



Technische Daten

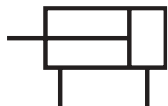
Kolbendurchmesser (mm)	8	10	12	16	20	25	
Kolbenstangendurchm. (mm)	4	4	6	6	8	10	
Kolbenstangengewinde	M4 X 0.7	M4 X 0.7	M6 X 1	M6 X 1	M8 X 1.25	M10 X 1.25	
Anschlüsse	M5	M5	M5	M5	G1/8	G1/8	
Funktionsweise	Doppeltwirkend/Standardausführung oder durchgehende Kolbenstange						
Medium	Druckluft						
Prüfdruck	1.5MPa						
Max. Betriebsdruck	1.0MPa						
Min. Betriebsdruck	0.1MPa	0.08MPa		0.05MPa			
Umgebungs- und Mediumstemperatur	-20 bis 80°C (Eingebauter Magnetring: -10 bis 60°C)						
Dämpfung	Elastische Endlagendämpfung.						
Schmierung	Nicht erforderlich. Wenn notwendig, wird Turbinenöl Nr.1 ISOVG32 empfohlen.						
Kolbengeschwindigkeit	50 bis 1500mm/s						
Zulässige kinetische Energie	Elastische Endlagendämpfung	0.02J	0.03J	0.04J	0.09J	0.27J	0.4J
	Einstellbare Endlagendämpfung						
Verdrehgenauigkeit [°]	?1? 30'	?1? 30'	? 1?	?1?	?0? 42'	?0? 42'	
Hubtoleranz	0/+1			0/+1.4			

° Maximale Umgebungstemperatur gilt nur für Manschetten.

°° Gilt nur für verdrehgesicherte Modelle.

Symbol

Doppeltwirkend/Standardausführung



Elastische Endlagendämpfung

Gewicht (Standard, Verdrehgesichert) [g]

Kolbendurchmesser (mm)		8	10	12	16	20	25
Doppeltwirkend	Basisgewicht	45	49	96	109	183(203)	258(286)
Durchgehende Kolbenstange	Zus. Gewicht pro 10mm Hub	3	3.2	6.2	7.2	11.8	18.4
Befestigungselement	C85L□A	20		40		95	
	C85L□B	55		105		210	
	C85F□	12		25		90	
	C85T□	20		50		75	
	C85C□	20		40		85	
Zubehör	Gelenkkopf	KJ□D	17	25	45	70	
	Gabelgelenk	GKM□-□	10	20	50	100	
	Ausgleichselement	JA□-□-□	10	20	50	70	

Berechnungsbeispiel: C85N10-50, C85F10

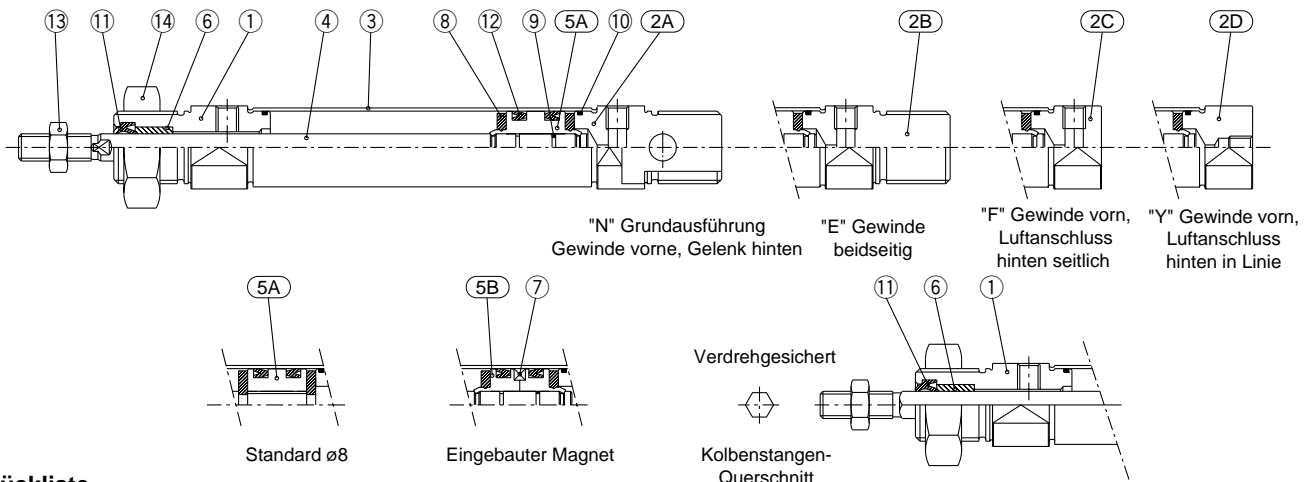
Basisgewicht.....49 (ø10)
Zusätz. Gewicht.....3.2/10mm Hub
Zylinderhub.....50mm
Befestigungselement.....12g
49+3.2 X 50/10=65g 65+12=77g

