Ordering Code Rules

B	H	P	3	A0	D	20	CO	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
H	30 bar. Front and end cover material cast iron, pressure 30 bar higher than aluminum covers

P	Pump
M	Motor

3	Group 3

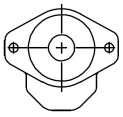
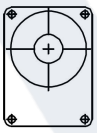
D	Clockwise
S	Counter clockwise
R	Reversible

20
22
26
33
39
46
50
52
55
63
71

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.

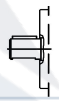
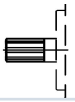
Special designing

Front cover

A0	**ø101.6** Diamond front cover (centering ø101.6mm)	
A1	**ø100** Square front cover (centering ø100mm)	
B0	**ø90** Square front cover (centering ø90mm)	
B1	**ø50.8** Square front cover (centering ø50.8mm)	
B2	**ø105** Square front cover (centering ø105mm)	

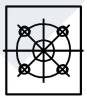
179 See page 179 for details

Shaft

TO	**1:8** Taper shaft 1:8	
T1	**1:5** Taper shaft 1:5	
C0	**ø25** Straight keyed ø25	
C2	**ø22.22** Straight keyed ø22.22	
C3	**ø25.4** Straight keyed ø25.4	
H0	Rectangle spline shaft ⎍6-25x20.1x6	
H2	Rectangle spline shaft ⎍6-25x21x5	
S0	SAE spline shaft DP16/32-30°-13T	
S1	SAE spline shaft DP16/32-30°-15T	

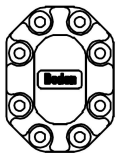
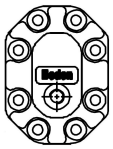
180 See page 180 for details

Ports

E_	Rectanglular flange	
F_	Rectanglular flange	
F_	Split flange	
Z_	**(M)** Metric thread	
L_	**(G)** Gas thread	
U_	**(UNF-2B)** UNF thread	
R_	**(PT)** PT thread	
X	Body without ports	

181-182 See page 181-182 for details

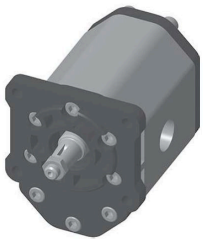
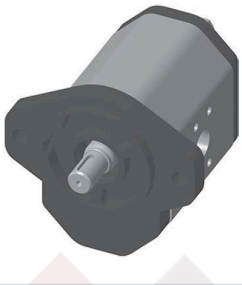
Special structure

	omit-regular	
Q_	Back cover with oil drain	

183 See page 183 for details

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

Standart Product Overview

type			
			
page	184	185	186

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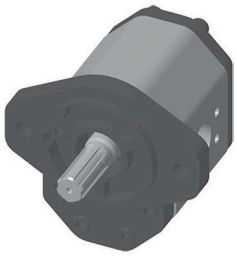
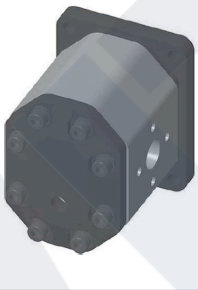
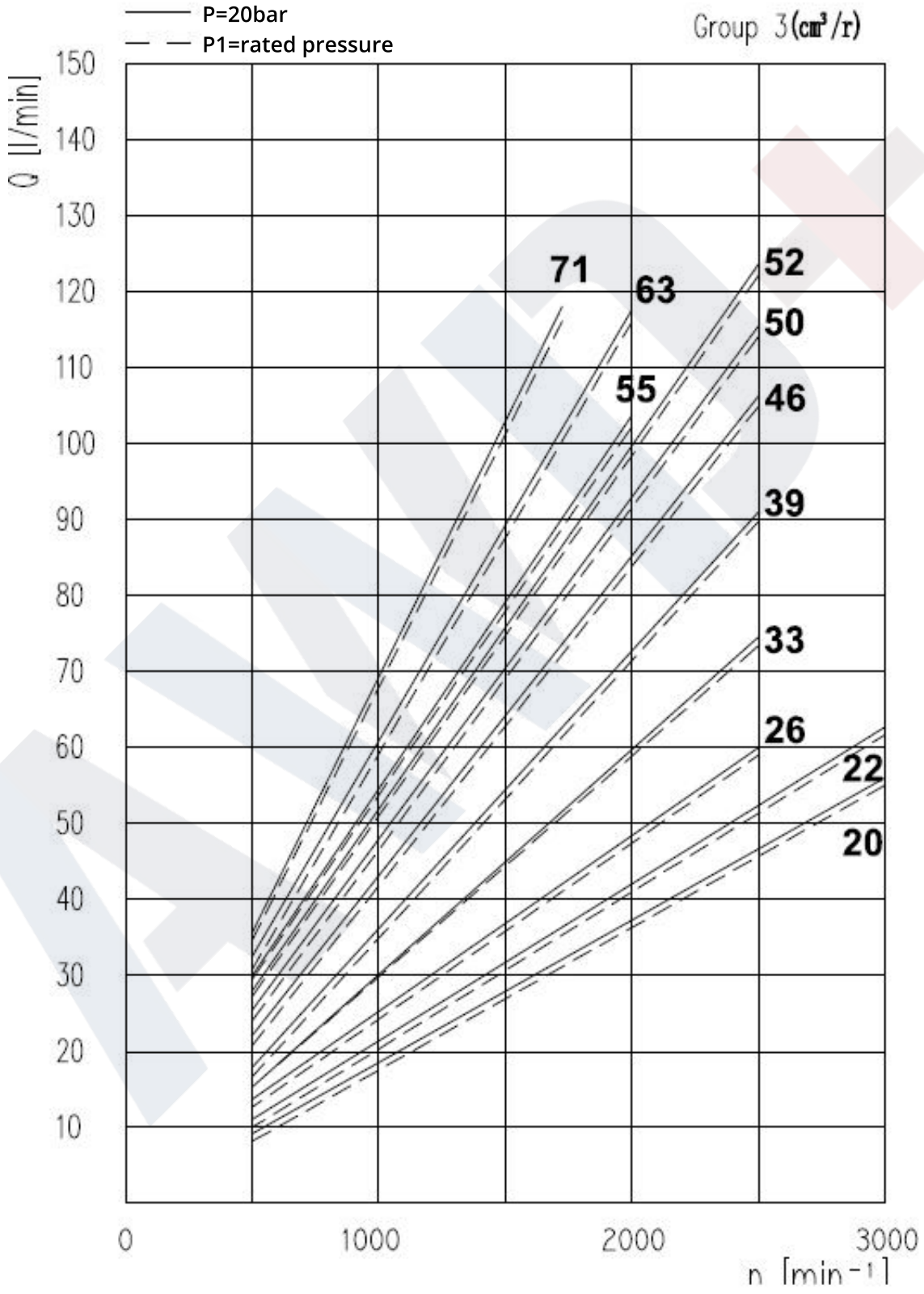
		
page	187	188

Displacement parameter table

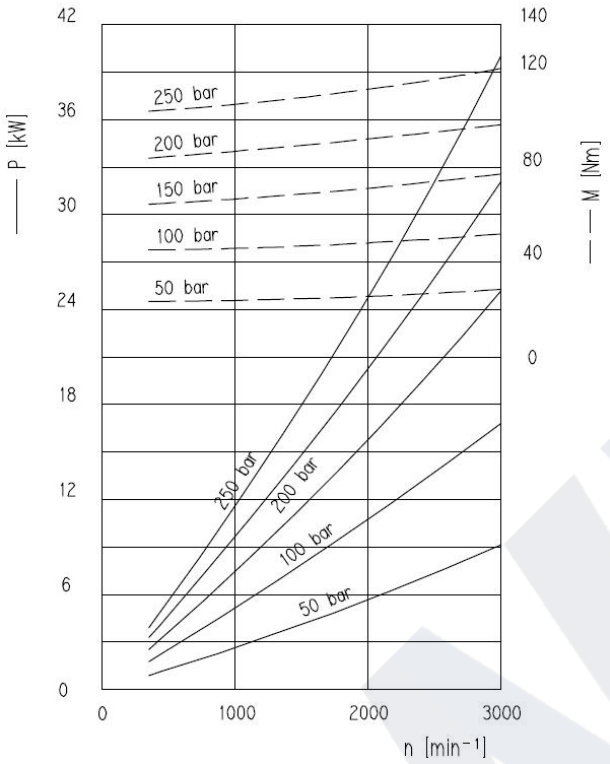
Displacement	V	cm³/rev	20	22	26	33	39	46	50	52	55	63	71
Suction absolute pressure	Pe	bar	0.7...3										
Max. continuous pressure	P1		250			230			220		200		180
Max. intermittent pressure	P2		265			250			240		230		200
Max. peak pressure	P3		280			270			260		250		200
Min. speed	n_{Min}	r/min	600			500					400		
Max.speed	n_{Max}		3500			3000					2800		2500
Volumetric efficiency	η_v	%	>92			>93			>94			>95	

