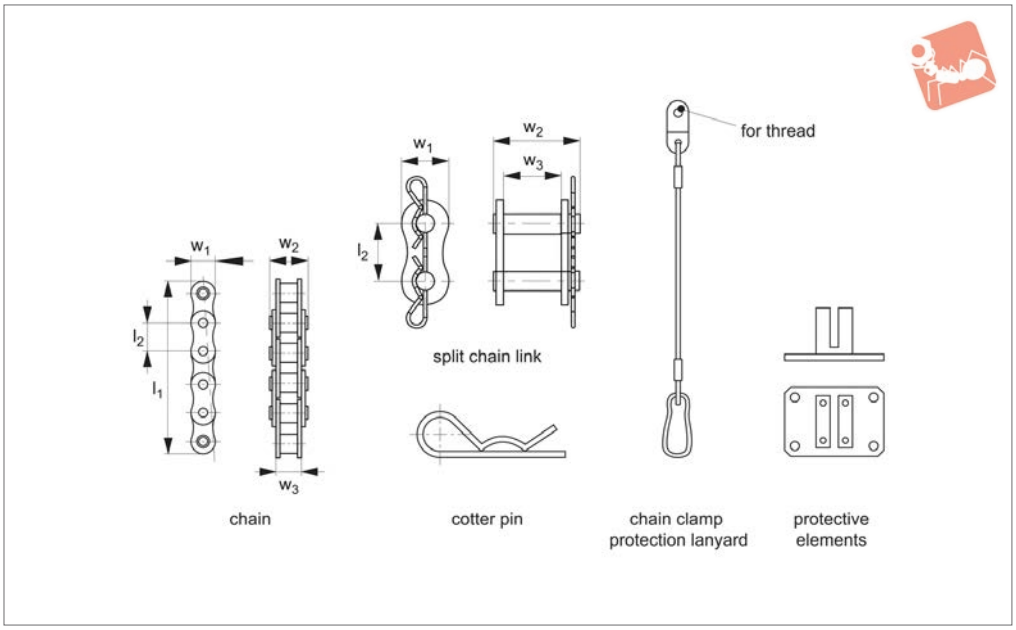


12705

Technical Notes

Lanyard: for use with chain clamp, when properly assembled prevents chain from snapping uncontrolled if chain breaks.
Protective element: can be placed between chain and workpiece to protect surfaces.
Chain Links: for use to connect chain of different lengths to expand chain capacity and hence accomodate larger workpieces.
Chain: DIN8187, as well as being extended with the use of connecting links, can also be shortened to suit requirements. Chain is pre-tensioned to minimise elongation.

Important Notes

If the lanyard system is damaged the entire lanyard set must be replaced.

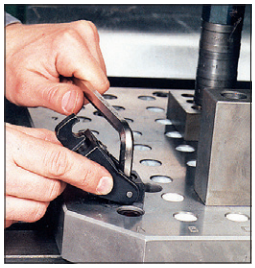
Order No.	Size	Type	Length nom.	l_1	l_2	w_1	w_2	w_3	Clamping force to be secured kN max.	Qty/pack	Weight g
12705.W0012	12	Lanyard	-	-	-	-	-	-	15	-	280
12705.W0016	16	Lanyard	-	-	-	-	-	-	40	-	350
12705.W0020	20	Lanyard	-	-	-	-	-	-	75	-	1313
12705.W0024	24	Lanyard	-	-	-	-	-	-	120	-	1313
12705.W0112	12	Workpiece Protector	-	-	-	-	-	-	-	6	3
12705.W0116	16	Workpiece Protector	-	-	-	-	-	-	-	6	5
12705.W0120	20	Workpiece Protector	-	-	-	-	-	-	-	6	10
12705.W0124	24	Workpiece Protector	-	-	-	-	-	-	-	6	16
12705.W0212	12	Chain Link	-	-	15.87	14	22	13	15	-	15
12705.W0216	16	Chain Link	-	-	25.40	21	39	25	40	-	67
12705.W0220	20	Chain Link	-	-	31.75	26	44	29	75	-	113
12705.W0224	24	Chain Link	-	-	38.10	33	59	38	120	-	274
12705.W0312	12	Cotter Pin	-	-	-	-	-	-	-	10	0.5
12705.W0316	16	Cotter Pin	-	-	-	-	-	-	-	10	1.0
12705.W0320	20	Cotter Pin	-	-	-	-	-	-	-	10	2.2
12705.W0324	24	Cotter Pin	-	-	-	-	-	-	-	10	6.5
12705.W0412	12	Chain	125	111	15.87	15	20	13	15	-	114
12705.W0413	12	Chain	250	238	15.87	15	20	13	15	-	228
12705.W0414	12	Chain	500	492	15.87	15	20	13	15	-	455
12705.W0415	12	Chain	1000	1000	15.87	15	20	13	15	-	910
12705.W0416	16	Chain	125	127	25.40	21	23	25	40	-	335
12705.W0417	16	Chain	250	229	25.40	21	23	25	40	-	670
12705.W0418	16	Chain	500	483	25.40	21	23	25	40	-	1340
12705.W0419	16	Chain	1000	991	25.40	21	23	25	40	-	2680
12705.W0420	20	Chain	1000	984	31.75	26	44	29	75	-	3720
12705.W0421	20	Chain	1500	1492	31.75	26	44	29	75	-	5580
12705.W0422	20	Chain	2000	2000	31.75	26	44	29	75	-	7440
12705.W0424	24	Chain	1000	1028	38.10	33	54	38	120	-	7050
12705.W0425	24	Chain	1500	1485	38.10	33	54	38	120	-	10575
12705.W0426	24	Chain	2000	2019	38.10	33	54	38	120	-	14100

