



HYDRAULIC COMPONENTS  
HYDROSTATIC TRANSMISSIONS  
GEARBOXES - ACCESSORIES

Certified Company ISO 9001 - 14001

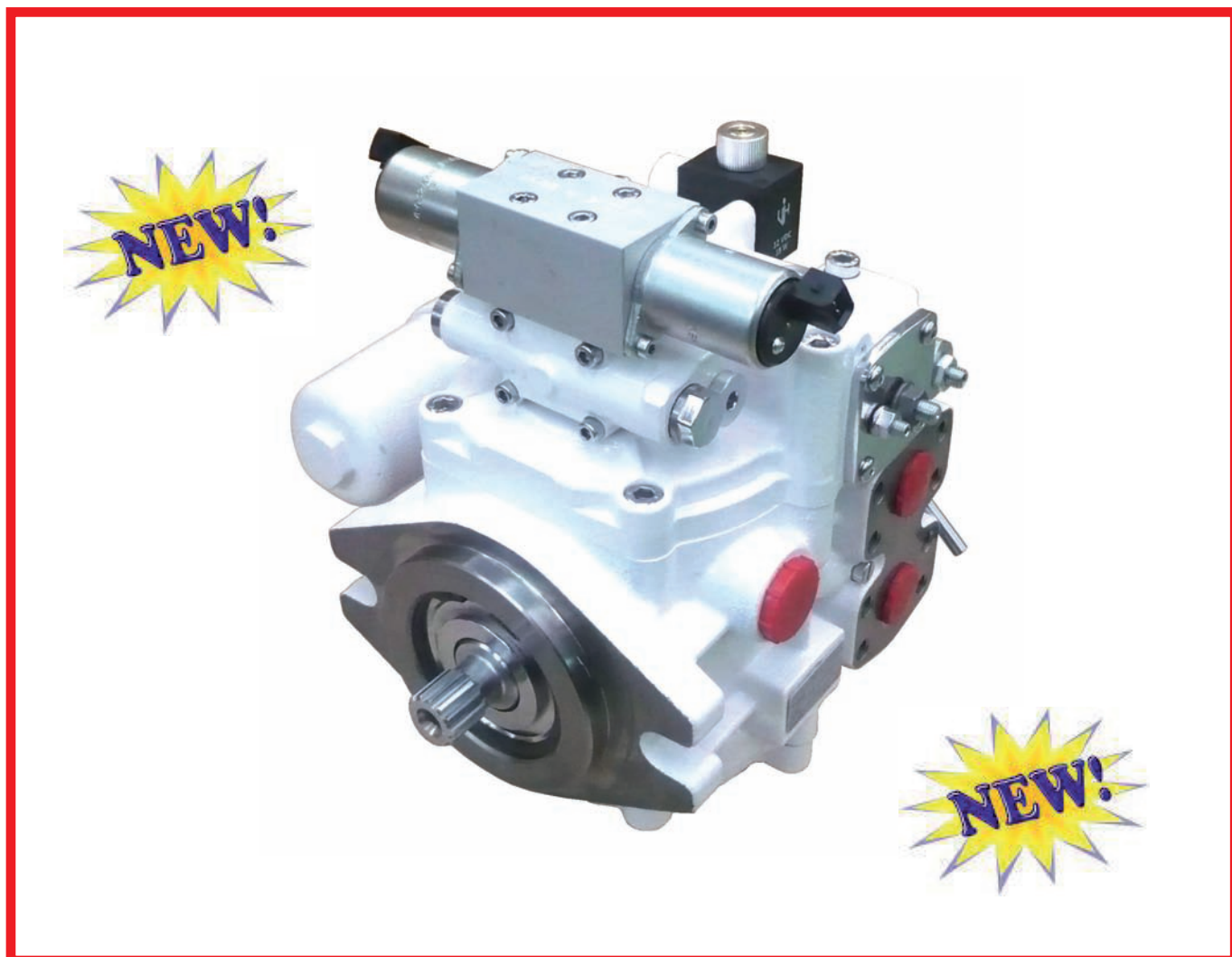


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HT 16 / M / 4004 / 0916 / E / V

THE PRODUCTION LINE OF HANSA-TMP

## Variable Displacement Closed Loop System Axial Piston Pump TPV 3600



**Preliminary Information**

The new TPV 3600 is a variable displacement axial piston pump for closed loop circuit. The pump is designed to meet the high demanding performances of the new machines: high efficiency, high pressure rate and high reliability.