Power Perfomance Curve Table

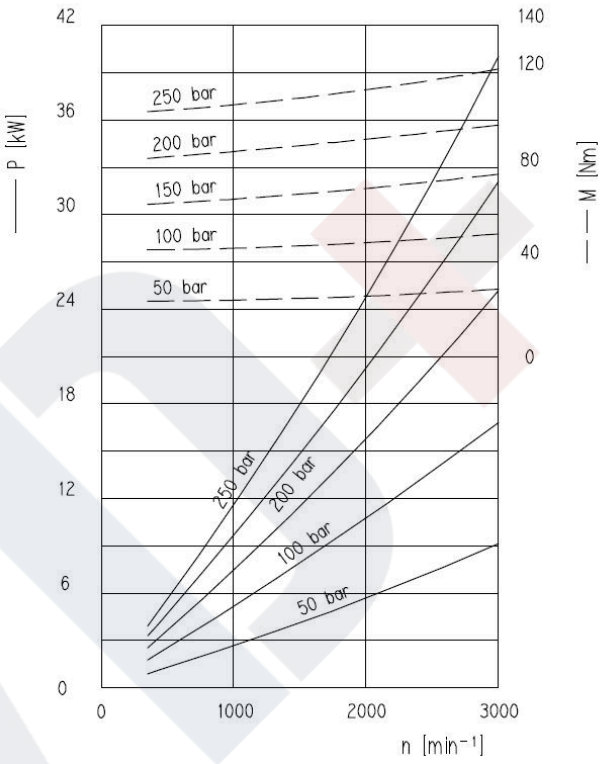


Power Perfomance Curve Table

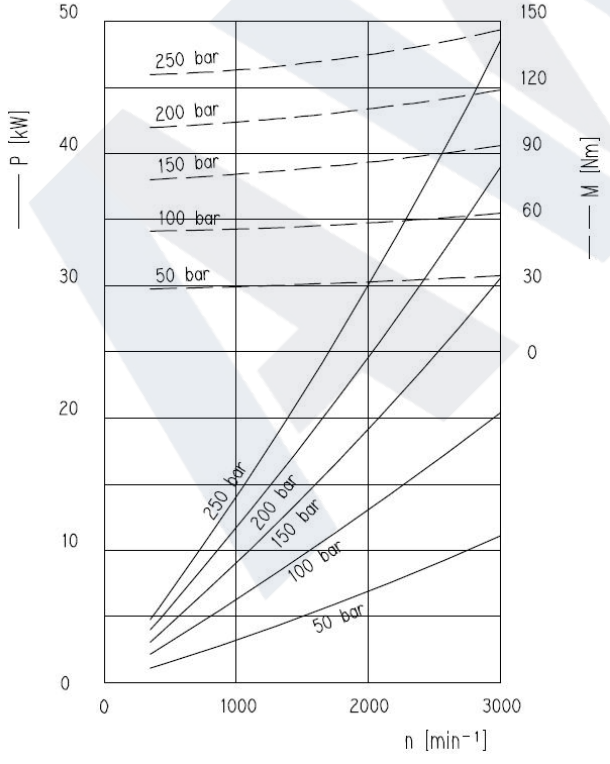
V=20cm³/r



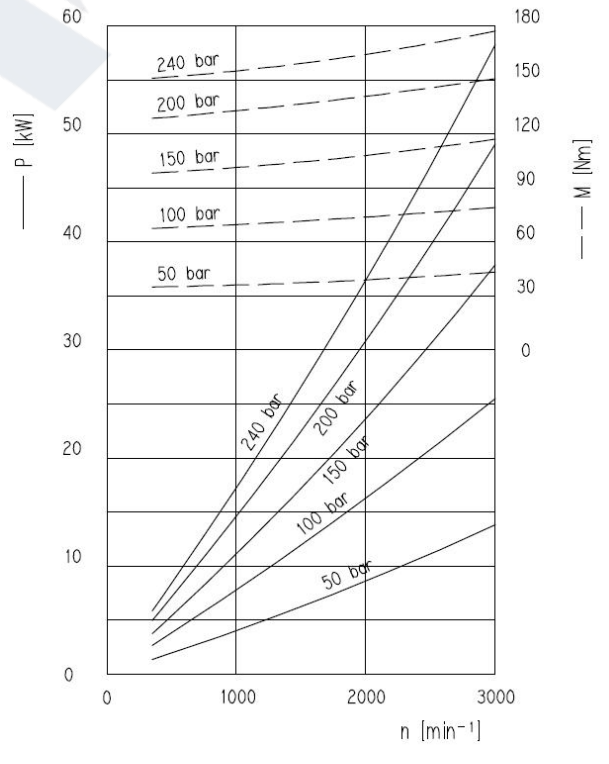
V=22cm³/r



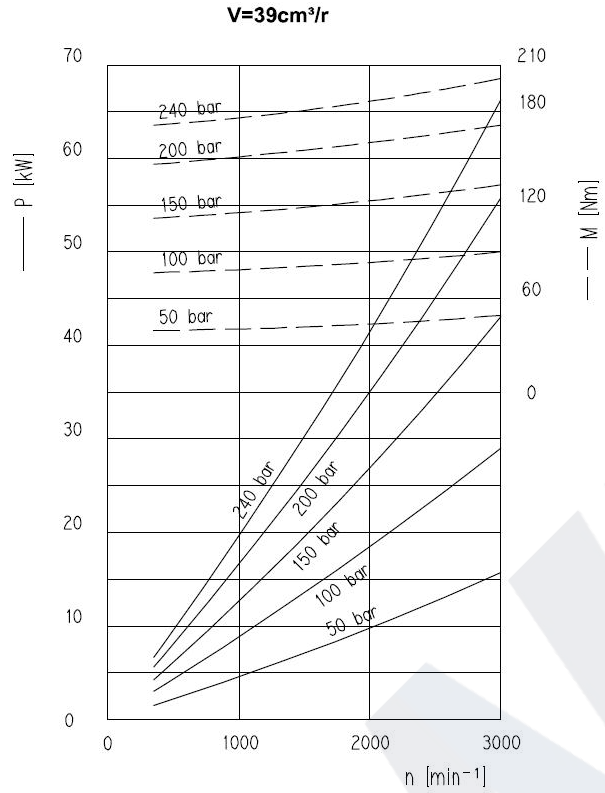
V=26cm³/r

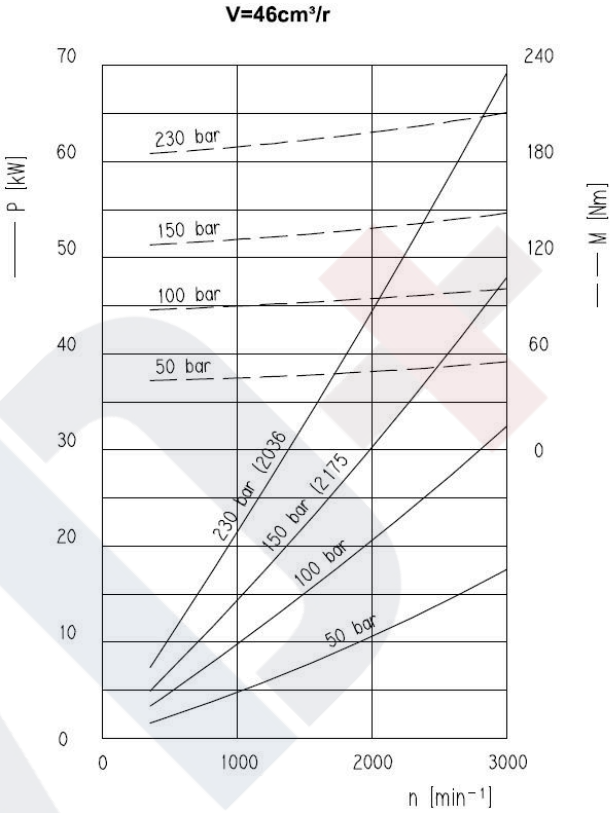


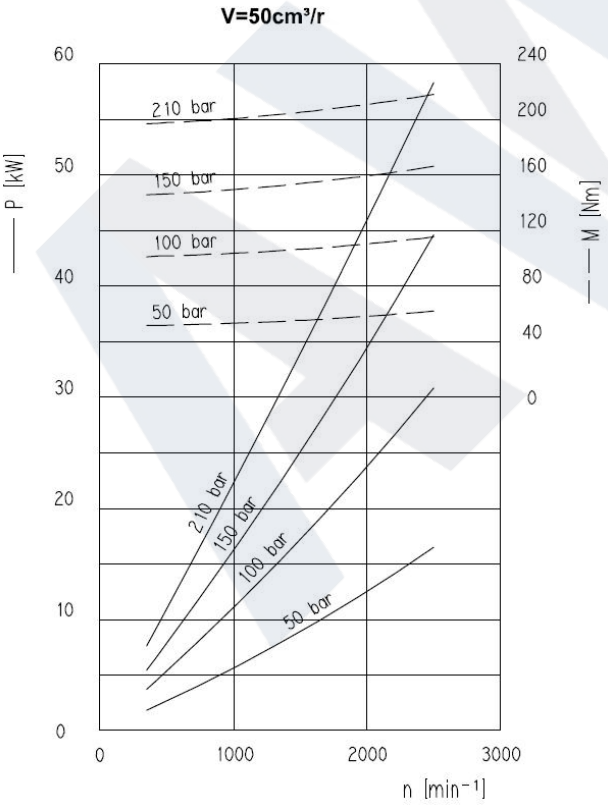
V=33cm³/r

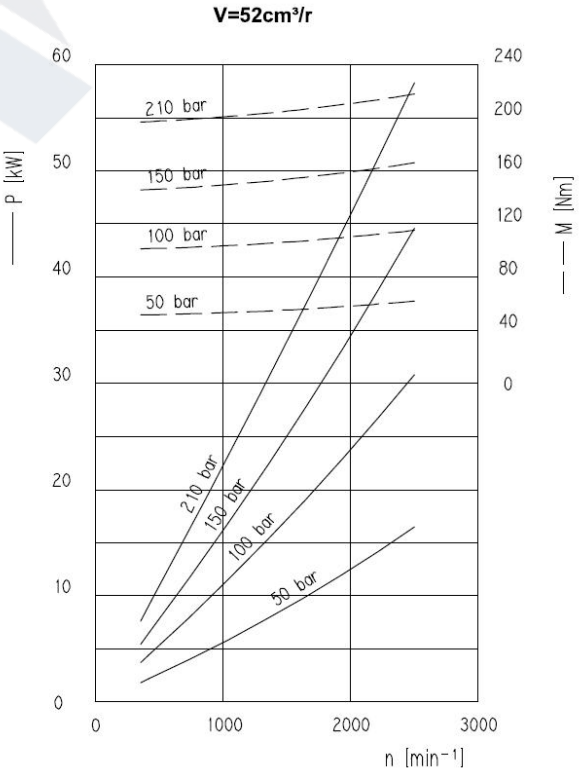


