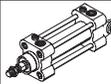


Corrosion resistant cylinders - Inch Series



- 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	■	-	■	■	-	

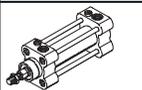
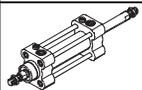
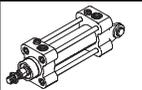
Variants

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



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

Technical data

Double-acting



Diameter

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

Stroke length

0.04 ... 20 in



General technical data					
Piston Ø	[in]	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	5/8-18 UNF	5/8-18 UNF
Constructional design		Piston			
		Piston rod			
		Cylinder barrel			
Cushioning		Flexible cushioning rings at both ends			
Magnet for position sensing ¹⁾		Standard			

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

Operating and environmental conditions					
Piston Ø	[in]	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 ²⁾	[°F]	-4 ... +176			
Corrosion resistance class CRC ³⁾		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	[in]	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

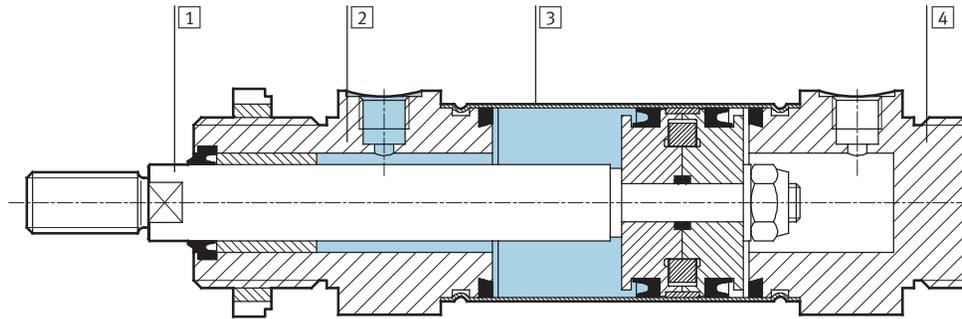
Weights [oz]					
Piston Ø	[in]	1-1/4	1-5/8	2	2-1/2
Basic weight at 0 inch stroke		23.6	51.5	69.1	117.3
Additional weight per 1 inch stroke		1.6	2.0	3.1	3.7

Round cylinders CRDSW, corrosion-resistant - Inch Series

Technical data

Materials

Sectional view

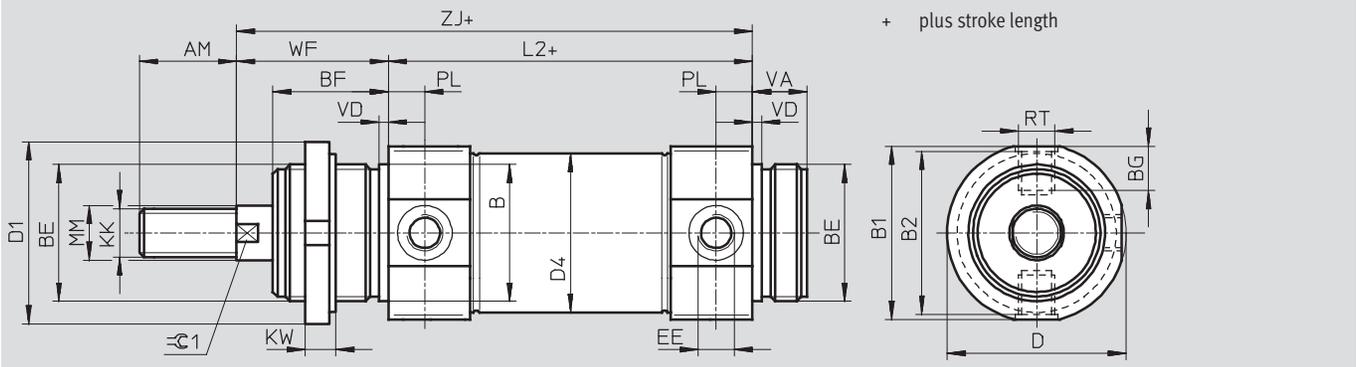


Cylinder

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



∅ [in]	AM	B ∅	B1	B2	BE	BF	BG	D ∅	D1 ∅	D4 ∅	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

∅ [in]	KK	KW	MM ∅	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	5/8-18 UNF	0.4	0.8	4.7	M12x1.5	0.5	0.7	0.1	2.0	6.7	17
2-1/2	5/8-18 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



Ordering Data

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

Ordering table						
Size	1 1/4	1 5/8	2	2 1/2	Code	Enter code
M Function	Round cylinders, corrosion resistant				CRDSW	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				-P	-P
Magnet for position sensing ¹⁾	Standard				-A	-A

