# EAS®-Compact®-R

## **Rustproof Torque Limiting Clutches**



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



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## Rustproof torque limiting clutches

Mechanical torque limiting clutches are the only reliable means of maximising the productivity and economic efficiency of machines and systems. These clutches prevent damage in case of malfunctions and collisions and therefore also expensive downtimes and repairs.

In the food industry, the chemical industry and in process engineering, wet conditions, cleaning liquids and aggressive media are part of the everyday ambient conditions, which only torque limiting clutches with high-quality corrosion protection are able to withstand without any damage over long periods of time.

Standard torque limiting clutches are normally unsuitable for such application fields.

mayr® power transmission offers various types of clutches. which are optimally suited for such application fields.

The range includes open designs made of stainless steels, sealed, rustproof clutches, as well as complete, ready-tomount units with standard flanges for integration between the motor and the gearbox (see brochure EAS®-HTL Housed Torque Limiter).

## EAS®-Compact®-R

Completely made of rustproof stainless steel \*

We manufacture the EAS®-Compact® in rustproof design for your series requirements.

 Identical in construction to the EAS®-Compact® standard version

## EAS®-Compact®-RA sealed

## Completely made of rustproof stainless steel with seal \*

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



- · Synchronous function
- Automatic re-engagement
- Mechanical separation of input and output in case of overload
- Exact torque limitation due to high disengagement and repeat accuracies
  - · Permanent backlash-free torque transmission
  - Low mass moment of inertia due to compact design
    - · Easy torque adjustment
- Long service lifetime due to hardened functional components
- Application of lubricants approved for the food industry



#### **Order Number**

	/ 4	9	Α			5			/ _	/ _
Sizes 0 to 3	Torque ramedium high very high			5 6 7	1 v b	lub vith cone oushing vith eyway	0 C	<b>Design</b> Not sealed Sealed	Bore Hub Ø d <sup>H7</sup> Ø d <sub>P</sub> <sup>H7</sup>	With limit switch for possible designs, see catalogue EAS®-Compact® K.490.VGB

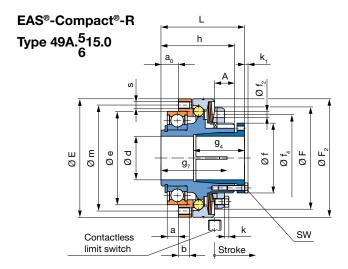
Example: Order number 1 / 49A.625.C / 22 / 25 / with limit switch 055.002.5

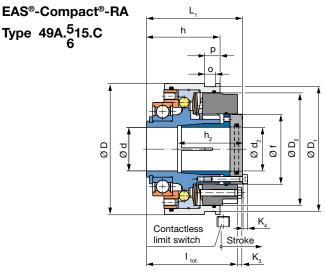
- \* Cup springs with high quality corrosion protection.
- \*\* See Technical Data, limit torque for overload M<sub>a</sub>
- \*\*\* Not possible with cone bushing design.

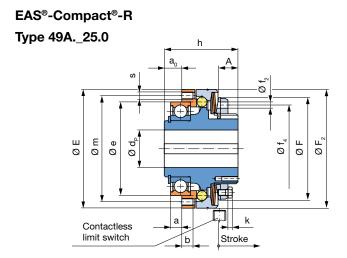
Technical Data			Size				
recimical Data				0	1	2	3
	Type 49A.5_5	M <sub>G</sub>	[Nm]	10 - 25	20 - 50	40 - 100	70 - 175
Limit torques for overload 1)	Type 49A.6_5	M <sub>G</sub>	[Nm]	20 - 50	40 - 100	80 - 200	140 - 350
	Type 49A.725 2)	M <sub>G</sub>	[Nm]	40 - 100	80 - 200	160 - 400	280 - 700
Max. speed		n <sub>max</sub>	[rpm]	3000	2500	2000	1200
Thrust washer stroke on overload [mm]			1,5	1,8	2,0	2,2	

## **Rustproof torque limiting clutches**









EAS®-Compact®-RA Type 49A25.C	h p o
Q D D D D D D D D D D D D D D D D D D D	
•	Contactless limit switch Stroke

<b>Dimensions</b>	Size				
[mm]	0	1	2	3	
Α	13,5	16	17	20,5	
a <sup>5)</sup>	7	9	10	10	
a <sub>o</sub>		11	14	16	18
b				10	12
D		90	105	120	140
D <sub>1</sub>		85	100	115	135
$D_{_{\!2}}$		75	90	105	125
E		80	95	110	130
e <sub>h5</sub> 6)		62	75	90	100
F	67	82	97	117	
F <sub>2</sub>		80	95	110	130
f				70	84
f <sub>2</sub>	f,			6	7
f <sub>4</sub>		55	70	84	100
Min. shaft	g <sub>4</sub>	39	42	48	53
	<b>9</b> <sub>7</sub>	36	48	49	62
length	h <sub>2</sub>	47	52	63	65
h		48	59	64	75
K <sub>3</sub>	2,8	3,5	4	4	
K <sub>4</sub>	4	4	5	6	
k	2,8	3,5	4,0	4,0	
k <sub>1</sub>				3,5	4,0
L 7)	56	67	73	86	
L <sub>1</sub> 7)		64	77	88	98
L <sub>2</sub>		64	79	84	99

Dimensions	Size					
[mm]	0	1	2	3		
l tot.	Dependent on torque setting					
m	71	85	100	116		
0	9	9	9	9		
р	10,5	12,5	13	14		
S	8 x M5	8 x M6	8 x M6	8 x M8		
F						

For clutch operation from "Torque range high (Type 49A.6\_5.\_)", screws quality class 12.9 must be used for mounting the drive element.

Bores [mm]		Size					
pores filli	'',	0	1	2	3		
d <sup>3) 4)</sup>	d <sub>min</sub>	15	22	32	35		
a sy sy	d <sub>max</sub>	25	35	45	55		
d 10)	d <sub>P min</sub> 8)	15	22	28	32		
a <sub>P</sub> ™	d <sub>P max</sub> 9)	25	30	40	50		
$d_2$		Acc. to customer's request - As for standard, without bore.					

We reserve the right to make dimensional and constructional alterations.

- Further sizes for smaller and larger torques available on request.
- Very high torque range only for hubs with keyway.
- 3)
- Shaft tolerance up to Ø 38 her over Ø 38 he. Transmittable torques with smaller bores available on request.
- Mounting tolerance + 0,1

SW

- Tolerance user-side H7
- Dimensions in untightened condition (shorter in tightened condition).

  Smaller bores for low torques available on request.
- Larger bores available on request.
- 10) The position of the keyway to the mounting bore "s" in the pressure flange is not defined. Defined position available on request.

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You can find the complete address for the representative responsible for your area under www.mayr.com in the internet.



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