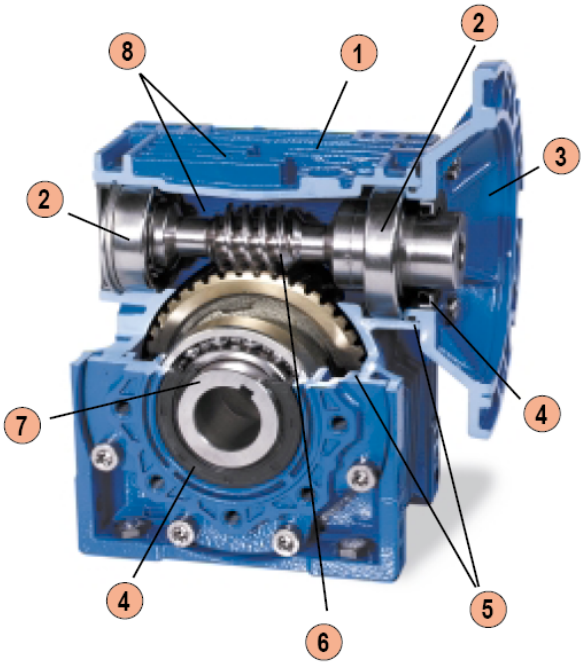
DIMOVARE®

Decline of the IRON AGE

DIMOVARE®

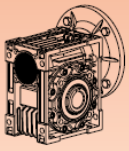
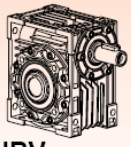
DIMOVARE S.A DE C.V. ID 92*1010304*1,4, CEL 33 14843414, 33 16661611.

Worm Gear Reducers



1. Aluminum alloy housing with patented heat sink design provides greater surface area and higher thermal capacity than traditional cast-iron housings.
2. Two bearings along the input shaft prevent leaks and contribute to flexibility in mounting. High quality SKF bearings increase reducer life versus worm reducers with a bushing on the input.
3. NEMA and IEC motor inputs available for greater customer flexibility.
4. Double-lip oil seals, designed with NOK, aid the reducer's thermal capacity and extended the reducer's oil life.
5. Use of O-rings on the input flange and output cover prevents leaks more effectively than a paper gasket.
6. Hardened worm shaft gives increased durability versus forged worm shafts.
7. Standard hollow output bore and optional plug-in shafts provide greater flexibility in ordering and reduced inventory.
8. Polyester epoxy paint applied on the inside and outside of the gearcase protects against rust.
9. No vent plug or breather is required, which means a maintenance-free reducer that is sealed for life. This prevents risk of oil oxidation and contamination and allows universal mounting.
10. No compression chamber ("bladder") required, preventing leaks and contributing to mounting flexibility. This helps prevent risk of oil oxidation and contamination.
11. Automated manufacturing process from an ISO 9001 certified company assures quality, reliable gearing.
12. Aluminum units are prefilled with synthetic oil; cast iron units are prefilled with mineral oil.

Nomenclature

NMRV	110	40	180TC	Foot Mount	B3	Protective Cover
Model	**Size**	**Ratio**	**Input Size**	**Output Design**	**Mounting Position**	**Accessories**
 **NMRV** Motor Input Flange	Aluminum Housing 030 040 050 063 075 090	5 7.5 10 15 20 25 30	48C 56C 140TC 180TC 210TC 250TC	**Shaft Mounted** standard hollow output bore **Foot Mounted** optional single or double plug-in output shaft **Flange Mounted** optional F or FL mounting flange and hollow output bore	B3 B6 B7 B8 V5 V6	Torque Arm Baseplate Double Extension Worm Shaft Protective Cover
 **NRV** Input Shaft	Cast Iron Housing 110 130 150	40 50 60 80 100				

DIMOVARE S.A DE C.V. ID 92*1010304*1,4, CEL 33 14843414, 33 16661611.

