

PRODUCT Catalogue

INNOVATIVE
TECHNOLOGY



IND-024385

High Performance Aluminium Piping
& Fittings For Compressed Air System

www.mechairgroup.com

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About Us

A company established to provide
“One-stop Service” for Compressed air piping
system to the worldwide customers.

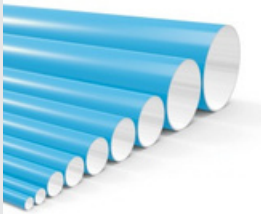
The MechAir is a world class manufacturer, exporter,
and service provider of the **Aluminium compressed air
piping system.**

The Group serves customers in more than 5 countries
with excellent quality products and services focused on
productivity, energy efficiency, safety and ergonomics.

Over the Years, MechAir group has Strengthened its
operations, technical knowledge, industry experience
and product innovation that enables us provides a fully
integrated turnkey solution. We pride ourselves on our
excellent comprehensive approach that can include
supply, consultation, airline design and installation of
your compressed air, vacuum airline systems

At the helms of affairs at MechAir group are qualified,
well trained and customer oriented engineers serving
various locations in Entire **India** with its Head quarters
based in **Chennai** and in the **Middle East** such as Entire
UAE, **Abu Dhabi** and **Ras Al khaimah** with headquarters
at **Dubai** and independent company at **Qatar, Bahrain,
Saudi Arabia**

25+
YEARS OF
EXPERIENCE



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MechAir Compressed Air Piping, Fittings & Accessories

MechAir is an innovative aluminium based full metal piping system, specifically designed energy savings in mind, it's extremely smooth corrosion-free piping system, complimented with easy install fittings and our full flow technology design, all go together to keep the fluid flow laminar, therefore reducing turbulence, minimising pressure drop and automatically removing condensation.

MechAir Aluminium air piping system is the overall superior solution for new projects, renovation, extension or modification of existing systems.

MechAir Full Metal Fittings



SAFE

Durable, reliable, and safe assured for superior performance



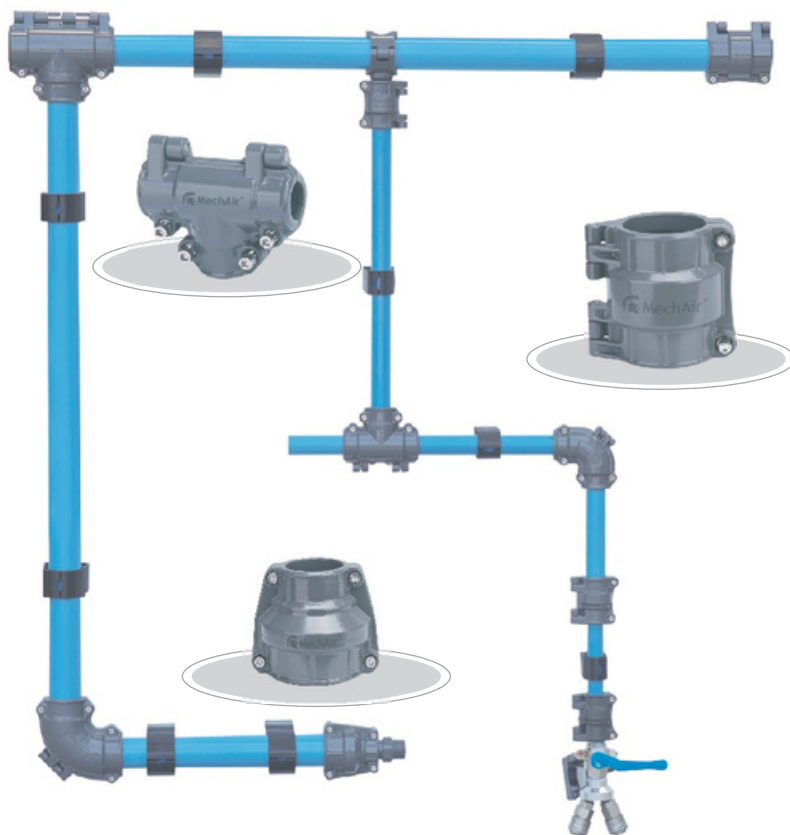
FAST

Easy and fast to install the modular push to connect fittings



CLEAN

Clean and quality fluids quality guarantee



Save Your Total Cost of Ownership



We help customers saving total cost of ownership from every aspect during usage of piping system.



