D-Swing

FIXED DISPLACEMENT AXIAL PISTON MOTOR

Bonfiglioli

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 cm^3 to 250 cm^3 [1.1 in^3 to 15.3 in^3]
- 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	Motor displacement	Max. motor speed	Gear ratio	Max. output torque	Max. output speed	Total displacement	Max. flow	Max. rated pressure r	Mechanical brake torque (motor)	Time delay valve	Anti reverse valve	Output pinion		Weight	Applicable vehicle mass
	cm3/rev	rpm		N.m	rpm	cm3/rev	l/min	Mpa	N.m			Module	Number	Kg	Ton
DSD-018A	18.1	1,547	21.5	1,275	71,9	389	28	21	68	X	X	6	11		4
DSD-029A	28.9	1,233	19.5	1,929	63,3	562	36	22	137	•	X	7	13	75	5 ~ 6
DSD-030A	30.4	1,171	19.5	2,118	60,2	592	36	23	137	•	X	7	13	75	5 ~ 6
DSD-030B	30.0	1,667	23.2	2,391	72,0	695	50	22	116	•	.	7	13	83	6
DSD-032A	32.3	1,548	19.5	2,255.5	79,5	629	50	23	137	•	X	7	13	75	5 ~ 6
DSD-043A	43.0	1,395	19.5	2,873	71,7	837	60	22	137	•	X	8	12	75	5 ~ 6
DSD-047A	46.8	1,581	19.5	3,269	81,2	910	74	23	185	•	•	8	12	77	7 ~ 8
DSD-048A	48.0	1,542	19.5	3,208	79,2	934	74	22	185	•	•	8	11	77	7 ~ 8
DSM-053A	53.1	1,525		165.7			81	20	137	•	X			24	7 ~ 8
DSD-068A	67.8	1,917	19.0	4,850	100,7	1,295	130	24	245	•	•	10	12	112	14
DSM-072A	72.0	1,806		292.2			130	26	294	•	•			32	14
DSM-118A	117.8	1,426		505.5			168	27	579	•	•			61	18
DSD-151A	151.0	1,490	17.6	9977	84,5	2,664	225	24	579	•	•	12	13	237	22
DSM-169A	169.4	1,488		766.9			252	28	686	•	•			65	29
DSM-195A	194.5	1,285		834.8			250	27	865	•	•			87	30
DSM-233A	233.0	1,236		1,054			288	28	1,049	•	•			87	33~36
DSM-250A	250.0	1,160		1,112.1			290	28	1,255	•	•			87	33~ 36

