



HANSA-TMP

HYDRAULIC & ELECTRIC SOLUTIONS

COMPONENTS & SYSTEMS

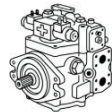
For Mobile Off-highway Machinery



CONTROLS



AUXILIARY
SYSTEMS



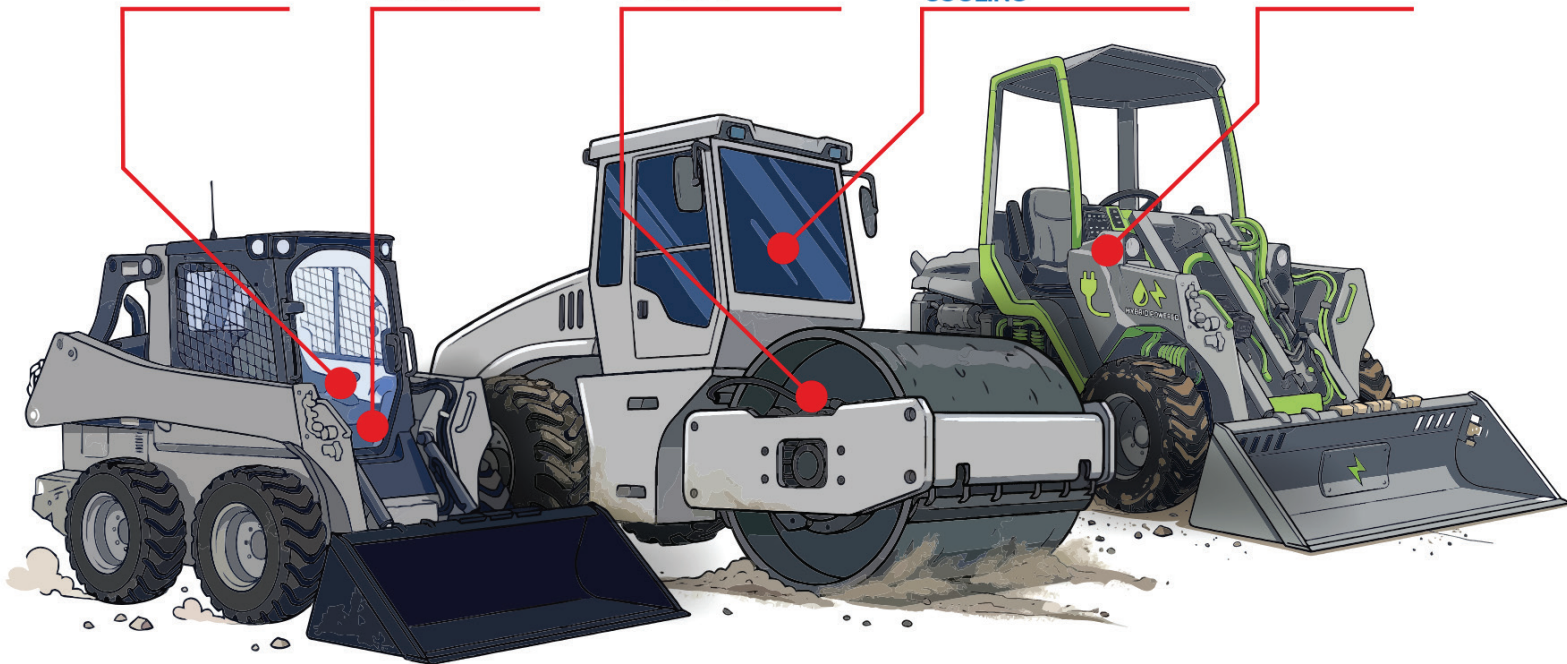
DRIVE
SYSTEM



FILTRATION &
COOLING



HYTRON
ELECTRIFICATION



ITALY | GERMANY | CHINA | INDIA

www.hansatmp.com

SUMMURY

COMPANY PROFILE

4 - 5

MACHINE FUNCTIONAL COMPONENTS

HYDRAULIC COMPONENTS

PUMPS	6 - 10
MOTORS	11 - 15
VALVES & FLOW DIVIDERS	16 - 17
ROTATION SYSTEMS	18 - 19

MECHANICAL COMPONENTS

POWER TRANSMISSION	20 - 23
FILTRATION SYSTEMS	24
COOLING SYSTEMS	25 - 26

ELECTRIC COMPONENTS



ELECTRIC MOTORS	27
ELECTRIC DRIVE WHEEL GEAR UNIT	27

MACHINE INTELLIGENCE

HUMAN-MACHINE INTERFACE

JOYSTICK	28
PEDALS	29
DISPLAYS	30

CONTROLS

HCU - ELECTRONIC CONTROL UNIT	31
DRIVER FOR PWM CONTROL	32
ELECTRONIC CONTROL UNIT FOR ELECTIC MOTORS	33

SENSORS

POSITION SENSORS	34
PRESSURE SENSORS	34
SPEED SENSORS	34
TEMPERATURE SENSORS	34



OUR COMPANY

Founded in **1984 in Modena**, HANSA-TMP specializes in **hydraulic component design and production**, and in the **integration of hydraulic, electric, and hybrid systems**. Its solutions serve the **mobile, industrial, marine, and energy sectors**, ensuring performance, reliability, and sustainability.

With a dedicated **R&D and manufacturing center in Italy** and offices in **Germany** and **China**, HANSA-TMP supports OEMs and manufacturers in more than 60 countries, offering custom-engineered systems and full assistance, from project definition to commissioning and after-sales.

Certified **ISO 9001** and **ISO 14001**, the company combines quality, innovation, and environmental responsibility, positioning itself as a global partner for **high-performance hydraulic and hybrid technologies**.



MANUFACTURING FACILITIES

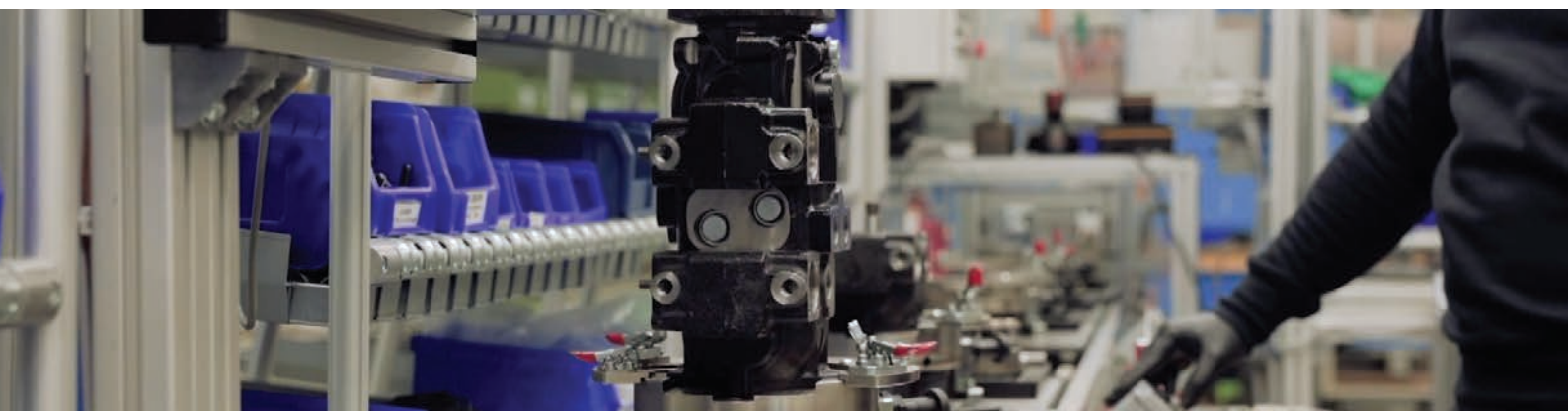
At its facility in Modena, HANSA-TMP combines **advanced technology with Italian craftsmanship** to create high-performance hydraulic components.

