

The perfect torque limiting clutch for

Food Industry
Chemical Industry
Environmental Technology
Process Engineering



Number 1
for
torque limiting
clutches

EAS[®]-Compact[®]-R

Rustproof torque limiting clutches

- *Stainless steel design*
- *Immediate disengagement in case of an overload*
- *Continuous backlash-free torque transmission*
- *Short delivery times*

mayr[®]

your reliable partner

www.mayr.de

P.49A.V02.GB

Mechanical safety clutches are the only reliable means to maximise the productivity and economy of machines and equipment. These clutches avoid machine damage in case of breakdown and collisions and, therefore, costly repairs and downtime. In the food industry, chemical industry and process engineering, where wash downs, cleaning liquids and aggressive media belong to the day-to-day conditions, and only safety clutches with high-quality corrosion protection survive without damage over a long time period.

Standard safety clutches are usually not suitable for such harsh applications and conditions. **mayr**[®] Antriebstechnik offers various versions of torque limiting clutches which are optimally adapted for such applications.

The range goes from open designs made of stainless steels and sealed, rustproof clutches to complete units with standard flanges ready to be mounted for integration between motor and gearboxes (see catalogue EAS[®]-HTL Housed Torque Limiter).

EAS[®]-Compact[®]-R Completely made of stainless steel ¹⁾

We manufacture the EAS[®]-Compact[®] in stainless steel for your production requirements.

- Identically with the EAS[®]-Compact[®] standard



EAS[®]-Compact[®]-RA sealed Completely rustproof with seal

- No penetration of cleaning liquids or other media, no discharge of grease
- Completely closed due to rustproof seal



- Synchronous function
- Automatic re-engagement
- Mechanical disengagement of input and output in case of an overload
 - Precise torque limitation with high disengagement and repetitive accuracies
 - Permanent backlash-free torque transmission
 - Low mass moment of inertia due to compact design
 - Easy torque adjustment
- Long service life due to hardened functional components
- Use of food industry approved lubricants

¹⁾ Cup spring with high-quality corrosion protection

Order example:

	Size	Type	Bore Ø d	Bore Ø d ₁	With limit switch
Order number:		4 9 A . . . 5 . .			

0 - 3 →

- * Medium torque range 5
- * High torque range 6
- * Maximum torque range** 7
- Hub with cone bushing 1
- Hub with keyway 2

* See technical data, limiting torque for overload M_G
** not possible with cone bushing design

Example: Order number 1/49A.625.C/22/25/ with limit switch 055.002.5

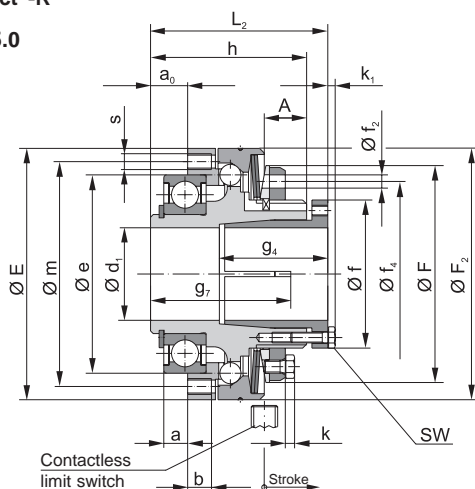
← Possible versions see cat. EAS[®]-Compact[®]

