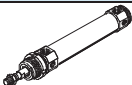
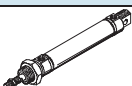
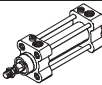
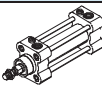


## Corrosion resistant cylinders - Inch Series

**FESTO**



- Corrosion-resistant in aggressive environmental conditions
- Easy to clean design
- Wide choice of variants
- Comprehensive range of accessories

Product range overview										
Function	Version	Type	Piston Ø [in]	Stroke [in]	Force [lbf]	Variants				
						A	P	PPV	S6	S2
Double-acting	Round cylinders									
		CRDSW	1-1/4, 1-5/8, 2, 2-1/2	0.4 ... 20	108 ... 420	■	■	–	–	–
	Standard cylinders									
		CRDSNU	1/2, 5/8	0.4 ... 8	12 ... 60	■	■	–	–	■
			3/4	0.4 ... 13						
			1	0.4 ... 19.7						
		CRDNG	1-1/4, 1-5/8, 2, 2-1/2, 3, 4, 5	0.4 ... 78	108 ... 1,654	■	–	■	■	■
	Standard cylinders with swivel bearing at rear									
	CRDNGS	1-1/4, 1-5/8, 2, 2-1/2, 3, 4, 5	0.4 ... 78	108 ... 1,654	■	–	■	■	–	

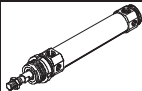
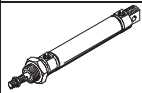
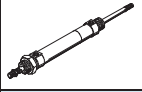
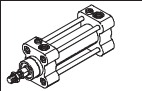
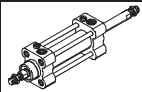
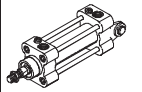
### Variants

A Magnet for position sensing	PPV Adjustable air cushioning at both ends	S6 Heat-resistant seals up to 302 °F
P Flexible cushioning rings at both ends		S2 Through piston rod

# Corrosion-resistant cylinders - Inch Series

Product range overview

**FESTO**

Function	Design	Type	Piston Ø	Standard stroke	Magnet for position sensing	Cushioning	
			[in]	[in]		Non-adjustable at both ends	Adjustable at both ends
					A	P	PPV
Double-acting	Round cylinders						
		<b>CRDSW</b> Piston rod at one end	1-1/4, 1-5/8, 2, 2-1/2	0.4 ... 20	■	■	–
		<b>CRDSNU</b> Piston rod at one end	1/2, 5/8	0.4 ... 8	■	■	–
			3/4	0.4 ... 13			
			1	0.4 ... 19.7			
		<b>CRDSNU- ... -S2</b> Through piston rod	1/2, 5/8	0.4 ... 8	■	■	–
			3/4	0.4 ... 13			
			1	0.4 ... 19.7			
	Tie rod cylinders						
		<b>CRDNG</b> Piston rod at one end	1-1/4, 1-5/8, 2, 2-1/2, 3, 4, 5	0.4 ... 78	■	–	■
		<b>CRDNG- ... -S2</b> Through piston rod	1-1/4, 1-5/8, 2, 2-1/2, 3, 4, 5	0.4 ... 78	■	–	■
	Tie rod cylinders with swivel bearing at rear						
		<b>CRDNGS</b> Piston rod at one end	1-1/4, 1-5/8, 2, 2-1/2, 3, 4, 5	0.4 ... 78	■	–	■

# Round cylinders CRDSW, corrosion-resistant - Inch Series

FESTO

Technical data

Double-acting



Diameter

1-1/4 ... 2-1/2 in

Stroke length

0.04 ... 20 in



General technical data				
Piston Ø	1-1/4	1-5/8	2	2-1/2
Pneumatic connection	1/8" NPT	1/4" NPT	1/4" NPT	3/8" NPT
Piston rod thread	3/8-24 UNF	1/2-20 UNF	1/2-20 UNF	5/16-18 UNF
Constructional design	Piston			
	Piston rod			
	Cylinder barrel			
Cushioning	Flexible cushioning rings at both ends			
Magnet for position sensing <sup>1)</sup>	Standard			

1) Position sensing via magnetic proximity sensor (ordered separately, see accessories).

Operating and environmental conditions				
Piston Ø	1-1/4	1-5/8	2	2-1/2
Operating medium	Filtered compressed air, lubricated or unlubricated			
Operating pressure	15 ... 150 psi			
Ambient temperature <sup>2)</sup> [°F]	-4 ... +176			
Corrosion resistance class CRC <sup>3)</sup>	4			

2) Note operating range of proximity sensors

3) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Forces [lbf]				
Piston Ø	1-1/4	1-5/8	2	2-1/2
Theoretical force at 90 psi, advancing	108.6	169.5	264.8	420.4
Theoretical force at 90 psi, retracting	93.3	142.3	222.6	378.1

Weights [oz]				
Piston Ø	1-1/4	1-5/8	2	2-1/2
Basic weight at 0 inch stroke	23.6	51.5	69.1	117.3
Additional weight per 1 inch stroke	1.6	2.0	3.1	3.7

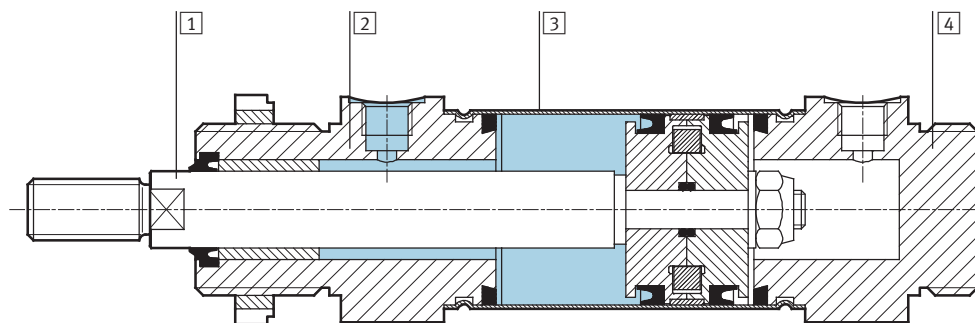
# Round cylinders CRDSW, corrosion-resistant - Inch Series

Technical data

**FESTO**

## Materials

Sectional view

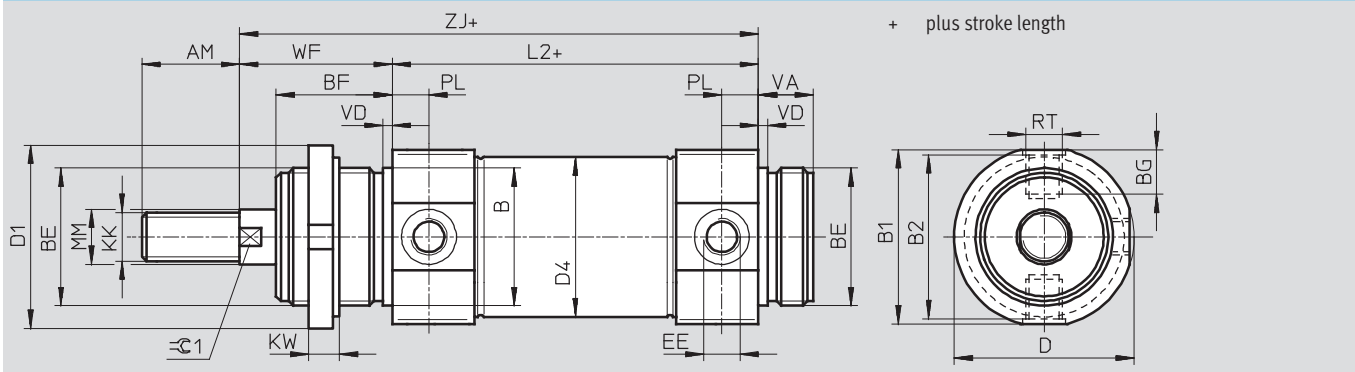


## Cylinder

1	Piston rod	High-alloy stainless steel
2	Bearing cap	High-alloy stainless steel
3	Cylinder barrel	High-alloy stainless steel
4	End cap	High-alloy stainless steel
-	Seals	Polyurethane

## Dimensions

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)



Ø [in]	AM	B Ø	B1	B2	BE	BF	BG	D Ø	D1 Ø	D4 Ø	EE
1-1/4	0.8	1.2	1.5	1.4	M30x1.5	1.2	0.3	1.6	1.7	1.3	1/8" NPT
1-5/8	0.9	1.5	1.8	1.8	M38x1.5	1.4	0.4	1.9	2.0	1.6	1/4" NPT
2	1.3	1.8	2.2	2.2	M45x1.5	1.5	0.5	2.3	2.4	2.1	1/4" NPT
2-1/2	1.3	1.8	2.8	2.6	M45x1.5	1.5	0.6	2.8	2.4	2.6	3/8" NPT

Ø [in]	KK	KW	MM Ø	L2	RT	PL	VA	VD	WF	ZJ	C1 [mm]
1-1/4	3/8-24 UNF	0.3	0.5	3.8	M8x1	0.4	0.6	0.1	1.5	5.3	10
1-5/8	1/2-20 UNF	0.4	0.6	4.4	M10x1	0.5	0.6	0.1	1.8	6.2	13
2	5/16-18 UNF	0.4	0.8	4.7	M12x1.5	0.5	0.7	0.1	2.0	6.7	17
2-1/2	5/16-18 UNF	0.4	0.8	4.9	M14x1.5	0.5	0.7	0.1	2.0	6.9	17

Dimensions are in inches, unless otherwise noted.

