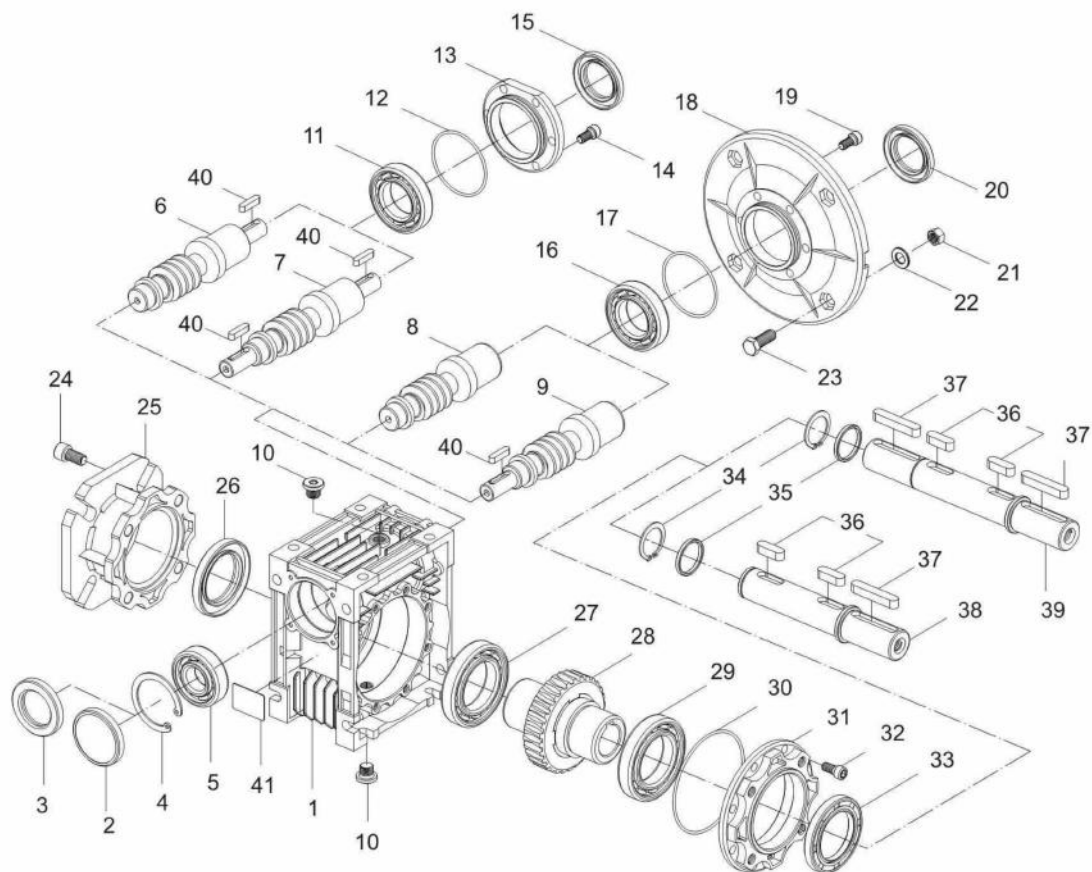




RV025/RV030/RV040/RV050/RV063/RV075/RV090/RV110/RV130/RV150

结构分解图 / STRUCTURE DIAGRAM



1	箱体 / Cablint	22	垫圈 / Washer
2	油封盖 / Closing cap	23	外六角螺栓 / Six hexagon bolt
3	油封 / Oil seal	24	内六角螺钉 / Inner hex screw
4	孔用挡圈 / Hole-circlip	25	输出法兰 / Output flange
5	轴承 / Bearing	26	油封 / Oil seal
6	轴输入蜗杆 / Input shaft worm	27	轴承 / Bearing
7	双轴输入蜗杆 / Double input worm	28	蜗轮 / Worm gear
8	孔输入蜗杆 / Input hole worm	29	轴承 / Bearing
9	孔输入轴输入蜗杆 / Input shaft and hole worm	30	O型橡胶密封圈 / O-ring
10	油塞 / Oil plug	31	输出端盖 / Bearing support cover
11	轴承 / Bearing	32	内六角螺钉 / Inner hex screw
12	O型橡胶密封圈 / O-ring	33	油封 / Oil seal
13	轴承座 / Bearing block	34	轴用挡圈 / Shaft-circlip
14	内六角螺钉 / Inner hex screw	35	垫圈 / Washer
15	油封 / Oil seal	36	键 / Key
16	轴承 / Bearing	37	键 / Key
17	O型橡胶密封圈 / O-ring	38	单向输出轴 / Single output shaft
18	输入法兰 / Input flange	39	双向输出轴 / Double output shaft
19	内六角螺钉 / Inner hex screw	40	键 / Key
20	油封 / Oil seal	41	铭牌 / Nameplate
21	外六角螺母 / Six hexagon nut		

产品概述 / SUMMARIZE

结构特点 / Structure Features

1. 优质铝合金铸造箱体，适应全方位的万能安装配置；
 2. 充分的冷却筋条，使机体具有优良的热传导性能；
 3. 从025-150共10种机座规格；传递功率范围从60W-15kW；
 4. 速比范围大，每个机座具有从5:1到100:1的12种减速比；
 5. 精密磨削加工的硬齿面传动蜗杆，效率高、输出扭矩大；
 6. 低噪声平稳运转，能适合在恶劣环境中长期连续工作；
 7. 重量轻，机械强度高；
 8. 模块化组合PCR/V及DRV将NMRV减速机的传动比拓展至：i=5--5000
1. high quality die casting aluminum alloy housing ,suitable for universal mounting .
 2. Heat sink design for cooling provides great surface area and higher thermal capacity than the casting iron housings
 3. 025 to 150,with power scope from 60W to 15kW.
 4. Larger speed ratio range .each single frame size has 12 ratios from 5:1 to 100:1
 5. Hardened worm with fine grinding has the features of higher efficiency and big output torque .
 6. Low noise and stably running ,can adapt long term work condition in terrible environments
 7. Light weight ,high mechanical strength .
 8. Modularization combination PCR/V and DRV extend the ration of NMRV reducers from i=5:1 to 5000:1.

主要材料 / Main Materials

1. 外壳：铝合金（机座：025-090），铸铁（机座：110-150）；
 2. 蜗杆：20Cr，渗碳淬火，齿面硬度58-62HRC，精磨后保持渗碳层厚度0.3-0.5mm；
 3. 蜗轮：耐磨镍青铜。
1. Housing: die-cast aluminum alloy(frame size 025 to 090);cast iron(frame size:110 to 150);
 2. Worm: 20Cr, carbonize&quencher heat treatment make the hardness of gear's surface up to 58-62HRC,retain carburized layer's thickness between 0.3 and 0.5mm after accurate grinding.
 3. Worm wheel:wearable nickel bronze alloy.

表面涂装 / Surface Painting

铝合金外壳：

- 1.先抛丸处理，再经特种防腐处理，保持银白金属感，并耐汽油、二甲苯等有机溶剂的腐蚀；
- 2.磷化处理后，再喷RAL5010蓝色或RAL7035浅灰色涂料。

铸铁外壳：先涂红色防锈漆，后喷涂RAL5010蓝色或RAL7035浅灰色涂料。

Aluminum alloy housing:

1. Shot blasting and special antiseptic treatment on the aluminum alloy surface.
2. After phosphating, paint with RAL5010 blue or RAL7035 grey paint.

