Airline accessories



People. Passion. Performance.

Chicago Pneumatic

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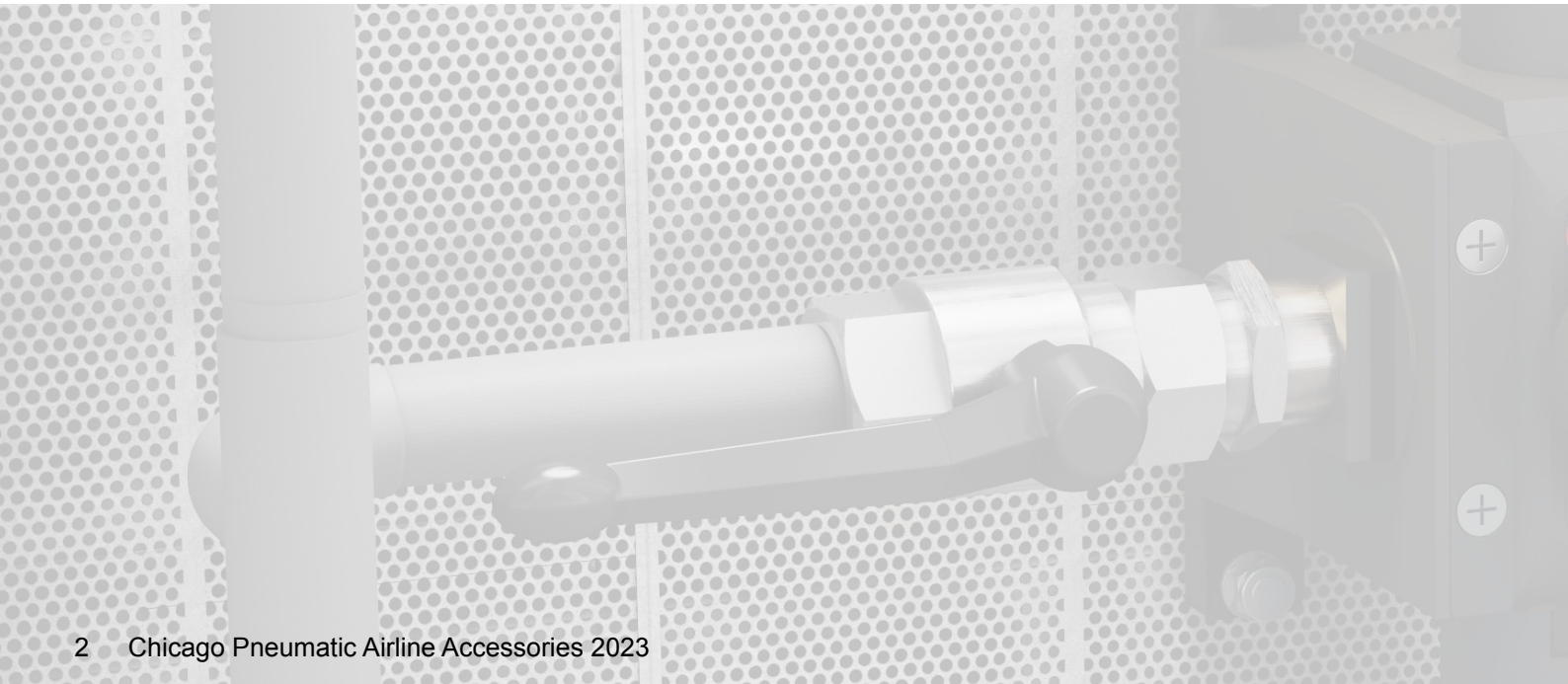
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The right air line accessories: efficient, ergonomic and safe.

At Chicago Pneumatic you will find powerful pneumatic and cordless tools – for industrial manufacturing, for use in workshops or for maintenance on the construction site. Our brand stands for efficient solutions, ergonomic, safe handling and productive results.

This also includes extensive accessories for air tools, which we present to you in this catalogue: from couplings and nipples to hoses, clamps, hose rupture safety devices and hose whips to efficient maintenance units with filter, regulator and lubrication unit (FRL).

Efficient accessories help you to avoid pressure losses in the air line network and thus performance losses of your tools. This brings you more productivity and more safety in the workplace. Check your air line installation regularly: Where is pressure being lost due to incorrectly installed or inefficient accessories? Check the air inlet on the tool the couplings, plug nipples and hose connections as well as the maintenance unit.

Pay attention to the following points:

– Are all the connectors properly fastened?
– Are the size and type of the air inlet on the tool correct?
– Is the required flow pressure optimally set (usually 6.3 bar)?
– Do you adhere to the hose diameter recommended by the manufacturer as well as the hose length (this should be as short as possible and no longer than necessary)?

In this catalogue you will find a wide range of accessories that will help you to work productively and safely, and to reduce the energy costs of operating your pneumatic tools!



Air line network

Chicago Pneumatic Air Preparation Units are designed to help you get maximum performance from your tools.

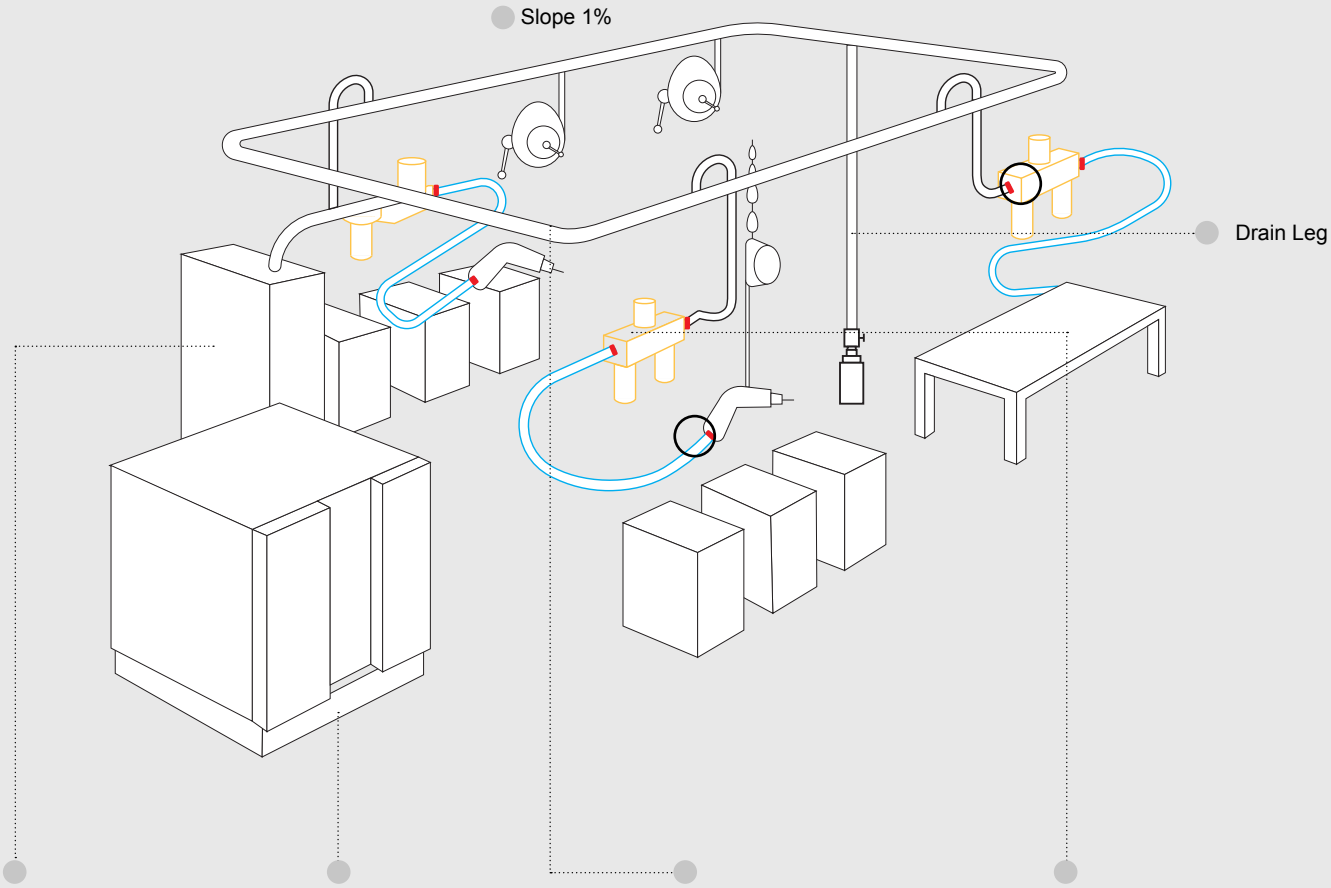
They ensure minimal pressure drop and thus minimum energy losses in the air distribution system, benefiting the environment and cutting your operating costs.