# Round cylinders CRDSW, corrosion-resistant - Inch Series

**FESTO**

Ordering Data

M Mandatory data				
Function	Piston Ø	Stroke	Cushioning	Magnet for position sensing
CRDSW	1 1/4 1 5/8 2 2 1/2	0.04 ... 20	P	A
<b>CRDSW</b>	<b>- 2</b>	<b>- 3</b>	<b>- P</b>	<b>- A</b>

Ordering table						
Size	1 1/4	1 5/8	2	2 1/2	Code	Enter code
M Function	Round cylinders, corrosion resistant				<b>CRDSW</b>	CRDSW
Piston Ø [in]	1 1/4	1 5/8	2	2 1/2	-...	
Stroke [in]	0.04 ... 20				-...	
Cushioning	Flexible cushioning rings at both ends				<b>-P</b>	-P
Magnet for position sensing <sup>1)</sup>	Standard				<b>-A</b>	-A

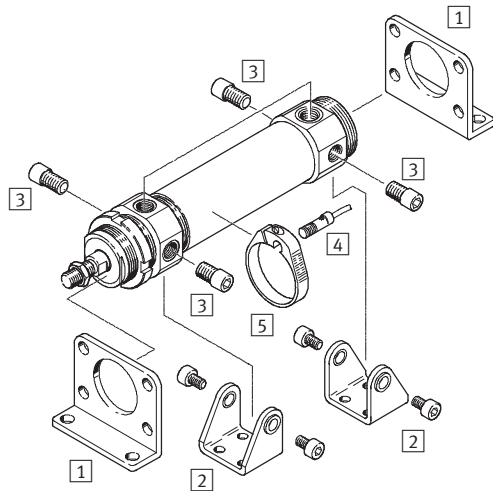
1) Position sensing via magnetic proximity sensor (ordered separately, see accessories).

Transfer order code

<b>CRDSW</b>	-		-		-	<b>P</b>	-	<b>A</b>
--------------	---	--	---	--	---	----------	---	----------

# Round cylinders CRDSW, corrosion-resistant - Inch Series

Accessories overview



Mounting attachments and accessories	
	Description
1 Foot mounting CRH (2 pieces)	For bearing and end cap
1 Flange mounting CRFV	For bearing and end cap
2 Clevis foot CRSBS	For bearing and end cap
3 Pivot bolt CRGBS	For bearing and end cap
4 Proximity sensor CRSMEO-4	With LED for operating status indication
5 Mounting kit CRSMBR	For proximity sensor CRSMEO-4

# Round cylinders CRDSNU, corrosion-resistant - Inch Series

FESTO

Technical data

Double-acting

- Through piston rod available (S2)



Diameter

1/2 ... 1 in

Stroke length

0.4 ... 19.7 in



General technical data				
Piston Ø	1/2	5/8	3/4	1
Pneumatic connection	10-32 UNF	10-32 UNF	1/8" NPT	1/8" NPT
Piston rod thread	1/4-20 UNC	1/4-20 UNC	5/16-24 UNF	3/8-24 UNF
Constructional design	Piston			
	Piston rod			
	Cylinder barrel			
Cushioning	Flexible cushioning rings at both ends			
Magnet for position sensing <sup>1)</sup>	Standard			

1) Position sensing via magnetic proximity sensor (ordered separately, see accessories).

Operating and environmental conditions				
Piston Ø	1/2	5/8	3/4	1
Operating medium	Filtered compressed air, lubricated or unlubricated			
Operating pressure [psi]	15 ... 150			
Ambient temperature <sup>2)</sup> [°F]	-4 ... +176			
Corrosion resistance class CRC <sup>3)</sup>	4			

2) Note operating range of proximity sensors

3) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Forces [lbf] and impact energy [ft-lbf]				
Piston Ø	1/2	5/8	3/4	1
Theoretical force at 90 psi, advancing	12.4	23.4	37.1	60
Theoretical force at 90 psi, retracting	8.5	19.6	31.5	49.5
Max. impact energy at end positions	0.05	0.11	0.15	0.22

Weights [oz]				
Piston Ø	1/2	5/8	3/4	1
Basic weight at 0 inch stroke	4.2	5.3	11.3	15.9
Additional weight per 1 inch stroke	0.38	0.43	0.65	0.9

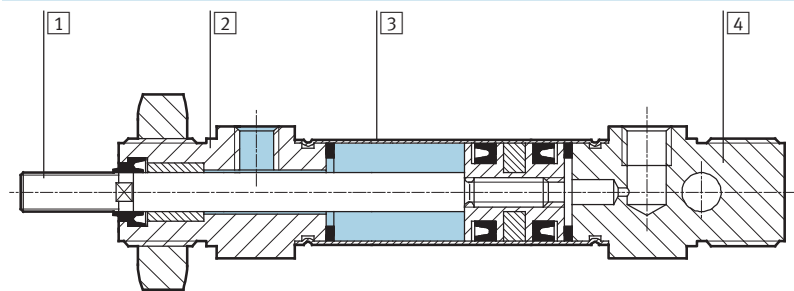
# Round cylinders CRDSNU, corrosion-resistant - Inch Series



Technical data

## Materials

Sectional view



Cylinder		
1	Piston rod	High-alloy stainless steel
2	Bearing cap	High-alloy stainless steel
3	Cylinder barrel	High-alloy stainless steel
4	End cap	High-alloy stainless steel
-	Seals	Polyurethane



# Round cylinders CRDSNU, corrosion-resistant - Inch Series

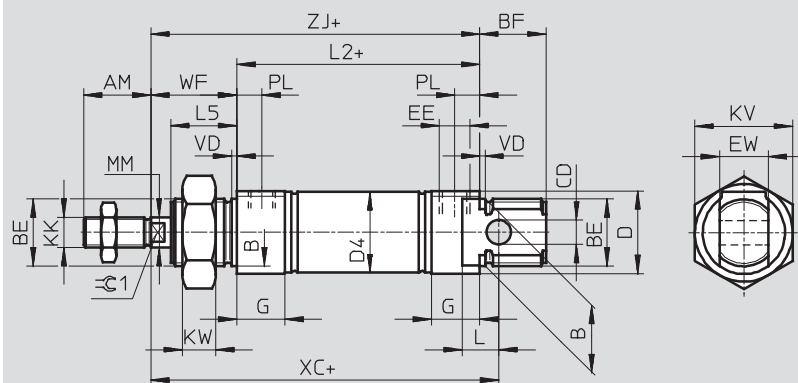
Technical data

**FESTO**

## Dimensions

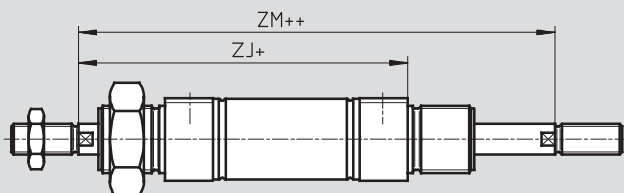
Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

### Basic version



+ plus stroke length

### S2 – Through piston rod



+ plus stroke length  
++ plus 2 stroke lengths

Ø [in]	AM	B	BE	BF	CD	D	D4	EE	EW	G	KK	KV
1/2	0.6	0.6	M16x1.5	0.7	0.2	0.8	0.5	10-32 UNF	0.5	0.4	1/4-20 UNC	0.9
5/8	0.6	0.6	M16x1.5	0.7	0.2	0.8	0.7	10-32 UNF	0.5	0.4	1/4-20 UNC	0.9
3/4	0.8	0.9	M22x1.5	0.8	0.3	1.2	0.8	1/8" NPT	0.6	0.6	5/16-24 UNF	1.3
1	0.9	0.9	M22x1.5	0.9	0.3	1.2	1.0	1/8" NPT	0.6	0.6	3/8-24 UNF	1.3

Ø [in]	KW	MM	L	L2	L5	PL	VD	WF	XC	ZJ	ZM	≈C1 [mm]
1/2	0.3	0.2	0.4	2.0	0.6	0.2	0.1	0.9	3.0	2.8	3.7	5
5/8	0.3	0.2	0.4	2.2	0.6	0.2	0.1	0.9	3.2	3.1	3.9	5
3/4	0.4	0.3	0.5	2.7	0.7	0.3	0.1	0.9	3.7	3.6	4.6	7
1	0.4	0.4	0.5	2.7	0.8	0.3	0.1	1.1	4.1	3.8	4.9	9

Dimensions are in inches, unless otherwise noted.

