



Gearboxes



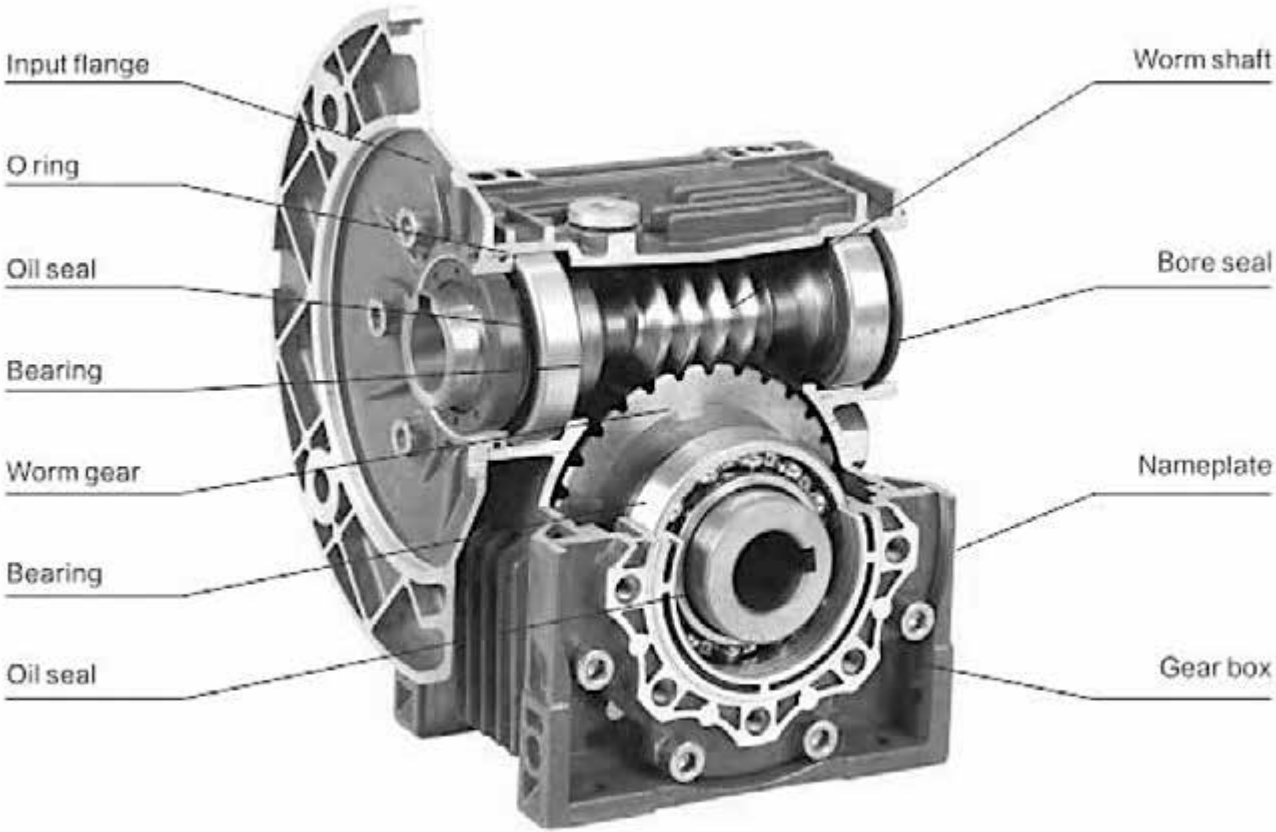


GEARBOXES

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Worm Gearbox Design



Designation

NMRV30-R10-D63-B5	
NMRV	Worm Reduction Unit
30	Centre Distance
10	Reduction Ratio
D63	Electric Motor Frame Size
B5	Mounting Type

Input Motor Flanges



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NMRV	Motor Flange							Input Hub Bore											
	PAM IEC	N	M	P	E	F	D	Transmission Ratio											
								7.5	10	15	20	25	30	40	50	60	80	100	
NMRV030	63B5	95	115	140	4	12.8	14	11	11	11	11	11	11	11	11	11	-	-	-
	63B14	60	75	90															
	56B5	80	100	120	3	10.4		9	9	9	9	9	9	9	9	9	9	9	-
	56B14	50	65	80															
NMRV040	71B5	110	130	160	5	16.3	18	14	14	14	14	14	14	14	-	-	-	-	-
	71B14	70	85	105															
	63B5	95	15	140	4	12.8		11	11	11	11	11	11	11	11	11	11	11	11
	63B14	60	75	90															
	56B5	80	100	120	3	10.4		-	-	-	-	-	-	-	9	9	9	9	9
NMRV050	80B5	130	165	200	6	21.8	25	19	19	19	19	19	19	-	-	-	-	-	-
	80B14	80	100	120															
	71B5	110	130	160	5	16.3		14	14	14	14	14	14	14	14	14	14	14	-
	71B14	70	85	105															
	63B5	95	115	140	4	12.8		-	-	-	-	-	-	11	11	11	11	11	11
NMRV063	90B5	130	165	200	8	27.3	25	24	24	24	24	24	24	-	-	-	-	-	-
	90B14	95	115	140															
	80B5	130	165	200	6	21.8		19	19	19	19	19	19	19	19	19	19	-	-
	80B14	80	100	120															
	71B5	110	130	160	5	16.3		-	-	-	-	-	-	14	14	14	14	14	14
	71B14	70	85	105															
NMRV075	100/112B5	180	215	250	8	31.3	28	28	28	28	-	-	-	-	-	-	-	-	-
	100/112B14	110	130	160															
	90B5	130	165	200	8	27.3		24	24	24	24	24	24	24	-	-	-	-	-
	90B14	95	115	140															
	80B5	130	165	200	6	21.8		-	-	-	19	19	19	19	19	19	19	19	19
	80B14	80	100	120															
NMRV090	100/112B5	180	215	250	8	31.3	35	28	28	28	28	28	28	-	-	-	-	-	-
	100/112B14	110	130	160															
	90B5	130	165	200	8	27.3		24	24	24	24	24	24	24	24	24	24	-	-
	90B14	95	115	140															
	80B5	130	165	200	6	21.8		-	-	-	-	-	-	19	19	19	19	19	19