The lifetimes of your tools will be extended by using air preparation units and with that comes lower repair costs and less downtime. A correct air installation guarantees productivity and good total economy.

A Couplings and nipples

B FRL

C Hoses

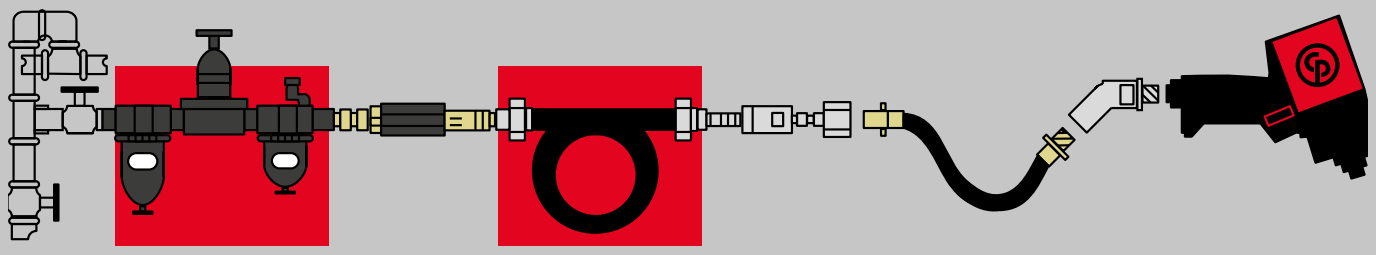


Air dryers and filters can cause a 0.2 - 0.3 bar pressure drop. However, for many applications these may be essential.

Compressors are able to deliver 6.3 bars of dynamic pressure that is needed for pneumatic tools to perform at stated catalogue values.

A carefully designed network virtually eliminates pressure drop. We recommend a Ring Main layout which has a slope away from the input of 1%.

To receive required pressure of 6.3 bars, we need to take in consideration pressure drop caused by airline and accessories. High quality industrial airline accessories will cause less pressure drop.



must have	safety	must have	safety & ergonomics	safety & ergonomics	safety & ergonomics
FRL To set up a proper air flow and pressure	**AIR FUSE** For improved safety, to avoid hose whiplash	**HOSE & CLAMPS** To ensure efficiency at the workplace	**COUPLING & NIPPLE** To ensure safe and flexible connection between accessories	**HOSE WHIP** For better ergonomics & to avoid premature hose wear	**CONNECTING ACCESSORY** i.e.: AIR FLEX For better ergonomics & to avoid premature hose wear
					
B	C	C	A	C	A
FRL stands for: **Filter** (clean compressed air) **Regulator** (ensures consistency of dynamic pressure) **Lubricator** (adds controlled quantities of oil to reduce friction and improve tool life) More info: http://qr.cp.com/Choose-right-FRL	Fixing an air fuse between the FRL & the hose will stop air flow in case of hose section, and prevent from potential work place accidents and body damages such as hose whiplash.	Chicago Pneumatic offers a wide range of hoses: different diameters (from 6.5 mm to 25 mm) different lengths (3, 5, 20 or 25m) 3 types (Effi Max, rubber, polyurethane).	4 things to consider when choosing coupling & nipple: Tool air inlet thread Type of coupling (easy flow, quick release, claw) Connection type (male, female, hose connection) Profile (Asia, Iso, Euro)	Using a hose whip brings 3 advantages: **Safety:** it reduces hose bending, but above all, it protects the operator against hose whiplash effects in case of breaks at coupling/nipple level. **Durability**: It enables longer tools inlet lifespan, and prevents hose wear. **Ergonomics:** In many working enviroments, the same hose is used for multiple tools: using hosewhips faciliate tools interchanges. In addition, it reduces vibration transmission to the operator and the weight of the hose.	Avoid using coupling/nipple at tool inlet (it creates rigidity and increases risks of whiplash.) We recommend using Chicago Pneumatic Air Flex connector: it ensures flexibility, ergonomics and safety for the operator. It is suitable for all tools, except percussive tools.

Air line set-up & air line accessories

A pneumatic tool's motor needs two things to work properly and at maximum speed:

1. A **dynamic air pressure** of 90 psi / 6.3 bars at the tool inlet
2. **Air flow** as recommended by the tool manufacturer

Without the correct pressure and flow, the tool's motor will not have enough energy to run the abrasive at full speed, resulting in a suboptimal efficiency (for rated speed, always check the abrasive manufacturer's recommended speed).

How to get the right dynamic air pressure and air flow?

The choice of the right air line accessories (such as hose, couplings, FRL) is critical to ensure your tool's performance.

To ensure accessories fit the tool perfectly and deliver the best performance level, always refer to the tool manufacturer's recommendations.

There are four key values to consider when selecting your air line accessories:

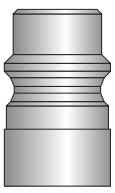
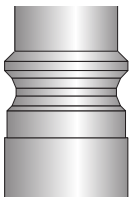
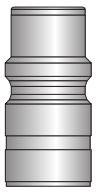
1. air line size,
2. air inlet type,
3. maximum air consumption at load,
4. recommended hose diameter/length.

Couplings and nipples

Nipples	ASIA	EURO 7.6mm	EURO 10.4mm	ISO6105B 6mm	ISO6105B 8mm	ISO6105B 11mm
CEJN	315	320	401	310	430	550
PREVOST		ESI 07 ERP 07	ESI 11 ERP 11	ISI 06 IRP 06	ISI 08 IRP 08	ESI 11 IRP 11
LEGRIS PARKER RECTUS	Series 13	Series 25 Series 26 Series 1625	Series 27 Series 1700 Series 1727	Series 23 Series 24 Series 1400 Series 1423	Series 30	Series 37
TEMA		1600	1700	1400		
ATLAS COPCO	10 ASIA	08E 10E 10SE	15E 15SE	08US atlas copco specific reference 08S	10US	15US
INGERSOLL RAND		7S7		AS/MS/102	A3/103/203	A4/104/204
ARO				120	103/203	104/204





Profile	European 7,6	European 10,4	ISO 6150-B 6mm	ISO 6150-B 8mm	ISO 6150-B 11mm
					
Air flow l/s	37,5	72	16,7	43	76,5

Air flow measured at 6 bars (87 PSI) inlet pressure, and pressure drop at 0,5 bar (7 PSI).

