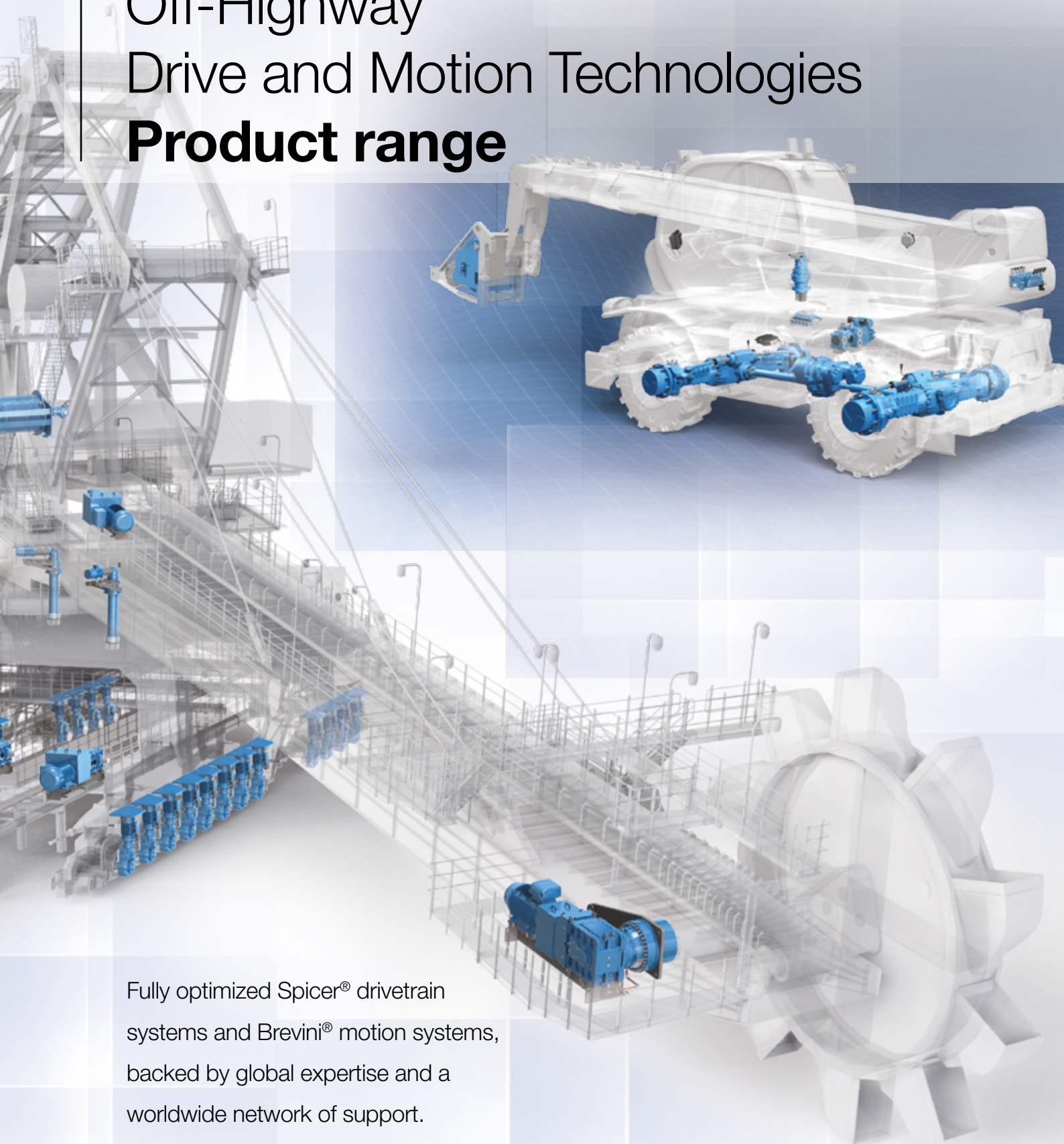




Off-Highway Drive and Motion Technologies **Product range**



Fully optimized Spicer® drivetrain systems and Brevini® motion systems, backed by global expertise and a worldwide network of support.



People Finding A Better Way®

Founded in 1904, Dana Incorporated is a world leader in highly engineered solutions for improving the efficiency, performance, and sustainability of powered vehicles and machinery. Dana supports the passenger vehicle, commercial truck and off-highway markets, as well as industrial and stationary equipment applications.

Employing more than 30,000 people in 33 countries, on six continents, our people work tirelessly to deliver long-term value to customers around the world. We have earned our position as a trusted, top-tier supplier by collaborating with customers to develop, integrate, and support the innovations required to improve vehicle performance and efficiency.

