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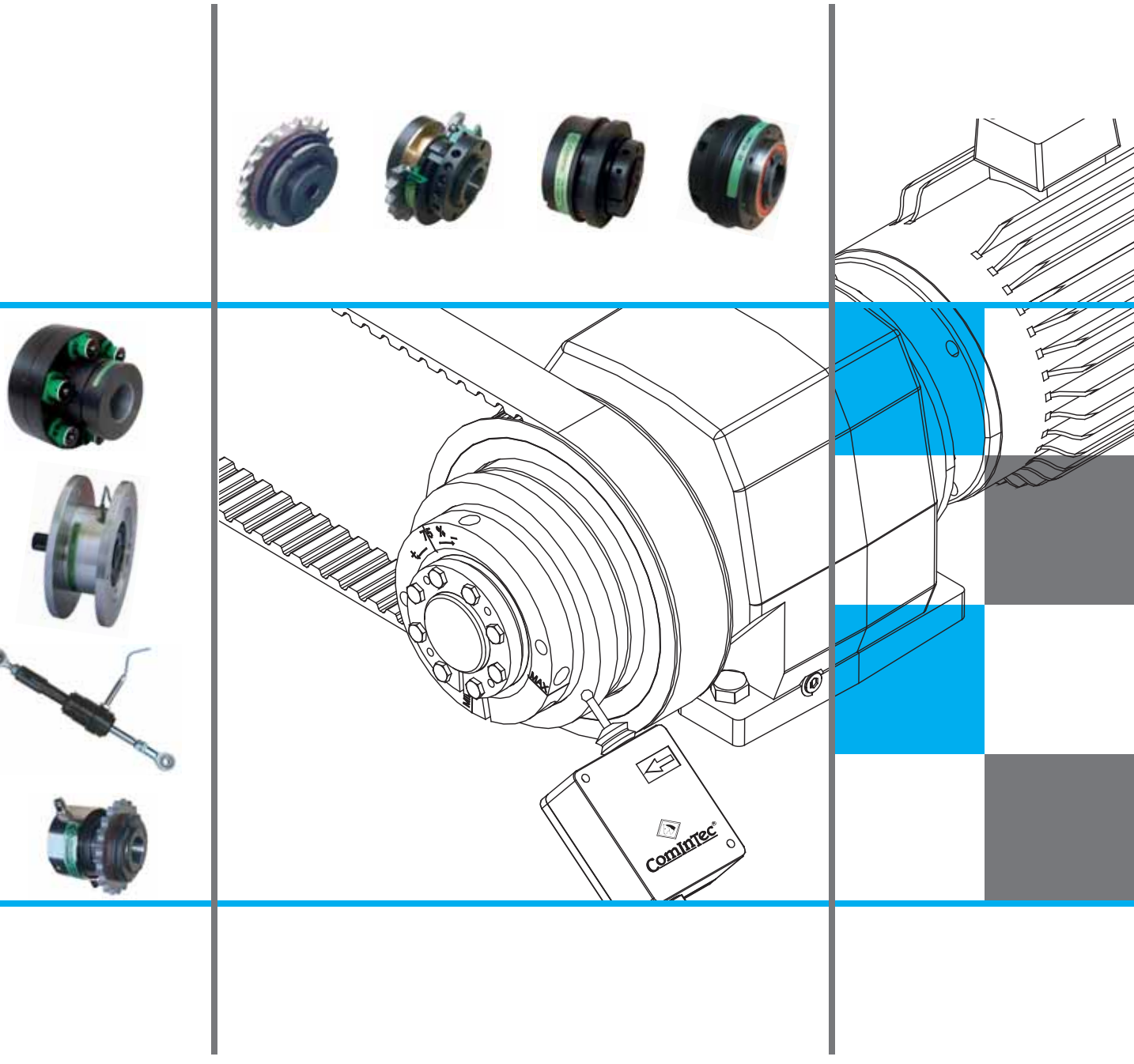
TORQUE LIMITERS - CLUTCHES

Up to 30.000 Nm of torque and 140 mm bores

(SAFETY COUPLINGS)



ComInTec®
Technology for Safety

Sold Exclusively in North America by:

HEXELUS

30 Wilson Drive,
Suite B
Sparta, NJ 07871
info@hexelus.com
(973) 864-4548

Edition 01/2015

TORQUE LIMITERS (SAFETY COUPLINGS) - CLUTCHES: introduction

ComInTec **torque limiters** (safety couplings) and **clutches** are mechanical components necessary to fit along the kinematic chain and are preferred to electronic safety devices because of a better response time, improved reliability, excellent configuration flexibility, easy fitting and adjustment, use at high speeds in hard environments in the presence of inertias and important masses. In fact the electronic systems, which normally act up to the transmission, present: delayed reaction time, many factors as a source of error, configuration and management complexity. The fitting of the mechanical torque limiters along the kinematic chain is therefore necessary for a reliable and complete protection, in order to improve the level of safety and the machine, according to the new EN ISO 13489-1 standards, reducing the average possible broken-down and unproductive downtime.

Benefit of our models:

- Long product life with continuous reliability.
- Optimum protection against environmental conditions.
- Simple mounting for in-line and parallel transmission.
- Easy setting and adjustment.
- Highly accurate and fast machine protection.
- Special designs to suit specific applications possible.
- Competitive pricing without sacrificing quality.
- "Made in Italy" with certified quality.