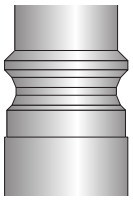


PROFILE EUROPE 7.6

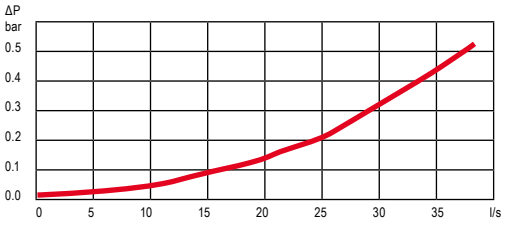
Full flow quick coupling with no air restriction inside the coupling. It is suitable for assembly tools, drills and small grinders. Upgrading any air system using Easy Flow coupling will give the benefit of productivity and energy efficiency.

- Full flow coupling.
- Ergonomic design, small size and low weight.
- Strong and durable.
- Safety feature according to EN 983 / ISO 4414.
- Main market: Europe.

Max pressure: 16 bars
Temperature range: -10°C to 70°C



Flow chart EF-076S coupling and nipples 076E



Air flow at an inlet pressure of 6.3 bar.

Easy flow couplings

Max air flow capacity: 37,5 l/s / 79 cfm
(@ ΔP 0,5 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part
EF-F076E 14 BSP	1/4	BSP	**615 810 5170**
EF-F076E 38 BSP	3/8	BSP	**615 810 5180**
EF-F076E 12 BSP	1/2	BSP	**615 810 5190**



Description	Thread size	Thread type	Single part
EF-M076E 14 BSP	1/4	BSP	**615 810 5140**
EF-M076E 38 BSP	3/8	BSP	**615 810 5150**
EF-M076E 12 BSP	1/2	BSP	**615 810 5160**



Description	HOSE diameter	ORDERING NUM.
EF-H076E 06mm	6 mm	**615 810 5500**
EF-H076E 08mm	8 mm	**615 810 5530**
EF-H076E 10mm	10 mm	**615 810 5540**
EF-H076E 13mm	13 mm	**615 810 5550**

Nipples

Max air flow capacity: 37,5 l/s / 79 cfm (@ ΔP 0,5 bars / 7,2 PSI)
Economical air flow capacity: 25 l/s / 53 cfm (@ ΔP 0,2 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part	Set of 5 pcs
F076E 14 BSP	1/4"	BSP	**615 810 5910**	**6158134270**
F076E 38 BSP	3/8"	BSP	**615 810 5920**	**6158134280**
F076E 12 BSP	1/2"	BSP	**615 810 5930**	**6158134290**
F076E 14 NPT	1/4"	NPT		**6158134300**



Description	Thread size	Thread type	Single part	Set of 5 pcs
M076E 14 BSP	1/4"	BSP	**6158105880**	**6158134240**
M076E 38 BSP	3/8"	BSP	**6158105890**	**6158134250**
M076E 12 BSP	1/2"	BSP	**6158105900**	**6158134260**



Description	Thread size	Thread type	Single part
H076E 06-07mm	06-07mm	6158106220	**6158134200**
H076E 08mm	08mm	6158106250	**6158134210**
H076E 09-10mm	09-10mm	6158106260	**6158134220**
H076E 13mm	13mm	6158106270	**6158134230**

Couplings and nipples

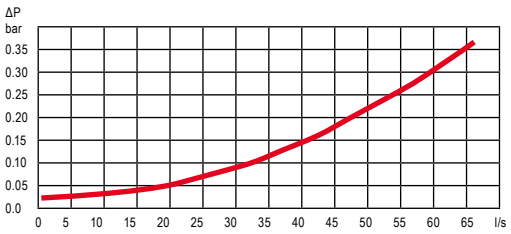
PROFILE EUROPE 10.4

Full flow quick coupling with no air restriction inside the coupling. It is suitable for large assembly tools, drills and grinders. Upgrading any air system using Easy Flow coupling EF-X104E will give the benefit of productivity and energy efficiency.

- Full flow coupling.
- Ergonomic design, small size and low weight.
- Strong and durable.
- Safety feature according to EN 983 / ISO 4414.
- Main market: Europe

Max pressure: 16 bars
Temperature range: -10°C to 70°C

Flow chart EF-104S coupling and nipple 104E



Air flow at an inlet pressure of 6.3 bar.

Easy flow coupling

Max air flow capacity: 72 l/s / 153 cfm
(@ ΔP 0,5 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part
EF-F104E 38 BSP	3/8"	BSP	6158106420
EF-F104E 12 BSP	1/2"	BSP	6158106430



Description	Thread size	Thread type	Single part
EF-M104E 38 BSP	3/8"	BSP	6158106390
EF-M104E 12 BSP	1/2"	BSP	6158106400
EF-M104E 34 BSP	3/4"	BSP	6158106410



Description	Hose diameter	Single part
EF-H104E 10mm	10mm	6158106510
EF-H104E 13mm	13mm	6158106520
EF-H104E 16mm	16mm	6158106530
EF-H104E 19mm	19mm	6158106540

Nipples

Max air flow capacity: 72 l/s / 153 cfm
(@ ΔP 0,5 bars / 7,2 PSI)
Economical air flow capacity: 48 l/s / 102 cfm
(@ ΔP 0,2 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part	Set of 5 pcs
F104E 38 BSP	3/8"	BSP	6158106710	6158134390
F104E 12 BSP	1/2"	BSP	6158106720	6158134400
F104E 34 BSP	3/4"	BSP	6158106730	6158134410
F104E 38 NPT	1/2"	NPT		6158134420



Description	Thread size	Thread type	Single part	Set of 5 pcs
M104E 38 BSP	3/8"	BSP	6158106650	6158134360
M104E 12 BSP	1/2"	BSP	6158106660	6158134370
M104E 34 BSP	3/4"	BSP	6158106670	6158134380



Description	Hose diameter	Single part	Set of 5 pcs
H104E 10mm	10mm	6158106770	6158134320
H104E 13mm	13mm	6158106780	6158134330
H104E 16mm	16mm	6158106790	6158134340
H0104E 19mm	19mm	6158106800	6158134350



PROFILE ISO6150B-6MM

ISO 6150B MIL-C4109

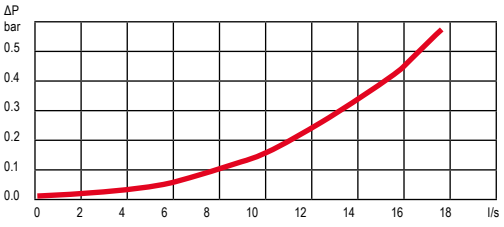
Full flow quick coupling with no air restriction inside the coupling. It is suitable for assembly tools, drills and small grinders. Upgrading any air system using Easy Flow coupling EF-06S will give the benefit of productivity and energy efficiency.

- Full flow coupling.
- Ergonomic design, small size and low weight.
- Strong and durable.
- Safety feature according to EN 983 / ISO 4414.
- Main market: France, Italy, Spain, Norway

Max pressure: 16 bars
Temperature range: -20°C to 80°C



Flow chart EF-06S coupling and nipple 06S



Air flow at an inlet pressure of 6.3 bar.

