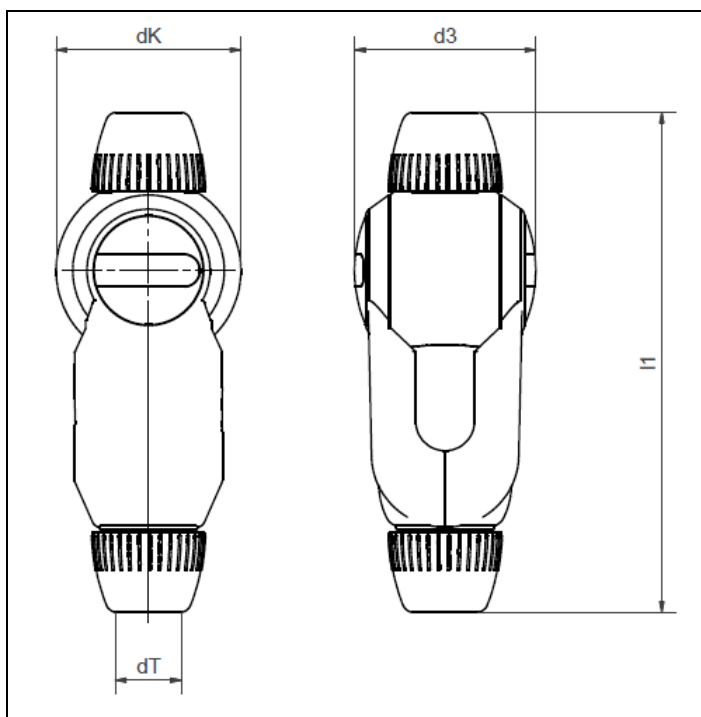


	<b>Technische Daten</b> <b>technical data sheet</b>	<b>roboLink</b>
<b>igus GmbH</b> Spicher Straße 1a - 51147 Köln tel.: +49-(0)2203 / 96 49-409 Fax: +49-(0)2203 / 96 98-409 e-mail: mraak@igus.de		<b>Roboter Gelenk</b> <b>Joint module</b>

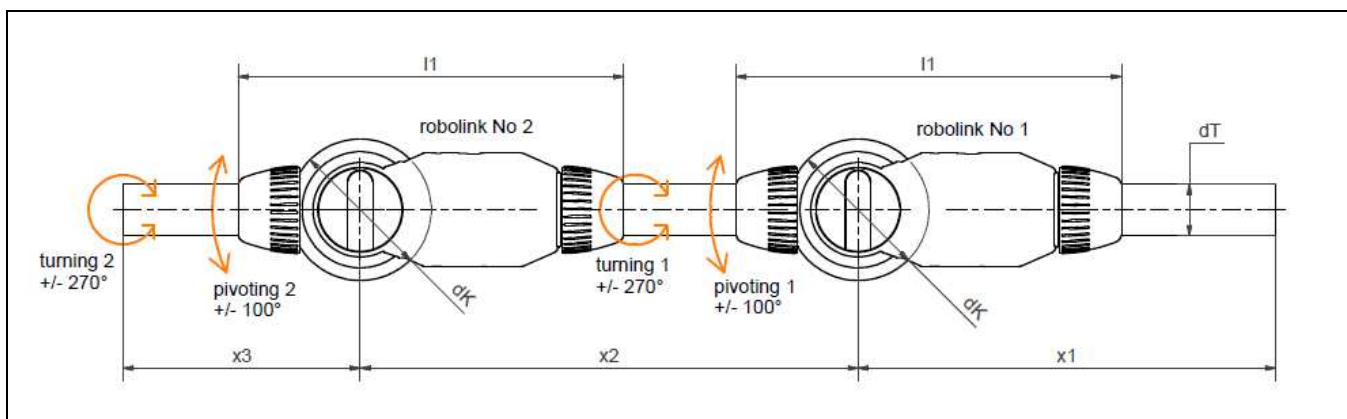
Zusammenbauzeichnung / assembly drawing:

Stand / state 08.08.2012



dk	75 mm	Kugeldurchmesser / ball diameter
dT	26 mm	Durchmesser Anschlussrohr / tube diameter of connection
d3	83 mm	Breite / width
l1	200 mm (+/- 5)	Länge / joint length

Reihenschaltung / series connection:



x1 / x2 / x3      Stangenlängen frei wählbar / individual tube lengths (max. 1.000 mm)

