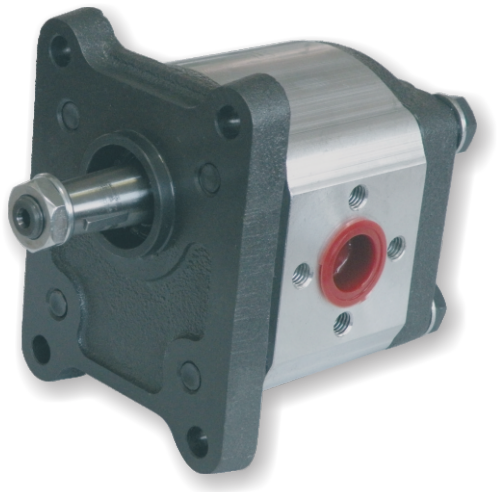
POMPE SUPERSILENȚIOASE CU ROȚI DINȚATE SS-HP2F
SUPERSILENT GEAR PUMPS SS-HP2F



Descriere şi utilizare

Sunt varianta supersilențioasă a pompelor HP2F.
Datorită construcției interne, au nivel de zgomot foarte scăzut, cu circa 10dB mai mic decât pompele standard.
Construcția cu flanșă și capac din fontă și corp din aluminiu extrudat conferă produsului performanțe îmbunătățite, o durată mai mare de viață, valori mai ridicate ale presiunii nominale de lucru și presiunii maxime. Aceste performanțe le recomandă pentru înlocuirea pompelor standard de aluminiu în aplicații în care sunt solicitate presiuni de lucru mai mari și durată mai mare de viață.
Aplicații: sistemele hidraulice moderne, mașini agricole, echipamente mobile, utilaje de ridicat și transport, utilaje terasiere grele, mașini unelte etc.

Description and use

Are the super-silent variant for the HP2F pumps.
The internal construction ensure a very low noise level, about 10dB less than standard pumps.
The construction with cast iron flange and cover give the product higher performances, allow a longer life, improving the working and maximum pressures.
These performances it recommend for the replacement of standard aluminum pumps in applications that ask for higher working pressures and longer life.
Applications: in modern hydraulic systems, agricultural machines, mobile, heavy-duty equipment for transport and earth moving, machines tools etc.

Codificare – *Codification*

SS-HP2F – Vg (cm3/rot, *ccm/rev*) – Ax antrenare / *Driving shaft* – Flanşa prindere / *Fastening flange* – Flanşa aspiraţie / *Inlet port* – Flanşa refulare / *Outlet port* – Sens / *Rotation*

Vg (cm3/rot, *ccm/rev*)
6.3
8.2
11.3
14
16
19
22.5
25
27.9

Ax antrenare / *Driving shaft*	
1	Conic 1:5 BOSCH *Conical 1:5 BOSCH*
D	Conic 1:5 BOSCH *Conical 1:5 BOSCH*
3	Conic 1:8 PLESSEY *Conical 1:8 PLESSEY*
5	Canelat-*involute spline* B 17x14 DIN 5482
A	Canelat-*involute spline* SAE 9T 16/32 Dp
L	Canelat-*involute spline* SAE 9T 16/32 Dp
E	Cilindric Ø15.875 *Cylindrical Ø15.875*
T	Cilindric scurt Ø15.875 *Cilindrical short Ø15.875*
0	Cilindric Ø17.45 *Cylindrical Ø17.45*
B	Cep DEUTZ - scurt *Deutz pin - short*
F	Cep DEUTZ - lung *Deutz pin - long*
G	Cep DEUTZ - scurt cu frezare *DEUTZ pin - short with milling*

Flanşa prindere / *Fastening flange*	
1	PLESSEY (4xØ7)
3	PLESSEY (4xØ9)

