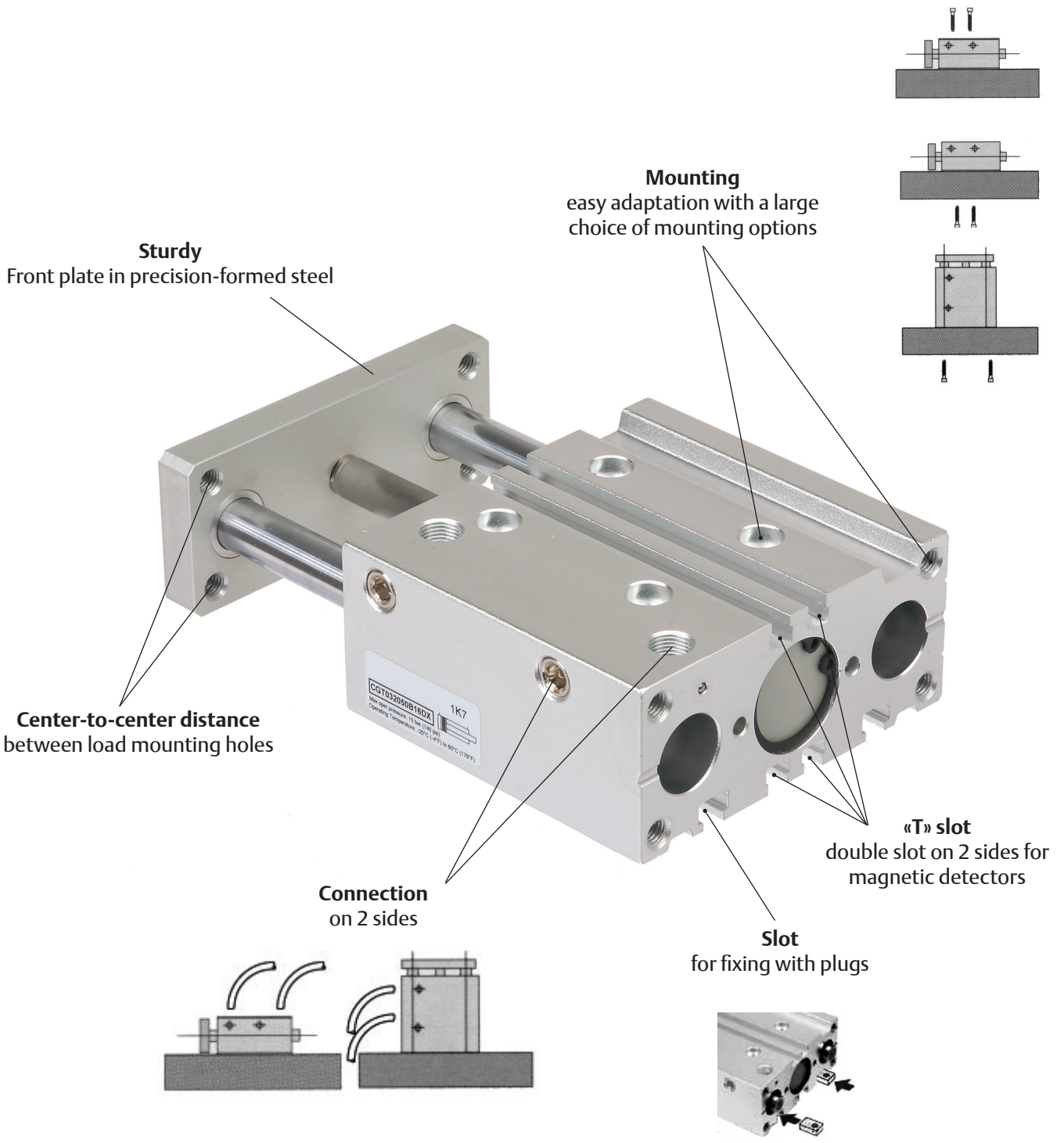


AVENTICS™ Guide Cylinder

with plain bronze or linear ball bearings

Series
CGT

- Transfer and positioning of loads with accurate force, torque, speed and position control
- Compact design, ideally suited for installation in confined spaces
- Options for dusty environments, precision metal component manufacturing and welding applications
- Linear guide slides with plain bronze or ball bearings



