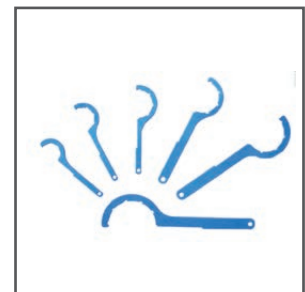


Modular Pipe Systems

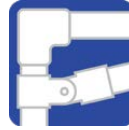
Quick Pipe System for Compressed Air



About Modular Solutions



Aluminum Profile



Lean Tube



Quick Pipe



Conveyors

Equipment Guarding

Shelving

Custom Racks

Carts

Work Stations

Conveyors

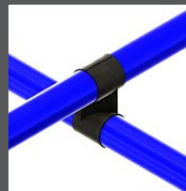
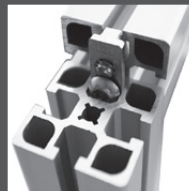
Stands

Quick Pipe Systems

Tables

Enclosures

Bulk Aluminum Profile



Modular Solutions is an all in one source for aluminum profile, lean tube, quick air pipe and conveyor systems. Whether a custom build or a bulk product quote our knowledgeable staff can assist you in offering the best solutions for your application.

We pride ourselves on offering innovative products, selection tools and services that simplify the process of ordering and assembly thus offering increased value and time savings.

Modular Solutions serves such industries as Automotive, Automation, Material Handling, Wheel & Tire, Food & Beverage, Commercial Contractors and Property Management.

Helpful Support:

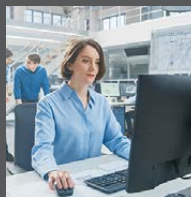
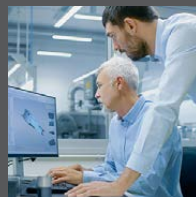
Engineers

Dedicated Customer Service

Outside Sales Staff

On site Installation Available

Samples & Demos Available
Upon Request



Our biggest goal at Modular Solutions is to provide our customers with unparalleled service to help them through every stage of their project, no matter how big or small. Our friendly and knowledgeable Customer Service and Tech Support branches are more than happy to assist with anything our customers may need! Our outside sales staff are available to bring by samples or show demonstrations of our innovative products. We also offer on site assembly and installation for many of our build items.

We welcome any feedback you may have, whether it's a suggestion, question, or simply a check-in on an order. Feel free to reach out to us at any time!

Pipe & Fittings for Compressed Air

Table of Contents

3	PIPES AND FITTINGS FOR COMPRESSED AIR			
22	ACCESSORY COMPONENTS FOR COMPRESSED AIR			
55	TOOLS			

Certifications & Specifications

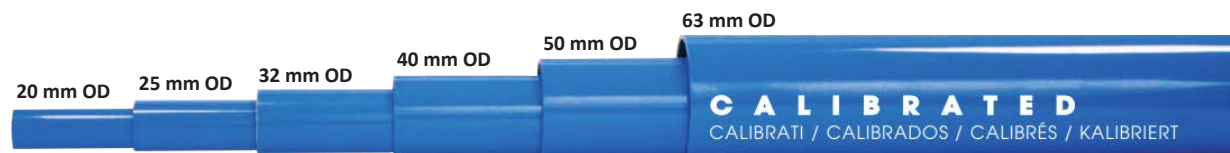


The System: - EASY AND RAPID INSTALLATION - REDUCED PRESSURE DROP - CORROSION RESISTANCE - REUSABLE - FIRE-RESISTANT - UV-RESISTANT - GOOD SHOCK RESISTANCE - NO WELDING	Specifications - Fluid Medium: Compressed Air / Vacuum - Max. Operating pressure: 180 PSI (12.5 BAR) - Max. Vacuum: -17.76in. Hg (-0.6 BAR) - Operating temp. Range: -4 ~ 158°F (-20 ~70°C) - Pipe Treatment: Fluotitanation - Pipe Finish: Powdercoat - Pipe Max Length: 4 Meter - Fitting Body: Black Nylon - Fitting Coupling: Blue Nylon - Fitting Ring: Aisi 301 Stainless Steel - Fitting Sealing Ring: NBR O-Ring	System Certifications: - ASME B31.3 - CRN - Qualicoat - ISO 9001:2008 - TÜV
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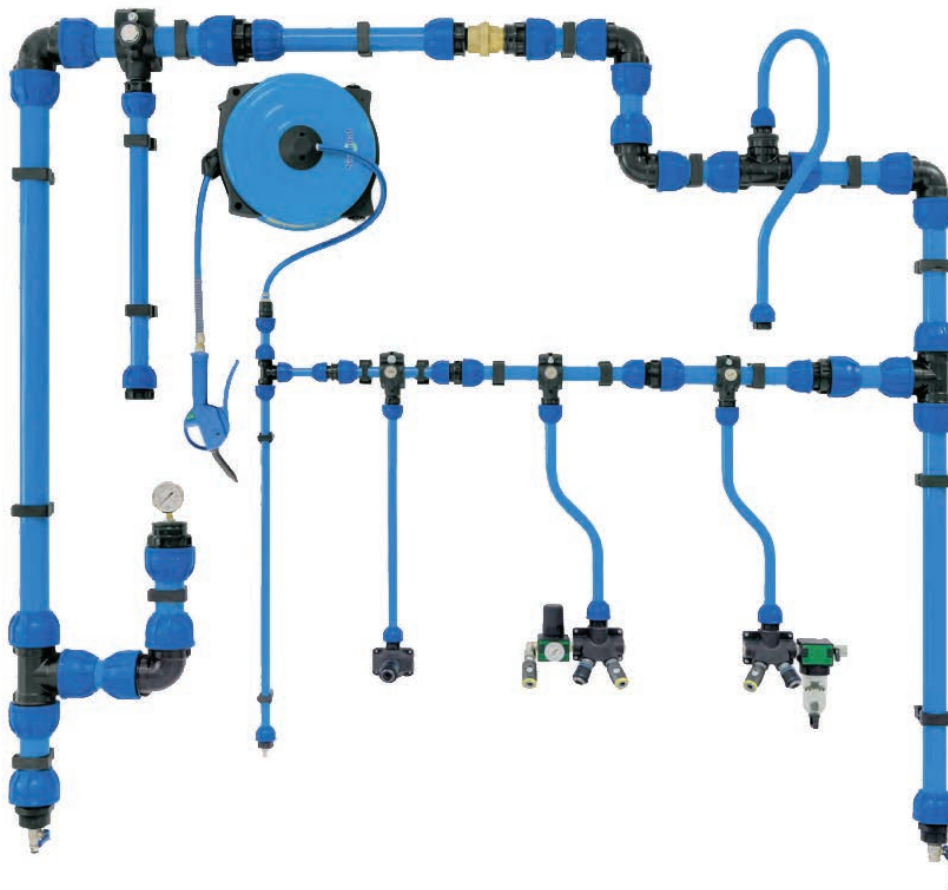
Distribution

Aluminum Pipes for Compressed Air									
Primary Aluminum Extruded Pipes: EN AW-6060 T6 (AL Mg Si 0.5) Electrostatic Painting: RAL 5015									
Chemical Composition									
Alloy	Cu	Fe	Mn	Mg	Si	Zn	Cr	Ti	Al
6060	0.10	0.10-0.30	0.10	0.35-0.6	0.3-0.6	0.15	0.05	0.10	Rest
Specific Weight: 2.70 Kg/dm³									
Minimum Mechanical Specifications									
Alloy		Ultimate Tensile Stress		Yield Point		A % Stretch		HB Hardness	
6060		Rm 215 N/mm²		Rp0.2 160 N/mm²		8		75	
Elastic Modulus: 69.00 N/mm² Expansivity: 20-100° C x 10- ⁶ /°C Resistivity Electric: 0.033 mm²/m Internal Chromatizing					Thermal Conductivity: 210 W/mk Melting Temperature: 615° C-655° C Calibrated Extrusion				

Size	7 Bar Delivery	Standard Pipe Length	Part Number
20 mm OD x 17 mm ID	1,477 L/min.	4 m	20-PIPE-BLU
25 mm OD x 22 mm ID	2,727 L/min.	4 m	25-PIPE-BLU
32 mm OD x 29 mm ID	5,504 L/min.	4 m	32-PIPE-BLU
40 mm OD x 37 mm ID	10,054 L/min.	4 m	40-PIPE-BLU
50 mm OD x 46 mm ID	16,538 L/min.	4 m	50-PIPE-BLU
63 mm OD x 59 mm ID	30,214 L/min.	4 m	63-PIPE-BLU

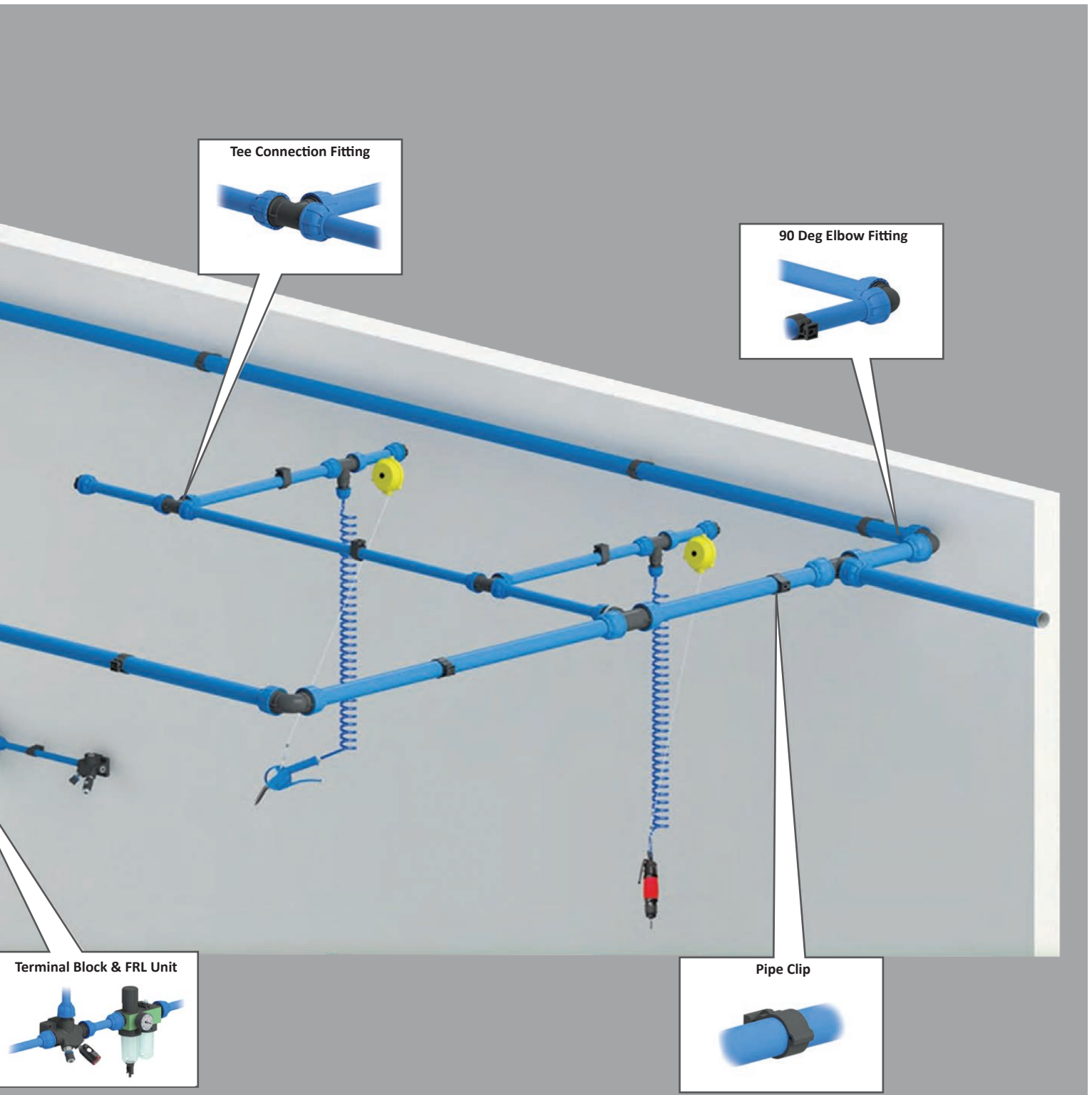


Pipe, Fittings & Ball Valves

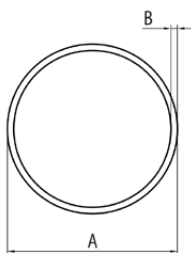


Compressed Air Distribution



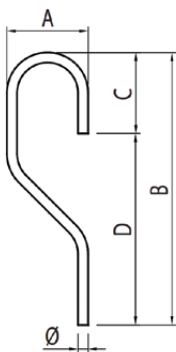


Aluminum Pipe - Straight

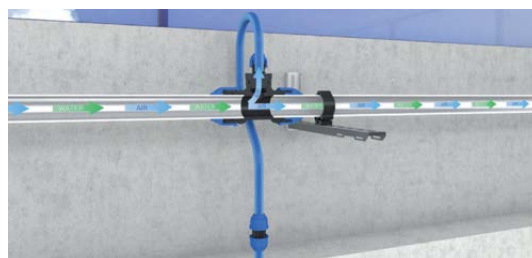
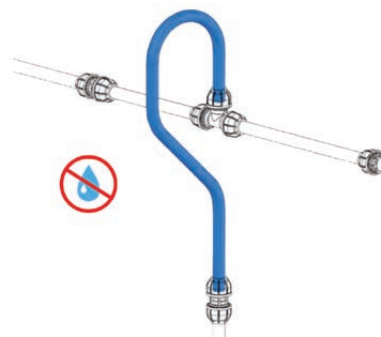