# Round cylinders CRDSNU, corrosion-resistant - Inch Series

Ordering Data

**FESTO**

M Mandatory data					O Options
Function	Piston Ø	Stroke	Cushioning	Magnet for position sensing	Type of piston rod
CRDSNU	1/2 5/8 3/4 1	0.04 ... 19.7	P	A	S2
CRDSNU	- 1	- 6	- P	- A	-

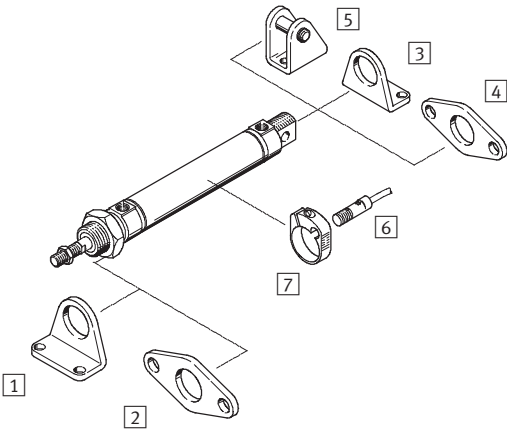
Ordering table						
Size	1/2	5/8	3/4	1	Code	Enter code
M Function	Standard cylinders				CRDSNU	CRDSNU
Piston Ø [in]	1/2	5/8	3/4	1	-...	
Stroke [in]	0.04 ... 19.7				-...	
Cushioning	Flexible cushioning rings at both ends				-P	-P
Magnet for position sensing	For use with magnetic proximity sensors				-A	-A
O Type of piston rod	Through piston rod				-S2	

Transfer order code

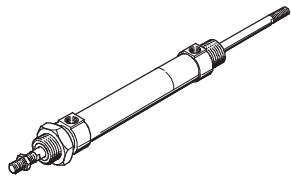
CRDSNU - - - P - A -

# Round cylinders CRDSNU, corrosion-resistant - Inch Series

Accessories overview



Variant
CRDSNU-S2



Mounting attachments and accessories		
	Description	
3	Foot mounting CRHBN	For bearing and end cap
4	Flange mounting CRFBN	For bearing or end cap
5	Clevis foot CRLBN	For direct mounting on end cap
6	Proximity sensor CRSMEO-4	With LED for operating status indication
7	Mounting kit CRSMBR	For proximity sensor CRSMEO-4

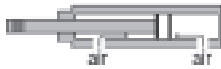
# Tie rod cylinders CRDNG, corrosion resistant - Inch Series

FESTO

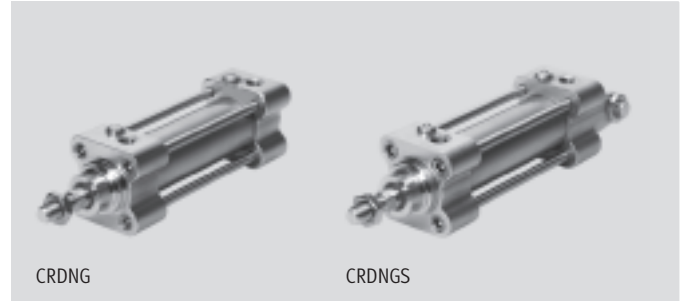
Technical data

Double-acting

- Through piston rod available (S2)



- N- Diameter  
1-1/4 ... 5
- T- Stroke length  
0.4 ... 78



General technical data							
Piston Ø	1-1/4	1-5/8	2	2-1/2	3	4	5
Pneumatic connection	1/8" NPT	1/4" NPT		3/8" NPT		1/2" NPT	
Piston rod thread	3/8-24 UNF-2A	1/2-20 UNF-2A	5/8-18 UNF-2A		3/4 -16 UNF-2A		1-12 UNF-2A
Constructional design	Piston						
	Piston rod						
	Cylinder barrel						
Cushioning	Adjustable air cushioning at both ends						
Cushioning length [in]	0.79	0.79	0.91	0.91	1.18	1.18	1.57
Magnet for position sensing <sup>1)</sup>	Standard						

1) Position sensing via magnetic proximity sensor (ordered separately, see accessories).

Operating and environmental conditions	
CRDNG/CRDNGS	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure	9 ... 150 psi
Ambient temperature <sup>2)</sup> [°F]	-4 ... +176
Corrosion resistance class CRC <sup>3)</sup>	4

2) Note operating range of proximity sensors

3) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Forces [lbf]							
Piston Ø	1-1/4	1-5/8	2	2-1/2	3	4	5
Theoretical force at 90 psi, advancing	108	170	265	420	678	1059	1654
Theoretical force at 90 psi, retracting	93	142	223	378	612	993	1547

# Tie rod cylinders CRDNG, corrosion resistant - Inch Series

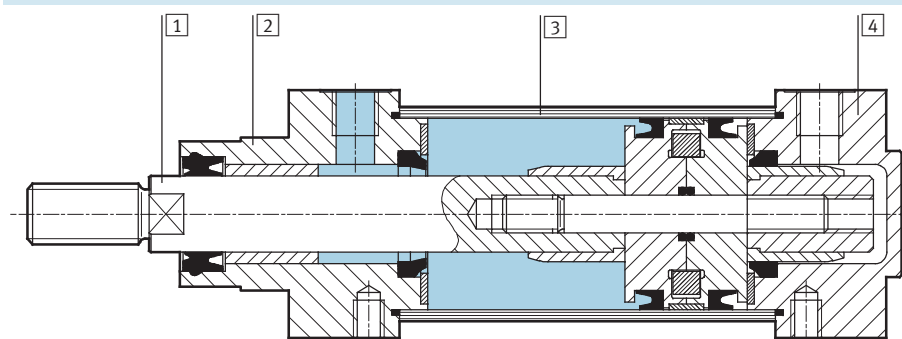
Technical data

**FESTO**

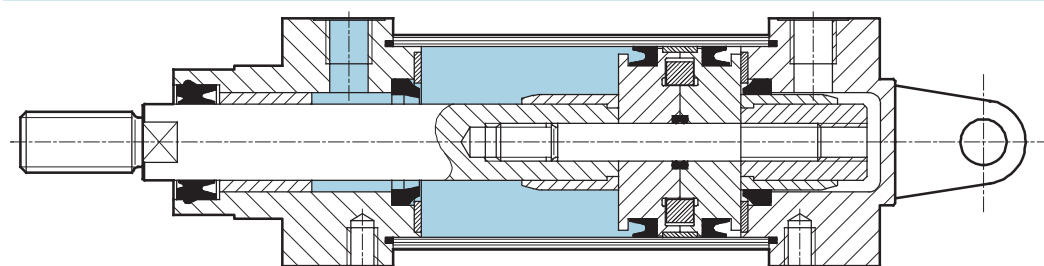
Weights [oz]							
Piston Ø	1-1/4	1-5/8	2	2-1/2	3	4	5
CRDNG							
Basic weight at 0 inch stroke	36.9	48.0	76.2	121.9	209.4	284.7	
Additional weight per 1 inch stroke	1.8	2.7	5.4	5.4	9.0	9.9	
CRDNGS							
Basic weight at 0 inch stroke	37.7	51.5	82.2				
Additional weight per 1 inch stroke	1.8	2.7	5.4				

## Materials

### Sectional view CRDNG



### Sectional view CRDNGS



CRDNG/CRDNGS		
1	Piston rod	High-alloy stainless steel
2	Bearing cap	Stainless steel casting
3	Cylinder barrel	High-alloy stainless steel
4	End cap	Stainless steel casting
–	Tie rod	High-alloy stainless steel
–	Seals	Polyurethane, nitrile rubber