RPM=1400

NMRV30

Ratio	Speed (RPM)	Power (kW1)	Torque (Nm)	Service Factor
7	186.6	0.18	8	2.3
10	140	0.18	10	1.8
15	93.3	0.18	14	1.3
20	70	0.18	18	1
25	56	0.18	21	1
30	46.6	0.18	24	0.8
40	35	0.12	19	0.9
50	28	0.12	23	0.8
60	23.3	0.09	19	0.8
80	17.5	0.06	14	0.9

NMRV40

Ratio	Speed (RPM)	Power (kW1)	Torque (Nm)	Service Factor
7	186.6	0.37	16	2.4
10	140	0.37	21	1.9
15	93.3	0.37	31	1.3
20	70	0.37	39	0.9
25	56	0.37	47	0.8
30	46.6	0.37	53	0.8
40	35	0.25	44	0.9
50	28	0.18	38	1
60	23.3	0.18	43	0.8
80	17.5	0.12	34	0.9
100	14	0.12	38	0.8

NMRV50

Ratio	Speed (RPM)	Power (kW1)	Torque (Nm)	Service Factor
7.5	186.6	0.75	34	2.1
10	140	0.75	44	1.6
15	93.3	0.75	63	1.2
20	70	0.75	81	0.9
25	56	0.55	71	1
30	46.6	0.55	81	1
40	35	0.37	68	1.1
50	28	0.37	80	0.9
60	23.3	0.37	89	0.8
80	17.5	0.25	72	0.8
100	14	0.18	60	0.9

NMRV63

Ratio	Speed (RPM)	Power (kW1)	Torque (Nm)	Service Factor
7.5	186.6	1.5	68	1.9
10	140	1.5	89	1.5
15	93.3	1.5	127	1.1
20	70	1.5	166	0.8
25	56	1.1	146	0.8
30	46.6	1.1	167	0.9
40	35	0.75	143	1
50	28	0.55	124	1
60	23.3	0.55	140	0.9
80	17.5	0.37	115	1
100	14	0.37	129	0.9

NMRV75

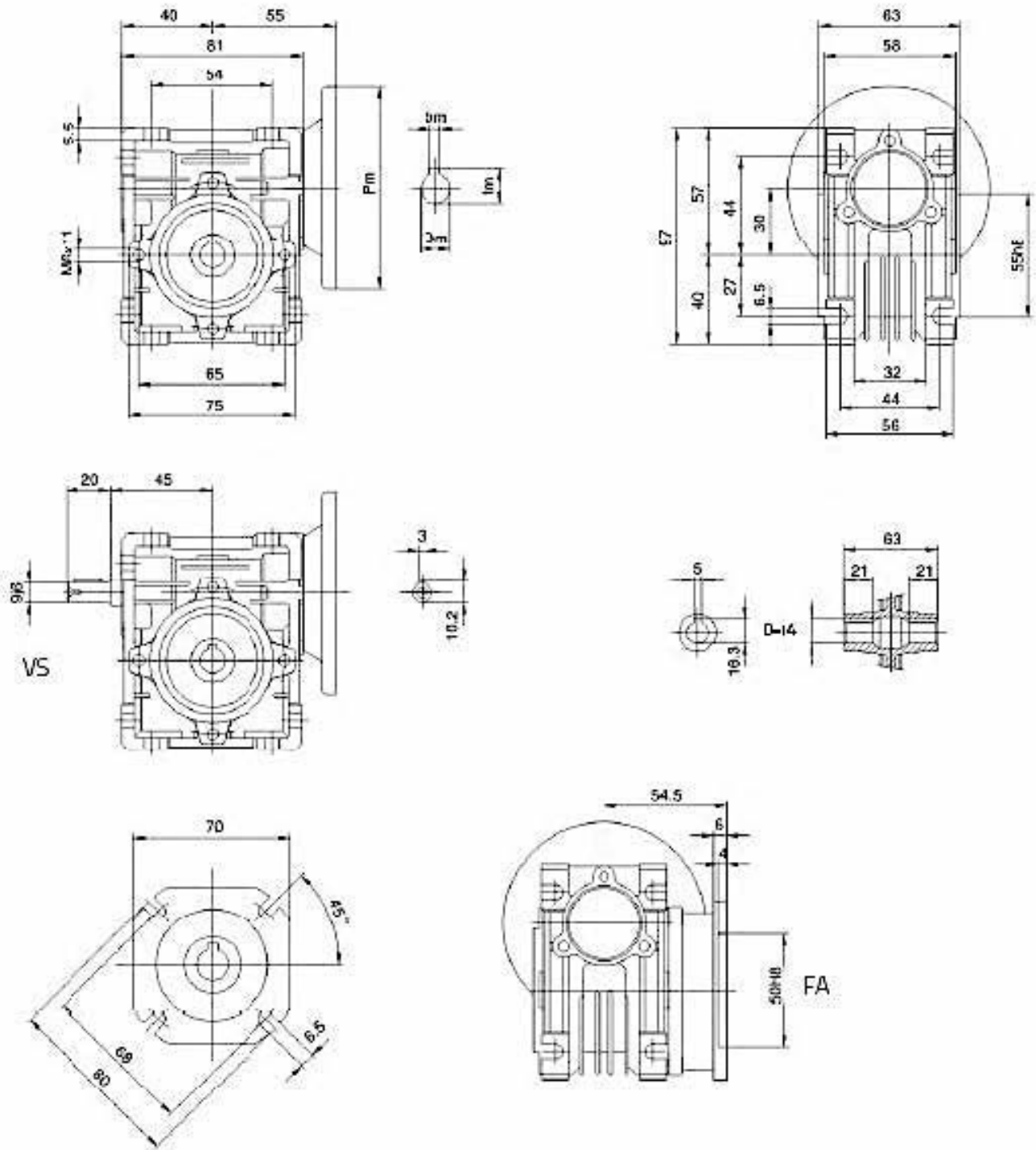
Ratio	Speed (RPM)	Power (kW1)	Torque (Nm)	Service Factor
7.5	186.6	4	182	1
10	140	3	180	1
15	93.3	3	260	0.8
20	70	1.5	174	1.2
25	56	1.5	204	0.9
30	46.6	1.1	180	1.3
40	35	1.1	2016	1
50	28	0.75	189	1.1
60	23.3	0.75	218	0.9
80	17.5	0.55	180	1
100	14	0.55	206	0.8