Our main product lines:

- **Friction lines:** simple, economical, with sliding function suitable for use in dry and dusty environments .
- **disengage lines:** high stability during transmission with instant disengagement and the possibility of free rotation.
- **Axial lines:** Suitable for limiting compression and tension forces on crank mechanisms.
- **Pneumatic clutch lines:** function of the clutch- disengagement with the possibility of variation of the torque during the motion.

FRICTION TORQUE LIMITER "DF"

Sliding Safety coupling where the transmission component is fitted between two friction rings and slides when the calibrated torque is reached. The minimum required to have a low cost protection.
Torque max 23000 Nm - Max bore ø140 mm. 7

ECONOMIC BALLS TORQUE LIMITER "EDF"

Safety coupling with simple and compact balls inserted directly in the drive element of transmission. The disengagement occurs quickly and safely if the calibrated torque is exceeded.
Torque max 1450 Nm - Max bore ø55 mm. 17

ROLLERS TORQUE LIMITER "DSR"

A Roller safety coupling that allows a complete disengagement when the calibrated torque is reached. Suitable for transmitting high torque with high reliability and small size.
Torque max 12000 Nm - Max bore ø120 mm. 21

BACKLASH FREE TORQUE LIMITER "DSS/SG"

Ball safety coupling with high technology and backlash free transmission. Device with high sensitivity of intervention, instant and precise disconnection.
Torque max 1200 Nm - Max bore ø65 mm. 31

FREE ROTATION TORQUE LIMITER "DSS/SG/RF"

Backlash free Safety coupling suitable for high speeds, with free rotation without residual torque after disengagement that occurs precisely and immediately. The re-engagement is manual.
Torque max 1200 Nm - Max bore ø65 mm. 43

MODULAR TORQUE LIMITER "DSM"

Modular Safety coupling, robust, suitable for "heavy industries" even at high speeds. After disconnection there is free rotation without residual torque, re-engagement is simple and manual.
Torque max 9000 Nm - Max bore ø140 mm. 49

TORQUE LIMITER FOR REDUCERS "PR"

Safety coupling to be mounted between the motor and gear unit thus reducing significantly the size of the device at the same power output. Available in both slip release versions.
Torque max 2600 Nm - Max bore ø55 mm. 55

AXIAL FORCE LIMITER "DSA"

Safety coupling with linear limitation of force. The axial disengagement can take place in both compression and tension once the calibrated force is reached, the re-engagement is automatic.
Force max 4700 N - Max shaft ø20 mm. 61

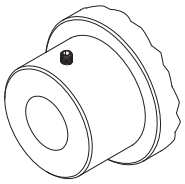
PNEUMATIC CLUTCHES "AP"

Clutch or roller with torque control during motion and low residual torque after disengagement. Ability to disconnect the driven portion from the driving through pneumatic control.
Torque max 30000 Nm - Max bore ø120 mm. 65

SELECTION GUIDE

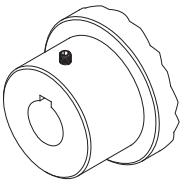
TECHNICAL CHARACTERISTICS	DF page 7	EDF page 17	DSR page 21	DSS/SG page 31	DSS/SG/RF page 43	DSM page 49	PR page 55	DSA page 61	AP page 65
Manufactured in turned steel	■	■	■	■	■	■	■	■	■
Anticorrosive treatment std. phosphate	■	■	■	■	■	■	■	■	■
Compact size	■	■		■	■	■	■		
High torque possible			■			■			■
Maintenance-free		■	■	■	■	■	■	■	
High torsional stiffness				■	■				
Modular system						■			
Reduced inertia				■	■		■		
Noise during transmission	■								
Suitable for high speeds				■	■	■	■		■
Suitable for dusty environments	■								
Suitable for wet and oily		■	■	■	■	■	■	■	
Assembly with **flexible couplings - rigid coupling** possible	■	■	■	■	■	■	■		■
ADVANTAGES AND BENEFITS									
Protect the gear motor from jamming due to foreign bodies	■	■	■	■		■	■		■
Absorb starting torques without disconnecting the transmission	■								
Protect the film of the packaging in case of excessive traction	■								■
Protect slides or servomotors from impact or limit		■		■			■	■	
Keep the phases between the driving and driven after an overload			■	■					
Protect the final product from crushing or deformation	■	■	■	■		■	■	■	■
Protect indexers overload long transmission				■					
Where it is necessary to complete the transmission disconnect					■	■			■
Best simplicity and sensitivity compared to integrated solutions in gear box	■			■			■		
Protect the operating units of the machine tool from collisions				■					
Protecting mechanical devices during transmission at high speeds of rotation					■	■			
Engage / disengage different lines of transmission of the product									■
Greater durability of all the devices, thanks to the free rotation					■	■			
Protect axial movers within the transmission from overload								■	
APPLICATIONS									
Conveyors	■	■	■	■			■		
Extruders and laminators					■	■			
Heavy Industry	■		■			■			
Packaging machinery and equipment			■	■			■		
Labelling				■					
Conveyors		■	■						
Machine tools and CNC				■					
Servo motors and linear guides				■					
Machines with cycle variable torque									■
Agricultural machinery and earthmoving	■		■						
Winding and unwinding of coils									■
Test benches					■				■
Automotive	■			■					
Handling and eccentric cams								■	

Type A — Plain bored H7 hub with set screw.



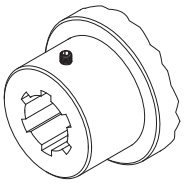
An economic and quick solution for low torque.

Type A1 — H7 bore with keyway and set screw.



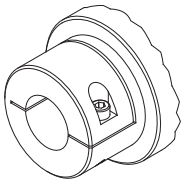
Standard solution on the hubs shown in the catalogue for horizontal assembling.

