



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	1 OF 8
TYPE	PACKED PLUNGER					
MODEL	PNP16A	PNP16B	PNP16E	PNP16C	PNP16D	
MAX FLOW (IN LPH)	5.6	11.3	15	22.5	28.2	
MAXIMUM PRESSURE (KG/CM²)	125	125	125	125	125	
SPM	36	72	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.0005 X PR	0.001 X PR.	0.0013 X PR.	0.0019 X PR	0.0024 X PR.	
MAXIMUM VISCOSITY - CPS	2450	1000	600	450	325	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	10 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-8					
5.BALL	SS 316					
6.HEAD	SS 316					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	SS 316					
9. PACKING	PTFE BRAIDED ROPE - 5 MM SQ.					
10. GLAND BUSH & NUT	SS 316					
11.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1/2" NPT (M) , Y-STRAINER - 1/2" BSP(F)					



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	2 OF 8
TYPE	PACKED PLUNGER					
MODEL	PNP20A	PNP20B	PNP20E	PNP20C	PNP20D	
MAX FLOW (IN LPH)	8.9	17.9	23.8	35.7	44.6	
MAXIMUM PRESSURE (KG/CM²)	90	90	90	90	90	
SPM	36	72	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.0062 X PR	0.0012 X PR.	0.002X PR	0.0030 X PR.	0.0037 X PR.	
MAXIMUM VISCOSITY - CPS	4500	2700	1800	1150	850	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	10 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-8					
5.BALL	SS 316					
6.HEAD	SS 316					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	CF8M					
9. PACKING	PTFE BRAIDED ROPE - 5 MM SQ.					
10. GLAND BUSH & NUT	SS 316					
11.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1/2" BSP (M) , Y-STRAINER - 1/2" BSP(F)					



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	3 OF 8
TYPE	PACKED PLUNGER					
MODEL	PNP25A	PNP25B	PNP25E	PNP25D	PNP25C	
MAX FLOW (IN LPH)	14.2	28.3	37.7	56.6	70.8	
MAXIMUM PRESSURE (KG/CM²)	55	55	55	55	55	
SPM	36	72	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.0012 X PR	0.0023 X PR.	0.0031 X PR	0.0046 X PR.	0.0058X PR.	
MAXIMUM VISCOSITY - CPS	2500	1700	1300	800	400	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	10 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-8					
5.BALL	SS 316					
6.HEAD	SS 316					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	CF8M					
9. PACKING	PTFE BRAIDED ROPE - 5 MM SQ.					
10. GLAND BUSH & NUT	SS 316					
11.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1/2" BSP (M) , Y-STRAINER - 1/2" BSP(F)					



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	4 OF 8
TYPE	PACKED PLUNGER					
MODEL	PNP32A	PNP32B	PNP32E	PNP32C	PNP32D	
MAX FLOW (IN LPH)	23.4	46.7	62.3	93.5	116.9	
MAXIMUM PRESSURE (KG/CM²)	35	35	35	35	35	
SPM	36	72	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.0019 X PR	0.0038 X PR.	0.0051 X PR	0.0076 X PR.	0.009 X PR.	
MAXIMUM VISCOSITY - CPS	2500	1200	800	600	300	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	10 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-8					
5.BALL	SS 316					
6.HEAD	SS 316/CF8M					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	CF8M					
9. PACKING	PTFE BRAIDED ROPE - 8 MM SQ.					
10. GLAND BUSH & NUT	SS316/CF8M					
11.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1/2" BSP (M) , Y-STRAINER - 1/2" BSP(F)					



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	5 OF 8
TYPE	PACKED PLUNGER					
MODEL	PNP40A	PNP40B	PNP40E	PNP40C	PNP40D	
MAX FLOW (IN LPH)	36.7	73.5	98	147	183.7	
MAXIMUM PRESSURE (KG/CM²)	20	20	20	20	20	
SPM	32	76	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.003 X PR	0.006 X PR.	0.008 X PR	0.0012 X PR.	0.0148 X PR.	
MAXIMUM VISCOSITY - CPS	2200	1000	600	500	250	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	5 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-8					
5.BALL	SS 316					
6.HEAD	SS 316/CF8M					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	CF8M					
9. PACKING	PTFE BRAIDED ROPE - 8 MM SQ.					
10. GLAND BUSH & NUT	SS316 / CF8M					
10.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1/2" NPT (M) , Y-STRAINER - 1/2" BSP(F)					



