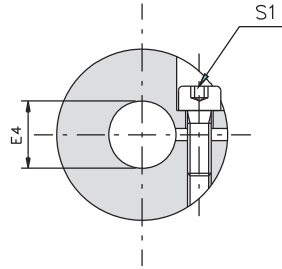
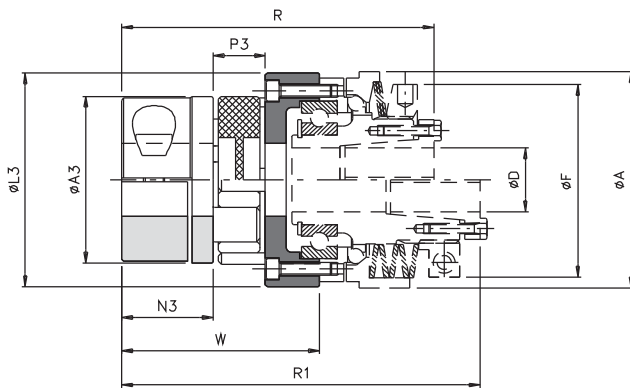


## ... + GAS/SG (model with jaw coupling and single split clamp hub type "B"): technical data



### DIMENSIONS

Size		Torque [Nm]		A3	E4 H7 max	L3	N3	P3	A		D H7 max.	F		W	R	R1
SG	GAS SG	Nom.	Max.						Positive	Negative		Positive	Negative			
00.47	00	17	34	40	20	49	25	16	50	17	42	53	82,5	117		
0.63	0	60	120	55	30	65	30	18	70	20	63	62	63	102	118,5	
1.80	1	160	320	65	35	84	35	20	85	25	75	74,5	119,5	137,5		
2.96	2	325	650	80	45	102	45	24	100	35	82	93	146	164		
3.116	3	450	900	95	50	122	50	26	115	42	104	97	100	159	177	
4.138	4	525	1050	105	60	143	56	28	139,5	135	50	128	117	110,5	182	203

### TECHNICAL DETAILS

Size		Clamp hub		Misalignments			Rigidity			Inertia coupling side [Kgm <sup>2</sup> ]	Max. speed [Rpm]	Weight [Kg]
SG	GAS SG	screw	Tightening torque [Nm]	Angular α [°]	Axial X [mm]	Radial K [mm]	Torsional [Nm/rad·10 <sup>3</sup> ]	Axial [mm]	Radial [mm]			
00.47	00	M5	8,7	0° 54'	1,2	0,06	980	2300	2000	0,00013	4000	0,4
0.63	0	M6	15	0° 54'	1,4	0,10	2350	6300	2620	0,00040	4000	0,7
1.80	1	M8	36	0° 54'	1,5	0,11	3620	10900	3490	0,00107	3000	1,7
2.96	2	M8	36	0° 54'	1,8	0,12	7850	21850	4650	0,00296	2500	1,9
3.116	3	M10	70	0° 54'	2,0	0,14	18600	47500	5760	0,00559	2000	3,2
4.138	4	M12	121	0° 54'	2,1	0,16	20400	50600	6400	0,01213	1200	5,8

### TRANSMITTABLE TORQUE WITH CLAMP HUB ASSEMBLY

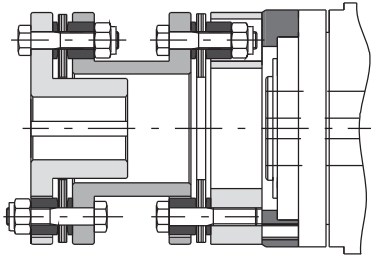
Size	Transmission torque [Nm] according to the ø finished bore [mm]																							
	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
00 (19/24)	38	39	40	42	43	44	46	47	48															
0 (24/28)			67	70	71	72	75	76	77	79	82	83	87	89										
1 (28/38)							140	142	144	148	153	155	161	165	170	176								
2 (38/45)									170	174	178	180	186	191	195	201	208	212	216	223				
3 (42/55)												266	275	280	286	294	302	307	313	321	329	335		
4 (48/60)																461	473	481	489	501	513	521	541	561

### NOTES

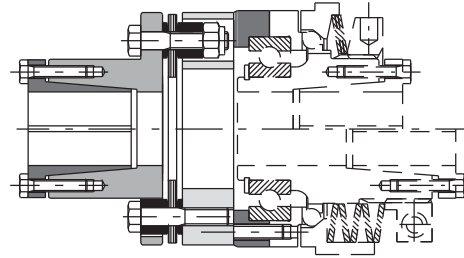
- ⊗ **Technical details:** these details refer only for the coupling (GAS/SG with backlash free red element 98 Shore-A), for torque limiters details see on page 26-27.
- ⊗ **Technical details:** weights are relevant only to the pilot bore (GAS/SG); inertias refer only for the coupling with maximum bore (GAS/SG).