(): Gilt für einstellbare Endlagendämpfung

Serie C85N

Konstruktion

Doppeltwirkend: Standardausführung C85N 8 bis 16 Elastische Endlagendämpfung (Demontage nicht möglich)

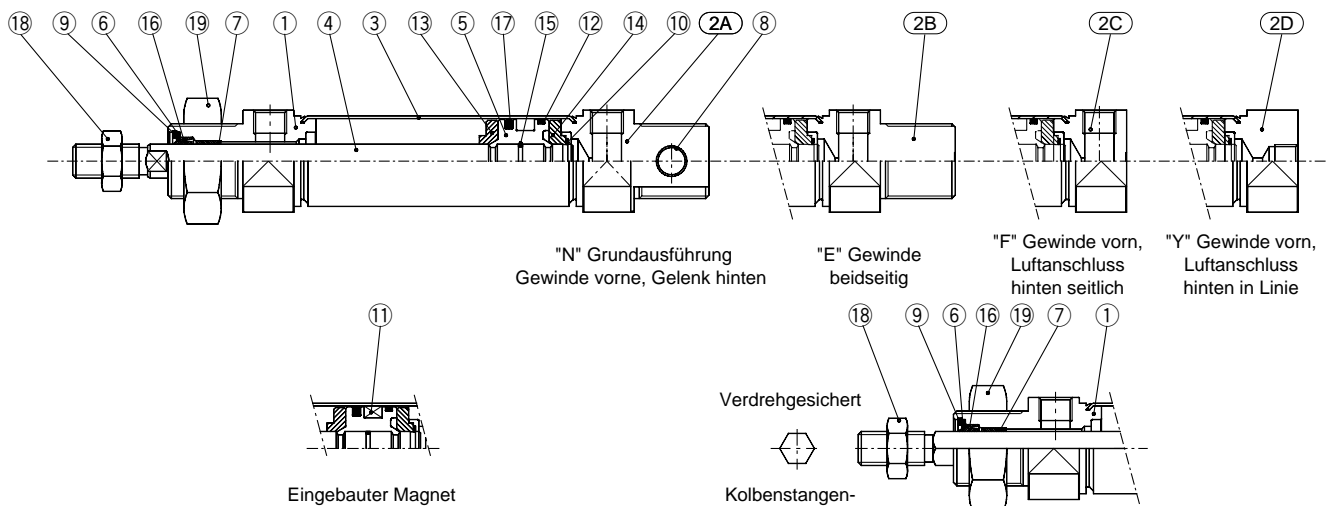


Stückliste

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	
⑤A	Kolben A	Messing	1	
⑤B	Kolben B	Messing	2	(Für Signalgeberausf.)

Pos.	Bezeichnung	Material	Anzahl	Bemerkung
⑥	Gleitlager	Sinterbronze	1	
⑦	Magnetring		1	(Nur Signalgeberausf.)
⑧	Dämpfscheibe	PUR	2	
⑨	Dichtung	NBR	1	(2 für Signalgeberausf.)
⑩	Dichtung/Zyl.rohr	NBR	2	
⑪	Dichtung/Abstreifer	NBR	1	
⑫	Kolbendichtung	NBR	2	
⑬	Kolbenstangenmutter	Stahl	1	Vernickelt
⑭	Befestigungsmutter	Stahl	1	Vernickelt

C85N 20, 25 Elastische Endlagendämpfung (Demontage nicht möglich, ausser Abstreifer Pos. 16)