The pump can be equipped with speed, angle and pressure sensors to integrate the hydrostatic transmission with the electronic control board of the machine and improve the efficiency and the performance of the system.

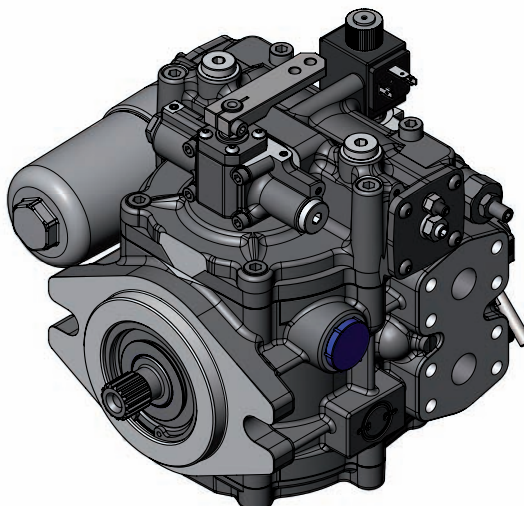
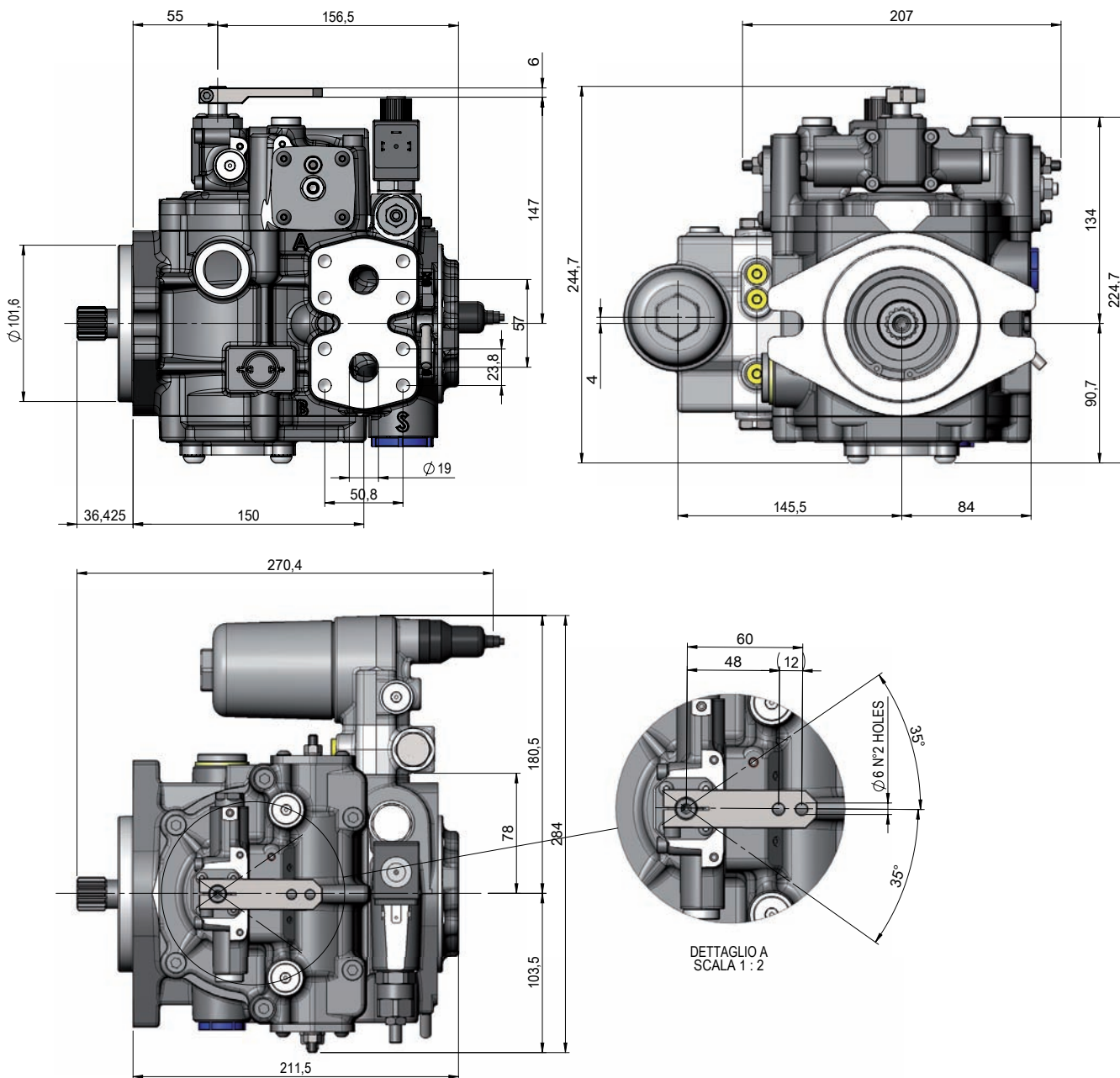
**Main features:**

