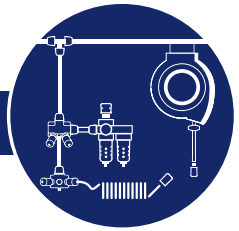
QUICK COUPLERS SELECTION GUIDE SERIES • S20 TO S31

MODEL	SAFE DISCONNECTION	CONNECTION	MATERIAL	INDUSTRIAL				ULTRAFLO	MEGAFLO	ARO 210	TRUFLATE			LINCOLN	NITTO	STÄUBLI	
				U 1/4	I/M 1/4	I/M 3/8	I/M 1/2	E 7.8	E 10.4	A 1/4	T 1/4	T 3/8	T 1/2	L 1/4	N 7.8	S 6	S 8
				S 20	S 20	S 21	S 22	S 31	S 31	S 23	S 24	S 25	S 25	S 26	S 27	S 30	S 30
TOPQUIK S1	✓	Automatic	Composite Stainless Steel (S22)		34 SCFM 174 PSI	81 SCFM 174 PSI	148 SCFM 232 PSI	73 SCFM 174 PSI	142 SCFM 174 PSI	32 SCFM 174 PSI							
TOPQUIK SC	✓	Manual	Steel		38 SCFM 360 PSI	75 SCFM 360 PSI	175 SCFM 360 PSI	70 SCFM 360 PSI		38 SCFM 360 PSI							
TOPQUIK	✓	Automatic	Composite		36 SCFM 225 PSI	73 SCFM 232 PSI	174 SCFM 167 PSI	59 SCFM 174 PSI							78 SCFM 175 PSI		
QUIKSILVER		Automatic	Steel		44 SCFM 362 PSI	72 SCFM 435 PSI	145 SCFM 500 PSI	80 SCFM 362 PSI		44 SCFM 362 PSI							
QUIKSILVER 2		Automatic	Steel		44 SCFM 362 PSI			80 SCFM 362 PSI									
AUTOMAX		Automatic	Brass		37 SCFM 250 PSI	62 SCFM 300 PSI	99 SCFM 300 PSI	50 SCFM 200 PSI		34 SCFM 250 PSI				32 SCFM 250 PSI			
AUTOMAX SLIM		Automatic	Brass		45 SCFM 150 PSI			60 SCFM 150 PSI		40 SCFM 150 PSI							
MAXQUIK		Manuelle	Steel		24 SCFM 250 PSI	56 SCFM 250 PSI	75 SCFM 250 PSI			34 SCFM 250 PSI	24 SCFM 250 PSI	67 SCFM 250 PSI	92 SCFM 250 PSI				
MAXQUIK PLUS		Manuelle	Brass Stainless Steel		37 SCFM 250 PSI												
UNISAFE 5 IN 1 Compatibility with S20•31•23•24•26	✓	Automatic	Steel	34 SCFM 200 PSI													
UNIQUIK 3 IN 1 Compatibility with S20•23•24		Automatic	Brass NP Brass	35 SCFM 150 PSI													
UNIMAX 5 IN 1 Compatibility with S20•31•23•24•26		Automatic	Steel	37 SCFM 200 PSI													
ISOSAFE	✓	Automatic	Aluminium													45 SCFM 175 PSI	100 SCFM 145 PSI

TOPRING
Compressed air solutions

QUICK COUPLERS SELECTION GUIDE SERIES • S20 TO S31



HOW TO CHOOSE THE IDEAL QUICK COUPLER?

Points to consider in order to choose the quick coupler for the application

ACCIDENT PREVENTION

ZERO PRESSURE DISCONNECT COUPLERS

These couplers prevent dangerous hose whips with their two-stage disconnection system. The first stage allows the downstream pressure to be evacuated, while the second releases the plug completely and safely.

The possibility of a hose whip is therefore eliminated.

ZERO PRESSURE CONNECT/DISCONNECT COUPLERS

These couplers allow connection and disconnection at zero pressure making it very easy to connect/disconnect. The plug is connected and secured before the air supply is released, providing a safe and easy connection.

Upon disconnection, the downstream pressure is released before the plug can be disconnected, thus eliminating the possibility of hose whips.

