

## Compact cylinders ADVU – Inch Series

FESTO



Compact cylinder for proximity sensing, Piston-rod end with male thread

- Piston  $\varnothing$  1/2" to 5"
- Stroke lengths up to 16"
- Double-acting
- Compact design – less space required
- Numerous options
- Repairable

Product Range Overview											
Function	Version	Piston $\varnothing$ [in]	Stroke [in]	Force [lbf]	Variants						
					A	P	A	S2	S6	S20	S26
Double-acting	ADVU	1/2, 5/8, 3/4, 1, 1-1/4, 1-5/8, 2, 2-1/2, 3, 4	see table below	15.3 ... 1,655	■	■	■	■	■	■	■
		5			■	■	■	■	■	-	-

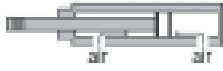
Variants							
A	Male thread	A	Magnet for position sensing	S6	Heat-resistant seals up to 302 °F	S26	Through piston rod, with heat-resistant seals up to 302 °F
P	Flexible cushioning rings at both ends	S2	Through piston rod	S20	Through, hollow piston rod		

Type	Piston $\varnothing$ [in]	Standard Strokes [in]	Variable Strokes [in]
ADVU Piston rod at one end	1/2, 5/8	1/4, 1/2, 3/4, 1, 1-1/4, 1-1/2	0.04 ... 8
	3/4, 1	1/4, 1/2, 3/4, 1, 1-1/4, 1-1/2, 2	0.04 ... 8
	1-1/4, 1-5/8	1/4, 1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2, 3	0.04 ... 12
	2, 2-1/2	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2, 3	0.04 ... 12
	3, 4, 5	1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2, 3	0.04 ... 16

# Compact cylinders ADVU – Inch Series

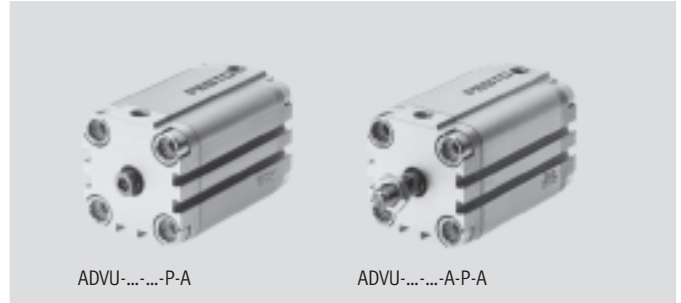
Technical data – Double-acting, basic version

Double-acting



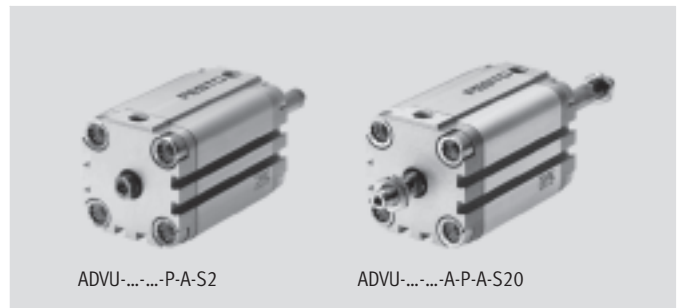
- N- Diameter  
1/2 ... 5 inch
- T- Stroke length  
0.04 ... 16 inch

- Through piston rod (S2)
- Through, hollow piston rod (S20)
- Heat resistant seals (S6)
- Through piston rod, heat resistant seals (S26)



ADVU-...-P-A

ADVU-...-A-P-A



ADVU-...-P-A-S2

ADVU-...-A-P-A-S20

General Technical Data												
Piston Ø	1/2	5/8	3/4	1	1-1/4	1-5/8	2	2-1/2	3	4	5	
Pneumatic connection	10-32 UNF				1/8" NPT					1/4" NPT		
End of piston rod	Female thread	4-48 UNF-2B	8-36 UNF-2B	10-32 UNF-2B		1/4-28 UNF-2B		5/16-24 UNF-2B		3/8-24 UNF-2B	1/2-20 UNF-2B	5/8-18 UNF-2B
	Male thread	10-32 UNF-2A	5/16-24 UNF-2A	3/8-24 UNF-2A			1/2-20 UNF-2A		5/8-18 UNF-2A	3/4-16 UNF-2A	1-12 UNF-2A	
Operating medium	Filtered compressed air, lubricated or unlubricated											
Constructional design	Piston											
	Piston rod											
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 Pressure [psi]											
Piston Ø	1/2	5/8	3/4	1	1-1/4	1-5/8	2	2-1/2	3	4	5
Piston rod at one end	17.6 ... 176.0		14.7 ... 147.0		11.8 ... 147.0		8.8 ... 147.0		7.4 ... 147		
Through piston rod S2/S20	22.1 ... 147.0		19.1 ... 147.0		17.6 ... 147		14.7 ... 147.0		11.8 ... 147.0		7.4 ... 147.0

Ambient Conditions		
Variant	Basic version	S6
Ambient temperature <sup>1)</sup> [°F]	-4 ... +176	32 ... +302
Corrosion resistance class CRC <sup>2)</sup>	2	2

1) Note operating range of proximity sensors.

2) Corrosion resistance class 2 according to Festo standard 940 070

Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

# Compact cylinders ADVU – Inch Series

Technical data – Double-acting, basic version



Forces [lbf] and Impact Energy [ft-lbf]												
Piston Ø	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	
Theoretical force at 90 psi, extending		15.3	27.2	42.3	66.4	108.7	169.7	265	420.8	678.6	1060.2	1655.3
	S2/S20	15.3	27.2	42.3	66.4	108.7	169.7	265	420.8	678.6	1060.2	1655.3
Theoretical force at 90 psi, retracting		15.3	27.2	42.3	66.4	108.7	169.7	265	420.8	678.6	1060.2	1655.3
	S2/S20	15.3	27.2	42.3	66.4	108.7	169.7	265	420.8	678.6	1060.2	1655.3
Max. impact energy at end positions (E <sub>perm</sub> )		0.07	0.07	0.10	0.07	0.30	0.38	0.47	0.52	0.55	0.74	2.95
	S20	0.01	0.01	0.01	0.01	0.03	0.04	0.04	0.05	0.06	0.07	0.30

Permissible impact velocity:

$$v_{perm.} = \sqrt{\frac{2 \times 32.2 \times E_{perm.}}{m_{piston} + m_{load}}}$$

Maximum permissible load:

$$m_{load} = \frac{2 \times 32.2 \times E_{perm.}}{v^2} - m_{piston}$$

### Notes

m<sub>piston</sub> equals mass of cylinder moving parts  
m<sub>load</sub> equals mass of external load

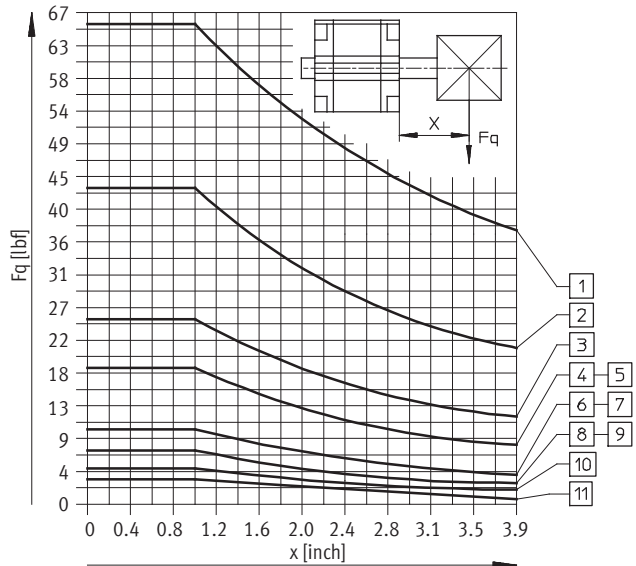
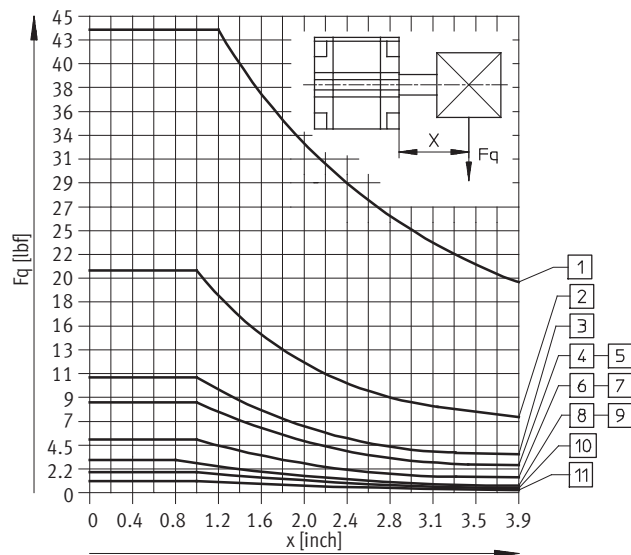
This data represents the maximum values that can be achieved. Values fluctuate in practice relative to the size of the effective load. Allowance must also be made for the limits of the cushioning capacity of the drive and the permissible impact energy.