Worm Gear Reducer Ratings
1750 RPM

Model	Ratio	RPM	Torque (in-lbs)	Max HP	OHL (lbs)
NMRV 030 NRV 030	5	350	159	1.02	113
	7.5	233	159	0.69	129
	10	175	159	0.54	142
	15	117	159	0.38	163
	20	88	159	0.30	179
	25	70	186	0.30	193
	30	58	177	0.25	205
	40	44	159	0.19	225
	50	35	150	0.15	243
	60	29	142	0.13	259
	80	22	115	0.09	284
NMRV 040 NRV 040	5	350	301	1.88	221
	7.5	233	354	1.51	253
	10	175	354	1.16	279
	15	117	354	0.80	319
	20	88	345	0.61	350
	25	70	336	0.50	378
	30	58	398	0.53	403
	40	44	363	0.39	441
	50	35	345	0.31	476
	60	29	319	0.25	507
	80	22	292	0.19	556
	100	18	257	0.15	595
NMRV 050 NRV 050	5	350	549	3.43	322
	7.5	233	628	2.64	369
	10	175	637	2.06	406
	15	117	655	1.48	464
	20	88	646	1.14	510
	25	70	619	0.90	551
	30	58	743	0.96	586
	40	44	672	0.70	643
	50	35	646	0.57	694
	60	29	602	0.47	739
	80	22	575	0.38	810
	100	18	487	0.28	866
NMRV 063 NRV 063	7.5	233	1133	4.77	463
	10	175	1150	3.67	510
	15	117	1239	2.76	583
	20	88	1194	2.05	641
	25	70	1150	1.64	692
	30	58	1416	1.77	736
	40	44	1283	1.27	807
	50	35	1194	1.01	871
	60	29	1150	0.86	928
	80	22	1079	0.66	1017
	100	18	1044	0.57	1088
NMRV 075 NRV 075	7.5	233	1637	6.81	549
	10	175	1725	5.45	604
	15	117	1770	3.86	691
	20	88	1858	3.15	759
	25	70	1770	2.46	820
	30	58	2035	2.48	873
	40	44	1947	1.88	957
	50	35	1858	1.50	1033
	60	29	1770	1.26	1099
	80	22	1681	0.97	1205
	100	18	1593	0.80	1289

Model	Ratio	RPM	Torque (in-lbs)	Max HP	OHL (lbs)
NMRV 090 NRV 090	7.5	233	2566	10.56	631
	10	175	2743	8.56	694
	15	117	3185	6.86	794
	20	88	3141	5.19	873
	25	70	3008	4.08	942
	30	58	3628	4.31	1003
	40	44	3185	2.95	1100
	50	35	3008	2.32	1187
	60	29	2831	1.90	1264
	80	22	2522	1.39	1386
	100	18	2389	1.12	1482
NMRV 110 NRV 110	7.5	233	4247	17.48	776
	10	175	4601	14.36	853
	15	117	5043	10.86	976
	20	88	4955	8.10	1073
	25	70	5220	6.90	1158
	30	58	5574	6.53	1233
	40	44	5397	4.81	1352
	50	35	5309	3.93	1459
	60	29	4955	3.19	1553
	80	22	4336	2.25	1703
	100	18	4070	1.79	1821
NMRV 130 NRV 130	7.5	233	6636	27.01	1017
	10	175	7255	22.64	1119
	15	117	8140	17.33	1279
	20	88	8052	13.00	1407
	25	70	8229	10.88	1518
	30	58	9202	10.65	1616
	40	44	9290	8.27	1772
	50	35	8671	6.42	1913
	60	29	7963	5.12	2036
	80	22	7432	3.79	2233
	100	18	6548	2.84	2387
NMRV 150 NRV 150	7.5	233	10618	43.22	1425
	10	175	10972	33.86	1568
	15	117	11060	23.27	1793
	20	88	11502	18.58	1971
	25	70	10618	14.04	2127
	30	58	10618	11.85	2265
	40	44	13715	12.21	2484
	50	35	12387	9.05	2680
	60	29	11149	7.07	2854
	80	22	10175	5.20	3129
	100	18	8848	3.84	3346

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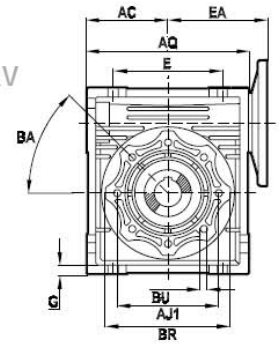
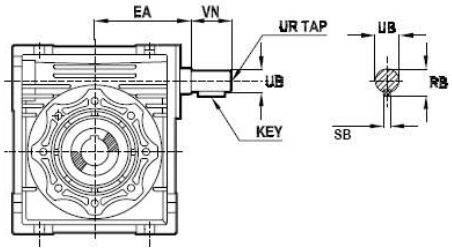
Worm Gear Reducers

