



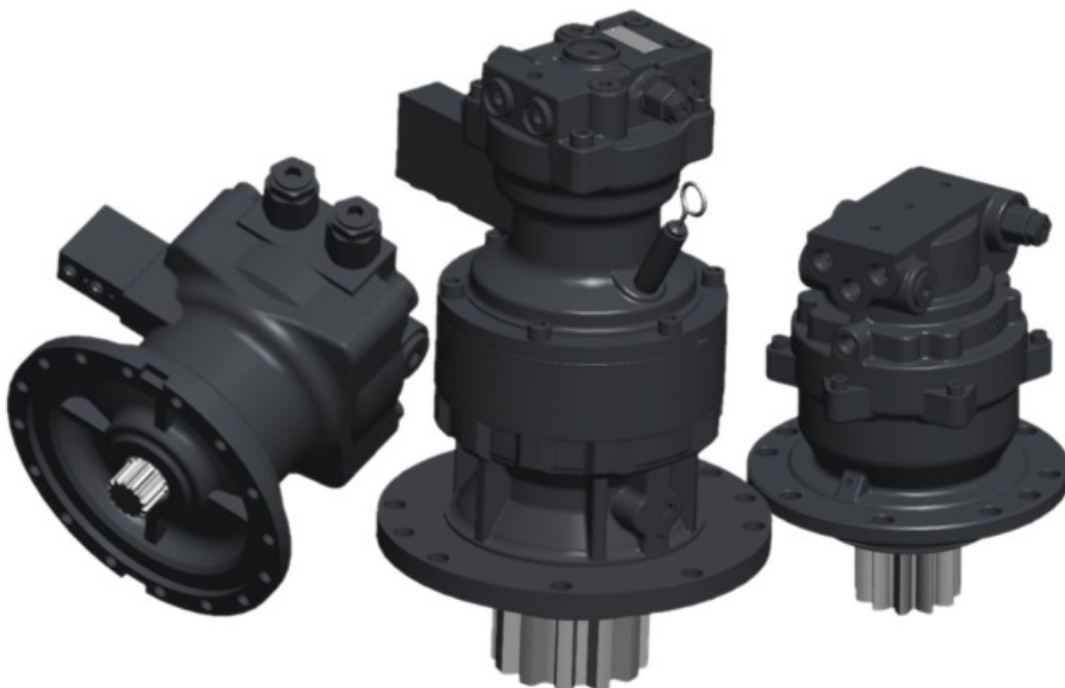
Danfoss DSD-018A Fixed Displacement Axial Piston Motor Owner's Manual

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ENGINEERING
TOMORROW
Product brochure
D-Swing

Fixed displacement axial piston motor



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DSD-018A Fixed Displacement Axial Piston Motor

Why D-Swing?

Our D-Swing motors are fixed-displacement, axial piston motors designed for durable and high-performance swing applications. With displacements from 18 cm³ to 250 cm³ [1.1 in³ to 15.3 in³] and a continuous pressure rating of 320 bar [4,641 psi], D-Swing motors are suitable for multiple applications including excavators in a wide tonnage range.

The motors feature an integrated design with a reducer, parking brake and multi-functioning valves, and provide high efficiency with smooth and precise swing movement. Features can meet customized requirements, including the shockless relief valve, anti-reverse valve, and time-delay valve.

Features

- Fixed displacement axial piston motor, reducer integrated
- Motor displacement 18 cm³ to 250 cm³ [1.1 in³ to 15.3 in³]
- Maximum flow 380 l/min [100 US gal/min]
- Motor pressure rated 320 bar [4,641 psi], peak 385 bar [5,584 psi]
- Motor output torque 1,071 Nm [790 lb-ft]
- Max total output torque 10,173 Nm [7,503 lb-ft]
- Integrated parking brake, shockless relief valve, and optional with anti-reverse valve, time delay valve
- Gear oil free maintenance · Applicable for 3.5T to above 40T excavators
- Proven reliability, output over 50,000 units/year globally
- Higher efficiency by optimized rotating parts designs
- Better performance with less shock and more precise positioning

