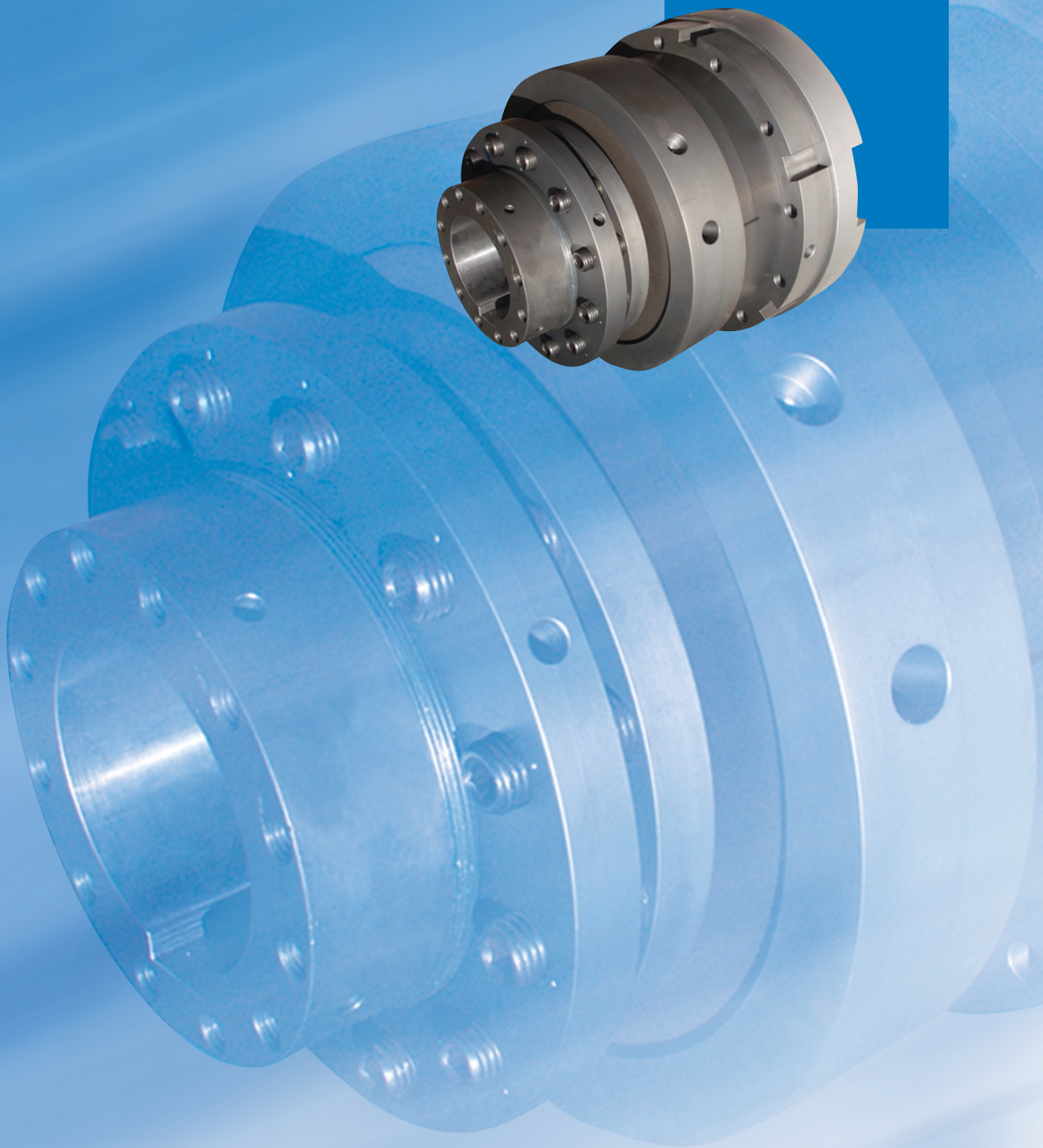


Perfect protection for



Manufacturer's declaration

EAS[®]-clutches are not machines within the scope of the Machinery directive 98/37/EG, but components for installation into machines. An initial start up is prohibited until it has been noticed that the machinery or the equipment into which this product has been incorporated correspond to the EG-guide lines.



Safety regulations

Danger!

- If the EAS[®]-clutches have been modified or reconverted.
- If the relevant standards of the safety or installation conditions are not observed.

