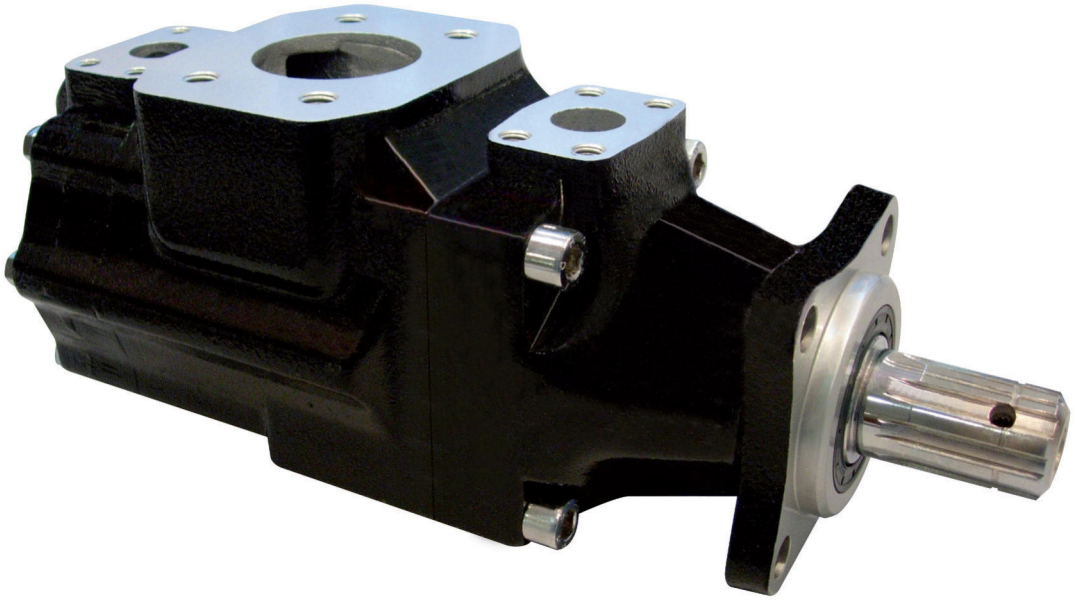

Mobile Hydraulic Pumps T6G, T67G, T6ZC

Denison Vane Technology, fixed displacement

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Parker

ENGINEERING YOUR SUCCESS.

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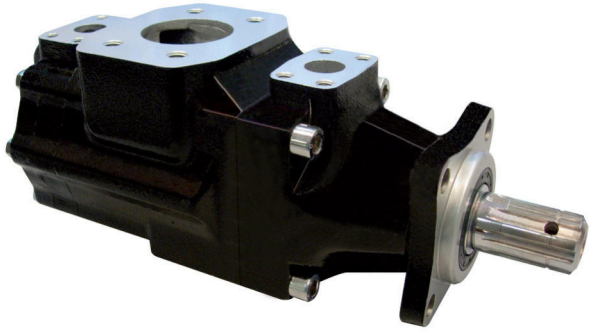

FEATURES

These pumps are specially designed for PTO drives for direct installation (Tipping trucks, refuse trucks, cranes...)

These T6 and T67 series vane pumps have been equipped with B or C cartridges in mobile version. The combination of different cartridges in single and double pumps allows low flow at high pressure and high flow at lower pressure. This is the clever way to optimize your circuit design. In double pumps, the large suction port is common.

GREATER FLOW

B size cartridge : 5,8 to 50,0 ml/rev.
C size cartridge :10,8 to 100,0 ml/rev.

HIGHER PRESSURE

B size cartridge : 300 bar max.
C size cartridge : 275 bar max.

WIDE SPEED RANGE

400 to 2800 RPM.

BETTER EFFICIENCY

Over 94% under high pressure, which increases the productivity and reduces the heating and operations costs.

HIGH SHAFT LOAD CAPABILITY

High shaft load capability up to 7500 N radial load on T6GC shaft.

LOW NOISE LEVELS

Increases operator safety and eases machines acceptances.

MOUNTING FLEXIBILITY

Single pump : 4 different positions
Double pump : 32 different positions

CARTRIDGE DESIGN

Interchangeable cartridges permit easy conversion and service at a minimum cost and minimum contamination risk.

WIDE RANGE OF ACCEPTABLE VISCOSITIES

Viscosities from 2000 to 10 cSt permit colder starts and hotter running. The balanced design compensates for wear and temperature changes.

FIRE RESISTANT FLUIDS AND BIODEGRADABLE FLUIDS

Phosphate esters, organic esters, chlorinated hydrocarbons, water glycols rapeseed may be pumped at high pressures and with long service life by these pumps.

