

Copar quarter turn actuators DRD/DRE




# Copar quarter turn actuators DRD/DRE

Key features and product range overview



## Brief description

-  Size  
8 ... 880
-  Torque  
7,5 ... 8 800 Nm
-  Swivel angle  
0 ... 90°

The Copar quarter turn actuators are ideally suited for automating swivel valves in the process industry. Sturdy, but nevertheless accurate for high precision positioning, especially with ball valves and plug valves, as well as shut-off and butterfly valves.

- Direction of rotation can be optionally changed from clockwise to anticlockwise
- End-position sensor and limit switch module can be mounted directly to the drive
- Fast or slow valve actuation
- Suitable for manual on-site use, as well as automatic operation
- Resistant to overload and continuous loads
- Can be used as a variable-speed actuator in combination with an electro-pneumatic positioning controller
- Opening and closing are controlled with a flange-mounted solenoid valve with port pattern to Namur
- Highly corrosion resistant
- Optionally adjustable end positions for sizes 8 ... 100, facilitating adjustment ranges of  $-4^\circ$  ...  $+4^\circ$  and  $86^\circ$  ...  $94^\circ$
- Selected types according to ATEX directive for explosive atmospheres → [www.festo.com/en/ex](http://www.festo.com/en/ex)
- Port pattern to Namur VDI/VDE 3845 for attaching solenoid valves
- Standard connection to the process valve to ISO 5211

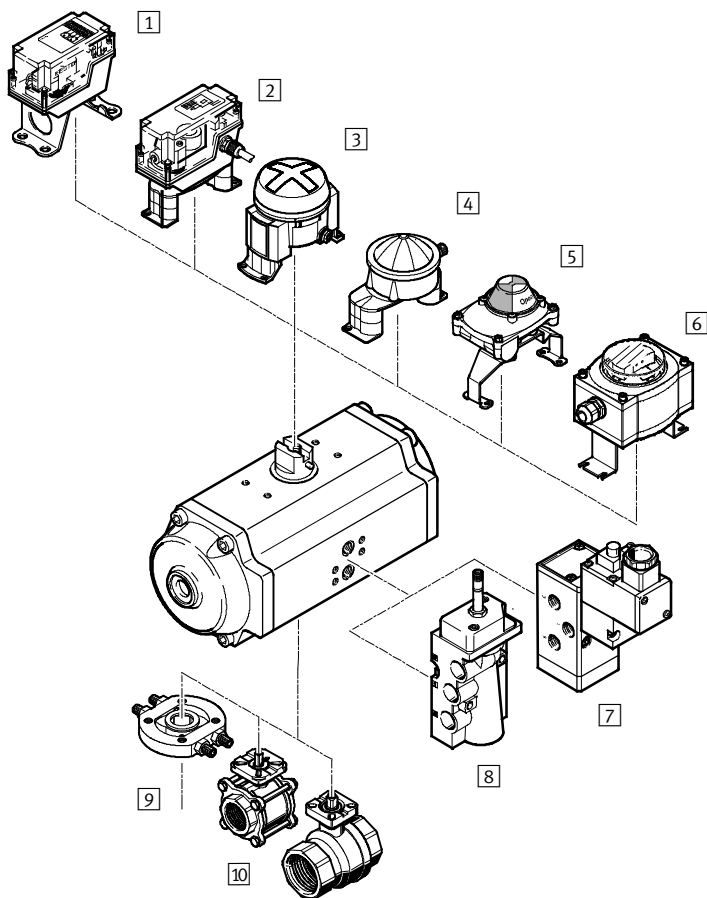


Flange hole pattern – Connection dimensions to DIN ISO 5211 and Namur VDI/VDE 3845

Connection	F03	F04	F05	F07	F10	F12	F14	F16	F25	F30	Shaft height	
Square	V09	V11	V14	V17	V22	V27	V36	V46	V55	V75		
DR...-8-F05	-	-	■	-	-	-	-	-	-	-	20	
DR...-14-F05	-	-	■	-	-	-	-	-	-	-	20	
DR...-26-F07	-	-	-	■	-	-	-	-	-	-	20	
DR...-50-F07	-	-	-	-	■	-	-	-	-	-	20	
DR...-50-F10	-	-	-	-	-	■	-	-	-	-	30	
DR...-77-F10	-	-	-	-	-	-	■	-	-	-	30	
DR...-77-F12	-	-	-	-	-	-	-	■	-	-	30	
DR...-100-F12	-	-	-	-	-	-	-	-	■	-	30	
DR...-150-F14	-	-	-	-	-	-	-	-	-	■	30	
DR...-225-F14	-	-	-	-	-	-	-	-	-	-	30	
DR...-375-F16	-	-	-	-	-	-	-	-	-	■	30	
DR...-575-F16	-	-	-	-	-	-	-	-	-	■	30	
DR...-575-F25	-	-	-	-	-	-	-	-	-	■	30	
DR...-880-F25	-	-	-	-	-	-	-	-	-	■	30	
DR...-880-F30	-	-	-	-	-	-	-	-	-	-	■	30
Hole pattern for	25	25	30	30	30	30	30	30	30	30		
Namur accessories	50	50	80	80	80	80	130	130	130	130	150	175

# Copar quarter turn actuators DRD/DRE

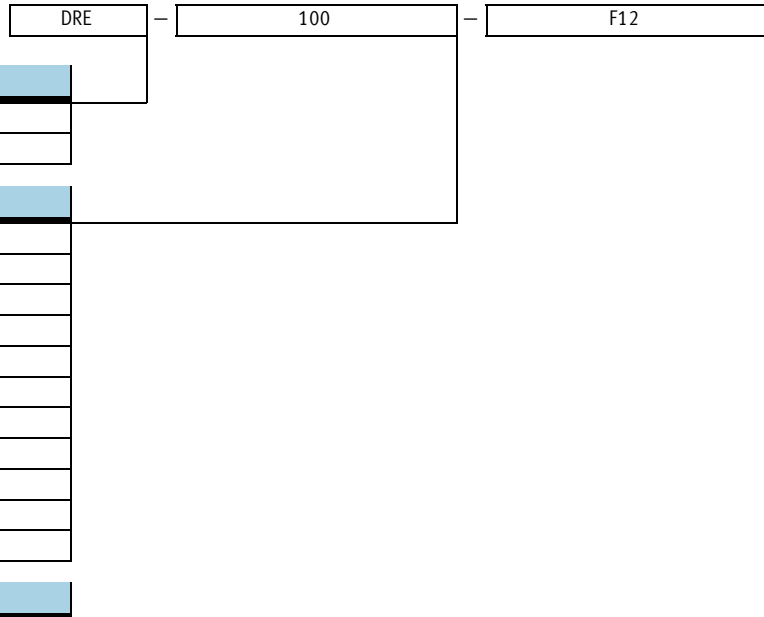
Peripherals overview



Mounting attachments and accessories			
	Brief description	→ Page/Internet	
1	Limit switch attachment QH-DR-E	Square design, pneumatic, electrical or inductive sensing fits sizes 8 ... 50	qh-dr-e
2	Limit switch attachment DAPZ	Square design, electrical, electrically explosion-proof or inductive sensing fits sizes 8 ... 225, with adapter for sizes 375 ... 880	dapz
3	Limit switch attachment DAPZ	Round design, variant AR, electrical, inductive or inductively explosion-proof sensing fits sizes 8 ... 225	dapz
4	Limit switch attachment DAPZ	Round design, variant RO, electrical, inductive or inductive Namur sensing fits sizes 8 ... 225, with adapter for sizes 375 ... 880	dapz
5	End-position sensing attachment SRBF	Square design Sensing via two mechanical switches	srbf
6	Sensor box SRBP, SRAP	SRBP, binary sensor box reports the open and closed position of the drive SRAP, analogue sensor box continuously senses the entire swivel range and reports this back to the controller	srbp, srpap
7	Solenoid valve MFH	Basic valve with pilot control valve for F solenoid coil	mfh
	Solenoid valve MN1H	Basic valve with pilot control valve for N1 solenoid coil	mn1h
	Solenoid valve MGTBH	Basic valve with pilot control valve, solenoid coil and socket	mgthb
8	Solenoid valve NVF3	For F solenoid coil and explosion-proof F solenoid coil	nvf3
9	Stop DADP	For end-position adjustment, based on standard VDI/VDE 3845 (Namur) fits sizes 150 ... 880; for size 8 ... 100 the adjustable end-position cushioning is in the end caps	27
10	Ball valve VAPB	Brass or stainless steel, corrosion-resistant	vapb

