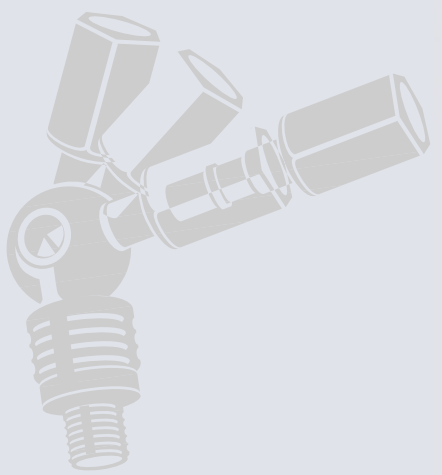


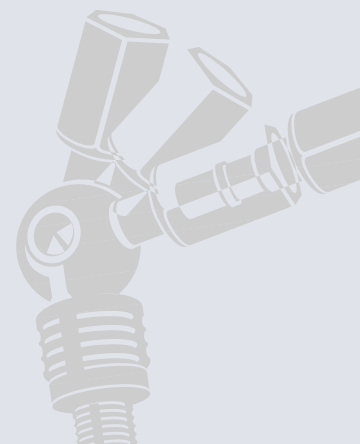
Edition 2002
OETIKER

OETIKER

Swing Couplings SC



Connecting Technology



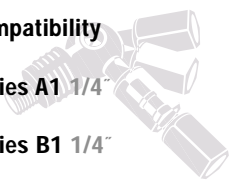
OETIKER Connecting Technology

Swing Couplings SC



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8	SC Series A1 1/4"
9	SC Series B1 1/4"
10	SC Series D 3/8"
11	SC Series E 3/8"
12	SC Series H 1/2"
13	SC Accessories
14	Air Consumption of Pneumatic Hand Tools
15	SC Materials, Seals, Lubricants



The OETIKER Group Worldwide

The primary objective of the OETIKER Group is to supply customers with safe and reliable products.

For over 50 years, OETIKER has revolutionized clamping of hoses, pipes and other objects with a great variety of clamps and rings for a wide range of materials. – All of it complemented by a full choice of quick action and swing couplings. The OETIKER Group was founded in Switzerland in 1943 and is now multinational with a worldwide network of companies which together offer their customers comprehensive planning, construction, design and service support. OETIKER companies are strategically placed throughout the world to produce and supply connecting products. Manufacturing is standardized across all OETIKER production companies. OETIKER products are sold both by companies within the OETIKER Group and via a specially selected distributor network. The OETIKER name is a protected trademark which stands for quality, innovation and continuous improvement, both literally and in the spirit intended by the founder of the company, Hans Oetiker. Numerous connecting technology patents are directly related to the OETIKER name.

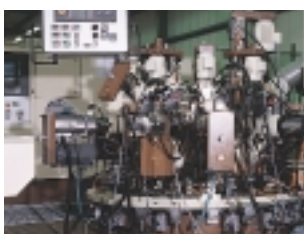
OETIKER Quality Standards

All companies within the OETIKER Group are certified under – ISO/TS 16949 for production, research, development and sales. OETIKER companies already comply with the newly formulated environmental guidelines detailed in ISO 14001 which involve the careful use of resources, the use of recyclable materials and minimal use of chemical additives. In order to ensure optimum quality throughout the world, all OETIKER companies use the latest in production and inspection equipment.

Research and Development...



...Experience, Know-how...



...Efficient Manufacturing Plants...



... Testing



Swing Couplings SC



The OETIKER SC Series: User friendly, economical, safe

Safely swing to connect. With full flow.
No force required or loss of pressure in the system.

Just a turn and the air vent ensures that the hose is ventilated – thus rendering it harmless.

OETIKER swing couplings SC are available in nominal sizes 1/4" to 1/2" and in different models. They are compatible with most popular plug systems. The many different types and models and a wide choice of seals and lubricants mean that OETIKER couplings are suitable for numerous applications throughout industry.

Durability, reliability, simple and safe handling are features of all OETIKER swing couplings. OETIKER swing couplings fulfil all the requirements of current quality standards and have also been awarded a type examination certificate from the Swiss Accident Insurance Institute SUVA.

1/4"
Series A1
Series B1



3/8"
Series D
Series E



1/2"
Series H



SC Swing to Connect



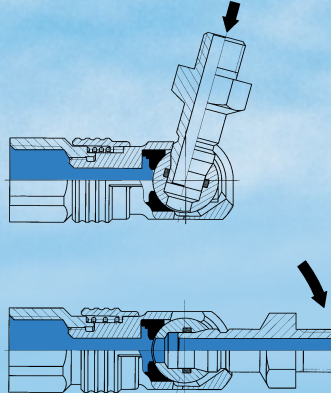
Simple and quick connection with no force or loss of pressure in the system: Operation of OETIKER swing coupling SC

Features

- In accordance with safety standard ISO 4414, EN 983
- Pressure always automatically off during the coupling process
- Full flow, negligible loss of pressure
- Simple operation, no force required
- Compact design,
- NBR standard seal
- Silicone free standard lubrication
- Eco-design
- Det Norske Veritas
Type approval no. P-10819
- CE

Connection

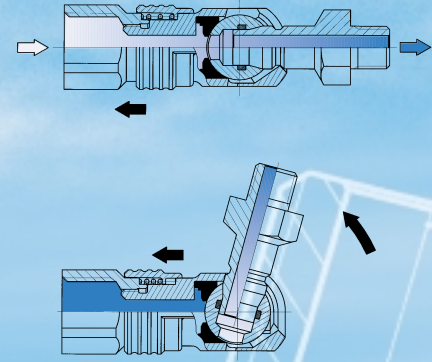
Push suitable plug into coupling and swing approximately 90° until the orange ring engages in the groove.