NMRV90

Ratio	Speed (RPM)	Power (kW1)	Torque (Nm)	Service Factor
7.5	186.6	4	184	1.6
10	140	4	243	1.3
15	93.3	4	352	1
20	70	4	458	0.8
25	56	3	420	0.8
30	46.6	3	479	0.8
40	35	1.5	307	1.2
50	28	1.5	368	0.9
60	23.3	1.5	424	0.8
80	17.5	0.75	258	1.1
100	14	0.75	302	0.8

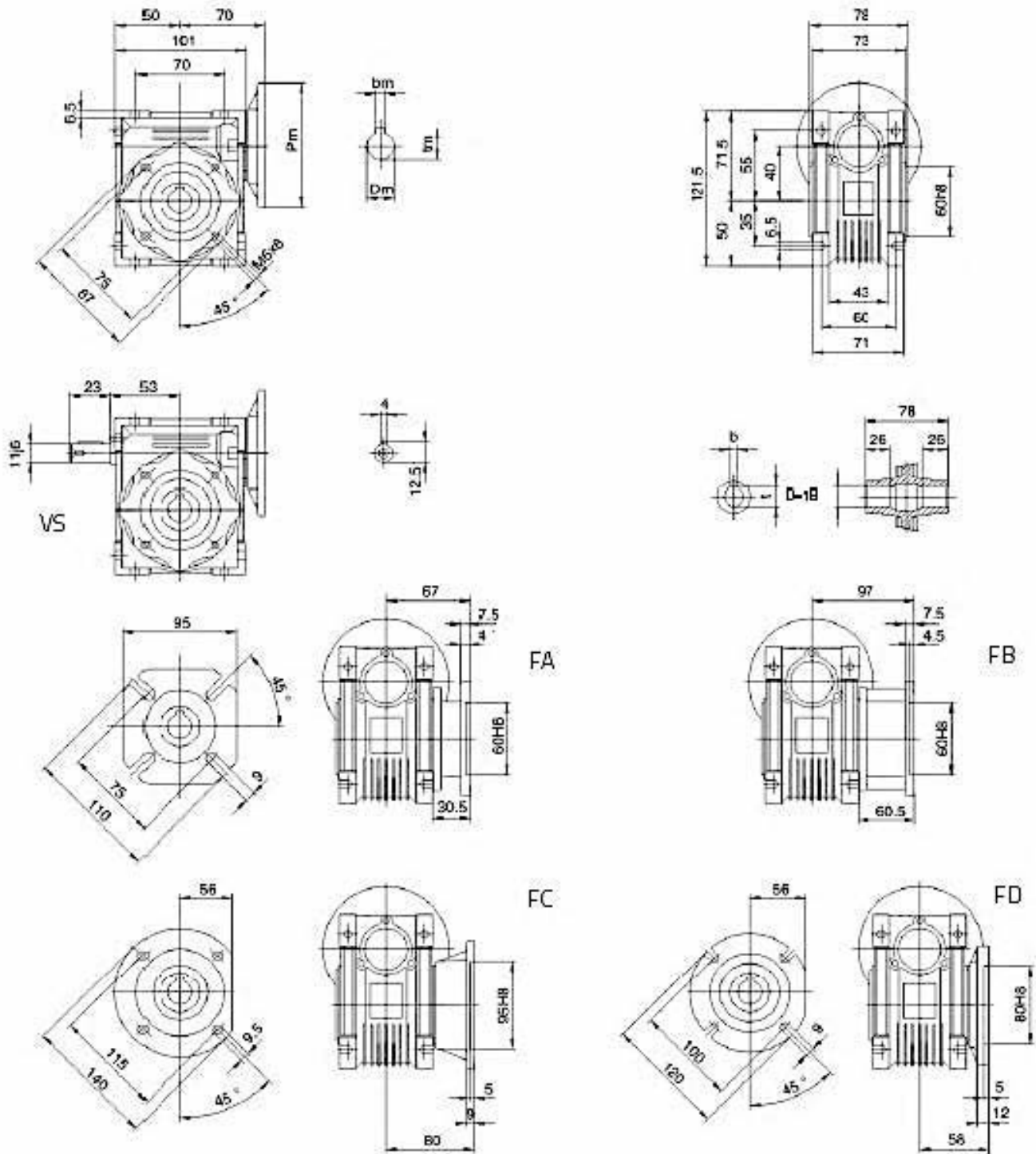


NMRV030 Gearbox Dimensions



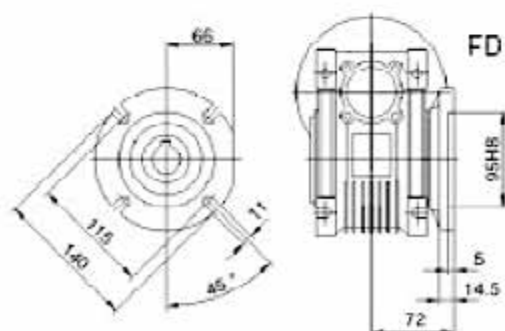
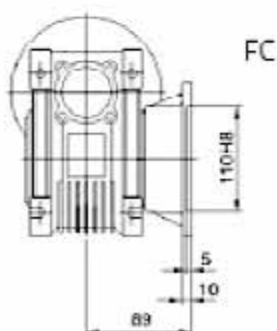
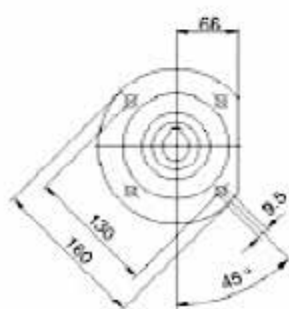
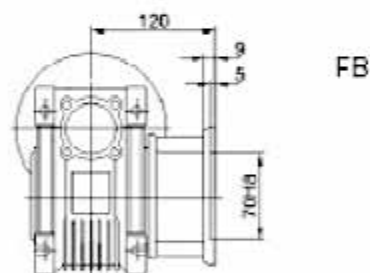
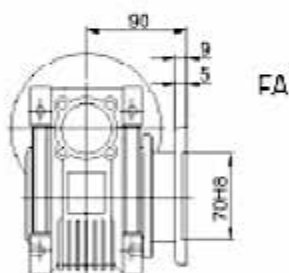
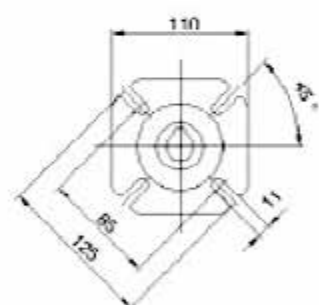
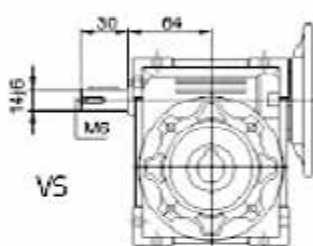
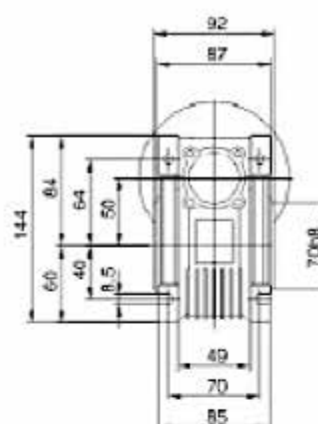
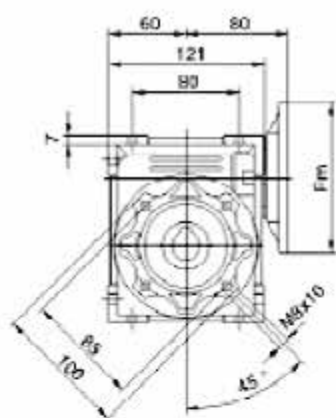