Easy flow coupling

Max air flow capacity: 16.7 l/s / 36 cfm
(@ ΔP 0,5 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part
EF-F06S 14 NPT	**1/4"**	**NPT**	**6158104880**
EF-F06S 38 NPT	**3/8"**	**NPT**	**6158104890**
EF-F06S 14 BSP	**1/4"**	**BSP**	**6158104820**
EF-F06S 38 BSP	3/8"	BSP	**6158104830**



Description	Thread size	Thread type	Single part
EF-M06S 14 NPT	**1/4"**	**NPT**	**6158104850**
EF-M06S 38 NPT	**3/8"**	**NPT**	**6158104860**
EF-M06S 12 NPT	**1/2"**	**NPT**	**6158104870**
EF-M06S 14 BSP	**1/4"**	**BSP**	**6158104790**
EF-M06S 38 BSP	**3/8"**	**BSP**	**6158104800**
EF-M06S 12 BSP	**1/2"**	**BSP**	**6158104810**



Description	Hose diameter	Single part
EF-H06S 06mm	**06mm**	**6158105300**
EF-H06S 08mm	**08mm**	**6158105310**
EF-H06S 10mm	**10mm**	**6158105320**
EF-H06S 13mm	13mm	**6158105330**

Nipples

Max air flow capacity: 16.7 l/s / 36 cfm
(@ ΔP 0,5 bars / 7,2 PSI)
Economical air flow capacity: 11 l/s / 23.3 cfm
(@ ΔP 0,2 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part	Set of 5 pcs
F06S 14 NPT	1/4"	NPT	**6158105650**	**6158134510**
F06S 38 NPT	3/8"	NPT	**6158105660**	**6158134520**
F06S 14 BSP	1/4"	BSP		**6158134490**
F06S 38 BSP	3/8"	BSP		**6158134500**



Description	Thread size	Thread type	Single part	Set of 5 pcs
M06S 14 NPT	1/4"	NPT	**6158105620**	**6158134470**
M06S 38 NPT	3/8"	NPT	**6158105630**	**6158134480**
M06S 14 BSP	1/4"	BSP	**6158105560**	**6158134870**
M06S 38 BSP	3/8"	BSP	**6158105570**	**6158134880**



Description	Hose diameter	Single part	Set of 5 pcs
H06S 06mm	**06mm**	**6158106040**	**6158134440**
H06S 08mm	**08mm**	**6158106050**	**6158134450**
H06S 10mm	**10mm**	**6158106060**	**6158134460**
H06S 13mm	**13mm**	**6158106070**	**6158134900**

PROFILE ISO6150B-8MM

ISO 6150B MIL-C4109

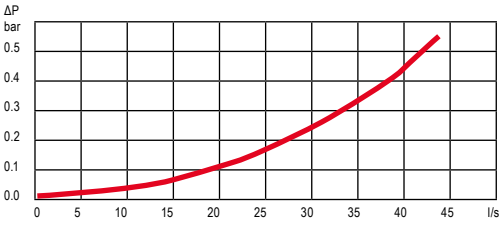
Full flow quick coupling with no air restriction inside the coupling. It is suitable for assembly tools, drills and small grinders. Upgrading any air system using Easy Flow coupling EF-08S will give the benefit of productivity and energy efficiency.

- Full flow coupling.
- Ergonomic design, small size and low weight.
- Strong and durable.
- Safety feature according to EN 983 / ISO 4414.
- Main market: USA, Norway, France, Italy, Spain

Max pressure: 16 bars
Temperature range: -20°C to 80°C



Flow chart EF-08S coupling and nipple 08S



Air flow at an inlet pressure of 6.3 bar.

Easy flow coupling

Max air flow capacity: 43 l/s / 91 cfm
(@ ΔP 0,5 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part
EF-F08S 14 NPT	1/4"	NPT	6158105010
EF-F08S 38 NPT	3/8"	NPT	6158105020
EF-F08S 12 NPT	1/2"	NPT	6158105030
EF-F08S 14 BSP	1/4"	BSP	6158104950
EF-F08S 38 BSP	3/8"	BSP	6158104960
EF-F08S 12 BSP	1/2"	BSP	6158104970



Description	Thread size	Thread type	Single part
EF-M08S 14 NPT	1/4"	NPT	6158104980
EF-M08S 38 NPT	3/8"	NPT	6158104990
EF-M08S 12 NPT	1/2"	NPT	6158105000
EF-M08S 14 BSP	1/4"	BSP	6158104920
EF-M08S 38 BSP	3/8"	BSP	6158104930
EF-M08S 12 BSP	1/2"	BSP	6158104940



Description	Hose diameter	Single part
EF-H08S 08mm	08mm	6158105380
EF-H08S 10mm	10mm	6158105390
EF-H08S 13mm	13mm	6158105400
EF-H08S 16mm	16mm	6158105410

Nipples

Max air flow capacity: 43 l/s / 91 cfm
(@ ΔP 0,5 bars / 7,2 PSI)
Economical air flow capacity: 27 l/s / 57 cfm
(@ ΔP 0,2 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part	Set of 5 pcs
F08S 14 NPT	1/4"	NPT	6158105770	6158134740
F08S 38 NPT	3/8"	NPT	6158105780	6158134750
F08S 12 NPT	1/2"	NPT	6158105790	6158134760
F08S 14 BSP	1/4"	BSP	6158105710	6158134720
F08S 38 BSP	3/8"	BSP	6158105720	6158134730



Description	Thread size	Thread type	Single part	Set of 5 pcs
M08S 14 NPT	1/4"	NPT	6158105740	6158134690
M08S 38 NPT	3/8"	NPT	6158105750	6158134700
M08S 12 NPT	1/2"	NPT	6158105760	6158134710



Description	Hose diameter	Single part	Set of 5 pcs
H08S 08mm	08mm	6158106110	6158134650
H08S 10mm	10mm	6158106120	6158134660
H08S 13mm	13mm	6158106130	6158134670
H08S 16mm	16mm	6158111330	6158134680



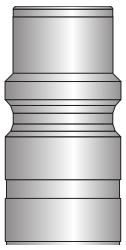
PROFILE ISO6150B-11MM

ISO 6150B MIL-C4109

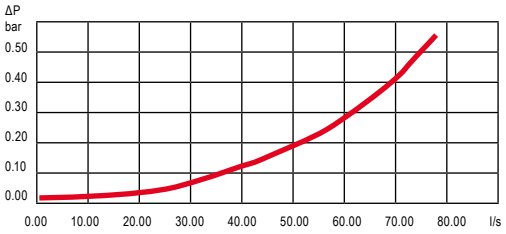
Full flow quick coupling with no air restriction inside the coupling. It is suitable for assembly tools, drills and small grinders. Upgrading any air system using Easy Flow coupling EF-11S will give the benefit of productivity and energy efficiency.

- Full flow coupling.
- Ergonomic design, small size and low weight.
- Strong and durable.
- Safety feature according to EN 983 / ISO 4414.
- USA, Norway, France, Italy, Spain

Max pressure: 16 bars
Temperature range: -20°C to 80°C



Flow chart EF-11S coupling and nipple 11S



Air flow at an inlet pressure of 6.3 bar.