Full flow with no deflections.

Disconnection

Pull back orange ring and swing plug to stop. Remove plug from coupling.



In order to prevent the hose from ejecting dangerously, the plug must be held in the hand until the hose is completely ventilated.



Safely swing to connect

SC Full Flow



**More efficient, low energy consumption and safe:
Use of the valveless OETIKER swing coupling SC**

The new generation of OETIKER couplings, the valveless SC coupling model - result of innovative development and many years of experience - full flow guaranteed in every case.

When using compressed air operated equipment, for instance, in conjunction with OETIKER swing couplings SC, the result will always be a method of operation which is more efficient with low energy consumption, thus making it very economical.

Application

Throughput media

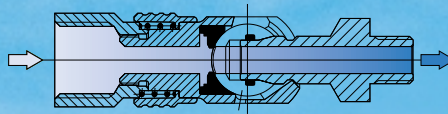
Compressed air, gases, liquids and media with low to medium viscosity due to free flow with no deflections. Easy to clean.

Pressure

Operating pressure up to 700 psi - connection and disconnection up to 200 psi - also suitable for technical vacuums (up to approximately 3 inHg).

Temperature

Standard model from -4° to +212°F (-20° to +100°C). Higher temperatures possible depending upon media with the use of special FPM or EPDM seals (see page 15).

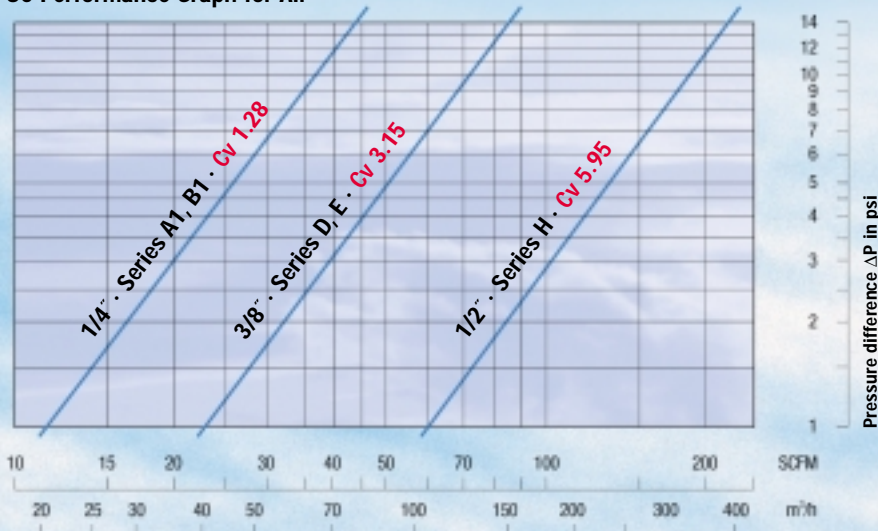


**Full flow
with negligible loss of pressure**

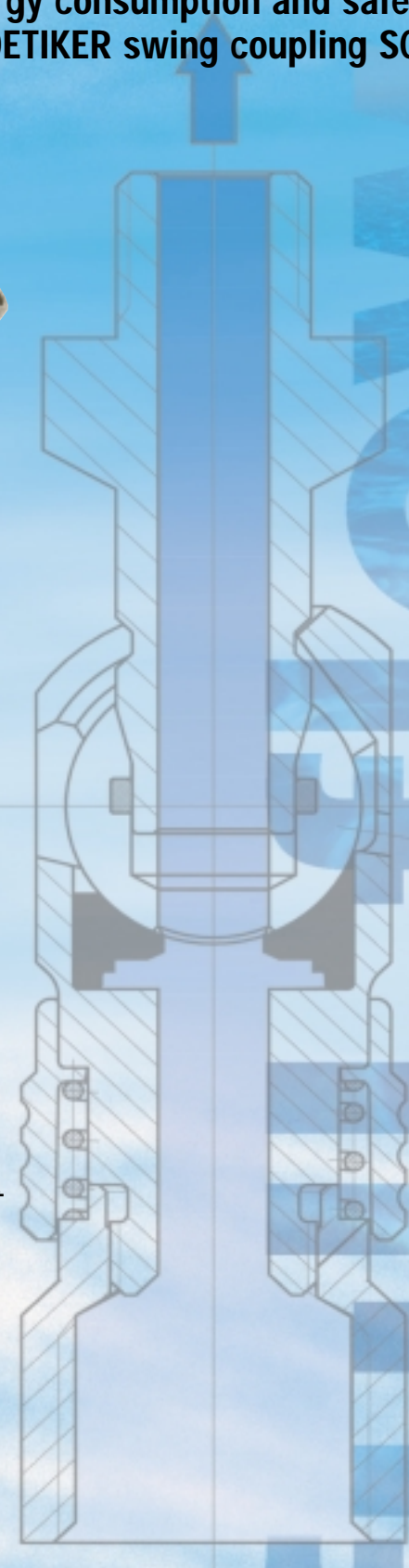


Cross Section Model SC

SC Performance Graph for Air



Flow rate at 68°F (20°C), operating pressure 100 psi (6 bar)