# Copar quarter turn actuators DRD/DRE

Type codes



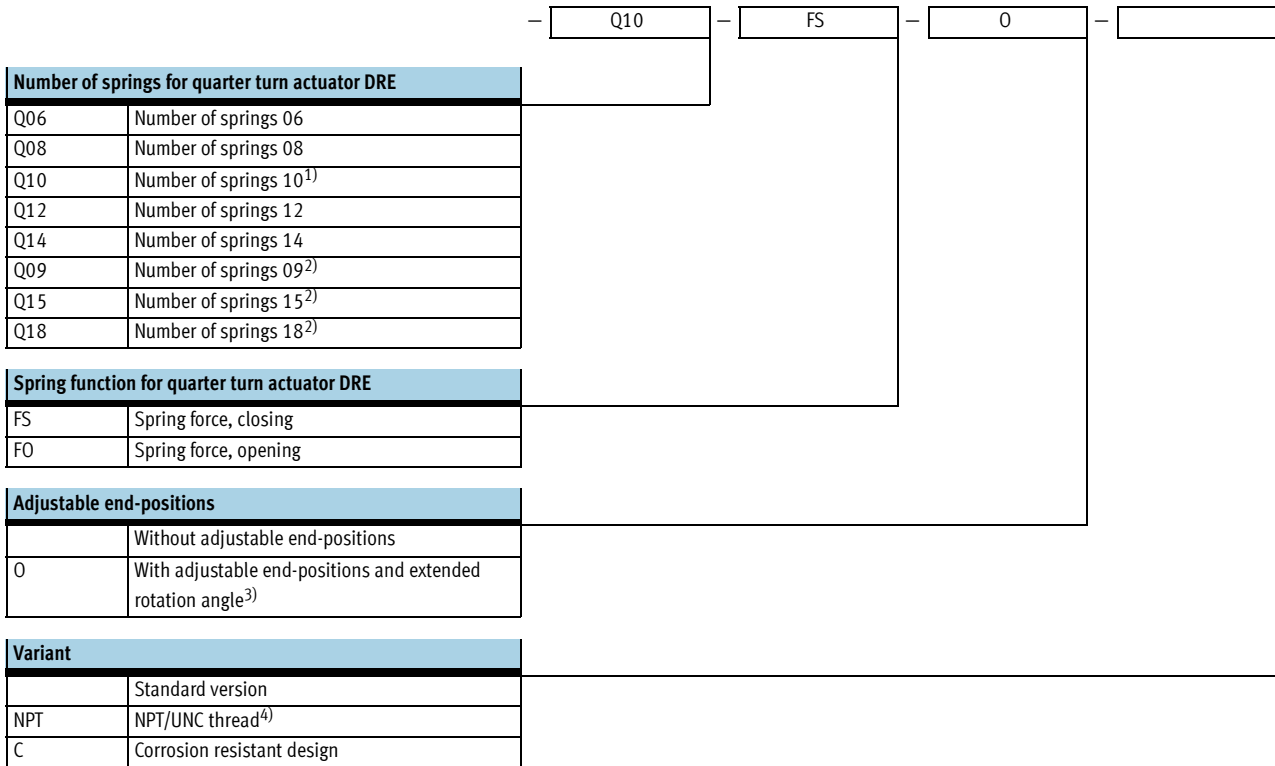
Type	
DRD	Double-acting quarter turn actuator
DRE	Single-acting quarter turn actuator

Size	
8	Size 8
14	Size 14
26	Size 26
50	Size 50
77	Size 77
100	Size 100
150	Size 150
225	Size 225
375	Size 375
575	Size 575
880	Size 880

Flange hole pattern	
F03	Flange hole pattern F03 with shaft connection V09
F04	Flange hole pattern F04 with shaft connection V11
F05	Flange hole pattern F05 with shaft connection V14
F07	Flange hole pattern F07 with shaft connection V17
F10	Flange hole pattern F10 with shaft connection V22
F12	Flange hole pattern F12 with shaft connection V27
F14	Flange hole pattern F14 with shaft connection V36
F16	Flange hole pattern F16 with shaft connection V46
F25	Flange hole pattern F25 with shaft connection V55
F30	Flange hole pattern F30 with shaft connection V75

# Copar quarter turn actuators DRD/DRE

Type codes

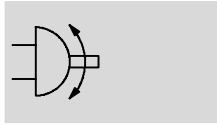


- 1) Standard spring quantity designed for 6 bar operating pressure
- 2) Only with size 575
- 3) Swivel range to 98°, only with size 8 ... 100
- 4) On request

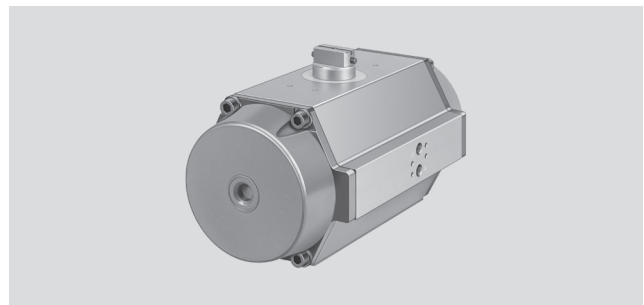
# Copar quarter turn actuators DRD

## Technical data

### Function



Swivel angle  
0 ... 90°



Size  
8 ... 880

Torque  
2.5 ... 11 750 Nm

General technical data		
Size	8 ... 100	150 ... 880
Pneumatic connection	G1/4	
Design	Rack and pinion, double-acting	
Assembly position	Any	
Swivel angle [°]	90	
End-position adjusting range [°]	-4 ... +4	-
Closing direction	Closes to right	

Operating and environmental conditions		
Size	8 ... 100	150 ... 880
Operating pressure <sup>1)</sup> [bar]	2 ... 10	
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]	
Note on operating/pilot medium	Operation with lubricated medium possible (in which case lubricated operation will always be required)	
Ambient temperature <sup>2)3)</sup> [°C]	-20 ... +80	
ATEX category gas	II 2G	
Ex-ignition protection type gas	c T6	
ATEX category dust	II 2D	
EX-ignition protection type dust	c 60°C	
EX ambient temperature <sup>3)</sup> [°C]	-20°C ≤ Ta ≤ +60°C	
Corrosion resistance class CRC <sup>4)</sup>	3	
Corrosion resistance class CRC <sup>5)</sup> for corrosion-resistant design	4	
CE marking (see declaration of conformity) → <a href="http://www.festo.com">www.festo.com</a>	EU Explosion Protection Directive (ATEX)	

1) Minimum operating pressures vary for single-acting quarter-turn actuators depending upon spring quantity

2) Further temperature ranges upon request

3) Note operating range of proximity sensors

4) Corrosion resistance class 3 according to Festo standard 940 070

Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

5) Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

Air consumption [l/cycle] at 6 bar			
Size		Size	
DRD-8	4.2	DRD-150	74.4
DRD-14	12	DRD-225	99.6
DRD-26	19.2	DRD-375	204
DRD-50	24	DRD-575	276
DRD-77	36	DRD-880	384
DRD-100	48		


# Copar quarter turn actuators DRD

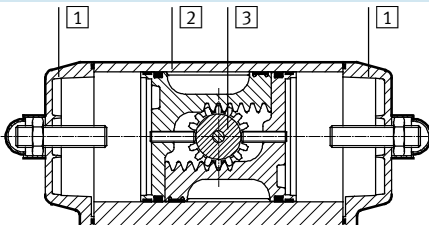
Technical data

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Weight [g]			
Size		Size	
DRD-8	2,400	DRD-150	31,000
DRD-14	3,600	DRD-225	37,000
DRD-26	6,400	DRD-375	80,000
DRD-50	11,200	DRD-575	123,000
DRD-77	18,500	DRD-880	156,000
DRD-100	23,000		

Theoretical torque [Nm] at swivel angle 0° and 90° as a function of operating pressure [bar]							
Size	Operating pressure [bar]						
	2	3	4	5	6	7	8
DRD-8	24.7	37	49.3	61.6	74	86.3	98.6
DRD-14	47	72	95	119	143	167	191
DRD-26	89	133	177	222	266	310	354
DRD-50	169	253	337	421	505	589	673
DRD-77	256	385	513	642	770	898	1,026
DRD-100	338	506	675	843	1,012	1,181	1,350
DRD-150	506	758	1,011	1,264	1,517	1,770	2,023
DRD-225	758	1,138	1,517	1,896	2,275	2,654	3,033
DRD-375	1,264	1,896	2,528	3,159	3,791	4,423	5,055
DRD-575	1,919	2,879	3,839	4,799	5,758	6,718	7,677
DRD-880	2,938	4,407	5,876	7,345	8,814	10,283	11,752

