

# Housed Torque Limiter

*Ball/detent overload  
clutch enclosed in  
IEC + NEMA  
flanged housing*



## EAS<sup>®</sup> -HTL

*Overload Protection for machinery and components*

- *zero backlash torque limiter*
- *integrated limit switch*
- *versatile functions*

[www.mayr.de](http://www.mayr.de)

P.HTL.V06.GB

**mayr**<sup>®</sup>  
power  
transmission

**Manufacturer's declaration**

The product is to be seen as an option or component for installation into machines or equipment according to the machinery directive 98/37/EC. The machinery (product) must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the applicable EC-directives.

**Safety regulations**



**Danger!**

- If the EAS<sup>®</sup>-clutches have been modified or reconverted.
- If the relevant standard of the safety or installation conditions are not observed.

**Necessary protective measures to be undertaken by the user**

- Cover of moving parts to prevent personal injury as squeezing and seizing.
- Only qualified and well-trained specialists should work on the units to avoid any personal injury or damage to machinery.**

**With these safety notes no claim on completeness is raised!**

**Integrated Limit Switch**

- PNP-normally open: Signals drive off in case of an overload.
- Assembled and adjusted at the factory.

**Sturdy Housing**

The sturdy steel housing allows overhung loads.

**Short overall length**

The extremely short overall length allows retrofitting into existing designs and equipment.

**IEC and NEMA**

Standard IEC/B5 and NEMA dimensions for connecting flanges and shaft diameters. Allows retrofitting to existing drives.

**Versatile functions**

Ratchetting, synchronous or overload clutch versions.

**Backlash-free torque transmission**

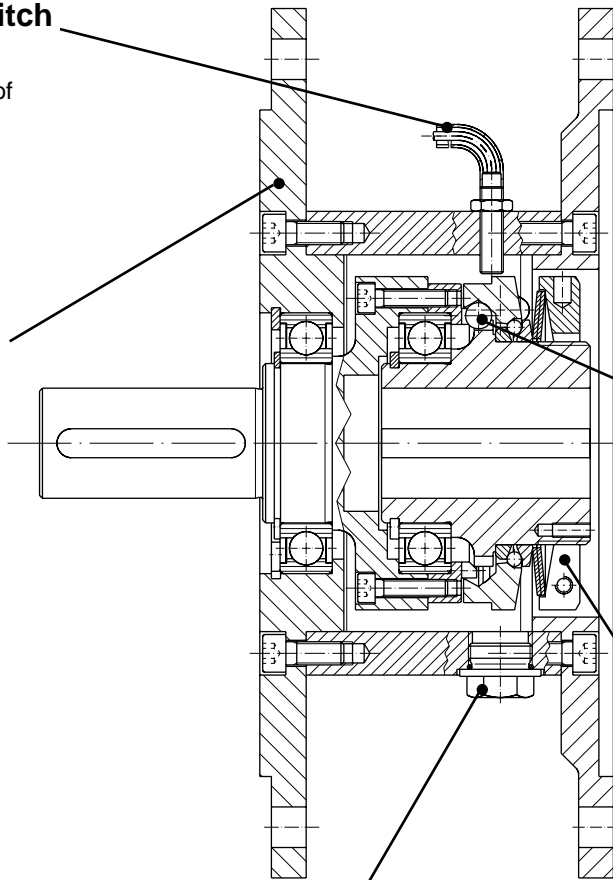
Backlash-free torque transmission due to the patented EAS<sup>®</sup>-NC and EAS<sup>®</sup>-Compact<sup>®</sup> principle.

**Torque adjustment**

The torque is factory adjusted to customer specification. The torque limiting clutch uses a percentage scale graduated adjusting nut.

**Hole for re-engagement**

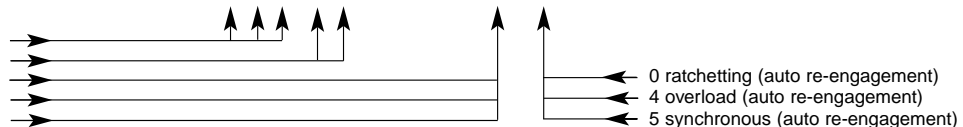
Only with the overload clutch version.