Cast iron housing: First paint with red antirust paint, then paint white RAL5010 blue or RAL7035 grey paint.

型号说明 / MODEL ILLUMINATE

减速机 / Gear unit								电机 / Motors													
NMRV	063	/	50	/	E	/	FA1	/	SS1	/	71B5	/	B3	/	0.37-4P	/	BMG	/	1	/	X
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫										

NO.	说明	Description
1	减速机系列代号: 1.NMRV:孔输入带输入法兰 2.NRV: 轴输入不带输入法兰 3.DRV:双蜗轮蜗杆减速机 (NMRV+NMRV/NRV+NMRV) 4.PCRV:前置齿轮蜗轮蜗杆减速机	Code for gear units series: 1. NMRV:Hole input with flange 2. NRV: Shaft input without flange 3. DRV:Combination worm gear units (NMRV+NMRV/NRV+NMRV) 4.PCRV:Worm geared motors with pre-stage helical unit
2	蜗轮蜗杆减速机中心距 (规格) 1.NMRV:025,030,040,050,063,075,090,110,130,150 2.DRV:030/063..... 3.PCRV:071/063...	Central distance of worm gear units(spec) 1.NMRV:025,030,040,050,063,075,090,110,130,150 2.DRV:030/063..... 3.PCRV:071/063
3	减速机速比 1.NMRV:i=5,7.5,10,15,20,25,30,40,50,60,80,100 2.DRV:i=100.....5000 3.PCRV:i=NMRV	Speed ratio of reducer 1.NMRV:i=5,7.5,10,15,20,25,30,40,50,60,80,100 2.DRV:i=100.....5000 3.PCRV:i=NMRV
4	无代号表示不带蜗杆同向尾出轴 E: 带蜗杆同向尾出轴	1.No mark means single extension worm shaft 2.E:Double extension worm shaft
5	1.无代号表示不带输出法兰 2.FA,FB,FC,FD,FE(1/2):输出法兰代号和位置	1.No mark means without output flange 2.FA, FB, FC, FD, FE(1/2):output Flange and position
6	1.无代号表示孔输出 2.SS(1/2):单向输出轴和位置 3.DS: 双向输出轴	1.No mark means hole output 2.SS(1/2):Single output shaft and position 3.DS:Double output shaft
7	输入法兰规格形式 (不带电机时) 1.71B5: IEC输入法兰及规格代号 2. 56C: NEMA输入法兰及规格代号 3. ST80: 伺服电机输入法兰规格代号	Normalized from of input flange (without motor) 1.71B5:IEC input flange code 2. 56C: NEMA input flange code 3. ST80 : Servo motor input flange code
8	安装方位代号	Installation position code
9	1.无代号表示不带电机 2.0.37-4P: 电机功率、级数 3.80ST-M01330:伺服电机型号	1. No mark means without motor 1.0.37-4P: Model motors(poles of power) 2.80ST-M01330: Servo motor type
10	1.无代号表示不带制动器 2.BMG:制动器	1.No mark means without brake 2.BMG:brake
11	电机接线盒位置, 默认位置1可以不写	Position of motor terminal box default position 1 not to write out is ok
12	电机进线位置, 默认位置X 可以不写	Coil position for motor , default position X not to write out is ok

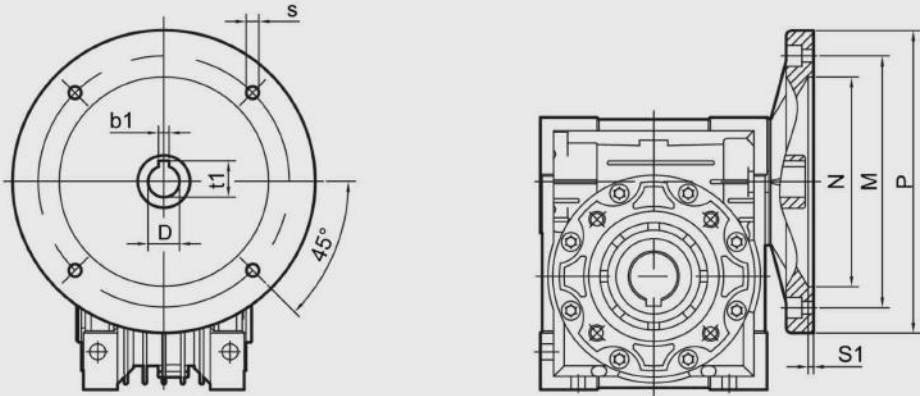
注: 订单时请说明是否带电机, 一般按不带电机供应。

NOTE: When ordering, you should show whether the reducers are equipped with motors, otherwise reducers aren't supplied with motors.

示例Example: NMRV063 / 60 / FA2 / 80B5

NMRV连接尺寸图表 / CONNECTING DIMENSION SHEET

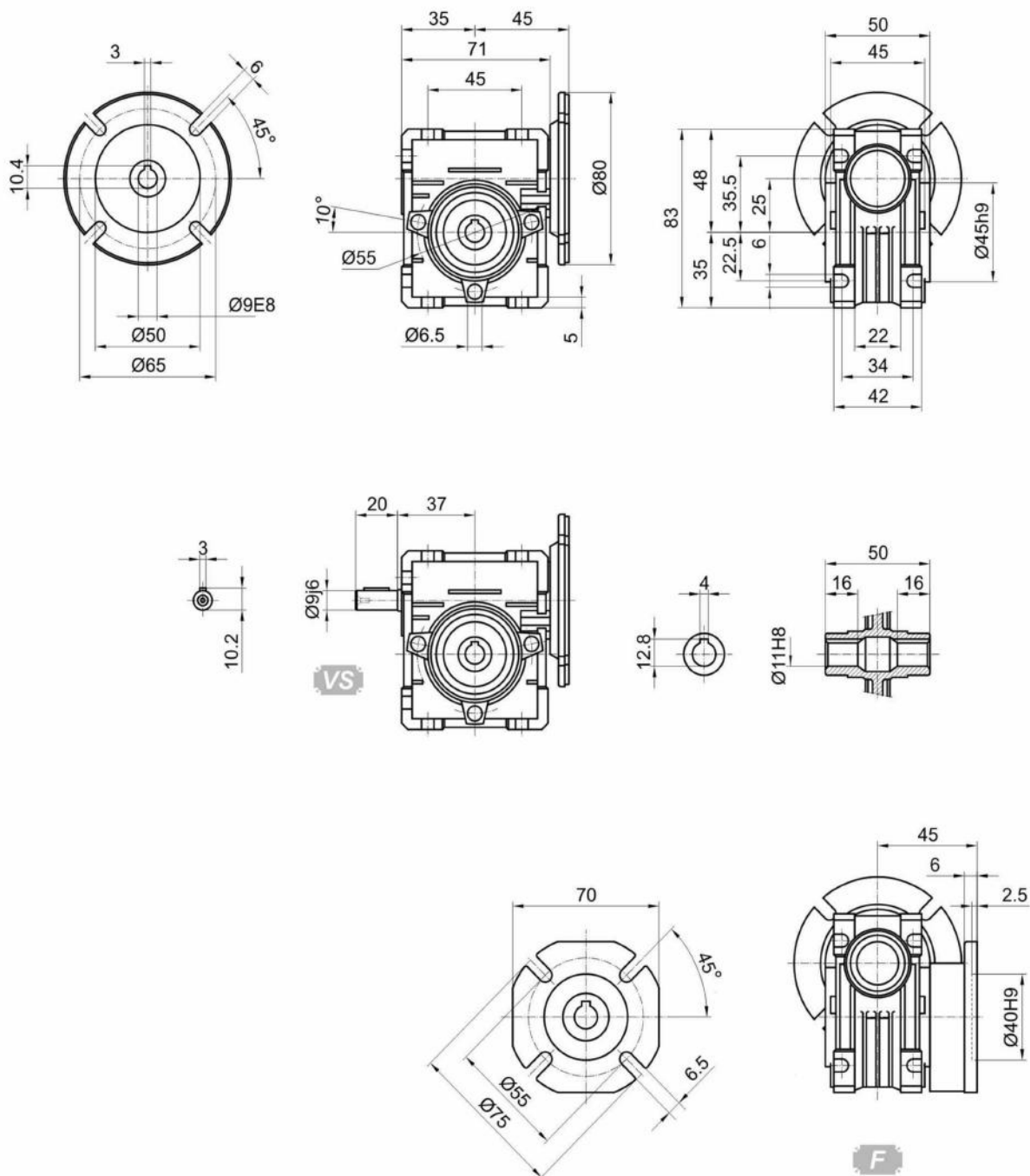
NMRV..IEC输入法兰尺寸 / Input Flange Dimension