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	Leichtmetall	1	Chromatiert
⑥	Scheibe	Stahl	1	Vernickelt
⑦	Gleitlager	Sinterbronze	1	
⑧	Gleitlager	Sinterbronze	2	

Pos.	Bezeichnung	Material	Anzahl	Bemerkung
⑨	Sicherungsring	Stahl	1	Vernickelt
⑩	Sicherungsring	Stahl	2	
⑪	Magnetring		1	(Nur Signalgeberausf.)
⑫	Kolbenführungsband	PTFE	1	
⑬	Dämpfscheibe A	PUR	1	
⑭	Dämpfscheibe B	PUR	1	
⑮	Dichtung	NBR	1	
⑯	Dichtung/Abstreifer	NBR	1	
⑰	Kolbendichtung	NBR	1	
⑱	Kolbenstangenmutter	Stahl	1	Vernickelt
⑲	Befestigungsmutter	Stahl	1	Vernickelt

° Rostfreier Stahl (Verdrehgesicherte Kolbenstange)

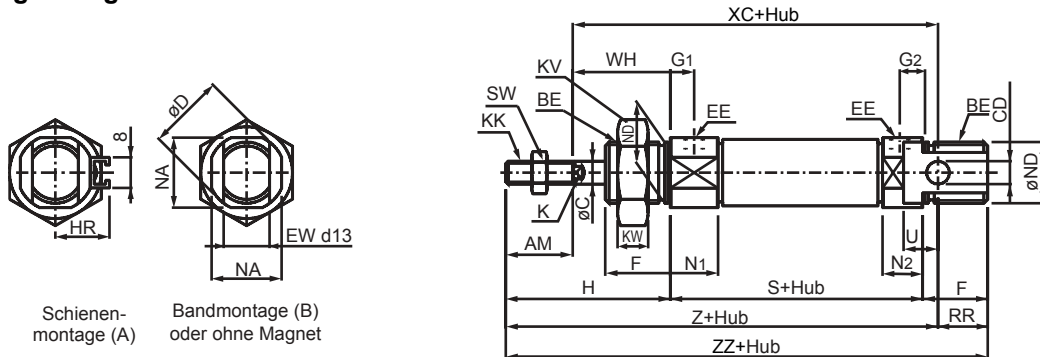
Abmessungen

Doppeltwirkend: Standardausführung

Elastische Endlagendämpfung/ C85N



Mit oder ohne Magnetring



ø	AM	BE	øC	CD	øD	EE	EW	F	G1	G2	WA	WB	H	HR	K	KA	KK	KV	KW	N1	N2	NA	øND(h8)	RR	S	SW	U	WH	XC	Z	ZZ
ø8	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5 X 0.8	8	12	7	5	—	—	28	10	—	4.2	M4 X 0.7	19	6	11.5	9.5	15	12	10	46	7	6	16	64	76	86
ø10	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5 X 0.8	8	12	7 ^(5.5)	5 ^(5.5)	10.5	4.5	28	10.5	—	4.2	M4 X 0.7	19	6	11.5 ^(13.5)	9.5 ^(13.5)	15	12	10	46 ⁽⁵³⁾	7	6	16	64 ⁽⁷¹⁾	76 ⁽⁸³⁾	86 ⁽⁹³⁾
ø12	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5 X 0.8	12	17	8 ^(5.5)	6 ^(5.5)	9.5	5.5	38	14	5	6.2	M6 X 1	24	8	12.5 ^(12.5)	10.5 ^(12.5)	18	16	14	50 ⁽⁵⁴⁾	10	9	22	75 ⁽⁷⁹⁾	91 ⁽⁹⁵⁾	105 ⁽¹⁰⁹⁾
ø16	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5 X 0.8	12	17	8 ^(5.5)	6 ^(5.5)	9.5	5.5	38	14	5	6.2	M6 X 1	24	8	12.5 ^(12.5)	10.5 ^(12.5)	18	16	13	56 ⁽⁵⁶⁾	10	9	22	82 ⁽⁸²⁾	98 ⁽⁹⁸⁾	111 ⁽¹¹¹⁾
ø20	20	M22 X 1.5	8	8 ^{+0.036} _{-0.036}	28	G1/8	16	20	8	8	13	8.5	44	17	6	8.2	M8 X 1.25	32	10	15 ⁽¹⁷⁾	15 ⁽¹⁷⁾	24	22	11	62	13	12	24	95	115	126
ø25	22	M22 X 1.5	10	8 ^{+0.036} _{-0.036}	33.5	G1/8	16	22	8	8	13	10.5	50	20	8	10.2	M10 X 1.25	32	10	15 ⁽¹⁷⁾	15 ⁽¹⁷⁾	30	22	11	65	17	12	28	104	126	137

