



ROTARY CYLINDER



SD

Mega-Bore Short body
Open-Center
Hydraulic Cylinder

62 P



DY

Double Piston
Hyd. Cylinder

80 P



SD-E

Mega-Bore Short body
Open-Center
Hydraulic Cylinder

64 P



AY-R

Closed Center
Pneumatic Cylinder

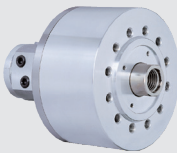
82 P



SD-S

Mega-Bore Short Body Open-
Center Hydraulic
Cylinder (Seal Type)

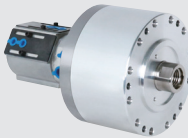
66 P



Y-R

Standard Closed Center
Hyd. Cylinder

68 P



Y-RE

Closed Center Hyd.
Cylinder with Proximity
Bracket

70 P



YH-RE

Ultra Compact Closed
Center Hyd. Cylinder with
Proximity Bracket

74 P



YS-RA

Ultra Compact Closed Center
Hyd. Cylinder with Proximity
Bracket & Built in
Rotary Union

76 P



YS-RC

Ultra Compact Closed Center
Hyd. Cylinder with Proximity
Bracket & Built in
Rotary Union

78 P

SD Mega-Bore Short body Open-Center Hydraulic Cylinder



Application

Large bore work in machines with limited clearance

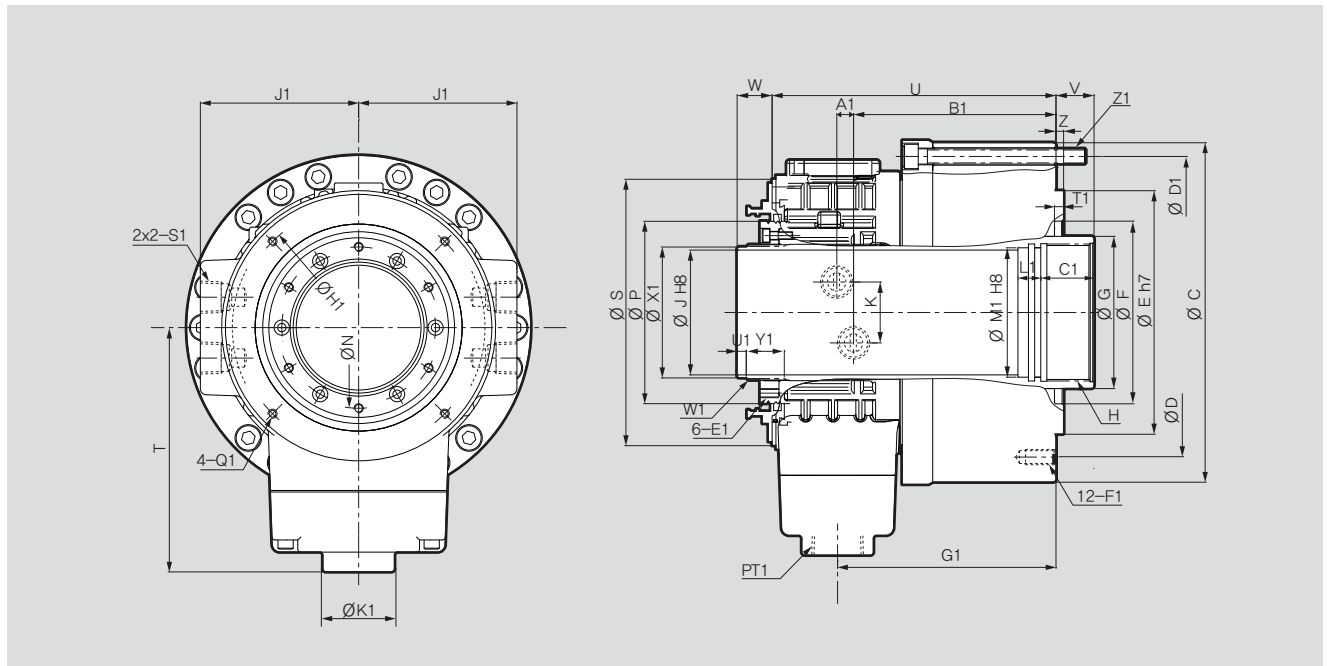
Technical features

Low drain rate reduces heat generation

SPECIFICATIONS

	SD-13546	SD-15452	SD-17568	SD-18577	SD-18582	SD-21510	SDL-25411	SDL-30516
Available I.D. [mm]	46	52	68	77	82	103	117.5	166.5
Piston Dia. [mm]	132	156	170	185	185	220	250	305
Piston Stroke [mm]	25	25	29	29	30	35	50	51
Piston Surface Area (Push) [cm ²]	108	151	172	201	195	238	356	480
Piston Surface Area (Pull) [cm ²]	97	142	160	187	180	230	325	436
Piston Force (Push) [kN(kgf)]	47(4800)	67(6800)	75(7656)	89(9000)	85(8700)	105(10700)	138(14100)	152(15483)
Piston Force (Pull) [kN(kgf)]	44(4500)	63(6400)	70(7050)	82(8300)	79(8100)	101(10300)	126(12900)	138(14060)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.0(40)	3.3(33)
Max. r.p.m. [min ⁻¹]	7000	6200	5600	5000	4800	3600	3000	2000
Moment of inertia [kg-m ²]	0.03	0.045	0.07	0.097	0.11	0.25	0.5	1.45
Weight [kg]	10	14	18	23	26	37	54	90
Total Leakage [ℓ/min]	2.5	3	3.2	3.5	3.5	4.5	6	8.4

- ※ Maximum turning speed is based upon actual measurement.
- ※ Specifications are subject to change without notice.



- ※ See the product dimension Table on the right.

