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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

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



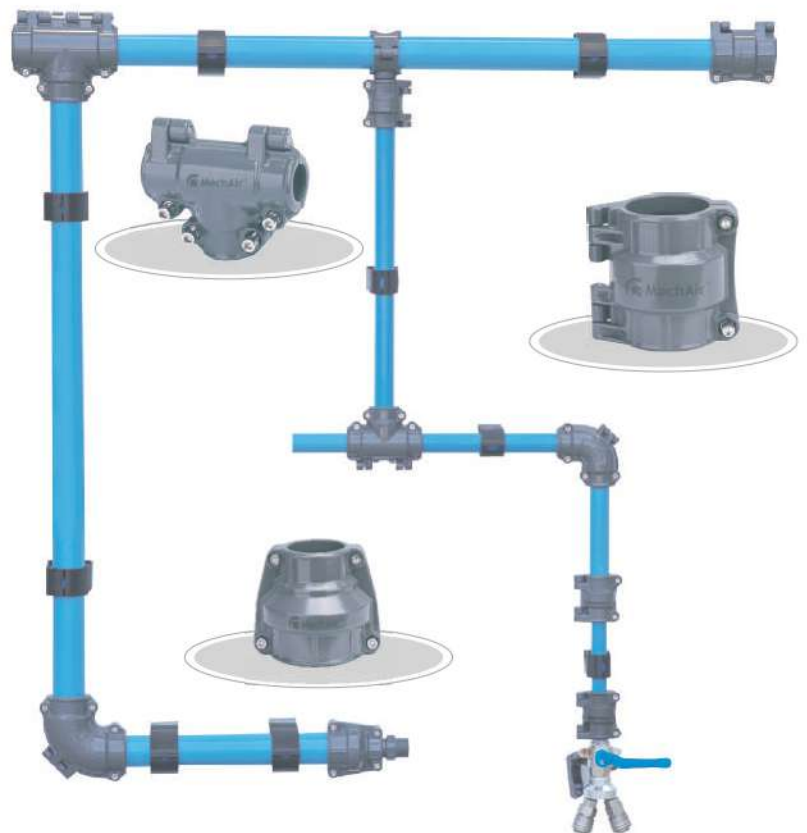
FAST

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

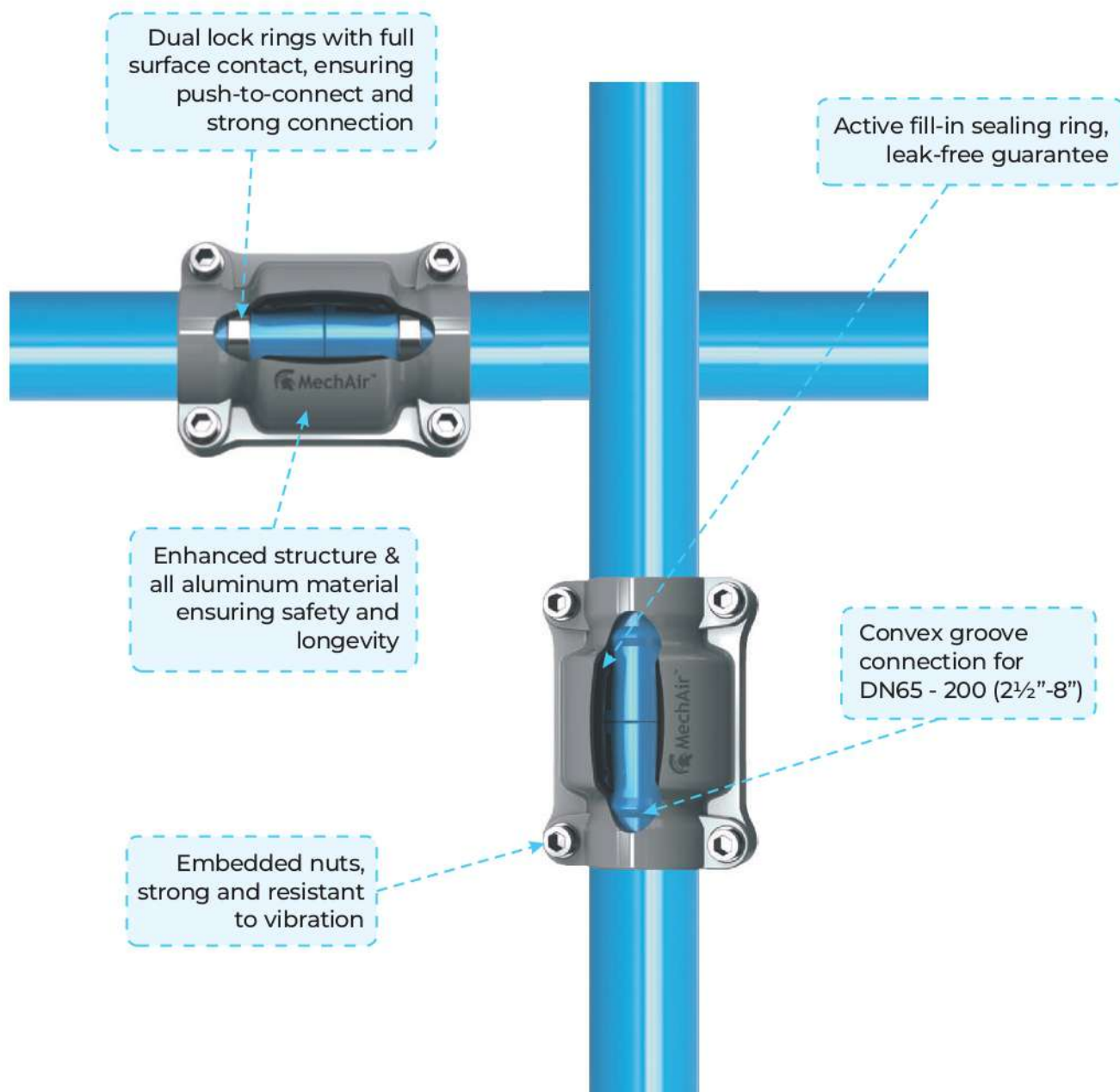
No maintenance required at all.