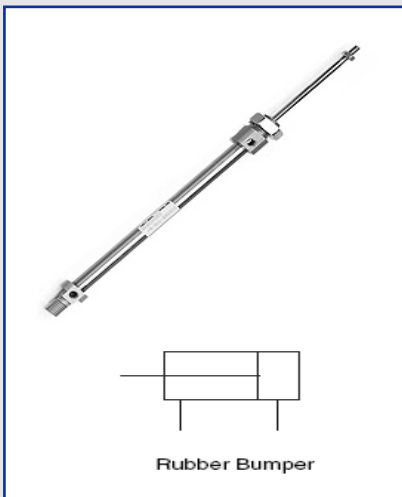
(): Bei einstellbarer Endlagendämpfung

(mm)

Air Cylinders

Languages > 

SMC Air Cylinder ISO 6432 - Type C85N - Double Acting



Air Cylinders ISO 6432-Type C85N
Item no.: 206131000000

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

Technical Data

Bore size (mm)		8	10	12	16	20	25
Piston rod dia. (mm)		4	4	6	6	8	10
Piston rod thread		M4	M4	M6	M6	M8	M10 X 1.25
Ports		M5	M5	M5	M5	G1/8	G1/8
Action		Double acting/Single or Double rod					
Fluid		Air					
Proof pressure		1.5MPa					
Max operating pressure		1.0MPa					
Min operating pressure		0.1MPa	0.08MPa			0.05MPa	
Ambient and fluid temperature		-20 to 80°C (Built-in magnet: -10 to 60°C)					
Cushion		Rubber bumper, Air cushion (Except for ø8) (Non-rotating: only rubber bumper)					
Lubrication		Not required. If necessary turbine oil no.1 ISOVG32 is recommended					
Rod boot	Nylon tarpaulin	—				Max ambient temperature 60°C	
	Neoprene cloth	—				Max ambient temperature 110°C*	
Piston speed		50 to 1500mm/s					
Allowable kinetic energy	Rubber bumper	0.02J	0.03J	0.04J	0.09J	0.27J	0.4J
	Air cushion	—	0.17J	0.19J	0.4J	0.66J	0.97J
Non-rotating accuracy**		±1° 30'	±1° 30'	±1°	±1°	±0° 42'	±0° 42'
Stroke tolerance		0/+1				0/+1.4	

* Maximum ambient temperature of gaiters only.
** Applicable to non-rotating models only.

Weight (Standard-Non Rotating Rod)

Bore size (mm)		8	10	12	16	20	25
Double action	Basic weight	45	49	96	109	183(203)	258(286)
	Double rod	Add'l weight for each 10mm of stroke					
		3	3.2	6.2	7.2	11.8	18.4
Mounting bracket	C85L□A	20		40		95	
	C85L□B	55		105		210	
	C85F□	12		25		90	
	C85T□	20		50		75	
	C85C□	20		40		85	
Accessories	Single knuckle joint	KJ□D		17		25 45 70	
	Double knuckle joint	GKM□-□		10		20 50 100	
	Floating joint	JA□-□-□		10		20 50 70	

Calculation Example: C85N10-50, C85F10

Basic weight.....49 (ø10)