PART NUMBER	A (MM)	B (MM)	LENGTH	(KG/M)
20-PIPE-BLU	20	1.5	4 m	0.24
25-PIPE-BLU	25	1.5	4 m	0.27
32-PIPE-BLU	32	1.5	4 m	0.35
40-PIPE-BLU	40	1.5	4 m	0.46
50-PIPE-BLU	50	2	4 m	0.76
63-PIPE-BLU	63	2	4 m	0.99
Blue powder-coated aluminum Ral 5015				

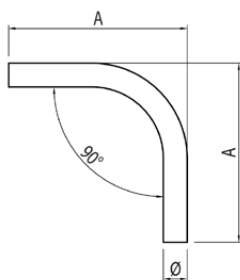
Aluminum Pipe - Drop Bends



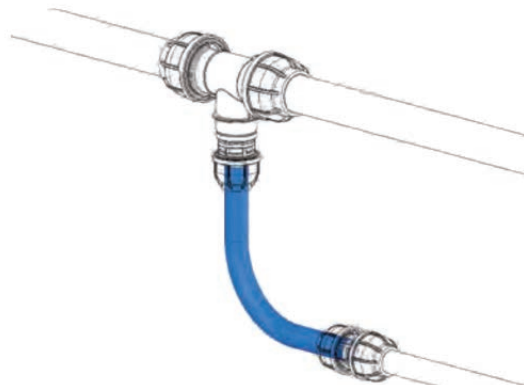
PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	D (MM)	WGT (G)
20-DROP-BLU	20	160	500	160	340	197
25-DROP-BLU	25	195	600	195	405	267
Blue powder-coated aluminum Ral 5015						



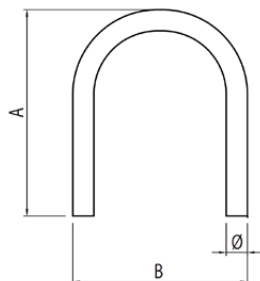
Aluminum Pipe - 90 Deg Bend



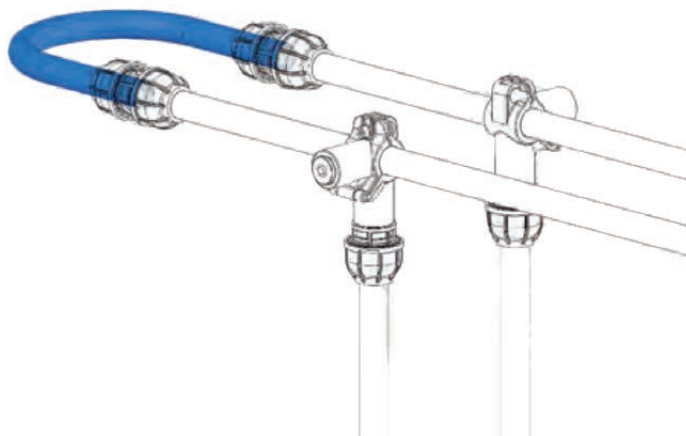
PART NUMBER	Ø (MM)	A (MM)	WGT (G)
20-ELB-BLU	20	150	72
25-ELB-BLU	25	160	86
Blue powder-coated aluminum Ral 5015			



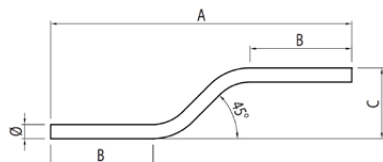
Aluminum Pipe - 180 Deg Bend



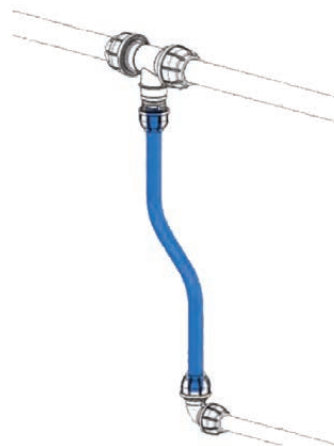
PART NUMBER	Ø (MM)	A (MM)	B (MM)
20-UIPIPE-BLU	20	195	165
25-UIPIPE-BLU	25	215	200
Blue powder-coated aluminum Ral 5015			



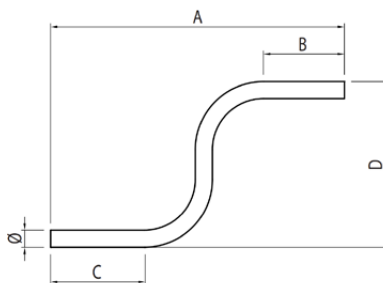
Aluminum Pipe - "S" Bend



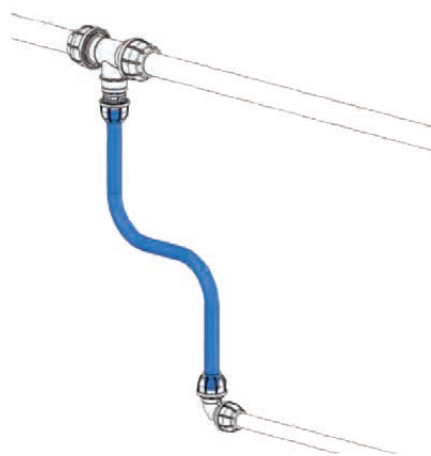
PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	WGT (G)
20-SPIPE-BLU	20	425	143.5	100	126
25-SPIPE-BLU	25	470	150	125	160
Blue powder-coated aluminum Ral 5015					



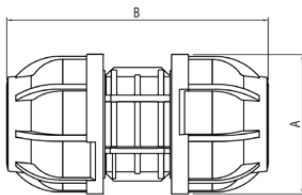
Aluminum Pipe - "Z" Bend



PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	D (MM)	WGT (G)
20-ZPIPE-BLU	20	345	95	110	195	109
25-ZPIPE-BLU	25	460	150	150	240	165
Blue powder-coated aluminum Ral 5015						



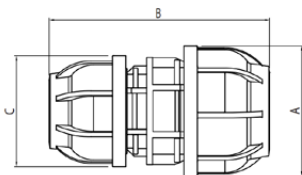
Equal Union Fitting



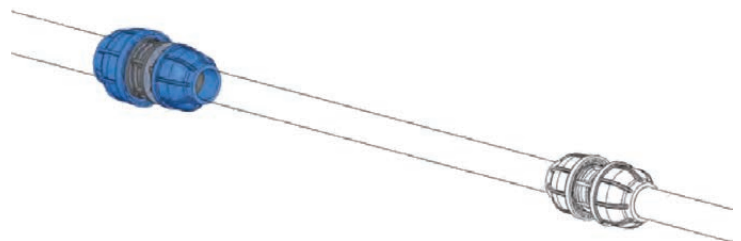
PART NUMBER	Ø (MM)	A (MM)	B (MM)	WGT (G)
20-U-20	20	44	85	58
25-U-25	25	52	97	97
32-U-32	32	62	113	165
40-U-40	40	72	129	215
50-U-50	50	86.50	157	401
63-U-63	63	105	182	633



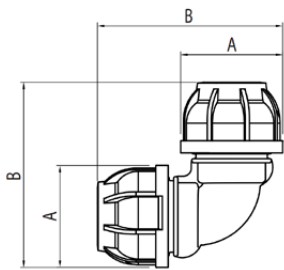
Unequal Union Fitting



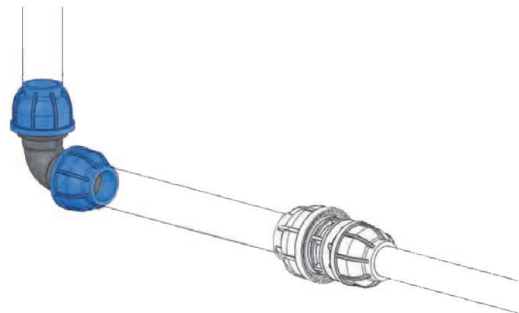
PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	WGT (G)
25-U-20	25 x 20	52	91	44	81
32-U-25	32 x 25	62	103.5	52	133
40-U-32	40 x 32	72	121	62	193
50-U-40	50 x 40	86.50	145.50	72	320
63-U-50	63 x 50	105	167	86.50	531



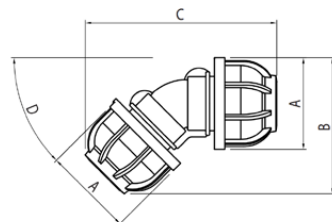
90 Deg Elbow



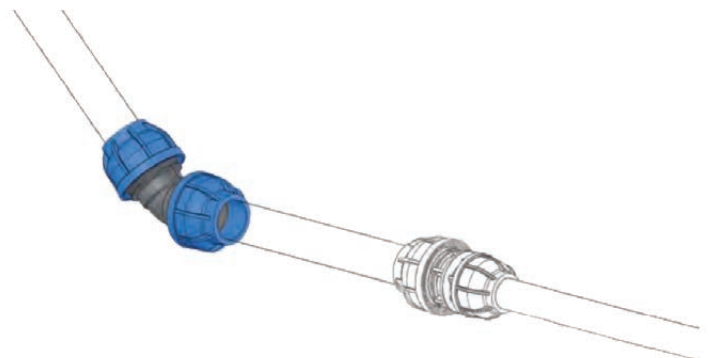
PART NUMBER	Ø (MM)	A (MM)	B (MM)	WGT (G)
20-ELB-20	20	44	76	62
25-ELB-25	25	52	92	106
32-ELB-32	32	62	109	172
40-ELB-40	40	72	127.50	243
50-ELB-50	50	86.50	157.50	465
63-ELB-63	63	105	184	745



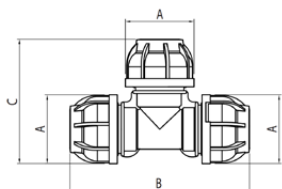
45 Deg Elbow



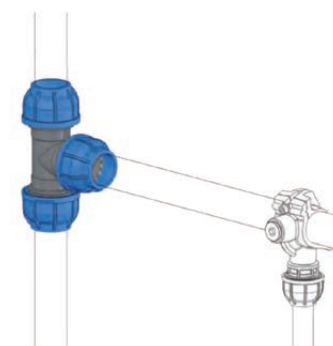
PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	D (MM)	WGT (G)
20-45ELB-20	20	44	66.50	92	45 DEG	65
25-45ELB-25	25	52	80	114	45 DEG	110
32-45ELB-32	32	62	94	135	45 DEG	175
40-45ELB-40	40	72	109	151	45 DEG	245
50-45ELB-50	50	86.50	131	182	45 DEG	450
63-45ELB-63	63	105	157	215	45 DEG	670



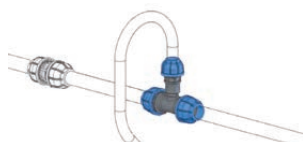
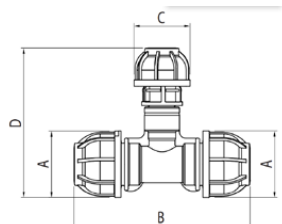
Tee Fitting



PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	WGT (G)
20-TEE-20	20	44	109.50	76.50	89
25-TEE-25	25	52	132	93.50	155
32-TEE-32	32	62	159.50	111	255
40-TEE-40	40	72	182	127.50	367
50-TEE-50	50	86.50	225	154	697
63-TEE-63	63	105	262	182	1123