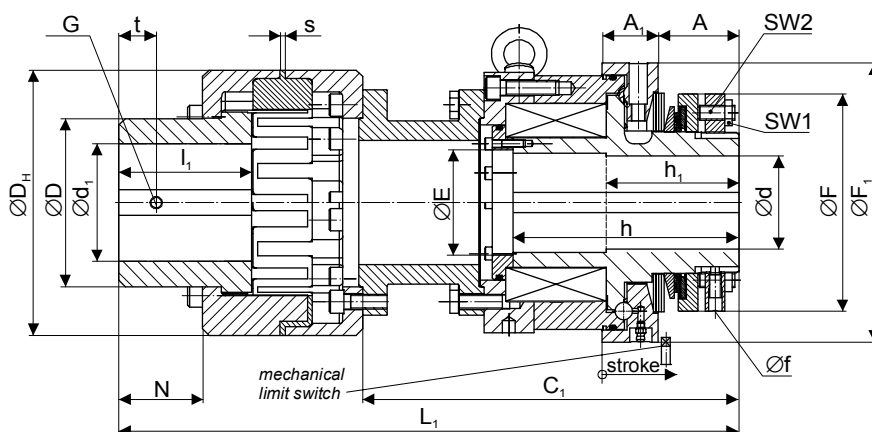
Necessary protective measures to be undertaken by the user

- Cover all moving parts to prevent personnel injury as squeezing and seizing.

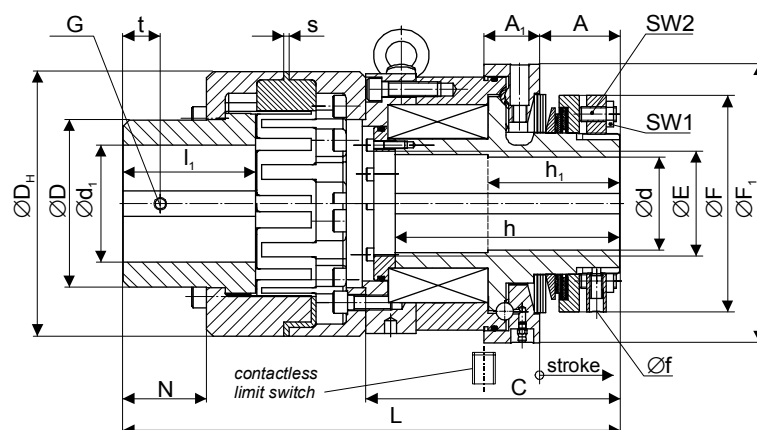
Only qualified and well-trained specialists should work on the units to avoid any personal injury or damage to machinery.

With these safety notes no claim on completeness is raised!

Type 475. – 24.8
keyway on both sides
(EAS[®]-side cone bushing on request)



Type 475. – 24.0
keyway on both sides
(EAS[®]-side cone bushing on request)



To be included when ordering, please state:	size	type	* bore Ø d ^{H7/G7}	* bore Ø d ₁ ^{H7/G7}	with limit switch	with cover EAS [®] -side
Order number:		475. _ 24. _			see page 5	see page 5

2 ÷ 6 _____ ↑
 minimum torque range.....
 low torque range.....
 medium torque range
 high torque range
 maximum torque range.....

3 _____ ↑
 4 _____ ↑
 5 _____ ↑
 6 _____ ↑
 7 _____ ↑

_____ ↑ according to size
 0..... without intermediate sleeve
 8..... with intermediate sleeve

Example: order number 4/475.524.0 / 60 H7 / 60 H7 / plus limit switch 055.002.5/ plus cover

* standard bore tolerances are H7 or G7 fits, other fits on request.

Technical data and dimensions

Size	Limiting torques for overload [Nm]					Torque of the flex. coupling	
	Type 475.324. _ cup spring layer single	Type 475.424. _ cup spring layer double	Type 475.524. _ cup spring layer triple	Type 475.624. _ cup spring layer quadruple	Type 475.724. _ cup spring layer sextuple	T _{K nom} [Nm]	T _{K max} [Nm]
2							
3	60 – 120	120 – 240	180 – 360	240 – 480	360 – 720	1050	2000
4	125 – 250	250 – 500	375 – 750	500 – 1000	750 – 1500	1500	3100
5	240 – 600	480 – 1200	720 – 1800	960 – 2400	1440 – 3600	3700	7500
6	600 – 1250	1200 – 2500	1800 – 3750	2400 – 5000	3600 – 7500	9900	14500