Each product is designed, machined, assembled, and tested in-house, ensuring **full control over quality, precision, and reliability**.

From raw material inspection to final testing, strict quality standards and ISO 9001 certification

guarantee long-lasting performance and consistency.

This unique integration of engineering expertise and attention to detail defines the HANSA-TMP quality standard, recognized worldwide.



MOBILE APPLICATIONS



AGRICULTURE



CONSTRUCTION



MUNICIPAL



RAILWAY



DEFENCE

Hansa TMP operates across **six technological sectors**: construction and lifting, agriculture and forestry, municipal vehicles, defence, railway, and special-purpose machinery.

In all these fields, **hydraulic and electric systems** manage traction, load lifting, rotation and operational functions, ensuring **precision, safety and continuity** even under severe conditions.

The company supports **OEMs and manufacturers** with complete, **customized solutions**, ranging from **fully hydraulic systems** for maximum power and robustness to **hybrid and electric options** for improved efficiency and reduced emissions.

Each project is developed to increase **productivity**, **minimize downtime** and meet sector-specific regulations and certifications.

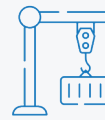
SYSTEMS FOR MOBILE APPLICATIONS

HANSA-TMP develops integrated hydraulic and hybrid systems that ensure efficiency, control, and reliability in all mobile machinery applications.



Drive Systems

Smooth traction and precise movement in any terrain or operating condition.



Lifting & Tilting Systems

Power and accuracy for lifting loads and precise material positioning.



Auxiliary Circuits

Dedicated power supply for attachments and enhanced machine versatility.



Cooling & Filtration

Protects the hydraulic circuit and extends component service life.



Control Systems

Advanced integration of hydraulics, electronics, and software for efficient control.



Electrification Solutions

Hybrid and full-electric systems for higher energy efficiency and reduced environmental impact.

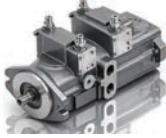
STRATEGIC PARTNERSHIPS

HANSA-TMP combines **in-house manufacturing** with consolidated partnerships with **leading international producers** of pumps, motors, valves, actuators, and electronic solutions, ensuring high-performance, fully **integrated systems** for industrial and mobile applications.



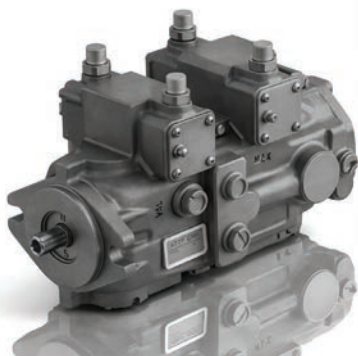
HYDROSTATIC TRANSMISSION

TPV SERIS - Closed Loop Axial Piston Pumps Variable Displacement

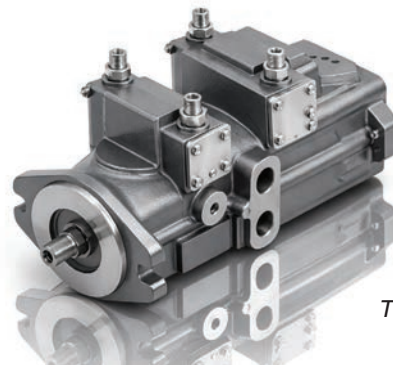
MODEL		DISPLACEMENT (CM ³ /N)	PEAK PRESSURE (BAR)	MAX. SPEED (RPM)
TPV 1100 (single)		6 ÷ 21	350	3.900
TPVT 1300 (compact tandem)		6 ÷ 21	350	3.900
TPV 1500 (single)		17 ÷ 24	350	3.600
TPVTC 1500 (compact tandem)		17 ÷ 24	350	3.600
TPV 3600 MD (single & multiple)		26 ÷ 43	350	3.600
TPV 3800 (single & multiple)		26 ÷ 43	450	3.800
TPV 4300 (single & multiple)		32 ÷ 50	320	3.900
TPV 9000		55 ÷ 210	500	4.300

UNIQUE DESIGN | TPV BACK-TO-BACK TECHNOLOGY

TPV series available models:



TPV BTB 1300



TPVTC 1500

HYDROSTATIC TRANSMISSION

TPV SERIS - Closed Loop Axial Piston Pumps Variable Displacement

CONTROLS

- Direct mechanical control, available with or without lever
- Mechanical lever control with return to neutral position
- Hydraulic servo control
- Electro-proportional servo control
- On/Off electric servo control
- Hydraulic servo control with feedback
- Mechanical lever servo control with feedback
- Electro-proportional servo control with feedback
- On/Off electric servo control with feedback
- Hydraulic automotive control
- Electric automotive control

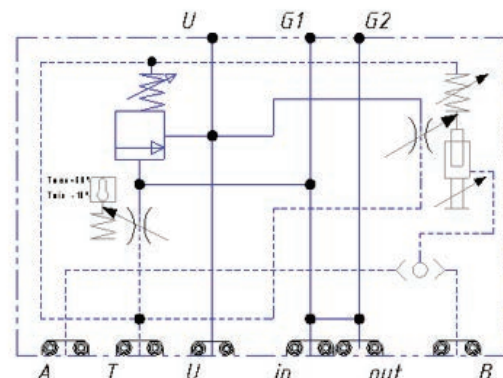
OPTIONS

- Flushing Valve
- By-pass Valve
- Angle Sensor
- Speed Sensor
- Pressure Sensor
- Pressure Cut-off Valve
- Pre-arranged for connection with external filter
- On-Board Pressure Filter
- Man on Board Valve

HYDRAULIC AUTOMOTIVE CONTROL



The **hydraulic automotive control** version offers an automatic regulation solution for transmissions driven by internal combustion engines, where the pump displacement is mechanically modulated based on the engine's rotation speed. This system ensures simplified and intuitive driving, allowing the operator to manage the vehicle's speed and starting by acting solely on the accelerator pedal.



VARIABLE DISPLACEMENT AXIAL PISTON PUMP

For open loop system

MODEL	DISPLACEMENT (CM ₃ /N)	PEAK PRESSURE (MPA)	CONTROL TYPE
K3VLS Series 	50 ÷ 150	35	• Load Sensing • Pressure Compensating • Electric Flow Control
K3VL Series 	28 ÷ 200	35	• Load Sensing • Pressure Compensating • Horse Power Control
K7V Series 	65 ÷ 140	40	• Electric Flow Control • Hydraulic Pilot Flow Control • Horse Power Control
K3V / K5V Series 	63 ÷ 280	39,2	• Electric Flow Control • Hydraulic Pilot Flow Control • Horse Power Control
K7SP Series 	36 x 2	32	• Horse Power Control

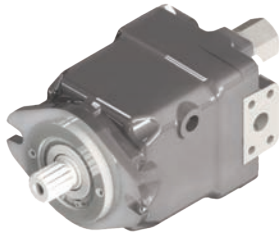
KAWASAKI COOPERATION WITH HANSA-TMP SINCE 1997.

