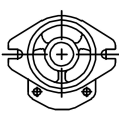


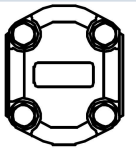



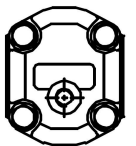





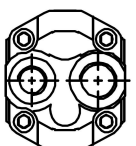








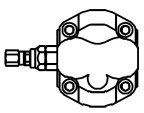



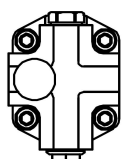




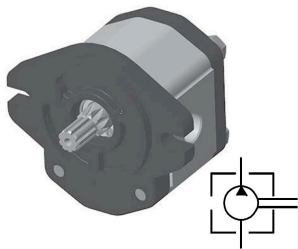
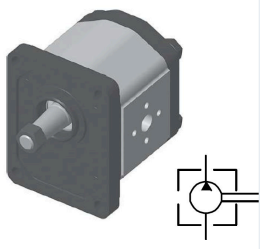
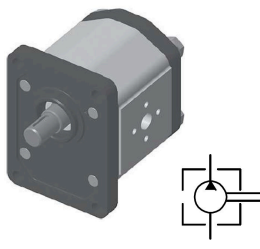
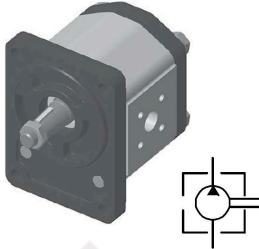
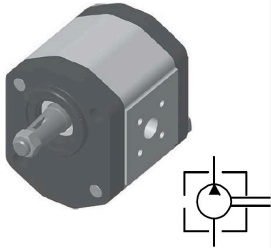
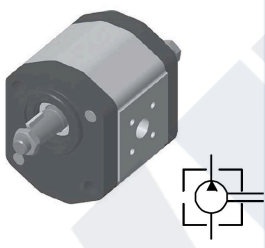
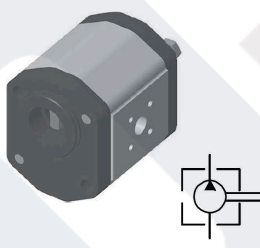
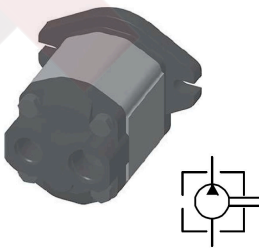
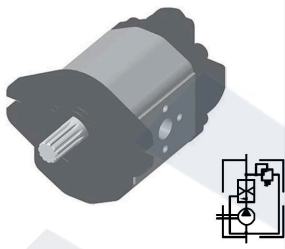
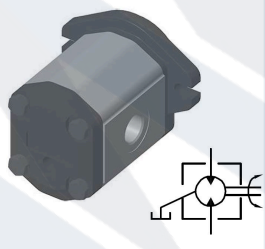
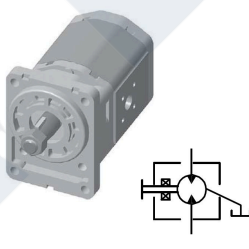
Ordering Code Rules

B	A	P	2	B0	D	3	TO	EO	/omit	/omit	/omit
Boden	Material	Function	Group	Front cover	Rotation	Displacement	Shaft	Ports	Special structure	Options	Other
	A Front and end cover material aluminium	P Pump M Motor	2 Group 2		D Clockwise S Counter clockwise R Reversible	3 4 6 8 10 12 14 16 18 20 22 25 28 30					Special designing
	H 30 bar. Front and end cover material cast iron, pressure 30 bar higher than aluminum covers								Options Omit-Range between -10°C and +80°C, inlet pressure up to max. 3 bar absolute. V Version suitable for fluid at hi-temperatures, range between -10°C and +120°C. H Version suitable for fluid at low-temperatures, range between -40°C and +80°C. N Version suitable for inlet pressure up to max. 3 and 10 bar absolute. For other special options, please contact our engineers.		

Front cover		Shaft		Ports		Special structure	
A0	ø85.55 Diamond front cover (centering ø82.55mm) 	TO	1:8 Taper shaft 1:8 	E_	Rectangular flange 		omit-regular 
B0	ø36.5 Square front cover (centering ø36.5mm) 	T1	1:5 Taper shaft 1:5 	F_	Rectangular flange 	Q_	Back cover with oil drain 
		C0	Straight keyed 	F_	Split flange 		
B1	ø38 Square front cover (centering ø38mm) 	G0	Tang shaft 	Z_	(M) Metric thread 		Back cover with inlet and outlet 
		G1	Tang shaft 	L_	(G) Gas thread 		
B2	ø80 Square front cover (centering ø80mm) 	H0	Rectangle spline shaft 4-15x11.4x4 	U_	(UNF-2B) UNF thread 	DFO	Back cover with one-way valve 
		S0	SAE SAE spline shaft DP16/32-30°-9T 	R_	(PT) PT thread 	YFO	Back cover with relief valve 
Q2	ø52, O-RING Square front cover (centering ø52mm), O-RING 	S1	SAE spline shaft DP16/32-30°-11T 	N_	(NPT) NPT thread 	HFA_	Back cover with constant flow valve 
		S8	SAE spline shaft DP16/32-30°-10T 	X_	Body without ports 		
99 See page 99 for details		100 See page 100 for details		101-102 See page 101-102 for details		103 See page 103 for details	

If you need other models, please see the details page or contact our engineers.

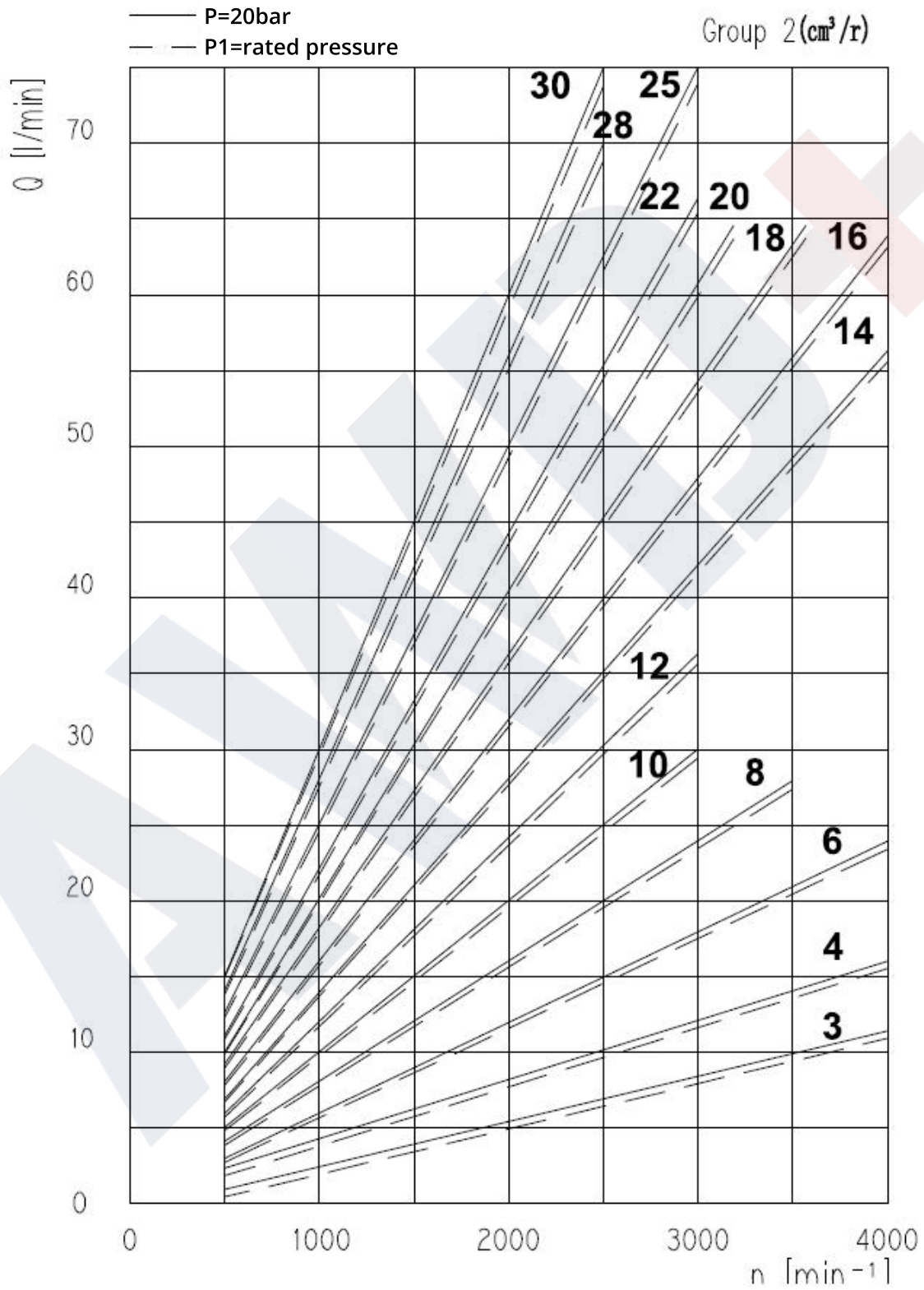
Standart Product Overview

type				
page	104	105	106	107
type				
page	108	109	110	111
type				
page	112	113	114	

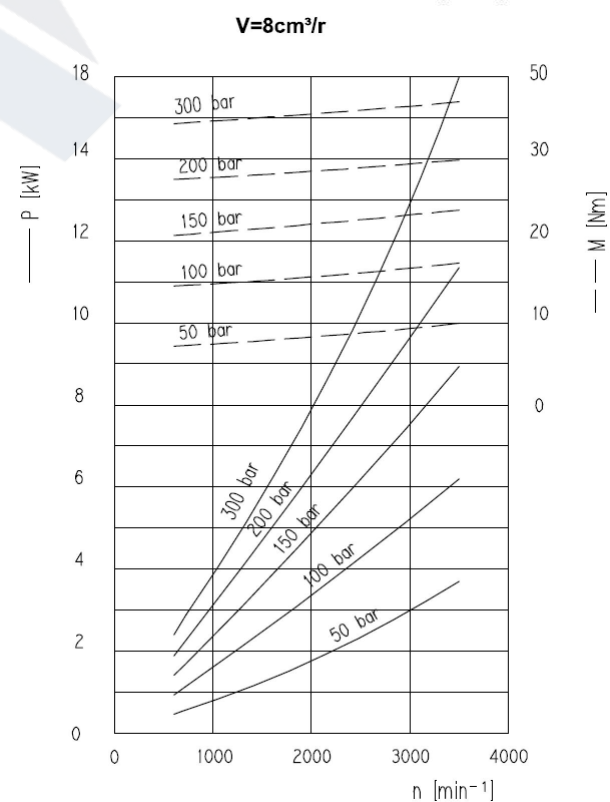
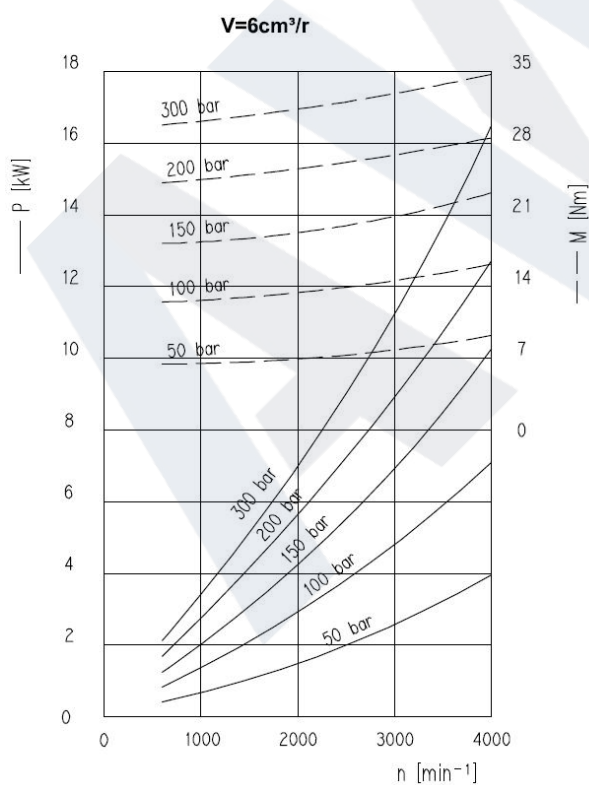
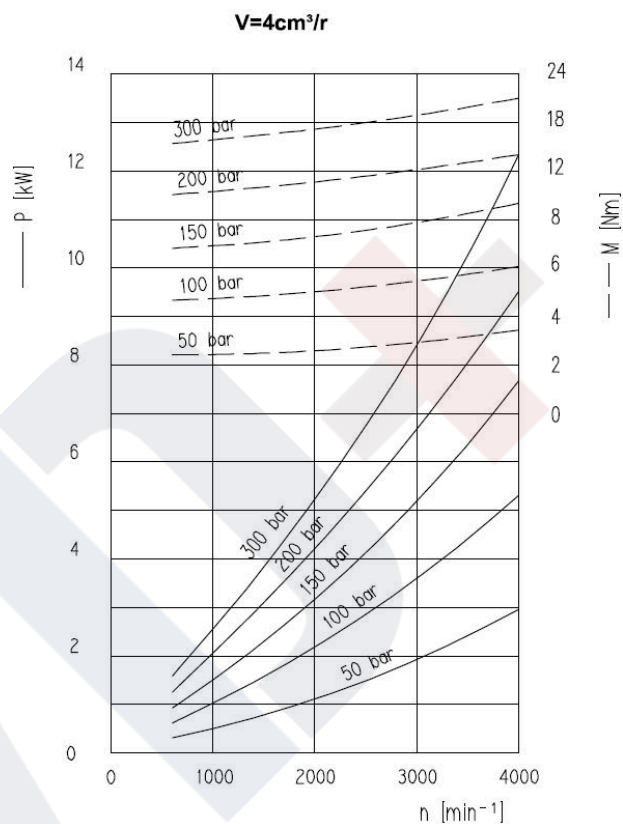
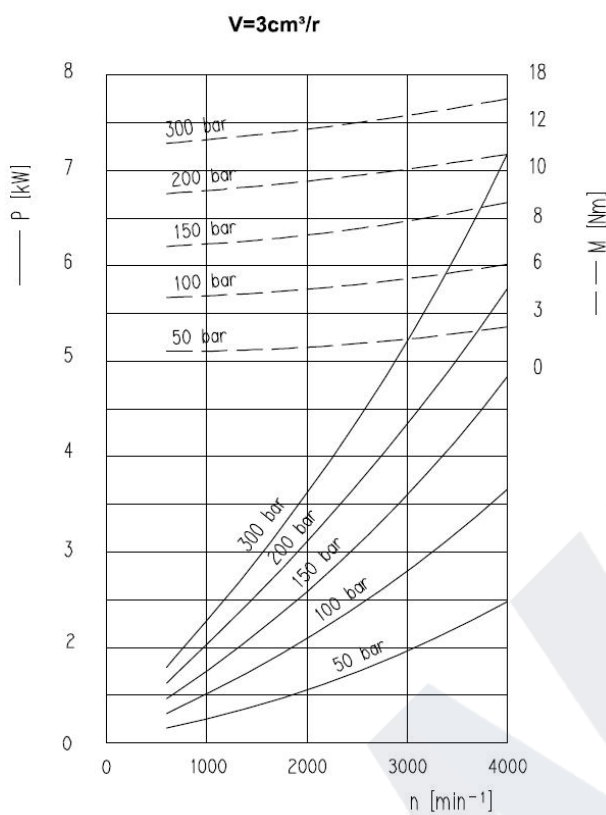
Displacement parameter table