SC Compatibility



Full compatibility with most popular plug systems:
Guide for determining the most suitable OETIKER swing coupling SC

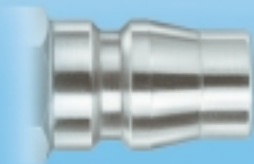
Plug form 1:1



Nominal Bore	SC Series	Standards	Compatible with*	Information Page	
6 mm 1/4"	Series A1	Plug in accordance with: ISO 4414	Aeroquip	FD41	8
			Amflo	C37, C38	
			Aro	210	
			Cejn	300	
			Dixon	DCP 37, DCP 38	
			DynaQuip	DM-2	
			Fairview	QD-F35	
			Foster	210	
			Legris	14, 22	
			Parker	50	
			Prevost	A.. 06	
			Tomco	100	
			SNAP-Tite	37	



Nominal Bore	SC Series	Standards	Compatible with*	Information Page	
6 mm 1/4"	Series B1	Plug in accordance with: ISO 4414 US: MIL-C-4109 ISO 6150-B-12 AFNOR: B-12 NF E 49-053	Aeroquip	FD40, FD43 1/4"	9
			Amflo	C20, C21	
			Aro	MS, H-F 1/4"	
			Cejn	310	
			Dixon	DC 20, DC 21	
			DynaQuip	D, DM, DC 1/4"	
			Fairview	QD-F37	
			Foster	3000	
			Hansen	30-SVS, 1000, 3000	
			Legris	23, 24	
			Milton	H Series	
			Parker	E-z, 20, 30, HF 1/4"	
			Prevost	I.. 06	
			Tomco	180	
			SNAP-Tite	37	



Nominal Bore	SC Series	Standards	Compatible with*	Information Page	
8 mm 3/8"	Series D	Plug in accordance with: ISO 4414	Cejn	315	10
			Nitto	20, 30, 40	
			Rectus	13	

SC Compatibility



Full compatibility with most popular plug systems: Guide for determining the most suitable OETIKER swing coupling SC

Plug form 1:1



Nominal Bore	SC Series	Standards	Compatible with*	Information Page
8 mm 3/8"	Series E	Plug in accordance with: ISO 4414 US: MIL-C-4109 ISO 6150-B -15 AFNOR: B-15 NF E 49-053	Aeroquip	FD40, FD43 3/8" 11
			Amflo	C26, C25
			Aro	MS, H-F 3/8"
			Cejn	430
			Dixon	DCP 26, DCP 25
			DynaQuip	D, DM, DC, DP 3/8"
			Fairview	QD-F37
			Foster	4000
			Hansen	40-SVS, 400, 4000
			Legris	30
Parker	EZ, 20, 30, HF, PB 3/8"			
Prevost	I.. 08			
Tomco	T4000, T400			
SNAP-Tite	37			



Nominal Bore	SC Series	Standards	Compatible with*	Information Page
11 mm 1/2"	Series H	Plug in accordance with: ISO 4414 US: MIL-C-4109 ISO 6150-B-17 AFNOR: B-17 NF E 49-053	Aeroquip	FD40, FD43 1/2" 12
			Amflo	C10, C9, CP18, CP17
			Aro	H-F, F-B 1/2"
			Cejn	550
			Dixon	DC 10, DC 9
			DynaQuip	D, DM, DC, DP 1/2"
			Fairview	QD-F37
			Foster	5000
			Hansen	50-SVS, 500, 5000
			Parker	EZ, 20, 30, PB 1/2"
Prevost	IRM 11			
Tomco	T5000, T500			

* The list is not conclusive. Names and references are, in some instances, registered trademarks of other manufacturers.



1/4"

Swing Coupling SC Series A1



Actual size

Features

- In accordance with safety standard ISO 4414, EN 983
- Full flow, negligible loss of pressure
- Simple operation, no force required
- Compact design
- Det Norske Veritas
Type approval no. P-10819
- CE



Temperature Range

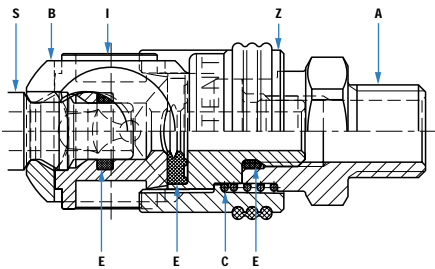
-4° to +212°F (-20° to +100°C)

Operating Pressure

3 inHg to 700 psi, connection/
disconnection to maximum 200 psi

Materials, Seals, Lubricants

Guide to selection and ordering
(see page 15).