MODEL	DISPLACEMENT (CM ₃ /N)	PEAK PRESSURE (MPA)	MAX. SPEED (N/MIN)
AR SERIES 	15,8 ÷ 22,2	21	1.800
V SERIES 	15,0 ÷ 69,7	25	1.800
PA10VSO SE-RIES 	18 ÷ 45	35	3.900

FIX DISPLACEMENT AXIAL PISTON PUMP

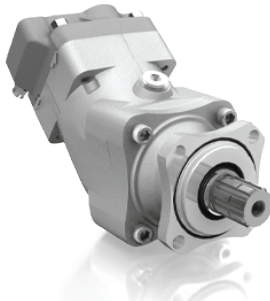
For open loop system

TMF SERIES



MODEL	DISPLACEMENT (CM ³ /N)	MAX. PRESSURE (MPA)	MAX. SPEED (N/MIN)
TPF 60	35 ÷ 50	35	2.800

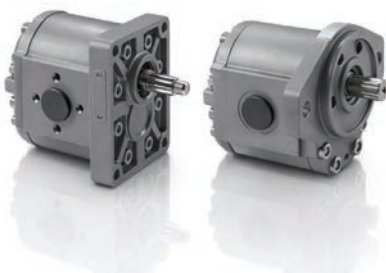
TMB SERIES



MODEL	DISPLACEMENT (CM ³ /N)	MAX. PRESSURE (MPA)	MAX. SPEED (N/MIN)
TMB	12,6 ÷ 130	40	3.300

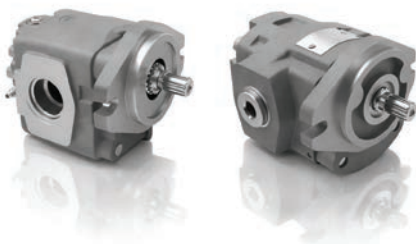
GEAR PUMPS

HYDRAULIC GEAR PUMPS | 0-1-2-3 GROUP



GROUP	DISPLACEMENT (CM ³ /N)	MAX. CONTINUOUS PRESSURE (MPA)	MAX. SPEED (N/MIN)
0	0,16 ÷ 2,28	22	9.000
1	0,89 ÷ 9,78	24	6.000
2	4,00 ÷ 31,50	25	4.000
3	19,30 ÷ 77,20	25	3.500
3	19,30 ÷ 77,20	25	

CAST IRON GEAR PUMPS | 2XPW GROUP 2



GROUP	DISPLACEMENT (CM ³ /N)	MAX. CONTINUOUS PRESSURE (MPA)	MAX. SPEED (N/MIN)
2XPW - Group 2	11 ÷ 31,5	27	9.000
3TPW - Group 3	23,9 ÷ 79,8	30	6.000

HAND PUMPS

GL series

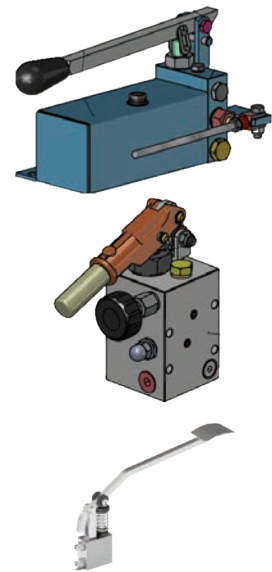
HAND PUMPS FOR SINGLE ACTING CYLINDER



SINGLE ACTING HAND PUMP
DOUBLE ACTING HAND PUMP
FOOT-OPERATED

OPTIONS:

- Single pump
- With drain
- With tank and drain



HAND PUMPS FOR DOUBLE ACTING CYLINDER



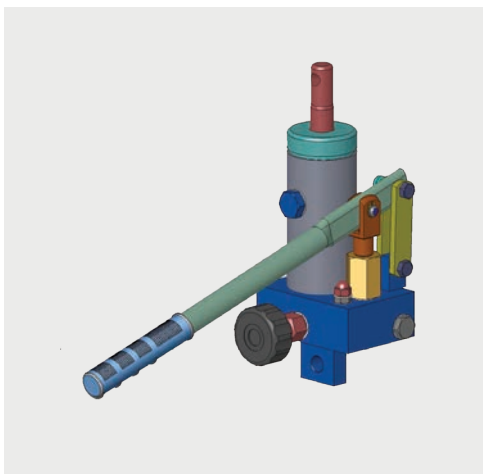
SINGLE ACTING HAND PUMP
DOUBLE ACTING HAND PUMP
FOOT-OPERATED

OPTIONS:

- Single pump
- With tank



HAND PUMPS WITH BUILD-IN CYLINDER



SINGLE ACTING HAND PUMP
DOUBLE ACTING HAND PUMP

OPTIONS:

- Single pump
- With tank

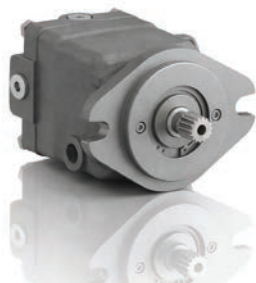


We can provide different types of hand pumps according to customer requirements.

AXIAL PISTON MOTORS

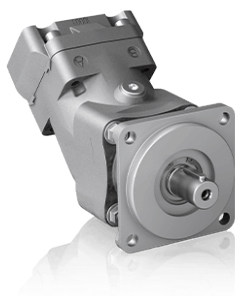
FIX DISPLACEMENT

TMF SERIES



MODEL	DISPLACEMENT (CM ³ /N)	PEAK PRESSURE (MPA)	MAX. SPEED (N/MIN)
TMF 600 (medium duty)	22 ÷ 100	42	4.200

TMB SERIES



MODEL	DISPLACEMENT (CM ³ /N)	PEAK PRESSURE (MPA)	MAX. SPEED (N/MIN)
TMB 700	12,6 ÷ 130	40	7.500

AXIAL PISTON MOTORS

VARIABLE DISPLACEMENT

TMV SERIES



MODEL	DISPLACEMENT (CM ³ /N)	PEAK PRESSURE (MPA)	MAX. SPEED (N/MIN)
TMV 660 (plug-in)	Max 25 ÷ 45 Min 12 ÷ 22	41	5.200



MODEL	DISPLACEMENT (CM ³ /N)	PEAK PRESSURE (MPA)	MAX. SPEED (N/MIN)
TMV 560	Max 35 ÷ 40 Min 17 ÷ 20	41	5.200

RADIAL PISTON MOTORS

BD SERIES



MODEL	DISPLACEMENT (CM ₃ /N)	RATED PRESSURE (MPA)	MAX. PRESSURE (MPA)	CONTINUOUS SPEED (N/MIN)	MAX. POWER (KW)
BD 1	45 ÷ 250	30	40	500 / 1.500	55 / 42
BD 2	90 ÷ 500	25	37,5	700 / 1.500	75 / 65
BD 3	130 ÷ 900	25	40	360 / 1.600	95 / 85
BD 5	250 ÷ 1.900	25	42,5	700 / 1.400	170 / 150
BD 6	420 ÷ 3.000	25	45	300 / 625	240 / 200

