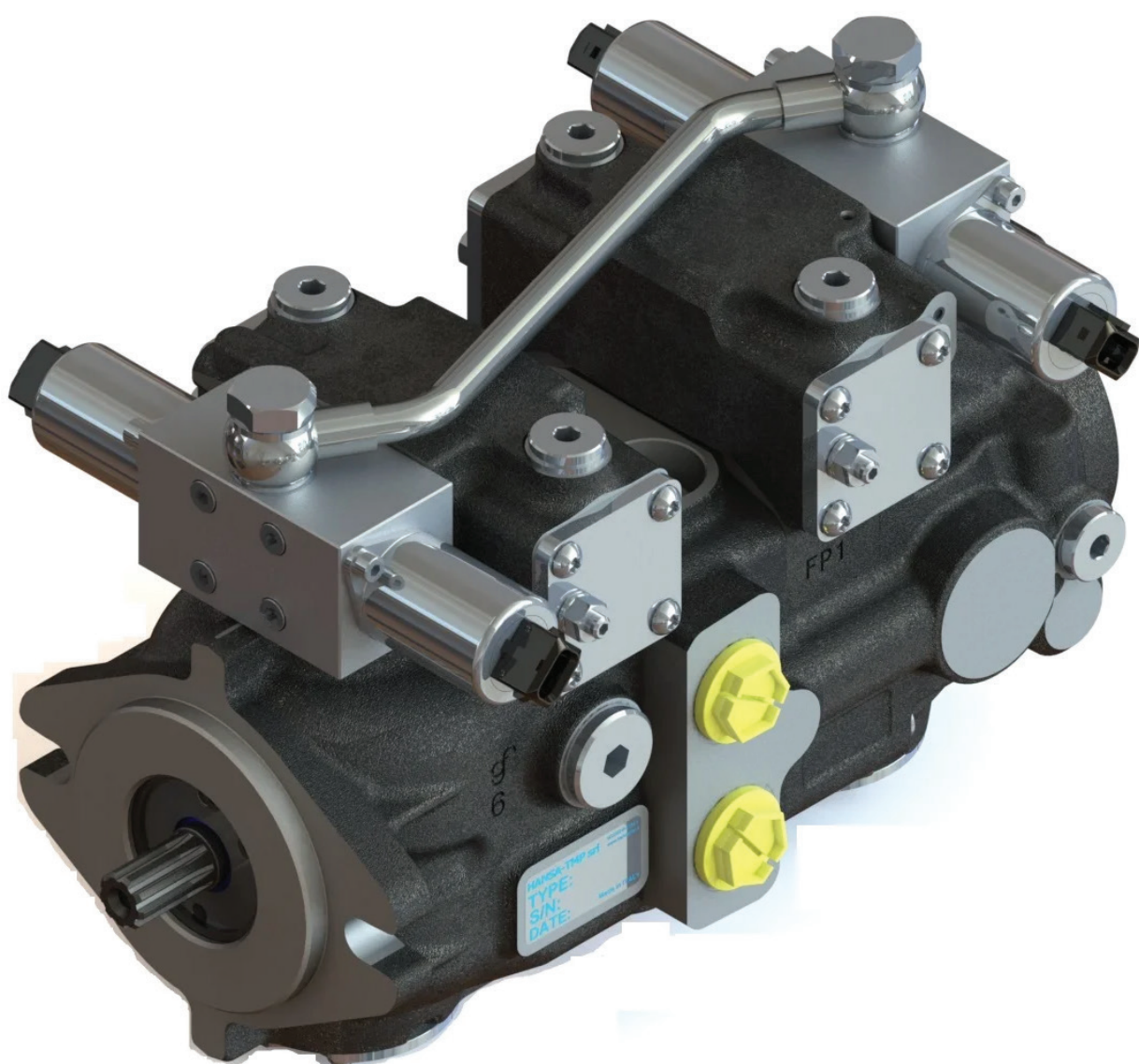




HANSA-TMP
MANUFACTURING YOUR SUCCESS

TPV 1300

The **TPV 1300** from HANSA-TMP is a compact tandem axial piston pump for closed-loop hydrostatic transmissions, offering enhanced fatigue resistance, reduced noise, and improved precision thanks to its updated design. The BTB system makes it even more compact, ideal for those who need to save space.