Material Code

- A = Steel, nickel plated / aluminium
 - B = Steel, black abrasion resistant finish
 - C = Stainless steel
 - E = Nitrile elastomer (NBR)
 - I = Surface hardened steel, nickel plated
 - S = Surface hardened steel, zinc plated
 - Z = Zinc diecast, nickel plated,
orange plastic coating
- Silicone free standard lubrication

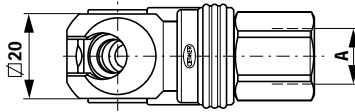
Compatible with



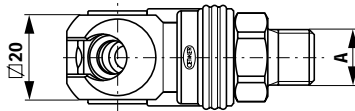
See page 6.

Swing coupling

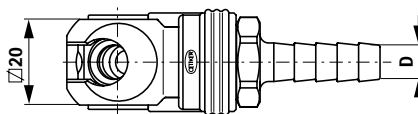
← with female thread



← with male thread

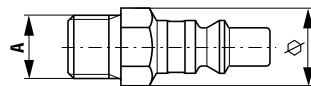


← with hose barb

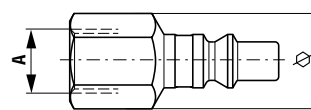


Plug

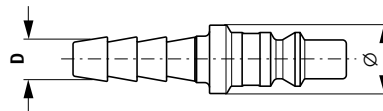
← with male thread



← with female thread



← with hose barb



A	Art. No.
NPT1/4"	205 00 291
NPT3/8"	205 00 292
NPT1/2"	205 00 293

NPT1/4"	205 00 297
NPT3/8"	205 00 298
NPT1/2"	205 00 299

D	Art. No.
HB 1/4"	205 00 395
HB 5/16"	205 00 396
HB 3/8"	205 00 397
HB 1/2"	205 00 398

A	Art. No.
NPT1/4"	255 00 003
NPT3/8"	255 00 066

NPT1/4"	255 00 007
NPT 3/8"	255 00 068

D	Art. No.
HB 1/4"	255 00 240
HB 5/16"	255 00 241
HB 3/8"	255 00 242



Actual size

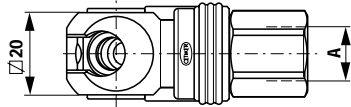
1/4"

Swing Coupling SC Series B1

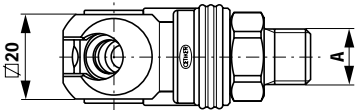


Swing coupling

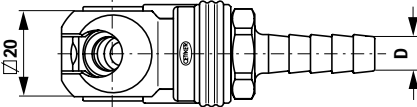
↻ with female thread



↻ with male thread

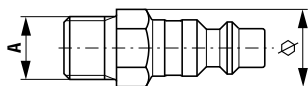


↻ with hose barb

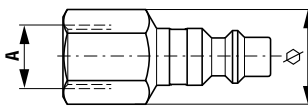


Plug

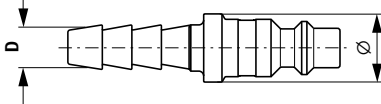
← with male thread



← with female thread



← with hose barb



A	Art. No.
NPT1/4"	205 00 311
NPT3/8"	205 00 312
NPT1/2"	205 00 313

NPT1/4"	205 00 317
NPT3/8"	205 00 318
NPT1/2"	205 00 319

D	Art. No.
HB 1/4"	205 00 399
HB 5/16"	205 00 400
HB 3/8"	205 00 401
HB 1/2"	205 00 402

A	Art. No.
NPT1/4"	255 00 014
NPT3/8"	255 00 069

NPT1/4"	255 00 018
NPT3/8"	255 00 274

D	Art. No.
HB 1/4"	255 00 243
HB 5/16"	255 00 244
HB 3/8"	255 00 245

Features

- In accordance with safety standard ISO 4414, EN 983
- Model in accordance with ISO 6150-B-12, AFNOR: B-12 NF E 49-053 and US: MIL-C-4109
- Full flow, negligible loss of pressure
- Simple operation, no force required
- Compact design
- Det Norske Veritas Type approval no. P-10819
- CE

Temperature Range

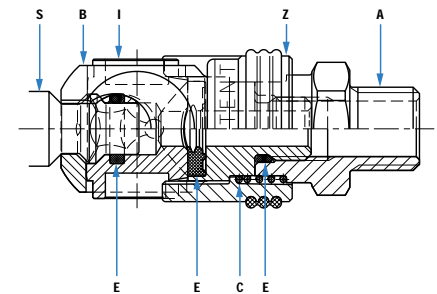
-4° to +212°F (-20° to +100°C)

Operating Pressure

3 inHg to 700 psi, connection/disconnection to maximum 200 psi

Materials, Seals, Lubricants

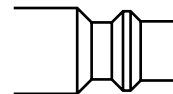
Guide to selection and ordering (see page 15).