BD SERIES



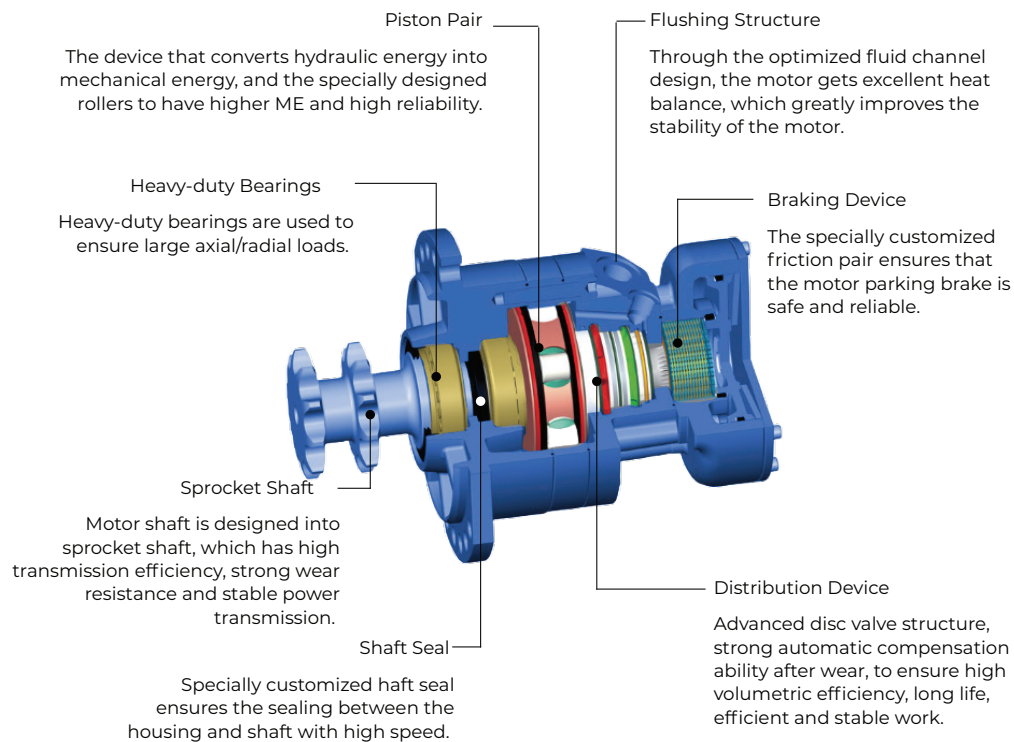
MODEL	DISPLACEMENT (CM ₃ /N)	TORQUE (NM/MPA)	RATED PRESSURE (MPA)	MAX. SPEED (N/MIN)	MAX. POWER (KW)
GM 05	39 ÷ 191	0,062 - 0,304	25	1.000	33
GM 1	99 ÷ 314	0,154 - 0,49	25	1.000	48
GM 2	192 ÷ 623	0,3 - 0,973	25	800	90
GM 3	352 ÷ 987	0,549 - 1,54	25	700	80
GM 4	402 ÷ 1316	0,627 - 2,05	25	600	100
GM 5A	807 ÷ 2007	1,26 - 3,13	25	450	120
GM 6	1690 ÷ 3041	2,64 - 4,75	25	400	170
GM 7	1373 ÷ 4663	2,19 - 7,42	25	400	250

TMR 03 | SINGLE & DUAL DISPLACEMENT



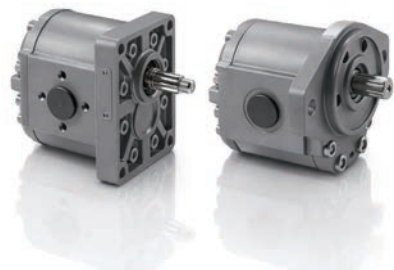
MAX. DISPLACEMENT (CM ³ /N)	RATED PRESSURE (MPA)	PEAK PRESSURE (BAR)	MAX. SPEED (N/MIN)	PEAK POWER (KW)
225	250	400	475	22
225			420	22
400			270	22

INTERNAL STRUCTURE



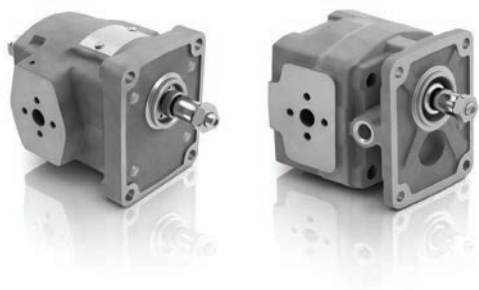
GEAR MOTORS

HYDRAULIC GEAR MOTORS | 0-1-2-3 GROUP



GROUP	DISPLACEMENT (CM ₃ /N)	MAX. CONTINUOUS PRESSURE (MPA)	MAX. SPEED (N/MIN)
0	0,16 ÷ 2,28	22	9.000/5000
1	0,89 ÷ 9,78	24	6.000/2000
2	4,00 ÷ 31,50	25	4.000/2200
3	19,30 ÷ 77,20	25	3.500/2200

CAST IRON GEAR MOTORS



GROUP	DISPLACEMENT (CM ₃ /N)	MAX. CONTINUOUS PRESSURE (MPA)	MAX. SPEED (N/MIN)
2XPW - Group 2	11 ÷ 31,5	27	9.000
3TPW - Group 3	23,9 ÷ 79,8	30	6.000

ORBIT MOTOR

SPOOL VALVE ORBIT MOTORS



MOTOR MODEL	DISPLACEMENT (CM ₃ /N)	RATED PRESSURE (MPA)	MAX. PRESSURE (MPA)	TORQUE (NM)
OTMM	8 - 50	10	20	11 - 46
OTMR	51 - 402	14	20	93 - 380
OTS	52 - 402	14	20	93 - 540
OTMH	203 - 472	16	22	425 - 720
OTMP	52 - 393	14	22	97 - 416
OTH	49 - 383	10,5	18	65 - 335
OTMPH	49 - 383	14	20	90 - 350

DISC VALVE ORBIT MOTORS



MOTOR MODEL	DISPLACEMENT (CM ₃ /N)	RATED PRESSURE (MPA)	MAX. PRESSURE (MPA)	TORQUE (NM)
OTM3Y	80 - 476	20,5	29,5	226-728
OTM4	158 - 535	20	28	450-1121
OTM5	314 - 969	20	28	873-1900
OTM6	759 - 1186	16	21	1690-2650

ORBIT MOTORS WITH BREAKS



MOTOR MODEL	DISPLACEMENT (CM ₃ /N)	RATED PRESSURE (MPA)	MAX. PRESSURE (MPA)	TORQUE (NM)
ZOTMR	80 - 321	9	14	152 - 380
ZOTMR/N	80 - 401	9	14	152 - 380
OTM5	80 - 1186	12,5	16	156 - 2250