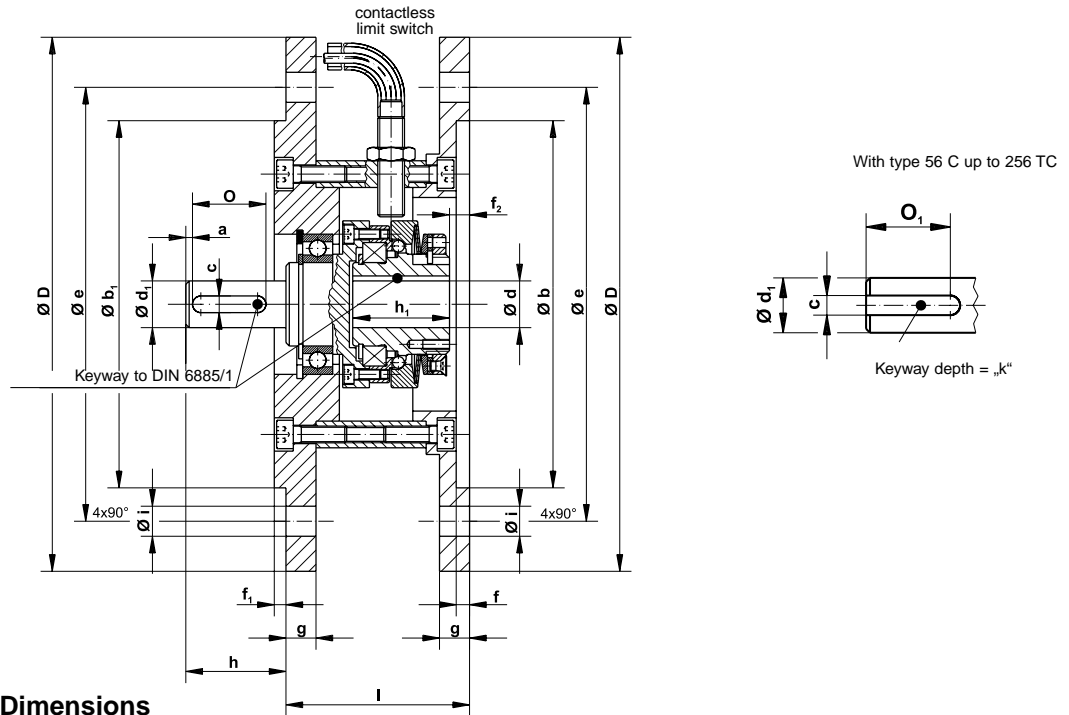
**Order example:**

To be included when ordering, please state:	Size	Type
Order number:	--- -	4 <sup>5</sup> <sub>90</sub> . 2 .0

motor size  
clutch size  
low torque range 5  
high torque range 6  
max. torque range 7



- ← 0 ratchetting (auto re-engagement)
- ← 4 overload (auto re-engagement)
- ← 5 synchronous (auto re-engagement)