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

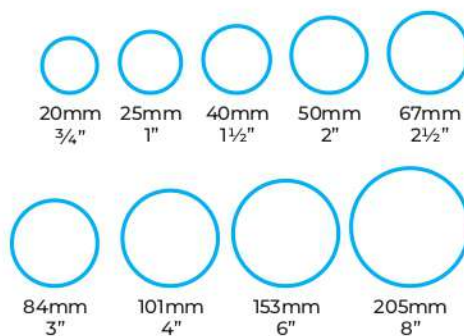
- Extremely low pressure drop.
- Leak free.
- Reduced compressor loading and running cost.
- Efficient condensate removal.



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



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

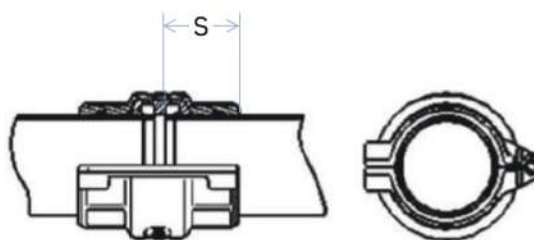
Resistance to:

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

Tube Connection



Aluminium Fittings



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

* S-pipe insert depth must be ensured.

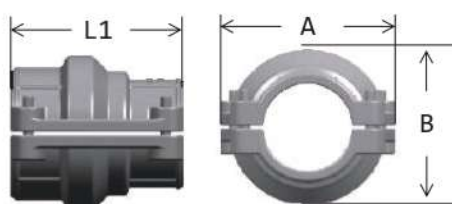


Aluminium Air Pipes ►►



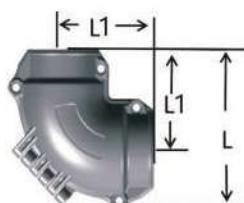
Part Number	Spec (DN)	OD	ID	T	L
MP9020BL600	20/¾"	20.1	17.5	1.3	5800
MP9025BL600	25/1"	25.1	22.5	1.3	5800
MP9040BL600	40/1½"	40.1	36.5	1.8	5800
MP9050BL600	50/2"	50.1	45.7	2.2	5800
MP9063BL600	63/2½"	67.6	63	2.3	5800
MP9080BL600	80/3"	84.8	80	2.4	5800
MP9100BL600	100/4"	101.8	96.8	2.5	5800
MP9150BL600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