# BACKLASH FREE TORQUE LIMITER "DSS/SG": additional information

## OTHER COUPLING TYPES AVAILABLE



DSS/SG model with double flexing torsionally rigid metal disc coupling **GTR/D** when torsional rigidity is required and ability to accommodate radial misalignment.



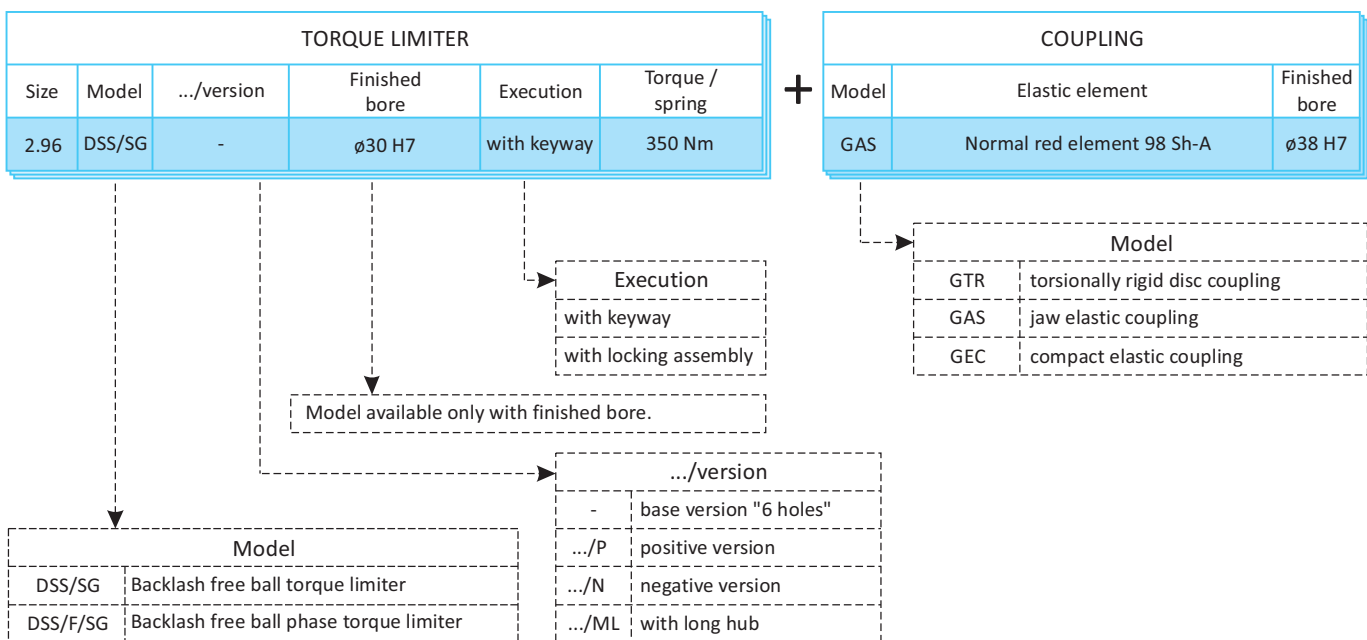
DSS/SG model with single flexing disc coupling **GTR/S** for applications where torsional rigidity is required.

## TORQUE TRANSMISSION

Size	Torque transmission [Nm] relevant to the springs configuration								
	Positive version (P)					Negative version (N)			
	A5S1P )00)	A6S1P )00)	A7S1P )000)	A5M1P )00)	A5G1P )00)	A1N )	A2N )0)	A3N )00)	A4N )000)
00.40		2 - 10				0,6 - 1,5	1,5 - 3	2,7 - 5	
00.47			6 - 14	12 - 23		2 - 5	4 - 9	7 - 15	
0.63	5 - 20			11 - 40	20 - 75	5 - 14	12 - 28	24 - 50	
1.80	12 - 35				30 - 105	9 - 28	18 - 60	40 - 100	
2.96				35 - 115	50 - 200	20 - 45	42 - 95		85 - 200
3.116	40 - 110 *			70 - 290	110 - 415	35 - 100	75 - 200		195 - 415
4.138	75 - 275 *			140 - 395 *	315 - 750	75 - 190	140 - 345		245 - 720