We maintain a competitive advantage in the marketplace with a commitment to delivering on the five dimensions of our enterprise strategy – leveraging the core, strengthening customer centricity, expanding global markets, commercializing new technology, and accelerating hybridization and electrification.

Each day, in both large and small ways, **Dana is defined as People Finding A Better Way.**



Brevini® Brand Expands Dana Portfolio

A seamless complement to our existing offerings, Dana acquired the power-transmission and fluid power businesses of the former Brevini® Group S.p.A. in February 2017. This acquisition increases Dana content on off-highway and stationary industrial equipment, expands our product portfolio with adjacent technologies, and gives Dana the unique ability to manage the power to both move equipment and perform its critical work functions.

In addition, tracked vehicles and a broader range of industrial equipment are now part of our company's addressable market with a platform of proven technologies that can accelerate hybridization and electrification initiatives.



Corporate Business Units

Dana serves global light vehicle, medium/heavy vehicle, and off-highway markets through four business units – Light Vehicle Driveline Technologies (Light Vehicle), Commercial Vehicle Driveline Technologies (Commercial Vehicle), Off-Highway Drive and Motion Technologies (Off-Highway) and Power Technologies, which is the center of excellence for sealing and thermal management technologies that span all customers in our on-highway and off-highway markets.



Brevini® products support a broad spectrum of motion system applications in working functions on all types of mobile off-highway machines, as well as stationary industrial sectors. By adding Brevini® motion systems to our range of Spicer drivetrain systems, we now have a full array of mechanical, hydraulic, and electronic advanced technologies to support customer application designs.



Dana's engineering capabilities, broad product range, and focus on collaboration with customers allow us to deliver optimal solutions with the performance required to support high levels of efficiency. As a single supplier with a unique portfolio of Spicer® drivetrains and Brevini® motion systems, we can also help to optimize supply chains.

Off-Highway Drive and Motion Technologies

As an innovation leader in off-highway drive and motion systems, Dana's full breadth of solutions also includes thermal management and engine sealing technologies.

Off-Highway brands

Drivetrain Systems



Motion Systems



Thermal Management



Sealing



Off-Highway Sectors

Dana leverages our global expertise to engineer the most advanced, customized product solutions for developed and emerging markets. Our drive and motion products serve a wide range of demanding industries with applications for wheel and track drives, along with stationary machines.

MOBILE

Agricultural Segment

Our products are engineered to support increased crop yields, optimized harvesting operations, lower emissions, improved operator safety and comfort, and reduced total cost of ownership while complying with evolving emissions standards.



Construction Segment

Integrated drive and motion systems from Dana enhance construction equipment performance, efficiency, and productivity with a range of solutions for vehicles ranging from 3 to 50 tonnes (4 to 55 tons). Spicer axles, wheel drives, transmissions, driveshafts, and Brevini motion products are integrated with the most advanced technologies for improved machine operation on any job site, in any condition.



Mining and Forestry Segment

Dana designs complete drive and motion systems to meet increasing industry demands for automation and productivity, coupled with high safety standards. Our solutions are specially engineered to maximize vehicle performance in extremely harsh environments.



Material Handling Segment

Our custom drive and motion systems enhance material-handling vehicle performance, productivity, and power. Spicer transmissions, axles, and driveshafts are designed to work seamlessly in any vehicle to allow operators to engage, lift, and transport heavy loads with more precision.



INDUSTRIAL

Industrial Segment

Dana's portfolio of advanced motion technologies has been engineered to support increased productivity and reliability, lower emissions, improved operator safety and comfort, and reduced total cost of ownership.



Leading Mobile Market Technology

Drivetrain Systems



Spicer® Driveshafts

Handles added input torque and heavy loads

Designed for longer life, minimal maintenance and lower operating cost



Spicer® Axles

Differential lock and mounting options
2- or 4-caliper dry disc brake per axle

Viton® rotating radial lip seals ensure high-integrity sealing



Spicer® Planetary Travel Drive

Combined with a pump drive in hydrostatic power transmission

Epicyclical gearbox reduces complexity while enhancing output

Flexible and robust design



Spicer® Transmissions

Lift capacities up to 120 tonnes

Full reversing range shift and full powershift options

Converter and transmission packages available



Spicer® Electronic Controls

Enable communication between driveline components

Best-in-class controls optimize productivity, maximize life, and reduce maintenance

Our mobile product range includes Spicer® transmissions, axles, wheel drives, driveshafts, tire-pressure management systems, and hydraulic-hybrid solutions.