Flanşa aspiraţie / *Inlet port*	
3 4 8 D E M	Variante PLESSEY *PLESSEY Variants*
V W	Variante SAE *SAE Variants*
2 A B	Variante DIN *DIN Variants*
1 9 F G H J T	Variante filetate BSPP *Threaded Variants BSPP*
7 K N P Q R	Variante filetate ISO (metric) *Threaded Variants ISO (metrical)*
6 S U Y	Variante filetate UNF *Threaded Variants UNF*
0	Obturată *Closed*

Flanşa refulare / *Outlet port*	
3 4 8 D E M	Variante PLESSEY *PLESSEY Variants*
V W	Variante SAE *SAE Variants*
2 A B	Variante DIN *DIN Variants*
1 9 F G H J T	Variante filetate BSPP *Threaded Variants BSPP*
7 K N P Q R	Variante filetate ISO (metric) *Threaded Variants ISO (metrical)*
6 S U Y	Variante filetate UNF *Threaded Variants UNF*
0	Obturată *Closed*

Sens / *Rotation*	
A	(stânga) *(Anticlockwise)*
C	(dreapta) *(Clockwise)*

"0" daca aspiraţia şi refularea nu sunt pe corpul pompei
"0" if inlet or outlet ports are not on the body of the pump.

Exemplu - *Example*

SS-HP2F	–	11.3	–	3	3	1	1	–	A

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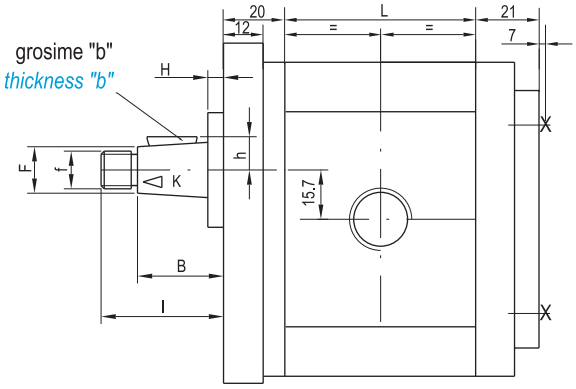
POMPE SUPERSILENȚIOASE CU ROȚI DINȚATE SS-HP2F
SUPERSILENT GEAR PUMPS SS-HP2F

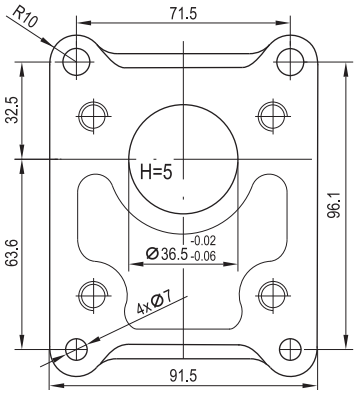
Axe antrenare - *Driving shafts*

Axe conice - Variantele 1; 3; D
Conical shafts - Variants 1; 3; D

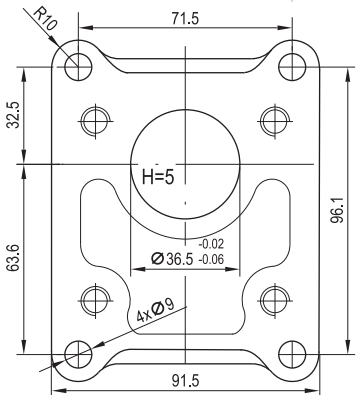


Flanşe de prindere - *Fastening Flanges*

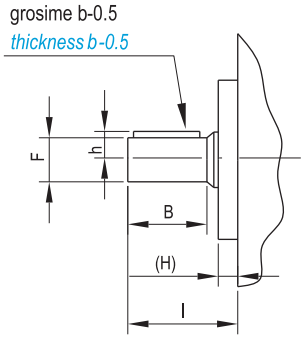
Varianta 1 (Plessey)
Variant 1 (Plessey)



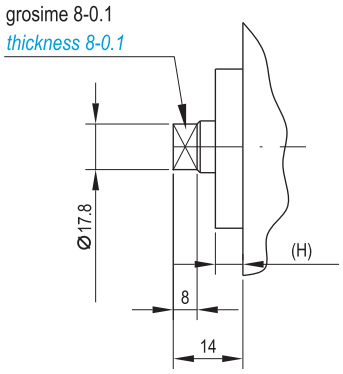
Varianta 3 (Plessey)
Variant 3 (Plessey)