NMRV	PAM-IEC	N(H8)		M		P		S		b1	t1	s1	i(速比/ratio)											
													5	7.5	10	15	20	25	30	40	50	60	80	100
		B5	B14	B5	B14	B5	B14	B5	B14				D(F8)											
025	56B14	—	50	—	65	—	80	—	6	3	10.4	4	9	9	9	9	9	9	9	9	9	—	—	
030	56B5/B14	80	50	100	65	120	80	6.5	5.5	3	10.4	4	9	9	9	9	9	9	9	9	9	9	—	
	63B5/B14	95	60	115	75	140	90	9	5.5	4	12.8	4	11	11	11	11	11	11	11	11	—	—	—	
040	56B5/B14	80	50	100	65	120	80	6.5	5.5	3	10.4	4	—	—	—	—	—	—	—	9	9	9	9	
	63B5/B14	95	60	115	75	140	90	9	5.5	4	12.8	4	11	11	11	11	11	11	11	11	11	11		
	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	14	14	14	14	14	14	14	—	—	—		
050	63B5/B14	95	60	115	75	140	90	9	5.5	4	12.8	5	—	—	—	—	—	—	—	11	11	11	11	
	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	14	14	14	14	14	14	14	14	14	14		
	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	19	19	19	19	19	19	19	—	—	—		
063	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	—	—	—	—	—	—	—	14	14	14	14	
	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	—	19	19	19	19	19	19	19	19	19		
	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	—	24	24	24	24	24	—	—	—	—		
075	71B5	110	—	130	—	160	—	9	7	5	16.3	5	—	—	—	—	—	—	—	14	14	14	14	
	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	—	—	—	—	—	—	19	19	19	19		
	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	—	24	24	24	24	24	—	—	—	—		
	100B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	—	28	28	28	—	—	—	—	—	—		
	112B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	—	28	—	—	—	—	—	—	—	—		
090	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	—	—	—	—	—	—	—	19	19	19	19	
	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	—	—	—	—	24	24	24	24	24	—		
	100B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	—	28	28	28	28	28	—	—	—	—		
	112B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	—	28	28	28	28	—	—	—	—	—		
110	80B5	130	—	165	—	200	—	11	7	6	21.8	6	—	—	—	—	—	—	—	—	—	19	19	
	90B5	130	—	165	—	200	—	11	9	8	27.3	6	—	—	—	—	—	24	24	24	24	24		
	100B5	180	—	215	—	250	—	13	9	8	27.3	6	—	28	28	28	28	28	28	28	28	—		
	112B5	180	—	215	—	250	—	13	9	8	31.3	6	—	28	28	28	28	28	28	—	—	—		
	132B5	230	—	265	—	300	—	13	—	10	41.3	6	—	38	38	38	38	—	—	—	—	—		
130	90B5	130	—	165	—	200	—	11	9	8	27.3	6	—	—	—	—	—	—	—	—	—	24	24	
	100B5	180	—	215	—	250	—	13	9	8	31.3	6	—	—	—	—	—	—	28	28	28	28		
	112B5	180	—	215	—	250	—	13	9	8	31.3	6	—	28	28	28	28	28	28	28	—	—		
	132B5	230	—	265	—	300	—	13	—	10	41.3	6	—	38	38	38	38	38	38	—	—	—		
150	100/112B5	180	—	215	—	250	—	13	9	8	31.3	6	—	—	—	—	—	—	—	28	28	28	28	
	132B5	230	—	265	—	300	—	13	—	10	41.3	6	—	—	—	—	38	38	38	38	38	—		
	160B5	250	—	300	—	350	—	19	—	12	45.3	6	—	42	42	42	42	42	—	—	—	—		