Size	Mass moments of inertia [kgm ²]			Mass [kg]		Shaft misalignments flexible coupling		
	Clutch side EAS®-XT Type 475. _ 24. _	Flex. coupling Type 475. _ 24.0	Flex. coupling Type 475. _ 24.8	Type 475. _ 24		Axial [mm]	Radial [mm]	Angle [°]
				.0	.8			
2								
3	0,017	0,12	0,141	34,5	40,0	+/- 1,5	0,7	0,23
4	0,11	0,26	0,30	66,0	74,0	+/- 2,0	0,7	0,21
5	0,20	0,63	0,73	104,0	117,0	+/- 2,5	0,7	0,17
6	0,62	1,77	1,98	194,0	214,0	+/- 2,5	0,8	0,17

Size	Maximum speed [rpm]	Stroke of the thrust washer [mm]	1) Bores	
			EAS®-XT d [mm]	Flexible coupling d ₁ [mm] 2)
2				
3	3000	2,4	32 – 50	32 – 85
4	2800	3,8	40 – 80	45 – 95
5	2500	4,5	45 – 95	65 – 120
6	2000	5,5	70 – 125	75 – 150

Size	A	A ₁	C	C ₁	D	D _H	E	F	F ₁	f	G ³⁾	h
2												
3	41,8	45	148,0	228,0	121,5	194	52	120	140	8	M6/10/12	132
4	65,0	45	205,5	303,5	135,5	214	85	175	225	11	M10/12	182
5	67,5	50	210,0	315,0	164,0	265	103	200	250	10	M12	182
6	117	66	292,0	407,0	208,0	330	130	230	310	12	M16	224

Size	Length of fit h ₁	L	L ₁	l ₁	N	S	SW1	SW2	t
2									
3	85	325,5	405,5	97	60,0	3,5	13	4	30
4	107	402,0	500,0	107	67,5	4	18	6	35
5	118	455,5	560,5	137	88,0	5,5	18	6	45
6	184	574,5	689,5	156	101,5	8	24	8	50

1) standard bore tolerances are H7 or G7 fits, other fits on request.

2) larger bores sizes 5 and 6, see additional dimension sheet (page 4)

3) dependent on bore diameter d₁

**Additional dimension sheet for the attachment of a larger flexible coupling.
Optional only for the sizes 5 and 6.**

Size	Limiting torques for overload [Nm]					Torque of the flex. coupling	
	Type 475.324. _ cup spring layer single	Type 475.424. _ cup spring layer double	Type 475.524. _ cup spring layer triple	Type 475.624. _ cup spring layer quadruple	Type 475.724. _ cup spring layer sextuple	T _{K nom} [Nm]	T _{K max} [Nm]
5	240 – 600	480 – 1200	720 – 1800	960 – 2400	1440 – 3600	6400	13000
6	600 – 1250	1200 – 2500	1800 – 3750	2400 – 5000	3600 – 7500	13200	27000

Size	Mass moments of inertia [kgm ²]			Mass [kg]		Shaft misalignments flexible coupling		
	Clutch side EAS [®] -XT Type 475. _ 24. _	Flex. coupling Type 475. _ 24.0	Flex. coupling Type 475. _ 24.8	Type 475. _ 24		Axial [mm]	Radial [mm]	Angle [°]
				.0	.8			
5	0,20	1,48	1,68	143,0	162,0	+/- 2,5	0,8	0,17
6	0,62	4,56	5,21	290,0	326,0	+/- 2,5	1,0	0,13

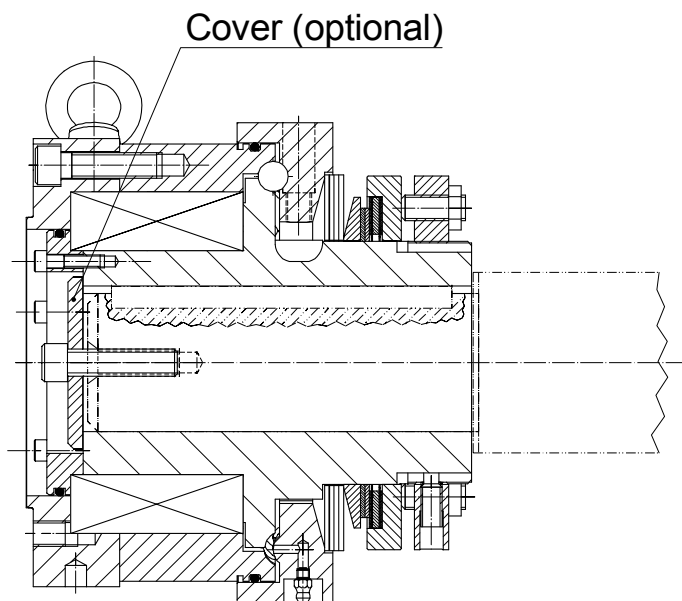
Size	Maximum speed [rpm]	Stroke of the thrust washer [mm]	1) Bores	
			EAS [®] -XT d [mm]	Flexible coupling d ₁ [mm]
5	2000	4,5	45 – 95	70 – 150
6	1500	5,5	70 – 125	85 – 190