Mass [lb]											
Piston Ø	1/2	5/8	3/4	1	1-1/4	1-5/8	2	2-1/2	3	4	5
Product mass with 0 inch stroke	0.19	0.19	0.33	0.40	0.66	0.96	1.24	2.34	3.91	6.17	7.56
Additional mass per 1 inch stroke	0.08	0.08	0.13	0.16	0.23	0.33	0.41	0.60	0.94	0.99	0.94
Moving load with 0 inch stroke (m <sub>piston</sub> )	0.02	0.03	0.04	0.06	0.11	0.14	0.25	0.29	0.68	1.36	2.91
Additional load per 1 inch stroke (m <sub>piston</sub> )	0.01	0.01	0.01	0.01	0.02	0.02	0.04	0.04	0.06	0.08	0.14

### Max. Lateral Force F<sub>q</sub> as a Function of the Projection x

Piston rod at one end

Through piston rod



- |                |                |               |
|----------------|----------------|---------------|
| 1 Ø 5 inch     | 5 Ø 2 inch     | 9 Ø 3/4 inch  |
| 2 Ø 4 inch     | 6 Ø 1-5/8 inch | 10 Ø 5/8 inch |
| 3 Ø 3 inch     | 7 Ø 1-1/4 inch | 11 Ø 1/2 inch |
| 4 Ø 2-1/2 inch | 8 Ø 1 inch     |               |

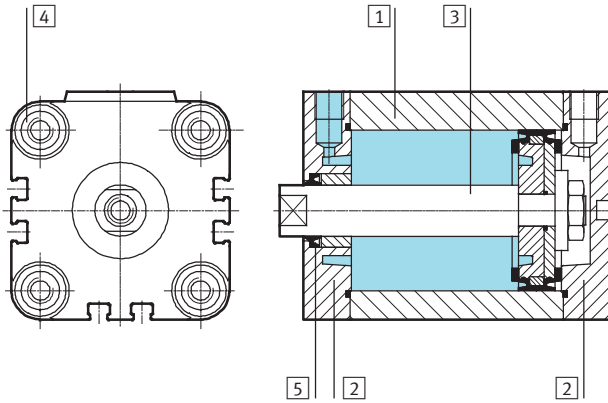
# Compact cylinders ADVU – Inch Series

Technical data – Double-acting, basic version



## Materials

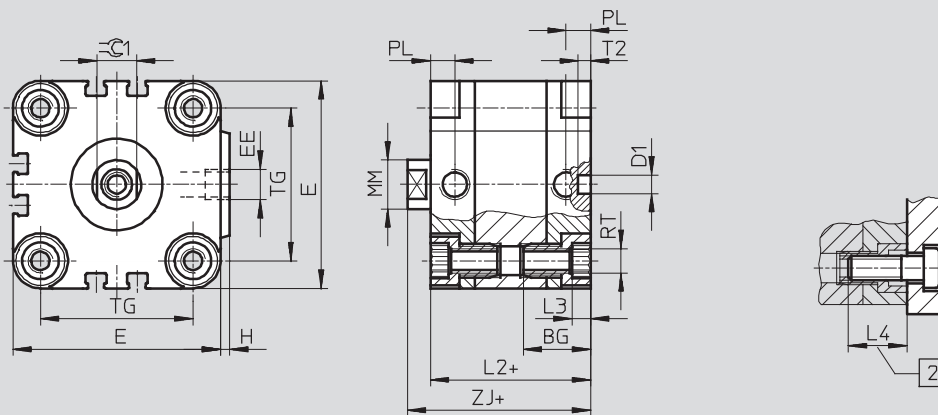
Sectional view



Variants	Basic version	S6
1 Cylinder barrel	Wrought aluminum alloy	Wrought aluminum alloy
2 End cap	Wrought aluminum alloy	Wrought aluminum alloy
3 Piston rod	∅ 1/2 ... 1-1/4	High-alloy stainless steel
	∅ 1-5/8 ... 5	High-alloy steel
4 Flange screws	∅ 1/2 ... 5/8	High-alloy stainless steel
	∅ 3/4 ... 5	Tempered steel
5 Dynamic seals	Polyurethane	Fluorocarbon rubber

## Dimensions – Basic Cylinder

Piston ∅ 1/2 ... 4 inch



### Note

To attach cylinder ∅ 1/2 and 5/8 inch from above, use only 2 screws diagonally or non-magnetic screws.

+ = plus stroke length

2 Minimum screw-in depth

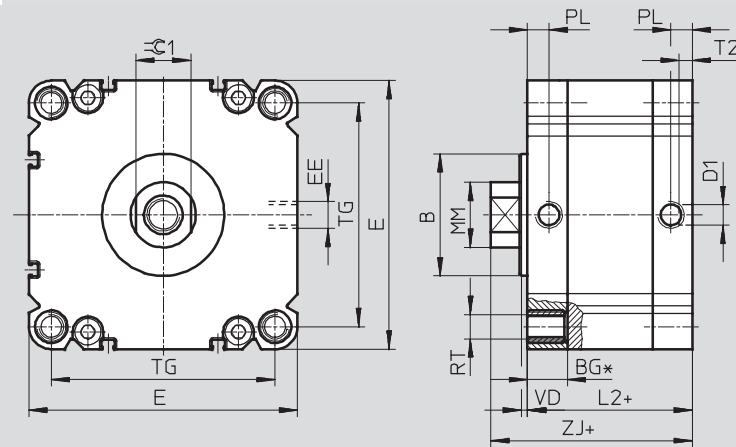
# Compact cylinders ADVU – Inch Series

Technical data – Double-acting, basic version



## Dimensions – Basic Cylinder

Piston  $\varnothing$  5 inch



\* Minimum screw-in depth  
0.7 inch.  
Cannot be screwed through with  
socket head screws.

+ = plus stroke length

$\varnothing$ [in]	B	BG	D1 $\varnothing$	E	EE	H	L2	L3	L4	MM $\varnothing$	PL	RT	T2	TG	VD	ZJ	$\varnothing C1$ [mm]
1/2	–	0.7	0.2	1.1	10-32 UNF	0.04	1.5	0.1	0.6	0.2	0.3	M4	0.2	0.7	–	1.7	5
5/8	–	0.7	0.2	1.1	10-32 UNF	0.04	1.5	0.1	0.6	0.3	0.3	M4	0.2	0.7	–	1.7	7
3/4	–	0.7	0.2	1.4	10-32 UNF	0.06	1.5	0.2	0.7	0.4	0.3	M5	0.2	0.9	–	1.7	9
1	–	0.7	0.2	1.6	10-32 UNF	0.06	1.6	0.2	0.7	0.4	0.3	M5	0.2	1.0	–	1.8	9
1-1/4	–	0.8	0.2	2.0	1/8" NPT	0.08	1.8	0.2	0.8	0.5	0.3	M6	0.2	1.3	–	2.0	10
1-5/8	–	0.8	0.2	2.4	1/8" NPT	0.10	1.8	0.2	0.8	0.5	0.3	M6	0.2	1.7	–	2.0	10
2	–	0.9	0.2	2.7	1/8" NPT	0.12	1.8	0.2	0.8	0.6	0.3	M8	0.2	2.0	–	2.1	13
2-1/2	–	1.0	0.3	3.4	1/8" NPT	0.16	2.0	0.3	1.0	0.6	0.3	M10	0.2	2.4	–	2.3	13
3	–	1.1	0.3	4.2	1/8" NPT	0.16	2.2	0.3	1.0	0.8	0.3	M10	0.2	3.2	–	2.5	17
4	–	1.3	0.3	5.0	1/4" NPT	0.20	2.6	0.3	1.0	1.0	0.4	M10	0.2	4.1	–	3.0	22
5	2.4	0.8	0.4	5.2	1/4" NPT	–	3.2	–	0.7	1.3	0.4	M12	0.2	4.3	–	3.9	27

Dimensions are in inches, unless otherwise noted.