 - Note  
 The following minimum degrees of efficiency apply for all quarter turn actuators:  
 DR...-8 ... 880: ≥ 90%

Materials			
Sectional view			
			
Quarter turn actuator			
1	Cover	Size	8 ... 880
			-
2	Housing	Size	8 ... 225
			375 ... 880
			Anodised aluminium
			Painted aluminium
3	Shaft		Aluminium
-	Seals		NBR
-	Note on materials		Contains PWIS (paint-wetting impairment substances)

# Copar quarter turn actuators DRD

Technical data

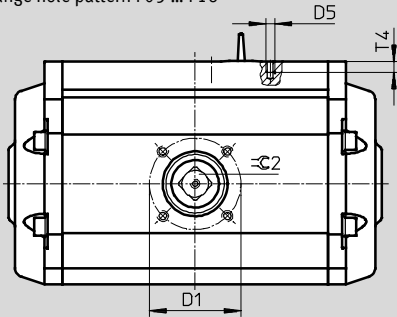
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## Dimensions

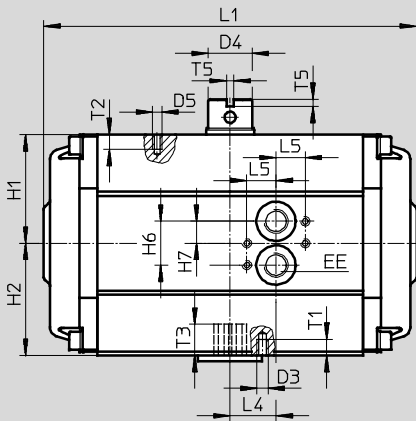
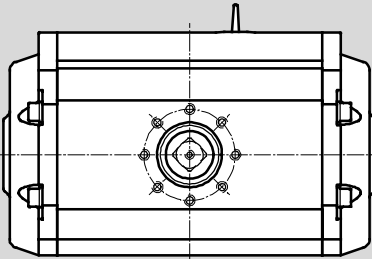
Download CAD data → [www.festo.com](http://www.festo.com)

Size 8 ... 880

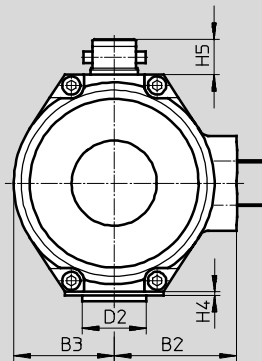
Flange hole pattern F05 ... F16



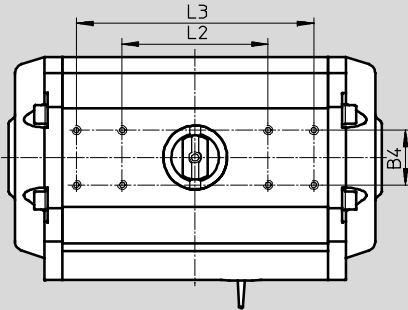
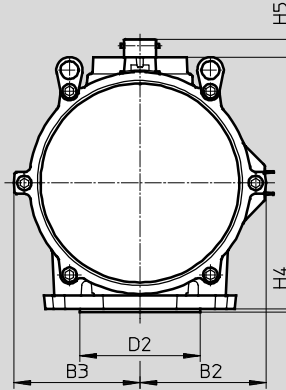
Flange hole pattern F25 ... F30



... 8-F05 ... 100-F12



... 150-F14 880-F30





# Copar quarter turn actuators DRD

Technical data



Size	B2	B3	B4	D1 ∅	D2 ∅	D3 ∅	D4 ∅	D5	EE	H1	H2	H3	H4 max.	H5 ±1
DRD-8-F05	52.5 <sub>±1</sub>	41 <sub>±1</sub>	30	50	35	M6	24	M5	G <sup>1</sup> / <sub>4</sub>	44.5 <sub>±1.5</sub>	46.5 <sub>±1</sub>	12	3	20
DRD-14-F05	67 <sub>±1.5</sub>	55 <sub>±1.5</sub>		50	35	M6				59.5 <sub>±1.5</sub>	61.5 <sub>±1</sub>			
DRD-26-F07	79 <sub>±2</sub>	67 <sub>±2</sub>		70	55	M8				71.5 <sub>±1.5</sub>	74.5 <sub>±1.5</sub>			
DRD-50-F07	94 <sub>±2</sub>	78 <sub>±2</sub>		70	55	M8				81.5 <sub>±2.5</sub>	84.5 <sub>±1.5</sub>		4	30
DRD-50-F10				102	70	M10								
DRD-77-F10	100 <sub>±2</sub>	90 <sub>±2</sub>		102	70	M10				94 <sub>±3</sub>	98 <sub>±2</sub>		4	30
DRD-77-F12				125	85	M12								
DRD-100-F12				114 <sub>±2.5</sub>	102 <sub>±2</sub>	125								
DRD-150-F14	140 <sub>±3</sub>	136 <sub>±2.5</sub>		140	100	M16				137 <sub>±3</sub>	137 <sub>±3</sub>			
DRD-225-F14				140	100	M16				137	147 <sub>±3</sub>		4	30
DRD-375-F16				177 <sub>±3.5</sub>	175 <sub>±3.5</sub>	165				130	M20			
DRD-575-F16	210 <sub>±4</sub>	210 <sub>±4</sub>		165	130	M20				210 <sub>±4</sub>	210 <sub>±4</sub>		5	30
DRD-575-F25				254	200	M16								
DRD-880-F25				223.5 <sub>±4.5</sub>	223.5 <sub>±4.5</sub>	254								
DRD-880-F30	298	230	M20											

Size	H6	H7	L1 max.	L2	L3	L4 ±1	L5	T1	T2	T3 +1	T4	T5	≈±2 H11
DRD-8-F05	24	12	215	80	-	25.5	16	8.8	8	17	6	4	14
DRD-14-F05			220	80		25.15							
DRD-26-F07			280	80	130	32.25		12.5		21			17
DRD-50-F07			365	80	130	46.85		13					
DRD-50-F10				130	16			25		16			
DRD-77-F10			430	130	54.5	16				30			22
DRD-77-F12			440	130		18							
DRD-100-F12			370	130	67.1	26		40		36			
DRD-150-F14			480	130		96.5							26
DRD-225-F14			520	130	99			22		50			46
DRD-375-F16			540	150		96.41		25					
DRD-575-F16					25			59		55			
DRD-575-F25					25								
DRD-880-F25			700	175	136	25		79		75			
DRD-880-F30	25												

# Copar quarter turn actuators DRD

Technical data

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Ordering data – Without adjustable end position		Ordering data – Without adjustable end position	
Part No.	Type	Part No.	Type
Size 8		Size 150	
189763	DRD-8-F05	189772	DRD-150-F14
Size 14		Size 225	
189764	DRD-14-F05	189774	DRD-225-F14
Size 26		Size 375	
189765	DRD-26-F07	189776	DRD-375-F16
Size 50		Size 575	
189766	DRD-50-F07	189777	DRD-575-F16
189767	DRD-50-F10	189778	DRD-575-F25
Size 77		Size 880	
189768	DRD-77-F10	189779	DRD-880-F25
189769	DRD-77-F12	189780	DRD-880-F30
Size 100			
189770	DRD-100-F12		



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary date see

→ 4

Ordering data – With adjustable end position		Ordering data – With adjustable end position	
Part No.	Type	Part No.	Type
Size 8		Size 50	
560518	DRD-8-F05-0	560524	DRD-50-F07-0
Size 14		Size 77	
560520	DRD-14-F05-0	560528	DRD-77-F10-0
Size 26		Size 100	
560522	DRD-26-F07-0	560530	DRD-77-F12-0
		Size 100	
		560532	DRD-100-F12-0



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary date see

→ 4

# Copar quarter turn actuators DRD

Technical data

Ordering data – Corrosion resistant		Ordering data – Corrosion resistant	
Part No.	Type	Part No.	Type
Size 8		Size 150	
189817	DRD-8-F05-C	189826	DRD-150-F14-C
Size 14		Size 225	
189818	DRD-14-F05-C	189828	DRD-225-F14-C
Size 26		Size 375	
189819	DRD-26-F07-C	189830	DRD-375-F16-C
Size 50		Size 575	
189820	DRD-50-F07-C	189831	DRD-575-F16-C
189821	DRD-50-F10-C	189832	DRD-575-F25-C
Size 77		Size 880	
189822	DRD-77-F10-C	189833	DRD-880-F25-C
189823	DRD-77-F12-C	189834	DRD-880-F30-C
Size 100			
189824	DRD-100-F12-C		