Displacement	V	cm ³ /rev	3	4	6	8	10	12	14	16	18	20	22	25	28	30		
Suction absolute pressure	Pe	bar	0.7...3															
Max. continuous pressure	P1		270				250				220		200		180		160	
Max. intermittent pressure	P2		285				265				235		215		190		170	
Max. peak pressure	P3		300				280				250		230		200		180	
Min. speed	n _{Min}	r/min	800		600		500				400							
Max. speed	n _{Max}		4000		3500				3200				3000		2500			
Volumetric efficiency	η _v	%	>91				>92				>93		>95					

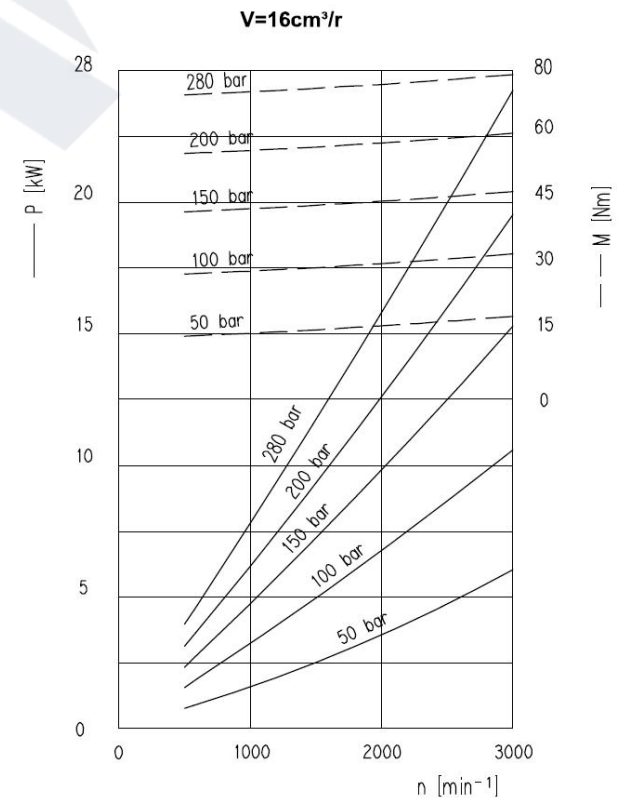
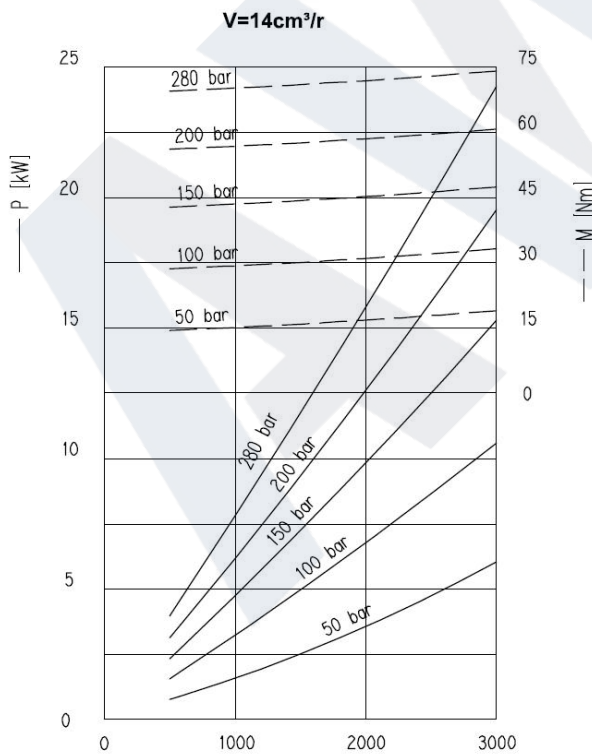
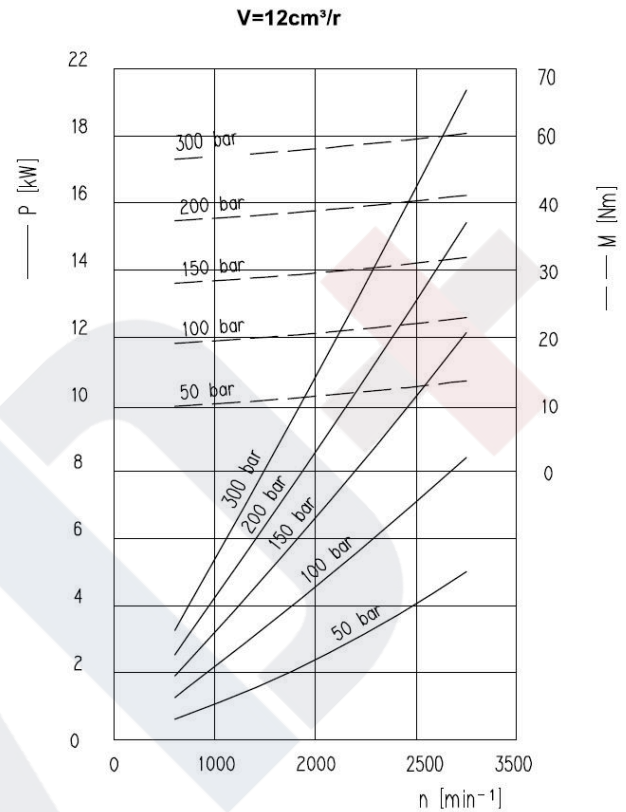
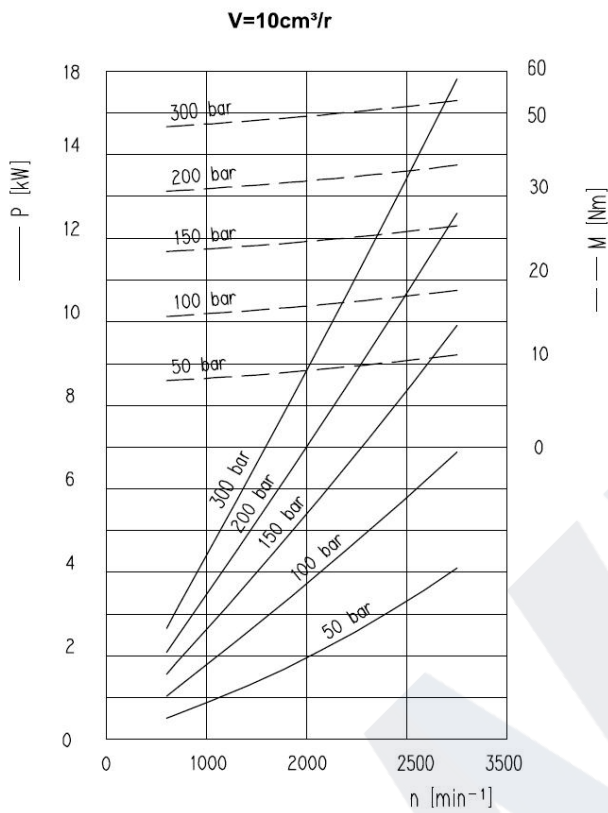
Power Performance Curve Table