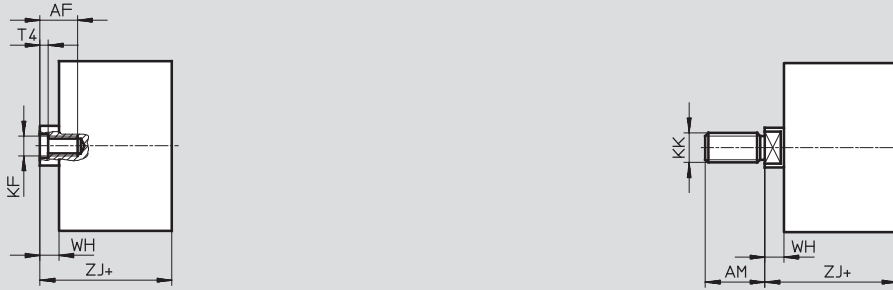
# Compact cylinders ADVU – Inch Series

Technical data – Double-acting, basic version

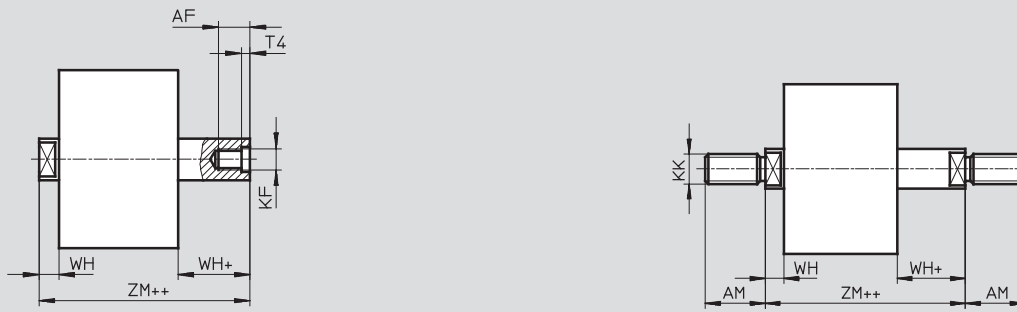


## Dimensions – Variants

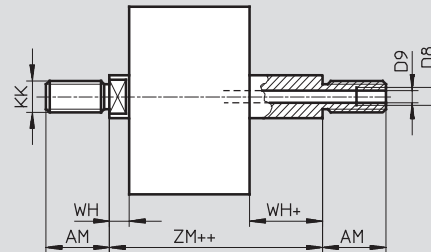
Basic version



## S2 – Through piston rod



## S20 – Through, hollow piston rod (only Piston $\varnothing$ 1/2 ... 4 inch)



+ = plus stroke length  
++ = plus 2x stroke length

$\varnothing$ [in]	AF	AM	D8	D9 $\varnothing$	KF	KK	T4	WH	ZJ	ZM
1/2	0.3	0.6	–	0.1	4-48 UNF-2B	10-32 UNF-2A	0.1	0.2	1.7	1.9
5/8	0.4	0.8	–	0.1	8-36 UNF-2B	5/16-24 UNF-2A	0.1	0.2	1.7	1.9
3/4 <sup>2)</sup>	0.5	0.9	–	0.1	10-32 UNF-2B	3/8-24 UNF-2A	0.1	0.2	1.7	1.9
1 <sup>2)</sup>	0.5	0.9	–	0.1	10-32 UNF-2B	3/8-24 UNF-2A	0.1	0.2	1.8	2.0
1-1/4 <sup>2)</sup>	0.6	0.9	–	0.2	1/4-28 UNF-2B	3/8-24 UNF-2A	0.1	0.2	2.0	2.2
1-5/8 <sup>2)</sup>	0.6	0.9	–	0.2	1/4-28 UNF-2B	3/8-24 UNF-2A	0.1	0.3	2.0	2.3
2 <sup>2)</sup>	0.6	0.9	–	0.2	5/16-24 UNF-2B	1/2-20 UNF-2A	0.1	0.3	2.1	2.4
2-1/2 <sup>2)</sup>	0.6	0.9	–	0.2	5/16-24 UNF-2B	1/2-20 UNF-2A	0.1	0.3	2.3	2.6
3 <sup>2)</sup>	0.8 <sup>1)</sup>	1.3	1/8" NPT	0.3	3/8-24 UNF-2B	5/8-18 UNF-2A	0.2	0.3	2.5	2.8
4 <sup>2)</sup>	0.9 <sup>1)</sup>	1.6	1/4" NPT	0.5	1/2-20 UNF-2B	3/4-16 UNF-2A	0.2	0.4	3.0	3.4
5 <sup>2)</sup>	1.0 <sup>1)</sup>	2.1	–	–	5/8-18 UNF-2B	1-12 UNF-2A	0.3	0.7	3.9	4.6

1) With a stroke < 0.2 inch, the maximum screw-in depth is reduced by 0.2 inch.  
2) Nut for piston rod thread included in scope of delivery.

Dimensions are in inches, unless otherwise noted.

# Compact cylinders ADVU – Inch Series

Ordering Data



M Mandatory Data						O Options	
Function	Piston Ø	Stroke	Piston Rod Thread	Cushioning	Magnet for position sensing	Type of piston rod	Temperature Resistant
ADVU	1/2 5/8 3/4 1 1 1/4 1 5/8 2 2 1/2 3 4 5	0.04 ... 16	- A	P	A	S2 S20	S6 S26
ADVU	- 1	- 6	-	- P	- A	- S26	

Ordering Table														
Size	1/2	5/8	3/4	1	1 1/4	1 5/8	2	2 1/2	3	4	5	Conditions	Code	Enter code
M Function	Double-acting Cylinder												ADVU	ADVU
Piston Ø [in]	1/2	5/8	3/4	1	1 1/4	1 5/8	2	2 1/2	3	4	5		-...	
Stroke [in]	0.04 ... 8			0.04 ... 13				0.04 ... 16					-...	
Piston Rod Thread	Female												-	
	Male												-A	
Cushioning	Flexible cushioning rings at both ends												-P	-P
Magnet for position sensing	For use with magnetic proximity sensor												-A	-A
O Type of piston rod	Through piston rod												-S2	
	Through, Hollow Piston Rod											1	-S20	
Temperature resistant	Heat-resistant seals up to max. 302 °F												-S6	
	Through piston rod, heat resistant up to max. 302 °F											2	-S26	

