

Coupling series KD/KDS

Variety

FESTO



Fast and secure coupling

Info 411

Variety for a genuine system partnership

Providing you with a free choice from a comprehensive range is part of Festo's philosophy. After all, this is the only way to ensure a correctly fitting solution. For proof of this, look no further than the completely revised and functionally enhanced coupling series KD/KS.



(Safety) x (Safety)

= (Safety)²

Flexible coupling

A large selection of variants with nominal sizes ranging from 1.5 to 13 mm and flow rates from 40 to 2,000 l/min offers the right quick coupling for all types of application.

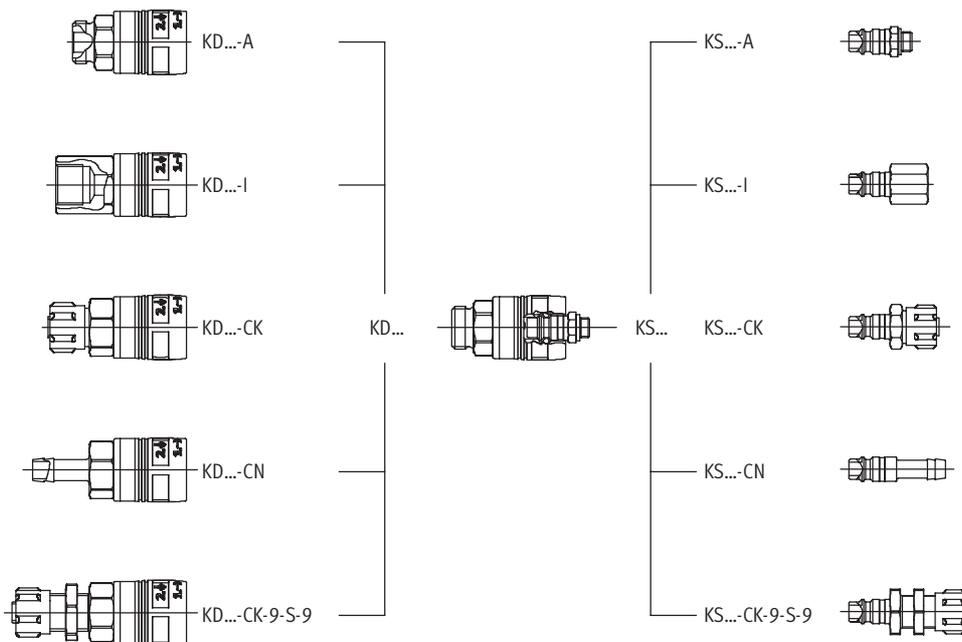
Reliable coupling

The safety couplings KDS cannot accidentally become detached while under pressure. Hard to believe, but true, as verified through BIA certification for the patented two-stage release principle.



Wide range of possible connection combinations

Choose from a wide selection of male and female threads, fittings with union nuts, barbed connectors and bulkhead fittings in different sizes to meet your specific requirements.



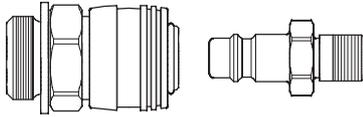
Quick coupling sockets/plugs

Key features

Mode of operation

Quick connection coupling, shut-off on one/both sides

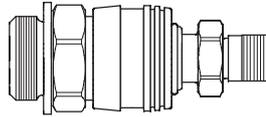
Coupling



When coupling, the plug is pushed into the socket.

The plug engages automatically when it reaches a certain position.

Decoupling

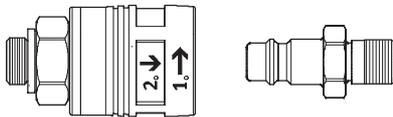


The plug is unlocked by pressing the releasing sleeve.

When decoupling, it is important to make sure that the quick coupling plug is held until the coupling plug is fully exhausted.

Safety coupling

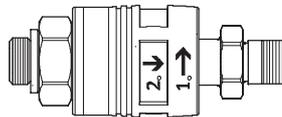
Coupling



When coupling, the plug is pushed into the socket.

The plug engages automatically when it reaches a certain position.

Decoupling



The releasing sleeve is first turned. This is to release the compressed air from the system.

The plug is then unlocked by pulling the releasing sleeve.

-  - Note

When inserting and releasing couplings, the maximum pressure should be 10 bar.

Quick coupling sockets/plugs

Product range overview



Function	Version	Type	Brief description	Max. standard nominal flow rate [l/min]	Nominal size [mm]	→ Page
Quick connection coupling	Shut-off on one side					
		KD1/KS1	For standard applications, without safety function	44	1.5	7
		KD2/KS2		139	2.7	9
		KD3/KS3		666	5	12
		KD4/KS4		1,350	7.2	15
		KD5/KS5		2,043	13	18
	Shut-off on both sides					
	KD3-A-R/ KS3-A-R	Both ends are sealed during unlocking	666	5	20	
	KD4-A-R/KS4-A-R		1,350	7.2	20	
Safety coupling		KDMS6	The compressed air is released from the system by turning the releasing sleeve. Only then can the coupling be unlocked	2,043	7.8	22
		KDS6/KSS6		1,818		

Coupling/tubing combination options							
Tubing	Quick coupling socket/plug						
	KD1/KS1	KD2/KS2	KD3/KS3	KD4/KS4	KD5/KS5	KDS6/KSS6	
Standard I.D.	Polyurethane						
	PU-2	■	-	-	-	-	-
	PU-3	-	■	-	-	-	-
	PU-4	-	■	■	■	-	-
	PU-6	-	-	■	■	-	-
	PU-9	-	-	-	■	-	■
	PU-13	-	-	-	-	■	■
	Nitrile rubber						
	P-6	-	-	-	■	-	-
	P-9	-	-	-	■	-	■
	P-13	-	-	-	-	■	-
	Polyamide						
	PP-3	-	■	-	-	-	-
	PP-4	-	■	■	■	-	-
	PP-6	-	-	■	■	-	-
Standard O.D.	Polyurethane						
	PUN-3	■	-	-	-	-	-
	PUN-4	-	■	-	-	-	-
	PUN-6	-	■	■	■	-	-
	PUN-8	-	-	■	■	-	-
	Polyamide						
	PAN-4	-	■	-	-	-	-
	PAN-6	-	■	■	■	-	-
	PAN-8	-	-	■	■	-	-
	Nitrile rubber with metal braiding (only with KS...-CX quick coupling plug)						
	PX-4	-	-	■	-	-	-
	PX-6	-	-	-	■	-	-
	PX-9	-	-	-	■	-	-