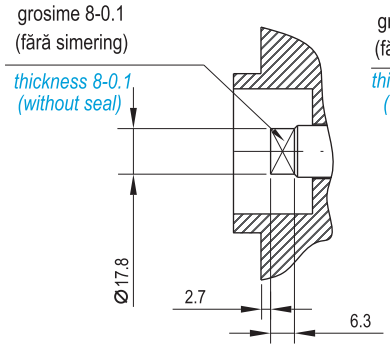
Axe cilindrice Variantele O; E; T
Cylindrical shafts Variants O; E; T



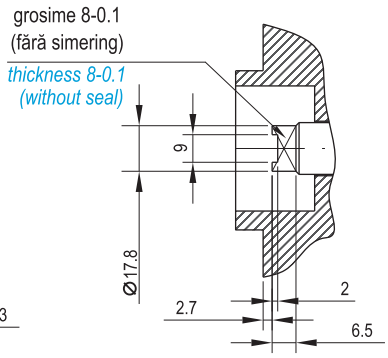
Cep DEUTZ lung Varianta F
DEUTZ pin - long Variant F



Cep DEUTZ scurt Varianta B
DEUTZ pin - short Variant B



Cep DEUTZ scurt Varianta G
DEUTZ pin - short Variant G

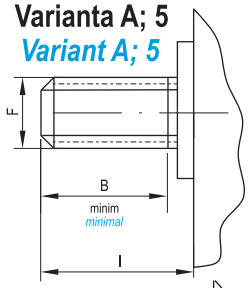


Axe antrenare - *Driving shafts*

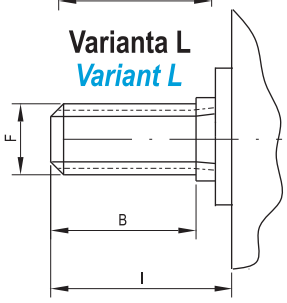
Variantă *Variant*	Tip ax *Shaft type*	l (mm)	B (mm)	F (mm)	f (mm)	k	h (mm)	b (mm)	Mmax (Nm)
1	Conic 1:5 BOSCH *Conical 1:5 BOSCH*	38	24.8	13.6	M12x1.25	1:5	9.2	3	150
D	Conic 1:5 BOSCH *Conical 1:5 BOSCH*	40.5	27.3	13.6	M12x1.25	1:5	9.5	3	150
3	Conic 1:8 PLESSEY *Conical 1:8 PLESSEY*	39	27.4	14.8	M12x1.25	1:8	9.4	3.2	180
5	Canelat *Grooved* B17x14 DIN 5482	26	19	16.5	-	-	-	-	75
A	Canelat *Grooved* SAE 9T 16/32 Dp	31.5	19	15.5	-	-	-	-	70
L	Canelat *Grooved* SAE 9T 16/32 Dp	32	24	15.5	-	-	-	-	70
0	Cilindric Ø17.45 *Cylindrical Ø17.45*	43	37	17.45 $^{0}_{-0.02}$	-	-	11.1	4.76	70
E	Cilindric Ø15.875 *Cylindrical Ø15.875*	44.5	36.5	15.87 $^{0}_{-0.02}$	-	-	9.7	3.96	65
T	Cilindric Ø15.875 *Cylindrical Ø15.875*	32	25.4	15.87 $^{0}_{-0.02}$	-	-	9.7	3.96	50
F	Cep DEUTZ - lung *DEUTZ pin - long*	-	-	-	-	-	-	-	65
B	Cep DEUTZ - scurt *DEUTZ pin - short*	-	-	-	-	-	-	-	65
G	Cep DEUTZ cu frezare *DEUTZ pin with milling*	-	-	-	-	-	-	-	65