1 Not in combination with S6

2 S2 in combination with S6 equals S26

Transfer order code

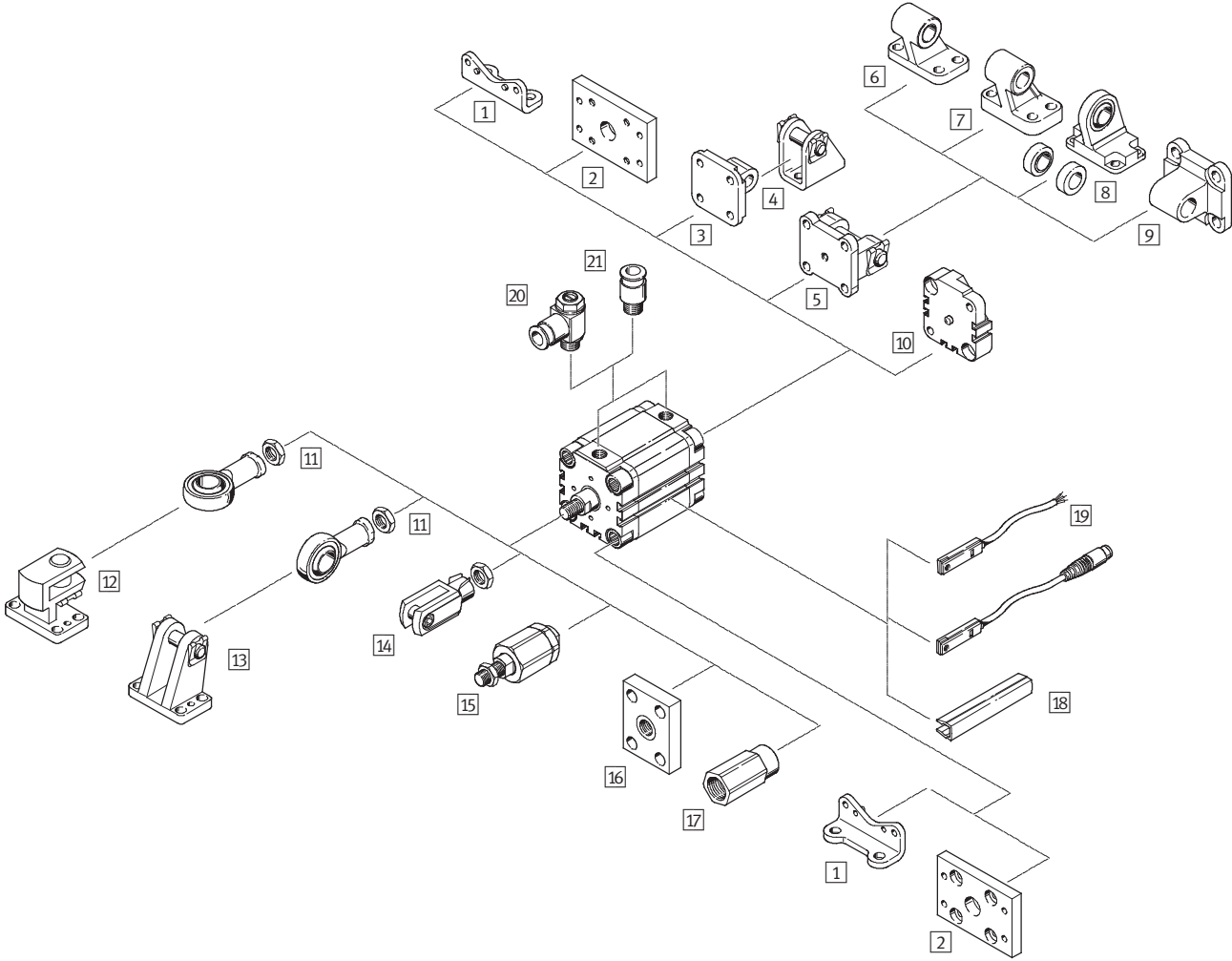
ADVU - [ ] - [ ] - [ ] - P - A - [ ]

# Compact cylinders ADVU – Inch Series

Accessories overview



Piston  $\varnothing$  1/2 ... 4 Inch





## Compact cylinders ADVU – Inch Series

Accessories overview

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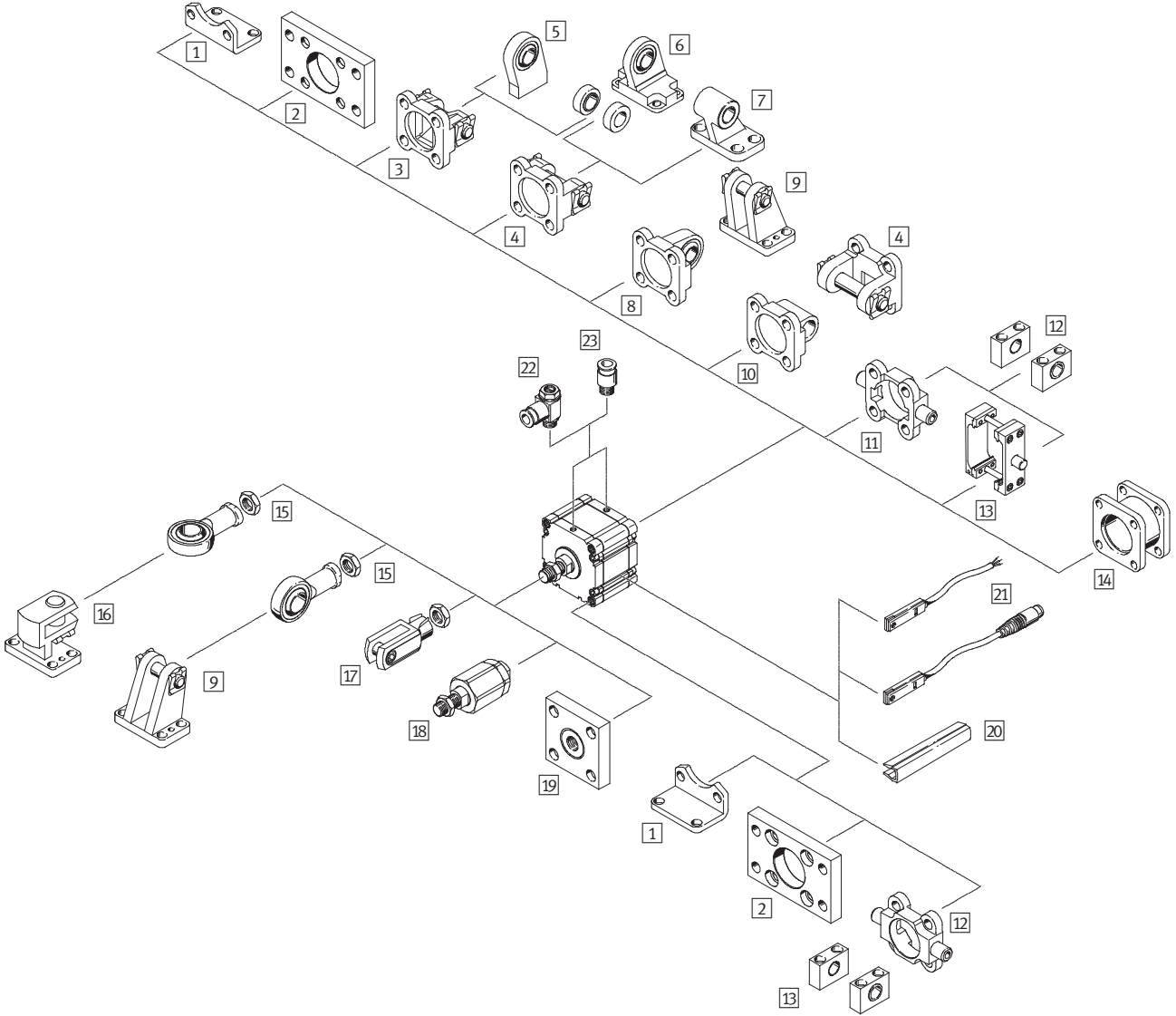
Mounting Attachments and Accessories					
	Description	Basic	S2/S20	→ Page	
1	Foot mounting HUA	For bearing and end cap	■	■	12
2	Flange mounting FUA	For bearing or end cap	■	■	13
3	Swivel flange SUA for Ø 1/2 ... 1	For end cap	■	–	14
4	Clevis foot LBN	–	■	–	19
5	Swivel flange SUA for Ø 1-1/4 ... 4	For end cap	■	–	14
6	Clevis foot LN	–	■	–	19
7	Clevis foot LNG	–	■	–	19
8	Clevis foot LSN	With spherical bearing	■	–	19
9	Swivel flange SNCL	–	■	–	19
10	Adapter kit DPVU	For connecting two cylinders with identical piston Ø to form a multi-position cylinder	■	–	18
11	Rod eye SGS	With spherical bearing	■	■	20
12	Clevis foot, lateral LQG	–	■	■	19
13	Clevis foot LBG	–	■	■	19
14	Rod clevis SG	Permits a swivelling movement of the cylinder in one plane	■	■	20
15	Self-aligning rod coupler FK	For compensating radial and angular deviations	■	■	20
16	Coupling piece KSZ	For cylinders with non-rotating piston rod for compensating radial deviations	–	–	20
17	Adapter AD	For vacuum generator	–	■ S20	–
18	Slot cover ABP-5-S	For protecting the sensor cable and keeping dirt out of the sensor slots	■	■	22
19	Proximity sensor SME/SMT-8	Can be integrated in the cylinder profile barrel	■	■	22
20	One-way flow control valve GRLA/GRLZ	For speed regulation	■	■	21
21	Push-in fitting QS	For connecting compressed air tubing with standard O.D.	■	■	21