• = Standard
X = Not available

Product dimensions

DSD: SWING DEVICE WITH GEARBOX

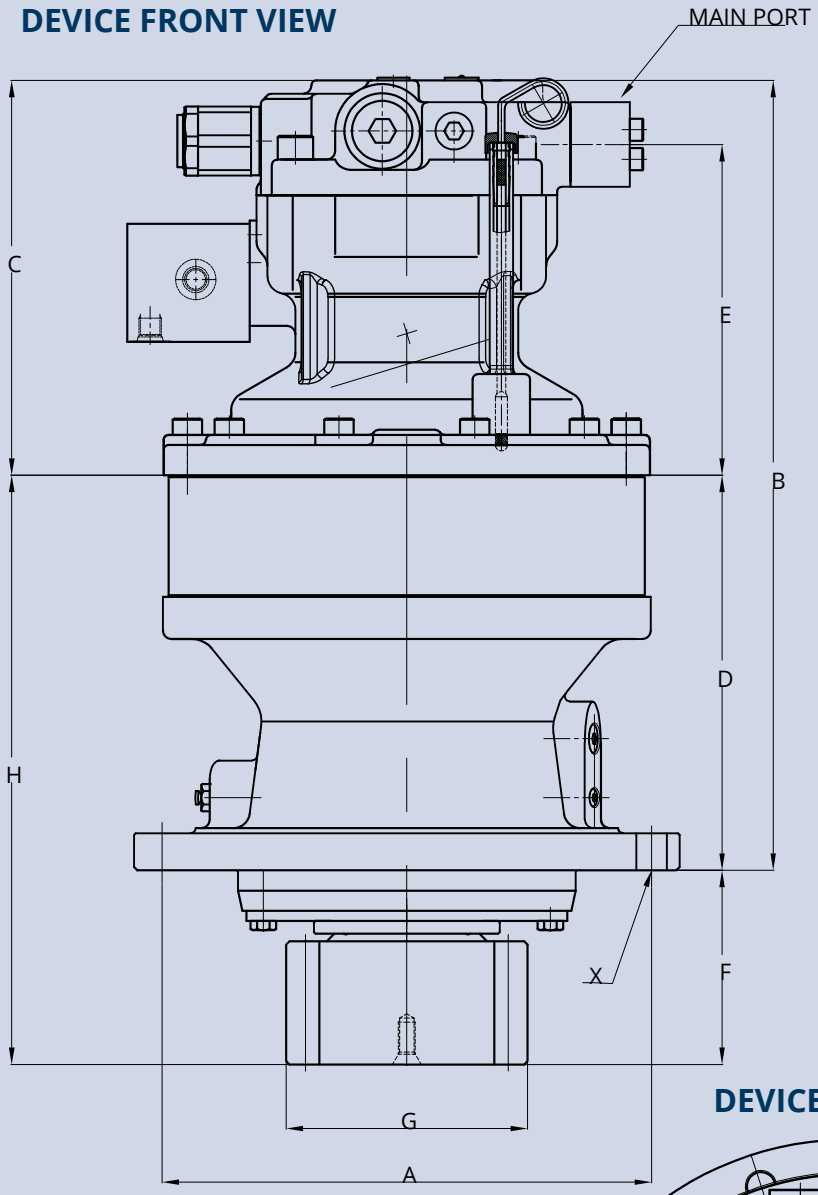
DSM: SWING MOTOR WITHOUT GEARBOX

Model	A (ø)	B	C	D	E	F	G (ø)	H	I	J	X	K	L	M
DSD-018A	220	230	125	105	104.5	94	82,8	199	85	175	10-ø17		SCREW TYPE	
DSD-029A	275	405	211	194	184	98	112	292	72	200	7-ø17		SCREW TYPE	
DSD-030A	275	405	211	194	184	98	112	292	72	200	7-ø17		SCREW TYPE	
DSD-030B	275	309	175.5	133.5	120	98	120.8	231.5	96	200	7-ø17		SCREW TYPE	
DSD-032A	275	405	211	194	184	98	112	292	72	200	7-ø17		SCREW TYPE	
DSD-043A	275	417	210	207	183	105.5	120.8	312.5	72	200	7-ø18		SCREW TYPE	
DSD-047A	275	442.5	249.5	193	189.5	105.5	120.8	298.5	75	200	7-ø18		SCREW TYPE	
DSD-048A	275	442.5	249.5	193	189.5	127	109.4	320	75	200	7-ø18		SCREW TYPE	
DSM-053A	203		216.5		189.5	17.75			75	184	6-ø13		SCREW TYPE	
DSD-068A	290	468	234	234	196	113	143	347	97	200	9-ø18	17.5	38.1	60
DSM-072A	244		242		204	19			97	263	10-ø15	17.5	38.1	60
DSM-118A	306		303		254	17			121	330	12-ø72	22.2	47.6	68
DSD-151A	360	632	298	334	248	143	194	477	121	310	11-ø22	22.2	47.6	68
DSM-169A	344		310.5		257.5	18.5			117	315	12-ø19	22.2	47.6	68
DSM-195A	282		303		258	26.5			112	262	16-ø13	26.2	52.4	70
DSM-233A	B.C.D. 162		339.5		283.5	57.5			113	152.4	4-ø18	27.8	57.1	75.5
DSM-250A	B.C.D. 162		339.5		283.5	57.5			113	152.4	4-ø18	27.8	57.1	75.5