Power Perfomance Curve Table



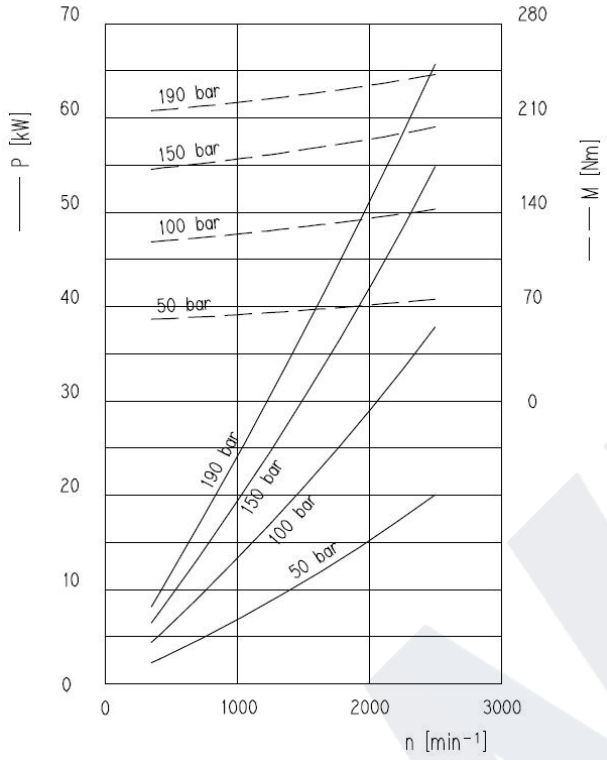




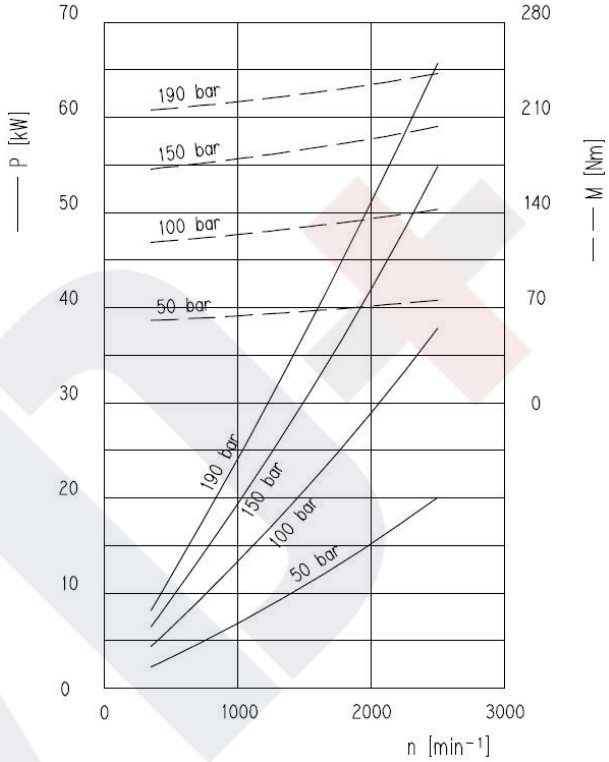


Power Perfomance Curve Table

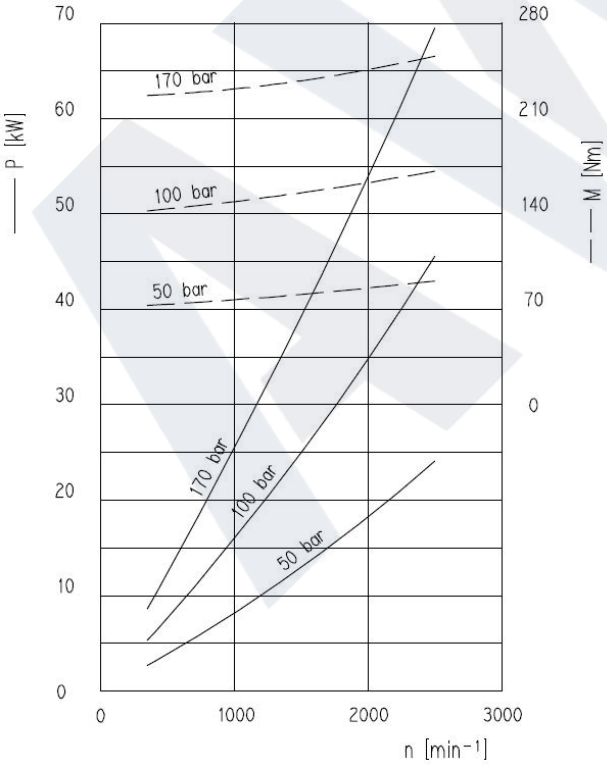
V=55cm³/r



V=63cm³/r



V=71cm³/r



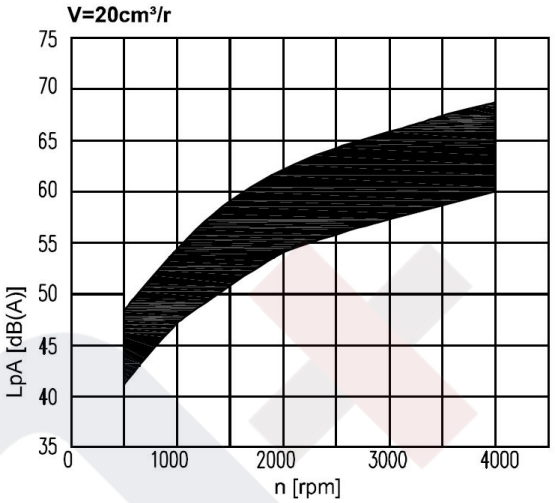
Noise Curve Table

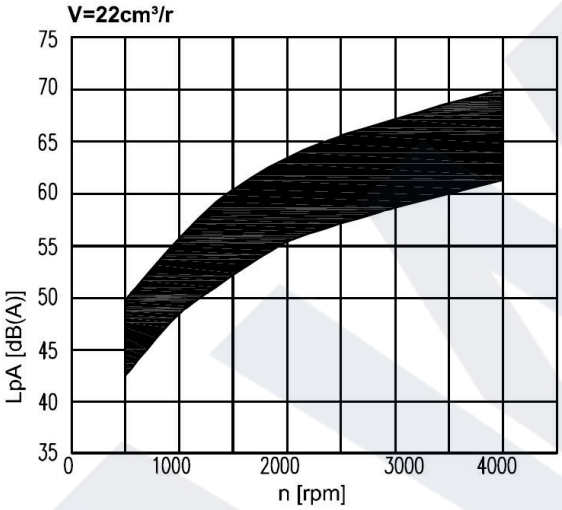
The noise level depends on the speed and pressure range;
This pressure range is between10 bar and pressure value P1.