Axe canelate - *Grooved shafts*

Varianta A; 5
Variant A; 5



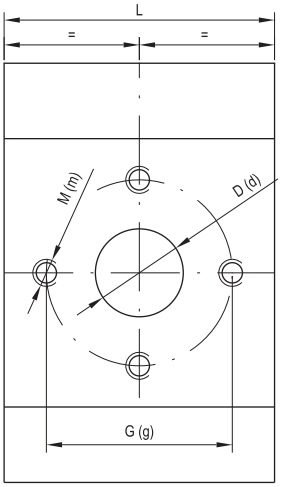
Varianta L
Variant L



POMPE SUPERSILENȚIOASE CU ROȚI DINȚATE SS-HP2F
SUPERSILENT GEAR PUMPS SS-HP2F

Flanşe aspiraţie-refulare - *Inlet-outlet ports*

Variante PLESSEY - *PLESSEY Variants*



Vg cm3/rev	L mm
6.3	48.6
8.2	51.7
11.3	56.8
14	61.3
16	64.7
19	69.7
22.5	75.1
25	79.2
27.9	84

tip 3 - *type 3*

inlet			outlet		
D	G	M	d	g	m
13.1	30.2	M6	13.1	30.2	M6
19	39.7	M8	14.2	30.2	M6
22	39.7	M8	16	39.7	M8

tip 8 - *type 8*

inlet			outlet		
D	G	M	d	g	m
13	30.2	M6	13	30.2	M6
19	39.7	M8			
22	39.7	M8			

tip M - *type M*

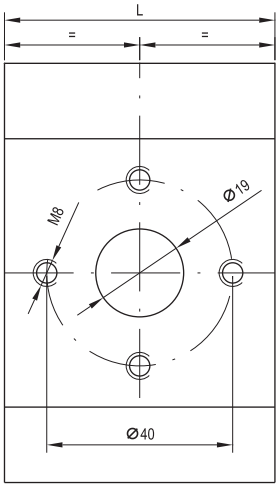
inlet			outlet		
D	G	M	d	g	m
13	30	M6	13	30	M6
19	40	M8	19	40	M8

tip 4 - *type 4*

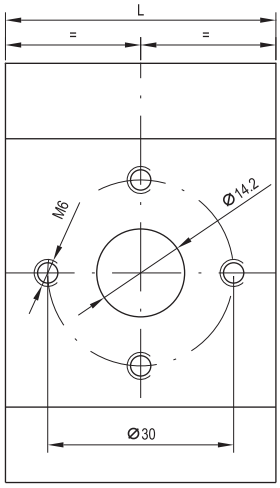
inlet			outlet		
D	G	M	d	g	m
15	30.2	M6	15	30.2	M6
20	39.7	M8			