Installation Cost

It saves more than 60% times to install and no special skills and tools needed to install.



Energy Cost

Great full diameter pipes, surface processing, leak - free performance, reduces pressure drop effectively.



Maintenance Cost

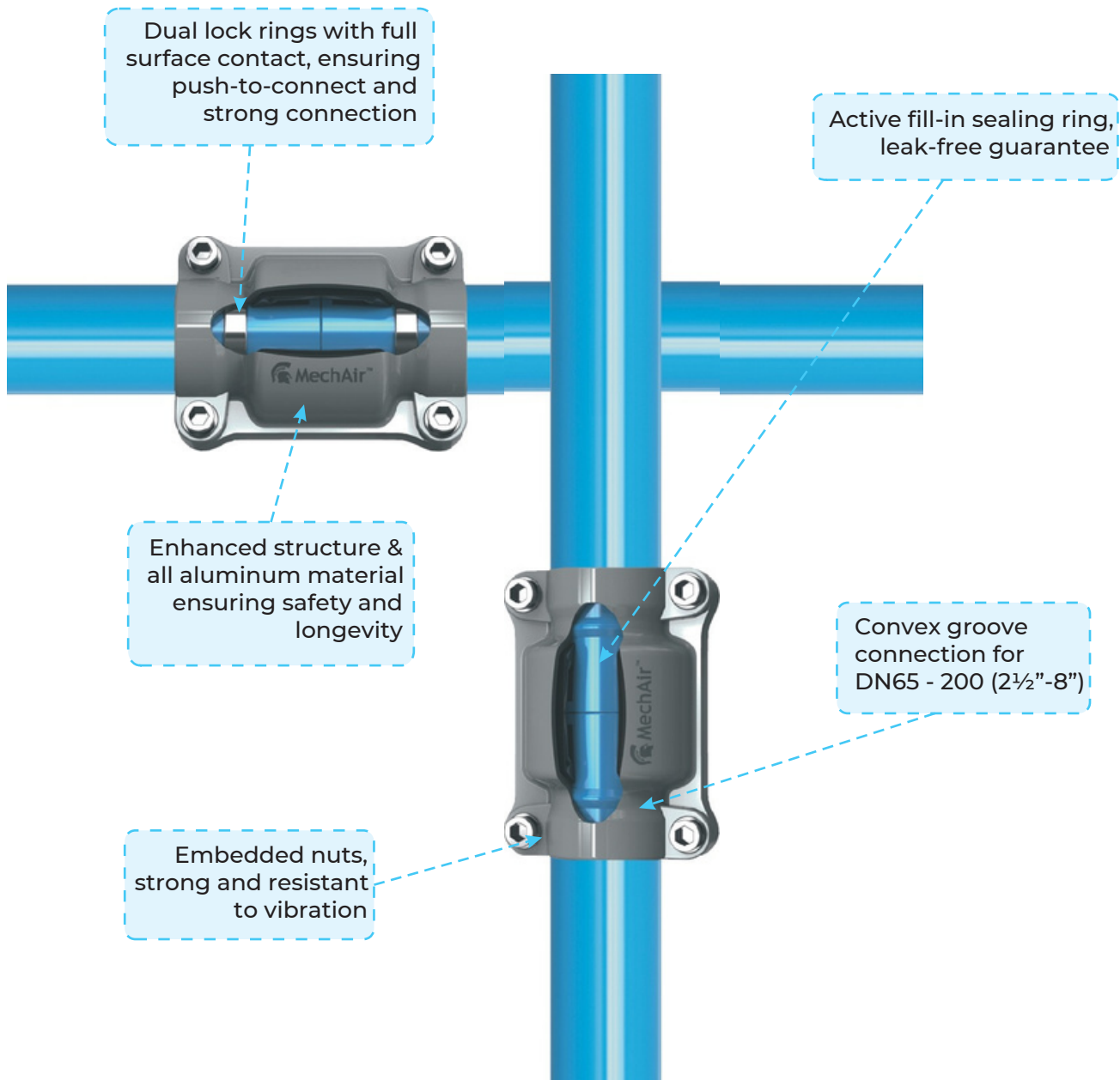
No maintenance required at all.



Modification Cost

Modular design and fast connection technology!

