D-Track

TWO-SPEED AXIAL PISTON MOTOR

Bonfiglioli

Why D-Track?



Our **D-Track** motors are two-speed, axial-piston motors designed for durable and powerful track drive. With displacements from 14 cm3 to 185 cm3 [0.9 in3 to 11.3 in3] and a continuous pressure rating of 365 bar [5,294 psi], D-Track 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 provides high efficiency with smooth acceleration and deceleration. Features can meet customized requirements, including the shockless relief valve, counter-balance valve, anti-cavitation valve, and auto-two-speed function.

FEATURES

- Two-speed axial piston motor, reducer integrated (DTD14 is one speed)
- Motor displacements from 14 cm3 to 185 cm^3 [0.9 in^3 to 11.3 in^3]
- Rated pressure 365 bar [5,294 psi], peak pressure 430 bar [6,237 psi]
- Max flow 380 l/min [100 US gal/min]
- Max output torque 74.4 KNm [54,875 lb-ft]
- Integrated shockless relief valve, counter-balance valve, anti-cavitation valve, auto-2-speed function
- Applicable for 1.5T to 40T excavators
- Proven reliability, output over 50,000 units/year globally
- Higher efficiency by optimized rotating parts designs
- Better performance smooth starting and stopping with less shock and more precise positioning
- Compact design and easy Installation with exchangeability

MARKETS/APPLICATIONS

- Excavator track
- AWP track
- Drilling machine track
- Undercarriage track
- Special crawler vehicle track
- Winch