BTM - BRAKE WITH HYDRAULIC PILOT

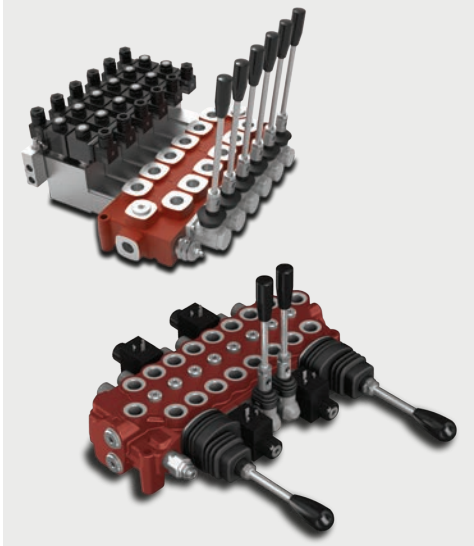


MODEL	DISPLACEMENT (CM ₃ /N)	RATED PRESSURE (MPA)	MAX. PRESSURE (MPA)	TORQUE (NM)
BTM 03	30-40	35	0,3-0,5	9,5
BTM 07	60-80		0,4-0,6	
BTM 11	100-120		0,7-0,9	
BTM 18	170-190		1,1-1,3	
BTM 24	230-250		1,1-1,3	
BTM 32	320-330		1,5-1,7	
BTM 42	400-440		1,5-1,7	
BTM 50	480-520		1,7-1,9	

VALVES

DIRECTIONAL VALVES AND REMOTE CONTROLS

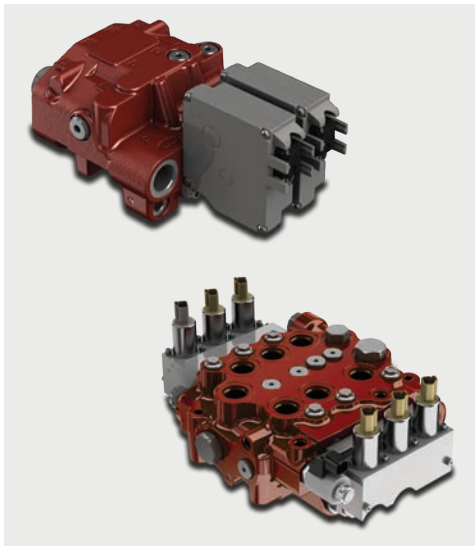
Specifically used in applications such as: agriculture, construction and earthmoving, lifting and transport, industrial vehicles:



Monoblock valves



Sectional valves



Valves for special applications



**Pressure pre-compensated
Load-Sensing and Flow
Sharing valves**

VALVES

COMPACT HYDRAULICS



SAE CAVITY CARTRIDGES
VALVES



HYDRAULIC VALVES
(PARTS IN BODY)



BANKABLE SOLENOID
VALVES



DIVERTER VALVES



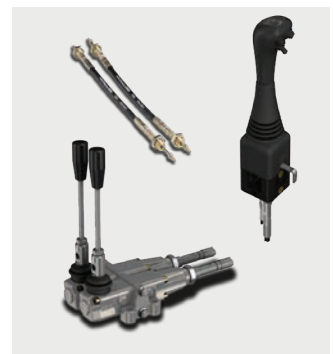
HYDRAULIC INTEGRATED
CIRCUITS (HICS)



HYDRAULIC REMOTE
CONTROLS AND FEED
UNITS



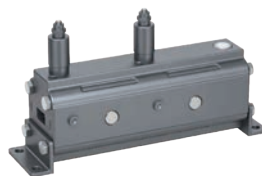
PNEUMATIC REMOTE
CONTROLS



FLEXIBLE CABLE
REMOTE CONTROLS

FLOW DIVIDERS

GEAR FLOW DIVIDERS | 0-1-2-3 GROUP



MODEL	DISPLACEMENT	MAX. PRESSURE	ONE ELEMENT FLOW RATE (L/ MIN)	
	CM ₃ /N	MPA	MIN.	MAX.
GROUP 0	0,17 ÷ 2,3	21	0,2	10,3
GROUP 1	0,9 ÷ 9,8	22	1	41
GROUP 2	4 ÷ 40	21	4,8	100
GROUP 3	15 ÷ 90	30	18	180

HYDRAULIC ROTARY COUPLINGS



MODEL	PORTS	FLUIDS	MAX. PRESSURE (MPa)	ROTATION SPEED (RPM)	OPERATING TEMPERATURE*
DA SERIES	2 to 8	hydraulic fluid, air	420 bar	0 - 12 rpm	-30 to 80°C
DI SERIES	2 to 18	hydraulic fluid, air	420 bar	0 - 12 rpm	-30 to 80°C
DIF SERIES	6 to 22	hydraulic fluid, air	420 bar	0 - 12 rpm	-30 to 80°C
DPC SERIES	2 to 18	hydraulic fluid, air	420 bar	0 - 12 rpm	-30 to 80°C
DM SERIES	7 to 11	hydraulic fluid, air	420 bar	0 - 12 rpm	-30 to 80°C

HYDRAULIC ROTARY COUPLINGS



MODEL	ROTATION SPEED	OPERATING TEMPERATURE	NUMBER OF CONTACTS	CURRENT LOAD	OPERATING VOLTAGE	PROTECTION RATING (CE163)
CE SERIES	0 - 20 rpm	-20 to 60°C	1 to 80	0.1 mA to 50 A	680 V AC / 220 V DC	IP65
HIPO SERIES	0 - 30 rpm	-40 to 60°C	50	10 mA to 300 A	700 V AC / 700 V DC	IP67

ATEX CERTIFIED PRODUCTS



SWIVEL JOINTS

FLUIDS	MAX. PRESSURE	WORKING PRESSURE	ROTATION SPEED	OPERATING TEMPERATURE
MINERAL OIL	450 bar	up to 450 bar	0 - 15 rpm	-50 to 60°C



ELECTRIC SLIP RING - ATEX

FLUIDS	MAX. PRESSURE	WORKING PRESSURE	ROTATION SPEED	OPERATING TEMPERATURE
MINERAL OIL	450 bar	up to 450 bar	0 - 15 rpm	-50 to 60°C

HYDRAULIC ROTARY ACTUATORS

DA-H SERIES



- Rotating shaft
- Working pressure up to 25 MPa
- Torque up to 250.000 Nm (15 sizes)
- Standard angle 90°, 180°, 270°, 360°
- Special angle up to 1500°

Preferred applications:

Industry (construction machinery, machine tools etc.)

DA-H SERIES



- Rotating shaft
- Working pressure up to 21 MPa
- Torque up to 16.000 Nm
- Standard angle 90°, 180°, 270°, 360°
- Special angle up to 1500°
- Reduced weight (aluminium)

Preferred applications: Aerial platforms

M-DA-H SERIES



- Rotating flange
- Working pressure up to 25 MPa
- Torque up to 4.800 Nm (11 sizes)
- Standard angle 180°, 360°

Preferred applications:

Working platform, construction machinery, automotive technology

M-DA-H-F SERIES



- Rotating flange or shaft, with foot
- Working pressure up to 21 MPa
- Torque up to 50.000 Nm
- Standard angle 180°, 360°

Preferred applications:

Working platform, Garbage trucks, Automotive technology, etc.