Easy flow coupling

Max air flow capacity: 76,5 l/s / 162 cfm
(@ ΔP 0,5 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part
EF-F11S 38 NPT	3/8"	NPT	6158105110
EF-F11S 12 NPT	1/2"	NPT	6158105120
EF-F11S 34 NPT	3/4"	NPT	6158106370
EF-F11S 38 BSP	3/8"	BSP	6158105070
EF-F11S 12 BSP	1/2"	BSP	6158105080
EF-F11S 34 BSP	3/4"	BSP	6158106360



Description	Thread size	Thread type	Single part
EF-M11S 38 NPT	3/8"	NPT	6158105090
EF-M11S 12 NPT	1/2"	NPT	6158105100
EF-M11S 34 NPT	3/4"	NPT	6158106350
EF-M11S 38 BSP	3/8"	BSP	6158105050
EF-M11S 12 BSP	1/2"	BSP	6158105060
EF-M11S 34 BSP	3/4"	BSP	6158106340



Description	Hose diameter	Single part
EF-H11S 10mm	10mm	6158105460
EF-H11S 13mm	13mm	6158105470
EF-H11S 16mm	16mm	6158105480
EF-H11S 19mm	19mm	6158105490

Nipples

Max air flow capacity: 76,5 l/s / 162 cfm
(@ ΔP 0,5 bars / 7,2 PSI)
Economical air flow capacity: 52 l/s / 110 cfm
(@ ΔP 0,2 bars / 2,9 PSI)



Description	Thread size	Thread type	Single part	Set of 5 pcs
F11S 38 NPT	3/8"	NPT	6158105860	6158134570
F11S 12 NPT	1/2"	NPT	6158105870	6158134580
F11S 34 NPT	3/4"	NPT	6158106940	6158134590

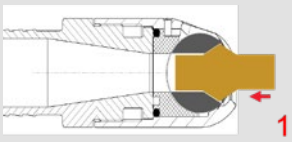


Description	Thread size	Thread type	Single part	Set of 5 pcs
M11S 14 NPT	3/8"	NPT	6158105840	6158134600
M11S 38 NPT	1/2"	NPT	6158105850	6158134610
M11S 12 NPT	3/4"	NPT	6158106920	6158134620

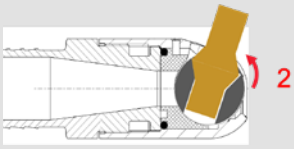


Description	Hose diameter	Single part	Set of 5 pcs
H11S 10mm	10mm	6158106180	6158134530
H11S 13mm	13mm	6158106190	6158134540
H11S 16mm	16mm	6158106200	6158134550
H11S 19mm	19mm	6158106210	6158134560

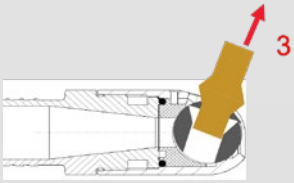
Couplings and nipples



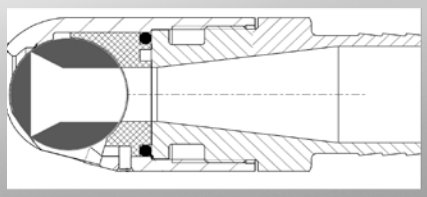
Push on the nipple.

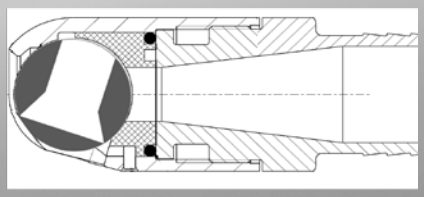


Rotate the nipple. The ball blocks the air flow.



Pull the nipple out of the coupling.







Air Flex

Chicago Pneumatic

ERGONOMIC
turn all rigid hoses flexible.

EASY
Less effort due to hose rigidity, makes work easier in hard reach area.

LESS WEAR
No more premature hose wear

COMFORT AND SAFETY
No twisting, the hose remains in the ideal working position and lower risk of tendinitis



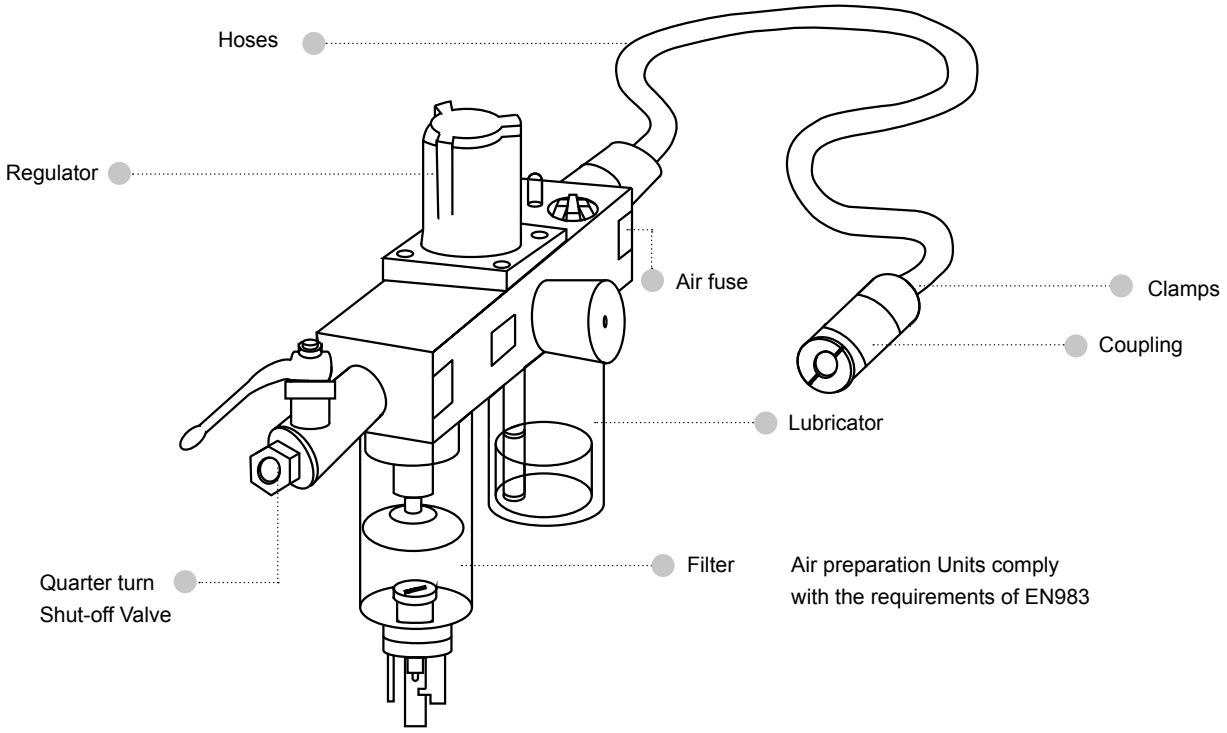
Model	Part number	Recomended airflow	Maximum airflow
CP AIR FLEX 1/4" BSP	**8940171568**	**12**	**14**
CP AIR FLEX 3/8" BSP	**8940171570**	**30**	**35**
CP AIR FLEX 1/2" BSP	**8940171566**	**30**	**35**
CP AIR FLEX 1/4" NPT	**8940171569**	**12**	**14**
CP AIR FLEX 3/8" NPT	**8940171571**	**30**	**35**
CP AIR FLEX 1/2" NPT	**8940171567**	**30**	**35**
CP AIR FLEX 1/2" NPT HIGH FLOW	**8940175305**	**52**	**60**

Be careful, Air Flex are not recommended for percussive tools!
(hammer, chipping hammer, needle scaler, sand rammer)

Filters, regulators, lubricators

Why should you use a filter, regulator and lubricator?

The use of a filter, regulator and lubricator (in that order) for pretool air preparation is strongly recommended by Chicago Pneumatic. Proper air preparation will result in improved tool performance and increased tool life. The units should be mounted as close to the tool as possible, preferably right where the tool hose is connected to the system. To realize their full value, these units should be checked on a regular assigned basis by maintenance workers or the operators themselves.



Air pressure at tool	Air consumption
A6 bar	100 %
7 bar	110 %
8 bar	125 %

Different typesof FRL	Port size in.	Air flows at 6 bars l/s
Small units	1/4 3/8	Up to 9 Up to 14
Medium units	1/2	Up to 37
Big units	3/4	Up to 83

Air filter

Filter separates impurities such as water and solid particles. Not using filters in combination with air tools leads to shorter service life, higher maintenance costs and lower efficiency. Old air systems with cool dryers, for instance, generate a lot of rust and running tools without installing a filter could damage the tool in less than a week. Chicago Pneumatic filters separate up to 98% of the water when operating within their working range. All three types (Small, Medium and Big) are very low pressure drop.