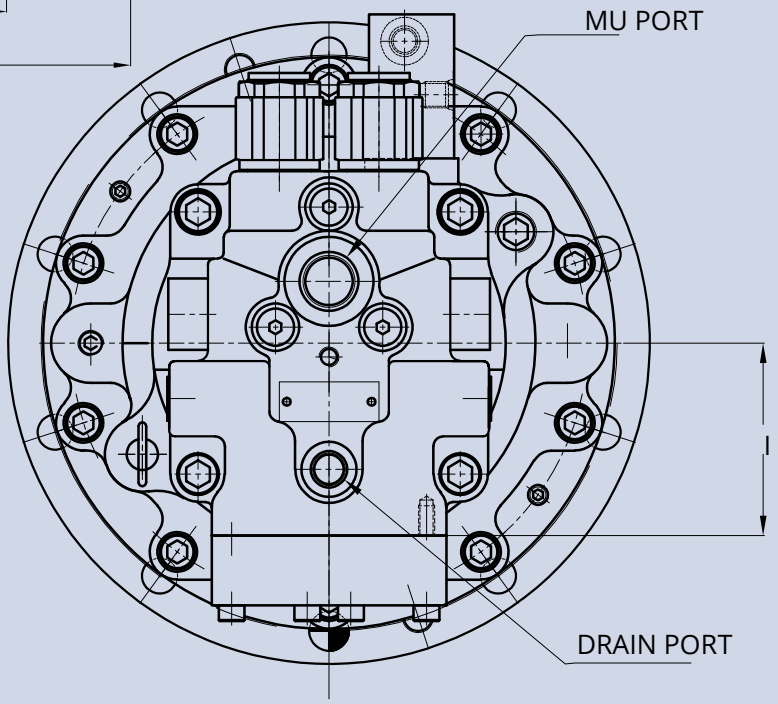
Model	Main port	Drain port	Pilot port (Pg)	MU port
DSD-018A	BSP G3/8 (JIS PF3/8)	PF3/8	PF1/4	PF3/8
DSD-029A	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSD-030A	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSD-030B	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSD-032A	BSP G1/2 (JIS PF1/2)	PF3/8	PF1/4	PF3/4
DSD-043A	BSP 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	PF1/4	PF3/4
DSD-068A	SAE 1/2" 8-M8 HEXAGON TYPE	PF3/8	PF1/4	PF3/4
DSM-072A	SAE 1/2" 8-M8 HEXAGON TYPE	PF3/8	PF1/4	PF3/4
DSM-118A	SAE 3/4" 8-M10 HEXAGON TYPE	PF1/2	PF1/4	PF1
DSD-151A	SAE 3/4" 8-M10 HEXAGON TYPE	PF1/2	PF1/4	PF1
DSM-169A	SAE 3/4" 8-M10 HEXAGON TYPE	PF1/2	PF1/4	PF1
DSM-195A	SAE 1" 8-M10 HEXAGON TYPE	PF1/2	PF1/4	PF1
DSM-233A	SAE 1" 8-M12 SQUARE TYPE	PF1/2	PF1/4	PF1-1/4
DSM-250A	SAE 1" 8-M12 SQUARE TYPE	PF1/2	PF1/4	PF1-1/4