M-DA-H-F3 SERIES



- Rotating flange, special mounting
- Working pressure up to 21 MPa
- Torque up to 5.000 Nm
- Standard angle 180°, 360°

Preferred applications: Working platform

BV SERIES



- Rotating flange, with foot
- Working pressure up to 10 MPa
- Torque up to 100.000 Nm (9 sizes)
- Standard angle 100°, 140°

Preferred applications:

Bucket and ancillary equipment for construction machinery

GEARBOXES

MULTIPURPOSE PLANETARY GEARBOXES | 300 SERIES



TORQUE RANGE (NM)	GEAR RATIOS (KW)	TRANSMISSIBLE MECHANICAL POWER (KW)
1,000 - 1,100,000	3.4 - 5,000	up to 1,050

TRUCK MIXER DRIVES GEARBOXES | 500 SERIES



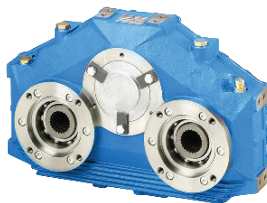
TORQUE RANGE (NM)	GEAR RATIOS (KW)	APPLICABLE MOTORS
3,000 - 75,000	17 - 161	Axial piston motors to SAE Standard orbit motors

TRUCK DRIVE GEARBOXES | 600 SERIES



TORQUE RANGE (NM)	GEAR RATIOS (KW)	TRANSMISSIBLE MECHANICAL POWER (KW)
3,000 - 85,000	4.3 - 153	up to 4,000

PUMP DRIVES

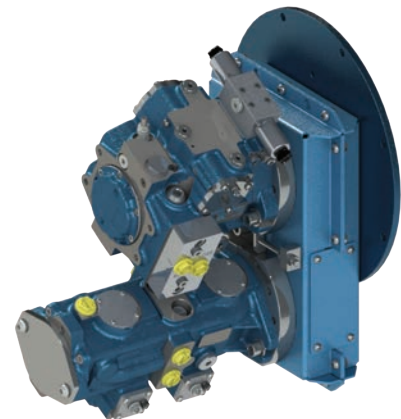


MODEL	MAX. INPUT POWER (KW)	MAX. INPUT TORQUE (NM)	MAX. INPUT SPEED (N/MIN)	GEAR RATIO 1: ...
TWO PUMPS DRIVE				
AM 110	180	735 - 450	2.400 - 3.950	0,49 - 1,50
AM 216	205	800 - 500	2.400 - 3.950	0,50 - 1,47
AM 220	355	1.470 - 900	2.400 - 3.950	0,49 - 1,50
AM 230	430	2.080 - 1.270	1.950 - 3.200	0,51 - 1,48
AM 232	656	3.250 - 2.300	1.750 - 2.400	0,49 - 1,00
AM 270	700	4.400 - 2.570	1.800 - 2.600	0,70 - 1,43
700THREE PUMPS DRIVE				
AM 320	205	735 - 500	2.650 - 3.950	0,68 - 1,47
AM 330	355	1.470 - 900	2.400 - 3.950	0,49 - 1,50
AM 345	430	2.080 - 1.270	1.950 - 3.200	0,51 - 1,48
AM 365	670	3.480 - 2.350	1.800 - 2.500	0,69 - 1,45
AM 370	700	4.400 - 2.570	1.800 - 2.600	0,70 - 1,43
FOUR PUMPS DRIVE				
AM 450	640	4.200 - 2.600	1.800 - 2.400	0,50 - 1,00
AM 480	700	4.400 - 3.490	1.700 - 2.000	0,72 - 1,15
AM 481	850	5.500	1.700 - 2.000	0,72 - 1,15

SPLIT BOX

FEATURES:

- Press formed sheet metal housing
- Arrangements for SAE A and SAE B
- Prepared to be applied on heat engine with SAE B interface + adapter bell.
- Compactness



GENERAL INFORMATION	
MAX INPUT SPEED (RPM)	3500
MAX INPUT TORQUE (Nm)	500
MAX INPUT POWER (KW)	180
WORKING TEMPERATURE (°C)	-20 / +100
DIRECT PTO "A" with HEAT ENGINE	
COUPLE MAX (Nm)	500
TOTAL MAX TORQUE RELATIVE (Nm)	358
MOTION SOCKET "B" connected to the belt	
COUPLE MAX (Nm)	142
POWER MAX (KW)	44.5

BDS 24 - 35 | BELT DRIVE SUPPORT



SAE-A

SAE-B

BDS 24	BDS 35	FEATURES
ø24, 9 shaft	ø35, 13 shaft	• SAE-A BDS 24/9 & 24/13 • SAE-B BDS 35/13 & 35/15 • High radial load capacity • Long lifetime • Suitable for high-speed engines. Up to 3600 rpm • Maintenance free
ø24, 13 shaft	ø35, 15 shaft	

OVER-GEARS



	MODEL	POWER (KW)	PUMP GROUP
Speed-Up	60000	10	GR 2
	70000 Standard	20	GR 3
	70000 Through Shaft	20	GR 3
	71000	20	GR 3
	80000	36	GR 3,5
	70012	37	GR 3
	72000 Standard	37	ISO PTO
	72000 Through Shaft	37	ISO PTO
	92000 (MTL 3,5)	40	GR 3,5
	97601	68	SAE A-B
	97701	68	GR 2 - 3
	93000	70	GR 4
Splitter	85000	36	GR 2- 3
	90000	45	GR 3 - 3,5
	91000	74	GR 4

SPEED REDUCERS



MODEL	POWER (KW)	REDUCTION RATIO N1/N2	INLET FLANGE
95000	10	1,5-2-2,5 3-3,5-3,8	SAEA
96000	20	1,5-2-2,5 3-3,5-3,8	SAEA SAEB
97500	18	1,5-2-2,5 3-3,5-3,8	SAEA
97003	37	2-3-3,5	SAEA SAEB
97001	68	2-2,5-3	SAEA
97001/13 97001/15	68	2-2,5-3	SAEB

CLUTCHES



MODEL	VOLTAGE	MAX RATED TORQUE DANM	PUMP FLANGES
Clutches	12- 24 V DC	3-30	Gr.1 - Gr.2 - Gr.3 Gr.2 Bosch - Gr.3 Bosch SAE A - SAE B

CLUTCHES



MODEL	POWER (KW)	REDUCTION RATIO N1/N2
BDS 112/16	200	3500
BDS 118/24	240	3500
BDS 130/50	330	3100
BDS 145/75	450	3100
BDS 290/150	880	2900
BDS 2200	1960	2400
BDS 3300	2940	2400

FLANGE AND COUPLINGS



FLANGE HOUSING					
SAE	D1	D2	D3	D6	L1

JOINT				
SAE	D4	D25	L2	D7

RETURN FILTERS | FR532



TECHNICAL FEATURES

- Tank top filters to protect the circuit return line flows
- 360° adjustable connection
- “AF” microfiber and conductive plastics media to minimize the risk of electric discharges inside the element
- Wide range of accessories and clogging indicators

MAX FLOW 55L/min
FILTERING UP TO 10 µm

MEDIUM AND HIGH PRESSURE FILTERS | FR690



TECHNICAL FEATURES

- Suction and return in a single filter body
- Integrated pressurization valves for ideal circuit conditions
- In-line mounting for quick installation and maintenance
- Available range: CFS 40/80/100 and CFS 150/180 l/min
- Optional electric or visual clogging sensor