Applications:

- » Mini Dumper
- » Skid Steer loaders
- » Lawn Mowers
- » Sweepers
- » Tracked Vehicles

Scan the QR code to download our TPV 1300 catalog



ORDER CODE TPV 1300																		
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Model code single pump		Model code triple pump																
TPV/TPVS 1300		06 06	CR	SS2	B	F1	SHI SHI	OAL OAL	20 20	06	20	000	B2	000	0	00	G	00
TPVT3		06 06 06		SHI SHI SHI OAL OAL OAL 20 20 20														

0. Pump model

- TPV = Closed loop circuit tandem pump
- TPVS = Closed loop circuit special tandem pump
- TPV-T3 = Closed loop circuit triple pump

1. Pump series

1300 = TPV 1300

2. Displacement

6 = 7.4 cm³/rev	8 = 8.9 cm³/rev	9 = 9.6 cm³/rev	11 = 11.2 cm³/rev
12 = 12.8 cm³/rev	13 = 13.6 cm³/rev	15 = 15 cm³/rev	17 = 17.1 cm³/rev
18 = 18.2 cm³/rev	19 = 19.4 cm³/rev	21 = 21.15 cm³/rev	

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 D.P.)
- PS3 = Parallel keyed shaft 18 mm. diam. with increased bearing for external radial load
- SS2 = Splined shaft Z9 - 16/32" D.P.
- SS4 = Splined shaft Z11 - 16/32 D.P.

5. Swashplate bearings

- B = Bushings
- C = Needle roller bearing

6. Mounting flange

- F1 = SAE-A 2 holes - pilot diam. 82,55 mm.
- F2 = SAE-B 2 holes - pilot diam. 101,6 mm. (available only with servo-control)

7. Pump controls

- DM = Direct mechanical (without control lever)
- BC = Tapered bush
- LC = Direct Mechanical Control with Lever
- DMS = Control lever with return to zero position (torsion spring standard diameter 3,6 mm.)
- DMS(30) = Control lever with return to zero position (torsion spring diameter 3 mm.)
- DMS(33) = Control lever with return to zero position (torsion spring diameter 3,3 mm.)
- DMS(44) = Control lever with return to zero position (torsion spring diameter 4 mm.)
- DMS(50) = Control lever with return to zero position (torsion spring diameter 5 mm.)
- DMZ = Control lever with return to zero position (red compression spring)
- SHI = Hydraulic servo control
- SHIC = Compact Hydraulic servo control
- SEI 1 = Electro-proportional servo control 12V DC
- SEI 2 = Electro-proportional servo control 24V DC
- SEI1 D = Electro-proportional servo control 12V DC (Deutsch connector)
- SEI2 D = Electro-proportional servo control 24V DC (Deutsch connector)

	F1	F2
DM	x	
BC	x	
LC	x	
DMS	x	
DMZ	x	x
SHI	x	x
SHIC	x	x
SEI 1	x	x
SEI 2	x	x
SEI1 D	x	x
SEI2 D	x	x

8. Control devices position

Device control DM, BC

- OA = Upper position
- OB = Lower position

Device control LC, DMS e DMZ

- LA = Left lever upper position
- LB = Lower position
- RA = Left lever lower position
- RB = Right lever lower position

Device control SHI - SEI (all)

- OAL = Upper servo position, left zero screw (STD)
- OBL = Lower servo position, left zero screw
- OAR = Upper servo position, right zero screw
- OBR = Lower servo position, right zero screw