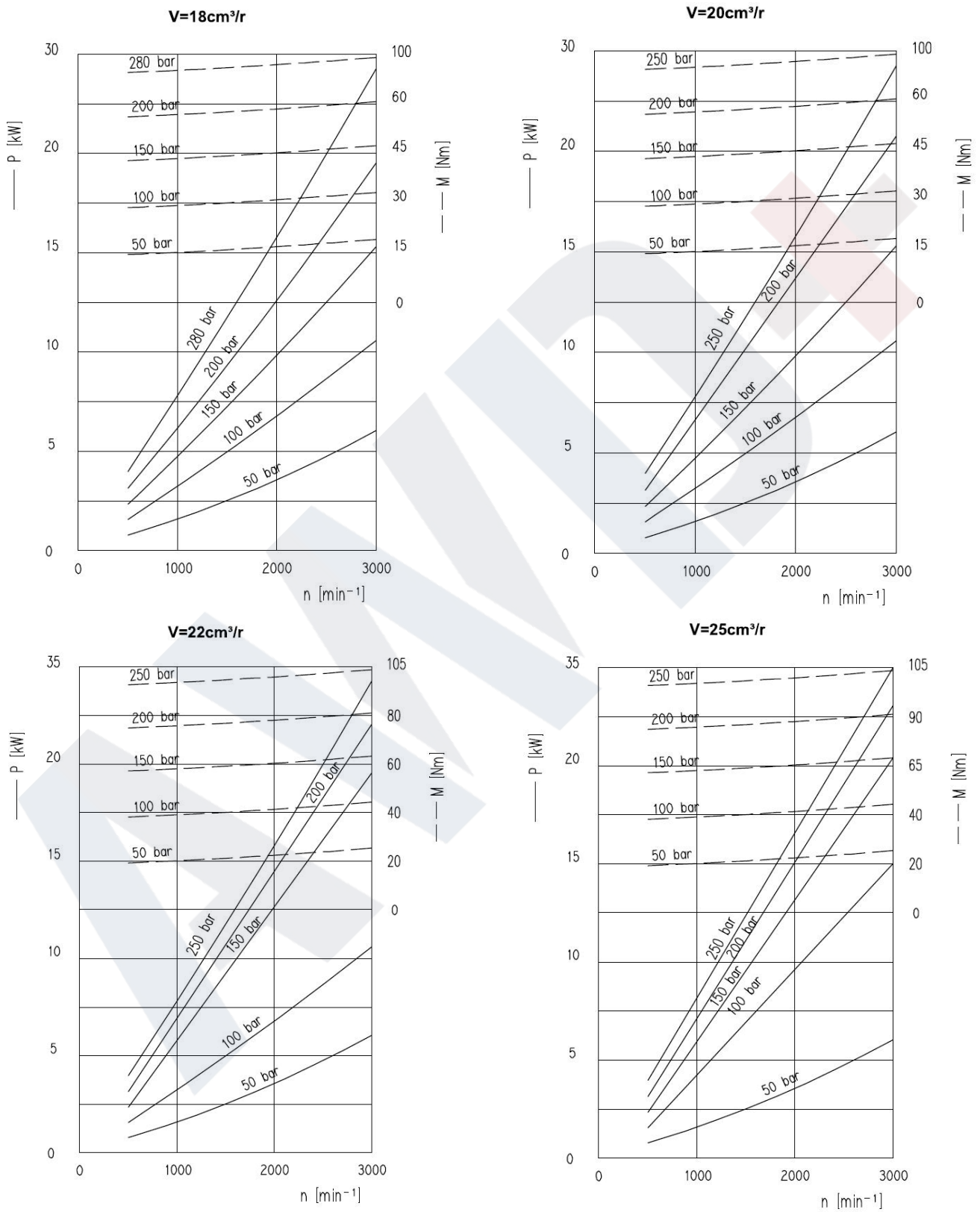
Power Performance Curve Table



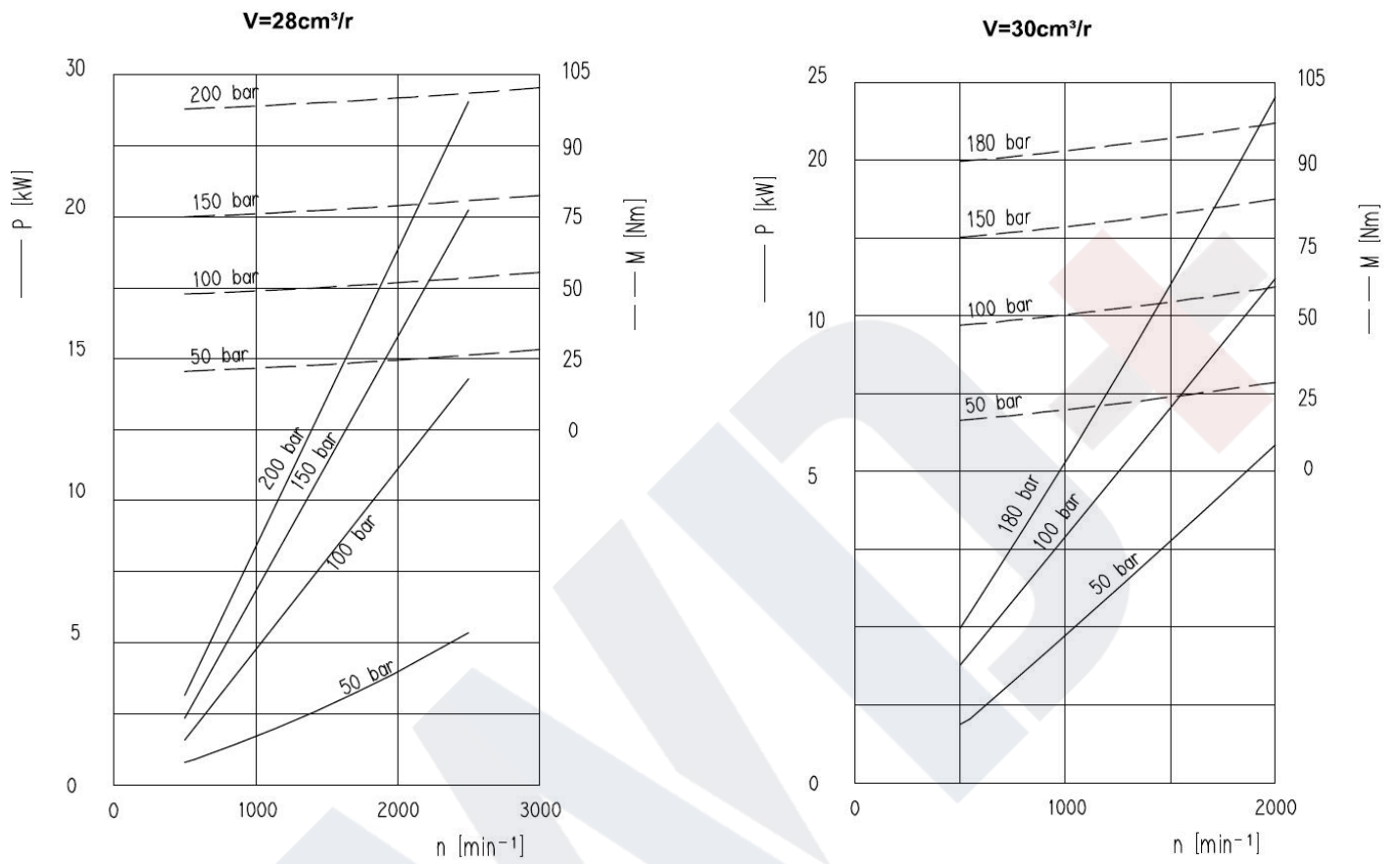
Power Performance Curve Table



Power Performance Curve Table



Power Performance Curve Table



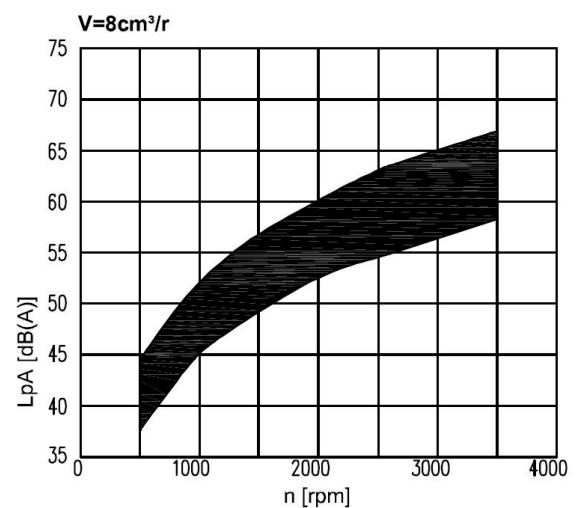
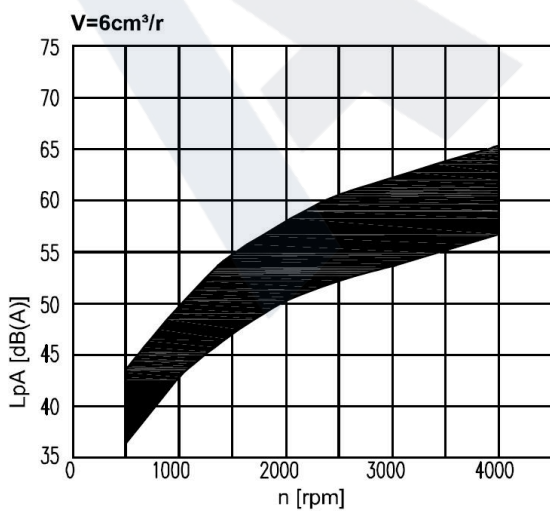
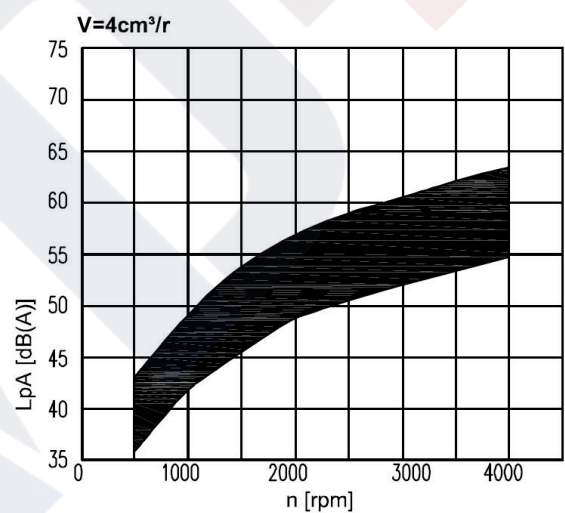
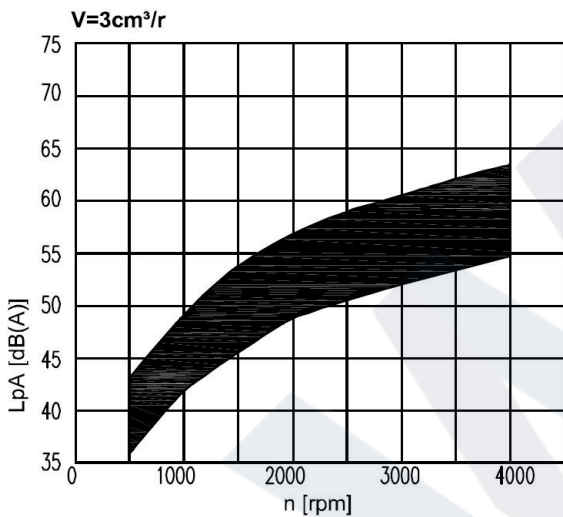
Noise Curve Table

The noise level depends on the speed and pressure range;
This pressure range is between 10 bar and pressure value P1.

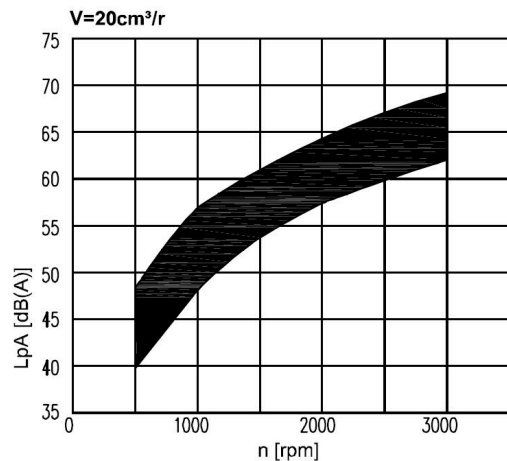
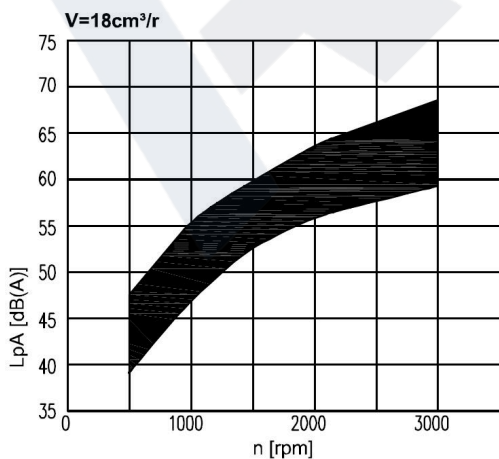
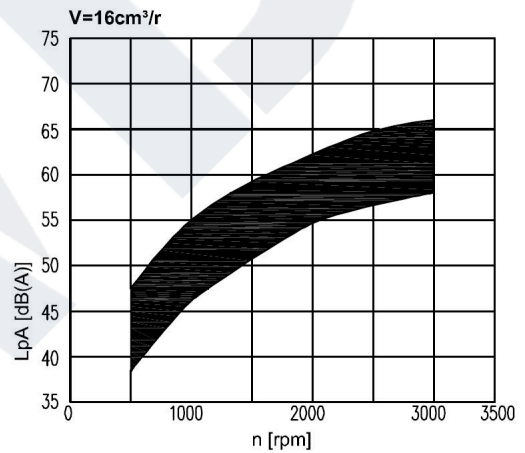
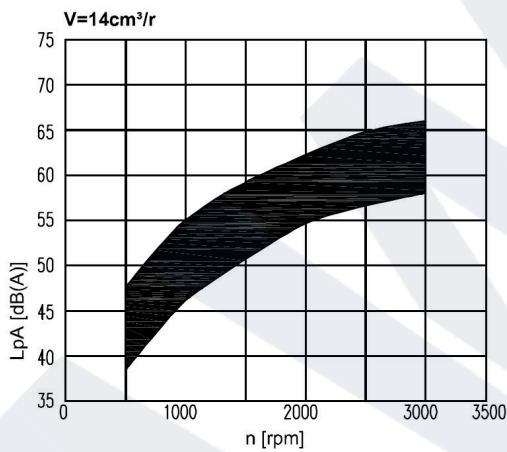
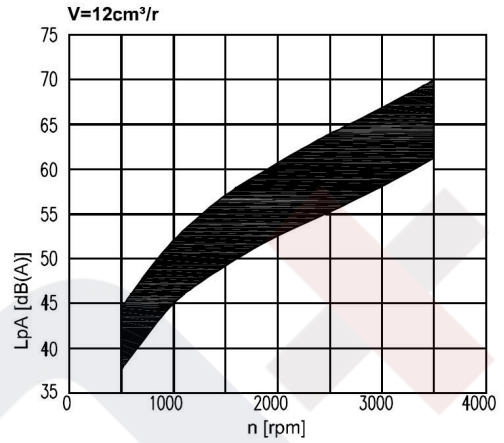
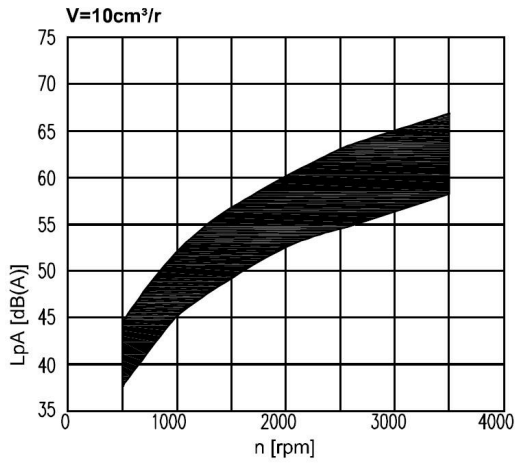
Oil data: $v=32 \text{ mm}^2/\text{s}$, $\theta=50^\circ\text{C}$.