MAX FLOW UP TO 350L/min
MAX PRESSURE 25 Bar
FILTERING UP TO 10 µm

SUCTION AND RETURN IN LINE SPIN-ON FILTERS | CFS SERIE

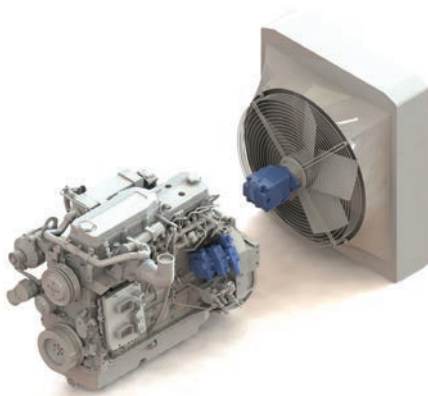


TECHNICAL FEATURES

- Lightweight medium pressure filter
- Different mounting options
- Visual and electrical differential indicators available

MAX FLOW UP TO 85L/min
MAX PRESSURE 150 Bar
FILTERING UP TO 3 µm

FAN DRIVE SYSTEM IN CLOSED LOOP SYSTEM | TPV SERIES



FIXED DISPLACEMENT AXIAL PISTON MOTORS TMF SERIES

- STD: Standard
- SL: Speed Limiter
- RF: Reverse Flow
- TOP Version: Speed Limiter + Reverse Flow

BENEFIT

- . LOWER dimension of the oil tank
- . HIGH SPEED rotation
- . Complete CONTROL of the propeller working conditions
- . NO risk of CAVITATION during the fan stop
- . INVERSION OF ROTATION by the pump displacement control

PUMP MODEL	DISPLACEMENT (CM ³ /N)	RATED PRESSURE (MPA)
TPV 1100	6 ÷ 21	30
TPV 1500	17 ÷ 21	30
TPV 3600	26 ÷ 38	40
TPV4300	32 ÷ 50	28

FAN DRIVE SYSTEM IN OPEN LOOP SYSTEM | WAILVOIL FAN DRIVE SYSTEM



These types of motors are widely used in modern Hydraulics due to their performance, long life service and low maintenance costs. An electrohydraulics Fan Drive offers significant advantages if compared with traditional solutions with electric or belt drives.

FAN DRIVE SYSTEM IN OPEN LOOP SYSTEM | KAWASAKI FAN DRIVE SYSTEM



The K3VL pump 28 Fan Drive is variable displacement axial piston pump with a proportional electric controller which can be operated either by the Diesel engine control unit or by the machine control unit. In this way, the cooling air flow is optimized with the temperature of the combustion engine reducing the noise and increasing the efficiency of the system.

AIR-OIL HEAT EXCHANGER | MG AIR SERIES | HPA SERIES



- FEATURES:
- High efficiency
 - Wide range of applications
 - Easy maintenance

EXCHANGER MODEL	RATED FLOW IT/MIN	MAX WORKING PRESSURE (BAR)	CAPACITY KW/°C
Air - Oil	5 - 520	20	0.49 - 1,50
Electric ventilation	Single phase V AC - 50 HZ - Three phase 230 - 400 V AC 50 - 60 Hz		
Hydraulic ventilation	Motor Gr. 1 - 2 - 3		
Standard Equipment	Fixed thermostat - Support feet		
Water - Oil	5 - 800	12	up to 8,30
Standard Equipment	Fixed tube - Extensible tube bundle - Immersed tube bundle		
Materials	Copper brass AISI 304 - Cu Ni 10 - Carbon steel		

Hybrid Solution - Zero Emissions

ELECTRIC MOTOR | BDS SERIES

MODEL	POWER kW	EM BRAKE Nm
BD073 - SPM	0,4 - 0,8	2
BD090 - SPM	0,5 - 1,5	5
BD106 - IPM	1,4 - 2,6	10
BD125 - IPM	1,2 - 3,5	20
BD135 - IPM	2,2 - 5,6	32 - 60
BD173 - IPM	2 - 10	60 - 75
BD200 - IPM	3,2 - 19	100



100% Electric - Zero Emissions

ELECTRIC DRIVE WHEEL GEAR UNIT | RE1200

ELECTRIC MOTOR	
SERIE	BD (IPM)/AMX (AC)
POWER	1,5 - 3 kW
VOLTAGE	12 - 144 Vdc
PROTECTION	IP67

GEARBOX	
MAX WHEEL TORQUE	1200 Nm
MAX INPUT SPEED	4000 rpm
RATIOS	18 / 31 / 41
MAX WHEEL LOAD	2.000 KG
EFFICIENCY	90%

PARKING BREAK	
TYPE	Negative EM
PARKING TORQUE	20 Nm

HYDRAULIC JOYSTICK



TECHNICAL FEATURES

- Compact body in fiberglass-reinforced PA66
- Integrated high-reliability electronics
- Single or dual-axis control
- Optional friction and detent functions
- IP65 protection rating
- Available outputs: CANopen, PWM, 0–5 V, ratiometric
- PC software for parameter setting
- Compliant with major EMC standards

ELECTRIC JOYSTICK



TECHNICAL FEATURES

- Compact and lightweight structure
- Dual-axis control
- Microswitches up to 16 A
- Mini version for tight spaces
- Ergonomic multi-function handle
- Reliable for heavy-duty applications

MULTIFUNCTIONAL HANDLE



TECHNICAL FEATURES

- Ergonomic design for intensive use, Nylon® 6 with 30% glass fiber
- Up to 12 buttons and 5 rollers, fully configurable
- Capacitive operator presence detection
- Integrated light signal area
- Right and left-hand configuration available
- Operating temperature from -20 to +60°C

HYDRAULIC PEDAL



TECHNICAL FEATURES

- Compact and lightweight
- Wide application compatibility
- Reliable pressure reducing elements
- Precise regulation curves with low hysteresis
- Various pedal force calibrations available
- Dustproof rubber bellow protection
- Corrosion-resistant steel plungers
- External safety end-stroke
- Double seal available

ELECTRIC PEDAL



TECHNICAL FEATURES

- Frictionless Hall Effect technology
- Dual return springs
- Integrated safety signal
- Anti-slip pedal available in S / M / L sizes
- Horizontal or vertical cable outlet
- Customizable rest inclination
- Dual-channel architecture (optional)
- Custom versions on request



TECHNICAL FEATURES

- Category 2 hardware, Performance Level D / SIL 2
- Mechanical and electrical life of 5 million cycles per axis
- IP67/IPx9K protection with fully encapsulated board
- Power supply from 8 to 32V, operating temperature from -40 to +85°C
- Analog or CANbus output signal (SAE J1939 / CANopen)
- Integrated damping system for smooth return to neutral position
- Lever angle $\pm 11^\circ$

H-VIEW

Advanced HMI for Industrial and Mobile Applications



H-VIEW is a powerful, reliable, and fully configurable Human-Machine Interface designed for professional high-integration applications.

Based on the **i.MX6 processor**, it ensures high performance and responsiveness even in the most complex applications, communicating via the CANopen protocol to simplify system integration.

MAIN FEATURES:

CONFIGURABLE

Evolved HMI tailored to every need. Capacitive display with physical keys, rotary encoders, protected power and digital I/O. Each version is customizable with specific interfaces, commands and functions.

PLUG AND PLAY

Compact, flexible, easy to integrate. Installs quickly on any machine or plant. It also handles signals and commands in stand-alone configuration.