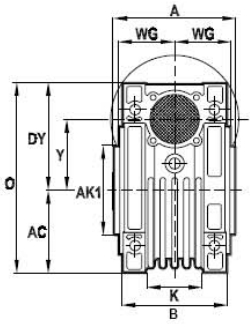
NMRV



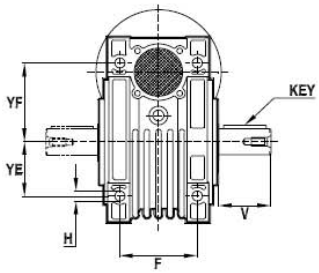
NRV



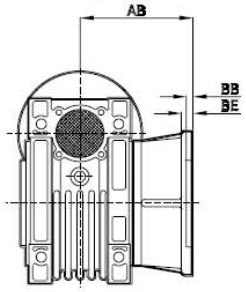
Shaft Mount



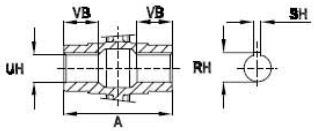
Foot Mount



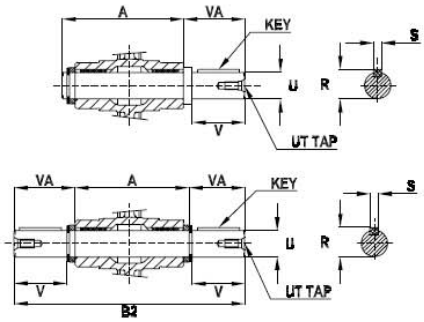
Flange Mount



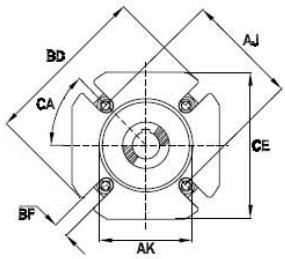
Hollow Output Bore



Single & Double Output Shaft



Output Flange



	030	040	050	063	075	090	110	130	150
A	2.48	3.07	3.62	4.41	4.72	5.51	6.10	6.69	7.87
AB	2.15	2.64 (3.82)	3.54 (4.72)	3.23 (4.41)	4.37	4.37	5.16	5.51	6.10
AC	1.57	1.97	2.36	2.83	3.39	4.06	5.02	5.81	6.69
AJ	2.68	2.95 (3.43)	3.35 (3.54)	5.91 (5.91)	6.49	6.89	9.06	10.03	10.03
AJ1	2.56	2.95	3.35	3.74	4.53	5.12	6.50	8.46	8.46
AK	1.97 $^{0}_{-0.0007}$	2.36 $^{0}_{-0.0007}$	2.76 $^{0}_{-0.0007}$	4.53 $^{0}_{-0.0009}$	5.12 $^{0}_{-0.001}$	5.98 $^{0}_{-0.001}$	6.69 $^{0}_{-0.001}$	7.09 $^{0}_{-0.001}$	7.09 $^{0}_{-0.001}$
AK1	2.17 $^{+0}_{-0.0018}$	2.36 $^{+0}_{-0.0018}$	2.76 $^{+0}_{-0.0018}$	3.15 $^{+0}_{-0.0021}$	3.74 $^{+0}_{-0.0021}$	4.33 $^{+0}_{-0.0021}$	5.12 $^{+0}_{-0.0025}$	7.09 $^{+0}_{-0.0025}$	7.09 $^{+0}_{-0.0025}$
AQ	3.15	3.94	4.72	5.67	6.77	8.11	9.94	11.52	13.39