The sound pressure level obtained by calculating the noise value measured from the sound absorption measuring room meets the requirements of Chapter 26 of DIN 45635.

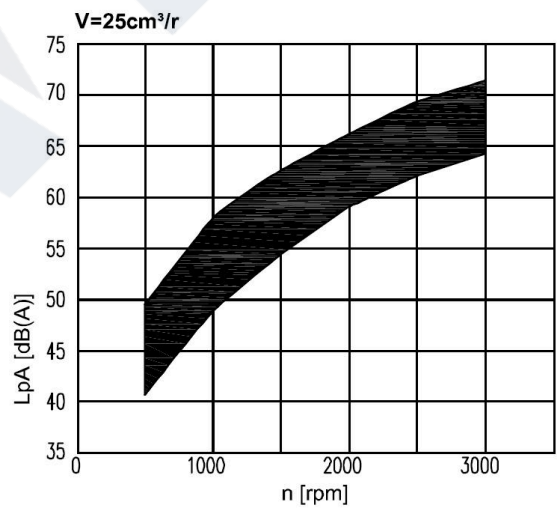
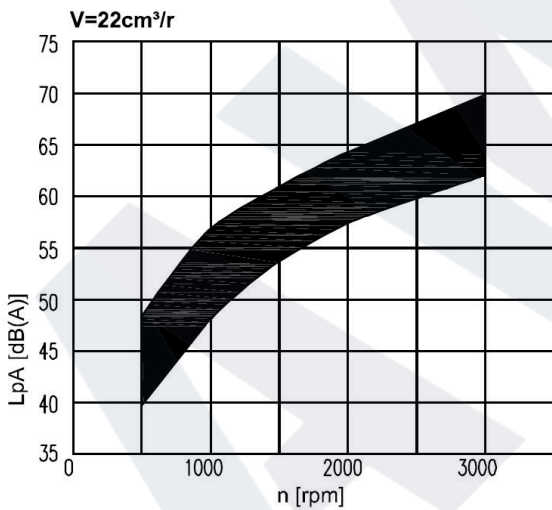
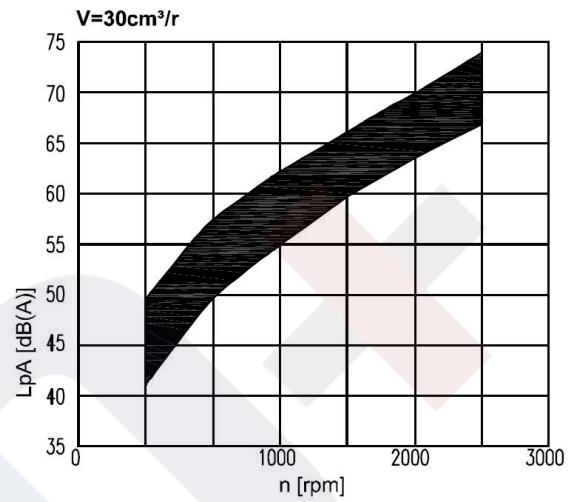
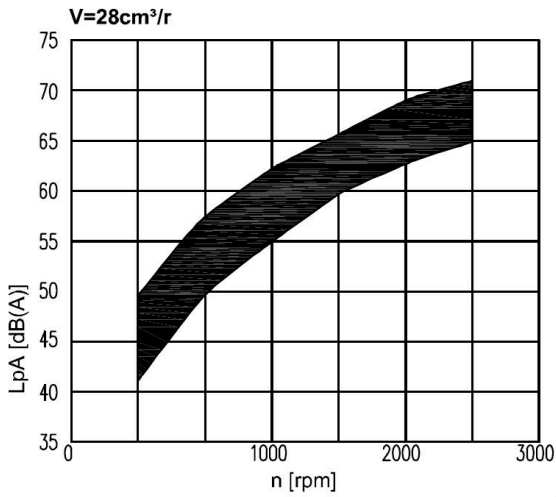
Distance between measuring sensor and hydraulic pump: 1m.



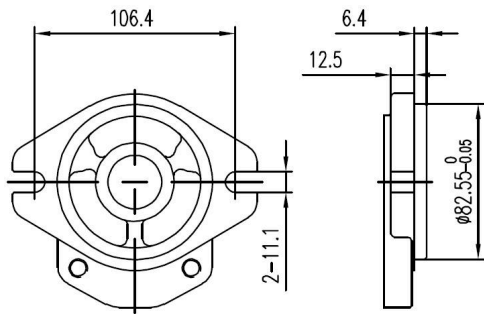
Noise Curve Table



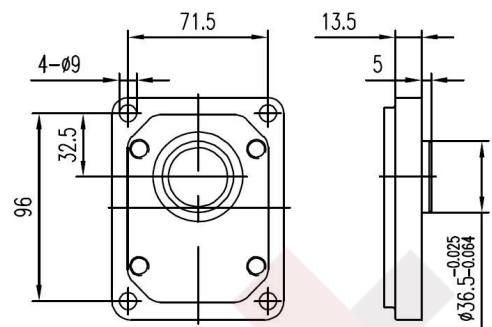
Noise Curve Table



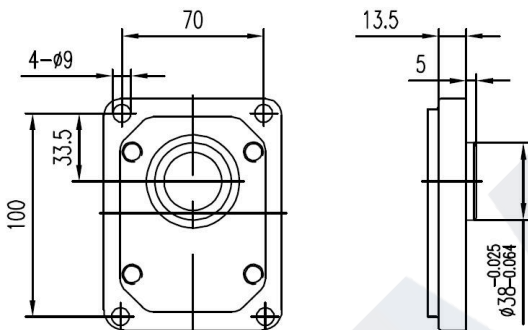
Front cover



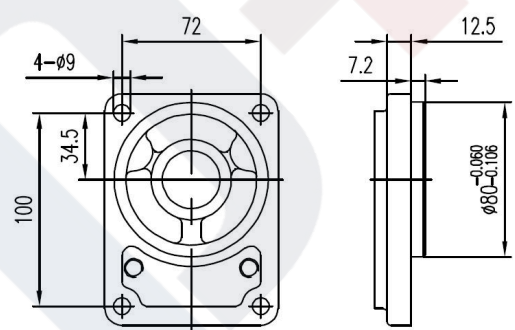
A0



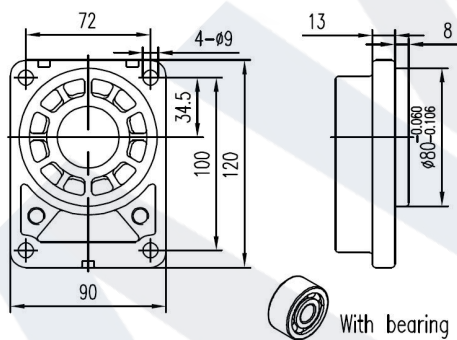
B0



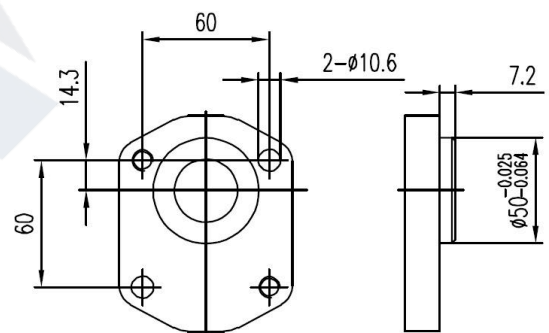
B1



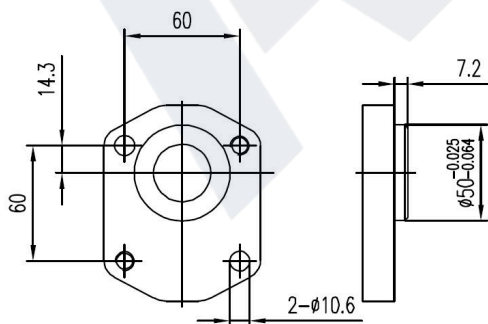
B2



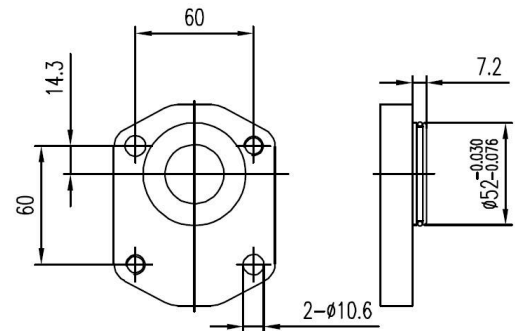
B3



Q0

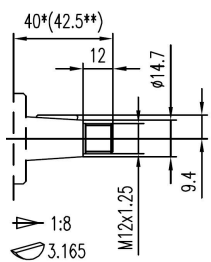


Q1



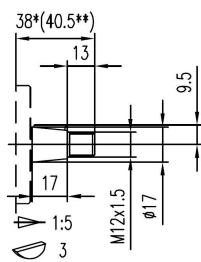
Q2

Shafts



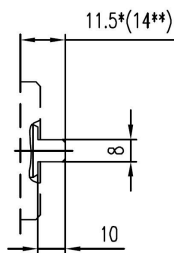
T0

Max. Torque 200 Nm



T1

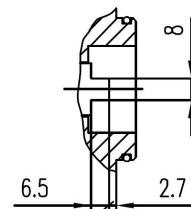
Max. Torque 180 Nm



G0

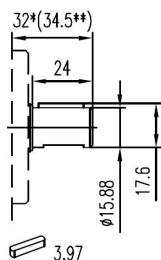
Max. Torque 100 Nm

With Q2 front cover



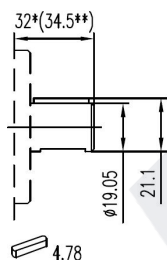
G1

Max. Torque 100 Nm



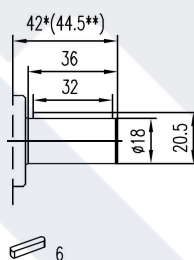
C0

Max. Torque 140 Nm



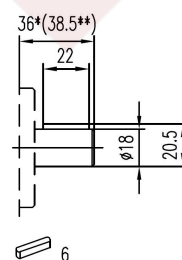
C1

Max. Torque 160 Nm



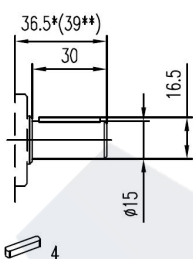
C2

Max. Torque 150 Nm



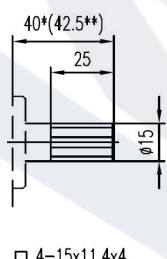
C3

Max. Torque 150 Nm



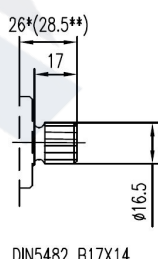
C4

Max. Torque 135 Nm



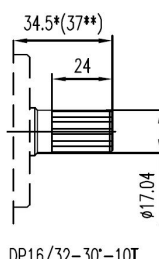
H0

Max. Torque 185 Nm



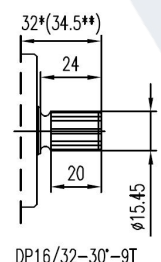
S3

Max. Torque 150 Nm



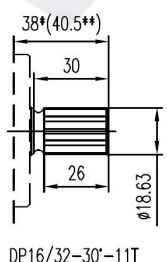
S8

Max. Torque 190 Nm



S0

Max. Torque 185 Nm

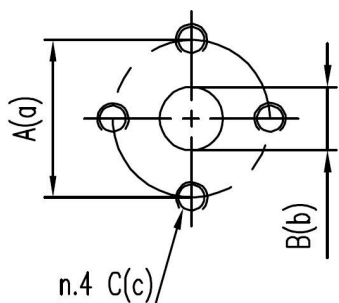


S1

Max. Torque 200 Nm

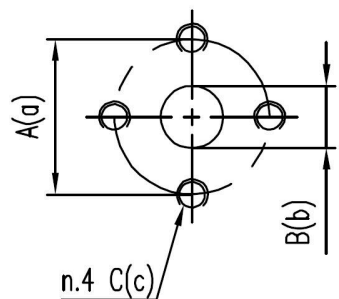
* Dimension with front cover A/B
 ** Dimension with front cover Q