Type A2 — Splined bore with set screw.



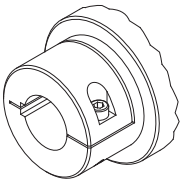
Recommended solution in the case of hard transmission.

Type B — Single split clamp hub with plain H7 bore.



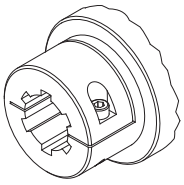
Reduction of angular backlash without change to the overall dimensions.

Type B1 — Single split clamp hub with H7 bore and keyway.



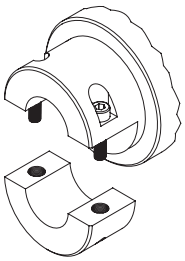
Reduction of angular backlash, during reversing drives, and high torques.

Type B2 — Single split clamp hub with splined bore.



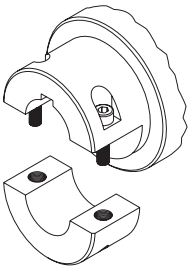
Reduction of angular backlash in the case of hard transmission.

Type C — Two piece clamp hub with plain H7 bore.



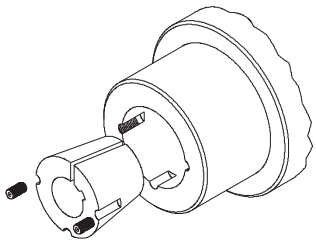
Reduction of angular backlash, and simple radial assembly/disassembly.

Type C1 — Two piece clamp hub with H7 bore and keyway.



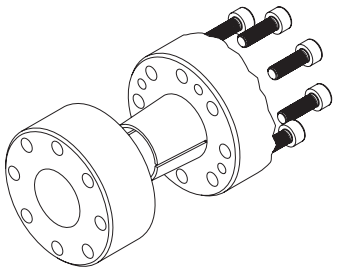
Simple assembly and reduction angular backlash, even with high torque.

Type G — Clamp connection with internal Taper Bush.



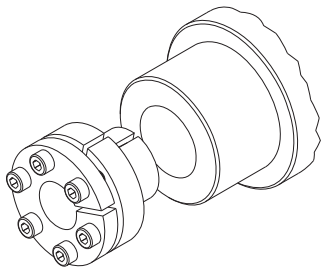
Flexibility of fitting for conical bushing without angular backlash.

Type D — Clamp connection with integrated locking assembly.



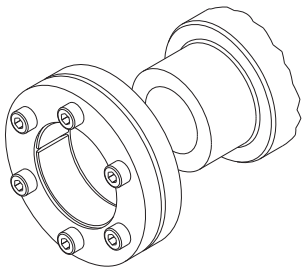
Suitable for high speeds without change to standard dimensions **(.../CCE version)**.

Type E — Clamp connection with internal locking assembly.

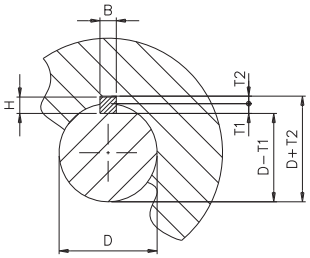


Reduction of angular backlash and reduced radial dimensions.

Type F — Clamp connection with external locking assembly.



Fast and economic solution to transmit low torque.



Bore and Keyways according to UNI 6604 (DIN 6885-1)																	
D	>10 12	>12 17	<17 22	>22 30	>30 38	>38 44	>44 50	>50 58	>58 65	>65 75	>75 85	>85 95	>95 110	>110 130	>130 150	>150 170	>170 200
B H9	4	5	6	8	10	12	14	16	18	20	22	25	28	32	36	40	45
H	4	5	6	7	8	8	9	10	11	12	14	14	16	18	20	22	25
T1	2,5	3	3,5	4	5	5	5,5	6	7	7,5	9	9	10	11	12	13	15
T2	1,8	2,3	2,8	3,3	3,3	3,3	3,8	4,3	4,4	4,9	5,4	5,4	6,4	7,4	8,4	9,4	10,4
	+0,1 0			+0,2 0											+0,3 0		

TORQUE LIMITERS (SAFETY COUPLINGS) - CLUTCHES: hub connection type on couplings application

HUB CONNECTIONS	DF			EDF/F	DSR			DSS/SG			DSS/SG/RF	DSM		AP
														
	.../TAC page 11	+GAS page 12	+GEC page 12	.../TAC page 20	+GTR page 27	+GAS page 27	+GEC page 28	+GAS/SG/ CCE page 38	+GAS/SG page 39	+GSF page 40	+GAS/SG page 47	+GAS page 52	+GTR page 52	+GEC page 68
Pilot bore	●	●	●	●	●	●	●	●	×	○	●	●	●	●
Type A	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	▲	▲	▲
Type A1	●	●	●	●	●	●	●	●	×	×	●	●	●	○
Type A2	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	▲	▲	▲
Type B	▲	○	▲	▲	○	○	▲	○	×	●	○	×	×	▲
Type B1	▲	▲	▲	▲	▲	▲	▲	▲	×	▲	▲	×	×	▲
Type B2	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	×	×	▲
Type C	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	×	×	▲
Type C1	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	×	×	▲
Type G	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	▲	▲	▲
Type D	×	×	×	×	▲	×	×	●	●	×	×	×	●	●
Type E	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	▲	▲	▲
Type F	▲	▲	▲	▲	▲	▲	▲	▲	×	×	▲	▲	▲	▲