Product specifications

DTD: TRACK DEVICE WITH GEARBOX

Model	Motor displace-ment	Max. motor speed	Gear ratio	Max. output torque	Max. output speed	Total displace-ment	Max. flow	Max. rated pressure r	Mechani-cal brake torque (motor)	Automatic 2-speed	Relief valve	Anti-cavitation v/v	Weight	Applicable vehicle mass
	cm3/rev	rpm		N.m	rpm	cm3/rev	l/min	Mpa	N.m				Kg	Ton
DTD-14.7/7.7	14.7	3,116.9	42.636	2,200.6	38.3/73.1	626.7	24	22	37.26	•	X	▲	27	1.5~2.0
DTD-16	16	1,056	31	1,549	34,2	496	17	19.6	18	X	X	X	25	1.5~2.0
DTD-16.4/11.4	16.4	3,070	42.636	2,785	50/72	699.2304	35	25	37.26	•	▲	▲	27	1.5~2.0
DTD-16.4/10.2	16.4	2,941.2	42.636	2,785	42.9/69	699.2304	30	25	37.26	•	▲	▲	27	1.5~2.0
DTD-18/10.3	18	3,146.7	42.636	2,999.8	42.3/76.2	767.4	32,5	24.5	29.4	•	X	▲	27	1.5~2.0
	18	3,398	42.636	2,478.1	45.6/79.7	767.4	35	24.5	49	▲	X	•	27	1.5~2.0
DTD-18/9	18.4	2,667	53.7	2,483	37.69/77.07	636.6	24	24.5		•	•	X	41	2.5~3
DTD-16.4/10.4	16.4	3,365.4	53.7	3,020.4	39.7/62.6	880.68	35	21.8	49	X	▲	X	38	3.0~3.5
DTD-18/10.1	18	3,465.3	53.7	3,317.5	36.2/64.5	966.6	35	21.8	49	X	▲	X	38	3.0~3.5
	18	3,465.3	53.7	3,317.5	36.2/64.5	966.6	35	24.5	42.7	•	X	•	38	3.0~3.5
DTD-21/11.2	21	3,125	53.7	3,696.1	31/58.2	1,262	35	20.6	49	X	▲	X	38	3.0~3.5
	21	3,125	53.7	3,870.6	31/58.2	1,127	35	21.6	49	X	•	X	41	3.0~3.5
	21	3,303.6	53.7	4,223.7	32.8/61.5	1,127	37	23.5	42,7	•	▲	▲	38	3.0~3.5
	21	3,571.4	53.7	4,400.2	35.5/66.5	1,127	40	24.5	34.8/42.7	•	▲	▲	38	3.0~3.5
DTD-23.04/12.66	23.04	2,764.6	53.7	4,538.5	28.3/51.5	1,237.4	35	23	42.7	•	▲	▲	38	3.0~3.5
DTD-23.5/14.7	23.5	2,380	53.7	4,726.8	27.7/44.3	1,262	35	23.5	49	X	▲	X	38	3.0~3.5
	23.5	2,380	53.7	4,726.8	27.7/44.3	1,262	35	23.5	42.7	•	▲	▲	38	3.0~3.5
DTD-40/20.6	40	2,670	45.568	7,111.7	30.2/58.6	1,823	55	24.5	82.3	•	•	X	80	5 ~ 6
	40	2,912	45.568	8,722	27.9/54.2	1,823	60	25.5	82.3	•	•	X	80	5 ~ 6
DTD-43.7/23.1	43.7	2,381	53.7	10,253.8	23.4/44.3	2,347	55	27.4	82.3	▲	•	X	85	5 ~ 6
	43.7	2,381	45.6	6,835.2	27.6/52.2	1,991	55	21.6	82.3	▲	•	X	85	5 ~ 6
	43.7	2,500	53.7	8,061	24.6/46.5	2,347	57.75	21.6	82.3	•	•	X	85	5 ~ 6
DTD-46.6/27.5	46.6	2,981.8	53.7	1,0934.4	32.7/55.5	2,502	82	27.4	82.3	▲	•	X	85	7~7.5
	46.6	2,981.8	45.6	9,277	38.6/65.4	2,123	82	27.4	115.5	▲	•	X	85	7~7.5
	46.6	2,599	53.7	10,954	28.8/48.4	2,502	72	27.4	101,.9	•	•	X	85	7~7.5
DTD-41.1/26.1	41.1	2,835.2	53.706	10,336.2	33.5/52.8	2,207.3	74	29.4	149.6	•	•	X	89	7~7.5
DTD-53.21/33.8	53.21	2,424	45.568	10,591.1	37.1/58.4	2,424	90	27.4	126.5	▲	•	X	89	7~7.5
DTD-53.21/31.4	53.21	2,410	47.065	10,943.2	30.2/51.2	2,504	75.6	27.4	82.3	▲	•	X	89	8 ~ 9
DTD-57.1/30.7	57.08	2,604.2	47.065	11,746.4	29.8/55.3	2,686.4	80	27.4	82.3	▲	•	X	89	8 ~ 9
	57.08	2,539.1	47.065	11,746.4	29/53.9	2,686.4	78	27.4	82.3	•	•	X	89	8 ~ 9
DTD-67.3/41.22	67.3	2,718.4	54	18,719.9	30.82/50.34	3,634.2	112	32.4	196.1	•	•	X	140	11~12
DTD-76.62/44.8	76.62	2,756.7	54	23,565.3	29.85/51.05	4,137.4	123.5	35.8	193.1	•	•	X	140	11~14
DTD-118/72	118	2,222.2	50.508	32,557.1	26.8/43.9	5,959.9	160	34.3	480.5	•	•	X	280	17~19
DTD-146.5/95	146.5	2,315.7	50.508	41,575.2	29.8/45.8	7,399.4	220	35.3	480.5	•	•	X	280	22~23
DTD-146.5/81.8	146.5	2,315.7	50.508	41,575.2	29.8/53.2	7,399.4	220	35.3	480.5	•	•	X	280	22~25
DTD-168.4/102.5	168.4	2,412.7	50.508	47,790.7	29/47.7	8,505.5	247.3	35.3	480.5	•	•	X	310	22~25
DTD-168.4/90	168.4	2,747.8	50.508	46,462.9	29/54.4	8,505.5	247.3	34.3	480.5	•	•	X	310	22~25
DTD-154.8/88.5	154.8	3,005.6	72.978	61,713.2	23.5/41.2	11,297	275	34.3	480.5	•	•	X	404	29~30
DTD-159/96	154.8	2,604.1	72.978	58,849.7	21.5/35.6	11,603	250	31.8	392.2	▲	•	X	404	29~30
DTD-173/101	173.0	2,673.3	72.978	65,054.3	21.4/36.6	12,625	270	32.4	392.2	•	•	X	404	30~33
DTD-185/114.1	185.0	2,541	70.18	72,941.8	22.3/36.2	12,983	290	35.3	392.2	X	•	X	430	34~36
DTD-185/90	185.0	3,000	70.18	70,923.6	20.8/42.7	12,983	270	34.3	392.2	X	•	X	430	34~36