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Worm Gear Reducer

Dimensions

	030	040	050	063	075	090	110	130	150
B	2.20	2.80	3.35	4.06	4.41	5.12	5.67	6.10	7.28
B2	5.83	7.24	7.83	9.41	10.51	12.13	16.14	14.17	16.14
BA	0°	45°	45°	45°	45°	45°	45°	45°	45°
BB	0.16	0.16	0.20	0.24	0.24	0.24	0.24	0.28	0.28
BD	3.15	4.33	4.92	7.09	7.87	8.27	11.02	12.60	12.60
BE	0.24	0.28	0.35	0.39	0.51	0.51	0.59	0.59	0.59
BF	.26, 4 pl.	.35, 4 pl.	.43, 4 pl.	.43, 4 pl.	.55, 4 pl.	.55, 4 pl.	.55, 8 pl.	.63, 8 pl.	.63, 8 pl.
BR	2.95	3.43	3.94	4.33	5.51	6.30	7.87	9.84	9.84
BU	M6 Tap 0.43 deep, 4 pl.	M6 Tap 0.32 deep, 4 pl.	M8 Tap 0.39 deep, 4 pl.	M8 Tap 0.55 deep, 8 pl.	M8 Tap 0.55 deep, 8 pl.	M10 Tap 0.71 deep, 8 pl.	M10 Tap 0.71 deep, 8 pl.	M12 Tap 0.83 deep, 8 pl.	M12 Tap 0.83 deep, 8 pl.
CA	45°	45°	45°	45°	45°	45°	45°	22.5°	22.5°
CE	2.76	3.74	4.33	5.60	6.69	7.87	10.24	11.42	11.42
DY	2.24	2.81	3.31	4.02	4.69	5.32	6.59	7.38	9.06
E	2.13	2.76	3.15	3.94	4.72	5.51	6.69	7.87	9.45
EA	2.64	3.15	3.54	4.13	4.96	5.63	6.81	7.60	8.27
F	1.73	2.36	2.76	3.35	3.54	3.94	4.53	4.72	5.71
G	0.22	0.26	0.28	0.32	0.39	0.43	0.57	0.61	0.71
H	0.26	0.26	0.34	0.33	0.45	0.51	0.55	0.63	0.71
K	1.26	1.69	1.93	2.64	2.83	2.91	-	-	-
O	3.82	4.78	5.67	6.85	8.07	9.37	11.61	13.19	15.75
R	0.70	0.83	1.11	1.23	1.36	1.51	1.79	1.92	2.50
RB	0.42	0.55	0.70	0.83	0.96	0.96	1.24	1.36	1.38
RH	0.71	0.84	1.12	1.24	1.37	1.52	1.80	1.93	2.20
S	0.188	0.188	0.250	0.250	0.250	0.313	0.375	0.375	0.500
SB	0.094	0.125	0.188	0.188	0.188	0.188	0.250	0.250	0.313
SH	0.188	0.188	0.250	0.250	0.250	0.313	0.375	0.375	0.710
U	0.625 $^{+0}_{-.0005}$	0.750 $^{+0}_{-.0005}$	1.000 $^{+0}_{-.0005}$	1.125 $^{+0}_{-.0005}$	1.250 $^{+0}_{-.0005}$	1.375 $^{+0}_{-.0005}$	1.625 $^{+0}_{-.001}$	1.750 $^{+0}_{-.001}$	2.000 $^{+0}_{-.001}$
UH	0.625 $^{+.001}_{-0}$	0.750 $^{+.001}_{-0}$	1.000 $^{+.001}_{-0}$	1.125 $^{+.001}_{-0}$	1.250 $^{+.001}_{-0}$	1.375 $^{+.001}_{-0}$	1.625 $^{+.001}_{-0}$	1.750 $^{+.001}_{-0}$	2.000 $^{+.001}_{-0}$
UT	1/4-20	1/4-20	3/8-16	3/8-16	1/2-13	1/2-13	5/8-11	5/8-11	3/4-10
V	1.58	1.97	1.97	2.36	2.76	3.15	3.54	3.54	4.02
VA	1.67	2.09	2.11	2.50	2.89	3.33	4.13	3.74	4.57
VB	0.827	1.024	1.181	1.417	1.575	1.772	1.969	2.362	2.850
VN	1.18	1.18	1.58	1.97	2.36	2.36	2.76	3.15	3.15
WG	1.14	1.44	1.71	2.09	2.24	2.64	2.91	3.19	3.78
UB	0.375 $^{+0}_{-.0005}$	0.500 $^{+0}_{-.0005}$	0.625 $^{+0}_{-.0005}$	0.750 $^{+0}_{-.0005}$	0.875 $^{+0}_{-.0005}$	0.875 $^{+0}_{-.0005}$	1.125 $^{+0}_{-.0005}$	1.250 $^{+0}_{-.0005}$	1.375 $^{+0}_{-.0005}$
UR	-	1/4-20	1/4-20	1/4-20	1/4-20	1/4-20	3/8-16	1/2-13	1/2-13
Y	1.18	1.58	1.97	2.48	2.95	3.54	4.33	5.12	5.91
YE	1.06	1.38	1.58	1.97	2.36	2.76	3.35	3.94	4.72
YF	1.73	2.17	2.52	3.15	3.66	4.02	4.92	5.51	7.09
Input Key									
Length	0.875	0.875	1.125	1.500	1.875	1.875	2.250	2.500	2.875
Square	0.094	0.125	0.188	0.188	0.188	0.188	0.250	0.250	0.315
Output Key									
Length	1.125	1.500	1.500	1.875	2.250	2.500	2.750	2.750	3.563
Square	0.188	0.188	0.250	0.250	0.250	0.313	0.375	0.375	0.500
Weight (lbs)	3	5	8	14	20	29	77	106	185