COUPLERS WITH DRAG GUARDS

These couplers have an integrated drag guard preventing accidental disconnections when they are dragged on the floor.

The drag guard protects the coupler sleeve from releasing the plug under pressure.

TOPQUIK S1

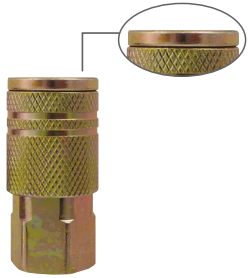
TOPQUIK

ISOSAFE

UNISAFE

TOPQUIK SC

QUIKSILVER



MAXQUIK

PRESSURE AND FLOW REQUIREMENTS FOR THE APPLICATION (PSI & SCFM)

Air tools operate at variable air flow rates and pressures (specified by the manufacturers).

Quick coupler can be selected once the required SCFM is determined. The table on the first page summarizes the technical specifications of all **TOPRING** couplers.

Note that the inside diameter of the air hose used can be matched to the size of the coupler (e.g. 1/4 I.D. hose, 1/4 coupler). However, pressure and air volume restrictions such as a 1/2 I.D. hose with a 1/4 coupler must be avoided.

Finally, the maximum operating pressure of the selected connection must be equal to or greater than the maximum pressure of the compressed air system.

TECH TIP

Refer to the pneumatic tools flow reference guide on page 271 of the catalogue.

SELECTION GUIDE

Minimum air hose size per length size and flow

TOOL TYPE	FLOW SCFM	HOSE LENGTH					
		25'	30'	50'	75'	100'	150'
NAILERS/STAPLERS							
Roofer Stapler (14 Gauge)	3.5	1/4	1/4	1/4	1/4	1/4	1/4
Stapler (22-18 Gauge)	3.5	1/4	1/4	1/4	1/4	1/4	1/4
Finishing nailer	3.5	1/4	1/4	1/4	1/4	1/4	1/4
Roofing nailer	6.0	3/8	3/8	3/8	3/8	3/8	1/2
Framing nailer	11.0	3/8	3/8	3/8	3/8	3/8	1/2
Industrial Nailer	20.4	3/8	1/2	1/2	1/2	1/2	1/2
IMPACT TOOLS							
Miniature 1/4" ratchet	12.3	3/8	3/8	3/8	1/2	1/2	1/2
1/4" impact gun	14.0	3/8	3/8	3/8	1/2	1/2	1/2
3/8" ratchet	19.2	3/8	1/2	1/2	1/2	1/2	3/4
Zip gun	21.0	3/8	1/2	1/2	1/2	3/4	3/4
1/2" impact gun	28.4	1/2	1/2	1/2	3/4	3/4	3/4
3/4" impact gun	34.7	1/2	1/2	3/4	3/4	3/4	3/4
1" impact gun	87.3	3/4	3/4	3/4	1	1	1
POLISHING TOOLS							
Vertical polisher	16.6	3/8	3/8	1/2	1/2	1/2	1/2
Oscillating sander	20.0	1/2	1/2	1/2	1/2	3/4	3/4
SANDERS							
Sander	9.8	5/16	5/16	3/8	3/8	3/8	1/2
4-1/2" angle grinder	18.4	3/8	1/2	1/2	1/2	1/2	3/4
10 mm ball sander	18.0	3/8	1/2	1/2	1/2	1/2	3/4
7" angle sander	20.4	1/2	1/2	1/2	3/4	3/4	3/4
DRILLS							
3/8" air drill	11.3	3/8	1/2	1/2	1/2	1/2	1/2
3/8" reversible air drill	20.8	1/2	1/2	1/2	1/2	3/4	3/4
1/2" reversible air drill	26.4	1/2	1/2	1/2	3/4	3/4	3/4
OTHER TOOLS							
Riveter	4.0	1/4	1/4	1/4	1/4	5/16	5/16
Sealer gun	6.2	5/16	5/16	5/16	3/8	3/8	3/8
Caulking gun	0.1	1/4	1/4	1/4	1/4	1/4	1/4
HVLP paint gun	6.6	3/16	3/16	3/8	3/8	3/8	1/2
Screw driver	6.6	5/16	5/16	3/8	3/8	3/8	1/2
Gravity fed sand blaster	12.0	3/8	3/8	3/8	1/2	1/2	1/2

CAUTION

Over-pressurization could result in a sudden failure of the coupler causing severe bodily injury or death.