- Displacement from 28 to 38 cm<sup>3</sup>/n.
- Pressure up to 45 MPa
- Wide range of controls with mechanical feedback.
- SAE-B standard mounting flange
- Built in pressure filter (optional)
- Built in flushing valve (optional)
- Built in by-pass valve (optional)
- Man on board safety valve
- 10,3 cm<sup>3</sup>/n charge pump
- Full featured through drive options

**Typical applications:**

- Construction equipment
- Agricultural machines
- Utility vehicles
- Forestry machines
- Remote controlled vehicles

<b>AXIAL PISTON PUMP TPV 3600</b>			
<i>Technical Data (theoretical values)</i>			
Displacement	V	cc/rev.	26-38
Maximum speed	n <sub>max-cont.</sub>	min <sup>-1</sup>	3,600
Continuous pressure	P <sub>nom.</sub>	MPa	35
Maximum pressure	P <sub>max.</sub>	MPa	45
Fluid contamination	19/17/14 according to ISO 4406		
Weight (SMIX version)	TPV	Kg	28
	TPVTC	Kg	51



Potential order code												
3600	TPV	38	CR	SS3	F2	SMIX	OA	20	10	C	0	SB
0	1	2	3	4	5	6	7	8	9	10	11	12

**0 Pump series**  
3600 = TPV 3600

**1 Pump model**  
TPV - TPVT = Single/double closed loop circuit pump

**2 Pump displacement**  
26      28      30      31      32      34      36      38

**3 Rotation**  
CR = Clockwise rotation (right)  
CC = Counter-clockwise rotation (left)

**4 Shaft (mounting side)**  
SS3 = Splined shaft SAE-B (ANSI B92.1A - 13T - 16/32 DP)  
SS5 = Splined shaft SAE-B (ANSI B92.1A - 15T - 16/32 DP)

**5 Mounting flange**  
F2 = SAE-B 2 bolt - pilot diam. 101,6 mm

**6 Controls**  
SHI = Hydraulic servo control  
SEI1.3 = Electro-proportional servo control 12V DC (AMP junior timer connector)  
SEI2.3 = Electro-proportional servo control 24V DC (AMP junior timer connector)  
SEI1.3D = Electro-proportional servo control 12V DC (Deutsch connector)  
SEI2.3D = Electro-proportional servo control 24V DC (Deutsch connector)  
SHIX = Hydraulic servo control with feed back  
SMIX = Mechanical lever servo control with feed back  
SEIX1.3 = Electro-proportional servo control with feed back 12V DC (AMP junior timer connector)  
SEIX2.3 = Electro-proportional servo control with feed back 24V DC (AMP junior timer connector)  
SEIX1.3D = Electro-proportional servo control with feed back 12V DC (Deutsch connector)  
SEIX2.3D = Electro-proportional servo control with feed back 24V DC (Deutsch connector)