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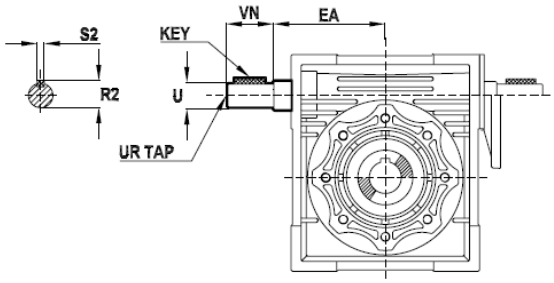
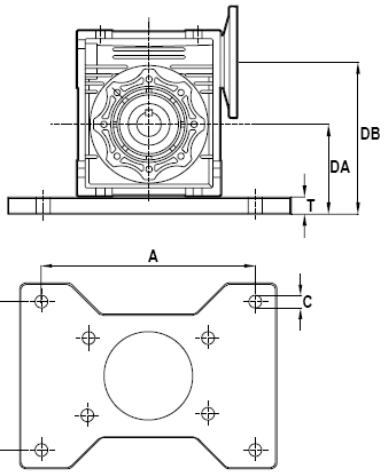
Worm Gear Reducers
Accessories

High Speed Extension Shaft



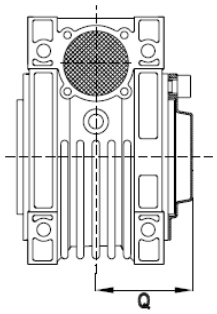
	EA	S2	R2	U	UR	VN	Key	
							Length	Square
030	1.772	0.093	0.42	0.375 $^{0}_{-.0005}$	-	1.181	0.875	0.094
040	2.087	0.125	0.55	0.500 $^{0}_{-.0005}$	1/4-20	1.181	0.875	0.125
050	2.520	0.188	0.70	0.625 $^{0}_{-.0005}$	1/4-20	1.575	1.125	0.188
063	2.953	0.188	0.83	0.750 $^{0}_{-.0005}$	1/4-20	1.969	1.500	0.188
075	3.543	0.188	0.96	0.875 $^{0}_{-.0005}$	1/4-20	2.362	1.875	0.188
090	4.252	0.188	0.96	0.875 $^{0}_{-.0005}$	1/4-20	2.362	1.875	0.188
110	5.315	0.250	1.24	1.125 $^{0}_{-.0005}$	3/8-16	2.756	2.250	0.250
130	6.102	0.250	1.36	1.250 $^{0}_{-.0005}$	1/2-13	3.150	2.500	0.250
150	8.270	0.315	1.51	1.375 $^{0}_{-.0005}$	1/2-13	3.150	2.875	0.313

Baseplates



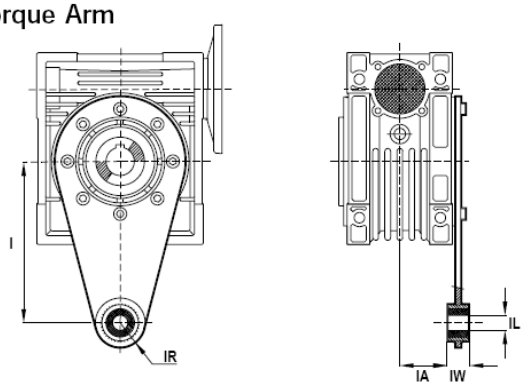
	Size							
	030	040-A	040-B	050	063-A	063-B	075	090
A	4.38	4.38	5.75	6.38	7.06	8.00	8.44	9.50
B	3.31	3.31	4.50	4.69	4.88	5.25	5.88	6.13
C	0.34	0.34	0.41	0.50	0.50	0.50	0.50	0.50
DA	2.25	2.65	2.75	3.00	3.50	3.68	4.00	4.63
DB	3.43	4.22	4.32	4.97	5.97	6.16	6.95	8.17
T	0.68	0.68	0.78	0.64	0.66	0.85	0.61	0.57