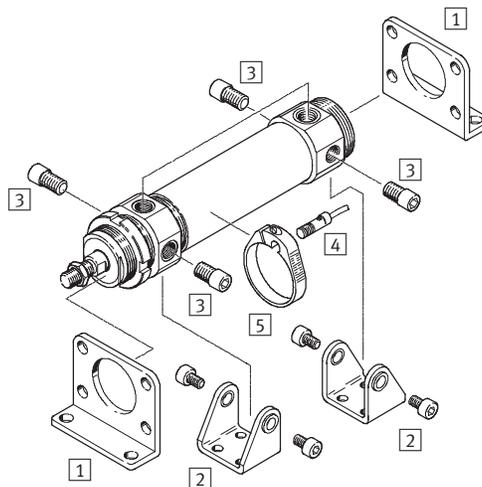
1) Position sensing via magnetic proximity sensor (ordered separately, see accessories).

Transfer order code

CRDSW	-		-		-	P	-	A
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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	[in]	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 ¹⁾		Standard			

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

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

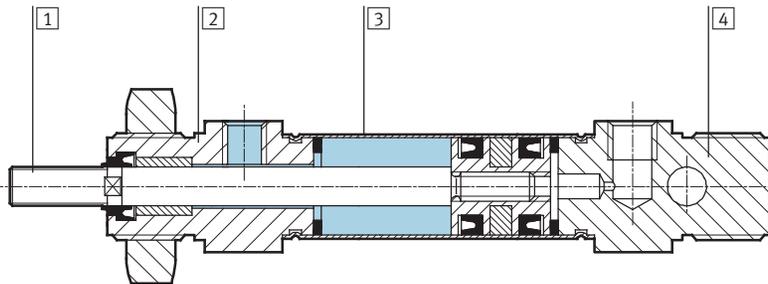
Weights [oz]					
Piston Ø	[in]	1/2	5/8	3/4	1
Basic weight at 0 inch stroke		4.2	5.3	11.3	15.9
Additional weight per 1 inch stroke		0.38	0.43	0.65	0.9

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

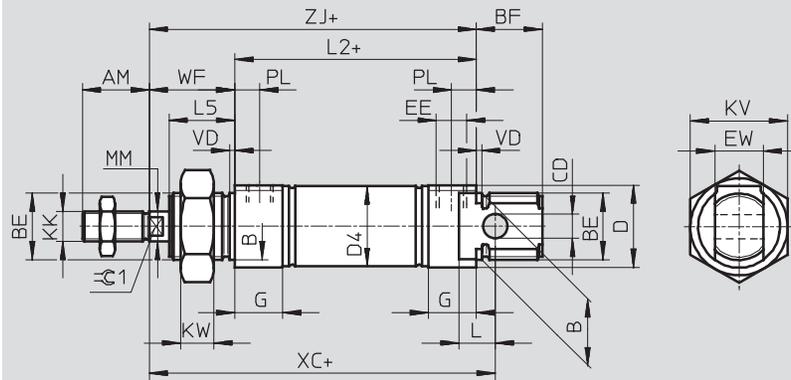


Technical data

Dimensions

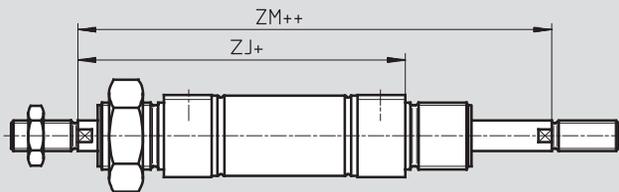
Download CAD Data → www.festo.com/us/cad

Basic version



+ plus stroke length

S2 – Through piston rod



+ plus stroke length
++ plus 2 stroke lengths

∅ [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

∅ [in]	KW	MM	L	L2	L5	PL	VD	WF	XC	ZJ	ZM	≈1 [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

M Mandatory data					O Options
Function	Piston Ø [in]	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	-

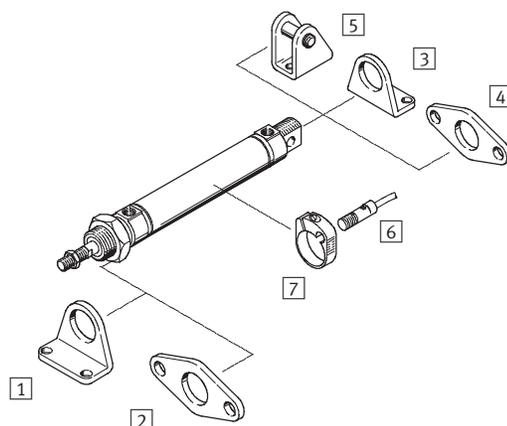
Ordering table						
Size	1/2	5/8	3/4	1	Code	Enter code
M Function	Standard cylinders				CRDSNU	CRDSNU
Piston Ø [in]	1/2	5/8	3/4	1	-...	
Stroke [in]	0.04 ... 19.7				-...	
Cushioning	Flexible cushioning rings at both ends				-P	-P
Magnet for position sensing	For use with magnetic proximity sensors		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