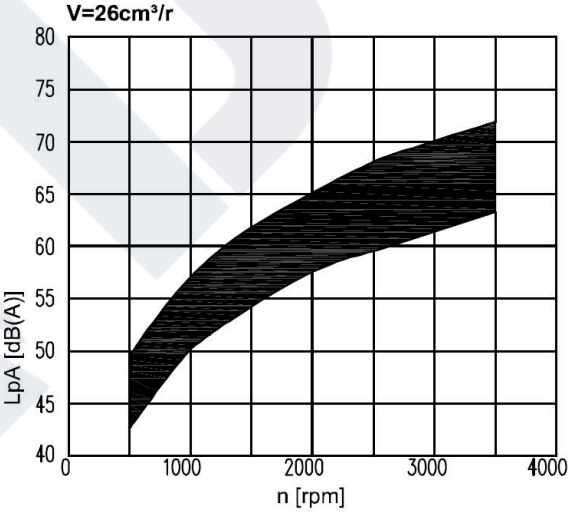
Oil data: v=32 mm²/s, θ=50°C.

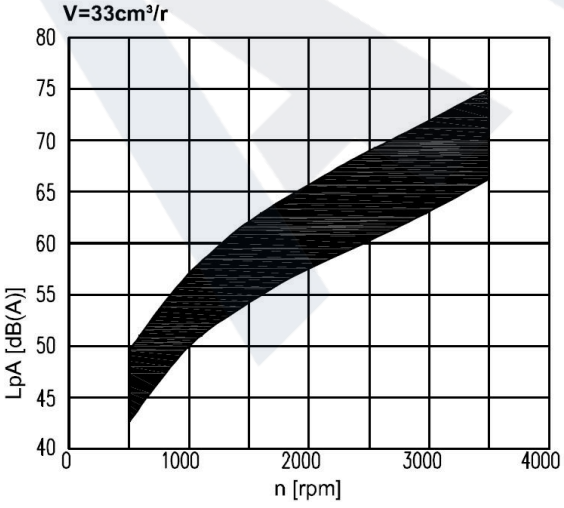
The sound pressure level obtained by calculating
the noise value measured
from the sound absorption measuring room meets
the requiements
of Chapter 26 of DIN 45635.

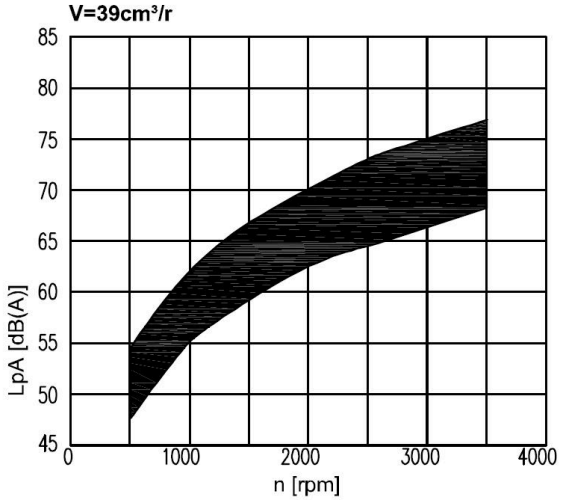
Distance between measuring sensor
and hydraulic pump: 1m.





