



®

ROTO PUMPS

PERFORMANCE CURVE

MODEL

D 412

GRAPH NO.

RS-400-00

STARTING TORQUE :- 0.70 Nm.

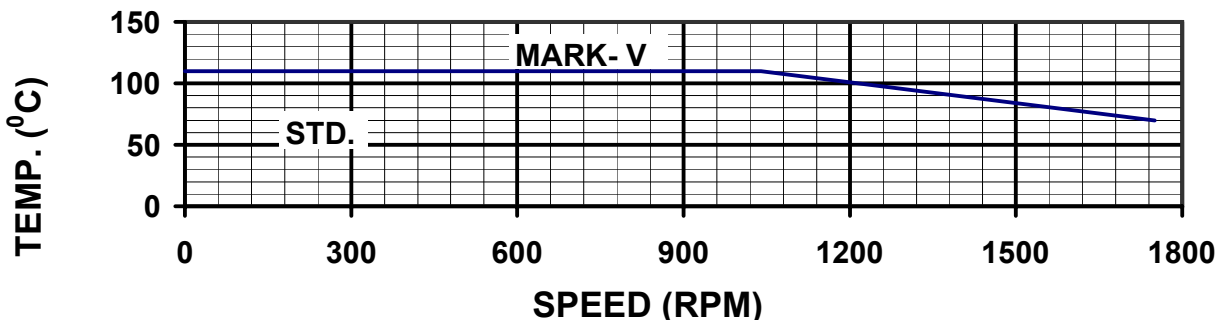
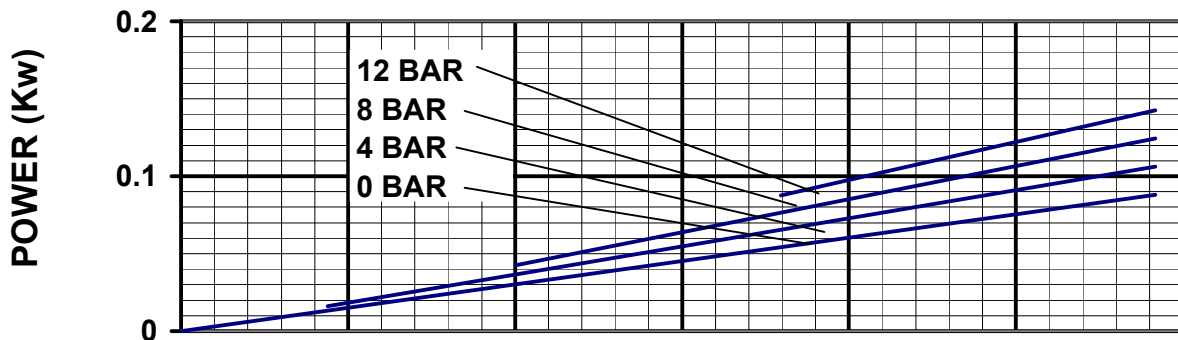
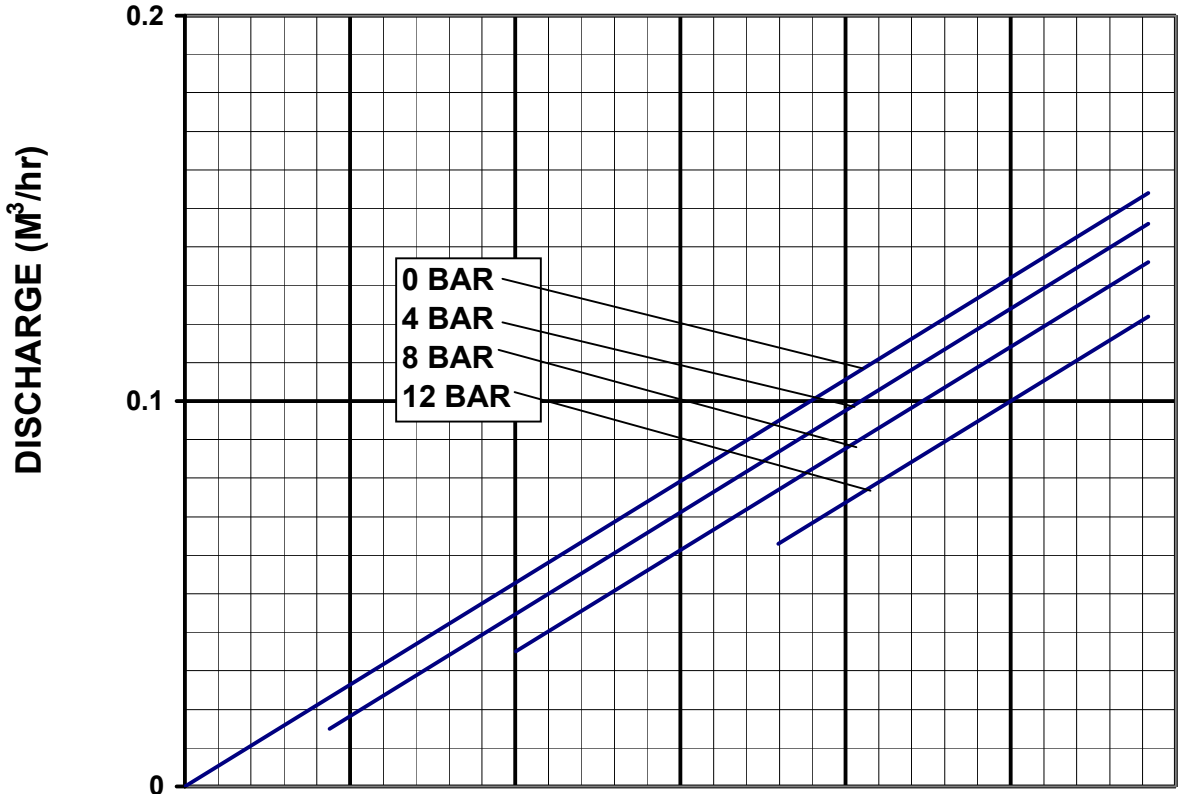
STATOR HARDNESS :- 75^o Shore A

Tested on Water at 30^oc for RA & RR Stator

Solid Handling Capacity

Soft & Compressible 4 mm

Hard & Angular 1 mm.