MechAir Improved Features Air Piping System



MechAir Quality

- Corrosion free coating.
- Consistent air quality to every outlet.
- 15 years warranty on all products.
- Minimal expansion; no sag or bow.
- Total metal system.



MechAir Energy Saving

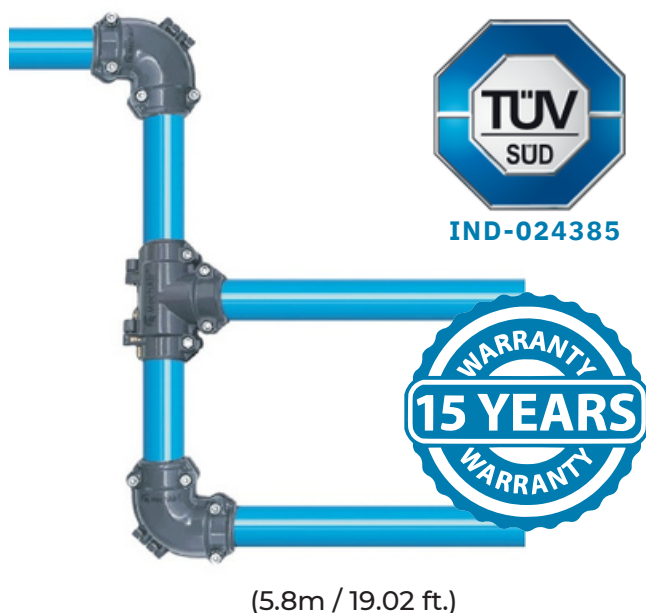
- Extremely low pressure drop.
- Leak free.
- Reduced compressor loading and running cost.
- Efficient condensate removal.



MechAir Time Saving

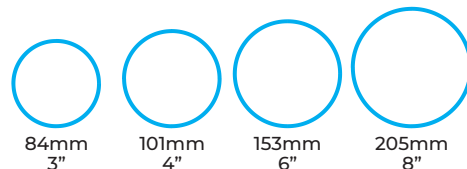
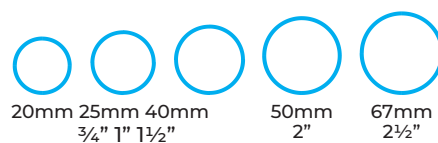
- Simple system, Modular connection.
- Light-weight tubing.
- Fully adjustable and reusable, ideal for future expansion.
- Less clips; minimal expansion.
- Adapts to all existing pipe systems.

MechAir Superior Aluminium Air Pipes



Resistance to:

- ▶ Ultraviolet rays
- ▶ Mineral and synthetic
- ▶ compressor lubricants
- ▶ Environmental weather conditions
- ▶ Mechanical Shocks



General Technical Specifications:

- ▶ Max. working pressure: 16 bar
- ▶ Working Temperature: -20°C, +80°C
- ▶ Vacuum : 0.13 bar (absolute pressure)
- ▶ Extruded Aluminium Alloy : 6063/T6 (according to EN 755.2, EN 573.3)
- ▶ Internal and external corrosion free coating

Compatible Fluids:

- ▶ Compressed air
- ▶ Vacuum
- ▶ Inert Gas

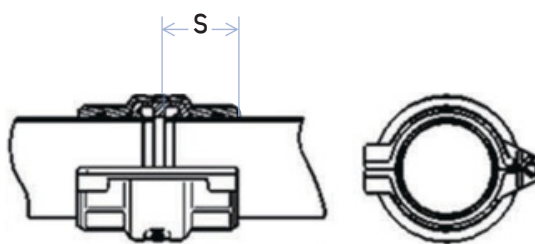
Fire Resistance:

- ▶ The system does not stroke or propagate any fires
- ▶ High quality powder coated exterior

Tube Connection



Aluminium Fittings



Spec	Description	Pipe Insert Depth (mm)
DN2	Suitable for all DN20 Fittings	30
0	Suitable for all DN25 Fittings	30
DN2	Suitable for all DN40 Fittings	40
5	Suitable for all DN50 Fittings	40

* S-pipe insert depth must be ensured.

