

**HIGH POWER Built-In Nutrunner****E 1.2****■ Built-In Nutrunner – Offset Drive**

Torque up to 1075 Nm  
Speed up to 1120 rpm



# Built-In Nutrunner – Offset Drive

## HIGH POWER Built-In Nutrunner

### Designation Code Subassemblies

E 1.2

#### 1 Motor and gear units

Design

##### ECR105

- ECR = Built-in tool, brushless driving motor, Resolver
- 1 = Size 1, 2, 3
- 05 = Capacity x 10 in Nm



#### 2 Torque sensors

Reaction torque sensor

##### DR50

- D = Torque sensor
- R = Reaction torque sensor
- 50 = Nominal torque of the torque sensor



Reaction torque sensor with angle encoder

##### DWR50

- D = Torque sensor
- W = Angle encoder
- R = Reaction torque sensor
- 50 = Nominal torque of the torque sensor



#### 3 Drive units

Offset design without torque sensor

##### AO125

- A = Drive
- O = Offset drive
- 1 = Size 1, 2, 3
- 25 = Spring travel 25mm; 50mm



Offset design with action torque sensor

##### AOD125-50

- A = Drive
- O = Offset drive
- D = Action torque sensor
- 1 = Size 1, 2, 3
- 25 = Spring travel 25mm; 50mm
- 50 = Nominal torque of the torque sensor



Angle encoder subassembly for offset drive AOD

##### W1

- W = Angle encoder subassembly
- 1 = Size 1, 2, 3



#### 4 Socket adapter designation

##### SK1-1/2-50

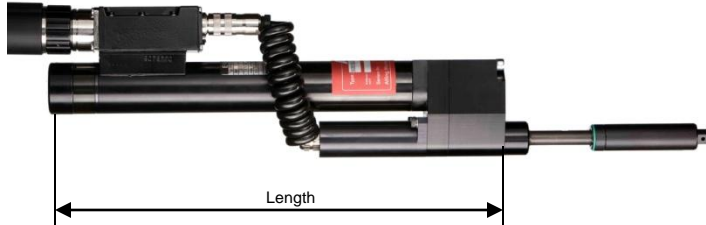
- SK = Socket adapter
- 1 = Size 1, 2, 3
- 1/2 = Size of the square drive in inches
- 50 = Spring travel 25mm; 50mm



### Built-In Nutrunner Size 1 – Offset Drive

E 1.2.1

Illustration: ECR105 AOD150-50



**Size 1**  
4 Nm up to 51 Nm

#### ■ Technical Data

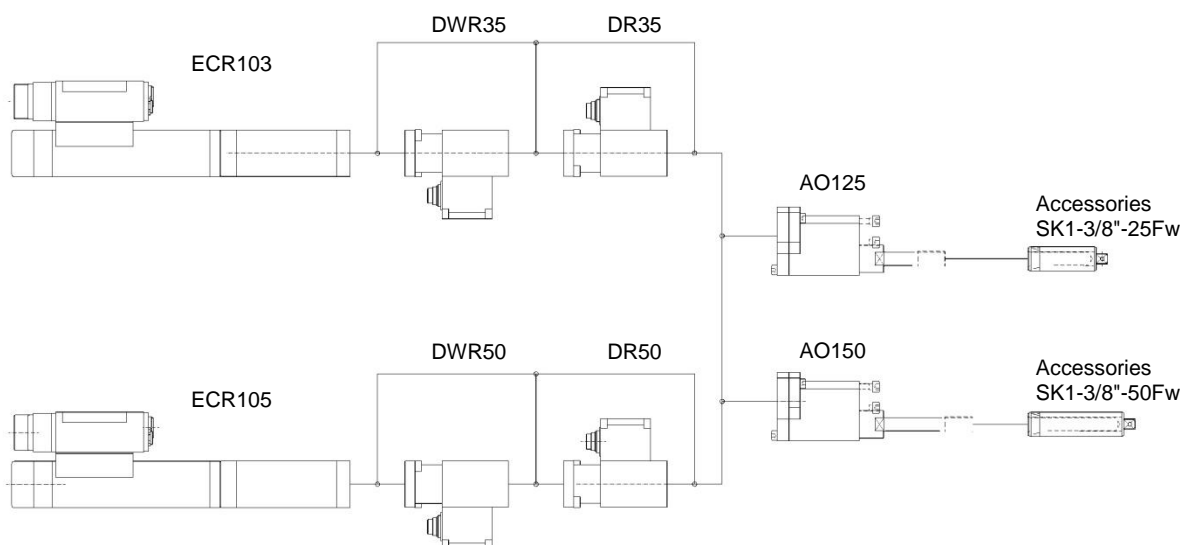
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.
<b>Built-in nutrunner with reaction torque sensor</b>								
A	34	12 - 30	ECR103 AO125	927	382	3,2	67	792 0120
	34	12 - 30	ECR103 AO150	927	382	3,3	67	792 0121
	51	18 - 45	ECR105 AO125	619	382	3,2	67	792 0122
	51	18 - 45	ECR105 AO150	619	382	3,3	67	792 0123
<b>Built-in nutrunner with reaction torque sensor for calibration</b>								
B	34	12 - 30	ECR103 DWR35 AO125	927	476	4,2	67	792 0124
	34	12 - 30	ECR103 DWR35 AO150	927	476	4,2	67	792 0125
	51	18 - 45	ECR105 DWR50 AO125	619	476	4,2	67	792 0126
	51	18 - 45	ECR105 DWR50 AO150	619	476	4,2	67	792 0127
<b>Built-in nutrunner with reaction torque sensor</b>								
C	34	7 - 30	ECR103 DR35 AO125	927	476	4,1	67	792 0438
	34	7 - 30	ECR103 DR35 AO150	927	476	4,1	67	792 0439
	51	10 - 45	ECR105 DR50 AO125	619	476	4,1	67	792 0440
	51	10 - 45	ECR105 DR50 AO150	619	476	4,1	67	792 0441
<b>Built-in nutrunner with two reaction torque sensors</b>								
D	34	7 - 30	ECR103 DWR35 DR35 AO125	927	570	5,0	67	792 0456
	34	7 - 30	ECR103 DWR35 DR35 AO150	927	570	5,0	67	792 0457
	51	10 - 45	ECR105 DWR50 DR50 AO125	619	570	5,0	67	792 0458
	51	10 - 45	ECR105 DWR50 DR50 AO150	619	570	5,0	67	792 0459

## Built-In Nutrunner – Offset Drive

E 1.2.1

### ■ Combinations

Design with reaction torque sensor



#### **Note:**

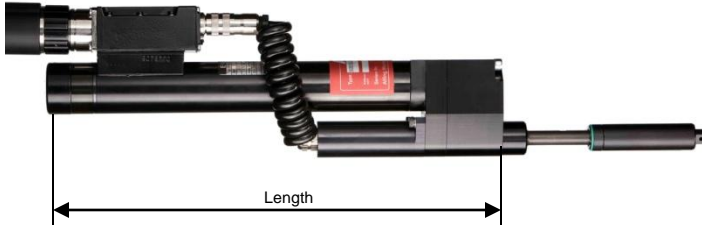
When using two torque sensors, the cable connections are on opposite sides.

Depending on the bolt pattern, an additional adapter may have to be provided.