# Compact cylinders ADVU – Inch Series

Accessories overview



Piston  $\varnothing$  5 Inch



# Compact cylinders ADVU – Inch Series

Accessories overview



Mounting Attachments and Accessories				
	Description	Basic	S2	→ Page
1	Foot mounting HNC	■	■	12
2	Flange mounting FNC	■	■	13
3	Swivel flange SNC	■	–	15
4	Swivel flange SNCB	■	–	15
5	Clevis foot LSNSG	■	–	19
6	Clevis foot LSN	■	–	19
7	Clevis foot LN	■	–	19
8	Swivel flange SNCS	■	–	16
9	Clevis foot LBG	■	■	19
10	Swivel flange SNCL	■	–	16
11	Trunnion flange ZNCF	■	■	17
12	Trunnion support LNZG	■	■	19
13	Trunnion mounting kit ZNCM	■	■	17
14	Adapter kit DPNC	■	■	18
15	Rod eye SGS	■	■	20
16	Clevis foot, lateral LQG	■	■	19
17	Rod clevis SG	■	■	20
18	Self-aligning rod coupler FK	■	■	20
19	Coupling piece KSZ	■	■	20
20	Slot cover ABP-5-S	■	■	22
21	Proximity sensor SME/SMT-8	■	■	22
22	One-way flow control valve GRLA/GRLZ	■	■	21
23	Push-in fitting QS	■	■	21

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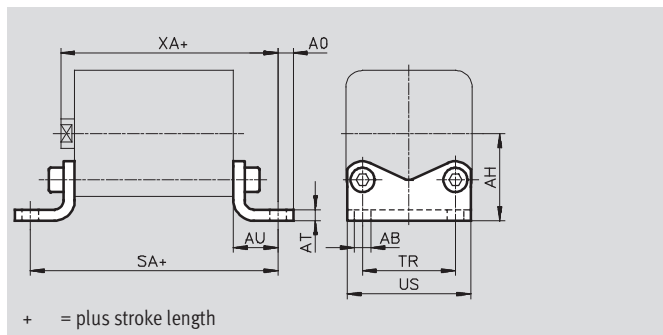
Accessories



**Foot mounting HUA**  
for piston  $\varnothing$  1/2 ... 4 inch

**Foot mounting HNC**  
for piston  $\varnothing$  5 inch  
(not illustrated)

Material:  
HUA/HNC: Galvanized steel



Dimensions and Ordering Data													
For $\varnothing$	AB $\varnothing$	AH	AO	AT	AU	SA	TR	US	XA	Weight [oz]	Basic version		
											CRC <sup>1)</sup>	Part No.	Type
1/2, 5/8	0.22	0.9	0.2	0.1	0.5	2.5	0.7	1.1	2.2	1.38	2	157309	HUA-12/16
3/4	0.26	1.1	0.2	0.2	0.6	2.8	0.9	1.3	2.3	2.75	2	157310	HUA-20
1	0.26	1.1	0.2	0.2	0.6	2.8	1.0	1.5	2.4	3.17	2	157311	HUA-25
1-1/4	0.26	1.3	0.3	0.2	0.7	3.2	1.3	1.9	2.7	5.47	2	157312	HUA-32
1-5/8	0.35	1.6	0.3	0.2	0.8	3.4	1.7	2.3	2.8	7.09	2	157313	HUA-40
2	0.35	1.9	0.3	0.2	0.9	3.7	2.0	2.6	3.0	11.08	2	157314	HUA-50
2-1/2	0.43	2.2	0.5	0.2	1.1	4.1	2.4	3.3	3.3	19.40	2	157315	HUA-63
3	0.43	2.7	0.5	0.3	1.2	4.6	3.2	4.1	3.7	29.10	2	157316	HUA-80
4	0.53	3.2	0.5	0.3	1.3	5.2	4.1	5.0	4.3	37.04	2	157317	HUA-100
5	0.65	3.5	0.9	0.3	1.8	6.7	3.5	5.2	5.7	65.08	2	174375	HNC-125

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

Dimensions are in inches, unless otherwise noted.

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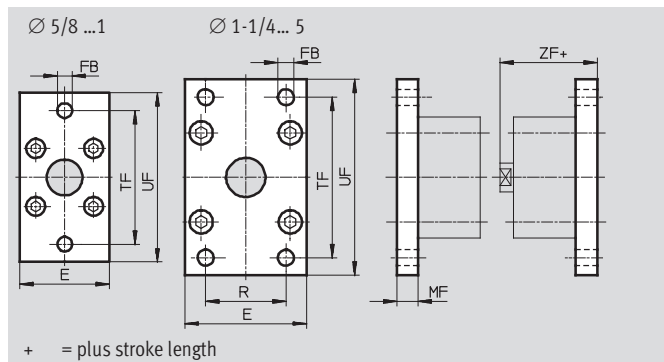
Accessories



**Flange mounting FUA**  
for piston  $\varnothing$  1/2 ... 4 inch

**Flange mounting FNC**  
for piston  $\varnothing$  5 inch  
(not illustrated)

Material:  
FUA: Clear anodized aluminum  
FNC: Galvanized steel



Dimensions and Ordering Data											
For $\varnothing$	E	FB	MF	R	TF	UF	ZF	CRC <sup>2)</sup>	Weight [oz]	Part No.	Type
1/2, 5/8	1.1	0.2	0.4	–	1.7	2.2	2.1	2	1.69	157299	FUA-12/16
3/4	1.4	0.3	0.4	–	2.2	2.8	2.1	2	2.54	157300	FUA-20
1	1.6	0.3	0.4	–	2.4	3.0	2.2	2	3.07	157301	FUA-25
1-1/4	2.0	0.3	0.4	1.3	2.6	3.1	2.4	2	4.13	157302	FUA-32
1-5/8	2.4	0.4	0.4	1.4	3.2	4.0	2.4	2	6.35	157303	FUA-40
2	2.7	0.4	0.5	1.8	3.5	4.3	2.6	2	9.38	157304	FUA-50
2-1/2	3.4	0.4	0.6	2.0	4.3	5.1	2.9	2	19.40	157305	FUA-63
3	4.2	0.5	0.6	2.5	5.3	6.3	3.0	2	26.28	157306	FUA-80
4	5.0	0.6	0.6	3.0	6.4	7.5	3.6	2	36.51	157307	FUA-100
5	5.2	0.6	0.8	3.5	7.1	8.3	4.7	2	132.28	174382	FNC-125 <sup>1)</sup>

1) Free of copper, PTFE and silicone

2) Corrosion resistance class 2 according to Festo standard 940 070

Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

Dimensions are in inches, unless otherwise noted.