Material Code

A = Steel, nickel plated / aluminium
 B = Steel, black abrasion resistant finish
 C = Stainless steel
 E = Nitrile elastomer (NBR)
 I = Surface hardened steel, nickel plated
 S = Surface hardened steel, zinc plated
 Z = Zinc diecast, nickel plated, orange plastic coating
 Silicone free standard lubrication

Compatible with



See page 6.

3/8"

Swing Coupling SC Series D



Actual size

Features

- In accordance with safety standard ISO 4414, EN 983
- Full flow, negligible loss of pressure
- Simple operation, no force required
- Compact design
- Det Norske Veritas
Type approval no. P-10819
- CE



Temperature Range

-4° to +212°F (-20° to +100°C)

Operating Pressure

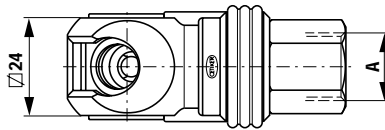
3 inHg to 700 psi, connection/
disconnection to maximum 200 psi

Materials, Seals, Lubricants

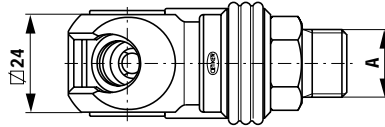
Guide to selection and ordering
(see page 15).

Swing coupling

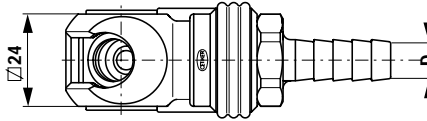
← with female thread



← with male thread



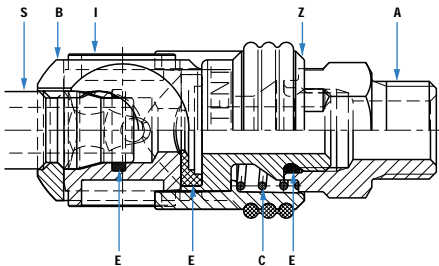
← with hose barb



A	Art. No.
NPT1/4"	205 00 034
NPT3/8"	205 00 035
NPT1/2"	205 00 036

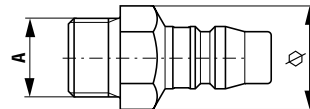
NPT1/4"	205 00 426
NPT3/8"	205 00 037
NPT1/2"	205 00 038

D	Art. No.
HB 5/16"	205 00 410
HB 3/8"	205 00 411
HB 1/2"	205 00 412

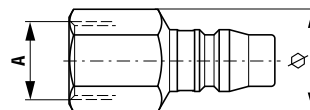


Plug

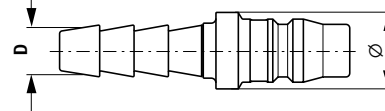
← with male thread



← with female thread



← with hose barb



A	Art. No.
NPT1/4"	255 00 058
NPT3/8"	255 00 059
NPT1/2"	255 00 060

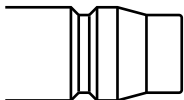
NPT1/4"	255 00 061
NPT 3/8"	255 00 062
NPT1/2"	255 00 063

D	Art. No.
HB 5/16"	255 00 249
HB 3/8"	255 00 250
HB 1/2"	255 00 251

Material Code

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 - B = Steel, black abrasion resistant finish
 - C = Stainless steel
 - E = Nitrile elastomer (NBR)
 - I = Surface hardened steel, nickel plated
 - S = Surface hardened steel, zinc plated
 - Z = Zinc diecast, nickel plated,
orange plastic coating
- Silicone free standard lubrication

Compatible with



See page 6.



Actual size

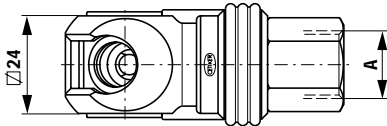
3/8"

Swing Coupling SC Series E

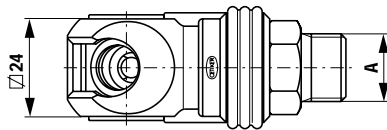


Swing coupling

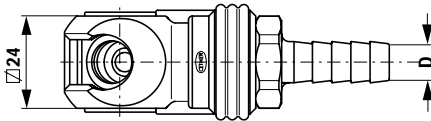
← with female thread



← with male thread

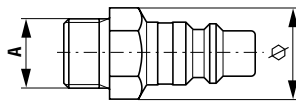


← with hose barb

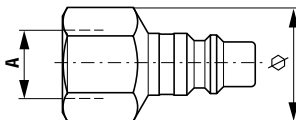


Plug

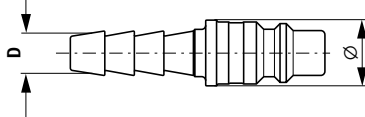
← with male thread



← with female thread



← with hose barb



A	Art. No.
NPT1/4"	205 00 052
NPT3/8"	205 00 026
NPT1/2"	205 00 027

NPT1/4"	205 00 214
NPT3/8"	205 00 030
NPT1/2"	205 00 031

D	Art. No.
HB 5/16"	205 00 416
HB 3/8"	205 00 417
HB 1/2"	205 00 418

A	Art. No.
NPT1/4"	255 00 236
NPT3/8"	255 00 044
NPT1/2"	255 00 045

NPT1/4"	255 00 237
NPT3/8"	255 00 049
NPT1/2"	255 00 050

D	Art. No.
HB 5/16"	255 00 252
HB 3/8"	255 00 253
HB 1/2"	255 00 254
HB 5/8"	255 00 255