Be sure to select the proper coupler for your application and use only within the specified service pressure range.

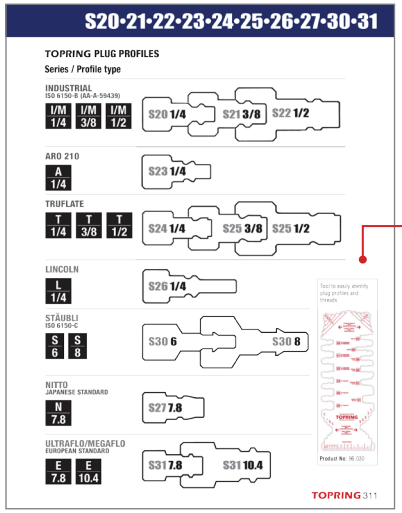
PLUG PROFILE USED

The plug profile determines the type of coupler to be used. The opening of the plug determines the quantity of air (SCFM). The ULTRAFLO S31 plug has an opening of 7.8 mm and offers flow rates from 50 to 80 SCFM.

Most couplers are associated with a single plug profile except for the «Universal» type coupler that accepts 3 to 5 plug profiles (see below examples of UNIVERSAL couplers).

THE SOLUTION
to coupler
confusion

UNISAFE UNIQUIK UNIMAX



TOPRING offers a tool to easily identify plug profiles and threads

Product No
96.030

FREQUENCY OF CONNECTION/DISCONNECTION

AUTOMATIC OR MANUAL COUPLERS ?

If the coupler must be disconnected several times a day, the automatic coupler is a better option. The connection is made by inserting the plug into the coupler without having to activate the sliding sleeve manually (but must be activated for disconnection). To use the manual coupling, the sleeve must be manually retracted to connect or disconnect the plug.

AUTOMATIC COUPLERS

TOPQUIK S1 | TOPQUIK S1 | TOPQUIK | QUIKSILVER | QUIKSILVER 2 | AUTOMAX | AUTOMAX SLIM | UNISAFE | ISOSAFE | UNIQUIK | UNIMAX

MANUAL COUPLERS

TOPQUIK SC | MAXQUIK | MAXQUIK PLUS

QUICK COUPLERS BODY MATERIAL

- Composite
- Steel
- Brass
- Aluminium
- Nickel Plated Brass
- Stainless Steel

CONDITIONS OF USE

Steel couplers offer greater resistance to harsh environments. They are also more resistant to applications where there are frequent impacts and high operating pressures.

Environmental conditions including moisture, water, chemicals and air pollutants can also cause premature deterioration of the couplers. For this type of environment, a stainless steel coupler is preferred.

QUIKSILVER AND QUIKSILVER 2
ZINC PLATED STEEL

MAXQUIK PLUS
STAINLESS STEEL

FLUIDS AND TEMPERATURES

The material of the coupler body and seal must be compatible with the fluids present and the operating temperature.
The limits of the coupler must never be exceeded in order to increase their service life.

DELICATE SURFACES TO PROTECT

In specific industries and applications, the risk of scratches on finished products is not acceptable (car body, furniture manufacturing, etc.).

Composite couplers protect delicate surfaces against scratches effectively.

TOPQUIK S1

TOPQUIK

TOPQUIK SC

ERGONOMICS FOR THE USER

TOPQUIK couplers are very light compared to metal couplers offering better ergonomics for the user.

TOPQUIK S1

TOPQUIK

62.360

62.332

Free-angle fittings also offer improved tool handling and help reduce fatigue at the wrist.

See Series 62 for more details.

PRECAUTION TO EXTEND COUPLER'S LIFE

Using a short anti-hose whip between the tool and the coupler will isolate the vibration on the coupler and extend its life while reducing the hazard of whipping.

CAUTION

Anti-hose whip air hoses are highly recommended for all impact tools, or when strong vibrations are present.
See Series 62 for more details.

1/4 INDUSTRIAL QUICK COUPLERS DEMO KIT

Product No
95.201