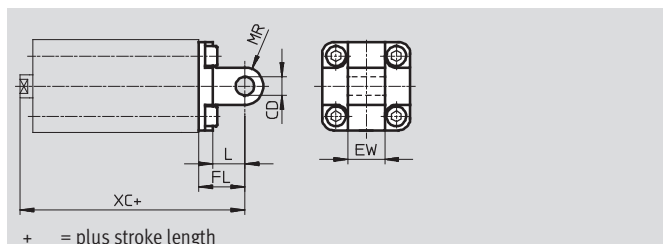
# Compact cylinders ADVU – Inch Series

Accessories



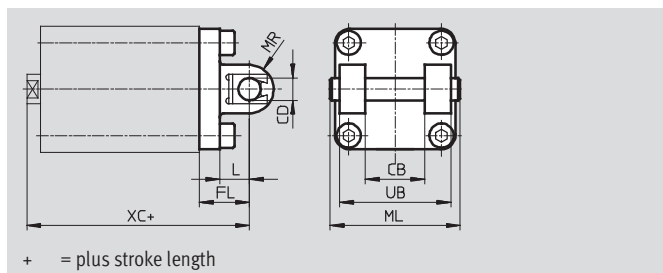
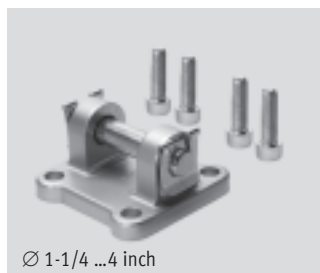
## Swivel flange SUA for piston $\varnothing$ 1/2 ... 1 inch

Material:  
SUA: Anodized aluminum



## for piston $\varnothing$ 1-1/4 ... 4 inch

Material:  
SUA: Anodized aluminum



Dimensions and Ordering Data												
For $\varnothing$	CB	CD $\varnothing$	EW	FL	L	ML	MR	UB	XC	Weight [oz]	Basic version	
											Part No.	Type
1/2, 5/8	–	0.2	0.5	0.6	0.4	–	0.2	–	2.3	1.5	157319	SUA-12/16
3/4	–	0.3	0.6	0.8	0.6	–	0.3	–	2.5	2.8	157320	SUA-20
1	–	0.3	0.6	0.8	0.6	–	0.3	–	2.6	3.0	157321	SUA-25
1-1/4	1.0	0.4	–	0.9	0.5	2.1	0.4	1.8	2.9	7.3	157322	SUA-32
1-5/8	1.1	0.5	–	1.0	0.6	2.4	0.5	2.0	3.0	11.3	157323	SUA-40
2	1.3	0.5	–	1.1	0.6	2.8	0.5	2.4	3.1	15.4	157324	SUA-50
2-1/2	1.6	0.6	–	1.3	0.8	3.2	0.6	2.8	3.5	26.8	157325	SUA-63
3	2.0	0.6	–	1.4	0.9	4.0	0.6	3.5	3.9	42.0	157326	SUA-80
4	2.4	0.8	–	1.6	1.0	5.0	0.8	4.3	4.6	67.0	157327	SUA-100

### Note

Do not exceed the maximum overall stroke length listed when combining cylinders and swivel flanges.

For $\varnothing$	Max. stroke length [in]
1/2	2
5/8	2
3/4	2
1	2
1-1/4	4

For $\varnothing$	Max. stroke length [in]
1-5/8	4
2	4
2-1/2	4
3	6
4	6

Dimensions are in inches, unless otherwise noted.

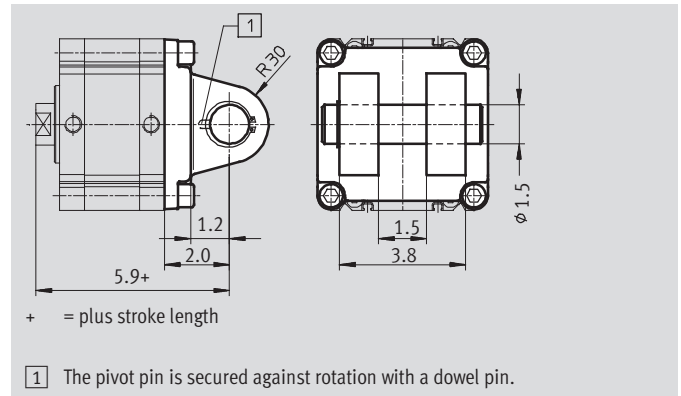
# Compact cylinders ADVU – Inch Series

Accessories



## Swivel flange SNC-125 for piston $\varnothing$ 5 inch

Material:  
Wrought aluminum alloy

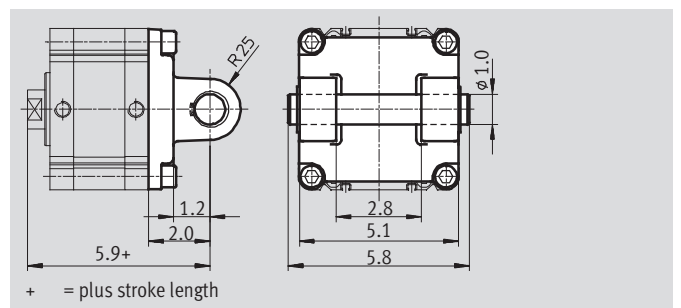


Ordering Data				
For $\varnothing$	CRC <sup>1)</sup>	Weight [oz]	Basic version	
			Part No.	Type
5	2	6.3	174389	SNC-125

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

## Swivel flange SNCB-125 for piston $\varnothing$ 5 inch

Material:  
SNCB-125: Wrought aluminum alloy  
Free of copper, PTFE and silicone



Ordering Data			
For $\varnothing$	Weight [oz]	Basic version	
		Part No.	Type
5	63.0	174396	SNCB-125

Dimensions are in inches, unless otherwise noted.

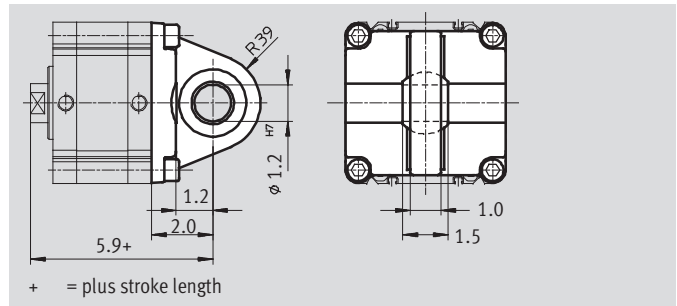
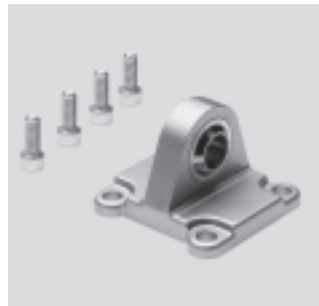
# Compact cylinders ADVU – Inch Series

Accessories



## Swivel flange SNCS-125 for piston $\varnothing$ 5 inch

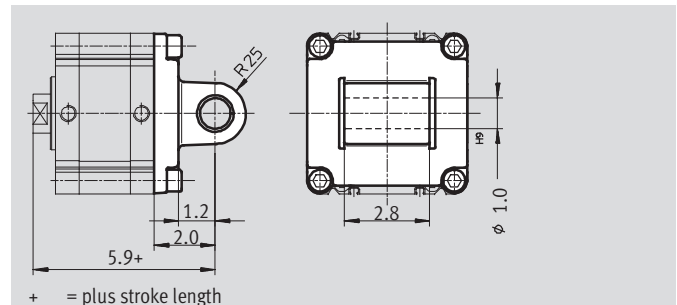
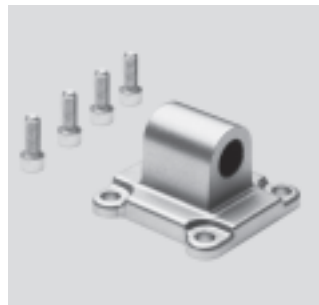
Material:  
Wrought aluminum alloy



Ordering Data			
For $\varnothing$	Weight [oz]	Basic version	
		Part No.	Type
5	49.7	174403	SNCS-125

## Swivel flange SNCL-125 for piston $\varnothing$ 5 inch

Material:  
Wrought aluminum alloy



Ordering Data			
For $\varnothing$	Weight [g]	Basic version	
		Part No.	Type
5	43.9	174410	SNCL-125

Dimensions are in inches, unless otherwise noted.