DIMENSIONS

	SD-13546	SD-15452	SD-17568	SD-18577	SD-18582	SD-21510	SDL-25411	SDL-30516
ΦC	165	190	210	218	223	266	310	370
ΦD	130	170	190	190	190	225	275	290
ΦD1	147	170	190	200	205	240	275	345
ΦE	100	130	160	160	160	200	230	260
ΦF	80	85	120	120	120	160	166	240
ΦG	65	70	85	95	100	125	140	190
H	M52x2.0	M60x2.0	M75x2.0	M85x2.0	M90x2.0	M112x2.0	M130x2.0	M180x3.0
ΦJ	46	52	68	77	82	103	117.5	166.5
K	36	36	40	40	40	48	46	42
N	63	76	92	102	106	128	138	188
ΦP	79.8	89.8	105.8	115.8	119.8	173.5	170	222
ΦS	116	135	154	164	175	208	230	278
T	125	134	141	149.5	160.5	174.5	204	230
U	159.5	149.5	173	180.5	186.5	216.5	258	290
V max	15	22	25	25	25	35	46	51
V min	-10	-3	-4	-4	-5	0	-4	0
W max	41.5	51	58.5	57.5	53	63	75	76
W min	16.5	26	29.5	28.5	23	28	25	25
Z	5	5	5	5	5	5	6	5
A1	8.5	8.5	11	11	11	14	18	17.5
B1	117.5	107.5	122.5	129.5	133	153.5	178.5	206
C1	30	30	30	35	35	30	45	45
E1	M6	M6	M6	M6	M6	M6	M6	M6
F1	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M12 TAP DP'20	M16 TAP DP'32	M16 TAP DP'32
G1	125.5	115.5	132.5	139.5	143.5	163	194.5	221
H1	105	118	145	155	160	190	206	256
J1	75	80	90	95	104	120	135	160
K1	47	47	47	47	47	47	47	47
L1	15	15	21	15	15	15	20	20
M1	48	55	71	80	85	106	123	170
Q1	M5 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'13	M6 TAP DP'10	M6 TAP DP'12	M6 TAP DP'12
S1	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 1/2
T1	7	7	8	5	8	6	6	7
W1	M52x1.5	M58x1.5	M74x1.5	M84x2.0	M89x2.0	M120x2.0	M124x2.0	M173x2.0
ΦX1	50	56	71.5	81	86	117	121.5	170.5
Y1	21	27	28	26	25	34	29	45
U1	4	9	8	9	6	6	9	8
Z1	6-M8x95	6-M8x85	6-M10x100	8-M8x110	6-M10x110	6-M12x120	8-M12x140	12-M12x160

DIMENSIONS

	SD-13546E	SD-15452E	SD-16567E	SD-17577E	SD-18582E	SD-19568E	SD-20595E	SD-21511E
ΦC	162	182	197	214	223	228	245	266
ΦD	147	165	180	195	205	210	227	240
ΦD1	147	165	180	195	205	210	227	240
ΦE	130	140	160	160	168	180	210	210
ΦF	80	85	120	120	120	120	130	160
ΦG	61	70	85	95	100	105	115	130
H	M55x2.0	M60x1.5	M75x2.0	M85x2.0	M90x2.0	M95x2.0	M105x2.0	M120x2.0
H1	M50x1.5	M55x2.0	M72x1.5	M80x2.0	-	M90x2.0	M100x2.0	M115x2.0
ΦJ	46.5	52.5	67.5	77	82	86.5	95.5	110.5
K	36	36	40	40	40	40	40	48
N	66	76	92	102	106	112	124	139
ΦP	79.8	89.8	105.8	115.8	119.8	125.8	137.8	173.5
ΦS	116	135	154	164	175	181	188	208
T	119	134	141	149.5	159.5	158.5	166	174.5
U	149	148	172.5	175	186.5	194	204	233.5
V max	22	22	25	25	23	31	31	31
V min	-3	-3	-4	-4	-7	-3	-3	-4
W max	42	45.5	51.5	49	53	55	55	63
W min	17	20.5	22.5	20	23	21	21	28
Z	5	5	8	8	5	8	8	8
A1	8.5	8.5	11	11	11	13	13	14
B1	107.5	107.5	122.5	122.5	133	136	143	170.5
C1	25	25	25	25	35	32	32	32
C2	25	28	28	28	-	30	30	30
E1	M6	M6	M6	M6	M6	M6	M6	M6
F1	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'17	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M12 TAP DP'24
G1	115.5	115.5	132.5	132.5	143.5	144	151	180
J1	75	80	90	95	104	108	116	120
K1	47	47	47	47	47	47	47	47
L1	6	6	6	6	15	6	6	6
L2	6	6	6	6	-	6	6	6
M1	52.5	57	72.5	82	85	92	102.5	117.5
M2	47	52.5	69	77	-	87	97	112
Q	105	118	145	155	160	168	168	190
Q1	M5 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'13	M6 TAP DP'12	M6 TAP DP'12	M6 TAP DP'12
S1	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8
T1	7	7	8	8	8	9	9	9
W1	M52x1.5	M60x1.5	M74x1.5	M84x1.5	M89x2.0	M94x2.0	M104x2.0	M120x2.0
ΦX1	50	58	71	81	86	91	101	117
Y1	21	21	24	25	25	26	26	34
U1	4	5	5	5	6	5	6	6
Z1	6-M8x90	6-M8x90	6-M10x100	6-M10x100	6-M10x110	6-M10x105	6-M10x110	6-M10x135

SD-S Mega-Bore Short Body Open-Center Hydraulic Cylinder (Seal Type)