•= Standard ▲= Option X = Not available

Product dimensions

DTD: TRACK DEVICE WITH GEARBOX

Model	A (ø)	B (ø	C (ø)	D	E (ø)	F (ø)	G	H	I	J	X	Y
DTD-16	180	160	154	99	150	170	214	40	58	39	10-M10	9-M10
DTD-14.7/7.7	180	160	159	114.5	150	170	251.5	40	77	39	8-M10	9-M10
DTD-16.4/11.4	180	160	159	114.5	150	170	251.5	40	77	39	8/10/14-M10	8/9/12-M10
DTD-16.4/10.2	180	160	159	114.5	150	170	251.5	40	77	39	8/14-M10	8/9/12-M10
DTD-18/10.3	180	160	159	114.5	150	170	251.5	40	77	39	14-M10	12-M10
	215	190	160	114.5	165	192	251.5	50	67	39	9-M12	9-M12
DTD-16.4/10.4	215	190	188	131.8	165	192	257.3	50	55.5	51	9-M12	9-M12
DTD-18/10.1	215	190	188	131.8	165	192	257.3	50	55.5	51	9-M12	9-M12
	215	190	188	131.8	165	192	257.3	50	55.5	51	9-M12	9-M12
DTD-18/9	212	190	188	128.8	165	192	298.3	50	55.5	51	9-M12	9-M12
	232	210	196	120.3	165	192	257.3	70	47	51	13-M12	12-M12
DTD-21/11.2	232	204	196	120.3	165	192	257.3	72	45	51	9-M12	10-M12
	232	204	196	120.3	165	192	257.3	70	47	51	9-M12	10-M12
	232	204	196	120.3	165	192	257.3	70	55.5	51	9-M12	10-M12
	255	210	196	124.1	165	192	272.1	70	43	51	13-M12	12-M12
DTD-23.04/12.66	255	204	196	120.3	165	192	257.3	70	47	51	9-M12	10-M12
DTD-23.5/14.7	255	204	196	131.8	165	192	257.3	50	55.5	51	9-M12	10-M12
DTD-40/20.6	282	250	244	154.5	210	244	341.5	68	76	74	12-M14	12-M14
DTD-43.7/23.1	282	250	244	154.5	210	244	341.5	68	76	74	12-M14	12-M14
	300	265	244	148,5	210	250	351,5	80	74	74	12-M16	12-M14
DTD-46.6/27.5	300	265	244	148.5	210	250	351.5	80	74	74	12-M16	12-M14
	300	265	244	148,5	210	250	345,5	80	74	74	12-M16	12-M16
DTD-41.1/26.1	300	265	244	150.5	210	250	347	80	74	74	12-M16	12-M14
DTD-53.21/33.8	300	265	244	148.5	210	250	351.5	80	75	74	12-M16	12-M14
DTD-53.21/31.37	300	265	261	154.1	210	250	348.6	80	72	76	12-M16	12-M14
DTD-57.08/30.72	300	265	261	154.1	210	250	348.6	80	72	76	12-M16	12-M14
DTD-67.3/41.2	364	324	320	204.1	290	320	399.6	83	88.5	73	16-M16	15-M16
	364	324	320	202.1	290	320	397.6	83	88.5	72	16-M16	15-M16
DTD-76.62/44.8	364	324	320	193	246	280	396.5	98.5	81	72	20-M16	18/21-M16
DTD-118/72	440	402	440	250	300	340	515.5	98.5	123	90	30-M16	30-M16
DTD-168.4/102.5	440	402	400	256	300	340	521.5	98.5	123	90	30-M16	30-M16/30-ø16