Symbol	Description	Notes
●	Standard supply	• All types of hub connections are carried out only on the finished bore. • For the supply or feasibility of other types of hub locking and combinations please contact our technical department.
○	Optional standard supply	
▲	Supplied on request	
×	Not supplied	

TORQUE LIMITERS (SAFETY COUPLINGS) - CLUTCHES: selection and assembly

SUMMARY CHARACTERISTICS

Model	Function	Torque	Max bore	Speed	Main characteristics	Sensitivity
DF	friction	1 ÷ 23000	140	medium - low	economic solution	medium - low
EDF/F	mechanical	7,5 ÷ 1450	55	medium - low	compact solution with balls in phase	medium - high
DSR	mechanical	10 ÷ 12000	120	medium - low	with rollers in phase or equidistant	medium - high
DSS/SG	mechanical	0,8 ÷ 1200	50	medium - high	backlash free with balls in phase or equidistant	high
DSR/SG/RF	mechanical	10 ÷ 1200	65	medium - high	backlash free rotation	medium - high
DSM	mechanical	200 ÷ 9000	140	high	free rotation for high speed	medium - high
DSS/F/SG/PR-V	mechanical	3 ÷ 720	48	medium - high	compact solution for gearbox	medium - high
DF/TAC/PR-V	friction	1 ÷ 2600	55	medium - low	economic and compact solution for gearbox	medium - low
DSA	mechanical	30 ÷ 4700 N	-	medium	axial limitation	medium - high
DSR/F/AP	pneumatic	7 ÷ 30000	120	high	mechanical roller clutch	high
DSF/TF/AP	pneumatic	3 ÷ 875	65	medium - high	friction clutch	medium

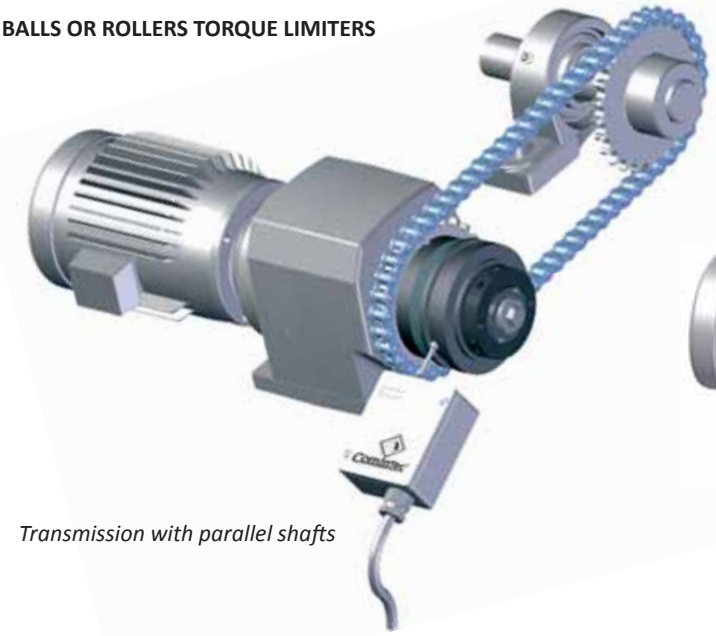
ASSEMBLY EXAMPLES

FRICTION TORQUE LIMITERS

Transmission with parallel shafts

Transmission with in-line shafts

BALLS OR ROLLERS TORQUE LIMITERS



Transmission with parallel shafts

Transmission with in-line shafts

DSA - axial force limiter: additional information

ORDER EXAMPLE MODULE ONLY

AXIAL FORCE LIMITER		
Size	Model	Force / Springs
1	**DSA**	**T0**

+

SENSOR
Description
PRX M8 NPN NO

Size
from 1 to 3

Springs
T0
T1
T2

ORDER EXAMPLE COMPLETE GROUP

AXIAL FORCE LIMITER					
Size	Model	Force / Springs	Compression Stroke / Traction Stroke	Ltot	Rod ends
1	**DSA**	**T0**	**50 mm / 50 mm**	**302 mm**	**M8**

+

SENSOR / MICROSWITCH
Description
PRX M8 NPN NO

Size
from 1 to 3

Springs
T0
T1
T2

PNEUMATIC CLUTCHES (SAFETY COUPLINGS)

Up to 30.000 Nm of torque and 120 mm bore

AP

ComInTec®
Technology for Safety

HEXELUS

AP - pneumatic clutches: introduction

- Simple and precise calibration.
- Transmission engagement / disengagement and torque limiter functions (safety coupling).
- Reliability and repetitiveness of the calibration torque.
- Torque variation whilst in motion, by pressure regulation.
- Free rotation after the disengagement through a complete disconnection between the parts.
- Low residual torque on disconnected parts.
- Models available only with finished bore.

ON REQUEST

- Complete with transmission element machined and assembled (plate wheel, pulley, gear, ...).
- Can be supplied with various types of rigid/elastic couplings for in-line shafts transmission.
- Possibility of shaft connection with finished bore, locking assembly or other systems.
- Available in anti-corrosive version, with specific surface treatments.

A friction clutch or roller with torque adjustment even during operation. Ability to disengage the drive and driven by pneumatic or electrical impulse. Low residual torque after disengagement. Calibration adjustable by changing the pressure (pneumatic) air supply.

