L1216	1/2" x 16 (2.0)	5	50
3AP154L1218	1/2" x 18 (2.0)	5	40
3AP154L1220	1/2" x 20 (2.0)	5	40

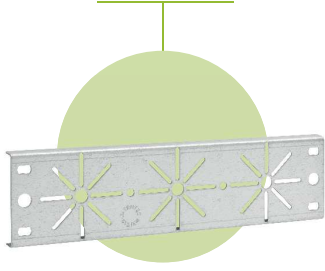
Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
3AP154L1216	Rp 1/2" ISO 7	Ø16 (2.0)	43	27,50	49
3AP154L1218	Rp 1/2" ISO 7	Ø18 (2.0)	43	27,50	50
3AP154L1220	Rp 1/2" ISO 7	Ø20 (2.0)	43	27,50	50



AP SERIES

Press fittings for multilayer pipes

PLATE FOR
ART. AP 154



Code	Size (mm)	Bag (nr)	Box (nr)
3AP493001	Staffa con interasse 153/76,5	10	

Recommendation: bracket for use with art. AP 154, AP 154L and AP 154D with through bolts.

Code	A (mm)	B (mm)	C (mm)	D (mm)
3AP493001	260	75,50	68	10,70

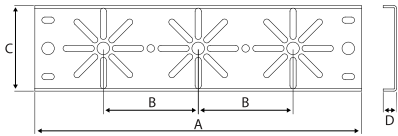
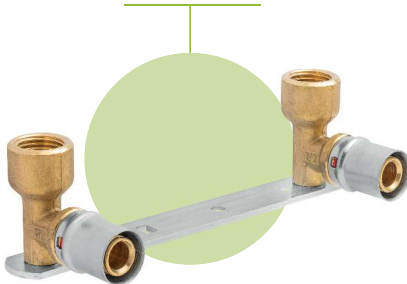
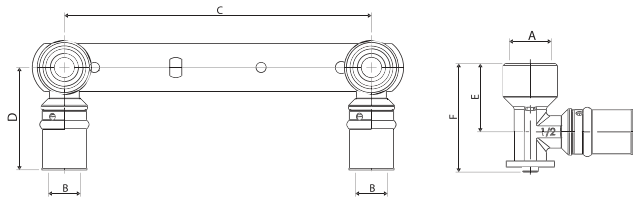


PLATE WITH TWO ELBOWS
ART. AP 492



Code	Size (mm)	Bag (nr)	Box (nr)
3AP4921216	1/2" x Ø16 (2.0)	2	10
3AP4921218	1/2" x Ø18 (2.0)	2	10
3AP4921220	1/2" x Ø20 (2.0)	2	10

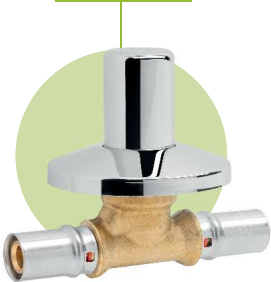
Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
3AP4921216	Rp 1/2" ISO 7	Ø16 (2.0)	153	51	34	54
3AP4921218	Rp 1/2" ISO 7	Ø18 (2.0)	153	51	34	54
3AP4921220	Rp 1/2" ISO 7	Ø20 (2.0)	153	51	34	54



AP SERIES

Press fittings for multilayer pipes

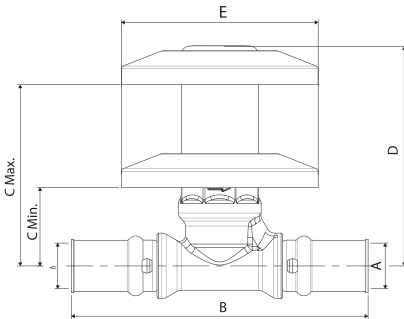
BUILT-IN BALL VALVE
ART. AP 136 C



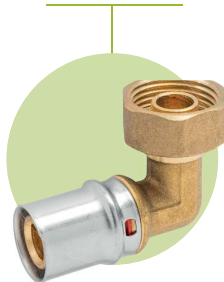
Code	Size (mm)	Bag (nr)	Box (nr)
3AP1361616C	Ø16 (2.0) x Ø16 (2.0)	2	12
3AP1362020C	Ø20 (2.0) x Ø20 (2.0)	2	12

Ricambi			
3AP136CON-C	Tap with rosette	1	20
3AP136PR12C	Extension 24,5 mm	1	60
3AP136VIT-C	Knob 1/2"	1	10

Code	A (mm)	B (mm)	C Min (mm)	C max (mm)	D (mm)	E (mm)
3AP1361616C	Ø16 (2.0)	104	27,50	63,50	76,90	Ø69
3AP1362020C	Ø20 (2.0)	104	27,50	63,50	76,90	Ø69



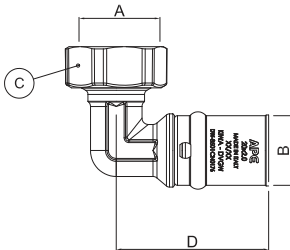
ELBOW WITH ROTATING NUT
ART. AP 187



Code	Size (mm)	Bag (nr)	Box (nr)
3AP1873420	3/4" x Ø20 (2.0)	10	60

Code	A (mm)	B (mm)	C (mm)	D (mm)
3AP1873420	3/4" ISO 228	Ø20 (2.0)	CH 30	48,50

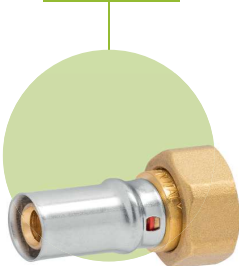
complete with gaskets.



AP SERIES

Press fittings for multilayer pipes Raccordi a pressione per tubo multistrato

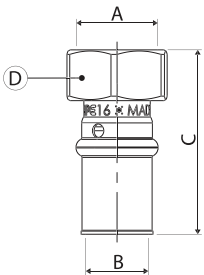
STRAIGHT FITTING WITH ROTATING NUT
ART. AP 185



Code	Size (mm)	Bag (nr)	Box (nr)
3AP1851216	1/2" x Ø16 (2.0)	10	100
3AP1851218	1/2" x Ø18 (2.0)	10	100
3AP1851220	1/2" x Ø20 (2.0)	5	80
3AP1853416	3/4" x Ø16 (2.0)	10	100
3AP1853420	3/4" x Ø20 (2.0)	5	70
3AP1853426	3/4" x Ø26 (3.0)	5	60
3AP1850126	1" x Ø26 (3.0)	5	50
3AP1850132	1" x Ø32 (3.0)	5	40

complete with gaskets

Code	A (mm)	B (mm)	C (mm)	D (mm)
3AP1851216	G 1/2" ISO 228	Ø16 (2.0)	47,20	CH 25
3AP1851218	G 1/2" ISO 228	Ø18 (2.0)	51,20	CH 25
3AP1851220	G 1/2" ISO 228	Ø20 (2.0)	51,20	CH 25
3AP1853416	G 3/4" ISO 228	Ø16 (2.0)	47,20	CH 30
3AP1853420	G 3/4" ISO 228	Ø20 (2.0)	47,20	CH 30
3AP1853426	G 3/4" ISO 228	Ø26 (3.0)	54,20	CH 30
3AP1850126	G 1" ISO 228	Ø26 (3.0)	54,70	CH 37
3AP1850132	G 1" ISO 228	Ø32 (3.0)	58,34	CH 37





Code	Description
URL3000100	TH Ø 16 pressing jaw
URL3000150	TH Ø 18 pressing jaw
URL3000200	TH Ø 20 pressing jaw
URL3000300	TH Ø 26 pressing jaw
URL3000400	TH Ø 32 pressing jaw



Code	Description
UTM5020100	16x2.00 deburrer
UTM5020150	18x2.00 deburrer
UTM5020200	20x2.00 deburrer
UTM5030300	26x3.00 deburrer
UTM5030400	32x3.00 deburrer



Code	Description
UTM5010001	Handle for calibrator



Code	Description
UTM5010002	Case for calibrator

TECHNICAL SPECIFICATIONS

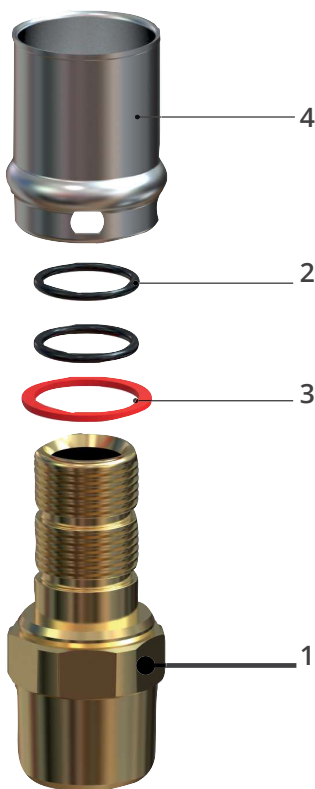
AP SERIES



INTRODUCTION

AP series press fittings, manufactured in compliance with UNI EN ISO 21003-3, UNI EN 1254-3 and Italian Ministerial Decree 174, are designed and produced with the aim of increasing tightness and cutting assembly times to simplify procedures for the installer. With two O-rings for sealing and a PE washer to eliminate any stray currents, they are used in heating and hot water systems and are available in a wide range of shapes, with diameters from Ø16 to Ø32.

A tight seal between pipe and fitting is guaranteed by the profile of the hose barb and the two O-rings [2] fitted within it. A crimping tool fitted with special jaws [see the notes on the crimping profiles below] is used to deform the sleeve permanently [4], while the compression force used when crimping also deforms the multilayer pipe onto the special profile.



The sleeve [4] has Two (2) inspection holes used to check that the pipe-fitting coupling is correct and that the pipe has been inserted fully and is resting against the PE washer. The sleeve thickness is designed to withstand high pressures under considerable temperature variations. It is manufactured in AISI 304 steel, which undergoes an additional solubilisation process to relieve any residual stresses in the material and ensure uniform distribution of stresses over time. The solubilisation process is of fundamental importance because it clears the material's memory, eliminating the risk of failure and thus leakage of the fitting. The PE washer [3] insulates the aluminium pipe from the brass fitting, preventing corrosion.

N.	Description	Materials and conformity
1	Body	Ottone CW617N Conforme norma UNI EN 12164:01; UNI EN12165:99; UNI EN 12168:01
2	O-ring	EPDM perossidico 70 SCH Conforme norma EN 681.1
3	Washer	PE (Polietilene)
4	Sleeve	Acciaio AISI 304 Conforme norma UNI EN 10088-2

Unlike screw fittings, the press fitting couplings are solid: this means that, if correctly crimped, the AP fitting is permanently deformed, guaranteeing its tightness over time. For this reason, press fittings are the only system used and guaranteed in pipe systems sunk into walls or floors.

TECHNICAL SPECIFICATIONS

Field of application	Heating and hot water systems
Fluids carried	Drinking water, water for technical purposes and water containing glycol
Temperature range	from 5 °C to 80 °C
Operating pressure:	max 10 bar
Type of pipe:	Multilayer PE-Xb/AL/PE-Xb (compliant with UNI 21003)

** if operating temperatures below 5°C are required, use glycol in the percentages indicated by the supplier.*

The AP tube fitting system has been certified by the following bodies: KIWA K66358 , DVGW DW-8501CN0176 WRAS 1906357 and KOMO K25301. The certified profile is the TH.

PRESS PROFILES

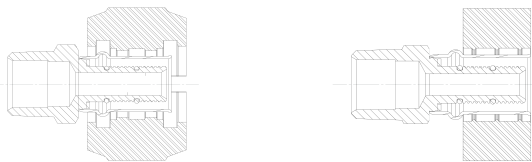
AP series fittings can be installed using different press profiles (TH, H, B, and U). The use of tools with appropriate press profiles is fundamental to ensure perfect coupling between the pipe and the fitting, guaranteeing the best system performance. The table below lists the crimping profiles to be used for the various diameters:

Diameter	Crimping profile			
Ø16 (2.0)	TH	H	B	U
Ø18 (2.0)	TH			
Ø20 (2.0)	TH	H	B	U
Ø26 (3.0)	TH	H	B	
Ø32 (3.0)	TH	H	B	

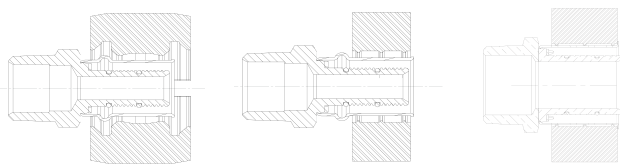


The illustrations below show the correct position for the crimping tool in relation to the profile: crimping must take place at the correct position with respect to the O-rings, in order to ensure the fitting's tightness.

TH: Ø16 - Ø18 - Ø20 - Ø26 - Ø32 H: Ø16 - Ø20 - Ø26 - Ø32



B: Ø16 - Ø20 - Ø26 - Ø32 U: Ø16 - Ø20



- Before proceeding to crimp the fittings, always:
1. Ensure that you have chosen the correct crimping tool for the fitting. If the wrong tool, or a tool that does not correspond to the diameter of the pipe (e.g. use of Ø25 on sleeve Ø26) is used, the fitting will never provide a tight seal.
 2. Ensure that the crimping tool profile is correct, referring to the table above.
 3. Choose original profiles (e.g. REMS tool with KLAU-KE jaws or vice-versa): profiles do not always work properly when not used with the original tool.
 4. Ensure that the crimping tool profile is not damaged, that the tool is not faulty or worn and that the tool lever springs are not broken or faulty.
 5. When using a battery operated crimping tool, check that the battery charge is sufficient for effective crimping.

INSTALLATION INSTRUCTIONS

AP SERIES



In order to achieve a perfect joint between the pipe and the fitting, we recommend that you carefully follow the following assembly instructions.

CUT

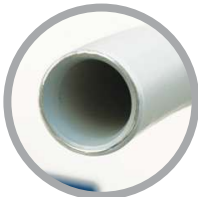
Cut the pipe to the desired length using Ape's special pipe cutter. The cut must be perpendicular to the axis of the pipe.

1



CALIBRATION AND COUNTERSINKING

This is the most important operation to be performed before inserting the hose barb into the pipe. Insert the pipe calibrator into the pipe and turn it several times until obtaining a perfectly rounded circle. In the meantime the calibrator countersinks the edge of the pipe reshaping it into a truncated cone as a result of the action of three cutters arranged at 120° at the base of the calibrator. Once the pipe is calibrated and flared remove the shavings that formed as a result of these operations. Before using the calibrators check that they are perfectly intact and functional.



2



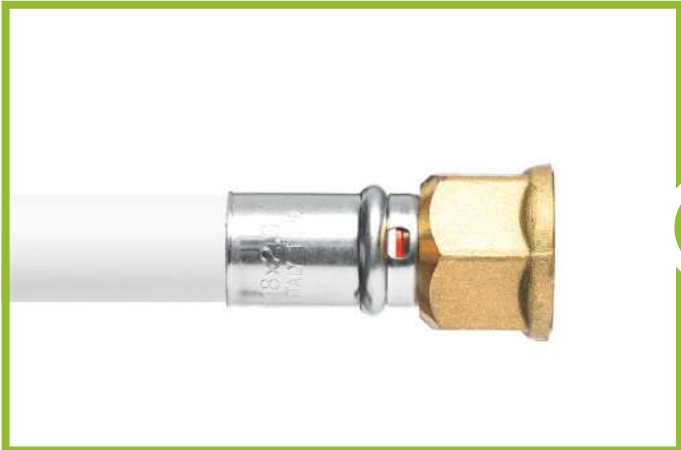
3



LUBRICATION

Before inserting the pipe into the hose fitting, it is strictly necessary to lubricate the inner pipe edge by applying a special silicone-based solution. The lubricant has the dual function of facilitating the pipe insertion and preserving the O-rings over time, protecting them against cuts and/or removal which would compromise their sealing capacity.

4



INSTALLATION

Insert the pipe into the fitting and, through the inspection holes, make sure that the pipe has been inserted fully until it touches the Teflon washer. This operation must be done with no effort, otherwise remove and check the fitting to verify the integrity of the O-rings.



5



PRESSING

Once the pipe is inserted into the fitting the bush must be pressed using the special press equipped with the special jaw or inserts. Ape presses have an end stop which triggers the press to reopen when it is reached. At the end of the operation check that the imprint on the bush is uniform and that the margins of the jaw are aligned.



Note: Any press can be used provided that it is equipped with jaws that are consistent with the profile of the AP series parts (see table).

Warning: the pipe connected to the fitting must not be folded.

[illegible][illegible]

[illegible]



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