In addition, Brevini® winches, slew drives, proportional directional valves, and other motion products are specifically developed to perform high-efficiency working functions.



Motion Systems



Brevini® Slew Drive

Designed for pinion and slewing ring drives

Planetary unit design optimizes torque performance and radial load capacity



Brevini® Winch

Designed to lift or pull loads in mobile, marine, and offshore applications

Planetary gearbox design uses the input power of a hydraulic or electric motor



Brevini® Proportional Directional Valves

Available in versions for fixed and variable displacement pumps

Remote, electronic operation

Provides smooth controllability to perform work functions

Spicer® Drivetrain Systems

The drivetrain solutions you need,
backed by global expertise and support.

Spicer® Axles

Spicer® axles are designed to deliver maximum performance for a variety of agriculture, construction, material handling, mining, and forestry machines. Our axles lines deliver the reliability, power, and performance needed in rough terrains. With a wide variety of options and modular configurations, we can further customize each product to suit regional preferences and existing machine systems



Spicer® Transmissions

Dana offers a full range of Spicer® hydrostatic and hydrodynamic transmissions and torque converters. The off-highway transmissions can be specified with electronic control systems to enhance performance even further. A range of options enable precise inching, eco-drive, power drive, and overlap control.



DanaRexroth® Transmissions

Through a joint venture with Bosch Rexroth, Dana delivers hydromechanical variable transmissions, which combine mechanical and hydrostatic travel drives to maximize fuel savings up to 35 percent.

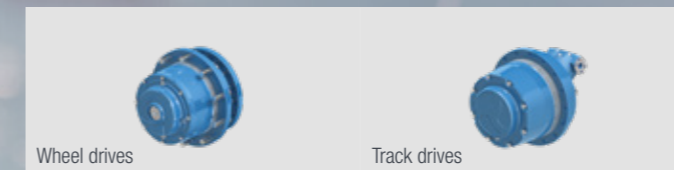


Dana leverages its global expertise from all markets to engineer the most advanced, customized product solutions for customers in both developed and emerging markets.

By working directly with our engineers, we can improve the productivity and fuel efficiency of your vehicles with Spicer® transmissions, axles, driveshafts, wheel and track drives, tire pressure management systems, and hybrid-electric solutions.

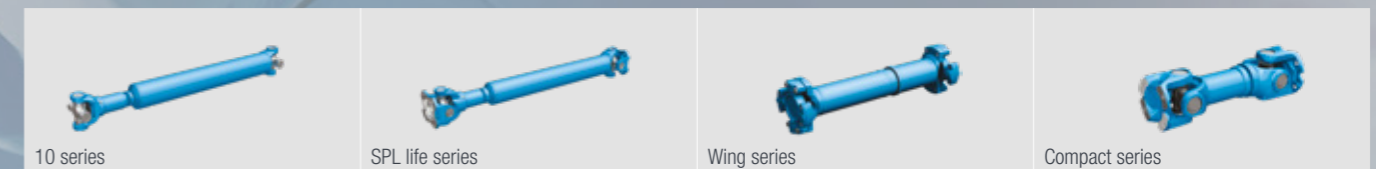
Spicer® Wheel and Track drives

An ideal solution for mobile applications, the unique Spicer® planetary design offers cost benefits savings and other advantages. Plus, our wheel and track drives are available with a full package of related Brevini hydraulic motors and valves that can be customized to meet any requirement.



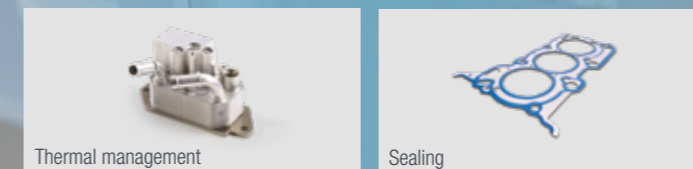
Spicer® Driveshafts

With more than a century of knowledge and expertise, Dana engineers the most robust driveshafts available for the off-highway market today. Equipped with a variety of end-fittings/flanges and maintenance-free options, our extensive driveshaft lines can handle rough terrains, heavy loads, and added input torque to increase your productivity and reduce operating costs



Engine technologies

Dana offers a range of engine technology solutions for the entire off-highway industry including agricultural, construction, forestry, and mining. Our products improve work productivity by increasing duty cycle loads per hour. The decreased downtime leads to higher profitability in high-pressure situations. When vehicles are working continuously, machines require the latest engine technology for superior protection and durability – turn to Dana’s engine technology for reliable solutions.



For more technical informations about Spicer® Drivetrain Systems please visit our product selector tool:
www.danaproductselectiontool.com.