Quick coupling sockets/plugs

Product range overview



Quick coupling socket/plug combination options													
Connection	Size 1		Size 2		Size 3 ¹⁾		Size 4 ¹⁾		Size 5		Size 6 ²⁾		
	Socket	Plug	Socket	Plug	Socket	Plug	Socket	Plug	Socket	Plug	Socket	Plug	
Male thread													
M3	■	-	-	-	-	-	-	-	-	-	-	-	-
M5	-	-	■	■	-	-	-	-	-	-	-	-	-
G ¹ / ₈	-	-	-	-	■	■	-	-	-	-	-	-	■
G ¹ / ₄	-	-	-	-	■	■	■	■	-	-	■	■	■
G ³ / ₈	-	-	-	-	-	-	■	■	-	-	■	■	■
G ¹ / ₂	-	-	-	-	-	-	■	■	-	■	■	■	■
Female thread													
M5	-	-	■	■	-	-	-	-	-	-	-	-	-
G ¹ / ₈	-	-	-	-	■	■	-	-	-	-	-	-	-
G ¹ / ₄	-	-	-	-	■	■	■	■	-	-	■	■	■
G ³ / ₈	-	-	-	-	-	-	■	■	-	-	■	■	■
G ¹ / ₂	-	-	-	-	-	-	■	■	■	-	■	■	■
Quick connector with union nut													
CK-3	-	-	■	■	-	-	-	-	-	-	-	-	-
CK-4	-	-	■	■	■	■	-	■	-	-	-	-	-
CK-6	-	-	-	-	■	■	■	■	-	-	-	-	-
CK-9	-	-	-	-	-	-	■	■	-	-	■	■	■
CK-13	-	-	-	-	-	-	-	-	-	■	■	■	■
CX-4	-	-	-	-	-	■ ³⁾	-	-	-	-	-	-	-
CX-6	-	-	-	-	-	-	-	■ ³⁾	-	-	-	-	-
CX-9	-	-	-	-	-	-	-	■ ³⁾	-	-	-	-	-
Bulkhead quick connector													
CK-9-S	-	-	-	-	-	-	■	■	-	-	■	■	■
Barbed fitting													
CN-2	-	■	-	-	-	-	-	-	-	-	-	-	-
CN-4	-	-	■	■	-	-	-	-	-	-	-	-	-
CN-6	-	-	-	-	■	■	-	-	-	-	-	-	-
N-6	-	-	-	-	-	-	-	■	-	-	-	-	-
N-9	-	-	-	-	-	-	■	■	-	-	■	■	■
N-13	-	-	-	-	-	-	-	-	-	■	-	-	-
Barbed bulkhead connector													
CN-4-S	-	-	■	■	-	-	-	-	-	-	-	-	-
CN-6-S	-	-	-	-	■	■	-	-	-	-	-	-	-

1) Quick coupling socket, shut-off on both sides, KD-...A-R, G¹/₈, G¹/₄ thread only

2) Quick coupling socket, steel version, KDMS6, G¹/₄, G³/₈, G¹/₂ only

3) For PX tubing only

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Quick connection coupling KD1/KS1

-  - Nominal size
1.5 mm



Technical data	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure ¹⁾ [bar]	-0.95 ... 12
Ambient temperature [°C]	-10 ... +60
Standard nominal flow rate ²⁾ [l/min]	Max. 44
Corrosion resistance classification CRC ³⁾	1

1) Safety factor 2.5

2) Measured at p1 = 6 bar and Δp = 1 bar

3) Corrosion resistance class 1 according to Festo standard 940 070

Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

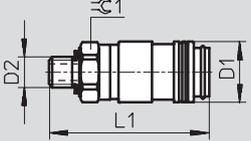
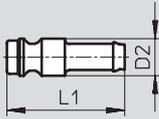
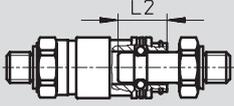
Weights [g]	Weights [g]	
	With male thread M3	With barbed connector CN-2
Coupling socket	29	-
Coupling plug	-	4

Materials	Materials	
	Coupling socket	Coupling plug
Housing	Brass, nickel-plated	Brass, nickel-plated
Releasing sleeve	Brass, nickel-plated	-

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Dimensions Download CAD data → www.festo.com/en/engineering

Coupling socket Male thread	Coupling plug Barbed fitting	Insertion depth
		

Type	D1 Ø	D2	L1	L2	±0.1
Coupling socket					
M3	6.5	M3	18.5	4.6	6
Coupling plug					
CN-2	4	–	12	4.6	–

Ordering data					
Connection	Coupling socket		Coupling plug		
	Part No.	Type	Part No.	Type	
Male thread					
M3	151 995	KD1-M3-A	–		
Barbed fitting					
CN-2	–		151 996	KS1-CN-2	

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Quick connection coupling KD2/KS2

Ø - Nominal size
2.7 mm

⌀ - Note
All quick coupling socket types of the same size are compatible with all plugs of this size.



Technical data	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure ¹⁾ [bar]	-0.95 ... 12
Ambient temperature [°C]	-10 ... +60
Standard nominal flow rate ²⁾ [l/min]	Max. 139
Corrosion resistance classification CRC ³⁾	1

- 1) Safety factor 2.5
- 2) Measured at p1 = 6 bar and Δp = 1 bar
- 3) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Weights [g]	Male thread	Female thread	Quick connector	
	M5	M5	CK-3	CK-4
Quick coupling sockets	10	12	11	16
Quick coupling plugs	5	5	4	11

Weights [g]	Barbed fitting	Barbed bulkhead connector
	CN4	CN-4-S
Quick coupling sockets	11	21
Quick coupling plugs	5	16

Materials		
	Quick coupling socket	Quick coupling plug
Housing	Brass, nickel-plated	Brass, nickel-plated
Releasing sleeve	Brass, nickel-plated	-

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Dimensions – Quick coupling socket Download CAD data → www.festo.com/en/engineering

Male thread	Female thread	Quick connector

Barbed fitting	Barbed bulkhead connector

Dimensions – Quick coupling plug Download CAD data → www.festo.com/en/engineering