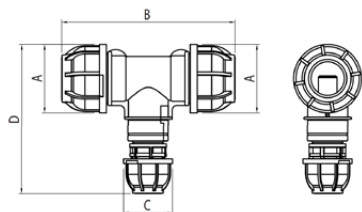


Reducing Tee Fitting



PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	D (MM)	WGT (G)
25-TEE-20	25 X 20 X 25	52	132	44	121	151
32-TEE-20	32 X 20 X 32	62	159.50	44	132	233
32-TEE-25	32 X 25 X 32	62	159.50	52	143	250
40-TEE-20	40 X 20 X 40	72	182	44	150	355
40-TEE-25	40 X 25 X 40	72	182	52	161	373
40-TEE-32	40 X 32 X 40	72	182	62	169	399
50-TEE-20	50 X 20 X 50	86.50	225	44	168	629
50-TEE-25	50 X 25 X 50	86.50	225	52	179	648
50-TEE-32	50 X 32 X 50	86.50	225	62	187	670
50-TEE-40	50 X 40 X 50	86.50	225	72	196	725
63-TEE-20	63 X 20 X 63	105	262	44	195	1002
63-TEE-25	63 X 25 X 63	105	262	52	206	1024
63-TEE-32	63 X 32 X 63	105	262	62	214	1031
63-TEE-40	63 X 40 X 63	105	262	72	223	1125
63-TEE-50	63 X 50 X 63	105	262	86.50	235	1144

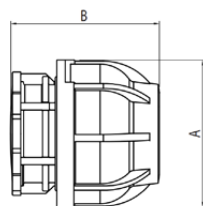
Dry Air Drop Reduced Outlet Fitting



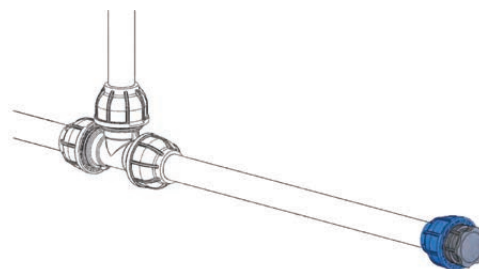
PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	D (MM)	WGT (G)
40-DRYTEE-20	40 X 20 X 40	72	182	44	150	380
40-DRYTEE-25	40 X 25 X 40	72	182	52	161	398
50-DRYTEE-20	50 X 20 X 50	86.50	225	44	168	654
50-DRYTEE-25	50 X 25 X 50	86.50	225	52	179	673
50-DRYTEE-32	50 X 32 X 50	86.50	225	62	187	700
50-DRYTEE-40	50 X 40 X 50	86.50	225	72	196	755
63-DRYTEE-20	63 X 20 X 63	105	262	44	195	1027
63-DRYTEE-25	63 X 25 X 63	105	262	52	206	1049
63-DRYTEE-32	63 X 32 X 63	105	262	62	214	1061
63-DRYTEE-40	63 X 40 X 63	105	262	72	223	1055
63-DRYTEE-50	63 X 50 X 63	105	262	86.50	235	1044



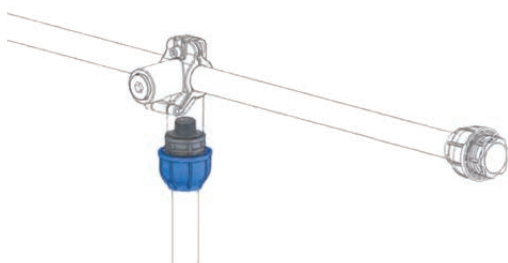
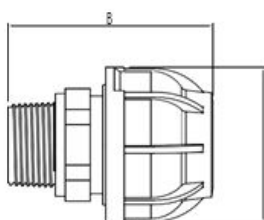
End Cap



PART NUMBER	Ø (MM)	A (MM)	B (MM)	WGT (G)
20-CAP	20	44	44.50	31
25-CAP	25	52	53.50	54
32-CAP	32	62	63	89
40-CAP	40	72	68.50	120
50-CAP	50	86.50	82.50	220
63-CAP	63	105	94.50	347

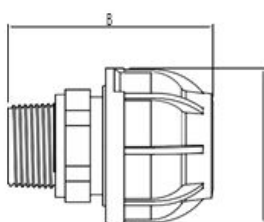


Straight Male Fitting - BSPT



PART NUMBER	Ø (MM) x BSPT	A	B (MM)	WGT (G)
		(MM)		
20-STR-12BSPT	20 x 1/2	44	60	34
20-STR-34BSPT	20 x 3/4	44	61	40
25-STR-34BSPT	25 x 3/4	52	68	57
25-STR-1BSPT	25 x 1	52	71.50	60
32-STR-1BSPT	32 X 1	62	75.50	96
32-STR-114BSPT	32 X 1 1/4	62	80.50	100
40-STR-1BSPT	40 X 1	72	88.50	132
40-STR-114BSPT	40 X 1 1/4	72	90	132
40-STR-112BSPT	40 X 1 1/2	72	89	135
50-STR-112BSPT	50 X 1 1/2	86.50	104	234
50-STR-2BSPT	50 X 2	86.50	108	236
63-STR-2BSPT	63 X 2	105	119	374
63-STR-212BSPT	63 X 2 1/2	105	125	380

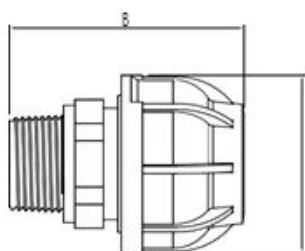
Straight Male Fitting - NPT



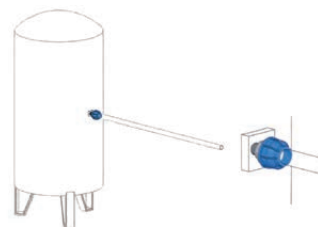
PART NUMBER	Ø (MM) x NPT	A	B (MM)	WGT (G)
		(MM)		
20-STR-12NPT	20 x 1/2	44	60	34
25-STR-34NPT	20 x 3/4	52	68	57
32-STR-1NPT	32 x 1	62	78.50	96
40-STR-114NPT	40 x 1 1/4	72	90	132
50-STR-112NPT	50 x 1 1/2	86.50	104	234
63-STR-2NPT	63 x 2	105	119	374



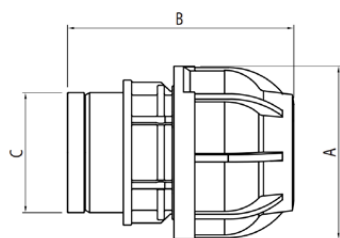
Straight Male Fitting BSPT - Aluminum



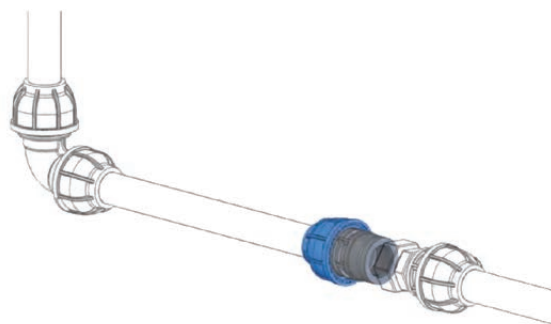
PART NUMBER	Ø (MM) x BSPT	A (MM)	B (MM)	WGT (G)
20-ASTR-12BSPT	20 x 1/2	44	60	59
25-ASTR-12BSPT	25 X 1/2	52	66.50	91
25-ASTR-34BSPT	25 x 3/4	52	68	91
32-ASTR-1BSPT	32 x 1	62	78.50	152
40-ASTR-1BSPT	40 X 1	72	88.50	202
40-ASTR-114BSPT	40 X 1 1/4	72	90	210
50-ASTR-112BSPT	50 X 1 1/2	86.50	104	342
63-ASTR-2BSPT	63 X 2	105	119	549



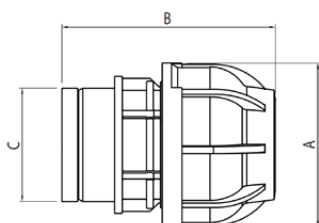
Straight Female Fitting - BSPP



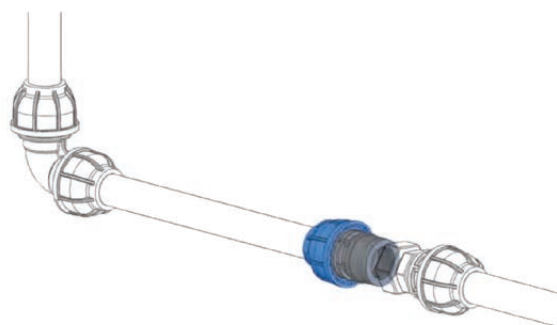
PART NUMBER	Ø (MM) x FEM BSPT	A (MM)	B (MM)	C (MM)	WGT (G)
20-FEMSTR-12BSPP	20 X 1/2	44	60.50	30	38
25-FEMSTR-34BSPP	25 X 3/4	52	69	43	64
32-FEMSTR-1BSPP	32 X 1	62	81	43	104
40-FEMSTR-114BSPP	40 X 1 1/4	72	92	54	142
50-FEMSTR-112BSPP	50 X 1 1/2	86.50	105	62	246
63-FEMSTR-2BSPP	63 X 2	105	122.50	77	389



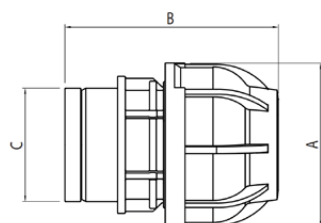
Straight Female Fitting - NPT



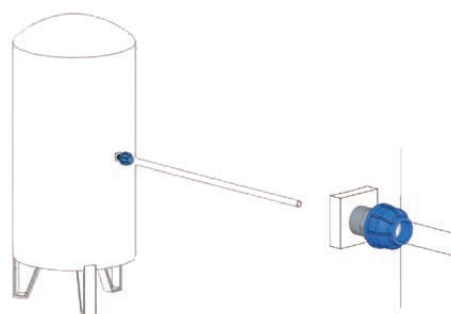
PART NUMBER	Ø (MM) x FEM NPT	A (MM)	B (MM)	C (MM)	WGT (G)
20-FEMSTR-12NPT	20 X 1/2	44	60.50	30	38
25-FEMSTR-34NPT	25 X 3/4	52	69	37	64
32-FEMSTR-1NPT	32 X 1	62	81	43	104
40-FEMSTR-114NPT	40 X 1 1/4	72	92	54	142
50-FEMSTR-112NPT	50 X 1 1/2	86.50	105	62	246
63-FEMSTR-2NPT	63 X 2	105	122.50	77	389



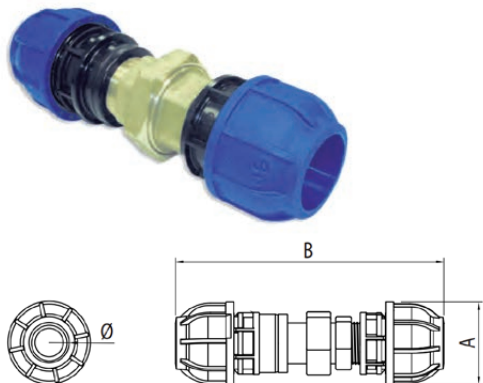
Aluminum Straight Female Fitting - BSPP



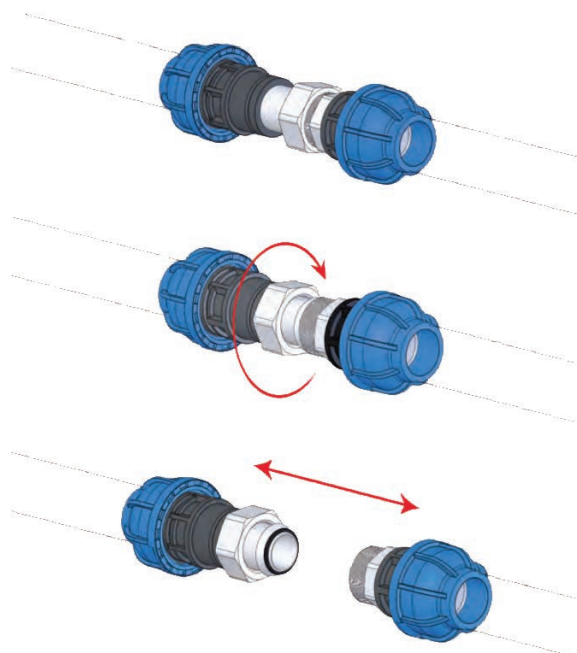
PART NUMBER	Ø (MM) x FEM BSPT	A (MM)	B (MM)	C (MM)	WGT (G)
20-AFEMSTR-12BSPP	20 x 1/2	44	60.50	30	59
25-AFEMSTR-34BSPP	25 x 3/4	52	69	37	91
32-AFEMSTR-1BSPP	32 x 1	62	81	43	152
40-AFEMSTR-114BSPP	40 x 1 1/4	72	92	54	210
50-AFEMSTR-112BSPP	50 x 1 1/2	86.50	105	62	342
63-AFEMSTR-2BSPP	63 x 2	105	122.50	77	549