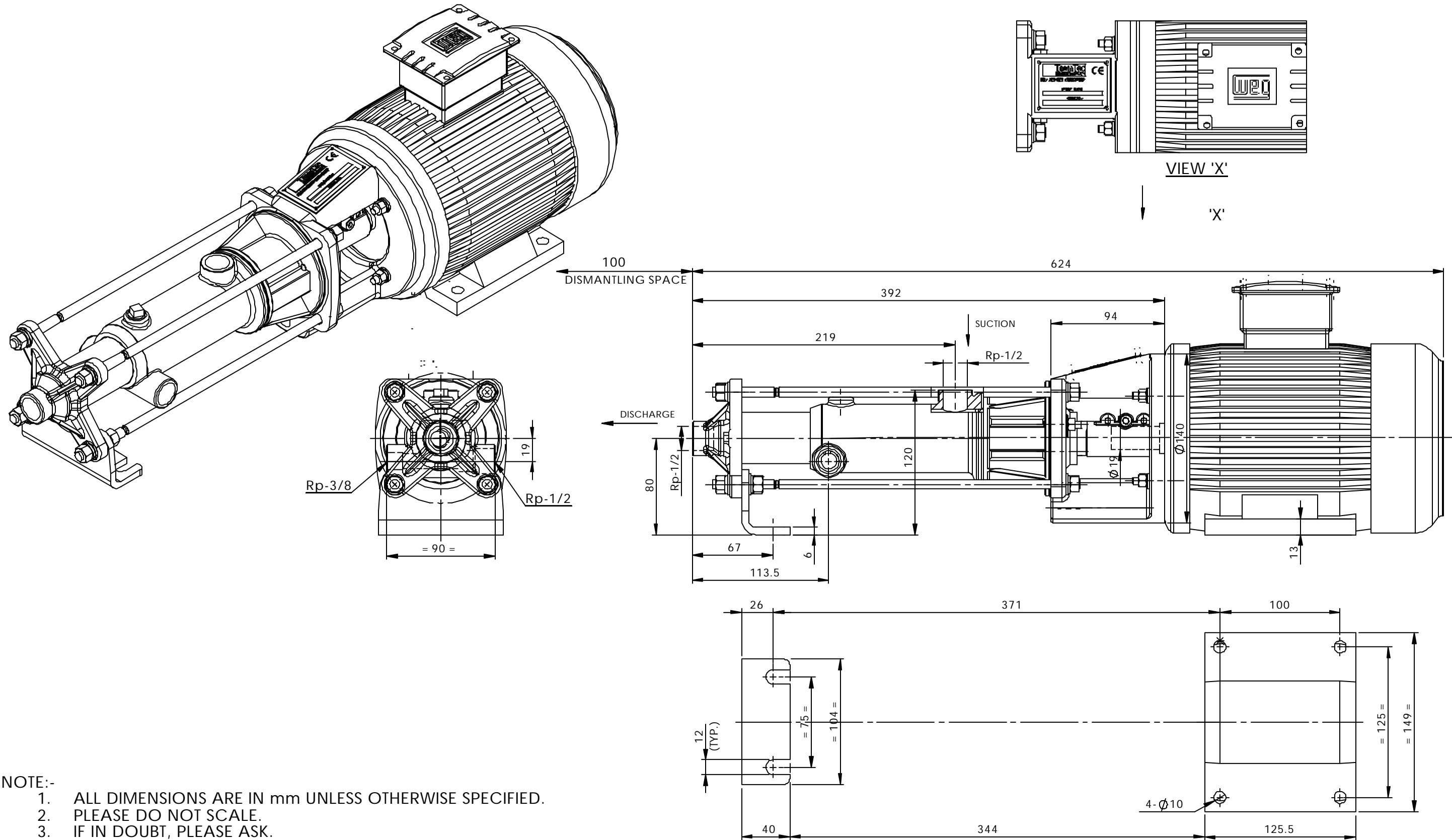


NOTE :- FOR FLUID TEMPERATURE BELOW 10^oC REFER TO ROTO



DIMENSIONAL DRAWING FOR RDCZ- 412/432 PUMPS A/C: RPL- UK

DRG. NO.
07-114-2005-05



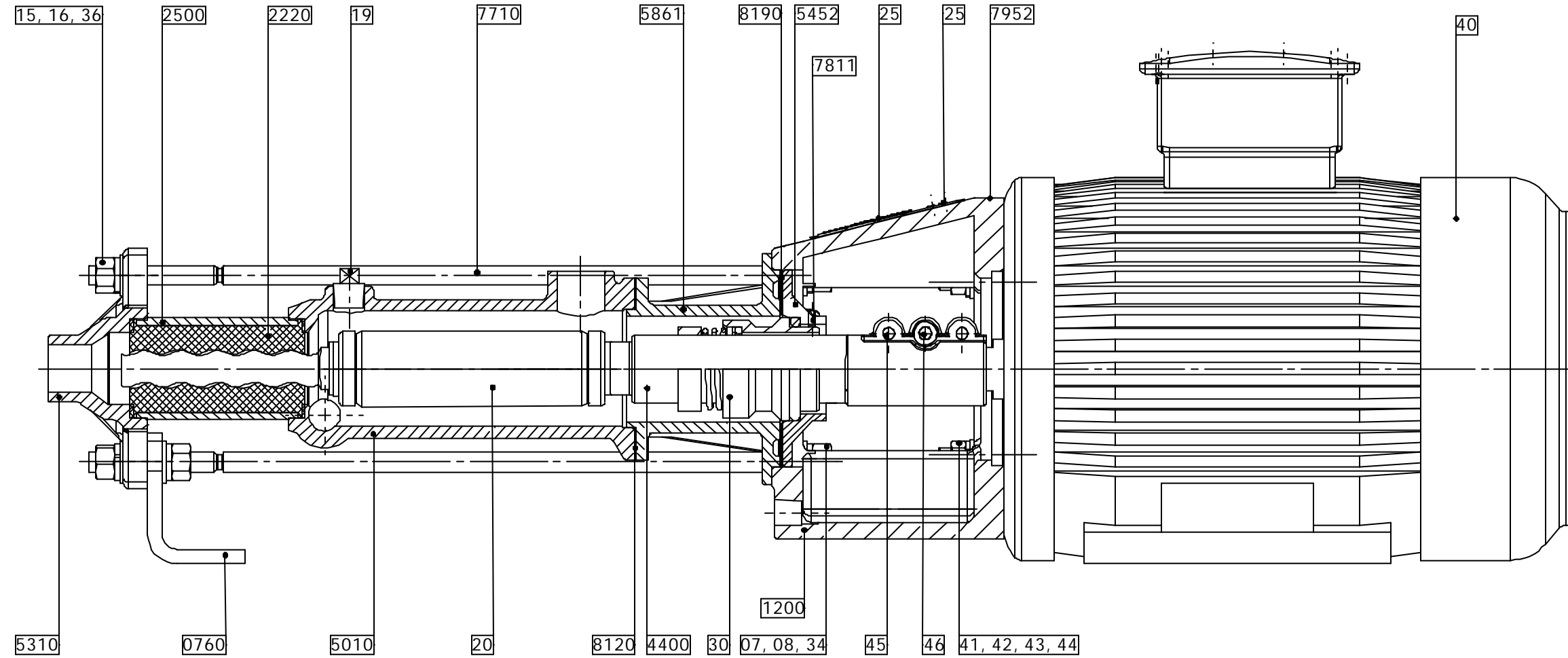
- NOTE:-
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
 2. PLEASE DO NOT SCALE.
 3. IF IN DOUBT, PLEASE ASK.

05	D-197-2006	DRAWING REDRAWN AS PER MODIFIED PUMP HOUSING AND ISOMETRIC VIEW ADDED.									
00	G-377-2005	NEW RELEASE	APS	17/2/6	DATE	DRAWN	CHECKED	APPROVED	SHEET NO.	NO. OF SHEET	
ALT. NO.	ALT. NOTE NO.	ALTERATION	SIGN	DATE	17/2/06	APS	APS	SKS	01	01	



CROSS SECTIONAL DRAWING FOR RDCZ- 432 R3 CE IS AND RDCZ 412 R3 CE IS PUMPS A/C (RPL- UK)

DRG. NO.
07-115-2005-03



* MARKED PART ARE NOT SHOWN IN THE DRAWING.

PART NO.	NOMENCLATURE	QTY	PART NO.	NOMENCLATURE	QTY
07	STUD (FOR NO.5452 & 5861)	02	0760	FOOT	01
08	HEX NUT (FOR PART NO. 07)	02	1200	PUMP LANTERN	01
15	HEX NUT (FOR PART NO. 5310, 7710 & 1200)	10	2220	BONDED STATOR	01
16	SPRING WASHER (FOR PART NO. 15)	10	2500	ROTOR	01
19	TAPER PLUG	01	4400	STUB SHAFT	01
20	UNIVERSAL JOINT	01	5010	PUMP HOUSING	01
25	DRIVE SCREW (FOR PART 7910 & 7940)	04	5310	STRAIGHT THROUGH END COVER	01
30	MECHANICAL SEAL	01	5452	SEAL PLATE	01
34	SPRING WASHER (FOR PART NO. 08)	02	5861	HECH. SEAL HOUSING	01
36	PUNCHED WASHER (FOR PART NO. 15)	10	*7620	GLAND GUARD	02
40	FACE MOUNTED MOTOR	01	7710	TIE ROD	04
41	STUD (FOR PART NO. 1200 & 40)	04	7811	RETAINING PIN	01
42	HEX NUT (FOR PART NO. 41)	04	7960	NAME PLATE	01
43	SPRING WASHER (FOR PART NO. 41)	04	7952	NAME PLATE (ROTATIONAL)	01
44	PUNCHED WASHER (FOR PART NO. 41)	04	8120	STUFFING BOX GASKET	01
45	HEX SOCKET HEAD CAP SCREW (FOR PART NO. 4400)	02	8190	SEAL PLATE GASKET	01
46	HEX SOCKET HEAD GRUB SCRW (FOR PART NO. 4400)	01			

03	D-197-2006	DRAWING REDRAWN AS PER MODIFIED PUMP HOUSING PUMP MODEL RDCZ-412 ADDED.				
00	G-377-2005	NEW RELEASE			APS	17/2/6
ALT. NO.	ALT. NOTE NO.	ALTERATION			SIGN	DATE
DATE	DRAWN	CHECKED	APPROVED	SHEET NO.	NO. OF SHEET	
17/2/06	APS	APS	SKS	01	01	