Male thread	Female thread	Quick connector

Barbed fitting	Barbed bulkhead connector	Insertion depth

Type	B1	D1 ∅	D2	D3	L1		L2	C1		C2
					Quick coupling socket	Quick coupling plug		Quick coupling socket	Quick coupling plug	
Male thread										
M5	-	10	M5	-	26.25	18.2	7.95	9	9	-
Female thread										
M5	-	10	M5	-	29.05	20	7.95	9	7	-
Quick connector with union nut										
CK-3	-	10	-	-	32.55	24	7.95	9	7	8
CK-4					35.75	27.2		11	11	12
Barbed fitting										
CN-4	-	10	-	-	33.25	25.4	7.95	11	7	-
Barbed bulkhead connector										
CN-4-S	1 ... 10	10	-	M10x1	47.75	39.7	7.95	11	11	13

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Ordering data				
Type	Quick coupling socket		Quick coupling plug	
	Part No.	Type	Part No.	Type
Male thread				
M5	4 087	KD2-M5-A	531 658	KS2-M5-A
Female thread				
M5	531 620	KD2-M5-I	531 660	KS2-M5-I
Quick connector with union nut				
CK-3	531 621	KD2-CK-3	4 091	KS2-CK-3
CK-4	531 622	KD2-CK-4	4 090	KS2-CK-4
Barbed fitting				
CN-4	531 623	KD2-CN-4	531 663	KS2-CN-4
Barbed bulkhead connector				
CN-4-S	531 624	KD2-CN-4-S	531 664	KS2-CN-4-S

 Core Range

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data



Quick connection coupling KD3/KS3

-  - Nominal size
5 mm

-  - Note
All quick coupling socket types of the same size are compatible with all plugs of this size.



Technical data	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure ¹⁾ [bar]	-0.95 ... 12
Ambient temperature [°C]	-10 ... +60
Standard nominal flow rate ²⁾ [l/min]	Max. 666
Corrosion resistance classification CRC ³⁾	1

- 1) Safety factor 2.5
- 2) Measured at p1 = 6 bar and Δp = 1 bar
- 3) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Weights [g]	Male thread		Female thread	
	G ¹ / ₈	G ¹ / ₄	G ¹ / ₈	G ¹ / ₄
Quick coupling sockets	28	35	32	47
Quick coupling plugs	13	23	16	27

Weights [g]	Quick connector			Barbed fitting	Barbed bulkhead connector
	CK-4	CK-6	CX-4	CN-6	CN-6-S
Quick coupling sockets	31	32	-	27	44
Quick coupling plugs	16	21	16	8	32

Materials		
	Quick coupling socket	Quick coupling plug
Housing	Brass, nickel-plated	Brass, nickel-plated ¹⁾
Releasing sleeve	Brass, nickel-plated	-

1) KS...-CX quick coupling plug: brass

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Dimensions – Quick coupling socket Download CAD data → www.festo.com/en/engineering

Male thread	Female thread	Quick connector
Barbed fitting 	Barbed bulkhead connector 	

Dimensions – Quick coupling plug Download CAD data → www.festo.com/en/engineering

Male thread	Female thread	Quick connector
Barbed fitting 	Barbed bulkhead connector 	Insertion depth

Type	B1	D1 ∅	D2	D3	L1		L2	∅ C 1		∅ C 2
					Quick coupling socket	Quick coupling plug		Quick coupling socket	Quick coupling plug	
Male thread										
G ¹ / ₈	-	16	G ¹ / ₈	-	36	25	13.6	14	13	-
G ¹ / ₄			G ¹ / ₄	-	37.6	27.6		17	17	
Female thread										
G ¹ / ₈	-	16	G ¹ / ₈	-	38.2	28	13.6	14	13	-
G ¹ / ₄			G ¹ / ₄	-	45.2	32.6	13.6	17	17	
Quick connector with union nut										
CK-4	-	16	-	-	43.1	34.5	13.6	14	12	12
CK-6					43.2	34.6			14	14
CX-4	-	-	-	-	-	43	-	-	14	14
Barbed fitting										
CN-6	-	16	9 d10	-	43.2	28.6	13.6	14	-	-
Barbed bulkhead connector										
CN-6-S	1,1 ... 10	16	-	M12x1	58.2	48.6	13.6	17	17	17

Quick coupling sockets/plugs KD/KS, shut-off on one side

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Technical data

Ordering data					
		Quick coupling socket		Quick coupling plug	
		Part No.	Type	Part No.	Type
Male thread					
G $\frac{1}{8}$	2 142	KD3- $\frac{1}{8}$ -A		3 492	KS3- $\frac{1}{8}$ -A
G $\frac{1}{4}$	531 626	KD3- $\frac{1}{4}$ -A		531 666	KS3- $\frac{1}{4}$ -A
Female thread					
G $\frac{1}{8}$	531 627	KD3- $\frac{1}{8}$ -I		531 668	KS3- $\frac{1}{8}$ -I
G $\frac{1}{4}$	531 628	KD3- $\frac{1}{4}$ -I		531 669	KS3- $\frac{1}{4}$ -I
Quick connector with union nut					
CK-4	531 629	KD3-CK-4		3 326	KS3-CK-4
CK-6	531 630	KD3-CK-6		3 478	KS3-CK-6
CX-4	-			4 047	KS3-CX-4
Barbed fitting					
CN-6	531 631	KD3-CN-6		531 672	KS3-CN-6
Barbed bulkhead connector					
CN-6-S	531 632	KD3-CN-6-S		531 673	KS3-CN-6-S

 Core Range

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Quick connection coupling KD4/KS4

- Releasing sleeve made from polymer material

⌀ - Nominal size
7.2 mm



⌀ - Note
All quick coupling socket types of the same size are compatible with all plugs of this size.