NMRV040 Gearbox Dimensions

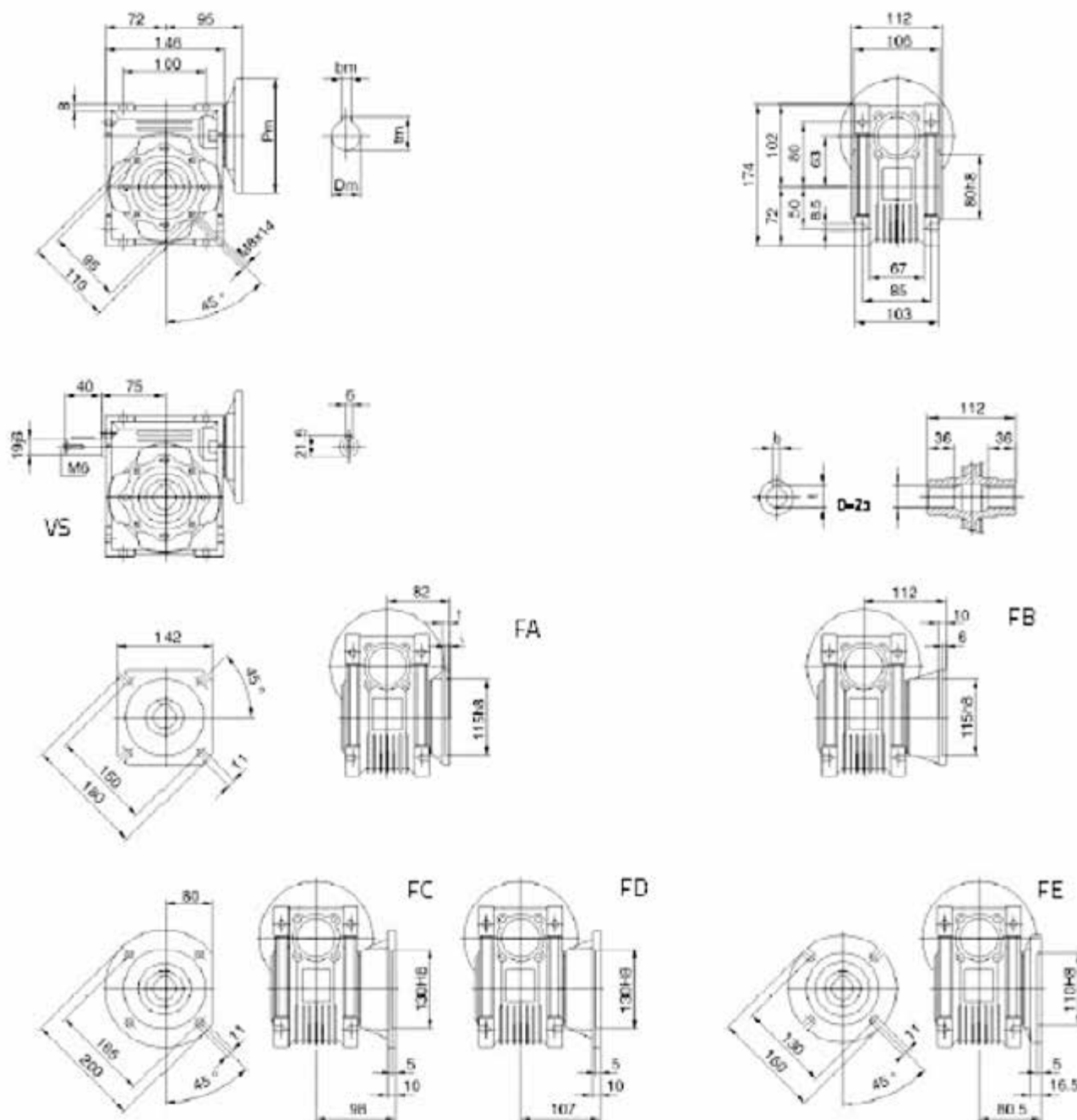




NMRV050 Gearbox Dimensions

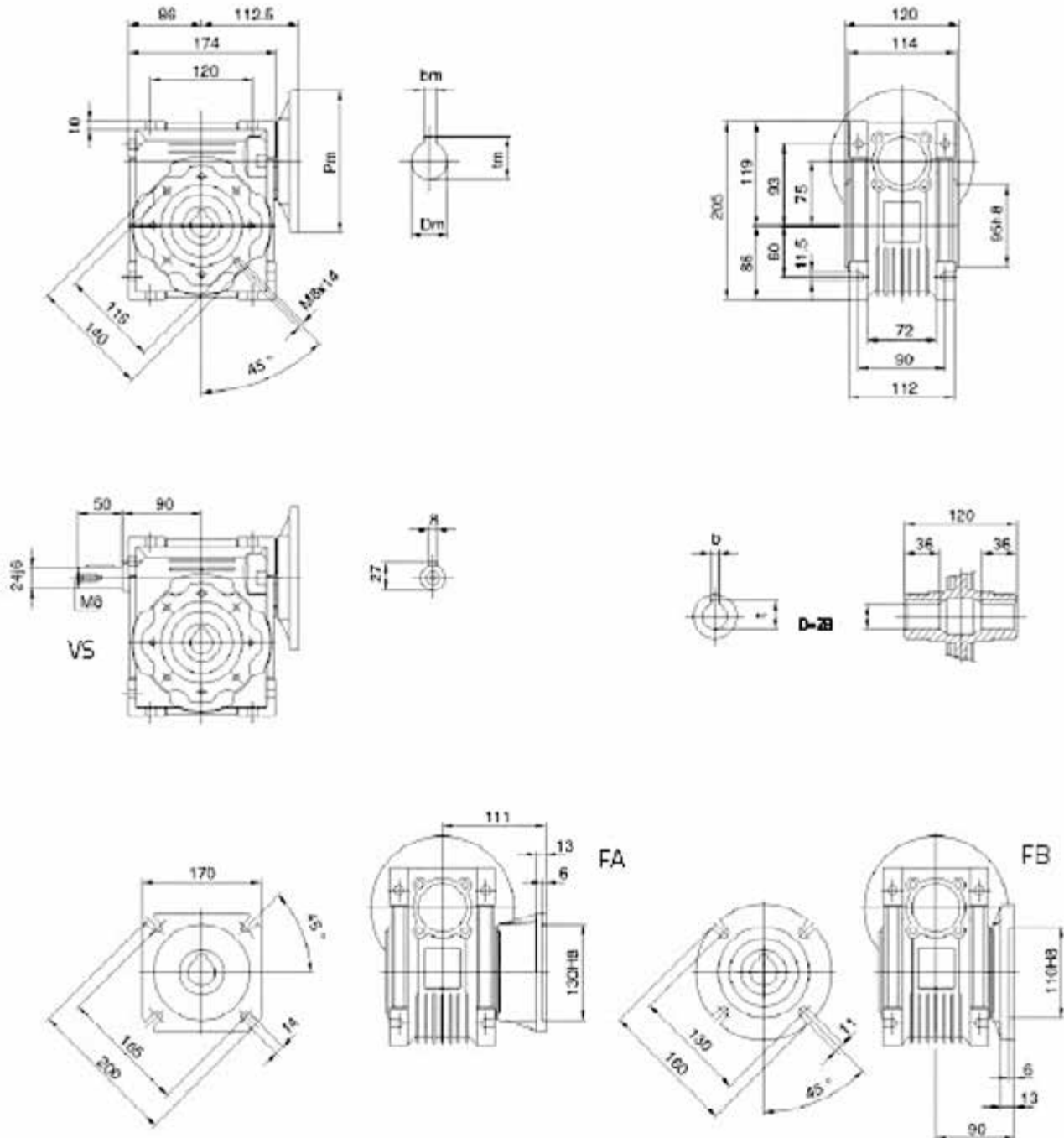


NMRV063 Gearbox Dimensions



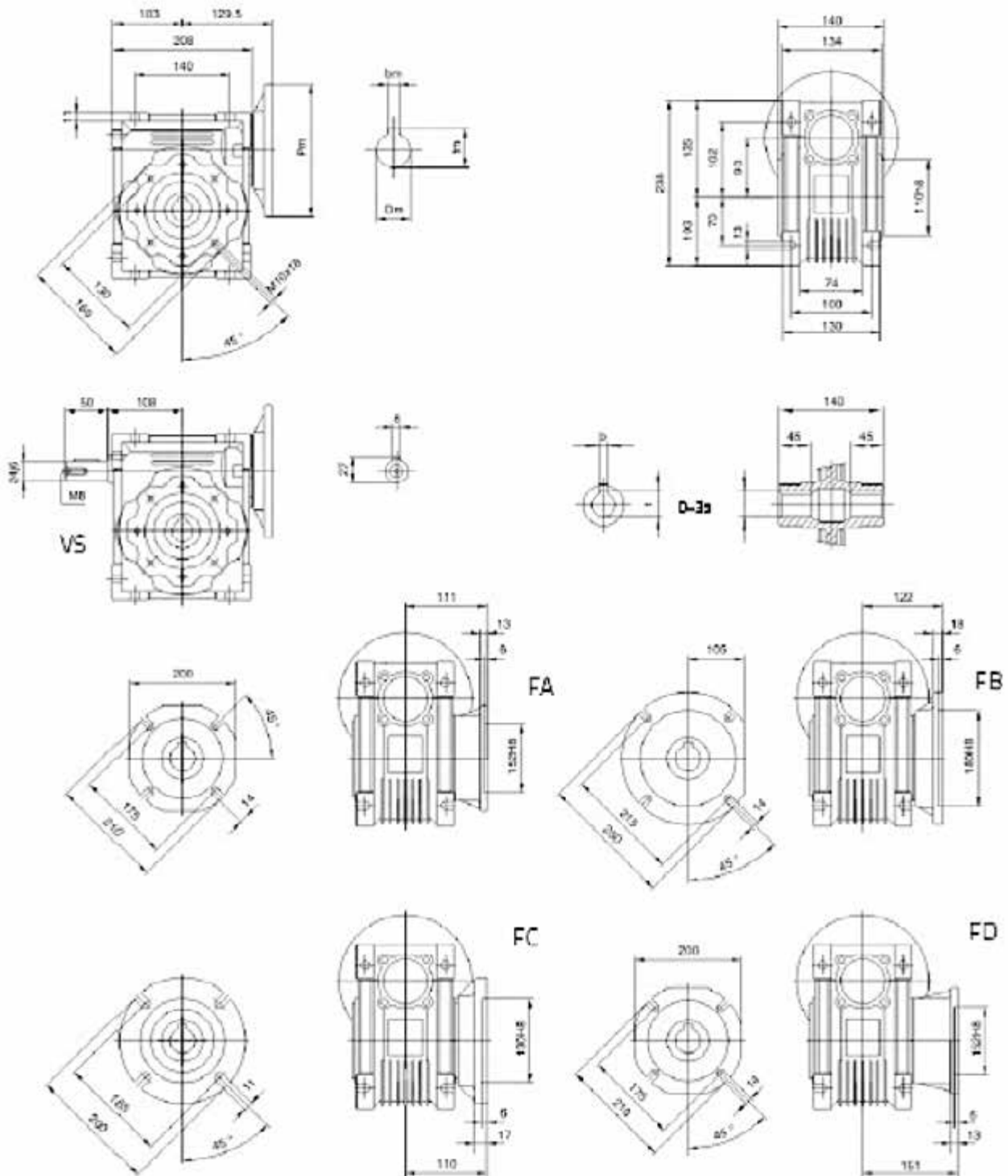


NMRV075 Gearbox Dimensions





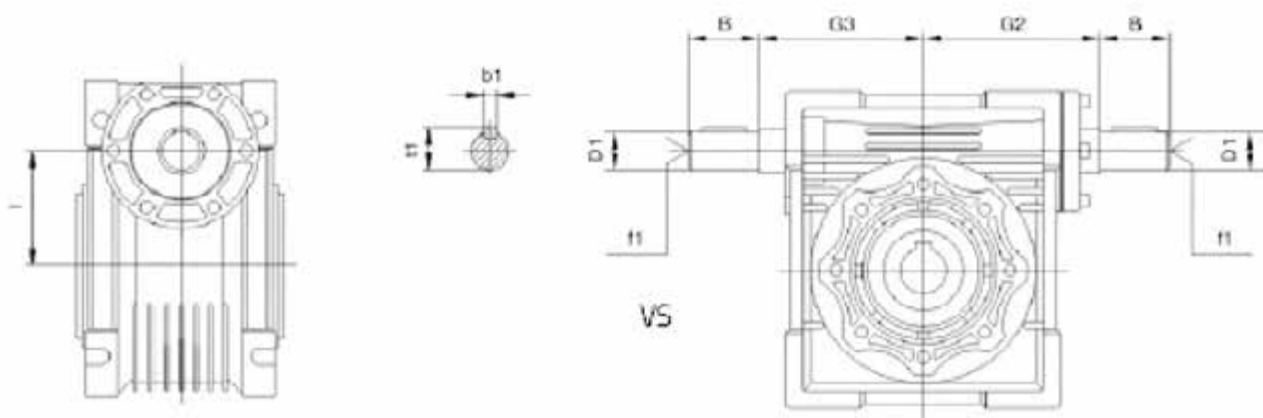