Regulator

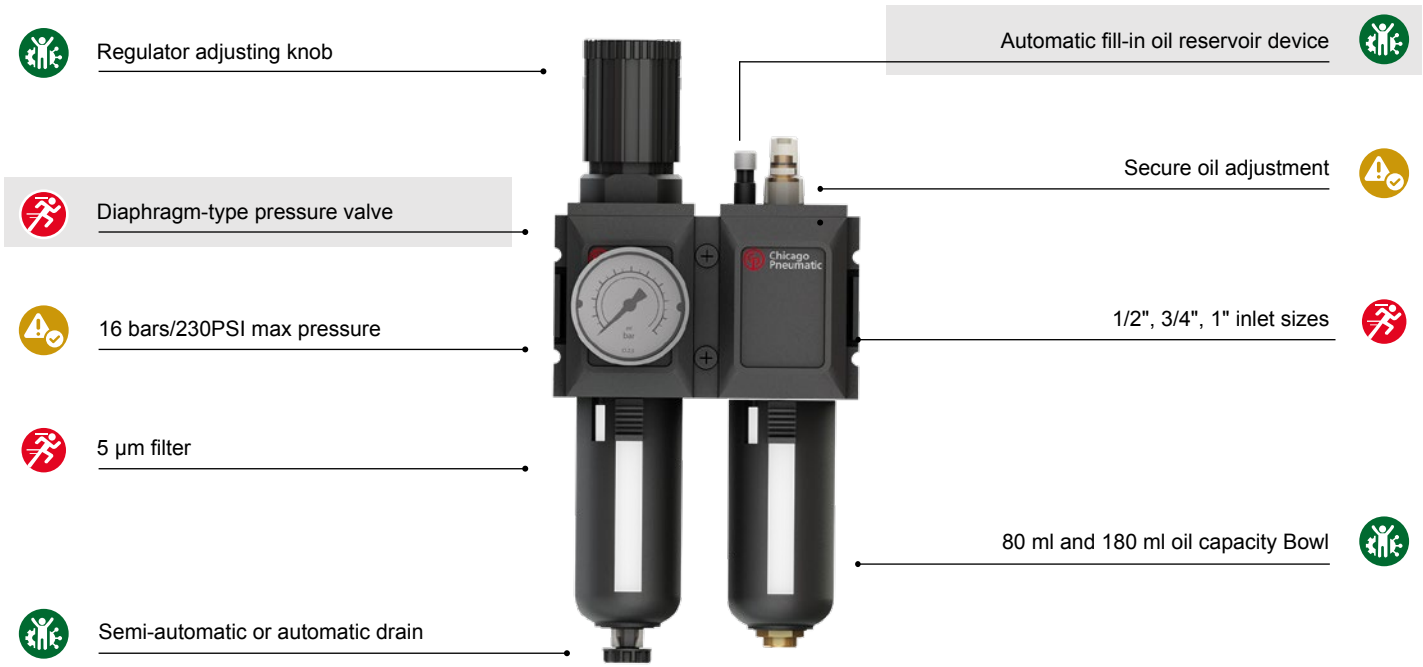
The regulator ensures that the pre-set working pressure remains constant - regardless of pressure variations in the intake air and minor variations in the airflow rate. For example, a pressure of 1 bar higher than necessary results in a 16% increase in air consumption. Spring controlled regulators are quick acting and therefore should be used for all types of air tools.

Benefits & Features

Chicago Pneumatic FRL – Filters, Regulators and Lubricators - units enable your air tools to run at optimal performance, hence reducing downtime and increasing productivity.

Simple to install on the air line with connection thread from ½" to 1", the solution can be adapted to customer's needs by choosing the proper modules. The automatic oil refilling system simplify the maintenance of the installation.

Using Chicago Pneumatic FRL is a first step in the reduction of CO_2 emission. The diaphragm type pressure valve limit pressure drop even with a high air flow.





FRL

FRL Range

	FRL12BSP	FRL34BSP	FRL1BSP
			
Thread size & type	1/2" BSP	3/4" BSP	1" BSP
Thread type	6158135640	6158135650	6158135660
Stages	2	2	2
Max. air flow [l/s]	59	134	134
Max. air flow [cfm]	125	284	284
Min-max pressure [bar]	1,5 – 16	1,5 – 17	1,5 – 17
Min-max pressure [PSI]	21 – 230	21 – 246	21 – 246
Min-max Temperature [°C]	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
Min-max Temperature [°F]	14°F – 122°F	14°F – 122°F	14°F – 122°F
Drain	semi-automatic	Automatic	Automatic
Gauge	External part	External part	External part
Filter	5 micron	5 micron	5 micron
Oil tank	Automatic oil fill-in	Automatic oil fill-in	Automatic oil fill-in
Oil volume [ml]	80 ml	180 ml	180 ml
Oil volume [oz]	2.7	6	6

The entire range is suitable for compressed air and neutral gases





Additional range

Customize the air preparation solution by choosing the right module for the application

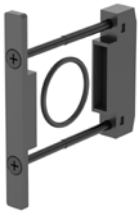
		Reference	Model name	Description
Filter/regulator Filter mounted with regulator		6154501105	FR12BSP	FILTER/REGULATOR 1/2" BSP
		6154501145	FR1BSP	FILTER/REGULATOR 1" BSP
Filter Separating water and solid particles from the air line		6154501115	F12BSP	FILTER 1" BSP
		6154501155	F1BSP	FILTER 1" BSP
Regulator Ensuring the right tool pressure (6,3 bars / 90 psi)		6154501125	R12BSP	REGULATOR 1/2" BSP
		6154501165	R2BSP	REGULATOR 1" BSP
Lubricator Supply the correct amont of oil to the tool		6154501135	L12BSP	LUBRICATOR 1/2" BSP
		6154501175	L1BSP	LUBRICATOR 1" BSP

Accessories

All accessories like mounting brackets or wall couplings kits need to be ordered separately. FRL units are delivered with gauge and coupling kits, but the coupling kits can be order to customized the air preparation solution according to the application's requirements.



6154500965 Wall Coupling kit for 1/2" FRL
6154500975 Wall Coupling kit for 3/4"
6154500995 Wall Coupling kit for 1"



6154500945 Coupling kit for 1/2" FRL
6154500955 Coupling kit for 3/4" & 1" FRL



6158136030 FRL Stand compatible with 1/2", 3/4" & 1" FRL



Composite FRL

Model	1/4” Composite FRL	3/8” Composite FRL	1/2” Composite FRL
			
Part number	**8940171927**	**8940171928**	**8940171929**
Max. air flow	**35 l/s**	**35 l/s**	**43 l/s**
Max. pressure	**15 bar**	**15 bar**	**15 bar**
Oil capacity	**125 ml**	**125 ml**	**125 ml**
Thread size	**1/4 “**	**3/8 “**	**1/2 “**
Thread type	**BSP**	**BSP**	**BSP**

In-Line Oilers



Capacity	Thread	Maximum working pressure	Ordering number
30 ml	1/4	34, 0 bar (500psi)	**6158120480**



Capacity	Thread	Maximum working pressure	Ordering number
40 ml	1/2	34, 0 bar (500psi)	**6158120490 BSP** **6158135550 NPT**



Capacity	Thread	Maximum working pressure	Ordering number
110 ml	3/4	18, 0 bar (260psi)	**6158120500 BSP** **6158135540 NPT**

Mini Oilers



Description	Ordering number
Mini Oiler NPT 1/4“	**2050524123**
Mini Oiler NPT 3/8”	**2050524293**
Mini Oiler BSP 1/4“	**8951011851**



Oil



Description	Ordering number
CPA1015 MOTOR OIL 125 mL	**8940176598**
CPA1014 MOTOR OIL 1L	**8940176597**
CPA1016 MOTOR OIL 5L	**8940176599**

Effi Max Whips



Hose diam. mm	Thread size in	Hose length m	Ordering number
10	1/4	0.6	**6158111920**
13	1/2	0.6	**6158111930**
13	3/8	0.6	**6158112640**
16	1/2	0.6	**6158112650**

Always use a hose whip between the tool and the air supply hose. It provides safety and longer tool air inlet life.