	OA	OB	LA	LB	RA	RB	OAL	OBL	OAR	OBR
DM	x	x								
BC	x	x								
LC			x	x	x	x				
DMS			x	x	x	x				
DMZ			x	x	x	x				
SHI							x	x	x	x
SEI							x	x	x	x

ORDER CODE TPV 1300

Model code single pump
Model code triple pump

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TPV/TPVS 1300	06 06	CR	SS2	B	F1	SHI SHI	OAL OAL	20 20	06	20	000	B2	000	0	00	G	00	
TPVT3	06 06 06					SHI SHI SHI	OAL OAL OAL	20 20 20										

9. Relief valve pressure setting

10=10 Mpa	15= 15 Mpa	18= 18 Mpa	20= 20 Mpa
25= 25 Mpa	28= 28 Mpa	30= 30 Mpa	35= 35 Mpa

10. Boost pump

00 (yy) = Without boost pump [indicate flow rate (yy)]
6 = Boost pump STD C-B1-B2 (5,4 cm³/rev)
For pressures other than STD, required between 0.5 MPa and 3 MPa MAX (calibration carried out at 1000 rpm). If in doubt contact our technical department.

11. Boost pressure

05 = 0.5 MPa	06 = 0.6 MPa (1)	07 = 0.7 MPa	08=0.8 Mpa	09=0.9 Mpa	10=1.0 Mpa
11=1.1 Mpa	12=1.2 Mpa	13=1.3 Mpa	14=1.4 Mpa	15=1.5 Mpa	16=1.6 Mpa
17=1.7 Mpa	18=1.8 Mpa	19=1.9 Mpa	20=2.0 Mpa (2)	21=2.1 Mpa	22=2.2 Mpa
23=2.3 Mpa	24=2.4 Mpa	25=2.5 Mpa	26=2.6 Mpa	27=2.7 Mpa	28=2.8 Mpa
29=2.9 Mpa	30=3.0 Mpa				

12. Boost flow rating

000 = Like boost pump	030 = 3 l/min	035 = 3,5 l/min	040 = 4 l/min	045 = 4,5 l/min	050 = 5 l/min
055 = 5,5 l/min	060 = 6 l/min	065 = 6,5 l/min	070 = 7 l/min	075 = 7,5 l/min	080 = 8 l/min
085 = 8,5 l/min	090 = 9 l/min	095 = 9,5 l/min	100 = 10 l/min	110 = 11 l/min	120 = 12 l/min
130 = 13 l/min	140 = 14 l/min	150 = 15 l/min	160 = 16 l/min	170 = 17 l/min	180 = 18 l/min
190 = 19 l/min	200 = 20 l/min	210 = 21 l/min	220 = 22 l/min	230 = 23 l/min	240 = 24 l/min
250 = 25 l/min	260 = 26 l/min	270 = 27 l/min	280 = 28 l/min	290 = 29 l/min	
300 = 30 l/min	310 = 31 l/min	320 = 32 l/min	330 = 33 l/min	340 = 34 l/min	

WARNING: For red flow rate, contact our technical department.

13 - Cover/rear mounting flange

C = Closed cover
C-B1 = for German standard pump group 1 mounting
B1 = Closed cover (without rear fitting)
B2 = SAE A 2 bolt female standard (ANSI B92.1a - 9T - 16/32" D.P.)

14. Gear pump displacement

000 = without gear pump

Group 1			
109=0.9 cm³/n	112=1.2 cm³/n	117=1.7 cm³/n	122=2.1 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
198=9.8 cm³/n			

Group 2			
204 = 4,2 cm³/n	206 = 6,0 cm³/n	209 = 8,4 cm³/n	211= 11 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	234 = 34,2 cm³/n	240 = 40,0 cm³/n

15. Gear pumps connections

0 = Without gear pump
F = Connection with holes for flange
G = Connection with GAS holes (BSPP)

Attention: For GR 1 pumps, GAS ports is standard; for GR 2 pumps flanged is standard