	<b>Technische Daten</b> <b>technical data sheet</b>	<b>roboLink</b>
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**Material / materials:**

Seilzüge / wires:	Dyneema® Ø2,0 mm	
Bowdenzug / cable:	igus RN54	
Stangen / bars:	Aluminium ENAW 6060 T66 E6EV1	270 g/m
	Carbon fibre tubes (CF)	170 g/m
	Glass fibre tubes (GF)	200 g/m
	Maximale Länge / maximum length	1.000 mm
Gelenk / joint:	Fine Polyamide 2200	
Schrauben / screws:	V2A / stainless steel	

**Technische Daten / technical datas:**

Mögliche Winkelstellungen / possible angles:

Schwenkbewegung / pivoting motion	001: +/-90° 002: +130°/-50° (=> 180° total)
Drehbewegung / rotation	+/- 270° (=> 540° total / 1,5 turns)

Drehmomente, Zugkräfte / torques, forces

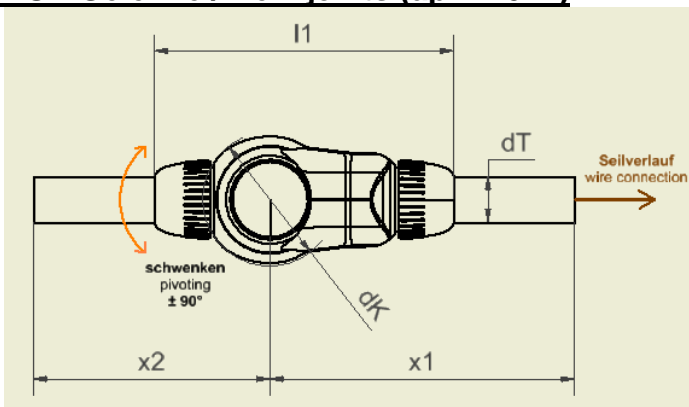
Übertragbares Drehmoment für die Schwenkbewegung (im Dauerbetrieb): Transferable torque for pivoting motion (permanent motion):	12 Nm
Antriebskraft (Seil-Zugkraft) / driving force (pulling force on wire)	600 N

Übertragbares Drehmoment für die Drehbewegung (im Dauerbetrieb): Transferable torque for rotation (permanent motion):	5 Nm
Antriebskraft (Seil-Zugkraft) / driving force (pulling force on wire)	300 N

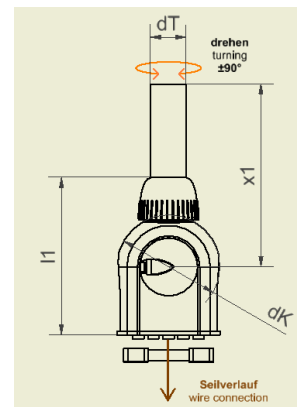
Gewicht / weight:

1 roboLink incl. Seile / wires:	350 g
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**NEUE Gelenke / New joints (april 2012)**



Schwenkgelenk / pivoting link **RL-50-PL1**:  
 dK 76mm, dT 26mm, l1 170mm  
 Gewicht / weight 260 g



Drehgelenk / rotating link **RL-50-TL1**:  
 dK 76mm, dT 26mm, l1 125mm  
 Gewicht / weight 240 g

### igus GmbH

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### Roboter Gelenk Joint module

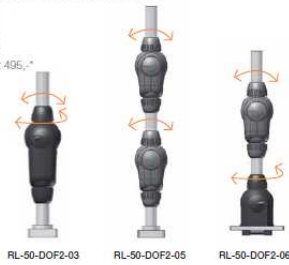
## Kombinationsmöglichkeiten / combinations:

31 Varianten / Unendliche Möglichkeiten\* 31 versions / Infinite possibilities\*

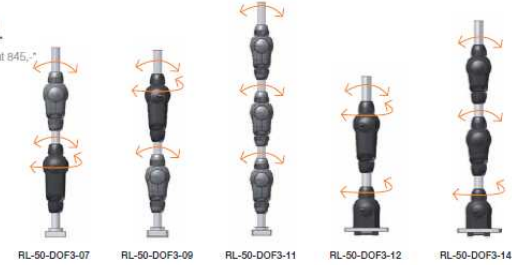
**1 DOF:**  
 Ab 329,-\*  
 starting at 329,-\*