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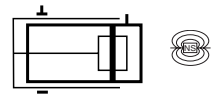
AVENTICS™ Guide Cylinder

with plain bronze or linear ball bearings, double acting, Ø 16 to 63 mm

Series
CGT

Features & Benefits

- Compact guide slide with pneumatic ports on two sides
- Excellent resistance to radial loads and torque



General

Detection

Fluid

Operating pressure

Ambient temperature

Max. speed

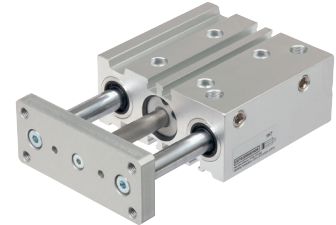
Equipped for magnetic position detectors

Air or neutral gas, filtered, lubricated or not

10 bar max.

-20°C to +80°C

0.4 to 0.8 m/s



Construction

Body

Seals

Guiding rods

Wiper seals

Piston

Front plate

Bearings

Anodised aluminium alloy

Highly wear-resistant polyurethane

Hardened and polished steel

Reinforced steel

Fitted with a permanent annular magnet

Treated steel

Plain bronze or ball

Product selection guide

CGT 032 050 B 1 6 D X

Diameter _____

016 = 16 mm
020 = 20 mm
025 = 25 mm
032 = 32 mm
040 = 40 mm
050 = 50 mm
063 = 63 mm

Standard stroke (mm) _____
(recommended standard strokes)

Ø (mm)	10	20	25	30	40	50	75	100	125	150	175	200
16	●	●		●	●	●	●	●				
20		●		●	●	●	●	●	●	●	●	●
25		●	●	●	●	●	●	●	●	●	●	●
32			●		●	●	●	●	●	●	●	●
40			●		●	●	●	●	●	●	●	●
50			●		●	●	●	●	●	●	●	●
63			●		●	●	●	●	●	●	●	●

Bearing option _____

B = Plain bronze
L = Linear ball bearing

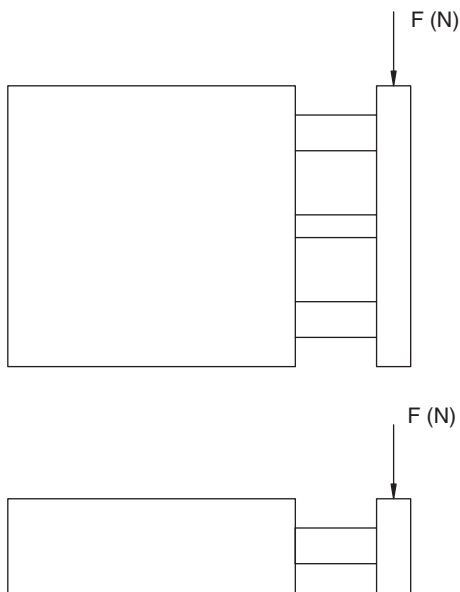
Options

X = No option
A = Adjustable Stroke
L = Front and Rear Metal Scraper
G = Front Plate Reinforced Seals
R = Front & Rear Reinforced Seals
M = Front Plate Metal Scraper
B = Pneumatic Cushioning
C = Double Tooling Plate

■ **Detectors:** The magnetic position detectors must be ordered separately. - "T" model, magneto-resistive type