TECHNOLOGICALLY ADVANCED

Powerful, responsive, designed to last. Based on i.MX6 processor THEIA delivers high performance even in complex applications. Thanks to the CANopen protocol, it simplifies communication and minimizes technical complexities.

HCU

Electronic Control Unit for Closed Loop Pumps

HCU HARDWARE



The **HCU Hansa Electronic Control Unit** of the TPV Series is specifically developed for the control of **variable displacement closed-loop hydrostatic pumps** in mobile applications.

Equipped with **current-controlled PWM outputs**, configurable sensor inputs and CAN communication J1939 and CANopen, the HCU ensures precise pump displacement control and optimized engine–pump interaction in all operating conditions.

Its robust electronic architecture enables **fast response, stable performance and reliable system management** in demanding environments.

HCU SOFTWARE

AUTOMOTIVE CONTROL

The Automotive Control pump automatically adjusts pump displacement according to engine speed variations.

It defines the engine speed at which machine movement begins and limits the power absorbed by the transmission to match the available engine output.

ANTI-STALL PROTECTION

The HCU continuously monitors engine speed and hydraulic demand. In high load conditions, pump displacement is automatically reduced to prevent engine stall and maintain stable machine operation.

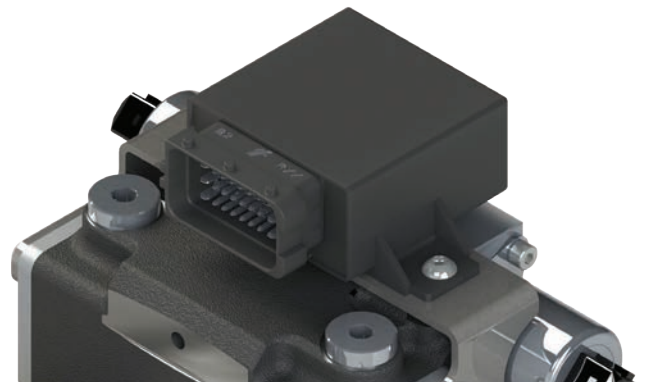
CONSTANT POWER MANAGEMENT

Pump displacement is dynamically adjusted to maintain the optimal balance between engine output and hydraulic demand, ensuring efficient power usage and consistent performance.

BLUETOOTH CONNECTIVITY

Integrated Bluetooth connectivity allows wireless access to the HCU for remote diagnostics and parameter monitoring. It enables fast configuration and troubleshooting, reducing service time and downtime.

AUTOMOTIVE CONTROL



DRIVER FOR PWM CONTROL

CONTROL UNIT FOR SAFETY RELATED APPLICATIONS



TECHNICAL FEATURES

- Category 2 hardware, Performance Level D / SIL 2
- IP67/IPx9K protection, operating temperature from -40 to +85°C
- Power supply from 8 to 32V, compatible with 12 and 24V systems
- 30 general purpose inputs, 6 proportional outputs at 6A, 12 proportional sections at 2A
- 4 CANbus ports, 10 relay outputs, 1 x 5V sensor power output
- PWM outputs with closed current loop for proportional valves
- Programmable with Mathworks® tools

ELECTRONIC CONTROL UNIT FOR PROPORTIONAL VALVES



TECHNICAL FEATURES

- Control of up to 8 proportional solenoid valves
- Pre-loaded standard software, customizable via PHC Studio
- 8 to 32V power supply, IP67 rated, -40 to +85°C operating range
- 4 analog inputs, 2 digital inputs, 1 CANbus port
- 8 HSD outputs and 4 LSD outputs, 2A per pin
- Deutsch connectors, short-circuit and over-temperature protection
- Programmable Dither frequency and coil current measurement

ELECTRONIC CONTROL UNIT FOR ELECTRIC MOTOR

AC MOTOR CONTROLLER SERIES | ACF SERIES



HYTRON
ELECTRIFICATION

AC MOTOR CONTROLLER SERIES								
NOMINAL INPUT VOLTAGE	24V	24–36V	36–48V	36–60V	48–60V	48–80V	60–80V	72–96V
MINIMUM VOLTAGE	12V	12V	18V	18V	24V	24V	30V	36V
MAXIMUM VOLTAGE	33V	50V	63V	70V	75V	100V	100V	120V
PWM FREQUENCY	10 kHz nominal (configurable)							
MAXIMUM CONTROLLER OUTPUT FREQUENCY	599Hz							
ELECTRICAL ISOLATION TO HEATSINK	500 VAC							
STORAGE AMBIENT TEMPERATURE	–40°C to 95°C							
INGRESS PROTECTION	IP67							

DUAL AC MOTOR CONTROLLER | ACF5-DE



HYTRON
ELECTRIFICATION

AC MOTOR CONTROLLER SERIES			
NOMINAL INPUT VOLTAGE	36–48V	72–80V	96V
MINIMUM VOLTAGE	18V	24V	41V
MAXIMUM VOLTAGE	63V	112V	122V
SEVERE OVERVOLTAGE	72V	122V	132V
PWM FREQUENCY	10 kHz nominal (configurable)		
MAXIMUM CONTROLLER OUTPUT FREQUENCY	599Hz		
ELECTRICAL ISOLATION TO HEATSINK	1200Vac		
STORAGE AMBIENT TEMPERATURE	–40°C to 85°C		
INGRESS PROTECTION	IP65/IP67		

POSITION SENSORS



Linear and angular transducers for accurate detection of mechanical movement in industrial and mobile applications.

- Multiple technologies available: magnetostrictive, potentiometric, Hall effect, MEMS Integrated high-reliability electronics
- Contactless measurement options for reduced mechanical wear
- High resistance to vibration, shock, and extreme conditions
- Versatile output signals for seamless integration into control systems

PRESSURE SENSORS



Transducers and transmitters for fluid pressure measurement in hydraulic and pneumatic systems.

- Suitable for high-viscosity media and high-temperature environments
- ATEX certified for potentially explosive areas
- SIL2/PLd safety certification, compliant with Machine Safety directives
- International approvals: CE, CuLUs, IECEx, FM

SPEED SENSORS



Sensors for rotational and linear speed measurement in mobile and industrial drive systems.

TEMPERATURE SENSORS



RTD (Pt100/Pt1000), thermocouple, and thermistor solutions for precise thermal monitoring in industrial and mobile applications.

- RTD sensors for high accuracy and long-term stability
- Thermocouples for wide temperature ranges and fast dynamic response
- High resistance to vibration, thermal shock, and mechanical stress



Hansa-TMP ITALY

Via M. L. King, 6 41122 Modena
+39 059 415711
hansatmp@hansatmp.it

Hansa-TMP GERMANY

Dünner Strasse 247-249, 41066 Mönchengladbach
+49 1621392182
michael.wolf@hansatmp.de

Hansa-TMP INDIA

Koncord, Unit No. 302, 3rd Floor, Bund Garden Road, Pune,
Maharashtra – 411001
+91 98608 01443
vallabh.joshi@hansatmp.in

Hansa-TMP CHINA

Room 8921, Building 18, No. 5555, Shenzhuan Road, Songjiang
District, Shanghai Zip 201601 Shanghai P.R.
+86 21 60709280
weiqijin@hansa-cn



www.hansatmp.com