Transfer order code

CRDSNU	-		-		-	P	-	A	-	
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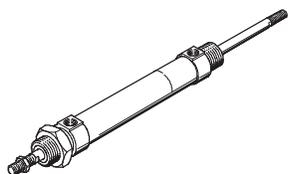
Round cylinders CRDSNU, corrosion-resistant - Inch Series

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

Technical data

Double-acting

- Through piston rod available (S2)

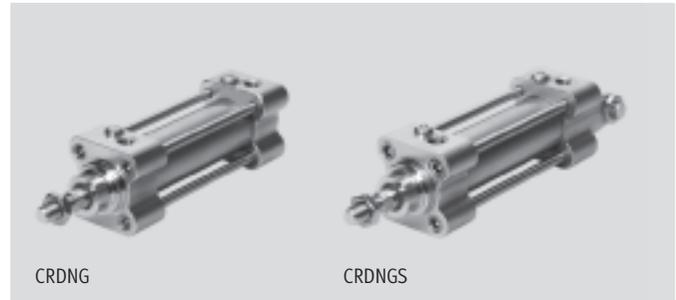


Diameter

1-1/4 ... 5

Stroke length

0.4 ... 78



CRDNG

CRDNGS

General technical data								
Piston Ø	[in]	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 ¹⁾		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 ²⁾	[°F] -4 ... +176
Corrosion resistance class CRC ³⁾	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	[in]	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

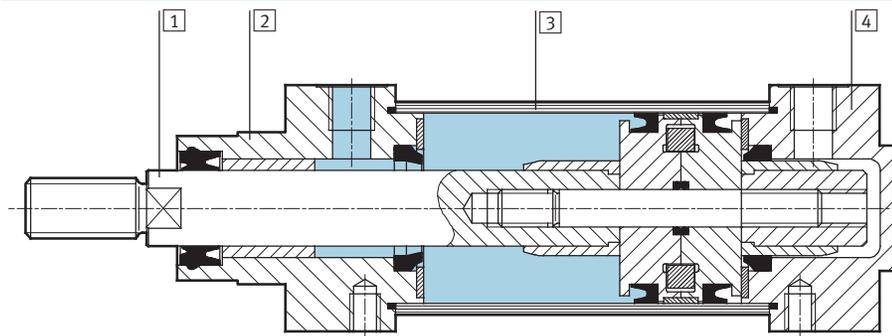
Tie rod cylinders CRDNG, corrosion resistant - Inch Series

Technical data

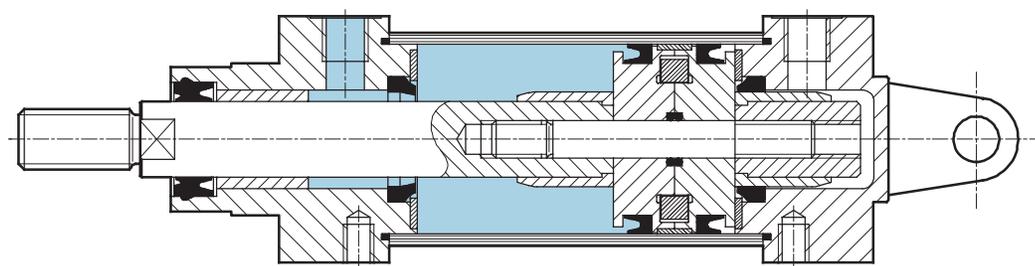
Weights [oz]								
Piston Ø	[in]	1-1/4	1-5/8	2	2-1/2	3	4	5
CRDNG								
Basic weight at 0 inch stroke		36.9	48.0	76.2	121.9	209.4	284.7	
Additional weight per 1 inch stroke		1.8	2.7	5.4	5.4	9.0	9.9	
CRDNGS								
Basic weight at 0 inch stroke		37.7	51.5	82.2				
Additional weight per 1 inch stroke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