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Maximum admissible load



Load / Stroke

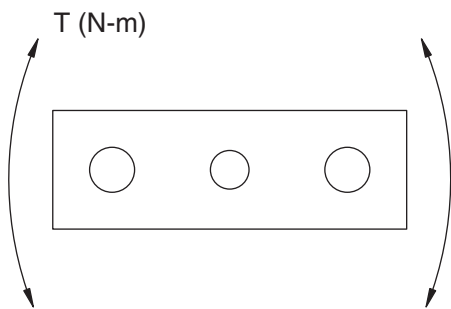
Load values = N

Ø (mm)	bearing type	stroke							
		10	20	25	30	40	50	75	100
16	Bronze	28.0	28.0	-	25.0	22.0	19.0	-	-
	Linear ball	35.0	30.0	-	26.0	37.0	33.0	-	-
20	Bronze	-	51.0	-	44.0	38.0	34.0	53.0	44.0
	Linear ball	-	55.0	-	47.0	78.0	69.0	57.0	49.0
25	Bronze	-	70.0	-	60.0	53.0	47.0	59.0	51.0
	Linear ball	-	71.0	-	61.0	77.0	72.0	77.0	65.0
32	Bronze	-	-	88.0	-	-	59.0	137.0	108.0
	Linear ball	-	-	196.0	-	-	167.0	275.0	216.0
40	Bronze	-	-	88.0	-	-	59.0	137.0	108.0
	Linear ball	-	-	196.0	-	-	167.0	275.0	216.0
50	Bronze	-	-	137.0	-	-	88.0	215.0	176.0
	Linear ball	-	-	294.0	-	-	255.0	392.0	313.0
63	Bronze	-	-	137.0	-	-	88.0	215.0	176.0
	Linear ball	-	-	294.0	-	-	255.0	392.0	313.0

Twisting moment / Stroke

Moment = Nm

Ø (mm)	bearing type	stroke							
		10	20	25	30	40	50	75	100
16	Bronze	0.51	0.43	-	0.35	0.31	0.27	-	-
	Linear ball	0.75	0.58	-	0.48	0.71	0.64	-	-
20	Bronze	-	0.91	-	0.78	0.71	0.63	1.04	0.88
	Linear ball	-	1.26	-	1.06	1.77	1.58	1.22	1.01
25	Bronze	-	1.53	-	1.31	1.16	1.03	1.65	1.41
	Linear ball	-	1.96	-	1.69	2.16	2.00	1.68	1.42
32	Bronze	-	-	1.96	-	-	2.94	2.45	1.96
	Linear ball	-	-	3.92	-	-	0.98	2.94	2.45
40	Bronze	-	-	2.45	-	-	1.45	2.94	2.45
	Linear ball	-	-	4.41	-	-	3.43	6.37	5.39
50	Bronze	-	-	3.43	-	-	2.45	4.90	4.41
	Linear ball	-	-	7.35	-	-	5.88	10.78	8.33
63	Bronze	-	-	3.43	-	-	2.45	4.90	4.41
	Linear ball	-	-	7.35	-	-	5.88	10.78	8.33