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

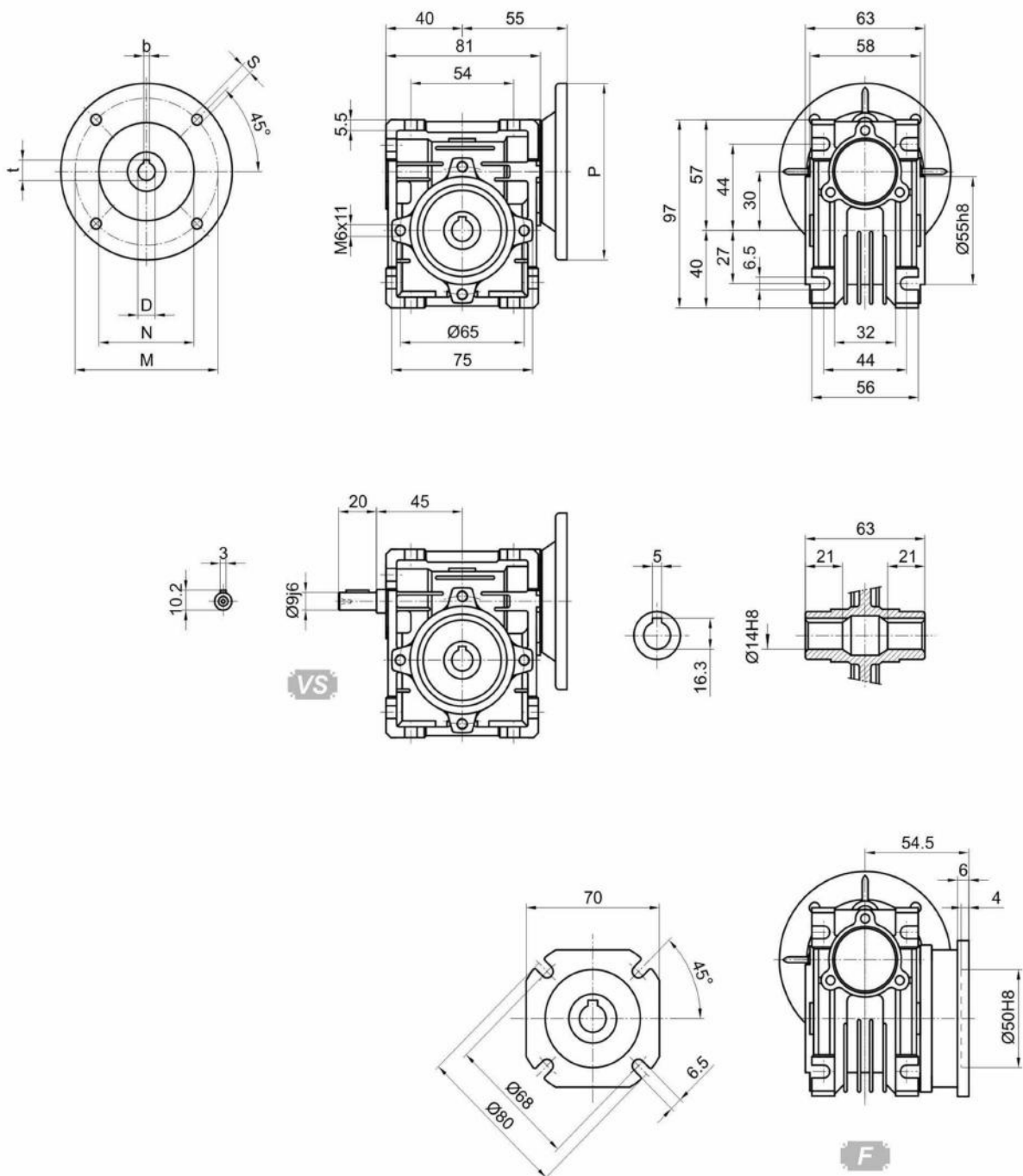
NMRV 025外形尺寸 / Outline Dimension



*不带电机重量 $\approx 0.7\text{kg}$
*Weight without motor $\approx 0.7\text{kg}$

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV 030外形尺寸 / Outline Dimension

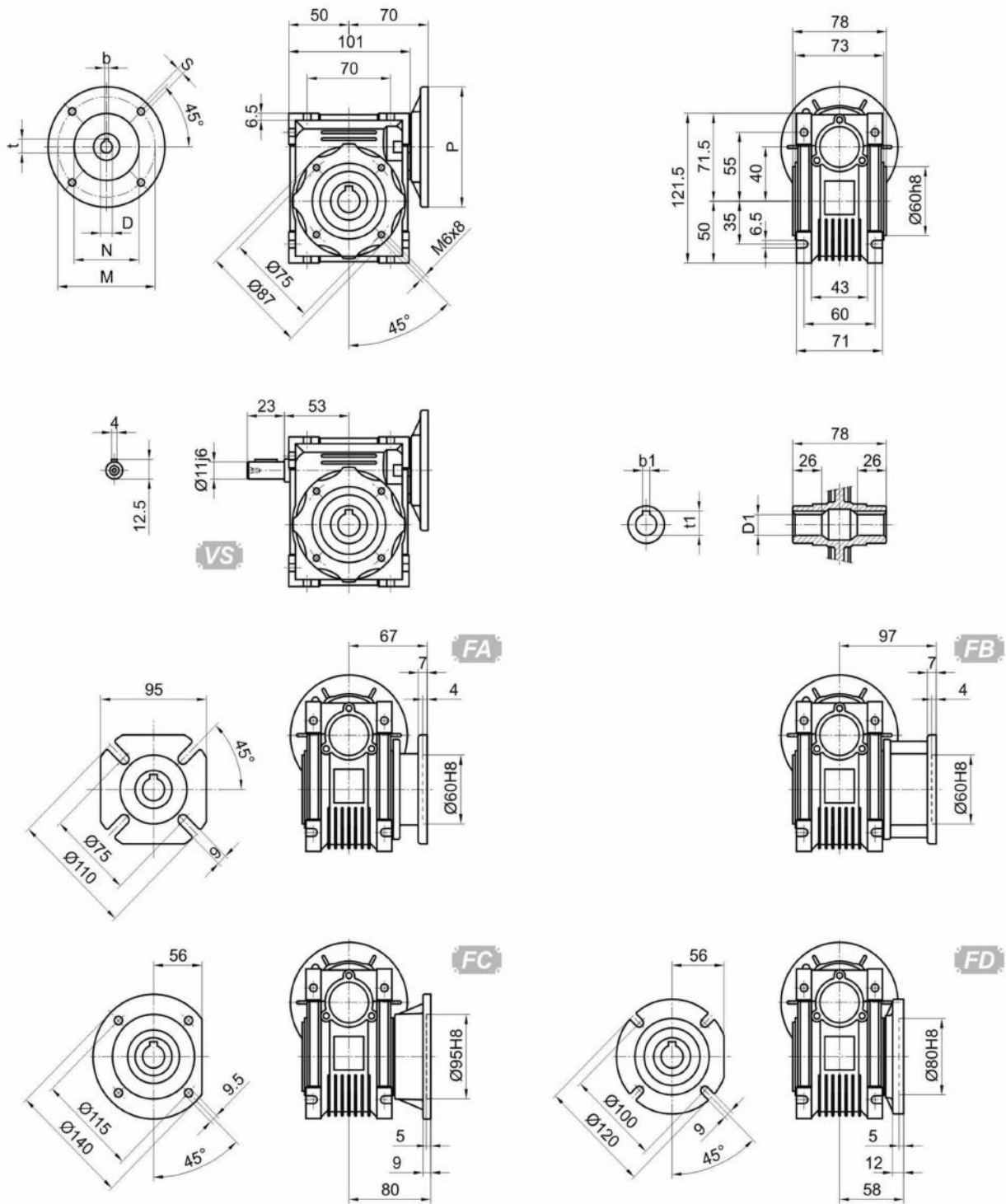


PAM IEC	D _{E8}	b	t	P	M	N	S
63B5	11	4	12.8	140	115	95	9
63B14	11	4	12.8	90	75	60	5.5
56B5	9	3	10.4	120	100	80	6.5
56B14	9	3	10.4	80	65	50	5.5

*不带电机重量 $\approx 1.2\text{kg}$
 *Weight without motor $\approx 1.2\text{kg}$

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV 040外形尺寸 / Outline Dimension