Application

Low drain, Ultra slim open-center cylinder

Technical features

Low drain minimizes heat generation

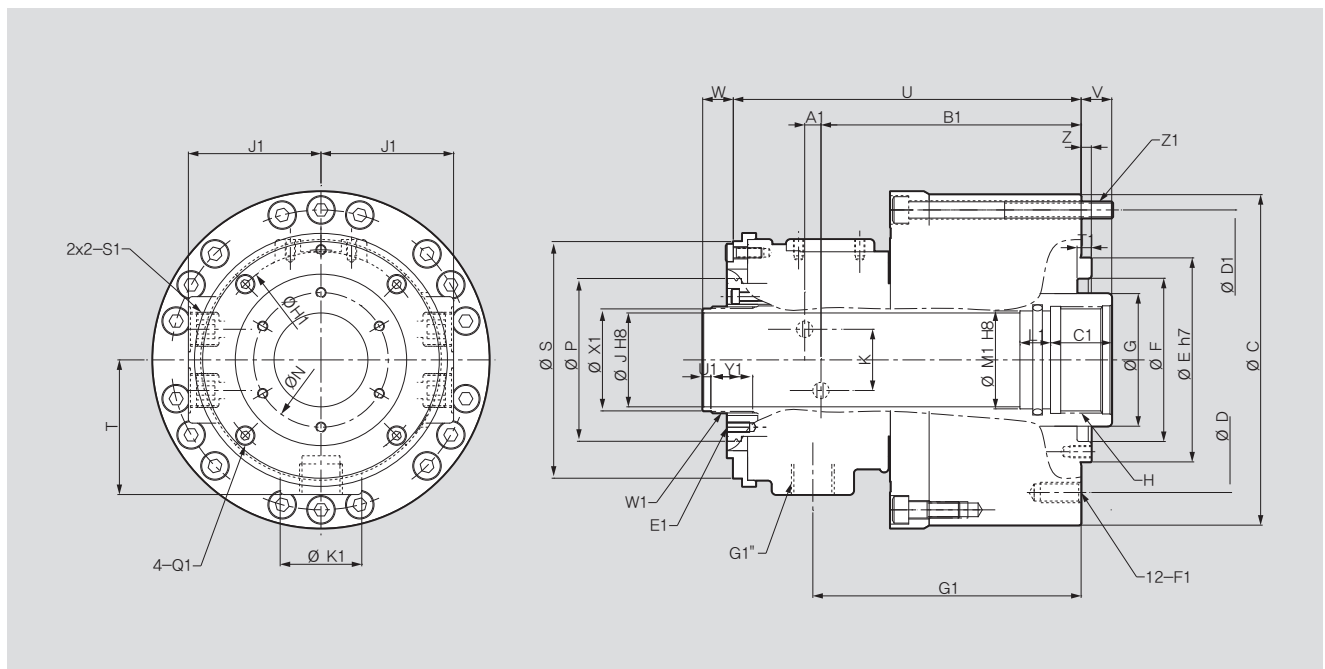
Sealed for use in subspindles when drain nipple does not face 6 o'clock position

Compact design ideal for machines with minimal clearance

SPECIFICATIONS

	SD-13546S	SD-15452S	SD-17568S
Available I.D. [mm]	46	52	68
Piston Dia. [mm]	132	156	170
Piston Stroke [mm]	25	25	29
Piston Surface Area (Push) [cm ²]	108	156	178
Piston Surface Area (Pull) [cm ²]	100	147	165
Piston Force (Push) [kN(kgf)]	47(4800)	67(6800)	75(7656)
Piston Force (Pull) [kN(kgf)]	44(4500)	63(6400)	70(7050)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.5(45)	4.5(45)	4.5(45)
Max. r.p.m. [min ⁻¹]	6000	6000	4800
Moment of inertia [kg·m ²]	0.021	0.045	0.07
Weight [kg]	9	14	18
Total Leakage [ℓ/min]	2.5	3.5	3.2

※ Maximum turning speed is based upon actual measurement.
 ※ Specifications are subject to change without notice.

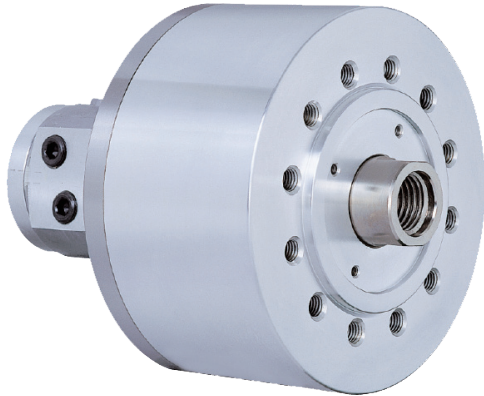


※ See the product dimension Table on the right.

DIMENSIONS

	SD-13546S	SD-15452S	SD-17568S
C	162	186	207
D	130	170	190
D1	147	170	190
E	100	130	160
F	80	85	120
G	65	70	85
H	M52x2.0	M60x2.0	M75x2.0
J	46	52	68
K	30	36	40
N	66	76	92
P	79.8	89.8	105.8
S	116	135	154
T	66	82	91
U	166	163.2	191.5
V max	15	22	25
V min	-10	-3	-4
W max	44.5	50	59
W min	19.5	25	30
Z	5	5	5
A1	8	8	10
B1	127.5	118	138.3
C1	30	30	30
E1	M5	M6	M6
F1	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20
G1	131.5	122	143
H1	105	118	145
J1	65	66	90
K1	40	47	47
L1	15	15	21
M1	48	55	71
Q1	M5 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10
S1	G 3/8	G 3/8	G 3/8
T1	7	7	8
W1	M52x1.5	M58x1.5	M74x1.5
X1	50	56	71.5
Y1	20.5	25	38
U1	4	9	8
Z1	6-M8x100	6-M8x85	6-M10x100

Y-R Standard Closed-Center Hydraulic Cylinder



Application

Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

SPECIFICATIONS

	Y-0715R	Y-1020R	Y-1225R	Y-1530R	Y-2035R
Piston Stroke [mm]	15	20	25	30	35
Piston Surface Area (Push) [cm ²]	44	86	122	176	314
Piston Surface Area (Pull) [cm ²]	37	79	113	160	290
Piston Force (Push) [kN(kgf)]	16.6(1693)	32.0(3264)	45.0(4589)	66.0(6732)	117.0(11934)
Piston Force (Pull) [kN(kgf)]	13.9(1417)	29(2957)	42(4283)	60(6118)	108(11013)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000	5500	5500
Moment of inertia [kg·m ²]	0.012	0.05	0.09	0.19	0.39
Weight [kg]	4	7.1	10	13.5	22
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8
KITAGAWA® Model	Y-0715R	Y-1020R	Y-1225R	Y-1530R	Y-2035R

※ Maximum turning speed is based upon actual measurement.

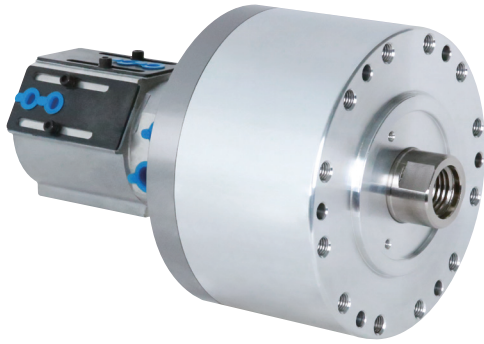
※ Specifications are subject to change without notice.