NMRV090 Gearbox Dimensions





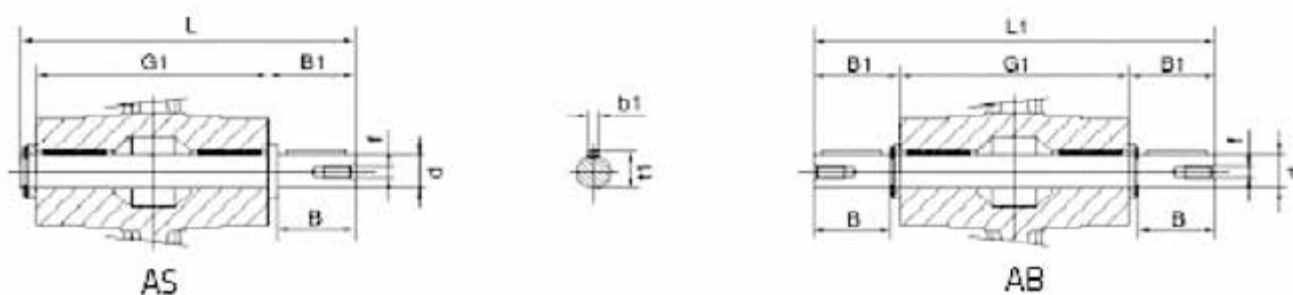
Shaft Dimensions

NMRV	G2	G3	D1	B	F1	I	b1	t1
030	51	45	9j6	20	-	30	3	10.2
040	60	53	11j6	23	-	40	4	12.5
050	74	64	14j6	30	M6	50	5	16
063	90	75	19j6	40	M6	63	6	21.5
075	105	90	24j6	50	M8	75	8	27
090	125	108	24j6	50	50	90	8	27