# Tie rod cylinders CRDNG, corrosion resistant - Inch Series

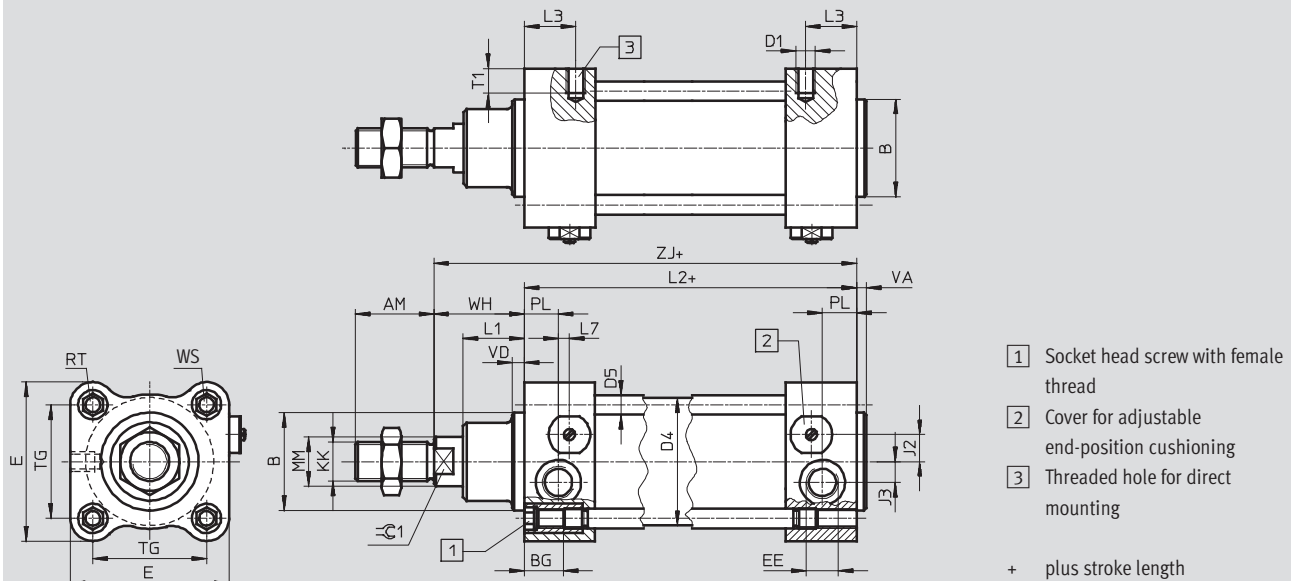
Technical data

**FESTO**

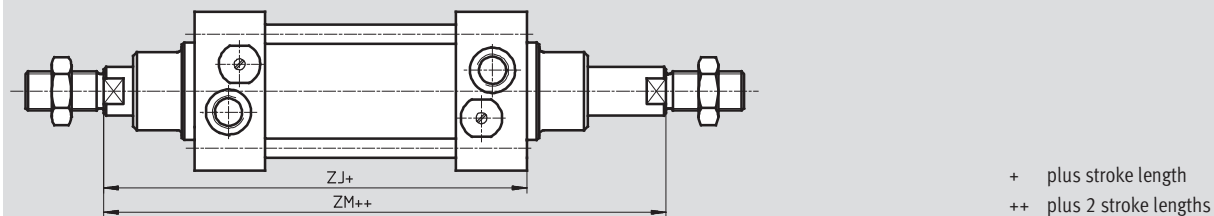
## Dimensions

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

### CRDNG



### S2 – Through piston rod



Ø [in]	AM	B Ø	BG	D1	D4 Ø	D5 Ø	E	EE	J2	J3	KK	L1	L2
1-1/4	0.9	1.2	0.6	M6	1.3	0.2	2.0	1/8" NPT	0.3	0.2	3/8-24 UNF-2A	0.6	3.7
1-5/8	0.9	1.4	0.6	M6	1.6	0.2	2.2	1/4" NPT	0.4	0.3	1/2-20UNF-2A	0.7	4.1
2	1.3	1.6	0.6	M8	2.1	0.3	2.6	1/4" NPT	0.5	0.3	5/8-18UNF-2A	1.0	4.2
2-1/2	1.3	1.8	0.6	M10	2.6	0.3	3.0	3/8" NPT	0.6	0.5	5/8-18UNF-2A	1.0	4.8
3	1.6	1.8	0.9	M10	3.3	0.4	3.9	3/8" NPT	0.6	0.5	3/4-16UNF-2A	1.2	5.0
4	1.6	2.2	0.9	M12	4.0	0.4	4.7	1/2" NPT	0.9	0.6	3/4-16UNF-2A	1.4	5.4
5	2.1	2.4	0.9	M12	5.1	0.5	5.7	1/2" NPT	1.1	0.3	1-12UNF-2A	1.2	6.3

Ø [in]	L3	L7	MM Ø	PL	RT	T1	TG	VA	VD	WH	ZJ	ZM	⌀C1 [mm]	WS [mm]
1-1/4	0.5	0.2	0.5	0.5	M6	0.4	1.3	0.2	0.2	1.0	4.7	5.8	0.4	HEX 6
1-5/8	0.6	0.1	0.6	0.6	M6	0.4	1.5	0.2	0.2	1.2	5.3	6.6	0.5	HEX 6
2	0.8	0.2	0.8	0.6	M8	0.4	1.8	0.2	0.2	1.5	5.6	7.2	0.7	HEX 8
2-1/2	0.9	0.2	0.8	0.7	M8	0.5	2.2	0.2	0.2	1.5	6.2	7.8	0.7	HEX 8
3	0.9	0.2	1.0	0.7	M10	0.6	2.8	0.2	0.2	1.8	6.9	8.7	0.9	HEX 10
4	0.9	0.4	1.0	0.7	M10	0.7	3.5	0.2	0.2	2.0	7.4	9.4	0.9	HEX 10
5	0.9	0.2	1.3	1.1	M12	0.7	4.3	0.2	0.2	2.6	8.9	11.5	1.1	HEX 12

Dimensions are in inches, unless otherwise noted.

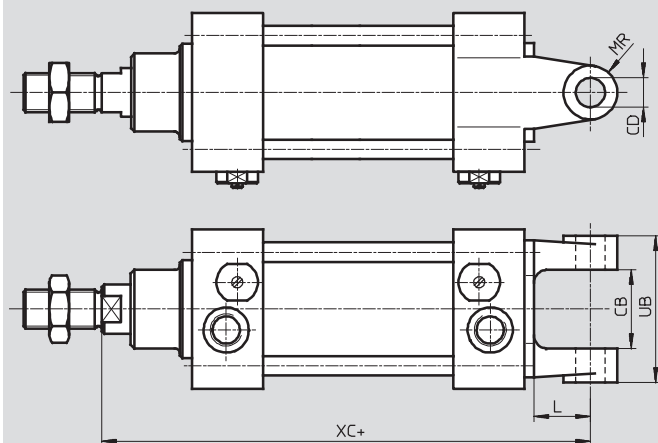
# Tie rod cylinders CRDNG, corrosion resistant - Inch Series

Technical data

**FESTO**

## Dimensions

CRDNGS



+ plus stroke length

Ø [in]	CB	CD Ø	L	MR	UB	XC
1-1/4	1.0	0.4	0.7	0.4	1.8	5.6
1-5/8	1.1	0.5	0.8	0.4	2.0	6.3
2	1.3	0.5	0.9	0.4	2.4	6.7
2-1/2	1.6	0.6	1.1	0.5	2.8	7.5
3	2.0	0.6	1.3	0.5	3.5	8.3
4	2.4	0.8	1.5	0.7	4.3	9.1
5	2.8	1.0	1.7	0.9	5.1	10.9

Dimensions are in inches, unless otherwise noted.

# Tie rod cylinders CRDNG, corrosion-resistant - Inch Series

Ordering Data

**FESTO**

M Mandatory data					O Options
Function	Piston Ø	Stroke	Cushioning	Magnet for position sensing	Type of piston rod
CRDNG CRDNGS	1 1/4 1 5/8 2 2 1/2 3 4	0.4 ... 78	PPV	A	S2
CRDNG	- 2	- 6	- PPV	- A	-

Ordering table								
Size	1 1/4	1 5/8	2	2 1/2	3	4	Code	Enter code
M	Function						CRDNG	
	Tie rod cylinders, corrosion resistant							
	Tie rod cylinders, corrosion resistant, rear swivel flange						CRDNGS	
	Piston Ø [in]	1 1/4	1 5/8	2	2 1/2	3	4	~...
	Stroke [in]	0.4 ... 78					~...	
	Cushioning	Adjustable air cushioning at both ends					-PPV	-PPV
O	Magnet for position sensing <sup>1)</sup>	Standard					-A	-A
	Type of piston rod	Through piston rod <sup>2)</sup>					-S2	

1) Position sensing via magnetic proximity sensor (ordered separately, see accessories).