※ Piston Force : Hydraulic 4.0MPa (40.8 kgf/cm²)

※ Total leakage pressure : 3.0MPa(30.6 kgf/cm²) at 50°C

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd

Y-RE Closed-Center Hydraulic Cylinder with Proximity Bracket (75mm~125mm)



Application

Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

SPECIFICATIONS

	Y-0715RE	Y-1020RE	Y-1025RE	Y-1225RE	Y-1240RE
Piston Stroke [mm]	15	20	25	25	40
Piston Surface Area (Push) [cm ²]	44	84	84	120	120
Piston Surface Area (Pull) [cm ²]	37	79	79	113	113
Piston Force (Push) [kN(kgf)]	15.9(1621)	31.0(3161)	31.0(3161)	45.0(4589)	45.0(4589)
Piston Force (Pull) [kN(kgf)]	13.9(1417)	29(2957)	29(2957)	42(4283)	42(4283)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000	6000	6000
Moment of inertia [kg·m ²]	0.012	0.05	0.05	0.09	0.09
Weight [kg]	4.0	7.6	7.7	10.5	11
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8
KITAGAWA® Model	Y-0715RE	Y-1020RE	Y-1025RE	Y-1225RE	Y-1240RE

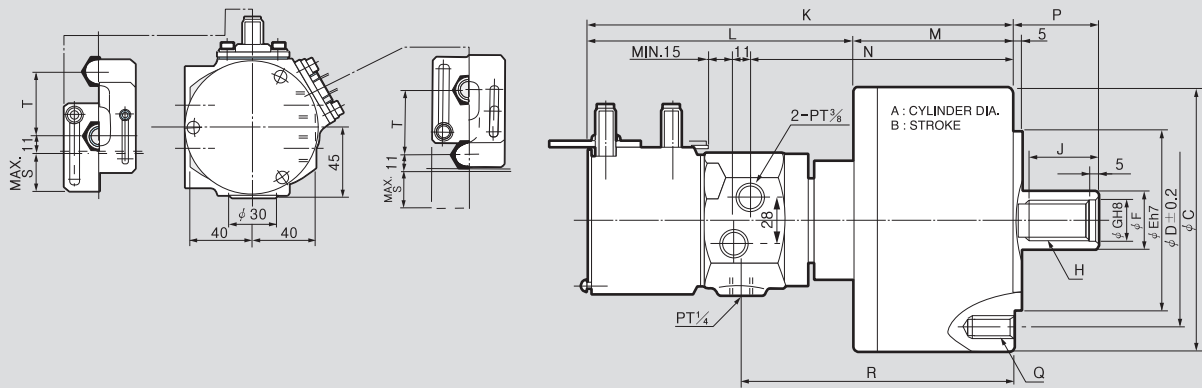
※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Piston Force : Hydraulic 4.0MPa (40.8 kgf/cm²)

※ Total leakage pressure : 3.0MPa(30.6 kgf/cm²) at 50℃

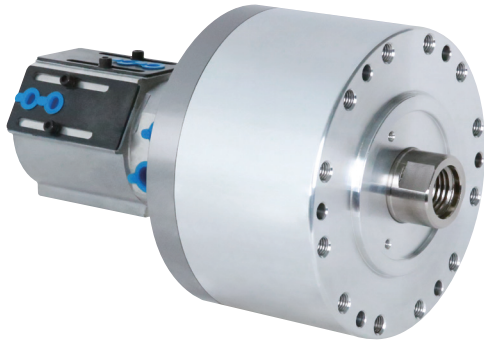
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DIMENSIONS

	Y-0715RE	Y-1020RE	Y-1025RE	Y-1225RE	Y-1240RE
A	75	105	105	125	125
B	15	20	25	25	40
ϕC	104	135	135	160	160
ϕD	90	100	100	130	130
ϕE	65	80	80	110	110
ϕF	30	30	30	35	35
ϕG	21	21	21	25	25
H	M20x2.5	M20x2.5	M20x2.5	M24x3.0	M24x3.0
J	36	35	35	44	44
K	227	252	257	260	306
L	161	163	163	163	194
M	66	89	94	97	112
N	127	152	157	160	175
P max.	46	45	45	51	65
P min.	31	25	20	26	25
Q	6-M6x20	6-M10x20	6-M10x20	6-M12x24	6-M12x24
R	133	158	163	166	181
S	23	23	23	23	-
T	41	41	41	41	-

Y-RE Closed-Center Hydraulic Cylinder with Proximity Bracket (150mm~250mm)



Application

Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

SPECIFICATIONS

	Y-1530RE	Y-1550RE	Y-2035RE	Y-2050RE	Y-2560RE
Piston Stroke [mm]	30	50	35	50	60
Piston Surface Area (Push) [cm ²]	174	174	312	312	515
Piston Surface Area (Pull) [cm ²]	160	160	290	290	482
Piston Force (Push) [kN(kgf)]	65.0(6628)	65(6628)	117.0(11934)	117.0(11934)	154(15759)
Piston Force (Pull) [kN(kgf)]	60(6118)	60(6118)	108(11013)	108(11013)	144.5(14749)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	5500	5500	5500	5500	2000
Moment of inertia [kg·m ²]	0.19	0.20	0.39	0.42	0.92
Weight [kg]	14	14.8	22.5	23.5	85
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8
KITAGAWA® Model	Y-1530RE	Y-1550RE	Y-2035RE	Y-2050RE	-