Markets/Applications

- Excavator swing
- Drilling machine swing
- Crane swing compact track loaders

Product specifications

DSD: Swing device with gearbox

DSM: Swing motor without gearbox

Model	Mot or displace- ment	Max · mot or speed	Gears ratio	Max · out put torque	Max · out put speed	Total displace- ment	Max · flow	Max · rate d pressure	Mechani- cal brake torque (motor)	Time delay valve	Anti reverse valve	Output pin ion		Wei ght	App lica ble vehi cle mass
	cm ² /rev	rpm		N.m	rpm	cm ³ /rev	U/min	Mpa	N.m			Mod ule	Nu mber	Kg	Ton
DSD-018A	18.1	1547	21.5	1275	71,9	389	28	21	68	X	X	6	11	–	4
DSD-029A	28.9	1233	19.5	1929	63,3	562	36	22	137	●	X	7	13	75	5–6
DSD-030A	30.4	1171	19.5	1118	60,2	592	36	23	137	●	X	7	13	75	5–6
DSD-030B	30	1667	23.2	2391	72,0	695	50	22	116	●	●	7	13	83	6
DSD-032A	32.3	1548	19.5	2255.5	79,5	629	50	23	137	●	X	7	13	75	5–6
DSD-043A	43	1395	19.5	2873	71,7	837	60	22	137	●	X	8	12	75	5–6
DSD-047A	46.8	1581	19.5	3269	81,2	910	74	23	185	●	●	8	12	77	7–8
DSD-048A	48	1542	19.5	3208	79,2	934	74	22	185	●	●	8	11	77	7–8
DSM-053A	53.1	1525	–	165.7	–	–	81	20	137	●	X		–	24	7–8
DSD-068A	67.8	1917	19	4850	100,7	1295	130	24	245	●	●	10	12	112	14
DSM-072A	72	1806	–	292.2	–	–	130	26	294	●	●		–	32	14
DSM-118A	117.8	1426	–	505.5	–	–	168	27	579	●	●	–	–	61	18
DSD-151A	151	1490	17.6	9977	84,5	2664	225	24	579	●	●	12	13	237	22
DSM-169A	169A	1488	–	766.9		–	252	28	686	●	●	–	–	65	29
DSM-195A	194.5	1285	–	834.8	–	–	250	27	865	●	●	–	–	87	30
DSM-233A	233	1236	–	1054	–	–	288	28	1049	●	●	–	–	87	33-36

DSM-250A	250	1160	–	1112.1	–	–	290	28	1255	●	●		–	87	33-36
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● = Standard
X = Not available