Size	A	A ₁	C	C ₁	D	D _H	E	F	F ₁	f	G ³⁾	h
5	67,5	50	206,0	321,0	208,0	330	103	200	250	10	M16	182
6	117	66	292,0	427,0	275,0	415	130	230	310	12	M16	224

Size	Length of the fit h ₁	L	L ₁	l ₁	N	S	SW1	SW2	t
5	118	488,5	603,5	156	101,5	8	18	6	50
6	184	635,0	770,0	196	131,0	8	24	8	65

¹⁾ standard bore tolerances are H7 or G7 fits, other fits on request.

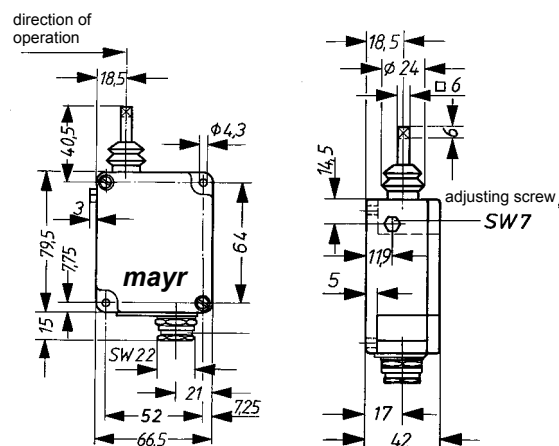
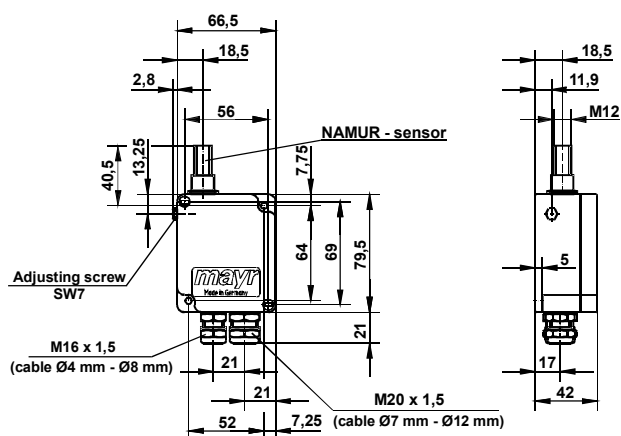
³⁾ dependent on the bore diameter d₁



On request we include a washer for axial attachment of the clutch.
Please indicate the size of the centering thread of the shaft with your order.

The fixing screw (DIN 912) is not included in the delivery.

Limit switch (optional)



Type 055.002.5 (contactless limit switch) with internal NAMUR-sensor fitted in the light metal housing

Technical data:

Supply voltage: 230 VAC, +/-10 %, 50-60 Hz
(to be included when ordering) 115 VAC, +/-10 %, 50-60 Hz
24 VDC, +/-5 %, independent polarity
Input: 1,5 VA
Ambient temperature: amplifier: -10 °C up to +60 °C
NAMUR-sensor: -25 °C up to +60 °C
Protection: amplifier: IP 54
NAMUR-sensor: IP 67
Max. connecting cross section: 2,5 mm²
Weight: 320 g
Relay: 1x change over contact, potential free
Contact load: max. 230 VAC / 5 Amp.
NAMUR-sensor: to EN 50227
metal housing M12 x 1 mm
flush fitting
switching distance SN 2 mm
max. switching frequency 2 kHz