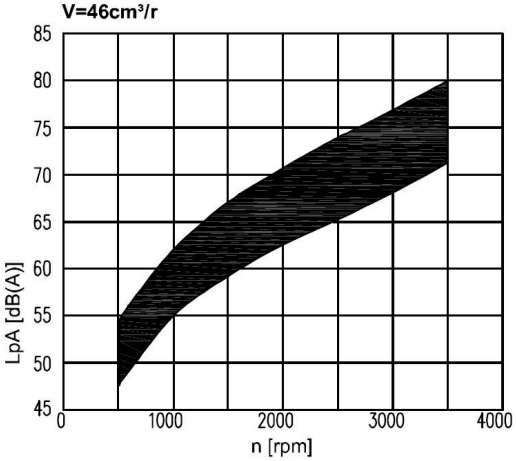




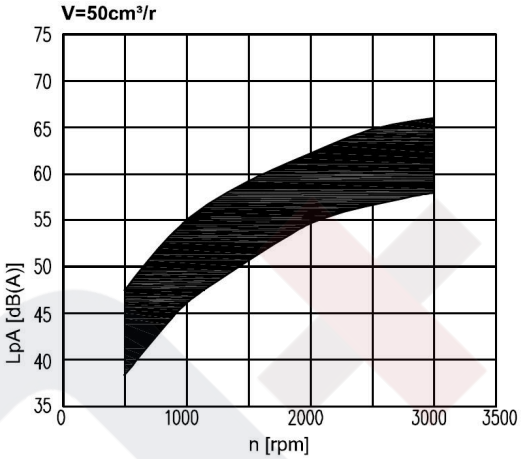


Noise Curve Table

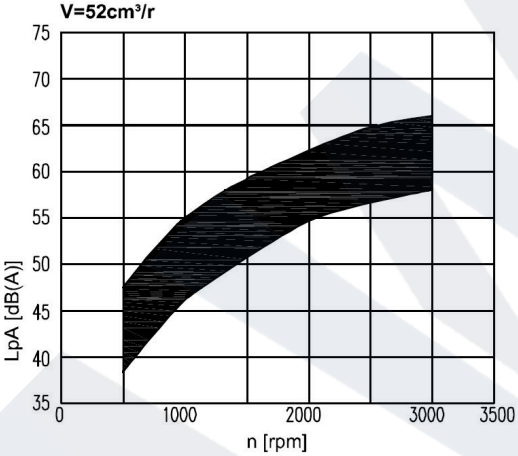
V=46cm³/r



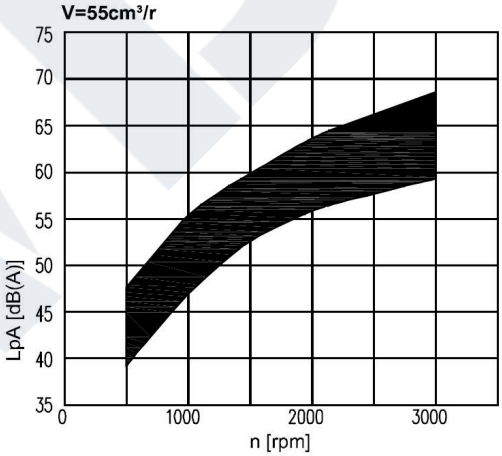
V=50cm³/r



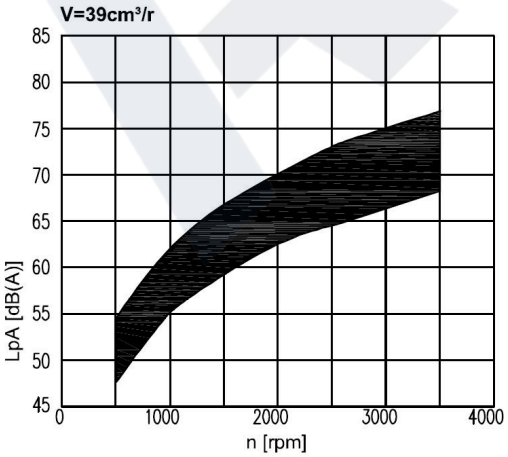
V=52cm³/r



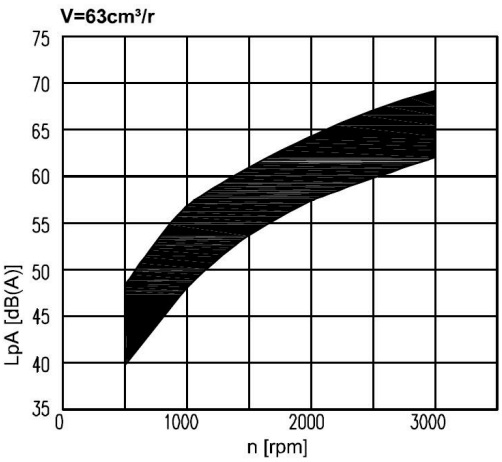
V=55cm³/r



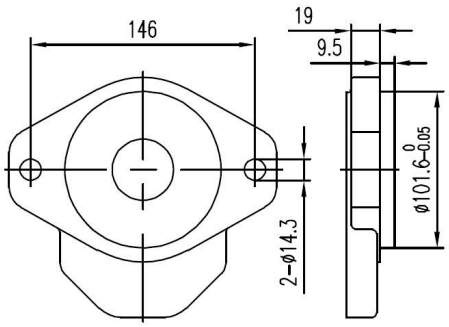
V=39cm³/r



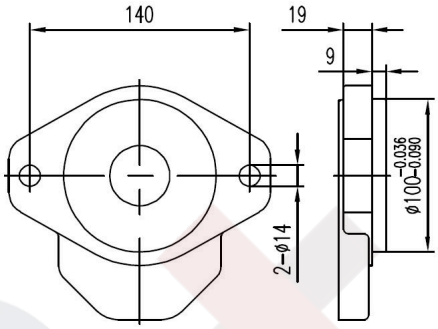
V=63cm³/r



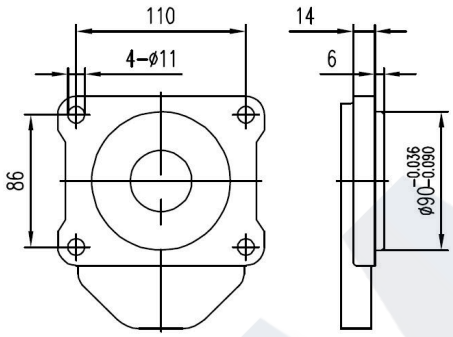
Front cover



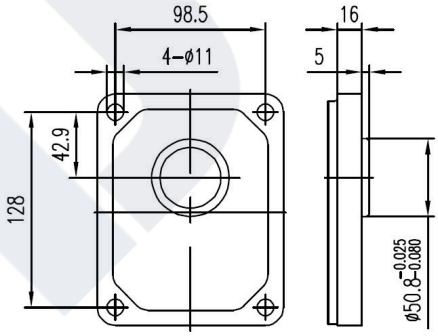
A0



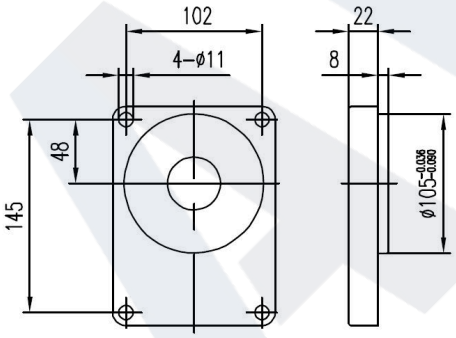
A1



B0

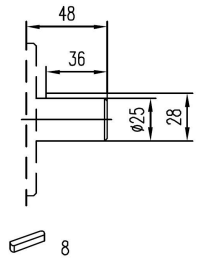


B1



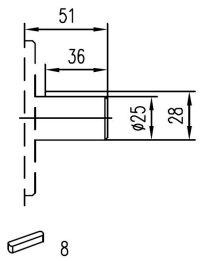
B2

Shafts



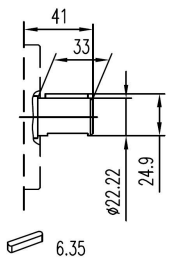
C0

Max. Torque 450 Nm



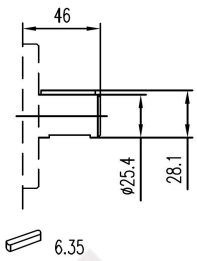
C1

Max. Torque 450 Nm



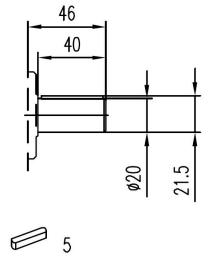
C2

Max. Torque 400 Nm



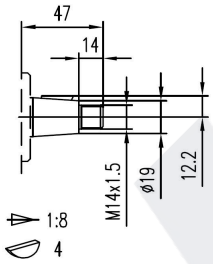
C3

Max. Torque 450 Nm



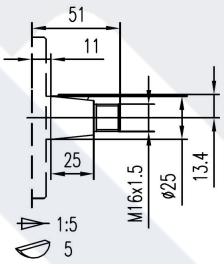
C4

Max. Torque 350 Nm



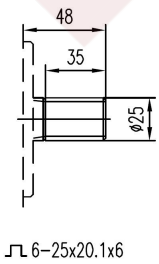
T0

Max. Torque 300 Nm



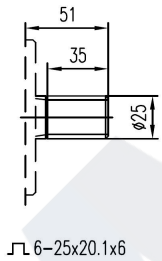
T1

Max. Torque 350 Nm



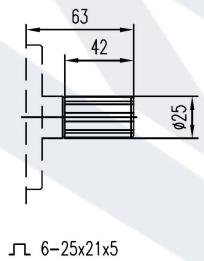
H0

Max. Torque 500 Nm



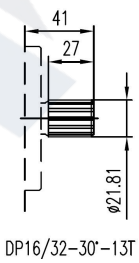
H1

Max. Torque 500 Nm



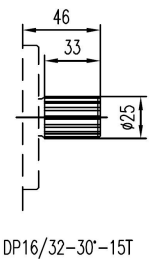
H2

Max. Torque 500 Nm



S0

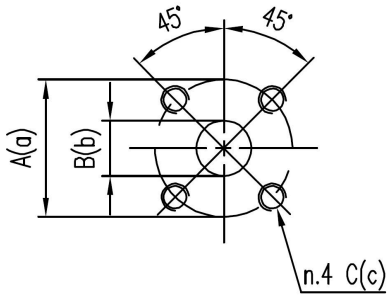
Max. Torque 500 Nm



S1

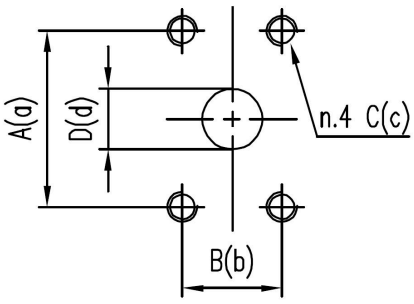
Max. Torque 600 Nm

Ports



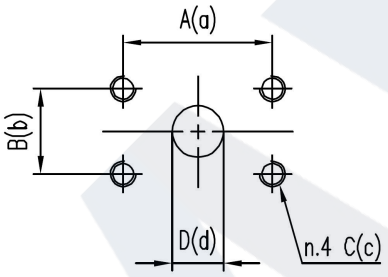
F0/F1/F2/F3

PORTS CODE	Displacement	INLET			OUTLET		
	(cm³/rev)	A	B	C	a	b	c
F0	20...26	50	20	M8	50	20	M8
F1	33...46	65	25	M8	65	20	M8
F2	50...71	76	33	M10	76	25	M10
F3	50...63	76	33	M8	76	25	M8