16. Optional

00 = Without optional
FB = Conversion flange from SAE-A to SAE-B
VS = Purge valve
ST = Conversion coupling from 9 teeth to 13 teeth
SB = Screw by-pass
SB (0.8) = Perforated screw by-pass ø0.8 for DMS control pumps
SB1 = Screw by-pass (rotated position of 180° - lower)
SB1 (0.8) = Perforated screw by-pass ø0.8 for DMS control pumps (rotated position of 180° - lower)
FBST = Conversion flange from SAE-A to SAE-B + Conversion shaft 9 teeth to 13 teeth
MOB = Man On Board (only SHI and SEI versions)

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Model code single pump
Model code triple pump

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TPV/TPVS 1300	06	06	CR	SS2	B	F1	SHI SHI	OAL OAL	20 20	06	20	000	B2	000	0	00	G	00
TPVT3		06 06 06					SHI SHI SHI	OAL OAL OAL	20 20 20									

17. Ports

COMBINATION	S	A-B	T-T1	P1-P2	Ma-Mb	IN-OUT	G
	Suction	Ports	Tanks	Pilot	Pressure connection	Remote Filter connection	Suction pressure connection
G=GAS Ports (STD)	1/2" BSPP	1/2" BSPP	1/2" BSPP	1/4" BSPP	1/4" BSPP	3/8" BSPP	1/4" BSPP
U=UNF Ports (1)	7/8-14 UNF	7/8-14 UNF	7/8-14 UNF	9/16-18 UNF	9/16-18 UNF	7/8-14 UNF	9/16-18 UNF

Note 1: only on request and minimum quantity of 50 pieces.

18. Restrictor on servo control (only SHI and SEI versions)

- 00 = Without restrictor
- 06 = Restrictor orifice ø0,6 mm
- 07 = Restrictor orifice ø0,7 mm
- 08 = Restrictor orifice ø0,8 mm
- 10 = Restrictor orifice ø1,0 mm
- 12 = Restrictor orifice ø1,2 mm



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Technical data

TPV 1300 series		TPV 6-7	TPV 8-7	TPV 9-7	TPV 11-7	TPV 12-7	TPV 13-7	TPV 15-9	TPV 17-9	TPV 18-9	TPV 19-9	TPV 21-9
Displacement	Cm³/rev.	7,4	8,9	9,6	11,2	12,8	13,6	15,00	17,1	18,2	19,4	21,15
Flow rated at 3600 rpm	l/min	25,01	31,96	34,74	40,32	46,08	48,88	54,00	61,77	66,37	69,84	76,4
Power rating (at 3600 rpm and 30 MPa)	kW	8,75	11,18	12,15	14,11	16,12	17,11	18,9	21,61	23,23	24,44	31,73
Boost pump displacement (single pump)	Cm³/rev.	5,4										
Continuos working pressure	MPa	30							25		22	
Max pressure	MPa	35							30		28	
Max relief valve setting	MPa	38										
Boost pressur relief valve settings (at 1000 rpm)	MPa	0,6 (Mechanical Control) 2 (Hydraulic / Electric Servo Control)										
Suction pressure	MPa	>/=0,008										
Max housing pressure	MPa	0,15										
Minimum rotation speed	Rpm	500										
Maximum rotation speed	Rpm	3600										2900
Maximum rotation peak speed	Rpm	3900										3200
Max fluid temperature	C°	80°										
Fluid viscosity	cSt	15-40										
Fluid contaminations		19/17/14 ISO 4406 (NAS 8)										
Mass (single pump)	Kg	11										
Mass (tandem pump)	Kq	23										

Hansa TMP – Your Partner in Hydraulics !

Since 1984, with headquarters and operations in the Hydraulic Valley of Modena-ITALY, we produce, design and distribute hydraulic components. We are specialized in the integration of complete hydraulic systems that involve the use of fluid technology in connection with electronics.



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