Variante SAE - *SAE variants*

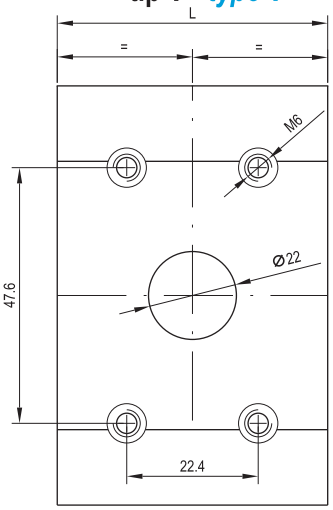
tip D - *type D*



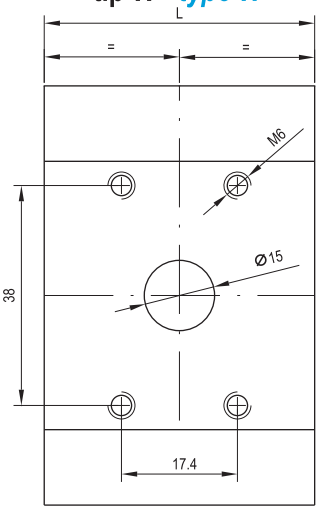
tip E - *type E*



tip V - *type V*



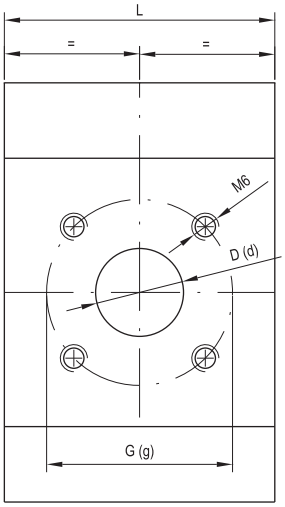
tip W - *type W*



Numai pentru Vg = 11,3 - 27,9 cm3/rot
Only for Vg = 11,3 - 27,9 ccm/rev

Variante DIN - *DIN variants*

tip 2 - *type 2*

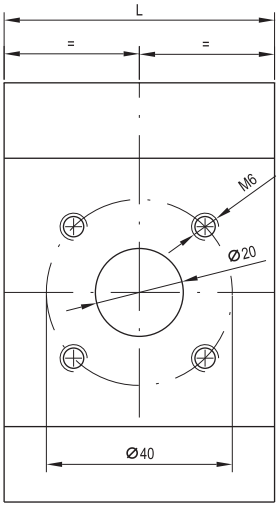


Vg cm3/rev	L mm
6.3	48.6
8.2	51.7
11.3	56.8
14	61.3
16	64.7
19	69.7
22.5	75.1
25	79.2
27.9	84

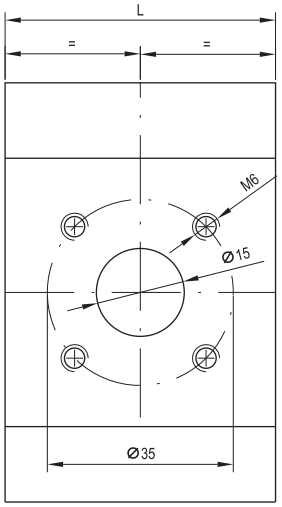
tip 2 - *type 2*

inlet		outlet	
D	G	d	g
15	40	12	35
20		15	

tip A - *type A*



tip B - *type B*



Notă: Aspiraţia trebuie să fie suficient de mare în conformitate cu volumul geometric şi turaţia.
Note: Inlet should be large enough, in conformity with displacement and speed.

HESPER FONDAT 1871

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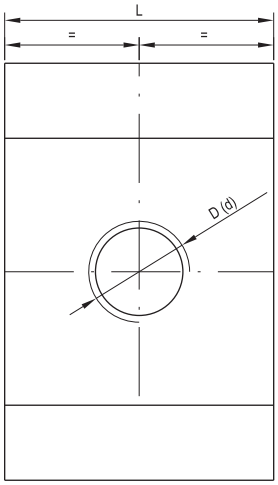
SUPERSILENT GEAR PUMPS SS-HP2F



Flanşe aspiraţie-refulare - *Inlet-outlet ports*

Variantele filetate BSPP - *BSPP threaded variants*

Vg cm3/rev	L mm	tip 1 - *type 1*		tip 9 - *type 9*		tip H - *type H*		tip F - *type F*		tip G - *type G*		tip J - *type J*		tip T - *type T*	
		inlet	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*
		D	d	D	d	D	d	D	d	D	d	D	d	D	d
6.3	48.6	G1/2"	G1/2"	G3/4"	G1/2"	G3/4"	G1/2"	G3/4"	G3/4"	G1/2"	G1/2"	G3/8"	G3/8"	Rc1/2"	Rc1/2"
8.2	51.7														
11.3	56.8	G3/4"		G1"	G3/4"									Rc3/4"	Rc1/2"
14	61.3														
16	64.7														
19	69.7														
22.5	75.1														
25	79.2	G1"	G3/4"												
27.9	84														