Advanced and Reliable Technologies for **Industrial Application**

Brevini® products support a broad spectrum of fluid power and power-transmission applications in asphalt and concrete production, civil engineering and infrastructure, marine and port equipment, material handling, pulp and paper production, sugar refining and food processing, along with mining and tunneling. In addition, the product range includes highly engineered components used in extrusion, compounding, and injection molding for plastic and rubber production.

Industrial Sectors

Bulk materials

Dana has an extensive range of gearboxes with torque ratings of up to 3 million Nm. Our qualified, experienced engineers provide optimum solutions for heavy duty applications and our service team deliver support for the life cycle after supply.



Marine

Dana Brevini® planetary gearboxes have been used in the Marine and Offshore Market for many years. In applications such as winches and cranes we are able to support the correct specifications and certifications required in this market. Combined with our range of fluid power solutions we are able to work with OEM's to provide safe and reliable solutions for their applications.



Heavy industry and steel

Dana Brevini® gearboxes have been used in heavy-duty operations from mines to steel production for more than fifty years. Our portfolio of advanced technologies has been engineered to support increased productivity and reliability, improved operator safety, and reduced total cost of ownership.



Industrial and stationary equipment

Our range of gearboxes and hydraulic products offer reliable solutions for all equipment within the industrial and stationary sectors. Products guarantee high productivity and low maintenance costs and are backed by aftermarket support and service.



Environment - renewable energy

Dana Brevini® Yaw and Pitch drive gearboxes are used by many of the major wind turbine OEM's. We provide input and offer sustainable and reliable solutions to meet requirements and our service division has a vast experience of servicing gearboxes for the main drives as well as the Yaw and Pitch.



Plastic and rubber

Dana Brevini® and PIV® offer a wide range of products including single-screw and twin-screw extruder drives, rack and pinion drives for injection molding machines, planetary gearboxes, and helical and bevel helical gearboxes.







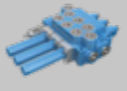















Brevini® Motion Systems










The most advanced Fluid Power and Power Transmission technologies

Brevini® Fluid Power

Dana's portfolio of hydraulic technologies is built on four decades of global proficiency in fluid power from the Brevini® brand.

Fluid Power			
Pumps			
			
Axial piston pump fixed displacement open loop	Axial piston pump variable displacement closed loop	Axial piston pump variable displacement open loop	Gear pumps
Valves			
			
Stackable valves	Cetop valves	Directional valves	Proportional directional valves
Motors			
			
Axial piston motor variable displacement open and closed loop	Axial piston motor fixed displacement open and closed loop	Orbital motor open and closed loop	Gear motors and flow dividers
Power Units			
			
Mini powerpacks	Micro powerpacks		
Ancillaries			
			
Gearboxes	Clutches		
Electronics			
			
Electronic control systems	Position sensor	Force sensor	Human machine interface

Power Transmission

Industrial planetary		
		
Industrial and E-series planetary gearboxes	S-series planetary gearboxes	
Helical and bevel helical		
		
Helical and bevel helical gearboxes		
Plano helical		
		
Compact plano helical	High power	
Slewing drives		
		
Industrial slewing drives		
Winches		
		
Hoisting winches	Recovery winches	Winch drives

Brevini® Power-Transmission

With global expertise in the design and manufacturing of high-efficiency technologies, the Brevini® Power-Transmission line includes planetary and helical gear units, gear motors, and winches, along with planetary gearboxes and industrial power transmissions. Supported applications include on- and offshore equipment, green technologies, mining, heavy industries, and earthmoving.



GWB® - Industrial driveshaft


Driveshaft for industrial applications

GWB® - Industrial Driveshaft

Since 1946, Dana's line of GWB® driveshafts have been recognized as the global standard for technical innovation, quality, and performance for industrial applications. GWB® driveshafts are built on a deep, long-term understanding of applications in the steel, rail, marine, paper, and recycling industries. Manufacturing operations in Germany are supported by Dana's global network of research and design, distribution, and aftermarket operations.

PIV® - Extruder drives

	
Twin screw extruder drives	Single screw extruder drives

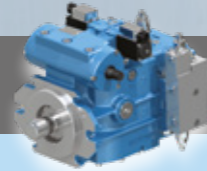
PIV® - Extruder Drives

The result of a partnership between PIV® Drives in Germany and Dana's Brevini® Power-Transmission headquarters in Italy, PIV® products have a reputation for high quality, reliability, exceptional performance, and long life. The complete PIV® product portfolio includes single- and twin-screw extruder drives.

