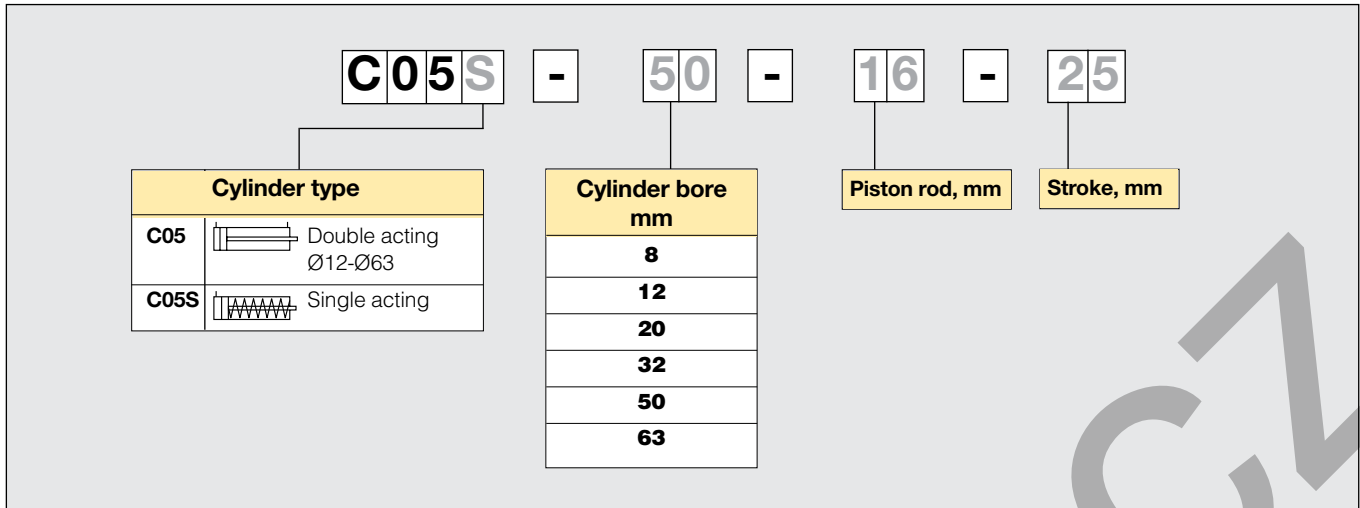
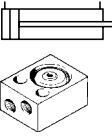
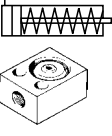


Order key



Main data for C05 and C05S cylinders

Symbol	Cyl. dia. mm	Piston rod mm	Spring force		Conn. thread	Stroke mm	Weight Kg	Designation
			Max N	Min N				
	12	5/-			M5	10	0,01	C05-12-5-10
	20	10/M5			M5	10	0,25	C05-20-10-10
	32	12/M6			G1/8	10	0,30	C05-32-12-10
					G1/8	25	0,79	C05-32-12-25
	50	16/M8			G1/4	25	0,65	C05-50-16-25
63	16/M8			G1/4	25	1,07	C05-63-16-25	
	8	4/-	3	2	M5	4	0,02	C05S-8-4-4
	12	5/-	7	3	M5	4	0,02	C05S-12-5-4
	20	10/M5	10	6	G1/8	4	0,16	C05S-20-10-4
	32	12/M6	25	19	G1/8	5	0,21	C05S-32-12-5
	50	16/M8	42	35	G1/4	10	0,36	C05S-50-16-10
	63	16/M8	58	45	G1/4	10	0,56	C05S-63-16-10

Indicated cylinder forces are theoretical and should be reduced according to the working conditions.

Main data

Cylinder	Cylinder		Piston rod		Theor. piston force		Air consumption ¹⁾ l	Spring force N	Stroke mm	Weight Kg
	bore mm	area cm ²	diam mm	area cm ²	at 6 bar in N plus stroke	minus stroke				
C05S-8-4-4	8	0.5	4	0.13	28	-	0,0045	2	4	0.016
C05S-12-5-4	12	1.1	5	0.20	65	-	0,0099	3	4	0.023
C05S-20-10-4	20	3.1	10	0.79	184	-	0,0151	6	4	0.067
C05S-32-12-5	32	8.0	12	1.13	463	-	0,0653	17	5	0.192
C05S-50-16-10	50	19.6	16	2.01	1145	-	0,1695	35	10	0.416
C05S-63-16-10	63	31.1	16	2.01	1825	-	0,2602	45	10	0.663
C05-12-5-10	12	1.1	5	0.20	68	56	0,0186	-	10	0.045
C05-20-10-10	20	3.1	10	0.79	190	143	0,0505	-	10	0.125
C05-32-12-10	32	8.0	12	1.13	480	415	0 1236	-	10	0.320
C05-32-12-25	32	8.0	12	1.13	480	415	0 1236	-	25	0.400
C05-50-16-25	50	19.6	16	2.01	1180	1060	0,3167	-	25	0.675
C05-63-16-25	63	31.1	16	2.01	1870	1750	0,4982	-	25	0.800

1) Consumption of free air per 10 mm stroke for a double stroke at 600 kPa (6 bar).