Ports



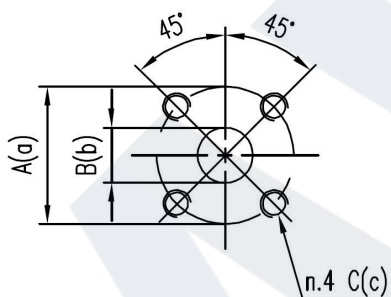
E0/E1/E2

PORTS CODE	Displacement (cm ³ /rev)	INLET			OUTLET		
		A	B	C	a	b	c
E0	3...8	30	13	M6	30	13	M6
E1	10...22	40	20	M6	30	13	M6
E2	25...30	40	22	M6	30	13	M6



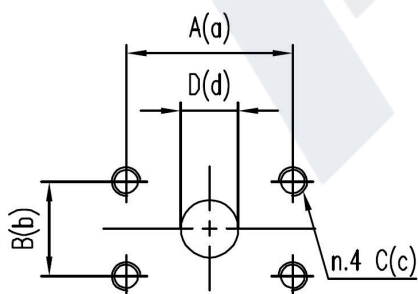
E3

PORTS CODE	Displacement (cm ³ /rev)	INLET			OUTLET		
		A	B	C	a	b	c
E3	3...8	38	14	M8	38	10	M8
E3	10...22	38	18	M8	38	15	M8
E3	25...30	38	20	M8	38	15	M8



F0/F1/F13

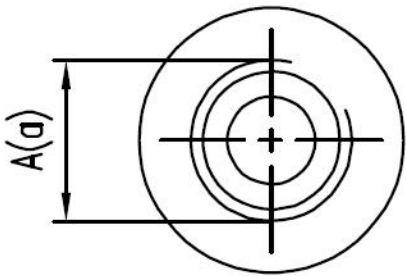
PORTS CODE	Displacement (cm ³ /rev)	INLET			OUTLET		
		A	B	C	a	b	c
F0	3...8	40	15	M6	35	15	M6
F1	10...30	40	20	M8	35	15	M6
F13	10...30	40	20	M6	40	20	M6



F2/F3/F4

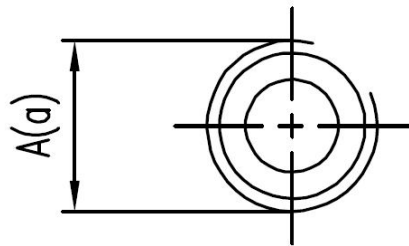
Ports code	Displacement (cm ³ /rev)	INLET				OUTLET			
		A	B	C	D	a	b	c	d
F2	3...16	38.1	17.48	5/16-18UNC	13	38.1	17.48	5/16-18UNC	13
F3	18...20	47.63	22.23	3/8-16UNC	20	38.1	17.48	5/16-18UNC	13
F4	22...30	47.63	22.23	3/8-16UNC	20	47.63	22.23	3/8-16UNC	20

Ports



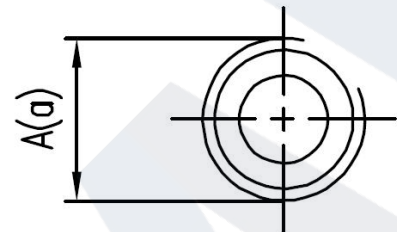
L0/L1

PORTS CODE	Displacement (cm ³ /rev)	INLET	OUTLET
		A	a
L0	3...6	G1/2	G1/2
L1	8...30	G3/4	G1/2



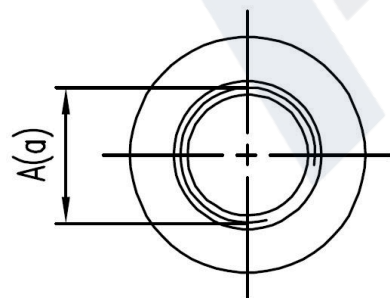
R0/R1/R2

PORTS CODE	Displacement (cm ³ /rev)	INLET	OUTLET
		A	a
R0	3...12	PT1/2	PT1/2
R1	14...25	PT3/4	PT1/2
R2	28...30	PT1	PT3/4



Z0/Z1/Z3

PORTS CODE	Displacement (cm ³ /rev)	INLET	OUTLET
		A	a
Z0	3...12	M14x1.5	M14x1.5
Z1	14...25	M20x1.5	M18x1.5
Z3	28...30	M24x1.5	M22x1.5

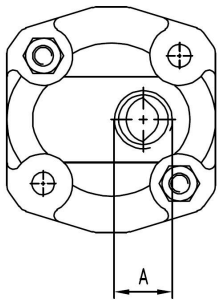


O-ring

U0/U1

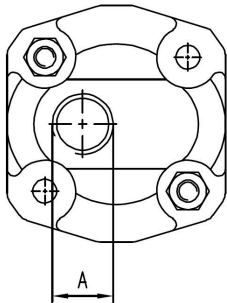
PORTS CODE	Displacement (cm ³ /rev)	INLET	OUTLET
		A	a
U0	3...28	1 1/16-12 UNF	7/8-14 UNF
U1	30	1 5/16-12 UNF	7/8-14 UNF

Special structure



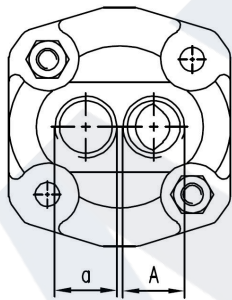
Q_

CODE	oil drain
	A
Q1	G1/4
Q2	9/16-18UNF



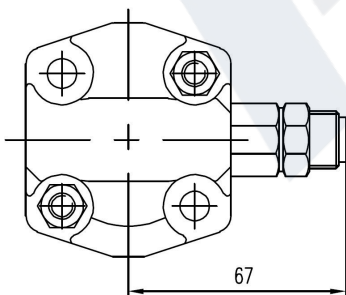
L0/R0/U0

CODE	INLET	OUTLET
	A	a
L0	G1/2	G1/2
R0	PT1/2	PT1/2
U0	1 1/16-12UNF	7/8-14UNF



HFA_

CODE	LET	Oil port position
HFAC19T	M18x1.5	Same side of oil inlet
HFAC19F	M18x1.5	Opposite side of oil inlet

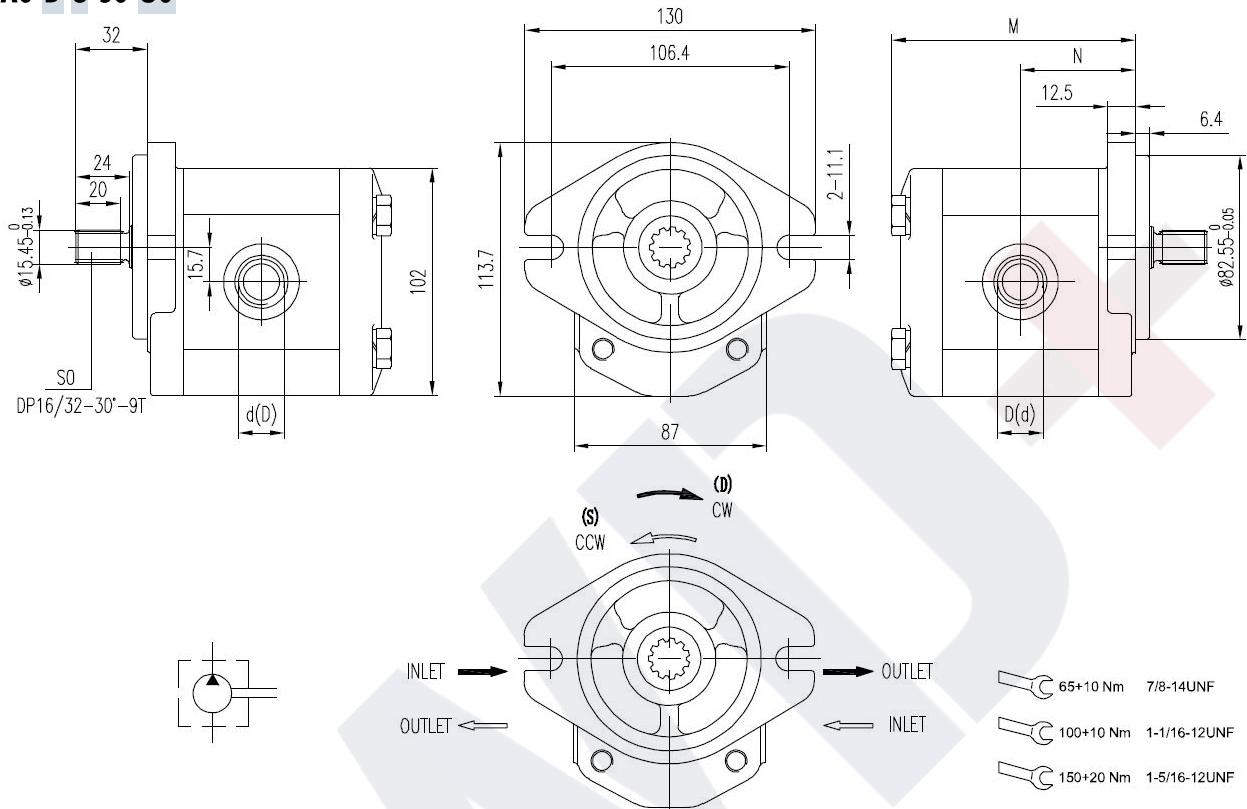


YF0

CODE	Pressure regulating range of overflow valve
YF0	20...250(bar)