## Built-In Nutrunner Size 1 – Offset Drive

E 1.2.1

Illustration: ECR105 AOD150-50



**Size 1**  
4 Nm up to 51 Nm

### ■ Technical Data

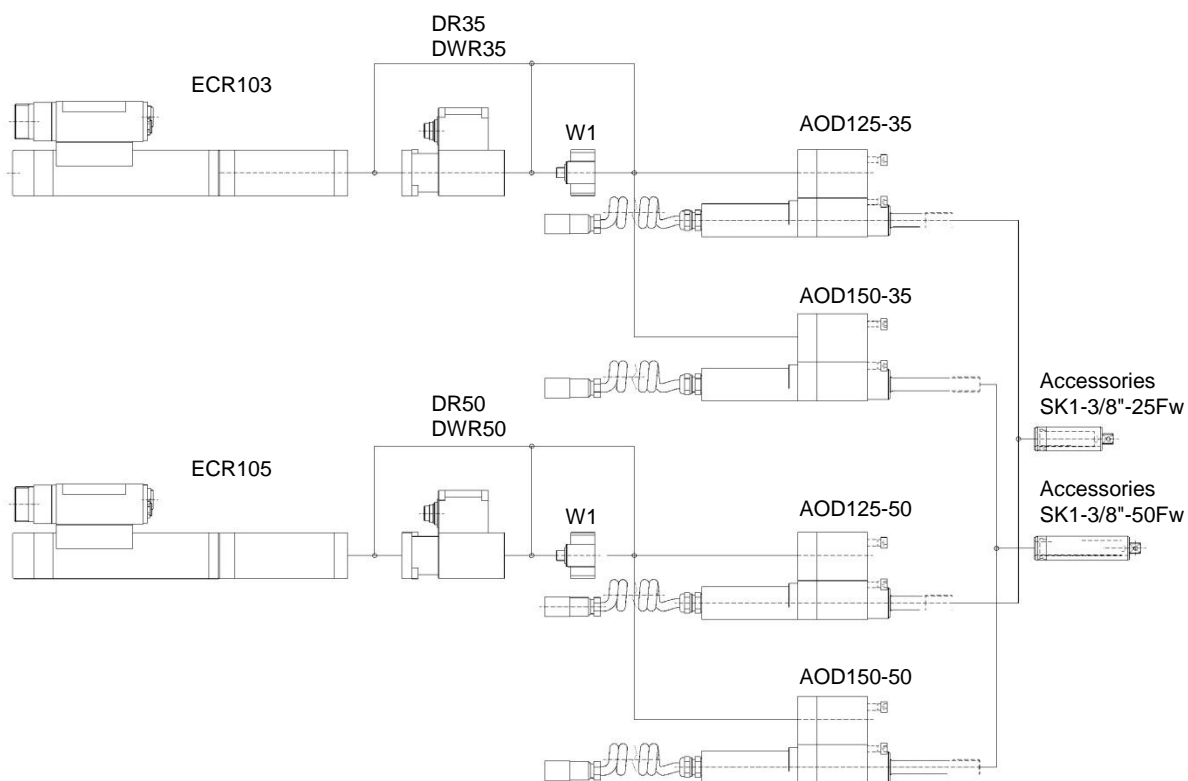
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.
<b>Built-in nutrunner with action torque sensor</b>								
E	34	4 - 30	ECR103 AOD125-35	927	371	3,6	67	792 0132
	34	4 - 30	ECR103 AOD150-35	927	371	3,6	67	792 0133
	51	5 - 45	ECR105 AOD125-50	619	371	3,6	67	792 0134
	51	5 - 45	ECR105 AOD150-50	619	371	3,6	67	792 0135
<b>Built-in nutrunner with action torque sensor and angle encoder</b>								
F	34	4 - 30	ECR103 W1 AOD125-35	927	393	3,7	67	792 0136
	34	4 - 30	ECR103 W1 AOD150-35	927	393	3,7	67	792 0137
	51	5 - 45	ECR105 W1 AOD125-50	619	393	3,7	67	792 0138
	51	5 - 45	ECR105 W1 AOD150-50	619	393	3,7	67	792 0139
<b>Built-in nutrunner with torque sensor for calibration (action torque sensor and reaction torque sensor)</b>								
G	34	4 - 30	ECR103 DWR35 AOD125-35	927	465	4,6	67	792 0140
	34	4 - 30	ECR103 DWR35 AOD150-35	927	465	4,6	67	792 0141
	51	5 - 45	ECR105 DWR50 AOD125-50	619	465	4,6	67	792 0142
	51	5 - 45	ECR105 DWR50 AOD150-50	619	465	4,6	67	792 0143
<b>Built-in nutrunner with redundant design</b>								
H	34	4 - 30	ECR103 DR35 W1 AOD125-35	927	487	4,7	67	792 0474
	34	4 - 30	ECR103 DR35 W1 AOD150-35	927	487	4,7	67	792 0475
	51	5 - 45	ECR105 DR50 W1 AOD125-50	619	487	4,7	67	792 0476
	51	5 - 45	ECR105 DR50 W1 AOD150-50	619	487	4,7	67	792 0477
<b>Built-in nutrunner with torque sensor for calibration (action torque sensor and reaction torque sensor)</b>								
I	34	4 - 30	ECR103 DWR35 W1 AOD125-35	927	487	4,7	67	792 0144
	34	4 - 30	ECR103 DWR35 W1 AOD150-35	927	487	4,7	67	792 0145
	51	5 - 45	ECR105 DWR50 W1 AOD125-50	619	487	4,7	67	792 0146
	51	5 - 45	ECR105 DWR50 W1 AOD150-50	619	487	4,7	67	792 0147

## Built-In Nutrunner – Offset Drive

**E 1.2.1**

### ■ Combinations

Design with action torque sensor



#### **Note:**

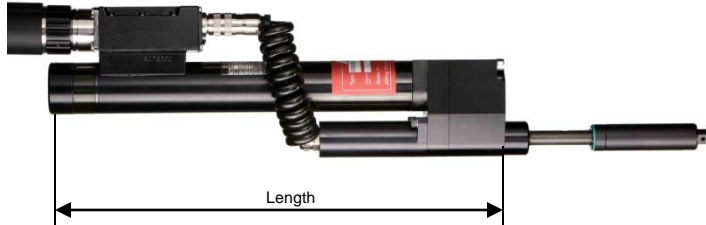
When using two torque sensors, the cable connections are on opposite sides.

Depending on the bolt pattern, an additional adapter may have to be provided.

## Built-In Nutrunner Size 2 – Offset Drive

E 1.2.2

Illustration similar (ECR105 AOD150-50)



**Size 2**  
6 Nm up to 210 Nm

### ■ Technical Data

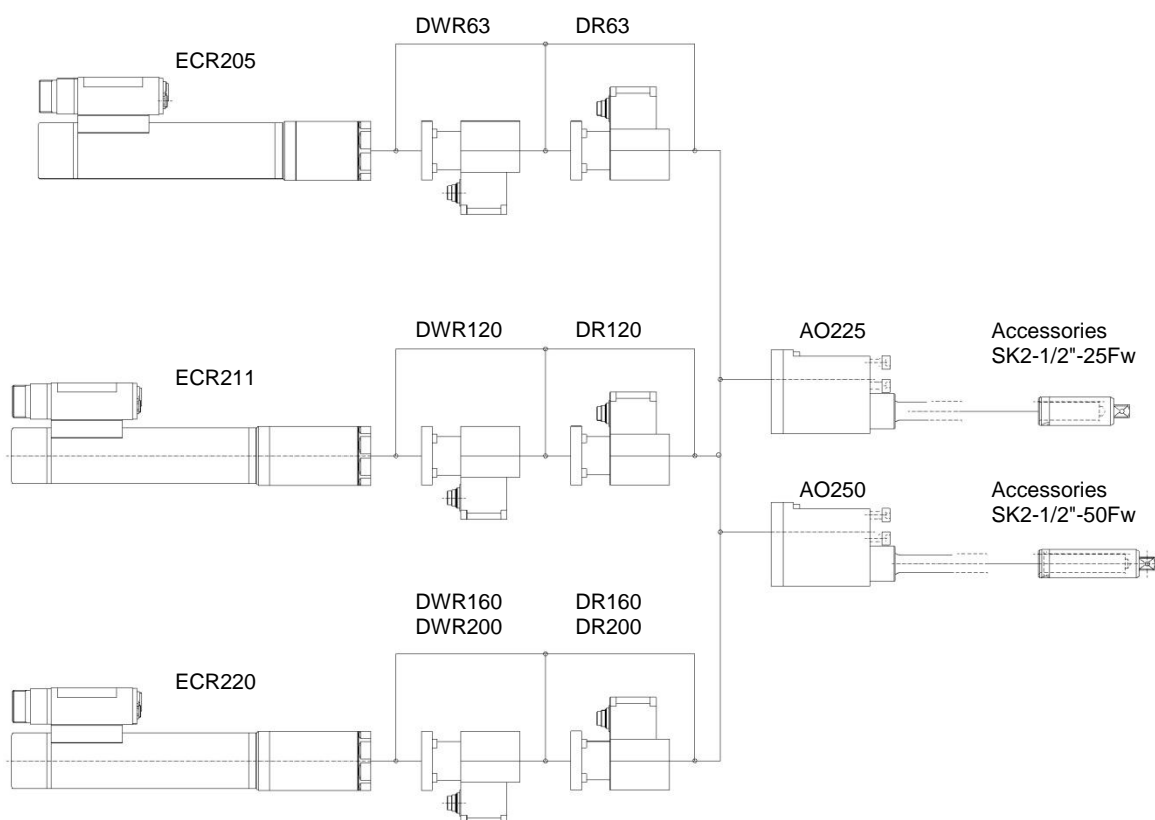
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.
<b>Built-in nutrunner without torque sensor</b>								
A	55	20 - 49	ECR205 AO225	1120	424	6,1	67	792 0148
	55	20 - 49	ECR205 AO250	1120	424	6,2	67	792 0149
	115	41 - 103	ECR211 AO225	538	450	6,6	67	792 0150
	115	41 - 103	ECR211 AO250	538	450	6,7	67	792 0151
	210	74 - 189	ECR220 AO225	297	450	6,6	67	792 0152
	210	74 - 189	ECR220 AO250	297	450	6,7	67	792 0153
<b>Built-in nutrunner with reaction torque sensor for calibration</b>								
B	55	20 - 49	ECR205 DWR63 AO225	1120	521	7,6	67	792 0154
	55	20 - 49	ECR205 DWR63 AO250	1120	521	7,7	67	792 0155
	115	41 - 103	ECR211 DWR120 AO225	538	547	8,1	67	792 0156
	115	41 - 103	ECR211 DWR120 AO250	538	547	8,2	67	792 0157
	210	74 - 189	ECR220 DWR200 AO225	297	547	8,1	67	792 0160
	210	74 - 189	ECR220 DWR200 AO250	297	547	8,2	67	792 0161
<b>Built-in nutrunner with reaction torque sensor</b>								
C	55	11 - 49	ECR205 DR63 AO225	1120	521	7,5	67	792 0442
	55	11 - 49	ECR205 DR63 AO250	1120	521	7,6	67	792 0443
	115	23 - 103	ECR211 DR120 AO225	538	547	8,0	67	792 0444
	115	23 - 103	ECR211 DR120 AO250	538	547	8,1	67	792 0445
	210	33 - 145	ECR220 DR160 AO225	297	547	8,0	67	792 0446
	210	33 - 145	ECR220 DR160 AO250	297	547	8,1	67	792 0447
	210	41 - 182	ECR220 DR200 AO225	297	547	8,0	67	792 0448
	210	41 - 182	ECR220 DR200 AO250	297	547	8,1	67	792 0449
<b>Built-in nutrunner with two reaction torque sensors</b>								
D	55	11 - 49	ECR205 DWR63 DR63 AO225	1120	618	8,8	67	792 0460
	55	11 - 49	ECR205 DWR63 DR63 AO250	1120	618	8,9	67	792 0461
	115	23 - 103	ECR211 DWR120 DR120 AO225	538	644	9,3	67	792 0462
	115	23 - 103	ECR211 DWR120 DR120 AO250	538	644	9,4	67	792 0463
	210	33 - 145	ECR220 DWR160 DR160 AO225	297	644	9,3	67	792 0464
	210	33 - 145	ECR220 DWR160 DR160 AO250	297	644	9,4	67	792 0465
	210	41 - 182	ECR220 DWR200 DR200 AO225	297	644	9,3	67	792 0466
	210	41 - 182	ECR220 DWR200 DR200 AO250	297	644	9,4	67	792 0467

## Built-In Nutrunner – Offset Drive

E 1.2.2

### ■ Combinations

Design with reaction torque sensor



#### **Note:**

When using two torque sensors, the cable connections are on opposite sides.

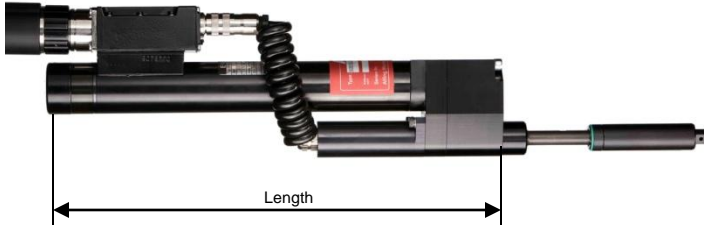
Depending on the bolt pattern, an additional adapter may have to be provided.



## Built-In Nutrunner Size 2 – Offset Drive

E 1.2.2

Illustration similar (ECR105 AOD150-50)



**Size 2**  
6 Nm up to 211 Nm

### ■ Technical Data

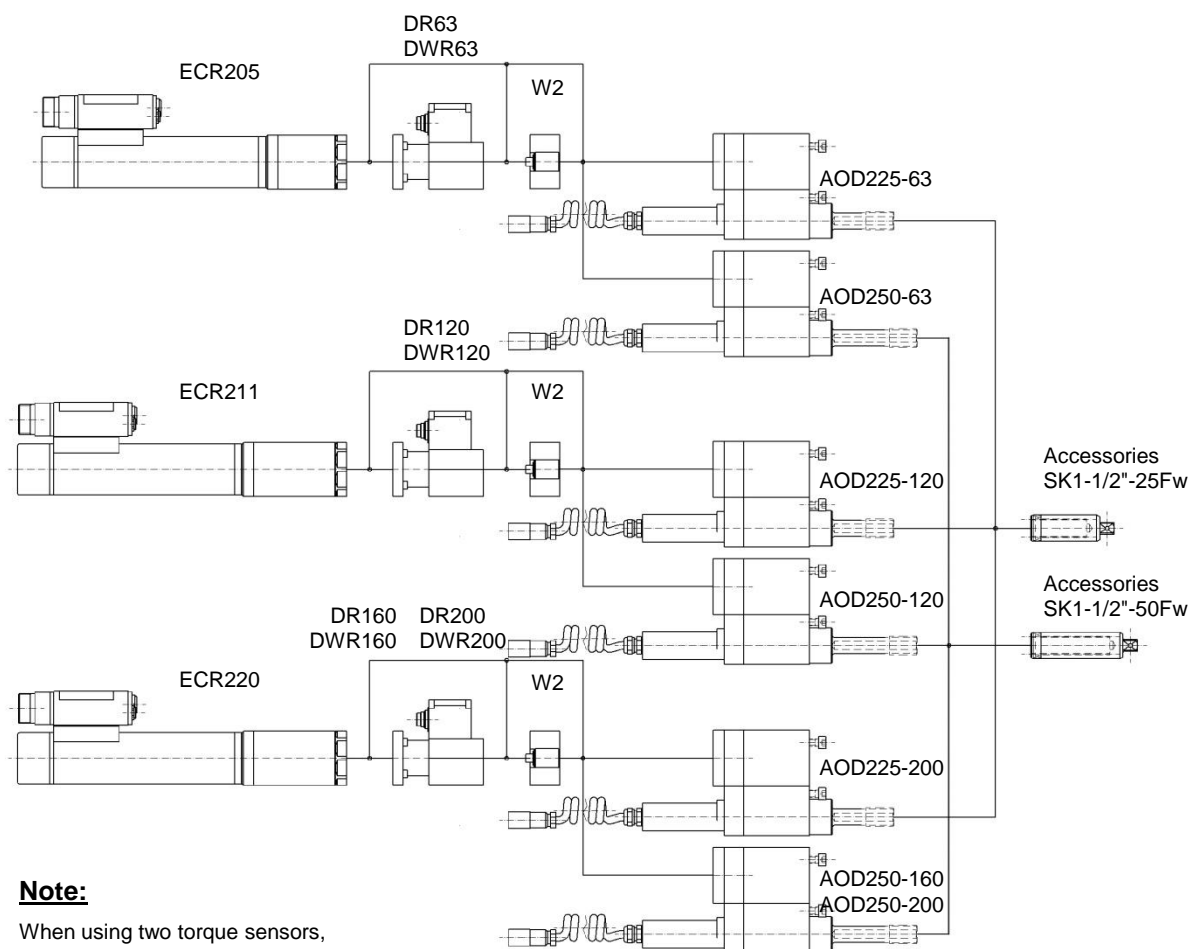
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.
<b>Built-in nutrunner with action torque sensor</b>								
E	56	6 - 50	ECR205 AOD225-63	1114	430	6,9	67	792 0170
	56	6 - 50	ECR205 AOD250-63	1114	430	7,0	67	792 0171
	116	12 - 104	ECR211 AOD225-120	535	456	7,4	67	792 0172
	116	12 - 104	ECR211 AOD250-120	535	456	7,5	67	792 0173
	211	16 - 144	ECR220 AOD250-160	296	456	7,5	67	792 0174
	211	20 - 180	ECR220 AOD225-200	296	456	7,4	67	792 0175
	211	20 - 180	ECR220 AOD250-200	296	456	7,5	67	792 0176
<b>Built-in nutrunner with action torque sensor and angle encoder</b>								
F	56	6 - 50	ECR205 W2 AOD225-63	1114	462	7,2	67	792 0177
	56	6 - 50	ECR205 W2 AOD250-63	1114	462	7,3	67	792 0178
	116	12 - 104	ECR211 W2 AOD225-120	535	488	7,7	67	792 0179
	116	12 - 104	ECR211 W2 AOD250-120	535	488	7,8	67	792 0180
	211	16 - 144	ECR220 W2 AOD250-160	296	488	7,8	67	792 0181
	211	20 - 180	ECR220 W2 AOD225-200	296	488	7,7	67	792 0182
	211	20 - 180	ECR220 W2 AOD250-200	296	488	7,8	67	792 0183
<b>Built-in nutrunner with torque sensor for calibration (action torque sensor and reaction torque sensor)</b>								
G	56	6 - 50	ECR205 DWR63 AOD225-63	1114	527	8,3	67	792 0184
	56	6 - 50	ECR205 DWR63 AOD250-63	1114	527	8,4	67	792 0185
	116	12 - 104	ECR211 DWR120 AOD225-120	535	553	8,8	67	792 0186
	116	12 - 104	ECR211 DWR120 AOD250-120	535	553	8,9	67	792 0187
	211	16 - 144	ECR220 DWR160 AOD250-160	296	553	8,9	67	792 0188
	211	20 - 180	ECR220 DWR200 AOD225-200	296	553	8,8	67	792 0189
	211	20 - 180	ECR220 DWR200 AOD250-200	296	553	8,9	67	792 0190
<b>Built-in nutrunner with redundant design</b>								
H	56	6 - 50	ECR205 DR63 W2 AOD225-63	1114	559	8,6	67	792 0478
	56	6 - 50	ECR205 DR63 W2 AOD250-63	1114	559	8,7	67	792 0479
	116	12 - 104	ECR211 DR120 W2 AOD225-120	535	585	9,1	67	792 0480
	116	12 - 104	ECR211 DR120 W2 AOD250-120	535	585	9,2	67	792 0481
	211	16 - 144	ECR220 DR160 W2 AOD250-160	296	585	9,2	67	792 0482
	211	20 - 180	ECR220 DR200 W2 AOD225-200	296	585	9,1	67	792 0483
	211	20 - 180	ECR220 DR200 W2 AOD250-200	296	585	9,2	67	792 0484
<b>Built-in nutrunner with torque sensor for calibration (action torque sensor and reaction torque sensor)</b>								
I	56	6 - 50	ECR205 DWR63 W2 AOD225-63	1114	559	8,6	67	792 0191
	56	6 - 50	ECR205 DWR63 W2 AOD250-63	1114	559	8,7	67	792 0192
	116	12 - 104	ECR211 DWR120 W2 AOD225-120	535	585	9,1	67	792 0193
	116	12 - 104	ECR211 DWR120 W2 AOD250-120	535	585	9,2	67	792 0194
	211	16 - 144	ECR220 DWR160 W2 AOD250-160	296	585	9,2	67	792 0195
	211	20 - 180	ECR220 DWR200 W2 AOD225-200	296	585	9,1	67	792 0196
	211	20 - 180	ECR220 DWR200 W2 AOD250-200	296	585	9,2	67	792 0197

## Built-In Nutrunner – Offset Drive

E 1.2.2

### ■ Combinations

Design with action torque sensor



**Note:**

When using two torque sensors, the cable connections are on opposite sides.

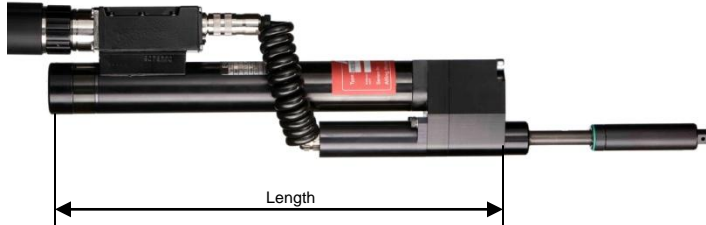
Depending on the bolt pattern, an additional adapter may have to be provided.

The combination of reaction torque sensor DR with action torque sensor AOD is only available with module W2.

## Built-In Nutrunner Size 3 – Offset Drive

E 1.2.3

Illustration similar (ECR105 AOD150-50)



**Size 3**  
27 Nm up to 1075 Nm

### ■ Technical Data

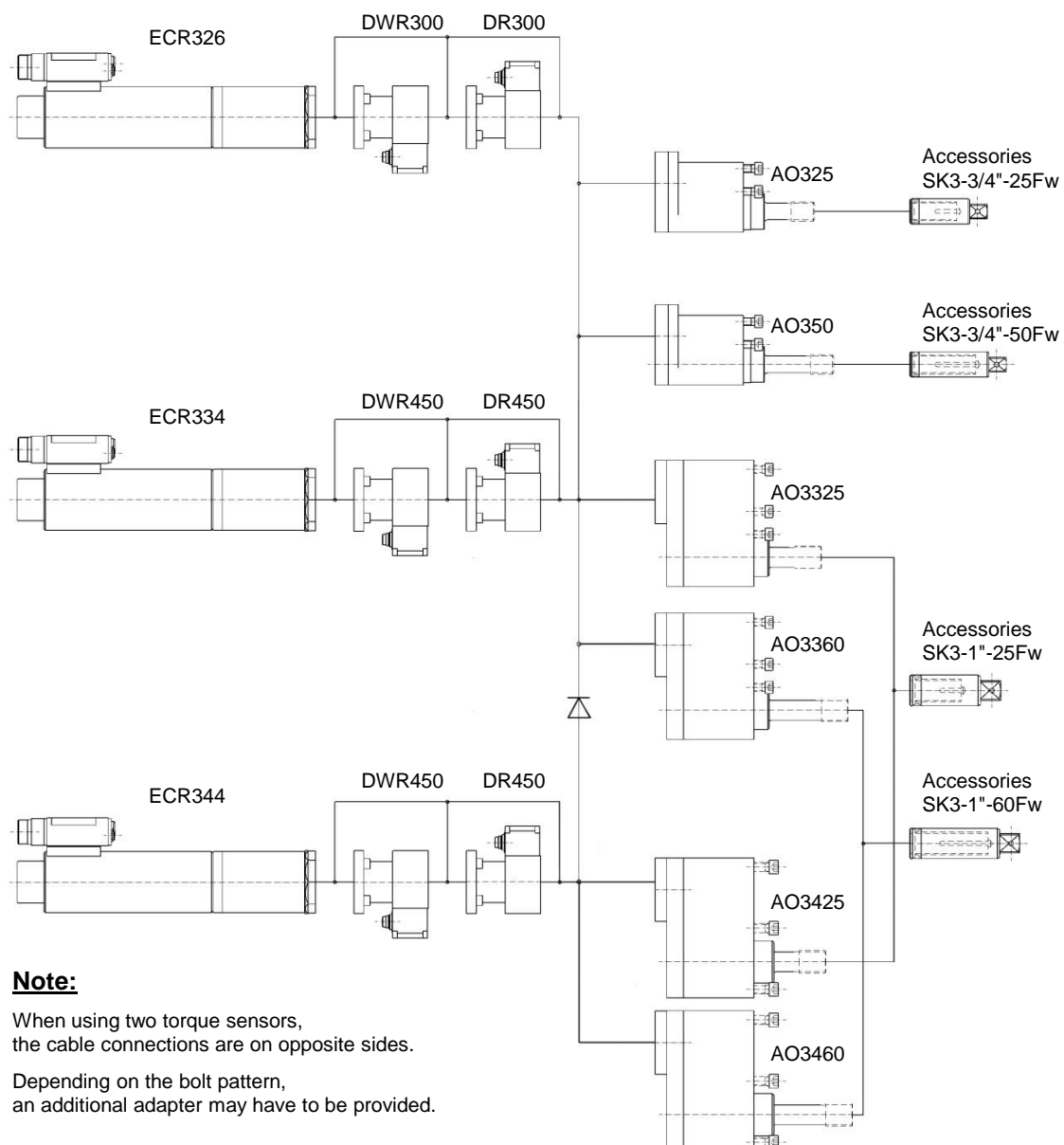
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.
<b>Built-in nutrunner without torque sensor</b>								
A	267	94 - 240	ECR326 AO325	436	505	10,1	65	792 0198
	267	94 - 240	ECR326 AO350	436	505	10,2	65	792 0199
	345	121 - 310	ECR334 AO325	336	505	13,3	65	792 0200
	345	121 - 310	ECR334 AO350	336	505	13,4	65	792 0201
	449	158 - 404	ECR344 AO325	259	505	13,3	65	792 0202
	449	158 - 404	ECR344 AO350	259	505	13,4	65	792 0203
	495	174 - 445	ECR326 AO3325	235	519		67	792 0563
	495	174 - 445	ECR326 AO3360	235	519		67	792 0564
	642	225 - 577	ECR334 AO3325	182	519		67	792 0565
	642	225 - 577	ECR334 AO3360	182	519		67	792 0566
	834	292 - 750	ECR344 AO3325	140	519		67	792 0567
	834	292 - 750	ECR344 AO3360	140	519		67	792 0568
	1075	377 - 967	ECR344 AO3425	108	519		67	792 0569
	1075	377 - 967	ECR344 AO3460	108	519		67	792 0570
<b>Built-in nutrunner with reaction torque sensor for calibration</b>								
B	267	94 - 240	ECR326 DWR300 AO325	436	602	12,8	65	792 0204
	267	94 - 240	ECR326 DWR300 AO350	436	602	12,9	65	792 0205
	345	121 - 310	ECR334 DWR450 AO325	336	602	16,0	65	792 0206
	345	121 - 310	ECR334 DWR450 AO350	336	602	16,1	65	792 0207
	449	158 - 404	ECR344 DWR450 AO325	259	602	16,0	65	792 0208
	449	158 - 404	ECR344 DWR450 AO350	259	602	16,1	65	792 0209
	495	174 - 445	ECR326 DWR300 AO3325	235	616		67	792 0677
	495	174 - 445	ECR326 DWR300 AO3360	235	616		67	792 0678
	642	225 - 577	ECR334 DWR450 AO3325	182	616		67	792 0679
	642	225 - 577	ECR334 DWR450 AO3360	182	616		67	792 0680
	834	292 - 750	ECR344 DWR450 AO3325	140	616		67	792 0681
	834	292 - 750	ECR344 DWR450 AO3360	140	616		67	792 0682
	1075	377 - 967	ECR344 DWR450 AO3425	108	616		67	792 0683
	1075	377 - 967	ECR344 DWR450 AO3460	108	616		67	792 0684

## Built-In Nutrunner – Offset Drive

E 1.2.3

### ■ Combinations

Design with reaction torque sensor



**Note:**

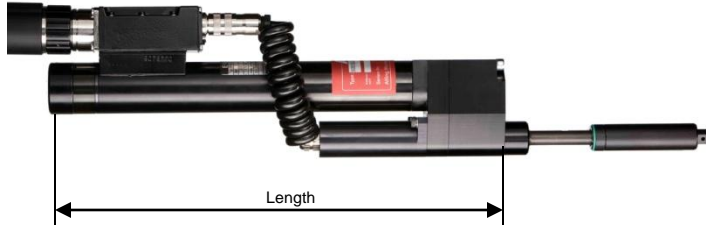
When using two torque sensors, the cable connections are on opposite sides.

Depending on the bolt pattern, an additional adapter may have to be provided.

### Built-In Nutrunner Size 3 – Offset Drive

E 1.2.3

Illustration similar (ECR105 AOD150-50)



**Size 3**  
27 Nm up to 1075 Nm

#### ■ Technical Data

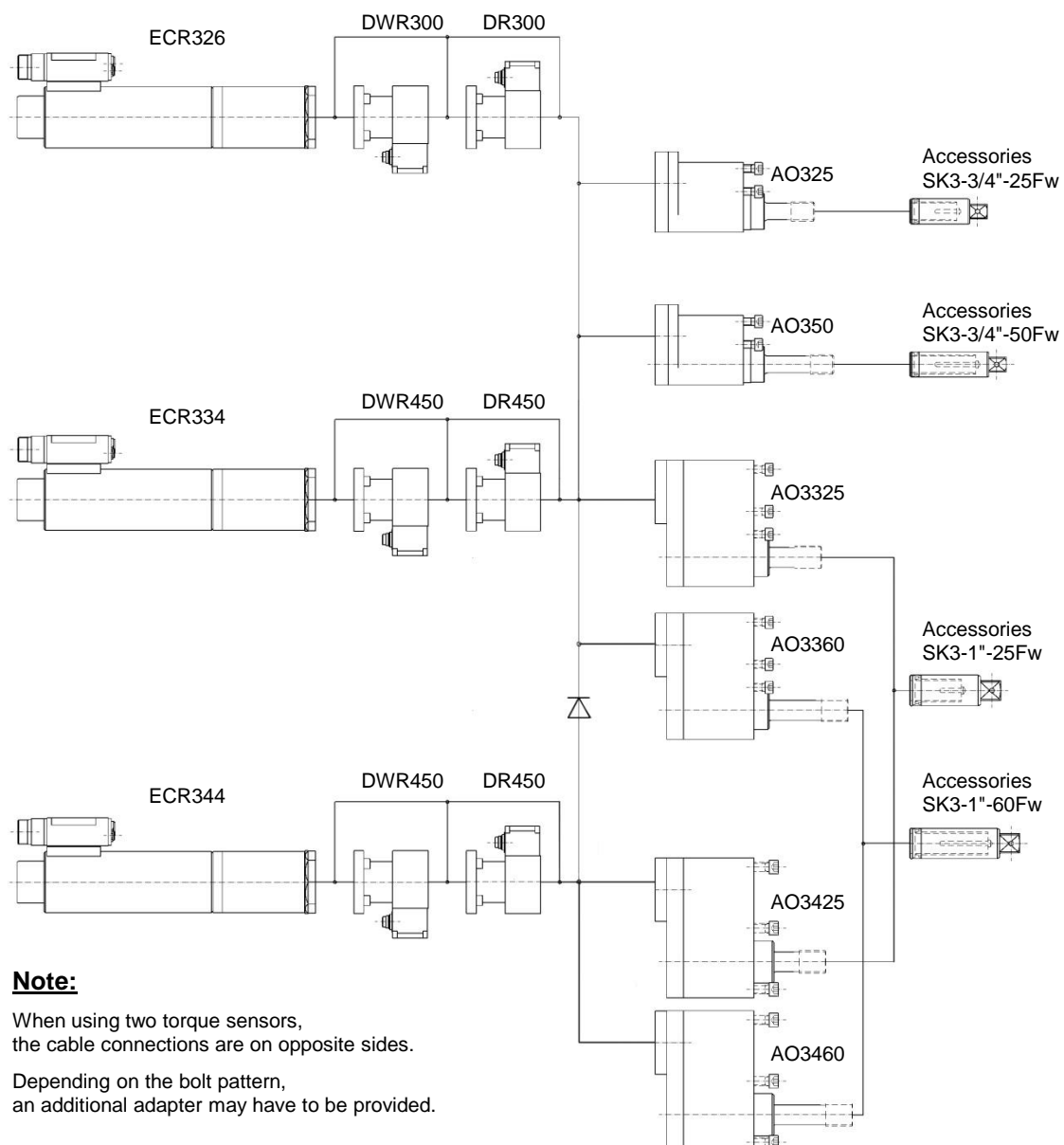
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.
	<b>Built-in nutrunner with reaction torque sensor</b>							
C	267	54 - 240	ECR326 DR300 AO325	436	602	12,7	65	792 0450
	267	54 - 240	ECR326 DR300 AO350	436	602	12,8	65	792 0451
	345	69 - 310	ECR334 DR450 AO325	336	602	15,9	65	792 0452
	345	69 - 310	ECR334 DR450 AO350	336	602	16,0	65	792 0453
	449	90 - 404	ECR344 DR450 AO325	259	602	15,9	65	792 0454
	449	90 - 404	ECR344 DR450 AO350	259	602	16,0	65	792 0455
	495	99 - 445	ECR326 DR300 AO3325	235	616		67	792 0571
	495	99 - 445	ECR326 DR300 AO3360	235	616		67	792 0572
	642	129 - 577	ECR334 DR450 AO3325	182	616		67	792 0573
	642	129 - 577	ECR334 DR450 AO3360	182	616		67	792 0574
	834	167 - 750	ECR344 DR450 AO3325	140	616		67	792 0575
	834	167 - 750	ECR344 DR450 AO3360	140	616		67	792 0576
1075	215 - 967	ECR344 DR450 AO3425	108	616		67	792 0577	
1075	215 - 967	ECR344 DR450 AO3460	108	616		67	792 0578	
	<b>Built-in nutrunner with two reaction torque sensors</b>							
D	267	54 - 240	ECR326 DWR300 DR300 AO325	436	699	15,3	65	792 0468
	267	54 - 240	ECR326 DWR300 DR300 AO350	436	699	15,4	65	792 0469
	345	69 - 310	ECR334 DWR450 DR450 AO325	336	699	18,5	65	792 0470
	345	69 - 310	ECR334 DWR450 DR450 AO350	336	699	18,5	65	792 0471
	449	90 - 404	ECR344 DWR450 DR450 AO325	259	699	18,5	65	792 0472
	449	90 - 404	ECR344 DWR450 DR450 AO350	259	699	18,6	65	792 0473
	495	99 - 445	ECR326 DWR300 DR300 AO3325	235	713		67	792 0579
	495	99 - 445	ECR326 DWR300 DR300 AO3360	235	713		67	792 0580
	642	129 - 577	ECR334 DWR450 DR450 AO3325	182	713		67	792 0581
	642	129 - 577	ECR334 DWR450 DR450 AO3360	182	713		67	792 0582
	834	167 - 750	ECR344 DWR450 DR450 AO3325	140	713		67	792 0583
	834	167 - 750	ECR344 DWR450 DR450 AO3360	140	713		67	792 0584
	1075	215 - 967	ECR344 DWR450 DR450 AO3450	108	713		67	792 0585
	1075	215 - 967	ECR344 DWR450 DR450 AO3460	108	713		67	792 0586

## Built-In Nutrunner – Offset Drive

E 1.2.3

### ■ Combinations

Design with reaction torque sensor



**Note:**

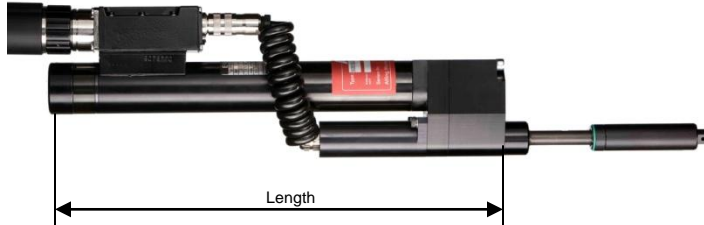
When using two torque sensors, the cable connections are on opposite sides.

Depending on the bolt pattern, an additional adapter may have to be provided.

## Built-In Nutrunner Size 3 – Offset Drive

E 1.2.3

Illustration similar (ECR105 AOD150-50)



**Size 3**  
27 Nm up to 1075 Nm

### ■ Technical Data

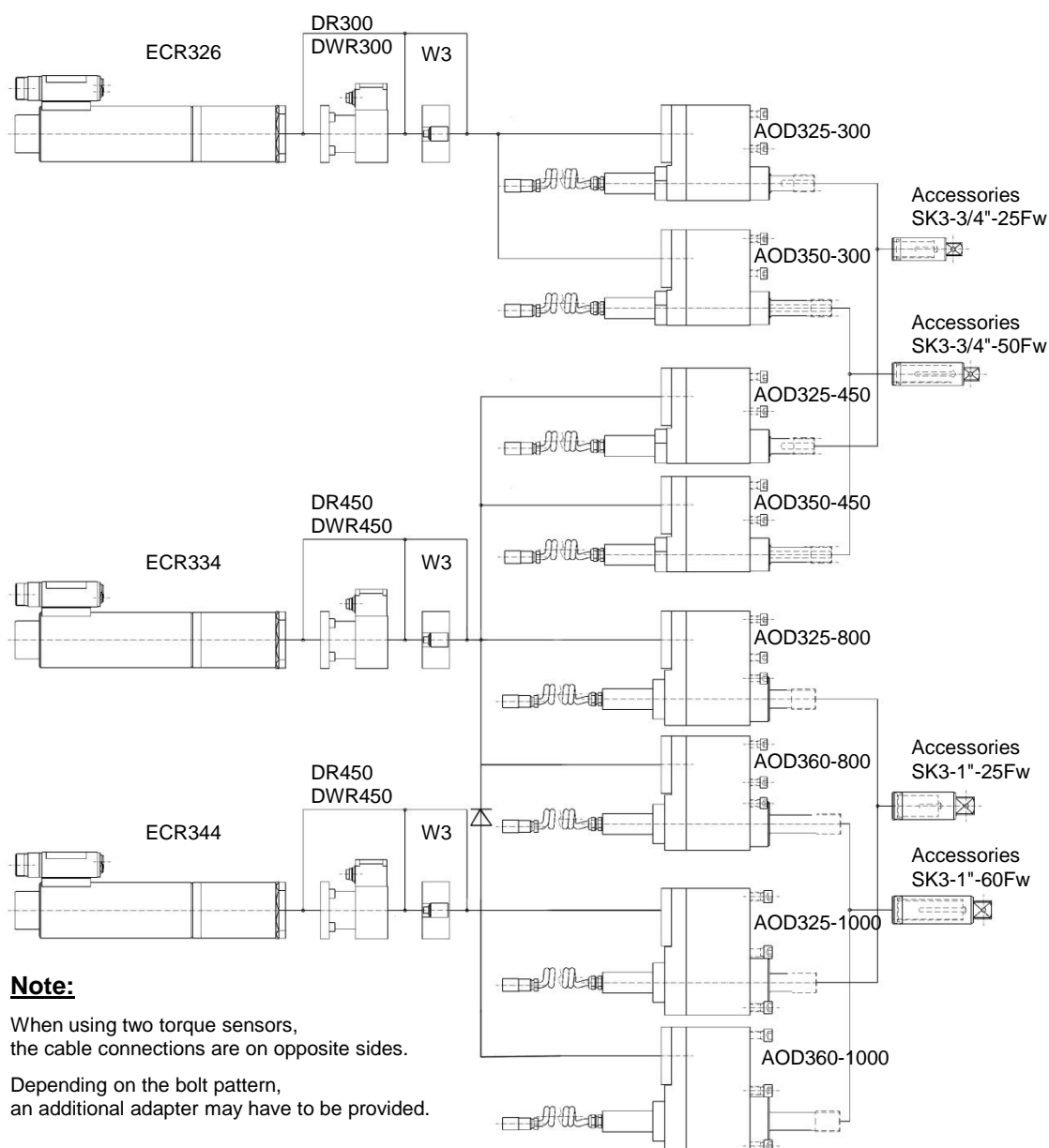
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.
<b>Built-in nutrunner with action torque sensor</b>								
E	268	27 - 241	ECR326 AOD325-300	433	518	11,5	65	792 0216
	268	27 - 241	ECR326 AOD350-300	433	518	11,6	65	792 0217
	347	35 - 312	ECR334 AOD325-450	334	518	14,7	65	792 0218
	347	35 - 312	ECR334 AOD350-450	334	518	14,8	65	792 0219
	642	65 - 577	ECR334 AOD325-800	181	518	18,4	65	792 0220
	642	65 - 577	ECR334 AOD360-800	181	518	18,5	65	792 0221
	450	45 - 405	ECR344 AOD325-450	258	518	14,7	65	792 0222
	450	45 - 404	ECR344 AOD350-450	258	518	14,8	65	792 0223
	834	80 - 720	ECR344 AOD325-800	140	518	18,4	65	792 0224
	834	80 - 720	ECR344 AOD360-800	140	518	18,5	65	792 0601
	1075	100 - 900	ECR344 AOD325-1000	108	518	21,1	65	792 0226
1075	100 - 900	ECR344 AOD360-1000	108	518	21,2	65	792 0227	
<b>Built-in nutrunner with action torque sensor and angle encoder</b>								
F	268	27 - 241	ECR326 W3 AOD325-300	433	557	16,0	65	792 0228
	268	27 - 241	ECR326 W3 AOD350-300	433	557	16,1	65	792 0229
	347	35 - 312	ECR334 W3 AOD325-450	334	557	19,2	65	792 0230
	347	35 - 312	ECR334 W3 AOD350-450	334	557	19,3	65	792 0231
	642	65 - 577	ECR334 W3 AOD325-800	181	557	22,9	65	792 0232
	642	65 - 577	ECR334 W3 AOD360-800	181	557	23,0	65	792 0233
	450	45 - 405	ECR344 W3 AOD325-450	258	557	19,2	65	792 0234
	450	45 - 404	ECR344 W3 AOD350-450	258	557	19,3	65	792 0235
	834	80 - 720	ECR344 W3 AOD325-800	140	557	22,9	65	792 0236
	834	80 - 720	ECR344 W3 AOD360-800	140	557	23,0	65	792 0237
	1075	100 - 900	ECR344 W3 AOD325-1000	108	557	25,6	65	792 0238
1075	100 - 900	ECR344 W3 AOD360-1000	108	557	25,7	65	792 0239	
<b>Built-in nutrunner with torque sensor for calibration (action torque sensor and reaction torque sensor)</b>								
G	268	27 - 241	ECR326 DWR300 AOD325-300	433	615	14,2	65	792 0240
	268	27 - 241	ECR326 DWR300 AOD350-300	433	615	14,3	65	792 0241
	347	35 - 312	ECR334 DWR450 AOD325-450	334	615	17,5	65	792 0242
	347	35 - 312	ECR334 DWR450 AOD350-450	334	615	17,6	65	792 0243
	642	65 - 577	ECR334 DWR450 AOD325-800	181	615	21,1	65	792 0244
	642	65 - 577	ECR334 DWR450 AOD360-800	181	615	21,2	65	792 0245
	450	45 - 405	ECR344 DWR450 AOD325-450	258	615	17,5	65	792 0246
	450	45 - 404	ECR344 DWR450 AOD350-450	258	615	17,6	65	792 0247
	834	80 - 720	ECR344 DWR450 AOD325-800	140	615	21,1	65	792 0248
	834	80 - 720	ECR344 DWR450 AOD360-800	140	615	21,2	65	792 0249
	1075	100 - 900	ECR344 DWR450 AOD325-1000	108	615	23,8	65	792 0250
1075	100 - 900	ECR344 DWR450 AOD360-1000	108	615	23,9	65	792 0251	

## Built-In Nutrunner – Offset Drive

E 1.2.3

### ■ Combinations

Design with action torque sensor



**Note:**

When using two torque sensors, the cable connections are on opposite sides.

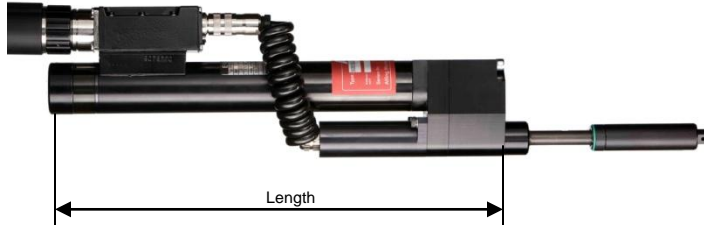
Depending on the bolt pattern, an additional adapter may have to be provided.