2) Through piston rod, -S2, is not available with CRDNGS (swivel flange).

Transfer order code

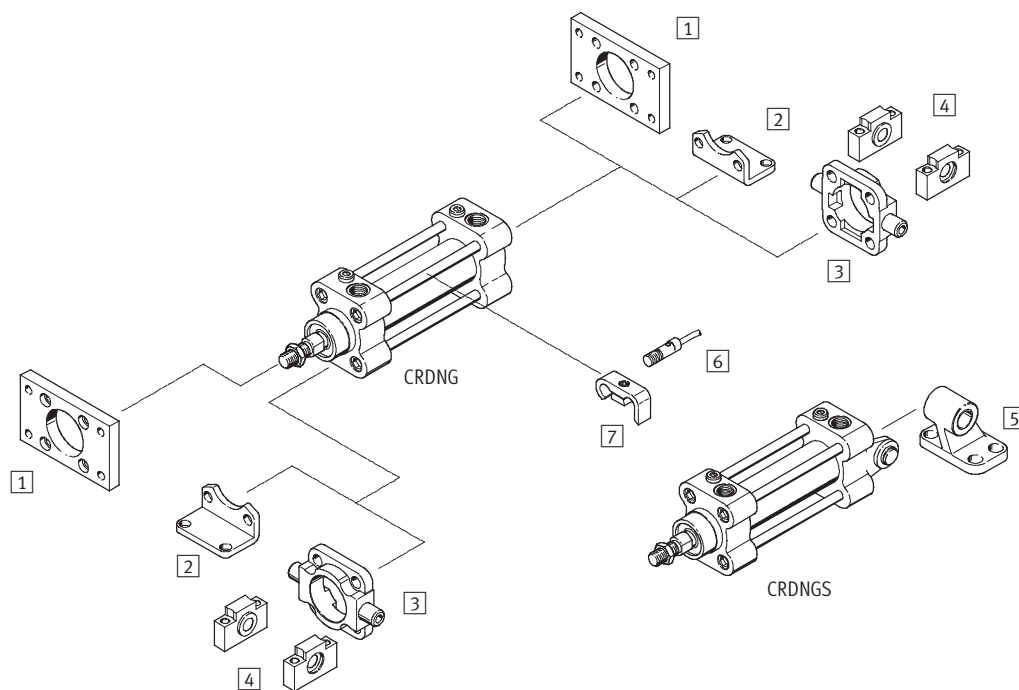
CRDNG - - - PPV - A -



# Tie rod cylinders CRDNG, corrosion resistant - Inch Series

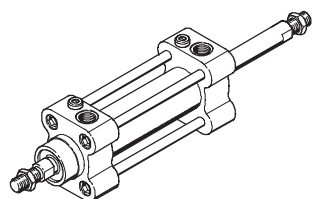
Accessories overview

**FESTO**



## Variant

CRDNG-S2



Mounting attachments and accessories				
	Description	CRDNG	CRDNGS	
1	Flange mounting CRFNG	For bearing or end cap	■	–
4	Foot mounting CRHNC	For bearing and end cap	■	–
5	Trunnion flange CRZNG	For bearing and end cap in combination with trunnion supports CRLNZG	■	–
6	Trunnion support CRLNZG	For supporting trunnion flange CRZNG	■	–
7	Clevis foot CRLNG	For variant with swivel flange	–	■
8	Proximity sensor CRSME0-4	With LED for operating status indication	■	■
9	Mounting kit CRSMB	For proximity sensor CRSME0-4	■	■

## Corrosion-resistant cylinders – Inch Series

Accessories

**FESTO**

### Foot mounting CRHBN

Scope of delivery:

CRHBN-... x1: 1 foot

CRHBN-... x2: 2 feet, 1 nut

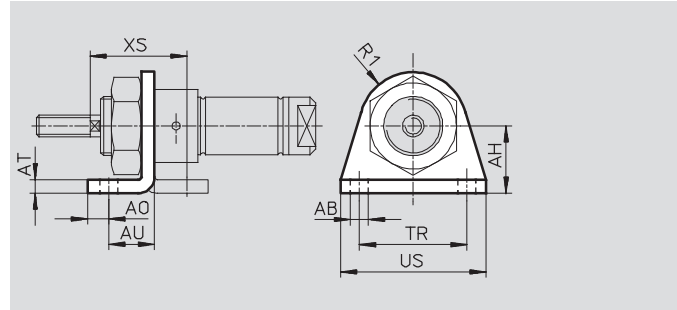
Material:

High-alloy steel

Free of copper, PTFE and silicone



CRHBN-... x2



#### Dimensions and ordering data

For Ø [in]	AB Ø	AH	AO	AT	AU	R1	TR	US	XS	CRC <sup>1)</sup>	Weight [oz]	Part No.	Type
1/2	0.2	0.8	0.2	0.2	0.5	0.5	1.3	1.7	1.3	4	1.4	161866	CRHBN-12/16x1
5/8	0.2	0.8	0.2	0.2	0.5	0.5	1.3	1.7	1.3	4	3.4	162999	CRHBN-12/16x2
3/4	0.3	1.0	0.3	0.2	0.6	0.8	1.6	2.1	1.4	4	1.9	161867	CRHBN-20/25x1
1	0.3	1.0	0.3	0.2	0.6	0.8	1.6	2.1	1.6	4	3.5	162998	CRHBN-20/25x2

1) Corrosion resistance class 4 according to Festo standard 940 070.

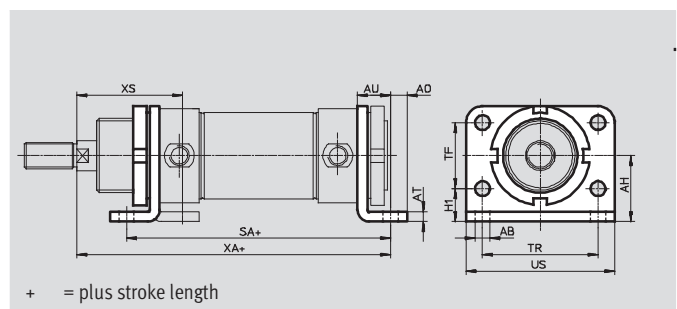
Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

### Foot mounting CRH

Material:

High-alloy steel

Free of copper, PTFE and silicone



#### Dimensions and ordering data

For Ø [in]	AB Ø	AH	AO	AT	AU	H1	SA	TF	TR	US	XA	XS	CRC <sup>1)</sup>	Weight [oz]	Part No.	Type
1-1/4	0.3	1.1	0.3	0.2	0.6	0.6	4.9	1.1	2.0	2.6	5.8	1.9	4	8.4	162951	CRH-32
1-5/8	0.4	1.3	0.4	0.2	0.8	0.7	6.0	1.2	2.4	3.1	7.0	2.4	4	12.0	162952	CRH-40
2	0.4	1.6	0.4	0.2	0.8	0.8	6.3	1.6	2.8	3.5	7.5	2.5	4	19.7	162953	CRH-50
2-1/2	0.4	1.8	0.4	0.2	0.8	0.8	6.5	2.0	3.0	3.8	7.7	2.5	4	24.0	162954	CRH-63

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions are in inches, unless otherwise noted.