Standard Product Dimensions

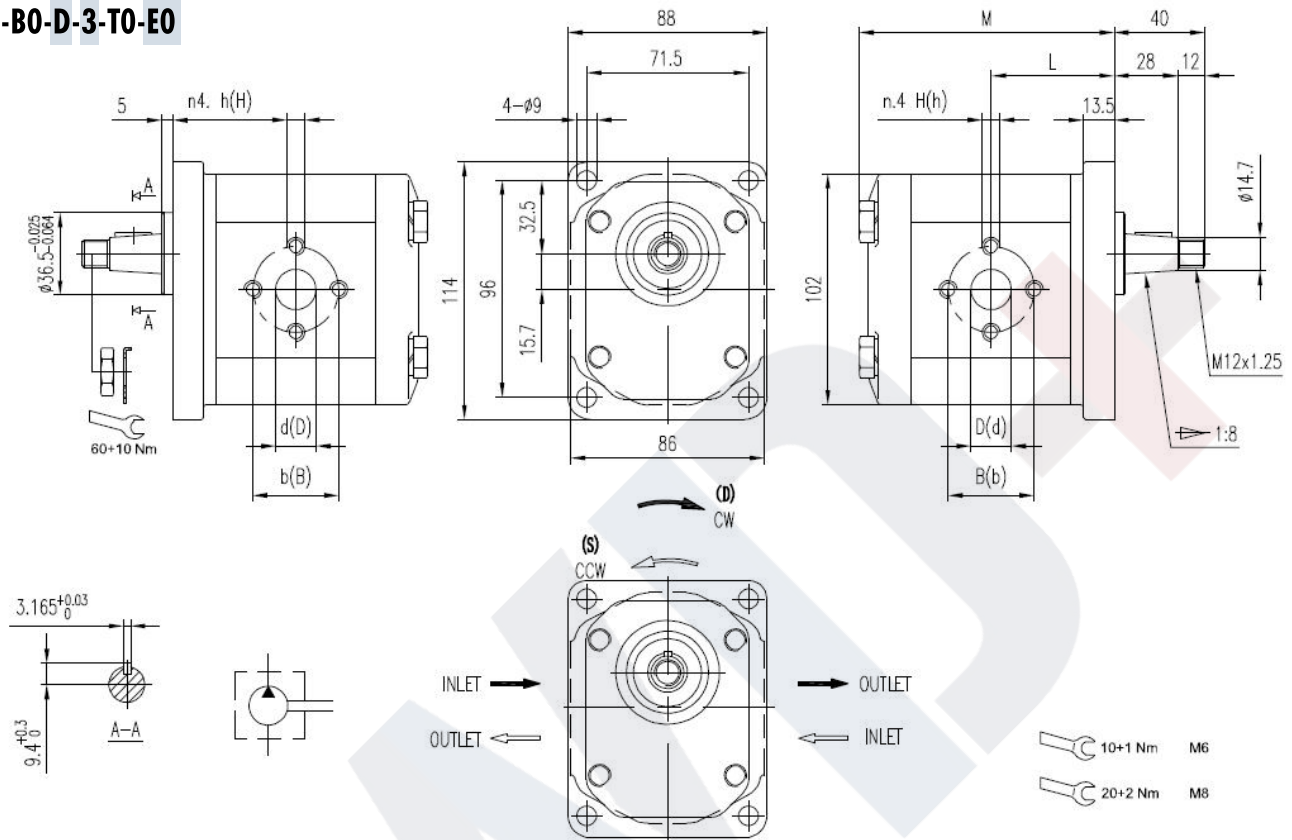
BHP2-A0-D-3-S0-U0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	INLET D	OUTLET d
	P1 bar	P2 bar	P3 bar				M mm	L mm			
3	270	285	300	4000	800	3.35	91.1	43.6	U0	1 1/16-12UNF	7/8-14UNF
4	270	285	300	4000	600	3.4	92.7	44.4	U0	1 1/16-12UNF	7/8-14UNF
6	270	285	300	4000	600	3.5	96	46	U0	1 1/16-12UNF	7/8-14UNF
8	270	285	300	3500	500	3.6	99.3	47.7	U0	1 1/16-12UNF	7/8-14UNF
10	270	285	300	3500	500	3.7	102.6	49.3	U0	1 1/16-12UNF	7/8-14UNF
12	270	285	300	3500	500	3.8	105.9	51	U0	1 1/16-12UNF	7/8-14UNF
14	250	265	280	3500	500	3.9	109.3	52.7	U0	1 1/16-12UNF	7/8-14UNF
16	250	265	280	3500	500	4.0	112.7	54.4	U0	1 1/16-12UNF	7/8-14UNF
18	250	265	280	3200	400	4.1	116	56	U0	1 1/16-12UNF	7/8-14UNF
20	220	235	250	3200	400	4.2	119.3	57.7	U0	1 1/16-12UNF	7/8-14UNF
22	220	235	250	3000	400	4.3	122.6	59.3	U0	1 1/16-12UNF	7/8-14UNF
25	200	215	230	3000	400	4.45	127.6	61.8	U0	1 1/16-12UNF	7/8-14UNF
28	180	190	200	2500	400	4.6	132.6	64.3	U0	1 1/16-12UNF	7/8-14UNF
30	160	170	180	2500	400	4.7	135.9	66	U1	1 5/16-12UNF	7/8-14UNF

Standard Product Dimensions

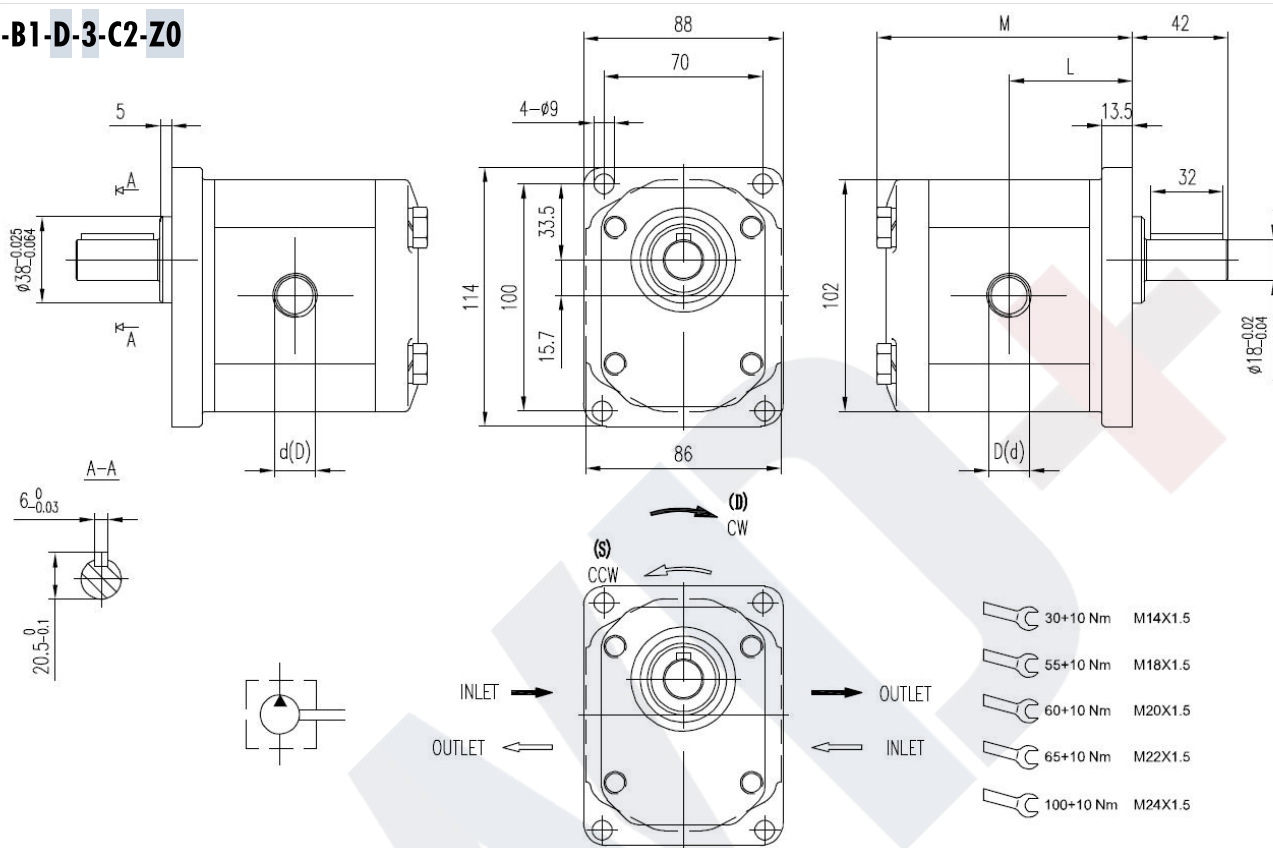
BHP2-B0-D-3-T0-E0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	INLET			OUTLET		
	P1 bar	P2 bar	P3 bar				M mm	L mm		B mm	D mm	H mm	b mm	d mm	h mm
3	270	285	300	4000	800	3.35	91.1	43.6	E0	30	13	M6	30	13	M6
4	270	285	300	4000	600	3.4	92.7	44.4	E0	30	13	M6	30	13	M6
6	270	285	300	4000	600	3.5	96	46	E0	30	13	M6	30	13	M6
8	270	285	300	3500	500	3.6	99.3	47.7	E0	30	13	M6	30	13	M6
10	270	285	300	3500	500	3.7	102.6	49.3	E1	40	20	M8	30	13	M6
12	270	285	300	3500	500	3.8	105.9	51	E1	40	20	M8	30	13	M6
14	250	265	280	3500	500	3.9	109.3	52.7	E1	40	20	M8	30	13	M6
16	250	265	280	3500	500	4.0	112.7	54.4	E1	40	20	M8	30	13	M6
18	250	265	280	3200	400	4.1	116	56	E1	40	20	M8	30	13	M6
20	220	235	250	3200	400	4.2	119.3	57.7	E1	40	20	M8	30	13	M6
22	220	235	250	3000	400	4.3	122.6	59.3	E1	40	20	M8	30	13	M6
25	200	215	230	3000	400	4.45	127.6	61.8	E2	40	22	M8	30	13	M6
28	180	190	200	2500	400	4.6	132.6	64.3	E2	40	22	M8	30	13	M6
30	160	170	180	2500	400	4.7	135.9	66	E2	40	22	M8	30	13	M6

Standard Product Dimensions

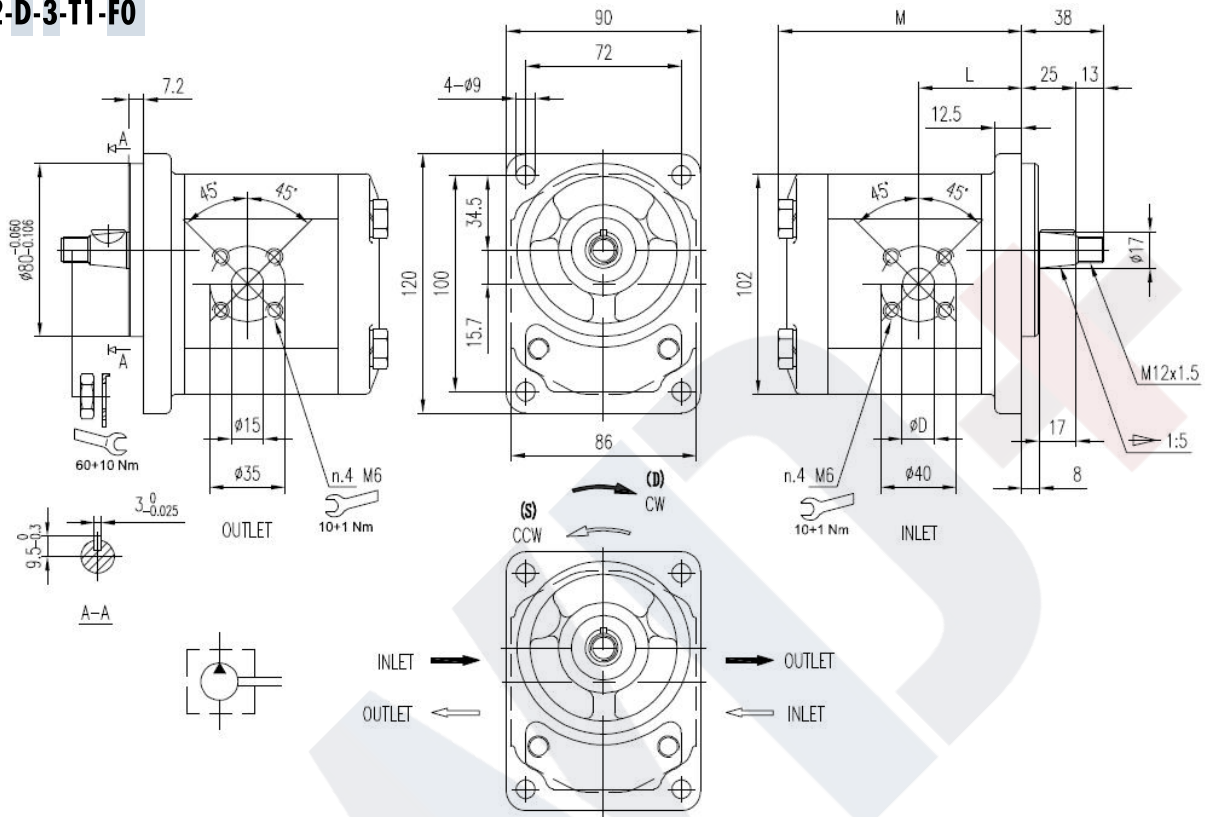
BHP2-B1-D-3-C2-Z0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	INLET D	OUTLET d
	P1 bar	P2 bar	P3 bar				M mm	L mm			
3	270	285	300	4000	800	3.35	91.1	43.6	Z0	M14x1.5	M14x1.5
4	270	285	300	4000	600	3.4	92.7	44.4	Z0	M14x1.5	M14x1.5
6	270	285	300	4000	600	3.5	96	46	Z1	M20x1.5	M18x1.5
8	270	285	300	3500	500	3.6	99.3	47.7	Z1	M20x1.5	M18x1.5
10	270	285	300	3500	500	3.7	102.6	49.3	Z1	M20x1.5	M18x1.5
12	270	285	300	3500	500	3.8	105.9	51	Z1	M20x1.5	M18x1.5
14	250	265	280	3500	500	3.9	109.3	52.7	Z1	M20x1.5	M18x1.5
16	250	265	280	3500	500	4.0	112.7	54.4	Z1	M20x1.5	M18x1.5
18	250	265	280	3200	400	4.1	116	56	Z1	M20x1.5	M18x1.5
20	220	235	250	3200	400	4.2	119.3	57.7	Z3	M24x1.5	M22x1.5
22	220	235	250	3000	400	4.3	122.6	59.3	Z3	M24x1.5	M22x1.5
25	200	215	230	3000	400	4.45	127.6	61.8	Z3	M24x1.5	M22x1.5
28	180	190	200	2500	400	4.6	132.6	64.3	Z3	M24x1.5	M22x1.5
30	160	170	180	2500	400	4.7	135.9	66	Z3	M24x1.5	M22x1.5

