

# SD Mega-Bore Short body Open Center Hydraulic Cylinder



## Application / Benefits

- Low drain rate
- Compact design
- Large bore for work requiring through hole

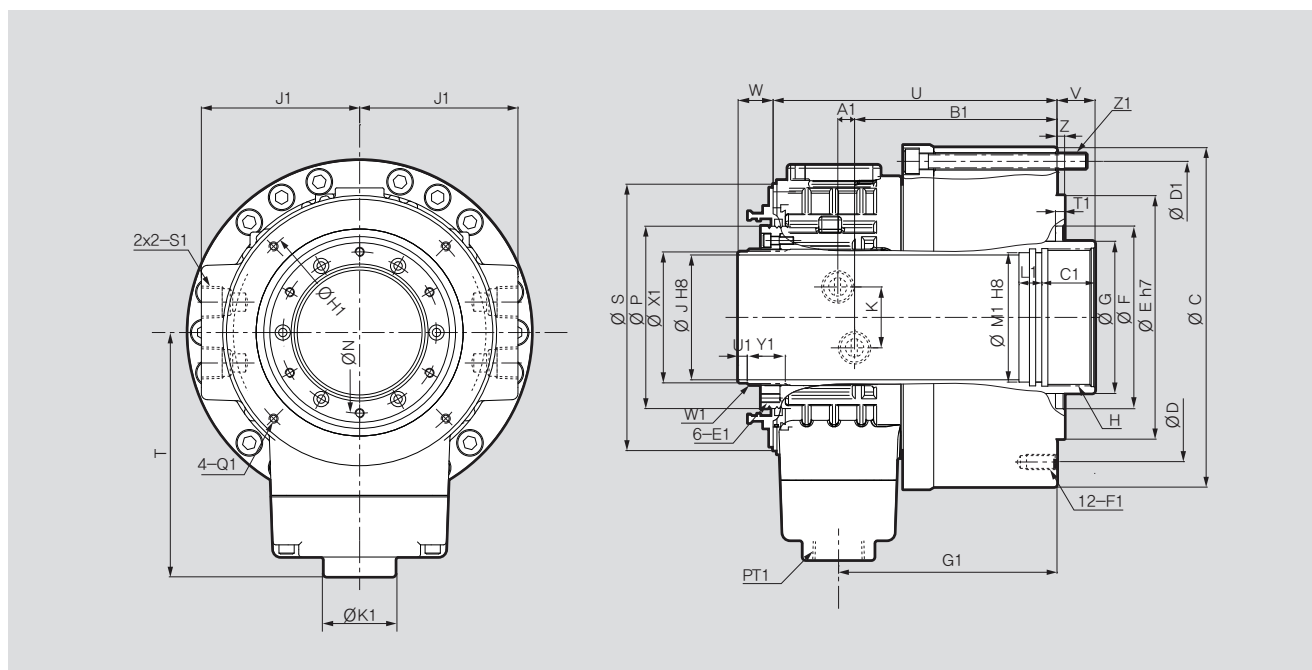
## Technical features

- Low leakage minimizes heat
- Check valve maintains pressure during power outage

## 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	215	250	305
Piston Stroke [mm]	25	25	29	29	30	35	50	51
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 <sup>2</sup> )]	4.5(45bar)	4.5(45bar)	4.5(45bar)	4.5(45bar)	4.5(45bar)	4.5(45bar)	4.0(40bar)	3.3(33bar)
Max. r.p.m. [min <sup>-1</sup> ]	7000	6200	5600	5000	4800	3500	3000	2000
Moment of inertia [N · m <sup>2</sup> (kg · m <sup>2</sup> )]	0.021	0.045	0.07	0.097	0.11	0.188	0.50	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	M52x2.0p	M60x2.0p	M75x2.0p	M85x2.0p	M90x2.0p	M112x2.0p	M130x2.0p	M180x3.0p
ΦJ	46.5	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	78.8	89.8	105.8	115.8	119.8	157.8	170	222
ΦS	116	135	154	164	175	205	230	278
T	119	134	141	149.5	160.5	174.5	204	230
U	159	150.5	172.5	182	186.5	203	258	290
V max	15	22	25	25	25	35	46	51
V min	-10	-3	-4	-4	-5	0	-4	0
W max	55	50	59	56	53	60	75	76
W min	30	25	30	27	23	25	25	25
Z	5	5	5	8	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	140	178.5	206
C1	30	30	30	35	35	30	45	45
E1	M6	M6	M6	M6	M6	M6	M6	M6
F1DP'	M10x20	M10x20	M10x20	M10x20	M10x20	M12x20	M16x32	M16x32
G1	125.5	115.5	132.5	139.5	143.5	152.5	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	M5x10	M6x10	M6x10	M6x10	M6x12	M6x12	M6x12	M6x12
S1	PT1/2	PT1/2	PT1/2	PT1/2	PT1/2	PT1/2	PT1/2	PT1/2
T1	7	7	8	8	8	6	6	7
W1	M52x1.5p	M58x1.5p	M74x1.5p	M84x2.0p	M89x2.0p	M119x2.0p	M124x2.0p	M180x3.0p
ΦX1	50	56	71.5	81	86	116	121.5	170.5
Y1	24	20	28	26	25	38	29	45
U1	9	9	8	9	6	9	9	8
Z1	6-M8x90	6-M8x90	6-M10x95	8-M8x110	6-M10x110	6-M12x120	8-M12x140	6-M10x95