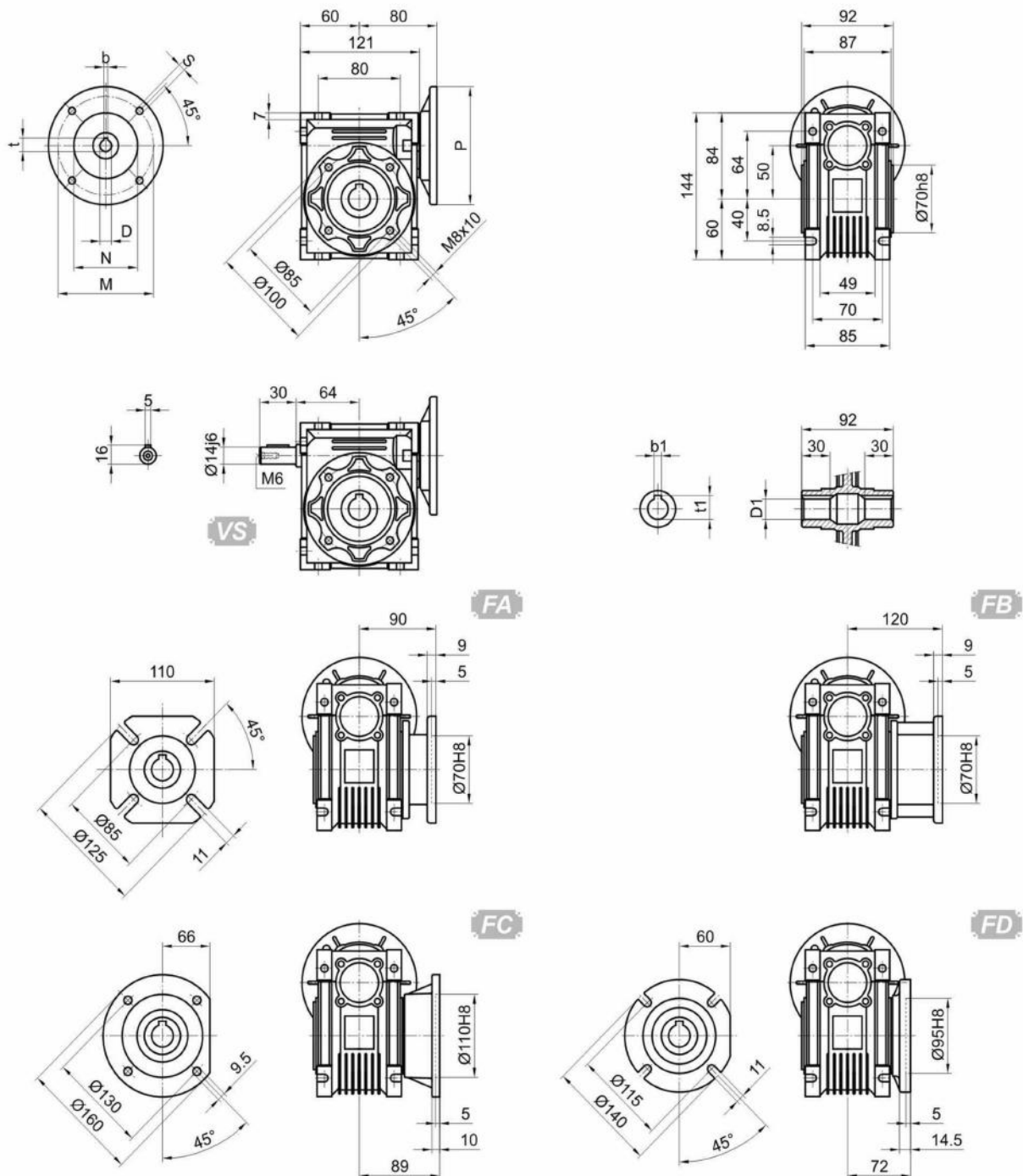


PAM IEC	D _{E8}	b	t	P	M	N	S	输出 Output	D _{1H8}	b ₁	t ₁
71B5	14	5	16.3	160	130	110	8.5		18	6	20.8
71B14	14	5	16.3	105	85	70	6.5		(19)	(6)	(21.8)
63B5	11	4	12.8	140	115	95	9		(...) 根据用户要求定制 (...) Only on request		
63B14	11	4	12.8	90	75	60	6				
56B5	9	3	10.4	120	100	80	6.5				

*不带电机重量 ≈2.3kg
*Weight without motor ≈2.3kg

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV 050外形尺寸 / Outline Dimension

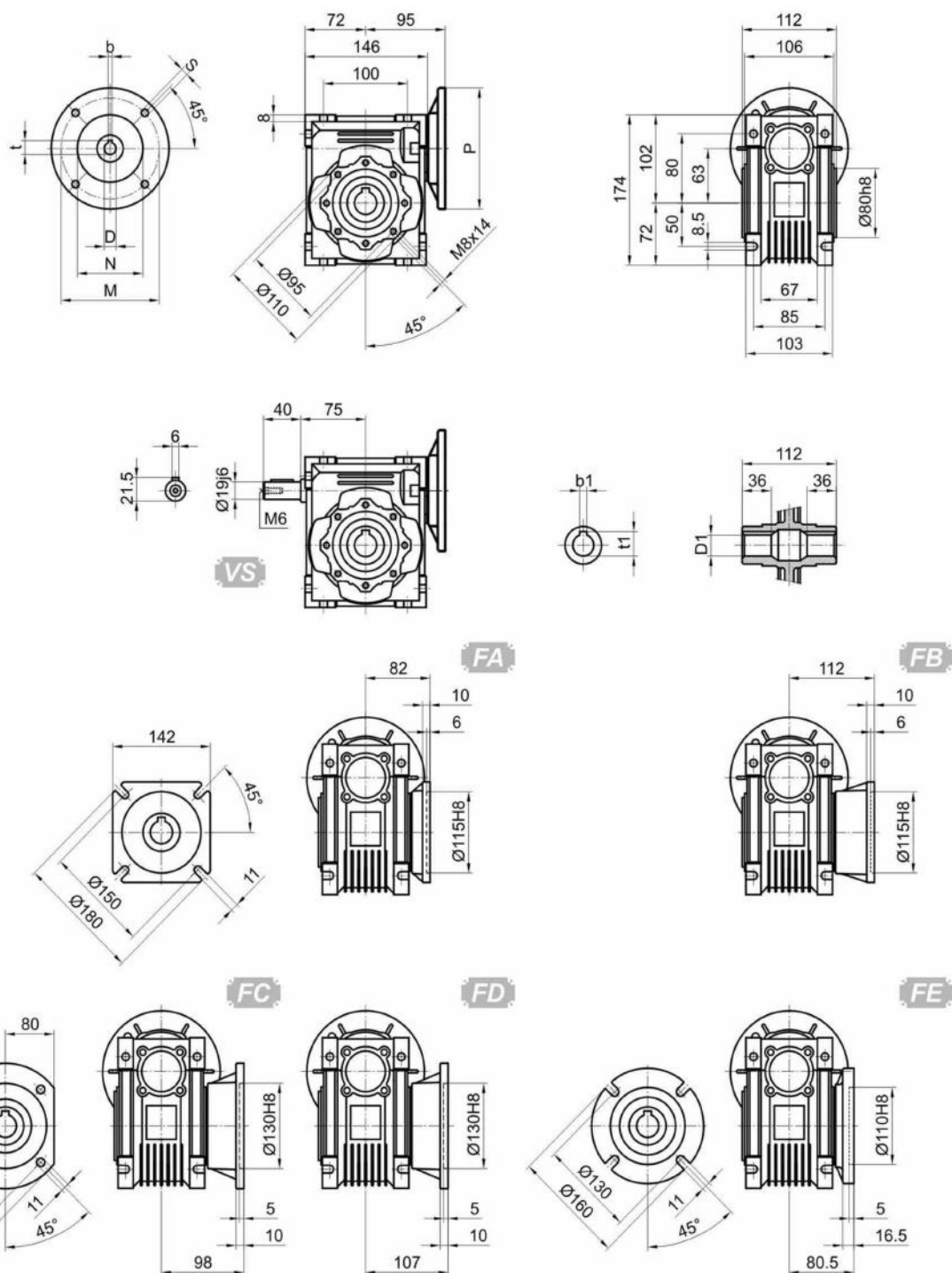


PAM IEC	D _{E8}	b	t	P	M	N	S	输出 Output	D _{1H8}	b ₁	t ₁
80B5	19	6	21.8	200	165	130	11		25	8	28.3
80B14	19	6	21.8	120	100	80	6.5		(24)	(8)	(27.3)
71B5	14	5	16.3	160	130	110	8.5		(...) 根据用户要求定制 (...) Only on request		
71B14	14	5	16.3	105	85	70	7				
63B5	11	4	12.8	140	115	95	8.5				

*不带电机重量 ≈3.5kg
*Weight without motor ≈3.5kg

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV 063外形尺寸 / Outline Dimension

