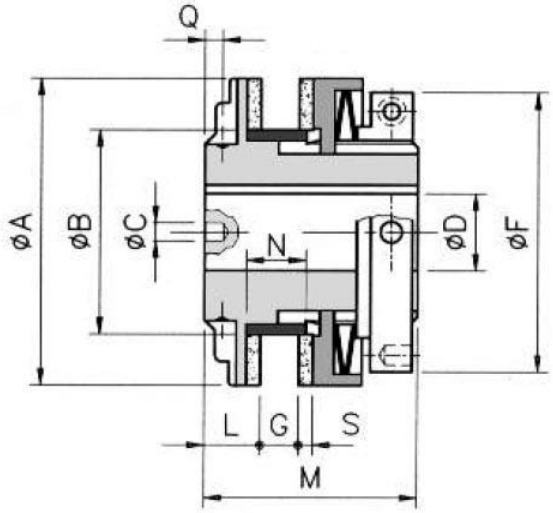
DSF Torque Limiters

Safety Couplings



Description:

The torque limiter is adopted where there is a need to provide efficient protection against overloads on mechanical parts (kinematic motions or machines). The easy-to-use and efficient device ensures complete operating reliability, the torque limiter device slips when the torque required exceeds the pre-set value and automatically restores the operating mode when the overload condition no longer applies. The component selected from the pulleys, chain sprockets and gears is positioned between the friction discs, which develop a friction force generated by tightening the ring nut, anchored by compressing the cup springs.

Size	Dimensions (mm)													On request	Technical data		
	A	B	C		D (h7)		F	G			L	M	N	S	Q	Torque	Weight	Rpm
		h7	Ø Pilot	Wheel base	Ø Pilot	Ø Max		Std	Min	Max					Ø Max	(Nm)	(kg)	Max
00.38	38	24	4	25	-	12	35	4,5	2,5	5	8,5	33,0	8	2,5	2,5 - M4	1-34	0,20	10000
0.50	50	36	4	36	-	20	42	5,5	3,5	6	11,0	37,5	10	3,0	3,5 - M4	1-100	0,37	7600
1.70	70	45	6	49	-	25	63	9,0	5,0	10	15,0	55,0	15	4,0	4,5 - M4	2-210	1,04	5450
2.90	90	60	6	65	-	38	82	11,0	7,0	12	16,0	61,0	17	4,0	5,0 - M6	3-450	1,95	4250
3.115	115	72	6	84	18	45	104	14,0	10,0	16	18,0	71,0	21	4,0	5,0 - M6	10-950	3,70	3350
4.140	140	85	7	98	24	55	128	17,0	11,0	19	20,0	86,0	25	5,0	6,0 - M6	80-1200	6,20	2750
5.170	170	98	8	115	28	65	157	20,0	15,0	22	22,5	97,5	28	5,0	6,5 - M8	150-2600	10,30	2250

Torque limiter selection:

Tkw = Power output expressed in kW n = r.p.m.
Mf = Twisting moment (Nm)
The twisting moment is given by the following formula:
Mt = (9550 • Tkw) / n

Example: Assuming a motor with the following characteristics is operated:

Power output 4 kW and n = 1.550 r.p.m.
Mt = (9550 • 4) / 1550 = 24,64 Nm

We will therefore select a limiter with a torque value equal to or greater than 24,64 Nm.