APPLICATION FIELD

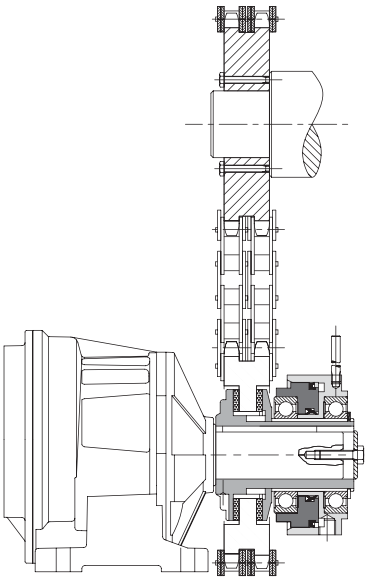
- Machines with variable torque requirements.
- Test benches.
- Coiler and uncoilers.
- Cut format systems.

ADVANTAGES AND BENEFITS

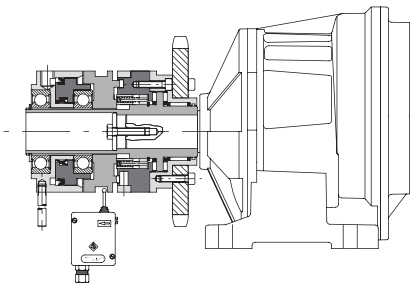
- Engage/disengage different product transmission lines.
- Maintain tension of wire/film coils.
- Regulate different torques depending on the change of the format.
- Protect the motor gearbox against every form of overload.

	DSR/F/AP: Complete engagement-disengagementof the transmission, also for long periods	from 7 to 30000 Nm 120 mm max bore	Page 67
	DSR/F/AP + GEC: compact coaxial connection for simple maintenance without being forced to remove the coupling	from 7 to 30000 Nm 180 mm max bore	Page 68
	DSF/TF/AP: friction motion transmission as tensioner.	from 3 to 875 Nm 65 mm max bore	Page 69
	DSF/TF/AP/TAC: simple and economic coaxial shaft connection.	from 3 to 875 Nm 80 mm max bore	Page 70

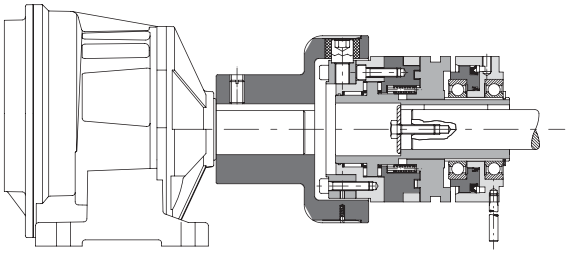
ASSEMBLY EXAMPLES



*Model **DSF/TF/AP** with plate wheel for parallel shaft transmission.*



*Model **DSR/F/AP** with plate wheel for parallel shaft transmission.*



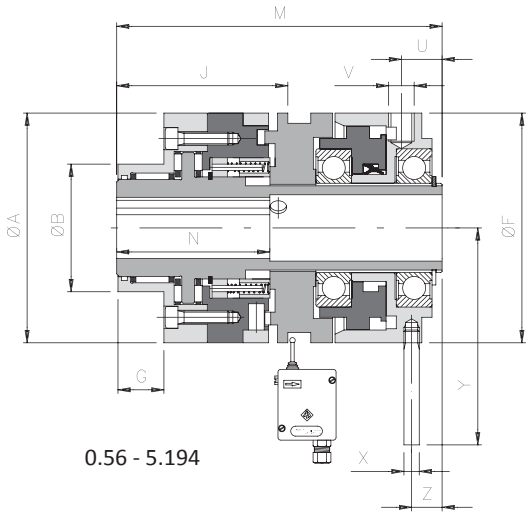
*Model **DSR/F/AP** Compact elastic coupling **GEC** for coaxial shaft transmission.*

NOTES

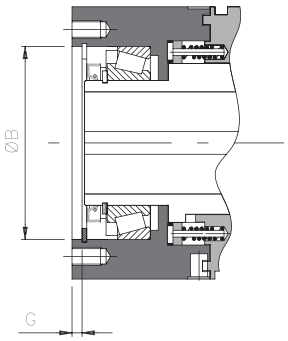
- Avoid rigid locking of the anti-rotating pin of the cylinder as it can cause imbalances during rotation

DSR/F/AP - roller phase pneumatic clutch: technical data

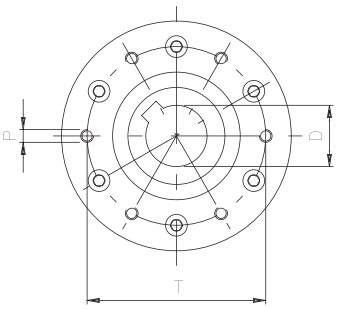
- Transmission through rollers with re-engagement in phase 360° (equidistant on request, 30°, 45°, …).
- Free rotation for long periods after overload: … / CS.
- Suitable for high rotation speeds.
- Maintenance free for high reliability.
- Arranged to add a microswitch / proximity to stop the motor drive.
- Torque range: 5 – 30.000 Nm; max. bore ø120 mm.