Materials

Sectional view CRDNG



Sectional view CRDNGS



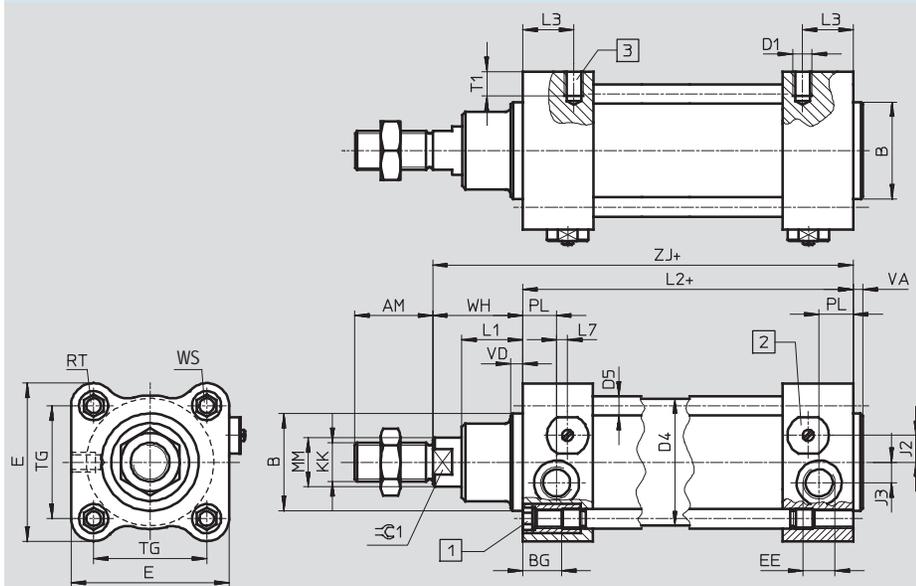
CRDNG/CRDNGS	
1	Piston rod High-alloy stainless steel
2	Bearing cap Stainless steel casting
3	Cylinder barrel High-alloy stainless steel
4	End cap Stainless steel casting
-	Tie rod High-alloy stainless steel
-	Seals Polyurethane, nitrile rubber

Tie rod cylinders CRDNG, corrosion resistant - Inch Series

Technical data

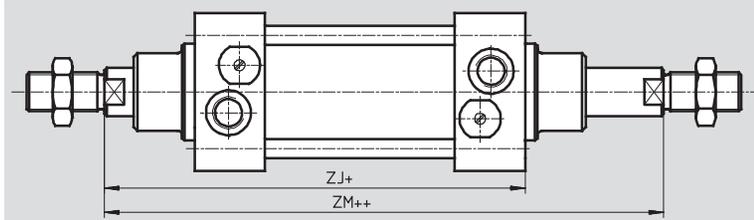
Dimensions Download CAD Data → www.festo.com/us/cad

CRDNG



- 1 Socket head screw with female thread
 - 2 Cover for adjustable end-position cushioning
 - 3 Threaded hole for direct mounting
- + plus stroke length

S2 – Through piston rod



- + plus stroke length
- ++ plus 2 stroke lengths

∅ [in]	AM	B ∅	BG	D1	D4 ∅	D5 ∅	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

∅ [in]	L3	L7	MM ∅	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

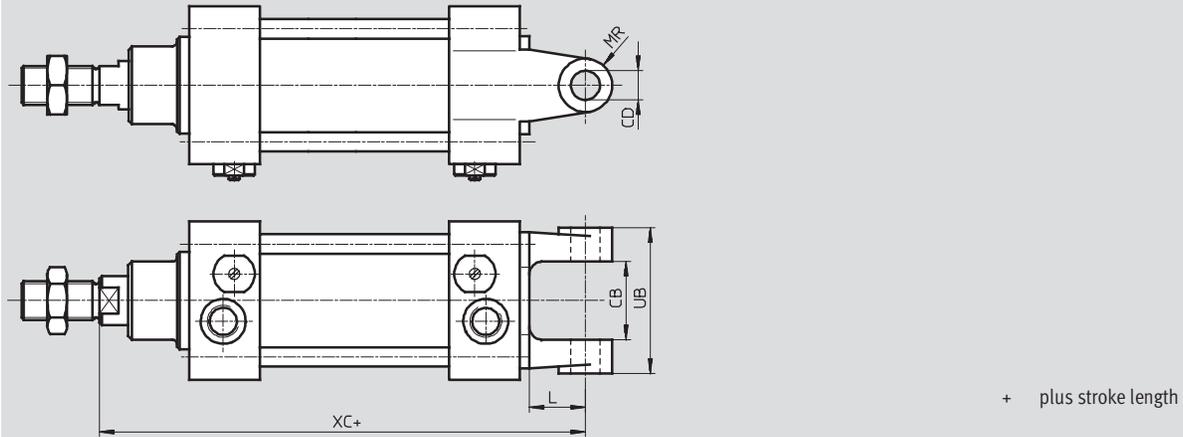
Dimensions are in inches, unless otherwise noted.