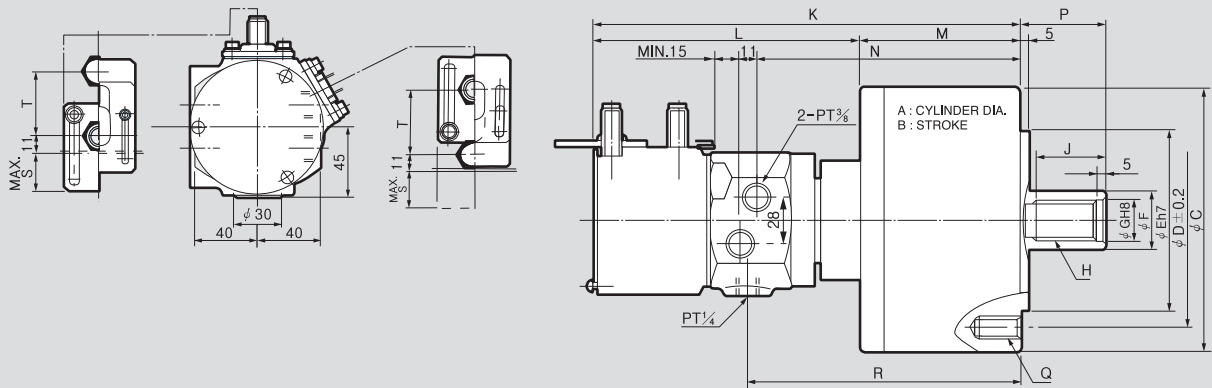
※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Piston Force : Hydraulic 4.0MPa (40.8 kgf/cm²)

※ Total leakage pressure : 3.0MPa(30.6 kgf/cm²) at 50℃

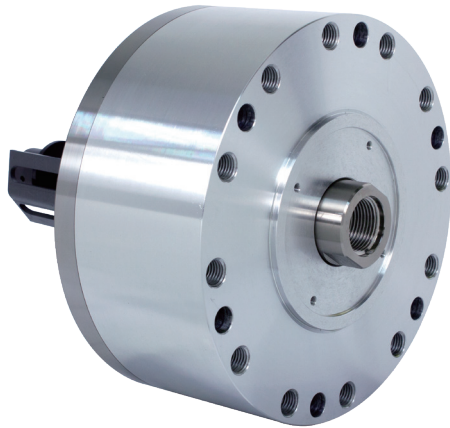
※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd



DIMENSIONS

	Y-1530RE	Y-1550RE	Y-2035RE	Y-2050RE	Y-2560RE
A	150	150	200	200	250
B	30	50	35	50	60
ϕC	190	190	245	245	300
ϕD	130	130	145	145	220
ϕE	110	110	120	120	160
ϕF	45	45	55	55	65
ϕG	31	31	37	37	44
H	M30x3.5	M30x3.5	M36x4.0	M36x4.0	M42x3.0
J	45	55	60	60	65
K	269	320.5	290	333	379
L	163	194.5	168	192	207
M	106	126	122	141	172
N	169	189	183	202	227
P max.	56	80	69	80	85
P min.	26	30	34	30	25
Q	6-M12 TAP DP'24	6-M12 TAP DP'24	12-M16 TAP DP'30	12-M16 TAP DP'30	12-M20 TAP DP'35
R	175	195	189	208	233
S	23	-	28	-	-
T	41	-	46	-	-

YH-RE Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket



Application

Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

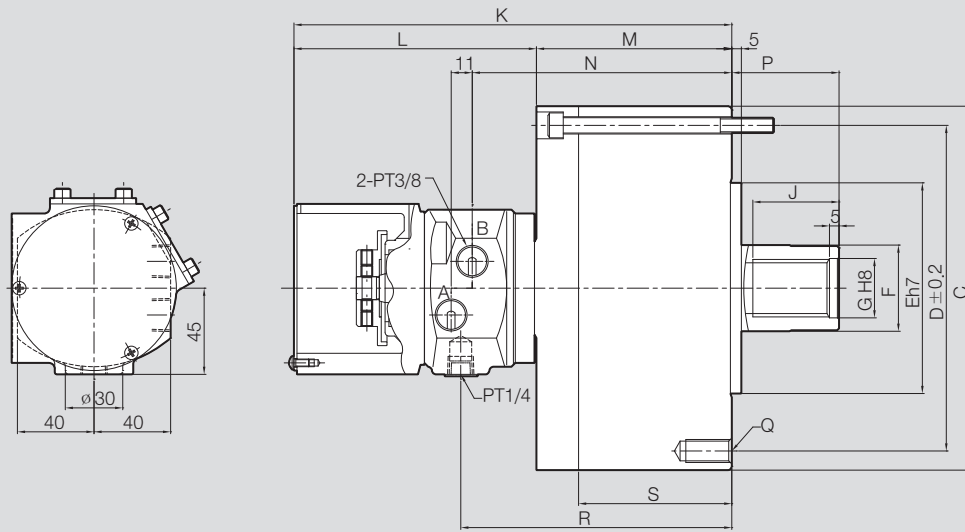
SPECIFICATIONS

	YH-10120RE	YH-10125RE	YH-12125RE	YH-12140RE	YH-15130RE
Piston Stroke [mm]	20	25	25	40	30
Piston Surface Area (Push) [cm ²]	78	78	114	114	168
Piston Surface Area (Pull) [cm ²]	73	73	106	106	154
Piston Force (Push) [kN(kgf)]	29(2960)	29(2960)	42(4326)	42(4326)	63(6375)
Piston Force (Pull) [kN(kgf)]	27(2770)	27(2770)	39(4022)	39(4022)	57(5843)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000	6000	5500
Moment of inertia [kg-m ²]	0.05	0.05	0.09	0.09	0.19
Weight [kg]	7.6	7.7	10.5	11	14
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8

	YH-15150RE	YH-20135RE	YH-20150RE	YH-25160RE
Piston Stroke [mm]	50	35	50	60
Piston Surface Area (Push) [cm ²]	168	305	305	515
Piston Surface Area (Pull) [cm ²]	154	283	283	482
Piston Force (Push) [kN(kgf)]	63(6375)	114(11573)	114(11573)	193(19541)
Piston Force (Pull) [kN(kgf)]	57(5843)	105(10738)	105(10738)	180(18289)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	5500	5500	5500	2000
Moment of inertia [kg-m ²]	0.2	0.39	0.42	0.92
Weight [kg]	14.5	22.5	23.5	88
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