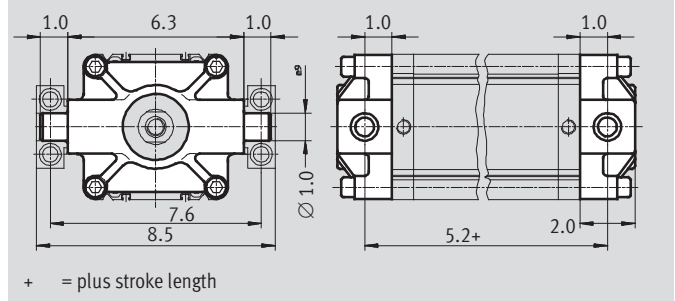


# Compact cylinders ADVU – Inch Series

Accessories

## Trunnion flange ZNCF-125 for piston Ø 5 inch

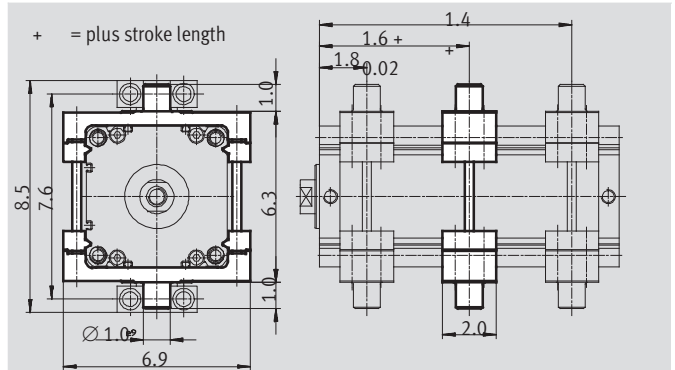
Material:  
High-alloy stainless steel  
Free of copper, PTFE and silicone



Ordering Data			
For Ø	Weight [oz]	Basic version	
		Part No.	Type
5	123.1	174417	ZNCF-125

## Trunnion mounting kit ZNCM-125 for piston Ø 5 inch

Material:  
Tempered steel



**Note**  
The trunnion mounting kit can be attached to the cylinder profile barrel at any position.

Ordering Data				
For Ø	CRC <sup>1)</sup>	Weight [oz]	Basic version	
			Part No.	Type
5	2	103.7	163531	ZNCM-125

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

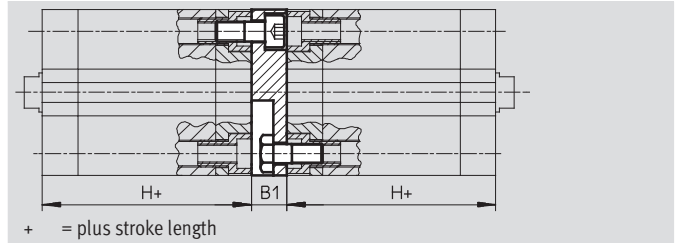
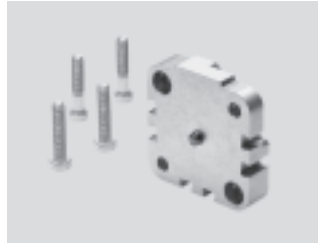
Dimensions are in inches, unless otherwise noted.

# Compact cylinders ADVU – Inch Series

Accessories

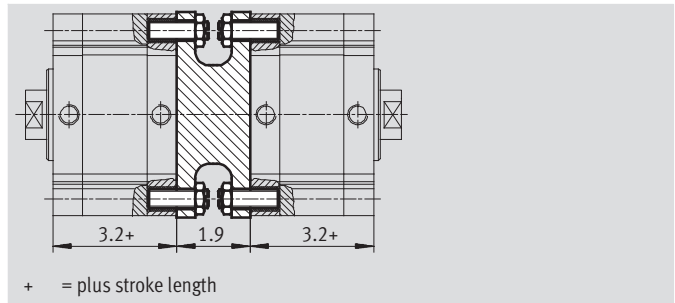
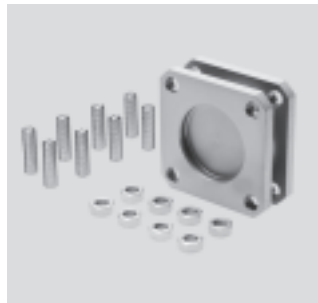
## Adapter kit DPVU for piston $\varnothing$ 1/2 ... 4 inch

Material:  
Aluminum  
Free of copper, PTFE and silicone



## Adapter kit DPNC for piston $\varnothing$ 5 inch

Material:  
Flange: Wrought aluminum alloy  
Threaded pins, hex nuts: Galvanized steel



**Note**  
Do not exceed the maximum overall stroke length listed when combining cylinders and the adapter kit.

Dimensions and Ordering Data							
For $\varnothing$	B1	H	Max. overall stroke length [in]	CRC <sup>1)</sup>	Weight [oz]	Part No.	Type
1/2, 5/8	0.5	1.5	15.7	2	0.78	161194	DPVU-12/16
3/4	0.5	1.5	15.7	2	1.27	161195	DPVU-20
1	0.5	1.6	15.7	2	1.55	161196	DPVU-25
1-1/4	0.6	1.8	23.6	2	3.17	161197	DPVU-32
1-5/8	0.6	1.8	23.6	2	4.83	161198	DPVU-40
2	0.6	1.8	23.6	2	6.24	161199	DPVU-50
2-1/2	0.6	2.0	23.6	2	10.86	161200	DPVU-63
3	0.6	2.2	31.5	2	17.46	161201	DPVU-80
4	0.8	2.6	31.5	2	30.30	161202	DPVU-100
5	1.9	3.2	39.4		56.44	174424	DPNC-125

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

### Connecting two Cylinders with Identical Piston $\varnothing$ as a 3 or 4-position Cylinder

A 3 or 4-position cylinder consists of two separate cylinders whose piston rods advance in opposing directions.

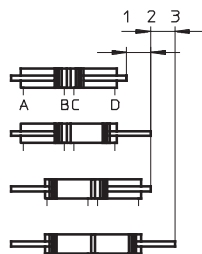
Depending upon actuation and stroke pattern, this type of cylinder can assume up to four positions. In each

case the cylinder is driven precisely against a stop. If one end of the piston rod is fixed, the cylinder barrel

executes the movement. The cylinder must be connected with flexible line connections.

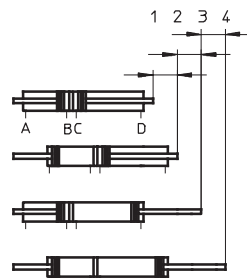
#### Implementing 3 positions

Two cylinders with identical stroke length must be connected to accomplish this.



#### Implementing 4 positions

Two cylinders with different stroke lengths must be connected to accomplish this.


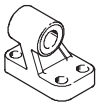
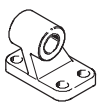
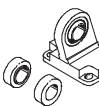
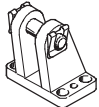
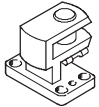
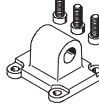




Dimensions are in inches, unless otherwise noted.

# Compact cylinders ADVU – Inch Series

Accessories


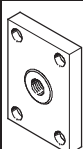




Ordering Data – Mounting Attachments				Technical data → <a href="http://www.festo.com/catalog/&lt;type&gt;">www.festo.com/catalog/&lt;type&gt;</a> or <order code>			
Designation	For Ø [in]	Part No.	Type	Designation	For Ø [in]	Part No.	Type
<b>Clevis foot LBN</b>				<b>Clevis foot LNG</b>			
	1/2	6058	LBN-12/16		1-1/4	33890	LNG-32
	5/8	6058	LBN-12/16		5/8	33891	LNG-40
	3/4	6059	LBN-20/25		2	33892	LNG-50
	1	6059	LBN-20/25		2-1/2	33893	LNG-63
<b>Clevis foot LN</b>				<b>Clevis foot LSN</b>			
	1-1/4	5147	LN-32		1-1/4	5561	LSN-32
	1-5/8	5148	LN-40		1-5/3	5562	LSN-40
	2	5149	LN-50		2	5563	LSN-50
	2-1/2	5150	LN-63		2-1/2	5564	LSN-63
	3	5151	LN-80		3	5565	LSN-80
	4	5152	LN-100		4	5566	LSN-100
<b>Clevis foot LBG</b>				<b>Clevis foot, lateral LQG</b>			
	3/4, 1, 1-1/4, 1-5/8	31761	LBG-32		3/4, 1, 1-1/4, 1-5/8	31768	LQG-32
	2, 2-1/2	31762	LBG-40		2, 2-1/2	31769	LQG-40
	3	31763	LBG-50		3	31770	LQG-50
		31764	LBG-63			31771	LQG-63
	4	31765	LBG-80		4	31772	LQG-80
31766		LBG-100	31773	LQG-100			
<b>Swivel flange SNCL</b>				<b>Clevis foot LSNSG</b>			
	1-1/4	174404	SNCL-32		5	31753	LSNSG-125
	1-5/8	174405	SNCL-40				
	2	174406	SNCL-50				
	2-1/2	174407	SNCL-63				
	3	174408	SNCL-80				
	4	174409	SNCL-100				
<b>Trunnion support LNZG</b>							
							