ROTO PUMPS PERFORMANCE CURVE

Model-D 432

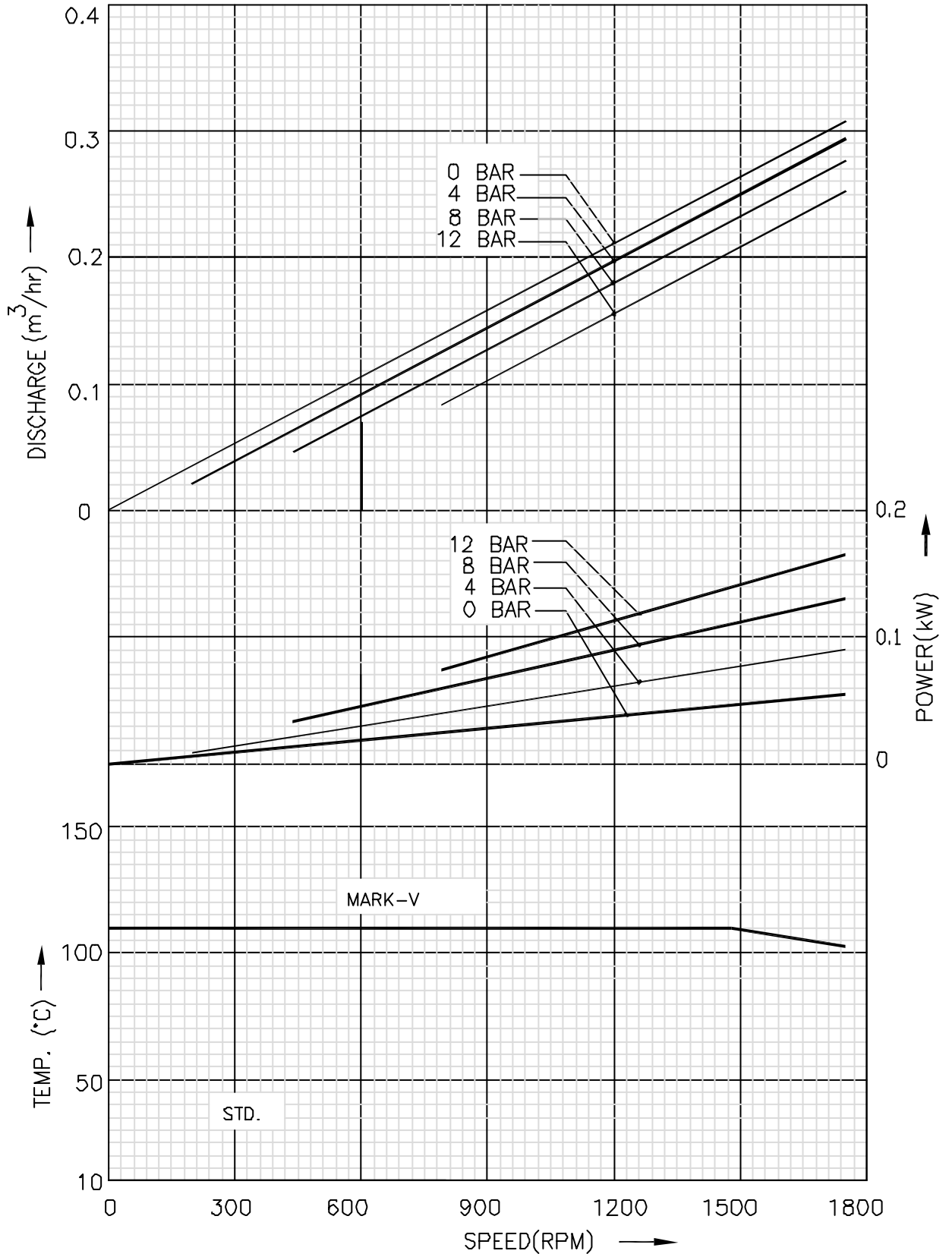
Graph No. RS-386-01

STARTING TORQUE : - 0.5 Nm

STATOR HARDNESS :- 70° Shore A

Tested on water at 30°C for RA & RR stator

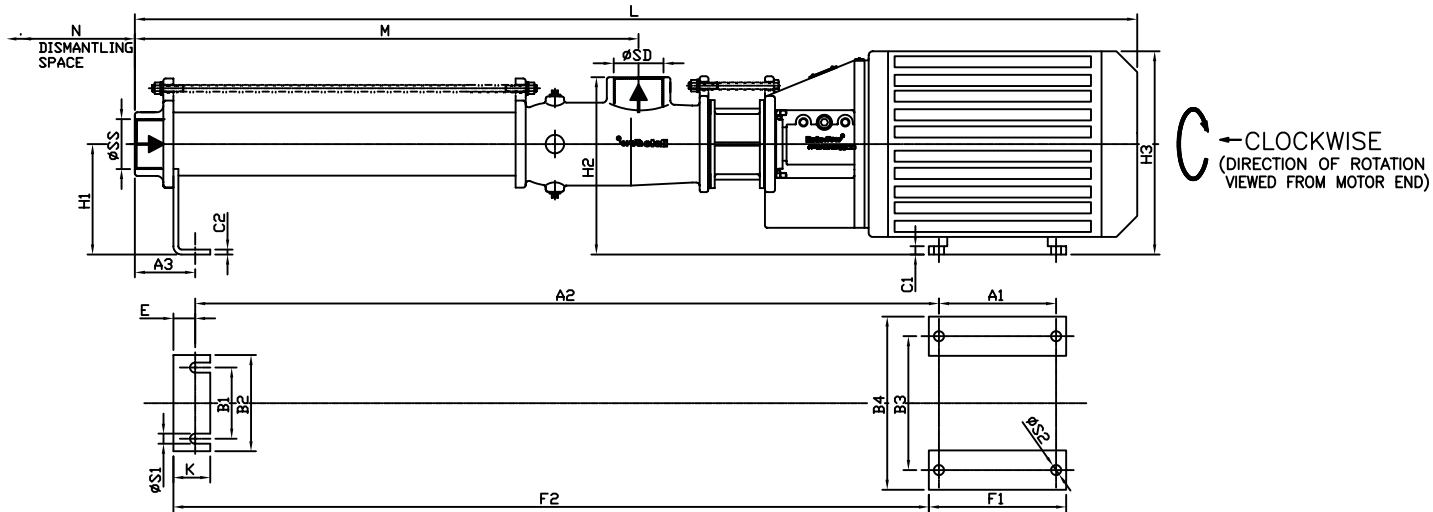
Solid handling capacity
Soft & Compressible 8 mm
Hard & Angular 2 mm





DIMENSIONAL DRAWING OF RDCZ 432 PUMP

DRG. NO.
07-017-2005-00



CLIENT	R.P.L. UK.
STATUS	OFFER DRAWING

MOTOR: 0.37kw/FOOT & FACE MOUNTED/FRAME SIZE L80
NOTE: PUMP AVAILABLE WITH MECHANICAL SEAL ONLY.

TYPE AND SIZE OF PUMP	BASIC DIMENSIONS																	FLANGE DIMENSION		MOTOR DIMENSIONS & RATING								
	A1	A2	A3	B1	B2	B3	B4	C1	C2	E	F1	F2	H1	H2	H3	K	L	M	N	$\phi S1$	$\phi S2$	ϕSD	ϕSS	FRAME SIZE	FLANGE DIA	SHAFT DIA	MOTOR (kw)	RATING RPM
RDCZ-432	100	376	67	75	104	125	157	10	6	26	120	392	80	125	220	40	607	216	145	12	12	Rp 3/4	Rp 3/4	80	140	19	0.37	1450

00	G-086-2005	NEW RELEASE	SKS	21.6.05	DATE	DRAWN	CHECKED	APPROVED	SHEET NO.	NO. OF SHEET
ALT NO.	ALT NOTE NO.	ALTERATION	SIGN	DATE	21.6.05	DKS	APS	SKS	1	1



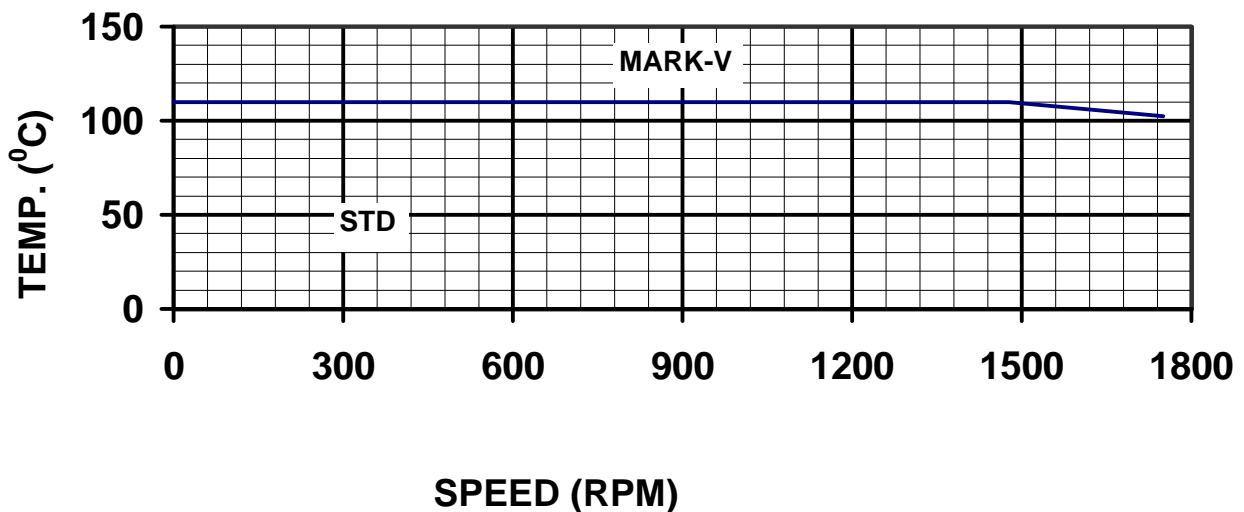
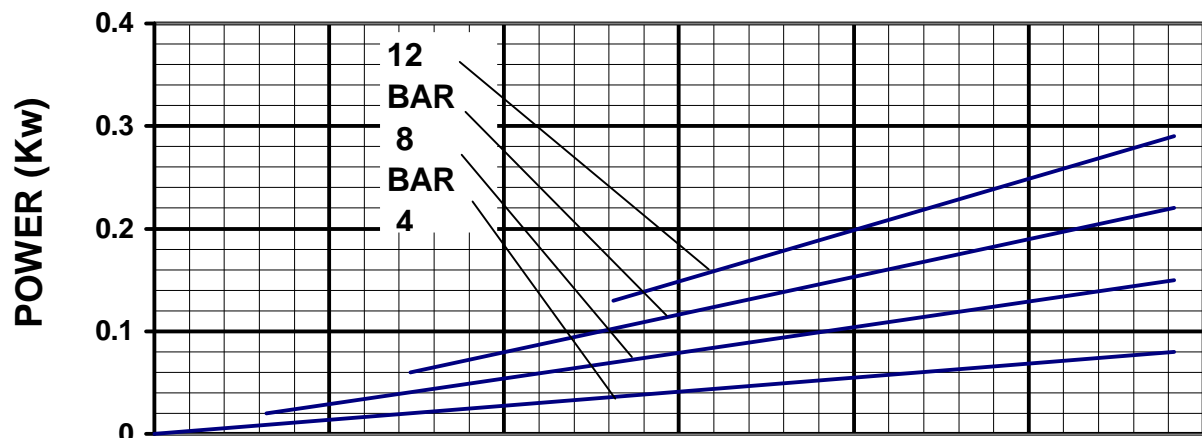
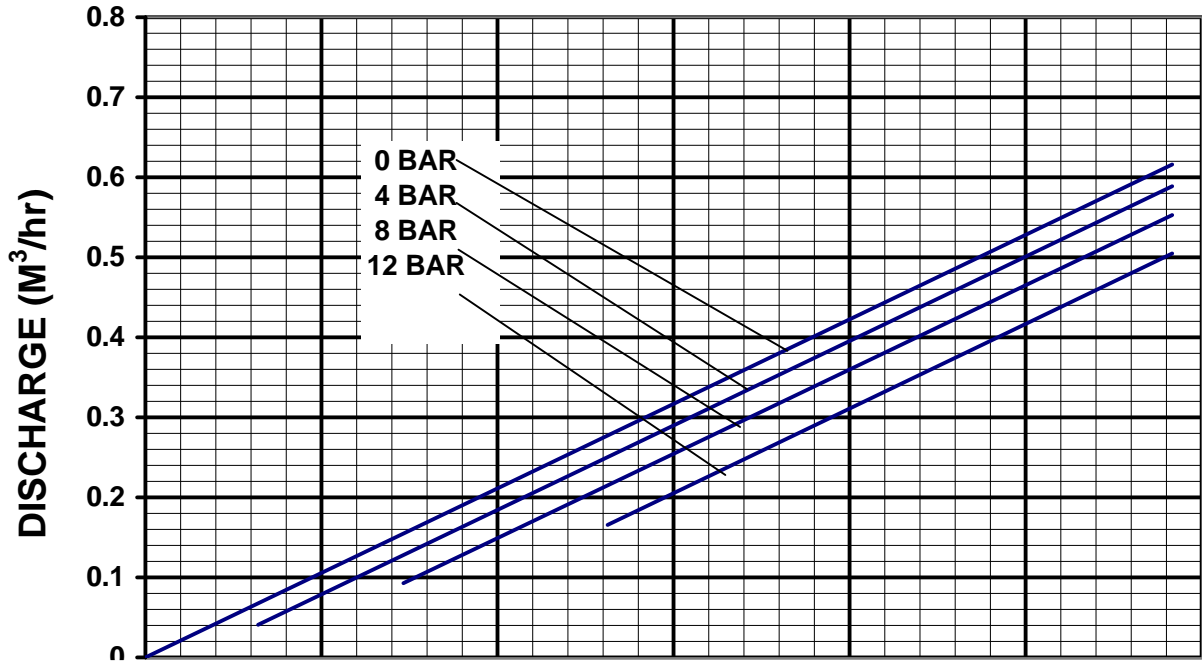
®

ROTO PUMPS PERFORMANCE CURVE

MODEL D 452
GRAPH NO. RS-377-02

STARTING TORQUE :- 1.1 Nm.
STATOR HARDNESS :- 70^o Shore A
Tested on Water at 30^oc for RA & RR Stator