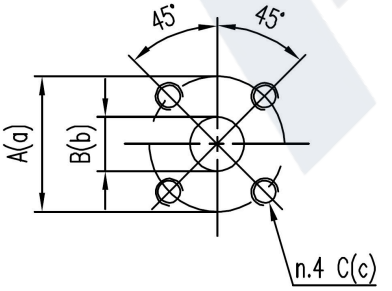
F4/F5

PORTS CODE	Displacement	INLET				OUTLET			
	(cm³/rev)	A	B	C	D	a	b	c	d
F4	20...52	52.4	26.2	3/8-16UNC	27	47.6	22.2	3/8-16UNC	19
F5	55...71	58.7	30.2	7/16-14UNC	33	52.4	26.2	3/8-16UNC	27



F6

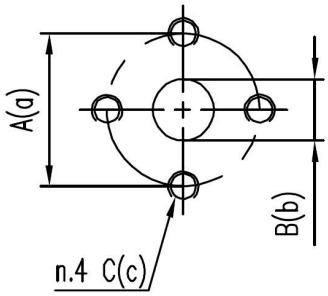
Displacement	INLET				OUTLET			
(cm³/rev)	A	B	C	D	a	b	c	d
20...25	52.2	26	M10	25	57.2	26	M10	20
33	52.2	26	M10	30	57.2	26	M10	20
39	52.2	26	M10	35	57.2	26	M10	20
50...63	52.2	26	M10	35	57.2	26	M10	25



F7

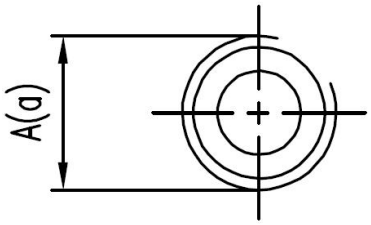
Displacement	INLET			OUTLET		
(cm3/rev)	A	B	C	a	b	c
20...71	55	27	M8	55	19	M8

Ports



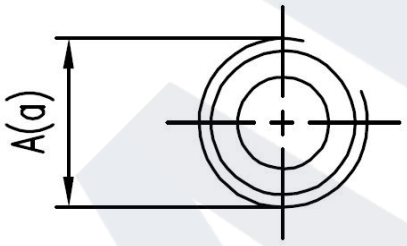
E0/E1/E2/E3

PORTS CODE	Displacement	INLET			OUTLET		
	(cm³/rev)	A	B	C	a	b	c
E0	20...39	56	27	M10	56	19	M10
E1	46	51	27	M10	51	27	M10
E2	50...52	56	27	M10	56	27	M10
E3	55...71	62	33	M10	51	27	M10



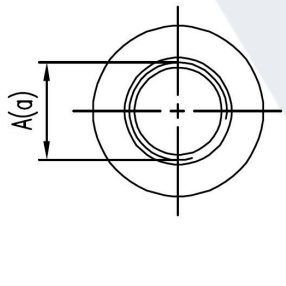
L0/L1/L2/L3

PORTS CODE	Displacement	INLET	OUTLET
	(cm³/rev)	A	a
L0	20...22	G3/4	G3/4
L1	26...39	G 1	G3/4
L2	46...63	G1 1/4	G 1
L3	71	G1 1/2	G1 1/4



R0/R1/R2/R3

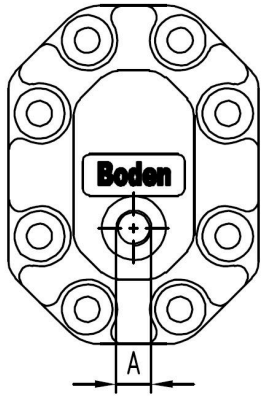
PORTS CODE	Displacement	INLET	OUTLET
	(cm³/rev)	A	a
R0	20...22	PT3/4	PT3/4
R1	26...39	PT 1	PT3/4
R2	46...63	PT1 1/4	PT 1
R3	71	PT1 1/2	PT1 1/4



U0/U1/U2

PORTS CODE	Displacement	INLET	OUTLET
	(cm³/rev)	A	a
U0	20...33	1 5/16-12UNF	1 1/16-12UNF
U1	39...52	1 5/8-12UNF	1 1/16-12UNF
U2	55...71	1 7/8-12UNF	1 5/16-12UNF