DIMENSIONS

	YH-10120RE	YH-10125RE	YH-12125RE	YH-12140RE	YH-15130RE	YH-15150RE	YH-20135RE	YH-20150RE	YH-25160RE
ΦC	135	135	160	160	190	190	245	245	305
ΦD	118	118	142	142	170	170	222	222	275
ΦE	80	80	110	110	110	110	120	120	160
ΦF	30	30	35	35	45	45	55	55	65
ΦG	21	21	25	25	31	31	37	37	44
J	35	35	44	44	45	55	60	60	65
K	209.6	214.6	220.6	267.1	228.6	280.1	265.1	280.1	310
L	126.6	126.6	126.6	156.5	126.6	158.1	158.1	158.1	136
M	83	88	94	109	102	122	107	122	142.5
N	116.5	121.5	127.5	142.5	135.5	155.5	140.5	155.5	176
P max.	45	45	51	65	56	80	69	80	85
P min.	25	20	26	25	26	30	34	30	25
Q	6-M10 TAP DP'20	6-M10 TAP DP'20	12-M12 TAP DP'24	12-M12 TAP DP'24	12-M12 TAP DP'24	12-M12 TAP DP'24	12-M16 TAP DP'30	12-M16 TAP DP'30	12-M20 TAP DP'35
R	122.5	127.5	133.5	148.5	141.5	161.5	146.5	161.5	182
S	67	72	72	87	80	100	85	100	120.5

YS-RA Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket and Built-in Rotary joint



Application

Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure

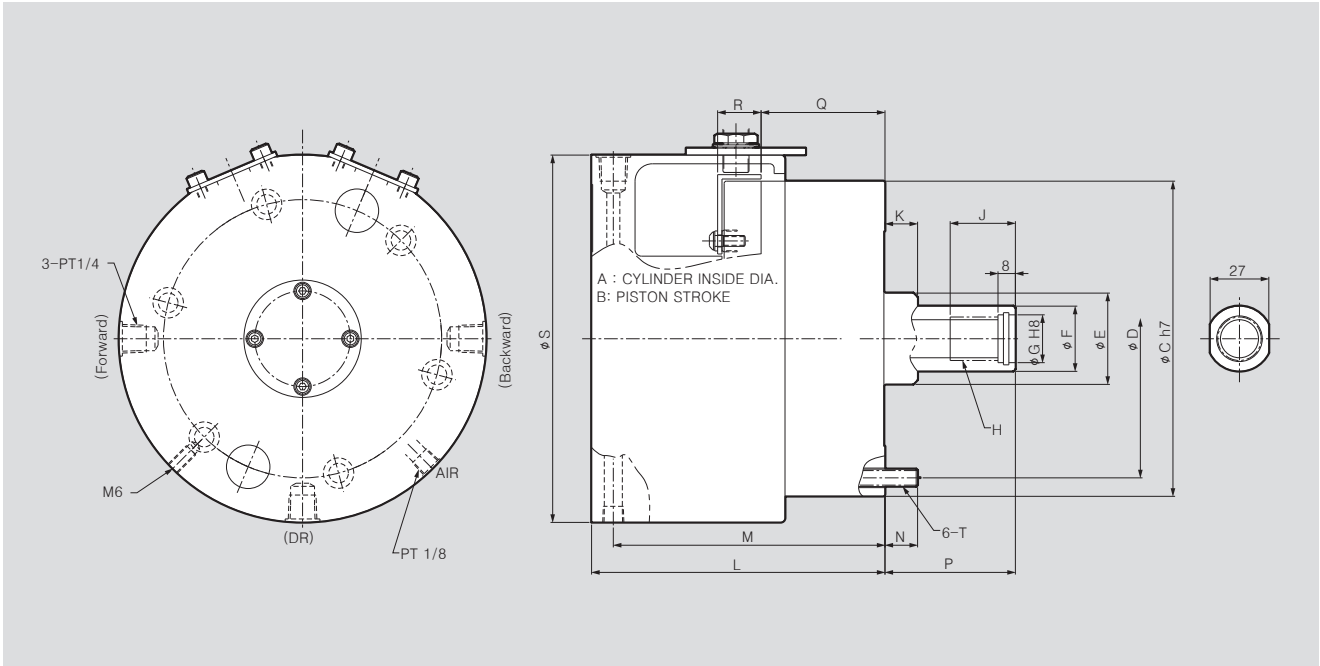
Ensures safety during blackouts or loss of power by maintaining pull force Built-in Rotary joint

SPECIFICATIONS

	YS-11020RA	YS-12021RA	YS-13030RA
Piston Stroke [mm]	20	21	30
Piston Surface Area (Push) [cm ²]	87.6	105.7	131.8
Piston Surface Area (Pull) [cm ²]	84	102	122.5
Piston Force (Push) [kN(kgf)]	28(2855)	39(3977)	47(4793)
Piston Force (Pull) [kN(kgf)]	27(2753)	38(3875)	45(4589)
Max. Operating Pressure [MPa(kgf/cm ²)]	3.5(35.7)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000
Moment of inertia [kg·m ²]	0.016	0.028	0.029
Weight [kg]	8.5	10.2	10.3
Total leakage [ℓ/min]	1.2	1.2	1.2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



DIMENSIONS

	YS-11020RA	YS-12021RA	YS-13030RA
A	110	120	130
B	20	21	30
ΦC	145	168	168
ΦD	128	145	150
ΦE	42	44	51
ΦF	30	32	36
ΦG	22	22	26
H	M20x2.5	M20x2.5	M24x3.0
J	30	30	35
K	15	15	15
L	135	135	144
M	125	125	134
N	15	17	17
P max.	60	60	60
P min.	40	39	30
Q max.	77	77	86
Q min.	57	57	66
R	20	20	20
ΦS	169	192	192
T	M8x80	M10x80	M10x90

YS-RC Ultra-Compact closed-center hydraulic cylinder with proximity bracket and built-in rotary joint