DN4
0
DN5
0



Pipe Cutter



No Leakage



With Auto Drain



Corrosion Free



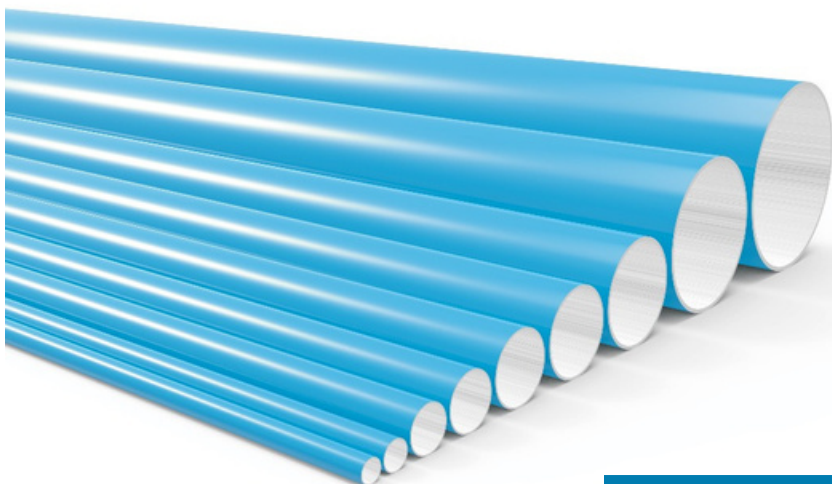
Power Saving



Fire Retard

Quick Installation

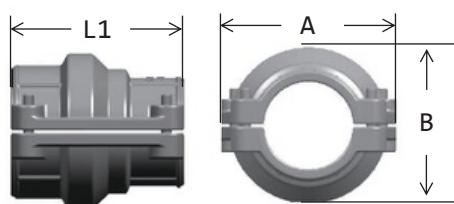
Aluminium Air Pipes ►►



mm

Part	Number	Spec (DN)	OD	ID	T	L
MP9020BL600		20/¾"	20.1	17.5	1.3	5800
MP9025BL600		25/1"	25.1	22.5	1.3	5800
MP9040BL600		40/1½"	40.1	36.5	1.8	5800
MP9050BL600		50/2"	50.1	45.7	2.2	5800
MP9063BL600		63/2½"	67.6	63	2.3	5800
MP9080BL600		80/3"	84.8	80	2.4	5800
MP9100BL600		100/4"	101.8	96.8	2.5	5800
MP9150BL600		150/6"	153	147.5	2.75	5800
MP9200BL600		200/8"	205	198	3.5	5800

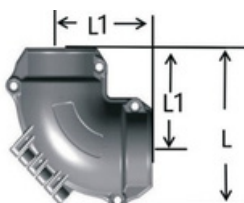
Reducing Connector ►►



mm

Part	Number	Spec (DN)	L1	A	B
MFR252000		25-20	60	61.5	41.5
MFR402500		40-25	70	72	58
MFR502500		50-25	70	82	72.5
MFR504000		50-40	80	82	72.5
MFR634000		63-40	97	117	97
MFR635000		63-50	97	117	97
MFR804000		80-40	97	135	114
MFR805000		80-50	97	135	114
MFR806300		80-63	114	135	114
MFR1B5000		100-50	100	153	131
MFR1B6300		100-63	117	153	131
MFR1B8000		100-80	117	153	131
MFR1W8000		150-80	119	208	185
MFR1W1B00		150-100	122	208	183
MFR2B1E00		200-100	125.5	262	251
MFR2B1W00		200-150	127.5	262	139

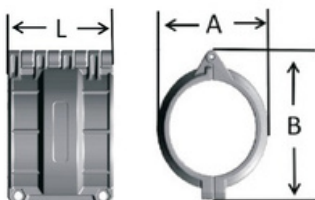
Reducing Elbow Connector



mm

Part Number Spec (DN)	L	L1
MFR25200E90° DN25-DN20	85	55

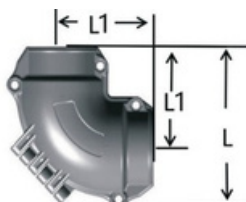
Pipe To Pipe Connector



mm

Part Number Spec (DN)	L	A	B
MFS200000 DN20	60	56	36
MFS250000 DN25	60	62	42
MFS400000 DN40	80	78	58
MFS500000 DN50	80	90	73
MFS630000 DN63	114	125	97
MFS800000 DN80	114	142	114
MFS1B0000 DN100	120	161	131
MFS1W0000 DN150	125	224	184
MFS2B0000 DN200	130	284	238