Chain Clamping Set

Our comprehensive range of clamping elements includes a compact and powerful workpiece clamping element, the chain clamping set no. 12700. This set was specifically designed for clamping large workpieces with round or arched surfaces.

Due to an increase in the bearing surface of the chain, the clamping force is distributed across the workpiece thereby reducing deformation.

Setting Up

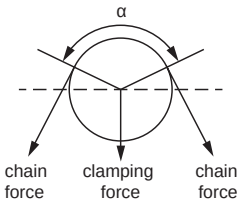


1. Attach the hook unit and the take-up unit as close to the workpiece as possible.

2. Turn the knurled nut on the take-up unit until the pull rod is fully extended. Select the number of chain segments required for the workpiece and attach to the pull rod.

3. Fine adjustment of the chain lengths is made by tightening the knurled nut until the chain slightly touches the workpiece.

4. To clamp the work piece connect the free end of the chain onto the hook unit. Using a hex key tighten the eccentric shaft, and ensure the lever is rotated to its fully locked position (180°). The workpiece is now clamped.



Important Factors in Selection of Chain Clamp

Chain Length and Stretch

Torque value of 50 Nm is used for M12 set.

Torque value of 90 Nm is used for M16 set.

The clamping force achievable through the Wixroyd chain clamp set is dependent upon three factors:

- Workpiece diameter (see graph).
- Chain length and stretch (see graph).
- Contact angle of chain and workpiece (see table below right).

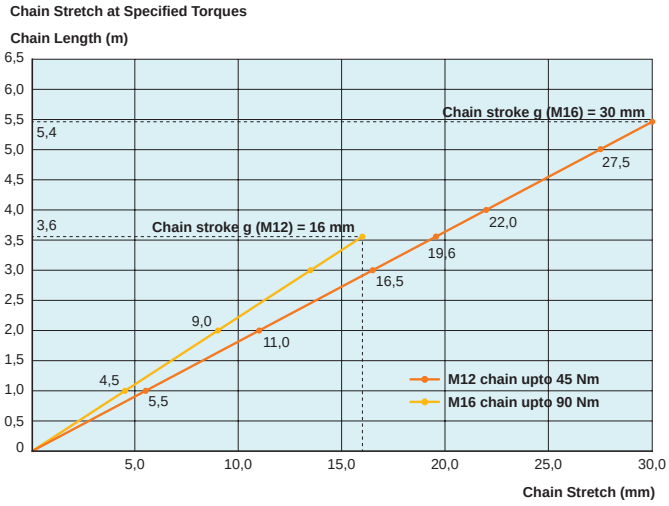
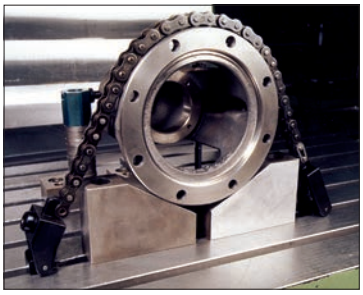


Table of Clamping Force to Contact Angle α



Clamping with the chain clamp set.

	Torque	α = 105°	α = 120°	α = 135°	α = 150°	α = 180°
M12	50Nm	80%	87%	92%	97%	100%
M16	90Nm	80%	87%	92%	97%	100%

Important Note: Achievable clamping force decreases as the contact angle of chain and workpiece (α) reduces. Please use the table above as a guide.

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