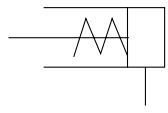


ISO-Zylinder/Standard, Einfachwirkend Federkraft eingefahren **Serie C85NS**



kraft eingefahren

Symbol Standard



mit Federkraft eingefahren

Technische Daten

Kolbendurchmesser (mm)	8	10	12	16	20	25
Kolbenstangendurchm. (mm)	4	4	6	6	8	10
Kolbenstangengewinde	M4 X 0.7	M4 X 0.7	M6 X 1	M6 X 1	M8 X 1.25	M10 X 1.25
Anschlüsse	M5	M5	M5	M5	G1/8	G1/8
Funktion	Einfachwirkend/Standardausführung, mit Federkraft eingefahren					
Medium	Druckluft					
Prüfdruck	1.5MPa					
Max. Betriebsdruck	1.0MPa					
Min. Betriebsdruck	0.22MPa	0.18MPa	0.13MPa	0.23MPa		
Umgebungs- und Mediumstemperatur	-20 bis 80°C (Mit eingebautem Magnet: -10 bis 60°C)					
Dämpfung	Elastische Endlagendämpfung (Standard)					
Schmierung	Nicht erforderlich. Wenn notwendig, wird Turbinenöl Nr.1 ISOVG32 empfohlen.					
Kolbengeschwindigkeit	50 bis 1500mm/s					
Zulässige kinetische Energie	0.02J	0.03J	0.04J	0.09J	0.27J	0.4J
Hubtoleranz	0/+1			0/+1.4		

° Gilt nur für Modelle mit verdrehgesicherter Kolbenstange.

Federkraft (Standard)

Mit Federkraft eingefahren

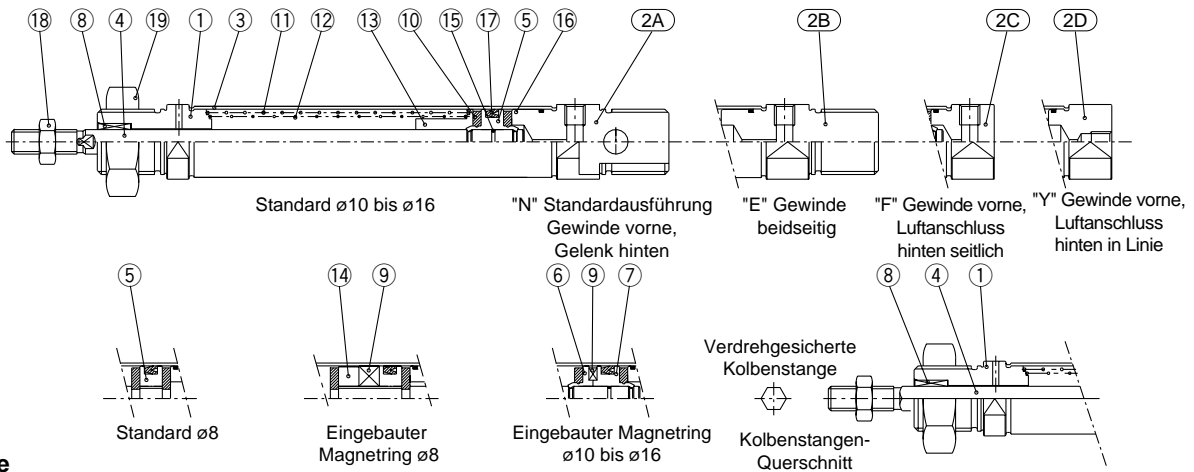
(N)

ø (mm)	Standardhub (mm)	Federkraft									
		10		25		50		100		150	
		Feder entspannt	Feder gespannt	Feder entspannt	Feder gespannt	Feder entspannt	Feder gespannt	Feder entspannt	Feder gespannt	Feder entspannt	Feder gespannt
8	10, 25, 50	4.02	4.41	3.43	4.41	2.45	4.41	—	—	—	—
10		5.69	6.28	4.90	6.28	3.53	6.28	—	—	—	—
12		6.57	7.16	5.79	7.16	4.41	7.16	—	—	—	—
16	10, 25, 50, 100, 150	12.1	13.2	10.3	13.2	7.45	13.2	7.45	13.2	7.45	13.2
20		18.6	21.6	16.7	21.6	11.8	21.6	9.81	39.2	9.81	39.2
25		25.3	27.5	22.1	27.5	16.7	27.5	13.7	47.1	15.7	47.1