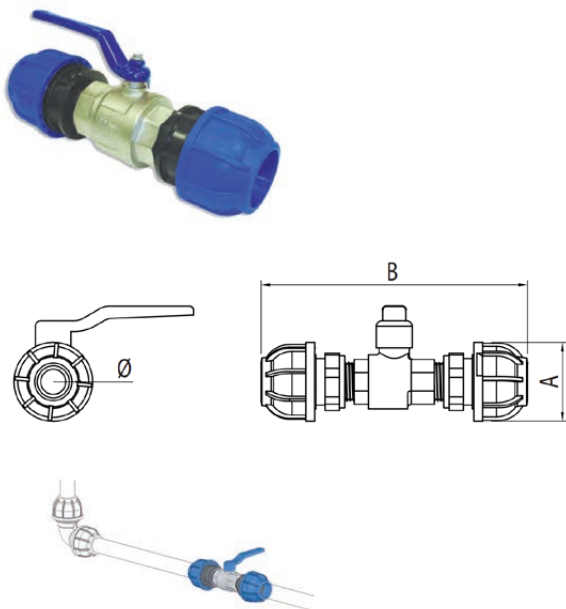
Union Swivel Joint Fitting



PART NUMBER	Ø (MM) x BSPT	A (MM)	B (MM)	WGT (G)
20-1/2USWIV-20	20 x 1/2	44	150	59
20-3/4USWIV-20	20 X 3/4	44	150	59
25-3/4USWIV-25	25 x 3/4	52	170	91
25-1USWIV-25	25 x 1	52	170	91
32-1USWIV-32	32 X 1	62	190	152
32-1-1/4USWIV-32	32 X 1 1/4	62	195	152
40-1-1/4USWIV-40	40 X 1 1/4	72	220	202
40-1-1/2USWIV-40	40 X 1 1/2	72	225	202
50-1-1/2USWIV-50	50 X 1 1/2	86.50	250	342
50-2USWIV-50	50 X 2	86.50	260	342
63-2USWIV-63	63 X 2	105	310	549
63-2-1/2USWIV-63	63 X 2 1/2	105	330	549

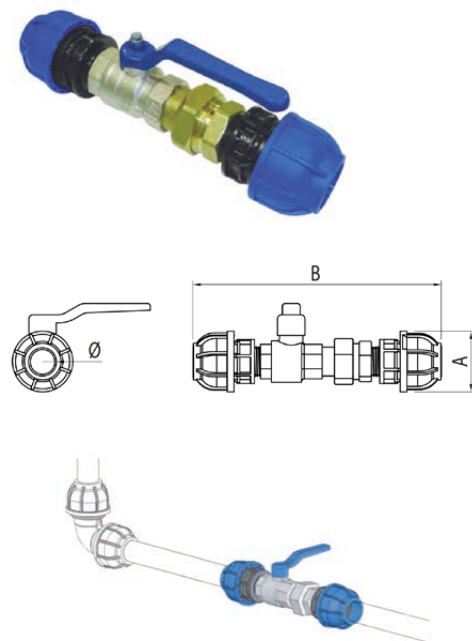


Straight Connection With Ball Valve Fitting



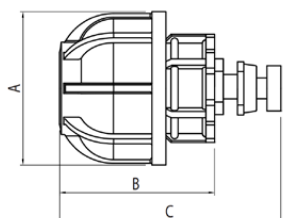
PART NUMBER	Ø (MM) x BSPT	A (MM)	B (MM)	WGT (G)
20-1/2BLV-20	20 x 1/2	44	150	218
20-3/4BLV-20	20 X 3/4	44	150	218
25-3/4BLV-25	25 x 3/4	52	170	334
25-1BLV-25	25 x 1	52	170	334
32-1BLV-32	32 X 1	62	195	577
32-1-1/4BLV-32	32 X 1 1/4	62	195	577
40-1-1/4BLV-40	40 X 1 1/4	72	225	787
40-1-1/2BLV-40	40 X 1 1/2	72	225	787
50-1-1/2BLV-50	50 X 1 1/2	86.50	260	1303
50-2BLV-50	50 X 2	86.50	260	1303
63-2BLV-63	63 X 2	105	305	2079
63-2-1/2BLV-63	63 X 2 1/2	105	325	2079

Union Swivel Joint With Ball Valve Fitting

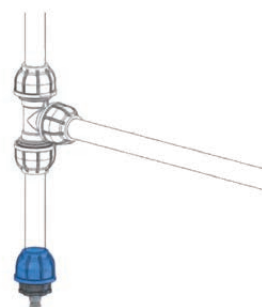


PART NUMBER	Ø (MM) x BSPT	A (MM)	B (MM)	WGT (G)
20-1/2'USWIVBLV-20	20 x 1/2	44	180	324
20-3/4USWIVBLV-20	20 X 3/4	44	190	324
25-3/4USWIVBLV-25	25 x 3/4	52	205	497
25-1USWIVBLV-25	25 x 1	52	215	497
32-1USWIVBLV-32	32 X 1	62	240	858
32-1-1/4USWIVBLV-32	32 X 1 1/4	62	255	858
40-1-1/4USWIVBLV-40	40 X 1 1/4	72	275	1233
40-1-1/2USWIVBLV-40	40 X 1 1/2	72	295	1233
50-1-1/2USWIVBLV-50	50 X 1 1/2	86.50	315	1803
50-2USWIVBLV-50	50 X 2	86.50	335	1803
63-2USWIVBLV-63	63 X 2	105	375	2679
63-2-1/2USWIVBLV-63	63 X 2 1/2	105	395	2679

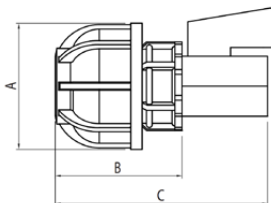
End Cap With Manual Vent Valve Fitting



PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	WGT (G)
20-VENTCAP	20	44	44.50	64.50	51
25-VENTCAP	25	52	53.50	88.50	104
32-VENTCAP	32	62	63	98	139
40-VENTCAP	40	72	68.50	103.50	170
50-VENTCAP	50	86.50	82.50	117.50	270
63-VENTCAP	63	105	94.50	129.50	397



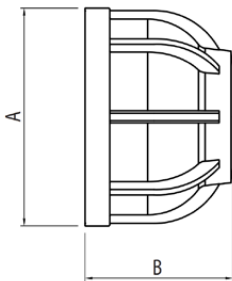
End Cap With Ball Valve Fitting



PART NUMBER	Ø (MM) X FEM BSPP	A (MM)	B (MM)	C (MM)	WGT (G)
20-DRAINCAP	20 X 1/4	44	44.50	74.50	111
25-DRAINCAP	25 X 1/4	52	53.50	98.50	164
32-DRAINCAP	32 X 1/4	62	63	108	199
40-DRAINCAP	40 X 1/4	72	68.50	113.50	230
50-DRAINCAP	50 X 1/4	86.50	82.50	127.50	330
63-DRAINCAP	63 X 1/4	105	94.50	139.50	457

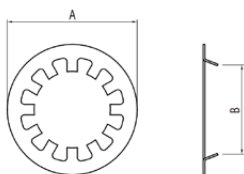


Coupling Ring Fitting

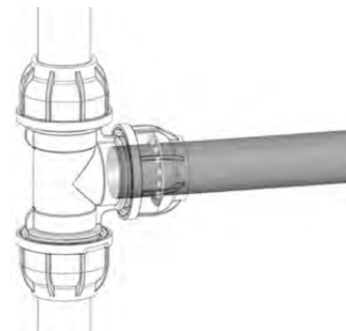


PART NUMBER	Ø (MM)	A (MM)	B (MM)	WGT (G)
20-COUP	20	44	30	15
25-COUP	25	52	37	25
32-COUP	32	62	43	39
40-COUP	40	72	47	53
50-COUP	50	86.50	59	106
63-COUP	63	105	70	156

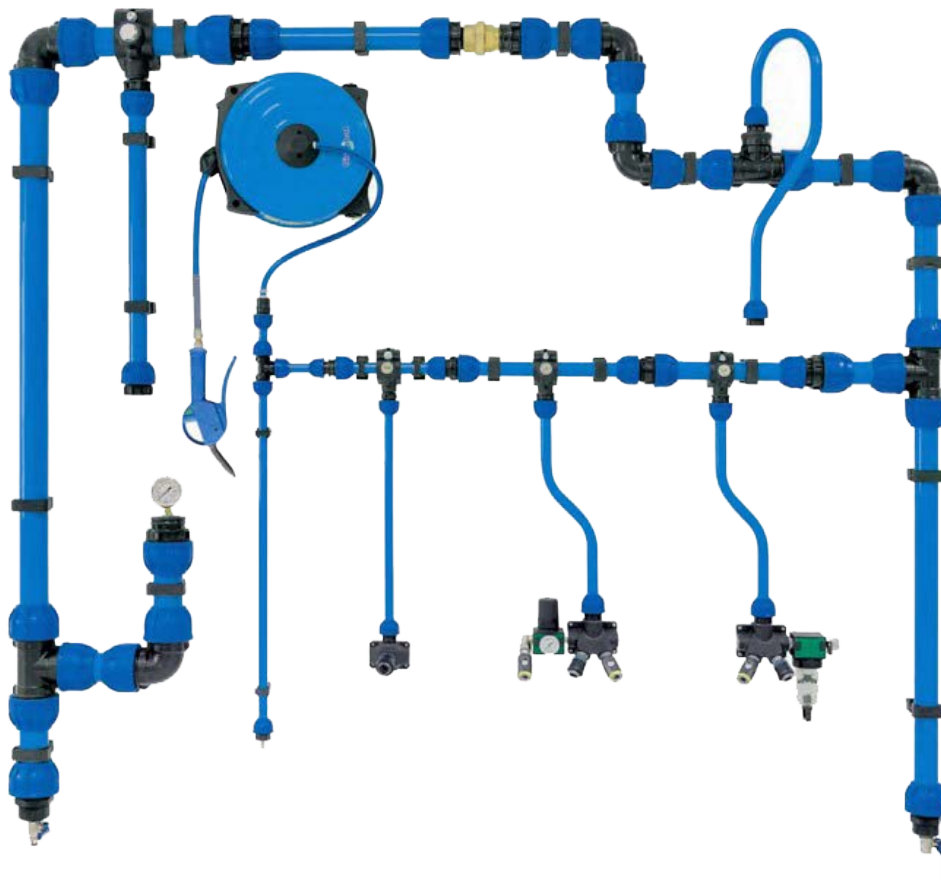
Gripping Ring Fitting



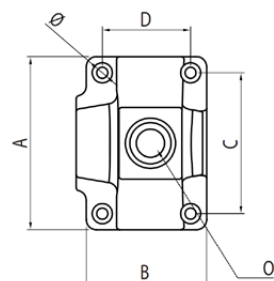
PART NUMBER	Ø (MM)	A (MM)	B (MM)	WGT (G)
20-GRIP	20	31	20.20	1
25-GRIP	25	38.80	25.20	2
32-GRIP	32	48.20	32.50	3
40-GRIP	40	56.30	40.50	4
50-GRIP	50	69	50.50	6
63-GRIP	63	85.10	63.20	8



Accessories



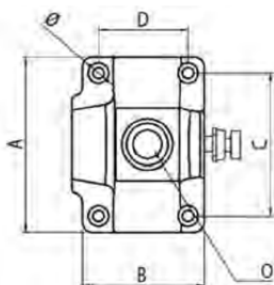
1 Outlet Diverter Block BSPP



PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-2-BSPP	1/2 F	1/2 F	86	60	70	44	5.5	22	55	108
MP-DB-34-12-2-BSPP	3/4 F	1/2 F	86	60	70	44	5.5	22	55	108



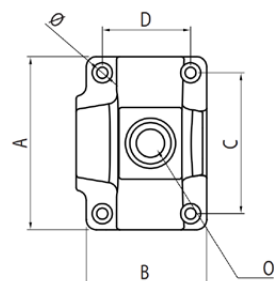
1 Outlet Diverter Block W/ Drain Valve BSPP



PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-2SC-BSPP	1/2 F	1/2 F	86	60	70	44	5.5	22	55	108
MP-DB-34-12-2SC-BSPP	3/4 F	1/2 F	86	60	70	44	5.5	22	55	108