Tie rod cylinders CRDNG, corrosion resistant - Inch Series

Technical data

Dimensions

CRDNGS



∅ [in]	CB	CD ∅	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

M Mandatory data					O Options
Function	Piston Ø [in]	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	Tie rod cylinders, corrosion resistant						CRDNG		
	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
Magnet for position sensing ¹⁾	Standard						-A	-A	
O Type of piston rod	Through piston rod ²⁾						-S2		

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

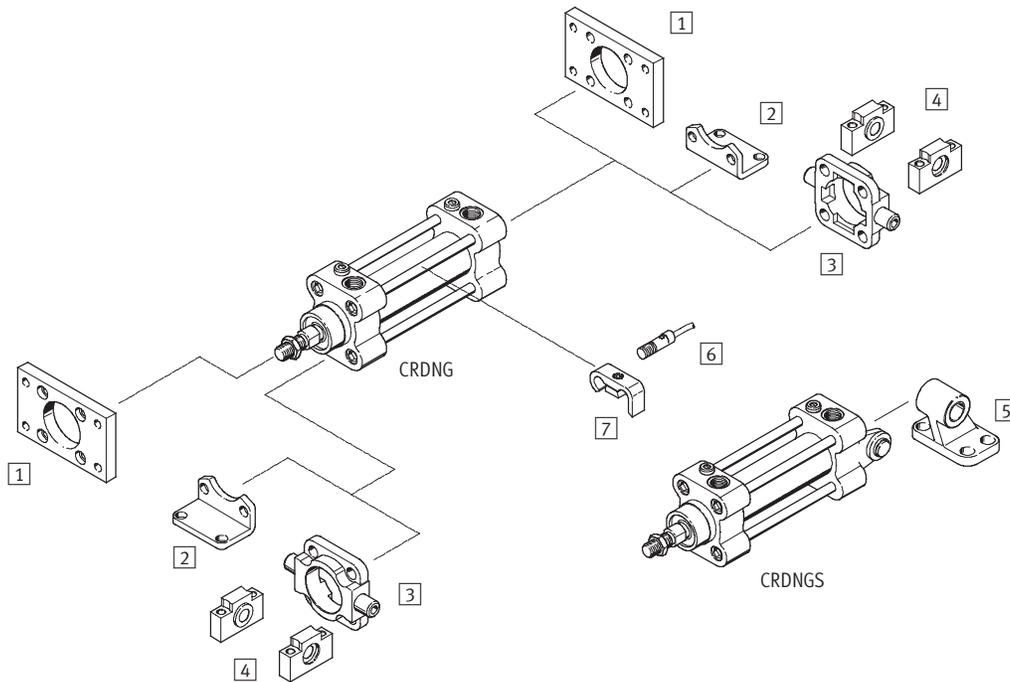
2) Through piston rod, -S2, is not available with CRDNGS (swivel flange).

Transfer order code

-
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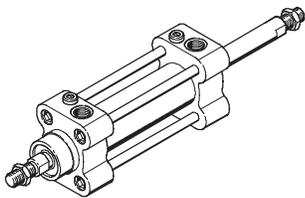
Tie rod cylinders CRDNG, corrosion resistant - Inch Series

Accessories overview



Variant

CRDNG-S2



Mounting attachments and accessories		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 CRSMEO-4	With LED for operating status indication	■	■
9	Mounting kit CRSMB	For proximity sensor CRSMEO-4	■	■

Corrosion-resistant cylinders – Inch Series

Accessories



Foot mounting CRHBN

Scope of delivery:

CRHBN-... x1: 1 foot

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

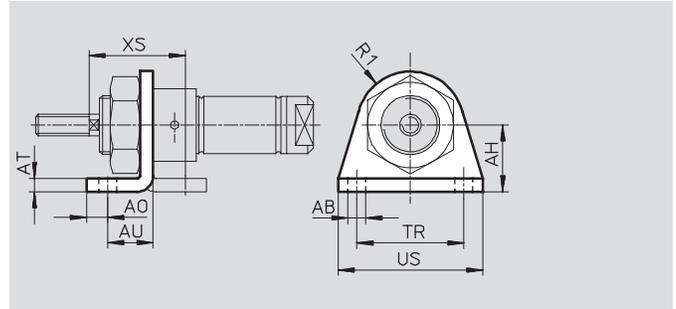
Material:

High-alloy steel

Free of copper, PTFE and silicone



CRHBN-... x2



Dimensions and ordering data													
For \varnothing	AB	AH	AO	AT	AU	R1	TR	US	XS	CRC ¹⁾	Weight	Part No.	Type
[in]	\varnothing										[oz]		
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.

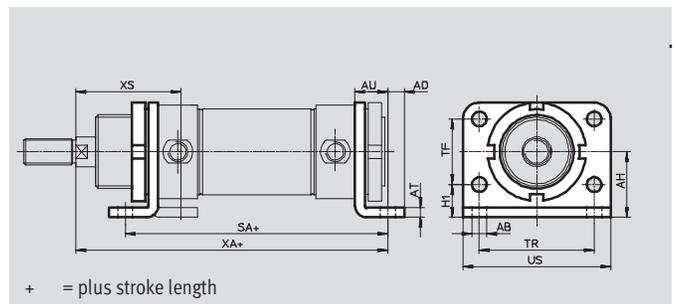
Components with higher corrosion resistance for use in environments subject to contact with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Foot mounting CRH

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data																
For \varnothing	AB	AH	AO	AT	AU	H1	SA	TF	TR	US	XA	XS	CRC ¹⁾	Weight	Part No.	Type
[in]	\varnothing													[oz]		
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.