Additional weight.....3.2/10mm of stroke

Cylinder stroke.....50mm

Mounting bracket..... 12

49+3.2 X 50/10=65 65+12=77

(): In case of air cushion

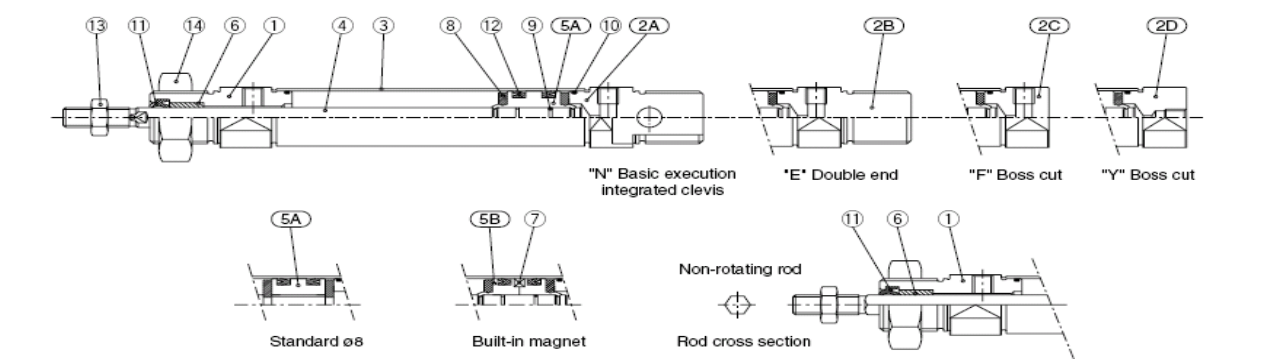
* Changes and mistakes excepted, prices plus packing and VAT.

Air Cylinders

Languages > 

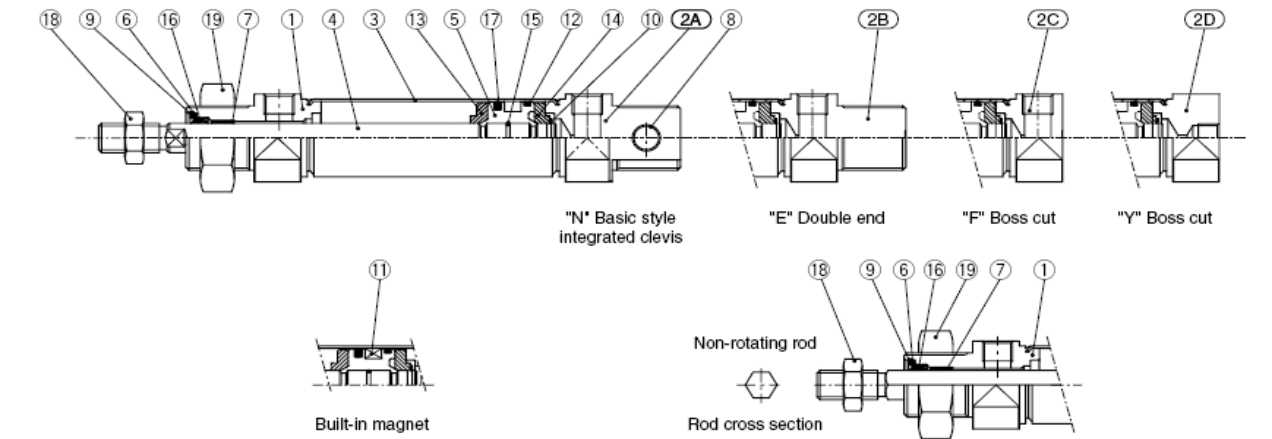
SMC Air Cylinder ISO 6432 - Type C85N - Double Acting

Double Acting Single Rod - Rubber Bumper 8 to 16-N



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	
⑤A	Piston A	Brass	1	
⑤B	Piston B	Brass	2	(Switch style piston)
⑥	Bushing	Sintered bronze	1	
⑦	Magnet		1	(Switch style only)
⑧	Bumper	Urethane	2	
⑨	Piston gasket	NBR	1	(2 for switch style)
⑩	Tube gasket	NBR	2	
⑪	Rod seal	NBR	1	
⑫	Piston seal	NBR	2	
⑬	Rod end nut	Carbon steel	1	Nickel plated
⑭	Mounting nut	Carbon steel	1	Nickel plated