Brevini® Fluid Power

Pumps

Axial piston pump variable displacement



Closed loop

Pcont = 250 bar – 420 bar

Series	cc/rev	Rpm
MD10V 014	14	3.600
MD10V 018	18	3.600
MD10V 021	21	3.600
MD10V 028	28	3.600
MD10V 046	46	3.600
MD10V 050	50	3.600
MD10V 064	64	3.600
HD1 055	55	3.800
S6CV 075	75	3.400
S6CV 128	128	2.850

Axial piston pump fixed displacement



Open loop

Pcont = 350 bar

Series	cc/rev	Rpm
H1C 006	6,1	5.000
H1C 226	225,1	1.600

Pcont = 430 bar

Series	cc/rev	Rpm
SH11C 010	10,3	3.150
SH11C 016	16	3.150
SH11C 020	19,9	2.500
SH11C 030	31,9	2.500
SH11C 045	46	2.245
SH11C 055	56,3	2.000
SH11C 063	63,3	2.000
SH11C 075	77,8	1.800
SH11C 090	86,2	1.800
SH11C 108	108,4	1.600
SH11C 125	124,8	1.550
SH11C 160	163,9	1.450
SH11C 180	178,1	1.450

Axial piston pump variable displacement



Open loop

Pcont = 250 bar – 350 bar

Series	cc/rev	Rpm
S5AV 032	32	3.150
S5AV 045	43,3	2.700
S5AV 050	49,7	3.000
S5AV 063	64	2.500
S5AV 075	75	2.600
S5AV 093	93,8	2.350
H1V 055	54,8	2.600
H1V 075	75,3	2.300
H1V 108	107,5	2.000
H1V 160	160,8	1.800
H1V 226	225,1	1.500

Gear pumps



Series	cc	pmax [bar]
OT 050 - GR 0.5	0,18 – 1,52	250
OT 100 - GR 1	0,73 – 9,9	300
OT 150 - GR 1.5	3,7 – 7	300
OT 200 - GR 2	4,2 – 30	300
OT 200 silent - GR 2	4,2 – 30	300
Hercules - GR 2	4,2 – 28	330
OT 300 - GR 3	22 – 90	300

Valves

Directional valves



Open center

Pcont = 350 bar – 400 bar

Series	Inlet flow	
DCV 20	40	Monoblock
DCV 40	70	Monoblock
DCV 30	40	Section
DCV 50	70	Section
DCV 80	120	Section
DCV MG	230	Section

Stackable valves



Size 6 On Off and proportional

Pmax = up to 310 bar

Series	Flow max [l/min]	
CDC3	30	On/Off compact
CD3	40	On/Off
CD3L	40	On/Off LS signal
CX3	up to 20	Proportional control
CXQ3	up to 25	Proportional flow control

Size 6 Pre - Post compensated

Pmax = up to 310 bar

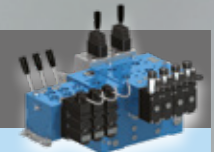
Series	Regulated flow	
CXDH3	up to 35	Proportional pre compensated
CDH3	1,3 – 26	Proportional pre compensated
CFS3	60	Proportional Flow Sharing

Modular options availables

Size 10 On Off

Series	Flow max [l/min]	
CD5	80	On/Off compact

Proportional directional valves



Open and closed centre version

Max working pressure = 370 bar

Series	Inlet flow	Section flow
HPV 41	160	130
HPV 77	240	190
HPV310	600	550

Wide range of electric controls PWM

Available also in ATEX version

Wide range of joysticks single and multi-axes (up to four) with additional control functions

Cetop valves



Series	Flow max [l/min]	Pressure (bar)
Cetop 2/NG04	20	250
Cetop 3/NG06	60	350
Cetop 5/NG10	120	350
Cetop 7/NG16	300	350
Cetop 8/NG25	600	320

Atex valves

AD3 XG - XD	60	250
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Proportional - Cetop valves

Cetop 2/NG04	10	250
Cetop 3/NG06	40	350
Cetop 5/NG10	100	320

Subplates

BS/BM	20 – 600	250
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Circuit selector

ADL/CDL	80	320
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Brevini® Fluid Power

Motors

Axial piston motor variable displacement



Open and closed loop

Pcont = 430 bar

Series	Cc/rev	Rpm
SH7V-R 055	61	4.450
SH7V-R 075	80,6	4.000
SH7V-R 108	112,5	3.550
SH7V-R 160	160,8	3.100
SH7V-R 200	216	2.900
SH9V 061	62	4.450
SH9V 085	85,3	4.000
SH9V 115	115,7	3.550
SH9V 165	166,2	3.100
SH9V 215	216	2.900