Type 055.000.5 (mechanical limit switch) - light metal housing -

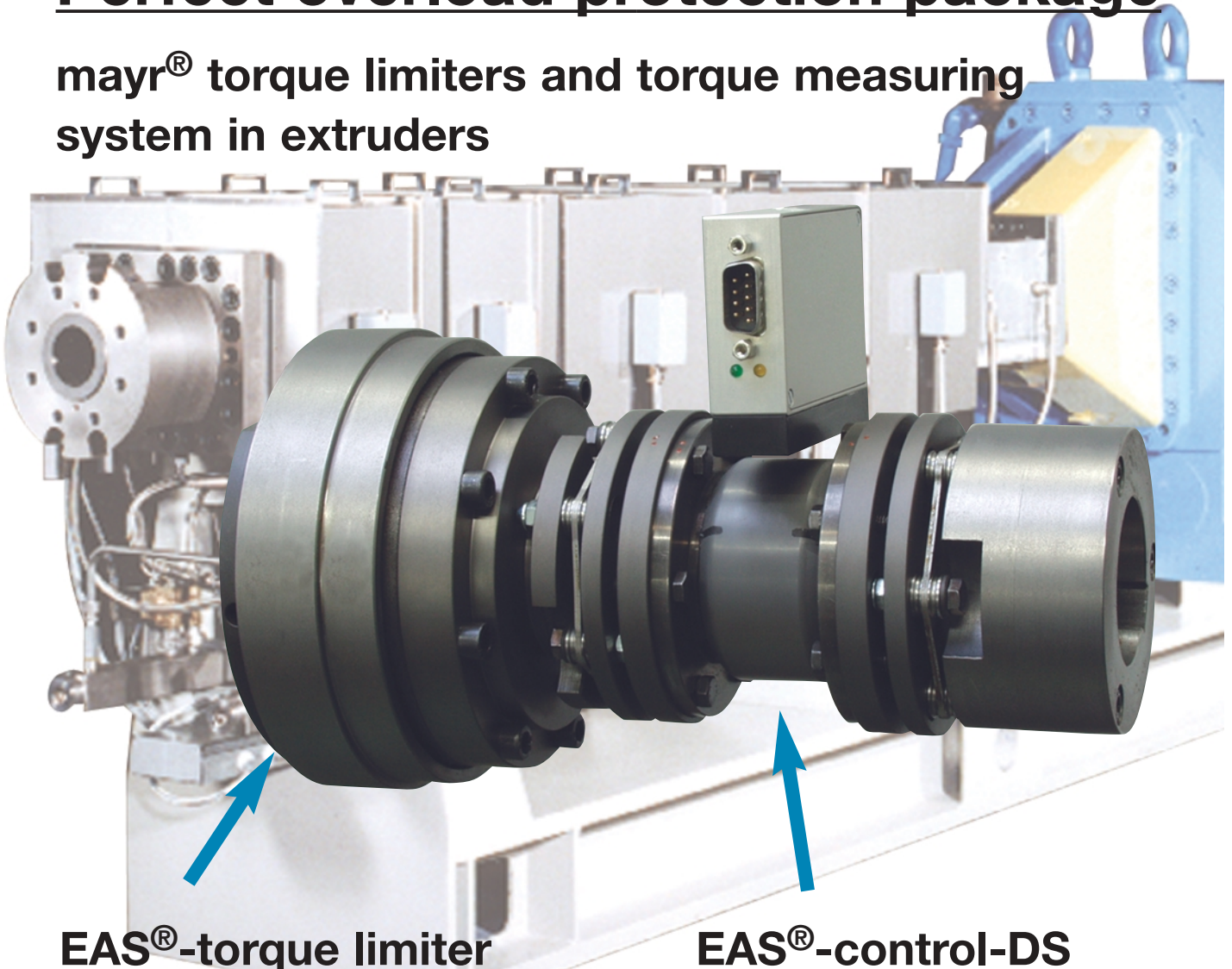
Technical data:

Micro switch: 1 x change over contact 11-12-14- (snap-acting)
Contact load: 250 VAC/15 Amp.
24 VDC/6 Amp.
60 VDC/1,5 Amp.
250 VDC/0,2 Amp.
Contact capacity min.: 12 VDC, 10 mA
Contact material: Ag CdO 90/10
Switching frequency: max. 200 switchings/min.
Ambient temperature: -10 °C up to +85 °C
Protection: IP 54
Weight: 275 g
Switch travel: By adjusting screw arranged laterally the zero shift is possible to right and left by max. 5 mm, wrench width SW7.
Pretravel: min. 0,5 mm
Overtravel: max. 10 mm, (min. 5 mm) depending on the zero shift.

Further limit switch types on request.

Perfect overload protection package

mayr[®] torque limiters and torque measuring system in extruders



EAS[®]-torque limiter

The mechanical torque limiter protects the machine against expensive overload damage

- protects costly screws and gears in case of collision
- completely disengages input and output when overloaded
- high disengaging accuracy over total service life of clutch
- limit switch actuates shut down of drive
- high reliability with robust mechanical components
- simple adjustment of disengaging torque

EAS[®]-control-DS

The torque measuring system optimizes and monitors the process

- continuous monitoring
 - optimizes quality and output
 - documentation of operating torques
 - output signal proportional to operating torque
 - robust and maintenance-free
 - contactless transmission of signals
-