Standard Product Dimensions

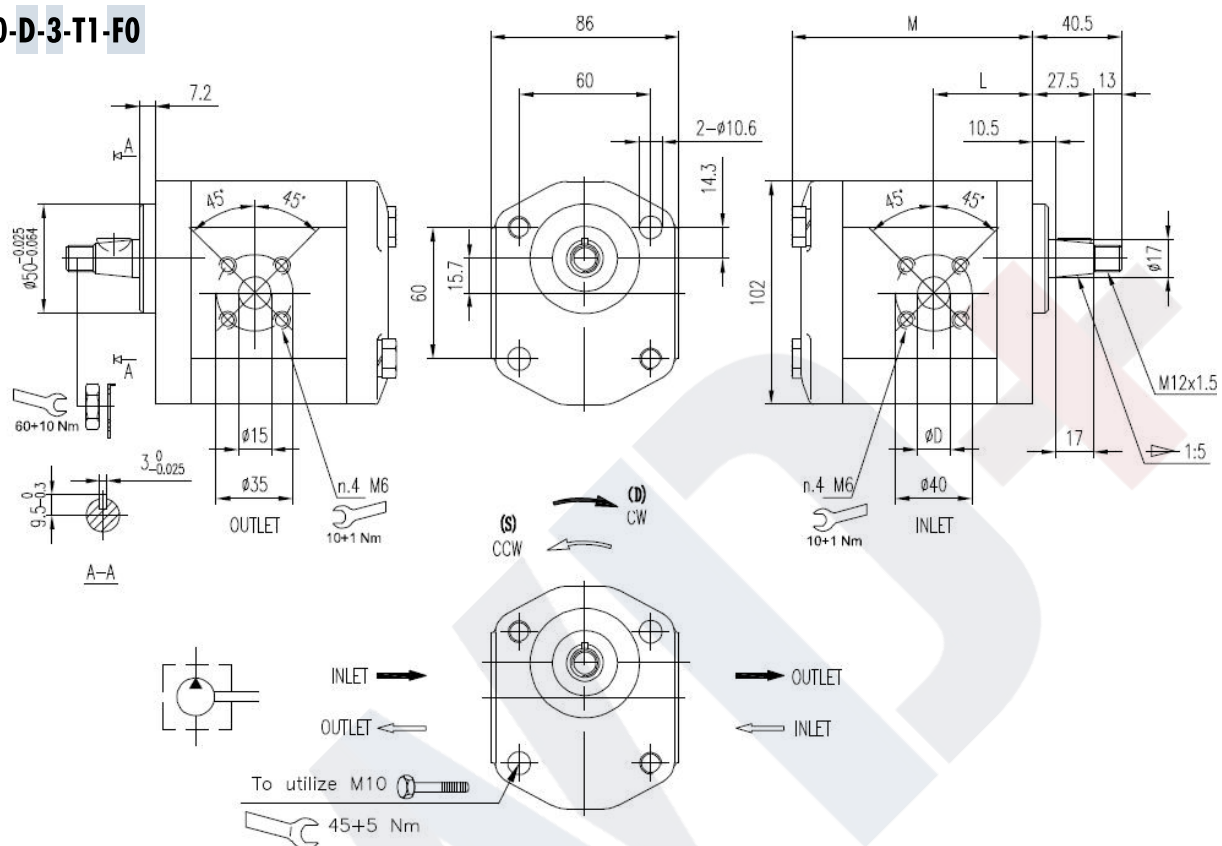
BHP2-B2-D-3-T1-F0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	INLET D
	P1 bar	P2 bar	P3 bar				M mm	L mm		
3	270	285	300	4000	800	3.35	91.1	39.9	F0	15
4	270	285	300	4000	600	3.4	92.7	39.9	F0	15
6	270	285	300	4000	600	3.5	96	41.1	F0	15
8	270	285	300	3500	500	3.6	99.3	43.2	F0	15
10	270	285	300	3500	500	3.7	102.6	43.7	F1	20
12	270	285	300	3500	500	3.8	105.9	47.5	F1	20
14	250	265	280	3500	500	3.9	109.3	47.5	F1	20
16	250	265	280	3500	500	4.0	112.7	47.5	F1	20
18	250	265	280	3200	400	4.1	116	47.5	F1	20
20	220	235	250	3200	400	4.2	119.3	47.5	F1	20
22	220	235	250	3000	400	4.3	122.6	55.1	F1	20
25	200	215	230	3000	400	4.45	127.6	61.8	F1	20
28	180	190	200	2500	400	4.6	132.6	64.3	F1	20
30	160	170	180	2500	400	4.7	135.9	66	F1	20

Standard Product Dimensions

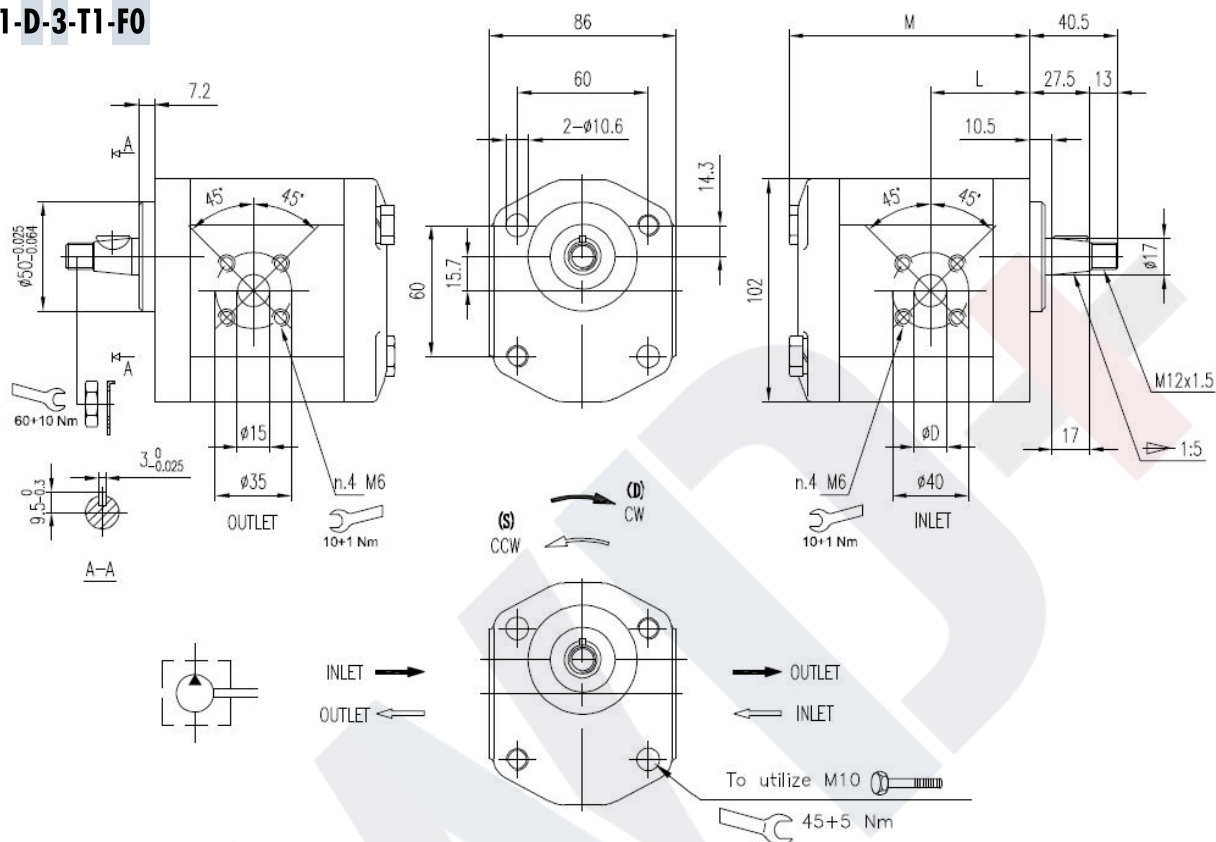
BHP2-Q0-D-3-T1-F0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	INLET D
	P1 bar	P2 bar	P3 bar				M mm	L mm		
3	270	285	300	4000	800	3.35	88.6	37.4	F0	15
4	270	285	300	4000	600	3.4	90.2	37.4	F0	15
6	270	285	300	4000	600	3.5	93.5	38.6	F0	15
8	270	285	300	3500	500	3.6	96.8	40.7	F0	15
10	270	285	300	3500	500	3.7	100.1	41.2	F1	20
12	270	285	300	3500	500	3.8	103.4	45	F1	20
14	250	265	280	3500	500	3.9	106.8	45	F1	20
16	250	265	280	3500	500	4.0	110.2	45	F1	20
18	250	265	280	3200	400	4.1	113.5	45	F1	20
20	220	235	250	3200	400	4.2	116.8	45	F1	20
22	220	235	250	3000	400	4.3	120.1	52.6	F1	20
25	200	215	230	3000	400	4.45	125.1	59.3	F1	20
28	180	190	200	2500	400	4.6	130.1	61.8	F1	20
30	160	170	180	2500	400	4.7	133.4	63.5	F1	20

Standard Product Dimensions

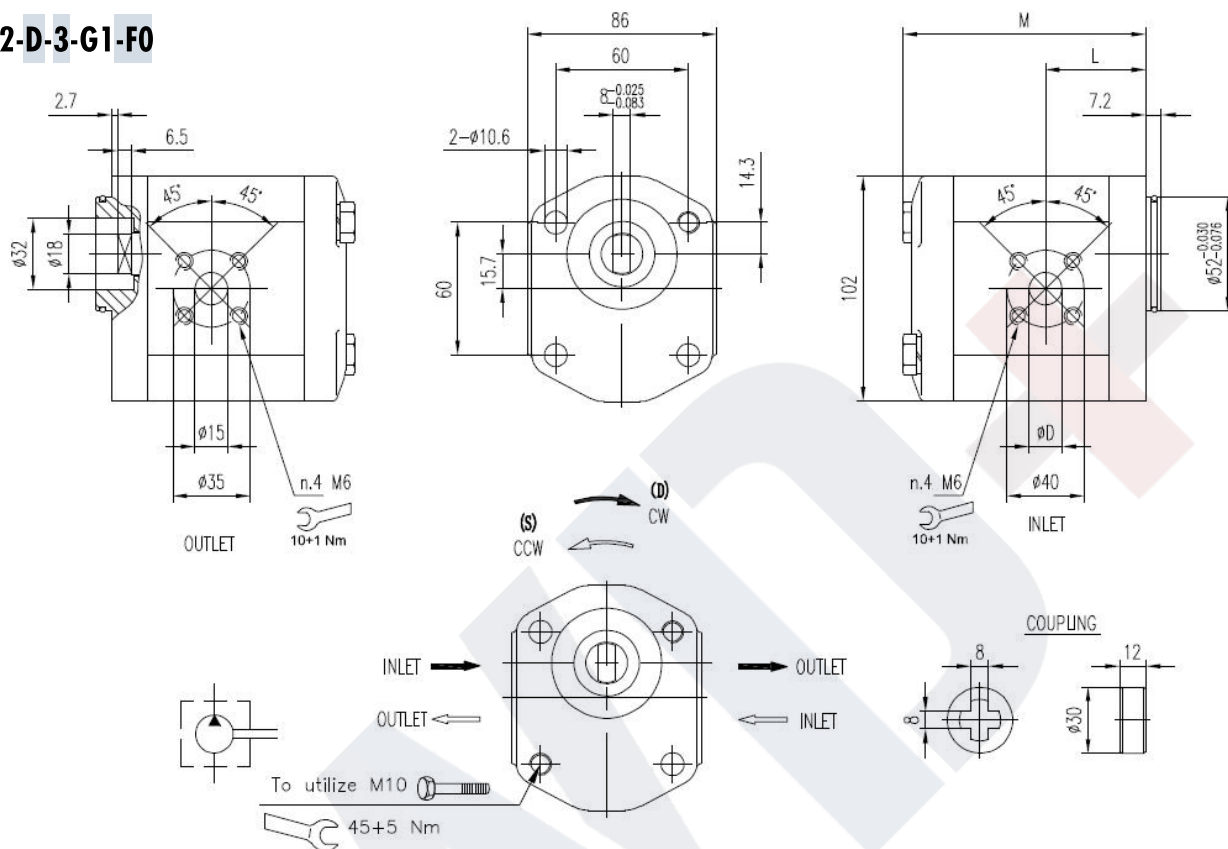
BHP2-Q1-D-3-T1-F0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	INLET D
	P1 bar	P2 bar	P3 bar				M mm	L mm		
3	270	285	300	4000	800	3.35	88.6	37.4	F0	15
4	270	285	300	4000	600	3.4	90.2	37.4	F0	15
6	270	285	300	4000	600	3.5	93.5	38.6	F0	15
8	270	285	300	3500	500	3.6	96.8	40.7	F0	15
10	270	285	300	3500	500	3.7	100.1	41.2	F1	20
12	270	285	300	3500	500	3.8	103.4	45	F1	20
14	250	265	280	3500	500	3.9	106.8	45	F1	20
16	250	265	280	3500	500	4.0	110.2	45	F1	20
18	250	265	280	3200	400	4.1	113.5	45	F1	20
20	220	235	250	3200	400	4.2	116.8	45	F1	20
22	220	235	250	3000	400	4.3	120.1	52.6	F1	20
25	200	215	230	3000	400	4.45	125.1	59.3	F1	20
28	180	190	200	2500	400	4.6	130.1	61.8	F1	20
30	160	170	180	2500	400	4.7	133.4	63.5	F1	20