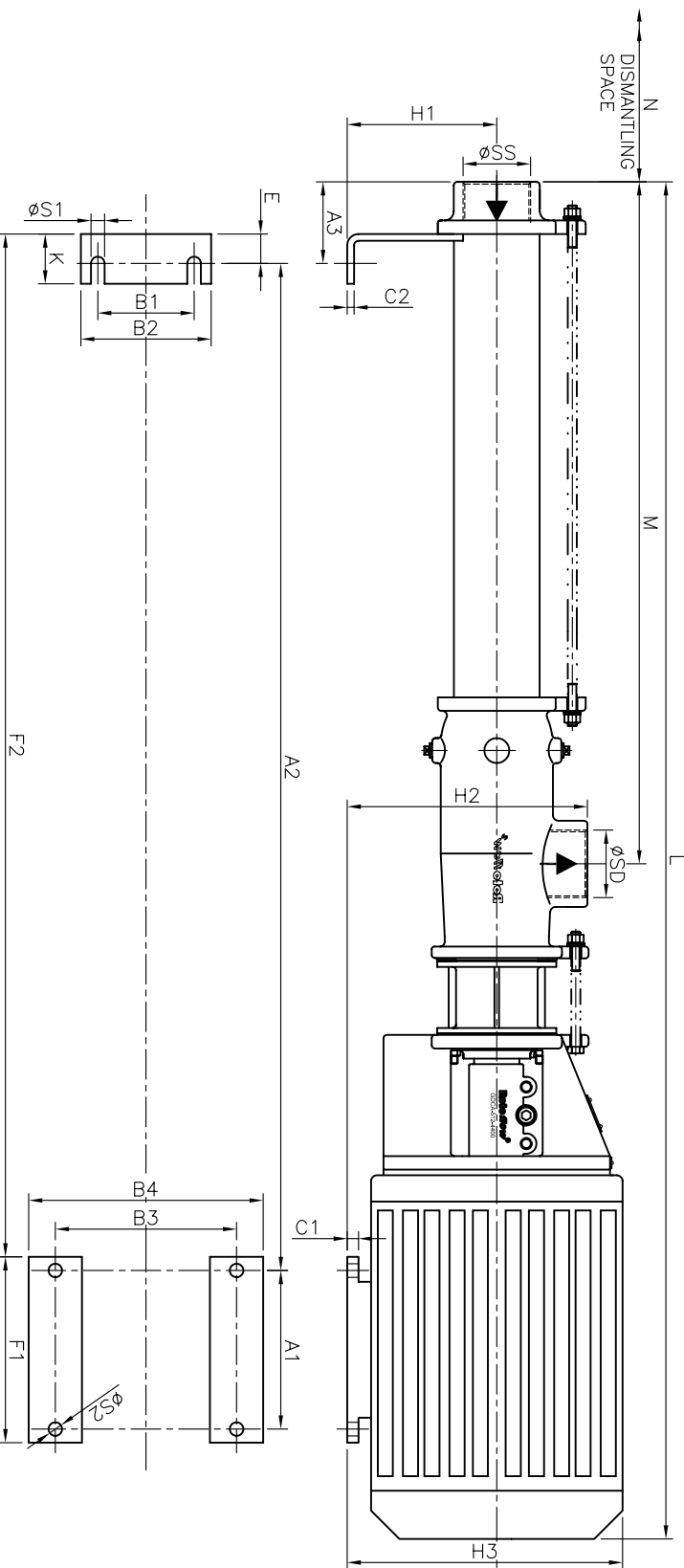
Solid Handling Capacity
Soft & Compressible 8 mm
Hard & Angular 2 mm.





DIMENSIONAL DRAWING OF GDCA-472/491/492/511/531/551 PUMPS

DRG. NO.
DD-33-005-00



→ CLOCKWISE
 (DIRECTION OF ROTATION
 VIEWED FROM MOTOR END)

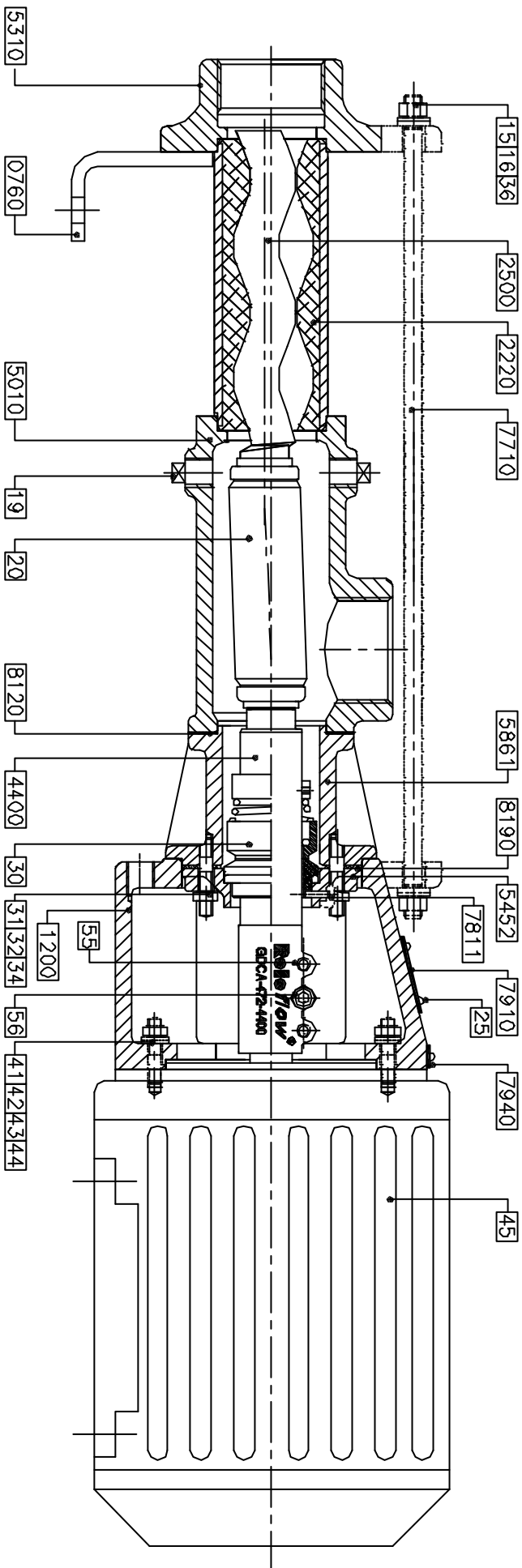
TYPE AND SIZE OF PUMP	BASIC DIMENSIONS																FLANGE DIMENSION			MOTOR DIMENSIONS & RATING						 <small>30</small>					
	A1	A2	A3	B1	B2	B3	B4	C1	C2	E	F1	F2	H1	H2	H3	K	L	M	N	ØS1	S2	ØSD	RATING (BAR)	ØSS	FRAME SIZE		FLANGE DIA	SHAFT DIA	MOTOR RATING (kw)	RATING RPM	Starting Torque (mm)
GDCA-472	100	507	67			125	157	10	6		120	523	80	125	220		738	347	220	12	12	Rp 3/4	16	Rp 3/4	80	140	19	0.75		4.0	37.5
GDCA-491		443				140	172	11	6			459	90	145	240		673	266	150	12	12	Rp 1-1/2	16	Rp 1-1/2	90	140	24	1.1		5.8	37.5
GDCA-492		646	68		75	104				26		660		170		40	929	429	290			Rp 1-1/2	16	Rp 1-1/2		160	28	2.2		1450	24.0
GDCA-511	140	561				160	196	13	6		164	575	100		250		848	319		12	12		16		100	160		2.2		11.6	23.0
GDCA-531		606									620			180			893	364	225			Rp 2	16	Rp 2				3.0		16	24.0
GDCA-551		753	85	85	115	216	255	15	6	30		771	132	217	350	44	1152	464	290	12	12		16		132	200	38	4.0	960	32	37.5

00	G-167-2003	NEW RELEASE	SIGN	DATE	DATE	DRAWN	CHECKED	APPROVED	SHEET NO. 1	NO. OF SHEET 1
ALT NO.	ALT NOTE NO.	ALTERATION								



CROSS SECTIONAL DRAWING OF GDCA-472,491 PUMP

CS. NO.
CS-33-001-01



8190	SEAL PLATE GASKET	01	56	HEX SOCKET HEAD CAP SCREW (for Part No-4400)	Q1
8120	STUFFING BOX GASKET	01	55	HEX SOCKET HEAD CAP SCREW (for Part No-4400)	Q2
7940	NAME PLATE (ROTATIONAL)	01	45	FOOT & FACE MOUNTED MOTOR	Q1
7910	NAME PLATE	01	44	PUNCHED WASHER (For Part No.-41)	Q4
7811	RETAINING PIN	01	43	SPRING WASHER (For Part No.-41)	Q4
7710	TIE ROD	04	42	HEX. NUT (For Part No.-41)	Q4
7620	GLAND GUARD	02	41	STUD (For Part No.-1200 & 45)	Q4
5861	MECH. SEAL HOUSING	01	36	PUNCHED WASHER (FOR PART NO. 15)	T0
5452	SEAL PLATE	01	34	SPRING WASHER (For Part No.-08)	Q2
5310	STRAIGHT THROUGH END COVER	01	32	HEX NUT (FOR PART NO. 31)	Q2
5010	PUMP HOUSING	01	31	STUD (FOR PART NO. 5452 & 5861)	Q2
4400	STUB SHAFT	01	30	MECHANICAL SEAL	Q1
2500	ROTOR	01	25	DRIVE SCREW (FOR PART NO. 7910&7940)	Q8
2220	BONDED STATOR	01	20	UNIVERSAL JOINT	Q1
1200	PUMP LANTERN	01	19	TAPER PLUG	Q2
0760	FOOT	01	15	HEX. NUT (FOR PART NO. 7710,5310,1200,5010&0760)	T0
SEQ. NO.	DESCRIPTION	NO. OFF	SEQ. NO.	DESCRIPTION	NO. OFF