Dimensional drawings

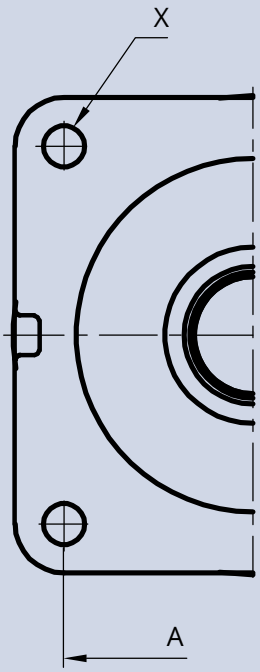
DEVICE FRONT VIEW

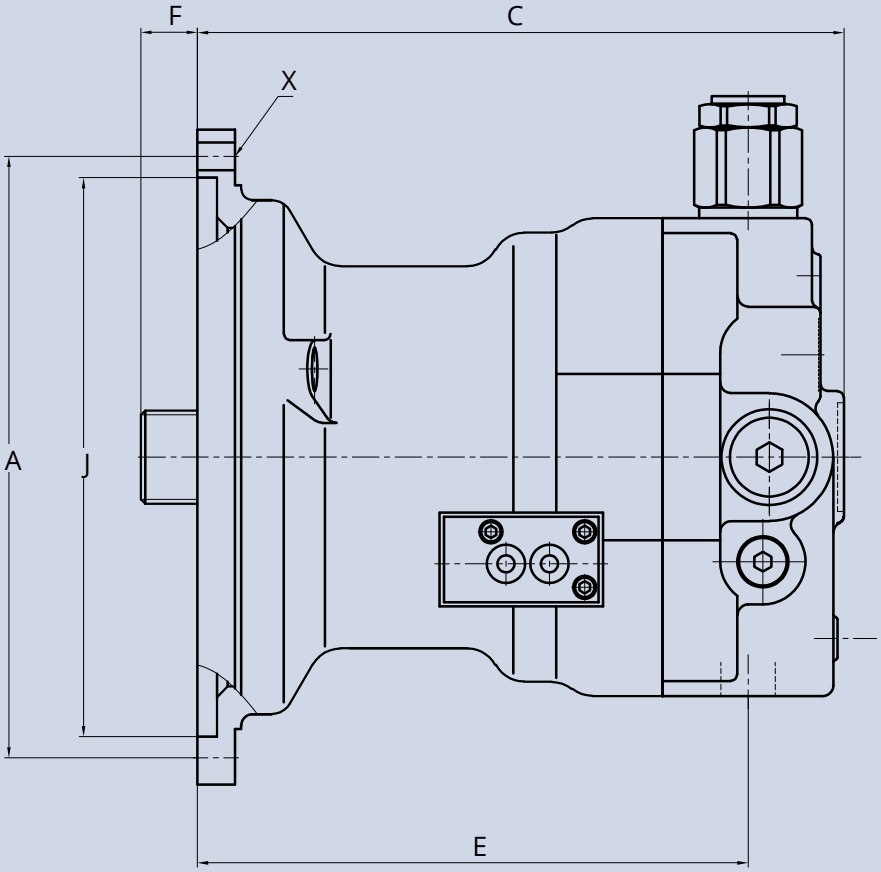


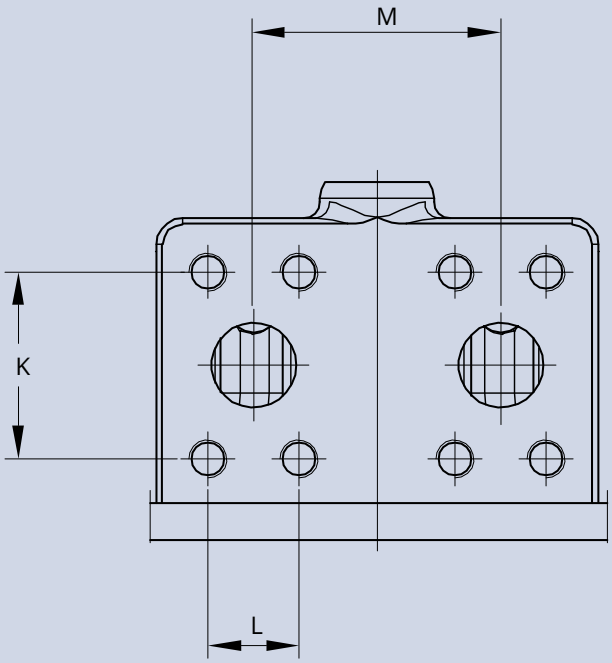
DEVICE TOP VIEW

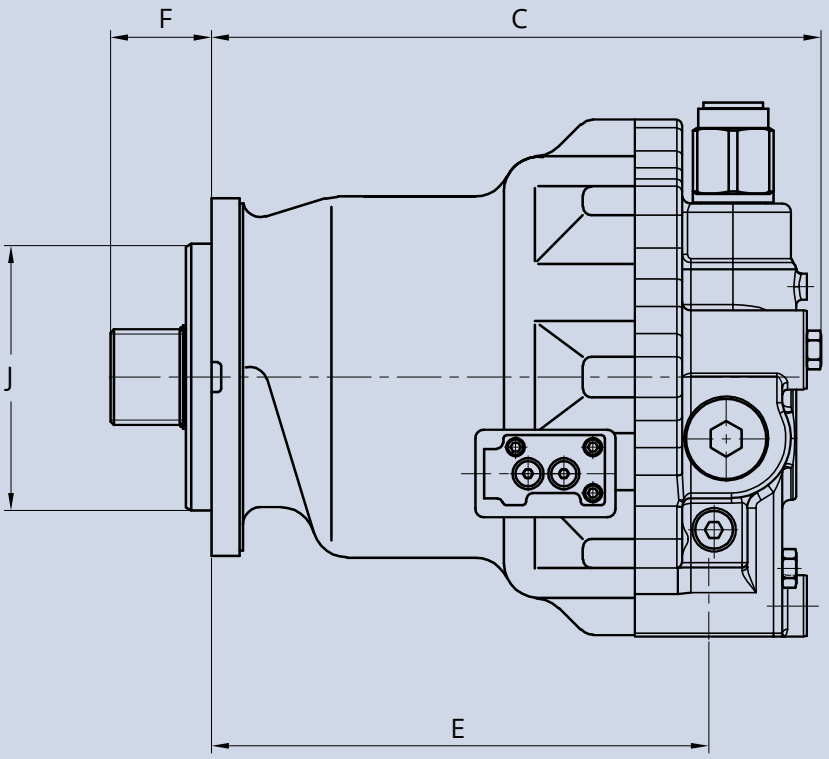


MOTOR ONLY VIEWS









Track drive motors for excavators

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