Special structure

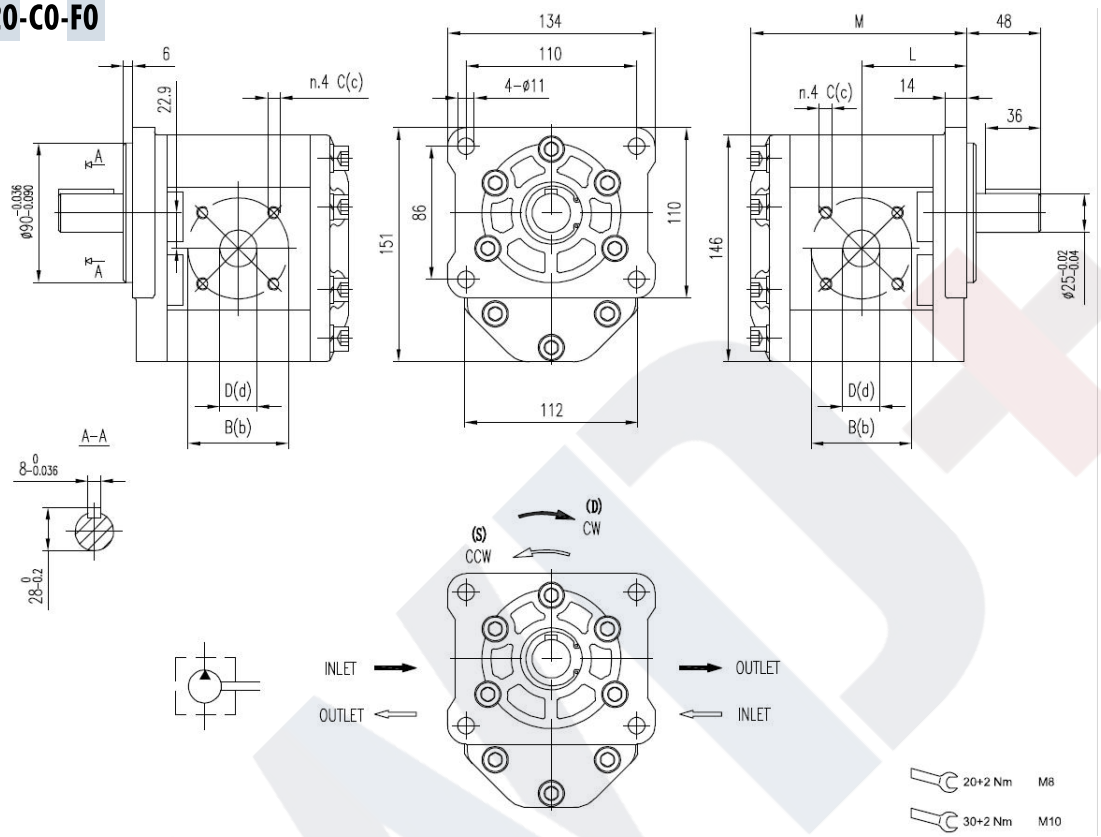


Q_

CODE	oil drain
	A
Q1	G3/8
Q2	3/4-16UNF

Standard Product Dimensions

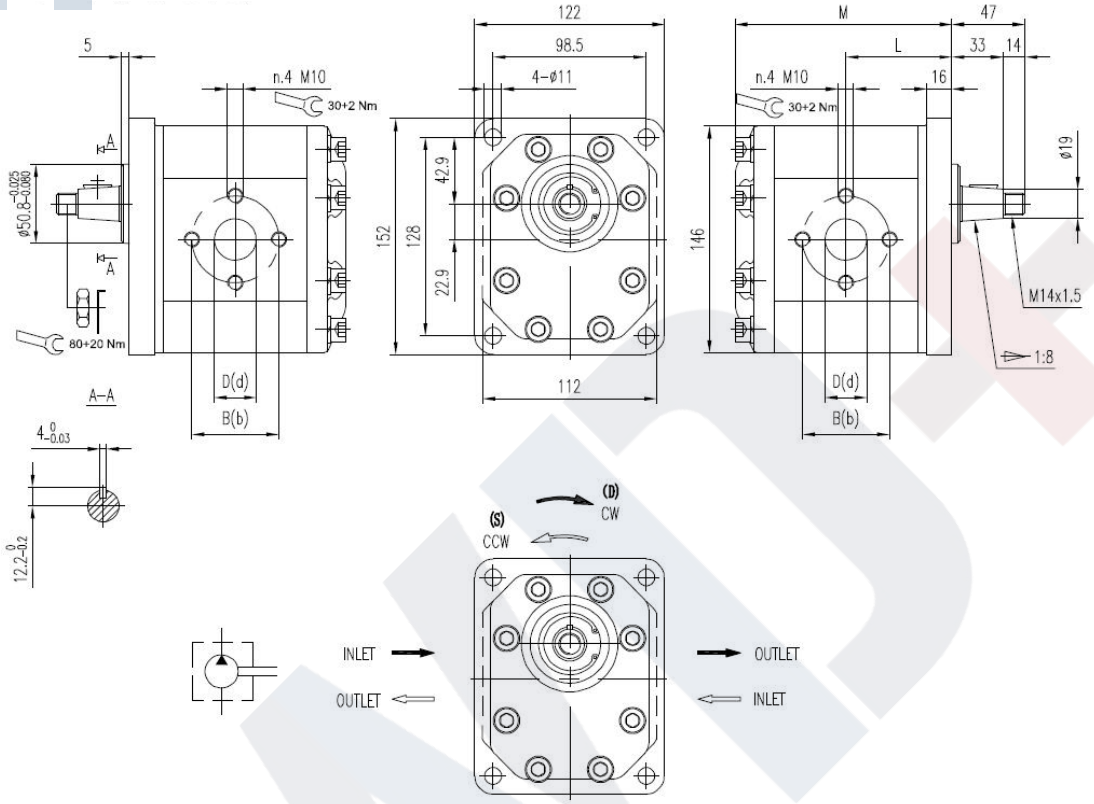
BHP3-B0-D-20-C0-F0



Displace-ment	Max. pressure			Max. speed	Min. speed	Weight	Dimensions		Oil port code	INLET			OUTLET		
	P1	P2	P3				M	L		B	D	C	b	d	c
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm		mm	mm		mm	mm	
20	250	265	280	3500	600	7.5	128	63	F0	50	20	M8	50	20	M8
22	250	265	280	3500	600	7.7	130	64	F0	50	20	M8	50	20	M8
26	250	265	280	3000	600	8.1	133	65	F0	50	20	M8	50	20	M8
33	230	250	270	3000	500	8.6	139	68	F1	65	25	M8	65	20	M8
39	230	250	270	3000	500	9.1	146	72	F1	65	25	M8	65	20	M8
46	230	250	270	3000	500	9.6	152	75	F1	65	25	M8	65	20	M8
50	220	240	260	3000	500	10.0	156	77	F2	76	33	M10	76	25	M10
52	220	240	260	3000	500	10.2	158	78	F2	76	33	M10	76	25	M10
55	200	230	250	2800	400	10.5	160	79	F2	76	33	M10	76	25	M10
63	200	230	250	2800	400	11.1	168	83	F2	76	33	M10	76	25	M10
71	180	200	220	2500	400	11.8	175	86	F2	76	33	M10	76	25	M10

Standard Product Dimensions

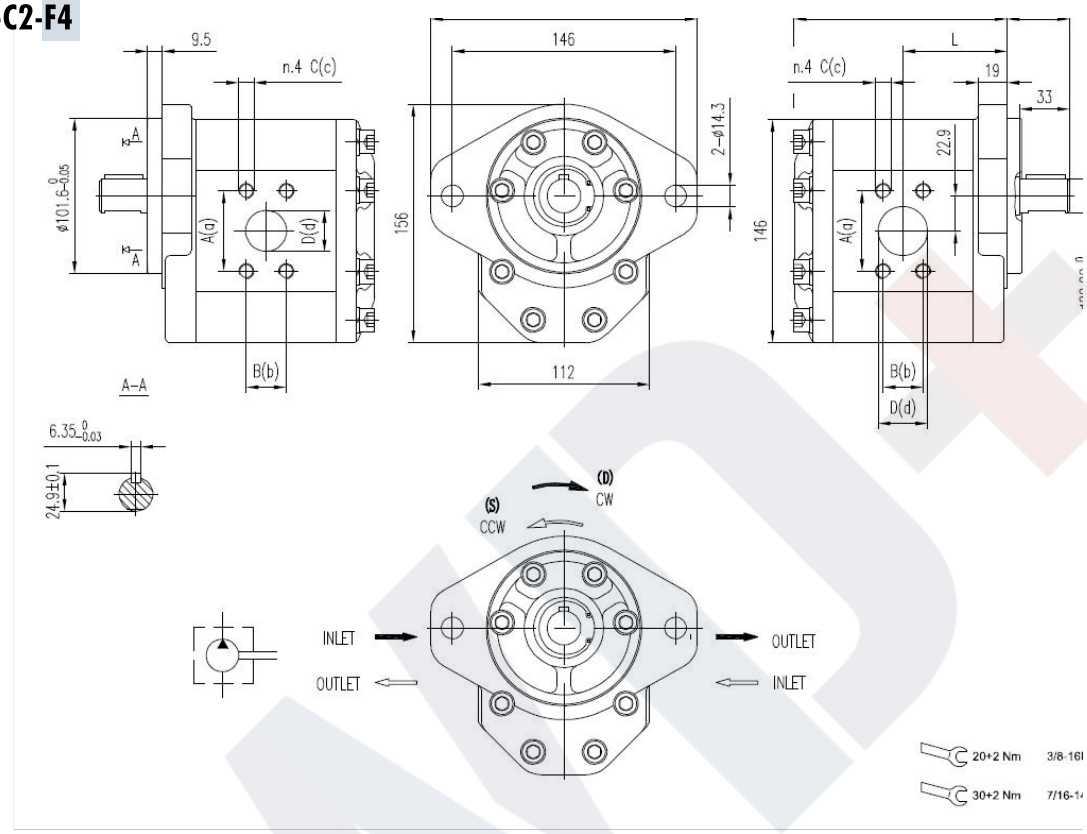
BHP3-B1-D-20-T0-E0



Displace-ment	Max. pressure			Max. speed	Min. speed	Weight	Dimensions		Oil port code	INLET		OUTLET	
	P1	P2	P3				M	L		B	D	b	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm		mm	mm	mm	mm
20	250	265	280	3500	600	7.5	128	63	E0	56	27	56	19
22	250	265	280	3500	600	7.7	130	64	E0	56	27	56	19
26	250	265	280	3000	600	8.1	133	65	E0	56	27	56	19
33	230	250	270	3000	500	8.6	139	68	E0	56	27	56	19
39	230	250	270	3000	500	9.1	146	72	E0	56	27	56	19
46	230	250	270	3000	500	9.6	152	75	E1	51	27	51	27
50	220	240	260	3000	500	10.0	156	77	E2	56	27	56	27
52	220	240	260	3000	500	10.2	158	78	E2	56	27	56	27
55	200	230	250	2800	400	10.5	160	79	E3	62	33	51	27
63	200	230	250	2800	400	11.1	168	83	E3	62	33	51	27
71	180	200	220	2500	400	11.8	175	86	E3	62	33	51	27