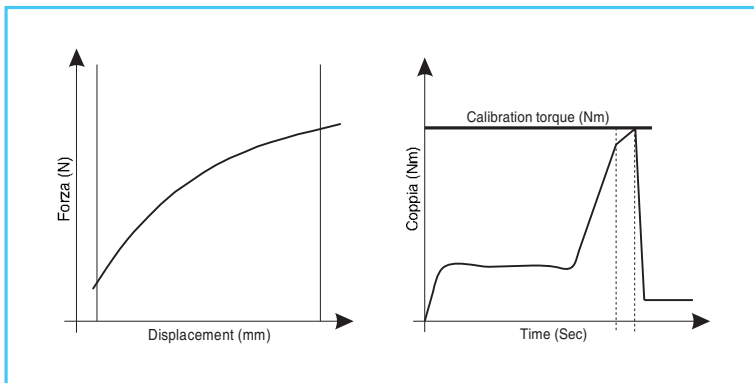
\* Until stocks are finished

## ORDER EXAMPLE



# BACKLASH FREE TORQUE LIMITER "DSS/SG": additional information

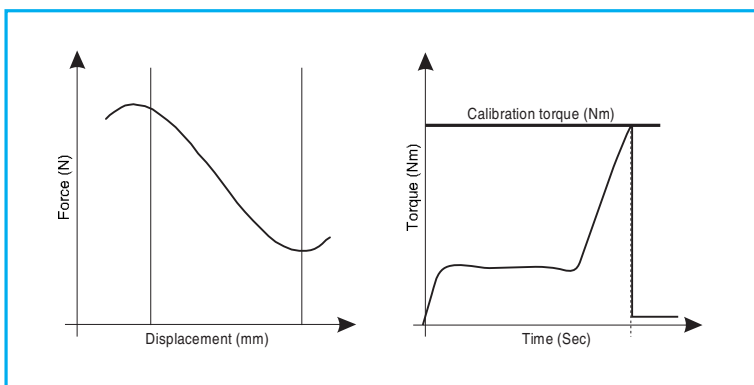
## VERSIONS



... / P

### Positive version (progressive spring)

This allows for a simpler and more linear calibration. Moreover, during disengagement it creates an increase in the torque, caused by the compression of springs, which, on presence of a non-homogenous (but normal) transmission, can be useful to avoid frequent disengagements and machine stops.

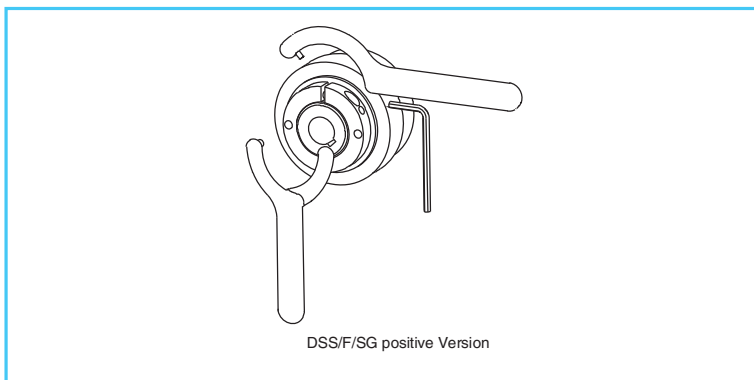


... / N

### Negative version (regressive spring)

It generates an immediate torque reduction, as soon as there is a minor overload, with consequent disengagement of the limiter and immediate stop of the drive. This characteristic is very useful on sensitive applications where even a slight increase of the loads can cause damage to the machine or to the machine product.

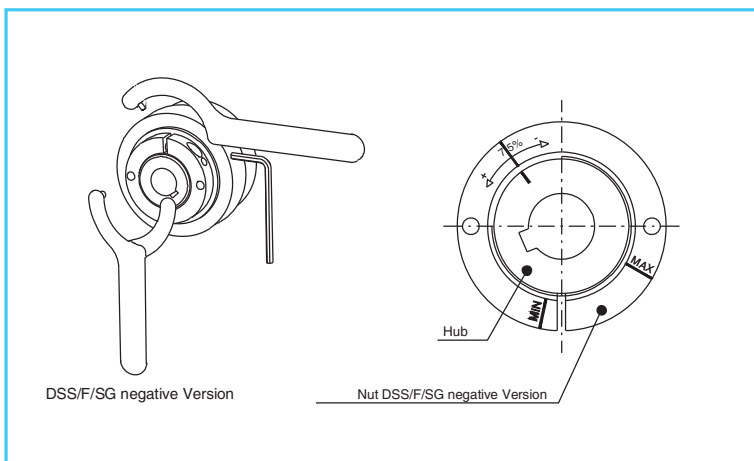
## TORQUE REGULATION



... / P

### Positive version (progressive spring)

As with the majority of ComInTec TORQUE LIMITERS, by turning the adjuster nut clockwise the disengagement torque increases. On the contrary turning it counter-clockwise, you obtain a reduction of the torque.