Note

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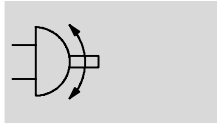
→ 4

# Copar quarter turn actuators DRE

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Technical data

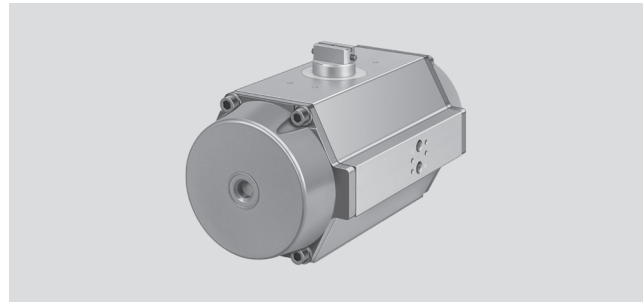
Function



Swivel angle  
0 ... 90°

Size  
8 ... 880

Torque  
2.5 ... 9 305 Nm



General technical data		
Size	8 ... 100	150 ... 880
Pneumatic connection	G $\frac{1}{4}$	
Design	Rack and pinion, single-acting	
Assembly position	Any	
Swivel angle	[°]	90
End-position adjusting range	[°]	-4 ... +4
Closing direction	Spring force, closing	

Operating and environmental conditions		
Size	8 ... 100	150 ... 880
Operating pressure <sup>1)</sup>	[bar]	2 ... 10
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]	
Note on operating/pilot medium	Operation with lubricated medium possible (in which case lubricated operation will always be required)	
Ambient temperature <sup>2)3)</sup>	[°C]	-20 ... +80
ATEX category gas	II 2G	
Ex-ignition protection type gas	c T6	
ATEX category dust	II 2D	
EX-ignition protection type dust	c 60°C	
EX ambient temperature <sup>3)</sup>	[°C]	-20°C ≤ Ta ≤ +60°C
Corrosion resistance class CRC <sup>4)</sup>	3	
Corrosion resistance class CRC <sup>5)</sup> for corrosion-resistant design	4	
CE marking (see declaration of conformity) → <a href="http://www.festo.com">www.festo.com</a>	EU Explosion Protection Directive (ATEX)	

1) Minimum operating pressures vary for single-acting quarter-turn actuators depending upon spring quantity

2) Further temperature ranges upon request

3) Note operating range of proximity sensors

4) Corrosion resistance class 3 according to Festo standard 940 070

Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

5) Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required


Air consumption [l/cycle] at 6 bar			
Type		Type	
DRE-8	2.1	DRE-150	37.2
DRE-14	6	DRE-225	49.8
DRE-26	9.6	DRE-375	102
DRE-50	12	DRE-575	138
DRE-77	18	DRE-880	192
DRE-100	24		

# Copar quarter turn actuators DRE

Technical data

Theoretical torque [Nm] at swivel angle 0° and 90° as a function of operating pressure [bar]								
Number of springs <sup>1)</sup>	Spring torque [Nm]	Md available	Operating pressure					
			3	4	5	6	7	8
Quarter turn actuators DRE-8								
6	12.3	min.	12.1	24.4	36.7	49.1	61.4	73.7
	24.9	max.	24.7	37	49.3	61.7	74	86.3
8	16.4	min.	3.8	16.1	28.4	40.8	53.1	65.4
	33.2	max.	20.6	32.9	45.2	57.6	69.9	82.2
10	20.5	min.	–	7.8	20.1	32.5	44.8	57.1
	41.5	max.	–	28.8	41.1	53.5	65.8	78.1
12	24.6	min.	–	–	11.8	24.2	36.5	48.8
	49.8	max.	–	–	37	49.4	61.7	74
14	28.7	min.	–	–	4.5	16.9	29.2	41.5
	57.1	max.	–	–	32.9	45.3	57.6	69.9

1) Smaller number of springs on request.

 - Note

The following minimum degrees of efficiency apply for all quarter turn actuators:


DR...-8 ... 880: ≥ 90%

# Copar quarter turn actuators DRE

Technical data

Theoretical torque [Nm] at swivel angle 0° and 90° as a function of operating pressure [bar]								
Number of springs <sup>1)</sup>	Spring torque [Nm]	Md available	Operating pressure					
			3	4	5	6	7	8
<b>Quarter turn actuators DRE-14</b>								
6	24	min.	24	47	71	95	119	143
	48	max.	48	71	95	119	143	167
8	32	min.	8	31	55	79	103	127
	64	max.	40	63	87	111	135	159
10	40	min.	-	15	39	63	87	111
	80	max.	-	55	79	103	127	151
12	48	min.	-	-	23	47	71	95
	96	max.	-	-	71	95	119	143
14	56	min.	-	-	7	31	55	79
	112	max.	-	-	63	87	111	135
<b>Quarter turn actuators DRE-26</b>								
6	44	min.	44	88	133	177	221	275
	89	max.	89	133	178	222	266	320
8	58	min.	15	59	104	148	192	246
	118	max.	75	119	164	208	252	306
10	73	min.	-	29	74	118	162	216
	148	max.	-	104	149	193	237	291
12	88	min.	-	-	44	88	132	186
	178	max.	-	-	134	178	222	276
14	102	min.	-	-	15	59	103	157
	207	max.	-	-	120	164	208	262
<b>Quarter turn actuators DRE-50</b>								
6	80	min.	85	169	253	337	421	505
	168	max.	173	257	341	425	509	593
8	107	min.	29	113	197	281	365	449
	224	max.	146	230	314	398	482	556
10	134	min.	-	57	141	225	309	393
	280	max.	-	203	287	371	455	539
12	160	min.	-	-	85	169	253	337
	336	max.	-	-	261	345	429	513
14	187	min.	-	-	29	113	197	281
	392	max.	-	-	234	318	402	486

1) Smaller number of springs on request.

 Note

The following minimum degrees of efficiency apply for all quarter turn actuators:


DR...-8 ... 880: ≥ 90%

# Copar quarter turn actuators DRE

Technical data

Theoretical torque [Nm] at swivel angle 0° and 90° as a function of operating pressure [bar]								
Number of springs <sup>1)</sup>	Spring torque [Nm]	Md available	Operating pressure					
			3	4	5	6	7	8
<b>Quarter turn actuators DRE-77</b>								
6	122	min.	132	260	389	517	645	773
	253	max.	263	391	520	648	776	904
8	162	min.	48	176	305	433	561	689
	337	max.	223	351	480	608	736	864
10	203	min.	-	91	220	348	476	604
	422	max.	-	310	439	567	695	823
12	244	min.	-	-	136	264	392	520
	506	max.	-	-	398	526	654	772
14	284	min.	-	-	52	180	308	436
	590	max.	-	-	358	486	614	742
<b>Quarter turn actuators DRE-100</b>								
6	160	min.	174	343	511	680	849	1,018
	332	max.	346	515	683	852	1,021	1,190
8	213	min.	63	232	400	569	738	907
	443	max.	293	462	630	799	968	1,137
10	267	min.	-	121	289	458	627	796
	554	max.	-	408	576	745	914	1,083
12	320	min.	-	-	178	347	516	685
	665	max.	-	-	523	692	861	1,030
14	373	min.	-	-	67	236	405	574
	767	max.	-	-	470	639	808	977
<b>Quarter turn actuators DRE-150</b>								
6	253	min.	252	505	758	1,011	1,264	1,517
	506	max.	505	758	1,011	1,264	1,517	1,770
8	337	min.	84	337	590	843	1,096	1,349
	674	max.	421	674	927	1,180	1,433	1,686
10	421	min.	-	168	421	674	927	1,180
	843	max.	-	590	843	1,096	1,349	1,602
12	506	min.	-	-	253	506	759	1,012
	1,011	max.	-	-	758	1,011	1,264	1,517
14	590	min.	-	-	84	337	590	843
	1,180	max.	-	-	674	927	1,180	1,433

1) Smaller number of springs on request.