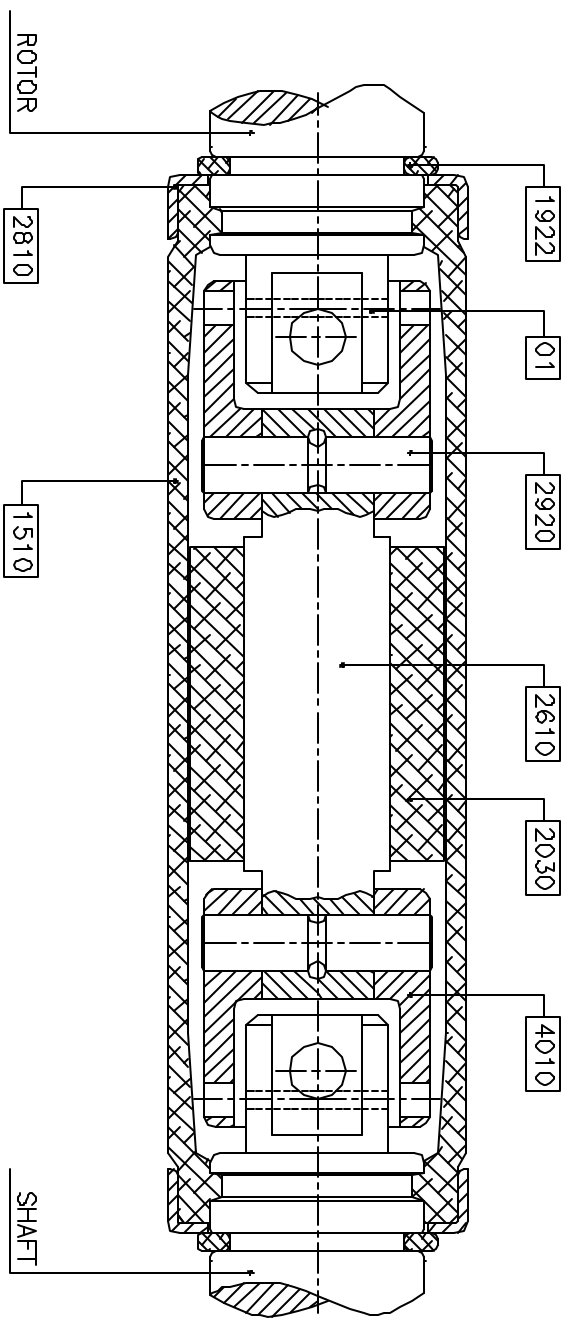
NOTE :-
1. PART NO. 7620 NOT SHOWN IN THE DRAWING.

01	D-213-2004	PART NO. 31 & 32 WAS 07 & 08 PART NO. 56 ADDED	SKS	28.12.04
00	G-167-03	NEW RELEASE	SKS	5.12.03
ALT NO.	ALT NOTE NO.	ALTERATION	APPROVED	SHEET NO.
DATE	DRAWN	CHECKED	SKS	NO. OF SHEET
				1



CROSS SECTIONAL DRAWING OF UNIVERSAL JOINT (FOR SIZES RUJC - 5/8/10)

DRG. NO.
CS-22-009-00



4010	U.J. HEAD	02							
2920	U.J. PIN	04							
2810	BOOT SEAL RETAINER	02							
2610	COUPLING ROD	01							
2030	BOOT SEAL SUPPORT RING	01	1922						
1510	BOOT SEAL	01	01						
SEQ. NO.	DESCRIPTION	NO. OFF.	SEQ. NO.	DESCRIPTION	NO. OFF.				

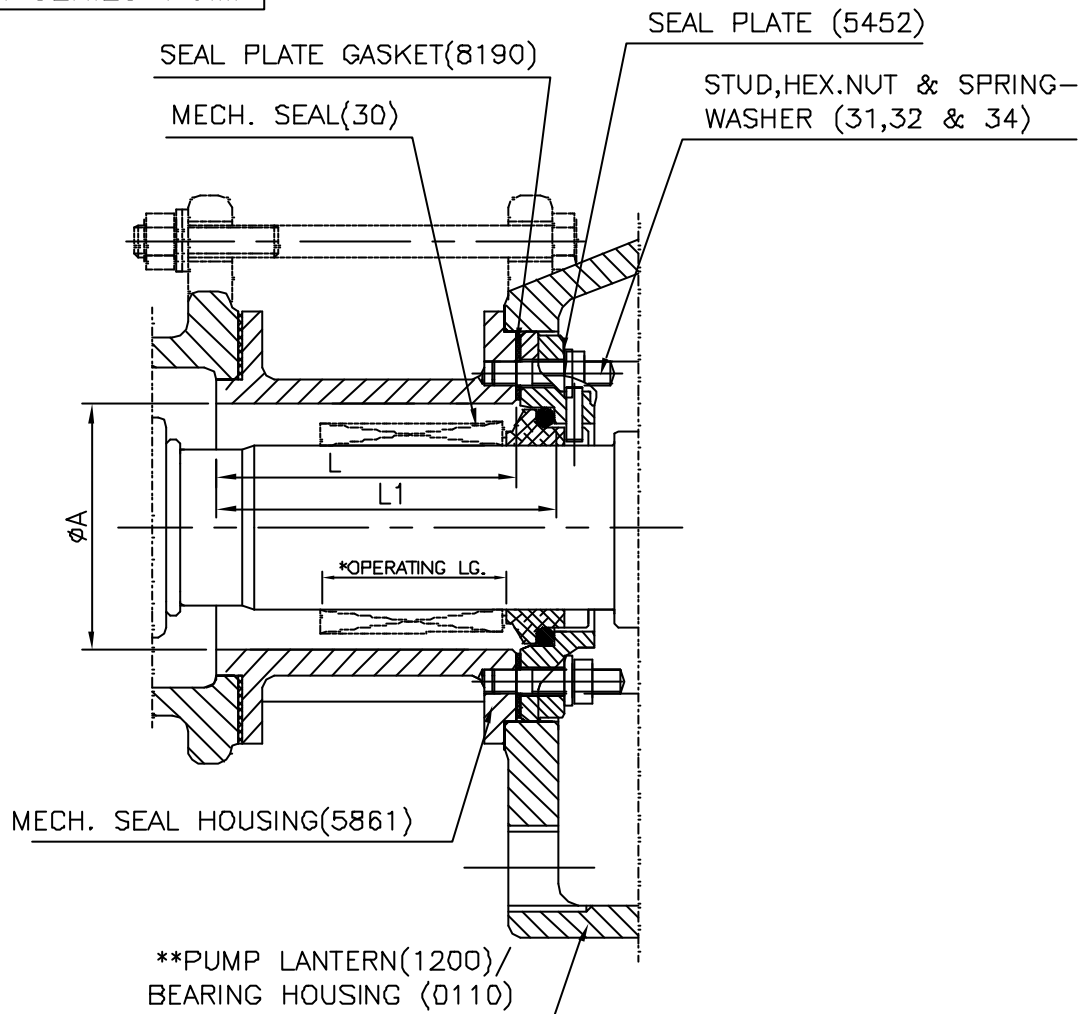
00		H-02-01		NEW RELEASE	
ALT NO.	ALT NOTE NO.	DATE	DRAWN	CHECKED	APPROVED
SHEET NO.	NO. OF SHEET	1	1		



MECHANICAL SEAL BOX DIMENSIONS

STD. NO.
RN-10-233-00

GDAA/GDCA SERIES PUMP



PUMP SIZE	DIM. "A"	DIM. "L"	DIM. "L1"
GDAA 472/491	44	63	71
GDCA 472/491	44	63	71
GDAA 492/511/531	48	58	66
GDCA 492/511/531	48	58	66
GDAA 512/532/551	60	71	80
GDCA 512/532/551	60	71	80

* OPERATING LENGTH TO BE MAINTAINED AS PER MECH. SEAL MANUFACTURERS SPECIFICATIONS

** PUMP LANTERN TO BE USED IN GDCA PUMP & BEARING HOUSING IN GDAA PUMP.

00	G-167-2003	NEW RELEASE			SKS	28.12.04
ALT NO.	ALT NOTE NO	ALTERATION			SIGN	DATE
DRAWN	CHECKED	APPROVED		SHEET NO.	NO OF SHEETS	
DT	APS	SKS		1	1	



ROTO PUMPS PERFORMANCE CURVE

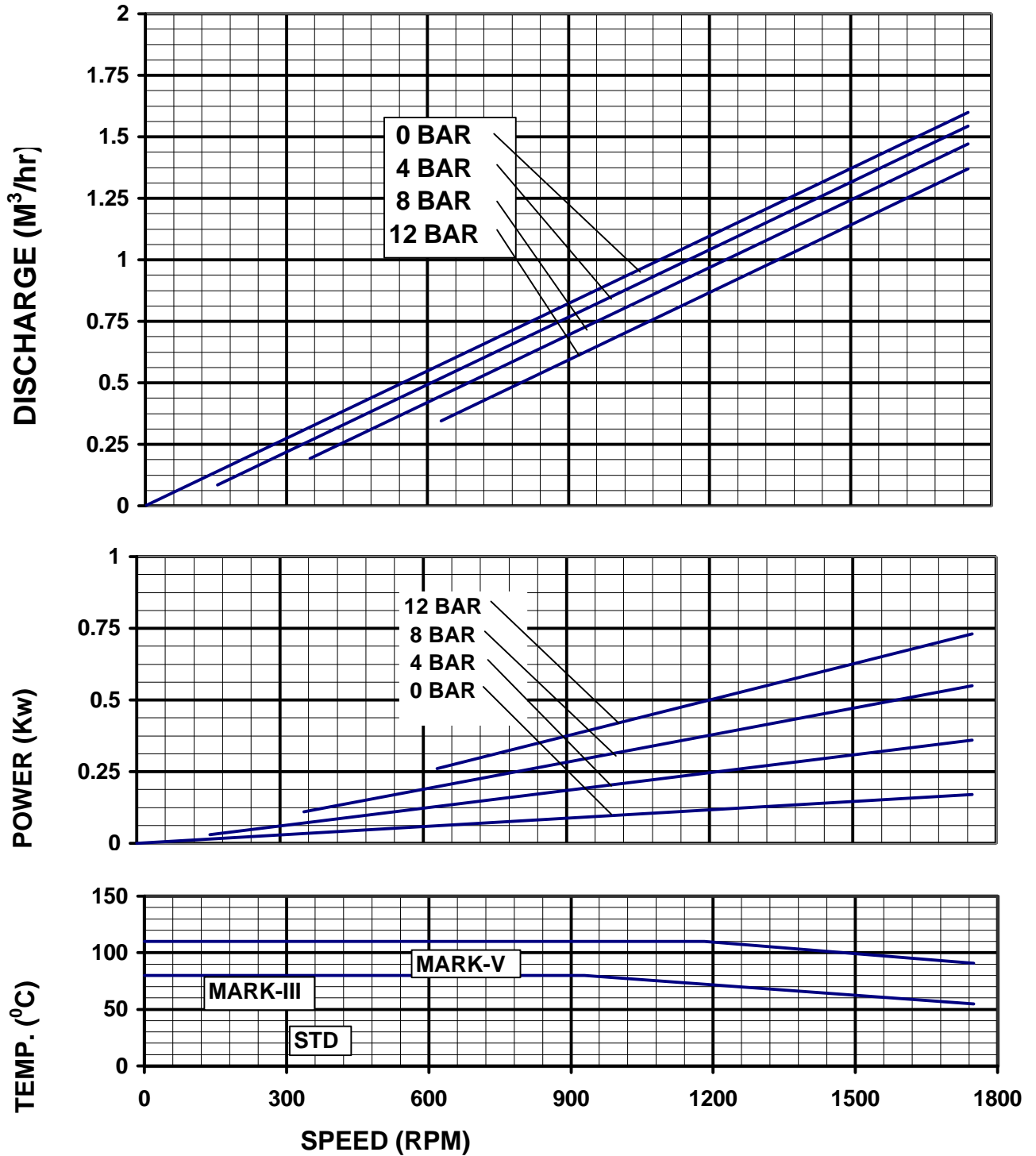
MODEL D 472
GRAPH NO. RS-381-01

STARTING TORQUE :- 2.7 Nm.