GENERAL CHARACTERISTICS

	Mounting standard	Weight without connector and bracket - kg	Moment of inertia $kgm^2 \times 10^{-4}$	SAE 4 bolts J518c - ISO/DIS 6162-1		
				Suction	Pressure	
T6ZC	3 bolts	14,1	8,6	1.1/2”	1” BSPP threads	
T6GC/T67GB	R. 17 - 102	18,0	9,1	1.1/2”	1” SAE threads	
					P1	P2
T6GCC	R. 17 - 102	27,2	15,9	3” 3” 2.1/2” 2.1/2”	1” 1” 1” 1”	1” 3/4” 1” 3/4”

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Size	Series	Theoretical Displacement Vi	Minimum Speed	Maximum Speed		Maximum Pressure					
				HF-0,HF-1 HF-2	HF-3, HF-4 HF-5	HF-0, HF-2		HF-1, HF-4, HF-5		HF-3	
						Int.	Cont.	Int.	Cont.	Int.	Cont.
		ml/rev.	RPM	RPM	RPM	bar	bar	bar	bar	bar	bar
B	B02	5,8	600	3600	1800	300	275	240	210	175	140
	B03	9,8									
	B04	12,8									
	B05	15,9									
	B06	19,8									
	B07	22,5									
	B08	24,9									
	B10	31,8									
	B12	41,0		3000							
	B15	50,0				280	240				
C	B03	10,8	400	2800	1800	275	240	210	175	175	140
	B05	17,2									
	B06	21,3									
	B08	26,4									
	B10	34,1									
	B12	37,1									
	B14	46,0									
	B17	58,3									
	B20	63,8									
	B22	70,3									
	B25	79,3		2500							
	B28	88,8				210	160		160		
	B31	100,0									

HF-0, HF2 = Antiwear Petroleum Base HF-1 = Non Antiwear Petroleum Base HF-5 = Synthetic Fluids
HF-3 = Water in oil Emulsions HF-4 = Water Glycols

For further information or if the performance characteristics outlined above do not meet your own particular requirements, please consult your local Parker representative.

MINIMUM ALLOWABLE INLET PRESSURE (BAR ABSOLUTE)

Cartridges		Speed RPM								Series
Size	Series	1800	2100	2200	2300	2500	2800	3000	3600	
B	B02-B03-B04-B05	0,80	0,80	0,80	0,80	0,80	0,80	0,80	0,80	B02-B03-B04-B05
	B06-B07							0,82	0,98	B06-B07
	B08							0,85	1,05	B08
	B10							0,90	1,15	B10
	B12									B12
	B15					0,84	0,99	0,92		B15
C	B03	0,80	0,80	0,80	0,80	0,90	1,00			B03
	B05									B05
	B06									B06
	B08									B08
	B10									B10
	B12				0,85	0,92				B12
	B14					0,95				B14
	B17			0,85	0,90		1,03			B17
	B20									B20
	B22		0,85	0,90		0,98	1,05			B22
	B25		0,90	0,95	0,95	1,05				B25
	B28			0,98	0,98	1,08				B28
	B31		0,85	0,90	1,00	1,11				B31

Inlet pressure is measured at inlet flange with petroleum base fluids at viscosity between 10 and 65 cSt. The difference between inlet pressure at the pump flange and atmospheric pressure must not exceed 0,2 bar to prevent aeration.
Multiply absolute pressure by 1,25 for HF-3, HF-4 fluids.
by 1,35 for HF-5 fluid.
by 1,10 for ester or rapeseed base.

For double pumps, prefer the cartridge requiring the highest absolute pressure.

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Model No. T6GCC - B22 - B08 - 6 R 00 - B 1 - 00

Series

Cam ring for "P1" & "P2"
(Delivery at 0 bar & 1500 r.p.m.)
B03 = 16,2 l/min
B05 = 25,8 l/min
B06 = 31,9 l/min
B08 = 39,6 l/min
B10 = 51,1 l/min
B12 = 55,6 l/min
B14 = 69,0 l/min
B17 = 87,4 l/min
B20 = 95,7 l/min
B22 = 105,4 l/min
B25 = 118,9 l/min
B28 = 133,2 l/min
B31 = 150,0 l/min

Type of shaft
6 = splined (DIN 5462)

Direction of rotation (view on shaft end)
R = clockwise
L = counter-clockwise

Modification

Mounting W/connection variables

	P1 = 1" - S = 3"		P1 = 1" - S = 2.1/2"[2]	
Code	00-0M	01-M0	10-1M	11-M1
P2	1"	3/4" [1]	1"	3/4" [1]