Serie C85NS Federkraft eingefahren

Konstruktion

Einfachwirkend: Standardausführung
mit Federkraft eingefahren/C85NS 8 bis 16-□S (Demontage nicht möglich)



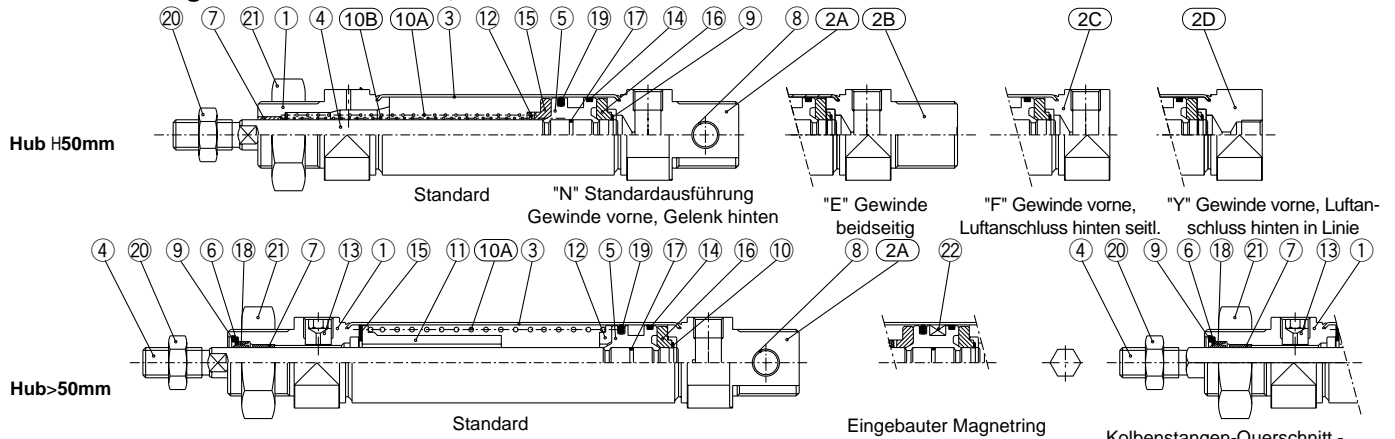
Stückliste

Pos.	Bezeichnung	Material	Anzahl	Bemerkung
①	Zylinderkopf	Leichtmetall	1	Alumite weiss
②A	Zylinderdeckel N	Leichtmetall	1	Alumite weiss
②B	Zylinderdeckel E	Leichtmetall	1	Alumite weiss
②C	Zylinderdeckel F	Leichtmetall	1	Alumite weiss
②D	Zylinderdeckel Y	Leichtmetall	1	Alumite weiss
③	Zylinderrohr	Rostfreier Stahl	1	
④	Kolbenstange	Rostfreier Stahl	1	
⑤	Kolben	Messing	1	
⑥	Kolben A	Messing	1	(Nur Signalgeberausf.)
⑦	Kolben B	Messing	1	(Nur Signalgeberausf.)
⑧	Gleitlager	Sinterbronze	1	

Pos.	Bezeichnung	Material	Anzahl	Bemerkung
⑨	Magnetring		1	(Nur Signalgeberausf.)
⑩	Dämpfscheibe	PUR	2	
⑪	Feder A	Federstahl	1	
⑫	Feder B	Federstahl	1	
⑬	Federführung	Messing	1	
⑭	Distanzring	Messing	1	
⑮	Dichtung	NBR	1	
⑯	Dichtung/Zyl.rohr	NBR	1	
⑰	Kolbendichtung	NBR	1	
⑱	Kolbenstangenmutter	Stahl	1	Vernickelt
⑲	Befestigungsmutter	Stahl	1	Vernickelt