STATOR HARDNESS :- 70⁰ Shore A

Tested on Water at 30⁰c for RA & RR Stator

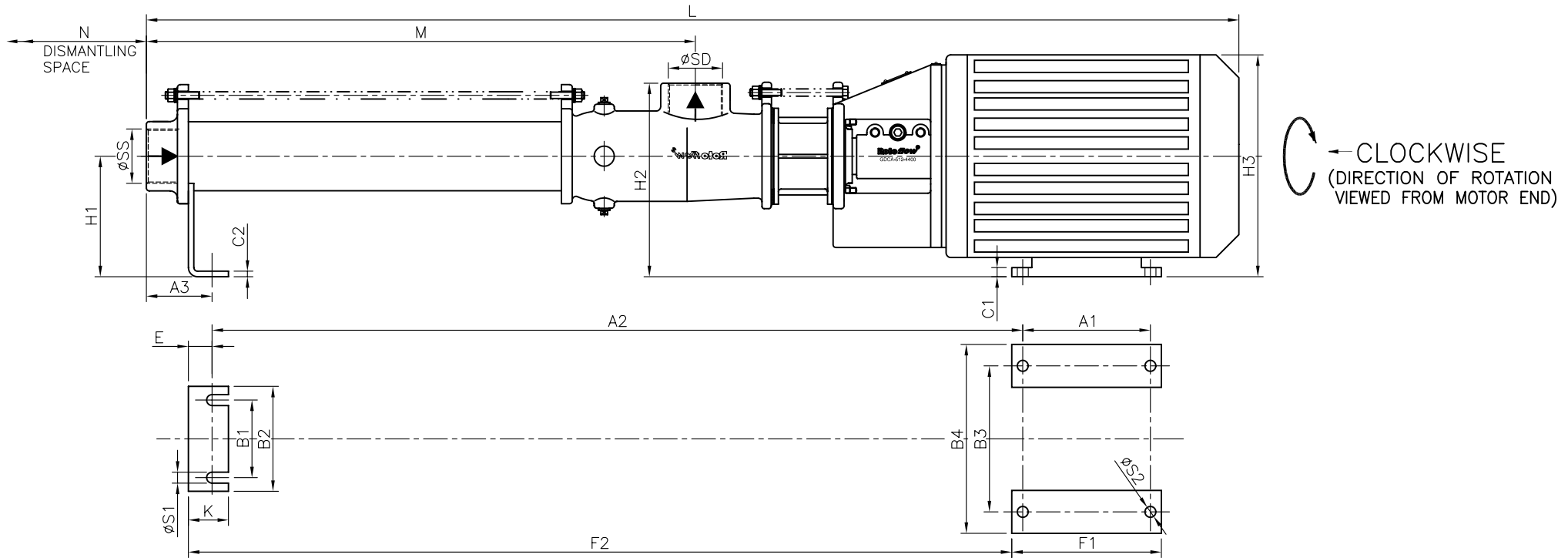
Solid Handling Capacity Soft
& Compressible 12 mm
Hard & Angular 3 mm.





DIMENSIONAL DRAWING OF GDCA-472/491/492/511/531/551 PUMPS

DRG. NO.
DD-33-005-00



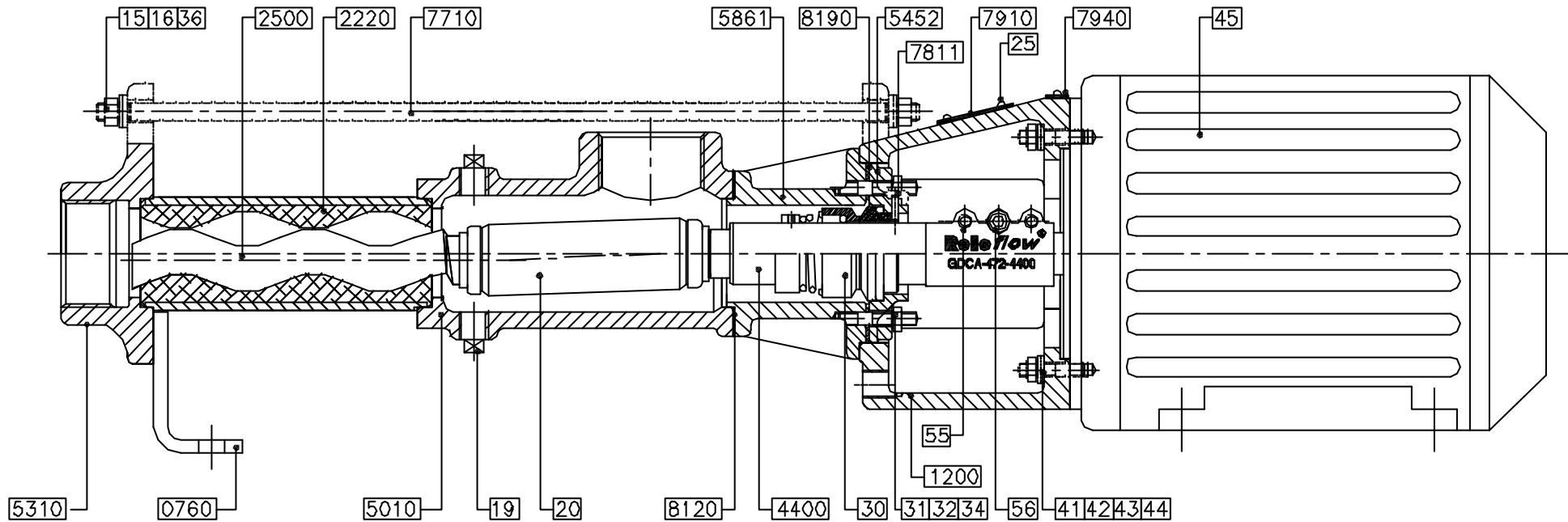
TYPE AND SIZE OF PUMP	BASIC DIMENSIONS																FLANGE DIMENSION					MOTOR DIEMENSIONS & RATING					wt.(kg) approx.							
	A1	A2	A3	B1	B2	B3	B4	C1	C2	E	F1	F2	H1	H2	H3	K	L	M	N	øS1	S2	øSD	RATING (BAR)	øSS	FRAME SIZE	FLANGE DIA		SHAFT DIA	MOTOR (kw)	RATING RPM	Starting Torque (min)			
GDCA-472	100	507	67	75	104	125	157	10	6	26	120	523	80	125	220	40	738	347	220	12	12	Rp 3/4	16	Rp 3/4	80	140	19	0.75	1450	4.0	37.5			
GDCA-491		443	68			140	172	11	6			459	90	145	240		673	266	150	12	12	Rp 1-1/2	16	Rp 1-1/2	90		24	1.1		5.8	37.5			
GDCA-492	140	646	72	85	115	160	196	13	6	30	164	660	170	250	44	929	429	290	12	12	Rp 2	16	Rp 2	100	160	28	2.2	16	23.0					
GDCA-511		561	72									620	180			848	319	225												893	364	3.0	11.6	24.0
GDCA-531		606	72									771	132			217	350	1152												464	290	12	12	16
GDCA-551		753	85																															

00	G-167-2003	NEW RELEASE			DATE	DRAWN	CHECKED	APPROVED	SHEET NO.	NO. OF SHEET
ALT NO.	ALT NOTE NO.	ALTERATION	SIGN	DATE					1	1



CROSS SECTIONAL DRAWING OF GDCA-472,491 PUMP

CS. NO.
CS-33-001-01



SEQ. NO.	DESCRIPTION	NO. OFF	SEQ. NO.	DESCRIPTION	NO. OFF
			56	HEX SOCKET HEAD CAP SCREW (For Part No-4400)	01
8190	SEAL PLATE GASKET	01	55	HEX SOCKET HEAD CAP SCREW (For Part No-4400)	02
8120	STUFFING BOX GASKET	01	45	FOOT & FACE MOUNTED MOTOR	01
7940	NAME PLATE (ROTATIONAL)	01	44	PUNCHED WASHER (For Part NO.-41)	04
7910	NAME PLATE	01	43	SPRING WASHER (For Part No.-41)	04
7811	RETAINING PIN	01	42	HEX. NUT (For Part No.-41)	04
7710	TIE ROD	04	41	STUD (For Part No.-1200 & 45)	04
7620	GLAND GUARD	02	36	PUNCHED WASHER (FOR PART NO. 15)	10
5861	MECH. SEAL HOUSING	01	34	SPRING WASHER (For Part No.-DB)	02
5452	SEAL PLATE	01	32	HEX NUT (FOR PART NO. 31)	02
5310	STRAIGHT THROUGH END COVER	01	31	STUD (FOR PART NO. 5452 & 5861)	02
5010	PUMP HOUSING	01	30	MECHANICAL SEAL	01
4400	STUB SHAFT	01	25	DRIVE SCREW (FOR PART NO. 7910&7940)	08
2500	ROTOR	01	20	UNIVERSAL JOINT	01
2220	BONDED STATOR	01	19	TAPER PLUG	02
1200	PUMP LANTERN	01	16	SPRING WASHER (FOR PART NO. 15)	10
0760	FOOT	01	15	HEX. NUT (FOR PART NO. 7710,5310,1200,5010&0760)	10