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	6 OF 8
TYPE	PACKED PLUNGER					
MODEL	PNP50A	PNP50B	PNP50E	PNP50C	PNP50D	
MAX FLOW (IN LPH)	57.6	115.2	153.6	230.4	288	
MAXIMUM PRESSURE (KG/CM²)	12	12	12	12	12	
SPM	36	72	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.0046 X PR	0.0093 X PR.	0.0124 X PR	0.0186 X PR.	0.0232 X PR.	
MAXIMUM VISCOSITY - CPS	3500	2100	1500	900	400	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	5 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-19					
5.BALL	SS 316					
6.HEAD	CF8M					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	CF8M					
9. PACKING	PTFE BRAIDED ROPE - 8 MM SQ.					
10. GLAND BUSH & NUT	SS 316 / CF8M					
11.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1" BSP (M) , Y-STRAINER - 1" BSP(F)					



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	7 OF 8
TYPE	PACKED PLUNGER					
MODEL	PNP55A	PNP55B	PNP55E	PNP55C	PNP55D	
MAX FLOW (IN LPH)	69.8	139.5	186	279	348.8	
MAXIMUM PRESSURE (KG/CM²)	11	11	11	11	11	
SPM	32	76	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.0056 X PR	0.011 X PR.	0.015 X PR	0.022 X PR.	0.028 X PR.	
MAXIMUM VISCOSITY - CPS	2500	1500	1000	700	300	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	3 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-8					
5.BALL	SS 316					
6.HEAD	CF8M					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	CF8M					
9. PACKING	PTFE BRAIDED ROPE - 8 MM SQ.					
10. GLAND BUSH & NUT	CF8M					
11.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1" NPT (M) , Y-STRAINER - 1" BSP(F)					



MILTON ROY INDIA (P) LTD.

DOCUMENT NAME	DATA SHEET FOR PN SERIES PUMPS				REV NO.	2
DOCUMENT NUMBER	DS-PNP				DATE	14.01.04
APPROVED BY	C.RAMESH				PAGE	1 OF 4
TYPE	PACKED PLUNGER					
MODEL	PNP63A	PNP63B	PNP63E	PNP63C	PNP63D	
MAX FLOW (IN LPH)	91.5	183.1	244.1	366.1	457.6	
MAXIMUM PRESSURE (KG/CM²)	7	7	7	7	7	
SPM	32	76	96	144	180	
DRIVE MOTOR	0.5HP	0.5HP	0.5HP	0.5HP	0.5HP	
MOTOR SPEED	1500	1500	1000	1500	1500	
VOLUMETRIC EFFICIENCY	>80%	>80%	>80%	>80%	>80%	
BKW	0.0074 X PR	0.015 X PR.	0.02 X PR	0.029 X PR.	0.037 X PR.	
MAXIMUM VISCOSITY - CPS	2000	1000	700	500	200	
LINEAR SPEED	stroke length x 2 xspm mm/minute					
TOLERANCE FOR FLOW	MORE THAN RATED FLOW					
REPEATABILITY	+ / - 3%					
STEADY STATE ACCURACY	+/- 1%					
LINEARITY	+ / - 3%					
STROKE LENGTH	16 MM					
TURN DOWN RATIO	10 : 1					
FLOW ADJUSTMENT	BY MANUAL STROKE ADJUSTMENT,					
SUCTION LIFT	1.5 M OF WATER COLUMN					
NPSH REQUIRED	0 PSI					
LIQUID END TEMPERATURE	120 DEG C MAXIMUM					
DIFFERENTIAL PRESSURE	1 KG/SQ.CM MINIMUM					
SUCTION PRESSURE	2 KG/SQ.CM MAX					
AMBIENT TEMPERATURE	45' C MAX					
OPTIONS	a) VARIABLE FREQUENCY DRIVE b) ELECTRONIC CAPACITY CONTROLLER (ECC)					
LUBRICANT	2 L OF HYDROL 220 OR EQUIVALENT					
FREQUENCY OF LUBRICATION	CHANGE OIL ONCE IN 6 MONTHS					
M O C						
1.HOUSING	CI FG-220					
2.CONNECTING ROD	CI FG-220					
3. WORM GEAR	SG 400					
4.WORM SHAFT	EN-8					
5.BALL	SS 316					
6.HEAD	CF8M					
7. PLUNGER	SS 316					
8.SUCTION / DISCHARGE VALVES	CF8M					
9. PACKING	PTFE BRAIDED ROPE - 8 MM SQ.					
10. GLAND BUSH & NUT	SS 316 / CF8M					
11.SUCTION STRAINER-Y TYPE	CF8M					
END CONNECTION	PUMP- 1" NPT (M) , Y-STRAINER - 1" BSP(F)					