Technical data	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure ¹⁾ [bar]	-0.95 ... 12
Ambient temperature [°C]	-10 ... +60
Standard nominal flow rate ²⁾ [l/min]	Max. 1,350
Corrosion resistance classification CRC ³⁾	1

- 1) Safety factor 2.5
- 2) Measured at p₁ = 6 bar and Δp = 1 bar
- 3) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Weights [g]	Male thread			Female thread		
	G ¹ / ₄	G ³ / ₈	G ¹ / ₂	G ¹ / ₄	G ³ / ₈	G ¹ / ₂
Quick coupling sockets	57	62	78	88	82	86
Quick coupling plugs	21	29	55	31	32	57

Weights [g]	Quick connector					Bulkhead quick connector	Barbed fitting	
	CK-4	CK-6	CK-9	CX-6	CX-9	CK-9-S	N-6	N-9
Quick coupling sockets	-	63	71	-	-	97	-	57
Quick coupling plugs	26	26	26	34	61	69	15	18

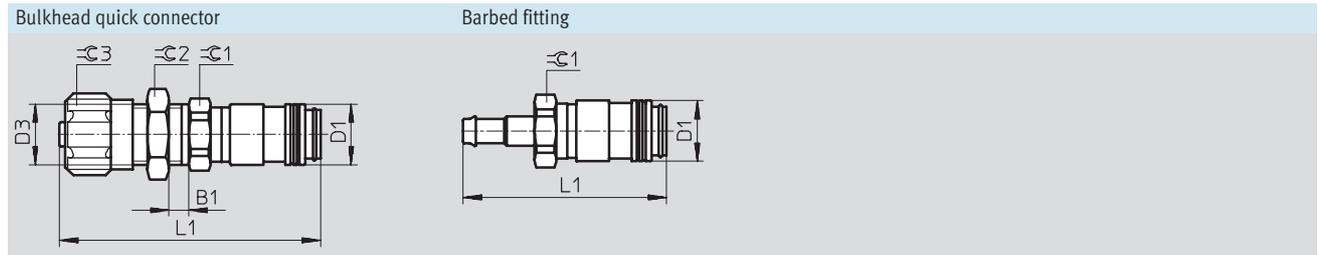
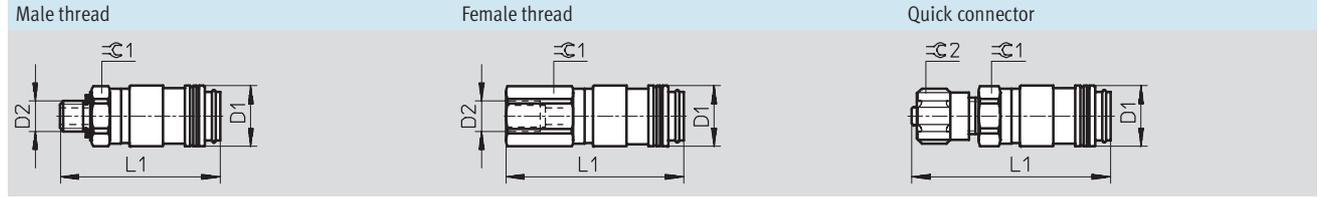
Materials	Quick coupling socket	Quick coupling plug
Housing	Brass, nickel-plated	Brass, nickel-plated ¹⁾
Releasing sleeve	Polypropylene	-

1) KS...-CX quick coupling plug: brass

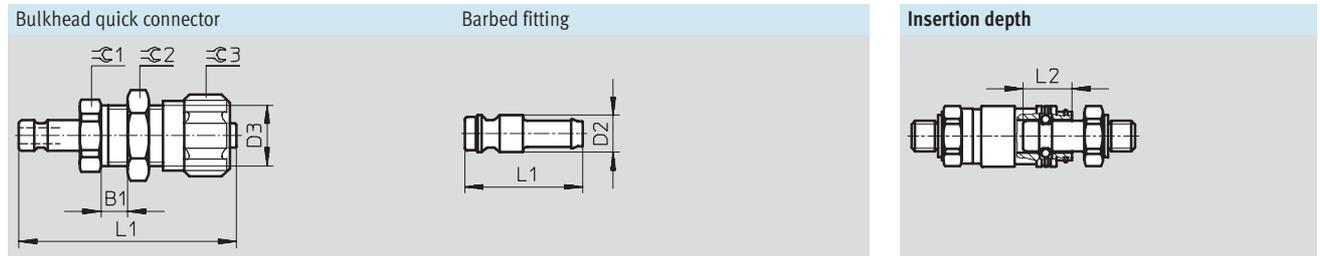
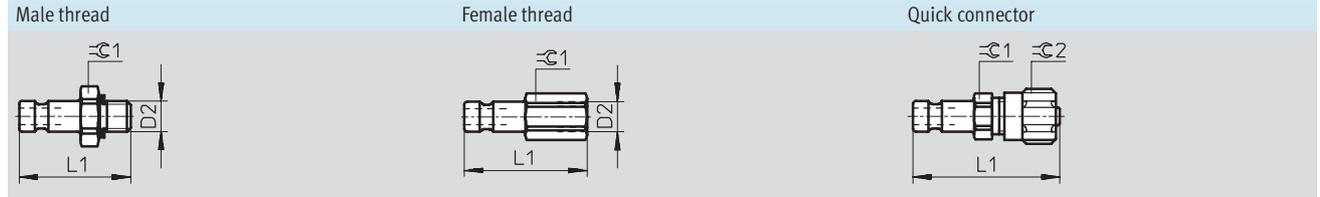
Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Dimensions – Quick coupling socket Download CAD data → www.festo.com/en/engineering



Dimensions – Quick coupling plug Download CAD data → www.festo.com/en/engineering



Quick coupling sockets/plugs KD/KS, shut-off on one side

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Technical data

Type	B1	D1 ∅	D2	D3	L1		L2	≈C 1		≈C 2	≈C 3	
					Quick coupling socket	Quick coupling plug		Quick coupling socket	Quick coupling plug			
Male thread												
G ¹ / ₄	-	26.4	G ¹ / ₄	-	40.5	32.5	14.95	22	17	-	-	
G ³ / ₈			G ³ / ₈		41.5	34			19			
G ¹ / ₂			G ¹ / ₂		43	37.5			24			24
Female thread												
G ¹ / ₄	-	26.4	G ¹ / ₄	-	46	38.5	14.95	22	17	-	-	
G ³ / ₈			G ³ / ₈		47.5	39.5			19			
G ¹ / ₂			G ¹ / ₂		50.5	44			24			24
Quick connector with union nut												
CK-4	-	-	-	-	-	40.2	14.95	22	17	12	-	
CK-6		26.4			46.4	40.3				14		
CK-9		-			49.8	43.7				19		19
CX-6		-			-	53				17		17
CX-9		-			-	60				19		22
Bulkhead quick connector with union nut												
CK-9-S	1,2 ... 18,2	26.4	-	M16x1	64.8	57.7	14.95	22	22	19	22	
Barbed fitting												
N-6	-	26.4	12	-	-	47	14.95	-	-	-	-	
N-9					56.2			21				