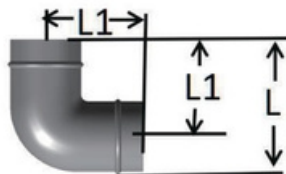
Elbow-Unibody



mm

Part Number	Spec (DN)	L	L1
MFE200000	DN20	77	52
MFE250000	DN25	81	55
MFE400000	DN40	109	72
MFE500000	DN50	127	79
MFE630000	DN63	181	114
MFE800000	DN80	193	120

Elbow ▶▶

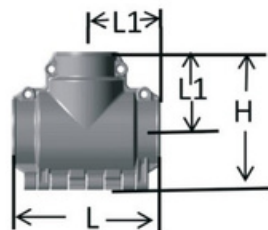


mm

Part Number Spec (DN)	L	L1
MFE1B0000 DN100	194	140
MFE1W0000 DN150	264	184
MFE2B0000 DN200	324	218

*2 connectors required; equal connector or reducing connector could be applied

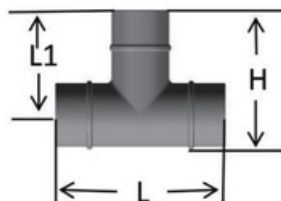
Equal Tee-Unibody ▶▶



mm

Part Number Spec (DN)	L	L1	H
MFT200000 20	90	45	77
MFT250000 25	96	48	83
MFT400000 40	129	65	110
MFT500000 50	146	73	127
MFT630000 63	197	98	172

Equal Tee ▶▶

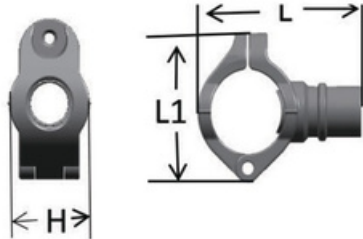


mm

Part Number Spec (DN)	L	L1	H
MFT800000 80	220	125	167.5
MFT1B0000 100	280	140	194.5
MFT1W0000 150	370	185	265
MFT2B0000 200	410	205	311

*3 connectors required; equal connector or reducing connector could be applied

Quick Drop

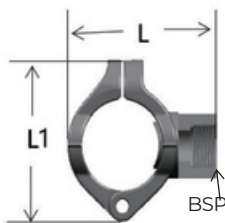


mm

Part Number	Spec (DN)	L	L1	H	Hole Size
MFQ252000	25-20	72	53	32	Ö16
MFQ402500	40-25	91	73	42	Ö22
MFQ502500	50-25	98	90	42	Ö22
MFQ632500	63-25	113	115	42	Ö22
MFQ802500	80-25	133	131	42	Ö22
MFQ805000	80-50	133	146	72	Ö50
MFQ1B2500	100-25	156	157.5	57	Ö22
MFQ1B4000	100-40	165	157.5	57	Ö38
MFQ1W2500	150-25	222	219	73	Ö22
MFQ1W5000	150-50	226	219	73	Ö50
MFQ2B5000	200-50	278	272	73	Ö50

*1 connector required; equal connector/
reducing connector/elbow could be applied.

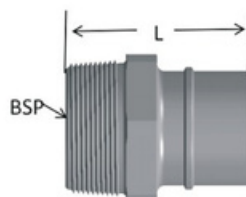
Quick Drop-Female



mm

Part Number	Spec (DN)	L	L1	BSP	Hole Size
MFQ2515F0	25-1/2	56	53	1/2"	Ö16
MFQ4015F0	40-1/2	73	73	1/2"	Ö22
MFQ5015F0	50-1/2	85	90	1/2"	Ö22
MFQ6315F0	63-1/2	113	98	1/2"	Ö22
MFQ8015F0	80-1/2	116	115	1/2"	Ö22

Thread Adapter-Male

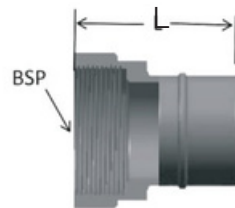


mm

Part Number	Spec (DN)	L	BSP
MFM201500	20	61	1/2"
MFM202000	20	64	3/4"
MFM252000	25	64	3/4"
MFM252500	25	65	1"
MFM404000	40	83	1 1/2"
MFM504000	50	88	1 1/2"
MFM505000	50	88	2"
MFM636300	63	107	2 1/2"
MFM808000	80	111	3"