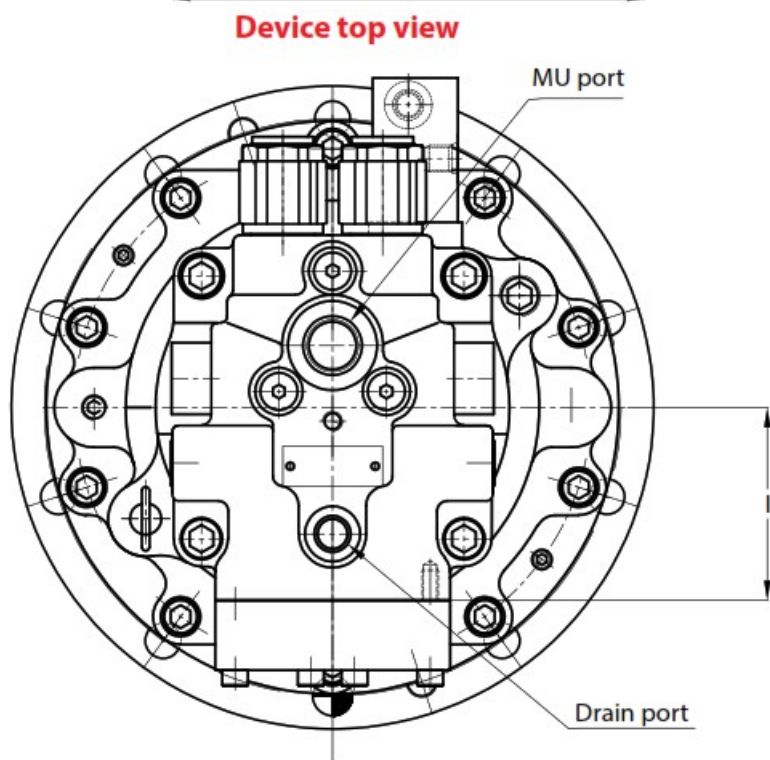
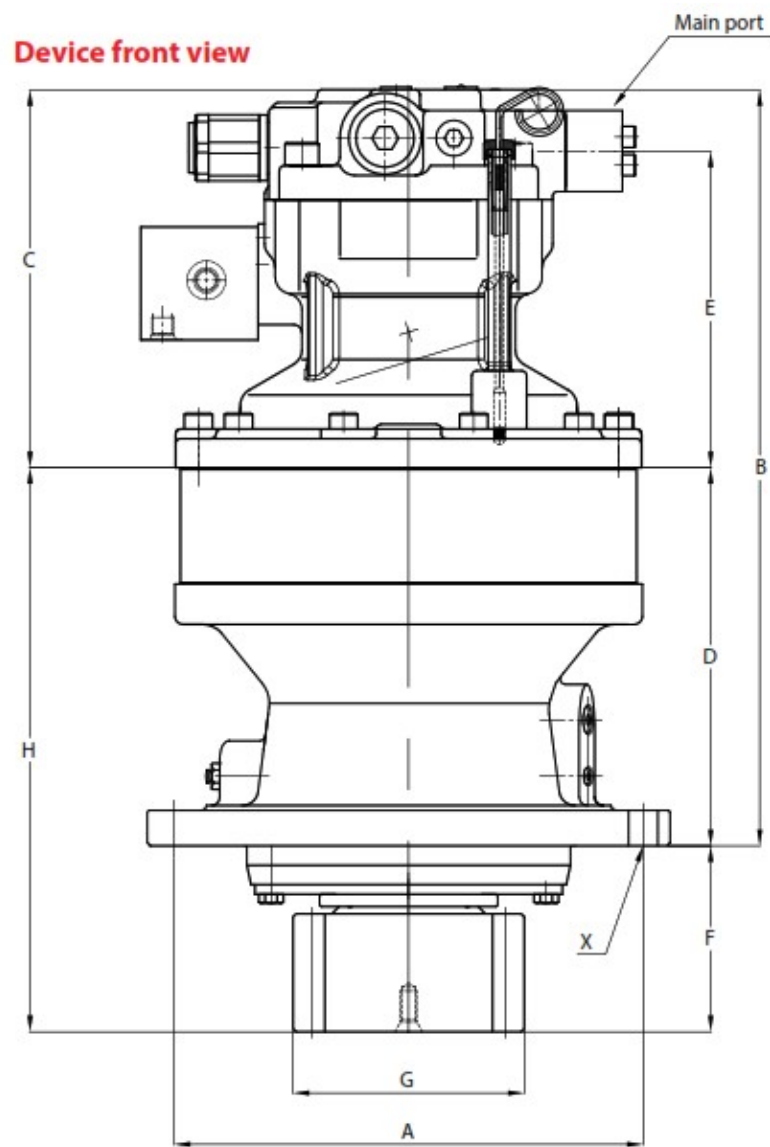
Product dimensions