Ordering data												
				Quick coupling socket				Quick coupling plug				
				Part No.	Type			Part No.	Type			
Male thread												
G ¹ / ₄				2 143	KD4-1/4-A			2 154	KS4-1/4-A			
G ³ / ₈				2 144	KD4-3/8-A			2 155	KS4-3/8-A			
G ¹ / ₂				2 145	KD4-1/2-A			531 676	KS4-1/2-A			
Female thread												
G ¹ / ₄				531 636	KD4-1/4-I			531 678	KS4-1/4-I			
G ³ / ₈				531 637	KD4-3/8-I			531 679	KS4-3/8-I			
G ¹ / ₂				531 638	KD4-1/2-I			531 680	KS4-1/2-I			
Quick connector with union nut												
CK-4				-			2 150	KS4-CK-4				
CK-6				531 639	KD4-CK-6			2 151	KS4-CK-6			
CK-9				531 640	KD4-CK-9			531 683	KS4-CK-9			
CX-6				-			4 048	KS4-CX-6				
CX-9				-			4 049	KS4-CX-9				
Bulkhead quick connector with union nut												
CK-9-S				531 642	KD4-CK-9-S			531 686	KS4-CK-9-S			
Barbed fitting												
N-6				-			2 152	KS4-N-6				
N-9				531 641	KD4-N-9			2 153	KS4-N-9			

 Core Range

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Quick connection coupling KD5/KS5

-  - Nominal size
13 mm

-  - Note
All quick coupling socket types of the same size are compatible with all plugs of this size.



Technical data	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure ¹⁾ [bar]	-0.95 ... +12
Ambient temperature [°C]	-10 ... +60
Standard nominal flow rate ²⁾ [l/min]	Max. 2 043
Corrosion resistance classification CRC ³⁾	1

- 1) Safety factor 2.5
- 2) Measured at p1 = 6 bar and Δp = 1 bar
- 3) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Weights [g]	Male thread	Female thread	Quick connector	Barbed fitting
	G½	G½	CK-13	N-13
Quick coupling socket	-	413	-	-
Quick coupling plug	255	-	251	256

Materials	Quick coupling socket	Quick coupling plug
	Housing	Galvanised steel
Releasing sleeve	Galvanised steel	-

-  - Note
The non-return function means that the direction of flow must always follow the direction of the arrow.

Quick coupling sockets/plugs KD/KS, shut-off on one side

Technical data

Dimensions – Quick coupling socket	Download CAD data → www.festo.com/en/engineering
Female thread	Insertion depth

Dimensions – Quick coupling plug	Download CAD data → www.festo.com/en/engineering	
Male thread	Quick connector	Barbed fitting

Type	D1 ∅	D2	L1		L2	∅ C 1		∅ C 2
			Quick coupling socket	Quick coupling plug		Quick coupling socket	Quick coupling plug	
Female thread								
G½	40	G½	78	–	25.5	32	–	–
Male thread								
G½	36	G½	–	74.9	25.5	–	32	–
Quick connector with union nut								
CK-13	36	–	–	83.2	25.5	–	32	24
Barbed fitting								
N-13	36	–	–	94	25.5	–	32	–

Ordering data			
	Quick coupling sockets		Quick coupling plugs
	Part No.	Type	Part No. Type
Female thread			
G½	4 088	KD5-1½-I	–
Male thread			
G½	–	–	531 687 KS5-½-A
Quick connector with union nut			
CK-13	–	–	4 096 KS5-CK-13
Barbed fitting			
N-13	–	–	4 089 KS5-N-13

Core Range

Quick coupling sockets/plugs KD/KS, shut-off on both sides

Technical data

Quick connection coupling KD3-A-R/KS3-A-R

■ For applications involving liquid media

⌀ - Nominal size
5 mm



KD3-...-A-R



KS3-...-A-R

⌀ - Note

Only coupling plugs and sockets of the same function and size may be combined.

⌀ - Nominal size
7.2 mm



KD4-...-A-R



KS4-...-A-R

Technical data		KD3/KS3	KD4/KS4
Operating medium		Filtered compressed air, lubricated or unlubricated	
Operating pressure ¹⁾	[bar]	-0.95 ... 12	
Ambient temperature	[°C]	-10 ... +60	
Standard nominal flow rate ²⁾	[l/min]	Max. 666	1 350
Corrosion resistance classification	CRC ³⁾	1	

1) Safety factor 2.5

2) Measured at p₁ = 6 bar and Δp = 1 bar

3) Corrosion resistance class 1 according to Festo standard 940 070

Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Weights [g]		
	KD3/KS3	KD4/KS4
	G ³ / ₈	G ¹ / ₄
Quick coupling socket	28	58
Quick coupling plug	32	46

Materials				
	Quick coupling socket	Quick coupling plug	Quick coupling socket	Quick coupling plug
	KD3	KS3	KD4	KS4
Housing	Brass		Brass	
Releasing sleeve	Brass	-	Polypropylene	-

Quick coupling sockets/plugs KD/KS, shut-off on both sides

Technical data

Dimensions Download CAD data → www.festo.com/en/engineering

Quick coupling socket Male thread	Quick coupling plug	Insertion depth

Type	D1 ∅	D2	L1		L2	≅ 1	
			Quick coupling socket	Quick coupling plug		Quick coupling socket	Quick coupling plug
male thread							
G ¹ / ₈	16	G ¹ / ₈	36	39.8	13.6	14	14
G ¹ / ₄	26.4	G ¹ / ₄	40.5	42.5	14.95	22	22

Ordering data				
Connection	Quick coupling socket		Quick coupling plug	
	Part No.	Type	Part No.	Type
G ¹ / ₈	531 659	KD3- ¹ / ₈ -A-R	531 667	KS3- ¹ / ₈ -A-R
G ¹ / ₄	531 694	KD4- ¹ / ₄ -A-R	531 677	KS4- ¹ / ₄ -A-R

Core Range

Quick coupling sockets/plugs KDMS/KDS/KSS, shut-off on one side

Technical data



Safety coupling made from steel

⌀ - Nominal size
7.8 mm

 - Note
All quick coupling socket types of the same size are compatible with all plugs of this size.



Safety coupling made from brass

■ Releasing sleeve made from polymer material

⌀ - Nominal size
7.8 mm

 - Note
All quick coupling socket types of the same size are compatible with all plugs of this size.