*1 connector required

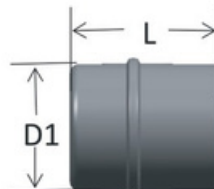
Thread Adapter-Female ▶▶



mm		
Part Number	Spec (DN) L	BSP
MFF201500	20 59	1/2"
MFF202000	20 59	3/4"
MFF251500	25 59	1/2"
MFF252500	25 65	1"
MFF404000	40 77	1 1/2"
MFF504000	50 81	1 1/2"
MFF505000	50 81	2"
MFF636300	63 97	2 1/2"
MFF808000	80 104	3"

*1 connector required

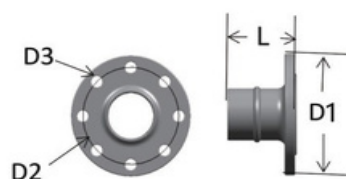
End Cap ▶▶



mm			
Part Number	Spec (DN)	L	D1
MFEC20000	20	42	20
MFEC25000	25	42	25
MFEC40000	40	51	40
MFEC63000	63	58	67.7
MFEC1B000	100	70	101.8
MFEC1W000	150	70	153
MFEC2B000	200	80	205

*1 connector required

Flange ▶▶



mm			
Part Number	Spec (DN) L1	D1	D2D3
MFL630000	63 86	184	145 18
MFL800000	80 86	199	160 18
MFL1B0000	100 102	219	180 18
MFL1W0000	150 107	285	240 21
MFL2B0000	200 110	340	295 22

*1 connector required; All flanges supplied with 8 bolts, nuts, and flange sealing.

Ball Valve ▶▶



Part Number	Spec (DN)
MFV200000	20
MFV250000	25
MFV400000	40
MFV500000	50
MFV630000	63

*2 connector required

Female Ball Valve ▶▶



Part Number	Spec (DN) BSP
MFV20200F	20 DN20-3/4"
MFV20150F	20 DN20-1/2"
MFV25250F	25 DN25-1"
MFV25150F	25 DN25-1/2"
MFV40400F	40 DN40-1-1/2"
MFV50500F	50 DN50-2"
MFV63630F	63 DN63-2-1/2"

*1 connector required

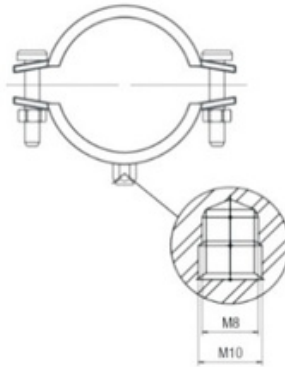
Butterfly Valve ▶▶



Part Number	Spec (DN)
MBV80000S	80
MBV1B000S	100
MBV1W000S	150
MBV2B000S	200

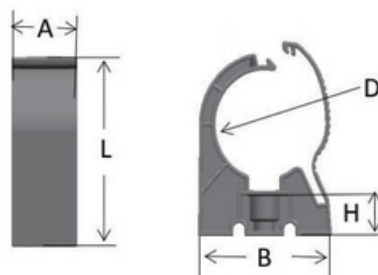
*2 flanges required

Metal Pipe Collar



Part Number	Spec (DN)
MFC20000M	20
MFC25000M	25
MFC40000M	40
MFC50000M	50
MFC63000M	63
MFC80000M	80
MPC1B000M	100
MPC1W000M	150
MPC2B000M	200

Plastic Pipe Collar



Part Number	Spec (DN)
MFC20000P	20
MFC25000P	25
MFC40000P	40
MFC50000P	50
MFC63000P	63
MFC80000P	80
MPC1B000P	100

Y Tee-Female-BSP



Part Number	Inlet
MTFB15	1/2"
MTFB20	3/4"
MTFB25	1"
MTFB40	1 1/2"
MTFB50	2"

Y Tee-Male-BSP ▶▶



Part Number	Inlet
MTMB15	1/2"
MTMB20	3/4"
MTMB25	1"
MTMB40	1 1/2"
MTMB50	2"

Manifold ▶▶



Part Number	Inlet	Outlet
M140SM00	Male 1/2"	1
M1SM2A00	Male 1/2"	2
M1SM3A00	Male 1/2"	3
M1SM4A01	Male 1/2"	4
M1SM5A01	Male 1/2"	5

Quick Plug ▶▶



Part Number	Quick Plug for
MFQP0800	OD8mm hose
MFQP1000	OD10mm hose
MFQP1200	OD12mm hose