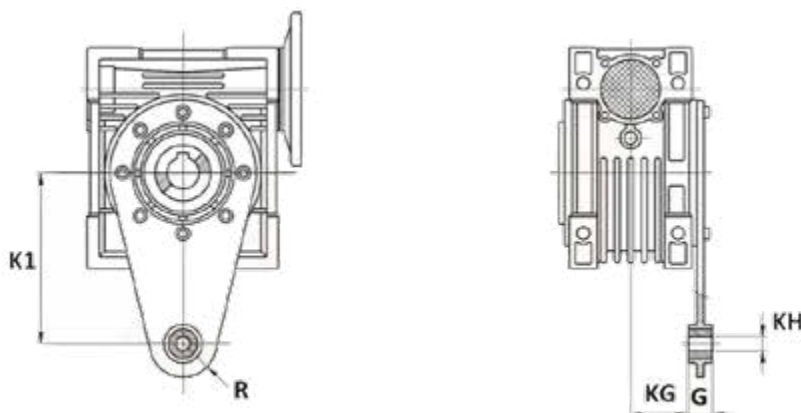
Low Speed Shafts Dimensions

NMRV	d	B	B1	G1	L	f	b1	t1
030	14 g6	30	32.5	63	102	M6	5	16
040	18 h6	40	43	78	128	M6	6	20.5
050	25 h6	50	53.5	92	153	M10	8	28
063	25 h6	50	53.5	112	173	M10	8	28
075	28 h6	60	63.5	120	192	M10	8	31
090	35 h6	80	84.5	140	234	M12	10	38