Product dimensions

DTD: TRACK DEVICE WITH GEARBOX

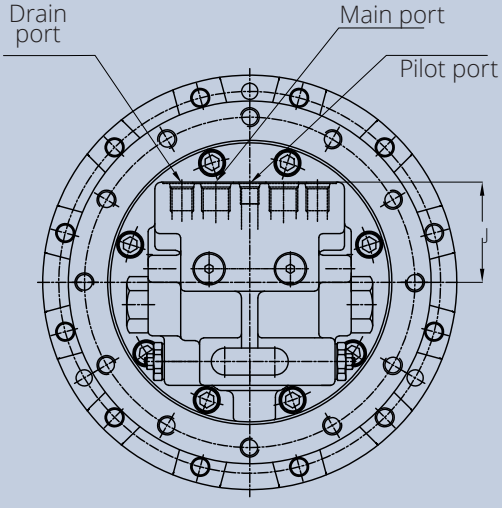
Model	Main port	Drain port	Pilot port (Pi)	Ton
DTD-16	2-PF3/8	2-PF1/4		1.5T
DTD-14.7/7.7	2-PF3/8	2-PF1/4	PF1/8	1.5T
DTD-16.4/11.4	2-PF3/8	2-PF1/4	PF1/8	1.5T
DTD-16.4/10.2	2-PF3/8	2-PF1/4	PF1/8	1.5T
DTD-18/10.3	2-PF3/8	2-PF1/4	PF1/8	1.5T
	2-PF3/8	2-PF1/4	PF1/8	1.5T
DTD-16.4/10.4	2-PF1/2	2-PF1/4	PF1/4	3.0T
DTD-18/10.1	2-PF1/2	2-PF1/4	PF1/4	3.0T
	2-PF1/2	2-PF1/4	PF1/4	3.0T
DTD-18/9	2-PF1/2	2-PF1/4	PF1/4	3.0T
	2-UNF7/8-14	2-UNF9/16-18	UNF9/16-18	3.0T
DTD-21/11.2	2-PF1/2	2-PF1/4	PF1/4	3.0T
	2-PF1/2	2-PF1/4	PF1/4	3.0T
	2-PF1/2	2-PF1/4	PF1/8	3.0T
	2-PF1/2	2-PF1/4	PF1/4	3.0T
DTD-23.04/12.66	2-PF1/2	2-PF1/4	PF1/4	3.0T

Model	Main port	Drain port	Pilot port (Pi)	Ton
DTD-23.5/14.7	2-PF1/2	2-PF1/4	PF1/4	3.0T
DTD-40/20.6	2-PF1/2	2-PF3/8	PF1/4	5T
DTD-43.7/23.1	2-PF1/2	2-PF3/8	PF1/4	6T
	2-PF1/2	2-PF3/8	PF1/4	6T
DTD-46.6/27.5	2-PF1/2	2-PF3/8	PF1/4	7T
	2-PF1/2	2-PF3/8	PF1/4	7T
DTD-41.1/26.1	2-PF1/2	2-PF3/8	PF1/4	7T
DTD-53.21/33.8	2-PF1/2	2-PF3/8	PF1/4	7T
DTD-53.21/31.37	2-PF1/2	2-PF3/8	PF1/4	8T
DTD-57.08/30.72	2-PF1/2	2-PF3/8	PF1/4	8T
DTD-67.3/41.2	2-UNF1-1/16-12-2B	1-UNF3/4-16-2B	UNF7/16-20-2B	11T
	2-UNF1-1/16-12-2B	1-UNF3/4-16-2B	UNF7/16-20-2B	11T
DTD-76.62/44.8	2-PF3/4	1-PF1/2	PF1/4	14T
DTD-118/72	2-PF1	2-PF1/2	PF1/4	18T
DTD-168.4/102.5	2-PF1	2-PF1/2	PF1/4	25T