Motors can swivel to zero displacement

Axial piston motor fixed displacement



Open and closed loop

Pcont = 350 bar

Series	Cc/rev	Rpm
H1C 006	6,1	5.000
H1C 226	225,1	1.600

Pcont = 430 bar

Series	Cc/rev	Rpm
SH11C 010	10,3	8.000
SH11C 016	16	8.000
SH11C-R 020	19,9	6.300
SH11C-R 030	31,9	6.300
SH11C-R 045	46	5.600
SH11C-R 055	56,3	5.000
SH11C-R 063	63,3	5.000
SH11C-R 075	77,8	4.500
SH11C-R 090	86,2	4.500
SH11C-R 108	108,4	4.000
SH11C-R 125	124,8	4.000
SH11C-R 160	163,9	3.600
SH11C-R 180	178,1	3.600

Orbital motor



Open and closed loop

Pcont = 280 bar – 350 bar

Series	Cc/rev	Rpm Max	Torque Max
BGM	13 - 50	1.935	83
BG	50 - 400	1.530	400
BR	50 - 400	970	750
HR	80 - 400	995	980
HT	160 - 500	780	1.370
ARS/ARF	50 - 400	970	510
BRZV (CTM)	50 - 400	775	292

Gear motors and Flow Dividers



Series	Cc	pmax [bar]
OT 100 – GR1	1,55 – 9,9	300
OT 200 – GR2	4,2 – 30	300
OT 200 silent – GR2	4,2 – 30	300
Hercules – GR2	4,2 – 28	330
OT 300 – GR3	22 – 90	300

Power Units

Mini powerpacks



Series	Pump/cc	Motor
MC2 – MC4	0,25 – 9,8	DC/AC-B14
FP	0,25 – 9,8	DC/AC-B14
DT	0,25 – 9,8	DC/AC-B14
MK1 – MK2	Dockleveler units	
EP - MP	Pump-DC motor combinations	

Micro powerpacks



Series	Pump/cc	Motor
MR2 – MR4	0,25 – 1,26	DC/AC-B14
MW – MW1	0,25 – 1,26	DC/AC-B14

Ancillaries

Gearboxes



Series	Ratio	power (KW)
ML 32	1:1 up to 1:3,8	10
ML 52	1:1 up to 1:3,8	30
B580	1:1 up to 1:4,8	30
B585	1:1 up to 1:5	40
B600	1:1 up to 1:3,8	50
B502	1:1 up to 1:3,8	55
B582	1:1 up to 1:3,8	55
B602	1:1 up to 1:3,8	100
RD33	0,66 up to 0,26	6
RD42	0,66 up to 0,29	6
RD52	0,66 up to 0,26	12

Clutches



Series	Mechanical	Electro mech.	Speed max.	Torque max. [Nm]
IM05	X		2.000	9
IM1	X		2.700	19
IM2	X		2.700	60
IE10		X	5.000	10
IE13		X	5.000	13

Electronics

Electronic control systems



Type	Description	Technical features
BM/BMS	Programmable ECU	from 15 to 177 I/Os in one ECU
M82/M92	Limiting device	load, working area or moment limitation up to PLd EN13849
VPL	Bar led display	load, moment limitation up to PLb EN13849
IDXY	Tilt switch	tilt limitation up to PLd EN13849

Force sensor



Type	Description	Technical features
TPE/TT/TC	load cells	custom design available, available redundant
TD	Strain gauge transducer	moment detection
TPV	Pressure sensor	up to 600bar, PLdEN13849 available

Position sensor



Type	Description	Technical features
TL/AS series	draw wire position sensor	length and angle detection up to 18m and 360°, available redundant
TAC/SP	Angle sensor	angle detection 1 or 2 axis, available redundant

Human machine interface



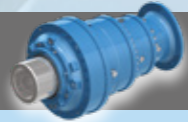
Type	Description	Technical features
OPUS	Graphic display	from 4,3" to 12" size
BJ	Joystick	custom design available

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Brevini® Power-Transmission

Industrial Planetary

S-Series Planetary Gearboxes



Nominal Torque 34.000 ... 2.170.000 Nm

Size	Nominal Torque Nm
300	34.000
400	48.000
600	64.000
850	90.000
1200	133.000
1800	190.000
2500	260.000
3500	370.000
5000	530.000
7500	735.000
10000	1.035.000
15000	1.500.000
20000	2.170.000