 - Note

The following minimum degrees of efficiency apply for all quarter turn actuators:


DR...-8 ... 880: ≥ 90%

# Copar quarter turn actuators DRE

Technical data

Theoretical torque [Nm] at swivel angle 0° and 90° as a function of operating pressure [bar]								
Number of springs <sup>1)</sup>	Spring torque [Nm]	Md available	Operating pressure					
			3	4	5	6	7	8
<b>Quarter turn actuators DRE-225</b>								
6	379	min.	382	761	1,140	1,519	1,898	2,277
	756	max.	759	1,138	1,517	1,896	2,275	2,654
8	506	min.	127	506	885	1,264	1,643	2,022
	1,011	max.	632	1,011	1,390	1,769	2,148	2,527
10	632	min.	–	253	632	1,011	1,390	1,769
	1,264	max.	–	885	1,264	1,643	2,022	2,401
12	758	min.	–	–	379	758	1,137	1,516
	1,517	max.	–	–	1,138	1,517	1,896	2,275
14	885	min.	–	–	127	506	885	1,264
	1,769	max.	–	–	1,011	1,390	1,769	2,148
<b>Quarter turn actuators DRE-375</b>								
6	632	min.	632	1,264	1,895	2,527	3,159	3,791
	1,264	max.	1,264	1,896	2,527	3,159	3,791	4,423
8	843	min.	211	843	1,474	2,106	2,738	3,370
	1,685	max.	1,053	1,685	2,316	2,948	3,580	4,212
10	1,053	min.	–	421	1,052	1,684	2,360	2,948
	2,107	max.	–	1,475	2,106	2,738	3,370	4,002
12	1,264	min.	–	–	631	1,263	1,895	2,527
	2,528	max.	–	–	1,895	2,527	3,159	3,791
14	1,475	min.	–	–	210	842	1,474	2,106
	2,949	max.	–	–	1,684	2,316	2,948	3,580
<b>Quarter turn actuators DRE-575</b>								
6	632	min.	1,615	2,575	3,535	4,494	5,454	6,413
	1,264	max.	2,247	3,207	4,167	5,126	6,086	7,045
9	948	min.	938	1,943	2,903	3,862	4,822	5,781
	1,896	max.	1,931	2,891	3,851	4,810	5,770	6,729
12	1,264	min.	351	1,311	2,271	3,230	4,190	5,149
	2,528	max.	1,615	2,575	3,535	4,494	5,454	6,413
15	1,580	min.	–	679	1,639	2,598	3,558	4,517
	3,160	max.	–	2,259	3,219	4,178	5,138	6,097
18	1,896	min.	–	–	1,007	1,966	2,926	3,885
	3,792	max.	–	–	2,903	3,862	4,822	5,781

1) Smaller number of springs on request.

 Note

The following minimum degrees of efficiency apply for all quarter turn actuators:

DR...-8 ... 880: ≥ 90%




# Copar quarter turn actuators DRE

Technical data

Theoretical torque [Nm] at swivel angle 0° and 90° as a function of operating pressure [bar]								
Number of springs <sup>1)</sup>	Spring torque [Nm]	Md available	Operating pressure					
			3	4	5	6	7	8
Quarter turn actuators DRE-880								
6	1,468	min.	1,470	2,939	4,408	5,877	7,346	8,815
	2,937	max.	2,939	4,408	5,877	7,346	8,815	10,284
8	1,958	min.	791	2,260	3,729	5,198	6,667	8,136
	3,616	max.	2,449	3,918	5,387	6,856	8,325	9,794
10	2,447	min.	–	982	2,451	3,920	5,389	6,858
	4,894	max.	–	3,429	4,898	6,367	7,836	9,305
12	2,937	min.	–	–	1,472	2,941	4,410	5,879
	5,873	max.	–	–	4,408	5,877	7,346	8,815
14	3,792	min.	–	–	493	1,962	3,431	4,900
	6,852	max.	–	–	3,553	5,022	6,491	7,960

1) Smaller number of springs on request.

 Note

The following minimum degrees of efficiency apply for all quarter turn actuators:

DR...-8 ... 880: ≥ 90%

# Copar quarter turn actuators DRE

Technical data

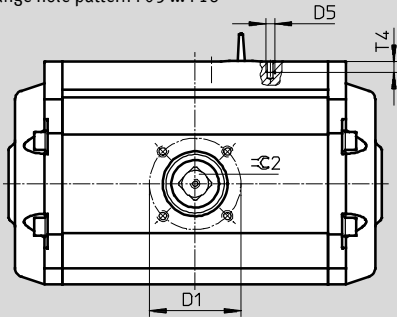
FESTO

## Dimensions

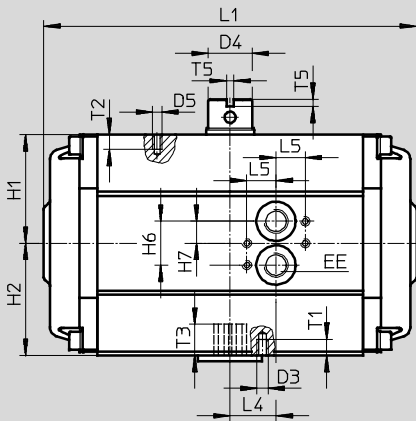
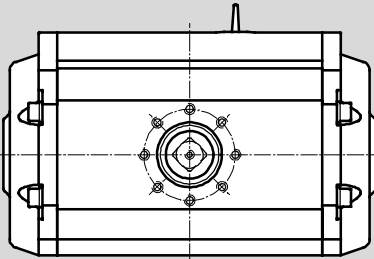
Download CAD data → [www.festo.com](http://www.festo.com)

Size 8 ... 880

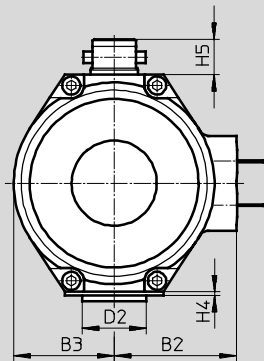
Flange hole pattern F05 ... F16



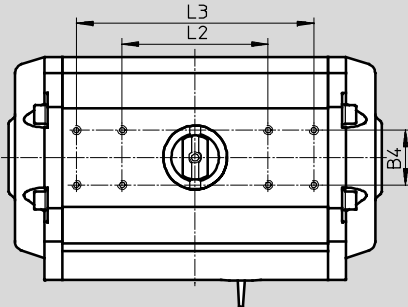
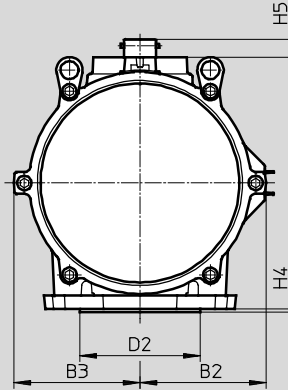
Flange hole pattern F25 ... F30



... 8-F05 ... 100-F12



... 150-F14 880-F30



# Copar quarter turn actuators DRE

Technical data



Size	B2	B3	B4	D1 ∅	D2 ∅	D3 ∅	D4 ∅	D5	EE	H1	H2	H3	H4 max.	H5 ±1
DRE-8-F05	52.5 <sub>±1</sub>	41 <sub>±1</sub>	30	50	35	M6	24	M5	G <sup>1</sup> / <sub>4</sub>	44.5 <sub>±1.5</sub>	46.5 <sub>±1</sub>	12	3	20
DRE-14-F05	67 <sub>±1.5</sub>	55 <sub>±1.5</sub>		50	35	M6				59.5 <sub>±1.5</sub>	61.5 <sub>±1</sub>			
DRE-26-F07	79 <sub>±2</sub>	67 <sub>±2</sub>		70	55	M8				71.5 <sub>±1.5</sub>	74.5 <sub>±1.5</sub>			
DRE-50-F07	94 <sub>±2</sub>	78 <sub>±2</sub>		70	55	M8				81.5 <sub>±2.5</sub>	84.5 <sub>±1.5</sub>		4	30
DRE-50-F10				102	70	M10								
DRE-77-F10	100 <sub>±2</sub>	90 <sub>±2</sub>		102	70	M10				94 <sub>±3</sub>	98 <sub>±2</sub>		4	30
DRE-77-F12				125	85	M12								
DRE-100-F12				114 <sub>±2.5</sub>	102 <sub>±2</sub>	125								
DRE-150-F14	140 <sub>±3</sub>	136 <sub>±2.5</sub>		140	100	M16				137 <sub>±3</sub>	137 <sub>±3</sub>			
DRE-225-F14				140	100	M16				137	147 <sub>±3</sub>		4	30
DRE-375-F16				177 <sub>±3.5</sub>	175 <sub>±3.5</sub>	165				130	M20			
DRE-575-F16	210 <sub>±4</sub>	210 <sub>±4</sub>		165	130	M20				210 <sub>±4</sub>	210 <sub>±4</sub>		5	30
DRE-575-F25				254	200	M16								
DRE-880-F25				223.5 <sub>±4.5</sub>	223.5 <sub>±4.5</sub>	254								
DRE-880-F30	298	230	M20											