0.56 - 5.194



6.240 - 7.280



DIMENSIONS

Size	A	Standard flange				D H7	F	J	M	N	U	V	Z	X	Y	Inertia *[Kgm²]*		Max speed *[Rpm]*	Weight *[Kg]*
		B h7	G	P	T	max										Flange side	Cilinder side		
0.56	56	38	10	M5	48	18	56	56	97	45	11,5	1/8"	7,5	6	63	0,000152	0,000301	11000	1,5
1.90	90	50	18	M5	70	25	90	67,5	127,5	60	15	1/4"	11	6	80	0,001791	0,002622	7000	5
2.110	110	60	20	M6	89	38	110	85	147,5	70	17,5	1/4"	13,5	8	105	0,005122	0,006831	5000	9
3.130	130	80	19	M8	105	45	130	90,5	160	100	18,5	1/4"	14,5	8	115	0,010921	0,014132	4300	13,3
4.160	160	100	22	M10	125	55	160	109	191,5	115	25	1/4"	17	10	146	0,030883	0,030793	3600	19
5.194	194	120	26	M12	155	65	215	125	201,5	145	30	1/4"	22	12	184	0,059572	0,093061	3200	35,8
▲ **6.240 CB**	240			M16	200	90	290		306,5										
▲ **6.240 CA**	240			M16	200	90	290		356,5										
▲ **7.280 CB**	280			M20	230	120	345		320										
▲ **7.280 CA**	280			M20	230	120	345		375										

TECHNICAL DETAILS

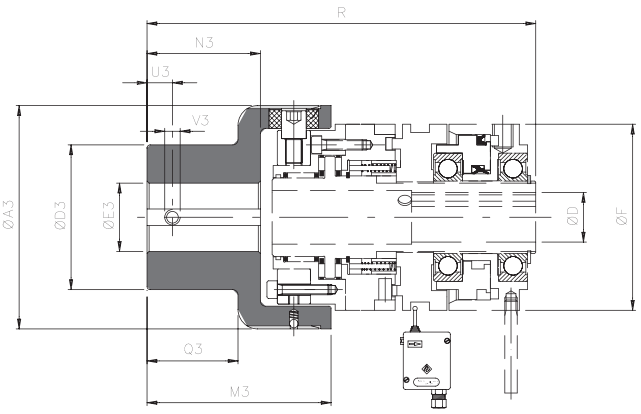
Size	Torque *[Nm]*	Torque transmission *[Nm]* according to the pressure *[bar]*							
		1	**2**	**3**	**4**	**5**	**6**	**10**	**15**
0.56	7 - 70	7	11	16	20	24	29	45	70
1.90	15 - 280	15	35	55	75	95	115	185	280
2.110	20 - 480	20	50	85	125	160	195	330	480
3.130	25 - 780	25	80	135	195	250	310	520	780
4.160	55 - 1335	55	150	245	340	435	530	900	1335
5.194	330 - 3970	330	550	830	1085	1340	1600	2600	3970
▲ **6.240 CB**	1100 - 5800	1100	2000	3000	3900	4800	5800	-	-
▲ **6.240 CA**	3400 - 15000	3400	6200	9040	11760	15000	-	-	-
▲ **7.280 CB**	1500 - 7500	1500	2500	3700	5000	6200	7500	-	-
▲ **7.280 CA**	7000 - 30000	5000	10000	15000	20000	25000	30000	-	-

▲ On request

NOTES

- Weights are relevant only to the pilot bore (DSR/F/AP), inertias refer to the connection (DSR/F/AP) hole max.
- Microswitches EM1 or EM2 and inductive sensor PRX see page 73

... + GEC - model with compact elastic coupling: technical data



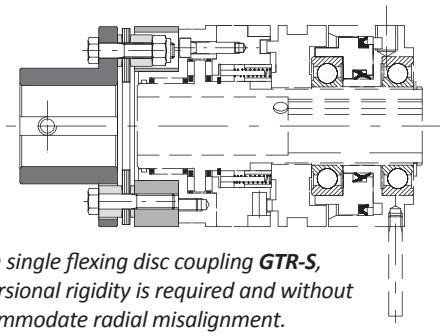
DIMENSIONS

Size		Torque *[Nm]*		A3	D3	E3 H7		M3	N3	U3	V3	Q3	D H7	F	R	U3	V3
DSR/F/AP	GEC	Nom	Max			pilot bore	max						max				
0.56	0	70	110	78	50	10	28	63,5	32	10	M5	28	18	56	142	10	M5
1.90	1	280	420	108	70	12	38	89	49	12	M6	44	25	90	189	12	M6
2.110	2	570	860	130	80	15	45	111	65	15	M8	59	38	110	228	15	M8
3.130	3	980	1500	161	100	15	60	140	85	15	M8	77	45	130	268	15	M8
4.160	4	2340	3600	206	120	20	70	168	105	20	M10	97	55	160	323	20	M10
5.194	5	3880	5800	239	135	30	80	201	130	20	M10	120	65	215	360	20	M10
▲ **6.240 CB**	6	15000	20000														
▲ **6.240 CA**																	
▲ **7.280 CB**	7	30000	35000														
▲ **7.280 CA**																	

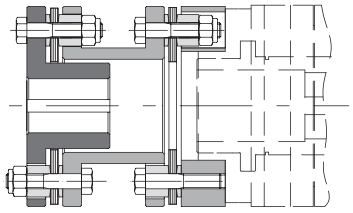
TECHNICAL DETAILS

Size		Misalignments						Max speed *[Rpm]*	Weight *[Kg]*
DSR/F/AP	GEC	Angular α *[°]*		Axial X *[mm]*		Radial K *[mm]*			
		continuous	intermittent	continuous	intermittent	continuous	intermittent		
0.56	0	1°	1° 30'	± 0,7	± 1,5	0,5	0,7	5500	1,1
1.90	1	0° 48'	1°	± 0,7	± 1,5	0,5	0,7	5000	3,3
2.110	2	0° 36'	0° 48'	± 0,7	± 1,5	0,6	0,7	4500	5,9
3.130	3	0° 30'	0° 42'	± 0,8	± 1,6	0,6	0,8	4000	10,9
4.160	4	0° 24'	0° 30'	± 0,8	± 1,6	0,6	0,8	3100	19,8
5.194	5	0° 24'	0° 30'	± 0,8	± 1,6	0,6	0,8	2800	30,5
▲ **6.240**	6	0° 24'	0° 30'	± 0,8	± 1,6	0,6	0,8	-	-
▲ **7.280**	7	0° 24'	0° 30'	± 0,8	± 1,6	0,6	0,8	-	-