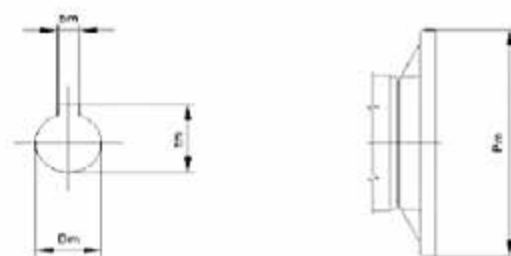


Torque Arm Dimensions



NMRV	K1	G	KG	KH	R
030	85	14	24	8	15
040	100	14	31.5	10	18
050	100	14	38.5	10	18
063	150	14	49	10	18
075	200	25	47.5	20	30
090	200	25	57.5	20	30

Input Flanges Dimensions



B5	IEC					
	056	063	071	080	090	100
Pm	120	140	160	200	200	250
Dm	9	11	14	19	24	28
bm	3	4	5	6	8	8
tm	10.4	12.8	16.3	21.8	27.3	31.3

B14	IEC					
	056	063	071	080	090	100
Pm	80	90	105	120	140	160
Dm	9	11	14	19	24	28
bm	3	4	5	6	8	8
tm	10.4	12.8	16.3	21.8	27.3	31.3



Worm Gearboxes with Input Flanges							
Part Number	Size	Ratio	Flange	Part Number	Size	Ratio	Flange
NMRV30-R7-D63-B5	NMRV30	7:1	D63-B5	NMRV63-R7.5-D90-B5	NMRV63	7.5:1	D90-B5
NMRV30-R10-D63-B5	NMRV30	10:1	D63-B5	NMRV63-R10-D90-B5	NMRV63	10:1	D90-B5
NMRV30-R15-D63-B5	NMRV30	15:1	D63-B5	NMRV63-R15-D90-B5	NMRV63	15:1	D90-B5
NMRV30-R20-D63-B5	NMRV30	20:1	D63-B5	NMRV63-R20-D90-B5	NMRV63	20:1	D90-B5
NMRV30-R25-D63-B5	NMRV30	25:1	D63-B5	NMRV63-R25-D90-B5	NMRV63	25:1	D90-B5
NMRV30-R30-D63-B5	NMRV30	30:1	D63-B5	NMRV63-R30-D90-B5	NMRV63	30:1	D90-B5
NMRV30-R40-D63-B5	NMRV30	40:1	D63-B5	NMRV63-R40-D80-B5	NMRV63	40:1	D80-B5
NMRV30-R50-D63-B5	NMRV30	50:1	D63-B5	NMRV63-R50-D80-B5	NMRV63	50:1	D80-B5
NMRV30-R60-D56-B5	NMRV30	60:1	D56-B5	NMRV63-R60-D80-B5	NMRV63	60:1	D80-B5
NMRV30-R80-D56-B5	NMRV30	80:1	D56-B5	NMRV63-R80-D71-B5	NMRV63	80:1	D71-B5
				NMRV63-R100-D71-B5	NMRV63	100:1	D71-B5
NMRV40-R7-D71-B5	NMRV40	7:1	D71-B5				
NMRV40-R10-D71-B5	NMRV40	10:1	D71-B5	NMRV75-R7.5-D100-B5	NMRV75	7.5:1	D100-B5
NMRV40-R15-D71-B5	NMRV40	15:1	D71-B5	NMRV75-R10-D100-B5	NMRV75	10:1	D100-B5
NMRV40-R20-D71-B5	NMRV40	20:1	D71-B5	NMRV75-R15-D100-B5	NMRV75	15:1	D100-B5
NMRV40-R25-D71-B5	NMRV40	25:1	D71-B5	NMRV75-R20-D90-B5	NMRV75	20:1	D90-B5
NMRV40-R30-D71-B5	NMRV40	30:1	D71-B5	NMRV75-R25-D90-B5	NMRV75	25:1	D90-B5
NMRV40-R40-D71-B5	NMRV40	40:1	D71-B5	NMRV75-R30-D90-B5	NMRV75	30:1	D90-B5
				NMRV75-R40-D90-B5	NMRV75	40:1	D90-B5
NMRV40-R50-D63-B5	NMRV40	50:1	D63-B5	NMRV75-R40-D80-B5	NMRV75	40:1	D80-B5
NMRV40-R60-D63-B5	NMRV40	60:1	D63-B5	NMRV75-R50-D80-B5	NMRV75	50:1	D80-B5
NMRV40-R80-D63-B5	NMRV40	80:1	D63-B5	NMRV75-R60-D80-B5	NMRV75	60:1	D80-B5
NMRV40-R100-D63-B5	NMRV40	100:1	D63-B5	NMRV75-R80-D80-B5	NMRV75	80:1	D80-B5
				NMRV75-R100-D80-B5	NMRV75	100:1	D80-B5
NMRV50-R7.5-D80-B5	NMRV50	7.5:1	D80-B5	NMRV75-R100-D80-B5	NMRV75	100:1	D80-B5
NMRV50-R10-D80-B5	NMRV50	10:1	D80-B5	NMRV90-R7.5-D100-B5	NMRV90	7.5:1	D100-B5
NMRV50-R15-D80-B5	NMRV50	15:1	D80-B5	NMRV90-R10-D100-B5	NMRV90	10:1	D100-B5
NMRV50-R20-D80-B5	NMRV50	20:1	D80-B5	NMRV90-R15-D100-B5	NMRV90	15:1	D100-B5
NMRV50-R25-D80-B5	NMRV50	25:1	D80-B5	NMRV90-R20-D100-B5	NMRV90	20:1	D100-B5
NMRV50-R30-D80-B5	NMRV50	30:1	D80-B5	NMRV90-R25-D100-B5	NMRV90	25:1	D100-B5
NMRV50-R40-D71-B5	NMRV50	40:1	D71-B5	NMRV90-R30-D100-B5	NMRV90	30:1	D100-B5
NMRV50-R50-D71-B5	NMRV50	50:1	D71-B5	NMRV90-R40-D90-B5	NMRV90	40:1	D90-B5
NMRV50-R60-D71-B5	NMRV50	60:1	D71-B5	NMRV90-R50-D90-B5	NMRV90	50:1	D90-B5
NMRV50-R80-D71-B5	NMRV50	80:1	D71-B5	NMRV90-R60-D90-B5	NMRV90	60:1	D90-B5
NMRV50-R100-D63-B5	NMRV50	100:1	D63-B5	NMRV90-R80-D80-B5	NMRV90	80:1	D80-B5
				NMRV90-R100-D80-B5	NMRV90	100:1	D80-B5