Konstruktion

Einfachwirkend: Standardausführung
Federkraft eingefahren/C85NS 20, 25-□S



Stückliste

Pos.	Bezeichnung	Material	Anzahl	Bemerkung
①	Zylinderkopf	Leichtmetall	1	Alumite weiss
②A	Zylinderdeckel N	Leichtmetall	1	Alumite weiss
②B	Zylinderdeckel E	Leichtmetall	1	Alumite weiss
②C	Zylinderdeckel F	Leichtmetall	1	Alumite weiss
②D	Zylinderdeckel Y	Leichtmetall	1	Alumite weiss
③	Zylinderrohr	Rostfreier Stahl	1	
④	Kolbenstange	Stahl	1	Hartverchromt
⑤	Kolben	Alumite weiss	1	Chromatiert
⑥	Scheibe	Stahl	1	Vernickelt
⑦	Gleitlager	Sinterbronze	1	
⑧	Gleitlager	Sinterbronze	1	
⑨	Sicherungsring	Stahl	1	Vernickelt
⑩A	Feder A	Federstahl	1	Zink verchromt

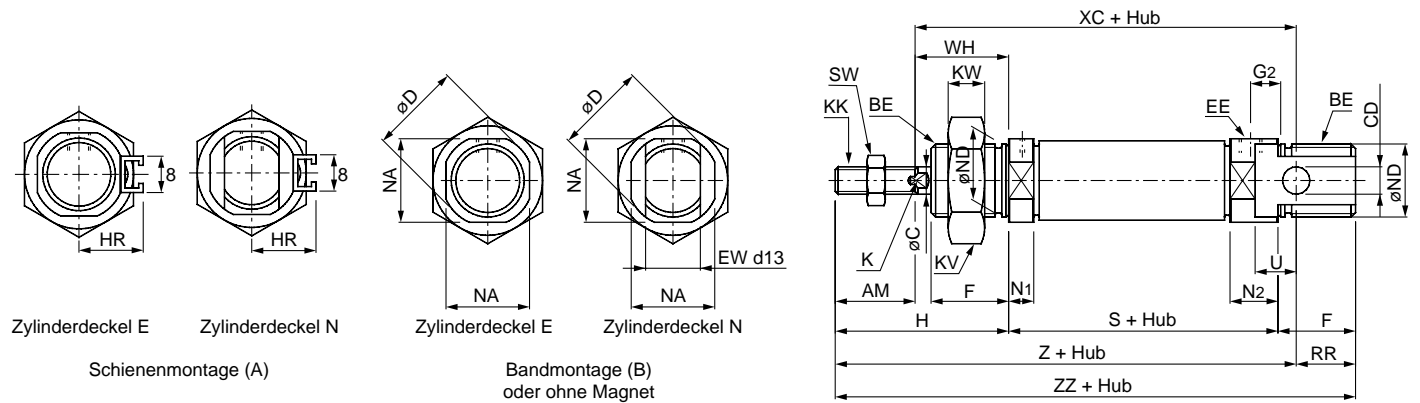
Pos.	Bezeichnung	Material	Anzahl	Bemerkung
⑩B	Feder B	Federstahl	1	Zink verchromt
⑪	Federführung	Leichtmetall	1	
⑫	Federhalter	Leichtmetall	1	
⑬	Stellschraube	Stahl	1	
⑭	Kolbenführungsband	PTFE	1	
⑮	Dämpfscheibe A	PUR	1	
⑯	Dämpfscheibe B	PUR	1	
⑰	Dichtung	NBR	1	
⑱	Dichtung/Abstreifer	NBR	1	
⑲	Kolbendichtung	NBR	1	
⑲	Kolbenstangenmutter	Stahl	1	Vernickelt
⑲	Befestigungsmutter	Stahl	1	Vernickelt
⑲	Magnetring		1	(Nur Signalgeberausf.)