OTHER COUPLING MODELS ON REQUEST



*Model **DSR/F/AP** with single flexing disc coupling **GTR-S**, for applications where torsional rigidity is required and without the ability to accommodate radial misalignment.*



*Model **DSR/F/AP** with double flexing torsionally rigid metal disc coupling **GTR-D**, when torsional rigidity is required and ability to accommodate radial misalignment.*

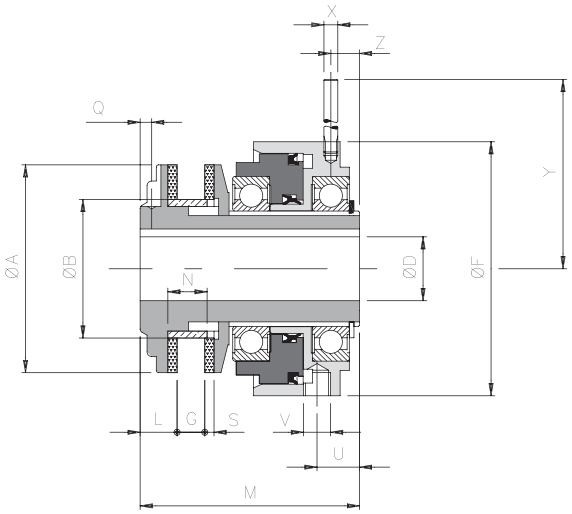
NOTES

▲ On request

- These details refer only for the coupling (GEC); for connection details see on page 67.
- Weights are relevant only to the pilot bore (GEC).
- Microswitches EM1 or EM2 and inductive sensor PRX see page 73

DSF/TF/AP - friction pneumatic clutch: technical data

- Friction torque transmission.
- As tensioner, brake and torque limiter (safety coupling).
- Constant adjustment of the calibration torque.
- Available with special friction rings for specific requirements.
- Available in version to stop the transmission after an overload: .../SI.
- Torque range: 3 – 875 Nm; max. bore ø 65 mm.



DIMENSIONS AND TECHNICAL DETAILS

Size	A	B h7	D H7	F	G		L	M	N	On request	S	U	V	Z	X	Y	Inertia *[Kgm²]*	Max speed *[Rpm]*	Weight *[Kg]*
			max		min	max				Q									
0.50	50	36	19*	56	3,5	6	11	62	10	3,5 - M4	3	11	1/8”	7	6	58	0,000065	7600	0,7
1.70	70	45	25	90	5	10	15	85	15	4,5 - M4	4	14,5	1/4”	10,5	6	80	0,000332	5450	2,4
2.90	90	60	38	110	7	12	16	95	17	5 - M6	4	17,5	1/4”	13,5	8	105	0,001024	4250	4,3
3.115	115	72	45	130	9	16	18	113	21	5 - M6	4	18,5	1/4”	14,5	8	115	0,004192	3350	7,0
4.140	140	85	55	160	11	19	20	128	25	6 - M6	5	24,5	1/4”	17	10	146	0,008521	2750	11,9
5.170	170	98	65	215	15	22	22,5	139,5	28	6,5 - M8	5	26,5	1/4”	18	12	184	0,019153	2250	19,8

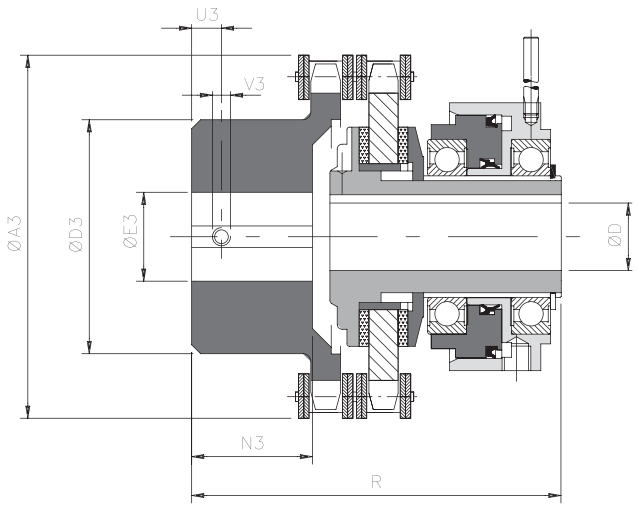
TORQUE TRANSMISSION

Size	Torque *[Nm]*	Torque transmission *[Nm]* in according to pressure *[bar]*						
		1	**2**	**3**	**4**	**5**	**6**	**10**
0.50	3 - 20	3	5	7	9	11	13	20
1.70	6 - 70	6	10	19	28	36	43	70
2.90	15 - 135	15	27	42	57	73	88	135
3.115	25 - 220	25	52	79	105	130	153	220
4.140	70 - 330	70	115	145	175	205	230	330
5.170	170 - 875	170	280	390	500	600	700	875

NOTES

- **DH7*:** with reduced keyway UNI7510.
- Weights are relevant only to the connection (DSF/TF/AP), inertias refer to the connection (DSF/TF/AP) hole max.