Technical data and Dimensions

Size/Type	Limiting torques M min-max [Nm]			Speed n rpm		Motor size		Flange size	Type					
	4_0.52_0	4_0.62_0	4_0.72_0	4_0.25_0	4_0.24.0	IEC	NEMA		4_0.25.0			4_0.24.0		
	f <sub>2</sub>	h <sub>1</sub>	l	f <sub>2</sub>	h <sub>1</sub>	l								
71-02/450_2_0	2 – 5	5 – 10	6 – 15	4000	–	71	–	A 160	6	29	55	–	–	–
80-01/490_2_0	5 – 12,5	10 – 20	20 – 50	4000	8000	80	–	A 200	11	40	78	6	45	78
90-0/490_2_0	10 – 25	20 – 50	40 – 100	3000	7000	90	–	A 200	12	48	90	7	55	92
100-1/490_2_0	20 – 50	40 – 100	80 – 200	2500	6000	100	–	A 250	12	59	110	12	65	116
132-2/490_2_0	40 – 100	80 – 200	160 – 400	2000	5000	132	–	A 300	8	64	110	8	72	118
160-3/490_2_0	80 – 175	160 – 350	320 – 700 <sup>1)</sup>	1500 <sup>1)</sup>	4000	160	–	A 350	15	75	124	29	82	139
180-3/490_2_0	80 – 175	160 – 350	320 – 700 <sup>1)</sup>	1500 <sup>1)</sup>	4000	180	–	A 350	15	75	124	23	82	139
56C-01/490_2_0	5 – 12,5	10 – 20	20 – 50	4000	8000	–	56 C	–	0.433"	1.57"	3.07"	0.236"	1.77"	3.07"
143TC-01/490_2_0	5 – 12,5	10 – 25	20 – 50	4000	8000	–	143 TC	–	0.433"	1.57"	3.07"	0.236"	1.77"	3.07"
184 TC-1/490_2_0	20 – 50	40 – 100	80 – 200	2500	6000	–	184 TC	–	0.271"	2.32"	4.42"	0.271"	2.56"	4.65"
215 TC-2/490_2_0	40 – 100	80 – 200	160 – 400	2000	5000	–	215 TC	–	0.678"	2.52"	4.42"	0.345"	2.83"	4.65"
256 TC-2/490_2_0	40 – 100	80 – 200	160 – 400	2000	5000	–	256 TC	–	1.31"	2.52"	5.28"	1.115"	2.83"	5.28"

Size/Type	a	Ø b <sup>+0.3/0.2</sup>	Ø b <sub>1</sub>	c P <sup>9</sup>	Ø D	Ø d <sup>H7</sup>	Ø d <sub>1 k6</sub>	Ø e	f	f <sub>1</sub>	g	h	Ø i	k	O <sub>1</sub>	O
71-02/450_2_0	2	110	110 <sub>j6</sub>	5	160	14	14	130	4	3,5	9	30	9	3	–	22
80-01/490_2_0	2	130	130 <sub>j6</sub>	6	200	19	19	165	4	3,5	10	40	11	3,5	–	32
90-0/490_2_0	2	130	130 <sub>j6</sub>	8	200	24	24	165	4	3,5	10	50	11	4	–	40
100-1/490_2_0	4	180	180 <sub>j6</sub>	8	250	28	28	215	4,5	4	11	60	14	4	–	50
132-2/490_2_0	6	230	230 <sub>j6</sub>	10	300	38	38	265	5	4	12	80	14	5	–	65
160-3/490_2_0	7	250	250 <sub>h6</sub>	12	350	42	42	300	6	5	13	110	18	5	–	90
180-3/490_2_0	7	250	250 <sub>h6</sub>	14	350	48	48	300	6	5	13	110	18	5,5	–	90
56C-01/490_2_0	–	4.5"	4.5" <sub>j6</sub>	0.188"	180	0.625"	0.625"	5.875"	0.18"	0.16"	0.375"	2.06"	0.438"	0.104"	1.41"	–
143TC-01/490_2_0	–	4.5"	4.5" <sub>j6</sub>	0.188"	180	0.875"	0.875"	5.875"	0.18"	0.16"	0.375"	2.12"	0.438"	0.104"	1.41"	–
184 TC-1/490_2_0	–	8.5"	8.5" <sub>j6</sub>	0.25"	250	1.125"	1.125"	7.250"	0.25"	0.25"	0.625"	2.87"	0.562"	0.139"	1.78"	–
215 TC-2/490_2_0	–	8.5"	8.5" <sub>j6</sub>	0.31"	250	1.325"	1.375"	7.250"	0.25"	0.25"	0.625"	3.37"	0.562"	0.174"	2.41"	–
256 TC-2/490_2_0	–	8.5"	8.5" <sub>j6</sub>	0.375"	250	1.625"	1.625"	7.250"	0.25"	0.25"	0.625"	4.00"	0.562"	0.200"	2.91"	–

<sup>1)</sup> Max. speed with Type 4\_0.72\_0: 1200 rpm

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agent.