... / N

### Negative version (regressive spring)

Adjustment of the Negative version is opposite to all other units in our range. Unlike the traditional units, by rotating the adjuster nut clockwise the disengagement torque will reduce, and therefore to increase the torque the nut must be rotated anti-clockwise. To assist the operator in setting, there are clear markings on the nut showing 75% of the max torque and +/- Min/Max directions indicated.

**Unless otherwise requested, these models are supplied pre-calibrated at 75% of the maximum torque value of the spring's chosen configuration.**

# BACKLASH FREE TORQUE LIMITER "DSS/SG": Introduction



- ⊙ Exact torque regulation through a balanced radial nut.
- ⊙ Innovative calibration system by quote "H" for an immediate calibration of the device.
- ⊙ Re-engagement in equidistant phase or 360°.
- ⊙ Maintenance free.
- ⊙ Possibility to add a microswitch / proximity to stop the motor drive.
- ⊙ Model available only with finished bore.
- ⊙ Drive component assembled and directly supported by a ball bearing.

### ON REQUEST

- ⊙ Complete with transmission component worked and assembled (plate wheel, pulley, gear,...)
- ⊙ Available in stainless steel for food and pharmaceutical environments.
- ⊙ Possibility to have a connection flange to the most common intermittent drive units.
- ⊙ Feasibility in personalized phase at 30°, 45°, 60°, 90°, ...

	.../P: base model for a high sensitivity in calibration.	from 1,5 to 750 Nm max. bore ø50 mm	Page 26
	.../N: immediate disengagement when exceeding the calibration torque; low residual torque after the disengagement.	from 0,7 to 720 Nm max. bore ø50 mm	Page 27
	... + GAS/CCE: connection by elastic coupling to accept high misalignments.	from 0,7 to 750 Nm max. bore ø62 mm	Page 28
	... + GAS/SG: connection by elastic coupling and single split clamp hub for a quick installation.	from 0,7 to 561 Nm max. bore ø60 mm	Page 29
	... + GSF: Connection by bellows coupling for application with reduced inertia.	from 0,7 to 300 Nm max. bore ø45 mm	Page 30
	DSS/SG/PR-V: Connection between motor and gearboxes with sensor and B5 flange.	from 2 to 415 Nm max. bore ø48 mm	Page 31



### NEWS: DSS/SG in STAINLESS STEEL

- ⊙ Model without any backlash.
- ⊙ Same dimensions as the standard model, both in negative and positive versions.
- ⊙ Made in stainless steel at high resistance by suitable heat treatments.
- ⊙ High resistance to corrosion.
- ⊙ Suitable to food and/or pharmaceutical environments.