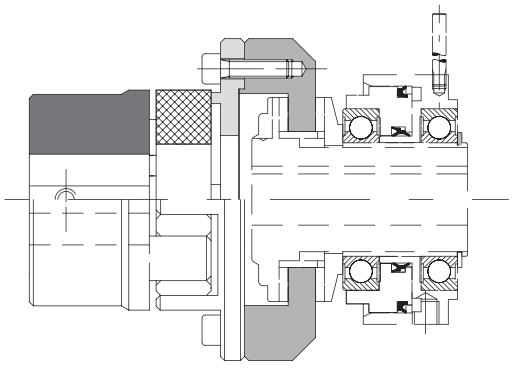
.../TAC - version with chain coupling: technical data



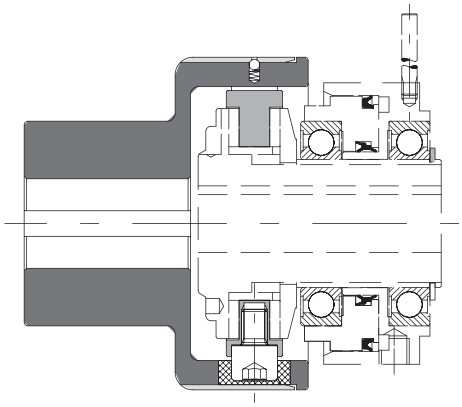
DIMENSIONS

Size	Torque *[Nm]*	A3	D3	E3 H7		N3	D H7 max	F	R	U3	V3	Max speed *[Rpm]*	Weight *[Kg]*
				pilot bore	max								
0.50	3 - 20	75	50	12	28	19	19	56	84	8	M4	7600	0,6
1.70	6 - 70	101	70	16	38	29	25	90	117	8	M4	5450	1,7
2.90	15 - 135	126	89	20	55	38	38	110	138	12	M6	4250	4,1
3.115	25 - 220	159	112	20	70	56,5	45	130	174	12	M6	3350	7,1
4.140	70 - 330	184	130	28	80	59	55	160	193,5	15	M8	2750	14,1
5.170	170 - 875	216	130	30	80	88	65	215	233	15	M8	2250	19,2

OTHER COUPLING MODELS



*Model **DSF/TF/AP** with elastic jaw coupling **GAS** to accomodate high misalignments.*

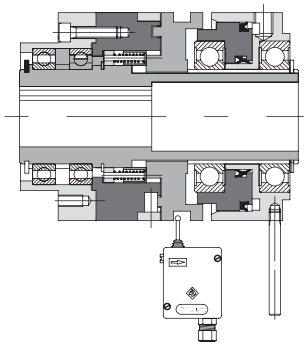


*Model **DSF/TF/AP** with compact elastic coupling **GEC** for simple maintenance without removing the coupling.*

NOTES

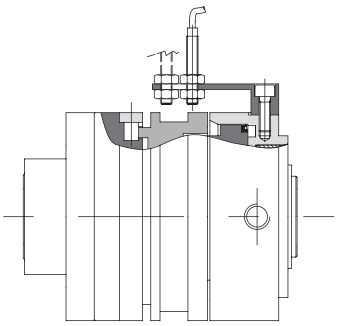
- Data is relevant to the whole assembly (DSF/TF/AP/TAC).
- Weights are relevant only to the pilot bore (DSF/TF/AP/TAC).

AP - pneumatic clutch: versions on request



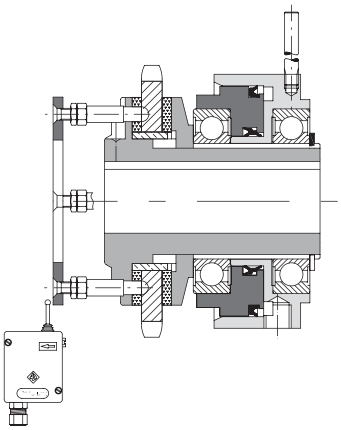
DSR/F/AP/CS

Version with ball bearings as an alternative to the rollers.
Suitable for long rotation on disengagement.



.../PRX

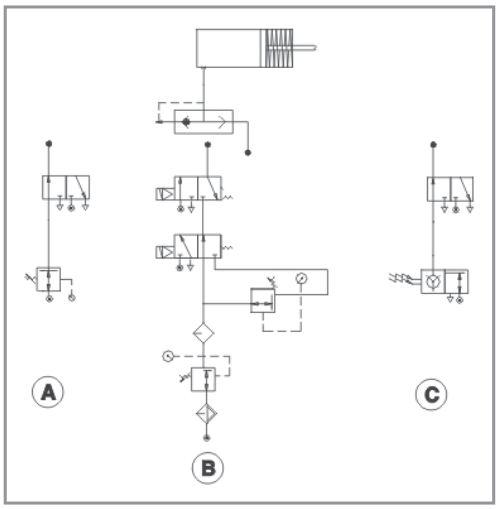
Version with proximity inductive sensor PRX M8x1, integrated into the DSR/F/AP. Compact and versatile solution, without adding equipment and/or external components.



DSF/TF/AP/SI

Friction clutch with intervention signal and further automatic re-engagement. This characteristic requires particular machining on the drive element, which has to be supplied together with the torque limiter.

AP - pneumatic clutch: additional information



EXAMPLE CIRCUIT CONNECTION TYRE

The pneumatic clutch are designed for the connection of pneumatic circuit with connection type *"GAS"*.
Some examples for the control to the pressure are shown here:

A) Adjustable pressure with pressure regulator.

B) Control of two pressures using solenoid valves.

C) Control of variable pressure by PLC.