Technical data		KDMS	KDS/KSS
Operating medium		Filtered compressed air, lubricated or unlubricated	
Operating pressure ¹⁾	[bar]	-0.95 ... 12	
Ambient temperature	[°C]	-10 ... +60	
Standard nominal flow rate ²⁾	[l/min]	Max. 2,043	Max. 1,818
Corrosion resistance classification	CRC ³⁾	1	

1) Safety factor 2.5

2) Measured at p₁ = 6 bar and Δp = 1 bar

3) Corrosion resistance class 1 according to Festo standard 940 070

Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

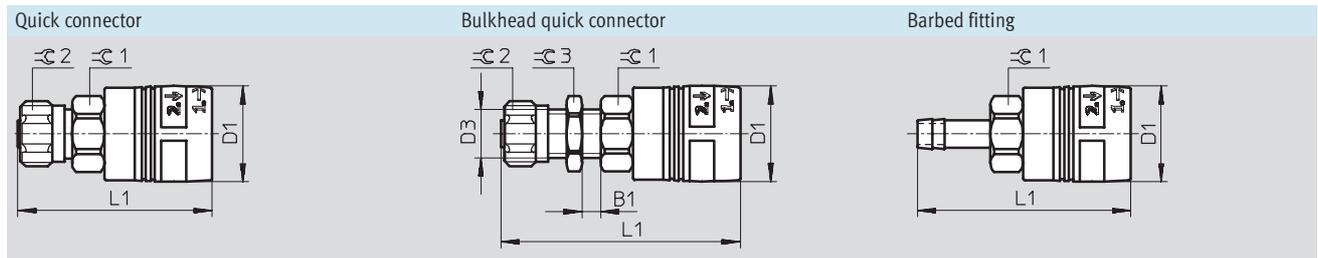
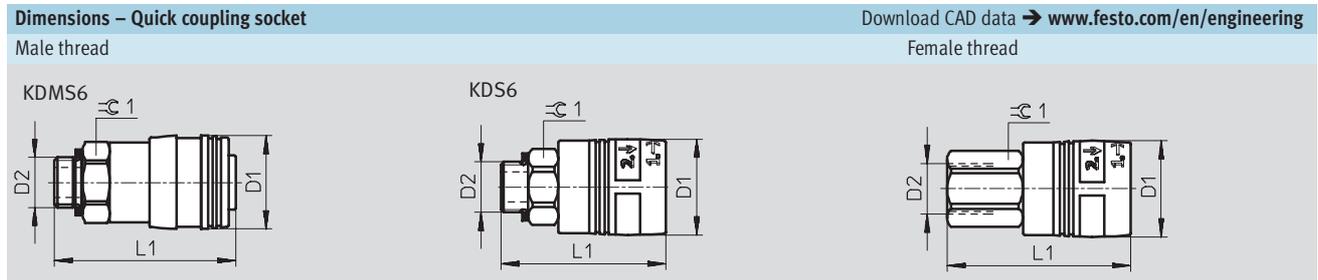
Weights [g]	Male thread				Female thread		
	G ³ / ₈	G ¹ / ₄	G ³ / ₈	G ¹ / ₂	G ¹ / ₄	G ³ / ₈	G ¹ / ₂
Quick coupling sockets KDMS-...	-	167	170	175	-	-	-
Quick coupling sockets KDS-...	-	93	96	111	125	115	121
Quick coupling plugs	19	20	27	50	28	29	49

Weights [g]	Quick connector		Bulkhead quick connector	Barbed fitting
	CK-9	CK-13	CK-9-S	N-6
Quick coupling sockets KDMS-...	-	-	-	-
Quick coupling sockets KDS-...	104	121	122	97
Quick coupling plugs	37	50	64	17

Materials	Quick coupling socket		Quick coupling plug
	KDMS	KDS	KSS
Housing	Nickel plated steel	Brass, nickel-plated	Hardened steel
Releasing sleeve	Nickel plated steel	Polyacetal	-

Quick coupling sockets/plugs KDMS/KDS/KSS, shut-off on one side

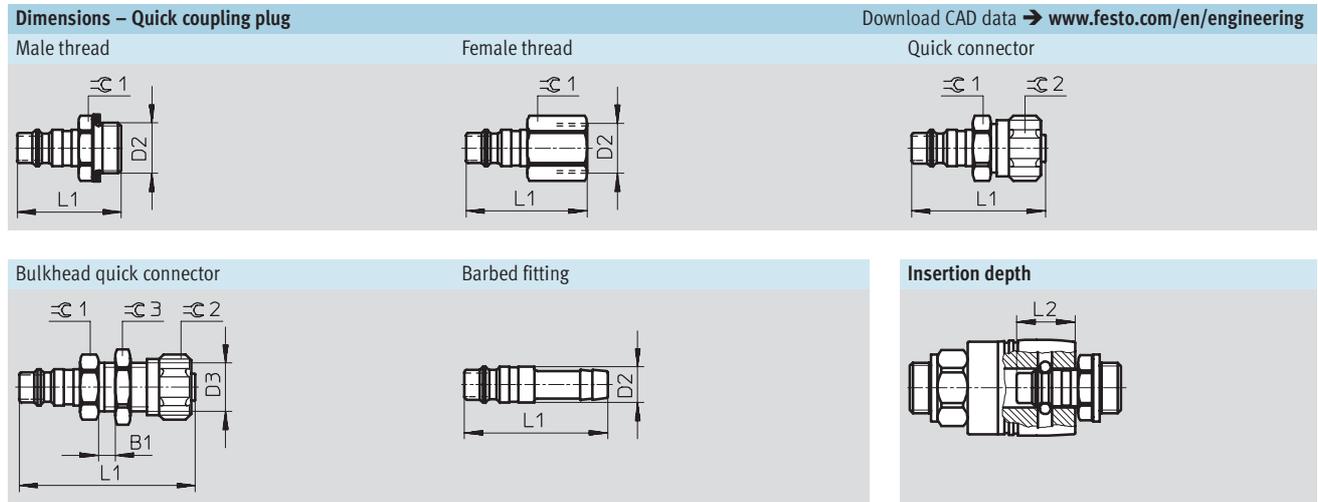
Technical data



Type	B1	D1 Ø	D2	D3	L1	≈C 1	≈C 2	≈C 3
Male thread, steel version								
G ¹ / ₄	-	31	G ¹ / ₄	-	59	24	-	-
G ³ / ₈			G ³ / ₈		60			
G ¹ / ₂			G ¹ / ₂		61.5			
Male thread, brass version								
G ¹ / ₄	-	31.6	G ¹ / ₄	-	53	22	-	-
G ³ / ₈			G ³ / ₈		54	22		
G ¹ / ₂			G ¹ / ₂		55.5	24		
Female thread								
G ¹ / ₄	-	31.6	G ¹ / ₄	-	60	22	-	-
G ³ / ₈			G ³ / ₈		60	22		
G ¹ / ₂			G ¹ / ₂		63	24		
Quick connector with union nut								
CK-9	-	31.6	-	-	63.5	22	19	-
CK-13					64.5	24	24	
Bulkhead quick connector with union nut								
CK-9-S	1,2 ... 18,2	31.6	-	M16x1	78.5	22	19	22
Barbed fitting								
N-9	-	31.6	12	-	69.7	22	-	-