- ← According to size
- ← 0 Not sealed
- ← C Sealed

Rustproof torque limiting clutches

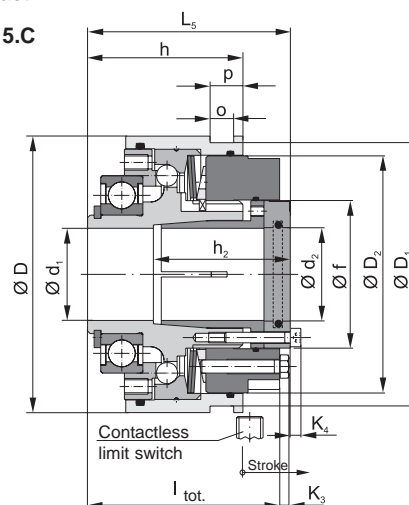
EAS[®]-Compact[®]-R

Type 49A.₆⁵15.0



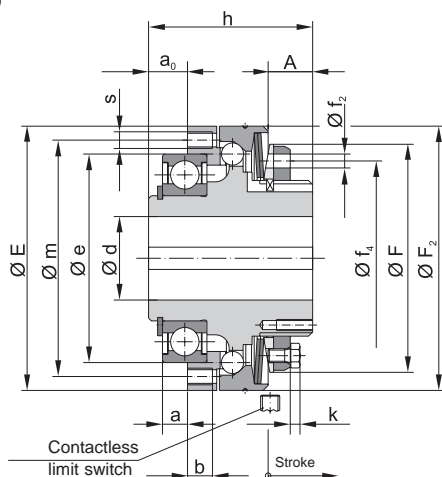
EAS[®]-Compact[®]-RA

Type 49A.₆⁵15.C



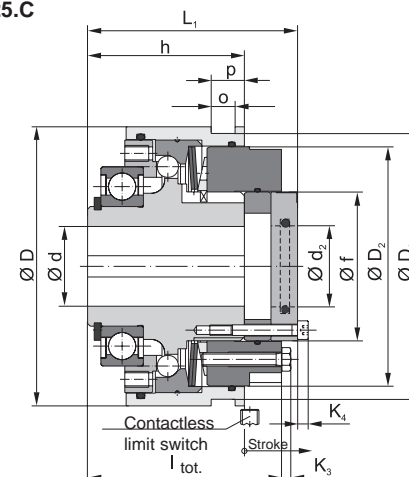
EAS[®]-Compact[®]-R

Type 49A.₂₅.0



EAS[®]-Compact[®]-RA

Type 49A.₂₅.C



Technical data and dimensions

Size	Limiting torques for overload M _G			Bore ø d [mm]	Bore ø d ₁ [mm]	Bore ø d ₂ [mm]	Max. speed n _{max} [rpm]	Stroke of the thrust washer in the event of an overload [mm]	A	a ²⁾	a ₀	b
	Type 49A.525. ₁ [Nm]	Type 49A.625. ₁ [Nm]	Type 49A.725. ₁ [Nm]									
0	10 – 25	20 – 50	40 – 100	15 – 25	15 – 25	Bore acc. to customer's request. As standard without bore.	3000	1,5	13,5	7	11	7
1	20 – 50	40 – 100	80 – 200	22 – 30	22 – 35		2500	1,8	16	9	14	9
2	40 – 100	80 – 200	160 – 400	28 – 40	32 – 45		2000	2,0	17	10	16	10
3	80 – 175	160 – 350	320 – 700	32 – 50	35 – 55		1200	2,2	20,5	10	18	12

Size	D	D ₁	D ₂	E	e _{h5} ³⁾	F	F ₂	f	f ₂	f ₄	h	K ₃	K ₄	k	k ₁	L ₁	L ₂ ⁴⁾	L ₅ ⁴⁾	I _{tot.}	m	o	p	s ⁵⁾	SW
0	90	85	75	80	62	67	80	44	5	55	48	2,8	4	3,5	2,8	64	56	64	dep. on torque set.	71	9	10,5	8xM5	7
1	105	100	90	95	75	82	95	56	5	70	59	3,5	4	3,5	2,8	79	67	77		85	9	12,5	8xM6	7
2	120	115	105	110	90	97	110	70	6	84	64	4	5	4	3,5	84	73	83		100	9	13	8xM6	8
3	140	135	125	130	100	117	130	84	6	100	75	4	6	4	4	99	86	98		116	9	14	8xM8	10

1) Maximum torque range only keyway hubs.

2) Mounting tolerance + 0,1

3) Customer side tolerance H7

4) Dimensions in un-tightened condition (in tightened condition shorter).

5) The selected quality and the tightening torque of the fixing screws must ensure that the adjusted limit torque is transmitted with adequate safety and security.

We reserve the right to make dimensional and design alterations.

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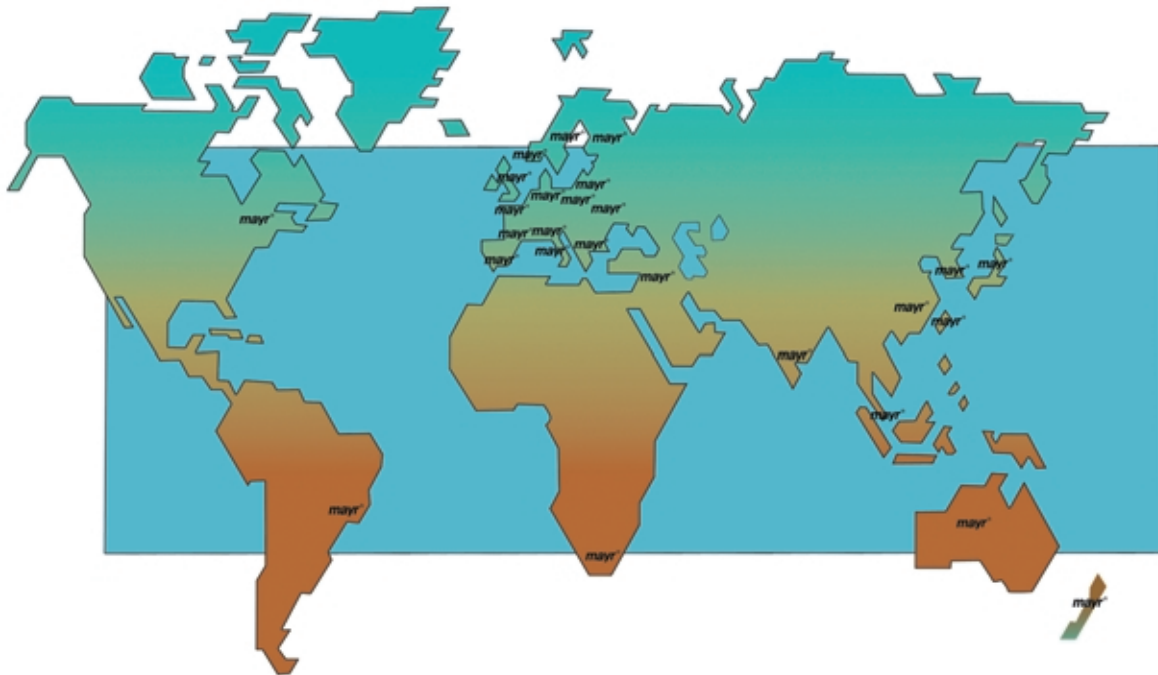
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our web site to be
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agent.