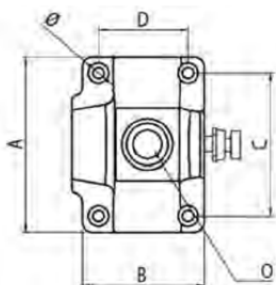
1 Outlet Diverter Block NPT



PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-2-NPT	1/2 F	1/2 F	86	60	70	44	5.5	22	55	108
MP-DB-34-12-2-NPT	3/4 F	1/2 F	86	60	70	44	5.5	22	55	108



1 Outlet Diverter Block W/ Drain Valve NPT

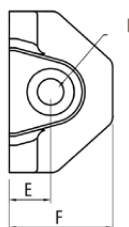
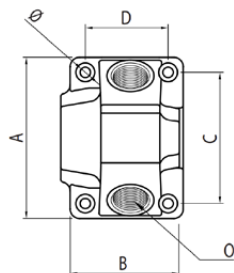


PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-2SC-NPT	1/2 F	1/2 F	86	60	70	44	5.5	22	55	108
MP-DB-34-12-2SC-NPT	3/4 F	1/2 F	86	60	70	44	5.5	22	55	108



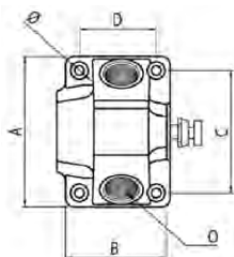
2 Outlet Diverter Block BSPP

PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-3-BSPP	1/2 F	1/2 F	86	60	70	44	5.5	22	55	134
MP-DB-34-12-3-BSPP	3/4 F	1/2 F	86	60	70	44	5.5	22	55	134



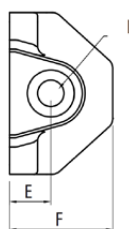
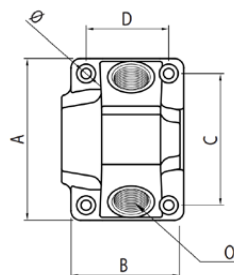
2 Outlet Diverter Block W/ Drain Valve BSPP

PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-3SC-BSPP	1/2 F	1/2 F	86	60	70	44	5.5	22	55	134
MP-DB-34-12-3SC-BSPP	3/4 F	1/2 F	86	60	70	44	5.5	22	55	134



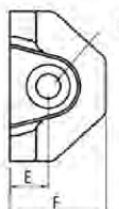
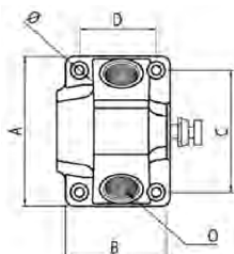
2 Outlet Diverter Block NPT

PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-3-NPT	1/2 F	1/2 F	86	60	70	44	5.5	22	55	134
MP-DB-34-12-3-NPT	3/4 F	1/2 F	86	60	70	44	5.5	22	55	134

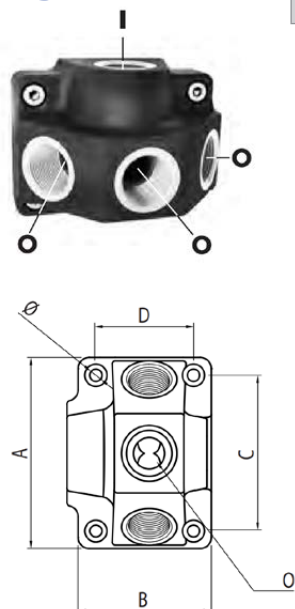


2 Outlet Diverter Block W/ Drain Valve NPT

PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-3SC-NPT	1/2 F	1/2 F	86	60	70	44	5.5	22	55	134
MP-DB-34-12-3SC-NPT	3/4 F	1/2 F	86	60	70	44	5.5	22	55	134



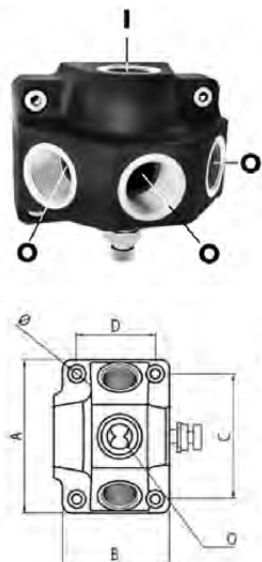
3 Outlet Diverter Block BSPP



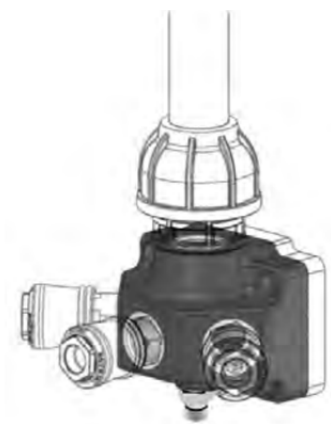
PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-4-BSPP	1/2 F	1/2 F	86	60	70	44	5.5	22	55	151
MP-DB-34-12-4-BSPP	3/4 F	1/2 F	86	60	70	44	5.5	22	55	151



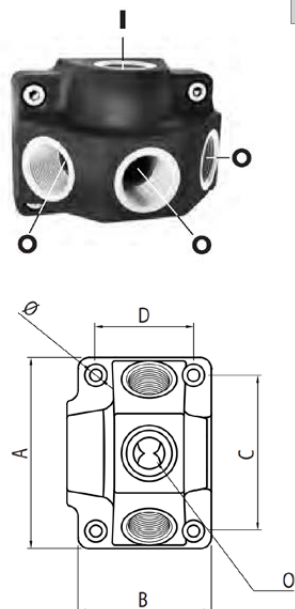
3 Outlet Diverter Block W/ Drain Valve BSPP



PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-4SC-BSPP	1/2 F	1/2 F	86	60	70	44	5.5	22	55	151
MP-DB-34-12-4SC-BSPP	3/4 F	1/2 F	86	60	70	44	5.5	22	55	151



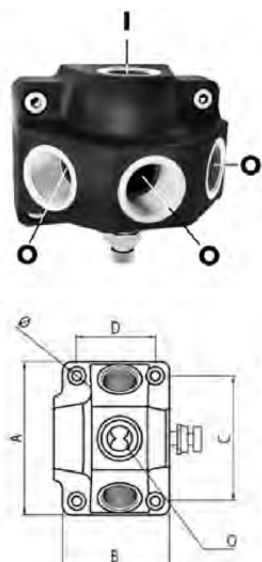
3 Outlet Diverter Block NPT



PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-4-NPT	1/2 F	1/2 F	86	60	70	44	5.5	22	55	151
MP-DB-34-12-4-NPT	3/4 F	1/2 F	86	60	70	44	5.5	22	55	151



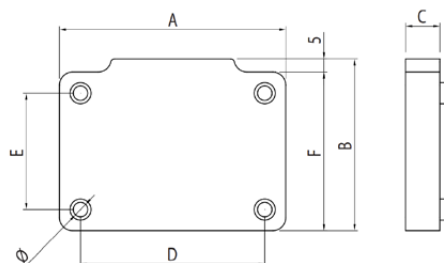
3 Outlet Diverter Block W/ Drain Valve NPT



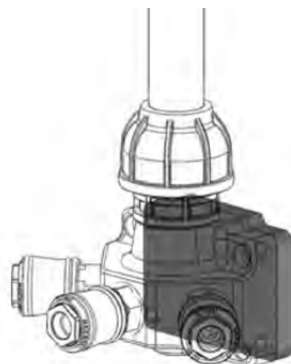
PART NUMBER	I (MM)	O (MM)	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DB-12-12-4SC-NPT	1/2 F	1/2 F	86	60	70	44	5.5	22	55	151
MP-DB-34-12-4SC-NPT	3/4 F	1/2 F	86	60	70	44	5.5	22	55	151



Block Spacer



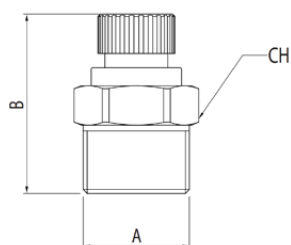
PART NUMBER	A (MM)	B (MM)	C (MM)	D (MM)	Ø (MM)	E (MM)	F (MM)	WGT (G)
MP-DBS-10	85	65	10	70	5.5	44	60	23
MP-DBS-13	85	65	13	70	5.5	44	60	25
MP-DBS-20	85	65	20	70	5.5	44	60	117



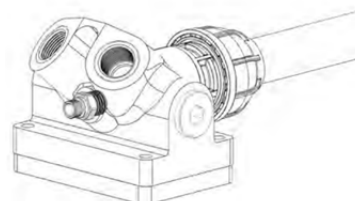
Use Block Spacers for With MP-DB Diverter Blocks

With 20 Dia. & 25 Dia. Pipes	With 20 Dia. & 40 Dia. Pipes	With 20 Dia. & 63 Dia Pipes
MP-DBS-13 35	MP-DBS-13 MP-DBS-10 45	MP-DBS-13 MP-DBS-20 55

Drain - BSPT

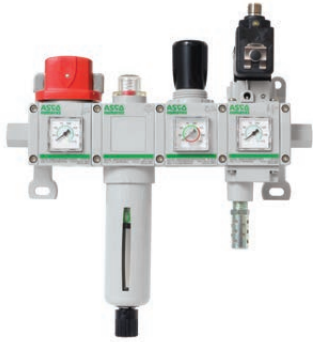


PART NUMBER	A (MM)	B (MM)	CH (MM)	WGT (G)
MP-DBD-14	1/4	23	14	15



FRL Units

Recommended for pipe sizes
20-40 only. Contact us for larger
size FRLs



How to Order

SERIES:

652-G04
(1/2" BSPP)

652-04
(1/2" NPT)

653-G08
(1" BSPP)

653-08
(1" NPT)

652-04-VFR

(Example 652-04-VFR = assembly with shut-off valve, particulate filter, regulator with gauge and 2 body clamps with wall mounts - no end plates)

UNIT:

V = SHUT-OFF VALVE

F = PARTICULATE FILTER (5 MIC)

P = PARTICULATE FILTER/REGULATOR W/ GAUGE (5 MIC)

T = COALESCING FILTER (0.3 MIC)

C = COALESCING FILTER/REGULATOR W/ GAUGE (0.3 MIC)

R = REGULATOR W/ GAUGE

L = LUBRICATOR

S = SOLENOID SOFT START VALVE W/ DIN CONNECTOR

O = LOCKOUT VALVE-YELLOW W/ RED KNOB

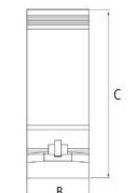
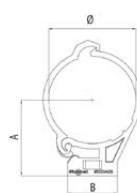
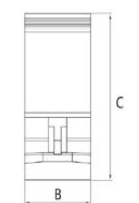
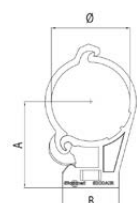
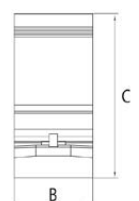
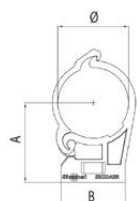
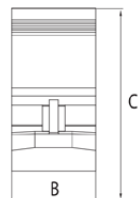
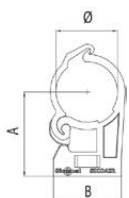
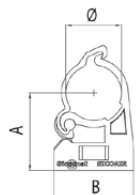
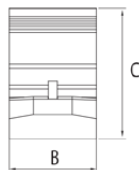
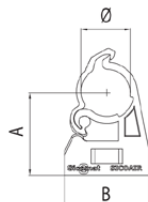
D = DIVERter BLOCK

COMPONENT	652 SERIES FLOW (SCFM @ 91.4 PSI/ 6.3 BAR)	653 SERIES FLOW (SCFM @ 91.4 PSI/ 6.3 BAR)	FILTER MIC	OUTPUT PRESS RANGE	STD DRAIN TYPE
SHUT-OFF VALVE	400.0	1833.0	N/A	N/A	N/A
PARTICULATE FILTER	80.2	150.0	5	N/A	MANUAL
PARTICULATE FILTER/REGULATOR W/ GAUGE	157.2	317.8	5	7 TO 125 PSI (0.5 TO 8 BAR)	MANUAL
COALESCING FILTER	30.5	91.8	0.3	N/A	MANUAL
COALESCING FILTER/REGULATOR W/ GAUGE	20.8	26.5	0.3	7 TO 125 PSI (0.5 TO 8 BAR)	MANUAL
REGULATOR W/ GAUGE	245.0	406.1	N/A	7 TO 125 PSI (0.5 TO 8 BAR)	N/A
LUBRICATOR	178.5	459.1	N/A	N/A	NONE
SOLENOID SOFT START VALVE W/ DIN CONNECTOR	164.0	290.6	N/A	N/A	N/A
LOCKOUT VALVE - YELLOW W/ RED KNOB	116.0	347.0	N/A	N/A	N/A
DIVERter BLOCK	400.0	1833.0	N/A	N/A	N/A

Additional Information Available Upon Request

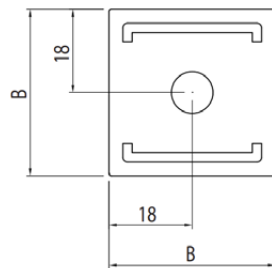
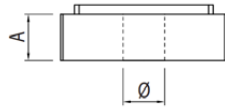
PARTICULATE FILTER	PARTICULATE FILTER/REGULATOR W/ GAUGE	REGULATOR W/ GAUGE	SOLENOID SOFT START VALVE W/ DIN CONNECTOR	SHUT-OFF VALVE
				
COALESCING FILTER	COALESCING FILTER/REGULATOR W/ GAUGE	LUBRICATOR	LOCKOUT VALVE - YELLOW W/ RED KNOB	DIVERter BLOCK
				

Wall Mount Pipe Clips

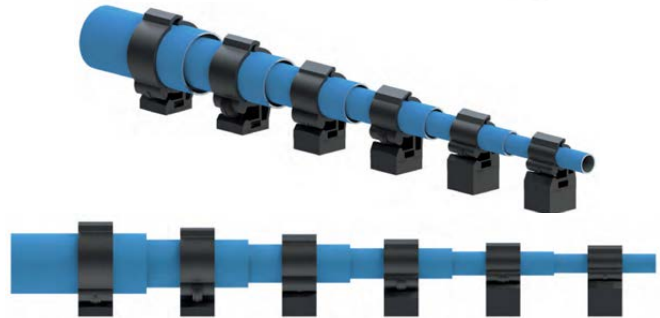


PART NUMBER	Ø (MM)	A (MM)	B (MM)	C (MM)	WGT (G)
20-WMPC	20	35	36	54	18
25-WMPC	25	35	36	56	18
32-WMPC	32	45	36	70	26
40-WMPC	40	45	36	75	28
50-WMPC	50	55	36	92	34
63-WMPC	63	55	36	98	36

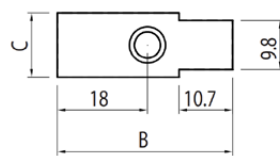
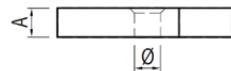
Wall Mount Pipe Clips



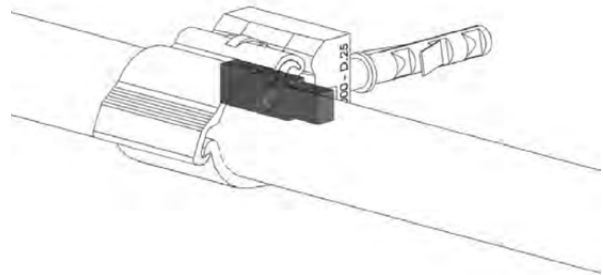
PART NUMBER	Ø	A (MM)	B (MM)	WGT (G)
MP-WMPS-10	9	10	36	8



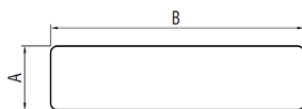
Wall Anchor Adapter



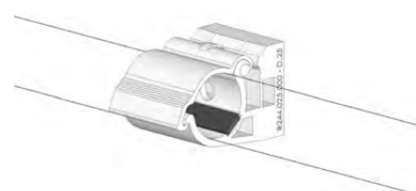
PART NUMBER	Ø	A (MM)	B (MM)	C (MM)	WGT (G)
MP-WMP-AA	5.2	5.8	35	12.8	5



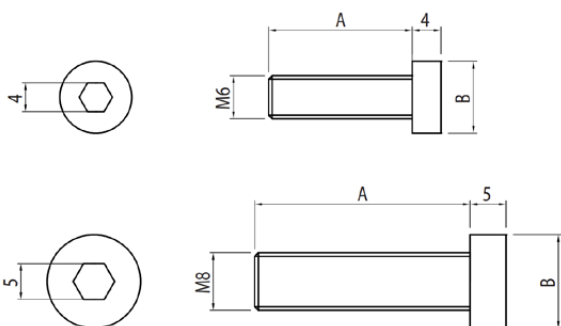
Wall Mount Stay - EPDM Insert



PART NUMBER	A (MM)	B (MM)	C (MM)	WGT (G)
MP-WMP-STAY	9	36	2	1

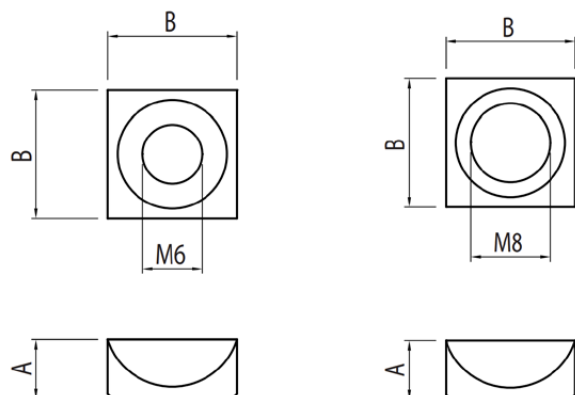
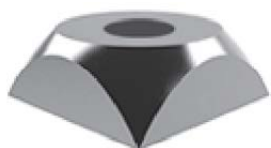


Screws - M6 & M8



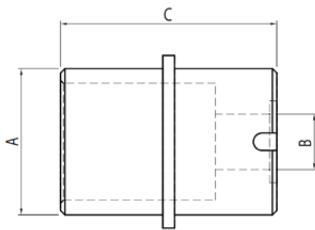
PART NUMBER	THD	A (MM)	B (MM)	WGT (G)
M6x20LHCS	M6	20	10	4
M8x20LHCS	M8	20	13	10
M8x30LHCS	M8	30	13	15
M8x40LHCS	M8	40	13	20
M8x50LHCS	M8	50	13	25
M8x60LHCS	M8	60	13	30
M8x70LHCS	M8	70	13	35

Square Nut - M6 & M8

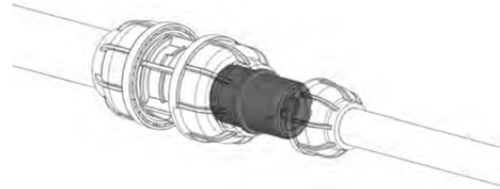


PART NUMBER	THD	A (MM)	B (MM)	WGT (G)
MP-WMPN-M6	M6	6	13	3
MP-WMPN-M8	M8	6	13	3

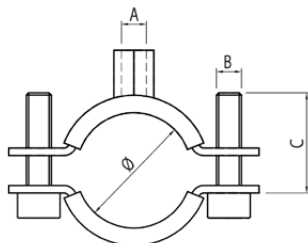
Fitting to Thread Adapters BSPP



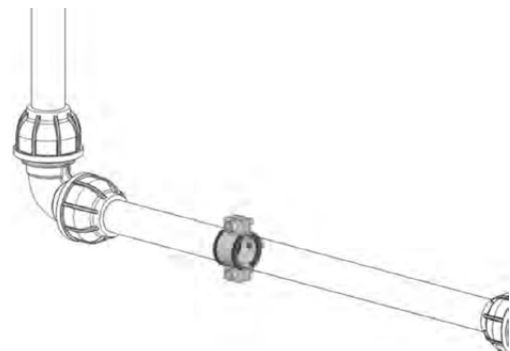
PART NUMBER	MATL	A (MM)	B (MM)	C (MM)	WGT (G)
25-REDUCE-12	ALUMINUM	25	1/2	65	42
32-REDUCE-12	NYLON	32	1/2	57	34
40-REDUCE-12	NYLON	40	1/2	62	68
40-REDUCE-1	NYLON	40	1	62	36
50-REDUCE-12	NYLON	50	1/2	74	144
50-REDUCE-1	NYLON	50	1	74	103
63-REDUCE-12	NYLON	63	1/2	77	254
63-REDUCE-1	NYLON	63	1	77	210
63-REDUCE-112	NYLON	63	1 1/2	77	133



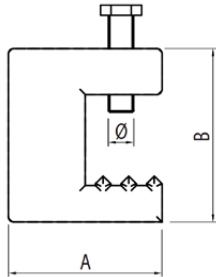
Hanging Pipe Thread



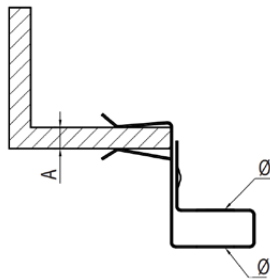
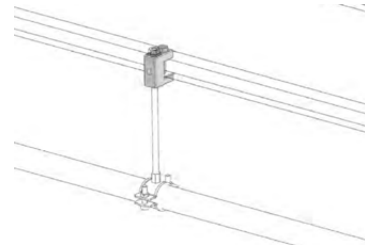
PART NUMBER	Ø	A (MM)	B (MM)	C (MM)	WGT (G)
20-HPC	20	M8/M10	M6	20	72
25-HPC	25	M8/M10	M6	20	80
32-HPC	32	M8/M10	M6	20	90
40-HPC	40	M8/M10	M6	25	99
50-HPC	50	M8/M10	M6	25	115
63-HPC	63	M8/M10	M6	25	128



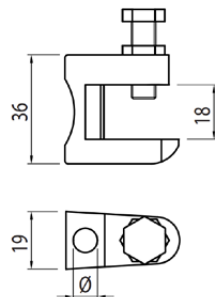
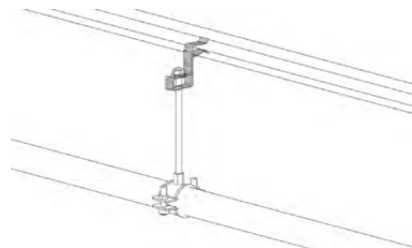
Beam Clip for Hanging Pipe



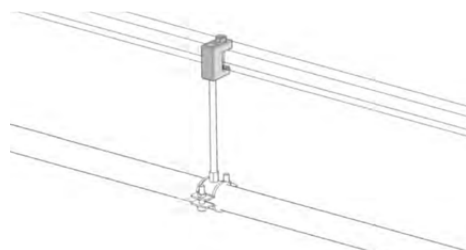
PART NUMBER	Ø	A (MM)	B (MM)	WGT (G)
MP-HPC-BC1	M6	30	34	27



PART NUMBER	Ø	A (MM)	WGT (G)
MP-HPC-BC4	11	3/8	30
MP-HPC-BC5	11	8/14	32
MP-HPC-BC6	11	14/20	33



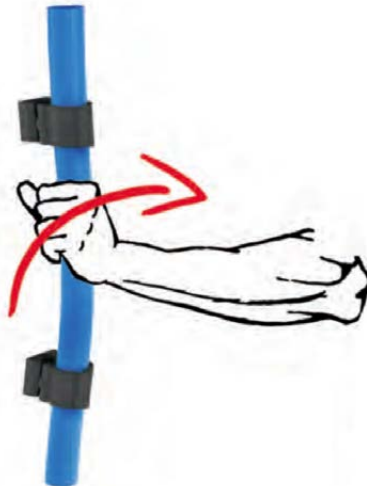
PART NUMBER	Ø	WGT (G)
MP-HPC-BC2	9	79
MP-HPC-BC3	M8	82



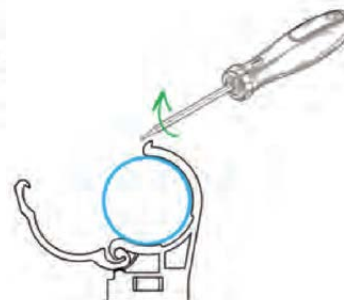
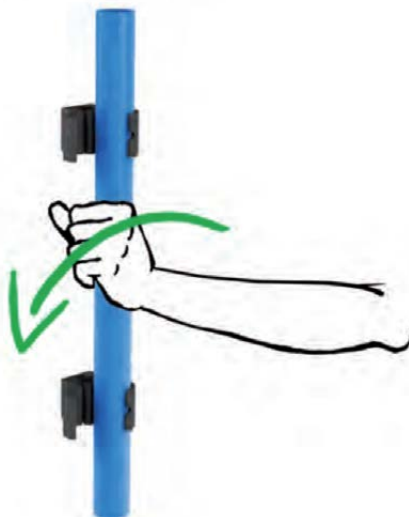
Safety Release System

To create a fixed point for the compensation of thermal expansions, the pipe clip is integrated by the insert in EPDM - Part # MP-WMP-STAY

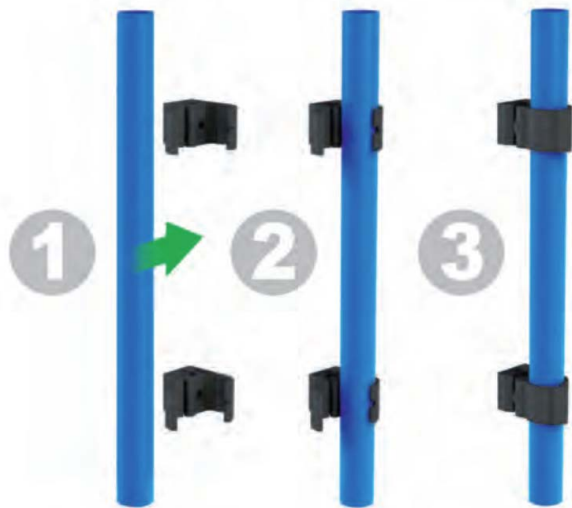
Efficient locking system with the two large hooking areas between the pipe clip body and lid



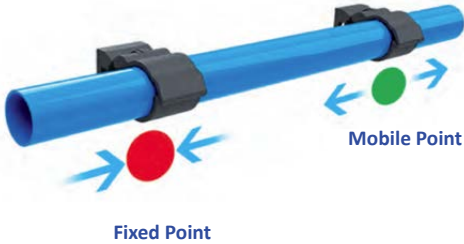
Quick and easy opening just by using a slotted screwdriver through the unhooking hole on the front side of the pipe clip



Installation of the Pipes

Vertical or horizontal pipe assembly	
The particular shape of the pipe clip ensures the retention of the tube until the catching lid is closed.	
Vertical Installation	 The diagram illustrates the vertical installation process in three steps. In step 1, a blue pipe is shown vertically. In step 2, a black pipe clip is being attached to the pipe. In step 3, the pipe clip is fully attached to the pipe.
Horizontal Installation	 The diagram illustrates the horizontal installation process in three steps. In step 1, a blue pipe is shown horizontally. In step 2, a black pipe clip is being attached to the pipe. In step 3, the pipe clip is fully attached to the pipe.

Creating a Fixed Point

To create a fixed point for the compensation of thermal expansions, the pipe clip is integrated by the insert in EPDM - Part # MP-WMP-STAY		
STEP 1	Remove the protective film for insert # MP-WMP-STAY going on the fixed point wall mount	
STEP 2	Attach the insert into its place on the wall mount	
STEP 3	Align Fixed Point wall mount and Mobile Point wall mount with pipe	
STEP 4	Close wall mount brackets	

Pipe Clips Attachment

Mounting with screw and nut	M8X20LHCS
Mounting with screw and external nut	MP-WMPN-M6 MP-WMPN-M8 M6X20LHCS M8X20LHCS

Clamping of the Pipe & Calculating the Bending Points

Clamping of the Pipes	
The minimum distance from the fitting of the bracket must be 100/150 mm to allow for the slipping of the pipe due to thermal expansion. When the piping is longer than 30 meters you must insert the appropriate means of compensation for expansion coefficient of the aluminum $K = 0.000023$). When planning the system, you should consider the minimum clearances necessary to ensure the proper expansion of the pipe.	
Calculating the Bending Points	
In order to allow the proper operation of the system, absorption points must be sized and prepared on long sections to take care of expansion caused by temperature changes.	KEYWORDS A-B* = UNIT (mm) L-L1-L2 = LENGTHS (mt) DL = EXPANSION (mm) DT = TEMPERATURE RANGE (°C) M = MOBILE BRACKET F = FIXED BRACKET L1 = 40 mt L2 = 40 mt DT = 50°C DL = DT x 0.02 x L = 50 x 0.02 x 40 = 40 mm A = DL x 23 = 40 x 23 = 920 mm B = 0.7 x A = 0.7 x 920 = 640 mm

Cutting & Assembly

For Cutting & Assembly, the following are the recommended tools & supplies

Please see pages ** through ** for more information on these tools.

Pipe Cutter MPT-PC-15-40 (For 20-40 mm Pipe) MPT-PC-15-63 (For 20-63 mm Pipe)	
Chamfering Tool MPT-DEBUR-15-40 (For exterior of 20-40 mm Pipe Sizes) MPT-DEBUR-50-63 (For exterior of 50-63 mm Pipe Sizes)	 
Deburring Tool MPT-DEBUR-HT (For interior of all pipe sizes)	
Neutral Grease or Vaseline (Recommended by not required)	

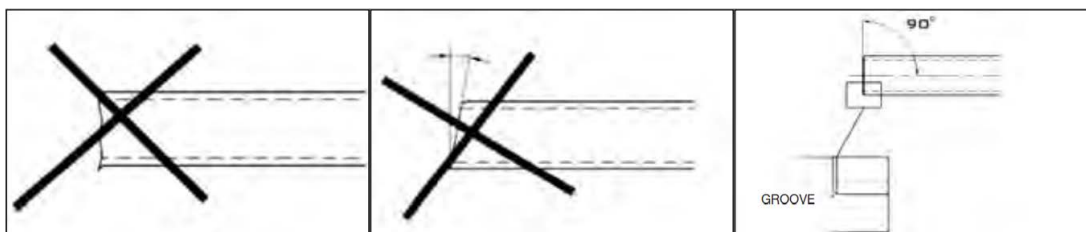
Pipe Fitting Body Wrench with Depth Gauge 20-CRW (For 20 mm Pipe) 25-CRW (For 25 mm Pipe) 32-CRW (For 32 mm Pipe) 40-CRW (For 40 mm Pipe) 50-CRW (For 50 mm Pipe) 63-CRW (For 63 mm Pipe)	
or Pipe Fitting Body Wrench 20-FRW (For 20 mm Pipe) 25-FRW (For 25 mm Pipe) 32-FRW (For 32 mm Pipe) 40-FRW (For 40 mm Pipe) 50-FRW (For 50 mm Pipe) 63-FRW (For 63 mm Pipe)	

Cutting & Assembly

STEP 1	Use pipe cutter # MPT-PC-15-40 or # MPT-PC-15-63 (depending on the diameter of the tube). Position the tool perpendicular to the pipe to be cut and start cutting.	
STEP 2	Use chamfering tool (# MPT-DEBUR-15-40 for pipes up to Ø 40 mm or # MPT-DEBUR-50-63 for pipes over Ø40 mm) and chamfering tool for interior (# MPT-DEBUR-HT) and operate according to the instructions in the literature accompanying the tool in use. Bevel the pipe as evenly as possible without generating chips which are not completely detached from it as these could affect and damage the seal.	

Important

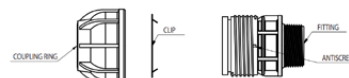
- Chamfering operation, essential to avoid damaging the seal of the fitting, must follow the indications given in the following scheme.
- For a perfect link between the pipes, it is recommended that the cut be perfectly perpendicular, remove any burrs and chamfer the edge in order to protect the seal during insertion.
- For a perfect link between the pipes, it is recommended that the cut be perfectly perpendicular, remove any burrs and chamfer the edge in order to protect the seal during insertion.



Cutting & Assembly

STEP 3

Make sure that all parts of the connector are properly mounted. Carefully check the orientation of the clip, if it is installed incorrectly, the tightness of the connection is not guaranteed.

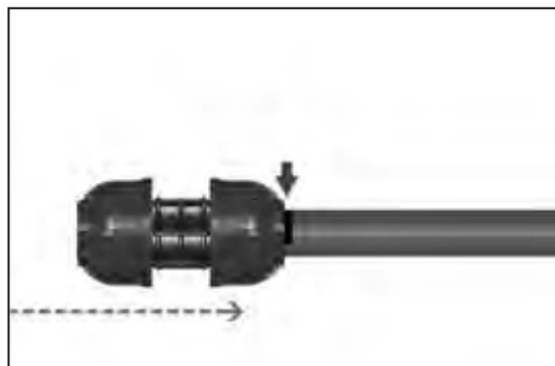


Before inserting the pipe into the fitting, screw the lock nut up against the tooth of the self-locking device and no further. The tube is inserted into the fitting up against the setback, over the seal. To ensure that this is done you can check by creating a mark on the tube starting from end to the measurement "L" shown in the table below.

DN	20	25	32	40	50	63
L[mm]	45	55	60	60	75	85

Tip

The "CRW" locking keys (ex. 32-CRW) have a break that turns out to be the template to mark the correct reference position of the pipe in the fitting.



STEP 4

To facilitate the insertion of the pipe into the fitting, we recommend that you lubricate the outside of the pipe and the inner seal of the fitting itself. Lubrication in addition to facilitating the insertion of the pipe into the fitting optimizes the operation of the seal avoiding damage over time.

Cutting & Assembly

Use neutral grease or Vaseline



Lubricate the seal inside the fitting



Use neutral grease or Vaseline



Use neutral grease or Vaseline



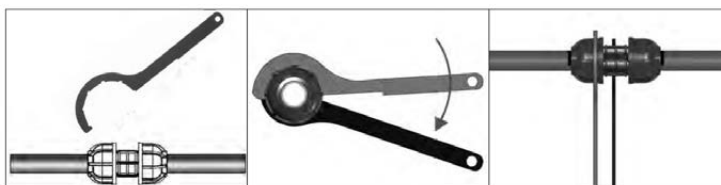
In the event the absence of any type of lubricant in the system is specifically required, the insertion of the pipe into the fitting can be performed without the help of lubricants.

STEP 5

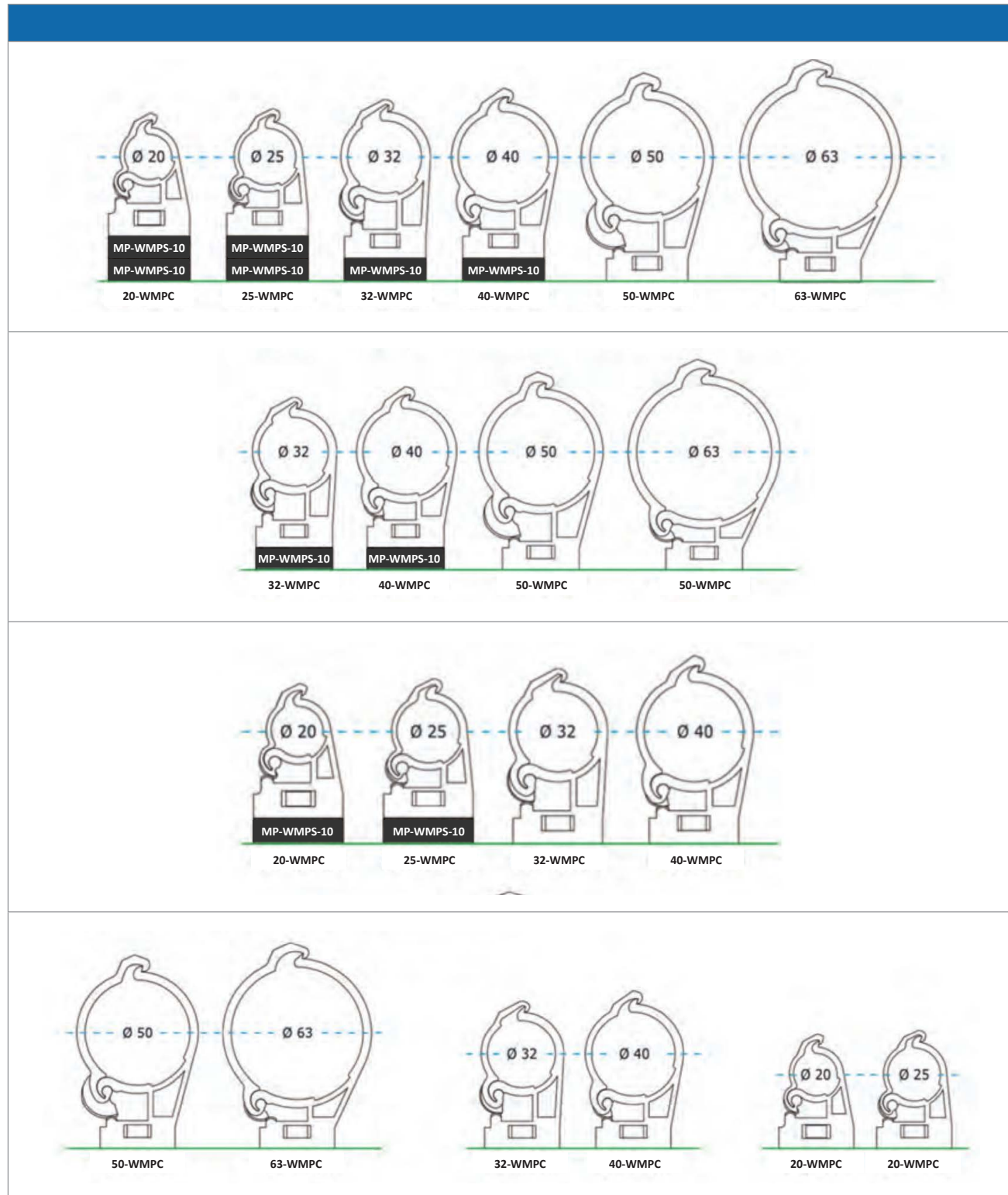
When the pipe is properly inserted into the fitting, screw the nut as tight as possible surpassing the self-locking device.