Application

Ultra-compact closed-center hydraulic cylinder

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure

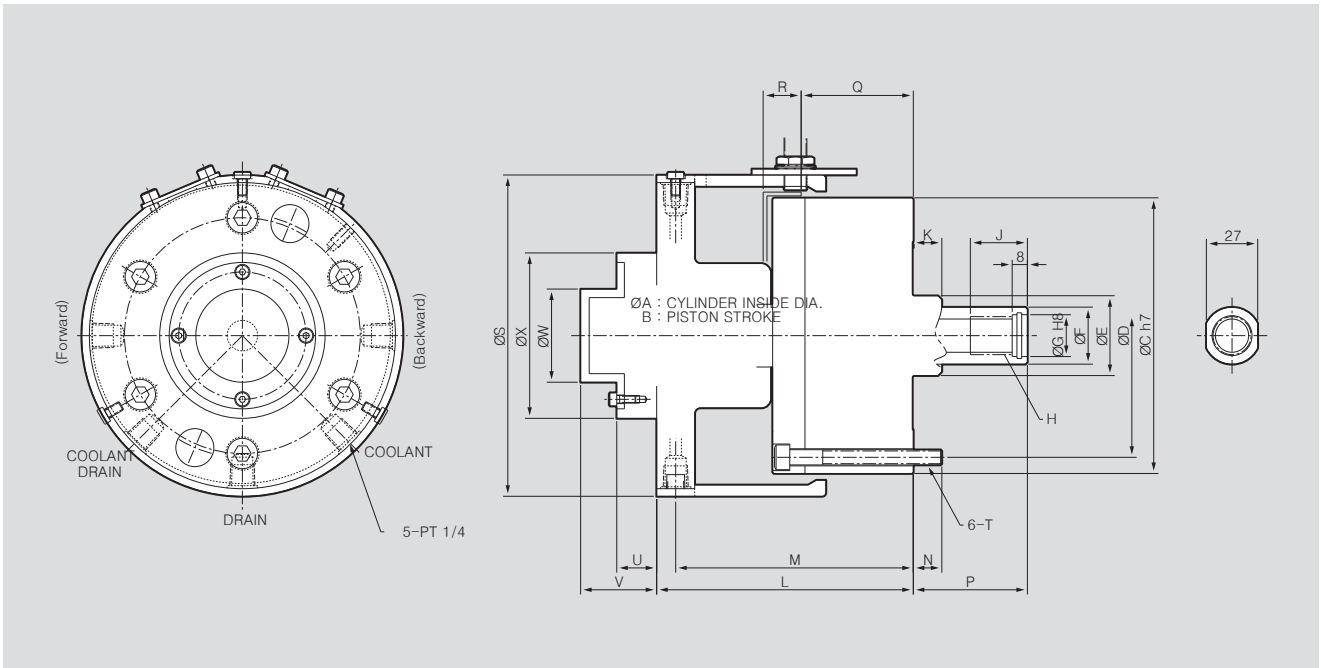
Ensures safety during blackouts or loss of power by maintaining pull force Built-in Rotary joint

SPECIFICATIONS

	YS-11020RC
Piston Stroke [mm]	20
Piston Surface Area (Push) [cm ²]	87.6
Piston Surface Area (Pull) [cm ²]	84
Piston Force (Push) [kN(kgf)]	28(2855)
Piston Force (Pull) [kN(kgf)]	27(2753)
Max. Operating Pressure [MPa(kgf/cm ²)]	3.5(35.7)
Max. r.p.m. [min ⁻¹]	6000
Moment of inertia [kg·m ²]	0.016
Weight [kg]	8.5
Total leakage [ℓ/min]	1.2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

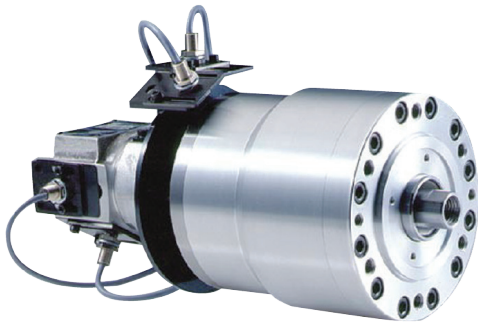


DIMENSIONS

	YS-11020RC
A	110
B	20
ØC	145
ØD	128
ØE	42
ØF	30
ØG	22
H	M20x2.5
J	30
K	15
L	135
M	125

	YS-11020RC
N	15
P max.	60
P min.	40
Q max.	77
Q min.	57
R	20
ØS	169
T	M8x80
U	21
V	40
W	49
X	87