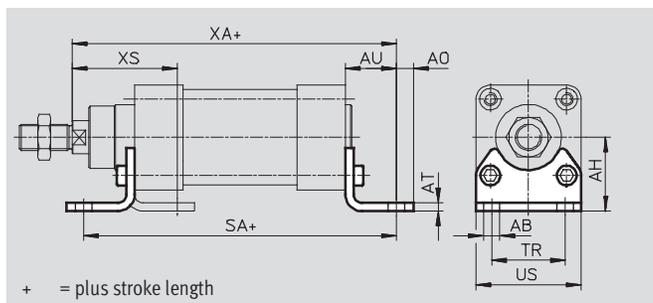
Corrosion-resistant cylinders – Inch Series

Accessories



Foot mounting CRHNC

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

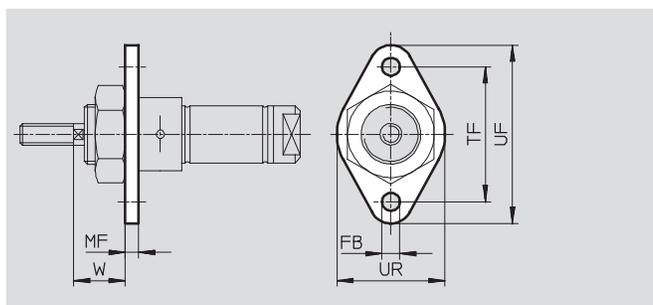


Dimensions and ordering data														
For Ø	AB	AH	AO	AT	AU	SA	TR	US	XA	XS	CRC ¹⁾	Weight	Part No.	Type
[in]	Ø											[oz]		
1-1/4	0.3	1.3	0.3	0.2	0.9	5.6	1.3	1.8	5.7	1.8	4	4.8	176937	CRHNC-32
1-5/8	0.4	1.4	0.4	0.2	1.1	6.3	1.4	2.1	6.4	2.1	4	6.3	176938	CRHNC-40
2	0.4	1.8	0.4	0.2	1.2	6.6	1.8	2.5	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	MF	TF	UF	UR	W	CRC ¹⁾	Weight	Part No.	Type
[in]	Ø							[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.

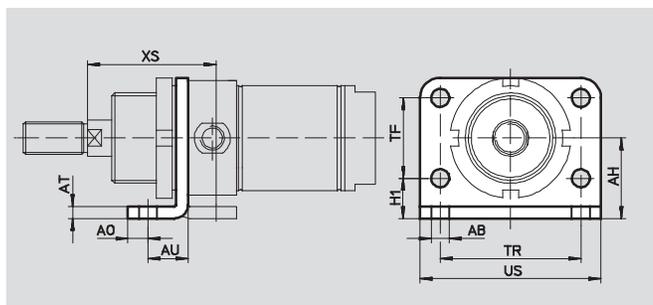
Corrosion-resistant cylinders – Inch Series

Accessories



Flange mounting CRFV

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

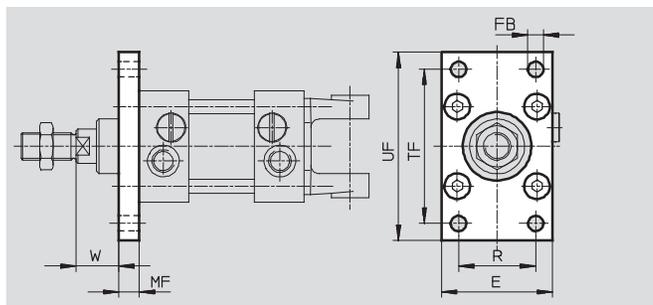
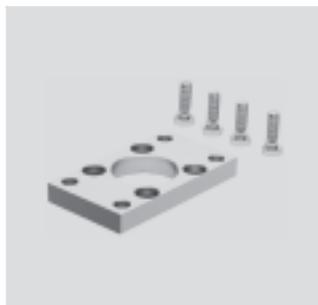


Dimensions and ordering data														
For \varnothing	AB \varnothing	AH	AO	AT	AU	H1	TF	TR	US	XS	CRC ¹⁾	Weight	Part No.	Type
[in]												[oz]		
1-1/4	0.3	1.1	0.3	0.2	0.6	0.6	1.1	2.0	2.6	1.9	4	3.6	161858	CRFV-32
1-5/8	0.4	1.3	0.4	0.2	0.7	0.7	1.2	2.4	3.1	2.4	4	6.7	161859	CRFV-40
2	0.4	1.6	0.4	0.2	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 \varnothing	E	FB \varnothing	MF	R	TF	UF	W	CRC ¹⁾	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.