Abmessungen

Einfachwirkend: mit Federkraft eingefahren

C 85 N \varnothing — Hub S — \square

Mit oder ohne Magnetring



\varnothing	AM	BE	$\varnothing C$	CD	$\varnothing D$	EE	EW	F	G2	H	HR	K	KA	KK	KV	KW	N1	N2	NA	$\varnothing ND(h8)$	RR	SW	U	WH
$\varnothing 8$	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5 X 0.8	8	12	5	28	10	—	4.2	M4 X 0.7	19	6	5.5	9.5	15	12	10	7	6	16
$\varnothing 10$	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5 X 0.8	8	12	5	28	10.5	—	4.2	M4 X 0.7	19	6	5.5	9.5	15	12	10	7	6	16
$\varnothing 12$	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5 X 0.8	12	17	6	38	14	5	6.2	M6 X 1	24	8	5.5	10.5	18	16	14	10	9	22
$\varnothing 16$	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5 X 0.8	12	17	6	38	14	5	6.2	M6 X 1	24	8	5.5	10.5	18	16	13	10	9	22
$\varnothing 20$	20	M22 X 1.5	8	8 ^{+0.036} _{-0.006}	27.9	G1/8	16	20	8	44	17	6	8.2	M8 X 1.25	32	11	15	15	24	22	11	13	12	24
$\varnothing 25$	22	M22 X 1.5	10	8 ^{+0.036} _{-0.006}	33.4	G1/8	16	22	8	50	20	8	10.2	M10 X 1.25	32	11	15	15	30	22	11	17	12	28

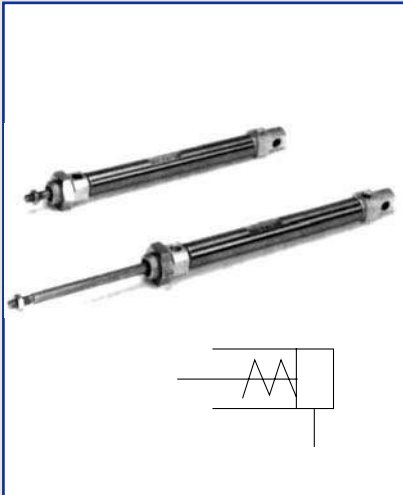
\varnothing	S			XC			Z			ZZ		
	1 bis 50	51 bis 100	101 bis 150	1 bis 50	51 bis 100	101 bis 150	1 bis 50	51 bis 100	101 bis 150	1 bis 50	51 bis 100	1 bis 50
$\varnothing 8$	46(52){56(62)}	—	—	64(70){74(80)}	—	—	76(82){86(92)}	—	—	86(92){96(102)}	—	—
$\varnothing 10$	46(50){56(60)}	—	—	64(68){74(78)}	—	—	76(80){86(90)}	—	—	86(90){96(100)}	—	—
$\varnothing 12$	50(53.5){60(63.5)}	—	—	75(78.5){85(88.5)}	—	—	91(94.5){101(104.5)}	—	—	105(108.5){115(118.5)}	—	—
$\varnothing 16$	56(59.5){66(69.5)}	71.5(75) {92(95.5)}	87(90.5) {118(121.5)}	82(85.5) {92(95.5)}	97.5(101) {118(121.5)}	113(116.5) {144(147.5)}	98(101.5) {108(111.5)}	113.5(117) {134(137.5)}	129(132.5) {160(163.5)}	111(114.5) {121(124.5)}	126.5(130) {147(150.5)}	142(145.5) {173(176.5)}
$\varnothing 20$	62(87)	112	137	95(120)	145	170	115(140)	165	190	126(151)	176	201
$\varnothing 25$	65(88.5)	113.5	138.5	104(127.5)	152.5	177.5	126(149.5)	174.5	199.5	137(160.5)	185.5	210.5

(): Gültig für Signalgeberausführung. { }: Gültig bei verdrehgesicherter Kolbenstange.

Air Cylinders

Languages > 

SMC Air Cylinder ISO 6432 - Type C85NS



Air Cylinders
Item no.: 206111000000

Product Description

- Pressure air cylinder with rust resistant cylinder tube
- Signal generator adjustment possible over rail or band
- Standard special seals for oil free operation and easy run execution
- Cylinder with adjustable extreme position attenuation, optional from Ø 10 mm y