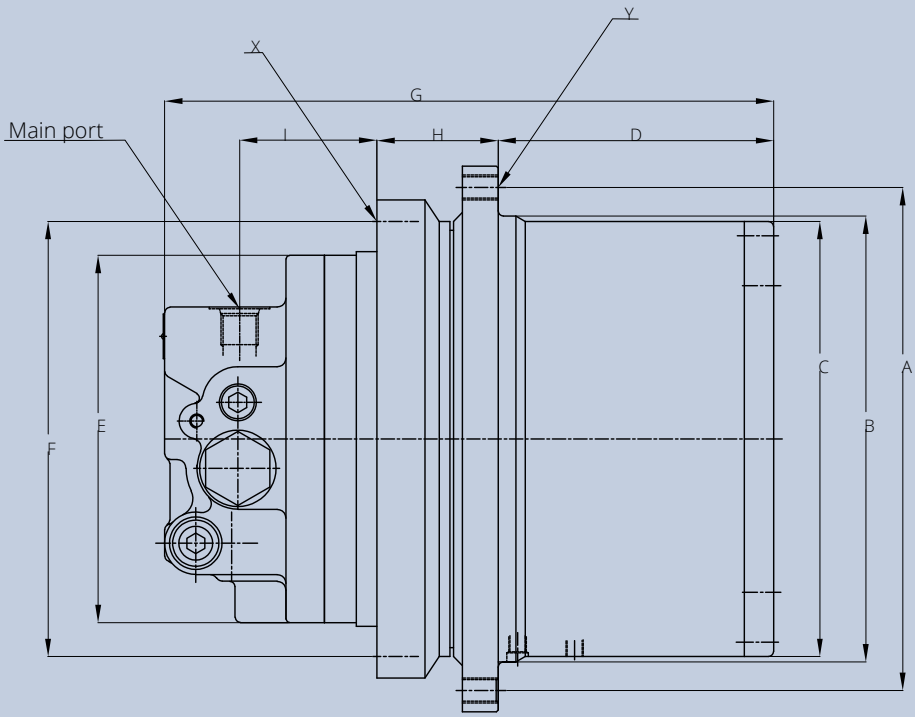
DIMENSIONS FOR:

DTD-14 DTD-16 DTD-18 DTD-21 DTD-23 DTD-40 DTD-41 DTD-44
DTD-47 DTD-53 DTD-57 DTD-67 DTD-76 DTD-118 DTD-168

DEVICE FRONT VIEW



DEVICE TOP VIEW



Product dimensions

DTD: TRACK DEVICE WITH GEARBOX

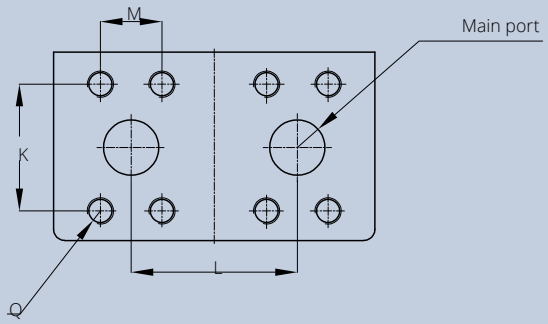
Model	A (ø)	B (ø)	C (ø)	D	E (ø)	F (ø)	G	H	I	J	X	Y	L	M	Q	K
DTD-146.5/95	440	402	400	250	300	340	515.5	98.5	123	90	30-M16	30-M16	74	52.4	8-M10	26.2
DTD-146.5/81.8	440	402	400	250	300	340	515.5	98.5	123	90	30-M16	30-M16	74	52.4	8-M10	26.2
DTD-168.4/102.5	440	402	400	256	300	340	521.5	98.5	123	90	30-M16	30-M16	74	52.4	8-M10	26.2
DTD-168.4/90	440	402	400	256	300	340	521.5	98.5	123	90	30-M16	30-M16	74	52.4	8-M10	26.2
DTD-154.8/88.5	480	450	444	305	380	440	572.5	102.5	103	165	18-M24	26-M20	75	57.2	8-M12	27.8
DTD-159/96	492	450	440	305	380	425	572.5	102.5	103	165	20-M20	26-ø22	75	57.2	8-M12	27.8
DTD-173/101	492	450	440	305	380	440	572.5	102.5	103	165	18-M24	26-M20	75	57,2	8-M12	27.8
DTD-185/114.13	490	450	369	295.5	380	425	572.5	112	103	165	26-M20	24-M20	75	57.2	8-M12	27.8
	490	450	369	306	380	425	572.5	112	92.5	165	26-M20	28-M20	75	57.2	8-M12	27.8
DTD-185/90	490	450	369	295.5	380	425	572.5	112	103	165	26-M20	24-M20	75	57.2	8-M12	27.8