Pipe Deburrer



Part Number	Suits For DN
M2202B00	DN20-DN200

Manual Pipe Cutter



Part Number	Suits For DN	Type
M1205000	DN20-DN50	Manual
M1651B00	DN50-DN110	Manual

Pipe Deburrer



Part Number	Suits For DN
M2205000	DN20-DN50

Hole Saw Bit▶▶



Part	Number	Suits Hole For Size
	M3200000	20
	M3250000	25
	M3400000	40
	M3500000	50

Groove Notching Machine▶▶



Part	Number	Suits For DN	Type
	MGM652BD	>_65	Manual
	MGE652BD	>_65	Electric

Demo Case▶▶



Part	Number
	MFKB0001

Compressed Air Pipe Size Chart

Closed loop system at 8bar with 5% allowable pressure drop

Flow			Length									
m³/hr	l/min	cfm	50m	100m	150m	300m	500m	750m	1000m	1300m	1600m	2000m
10	166	6	20	20	20	20	20	20	20	25	25	25
30	500	18	20	20	20	25	25	25	25	25	25	40
50	833	29	20	25	25	25	25	25	40	40	40	40
70	1166	41	25	25	25	25	40	40	40	40	40	40
100	1666	59	25	25	25	40	40	40	40	40	40	50
150	2500	88	25	40	40	40	40	40	40	50	50	50
250	4166	147	40	40	40	40	50	50	50	50	50	50
350	5833	206	40	40	40	50	50	50	63	63	63	63
500	8333	294	40	40	50	50	63	63	63	63	63	63
750	12500	441	40	50	50	50	63	63	63	80	80	80
1000	16667	589	50	50	63	63	63	80	80	100	100	100
1250	20833	736	50	50	63	63	63	100	100	100	100	100
1500	25000	883	50	63	63	80	80	100	100	100	100	100
1750	29167	1030	63	63	80	80	80	100	100	100	100	150
2000	33333	1177	63	80	80	80	100	100	100	100	150	150
2500	41667	1471	63	80	80	80	100	100	100	150	150	150
3000	50000	1766	80	80	80	100	100	150	150	150	150	150
3500	58333	2060	80	80	100	100	150	150	150	150	150	150
4000	66667	2354	80	100	100	100	150	150	150	150	150	150
4500	75000	2649	80	100	100	150	150	150	150	150	150	150
5000	83333	2943	80	100	100	150	150	150	150	150	150	150
5500	91667	3237	100	100	100	150	150	150	150	150	150	150
6000	100000	3531	100	100	150	150	150	150	150	150	150	150
6500	108333	3826	150	150	150	150	150	150	150	150	150	150
7000	116667	4120	150	150	150	150	150	150	150	150	200	200
7500	125000	4414	150	150	150	150	150	150	150	200	200	200
8000	133333	4709	150	200	200	200	200	200	200	200	200	200
8500	141667	5003	150	200	200	200	200	200	200	200	200	200
9000	150000	5297	200	200	200	200	200	200	200	200	200	200
9500	158333	5591	200	200	200	200	200	200	200	200	200	200
10000	166667	5886	200	200	200	200	200	200	200	200	200	200
12000	200000	7063	200	200	200	200	200	200	200	200	200	200

Example : Closed loop system; Main system length: 500m;
Required flow rate: 500CFM; Working pressure: 8 bar;
the most suitable MechAir pipe diameter is DN63

Technical Specifications:
Working temperature: -20°C, +80°C
Max. working pressure: 16 bar
Vacuum: 0.13 bar (absolute pressure)

MechAir systems project management team delivers custom solutions on-time, on-budget and to your specification.



Innovative Quality Products

A range of quality products to complete any system from compressor to outlet. All MechAir products are hand-picked by our compressed air specialists to complement each other for optimised efficiency and durability.



Airline Design

Our design team are available to provide advice on airline design, ensuring each customised system is energy and cost efficient.



Project Consultation

Our highly qualified business development consultants will recommend the best and most suitable pipeline products for the job.



Installation

Our team of installers are highly skilled, qualified and experienced. They take pride in fitting systems that not only look good but are also efficient and productive.



“ Whether you require product advice or application assistance, from consultation to installation, our team of experts are equipped to ensure the most cost effective, efficient outcome for every projects.”



Factory

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