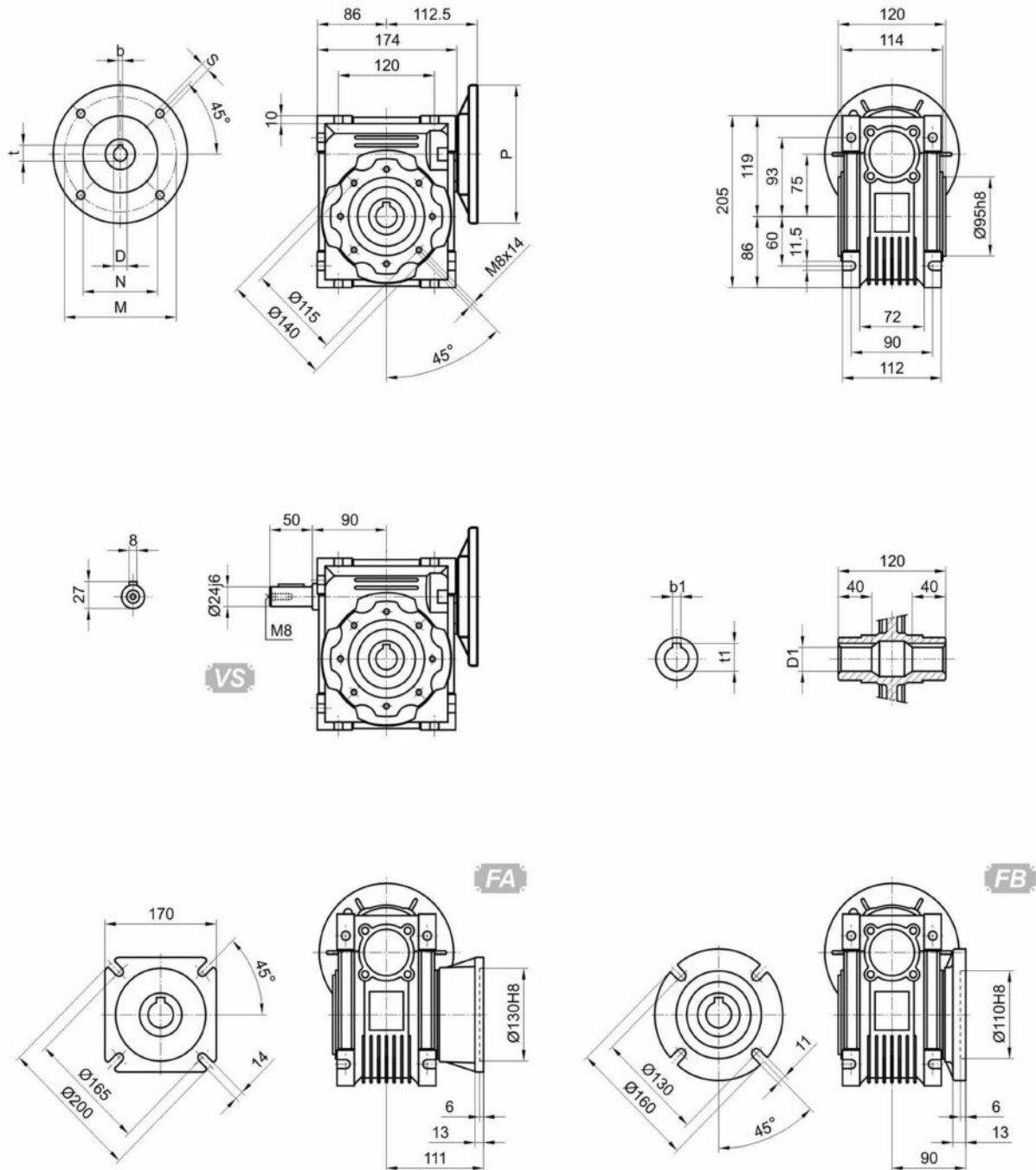


PAM IEC	D _{E8}	b	t	P	M	N	S	输出 Output	D _{1H8}	b ₁	t ₁
90B5	24	8	27.3	200	165	130	11		25	8	28.3
90B14	24	8	27.3	140	115	95	9		(28)	(8)	(31.3)
80B5	19	6	21.8	200	165	130	11				
80B14	19	6	21.8	120	100	80	7				
71B5	14	5	16.3	160	130	110	8.5				
71B14	14	5	16.3	105	85	70	7				