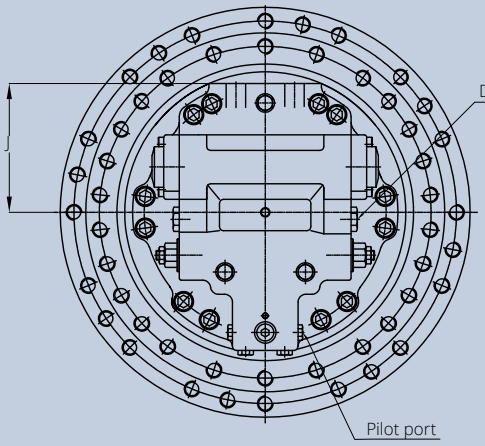
Model	Main port	Drain port	Pilot port (Pi)	Ton
DTD-146.5/95	2-ø25	2-PF1/2	PF1/4	22T
DTD-146.5/81.8	2-ø25	2-PF1/2	PF1/4	25T
DTD-168.4/102.5	2-ø25	2-PF1/2	PF1/4	25T
DTD-168.4/90	2-ø25	2-PF1/2	PF1/4	25T
DTD-154.8/88.5	2-ø25	2-PF1/2	PF1/4	30T
DTD-159/96	2-ø25	2-PF1/2	PF1/4	30T
DTD-173/101	2-ø25	2-PF1/2	PF1/4	30T
DTD-185/114.13	2-ø25	2-PF1/2	PF1/4	36T
	2-ø25	2-PF1/2	PF1/4	36T
DTD-185/90	2-ø25	2-PF1/2	PF1/4	36T

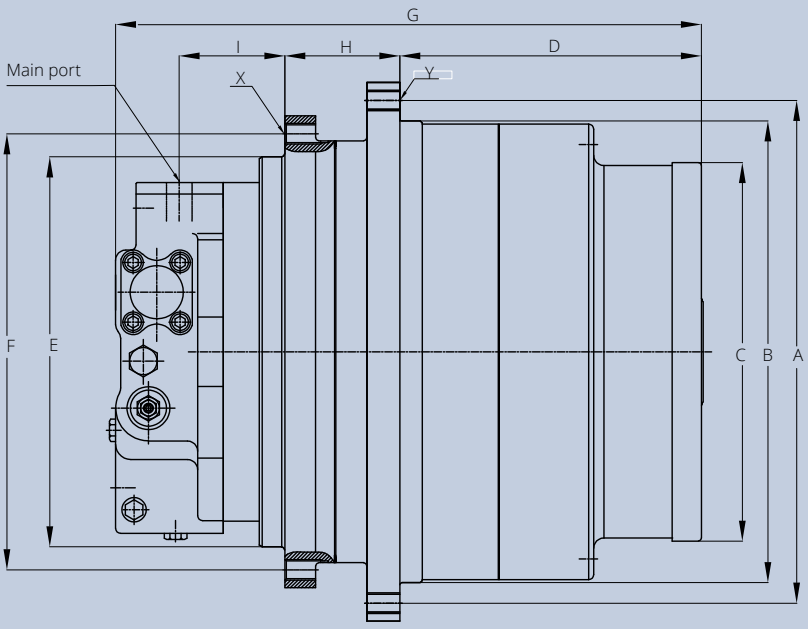
DIMENSIONS FOR:

DTD-147 DTD-155 DTD-159
DTD-168 DTD-173 DTD-185

MAIN PORT VIEW







Track drive motors for excavators

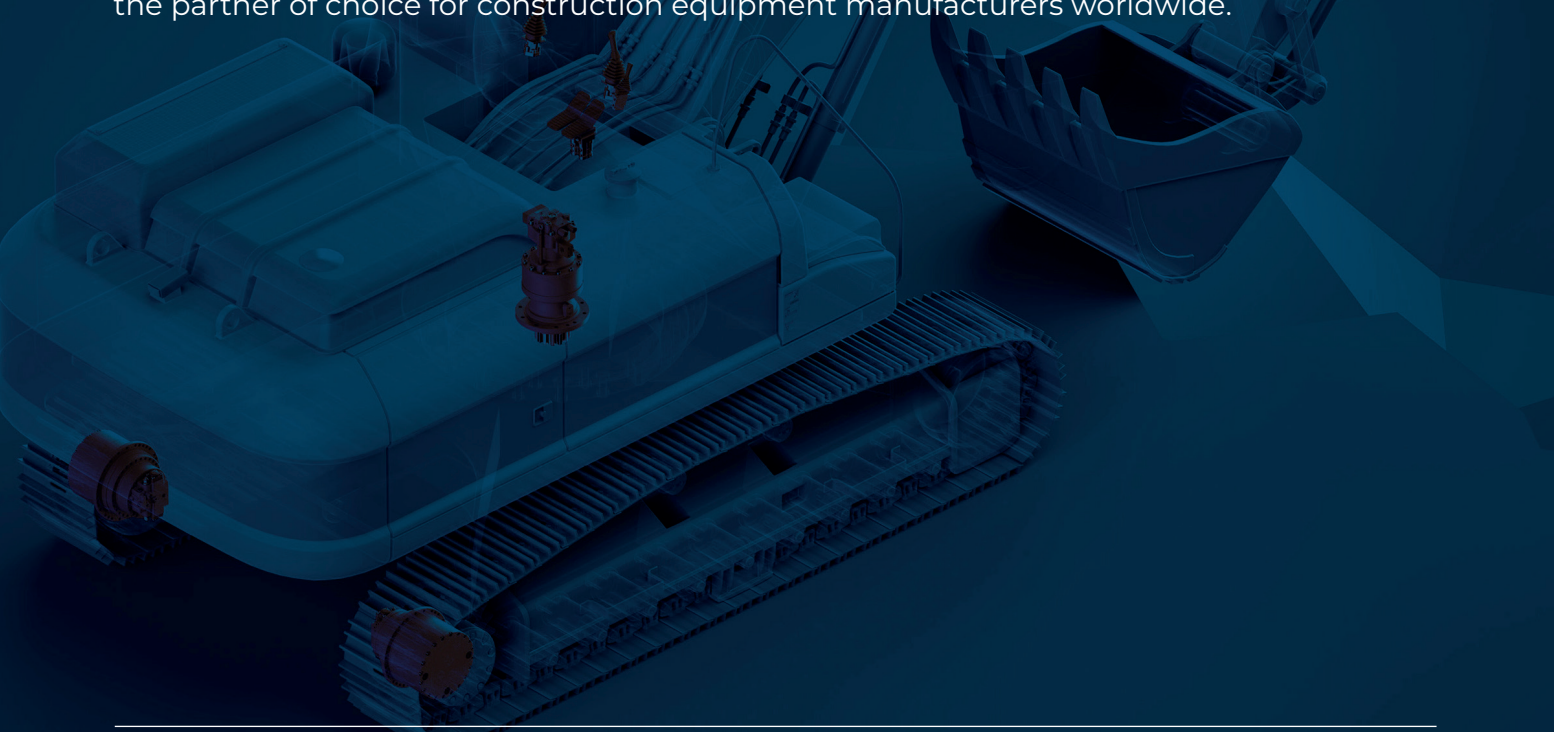
PERFORMANCE · QUALITY · INNOVATION

THE WIDEST RANGE OF SOLUTIONS FOR THE CONSTRUCTION INDUSTRY

For over 40 years we've partnered with the world's leading OEMs to engineer drive solutions that push construction machinery further. Our track, slew and winch drives deliver the torque density, compactness and reliability that construction equipment demand.

From hydraulic to hybrid and full-electric architectures, our electrification solutions cut total cost of ownership while boosting efficiency — scaling from compact machines to the heaviest earthmovers.

It's this combination of engineering depth and product breadth that makes Bonfiglioli the partner of choice for construction equipment manufacturers worldwide.



Bonfiglioli can accept no responsibility for possible errors in catalogues, brochures and other printed material. Bonfiglioli reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Bonfiglioli and the Bonfiglioli logotype are trademarks of Bonfiglioli S.p.A. All rights reserved.

AM445445908698en-000102