Features

- In accordance with safety standard ISO 4414, EN 983
- Model in accordance with ISO 6150-B-15, AFNOR: B-15 NF E 49-053 and US: MIL-C-4109
- Full flow, negligible loss of pressure
- Simple operation, no force required
- Compact design
- Det Norske Veritas Type approval no. P-10819
- CE

Temperature Range

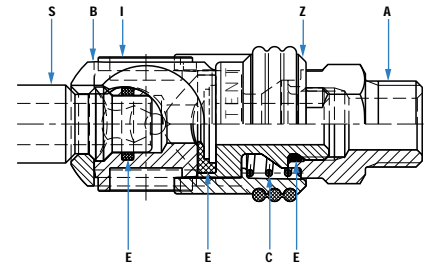
-4° to +212°F (-20° to +100°C)

Operating Pressure

3 inHg to 700 psi, connection/disconnection to maximum 200 psi

Materials, Seals, Lubricants

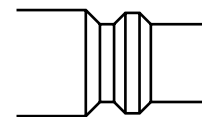
Guide to selection and ordering (see page 15).



Material Code

- A = Steel, nickel plated / aluminium
 - B = Steel, black abrasion resistant finish
 - C = Stainless steel
 - E = Nitrile elastomer (NBR)
 - I = Surface hardened steel, nickel plated
 - S = Surface hardened steel, zinc plated
 - Z = Zinc diecast, nickel plated, orange plastic coating
- Silicone free standard lubrication

Compatible with



See page 7.

1/2"

Swing Coupling SC Series H



75% of actual size

Features

- In accordance with safety standard ISO 4414, EN 983
- Model in accordance with ISO 6150-B-17, AFNOR: B-17 NF E 49-053 and US: MIL-C-4109
- Full flow, negligible loss of pressure
- Simple operation, no force required
- Compact design
- Det Norske Veritas Type approval no. P-10819
- CE



Temperature Range

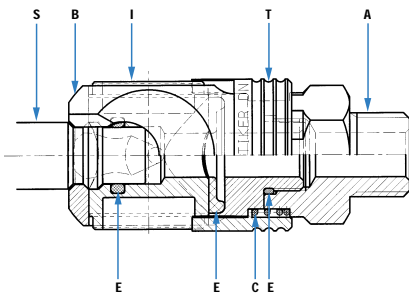
-4° to +212°F (-20° to +100°C)

Operating Pressure

3 inHg to 700 psi, connection/
disconnection to maximum 200 psi

Materials, Seals, Lubricants

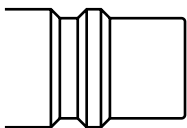
Guide to selection and ordering
(see page 15).



Material Code

- A = Steel, nickel plated / aluminium
 - B = Steel, black abrasion resistant finish
 - C = Stainless steel
 - E = Nitrile elastomer (NBR)
 - I = Surface hardened steel, nickel plated
 - S = Surface hardened steel, zinc plated
 - T = Steel, nickel plated, orange coated
- Silicone free standard lubrication

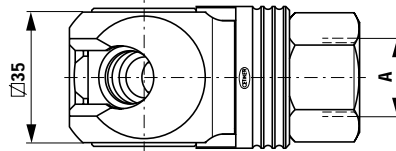
Compatible with



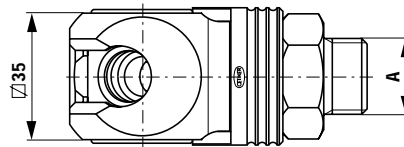
See page 7.

Swing coupling

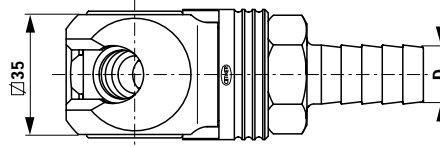
↺ with female thread



↻ with male thread

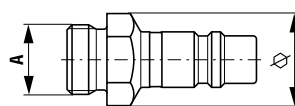


↺ with hose barb

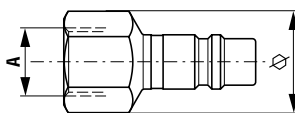


Plug

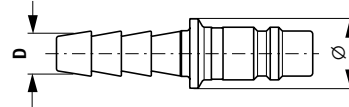
↺ with male thread



↻ with female thread



↺ with hose barb



A	Art. No.
NPT3/8"	205 00 109
NPT1/2"	205 00 110
NPT3/4"	205 00 111

NPT3/8"	205 00 112
NPT1/2"	205 00 113
NPT3/4"	205 00 114

D	Art. No.
HB 1/2"	205 00 653

A	Art. No.
NPT3/8"	255 00 277
NPT1/2"	255 00 278

NPT3/8"	255 00 279
NPT1/2"	255 00 280

D	Art. No.
HB 3/8"	255 00 265
HB 1/2"	255 00 266
HB 5/8"	255 00 267

SC Accessories



Covers, Protectors for OETIKER Swing Couplings SC

Suitable for hose	Art. No.
1/4" Series A1, B1	295 00 480
3/8" Series D, E	295 00 481
1/2" Series H	295 00 482



Protective Cover for OETIKER Swing Couplings SC

Slides over airline coupling installation. Provides complete protective coverage of coupling and adaptor.