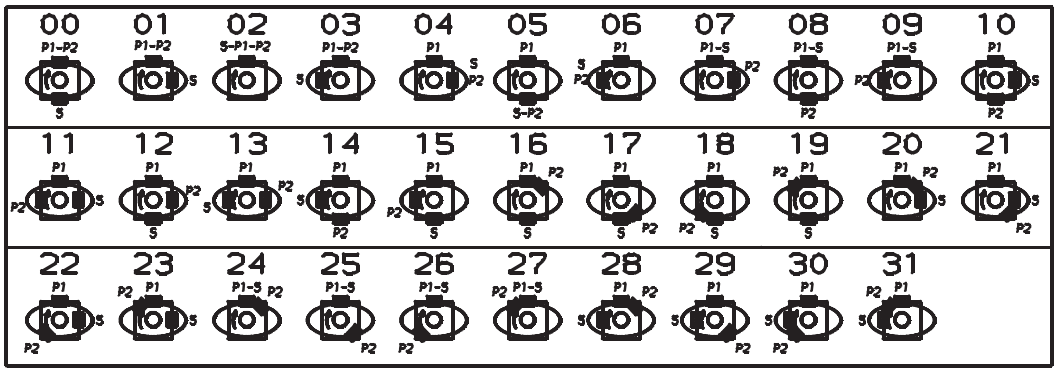
0 = UNC thread M = metric thread
[1] for 46 ml/rev. max.
[2] for 126 ml/rev. max.
The larger cartridge must always be mounted in the front.

Seal class
1 = S1 - BUNA N

Design letter

Porting combination
00 = standard

P = Pressure port
S = Suction port



OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Series	Volumetric Displacement Vi	Speed n [R.P.M.]	Flow Q [l/min]			Input power P [kW]		
			p = 0 bar	p = 140 bar	p = 240 bar	p = 7 bar	p = 140 bar	p = 240 bar
B03	10,8 ml/rev	1000 1500	10,8 16,2	- 10,7	- -	1,0 1,3	- 5,3	- -
B05	17,2 ml/rev	1000 1500	17,2 25,8	11,7 20,3	- 15,8	1,1 1,4	5,1 7,5	- 12,2
B06	21,3 ml/rev	1000 1500	21,3 31,9	15,8 26,5	11,3 22,0	1,1 1,5	6,0 8,9	10,0 14,7
B08	26,4 ml/rev	1000 1500	26,4 39,6	20,9 34,1	16,4 29,6	1,2 1,6	7,2 10,7	12,1 17,7
B10	34,1 ml/rev	1000 1500	34,1 51,1	28,6 45,7	24,1 41,2	1,3 1,7	8,9 13,4	15,1 22,3
B12	37,1 ml/rev	1000 1500	37,1 55,6	31,6 50,2	27,1 45,7	1,3 1,7	9,6 14,4	16,3 24,1
B14	46,0 ml/rev	1000 1500	46,0 69,0	40,5 63,5	36,0 59,0	1,4 1,9	11,7 17,6	19,9 29,5
B17	58,3 ml/rev	1000 1500	58,3 87,4	52,8 82,0	48,3 77,5	1,6 2,1	14,5 21,9	24,8 36,9
B20	63,8 ml/rev	1000 1500	63,8 95,7	58,3 90,2	53,8 85,7	1,6 2,2	15,8 23,8	27,0 40,2
B22	70,3 ml/rev	1000 1500	70,3 105,4	64,8 100,0	60,3 95,5	1,7 2,3	17,3 26,1	29,6 44,1
B25[1]	79,3 ml/rev	1000 1500	79,3 118,9	73,8 113,5	69,3 109,0	1,8 2,5	19,3 29,2	33,2 49,5
B28[1]	88,8 ml/rev	1000 1500	88,8 133,2	83,3 127,7	80,1[2] 124,5[2]	1,9 2,8	21,9 32,7	32,5[2] 48,5[2]
B31[1]	100,0 ml/rev	1000 1500	100,0 150,0	94,5 144,5	91,3[2] 141,3[2]	2,0 2,8	24,4 36,5	36,4[2] 54,4[2]

[1] B25 - B28 - B31 = 2500 R.P.M. max. *[2] B28 - B31 = 210 bar max. int.*
- Not to use if the internal leakage is greater than 50% of the theoretical flow.