(...) 根据用户要求定制
(...) Only on request

*不带电机重量 ≈6.2kg
*Weight without motor ≈6.2kg

NMRV 075外形尺寸 / Outline Dimension

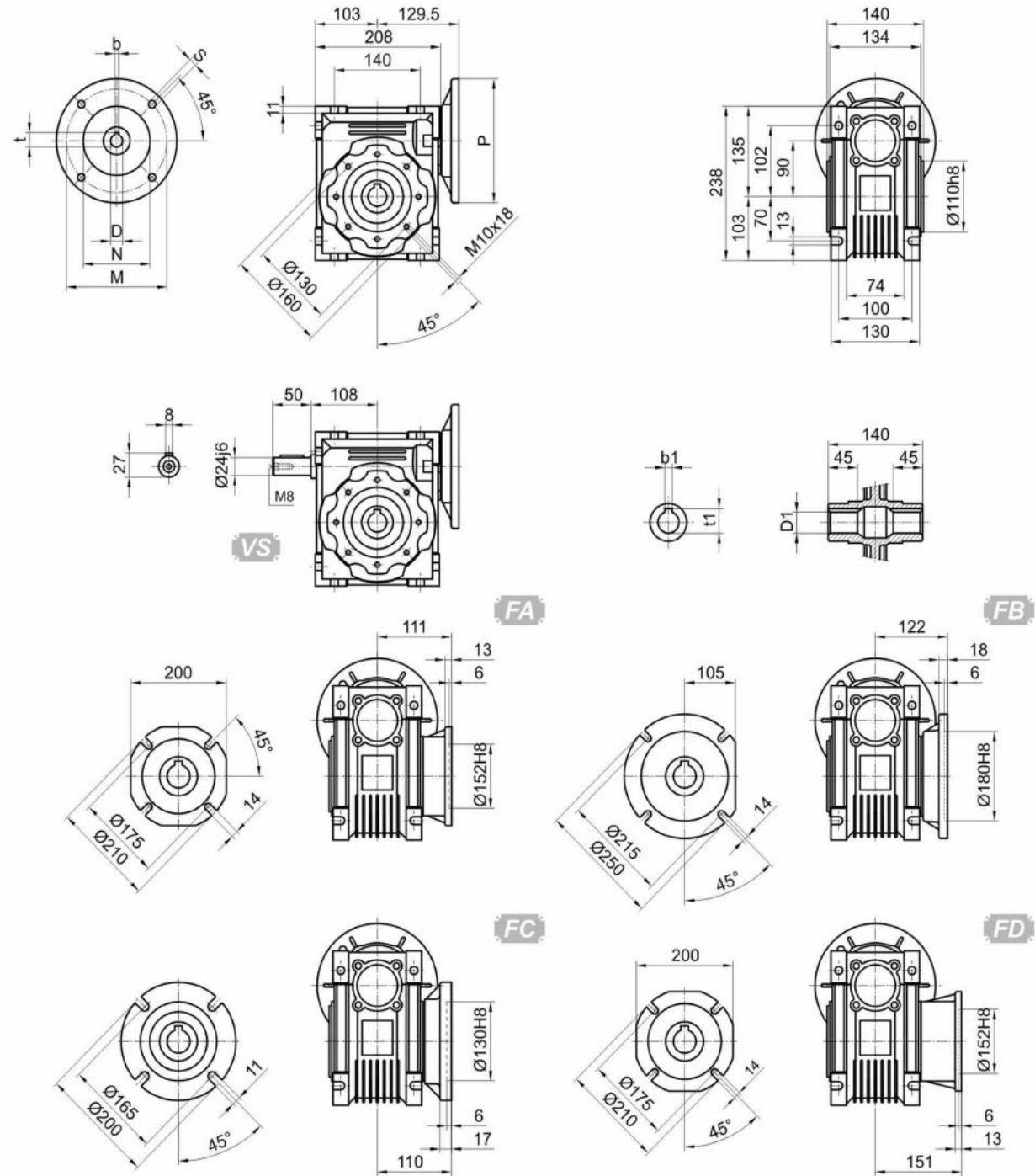


PAM IEC	D _{ES}	b	t	P	M	N	S	输出 Output	D1 _{H8}	b1	t1
									28	8	31.3
100/112B5	28	8	31.3	250	215	180	13		28	8	31.3
100/112B14	28	8	31.3	160	130	110	9		(35)	(10)	(38.3)
90B5	24	8	27.3	200	165	130	11				
90B14	24	8	27.3	140	115	95	9				
80B5	19	6	21.8	200	165	130	11				
80B14	19	6	21.8	120	100	80	6.5				
71B5	14	5	16.3	160	130	110	9				
										(..) 根据用户要求定制 (..) Only on request	

*不带电机重量 $\approx 9.0\text{kg}$
*Weight without motor $\approx 9.0\text{kg}$

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV090外形尺寸 / Outline Dimension

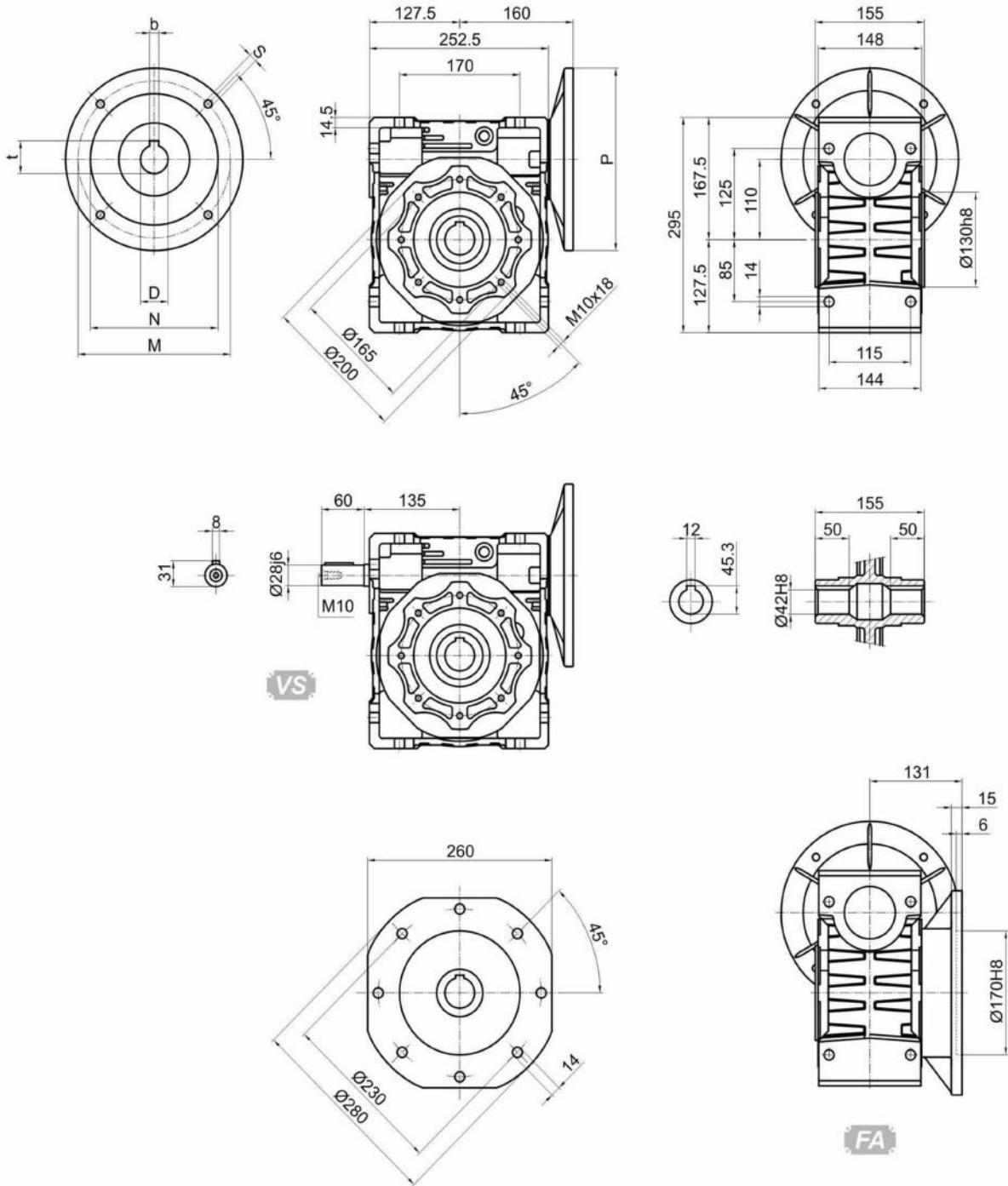


PAM IEC	D _{ES}	b	t	P	M	N	S	输出 Output	D _{1H8}	b ₁	t ₁
100/112B5	28	8	31.3	250	215	180	13		35	10	38.3
100/112B14	28	8	31.3	160	130	110	9		(38)	(10)	(41.3)
90B5	24	8	27.3	200	165	130	11		(..) 根据用户要求定制 (..) Only on request		
90B14	24	8	27.3	140	115	95	9				
80B5	19	6	21.8	200	165	130	11				
80B14	19	6	21.8	120	100	80	6.5				

*不带电机重量 ≈13kg
*Weight without motor ≈13kg

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV 110外形尺寸 / Outline Dimension

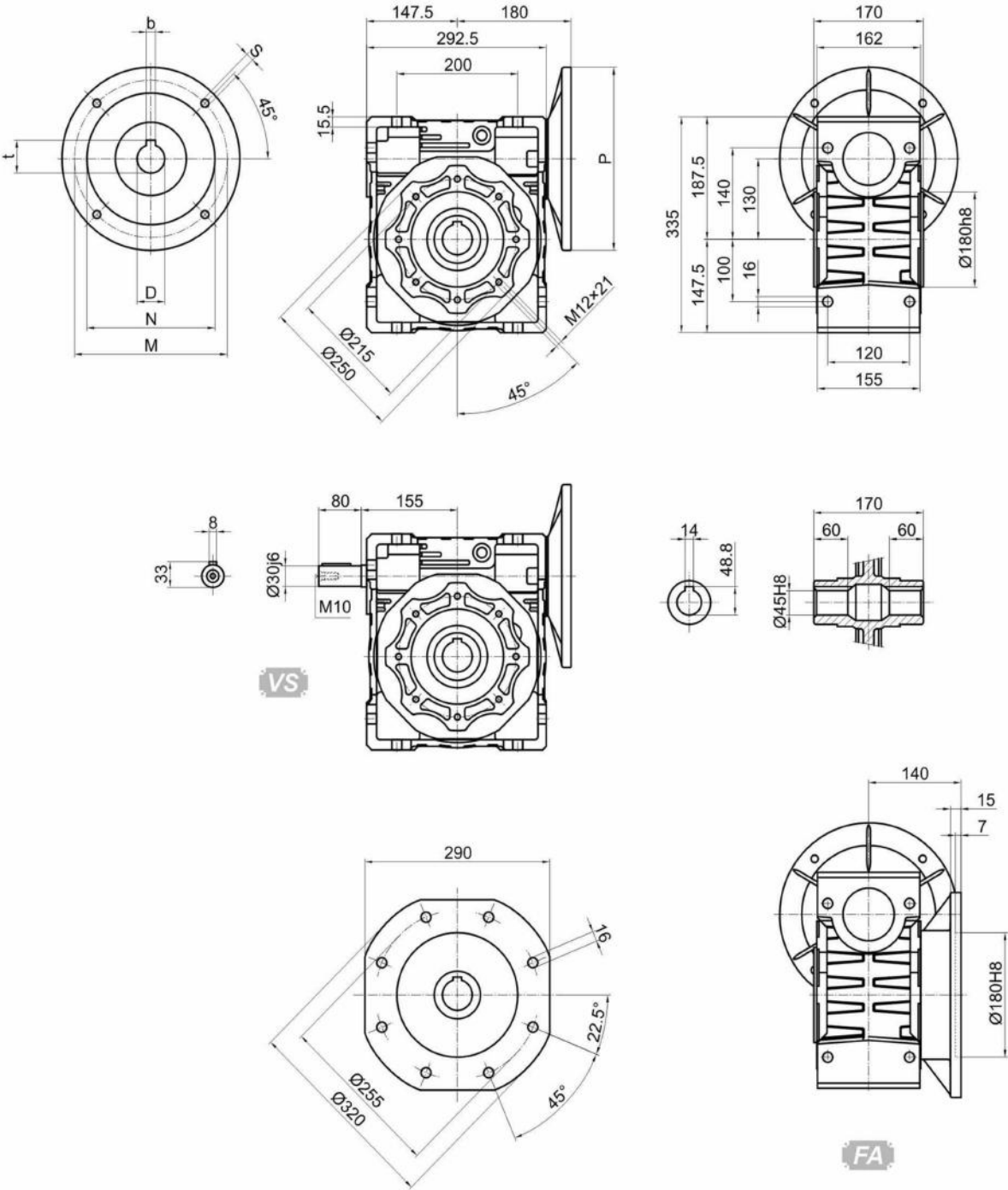


PAM IEC	D _{ES}	b	t	P	M	N	S
132B5	38	10	41.3	300	265	230	M12
100/112B5	28	8	31.3	250	215	180	13
90B5	24	8	27.3	200	165	130	11
80B5	19	6	21.8	200	165	130	11

*不带电机重量 ≈35kg
*Weight without motor ≈35kg

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV 130外形尺寸 / Outline Dimension

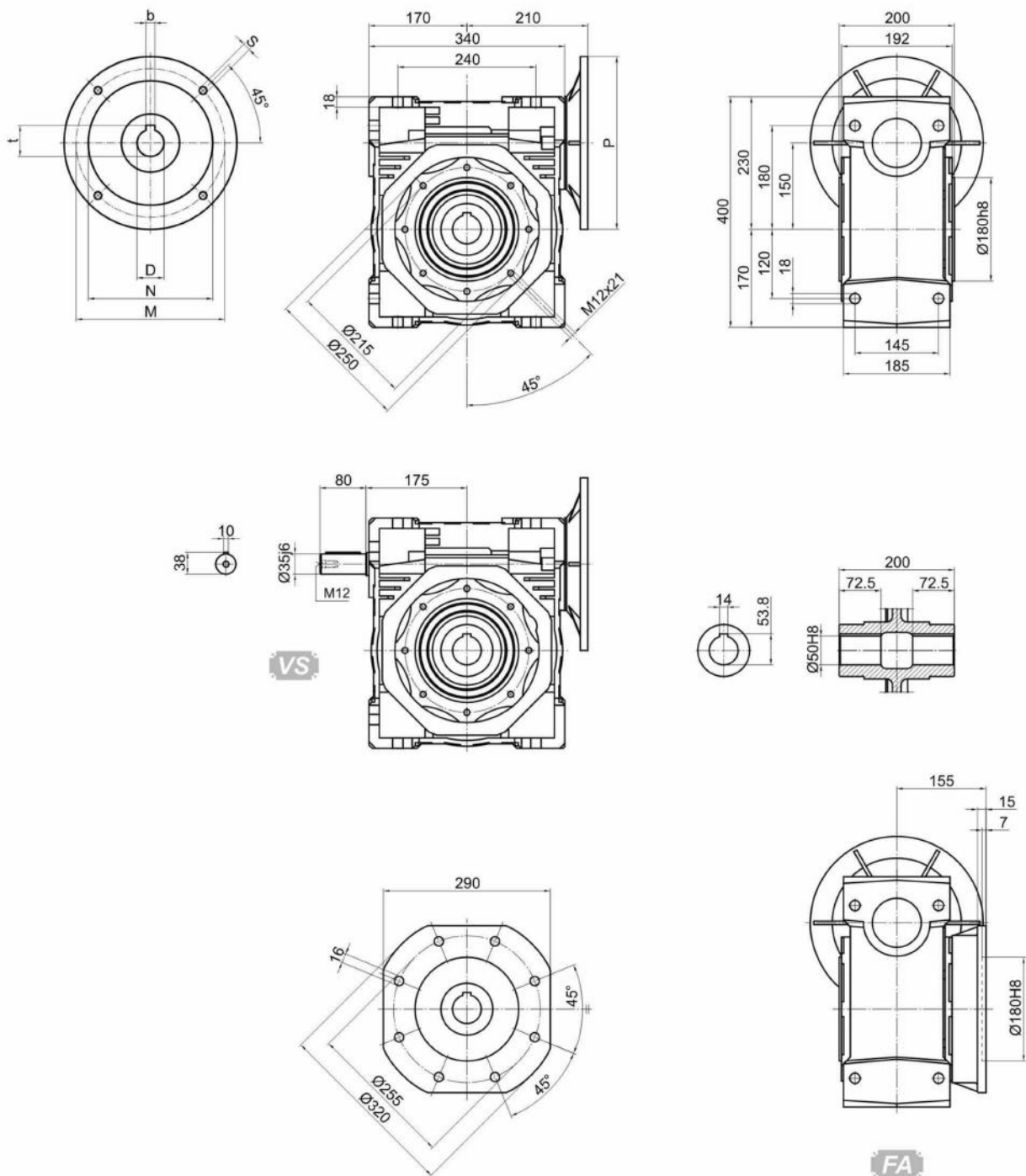


PAM IEC	D _{ES}	b	t	P	M	N	S
132B5	38	10	41.3	300	265	230	M12
100/112B5	28	8	31.3	250	215	180	13
90B5	24	8	27.3	200	165	130	11

*不带电机重量 ≈48kg
*Weight without motor ≈48kg

NMRV外形尺寸图表 / OUTLINE DIMENSION SHEET

NMRV 150外形尺寸 / Outline Dimension



PAM IEC	D _{E8}	b	t	P	M	N	S
160B5	42	12	45.3	350	300	250	19
132B5	38	10	41.3	300	265	230	M12
100/112B5	28	8	31.3	250	215	180	M12

*不带电机重量 ≈84kg
*Weight without motor ≈84kg