Technical Data


Piston Diameter (mm)	8	10	12	16	20	25
Piston Rod Diameter (mm)	4	4	6	6	8	1
Piston Rod Thread	M4 X 0.7	M4 X 0.7	M6 X 1	M6 X 1	M8 X 1.25	Ø
Connections	M5	M5	M5	M5	G1/8	M16 X 1.25
Functions	Single acting/Standard type, with spring force eingefahren					
Medium	Air					
Proof Pressure	1.5MPa					
Max. Operating Pressure	1.0MPa					
Min. Operating Pressure	0.22MPa	0.18MPa	0.13MPa	0.13MPa	0.23MPa	
Ambient- and Medium Temperatur	-20 to 80°C (with assembled solenoid: -10 to 60 °C)					
Dampening	Elastic Stop Damping (Standard)					
Lumbrication	Not Needed. If neededm, please use turbine oil No.1 ISOVG32					
Piston Speed	50 to 1500mm/s					
Admissible kinetic Energy	0.02J	0.03J	0.04J	0.09J	0.27J	0.4J
Tolerance of Stroke	0/+1					
* Are only valid for types with anti-twist safeguarded piston rod.						0/+1.4

Spring Force (Standard)

Retracted by spring force		(N)									
ø (mm)	Standard-stroke (mm)	Spring Force									
		10		25		50		100		150	
		Spring Released	Spring Released	Spring Released	Spring Released	Spring Released	Spring Released	Spring Released	Spring Released	Spring Released	Spring Released
8	10, 25, 50	4.02	4.41	3.43	4.41	2.45	4.41	—	—	—	—
10		5.69	6.28	4.90	6.28	3.53	6.28	—	—	—	—
12		6.57	7.16	5.79	7.16	4.41	7.16	—	—	—	—
16	10, 25, 50, 100, 150	12.1	13.2	10.3	13.2	7.45	13.2	7.45	13.2	7.45	13.2
20		18.6	21.6	16.7	21.6	11.8	21.6	9.81	39.2	9.81	39.2
25		25.3	27.5	22.1	27.5	16.7	27.5	13.7	47.1	15.7	47.1

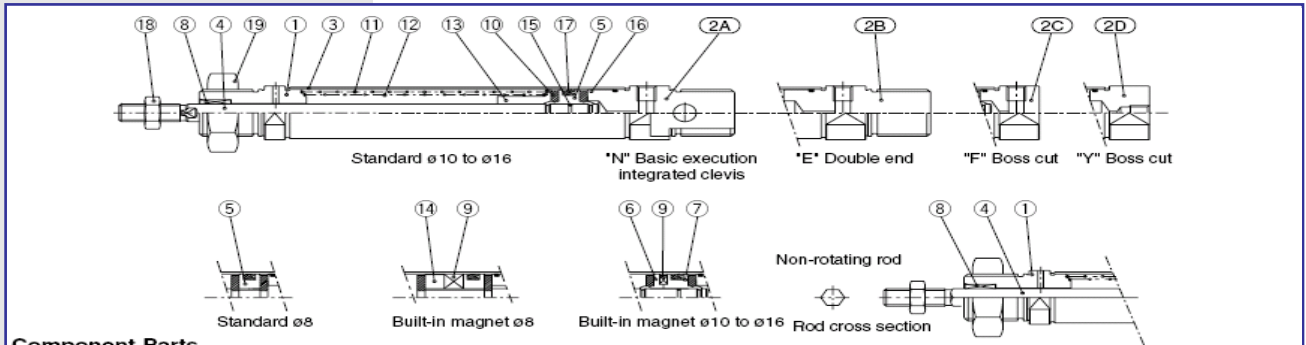
* Changes and mistakes excepted, prices plus packing and VAT.