Bush & Key Sets			
Part Number	Description	Part Number	Description
NMRV-9X11BK-SET	Bush & Key Set	NMRV-19X24BK-SET	Bush & Key Set
NMRV-11X14BK-SET	Bush & Key Set	NMRV-19X28BK-SET	Bush & Key Set
NMRV-14X19BK-SET	Bush & Key Set	NMRV-24X28BK-SET	Bush & Key Set



Input Flanges	
Part Number	Description
NMRV30-D56-B5-IF	NMRV30 D56-B5 Input Flange (with seal)
NMRV30-D56-B14-IF	NMRV30 D56-B14 Input Flange (with seal)
NMRV30-D63-B5-IF	NMRV30 D63-B5 Input Flange (with seal)
NMRV30-D63-B14-IF	NMRV30 D63-B14 Input Flange (with seal)
NMRV40-D63-B5-IF	NMRV40 D63-B5 Input Flange (with seal)
NMRV40-D63-B14-IF	NMRV40 D63-B14 Input Flange (with seal)
NMRV40-D71-B5-IF	NMRV40 D71-B5 Input Flange (with seal)
NMRV40-D71-B14-IF	NMRV40 D71-B14 Input Flange (with seal)
NMRV50-D63-B5-IF	NMRV50 D63-B5 Input Flange (with seal)
NMRV50-D63-B14-IF	NMRV50 D63-B14 Input Flange (with seal)
NMRV50-D71-B5-IF	NMRV50 D71-B5 Input Flange (with seal)
NMRV50-D71-B14-IF	NMRV50 D71-B14 Input Flange (with seal)
NMRV50-D80-B5-IF	NMRV50 D80-B5 Input Flange (with seal)
NMRV50-D80-B14-IF	NMRV50 D80-B14 Input Flange (with seal)
NMRV63-D71-B5-IF	NMRV63 D71-B5 Input Flange (with seal)
NMRV63-D71-B14-IF	NMRV63 D71-B14 Input Flange (with seal)
NMRV63-D80-B5-IF	NMRV63 D80-B5 Input Flange (with seal)
NMRV63-D80-B14-IF	NMRV63 D80-B14 Input Flange (with seal)
NMRV63-D90-B5-IF	NMRV63 D90-B5 Input Flange (with seal)
NMRV63-D90-B14-IF	NMRV63 D90-B14 Input Flange (with seal)
NMRV75-D71-B5-IF	NMRV75 D71-B5 Input Flange (with seal)
NMRV75-D80-B5-IF	NMRV75 D80-B5 Input Flange (with seal)
NMRV75-D80-B14-IF	NMRV75 D80-B14 Input Flange (with seal)
NMRV75-D90-B5-IF	NMRV75 D90-B5 Input Flange (with seal)
NMRV75-D90-B14-IF	NMRV75 D90-B14 Input Flange (with seal)
NMRV75-D100-B5-IF	NMRV75 D100-B5 Input Flange (with seal)
NMRV75-D100-B14-IF	NMRV75 D100-B14 Input Flange (with seal)
NMRV90-D80-B5-IF	NMRV90 D80-B5 Input Flange (with seal)
NMRV90-D80-B14-IF	NMRV90 D80-B14 Input Flange (with seal)
NMRV90-D90-B5-IF	NMRV90 D90-B5 Input Flange (with seal)
NMRV90-D90-B14-IF	NMRV90 D90-B14 Input Flange (with seal)
NMRV90-D100-B5-IF	NMRV90 D100-B5 Input Flange (with seal)
NMRV90-D100-B14-IF	NMRV90 D100-B14 Input Flange (with seal)

Output Flanges	
Part Number	Description
NMRV30-FA-OF	NMRV30 FA Output Flange
NMRV40-FA-OF	NMRV40 FA Output Flange
NMRV40-FB-OF	NMRV40 FB Output Flange
NMRV40-FC-OF	NMRV40 FC Output Flange
NMRV40-FD-OF	NMRV40 FD Output Flange
NMRV50-FA-OF	NMRV50 FA Output Flange
NMRV50-FB-OF	NMRV50 FB Output Flange
NMRV50-FC-OF	NMRV50 FC Output Flange
NMRV50-FD-OF	NMRV50 FD Output Flange
NMRV63-FA-OF	NMRV63 FA Output Flange
NMRV63-FB-OF	NMRV63 FB Output Flange
NMRV63-FC-OF	NMRV63 FC Output Flange
NMRV63-FD-OF	NMRV63 FD Output Flange
NMRV75-FA-OF	NMRV75 FA Output Flange
NMRV75-FB-OF	NMRV75 FB Output Flange
NMRV75-FC-OF	NMRV75 FC Output Flange
NMRV75-FD-OF	NMRV75 FD Output Flange
NMRV90-FA-OF	NMRV90 FA Output Flange
NMRV90-FB-OF	NMRV90 FB Output Flange
NMRV90-FC-OF	NMRV90 FC Output Flange
NMRV90-FD-OF	NMRV90 FD Output Flange

Torque Arms	
Part Number	Description
NMRV30-TORQUE-ARM	NMRV30 Torque Arm
NMRV40-TORQUE-ARM	NMRV40 Torque Arm
NMRV50-TORQUE-ARM	NMRV50 Torque Arm
NMRV63-TORQUE-ARM	NMRV63 Torque Arm
NMRV75-TORQUE-ARM	NMRV75 Torque Arm
NMRV90-TORQUE-ARM	NMRV90 Torque Arm

Shafts	
Part Number	Description
NMRV30-SHAFT	NMRV30 Single Shaft
NMRV30-D-SHAFT	NMRV30 Double Shaft
NMRV40-SHAFT	NMRV40 Single Shaft
NMRV40-D-SHAFT	NMRV40 Double Shaft
NMRV50-SHAFT	NMRV50 Single Shaft
NMRV50-D-SHAFT	NMRV50 Double Shaft
NMRV63-SHAFT	NMRV63 Single Shaft
NMRV63-D-SHAFT	NMRV63 Double Shaft
NMRV75-SHAFT	NMRV75 Single Shaft
NMRV75-D-SHAFT	NMRV75 Double Shaft
NMRV90-SHAFT	NMRV90 Single Shaft
NMRV90-D-SHAFT	NMRV90 Double Shaft