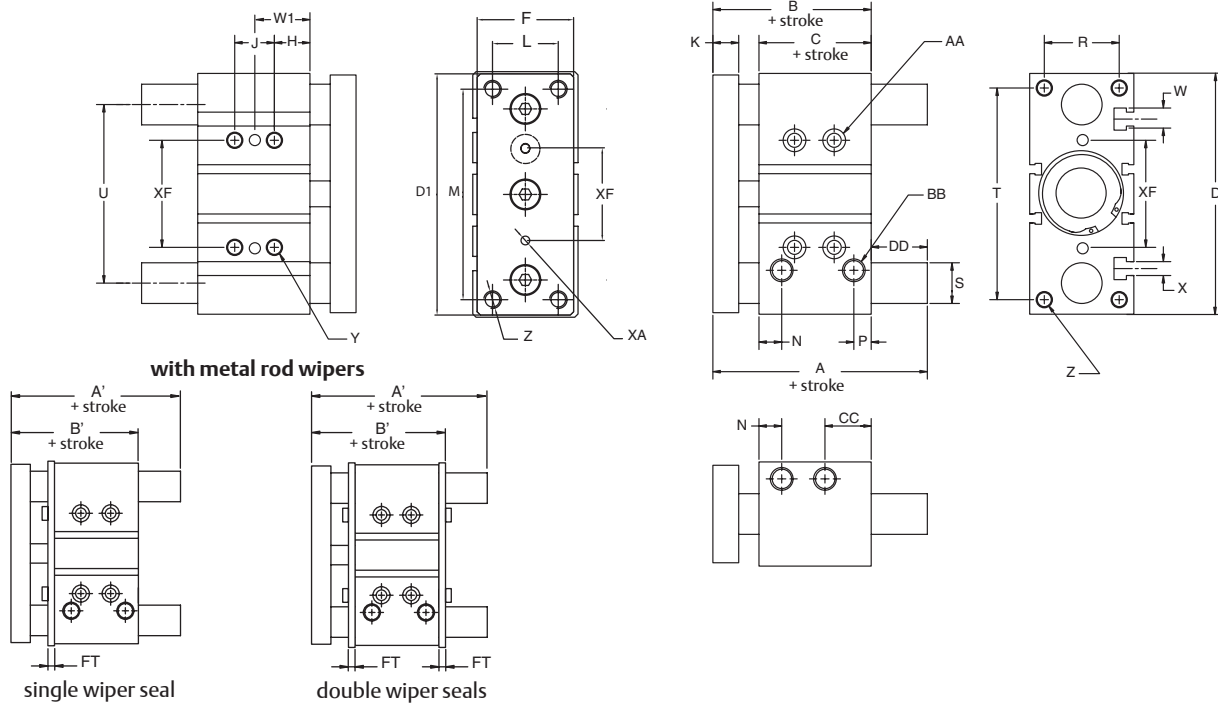


Output force / Pressure

	16	20	25	32	40	50	63
Extend force (N) at 6 bar	120 (N)	187 (N)	293 (N)	472 (N)	747 (N)	1161 (N)	1700 (N)
Retract force (N) at 6 bar	91 (N)	141 (N)	247 (N)	406 (N)	624 (N)	974 (N)	1540 (N)

AVENTICS™ Guide Cylinder

Dimensions (mm), Weight (kg)



Ø (mm)	B	B'	C	D	D1	F	FT	H	K	L	M	N	P	R
16	46.0	-	33.0	64.0	62.0	25.0	-	5.0	8.0	16.0	54.0	11.0	8.0	22.0
20	53.0	63.0	37.0	83.0	81.0	30.0	5	17.0	10.0	18.0	70.0	10.5	8.5	24.0
25	53.5	63.5	37.5	93.0	91.0	38.0	5	17.0	10.0	26.0	78.0	11.5	9.0	30.0
32	59.5	69.5	37.5	112.0	110.0	44.0	6	21.0	12.0	30.0	96.0	12.5	9.0	34.0
40	66.0	76.0	44.0	120.0	118.0	44.0	6	22.0	12.0	30.0	104.0	14.0	10.0	40.0
50	72.0	82.0	44.0	148.0	146.0	60.0	6	24.0	16.0	40.0	130.0	14.0	11.0	46.0
63	77.0	87.0	49.0	162.0	158.0	70.0	6	24.0	16.0	50.0	130.0	16.5	13.5	58.0

Ø (mm)	S	T	U	W	X	Y	Z	AA	BB	CC	XA	XF
16	10.0	56.0	46.0	7.40	4.4	M5	M5	4 mm SHCS	M5	18.0	3	24.0
20	12.0	72.0	54.0	8.40	5.5	M6	M5	5 mm SHCS	G 1/8	24.5	3	28.0
25	16.0	82.0	64.0	8.40	5.5	M6	M6	5 mm SHCS	G 1/8	24.0	4	34.0
32	20.0	98.0	78.0	10.50	6.5	M8	M8	6 mm SHCS	G 1/8	30.5	4	42.0
40	20.0	106.0	86.0	10.50	6.5	M8	M8	6 mm SHCS	G 1/8	31.0	4	50.0
50	25.0	130.0	110.0	13.5	8.5	M10	M10	8 mm SHCS	G 1/4	35.0	5	66.0
63	25.0	142.0	124.0	17.8	11.0	M10	M10	8 mm SHCS	G 1/4	35.0	5	80.0