To facilitate the mechanical closing of the connection, use of Pipe Fitting Body Wrenches are recommended

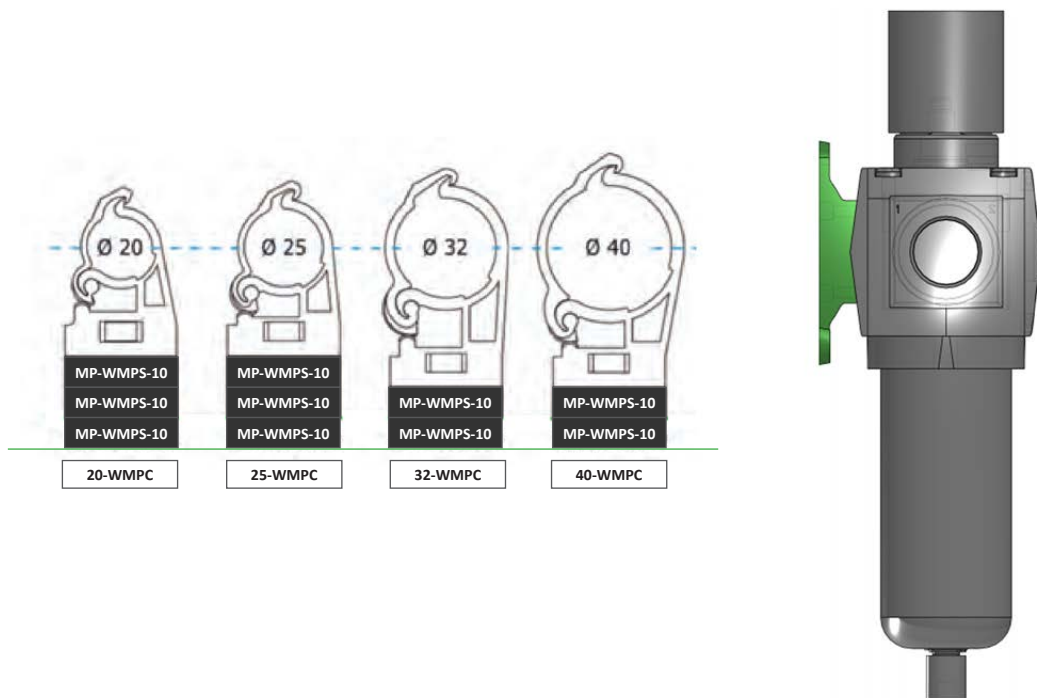


Mounting Reference for Different Diameter Tubes - Wall Brackets & Spacers



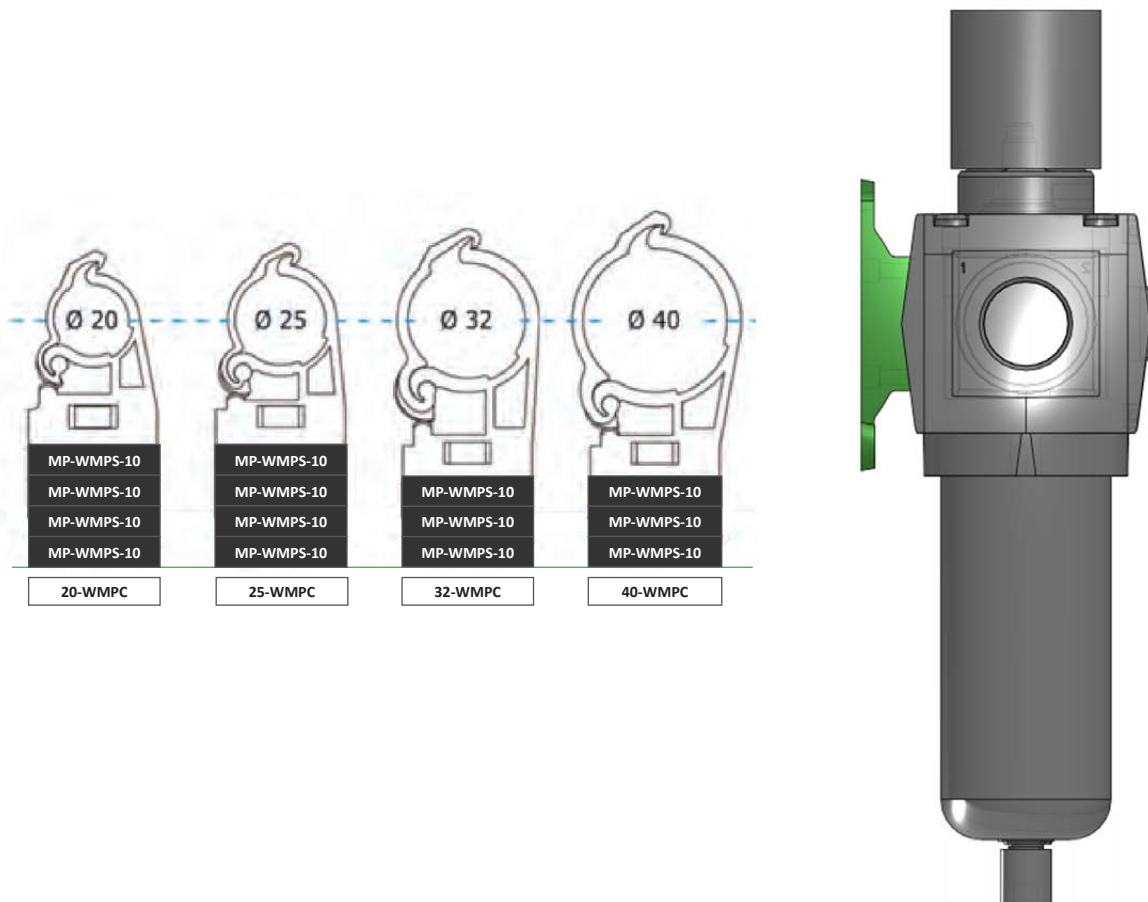
Mounting Reference for Different Diameter Tubes & 652 FRL- Wall Brackets & Spacers

Mounting Guide for Assemblies with Two or More Stations

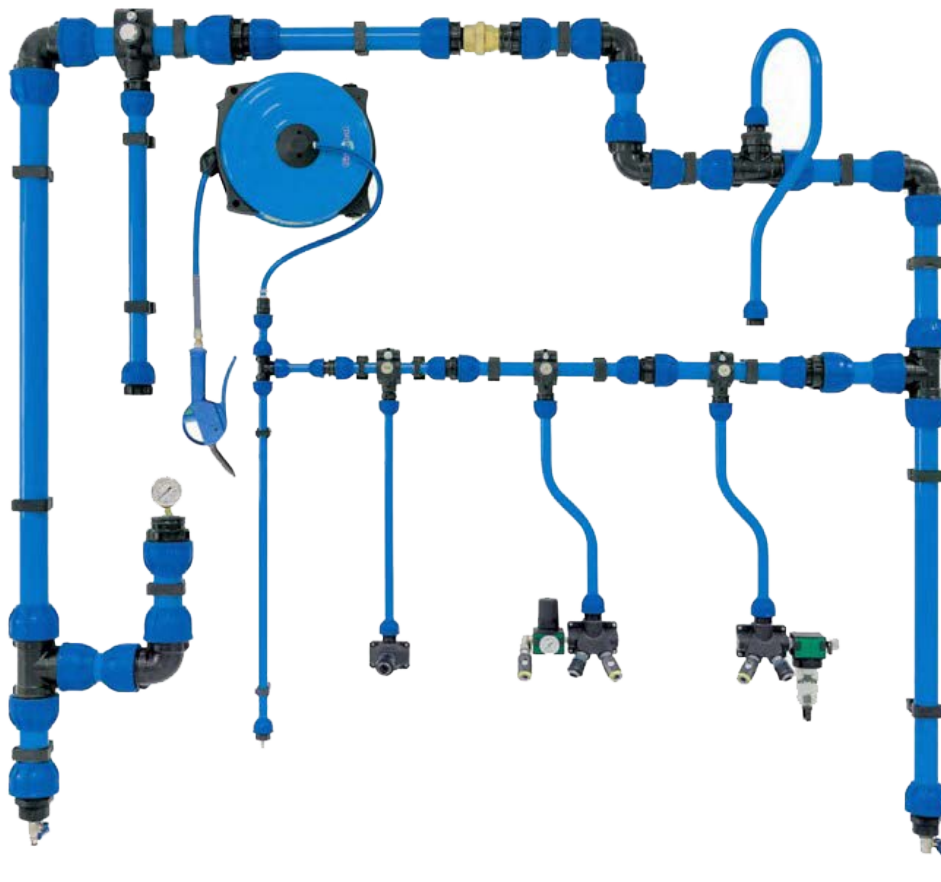
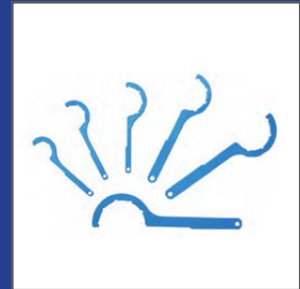


Mounting Reference for Different Diameter Tubes & 653 FRL- Wall Brackets & Spacers

Mounting Guide for Assemblies with Two or More Stations



Tools



Chamfer & Deburring Tool For Up to 50 mm OD Pipe



PART NUMBER	Ø	DESCRIPTION	WGT (G)
MPT-DEBUR-15-50	15-50	External and internal chamfering up to Ø 50 mm	257



Internal Chamfering



External Chamfering

Deburring Tool



PART NUMBER	Ø	DESCRIPTION	WGT (G)
MPT-DEBUR-HT	ALL TUBE SIZES	Internal chamfering	26



Adjustable Reamer Tool For 50 mm - 160 mm OD Pipe



PART NUMBER	Ø	DESCRIPTION	WGT (G)
MPT-DEBUR-50-63	50-63	For large size pipes	814



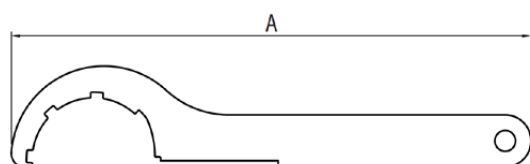
Pipe Cutter With Chamfer Tool



PART NUMBER	Ø	DESCRIPTION	WGT (G)
MPT-PC-15-40	15-40	For pipes from Ø 15 to Ø 40 mm	507
MPT-PC-15-63	50-63	For pipes from Ø 15 to Ø 63 mm	800

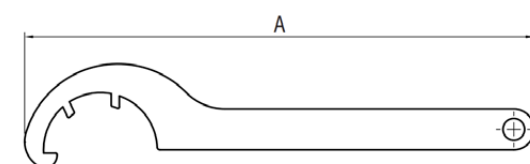


Pipe Coupling Ring Wrench With Depth Gauge



PART NUMBER	Ø	A	WGT (G)
20-CRW	20	170	66
25-CRW	25	210	71
32-CRW	32	210	73
40-CRW	40	240	133
50-CRW	50	280	188
63-CRW	63	320	306

Pipe Coupling Ring Wrench With Depth Gauge

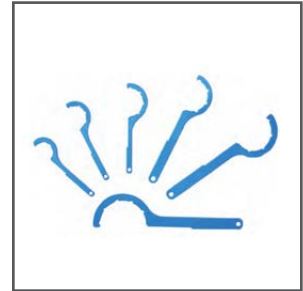


PART NUMBER	Ø	A	WGT (G)
20-FBW	20	170	70
25-FBW	25	210	102
32-FBW	32	210	114
40-FBW	40	240	150
50-FBW	50	280	210
63-FBW	63	320	271

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Modular Pipe Systems

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