# Corrosion-resistant cylinders – Inch Series

Accessories

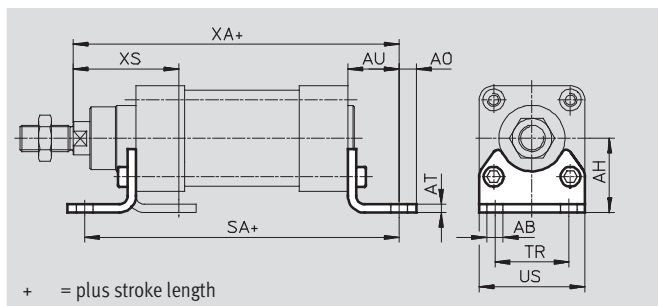
**FESTO**

## Foot mounting CRHNC

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	AB Ø	AH	AO	AT	AU	SA	TR	US	XA	XS	CRC <sup>1)</sup>	Weight	Part No. Type
[in]												[oz]	
1-1/4	0.3	1.3	0.3	0.2	0.9	5.6	1.3	1.8	5.7	1.8	4	4.8	176937 CRHNC-32
1-5/8	0.4	1.4	0.4	0.2	1.1	6.3	1.4	2.1	6.4	2.1	4	6.3	176938 CRHNC-40
2	0.4	1.8	0.4	0.2	1.2	6.6	1.8	2.5	6.9	2.5	4	11.5	176939 CRHNC-50
2-1/2	0.4	2.0	0.5	0.2	1.3	7.3	2.0	3.0	7.5	2.5	4	14.3	176940 CRHNC-63
3	0.5	2.5	0.6	0.2	1.6	8.3	2.5	3.7	8.5	3.2	4	28.9	176941 CRHNC-80
4	0.6	2.8	0.7	0.2	1.6	8.7	3.0	4.3	9.0	3.4	4	35.3	176942 CRHNC-100
5	0.6	3.5	0.9	0.3	1.8	9.8	3.5	5.2	10.6	4.0	4	64.9	176943 CRHNC-125

1) Corrosion resistance class 4 according to Festo standard 940 070.

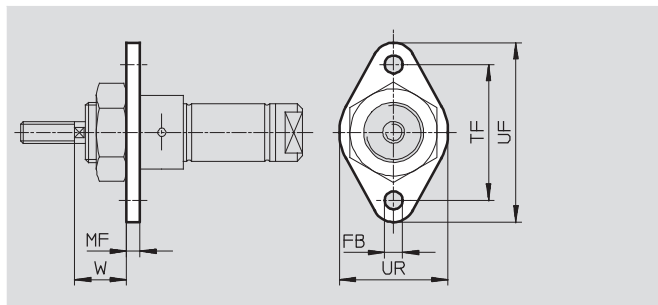
Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

## Flange mounting CRFBN

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data									
For Ø	FB Ø	MF	TF	UF	UR	W	CRC <sup>1)</sup>	Weight	Part No. Type
[in]								[oz]	
1/2, 5/8	0.2	0.2	1.6	2.1	1.2	0.7	4	0.9	161864 CRFBN-12/16
3/4, 1	0.3	0.2	2.0	2.6	1.6	0.7	4	1.6	161865 CRFBN-20/25

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions are in inches, unless otherwise noted.

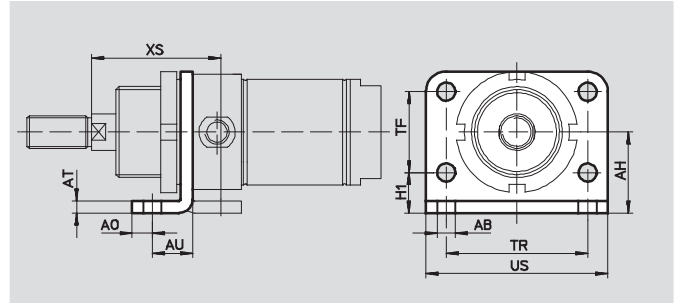
# Corrosion-resistant cylinders – Inch Series

Accessories

**FESTO**

## Flange mounting CRFV

Material:  
High-alloy steel  
Free of copper, PTFE and silicone



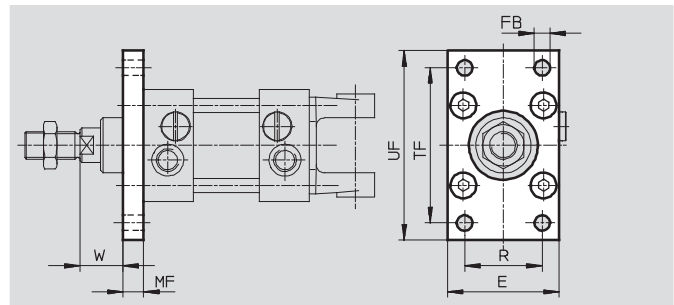
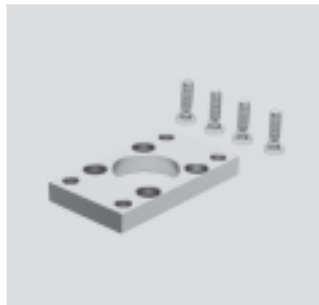
Dimensions and ordering data													
For Ø	AB Ø	AH	AO	AT	AU	H1	TF	TR	US	XS	CRC <sup>1)</sup>	Weight	Part No. Type
[in]												[oz]	
1-1/4	0.3	1.1	0.3	0.2	0.6	0.6	1.1	2.0	2.6	1.9	4	3.6	161858 CRFV-32
1-5/8	0.4	1.3	0.4	0.2	0.7	0.7	1.2	2.4	3.1	2.4	4	6.7	161859 CRFV-40
2	0.4	1.6	0.4	0.2	0.7	0.8	1.6	2.8	3.5	2.5	4	10.2	161860 CRFV-50
2-1/2	0.4	1.8	0.4	0.2	0.7	0.8	2.0	3.0	3.8	2.5	4	12.9	161861 CRFV-63

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

## Flange mounting CRFNG

Material:  
High-alloy steel  
Free of copper, PTFE and silicone



Dimensions and ordering data										
For Ø	E	FB Ø	MF	R	TF	UF	W	CRC <sup>1)</sup>	Weight	Part No. Type
[in]									[oz]	
1-1/4	1.8	0.3	0.4	1.3	2.5	3.1	0.6	4	8.5	161846 CRFNG-32
1-5/8	2.1	0.4	0.4	1.4	2.8	3.5	0.8	4	10.6	161847 CRFNG-40
2	2.6	0.4	0.5	1.8	3.5	4.3	1.0	4	19.4	161848 CRFNG-50
2-1/2	3.0	0.4	0.5	2.0	3.9	4.7	1.0	4	25.0	161849 CRFNG-63
3	3.7	0.5	0.6	2.5	5.0	5.9	1.2	4	59.3	161850 CRFNG-80
4	4.3	0.6	0.6	3.0	5.9	6.9	1.4	4	86.4	161851 CRFNG-100
5	5.2	0.6	0.8	3.5	7.1	8.3	1.8	4	129.1	185363 CRFNG-125

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions are in inches, unless otherwise noted.

# Corrosion-resistant cylinders – Inch Series

Accessories

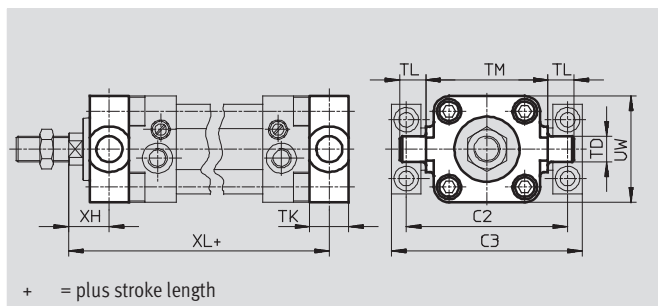
**FESTO**

## Trunnion flange CRZNG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data												
For Ø	C2	C3	TD Ø	TK	TL	TM	UW	XH	XL	CRC <sup>1)</sup>	Weight	Part No. Type
[in]											[oz]	
1-1/4	2.8	3.4	0.5	0.6	0.5	2.0	2.0	0.7	5.0	4	5.3	161852 CRZNG-32
1-5/8	3.4	4.1	0.6	0.8	0.6	2.5	2.2	0.8	5.7	4	9.2	161853 CRZNG-40
2	3.9	4.6	0.6	0.9	0.6	3.0	2.6	1.0	6.1	4	15.2	161854 CRZNG-50
2-1/2	4.6	5.4	0.8	0.9	0.8	3.5	3.0	1.0	6.7	4	22.6	161855 CRZNG-63
3	5.4	6.1	0.8	1.1	0.8	4.3	3.9	1.3	7.4	4	45.9	161856 CRZNG-80
4	6.5	7.4	1.0	1.5	1.0	5.2	4.7	1.3	8.2	4	84.7	161857 CRZNG-100
5	7.6	8.5	1.0	2.0	1.0	6.3	5.9	1.6	9.8	4	127.0	185362 CRZNG-125

1) Corrosion resistance class 4 according to Festo standard 940 070.