DY Double-Piston Hydraulic Cylinder



Application

2+2 chucks and chucks with face drivers or part ejectors

Technical features

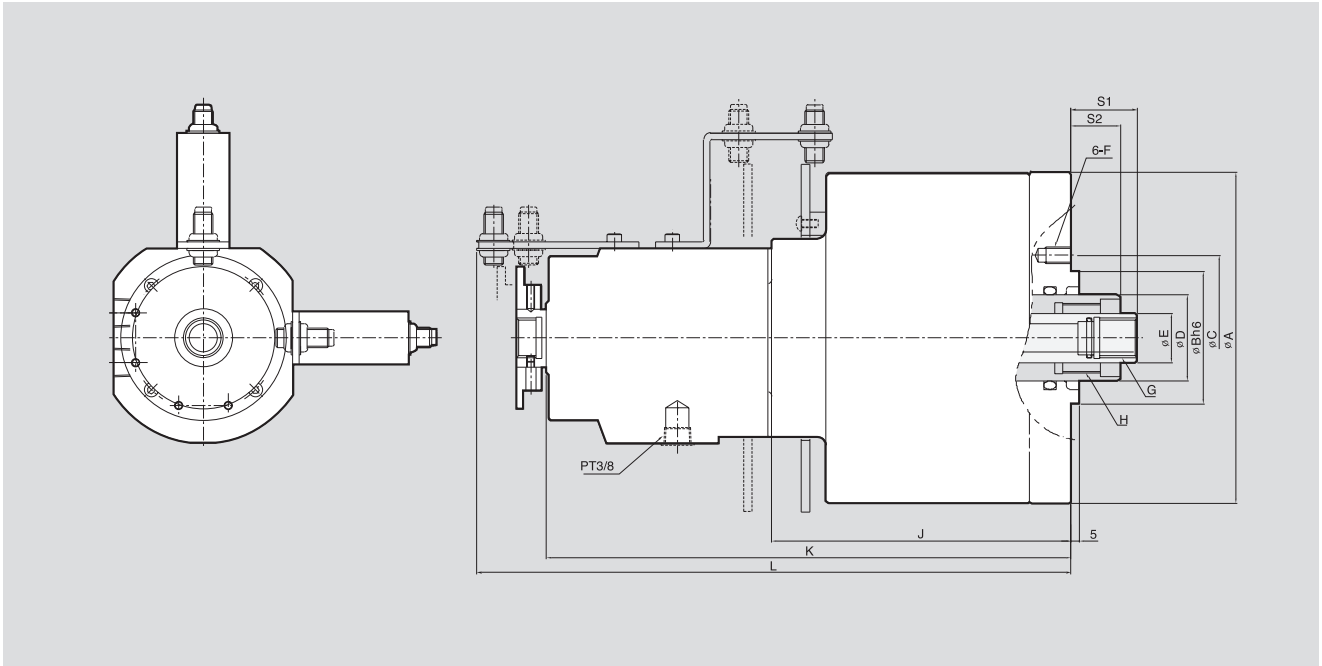
Dual actuation with a single cylinder

SPECIFICATIONS

	Piston Dia. (mm)	Piston Area (cm ²)	Piston Stroke		Weight (kg)	GD2 (kgf.m ²)	Max. Operating Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			S1(Max/Min)	S2(Max/Min)				
DY-1253030	125/70	103/33	60/30	45/15	-	0.065	40.8	5000
DY-1251535L	125/70	103/33	116/101	75/40	-	0.07	40.8	5000
DY-1251535S	125/70	103/33	90/75	75/40	-	0.07	40.8	5000
DY-1253060	125/70	103/33	90/60	75/15	-	0.085	40.8	5000
DY-1255030	125/70	103/33	80/30	45/15	-	0.072	40.8	5000

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



- ※ Piston A : Outer Piston
- ※ Piston B : Inner Piston

DIMENSIONS

	DY-1253030	DY-1251535	DY-1253060	DY-1255030
A	165	165	165	165
B (g6)	110	110	110	110
C	142	142	142	142
D	55	55	55	55
E	25	25	25	25
F	6-M8	6-M8	6-M8	6-M8
G	M16x2.0	M16x2.0	M16x2.0	M16x2.0
H	M45x1.5	M45x1.5	M45x1.5	M45x1.5
J	164	154	194	184
K	305	325	365	340
L	374.3	394.3	434.3	429.3

AY-R Closed-Center Pneumatic Cylinder



Application

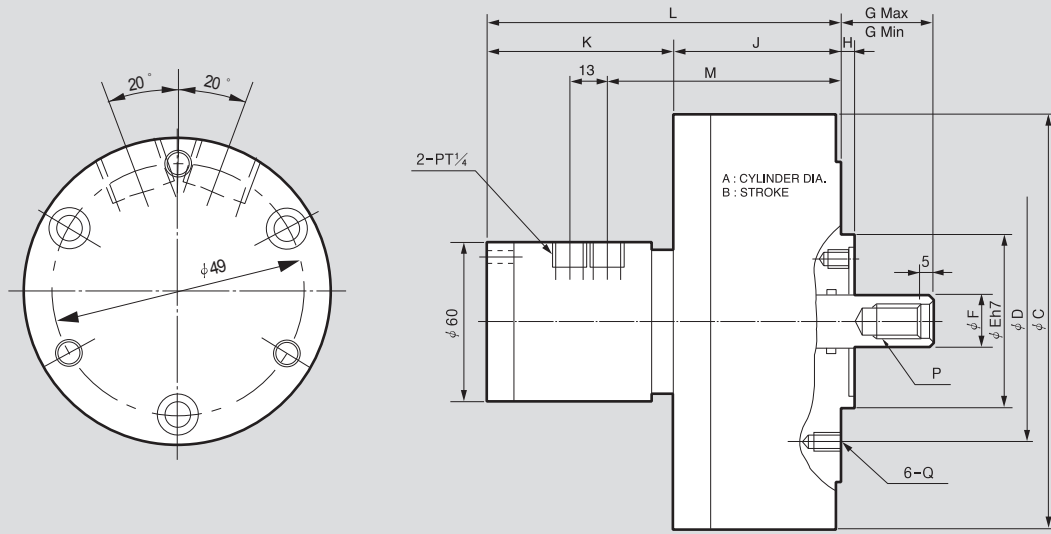
Closed-Center Pneumatic Cylinder
Suitable for cutting thin material

SPECIFICATIONS

	AY-1005R	AY-1315R	AY-1720R	AY-2225R	AY-2730R
Piston Stroke [mm]	5	15	20	25	30
Piston Surface Area (Push) [cm ²]	78.5	131	225	378	570.4
Piston Surface Area (Pull) [cm ²]	73.6	128	220.1	371.1	560.8
Piston Force (Push) [kN(kgf)]	5.4(552)	7.7(786)	13.23(1350)	22.2(2268)	33.5(3422)
Piston Force (Pull) [kN(kgf)]	5.1(518)	7.5(770)	12.9(1320)	21.8(2226)	33.0(3364)
Max. Operating Pressure [MPa(kgf/cm ²)]	8(0.82)	8(0.82)	8(0.82)	8(0.82)	8(0.82)
Max. r.p.m. [min ⁻¹]	5000	5000	5000	4000	3000
Weight [kg]	4.1	5.2	8.3	13.3	18.7
Moment of inertia [kg·m ²]	0.04	0.07	0.11	0.32	0.75

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



DIMENSIONS

	AY-1005R	AY-1315R	AY-1720R	AY-2225R	AY-2730R
A	100	130	170	220	270
B	5	15	20	25	30
ΦC	128	156	200	255	305
ΦD	90	90	100	130	130
ΦE(h7)	65	65	80	110	110
ΦF	20	20	25	30	35
G max.	30	35	65	71	76
G min.	25	20	45	46	46
H	5	5	5	5	5
J	53	63	82	93	103
K	71	71	71	71	74.5
L	124	134	153	164	177.5
M	80	90	109	120	133.5
N	M5	M5	M5	M5	M5
Q	M6x11	M6x11	M10x16	M12x20	M12x20
P	M12x22	M12x22	M16x30	M20x35	M24x40