Protective Cover



	Q
040	1.97
050	2.28
063	2.72
075	2.91
090	3.39
110	3.70
130	4.02
150	4.45

Torque Arm



	I	IA	IL	IR	IW
030	3.35	0.94	0.31	0.59	0.55
040	3.94	1.24	0.39	0.71	0.55
050	3.94	1.52	0.39	0.71	0.55
063	5.91	1.93	0.39	0.71	0.55
075	7.87	1.87	0.79	1.18	0.98
090	7.87	2.26	0.79	1.18	0.98
110	9.84	2.44	0.98	1.38	1.18
130	9.84	2.72	0.98	1.38	1.18
150	9.84	3.31	0.98	1.38	1.18

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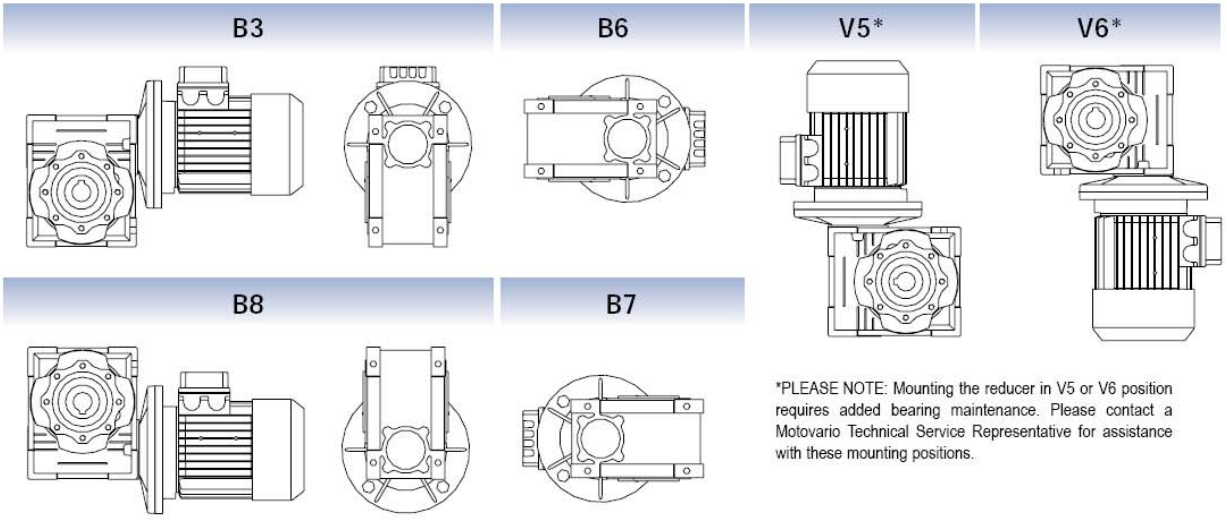
Mounting Positions



*PLEASE NOTE: Mounting the reducer in V5 or V6 position requires added bearing maintenance. Please contact a Motovario Technical Service Representative for assistance with these mounting positions.

	NEMA Flange	Input Bore Diameter	Available Ratios										
			5	7.5	10	15	20	25	30	40	50	60	80	100
NMRV 030	48C	0.500	•	•	•	•	•	•	•	•	•	•	•	
NMRV 040	56C	0.625	•	•	•	•	•	•	•	•	•	•	•	•
NMRV 050	56C	0.625	•	•	•	•	•	•	•	•	•	•	•	•
NMRV 063	56C	0.625					•	•	•	•	•	•	•	•
	140TC	0.875		•	•	•	•	•	•	•				
NMRV 075	56C	0.625									•	•	•	•
	140TC	0.875				•	•	•	•	•	•			
	180TC	1.125		•	•	•								
NMRV 090	56C	6.250											•	•
	140TC	0.875						•	•	•	•	•		
	180TC	1.125		•	•	•	•	•	•	•				
NMRV 110	140TC	0.875									•	•	•	•
	180TC	1.125					•	•	•	•	•	•		
	210TC	1.375		•	•	•	•							
NMRV 130	140TC	0.875											•	•
	180TC	1.125							•	•	•	•	•	
	210TC	1.375		•	•	•	•	•	•	•				
NMRV 150	180TC	1.125							•	•	•	•	•	•
	210TC	1.375				•	•	•	•	•				
	250TC	1.625		•	•	•	•							

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