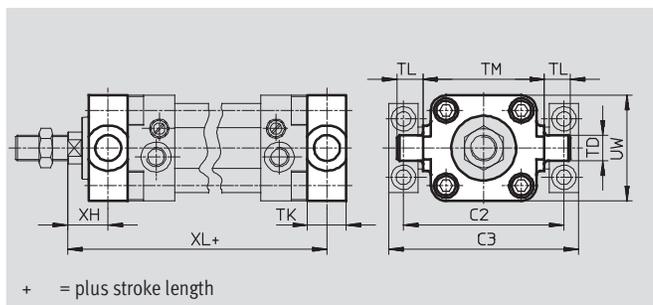
Corrosion-resistant cylinders – Inch Series

Accessories



Trunnion flange CRZNG

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

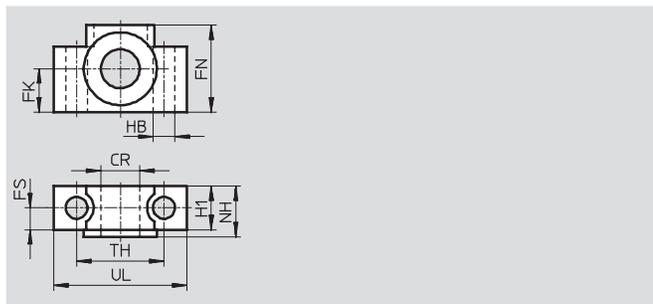
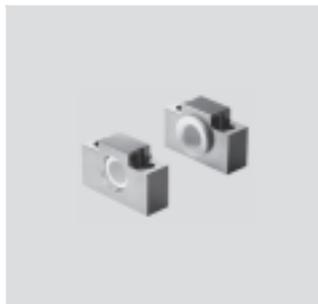


Dimensions and ordering data													
For Ø	C2	C3	TD	TK	TL	TM	UW	XH	XL	CRC ¹⁾	Weight	Part No.	Type
[in]			Ø								[oz]		
1-1/4	2.8	3.4	0.5	0.6	0.5	2.0	2.0	0.7	5.0	4	5.3	161852	CRZNG-32
1-5/8	3.4	4.1	0.6	0.8	0.6	2.5	2.2	0.8	5.7	4	9.2	161853	CRZNG-40
2	3.9	4.6	0.6	0.9	0.6	3.0	2.6	1.0	6.1	4	15.2	161854	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	FK	FN	FS	H1	HB	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[in]	Ø	Ø				Ø					[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.

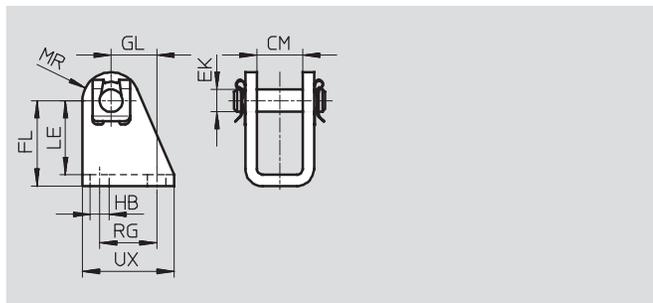
Corrosion-resistant cylinders – Inch Series

Accessories



Clevis foot CRLBN

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

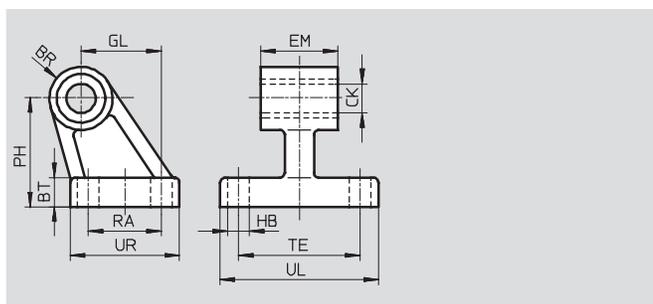


Dimensions and ordering data													
For Ø	CM	EK Ø	FL	GL	HB	LE	MR	RG	UX	CRC ¹⁾	Weight	Part No.	Type
[in]											[oz]		
1/2, 5/8	0.5	0.2	1.1	0.5	0.2	0.9	0.3	0.6	1.0	4	1.9	161862	CRLBN-12/16
3/4, 1	0.6	0.3	1.2	0.6	0.3	1.0	0.4	0.8	1.3	4	2.2	161863	CRLBN-20/25
1-1/4	0.6	0.4	1.4	0.7	0.3	1.2	0.4	0.9	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 ¹⁾	Weight	Part No.	Type
[in]															[oz]		
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	161840	CRLNG-32
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	161841	CRLNG-40
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	161842	CRLNG-50
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	161843	CRLNG-63
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	161844	CRLNG-80
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	161845	CRLNG-100
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	176951	CRLNG-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.