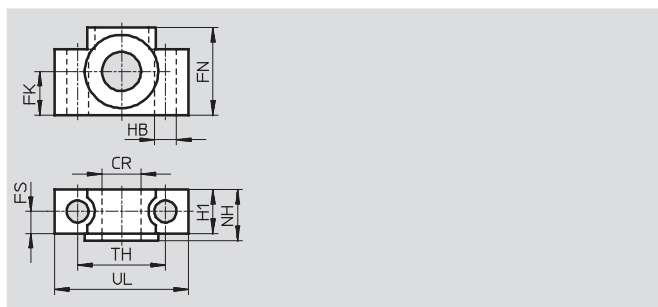
Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

## Trunnion support CRLNZG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data												
For Ø	CR Ø	FK Ø	FN	FS	H1	HB Ø	NH	TH	UL	CRC <sup>1)</sup>	Weight	Part No. Type
[in]											[oz]	
1-1/4	0.5	0.6	1.2	0.4	0.6	0.3	0.7	1.3	1.8	4	7.1	161874 CRLNZG-32
1-5/8, 2	0.6	0.7	1.4	0.5	0.7	0.4	0.8	1.4	2.2	4	11.6	161875 CRLNZG-40/50
2-1/2, 3	0.8	0.8	1.6	0.5	0.8	0.4	0.9	1.7	2.6	4	15.5	161876 CRLNZG-63/80
4/5	1.0	1.0	2.0	0.6	1.0	0.6	1.1	2.0	3.0	4	26.1	161877 CRLNZG-100/125

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions are in inches, unless otherwise noted.

## Corrosion-resistant cylinders – Inch Series

Accessories

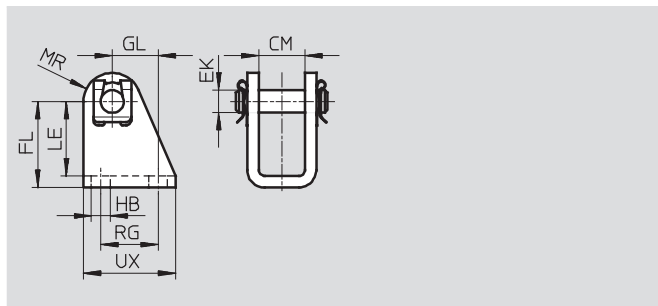
**FESTO**

### Clevis foot CRLBN

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data												
For Ø	CM	EK Ø	FL	GL	HB	LE	MR	RG	UX	CRC <sup>1)</sup>	Weight [oz]	Part No. Type
[in]												
1/2, 5/8	0.5	0.2	1.1	0.5	0.2	0.9	0.3	0.6	1.0	4	1.9	161862 CRLBN-12/16
3/4, 1	0.6	0.3	1.2	0.6	0.3	1.0	0.4	0.8	1.3	4	2.2	161863 CRLBN-20/25
1-1/4	0.6	0.4	1.4	0.7	0.3	1.2	0.4	0.9	1.4	4	3.8	195866 CRLBN-32
1-5/8	0.7	0.5	1.6	1.0	0.4	1.4	0.5	1.2	1.8	4	6.5	195867 CRLBN-40
2, 2-1/2	0.8	0.6	1.8	1.1	0.4	1.5	0.6	1.3	2.0	4	10.2	195868 CRLBN-50/63

1) Corrosion resistance class 4 according to Festo standard 940 070.

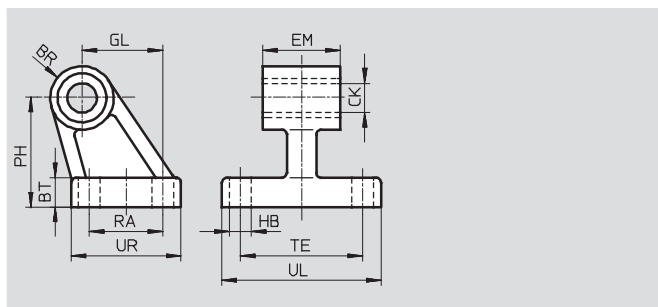
Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

### Clevis foot mounting CRLNG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data															
For Ø	BR	BT	CK Ø	EB Ø	EM	GL	HB Ø	OF	PH	RA	TE	UL	UR	CRC <sup>1)</sup>	Weight [oz]
[in]															
1-1/4	0.4	0.3	0.4	–	1.0	0.8	0.3	–	1.3	0.7	1.5	2.0	1.2	4	4.2
1-5/8	0.4	0.4	0.5	–	1.1	0.9	0.3	–	1.4	0.9	1.6	2.1	1.4	4	5.6
2	0.5	0.5	0.5	–	1.3	1.3	0.4	–	1.8	1.2	2.0	2.6	1.8	4	9.9
2-1/2	0.6	0.5	0.6	0.6	1.6	1.5	0.4	0.4	2.0	1.4	2.0	2.6	2.0	4	13.2
3	0.6	0.6	0.6	0.7	2.0	1.9	0.4	0.5	2.5	1.6	2.6	3.4	2.4	4	20.5
4	0.7	0.6	0.8	0.7	2.4	2.2	0.4	0.5	2.8	2.0	3.0	3.8	2.8	4	33.0
5	0.9	0.8	1.0	0.8	2.7	2.8	0.6	0.7	3.5	2.4	3.7	4.9	3.5	4	89.2

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions are in inches, unless otherwise noted.

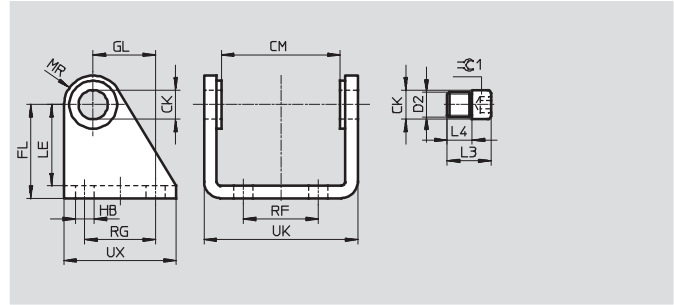
## Corrosion-resistant cylinders – Inch Series

Accessories

FESTO

### Clevis foot CRSBS

Material:  
High-alloy steel



#### Dimensions and ordering data

For Ø [in]	CK Ø	CM	D1 Ø	D2	FL	GL	H1	HB Ø	L3	L4	LE
1-1/4	0.4	1.5	0.6	M8x1	1.4	0.8	0.2	0.3	0.6	0.3	1.2
1-5/8	0.5	1.8	0.8	M10x1	1.6	1.1	0.2	0.4	0.7	0.4	1.4
2	0.6	2.2	0.9	M12x1.5	1.8	1.2	0.2	0.4	0.9	0.5	1.5
2-1/2	0.6	2.8	0.9	M14x1.5	2.0	1.3	0.2	0.4	1.1	0.6	1.7

For Ø [in]	MR	RF	RG	UK	UX	⌀1 [mm]	CRC <sup>1)</sup>	Weight [oz]	Part No.	Type
1-1/4	0.5	0.8	0.9	2.0	1.6	5	4	4.6	162955	CRSBS-32
1-5/8	0.5	1.1	1.2	2.4	2.0	6	4	7.1	162956	CRSBS-40
2	0.6	1.4	1.3	2.9	2.1	6	4	10.9	162957	CRSBS-50
2-1/2	0.6	1.7	1.4	3.5	2.6	8	4	15.5	162958	CRSBS-63

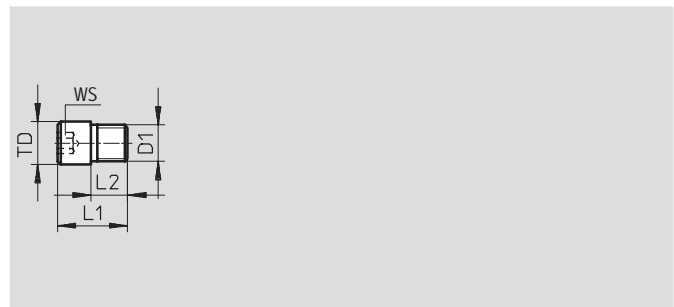
1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

### Pivot bolt CRGBS

For swivel mounting

Material:  
High-alloy steel  
Free of copper, PTFE and silicone



#### Dimensions and ordering data

For Ø [in]	D1	L1	L2	TD Ø	WS [mm]	CRC <sup>1)</sup>	Weight [oz]	Part No.	Type
1-1/4	M8x1	0.6	0.3	0.4	HEX 5	4	0.4	163132	CRGBS-32
1-5/8	M10x1	0.7	0.4	0.5	HEX 6	4	0.7	163133	CRGBS-40
2	M12x1.5	0.9	0.5	0.6	HEX 6	4	1.4	163134	CRGBS-50
2-1/2	M14x1.5	1.1	0.6	0.6	HEX 8	4	2.3	163135	CRGBS-63

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions are in inches, unless otherwise noted.

