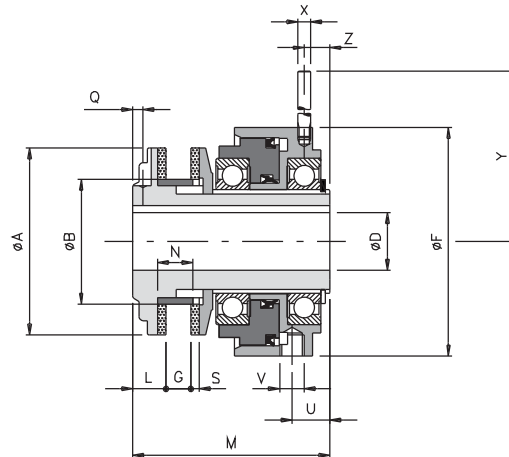


DSF/TF/AP (friction pneumatic clutch): technical data



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

PATENTED



DIMENSIONS AND TECHNICAL DETAILS

Size	Torque [Nm] 1 - 6 - 10 bar	A	B h7	D H7 max	F	G		L	M	N	On request	S	U	V	Z	X	Y	Max. speed [Rpm]	Weight [Kg]
						Q													
0.50	3 - 13 - 20	50	36	19*	56	3,5	6	11	62	10	3,5 - M4	3	11	1/8"	7	6	58	7600	0,7
1.70	6 - 43 - 70	70	45	25	90	5	10	15	85	15	4,5 - M4	4	14,5	1/4"	10,5	6	80	5450	2,4
2.90	15 - 88 - 135	90	60	38	110	7	12	16	95	17	5 - M6	4	17,5	1/4"	13,5	8	105	4250	4,3
3.115	25 - 153 - 220	115	72	45	130	9	16	18	113	21	5 - M6	4	18,5	1/4"	14,5	8	115	3350	7,0
4.140	70 - 230 - 330	140	85	55	160	11	19	20	128	25	6 - M6	5	24,5	1/4"	17	10	146	2750	11,9
5.170	170 - 700 - 875	170	98	65	215	15	22	22,5	139,5	28	6,5 - M8	5	26,5	1/4"	18	12	184	2250	19,8

TORQUE TRANSMISSION

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

NOTES





- ⊗ **DH7***: with reduced keyway UNI7510
- ⊗ **Technical details**: weights are relevant to the torque limiter with pilot bore (DSF/TF/AP).



- ⊙ Simple and precise calibration.
- ⊙ Transmission engagement / disengagement and torque limiter functions.
- ⊙ 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.

	DSR/F/AP: Complete engagement-disengagement of the transmission, also for long periods	from 7 to 30000 Nm max bore \varnothing 120 mm	Page 34
	DSR/F/AP + GEC: compact coaxial connection for simple maintenance without being forced to remove the coupling	from 7 to 30000 Nm max bore \varnothing 180 mm	Page 35
	DSF/TF/AP: friction motion transmission as tensioner	from 3 to 875 Nm max bore \varnothing 65 mm	Page 36
	DSF/TF/AP/TAC: simple and economic coaxial shaft connection.	from 3 to 875 Nm max bore \varnothing 80 mm	Page 37