				5			
				32962			
				LNZG-100/125			

# Compact cylinders ADVU – Inch Series

Accessories






Ordering Data – Piston Rod Attachments				Technical data → <a href="http://www.festo.com/catalog/&lt;type&gt; or &lt;order code&gt;">www.festo.com/catalog/&lt;type&gt; or &lt;order code&gt;</a>			
Designation	For Ø [in]	Part No.	Type	Designation	For Ø [in]	Part No.	Type
<b>Rod eye SGS</b>				<b>Coupling piece KSZ</b>			
	1/2	532694	SGS-10-32		1/2	–	
	5/8				5/8	–	
	3/4	532695	SGS-5/16-24		3/4	–	
	1	532696	SGS-3/8-24		1	36129	KSZ-3/8-24-UNF
	1-1/4	532696	SGS-3/8-24		1-1/4	36129	KSZ-3/8-24-UNF
	1-5/8	532697	SGS-1/2-20		1-5/8	36130	KSZ-1/2-20-UNF
	2	532698	SGS-5/8-18		2	36131	KSZ-5/8-18-UNF
	2-1/2				2-1/2		
	3	532699	SGS-3/4-16		3	36132	KSZ-3/4-16-UNF
	4				4		
5	532700	SGS-1-12	5	–			
<b>Rod clevis SG</b>				<b>Self-aligning rod coupler FK</b>			
	1/2	546552	SG-UNF10-32-B		1/2	532703	FK-10-32
	5/8				5/8		
	3/4	546574	SG-UNF5/16-24-B		3/4	532704	FK-5/16-24
	1	546540	SG-UNF3/8-24-B		1	532705	FK-3/8-24
	1-1/4				1-1/4	532705	FK-3/8-24
	1-5/8	546545	SG-UNF1/2-20-B		1-5/8	532706	FK-1/2-20
	2	546575	SG-UNF5/8-18-B		2	532707	FK-5/8-18
	2-1/2				2-1/2		
	3	546576	SG-UNF3/4-16-B		3	532708	FK-3/4-16
	4				4		
5	–		5	532709	FK-1-12		

# Compact cylinders ADVU – Inch Series

Accessories






Ordering Data – One-way Flow Control Valves			Technical data → <a href="http://www.festo.com/catalog/&lt;type&gt; or &lt;order code&gt;">www.festo.com/catalog/&lt;type&gt; or &lt;order code&gt;</a>	
Connection	Part No.		Type	
	Thread	For tubing OD		
<b>For exhaust air</b>				
	10-32 UNF	5/32	165008	GRLA-10-32-UNF-QS-5/32-U
		1/4	192753	GRLA-10-32-UNF-QS-1/4-U
	1/8" NPT	5/32	165009	GRLA-1/8-NPT-QS-5/32-U
		3/16	190941	GRLA-1/8-NPT-QS-3/16-U
		1/4	165010	GRLA-1/8-NPT-QS-1/4-U
		5/16	165013	GRLA-1/8-NPT-QS-5/16-U
		3/16	190944	GRLA-1/4-NPT-QS-3/16-U
	1/4" NPT	1/4	165011	GRLA-1/4-NPT-QS-1/4-U
		5/16	165014	GRLA-1/4-NPT-QS-5/16-U
		3/8	190947	GRLA-1/4-NPT-QS-3/8-U
<b>For supply air</b>				
	10-32-UNF	–	151576	GRLZ-10-UNF-B
		–	151579	GRLZ-10-UNF-RS-B
		3/16	151577	GRLZ-10-UNF-3/16-B
		1/4	151578	GRLZ-10-UNF-1/4-B
	1/8" NPT	–	151561	GRLZ-1/8-NPT-B
		–	151564	GRLZ-1/8-NPT-RS-B
		1/4	151562	GRLZ-1/8-NPT-1/4-B
		3/8	151563	GRLZ-1/8-NPT-3/8-B




Ordering Data – Push-in Fittings QB, NPT Thread					Technical Data → <a href="http://www.festo.com/catalog/QB">www.festo.com/catalog/QB</a>		
For tubing O.D. [in]	10/32 UNF		1/8NPT		1/4NPT		
	Part No.	Type	Part No.	Type	Part No.	Type	
<b>With external hex</b>							
	1/8	533266	QB-10-32-UNF-1/8-U	533270	QB-1/8-1/8-U	–	
	5/32	533267	QB-10-32-UNF-5/32-U	533271	QB-1/8-5/32-U	–	
	3/16	533268	QB-10-32-UNF-3/16-U	533272	QB-1/8-3/16-U	533275	QB-1/4-3/16-U
	1/4	533269	QB-10-32-UNF-1/4-U	533273	QB-1/8-1/4-U	533276	QB-1/4-1/4-U
	5/16	–	–	533274	QB-1/8-5/16-U	533277	QB-1/4-5/16-U
	3/8	–	–	–	–	533278	QB-1/4-3/8-U
	1/2	–	–	–	–	–	–



# Compact cylinders ADVU – Inch Series

Accessories

**FESTO**

Ordering Data – Proximity Switches for T-slot, Magneto-resistive					Technical data → <a href="http://www.festo.com/catalog/sm">www.festo.com/catalog/sm</a>	
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
<b>N/O contact</b>						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	2.5	543867	SMT-8M-PS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543866	SMT-8M-PS-24V-K-0,3-M8D
			Plug M12x1, 3-pin	0.3	543869	SMT-8M-PS-24V-K-0,3-M12
		NPN	Cable, 3-wire	2.5	543870	SMT-8M-NS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543871	SMT-8M-NS-24V-K-0,3-M8D
	Insertable in the slot lengthwise, flush with the cylinder profile	PNP	Cable, 3-wire	2.5	175436	SMT-8-PS-K-LED-24-B
			Plug M8x1, 3-pin	0.3	175484	SMT-8-PS-S-LED-24-B
<b>N/C contact</b>						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	7.5	543873	SMT-8M-PO-24V-K7,5-OE

Ordering Data – Proximity Switches for T-slot, Magnetic Reed					Technical data → <a href="http://www.festo.com/catalog/sm">www.festo.com/catalog/sm</a>	
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
<b>N/O contact</b>						
	Insertable in the slot from above, flush with cylinder profile	Contacting	Cable, 3-wire	2.5	543862	SME-8M-DS-24V-K-2,5-OE
				5.0	543863	SME-8M-DS-24V-K-5,0-OE
			Cable, 3-wire	2.5	543872	SME-8M-ZS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543861	SME-8M-DS-24V-K-0,3-M8D
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	150855	SME-8-K-LED-24
			Plug M8x1, 3-pin	0.3	150857	SME-8-S-LED-24
<b>N/C contact</b>						
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	160251	SME-8-O-K-LED-24

Ordering Data – Connecting Cables				Technical data → <a href="http://www.festo.com/catalog/nebu">www.festo.com/catalog/nebu</a>	
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541333	NEBU-M8G3-K-2.5-LE3
			5.0	541334	NEBU-M8G3-K-5-LE3
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541363	NEBU-M12G5-K-2.5-LE3
			5.0	541364	NEBU-M12G5-K-5-LE3
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541338	NEBU-M8W3-K-2.5-LE3
			5.0	541341	NEBU-M8W3-K-5-LE3
Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541367	NEBU-M12W5-K-2.5-LE3	
		5.0	541370	NEBU-M12W5-K-5-LE3	

Ordering Data – Slot Cover for T-slot				
	Assembly	Length [ft]	Part No.	Type
	Insertable from above	2x 1.6	151680	ABP-5-S

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