

# The perfect torque limiting clutch for

*Food Industry  
Chemical Industry  
Environmental Technology  
Process Engineering*



**Number 1**  
for  
torque limiting  
clutches

## *Rustproof torque limiting clutches*

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

# Rustproof torque limiting clutches

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 <sup>1)</sup>



<sup>1)</sup> Cup spring with high-quality corrosion protection

## EAS®-Compact®-RA sealed Completely rustproof with seal



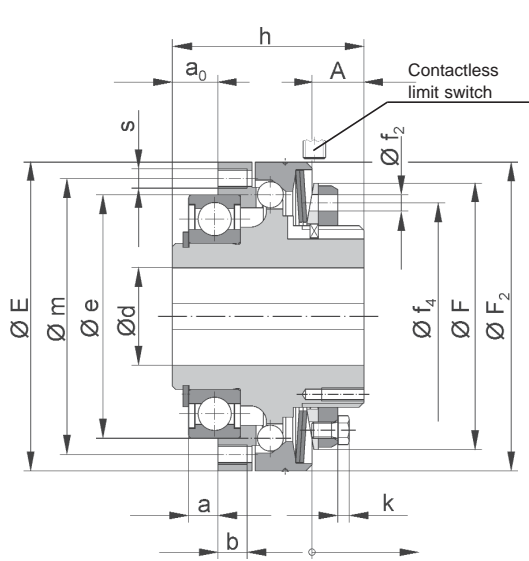
### We manufacture the EAS®-Compact® in stainless steel for your production requirements.

- Identically with the EAS®-Compact® standard
- 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

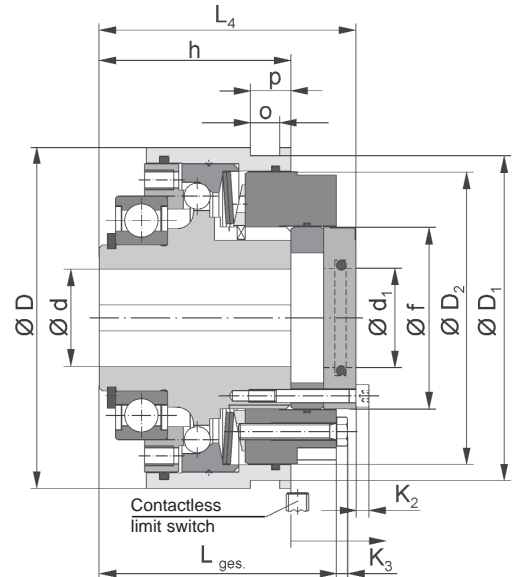
- No penetration of cleaning liquids or other media, no discharge of grease
- Completely closed due to rustproof seal
- Synchronous function
- Automatic re-engagement
- Mechanical disengagement of input and output in case of an overload
- Precise torque limitation with high disengagement and repetitive accuracies
- Permanent backlash-free torque transmission
- Low mass moment of inertia due to compact design
- Long service life due to hardened functional components
- Use of lubricants with approval for food industry



# Rustproof torque limiting clutches



EAS®-Compact®-R  
Type 49A..25.0



Dependent on cup spring layer and adjustment

EAS®-Compact®-RA  
Type 49A..25.C

## Technical data and dimensions

1) Size	Limiting torques for overload $M_G^{1)}$			Bore <sup>2)</sup> $\varnothing d$ [mm]	Bore $\varnothing d_1$	Max. speed $n_{max}$ [rpm]	Stroke of the thrust washer in the event of an overload [mm]	A	$a^3)$	$a_0$	b
	Type 49A.52..0 [Nm]	Type 49A.62..0 [Nm]	Type 49A.72..0 [Nm]								
0	10 – 25	20 – 50	40 – 100	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		2500	1,8	16	9	14	9
2	40 – 100	80 – 200	160 – 400	28 – 40		2000	2,0	17	10	16	10
3	70 – 175	140 – 350	280 – 700	32 – 50		1200	2,2	20,5	10	18	12

Size	D	D <sub>1</sub>	D <sub>2</sub>	E	$e_{h5^4)}$	F	F <sub>2</sub>	f	f <sub>2</sub>	f <sub>4</sub>	h	K <sub>2</sub>	K <sub>3</sub>	k	L <sub>4</sub>	m	o	p	S
0	90	85	75	80	62	67	80	44	5	55	48	4	2,8	3,5	64	71	9	10,5	8xM5
1	105	100	90	95	75	82	95	56	5	70	59	4	3,5	3,5	79	85	9	12,5	8xM6
2	120	115	105	110	90	97	110	70	6	84	64	5	4	4	84	100	9	13	8xM6 <sup>5)</sup>
3	140	135	125	130	100	117	130	84	7	100	75	6	4	4	99	116	9	14	8xM8 <sup>5)</sup>

- 1) Other sizes for lower and higher torques on request.
- 2) Smaller bores for lower torques and larger bores on request.
- 3) Mounting tolerance + 0,1.
- 4) Customer side tolerance H7.
- 5) Screws quality 12.9 must be used for mounting the drive element when operating in the max. torque range.

We reserve the right to make dimensional and design alterations.

## Order example:

To be included when ordering, please state:	Size	Type	Bore $\varnothing d$	Bore $\varnothing d_1$	With limit switch
Order number:		49A..25..			

- 0 - 3 →
- \* Medium torque range ..... 5 →
- \* High torque range ..... 6 →
- \* Maximum torque range ..... 7 →
- \* See technical data, limiting torque for overload  $M_G$
- ← Possible versions see cat. EAS®-Compact®
- ← According to size
- ← 0 Not sealed
- ← C Sealed

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