Material
Vinyl

Suitable for series	Art. No.
A1, B1	295 00 385
D, E	295 00 340



Covers for OETIKER Swing Couplings SC

The plastic cover is attached over the housing of the OETIKER swing coupling SC to protect the work piece, e.g. for work on car body parts, furniture, etc.

Material
Break-resistant polyamide, orange.

Suitable for series	Art. No.
A1, B1	295 00 381
D, E	295 00 195



Protectors for OETIKER Swing Couplings SC

The plastic protector is attached over the OETIKER swing coupling SC as shown to protect the coupling from dust and dirt when not used.

Material
Break-resistant polyamide, yellow.



Air Consumption of Pneumatic Hand Tools

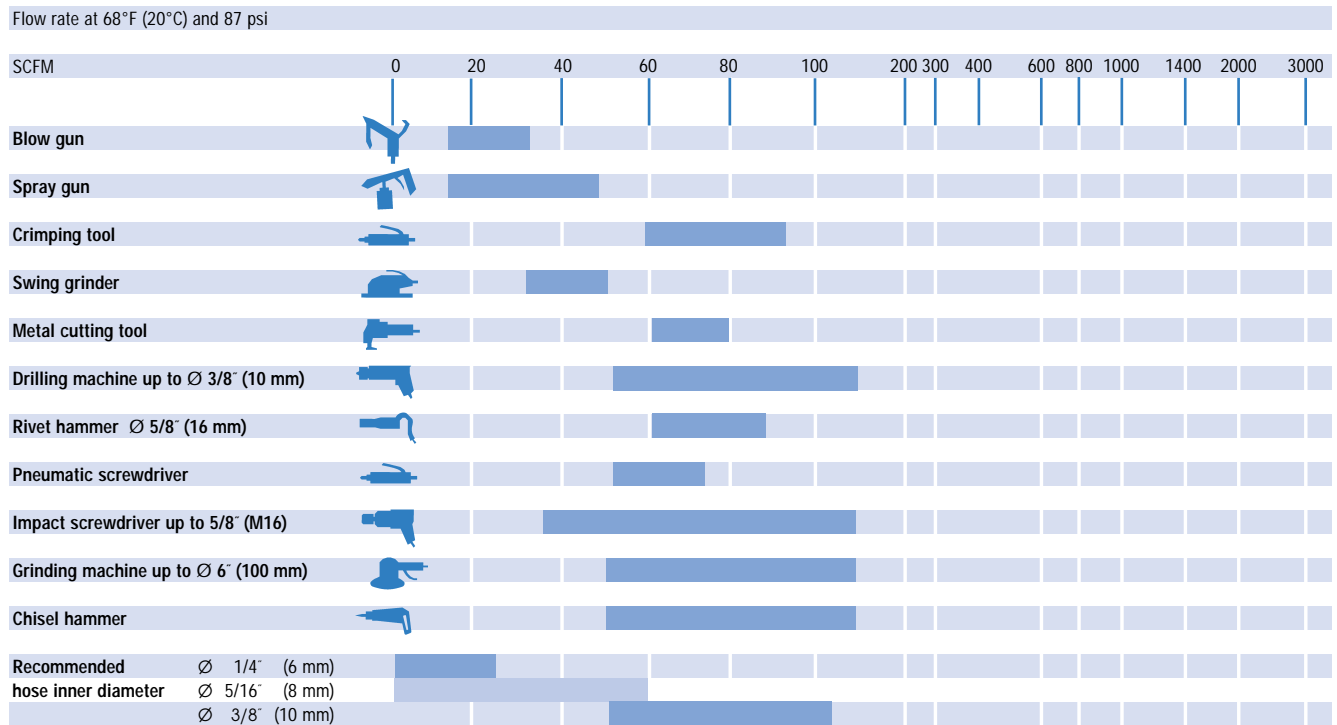


Excellent Seal

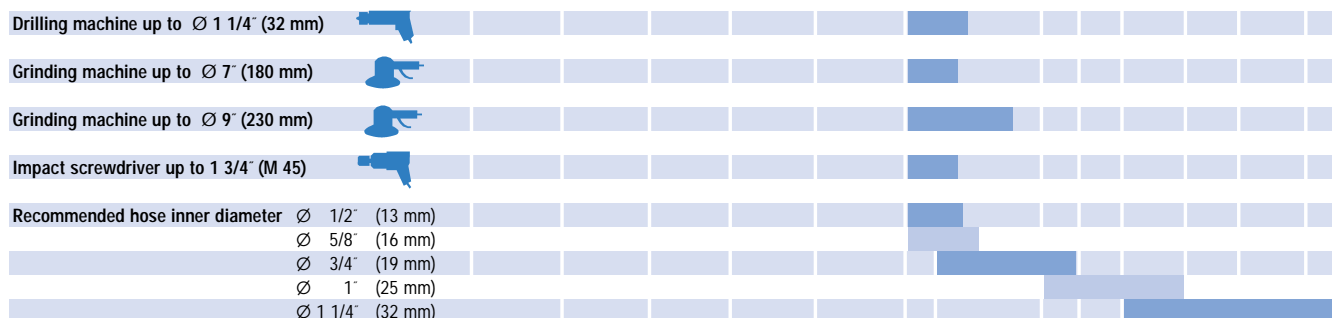
Even small leaks can lead to big losses and they can also cause serious accidents.

It has been shown that in the case of compressed air, leaking couplings account for an energy loss of 8 - 15%.

Applications for OETIKER Couplings Series A1, B1 1/4" D, E 3/8"



Applications for OETIKER Couplings Series H 1/2"





Guide to Selection and Ordering

Materials

OETIKER swing couplings are manufactured from high quality materials. Additional special surface treatments guarantee greater durability with less wear and tear and high resistance to corrosion.

The orange coating denotes safety – the plastic sleeve gives increased grip and helps to protect the work piece from possible damage. The cross section and material codes give details of the composition of each individual part.

In the case of air, gas and oil – as long as they are not mixed with any additives – OETIKER couplings made from standard materials will be suitable.

These details are not binding. Where there is any doubt, trials must be carried out.

Selection and Handling

Incorrect handling or the wrong choice of swing couplings or accessories can result in damage to property and/or personal injury. The maximum operating pressure for each model as specified by the manufacturer must not be exceeded. The throughput medium is a critical factor in the choice of seal and coupling material. External mechanical impact and/or vibration will have an adverse effect on the durability of couplings and accessories and should therefore be avoided or, where this is not possible, limited.

OETIKER recommends that couplings and accessories should be checked periodically for excessive wear and leaks.

OETIKER Customer Services Department will be happy to give you further details about the use of OETIKER couplings.

For more detailed information, please follow the Operating Instructions.

