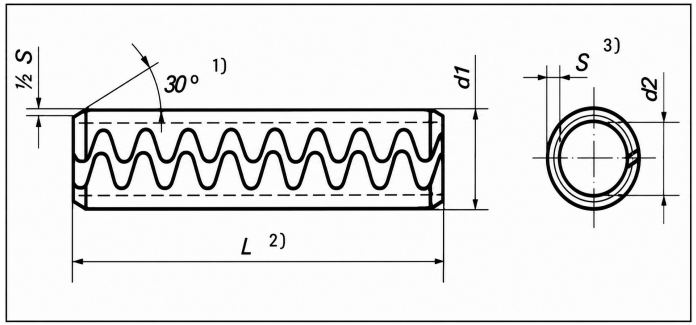


Q/PES 003-2026
Wave spring pin-light duty

Designed in accordance with ISO 8752 and DIN EN ISO 13337 standards for thickness, length, and nominal diameter, this product features a wave-shaped open design. It fulfills the end customers' requirements for lightweight construction and automated assembly, while combining the dual advantages of both solid pins and spring pins.
Cross-reference: DIN EN ISO 13337：Wave spring pin-light duty
Naming convention for gear pins: d=10, L= ①, stainless steel, MaNo：1.4310 ,
Q/PES 003 -M10*L -1.4310

Table 1 — Dimensions

nominal diameter *d*	**2**	**2,5**	**3**	**3,5**	**4**	**4,5**	**5**	**6**	**8**	**10**	**12**	**13**
s ②	2,4	2,9	3,5	4,0	4,6	5,1	5,6	6,7	8,8	10,8	12,8	13,8
d_1 bevor mounting	2,3	2,8	3,3	3,8	4,4	4,9	5,4	6,4	8,5	10,5	12,5	13,5
d_1 perm. deviation	1,9	2,3	2,7	3,1	3,4	3,9	4,4	4,9	7,0	8,5	10,5	11,0
d_2	0,4	0,45	0,45	0,5	0,7	0,7	0,7	0,9	1,8	2,4	2,4	2,4
for screws	0,2	0,25	0,25	0,3	0,5	0,5	0,5	0,7	1,5	2,0	2,0	2,0
perm. statically loda single shear	0,2	0,25	0,3	0,35	0,5	0,5	0,5	0,75	0,75	1,0	1,0	1,2
per shear plane(KN) double shear	1,5	2,4	3,5	4,6	8	8,8	10,4	18	24	40	48	66
nominal diameter *d*	**14**	**16**	**18**	**20**	**21**	**25**	**28**	**30**	**35**	**40**	**45**	**50**
s ②	14,8	16,8	18,9	20,9	21,9	25,9	28,9	30,9	35,9	40,9	45,9	50,9
d_1 bevor mounting	14,5	16,5	18,5	20,5	21,5	25,5	28,5	30,5	35,5	40,5	45,5	50,5
d_1 perm. deviation	11,5	13,5	15,0	16,5	17,5	21,5	23,5	25,5	28,5	32,5	37,5	40,5
d_2	2,4	2,4	2,4	2,4	2,4	3,4	3,4	3,4	3,6	4,6	4,6	4,6
for screws	2,0	2,0	2,0	2,0	2,0	3,0	3,0	3,0	3,0	4,0	4,0	4,0
perm. statically loda single shear	1,5	1,5	1,7	2,0	2,0	2,0	2,5	2,5	3,5	4,0	4,0	5,0
per shear plane(KN) double shear	84	98	126	158	168	202	280	302	490	634	720	1 000

① Lengths refer to DIN EN ISO 13337, see Table 1. ②Wall thickness tolerance according to EN 10140.

Table 2 — Requirements and reference International Standards

Material③	steel		stainless steel	
	DIN EN 10132-4		DIN EN 10088-1	10088-2
	C67S orC75S	51CrV4	X10CrNi18-8 MaNo：1.4310 Coid worked	X7CrNiAl17-7 MaNo：1.4568 aging treatment of stainless steel: 400-480HV
	Hardened and tempered to a Vickers hardness of：420HV～510HV	Hardened：see ISO		Hardened：see ISO 6507-1
Surface condition	Plain, i.e. pins to be supplied in natural finish, treated with a protective lubricant,unless otherwise specified by agreementbe tween customer and supplier.		Ptain, i.e. pins to be supplied in natural finish.	
Applications	The diameter of the hole into which the spring pin is to be inserted shall be equal to the nominal diameterd, of the mating pin and to tolerance class H12. When the elastic pin is inserted into the minimum allowable hole, the slot should not be fully closed.			
Appearance	scratches,rust,irregular or harmful defects are allowed.There must be no burrs, cracks or other defec			

③Other materials as agreed between customer and supplier.