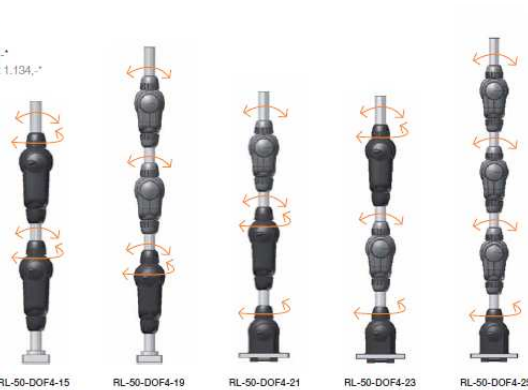
**2 DOF:**  
 Ab 495,-\*  
 starting at 495,-\*



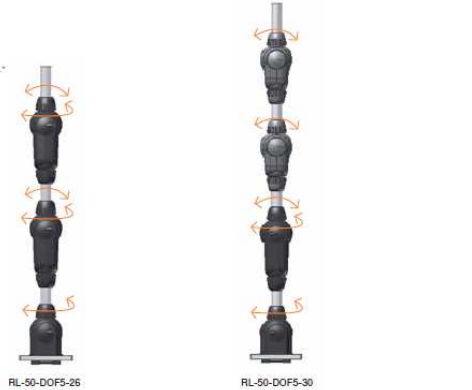
**3 DOF:**  
 Ab 845,-\*  
 starting at 845,-\*



**4 DOF:**  
 Ab 1.134,-\*  
 starting at 1.134,-\*



**5 DOF:**  
 Ab 1.484,-\*  
 starting at 1.484,-\*



DOF	Pos.	Version	LT [mm] (Stand.)	x1* [mm]	x2* [mm]	x3* [mm]	x4* [mm]	x ges. [mm]*)	weight [gr]*)	max. stat. load [N] *)	max. dyn. load [N] **)
1	1	RL-50-DOF1-01	100	173	134	-	-	307	290	89	62
	2	RL-50-DOF1-02	100	134	-	-	-	134	270	89	62
2	3	RL-50-DOF2-03	100	202	134	-	-	336	400	89	62
	4	RL-50-DOF2-04	100	202	134	-	-	336	400	89	62
	5	RL-50-DOF2-05	100	173	207	134	-	514	555	33	15
	6	RL-50-DOF2-06	100	207	134	-	-	341	535	89	62
3	7	RL-50-DOF3-07	100	202	207	134	-	543	665	33	15
	8	RL-50-DOF3-08	100	202	207	134	-	543	665	33	15
	9	RL-50-DOF3-09	100	173	236	134	-	543	665	30	12
	10	RL-50-DOF3-10	100	173	236	134	-	543	665	30	12
	11	RL-50-DOF3-11	100	173	207	207	134	721	815	18	5
	12	RL-50-DOF3-12	100	236	134	-	-	370	645	89	62
	13	RL-50-DOF3-13	100	236	134	-	-	370	645	89	62
4	14	RL-50-DOF3-14	100	207	207	134	-	548	800	33	15
	15	RL-50-DOF4-15	100	202	236	134	-	572	775	30	12
	16	RL-50-DOF4-16	100	202	236	134	-	572	775	30	12
	17	RL-50-DOF4-17	100	202	236	134	-	572	775	30	12
	18	RL-50-DOF4-18	100	202	236	134	-	572	775	30	12
	19	RL-50-DOF4-19	100	202	207	207	134	750	930	18	5
	20	RL-50-DOF4-20	100	202	207	207	134	750	930	18	5
	21	RL-50-DOF4-21	100	236	207	134	-	577	910	33	15
	22	RL-50-DOF4-22	100	236	207	134	-	577	910	33	15
	23	RL-50-DOF4-23	100	207	236	134	-	577	910	30	12
5	24	RL-50-DOF4-24	100	207	236	134	-	577	910	30	12
	25	RL-50-DOF4-25	100	207	207	207	134	755	1.060	18	5
	26	RL-50-DOF5-26	100	236	236	134	-	606	1.020	30	12
	27	RL-50-DOF5-27	100	236	236	134	-	606	1.020	30	12
	28	RL-50-DOF5-28	100	236	236	134	-	606	1.020	30	12
	29	RL-50-DOF5-29	100	236	236	134	-	606	1.020	30	12
	30	RL-50-DOF5-30	100	236	207	207	134	784	1.170	18	5
	31	RL-50-DOF5-31	100	236	207	207	134	784	1.170	18	5

\*) only for standard tube length = 100mm

\*\*) at 30 rpm and 0,1 sec. Acceleration time