Standard Product Dimensions

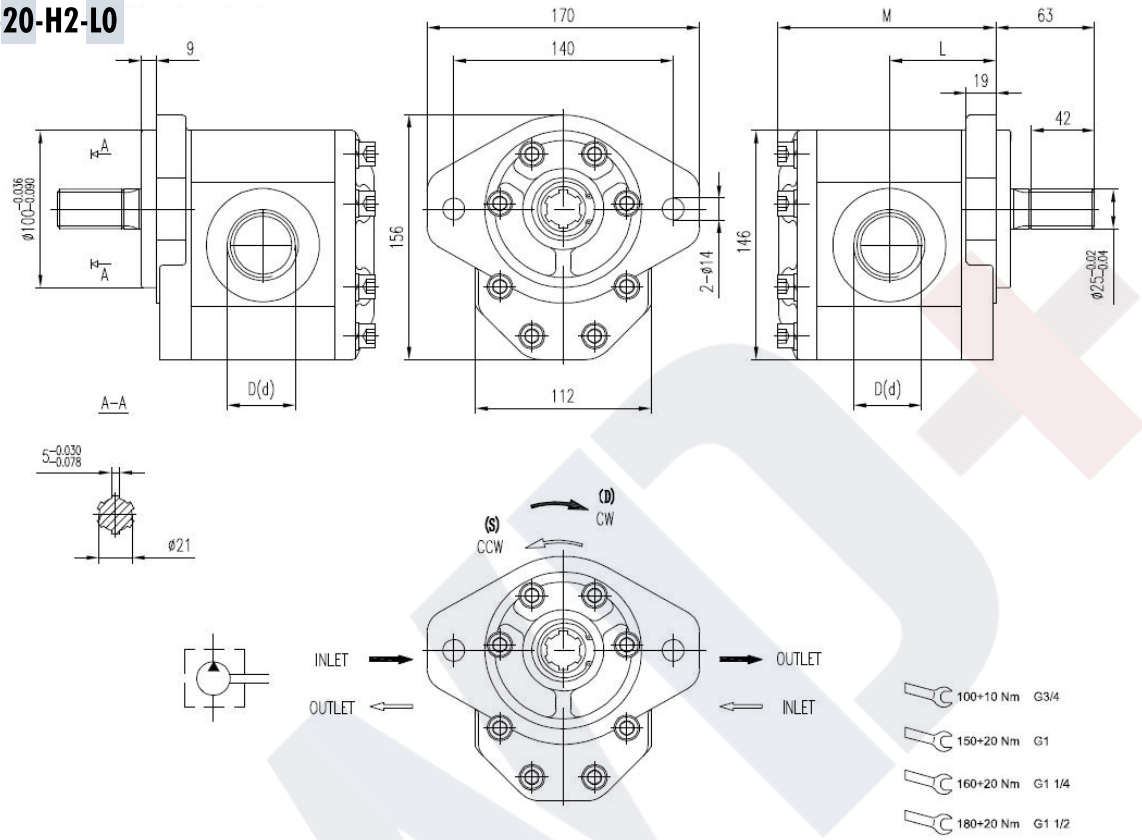
BHP3-A0-D-20-C2-F4



Displace-ment	Max. pressure			Max. speed	Min. speed	Weight	Dimensions		Oil port code	INLET				OUTLET			
	P1	P2	P3				M	L		A	B	C	D	a	b	c	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm		mm	mm	UNC	mm	mm	mm	UNC	mm
20	250	265	280	3500	600	7.5	128	63	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
22	250	265	280	3500	600	7.7	130	64	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
26	250	265	280	3000	600	8.1	133	65	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
33	230	250	270	3000	500	8.6	139	68	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
39	230	250	270	3000	500	9.1	146	72	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
46	230	250	270	3000	500	9.6	152	75	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
50	220	240	260	3000	500	10.0	156	77	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
52	220	240	260	3000	500	10.2	158	78	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
55	200	230	250	2800	400	10.5	160	79	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27
63	200	230	250	2800	400	11.1	168	83	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27
71	180	200	220	2500	400	11.8	175	86	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27

Standard Product Dimensions

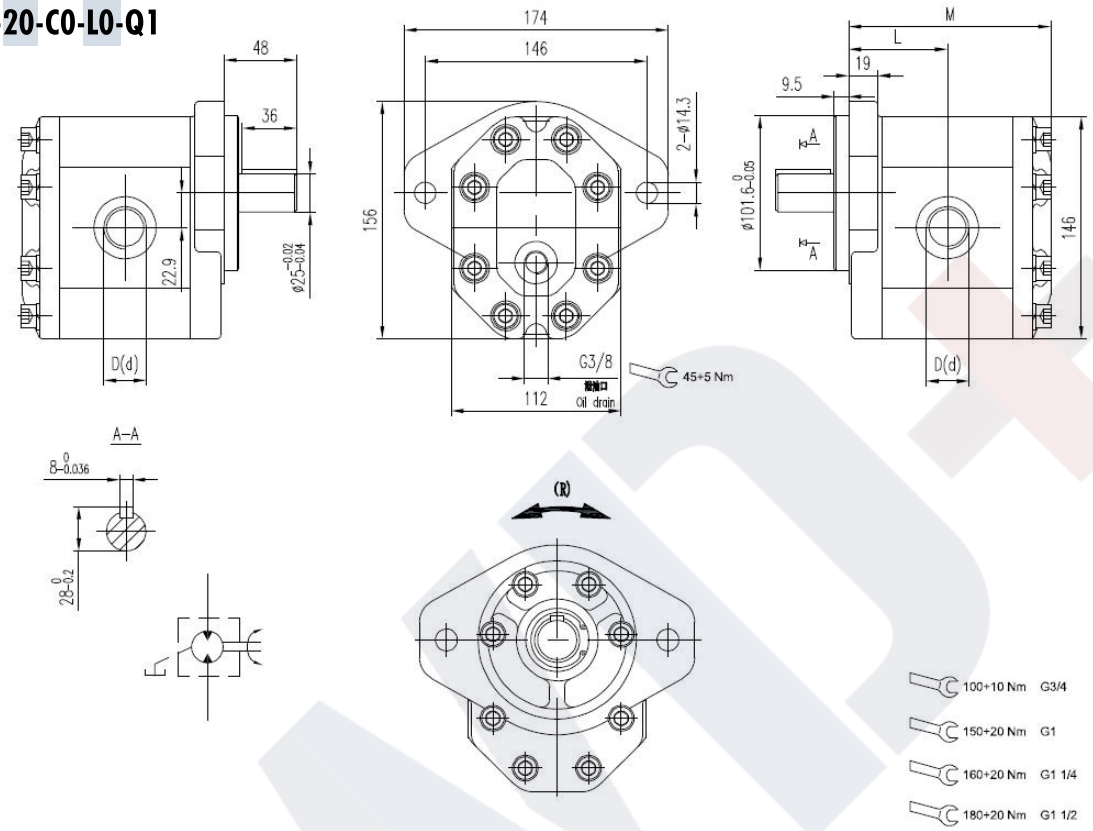
BHP3-A1-D-20-H2-L0



Displace-ment	Max. pressure			Max. speed	Min. speed	Weight	Dimensions		Oil port code	INLET	OUTLET
	P1	P2	P3				M	L		D	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm			
20	250	265	280	3500	600	7.5	128	63	L0	G3/4	G3/4
22	250	265	280	3500	600	7.7	130	64	L0	G3/4	G3/4
26	250	265	280	3000	600	8.1	133	65	L1	G1	G3/4
33	230	250	270	3000	500	8.6	139	68	L1	G1	G3/4
39	230	250	270	3000	500	9.1	146	72	L1	G1	G3/4
46	230	250	270	3000	500	9.6	152	75	L2	G1 1/4	G1
50	220	240	260	3000	500	10.0	156	77	L2	G1 1/4	G1
52	220	240	260	3000	500	10.2	158	78	L2	G1 1/4	G1
55	200	230	250	2800	400	10.5	160	79	L2	G1 1/4	G1
63	200	230	250	2800	400	11.1	168	83	L2	G1 1/4	G1
71	180	200	220	2500	400	11.8	175	86	L3	G1 1/2	G1 1/4

Standard Product Dimensions

BHM3-A0-R-20-C0-L0-Q1



Displace-ment	Max. pressure			Max. speed	Min. speed	Weight	Dimensions		Oil port code	INLET	OUTLET
	P1	P2	P3				M	L		D	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm			
20	250	265	280	3500	600	7.5	128	63	L0	G3/4	G3/4
22	250	265	280	3500	600	7.7	130	64	L0	G3/4	G3/4
26	250	265	280	3000	600	8.1	133	65	L1	G1	G3/4
33	230	250	270	3000	500	8.6	139	68	L1	G1	G3/4
39	230	250	270	3000	500	9.1	146	72	L1	G1	G3/4
46	230	250	270	3000	500	9.6	152	75	L2	G1 1/4	G1
50	220	240	260	3000	500	10.0	156	77	L2	G1 1/4	G1
52	220	240	260	3000	500	10.2	158	78	L2	G1 1/4	G1
55	200	230	250	2800	400	10.5	160	79	L2	G1 1/4	G1
63	200	230	250	2800	400	11.1	168	83	L2	G1 1/4	G1
71	180	200	220	2500	400	11.8	175	86	L3	G1 1/2	G1 1/4