Variantele filetate ISO 6149 (metric) - *ISO 6149 threaded variants (metrical)*

Vg cm3/rev	L mm	tip 7 - *type 7*		tip P - *type P*		tip K - *type K*		tip N - *type N*		tip Q - *type Q*		tip R - *type R*	
		inlet	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*
		D	d	D	d	D	d	D	d	D	d	D	d
6.3	48.6	M20 x 1.5	M16 x 1.5	M20 x 1.5	M20 x 1.5	M27 x 1.5	M27 x 1.5	M22 x 1.5	M22 x 1.5	M18 x 1.5	M18 x 1.5	M16 x 1.5	M16 x 1.5
8.2	51.7												
11.3	56.8												
14	61.3												
16	64.7												
19	69.7		M20 x 1.5										
22.5	75.1												
25	79.2	M22 x 1.5											
27.9	84												

Variantele filetate UNF- *UNF threaded variants*

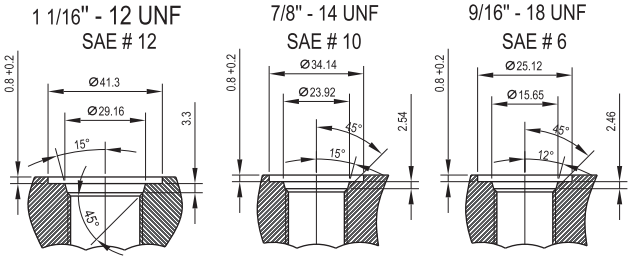
tip 6 - *type 6*		tip S - *type S*		tip U - *type U*		tip Y - *type Y*	
inlet	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*	*inlet*	*outlet*
D	d	D	d	D	d	D	d
1 1/16" - 12 UNF	7/8" - 14 UNF	1 1/16" - 12 UNF	1 1/16" - 12 UNF	SAE # 10 7/8" - 14 UNF	7/8" - 14 UNF	SAE # 6 9/16" - 18 UNF	SAE # 6 9/16" - 18 UNF
		SAE # 12	SAE # 12		SAE # 10		

Varianta specială
Special variant

tip 0 - *type 0*

- varianta blocată; dacă aspirația sau refularea nu sunt pe corpul pompei
- closed variant; if inlet or outlet ports are not on the body of the pump.

Notă: Aspiraţia trebuie să fie suficient de mare în conformitate cu volumul geometric şi turaţia.
Note: Inlet should be large enough, in conformity with displacement and speed.



CARACTERISTICI TEHNICE - *TECHNICAL CHARACTERISTICS*

Vg cm^3/rot *ccm/rev*	L mm	η_v %	η_m %	Presiune - *Pressure* (bar)		Presiune aspiraţie *Inlet pressure* (bar)	Turaţie (rot/min) *Speed (rev/min)*			Temperatura *Temperature* (°C)	Vâscozitate *Viscosity* (cSt)	Filtrare *Filtration* (µm)
				Pn	Pmax		$n_{nom.}$	$n_{min.}$	$n_{max.}$			
6,3	48,6	91	87	270	300	min. - 0,3 max. 2	1500	1000	4000	-15...+ 80	12...2000	max. 25
8,2	51,7	92	88					800				
11,3	56,8	93							3500			
14	61,3	94	89					600				
16	64,7	95										
19	69,7	95	90	250	270			500	3000	recomandat *recommended* 0...+ 60	recomandat *recommended* 25...200	recomandat *recommended* 16
22,5	75,1	96		210	230							
25	79,2	97		190	210				2500			
27,9	84	98		170	185							

NOTĂ:
Este interzisă încărcarea axului de antrenare al pompei cu sarcini radiale sau axiale în timpul utilizării.
Vă rugăm să contactaţi HESPER în cazul în care chiar şi una dintre limitele parametrilor de funcţionare indicate în tabel (temperatura, presiune, turaţie) sunt depăşite.

NOTE:
It is forrbiden radial and axial loads on the pump shaft, during the use. Please contact HESPER if even one of the operating limits indicated in the table (temperature, pressure, speed) are exceeded.

Producătorul îşi rezervă dreptul să modifice datele din prezenta documentaţie, pentru îmbunătăţirea produsului.
The producer reserves its right to make changes in the present documentation, to increase the quality of the product.