Quick coupling sockets/plugs KDMS/KDS/KSS, shut-off on one side

Technical data



Type	B1	D1 Ø	D2	D3	L1	L2	$\varnothing 1$	$\varnothing 2$	$\varnothing 3$
Male thread, steel version									
G $\frac{1}{4}$	-	31	G $\frac{1}{4}$	-	-	19.5	-	-	-
G $\frac{3}{8}$			G $\frac{3}{8}$						
G $\frac{1}{2}$			G $\frac{1}{2}$						
Male thread, brass version									
G $\frac{1}{8}$	-	31.6	G $\frac{1}{8}$	-	30.5	19.1	13	-	-
G $\frac{1}{4}$			G $\frac{1}{4}$		32.5		17		
G $\frac{3}{8}$			G $\frac{3}{8}$		34		19		
G $\frac{1}{2}$			G $\frac{1}{2}$		37.5		24		
Female thread									
G $\frac{1}{4}$	-	31.6	G $\frac{1}{4}$	-	38.5	19.1	17	-	-
G $\frac{3}{8}$			G $\frac{3}{8}$		39.5		19		
G $\frac{1}{2}$			G $\frac{1}{2}$		44		24		
Quick connector with union nut									
CK-9	-	31.6	-	-	43.7	19.1	19	19	-
CK-13					45.2		24	24	
Bulkhead quick connector with union nut									
CK-9-S	1,2 ... 18,2	31.6	-	M16x1	57.5	19.1	22	19	22
Barbed fitting									
N-9	-	31.6	12	-	47	19.1	-	-	-

Quick coupling sockets/plugs KDMS/KDS/KSS, shut-off on one side

FESTO

Technical data

Ordering data			
Connection	Quick coupling socket		Quick coupling plug
	Part No.	Type	Part No. Type
Male thread, steel version			
G $\frac{1}{4}$	151 776	KDMS6- $\frac{1}{4}$ -A	151 779 KSS6- $\frac{1}{4}$ -A
G $\frac{3}{8}$	151 777	KDMS6- $\frac{3}{8}$ -A	151 780 KSS6- $\frac{3}{8}$ -A
G $\frac{1}{2}$	151 778	KDMS6- $\frac{1}{2}$ -A	531 693 KSS6- $\frac{1}{2}$ -A
Male thread, brass version			
G $\frac{1}{8}$	-		151 781 KSS6- $\frac{1}{8}$ -A
G $\frac{1}{4}$	531 647	KDS6- $\frac{1}{4}$ -A	151 779 KSS6- $\frac{1}{4}$ -A
G $\frac{3}{8}$	531 648	KDS6- $\frac{3}{8}$ -A	151 780 KSS6- $\frac{3}{8}$ -A
G $\frac{1}{2}$	531 649	KDS6- $\frac{1}{2}$ -A	531 693 KSS6- $\frac{1}{2}$ -A
Female thread			
G $\frac{1}{4}$	531 650	KDS6- $\frac{1}{4}$ -I	531 695 KSS6- $\frac{1}{4}$ -I
G $\frac{3}{8}$	531 651	KDS6- $\frac{3}{8}$ -I	531 696 KSS6- $\frac{3}{8}$ -I
G $\frac{1}{2}$	531 652	KDS6- $\frac{1}{2}$ -I	531 697 KSS6- $\frac{1}{2}$ -I
Quick connector with union nut			
CK-9	531 653	KDS6-CK-9	531 698 KSS6-CK-9
CK-13	531 654	KDS6-CK-13	531 699 KSS6-CK-13
Bulkhead quick connector with union nut			
CK-9-S	531 656	KDS6-CK-9-S	531 701 KSS6-CK-9-S
Barbed fitting			
N-9	531 655	KDS6-N-9	531 700 KSS6-N-9

 Core Range

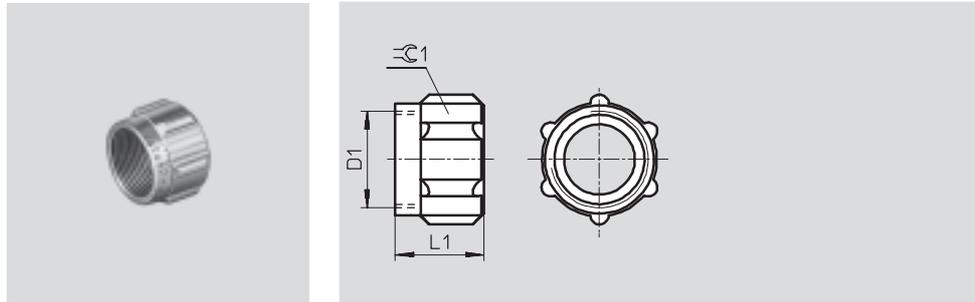
Union nut MCK

Accessories



Union nut MCK¹⁾
for quick connector

Material:
Wrought aluminium alloy



Ordering data						
Nominal size [mm]	D1	L1	$\approx \text{C} 1$	Weight [g]	Part No.	Type
3	M6x0.75	8.5	8	0.6	533 672	MCK-PK-3-KD
4	M10x1	11	12	1.6	533 673	MCK-PK-4-KD
6	M12x1	11	14	1.9	533 674	MCK-PK-6-KD
9	M16x1	14.4	19	5	533 675	MCK-PK-9-KD
13	M22x1	18	24	8	533 676	MCK-PK-13-KD

1) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

What must be observed when using Festo components?

Specified limit values for technical data and any specific instructions must be adhered to by the user in order to ensure recommended operating conditions.

When pneumatic components are used, the user shall ensure that they are operated using correctly prepared compressed air without aggressive media.