Industrial and E-Series Planetary Gearboxes



Nominal Torque 1.000 ... 25.000 Nm

Size	Nominal Torque Nm
EM1010	1.000
E10	1.300
E16	2.000
EM1020	2.600
E25	3.200
E30	3.700
EM1045	4.500
E50	4.800
EM1065	7.500
E80	8.300
EM1090	9.600
E120	13.000
EM1150	14.400
E160	16.400
EM1250	21.400
EM1320	24.000
E260	25.000

Slewing Drives

Industrial Slewing Drives

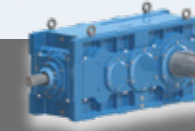


Nominal Torque 5.000 ... 200.000 Nm

Size	Nominal Torque Nm
030	5.000
046	6.000
065	12.000
080	20.000
150	45.000
200	50.000
250	54.000
300	94.000
400	115.000
600	165.000
850	200.000

Helical and Bevel Helical

Helical And Bevel Helical Gearboxes



Nominal Torque 3.260 ... 805.000 Nm

Size	Nominal Torque Nm
14	3.260
16	5.410
18	8.200
20	11.800
22	16.800
25	23.300
28	33.900
31	47.000
35	60.400
40	79.000
42	105.000
45	134.000
47	164.000
50	194.000
53	239.000
56	297.000
60	343.000
63	416.000
67	483.000
71	555.000
75	645.000
80	720.000
85	805.000

Plano Helical

Compact plano – helical



Nominal Torque 3.900 ... 35.000 Nm

Size	Nominal Torque Nm
13	3.900
16	5.800
18	8.985
20	10.900
21	12.640
23	16.700
25	24.200
28	35.000

High Power



Nominal Torque 90.000 ... 2.170.000 Nm

Size	Nominal Torque Nm
850	90.000
1200	133.000
1800	190.000
2500	260.000
3500	370.000
5000	530.000
7500	735.000
10000	1.035.000
15000	1.500.000
20000	2.170.000

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Brevini® Power-Transmission

Winches

Hoisting Winches



Hoisting winches, Line pull at first layer up to 16 Tons

Size	Max Line pull at first layer [kg]
DW050	500
DW090	900
BWF1000	1.350
BWF1500	2.500
BWF2000	3.100
BWF3000	3.800
BWF6000	7.500
EGO025	1.600
EGO045	3.800
EGO065	5.500
BWE085	8.500
BWE105	10.500
BWE125	12.500
BWE160	16.000

Recovery Winches



Recovery Winches, Line pull at first layer up to 30 Tons

Size	Max Line pull at first layer [kg]
BWT10000	10.000
BWT20000	20.000
BWT30000	30.000

Winch Drives



Output Torque 10.000 ... 850.000 Nm

Size	Output Torque [Nm]
PWD 2100	10.000
PWD 3150	20.000
PWD 3200	25.000
PWD 3300	36.000
PWD 3500	45.000
PWD 3700	70.000
PWD 3850	85.000
PWD 31100	110.000
SLW 300	85.000
SLW 400	105.000
SLW 600	165.000
SLW 850	190.000
SMW 1200	300.000
SMW 1800	390.000
SMW 2500	590.000
SMW 3500	850.000

GWB® Industrial Driveshaft

Driveshaft for Industrial applications



Series	Torque Range Tcs kNm	Flange Diameter mm
687/688	up to 35	100 - 225
587	up to 57	225 - 285
390	up to 255	285 - 435
392/393	up to 1.150	225 - 550
492/592	up to 1.300	285 - 550
498	up to 15.000	600 - 1.200
598	up to 21.500	600 - 1.300

Keep Driveshaft - Special Design

super short coupling, tunnel shaft, high speed design, carbon fiber tube electrical insulation, remote lubrication, automatic lubrication, condition monitoring

PIV® Extruder Drives

Twin Screw Extruder Drives



Screw centre distance: a = up to 125 mm

Torque factor: df up to 34,4 Nm/cm³

Size	Centre distance	Torque Factor Nm/cm ³
15/21.5-B2N40010	15 - 21,5	23.700
21.1/25-B2N82010	21,1 - 25	13.500
23/25-B2N13110	23 - 25	22.000
31/37.5-B2N40110	31 - 37,5	26.900
33.4/43-B2N43110	33,4 - 43	23.100
37.5/50-B2N80110	37,5 - 50	30.300
41/50-B2N82110	41 - 50	23.700
43.5-50B2N12210	43,5 - 50	30.000
48/54-B2N13210	48 - 54	23.500
48/62.5-B2N19210	48 - 62,5	34.400
58.5/63-B2N26210	58,5 - 63	26.000
62.5/75-B2N37210	62,5 - 75	30.300
67.5/80-B2N42210	67,5 - 80	27.300
75/80-B2N50210	75 - 80	23.700
75/78-C2N50210	75 - 78	23.700
75/80-B2N65210	75 - 80	30.800
87/101-B2N10310	87 - 101	30.400
98/112-B2N15310	98 - 112	31.900
101/110B2N10310	101 - 112	19.400
116/125B2N20310	116 - 125	25.600