Size	H6	H7	L1 max.	L2	L3	L4 ±1	L5	T1	T2	T3 +1	T4	T5	≈ <sub>2</sub> H11
DRE-8-F05	24	12	215	80	-	25.5	16	8.8	8	17	6	4	14
DRE-14-F05			220	80		25.15							
DRE-26-F07			280	80	130	32.25		12.5		21			17
DRE-50-F07			365	80	130	46.85		13					
DRE-50-F10				130	16			25		16			
DRE-77-F10			430	130	-	54.5				16			30
DRE-77-F12								18					
DRE-100-F12			440	130	18	8		30		27			
DRE-150-F14			370	130	26	40		36					
DRE-225-F14			480	130	26	40		36					
DRE-375-F16			520	130	22	50		46					
DRE-575-F16			540	150	-	96.41		25		55			
DRE-575-F25								25					
DRE-880-F25			700	175	-	136		25		75			
DRE-880-F30								25					

# Copar quarter turn actuators DRE

Technical data

**FESTO**

Ordering data – Without adjustable end position			
Spring-force closing		Spring-force opening	
Part No.	Type	Part No.	Type
Size 8			
190017	DRE-8-F05-Q06-FS	190022	DRE-8-F05-Q06-FO
190018	DRE-8-F05-Q08-FS	190023	DRE-8-F05-Q08-FO
190019	DRE-8-F05-Q10-FS	190024	DRE-8-F05-Q10-FO
190020	DRE-8-F05-Q12-FS	190025	DRE-8-F05-Q12-FO
190021	DRE-8-F05-Q14-FS	190026	DRE-8-F05-Q14-FO
Size 14			
190057	DRE-14-F05-Q06-FS	190062	DRE-14-F05-Q06-FO
190058	DRE-14-F05-Q08-FS	190063	DRE-14-F05-Q08-FO
190059	DRE-14-F05-Q10-FS	190064	DRE-14-F05-Q10-FO
190060	DRE-14-F05-Q12-FS	190065	DRE-14-F05-Q12-FO
190061	DRE-14-F05-Q14-FS	190066	DRE-14-F05-Q14-FO
Size 26			
190097	DRE-26-F07-Q06-FS	190102	DRE-26-F07-Q06-FO
190098	DRE-26-F07-Q08-FS	190103	DRE-26-F07-Q08-FO
190099	DRE-26-F07-Q10-FS	190104	DRE-26-F07-Q10-FO
190100	DRE-26-F07-Q12-FS	190105	DRE-26-F07-Q12-FO
190101	DRE-26-F07-Q14-FS	190106	DRE-26-F07-Q14-FO



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary data see

→ 4

# Copar quarter turn actuators DRE

Technical data

Ordering data – Without adjustable end position			
Spring-force closing		Spring-force opening	
Part No.	Type	Part No.	Type
Size 50			
190137	DRE-50-F07-Q06-FS	190147	DRE-50-F07-Q06-FO
190138	DRE-50-F10-Q06-FS	190148	DRE-50-F10-Q06-FO
190139	DRE-50-F07-Q08-FS	190149	DRE-50-F07-Q08-FO
190140	DRE-50-F10-Q08-FS	190150	DRE-50-F10-Q08-FO
190141	DRE-50-F07-Q10-FS	190151	DRE-50-F07-Q10-FO
190142	DRE-50-F10-Q10-FS	190152	DRE-50-F10-Q10-FO
190143	DRE-50-F07-Q12-FS	190153	DRE-50-F07-Q12-FO
190144	DRE-50-F10-Q12-FS	190154	DRE-50-F10-Q12-FO
190145	DRE-50-F07-Q14-FS	190155	DRE-50-F07-Q14-FO
190146	DRE-50-F10-Q14-FS	190156	DRE-50-F10-Q14-FO
Size 77			
190217	DRE-77-F10-Q06-FS	190227	DRE-77-F10-Q06-FO
190218	DRE-77-F12-Q06-FS	190228	DRE-77-F12-Q06-FO
190219	DRE-77-F10-Q08-FS	190229	DRE-77-F10-Q08-FO
190220	DRE-77-F12-Q08-FS	190230	DRE-77-F12-Q08-FO
190221	DRE-77-F10-Q10-FS	190231	DRE-77-F10-Q10-FO
190222	DRE-77-F12-Q10-FS	190232	DRE-77-F12-Q10-FO
190223	DRE-77-F10-Q12-FS	190233	DRE-77-F10-Q12-FO
190224	DRE-77-F12-Q12-FS	190234	DRE-77-F12-Q12-FO
190225	DRE-77-F10-Q14-FS	190235	DRE-77-F10-Q14-FO
190226	DRE-77-F12-Q14-FS	190236	DRE-77-F12-Q14-FO
Size 100			
190297	DRE-100-F12-Q06-FS	190302	DRE-100-F12-Q06-FO
190298	DRE-100-F12-Q08-FS	190303	DRE-100-F12-Q08-FO
190299	DRE-100-F12-Q10-FS	190304	DRE-100-F12-Q10-FO
190300	DRE-100-F12-Q12-FS	190305	DRE-100-F12-Q12-FO
190301	DRE-100-F12-Q14-FS	190306	DRE-100-F12-Q14-FO
Size 150			
190338	DRE-150-F14-Q06-FS	190348	DRE-150-F14-Q06-FO
190340	DRE-150-F14-Q08-FS	190350	DRE-150-F14-Q08-FO
190342	DRE-150-F14-Q10-FS	190352	DRE-150-F14-Q10-FO
190344	DRE-150-F14-Q12-FS	190354	DRE-150-F14-Q12-FO
190346	DRE-150-F14-Q14-FS	190356	DRE-150-F14-Q14-FO



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary data see

→ 4

# Copar quarter turn actuators DRE

Technical data

FESTO

Ordering data – Without adjustable end position			
Spring-force closing		Spring-force opening	
Part No.	Type	Part No.	Type
<b>Size 225</b>			
190398	DRE-225-F14-Q06-FS	190408	DRE-225-F14-Q06-FO
190400	DRE-225-F14-Q08-FS	190410	DRE-225-F14-Q08-FO
190402	DRE-225-F14-Q10-FS	190412	DRE-225-F14-Q10-FO
190404	DRE-225-F14-Q12-FS	190414	DRE-225-F14-Q12-FO
190406	DRE-225-F14-Q14-FS	190416	DRE-225-F14-Q14-FO
<b>Size 375</b>			
190458	DRE-375-F16-Q06-FS	190468	DRE-375-F16-Q06-FO
190460	DRE-375-F16-Q08-FS	190470	DRE-375-F16-Q08-FO
190462	DRE-375-F16-Q10-FS	190472	DRE-375-F16-Q10-FO
190464	DRE-375-F16-Q12-FS	190474	DRE-375-F16-Q12-FO
190466	DRE-375-F16-Q14-FS	190476	DRE-375-F16-Q14-FO
<b>Size 575</b>			
190517	DRE-575-F16-Q06-FS	190527	DRE-575-F16-Q06-FO
190518	DRE-575-F25-Q06-FS	190528	DRE-575-F25-Q06-FO
190519	DRE-575-F16-Q09-FS	190529	DRE-575-F16-Q09-FO
190520	DRE-575-F25-Q09-FS	190530	DRE-575-F25-Q09-FO
190521	DRE-575-F16-Q12-FS	190531	DRE-575-F16-Q12-FO
190522	DRE-575-F25-Q12-FS	190532	DRE-575-F25-Q12-FO
190523	DRE-575-F16-Q15-FS	190533	DRE-575-F16-Q15-FO
190524	DRE-575-F25-Q15-FS	190534	DRE-575-F25-Q15-FO
190525	DRE-575-F16-Q18-FS	190535	DRE-575-F16-Q18-FO
190526	DRE-575-F25-Q18-FS	190536	DRE-575-F25-Q18-FO
<b>Size 880</b>			
189719	DRE-880-F25-Q06-FS	189729	DRE-880-F25-Q06-FO
189720	DRE-880-F30-Q06-FS	189730	DRE-880-F30-Q06-FO
189721	DRE-880-F25-Q08-FS	189731	DRE-880-F25-Q08-FO
189722	DRE-880-F30-Q08-FS	189732	DRE-880-F30-Q08-FO
189723	DRE-880-F25-Q10-FS	189733	DRE-880-F25-Q10-FO
189724	DRE-880-F30-Q10-FS	189734	DRE-880-F30-Q10-FO
189725	DRE-880-F25-Q12-FS	189735	DRE-880-F25-Q12-FO
189726	DRE-880-F30-Q12-FS	189736	DRE-880-F30-Q12-FO
189727	DRE-880-F25-Q14-FS	189737	DRE-880-F25-Q14-FO
189728	DRE-880-F30-Q14-FS	189738	DRE-880-F30-Q14-FO