When Festo components are used in safety-oriented applications, the user shall ensure that all applicable

national and local safety laws and regulations, for example the machine directive, together with the relevant references to standards are observed. Unauthorised conversions or modifications to products and systems from Festo involve a safety risk and are thus not permissible.

Festo does not accept any liability for resulting damages.

You should contact Festo's advisors if one of the following apply to your application:

- The ambient conditions and conditions of use or the operating medium differ from the specified technical data.
- The product is to perform a safety function.
- A risk or safety analysis is required.
- You are unsure about the product's suitability for use in the planned application.
- You are unsure about the product's suitability for use in safety-oriented applications.

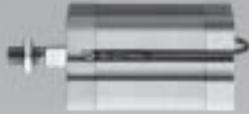
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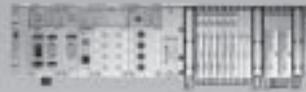
Products and services – everything from a single source

Products incorporating new ideas are created when enthusiasm for technology and efficiency come together. Tailor-made service goes without saying when the customer is the focus of attention.



Pneumatic and electrical drives

- Pneumatic cylinders
- Semi-rotary drives
- Handling modules
- Servopneumatic positioning systems
- Electromechanical drives
- Positioning controllers and controllers



Valves and valve terminals

- Standard valves
- Universal and application-optimised valves
- Manually and mechanically actuated valves
- Shut-off, pressure control and flow control valves
- Proportional valves
- Safety valves

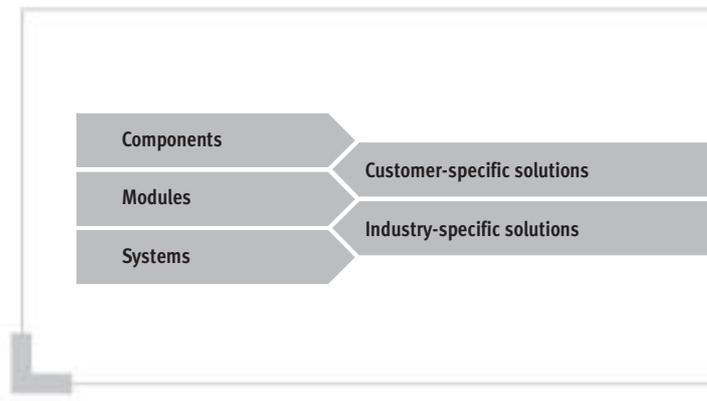
Fieldbus systems/ electrical peripherals

- Fieldbus Direct
- Installation system CP/CPI
- Modular electrical terminal CPX



Compressed air preparation

- Service unit combinations
- Filter regulators
- Filters
- Pressure regulators
- Lubricators
- On-off and soft-start valves
- Dryers
- Pressure amplifiers
- Accessories for compressed air preparation



Services from Festo to increase your productivity – across the entire value creation sequence



Engineering – for greater speed in the development process

- CAD models
- 14 engineering tools
- Digital catalogue
- FluidDRAW®
- More than 1,000 technical consultants and project engineers worldwide
- Technical hotlines



Supply chain – for greater speed in the procurement process

- E-commerce and online shop
- Online order tracking
- Euro special manufacturing service
- Logistics optimisation



Gripping and vacuum technology

- Vacuum generators
- Vacuum grippers
- Vacuum security valves
- Vacuum accessories
- Standard grippers
- Micro grippers
- Precision grippers
- Heavy-duty grippers



Sensors and monitoring units

- Proximity sensors
- Pressure and flow sensors
- Display and operating units
- Inductive and optical proximity sensors
- Displacement encoders for positioning cylinders
- Optical orientation detection and quality inspection



Controllers/bus systems

- Pneumatic and electropneumatic controllers
- Programmable logic controllers
- Fieldbus systems and accessories
- Timers/counters
- Software for visualisation and data acquisition
- Display and operating units



Accessories

- Pipes
- Tubing
- Pipe connectors and fittings
- Electrical connection technology
- Silencers
- Reservoirs
- Air guns

All in all, 100% product and service quality

A customer-oriented range with unlimited flexibility: Components combine to produce ready-to-install modules and systems. Included in this are special designs – since at Festo, most industry-specific products and customer-specific solutions are based on the 23,000 plus catalogue products. Combined with the services for the entire value creation sequence, the end result is unbeatable economy.



Assembly – for greater speed in the assembly/commissioning process

- Prepack
- Preassembly
- Turnkey pneumatics
- Handling solutions



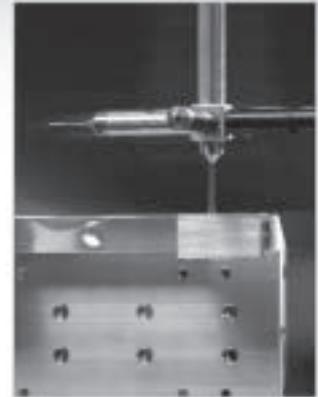
Operation – for greater speed in the operational process

- Spare parts service
- Energy saving service
- Compressed air consumption analysis
- Compressed air quality analysis
- Customer service

Aspects of quality

Quality can be viewed from a number of aspects. A short virtual tour of the Research and Development department, the Production department or the Customer Service Centre speaks more than a thousand words.

3D engineering and simulation



Innovation quality

Let's look at some of the figures:

- 6.5% of turnover
- 2,800 patents with 100 new applications every year
- 3D engineering and simulation
- 10,600 employees worldwide
- Each and every one of them a lateral thinker

Production quality

Your interest is quality and economy – therefore we place considerable value on:

- Minimum production tolerances
- Ultra-modern, proprietary production methods
- Core competencies in production
- Defined quality standards across the entire production chain
- Strict quality assurance systems: on that you can depend.



Price quality

More service for less money. Many of the new and further developments in the Festo product range have one thing in common: they are technically superior and more attractively priced than their predecessor product. Examples are to be found in all product segments: among the drives, valves, valve terminals; among the service units, and among the range of accessories.



Range quality

For individual solutions. Festo offers components as industry-specific catalogue products as well as standards-based and highly individual special designs. Ready-to-install combinations of these components play an integral part in the Festo product portfolio as modules or systems. Incidentally, an increasing number of components can be individually configured as modular products.



Didactic quality

To complement the products and services for automation, Festo Didactic offers exceptionally efficient training hardware, learning software and seminars of the highest quality. Optimally tailored to your value creation sequence. In short – training in practical applications for practical application.