Seals

The following quality seals are available for OETIKER couplings. Various seals can be used depending upon the throughput media. All details are not binding. Before use, please contact OETIKER for information about the concentration, mixture or temperature of media. If there is any doubt, trials should be carried out. All legislation relating to foodstuffs must be observed.

Standard Type

Type N

Nitrile elastomer (NBR)
Resistant to ageing, high mechanical strength, resistant to oil and fuel.
Temperature from -4°F to +212°F
(-20°C to +100°C).

Special Seals

Type V

Fluorine elastomer (FPM)
Very good resistance at high temperatures (except for hot water and steam).
Good resistance to many chemicals, ozone, weather. Temperature from -4°F to +554°F
(-15°C to +200°C).

Type P

Ethylene propylene elastomer (EPDM)
Very good resistance against hot water and steam, resistant to ageing and weather, not resistant to mineral oils and grease.
Temperature from -40°F to +320°F
(-40°C to +150°C).

Lubricants

All OETIKER couplings are greased with the standard high quality silicone free lubricant.

Note about Safety

ISO 6150 §7.1 recommends that a hose of at least 300 mm in length should be used between the coupling and a vibrating tool. Please also read the operating instructions which are supplied with the coupling.

Note about Ordering

If, instead of the standard version, a special seal is required, please specify this when ordering or get in touch with OETIKER!

OETIKER Swing Couplings SC

OETIKER Products

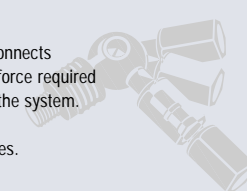
Clamps and Rings

Permanent, tight connection will only be released if required.
For all clamping and pressure ranges, hard or soft materials, hoses, cables or ropes.
Made from tube or band, stepless, self-tensioning or reusable.
Simple and straightforward to use.
Tools and accessories available.



Couplings

Safely swing to connect. Connects easily and quickly with no force required and no loss of pressure in the system.
Full flow. Compatible with most current adaptor profiles.



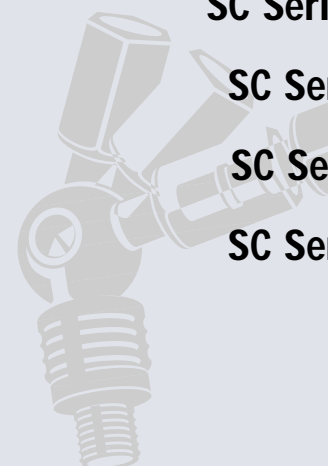
SC Series A1
1/4"

SC Series B1
1/4"

SC Series D
3/8"

SC Series E
3/8"

SC Series H
1/2"



Internet: www.oetiker.com

www.oetiker.com

OETIKER has been developing connecting technology for over 50 years. OETIKER products are manufactured by its own companies in line with ISO/TS 16949 and sold worldwide by subsidiary companies or agents in over 40 countries. Numerous patents are proof of continuous innovation.



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