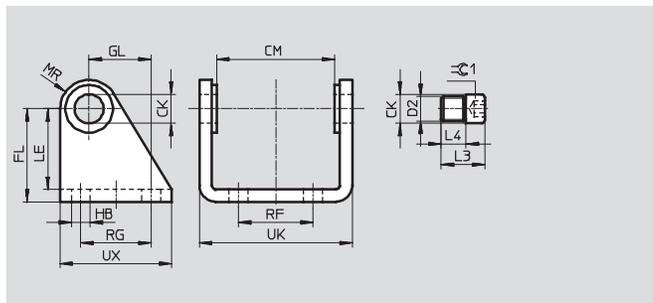
Corrosion-resistant cylinders – Inch Series

Accessories



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

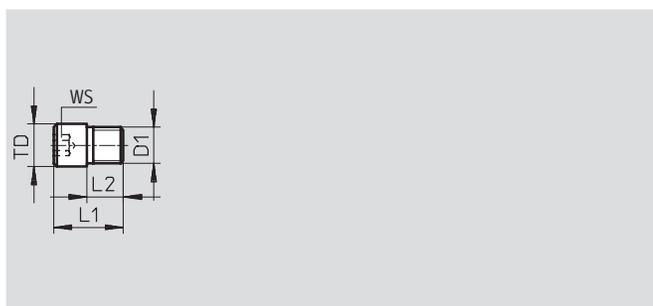
For Ø [in]	MR	RF	RG	UK	UX	∅C1 [mm]	CRC ¹⁾	Weight [oz]	Part No.	Type
1-1/4	0.5	0.8	0.9	2.0	1.6	5	4	4.6	162955	CRSBS-32
1-5/8	0.5	1.1	1.2	2.4	2.0	6	4	7.1	162956	CRSBS-40
2	0.6	1.4	1.3	2.9	2.1	6	4	10.9	162957	CRSBS-50
2-1/2	0.6	1.7	1.4	3.5	2.6	8	4	15.5	162958	CRSBS-63

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 ¹⁾	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.

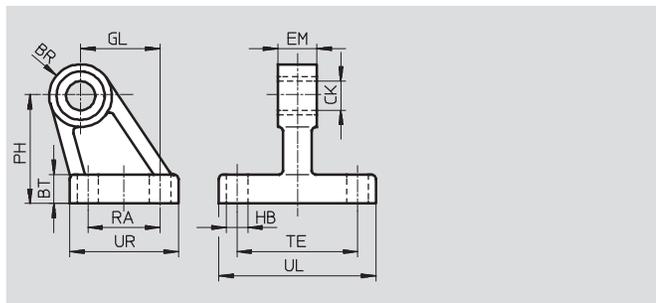
Dimensions are in inches, unless otherwise noted.

Corrosion-resistant cylinders – Inch Series

Accessories

Clevis foot CRLMC

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

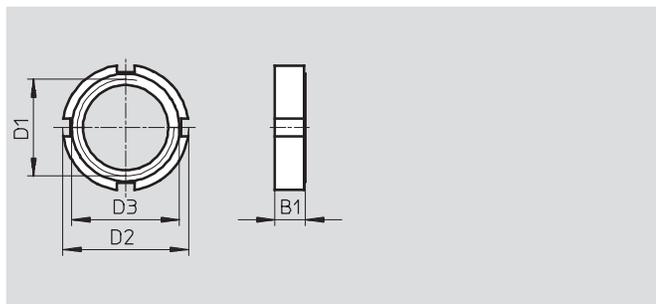
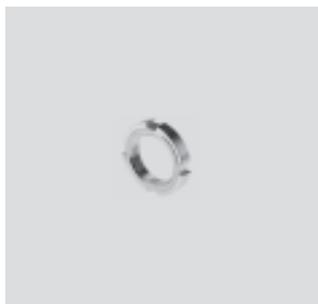


Dimensions and ordering data																	
For Ø	BR	BT	CK	EB	EM	GL	HB	OF	PH	RA	TE	UL	UR	CRC ¹⁾	Weight	Part No.	Type
[in]			Ø	Ø			Ø								[oz]		
1-1/4	0.4	0.3	0.4	–	0.4	0.8	0.3	–	1.3	0.7	1.5	2.0	1.2	4	3.6	197320	CRLMC-32
1-5/8	0.4	0.4	0.5	–	0.5	0.9	0.3	–	1.4	0.9	1.6	2.1	1.4	4	4.9	197321	CRLMC-40
2	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 ¹⁾	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



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	CRSMEO-4-K-LED-24

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

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

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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



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Shipment, stocking and storage services

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



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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

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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.

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