Using a hose whip brings 3 advantages:
Safety: it protects the operator against whiplash effects in case of breaks at coupling level
Durability: enables longer tools inlet lifespan and prevent from hose wear
Ergonomics: facilitate tools switch with a quick connection

Effi Max Kits

Description	Hose diam. mm	Thread size in	Hose length m	Ordering number
CPA3001 EFFI MAX KIT 13MM (1/2) 2M M38 BSB	13	3/8	2	**8940176677**
CPA3002 EFFI MAX KIT 16MM (5/8) 2M M12 BSP	16	1/2	2	**8940176678**
CPA3003 EFFI MAX KIT 10MM (3/8) 2M M14 BSP	10	1/4	2	**8940176679**



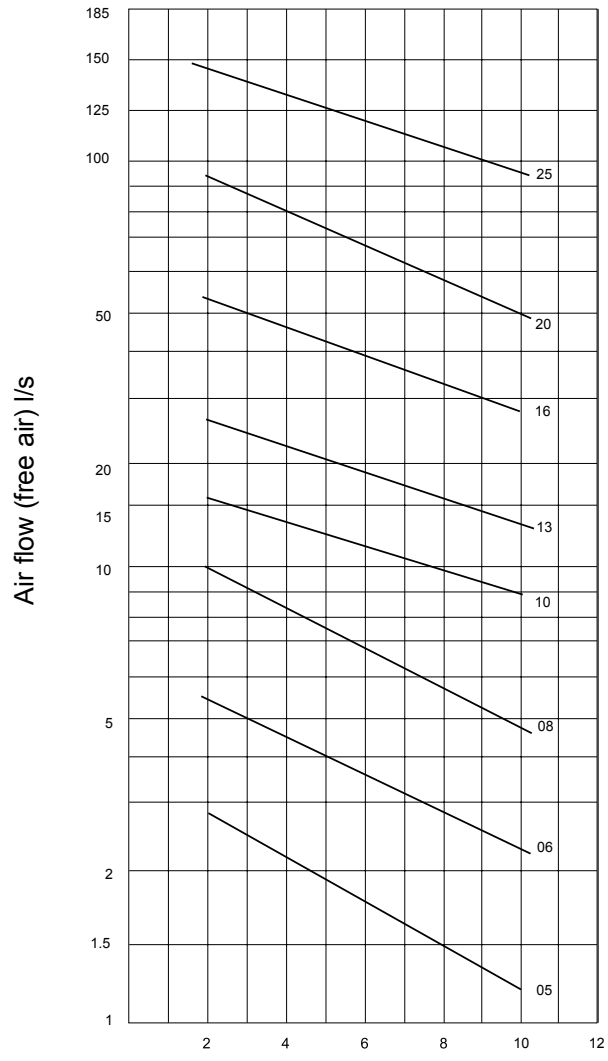
Hoses

Chicago Pneumatic offers the highest quality of PVC, Rubber and Polyurethane hoses in the Industrial Line to cover the different needs of applications with Power Tools In addition to this, the EFFI MAX series is designed with special features such as low weight and flexibility, to meet the highest ergonomic demands, as well as antistatic for applications with ESD demands.

Pressure drop diagram for straight hoses

Thos diagram helps you to choose the right hose according to the air consumption of the tool and the lenght of the hose. The purpose of the diagram is to ensure that the pressure drop in the hoses does not exceed 0.2 bar.

Internal hose diameter (mm)



Intel pressure 7 bar
Pressure drop 0.2 bar
Two hose nipples included

How to read a diagram:

Look up the tools required air consumption at 6 bar. Use this value in the diagram. What lenght of hose do you need? Look at the diagram to see which hose size you need.

Example:

The tool has an air consumption of 10 l/s and the application requires a hose lenght of 7 m. These two values have a cross point slightly under the 10 mm size hose (7m of 10 mm hose gives a value of approximately 11l/s)

Therefore a 10 mm hose will be suitable.



Description	Effi max	Rubber	Polyurthane
Flexibility	++	+	++
Lightweight	++	+	++
Outdoor	+++	+++	+
Spark resistant	+++	+++	-
Rough environment	+++	+++	++
Antistatic	+++	+++	-
Temperature range	-40 to +194F° -40 to +90°C	-40 to +194F° -40 to +90°C	-22 to +176F° -30 to +80°C

At recommended air flow the pressure drop is 2.9 PSI / 0.2 bar with a hose length of 16 ft / 5m.
Recommendation is to upgrade one size in diameter for every 32.8 ft / 10m of hose length.



Hoses

EFFI MAX Hoses

Chicago pneumatic specific braided fibers structure for **lighter & flexible** but **heavy duty** hoses. Antistatic and sparkes resistant.
Ideal for generic grinding applications



- Extreme low weight
- Antistatic
- Rubber hose
- Soft and flexible
- Welding spatter resistant

Dimensions (IDXOD) mm	Lenght m	Max working pressure bar	Air flow l/s	Weight per 30m kg	Clamp	Ordering number
10X16	5	16	13	5.5	A	**8940176317**
10x16	20	16		5.5	A	**8940169921**
13x18.6	5	16	21	7.4	B	**8940176318**
13X18.6	20	16		7.4	B	**6158109000**
16X22,5	5	16	43	7.9	C	**8940176319**
16X22.5	20	16		7.9	C	**6158109010**
19X25,1	5	16	75	8.3	D	**8940176320**
19X25,1	20	16		8.3	D	**6158109020**

RUBBER HOSES

Ideal for the most demanding tasks in construction, mining, shipyards, foundries etc.



- Material type of rubber = rubber EPDM / SBR black
- Chemical resistance = resistance of EPDM / CAS Number 25038-36-2
- Air flow consumption by hose length (5meters)

Dimensions (IDXOD) mm	Length m	Max working pressure bar	Air flow l/s	Weight per 30m kg	Clamp	Ordering number
10X16	20	16	13	6.3	A	**6158108640**
12.5X19.1	20	16	21	6.9	B	**6158108650**
16X23	20	16	43	9.3	C	**6158108660**
19X26.6	20	16	75	12	D	**6158108680**
25X34	20	16	125	16	E	**6158108700**

POLYURETHANE HOSES

Ideal for heavy duty applications for indoor and outdoor use



- Oil resistant
- Flexible
- Long service life
- PVC free: Enviroment friendly

Dimensions (IDXOD) mm	Length m	Max working pressure bar	Air flow l/s	Weight per 30m kg	Clamp	Ordering number
6.5X10	25	20	4.0	1.3	A	**6158046230**
8X12	25	20	7.5	2.2	A	**6158046240**
10X14	25	16	13.0	2.5	A/B	**6158046250**
13X18	25	13	44.5	4.0	B/C	**6158046260**