**7 Control devices position**  
OA = Position A  
OB = Position B

**8 Relief valve pressure setting**  
10 = 10 Mpa      15 = 15 Mpa      18 = 18 Mpa      20 = 20 Mpa  
25 = 25 Mpa      30 = 30 Mpa      35 = 35 Mpa      40 = 40 Mpa

**9 Boost pump**  
0 = Without boost pump  
10 = Standard pump (10,3 cm³/n) standard setting 2 Mpa at 1.000 n/min  
10(XX) = Electro-proportional servo control 24V DC (AMP junior timer connector)

**10 Through drive connection for rear pump**  
C = Closed cover  
B1 = German standard pump group 1 mounting  
B2 = German standard pump group 2 mounting  
SA = SAE-A 2 bolt mounting flange (T9 16/32" DP female shaft)  
SB = SAE-B 2 bolt mounting flange (T13 16/32" DP female shaft)

**11 Gear pump displacement**  
000 = Without gear pump

**Group 1**  
112 = 1,2 cm³/n      117 = 1,7 cm³/n      122 = 2,2 cm³/n  
126 = 2,6 cm³/n      132 = 3,1 cm³/n      138 = 3,6 cm³/n  
143 = 4,2 cm³/n      149 = 4,9 cm³/n      159 = 5,9 cm³/n  
165 = 6,5 cm³/n      178 = 7,5 cm³/n

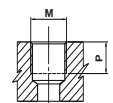
**Group 2**  
204 = 4,2 cm³/n      206 = 6,0 cm³/n      209 = 8,4 cm³/n  
211 = 10,8 cm³/n      214 = 14,4 cm³/n      217 = 16,8 cm³/n  
219 = 19,2 cm³/n      222 = 22,8 cm³/n      226 = 26,2 cm³/n  
230 = 30,0 cm³/n      240 = 40,0 cm³/n

**Group 3**  
315 = 15,0 cm³/n      318 = 18,0 cm³/n      321 = 21,0 cm³/n  
327 = 27,0 cm³/n      332 = 32,0 cm³/n      338 = 38,0 cm³/n  
343 = 43,0 cm³/n      347 = 47,0 cm³/n      351 = 51,0 cm³/n  
354 = 54,0 cm³/n      361 = 61,0 cm³/n      364 = 64,0 cm³/n  
370 = 70,0 cm³/n      374 = 74,0 cm³/n      390 = 90,0 cm³/n

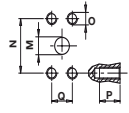
**12 Voltage for optionals (where applicable)**  
0 = Without  
1 = 12V DC  
2 = 24V DC

**13 Optional**  
0 = Without  
VS = Purge valve  
LB = Level by-pass  
FLT = Filter without clogging indicator  
FLT1 = Filter with clogging indicator  
MOB = Man on board  
RS = Angle sensor  
REV.S = RPM Sensor  
PRS = Pressure sensor  
G/U/N/M/- = Port threads and restrictor diameter (see right table)

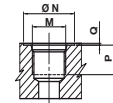
PORTS



TYPE	M		mm	P	in
	mm	Nm			
G2	1/4"	GAS BSPP	17	12	0,47
G6	3/4"	GAS BSPP	90	15	0,75



TYPE	M		N		Q		P		O	
	mm	in	mm	in	mm	in	mm	in	mm	Nm
N6	19	0,75	50,8	2	23,8	0,94	20	0,79	M10	38



TYPE	SIZE	N		P		Q		M	
		mm	in	mm	in	mm	in	7/16-20 UNF	Nm
U2	1/4"	21	0,83	12	0,47	0,3	0,01	17	17
U6	3/4"	42	1,65	18	0,70	0,3	0,01	1-1/16-12 UNF	90

COMBINATIONS

TYPE	S	A - B	L1 - L2	a - b	P1 - P2	M1 - M2
	INLET	OUTLET	DRAIN	PILOT	PRESSURE INTAKE	MANOMETER INTAKE
<b>G</b>	G6	G6	G6	G2	G2	G2
<b>U</b>	U6	U6	U6	U2	G2	U2
<b>N</b>	G6	N6	G6	G2	G2	G2
<b>M</b>	U6	N6	U6	U2	G2	U2