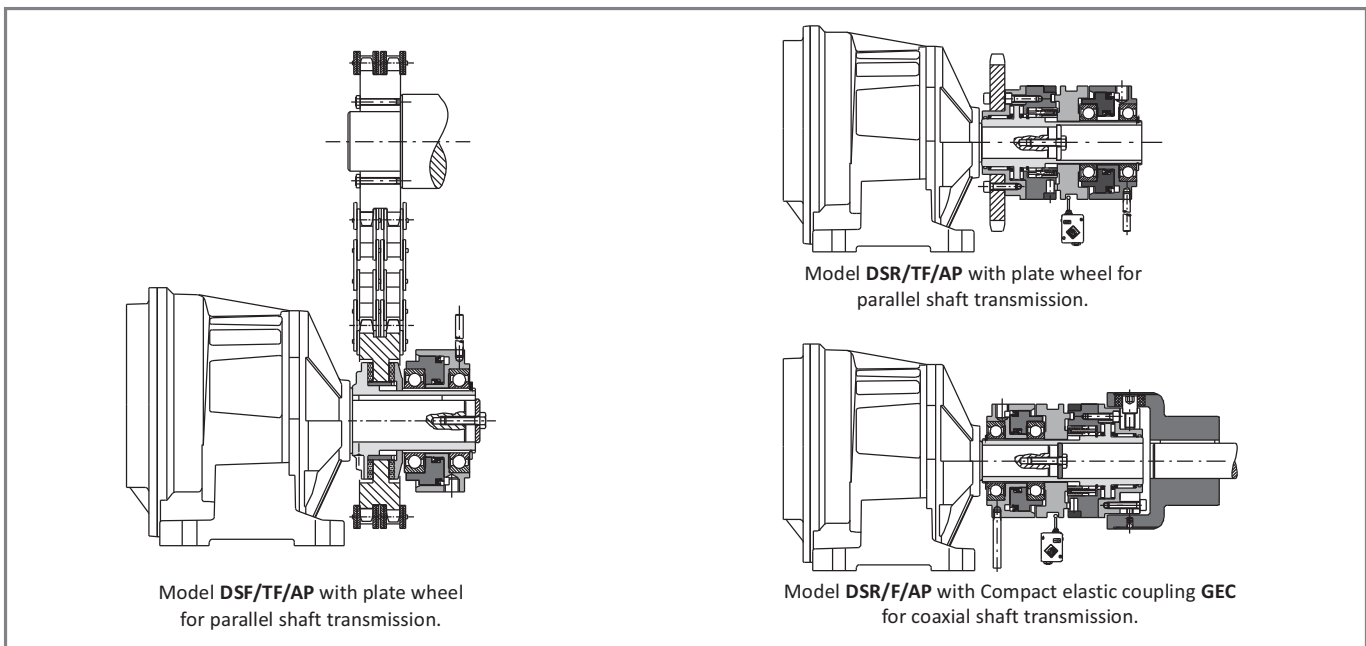
MAIN APPLICATION

- ⊙ Machines with work cycles of variable torque.
- ⊙ Test benches.
- ⊙ Coiler and uncoilers.
- ⊙ Transmission systems with varied products.
- ⊙ 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.
- ⊙ When it's necessary for complete disengagement of the transmission.

ASSEMBLY EXAMPLES

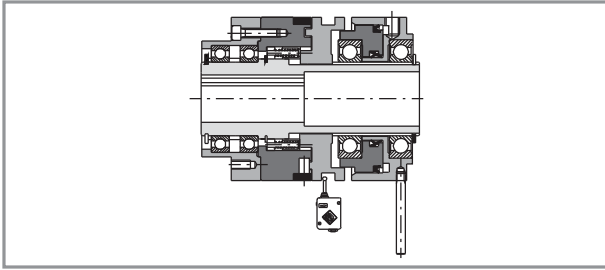


NOTE

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

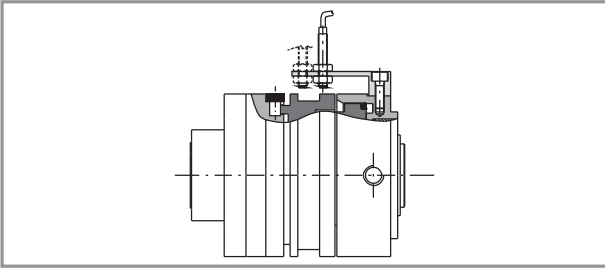
PNEUMATIC CLUTCH ".../AP": additional information

MODELS ON REQUEST:



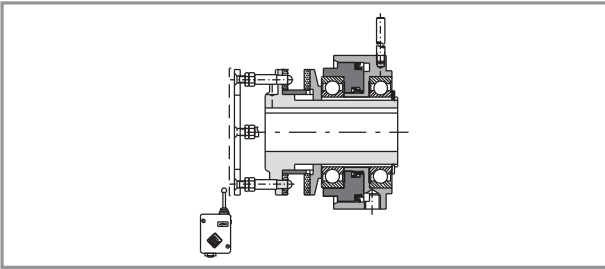
DSR/F/AP/CS

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



.../PRX

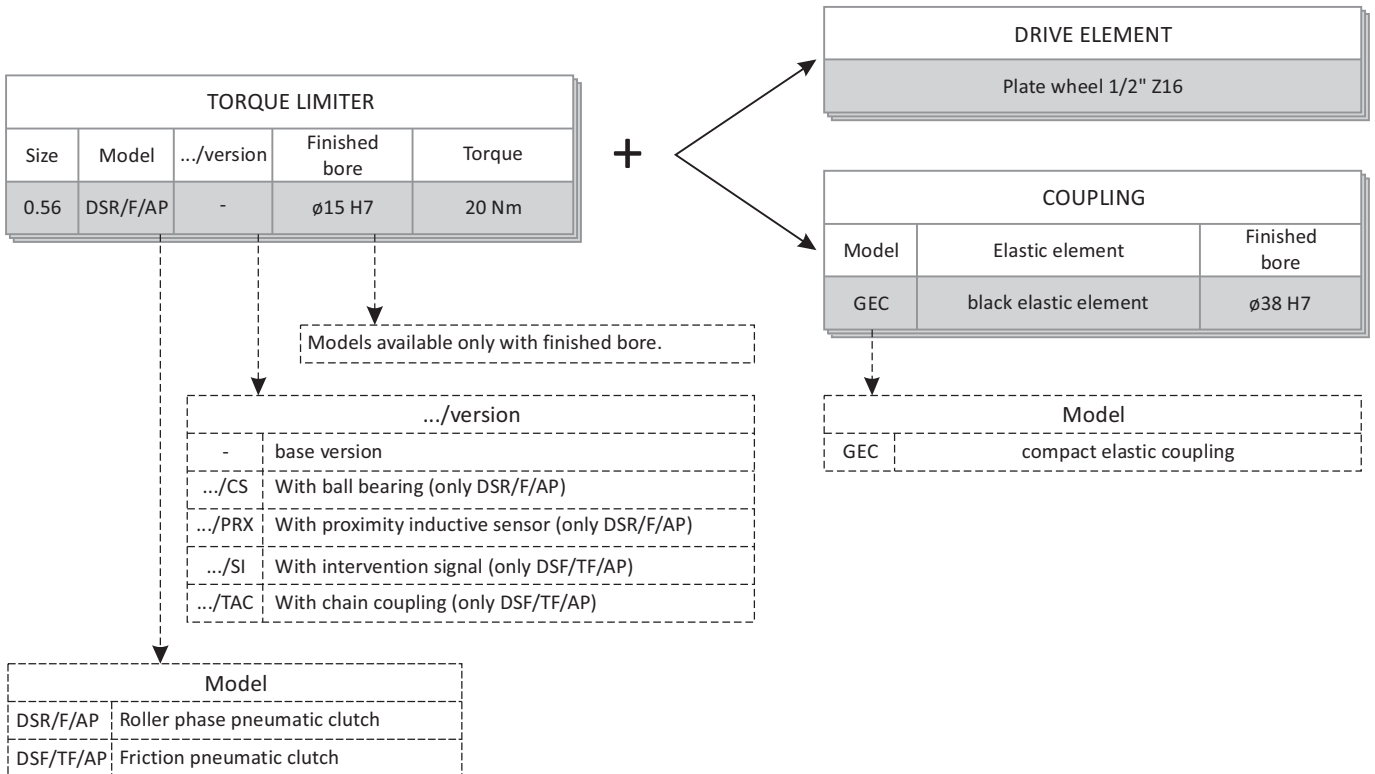
Version with proximity inductive sensor PRX M8x1, integrated into the DSR/F/AP. Compact and versatile solution, without adding equipment and/or external components.



DSF/TF/AP/SI

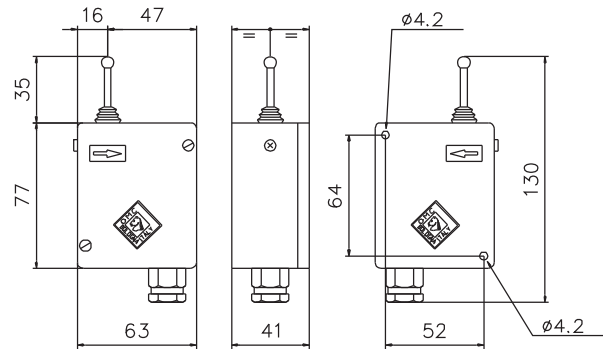
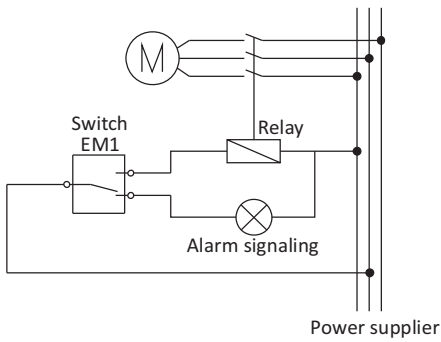
Friction clutch with intervention signal and further automatic re-engagement. This characteristic requires particular machining on the drive element, which has to be supplied together with the torque limiter.

ORDER EXAMPLE

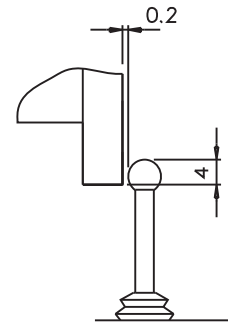


ELECTROMECHANICAL SWITCH "EM1"

- Die-cast aluminium box with rotection level **IP57** DIN 40050.
- Adjustment of the lever end position possible.
- Operation temperature range from -10°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).

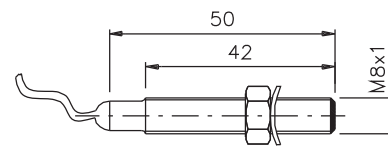
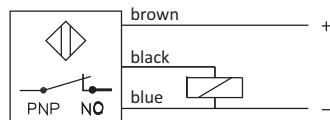
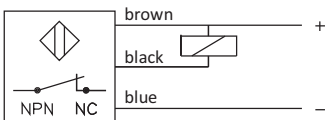
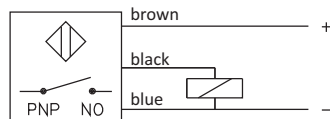
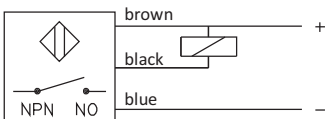


Weight: 350g



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