Additional data

Working pressure Max 10 bar
Working temperature -20 °C to +70 °C

Prelubricated, further lubrication is not normally necessary.
If additional lubrication is introduced it has to be continued.

Material specifications

Cylinder housing Black anodized aluminium
Front end cover, single action Ø50-63 Black anodized aluminium
Front end cover, other Brass
Piston rod bearing single action Ø50-63 PTFE/Brass/steel
Piston rod bearing, other Brass
Piston, Ø8-32 mm Stainless steel
Piston, Ø50-63 mm Aluminium
Piston rod Stainless steel
Seals Nitrile, NBR
Circlip Steel spring
Return spring Surface treated steel spring

Working medium, air quality

Working medium Dry, filtered compressed air
to ISO 8573-1 class 3.4.3.

Recommended air quality for cylinders

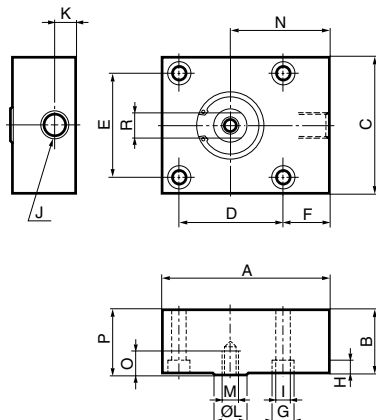
For best possible service life and trouble-free operation, ISO 8573-1 quality class 3.4.3 should be used. This means 5 µm filter (standard filter) dew point +3 °C for indoor operation (a lower dew point should be selected for outdoor operation) and oil concentration 1.0 mg oil/m³, which is what a standard compressor with a standard filter gives.

ISO 8573-1 quality classes

Quality class	Pollution		Water max. press. dew point (°C)	Oil max concentration (mg/m ³)
	particle size (µm)	max concentration (mg/m ³)		
1	0,1	0,1	-70	0,01
2	1	1	-40	0,1
3	5	5	-20	1,0
4	15	8	+3	5,0
5	40	10	+7	25
6	-	-	+10	-

Dimensions, basic cylinder

Single acting



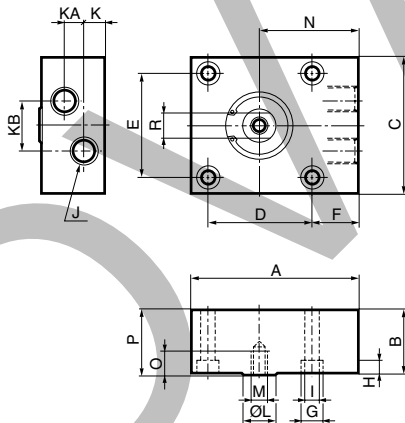
CAD drawings on the Internet

Our home page www.parker.com/euro_pneumatic includes the AirCad Drawing Library with 2D and 3D drawings for the main versions.

Type	A	B	C	D	E	F	G	H	I	J	K	KA	KB	L
C05S-8-4-4	20	16	18	0*	11	5,5	6	3,4	3,4	M5	5,0	-	-	4
C05S-12-5-4	25	16	20	0*	13	7,0	6	3,4	3,4	M5	6,0	-	-	5
C05S-20-10-4	40	20	32	0*	20	9,0	10	5,0	5,5	G1/8	9,5	-	-	10
C05S-32-12-5	55	26	45	0*	32	14,0	10	5,0	5,5	G1/8	9,5	-	-	12
C05S-50-16-10	80	30	65	50	50	22,5	11	6,5	6,5	G1/4	11,0	-	-	16
C05S-63-16-10	90	35	80	62	62	19,0	15	9,0	9,0	G1/4	11,0	-	-	16

Type	M	N	O	P	R
C05S-8-4-4	-	13,5	-	17	-
C05S-12-5-4	-	15,0	-	17	-
C05S-20-10-4	M5	24,0	8	21	-
C05S-32-12-5	M6	32,0	12	27	9
C05S-50-16-10	M8	47,5	12	31	14
C05S-63-16-10	M8	50,0	14	36	14

Double acting



Type	A	B	C	D	E	F	G	H	I	J	K	KA	KB	L
C05-12-5-10	25	27	20	0*	13	7,0	6	3,4	3,4	M5	6,0	13,0	3	5
C05-20-10-10	40	30	32	0*	20	9,0	10	5,0	5,5	M5	6,0	16,0	6	10
C05-32-12-10	55	36	45	0*	32	14,0	10	5,0	5,5	G1/8	9,5	16,5	14	12
C05-32-12-25	55	51	45	0*	32	14,0	10	5,0	5,5	G1/8	9,5	31,5	0**	12
C05-50-16-25	80	50	65	50	50	22,5	11	6,5	6,5	G1/4	11,0	28,0	0**	16
C05-63-16-25	90	55	80	62	62	19,0	15	9,0	9,0	G1/4	11,0	33,0	0**	16

Type	M	N	O	p	R
C05-12-5-10	-	16,0	-	28	-
C05-20-10-10	M5	24,0	8	31	-
C05-32-12-10	M6	32,0	12	37	9
C05-32-12-25	M6	32,0	12	52	9
C05-50-16-25	M8	47,5	12	51	14
C05-63-16-25	M8	50,0	14	56	14

* Only two mounting holes (F).

** Connections in-line.