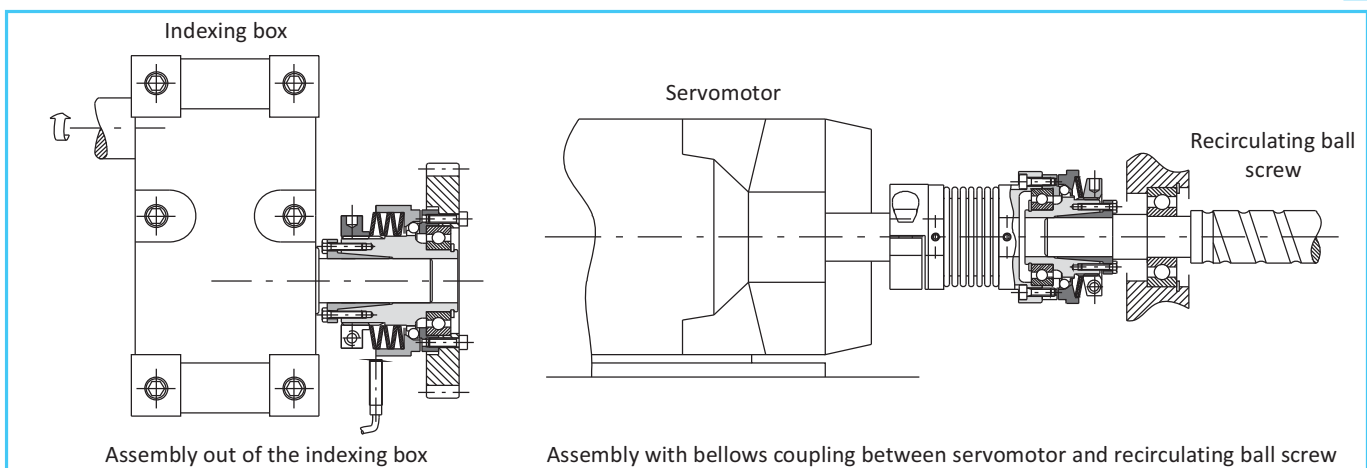
### APPLICATIONS

- ⊙ Packaging automatic machines.
- ⊙ Print machines.
- ⊙ CNC tool machines.
- ⊙ Index tables, filling machines, guiders.
- ⊙ Servomotors, slide guides.

### ADVANTAGES AND BENEFITS

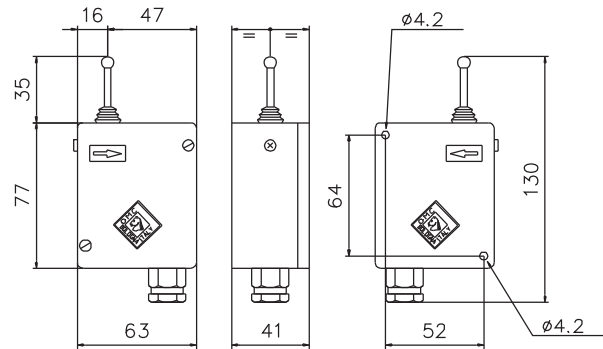
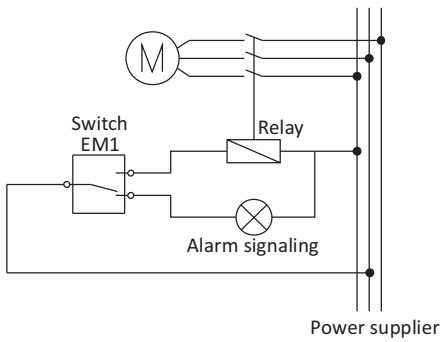
- ⊙ To protect the product against faulty positioning on the rotating table.
- ⊙ To protect the indexing against overloading along the transmission.
- ⊙ To protect the drive from product jam.
- ⊙ To protect the operating units of machine tools against impacts.
- ⊙ To protect slides or servomotors against impact or limit stops.

### ASSEMBLY EXAMPLES

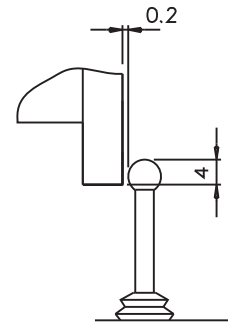


# ELECTROMECHANICAL SWITCH "EM1"

- Die-cast aluminium box with rotection level **IP57** DIN 40050.
- Adjustment of the lever end position possible.
- Operation temperature range from  $-10^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .
- Three different options of voltage input: 15A-250VCA; 5A-24VCC; 0,2A-250VCC.
- 1 or 2 contacts available.
- Initial stroke 0,5 mm, Extra stroke:  $4 \div 8$  mm depending on setting (possible in a range of 6 mm).

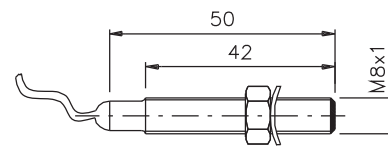
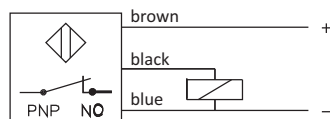
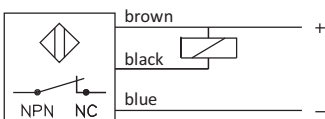
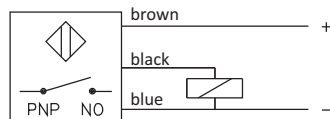
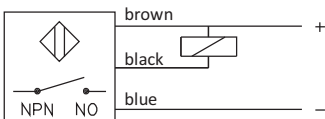


Weight: 350g



## PROXIMITY SENSOR "PRX"

- Standard version: Brass cover with protection level **IP67** DIN 40050.
- Electric contact:  $5 \div 24$  VdC.
- Frequency: 2000 Hz.
- Output: NPN (N.O.-N.C.) – PNP (N.O.-N.C.).
- Operating distance: max 1 mm.
- Cable length: 2 m (3x0,2).



Weight: 50g