	Model	Ordering number	Hose outer diameter min	Hose outer diameter max
A	MEDIUM PRESSURE CLAMP 8.0-16.0	**6158046740**	8	16
B	MEDIUM PRESSURE CLAMP 13.0-20.0	**6158046750**	13	20
C	MEDIUM PRESSURE CLAMP 15.0-24.0	**6158046760**	15	24
D	MEDIUM PRESSURE CLAMP 20.0-32.0	**6158046770**	20	32
E	MEDIUM PRESSURE CLAMP 26.0-38.0	**6158109940**	26	38

HOSE CONNECTOR SCREWED



• BSP threads

Max air flow capacity: 34 l/s / 72 cfm (@ ΔP 0,5 bars / 2,9 PSI)

Part number	Description	Thread size	Internal hose diameter mm
8951011801	HOSE CONNECTOR 6MM SCREW M 1/4" BSP	1/4	6
8940175922	HOSE CONNECTOR 8MM SCREW M 1/4" BSP	1/4	8
8940175923	HOSE CONNECTOR 10MM SCREW M 1/4" BSP	1/4	10
8940175924	HOSE CONNECTOR 8MM SCREW M 3/8" BSP	3/8	8
8940175925	HOSE CONNECTOR 10MM SCREW M 3/8" BSP	3/8	10
8951011804	HOSE CONNECTOR 13MM SCREW M 3/8" BSP	3/8	13
8940175926	HOSE CONNECTOR 10MM SCREW M 1/2" BSP	1/2	10
8951011805	HOSE CONNECTOR 13MM SCREW M 1/2" BSP	1/2	13
8940175927	HOSE CONNECTOR 16MM SCREW M 1/2" BSP	1/2	16
8940175928	HOSE CONNECTOR 16MM SCREW M 3/4" BSP	3/4	16
8940175929	HOSE CONNECTOR 25MM SCREW M 1" BSP	1	25

• NPT threads

Max air flow capacity: 34 l/s / 72 cfm (@ ΔP 0,5 bars / 2,9 PSI)

Part number	Description	Thread size	Internal hose diameter mm
8940175940	HOSE CONNECTOR 6MM SCREW M 1/4" NPT	1/4	6
6157040190	HOSE CONNECTOR 6MM SCREW M 1/4" NPT	1/4	8
8940175942	HOSE CONNECTOR 10MM SCREW M 1/4" NPT	1/4	10
8940175944	HOSE CONNECTOR 10MM SCREW M 3/8" NPT	3/8	10
8940175945	HOSE CONNECTOR 13MM SCREW M 3/8" NPT	3/8	13
8940175946	HOSE CONNECTOR 10MM SCREW M 1/2" NPT	1/2	10
8940175947	HOSE CONNECTOR 13MM SCREW M 1/2" NPT	1/2	13

Air Fuse

Chicago Pneumatic Air Fuse
Preventing from hose whiplash

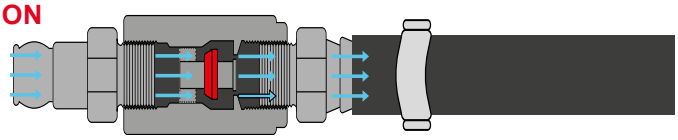
In a working environment, operator saftey matters as much as productivity does.
Think about using air fuses in your air lines.



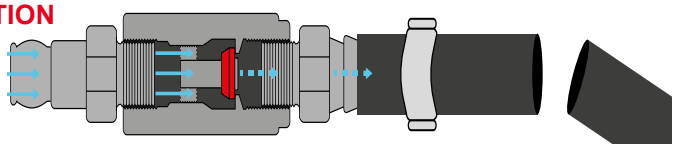
When a fitting comes loose from a pressurized hose or the hose is damaged (sometimes severed completely), the hose starts to blow an excessive amount of air in an uncontrolled way, causing whiplash. This can cause injury and damage to the work place and environment.
A way to avoid this is to use an air fuse.

Fixed between the FRL and the hose, this small accessory will prevent from whiplash.
It quickly shuts off the supply and resets automatically as soon as back pressure in the line downstream is restored.

NORMAL OPERATION



SHUTT OFF SITUATION



How to select your air fuse?

The air fuse should always be selected according to 3 values:

- **Maximum tool air consumption (see catalog value),**
- **Hose diameter and length***
- **Air line thread type.**

	Step 1	Step 2							Step 3
	Tool max. air consumption @6.3 bar	Inside hose diameter / Hose maximum length protected							Airline thread type
	l/s	5 mm	6.5 mm	8 mm	10 mm	11 mm	13 mm	16 mm	20 mm	BSP
AIR FUSE LOW FLOW 1/4	6	5 m	15 m	20 m						**6158112420**
AIR FUSE HIGH FLOW 1/4	10		5 m	15 m	15 m	20 m	20 m			**110402**
AIR FUSE LOW FLOW 3/8	14			9 m	8 m	15 m	20 m			**110422**
AIR FUSE HIGH FLOW 3/8	24						15 m	20 m		**110432**
AIR FUSE HIGH FLOW 1/2	35							15 m	20 m	**110442**
AIR FUSE HIGH FLOW 3/4	60							10 m	20 m	**6158112430**
AIR FUSE LOW FLOW 1"	70									**6158112440**



Perfect kit

Always get the best conditions for your application



- **Sufficient pressure**
- **Constant air flow**
- **Proper couplings and nipples**
- **Correct connection to the tool**
- **Better ergonomics**



Item included	Part number	P/N to be created	P/N to be created
CPA1015 motor oil	**8940176598**	X	X
CP AIR FLEX 1/2" BSP	**8940171566**	X	X
Hose whip 3/8” BSP	**6158112650**	X	X
EF coupling H011S 16mm	**6158405480**	X	X
Pressure clap HD x2	**615 811 0050**	X	X
Nipple H011S 16mm	**6158106200**	X	X
FRL12BSP	**6158135640**	X	X
FRL Stand	**Tbc**		
EF coupling H011S 16mm	**6158105060**	X	X
Effi max hose 16mm ID 20m	**8940176319**	X	
Effi max hose 16mm ID 5m	**6158109010**		X

Thread adaptor (BSP to NPT and NPT to BSP)

BSP to NPT

Part number	Description
6158136140	ADAPTOR MALE 1/8” BSP to FEMALE 1/8” NPT
6158136120	ADAPTOR MALE 1/4” BSP to FEMALE 1/4” NPT
6158136130	ADAPTOR MALE 3/8” BSP to FEMALE 3/8” NPT
6158135700	ADAPTOR MALE 1/2” BSP to FEMALE 1/2” NPT
6158135710	ADAPTOR MALE 3/4” BSP to FEMALE 3/4” NPT
6158135720	ADAPTOR MALE 1” BSP to FEMALE 1” NPT

NPT to NSP

Part number	Description
6158136200	ADAPTOR MALE 1/8” NPT to FEMALE 1/8” BSP
6158136150	ADAPTOR MALE 1/4” NPT to FEMALE 1/4” BSP
6158136160	ADAPTOR MALE 3/8” NPT to FEMALE 3/8” BSP
6158136170	ADAPTOR MALE 1/2” NPT to FEMALE 1/2” BSP
6158136180	ADAPTOR MALE 3/4” NPT to FEMALE 3/4” BSP
6158136190	ADAPTOR MALE 1” NPT to FEMALE 1” BSP

Chicago Pneumatic

At Chicago Pneumatic, we have a passion for performance and long-lasting partnerships. The Chicago Pneumatic brand has been reliability based on technology and trust since 1901.

People. Passion. Performance.

There is always a consumable matching your tool.

Some examples below:



Sockets



Pads



Chisels



Saw blades



Needles

Chicago Pneumatic

For more information, please contact your Chicago Pneumatic partner:

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2023 Chicago Pneumatic Tools, Airline Accessories Overview