## Corrosion-resistant cylinders – Inch Series

Accessories

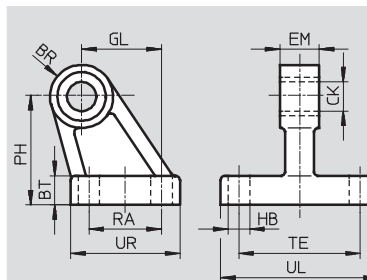
**FESTO**

### Clevis foot CRLMC

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data																	
For Ø	BR	BT	CK Ø	EB Ø	EM	GL	HB Ø	OF	PH	RA	TE	UL	UR	CRC <sup>1)</sup>	Weight	Part No.	Type
[in]															[oz]		
1-1/4	0.4	0.3	0.4	–	0.4	0.8	0.3	–	1.3	0.7	1.5	2.0	1.2	4	3.6	197320	CRLMC-32
1-5/8	0.4	0.4	0.5	–	0.5	0.9	0.3	–	1.4	0.9	1.6	2.1	1.4	4	4.9	197321	CRLMC-40
2	0.5	0.5	0.5	–	0.6	1.3	0.4	–	1.8	1.2	2.0	2.6	1.8	4	8.5	197322	CRLMC-50
2-1/2	0.6	0.5	0.6	0.6	0.6	1.5	0.4	0.4	2.0	1.4	2.0	2.6	2.0	4	10.7	197323	CRLMC-63
3	0.6	0.6	0.6	0.7	0.8	1.9	0.4	0.5	2.5	1.6	2.6	3.4	2.4	4	18.2	197324	CRLMC-80
4	0.7	0.6	0.8	0.7	0.8	2.2	0.4	0.5	2.8	2.0	3.0	3.8	2.8	4	26.8	197325	CRLMC-100

1) Corrosion resistance class 4 according to Festo standard 940 070.

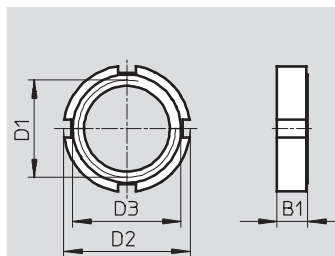
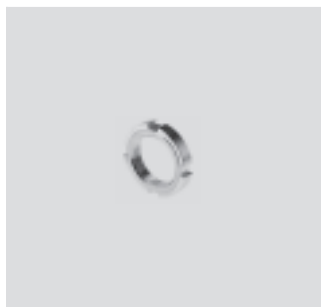
Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

### Ring nut CR

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data								
For Ø	B1	D1	D2	D3	CRC <sup>1)</sup>	Weight	Part No.	Type
[in]						[oz]		
1-1/4	0.3	M30x1.5	1.7	1.4	4	1.4	197326	CR-M30x1.5
1-5/8	0.4	M38x1.5	2.0	1.9	4	2.2	197327	CR-M38x1.5
2, 2-1/2	0.4	M45x1.5	2.4	2.2	4	3.1	197328	CR-M45x1.5
3, 4	0.5	M50x2	3.0	2.6	4	8.0	197329	CR-M50x2

1) Corrosion resistance class 4 according to Festo standard 940 070.

Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.


Dimensions are in inches, unless otherwise noted.





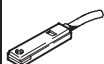
## Corrosion-resistant cylinders - Inch Series


Accessories

**FESTO**

Ordering data – Proximity sensor, magnetic reed				
	Electrical connection	Cable length [ft]	Part No.	Type
	Cable			
	NO contact			
	Resistant to corrosion			
	3-wire	8.2	161775	CRSME0-4-K-LED-24

Ordering data – Mounting kit				
	For Ø [in]	Part No.	Type	
Mounting kit CRSMBR				
	1/2	164581	CRSMBR-12	
	5/8	164582	CRSMBR-16	
	3/4	164583	CRSMBR-20	
	1	164584	CRSMBR-25	
	1-1/4	163888	CRSMBR-32	
	1-5/8	163889	CRSMBR-40	
	2	163890	CRSMBR-50	
	2-1/2	163891	CRSMBR-63	
Mounting kit CRSMB				
	1-1/4	161763	CRSMB-32	
	1-5/8	161764	CRSMB-40	
	2	161765	CRSMB-50	
	2-1/2	161766	CRSMB-63	
	3	161767	CRSMB-80	
	4	161768	CRSMB-100	
	5	185365	CRSMB-125	

Ordering data – Proximity sensor, magneto-resistive					
	Switch output	Electrical connection	Cable length [ft]	Part No.	Type
		Cable			
	NO contact				
	PNP	3-wire	8.2	525563	CRSMT-8-PS-K2.5-LED-24
			16.4	525564	CRSMT-8-PS-K5-LED-24

Ordering data – Mounting kit			Part No.	Type
			525565	CRSMB-8-32/100

## Product Range and Company Overview

### A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



**Custom Automation Components**  
Complete custom engineered solutions



**Custom Control Cabinets**  
Comprehensive engineering support and on-site services



**Complete Systems**  
Shipment, stocking and storage services

### The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



**Electromechanical**  
Electromechanical actuators, motors, controllers & drives



**Pneumatics**  
Pneumatic linear and rotary actuators, valves, and air supply



**PLCs and I/O Devices**  
PLC's, operator interfaces, sensors and I/O devices

### Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

### Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



© Copyright 2008, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. For Liability and Warranty conditions, refer to our "Terms and Conditions of Sale", available from your local Festo office. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Festo. All technical data subject to change according to technical update.



Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

# Festo North America

## Festo Regional Contact Center

5300 Explorer Drive  
Mississauga, Ontario L4W 5G4  
Canada

### USA Customers:

For ordering assistance,

**Call:** 1.800.99.FESTO (1.800.993.3786)

**Fax:** 1.800.96.FESTO (1.800.963.3786)

**Email:** [customer.service@us.festo.com](mailto:customer.service@us.festo.com)

For technical support,

**Call:** 1.866.GO.FESTO (1.866.463.3786)

**Fax:** 1.800.96.FESTO (1.800.963.3786)

**Email:** [product.support@us.festo.com](mailto:product.support@us.festo.com)

### Canadian Customers:

**Call:** 1.877.GO.FESTO (1.877.463.3786)

**Fax:** 1.877.FX.FESTO (1.877.393.3786)

**Email:** [festo.canada@ca.festo.com](mailto:festo.canada@ca.festo.com)

## USA Headquarters

Festo Corporation  
395 Moreland Road  
P.O. Box 18023  
Hauppauge, NY 11788, USA  
[www.festo.com/us](http://www.festo.com/us)

### USA Sales Offices

#### Appleton

North 922 Tower View Drive, Suite N  
Greenville, WI 54942, USA

#### Boston

120 Presidential Way, Suite 330  
Woburn, MA 01801, USA

#### Chicago

1441 East Business Center Drive  
Mt. Prospect, IL 60056, USA

#### Dallas

1825 Lakeway Drive, Suite 600  
Lewisville, TX 75057, USA

#### Detroit – Automotive Engineering Center

2601 Cambridge Court, Suite 320  
Auburn Hills, MI 48326, USA

#### New York

395 Moreland Road  
Hauppauge, NY 11788, USA

#### Silicon Valley

4935 Southfront Road, Suite F  
Livermore, CA 94550, USA

## United States



**USA Headquarters, East:** Festo Corp., 395 Moreland Road, Hauppauge, NY 11788  
Phone: 1.631.435.0800; Fax: 1.631.435.8026;  
Email: [info@festo-usa.com](mailto:info@festo-usa.com) [www.festo.com/us](http://www.festo.com/us)

## Canada



**Headquarters:** Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4  
Phone: 1.905.624.9000; Fax: 1.905.624.9001;  
Email: [festo.canada@ca.festo.com](mailto:festo.canada@ca.festo.com) [www.festo.ca](http://www.festo.ca)

## Mexico



**Headquarters:** Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquinhuauc,  
54020 Tlalnepantla, Edo. de México  
Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;  
Email: [festo.mexico@mx.festo.com](mailto:festo.mexico@mx.festo.com) [www.festo.com/mx](http://www.festo.com/mx)

### Central USA

Festo Corporation  
1441 East Business  
Center Drive  
Mt. Prospect, IL 60056, USA  
Phone: 1.847.759.2600  
Fax: 1.847.768.9480



### Western USA

Festo Corporation  
4935 Southfront Road,  
Suite F  
Livermore, CA 94550, USA  
Phone: 1.925.371.1099  
Fax: 1.925.245.1286



## Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark  
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan Latvia  
Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore  
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

[www.festo.com](http://www.festo.com)