NOTE :-

1. PART NO. 7620 NOT SHOWN IN THE DRAWING.

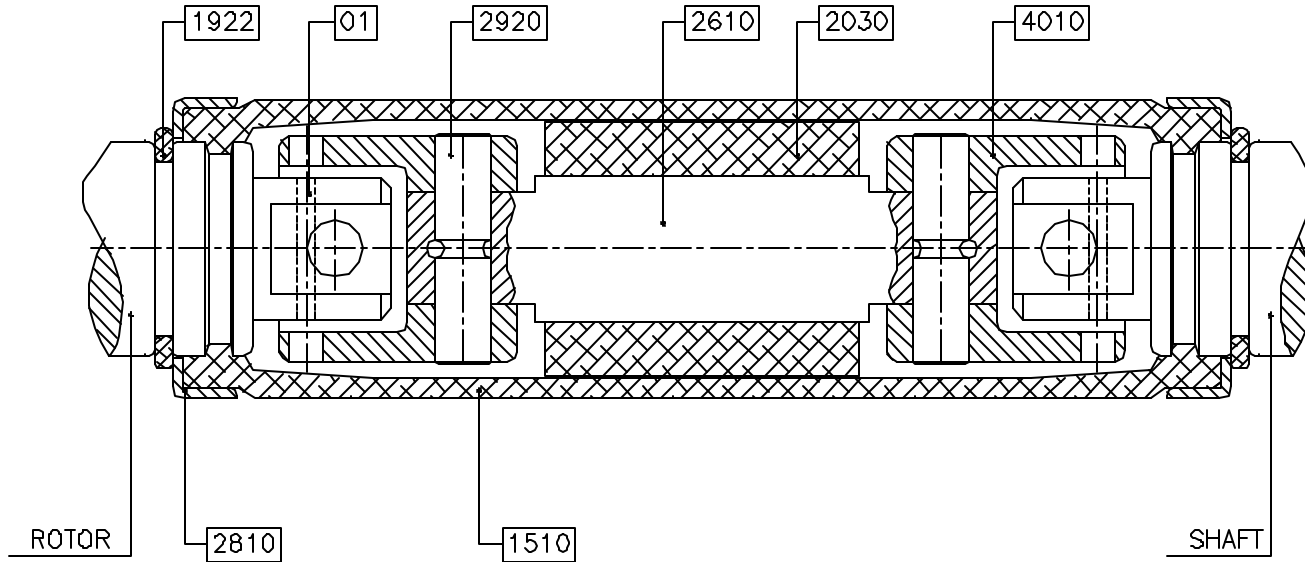
01	D-213-2004	PART NO. 31 & 32 WAS 07 & 08 PART NO. 56 ADDED	SKS	28.12.04
00	G-167-03	NEW RELEASE	SKS	5.12.03
ALT NO.	ALT NOTE NO.	ALTERATION	SIGN	DATE
DATE	DRAWN	CHECKED	APPROVED	SHEET NO. NO. OF SHEET
31.10.2003	TNATH	TNATH	SKS	1 1

FILE LOCATION:- \\C-00\Projects\GDCA\GDCA\CS_472_491.dwg



CROSS SECTIONAL DRAWING OF UNIVERSAL JOINT (FOR SIZES RUJC - 5/8/10)

DRG. NO.
CS-22-009-00



4010	U.J. HEAD	02			
2920	U.J. PIN	04			
2810	BOOT SEAL RETAINER	02			
2610	COUPLING ROD	01			
2030	BOOT SEAL SUPPORT RING	01	1922	BOOT SEAL RETAINING RING	02
1510	BOOT SEAL	01	01	SPRING PIN	04
SEQ. NO.	DESCRIPTION	NO. OFF.	SEQ. NO.	DESCRIPTION	NO. OFF.

00	H-02-01	NEW RELEASE				
ALT NO.	ALT NOTE NO.	ALTERATION			SIGN	DATE
DATE	DRAWN	CHECKED	APPROVED	SHEET NO.	NO. OF SHEET	
				1	1	



ROTO PUMPS

PERFORMANCE CURVE

MODEL D 492

GRAPH NO. RS-375-02

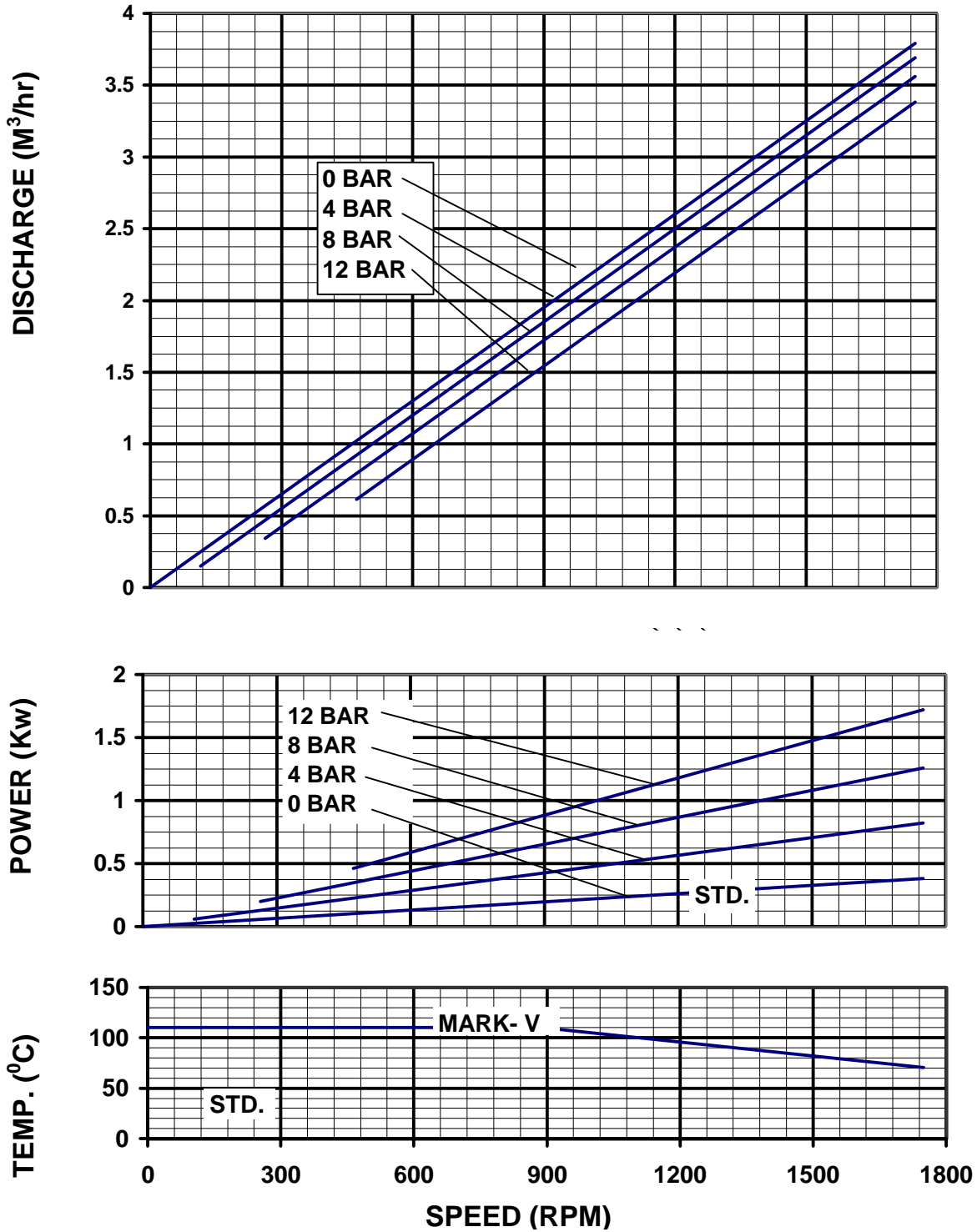
STARTING TORQUE :- 6.5 Nm.

STATOR HARDNESS :- 70⁰ Shore A

Tested on Water at 30⁰c for RA & RR Stator

Solid Handling Capacity

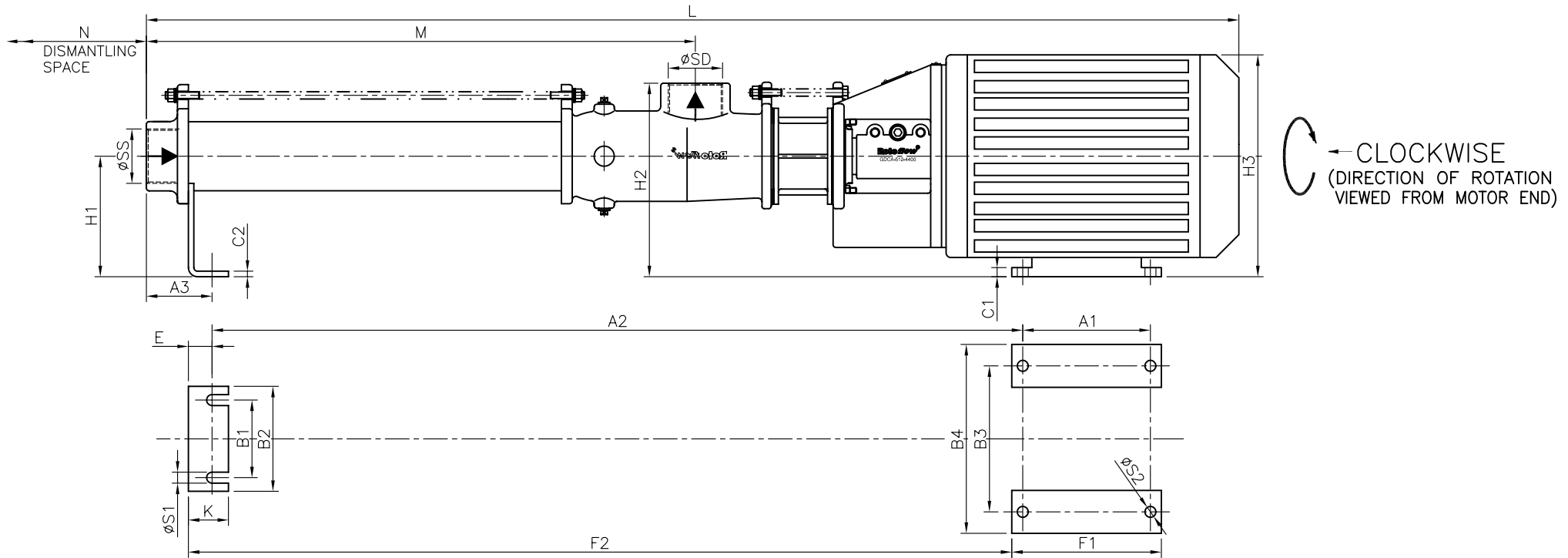
Soft & Compressible 16 mm
Hard & Angular 4 mm.