Air Cylinders

Languages > 

SMC Air Cylinder ISO 6432 - Type C85NS

Single Acting Single Rod - Spring Return 8 to 16

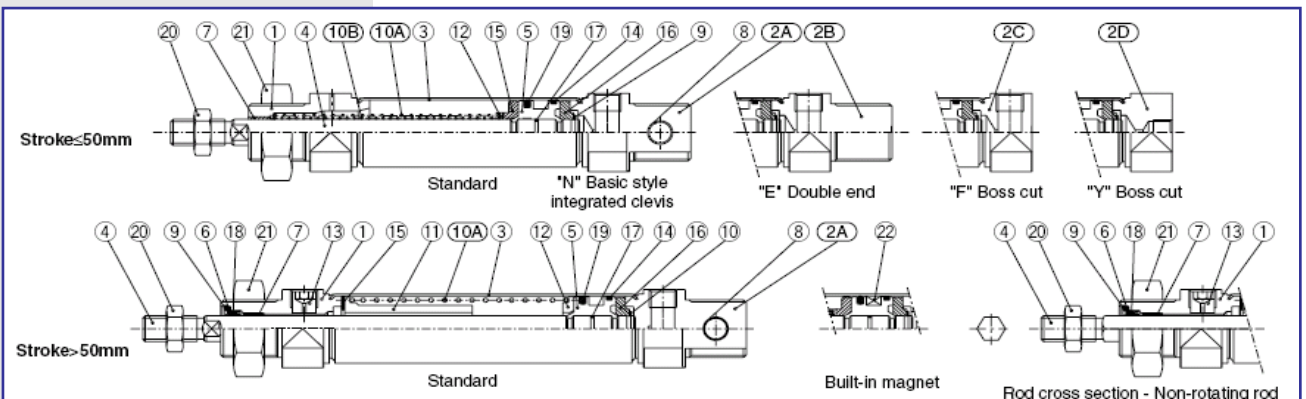


Component Parts

No.	Description	Material	Quantity	Remarks
①	Rod cover	Aluminum alloy	1	White anodized
(2A)	Head cover N	Aluminum alloy	1	White anodized
(2B)	Head cover E	Aluminum alloy	1	White anodized
(2C)	Head cover F	Aluminum alloy	1	White anodized
(2D)	Head cover Y	Aluminum alloy	1	White anodized
③	Cylinder tube	Stainless steel	1	
④	Piston rod	Stainless steel	1	
⑤	Piston	Brass	1	
⑥	Piston A	Brass	1	(Switch style only)
⑦	Piston B	Brass	1	(Switch style only)
⑧	Bushing	Sintered bronze	1	

No.	Description	Material	Quantity	Remarks
⑨	Magnet		1	(Switch style only)
⑩	Bumper	Urethane	2	
⑪	Return spring A	Piano wire	1	
⑫	Return spring B	Piano wire	1	
⑬	Spring guide	Brass	1	
⑭	Spacer	Brass	1	
⑮	Piston gasket	NBR	1	
⑯	Tube gasket	NBR	1	
⑰	Piston seal	NBR	1	
⑱	Rod end nut	Carbon steel	1	Nickel plated
⑲	Mounting nut	Carbon steel	1	Nickel plated

Single Acting Standard - Spring Return 20 to 25



Component Parts


No.	Description	Material	Quantity	Remarks
①	Rod cover	Aluminum alloy	1	White anodized
(2A)	Head cover N	Aluminum alloy	1	White anodized
(2B)	Head cover E	Aluminum alloy	1	White anodized
(2C)	Head cover F	Aluminum alloy	1	White anodized
(2D)	Head cover Y	Aluminum alloy	1	White anodized
③	Cylinder tube	Stainless steel	1	
④	Piston rod	Carbon steel*	1	Hard chrome plated
⑤	Piston	Aluminum alloy	1	Chromated
⑥	Plain washer	Carbon steel	1	Nickel plated
⑦	Bushing	Sintered bronze	1	
⑧	Bushing	Sintered bronze	1	
⑨	Retaining ring	Carbon steel	1	Nickel plated
(10A)	Return spring A	Piano wire	1	Zinc chromated

* Stainless steel (Non-rotating rod)

No.	Description	Material	Quantity	Remarks
(10B)	Return spring B	Piano wire	1	Zinc chromated
⑪	Spring guide	Aluminum alloy	1	
⑫	Spring holder	Aluminum alloy	1	
⑬	Set screw	Carbon steel	1	
⑭	Wear ring	Phenolic resin	1	
⑮	Bumper A	Urethane	1	
⑯	Bumper B	Urethane	1	
⑰	Piston gasket	NBR	1	
⑱	Rod seal	NBR	1	
⑲	Piston seal	NBR	1	
⑳	Rod end nut	Carbon steel	1	Nickel plated
㉑	Mounting nut	Carbon steel	1	Nickel plated
㉒	Magnet		1	(Switch style only)