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary data see

→ 4

# Copar quarter turn actuators DRE

Technical data

FESTO

Ordering data – With adjustable end position			
Spring-force closing		Spring-force opening	
Part No.	Type	Part No.	Typ
<b>Size 8</b>			
190027	DRE-8-F05-Q06-FS-O	190032	DRE-8-F05-Q06-FO-O
190028	DRE-8-F05-Q08-FS-O	190033	DRE-8-F05-Q08-FO-O
190029	DRE-8-F05-Q10-FS-O	190034	DRE-8-F05-Q10-FO-O
190030	DRE-8-F05-Q12-FS-O	190035	DRE-8-F05-Q12-FO-O
190031	DRE-8-F05-Q14-FS-O	190036	DRE-8-F05-Q14-FO-O
<b>Size 14</b>			
190067	DRE-14-F05-Q06-FS-O	190072	DRE-14-F05-Q06-FO-O
190068	DRE-14-F05-Q08-FS-O	190073	DRE-14-F05-Q08-FO-O
190069	DRE-14-F05-Q10-FS-O	190074	DRE-14-F05-Q10-FO-O
190070	DRE-14-F05-Q12-FS-O	190075	DRE-14-F05-Q12-FO-O
190071	DRE-14-F05-Q14-FS-O	190076	DRE-14-F05-Q14-FO-O
<b>Size 26</b>			
561881	DRE-26-F07-Q06-FS-O	561886	DRE-26-F07-Q06-FO-O
561882	DRE-26-F07-Q08-FS-O	561887	DRE-26-F07-Q08-FO-O
561883	DRE-26-F07-Q10-FS-O	561888	DRE-26-F07-Q10-FO-O
561884	DRE-26-F07-Q12-FS-O	561889	DRE-26-F07-Q12-FO-O
561885	DRE-26-F07-Q14-FS-O	561890	DRE-26-F07-Q14-FO-O
<b>Size 50</b>			
561901	DRE-50-F07-Q06-FS-O	561911	DRE-50-F07-Q06-FO-O
561902	DRE-50-F10-Q06-FS-O	561912	DRE-50-F10-Q06-FO-O
561903	DRE-50-F07-Q08-FS-O	561913	DRE-50-F07-Q08-FO-O
561904	DRE-50-F10-Q08-FS-O	561914	DRE-50-F10-Q08-FO-O
561905	DRE-50-F07-Q10-FS-O	561915	DRE-50-F07-Q10-FO-O
561906	DRE-50-F10-Q10-FS-O	561916	DRE-50-F10-Q10-FO-O
561907	DRE-50-F07-Q12-FS-O	561917	DRE-50-F07-Q12-FO-O
561908	DRE-50-F10-Q12-FS-O	561918	DRE-50-F10-Q12-FO-O
561909	DRE-50-F07-Q14-FS-O	561919	DRE-50-F07-Q14-FO-O
561910	DRE-50-F10-Q14-FS-O	561920	DRE-50-F10-Q14-FO-O
<b>Size 77</b>			
561941	DRE-77-F10-Q06-FS-O	561951	DRE-77-F10-Q06-FO-O
561942	DRE-77-F12-Q06-FS-O	561952	DRE-77-F12-Q06-FO-O
561943	DRE-77-F10-Q08-FS-O	561953	DRE-77-F10-Q08-FO-O
561944	DRE-77-F12-Q08-FS-O	561954	DRE-77-F12-Q08-FO-O
561945	DRE-77-F10-Q10-FS-O	561955	DRE-77-F10-Q10-FO-O
561946	DRE-77-F12-Q10-FS-O	561956	DRE-77-F12-Q10-FO-O
561947	DRE-77-F10-Q12-FS-O	561957	DRE-77-F10-Q12-FO-O
561948	DRE-77-F12-Q12-FS-O	561958	DRE-77-F12-Q12-FO-O
561949	DRE-77-F10-Q14-FS-O	561959	DRE-77-F10-Q14-FO-O
561950	DRE-77-F12-Q14-FS-O	561960	DRE-77-F12-Q14-FO-O
<b>Size 100</b>			
561981	DRE-100-F12-Q06-FS-O	561986	DRE-100-F12-Q06-FO-O
561982	DRE-100-F12-Q08-FS-O	561987	DRE-100-F12-Q08-FO-O
561983	DRE-100-F12-Q10-FS-O	561988	DRE-100-F12-Q10-FO-O
561984	DRE-100-F12-Q12-FS-O	561989	DRE-100-F12-Q12-FO-O
561985	DRE-100-F12-Q14-FS-O	561990	DRE-100-F12-Q14-FO-O



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary data see

→ 4

# Copar quarter turn actuators DRE

Technical data

FESTO

Ordering data – Corrosion resistant			
Spring-force closing		Spring-force opening	
Part No.	Type	Part No.	Type
Size 8			
190047	DRE-8-F05-Q06-FS-C	190052	DRE-8-F05-Q06-FO-C
190048	DRE-8-F05-Q08-FS-C	190053	DRE-8-F05-Q08-FO-C
190049	DRE-8-F05-Q10-FS-C	190054	DRE-8-F05-Q10-FO-C
190050	DRE-8-F05-Q12-FS-C	190055	DRE-8-F05-Q12-FO-C
190051	DRE-8-F05-Q14-FS-C	190056	DRE-8-F05-Q14-FO-C
Size 14			
190087	DRE-14-F05-Q06-FS-C	190092	DRE-14-F05-Q06-FO-C
190088	DRE-14-F05-Q08-FS-C	190093	DRE-14-F05-Q08-FO-C
190089	DRE-14-F05-Q10-FS-C	190094	DRE-14-F05-Q10-FO-C
190090	DRE-14-F05-Q12-FS-C	190095	DRE-14-F05-Q12-FO-C
190091	DRE-14-F05-Q14-FS-C	190096	DRE-14-F05-Q14-FO-C
Size 26			
190127	DRE-26-F07-Q06-FS-C	190132	DRE-26-F07-Q06-FO-C
190128	DRE-26-F07-Q08-FS-C	190133	DRE-26-F07-Q08-FO-C
190129	DRE-26-F07-Q10-FS-C	190134	DRE-26-F07-Q10-FO-C
190130	DRE-26-F07-Q12-FS-C	190135	DRE-26-F07-Q12-FO-C
190131	DRE-26-F07-Q14-FS-C	190136	DRE-26-F07-Q14-FO-C

 Note

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→ 4



# Copar quarter turn actuators DRE

Technical data

FESTO

Ordering data – Corrosion resistant			
Spring-force closing		Spring-force opening	
Part No.	Type	Part No.	Type
Size 50			
190197	DRE-50-F07-Q06-FS-C	190207	DRE-50-F07-Q06-FO-C
190198	DRE-50-F10-Q06-FS-C	190208	DRE-50-F10-Q06-FO-C
190199	DRE-50-F07-Q08-FS-C	190209	DRE-50-F07-Q08-FO-C
190200	DRE-50-F10-Q08-FS-C	190210	DRE-50-F10-Q08-FO-C
190201	DRE-50-F07-Q10-FS-C	190211	DRE-50-F07-Q10-FO-C
190202	DRE-50-F10-Q10-FS-C	190212	DRE-50-F10-Q10-FO-C
190203	DRE-50-F07-Q12-FS-C	190213	DRE-50-F07-Q12-FO-C
190204	DRE-50-F10-Q12-FS-C	190214	DRE-50-F10-Q12-FO-C
190205	DRE-50-F07-Q14-FS-C	190215	DRE-50-F07-Q14-FO-C
190206	DRE-50-F10-Q14-FS-C	190216	DRE-50-F10-Q14-FO-C
Size 77			
190277	DRE-77-F10-Q06-FS-C	190287	DRE-77-F10-Q06-FO-C
190278	DRE-77-F12-Q06-FS-C	190288	DRE-77-F12-Q06-FO-C
190279	DRE-77-F10-Q08-FS-C	190289	DRE-77-F10-Q08-FO-C
190280	DRE-77-F12-Q08-FS-C	190290	DRE-77-F12-Q08-FO-C
190281	DRE-77-F10-Q10-FS-C	190291	DRE-77-F10-Q10-FO-C
190282	DRE-77-F12-Q10-FS-C	190292	DRE-77-F12-Q10-FO-C
190283	DRE-77-F10-Q12-FS-C	190293	DRE-77-F10-Q12-FO-C
190284	DRE-77-F12-Q12-FS-C	190294	DRE-77-F12-Q12-FO-C
190285	DRE-77-F10-Q14-FS-C	190295	DRE-77-F10-Q14-FO-C
190286	DRE-77-F12-Q14-FS-C	190296	DRE-77-F12-Q14-FO-C
Size 100			
190327	DRE-100-F12-Q06-FS-C	190332	DRE-100-F12-Q06-FO-C
190328	DRE-100-F12-Q08-FS-C	190333	DRE-100-F12-Q08-FO-C
190329	DRE-100-F12-Q10-FS-C	190334	DRE-100-F12-Q10-FO-C
190330	DRE-100-F12-Q12-FS-C	190335	DRE-100-F12-Q12-FO-C
190331	DRE-100-F12-Q14-FS-C	190336	DRE-100-F12-Q14-FO-C
Size 150			
190378	DRE-150-F14-Q06-FS-C	190388	DRE-150-F14-Q06-FO-C
190380	DRE-150-F14-Q08-FS-C	190390	DRE-150-F14-Q08-FO-C
190382	DRE-150-F14-Q10-FS-C	190392	DRE-150-F14-Q10-FO-C
190384	DRE-150-F14-Q12-FS-C	190394	DRE-150-F14-Q12-FO-C
190386	DRE-150-F14-Q14-FS-C	190396	DRE-150-F14-Q14-FO-C