## Built-In Nutrunner Size 3 – Offset Drive

E 1.2.3

Illustration similar (ECR105 AOD150-50)



**Size 3**  
27 Nm up to 1075 Nm

### ■ Technical Data

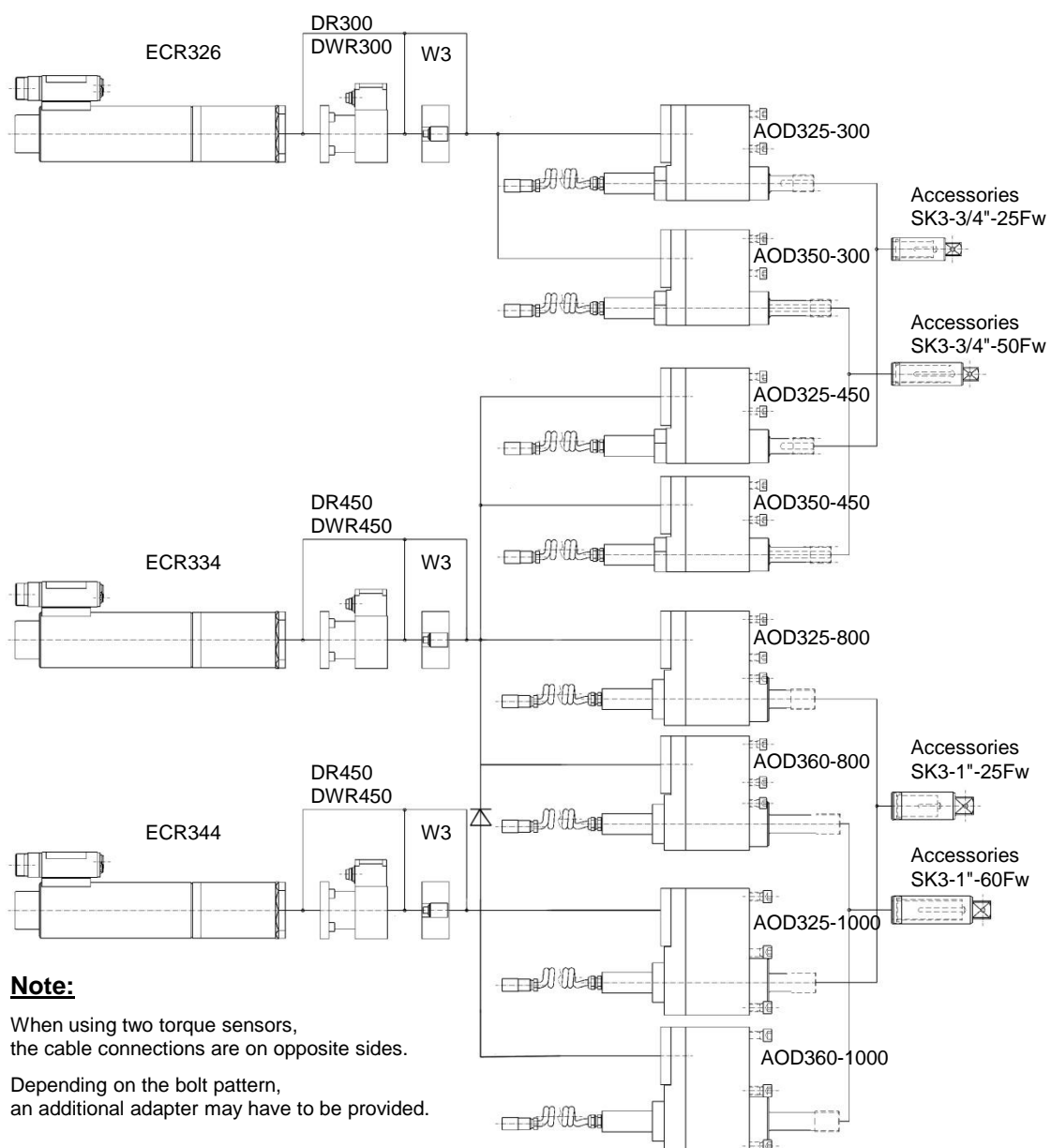
	Max. torque capacity in Nm	Torque range Nm	Type	Max. idle speed rpm	Length mm	Weight kg	Sound Level db (A)	Ident-No.	
	<b>Built-in nutrunner with redundant design</b>								
H	268	27 - 241	ECR326 DR300 W3 AOD325-300	433	654	14,9	65	792 0485	
	268	27 - 241	ECR326 DR300 W3 AOD350-300	433	654	15,0	65	792 0486	
	347	35 - 312	ECR334 DR450 W3 AOD325-450	334	654	18,2	65	792 0487	
	347	35 - 312	ECR334 DR450 W3 AOD350-450	334	654	18,3	65	792 0488	
	642	65 - 577	ECR334 DR450 W3 AOD325-800	181	654	21,8	65	792 0489	
	642	65 - 577	ECR334 DR450 W3 AOD360-800	181	654	21,9	65	792 0490	
	450	45 - 405	ECR344 DR450 W3 AOD325-450	258	654	18,2	65	792 0491	
	450	45 - 405	ECR344 DR450 W3 AOD350-450	258	654	18,3	65	792 0492	
	834	80 - 720	ECR344 DR450 W3 AOD325-800	140	654	21,8	65	792 0493	
	834	80 - 720	ECR344 DR450 W3 AOD360-800	140	654	21,9	65	792 0494	
	1075	100 - 900	ECR344 DR450 W3 AOD325-1000	108	654	24,5	65	792 0495	
	1075	100 - 900	ECR344 DR450 W3 AOD360-1000	108	654	24,6	65	792 0496	
	<b>Built-in nutrunner with torque sensor for calibration (action torque sensor and reaction torque sensor)</b>								
I	268	27 - 241	ECR326 DWR300 W3 AOD325-300	433	654	14,9	65	792 0252	
	268	27 - 241	ECR326 DWR300 W3 AOD350-300	433	654	15,0	65	792 0253	
	347	35 - 312	ECR334 DWR450 W3 AOD325-450	334	654	18,2	65	792 0254	
	347	35 - 312	ECR334 DWR450 W3 AOD350-450	334	654	18,3	65	792 0255	
	642	65 - 577	ECR334 DWR450 W3 AOD325-800	181	654	21,8	65	792 0256	
	642	65 - 577	ECR334 DWR450 W3 AOD360-800	181	654	21,9	65	792 0257	
	450	45 - 405	ECR344 DWR450 W3 AOD325-450	258	654	18,2	65	792 0258	
	450	45 - 405	ECR344 DWR450 W3 AOD350-450	258	654	18,3	65	792 0259	
	834	80 - 720	ECR344 DWR450 W3 AOD325-800	140	654	21,8	65	792 0260	
	834	80 - 720	ECR344 DWR450 W3 AOD360-800	140	654	21,9	65	792 0261	
		1075	100 - 900	ECR344 DWR450 W3 AOD325-1000	108	654	24,5	65	792 0262
		1075	100 - 900	ECR344 DWR450 W3 AOD360-1000	108	654	24,6	65	792 0263

## Built-In Nutrunner – Offset Drive

E 1.2.3

### ■ Combinations

Design with action torque sensor



**Note:**

When using two torque sensors, the cable connections are on opposite sides.

Depending on the bolt pattern, an additional adapter may have to be provided.