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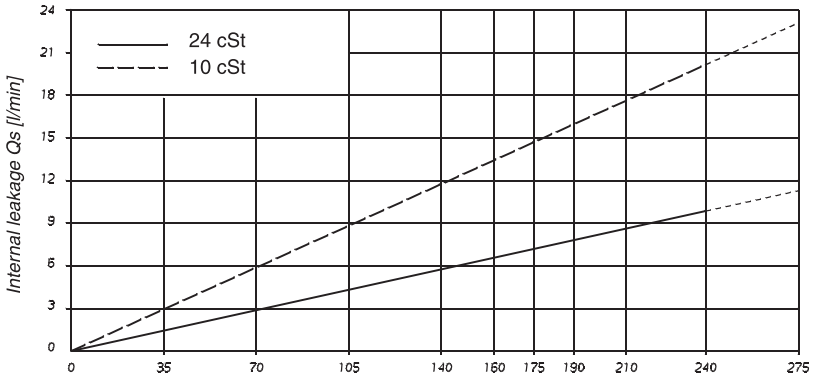
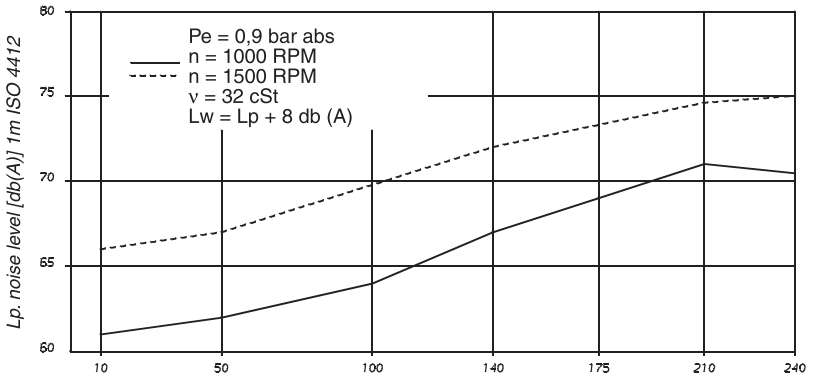
INTERNAL LEAKAGE (TYPICAL)



Pressure p [bar]

Do not operate pump more than 5 seconds at any speed or viscosity if the internal leakage is more than 50% of the theoretical flow.

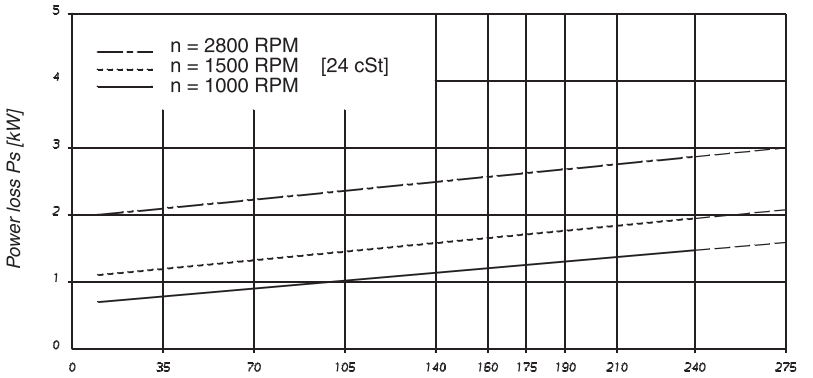
NOISE LEVEL (TYPICAL) T6GCC - B22 - B22



Pressure p [bar]

Double pump noise level is given with each section discharging at the pressure noted on the curve.

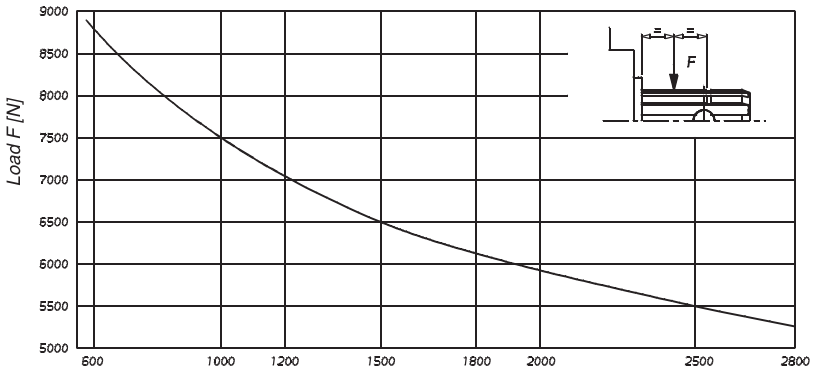
POWER LOSS HYDROMECHANICAL (TYPICAL)



Pressure p [bar]

Total hydrodynamic power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD - T6GCC



Speed n [RPM]

Life time 3000 hours when 70% of the time at 500 N and 30% at max. load.