DSD: Swing device with gearbox
DSM: Swing motor without gearbox

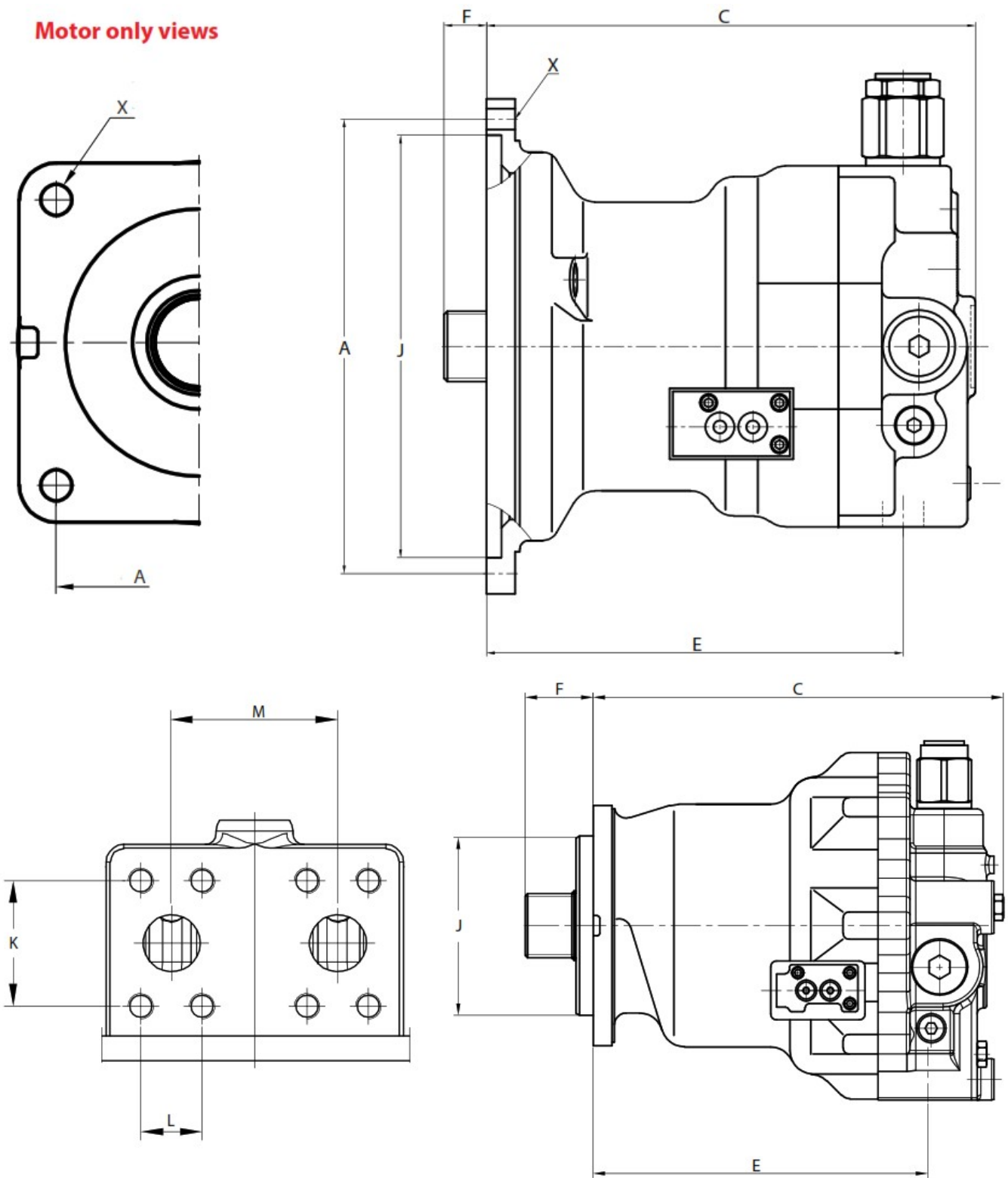
Model	A (6)	B	G	D		F	G (6)	H	I	J	X	K	L	M
DSD-018A	220	230	125	105	104.5	94	82,8	199	85	175	10-o17	SCREW TYPE		
DSD-029A	275	405	211	194	184	98	112	292	72	200	7-o17	SCREW TYPE		
DSD-030A	275	405	211	194	184	98	112	292	72	200	7-o17	SCREW TYPE		
DSD-03013	275	309	175.5	133.5	120	98	120.8	231.5	96	200	7-o17	SCREW TYPE		
DSD-032A	275	405	211	194	184	98	112	292	72	200	7-o17	SCREW TYPE		
DSD-043A	275	417	210	207	183	105.5	120.8	312.5	72	200	7-o18	SCREW TYPE		
DSD-047A	275	442.5	249.5	193	189.5	105.5	120.8	298.5	75	200	7-o18	SCREW TYPE		
DSD-048A	275	442.5	249.5	193	189.5	127	109.4	320	75	200	7-o18	SCREW TYPE		
DSM-053A	203	–	216.5	–	189.5	17.75	–	–	75	184	6-o13	SCREW TYPE		
DSD-068A	290	468	234	234	196	113	143	347	97	200	9-o18	17.5	38.1	60
DSM-072A	244	–	242	–	204	19	–	–	97	263	10-o15	17.5	38.1	60
DSM-118A	306	–	303		254	17	–	–	121	330	12-o72	22.2	47.6	68
DSD-151A	360	632	298	334	248	143	194	477	121	310	11-o22	22.2	47.6	68
DSM-169A	344	–	310.5	–	257.5	185	–	–	117	315	12-o19	22.2	47.6	68
DSM-195A	282	–	303	–	258	26.5	–	–	112	262	16-o13	26.2	52.4	70
DSM-233A	B.C. D. 162	–	339.5	–	283.5	57.5	–	–	113	152.4	4-o18	27.8	57.1	75.5
DSM-250A	B.C. D. 162	–	339.5	–	283.5	57.5			113	152.4	4-o18	27.8	57.1	75.5