Reducing Connector ►►



Part Number	Spec (DN)	L 1	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

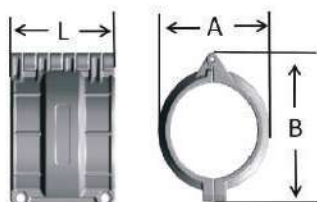
Reducing Elbow Connector ▶▶



Part Number	Spec (DN)	L	L1
MFR25200E	90° DN25-DN20	85	55

mm

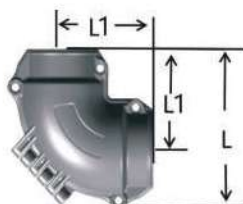
Pipe To Pipe Connector ▶▶



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

mm

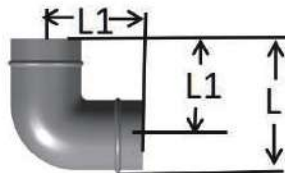
Elbow-Unibody ▶▶



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

mm

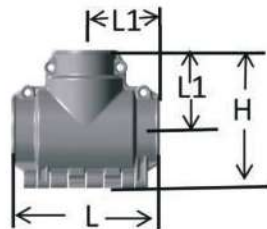
Elbow ▶▶



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

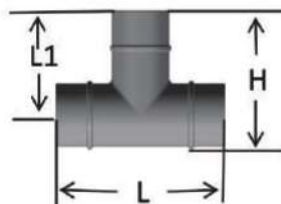
*2 connectors required; equal connector or reducing connector could be applied

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

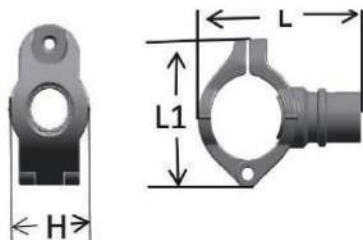
Equal Tee ▶▶



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

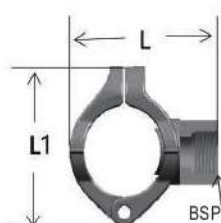
Quick Drop ▶▶



Part Number	Spec (DN)	L	L1	H	Hole Size
MFQ252000	25-20	72	53	32	Φ16
MFQ402500	40-25	91	73	42	Φ22
MFQ502500	50-25	98	90	42	Φ22
MFQ632500	63-25	113	115	42	Φ22
MFQ802500	80-25	133	131	42	Φ22
MFQ805000	80-50	133	146	72	Φ50
MFQ1B2500	100-25	156	157.5	57	Φ22
MFQ1B4000	100-40	165	157.5	57	Φ38
MFQ1W2500	150-25	222	219	73	Φ22
MFQ1W5000	150-50	226	219	73	Φ50
MFQ2B5000	200-50	278	272	73	Φ50

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

Quick Drop-Female ▶▶



Part Number	Spec (DN)	L	L1	BSP	Hole Size
MFQ2515F0	25-1/2	56	53	1/2"	Φ16
MFQ4015F0	40-1/2	73	73	1/2"	Φ22
MFQ5015F0	50-1/2	85	90	1/2"	Φ22
MFQ6315F0	63-1/2	113	98	1/2"	Φ22
MFQ8015F0	80-1/2	116	115	1/2"	Φ22

Thread Adapter-Male ▶▶



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

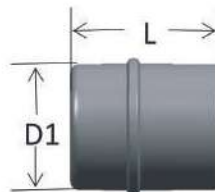
Thread Adapter-Female ▶▶



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 ▶▶



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 ▶▶



Part Number	Spec (DN)	L1	D1	D2	D3
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

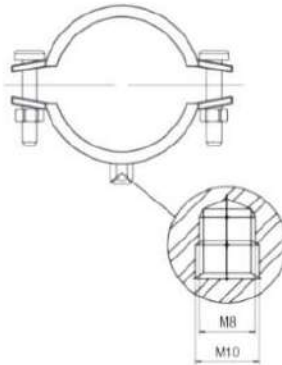
Butterfly Valve ▶▶



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

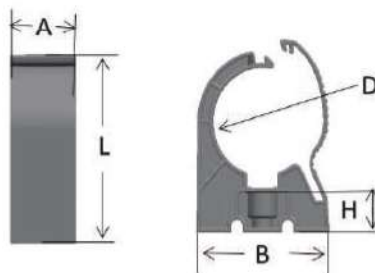
*2 flanges required

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
M15M2A00	Male 1/2"	2
M15M3A00	Male 1/2"	3
M15M4A01	Male 1/2"	4
M15M5A01	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									
m ³ /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.



Project Consultation

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



Airline Design

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



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.”



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