DIMENSIONAL DRAWING OF GDCA-472/491/492/511/531/551 PUMPS

DRG. NO.
DD-33-005-00



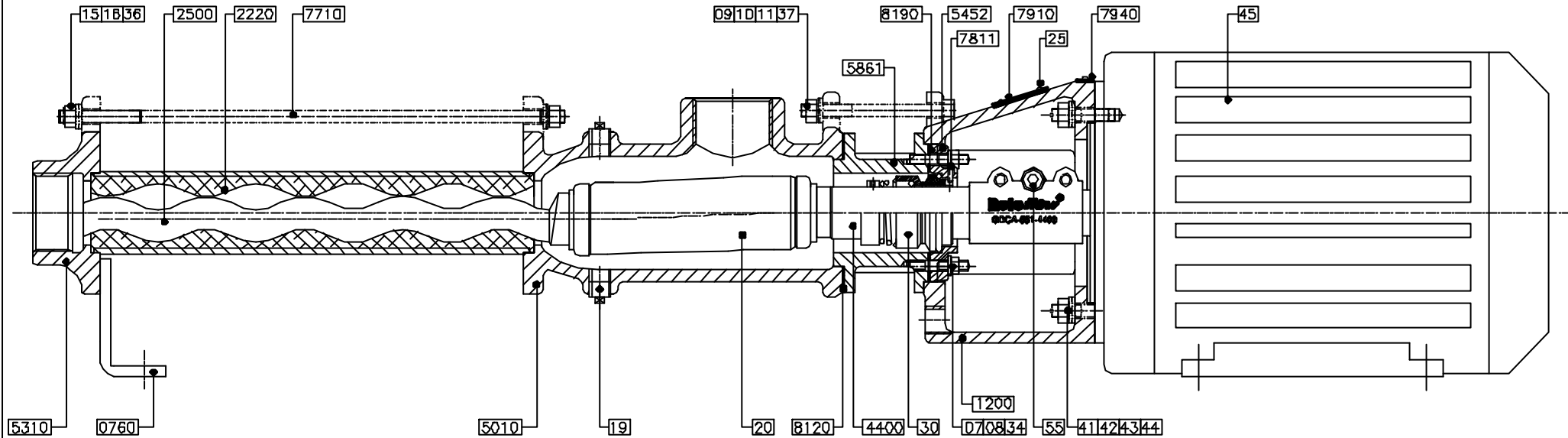
TYPE AND SIZE OF PUMP	BASIC DIMENSIONS																FLANGE DIMENSION					MOTOR DIEMENSIONS & RATING					wt.(kg) approx.				
	A1	A2	A3	B1	B2	B3	B4	C1	C2	E	F1	F2	H1	H2	H3	K	L	M	N	øS1	S2	øSD	RATING (BAR)	øSS	FRAME SIZE	FLANGE DIA		SHAFT DIA	MOTOR (kw)	RATING RPM	Starting Torque (min)
GDCA-472	100	507	67	75	104	125	157	10	6	26	120	523	80	125	220	40	738	347	220	12	12	Rp 3/4	16	Rp 3/4	80	140	19	0.75	1450	4.0	37.5
GDCA-491		443	68			140	172	11	6			459	90	145	240		673	266	150	12	12	Rp 1-1/2	16	Rp 1-1/2				90		24	1.1
GDCA-492	140	646		72	160	196	13	6	164	26	164	660	100	170	250	44	929	429	290	12	12	Rp 2	16	Rp 2	100	160	28	2.2	1450	11.6	23.0
GDCA-511		575	180									848		319			225	893	364												
GDCA-531		606	771									132	217	350	1152		464	290	12									12		16	32
GDCA-551		753	85	85	115	216	255	15	6	30	771	132	217	350	44	1152	464	290	12	12	Rp 2	16	Rp 2	132	200	38	4.0	960	32	37.5	

00	G-167-2003	NEW RELEASE			DATE	DRAWN	CHECKED	APPROVED	SHEET NO.	NO. OF SHEET
ALT NO.	ALT NOTE NO.	ALTERATION	SIGN	DATE					1	1



CROSS SECTIONAL DRAWING OF GDCA-492 PUMP

CS. NO.
CS-33-003-00



08	HEX NUT (FOR PART NO. 07)	02	55	HEX SOCKET HEAD CAP SCREW (For Part No-1200)	03
07	STUD (FOR PART NO. 5452 & 5861)	02	45	FOOT & FACE MOUNTED MOTOR	01
8190	SEAL PLATE GASKET	01	44	PUNCHED WASHER (For Part NO -41)	04
8120	STUFFING BOX GASKET	01	43	SPRING WASHER (For Part No -41)	04
7940	NAME PLATE (ROTATIONAL)	01	42	HEX. NUT (For Part No.-41)	04
7910	NAME PLATE	01	41	STUD (For Part No.-1200 & 45)	04
7811	RETAINING PIN	01	37	PUNCHED WASHER (FOR PART NO. 10)	04
7710	TIE ROD	04	36	PUNCHED WASHER (FOR PART NO. 15)	10
7620	GLAND GUARD	02	34	SPRING WASHER (FOR PART NO. 08)	02
5861	MECH. SEAL HOUSING	01	30	MECHANICAL SEAL	01
5452	SEAL PLATE	01	25	DRIVE SCREW (FOR PART NO. 7910&7940)	06
5310	STRAIGHT THROUGH END COVER	01	20	UNIVERSAL JOINT	01
5010	PUMP HOUSING	01	19	TAPER PLUG	02
4400	STUB SHAFT	01	16	SPRING WASHER (FOR PART NO. 15)	10
2500	ROTOR	01	15	HEX. NUT (FOR PART NO 7710,5310,5010&0760)	10
2220	BONDED STATOR	01	11	SPRING WASHER (FOR PART NO. 10)	04
1200	PUMP LANTERN	01	10	HEX. NUT (FOR PART NO. 09)	04
0760	FOOT	01	09	HEX. HEAD BOLT (FOR PART NO.5010&1200)	04
REQ. NO.	DESCRIPTION	NO. OFF	REQ. NO.	DESCRIPTION	NO. OFF

NOTE :-

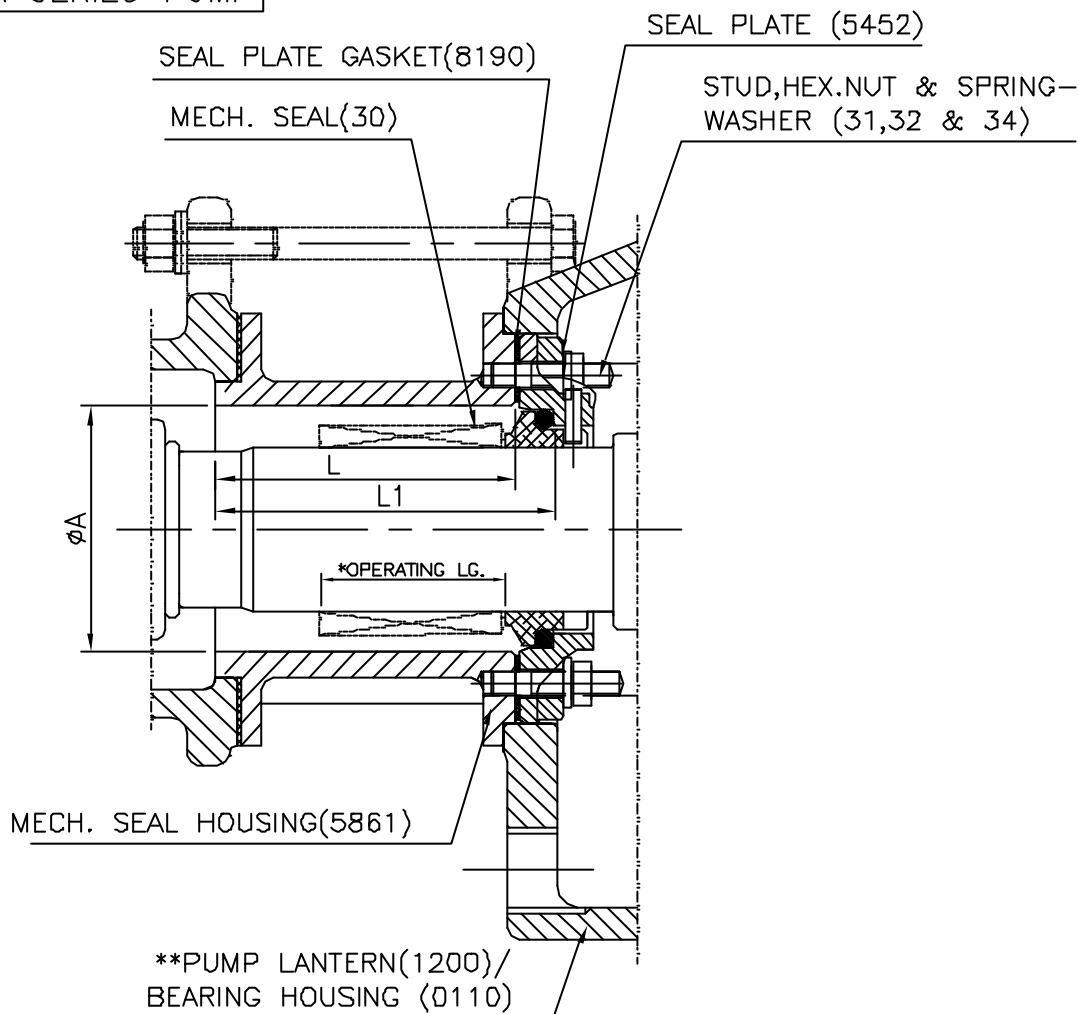
1 PART NO. 7620 NOT SHOWN IN THE DRAWING.



MECHANICAL SEAL BOX DIMENSIONS

STD. NO.
RN-10-233-00

GDAA/GDCA SERIES PUMP



PUMP SIZE	DIM. "A"	DIM. "L"	DIM. "L1"
GDAA 472/491	44	63	71
GDCA 472/491	44	63	71
GDAA 492/511/531	48	58	66
GDCA 492/511/531	48	58	66
GDAA 512/532/551	60	71	80
GDCA 512/532/551	60	71	80

* OPERATING LENGTH TO BE MAINTAINED AS PER MECH. SEAL MANUFACTURERS SPECIFICATIONS

** PUMP LANTERN TO BE USED IN GDCA PUMP & BEARING HOUSING IN GDAA PUMP.

00	G-167-2003	NEW RELEASE			SKS	28.12.04
ALT NO.	ALT NOTE NO	ALTERATION			SIGN	DATE
DRAWN	CHECKED	APPROVED		SHEET NO.	NO OF SHEETS	
DT	APS	SKS		1	1	