Single Screw Extruder Drives



Nominal Torque 3.260 ... 720.000 Nm

Size	Nominal Torque Nm
14	3.260
16	5.410
18	8.200
20	11.800
22	16.800
25	23.300
28	33.900
31	47.000
35	60.400
40	79.000
42	105.000
45	134.000
47	164.000
50	194.000
53	239.000
56	297.000
60	343.000
63	416.000
67	483.000
71	555.000
80	720.000

The data shown in this page are FOR INFORMATION ONLY. The actual data will be issued according to Customer

Global Strength

One of the ways we create value is by positioning our technical and manufacturing resources where customers need us globally. Today, that's 33 countries on six continents.

To help customers achieve success in today's ever-changing market conditions, top-tier suppliers must have a global perspective on megatrends and technology advancements that can be adapted and deployed to meet local requirements and end-user expectations. At Dana, we continue to deepen our commitment to global markets by making investments that optimize our already substantial footprint, extensive market knowledge, and established supply chain.

Dana's worldwide leadership, strengthened by the international presence of Brevini®, is the key to serving over 5,000 clients around the world. We bring our global expertise to the local level with technologies customized to individual requirements through a network of strategically placed technology centers, manufacturing locations, and distribution facilities.

Our strength is being over six continents thanks to our global logistic network

GLOBAL PRESENCE

We have the ability to deliver products that meet specific regional requirements through our vast network of nearly 100 engineering, manufacturing, and distribution facilities covering six continents. This global logistic network ensures maximum flexibility and punctuality in the delivery of the products.

DANA SERVICE AND ASSEMBLY CENTERS

Customers can capitalize on the specific market knowledge and engineering expertise of 30 regional former Brevini® subsidiaries - now known as Dana Service and Assembly Centers - to provide product customization and service.

ENGINEERING, RESEARCH AND DEVELOPMENT

We engage in ongoing engineering activities as well as research and development to improve the reliability, performance, and cost-effectiveness of our existing products. We are also focused on the design and development of innovative products that meet customer requirements for new applications. Our objective is to be an essential partner to our customers and we remain highly committed to offering superior product quality, technologically advanced solutions, world-class service, and competitive prices.

Culture of innovation

Since our introduction of the automotive universal joint in 1904, we have been focused on technological innovation. Every day, Dana employees around the world work together to leverage our shared insight, developing the most innovative technologies that provide more value for our customers and solve their biggest challenges.

Innovation drives growth, and our ever-evolving products and technologies provide customers with cutting-edge solutions, address end-user needs, and capitalize on key market trends. In 2017, Dana engineers achieved a new milestone: the company's 10,000th patent, granted for a Long®-brand heat exchanger with an integrated thermal bypass valve.

Electrification

Dana's comprehensive strategy for electrification in off-highway markets begins with a foundation of enabling original-equipment manufacturers to accelerate their hybrid and electric vehicle development programs. We offer a series of market-ready modular hybrid- and electric-drive systems that can fit into existing vehicle design envelopes and provide OEMs with effective, low-risk, quick-to-market solutions. These products can be connected to traditional Spicer wheel drives, track drives, axles, and transmissions to deliver hybrid or electric functionality. A wide selection of Brevini® motion products to support the unique power distribution requirements of hybrid and electric off-highway vehicles are also currently available.





Technologies Customized to **Every Part of the Globe**

With a global presence in 33 countries, Dana Incorporated boasts more than 100 engineering, manufacturing, and distribution facilities. Our worldwide network of local service centers provides assurance that each customer will benefit from the local proximity and responsiveness that they need.

About Dana Incorporated

Dana is an integral partner for virtually every major vehicle and engine manufacturer worldwide. We are a leading supplier of drivetrain, sealing, and thermal technologies to the global automotive, commercial-vehicle, and off-highway markets. Founded in 1904, we employ thousands of people across six continents.



About Dana Off-Highway Drive and Motion Technologies

Dana delivers fully optimized Spicer® drivetrain systems and individual product solutions to customers in construction, agriculture, material-handling, underground mining, and forestry markets, plus Brevini® motion systems for machine working functions.

Learn more about Dana's complete range of drive and motion systems for off-highway vehicles and industrial machines at dana.com/offhighway.

dana.com/oh/contact



SPICER® **BREVINI®**

Application Policy

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.