Standard Product Dimensions

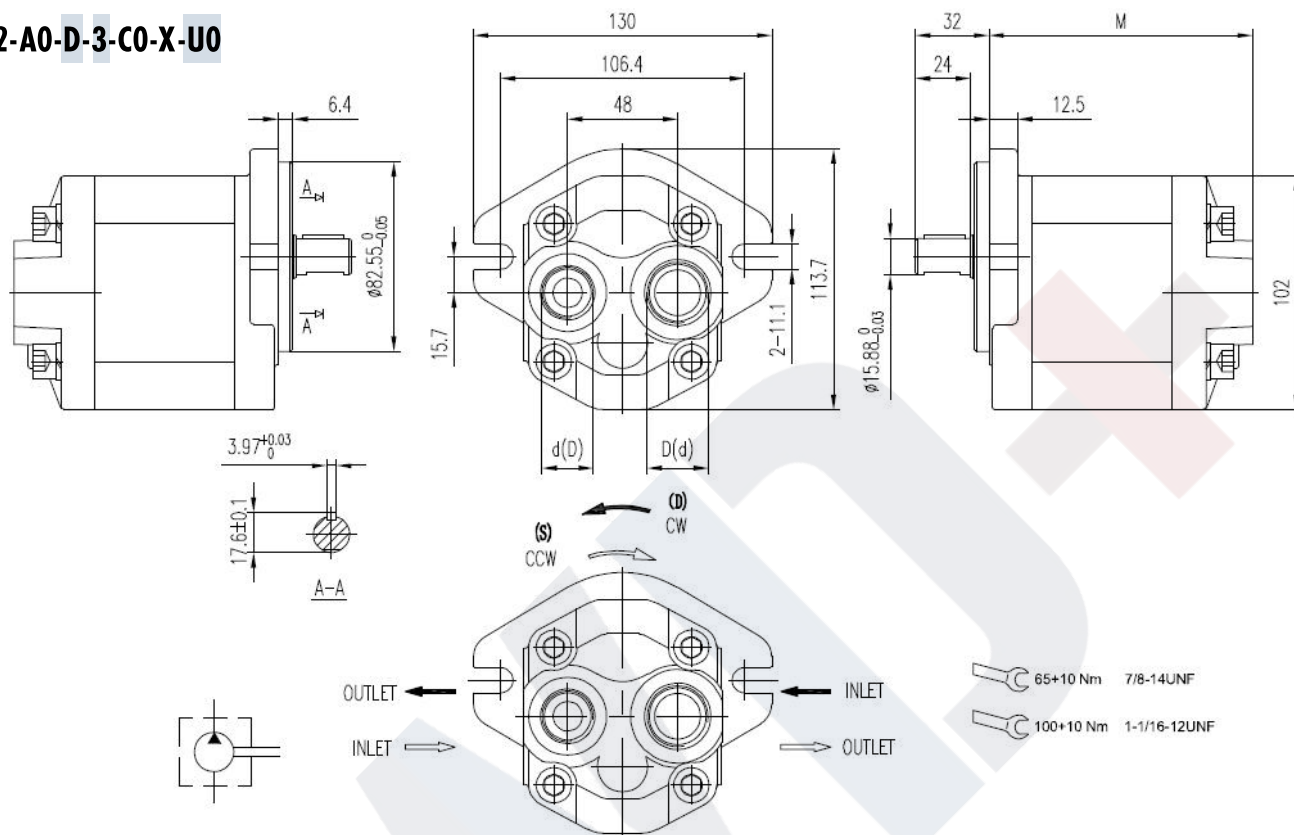
BHP2-Q2-D-3-G1-F0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	INLET D
	P1 bar	P2 bar	P3 bar				M mm	L mm		
3	270	285	300	4000	800	3.35	88.6	37.4	F0	15
4	270	285	300	4000	600	3.4	90.2	37.4	F0	15
6	270	285	300	4000	600	3.5	93.5	38.6	F0	15
8	270	285	300	3500	500	3.6	96.8	40.7	F0	15
10	270	285	300	3500	500	3.7	100.1	41.2	F1	20
12	270	285	300	3500	500	3.8	103.4	45	F1	20
14	250	265	280	3500	500	3.9	106.8	45	F1	20
16	250	265	280	3500	500	4.0	110.2	45	F1	20
18	250	265	280	3200	400	4.1	113.5	45	F1	20
20	220	235	250	3200	400	4.2	116.8	45	F1	20
22	220	235	250	3000	400	4.3	120.1	52.6	F1	20
25	200	215	230	3000	400	4.45	125.1	59.3	F1	20
28	180	190	200	2500	400	4.6	130.1	61.8	F1	20
30	160	170	180	2500	400	4.7	133.4	63.5	F1	20

Standard Product Dimensions

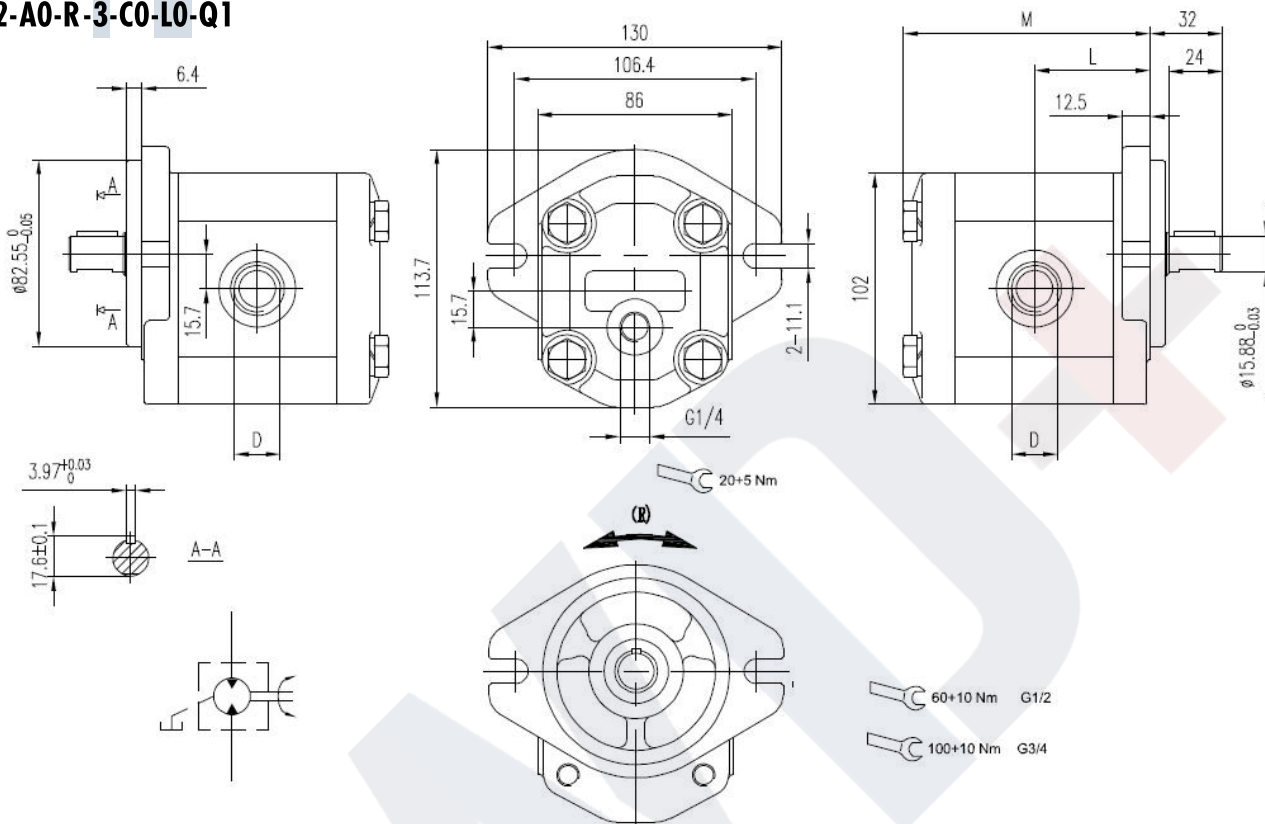
BHP2-A0-D-3-C0-X-U0



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions M mm	Oil port code	INLET	OUTLET
	P1 bar	P2 bar	P2 bar						D	d
3	270	285	300	4000	800	3.4	103.1	U0	1 1/16-12UNF	7/8-14UNF
4	270	285	300	4000	600	3.45	104.7	U0	1 1/16-12UNF	7/8-14UNF
6	270	285	300	4000	600	3.55	108	U0	1 1/16-12UNF	7/8-14UNF
8	270	285	300	3500	500	3.65	111.3	U0	1 1/16-12UNF	7/8-14UNF
10	270	285	300	3500	500	3.75	114.6	U0	1 1/16-12UNF	7/8-14UNF
12	270	285	300	3500	500	3.85	117.9	U0	1 1/16-12UNF	7/8-14UNF
14	250	265	280	3500	500	3.95	121.3	U0	1 1/16-12UNF	7/8-14UNF
16	250	265	280	3500	500	4.05	124.7	U0	1 1/16-12UNF	7/8-14UNF
18	250	265	280	3200	400	4.15	128	U0	1 1/16-12UNF	7/8-14UNF
20	220	235	250	3200	400	4.25	131.3	U0	1 1/16-12UNF	7/8-14UNF
22	220	235	250	3000	400	4.35	134.6	U0	1 1/16-12UNF	7/8-14UNF
25	200	215	230	3000	400	4.50	139.6	U0	1 1/16-12UNF	7/8-14UNF
28	180	190	200	2500	400	4.65	144.6	U0	1 1/16-12UNF	7/8-14UNF
30	160	170	180	2500	400	4.75	147.9	U0	1 1/16-12UNF	7/8-14UNF

Standard Product Dimensions

BHM2-A0-R-3-C0-L0-Q1



Displacement (cm ³ /rev)	Max. pressure			Max. speed (r/min)	Min. speed (r/min)	Weight Kg	Dimensions		Oil port code	LET D
	P1 bar	P2 bar	P3 bar				M mm	L mm		
3	270	285	300	4000	800	3.35	91.1	43.6	L0	G1/2
4	270	285	300	4000	600	3.4	92.7	44.4	L0	G1/2
6	270	285	300	4000	600	3.5	96	46	L0	G1/2
8	270	285	300	3500	500	3.6	99.3	47.7	L1	G3/4
10	270	285	300	3500	500	3.7	102.6	49.3	L1	G3/4
12	270	285	300	3500	500	3.8	105.9	51	L1	G3/4
14	250	265	280	3500	500	3.9	109.3	52.7	L1	G3/4
16	250	265	280	3500	500	4.0	112.7	54.4	L1	G3/4
18	250	265	280	3200	400	4.1	116	56	L1	G3/4
20	220	235	250	3200	400	4.2	119.3	57.7	L1	G3/4
22	220	235	250	3000	400	4.3	122.6	59.3	L1	G3/4
25	200	215	230	3000	400	4.45	127.6	61.8	L1	G3/4
28	180	190	200	2500	400	4.6	132.6	64.3	L1	G3/4
30	160	170	180	2500	400	4.7	135.9	66	L1	G3/4