Double Acting Standard - Rubber Bumper 20 to 25-N




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	2	
⑨	Retaining ring	Carbon steel	1	Nickel plated
⑩	Retaining ring	Carbon steel	2	
⑪	Magnet		1	(Switch style only)
⑫	Wear ring	Phenolic resin	1	
⑬	Bumper A	Urethane	1	
⑭	Bumper B	Urethane	1	
⑮	Piston gasket	NBR	1	
⑯	Rod seal	NBR	1	
⑰	Piston seal	NBR	1	
⑱	Rod end nut	Carbon steel	1	Nickel plated
⑲	Mounting nut	Carbon steel	1	Nickel plated

* Stainless steel (Non-rotating rod)

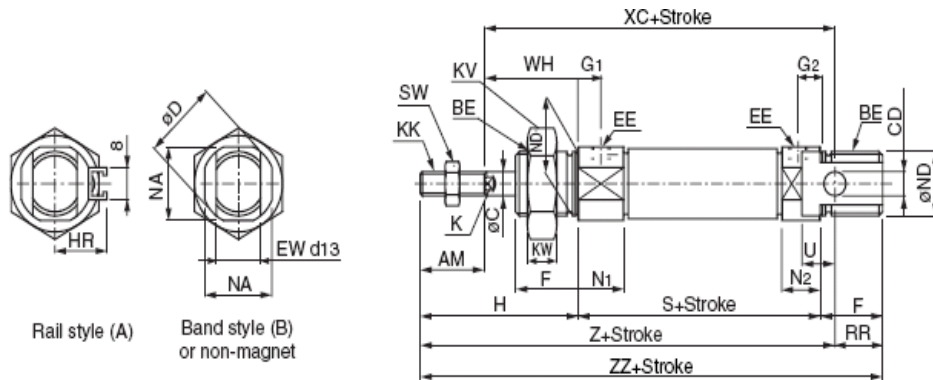
* Changes and mistakes excepted, prices plus packing and VAT.

Air Cylinders

Languages > 

SMC Air Cylinder ISO 6432 - Type C85N - Double Acting

Dimension - Double Acting - Rubber Bumper



Unit: (mm)

Bore	AM	BE	øC	CD	øD	EE	EW	F	G1	G2	WA	WB	H	HR	K	KA	KK	KV	KW	N1	N2	NA	øND(hx)	RR	S	SW	U	WH	XC	Z	ZZ
ø8	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5	8	12	7	5	—	—	28	10	—	4.2	M4	19	6	11.5	9.5	15	12	10	46	7	6	16	64	76	86
ø10	12	M12 X 1.25	4	4 ^{+0.030} ₀	16.7	M5	8	12	7 ^(5.5)	5 ^(5.5)	10.5	4.5	28	10.5	—	4.2	M4	19	6	11.5 ^(13.5)	9.5 ^(13.5)	15	12	10	46 ⁽⁵³⁾	7	6	16	64 ⁽⁷¹⁾	76 ⁽⁸³⁾	86 ⁽⁹³⁾
ø12	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5	12	17	8 ^(5.5)	6 ^(5.5)	9.5	5.5	38	14	5	6.2	M6	24	8	12.5 ^(12.5)	10.5 ^(12.5)	18	16	14	60 ⁽⁶⁴⁾	10	9	22	76 ⁽⁷⁹⁾	91 ⁽⁹⁵⁾	105 ⁽¹⁰⁹⁾
ø16	16	M16 X 1.5	6	6 ^{+0.030} ₀	19.7	M5	12	17	8 ^(5.5)	6 ^(5.5)	9.5	5.5	38	14	5	6.2	M6	24	8	12.5 ^(12.5)	10.5 ^(12.5)	18	16	13	66 ⁽⁶⁶⁾	10	9	22	82 ⁽⁸²⁾	98 ⁽⁹⁸⁾	111 ⁽¹¹¹⁾
ø20	20	M22 X 1.5	8	8 ^{+0.030} ₀	28	G1/8	16	20	8	8	13	8.5	44	17	6	8.2	M8	32	10	15 ⁽¹⁷⁾	15 ⁽¹⁷⁾	24	22	11	62	13	12	24	95	115	126
ø25	22	M22 X 1.5	10	8 ^{+0.030} ₀	33.5	G1/8	16	22	8	8	13	10.5	50	20	8	10.2	M10 X 1.25	32	10	15 ⁽¹⁷⁾	15 ⁽¹⁷⁾	30	22	11	65	17	12	28	104	126	137

() : In case of air cushion.

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