Model	Main port	Drain port	Pilot port (Pg)	I MU port
DSD-018A	BSP G3/8 (115 PF3/8)	PF3/8	PF1/4	PF3/8
DSD-029A	BSP G1/2 (JIS PF1 / 2)	PF3/8	PF1/4	PF3/4
DSD-030A	BSP G1/2 (MS PF1/ 2)	PF3/8	PF1/4	PF3/4
DSD-030B	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSD-032A	BSP G1/2 (MS PF1/ 2)	PF3/8	PF1/4	PF3/4
DSD-043A	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSD-047A	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSD-048A	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSM-053A	BSP G1/2 (JIS PF1/2)	PF3/8	PH /4	PF3/4
DSD-068A	SAE 1/2" 8-M8 HEXA GON TYPE	PF3/8	PF1/4	PF3/4
DSM-072A	SAE 1/2" 8-M8 HEX AGON TYPE	PF3/8	PF1/4	PF3/4
DSM-118A	SAE 3/4" 8-M10 HE XAGON TYPE	PF1/2	PF1/4	PF1
DSD-151A	SAE 3/4" 8-M10 HE XAGON TYPE	PF1/2	PF1/4	PF1
DSM-169A	SAE 3/4" 8-M10 HE XAGON TYPE	PF1/2	PF1/4	PF1
DSM-195A	SAE 1" 8-M10 HEXA GON TYPE	PF1/2	PF1/4	PF1
DSM-233A	SAE 1" 8-M12 SQUA RE TYPE	PF1/2	PF1/4	PF1-1/4
DSM-250A	SAE 1" 8-M12 SQUA RE TYPE	PF1/2	PF1/4	PF1-1/4

Dimensional drawings



Motor only views



Swing drive **motors for excavators**

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Count on Danfoss's experience to help lead the future of excellent construction equipment

We develop, manufacture, and supply field-proven solutions with 40 years of experience. Providing high quality and high performance products backed by deep application knowledge and focus on excavator customers.

We transform by market and technology trend and dig in electrification of excavators.

We aim to be leader of excavator components, systems and electrification.

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Documents / Resources

	Danfoss DSD-018A Fixed Displacement Axial Piston Motor [pdf] Owner's Manual DSD-018A Fixed Displacement Axial Piston Motor, DSD-018A, Fixed Displacement Axial Piston Motor, Displacement Axial Piston Motor, Axial Piston Motor, Piston Motor
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References

- [User Manual](#)