Ø (mm)	(stroke)																				
	plain bronze bearing						linear ball bearing						J	J	J	W1	W1	W1			
	A	A'	A	A'	DD	DD	A	A'	A	A'	DD	DD	J	J	J	W1	W1	W1			
16	46.0 (10-50)	-	64.5 (75-100)	-	0 (10-50)	18.5 (75-100)	46.0 (10-30)	-	66.0 (40-100)	-	0 (10-30)	20 (40-100)	24 (10-30)	44 (40-100)	-	17 (10-30)	27 (40-100)	-			
20	53.0 (20-50)	63.0 (20-50)	84.5 (75-200)	94.5 (75-200)	0 (20-50)	31.5 (75-200)	53.0 (20-30)	63.0 (20-30)	85.5 (40-200)	95.5 (40-200)	0 (20-30)	32.5 (40-200)	24 (20-30)	44 (40-100)	120 (125-200)	29 (20-30)	39 (40-100)	77 (125-200)			
25	53.5 (20-50)	63.5 (75-200)	85.0 (75-200)	95.0 (75-200)	0 (20-50)	31.5 (75-200)	53.5 (20-30)	63.5 (20-30)	86.0 (40-200)	96.0 (40-200)	0 (20-30)	32.5 (40-200)	24 (20-30)	44 (40-100)	120 (125-200)	29 (20-30)	39 (40-100)	77 (125-200)			
32	97.0 (25-50)	107.0 (25-50)	107.0 (75-200)	117.0 (75-200)	37.5 (25-50)	47.5 (75-200)	97.0 (25-50)	107.0 (25-50)	107 (75-200)	117 (75-200)	37.5 (25-50)	47.5 (75-200)	24 (25)	48 (50-100)	124 (125-200)	33 (25)	45 (50-100)	83 (125-200)			
40	97.0 (25-50)	107.0 (25-50)	107.0 (75-200)	117.0 (75-200)	31 (25-50)	41 (75-200)	97.0 (25-50)	107.0 (25-50)	107 (75-200)	117 (75-200)	31 (25-50)	41 (75-200)	24 (25)	48 (50-100)	124 (125-200)	34 (25)	46 (50-100)	84 (125-200)			
50	106.5 (25-50)	116.5 (25-50)	118.0 (75-200)	128.0 (75-200)	34.5 (25-50)	46 (75-200)	106.5 (25)	114 (50)	116.5 (25)	124 (50)	118 (25)	128 (50)	34.5 (25)	42 (50)	46 (75-200)	24 (25)	48 (50-100)	124 (125-200)	36 (25)	48 (50-100)	86 (125-200)
63	106.5 (25-50)	116.5 (25-50)	118.0 (75-200)	128.0 (75-200)	29.5 (25-50)	41 (75-200)	106.5 (25)	114 (50)	116.5 (25)	124 (50)	118 (25)	128 (50)	29.5 (25)	37 (50)	41 (75-200)	28 (25)	52 (50-100)	128 (125-200)	38 (25)	50 (50-100)	88 (125-200)

Weight (kg)

Ø (mm)	stroke											
	10	20	25	30	40	50	75	100	125	150	175	200
16	0.350	0.400	-	0.450	0.500	0.550	0.750	0.900	-	-	-	-
20	-	0.690	-	0.830	0.910	0.990	1.310	1.510	1.625	1.740	1.855	1.970
25	-	0.870	-	0.990	1.080	1.260	1.680	2.100	2.500	2.900	3.300	3.700
32	-	-	1.770	-	-	2.120	2.770	3.080	3.410	3.740	4.065	4.395
40	-	-	1.990	-	-	2.390	2.940	3.050	3.460	3.880	4.300	4.720
50	-	-	3.355	-	-	3.955	4.755	5.355	5.955	6.555	7.155	7.755
63	-	-	4.030	-	-	5.070	5.790	6.505	7.225	7.945	8.660	9.380

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