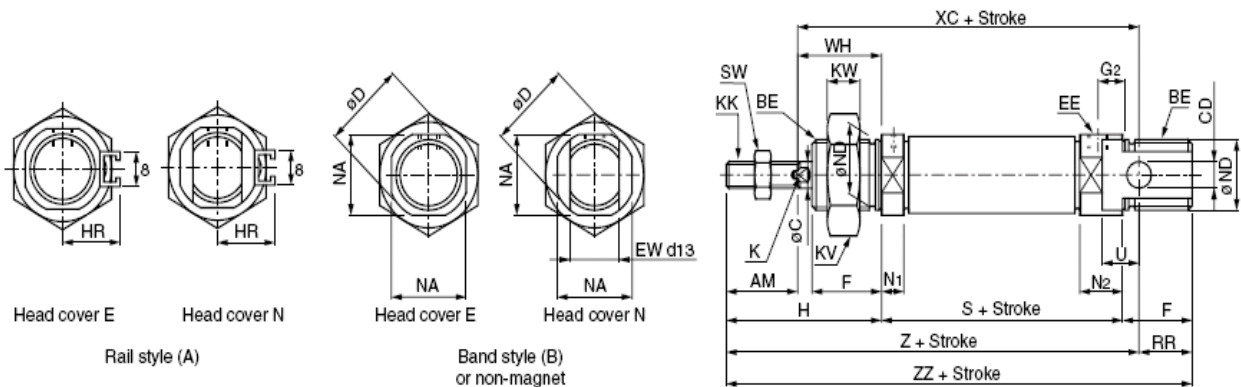
* Changes and mistakes excepted, prices plus packing and VAT.

Air Cylinders

Languages > 

SMC Air Cylinder ISO 6432 - Type C85NS

Dimension - Single Acting - Spring Return



Unit: (mm)

Bore	AM	BE	øC	CD	øD	EE	EW	F	G ₂	H	HR	K	KA	KK	KV	KW	N ₁	N ₂	NA	øND(h8)	RR	SW	U	WH
ø8	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5	8	12	5	28	10	—	4.2	M4	19	6	5.5	9.5	15	12	10	7	6	16
ø10	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5	8	12	5	28	10.5	—	4.2	M4	19	6	5.5	9.5	15	12	10	7	6	16
ø12	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5	12	17	6	38	14	5	6.2	M6	24	8	5.5	10.5	18	16	14	10	9	22
ø16	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5	12	17	6	38	14	5	6.2	M6	24	8	5.5	10.5	18	16	13	10	9	22
ø20	20	M22 X 1.5	8	8 ^{+0.036} _{-0.006}	27.9	G1/8	16	20	8	44	17	6	8.2	M8	32	11	15	15	24	22	11	13	12	24
ø25	22	M22 X 1.5	10	8 ^{+0.036} _{-0.006}	33.4	G1/8	16	22	8	50	20	8	10.2	M10 X 1.25	32	11	15	15	30	22	11	17	12	28

Bore	S			XC			Z			ZZ		
	1 to 50	51 to 100	101 to 150	1 to 50	51 to 100	101 to 150	1 to 50	51 to 100	101 to 150	1 to 50	51 to 100	1 to 50
ø8	46(52){56(62)}	—	—	64(70){74(80)}	—	—	76(82){86(92)}	—	—	86(92){96(102)}	—	—
ø10	46(50){56(60)}	—	—	64(68){74(78)}	—	—	76(80){86(90)}	—	—	86(90){96(100)}	—	—
ø12	50(53.5){60(63.5)}	—	—	75(78.5){85(88.5)}	—	—	91(94.5){101(104.5)}	—	—	105(108.5){115(118.5)}	—	—
ø16	56(59.5){66(69.5)}	71.5(75) {92(95.5)}	87(90.5) {118(121.5)}	82(85.5) {92(95.5)}	97.5(101) {118(121.5)}	113(116.5) {144(147.5)}	98(101.5) {108(111.5)}	113.5(117) {134(137.5)}	129(132.5) {160(163.5)}	111(114.5) {121(124.5)}	126.5(130) {147(150.5)}	143(146.5) {173(176.5)}
ø20	62(87)	112	137	95(120)	145	170	115(140)	165	190	126(151)	176	201
ø25	65(88.5)	113.5	138.5	104(127.5)	152.5	177.5	126(149.5)	174.5	199.5	137(160.5)	185.5	210.5

(): In case of auto switch style. { }: In case of non-rotating rod.

* Changes and mistakes excepted, prices plus packing and VAT.