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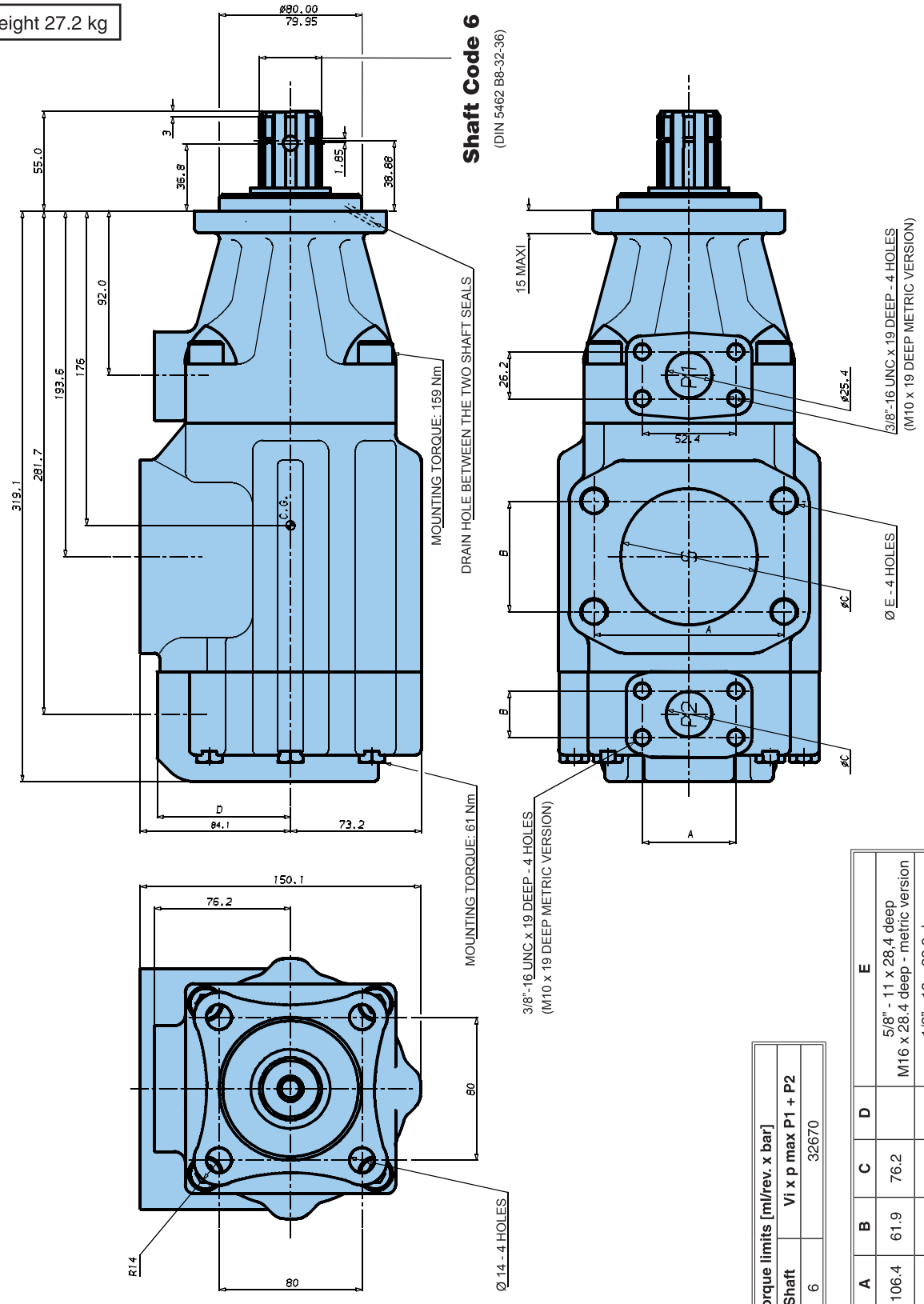
Weight 27.2 kg



Shaft torque limits [ml/rev. x bar]		
Pump	Shaft	Vi x p max P1 + P2
T6GCC	6	32670

Port	Code	A	B	C	D	E
S	3"	106.4	61.9	76.2		5/8" - 11 x 28,4 deep M16 x 28.4 deep - metric version
S	2.1/2"	88.9	50.8	63.5		1/2" - 13 x 23,9 deep M12 x 23.9 deep - metric version
P1	1"	52.4	26.2	25.4	76.2	
P2	3/4"	47.7	22.4	19.0	76.2	
P2	1"	52.4	26.2	25.4	74.7	

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