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary data see

→ 4

# Copar quarter turn actuators DRE

Technical data

FESTO

Ordering data – Corrosion resistant			
Spring-force closing		Spring-force opening	
Part No.	Type	Part No.	Type
Size 225			
190438	DRE-225-F14-Q06-FS-C	190448	DRE-225-F14-Q06-FO-C
190440	DRE-225-F14-Q08-FS-C	190450	DRE-225-F14-Q08-FO-C
190442	DRE-225-F14-Q10-FS-C	190452	DRE-225-F14-Q10-FO-C
190444	DRE-225-F14-Q12-FS-C	190454	DRE-225-F14-Q12-FO-C
190446	DRE-225-F14-Q14-FS-C	190456	DRE-225-F14-Q14-FO-C
Size 375			
190498	DRE-375-F16-Q06-FS-C	190508	DRE-375-F16-Q06-FO-C
190500	DRE-375-F16-Q08-FS-C	190510	DRE-375-F16-Q08-FO-C
190502	DRE-375-F16-Q10-FS-C	190512	DRE-375-F16-Q10-FO-C
190504	DRE-375-F16-Q12-FS-C	190514	DRE-375-F16-Q12-FO-C
190506	DRE-375-F16-Q14-FS-C	190516	DRE-375-F16-Q14-FO-C
Size 575			
189699	DRE-575-F16-Q06-FS-C	189709	DRE-575-F16-Q06-FO-C
189700	DRE-575-F25-Q06-FS-C	189710	DRE-575-F25-Q06-FO-C
189701	DRE-575-F16-Q08-FS-C	189711	DRE-575-F16-Q09-FO-C
189702	DRE-575-F25-Q08-FS-C	189712	DRE-575-F25-Q09-FO-C
189703	DRE-575-F16-Q10-FS-C	189713	DRE-575-F16-Q12-FO-C
189704	DRE-575-F25-Q10-FS-C	189714	DRE-575-F25-Q12-FS-C
189705	DRE-575-F16-Q12-FS-C	189715	DRE-575-F16-Q15-FS-C
189706	DRE-575-F25-Q12-FS-C	189716	DRE-575-F25-Q15-FO-C
189707	DRE-575-F16-Q14-FS-C	189717	DRE-575-F16-Q18-FO-C
189708	DRE-575-F25-Q14-FS-C	189718	DRE-575-F25-Q18-FO-C
Size 880			
189759	DRE-880-F25-Q06-FS-C	189850	DRE-880-F25-Q06-FO-C
189760	DRE-880-F30-Q06-FS-C	189851	DRE-880-F30-Q06-FO-C
189761	DRE-880-F25-Q08-FS-C	189852	DRE-880-F25-Q08-FO-C
189762	DRE-880-F30-Q08-FS-C	189853	DRE-880-F30-Q08-FO-C
189844	DRE-880-F25-Q10-FS-C	189854	DRE-880-F25-Q10-FO-C
189845	DRE-880-F30-Q10-FS-C	189855	DRE-880-F30-Q10-FO-C
189846	DRE-880-F25-Q12-FS-C	189856	DRE-880-F25-Q12-FO-C
189847	DRE-880-F30-Q12-FS-C	189857	DRE-880-F30-Q12-FO-C
189848	DRE-880-F25-Q14-FS-C	189858	DRE-880-F25-Q14-FO-C
189849	DRE-880-F30-Q14-FS-C	189859	DRE-880-F30-Q14-FO-C



Note

Should a quarter turn actuator be required with options that exceed these, then the appropriate order code needs to be established. There is no part number for this order code; for the necessary data see

→ 4

# Copar quarter turn actuators DRD/DRE

Accessories

## Stop DADP

Based/complies with standard VDI/VDE 3845 (NAMUR)

Scope of delivery:

1 stop

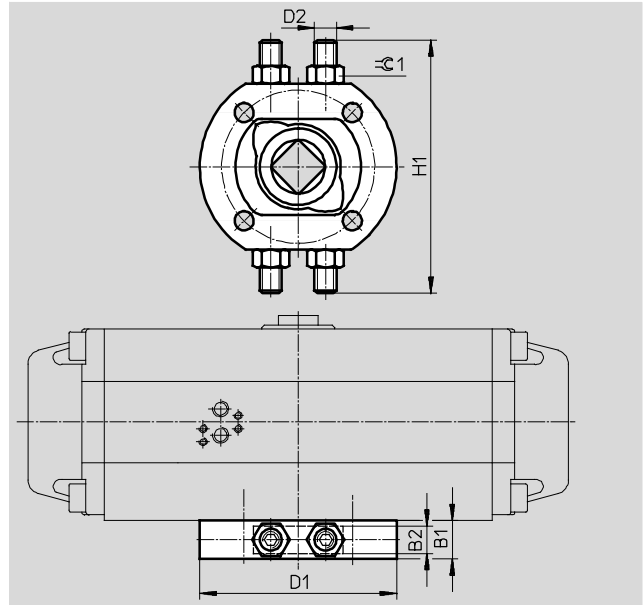
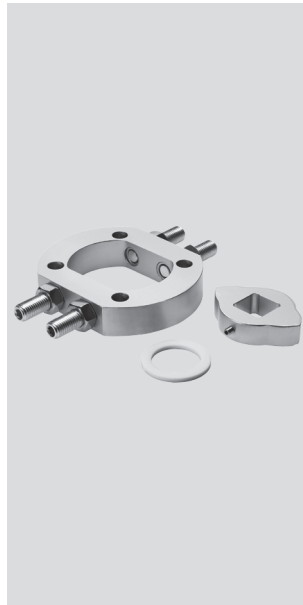
Material:

Housing, plate: Nickel plated steel

Nut, screws: Galvanised steel

Bearing: Polyacetal

Free of copper, PTFE and silicone



Dimensions and ordering data											
Size	Flange hole pattern	B1	B2	D1 ∅	D2	H1	CRC <sup>1)</sup>	CRC <sup>1)</sup>	Weight [g]	Part No.	Type
150, 225	F14	35	25	180	M20	232	30	2	5,000	539930	DADP-F14
375, 575	F16	45	35	200	M24	256	36	2	8,000	539931	DADP-F16
575, 880	F25	60	50	300	M30	344	46	2	23,500	539932	DADP-F25

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Ordering data – Adapter kits for mounting the sensor boxes SRBP, SRAP					
	Size	Dimensions [mm]	CRC <sup>1)</sup>	Part No.	Type
	DRD/DRE-8-F05	20x30x80	3	568275	DASB-P1-HA-SB
	DRD/DRE-14-F05				
	DRD/DRE-26-F07				
	DRD/DRE-50-F07				
	DRD/DRE-50-F10	30x30x130		572419	DASB-P1-HC-SB
	DRD/DRE-77-F10				
	DRD/DRE-77-F12				
	DRD/DRE-100-F12				
	DRD/DRE-150-F14				
	DRD/DRE-225-F14				
	DRD/DRE-375-F16				

1) Corrosion resistance class 3 according to Festo standard 940 070  
Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface